



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA

Board of Supervisors Room - County Administrative Center
224 North Edwards, Independence, California

NOTICES TO THE PUBLIC: (1) This meeting is accessible to the public both in person and, for convenience, via Zoom webinar. The Zoom webinar is accessible to the public at <https://zoom.us/j/868254781>. The meeting may also be accessed by telephone at the following numbers: (669) 900-6833; (346) 248-7799; (253) 215-8782; (929) 205-6099; (301) 715-8592; (312) 626-6799. Webinar ID: 868 254 781. Anyone unable to attend the Board meeting in person who wishes to make either a general public comment or a comment on a specific agenda item may do so by utilizing the Zoom "hand-raising" feature when appropriate during the meeting (the Chair will call on those who wish to speak). Generally, speakers are limited to three minutes. Remote participation for members of the public is provided for convenience only. In the event that the remote participation connection malfunctions for any reason, the Board of Supervisors reserves the right to conduct the meeting without remote access. Regardless of remote access, written public comments, limited to 250 words or fewer, may be emailed to the Assistant Clerk of the Board at boardclerk@inyocounty.us. (2) In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting please contact the Clerk of the Board at (760) 878-0373 (28 CFR 35.102-35.104 ADA Title II). Notification 48 hours prior to the meeting will enable the County to make reasonable arrangements to ensure accessibility to this meeting. Should you because of a disability require appropriate alternative formatting of this agenda, please notify the Clerk of the Board 72 hours prior to the meeting to enable the County to make the agenda available in a reasonable alternative format. (Government Code Section 54954.2). (3) If a writing, that is a public record relating to an agenda item for an open session of a regular meeting of the Board of Supervisors, is distributed less than 72 hours prior to the meeting, the writing shall be available for public inspection at the Office of the Clerk of the Board of Supervisors, 224 N. Edwards, Independence, California and is available per Government Code § 54957.5(b)(1).

REGULAR MEETING December 5, 2023

(Unless otherwise specified by time, items scheduled for either morning or afternoon sessions will be heard according to available time and presence of interested persons.)

Start Time

- 8:30 A.M.** 1) **Public Comment on Closed Session Item(s)**
Comments may be time-limited

CLOSED SESSION

- 2) **Conference with County's Labor Negotiators – Pursuant to Government Code §54957.6** – Regarding employee organizations: Deputy Sheriff's Association (DSA); Elected Officials Assistant Association (EOAA); Inyo County Correctional Officers Association (ICCOA); Inyo County Employees Association (ICEA); Inyo County Probation Peace Officers Association (ICPPOA); IHSS Workers; Law Enforcement Administrators' Association (LEAA). Unrepresented employees: all. County designated representatives – Administrative Officer Nate Greenberg, Assistant County Administrator Sue Dishion, Deputy Personnel Director Keri Oney, County Counsel John-Carl Vallejo, and Senior Budget Analyst Denelle Carrington.
- 3) **Public Employment – Pursuant to Government Code §54957** – Title: Assistant County Administrator.

OPEN SESSION (With the exception of timed items, which cannot be heard prior to their scheduled time, all open-session items may be considered at any time and in any order during the meeting in the Board's discretion.)

- 10 A.M.**
- 4) **Pledge of Allegiance**
 - 5) **Report on Closed Session as Required by Law**
 - 6) **Introductions** - The following new employees will be introduced to the Board: Heavy Equipment Operator Kelby Chirrick, Engineering Assistant Hasib Russ Rasooli, and Gate Attendant Edward (Ted) Ryan, Public Works; Laboratory Technician David Barasch, Environmental Health; Rehabilitation Specialist Ryan Navales, Probation; and Shelter Attendant Harlee Bardonnex, Correctional Officer Rosa Gonzalez, Shelter Attendant Joseph (Joe) Mulligan, and Correctional Officer Chad Rager, Sheriff's Office.
 - 7) **Public Comment**
Comments may be time-limited
 - 8) **County Department Reports**

CONSENT AGENDA (Items that are considered routine and are approved in a single motion; approval recommended by the County Administrator)

- 9) **Filling of Vacancy on Pioneer Cemetery District Board of Trustees**
Clerk of the Board | Assistant Clerk of the Board

Recommended Action: Reappoint Ms. Diane Corsaro to a four-year term on the Pioneer Cemetery District Board of Trustees, ending December 27, 2027.
- 10) **Contract for Restrictive Covenant Modification & Records Modernization Project**
Clerk-Recorder | Danielle Sexton

Recommended Action:
 - A) Declare Kofile Technology, Inc. of Dallas, Texas, the successful respondent to Inyo County RFP for "Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)" project;
 - B) Authorize a contract be entered into with Kofile Technologies, Inc. for the Provision of Restrictive Covenant Modification & Records Modernization Services, in an amount not to exceed \$200,000 for the term of December 5, 2023 through December 4, 2025, contingent upon the Board's adoption of future budgets; and
 - C) Authorize the County Clerk-Recorder to sign the Agreement between County of Inyo and Kofile Technologies, Inc., contingent upon all appropriate signatures being obtained.
- 11) **Termination of Local Emergency for March 2023 Storms and Spring Runoff**
County Administrator - Emergency Services | Mikaela Torres

Recommended Action: Approve staff's recommendation to terminate the

local emergency proclaimed in response to the 2023 storms and projected spring runoff in March 2023.

- 12) **Continuation of Local Emergency for Tropical Storm Hilary**
County Administrator - Emergency Services | Mikaela Torres

Recommended Action: Discuss, consider, and approve staff's recommendation to continue the local emergency proclaimed in response to Tropical Storm Hilary.

- 13) **Resolutions Approving the Application for Outdoor Equity Grants Program Funds**
Health & Human Services | Anna Scott

Recommended Action: Approve Resolution Nos. 2023-38 and 2023-39, authorizing Health and Human Services to apply for grant funding through the Outdoor Equity Grants Program administered by the California Department of Parks and Recreation.

- 14) **Contract with Thurmond Consulting for Continuum of Care Grants Management**
Health & Human Services | Anna Scott

Recommended Action:

- A) Declare Thurmond Consulting, LLC of Sacramento, California a sole-source provider of Continuum of Care (CoC) Grants Management and CoC Coordination;
- B) Ratify and approve the contract between the County of Inyo and Thurmond Consulting, LLC of Sacramento, California for the provision of Continuum of Care (CoC) Grants Management and CoC Coordination in an amount not to exceed \$250,000.00 for the period of July 1, 2023 through June 30, 2025, contingent upon the Board's approval of future budgets; and
- C) Authorize the HHS Director to sign, contingent upon all appropriate signatures being obtained.

- 15) **Authorization to Purchase a New Caterpillar Wheel Loader**
Public Works - Recycling & Waste Management | Michael Errante

Recommended Action: Authorize issuance of a purchase order in the amount not to exceed \$311,274, payable to Quinn Company of Lancaster, CA for one (1) 2024 Caterpillar 938 M Wheel Loader.

- 16) **Approval of Amendment No. 2 to the American Refuse Agreement**
Public Works - Recycling & Waste Management | Michael Errante

Recommended Action: Approve and ratify Amendment No. 2 to the contract between the County of Inyo and American Refuse of Wasco, CA increasing the contract to an amount not to exceed \$245,000 for waste tire hauling and recycling, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained.

17) **Plans and Specifications for Independence Courthouse HVAC Project**

Public Works | Michael Errante

Recommended Action: Approve the plans and specifications for the Independence Courthouse HVAC Project and authorize the Public Works Director to advertise for bids.

18) **Comment Letter for Little Lake Aqueduct Crossover Project Mitigated Negative Declaration**

Water Department | Holly Alpert

Recommended Action: Approve a comment letter in response to the Notice of Intent to Adopt a Mitigated Negative Declaration for the Little Lake Aqueduct Crossover Project and authorize the County Administrator to sign.

REGULAR AGENDA - MORNING

19) **Workshop on the Community Economic Resilience Fund (CERF)**

County Administrator | Stacy Corless - Sierra Business Council, Meaghan McCamman

20 minutes (10min. Presentation / 10min. Discussion)

Recommended Action:

- A) Receive an update regarding the Community Economic Resiliency Fund (CERF) from Sierra Business Council Government and Community Affairs Director Stacy Corless;
- B) Conduct a workshop on Inyo's participation in the CERF; and
- C) Provide any follow-up direction to staff as necessary.

20) **Accept United States Department of Agriculture Rural Development Broadband Technical Assistance Grant for Furnace Creek and Park Village**

County Administrator | Scott Armstrong

10 minutes (5min. Presentation / 5min. Discussion)

Recommended Action:

- A) Accept the US Department of Agriculture (USDA) Rural Development (RD), Rural Utilities Service (RUS) Grant Award for the Inyo County Application #GRANT13921206;
- B) Approve the USDA RD RUS Cooperative Agreement and Assurance Agreement in order to receive up to \$110,500 in reimbursable grant funding for Broadband Technical Assistance (BTA) to develop detailed last-mile broadband engineering designs for the Furnace Creek area, including Park Village; and
- C) Authorize the County Administrator to sign.

21) **Wildfire Coordinator Presentation**

County Administrator - Emergency Services | Kristen Pfeiler

30 minutes (20min. Presentation / 10min. Discussion)

Recommended Action: Receive presentation on wildfire mitigation efforts from the County Wildfire Coordinator.

22) **Amendment No. 2 to the Agreement with Armstrong Consultants, Budget Amendments**

Public Works | Ashley Helms

10 minutes (5min. Presentation / 5min. Discussion)

Recommended Action: Contingent upon the FAA's agreement to reimburse expenses incurred prior to grant award:

- A) Amend the Fiscal Year 2023-2024 Bishop Air Comm Terminal Budget (630500) as follows: Increase estimated revenue in Federal Grants Revenue Code 4555 by \$89,488; increase appropriation in Operating Transfers In Object Code 4998 by \$9,944; increase appropriation in Professional Services Object Code 5265 by \$99,432 (*4/5ths vote required*);
- B) Amend the Fiscal Year 2023-2024 Bishop Airport Operating Budget 150100 as follows: Increase appropriations in Operating Transfers Out Object Code 5801 by \$9,944 and decrease appropriations in Professional Services Object Code 5265 by \$9,944 (*4/5ths vote required*); and
- C) Approve Amendment No. 2 to the agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO, increasing the contract to an amount not to exceed \$195,132, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained.

LUNCH

- 23) The Board will recess for lunch and reconvene for the afternoon session.

REGULAR AGENDA - AFTERNOON

24) **2023 State of the Arts Report**

Community Organization/Outside Agency | Lynn Cooper - ICA, Sharon Freilich - ICA
20 minutes (10min. Presentation / 10min. Discussion)

Recommended Action: Receive a year-end "State of the Arts" report from the Inyo Council for the Arts.

ADDITIONAL PUBLIC COMMENT & REPORTS

25) **Public Comment**

Comments may be time-limited

26) **Board Member and Staff Reports**

Receive updates on recent or upcoming meetings and projects



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DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4306

**Introductions - The following new employees will be introduced to the Board: Heavy Equipment Operator Kelby Chirrick, Engineering Assistant Hasib Russ Rasooli, and Gate Attendant Edward (Ted) Ryan, Public Works; Laboratory Technician David Barasch, Environmental Health; Rehabilitation Specialist Ryan Navales, Probation; and Shelter Attendant Harlee Bardonnex, Correctional Officer Rosa Gonzalez, Shelter Attendant Joseph (Joe) Mulligan, and Correctional Officer Chad Rager, Sheriff's Office.
Board of Supervisors**

ITEM SUBMITTED BY

iooioi

ITEM PRESENTED BY

jhjhj

RECOMMENDED ACTION:

BACKGROUND / SUMMARY / JUSTIFICATION:

oioioi

FISCAL IMPACT:

| | | | |
|-----------------------------------|---|--------------------|--|
| Funding Source | General Fund / Non-General Fund / Grant Funded (list grant funding sources here) | Budget Unit | |
| Budgeted? | Yes / No | Object Code | |
| Recurrence | One-Time Expenditure / Ongoing Expenditure | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |

Additional Information

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

APPROVALS:

Darcy Ellis

Created -

Darcy Ellis

Darcy Ellis

Keri Oney

John Vallejo

Amy Shepherd

Nate Greenberg



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DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4335

Filling of Vacancy on Pioneer Cemetery District Board of Trustees Clerk of the Board ACTION REQUIRED

ITEM SUBMITTED BY

Clerk of the Board

ITEM PRESENTED BY

Assistant Clerk of the Board

RECOMMENDED ACTION:

Reappoint Ms. Diane Corsaro to a four-year term on the Pioneer Cemetery District Board of Trustees, ending December 27, 2027.

BACKGROUND / SUMMARY / JUSTIFICATION:

Your Board has appointing authority over the Pioneer Cemetery District Board of Trustees. One of three terms on the board expires December 27. Per your Board's policy, the upcoming vacancy was advertised and only one letter of interest was received - from Ms. Diane Corsaro, who currently holds the board seat.

Ms. Corsaro's letter is attached, along with a recommendation from the Pioneer Cemetery District Board of Trustees.

FISCAL IMPACT:

| | | | |
|-----------------------------------|-----|--------------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board may decline to make the appointment and/or ask staff to re-advertise the vacancy. Neither option is recommended.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. Diane Corsaro Letter of Interest 2023
2. Pioneer Cemetery District Board Recommendation 2023
3. Notice of Vacancy - Pioneer Cemetery District

APPROVALS:

| | |
|-------------|--------------------------------|
| Darcy Ellis | Created/Initiated - 11/29/2023 |
| Darcy Ellis | Final Approval - 11/29/2023 |

From: Diane Corsaro <diane@dianecinsurance.com>
Sent: Friday, November 17, 2023 4:55 PM
To: Darcy Ellis <dellis@inyocounty.us>
Subject: Pioneer Cemetery District Board of Trustees

Inyo County Board of Supervisors
P. O. Drawer N
Independence, CA 93526

My term on the Pioneer Board of Trustees expires on December 27, 2023 and I would like to apply to continue in this position for the next four year term ending December 27, 2027.

I feel like my terms on the board since 2001 have resulted in many of the things I wanted to see happen with our cemeteries.

We live in a very beautiful special place and it is very unique. I believe our cemeteries reflect that same beauty thanks to the work of the other trustees, myself and our staff.

We take our duties seriously as we all have loved one now resting in these very beautiful and peaceful places.

Sincerely

Diane Corsaro

311 Vista Rd.
Bishop, CA 93514
Nov. 22, 2023

Inyo County Board of Supervisors
P. O. Drawer N
Independence, CA 93526

Attention: Darcy Ellis

Dear Board Members,

I am writing in regard to Pioneer Cemetery District Board Member Diane Corsaro. Diane's term expires and she is asking to be appointed to the position again.

Diane is a longtime member of the Board. She is a local business owner and contributes much to our community and our area. Diane is a dedicated and caring member of the Board.

I am asking the Board's consideration to appoint Diane Corsaro to another term on the Pioneer Cemetery District in Bishop.

Sincerely,

A handwritten signature in cursive script that reads "Arlene Brierly Pearce". The signature is written in black ink and is positioned above the printed name.

Arlene Brierly Pearce

To the Inyo County Board of Supervisors:

As a fellow board member of the Pioneer Cemetery District, it has been a pleasure serving with Diane Corsaro.

She is very kind and caring towards others.

Her interest in the care and operation of our beautiful cemeteries is very important to her.

Please consider her for another Term, as it would be an honor to work with her.

Sincerely

Leslie Sott

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA,
COUNTY OF INYO

I am a citizen of the United States and a resident of the County aforesaid. I am over the age of eighteen years, And not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of the
The Inyo Register

County of Inyo

The Inyo Register has been adjudged a newspaper of general circulation by the Superior Court of the County of Inyo, State of California, under date of Oct. 5, 1953, Case Number 5414; that the notice, of which the annexed is a printed copy (set in type not smaller than non-pareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof, on the following date, to with:

November 18th,
In the year of **2023**

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Bishop, California, on this
20th Day of November, 2023



Signature

This space is for County Clerk's Filing Stamp

RECEIVED

NOV 27 2023

Inyo County Administrator
Clerk of the Board

Proof of Publication of Public Notice

**NOTICE OF VACANCY
PIONEER CEMETERY
DISTRICT BOARD OF
TRUSTEES**

NOTICE IS HEREBY GIVEN that the Inyo County Board of Supervisors is accepting letters of interest to fill one four-year term on the Pioneer Cemetery District Board of Trustees ending December 27, 2027.

Please submit your request for appointment to the Clerk of the Board of Supervisors at P.O. Drawer N, Independence, CA 93526 or dellis@inyocounty.us. In order for your request for appointment to be considered, it must be received on or before Monday, November 27 at 5:00 p.m. Postmarks are not accepted.

For more information, call (760) 878-0292. (IR 11.18, 2023 #21657)



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NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4323

Contract for Restrictive Covenant Modification & Records Modernization Project Clerk-Recorder ACTION REQUIRED

ITEM SUBMITTED BY

Danielle Sexton, Clerk/Recorder

ITEM PRESENTED BY

Danielle Sexton, Clerk/Recorder

RECOMMENDED ACTION:

- A) Declare Kofile Technology, Inc. of Dallas, Texas, the successful respondent to Inyo County RFP for “Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)” project;
- B) Authorize a contract be entered into with Kofile Technologies, Inc. for the Provision of Restrictive Covenant Modification & Records Modernization Services, in an amount not to exceed \$200,000 for the term of December 5, 2023 through December 4, 2025, contingent upon the Board’s adoption of future budgets; and
- C) Authorize the County Clerk-Recorder to sign the Agreement between County of Inyo and Kofile Technologies, Inc., contingent upon all appropriate signatures being obtained.

BACKGROUND / SUMMARY / JUSTIFICATION:

The Inyo County Clerk-Recorder’s Office houses more than 800,000 pages of Official Record documents in our repository consisting of a combination of paper historical books, microfiche, and scanned/digital images. It is the goal of this project to convert over 200,000 non-digital records to an interoperable, non-proprietary TIFF format which can be imported into our Tyler Eagle Recorder system, including the pre-population of indexing fields. It is additionally our goal to have all 800,000+ pages of records converted to an interoperable, non-proprietary OCR/ICR format which supports high-level indexing for search, retrieval, and information access.

Furthermore, per the regulations of AB 1466 (2021), all records need to be reviewed to ensure that discriminatory restrictive covenants are identified and redacted via a multi-departmental digital workflow involving a combination of automation and human analysis. The history of restrictive covenant modification and our Implementation Plan is posted on our website at: <https://www.inyocounty.us/services/clerk-recorder/restrictive-covenant-modifications>

On June 12, 2023, the County of Inyo, Clerk-Recorder Office advertised a Request For Proposal for “Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)” project.

Four (4) proposals were received by the submittal due date of July 21, 2023. An evaluation panel consisting of the Inyo County Clerk-Recorder Officer, Appointed Assistant Clerk-Recorder, and Inyo County Chief Information Officer reviewed and rated all four of the proposals. The proposal submitted on behalf of Kofile Technologies, Inc. (Kofile) was determined to be the proposal that could best address

and fulfill the needs of Inyo County in the successful completion of this project.

Kofile’s proposal addressed all requirements that were stipulated in the RFP, they had excellent references, and their proposal was also the lowest based on lateral comparison of quantities and services among all bids received.

Considerations:

- They were the lowest bid in both preserving historical records, digitizing, and providing a AB1466 workflow redaction platform. As such, we will be able to expand on their additional services to further enhance our original scope of historical record preservation and conversion, and not exceed our approved budget.
- Kofile’s AB1466 solution platform uses smart technology to weed out false positives, then their staff manually review each document that contains the searched terms before it is routed to our staff. The system includes tools and flexible options for selecting and changing selected text to redact, auto-populates forms including signatures of the users performing the tasks, provides the correct file formats, and provides all required reports.
- Kofile is well known as a historical document imaging vendor with high quality imaging services. All of our records to date that have been preserved on microfilm and physical book preservation have been done by Kofile. While they are a California-based company, their restoration building is located in Carson City. Kofile will personally transport our books that must be digitized, and are conveniently located for us to visit their office. As such, books will never be shipped between us and them. There is no additional fee for transportation.

FISCAL IMPACT:

| | | | |
|-----------------------------------|--|--------------------|--------|
| Funding Source | Non-General Fund –Operating Transfer from the American Rescue Plan Act Funds (ARPA). | Budget Unit | 023401 |
| Budgeted? | Yes | Object Code | 5265 |
| Recurrence | One-Time Expenditures over three (3) fiscal years | | |
| Current Fiscal Year Impact | | | |
| \$100,000 | | | |
| Future Fiscal Year Impacts | | | |
| \$100,000 | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board can deny the requests which would result in either future reviews of vendor selections, or not having the ability to be in compliance with CA AB 1466 regulations, and will leave our historical documents vulnerable to damage or loss by lack of preservation.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

County Counsel
Information Services

ATTACHMENTS:

1. Inyo-Kofile Agreement
2. Kofile Attachments A-1 & B-1
3. RFP-AB1466 RCM Modernization
4. 4 Received Vendor Quotes - Confidential Redacted by Vendors

APPROVALS:

| | |
|-----------------|--------------------------------|
| Danielle Sexton | Created/Initiated - 11/20/2023 |
| Darcy Ellis | Approved - 11/27/2023 |
| Danielle Sexton | Approved - 11/27/2023 |
| John Vallejo | Approved - 11/27/2023 |
| Amy Shepherd | Approved - 11/28/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

AGREEMENT BETWEEN COUNTY OF INYO

AND _____
FOR THE PROVISION OF _____ SERVICES

INTRODUCTION

WHEREAS, the County of Inyo (hereinafter referred to as "County") may have the need for the _____ services of _____ of _____ (hereinafter referred to as "Contractor"), and in consideration of the mutual promises, covenants, terms, and conditions hereinafter contained, the parties hereby agree as follows:

TERMS AND CONDITIONS

1. SCOPE OF WORK.

The Contractor shall furnish to the County, upon its request, those services and work set forth in Attachment A, attached hereto and by reference incorporated herein. Requests by the County to the Contractor to perform under this Agreement will be made by _____, whose title is: _____. Requests to the Contractor for work or services to be performed under this Agreement will be based upon the County's need for such services. The County makes no guarantee or warranty, of any nature, that any minimum level or amount of services or work will be requested of the Contractor by the County under this Agreement. County by this Agreement incurs no obligation or requirement to request from Contractor the performance of any services or work at all, even if County should have some need for such services or work during the term of this Agreement.

Services and work provided by the Contractor at the County's request under this Agreement will be performed in a manner consistent with the requirements and standards established by applicable federal, state, and County laws, ordinances, regulations, and resolutions. Such laws, ordinances, regulations, and resolutions include, but are not limited to, those which are referred to in this Agreement.

2. TERM.

The term of this Agreement shall be from _____ to _____ unless sooner terminated as provided below.

3. CONSIDERATION.

A. Compensation. County shall pay to Contractor in accordance with the Schedule of Fees (set forth as Attachment B) for the services and work described in Attachment A which are performed by Contractor at the County's request.

B. Travel and per diem. Contractor will not be paid or reimbursed for travel expenses or per diem which Contractor incurs in providing services and work requested by County under this Agreement.

C. No additional consideration. Except as expressly provided in this Agreement, Contractor shall not be entitled to, nor receive, from County, any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement. Specifically, Contractor shall not be entitled, by virtue of this Agreement, to consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays, or other paid leaves of absence of any type or kind whatsoever.

D. Limit upon amount payable under Agreement. The total sum of all payments made by the County to Contractor for services and work performed under this Agreement shall not exceed _____ Dollars

(\$ _____) (hereinafter referred to as "contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed which is in excess of the contract limit.

E. Billing and payment. Contractor shall submit to the County, once a month, an itemized statement of all services and work described in Attachment A, which were done at the County's request. This statement will be submitted to the County not later than the fifth (5th) day of the month. The statement to be submitted will cover the period from the first (1st) day of the preceding month through and including the last day of the preceding month. This statement will identify the date on which the services and work were performed and describe the nature of the services and work which were performed on each day. Upon timely receipt of the statement by the fifth (5th) day of the month, County shall make payment to Contractor on the last day of the month.

F. Federal and State taxes.

(1) Except as provided in subparagraph (2) below, County will not withhold any federal or state income taxes or social security from any payments made by County to Contractor under the terms and conditions of this Agreement.

(2) County will withhold California State income taxes from payments made under this Agreement to non-California resident independent contractors when it is anticipated that total annual payments to Contractor under this Agreement will exceed one thousand four hundred ninety nine dollars (\$1,499.00).

(3) Except as set forth above, County has no obligation to withhold any taxes or payments from sums paid by County to Contractor under this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Contractor. County has no responsibility or liability for payment of Contractor's taxes or assessments.

(4) The total amounts paid by County to Contractor, and taxes withheld from payments to non-California residents, if any, will be reported annually to the Internal Revenue Service and the California State Franchise Tax Board. To facilitate this reporting, Contractor shall complete and submit to the County an Internal Revenue Service (IRS) Form W-9 upon executing this Agreement.

4. WORK SCHEDULE.

Contractor's obligation is to perform, in a timely manner, those services and work identified in Attachment A which are requested by the County. It is understood by Contractor that the performance of these services and work will require a varied schedule. Contractor will arrange his/her own schedule, but will coordinate with County to ensure that all services and work requested by County under this Agreement will be performed within the time frame set forth by County.

5. REQUIRED LICENSES, CERTIFICATES, AND PERMITS.

A. Any licenses, certificates, or permits required by the federal, state, county, municipal governments, for contractor to provide the services and work described in Attachment A must be procured by Contractor and be valid at the time Contractor enters into this Agreement or as otherwise may be required. Further, during the term of this Agreement, Contractor must maintain such licenses, certificates, and permits in full force and effect. Licenses, certificates, and permits may include, but are not limited to, driver's licenses, professional licenses or certificates, and business licenses. Such licenses, certificates, and permits will be procured and maintained in force by Contractor at no expense to the County. Contractor will provide County, upon execution of this Agreement, with evidence of current and valid licenses, certificates and permits which are required to perform the services identified in Attachment A. Where there is a dispute between Contractor and County as to what licenses, certificates, and permits are required to perform the services identified in Attachment A, County reserves the right to make such determinations for purposes of this Agreement.

B. Contractor warrants that it is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in covered transactions by any federal department or agency. Contractor also warrants that it is not suspended or debarred from receiving federal funds as listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs issued by the General Services Administration available at: <http://www.sam.gov>.

6. OFFICE SPACE, SUPPLIES, EQUIPMENT, ET CETERA.

Contractor shall provide such office space, supplies, equipment, vehicles, reference materials, and telephone service as is necessary for Contractor to provide the services identified in Attachment A to this Agreement. County is not obligated to reimburse or pay Contractor, for any expense or cost incurred by Contractor in procuring or maintaining such items. Responsibility for the costs and expenses incurred by Contractor in providing and maintaining such items is the sole responsibility and obligation of Contractor.

7. COUNTY PROPERTY.

A. Personal Property of County. Any personal property such as, but not limited to, protective or safety devices, badges, identification cards, keys, etc. provided to Contractor by County pursuant to this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of County. Contractor will use reasonable care to protect, safeguard and maintain such items while they are in Contractor's possession. Contractor will be financially responsible for any loss or damage to such items, partial or total, which is the result of Contractor's negligence.

B. Products of Contractor's Work and Services. Any and all compositions, publications, plans, designs, specifications, blueprints, maps, formulas, processes, photographs, slides, video tapes, computer programs, computer disks, computer tapes, memory chips, soundtracks, audio recordings, films, audio-visual presentations, exhibits, reports, studies, works of art, inventions, patents, trademarks, copyrights, or intellectual properties of any kind which are created, produced, assembled, compiled by, or are the result, product, or manifestation of, Contractor's services or work under this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of the County. At the termination of the Agreement, Contractor will convey possession and title to all such properties to County.

8. INSURANCE.

For the duration of this Agreement Contractor shall procure and maintain insurance of the scope and amount specified in Attachment C and with the provisions specified in that attachment.

9. STATUS OF CONTRACTOR.

All acts of Contractor, its agents, officers, and employees, relating to the performance of this Agreement, shall be performed as independent contractors, and not as agents, officers, or employees of County. Contractor, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of County. Except as expressly provided in Attachment A, Contractor has no authority or responsibility to exercise any rights or power vested in the County. No agent, officer, or employee of the Contractor is to be considered an employee of County. It is understood by both Contractor and County that this Agreement shall not under any circumstances be construed or considered to create an employer-employee relationship or a joint venture. As an independent contractor:

A. Contractor shall determine the method, details, and means of performing the work and services to be provided by Contractor under this Agreement.

B. Contractor shall be responsible to County only for the requirements and results specified in this Agreement, and except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Contractor in fulfillment of this Agreement.

C. Contractor, its agents, officers, and employees are, and at all times during the term of this Agreement shall, represent and conduct themselves as independent contractors, and not as employees of County.

10. DEFENSE AND INDEMNIFICATION.

Contractor shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with Contractor's performance of work hereunder or its failure to comply with any of its obligations contained in the agreement, except such loss or damages which was caused by the sole negligence or willful misconduct of the County.

11. RECORDS AND AUDIT.

A. Records. Contractor shall prepare and maintain all records required by the various provisions of this Agreement, federal, state, county, municipal, ordinances, regulations, and directions. Contractor shall maintain these records for a minimum of four (4) years from the termination or completion of this Agreement. Contractor may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, microphotographs, or other authentic reproduction of such records.

B. Inspections and Audits. Any authorized representative of County shall have access to any books, documents, papers, records, including, but not limited to, financial records of Contractor, which County determines to be pertinent to this Agreement, for the purposes of making audit, evaluation, examination, excerpts, and transcripts during the period such records are to be maintained by Contractor. Further, County has the right, at all reasonable times, to audit, inspect, or otherwise evaluate the work performed or being performed under this Agreement.

12. NONDISCRIMINATION.

During the performance of this Agreement, Contractor, its agents, officers, and employees shall not unlawfully discriminate in violation of any federal, state, or local law, against any employee, or applicant for employment, or person receiving services under this Agreement, because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex. Contractor and its agents, officers, and employees shall comply with the provisions of the Fair Employment and Housing Act (Government Code section 12900, et seq.), and the applicable regulations promulgated thereunder in the California Code of Regulations. Contractor shall also abide by the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said act.

13. CANCELLATION.

This Agreement may be canceled by County without cause, and at will, for any reason by giving to Contractor thirty (30) days written notice of such intent to cancel. Contractor may cancel this Agreement without cause, and at will, for any reason whatsoever by giving thirty (30) days written notice of such intent to cancel to County.

14. ASSIGNMENT.

This is an agreement for the services of Contractor. County has relied upon the skills, knowledge, experience, and training of Contractor as an inducement to enter into this Agreement. Contractor shall not assign or subcontract this Agreement, or any part of it, without the express written consent of County. Further, Contractor shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

15. DEFAULT.

If the Contractor abandons the work, or fails to proceed with the work and services requested by County in a timely manner, or fails in any way as required to conduct the work and services as required by County, County may declare the Contractor in default and terminate this Agreement upon five (5) days written notice to Contractor. Upon such termination by default, County will pay to Contractor all amounts owing to Contractor for services and work satisfactorily performed to the date of termination.

16. WAIVER OF DEFAULT.

Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided in paragraph twenty-two (22) below.

17. CONFIDENTIALITY.

Contractor further agrees to comply with the various provisions of the federal, state, and county laws, regulations, and ordinances providing that information and records kept, maintained, or accessible by Contractor in the course of providing services and work under this Agreement, shall be privileged, restricted, or confidential. Contractor agrees to keep confidential all such information and records. Disclosure of such confidential, privileged, or protected information shall be made by Contractor only with the express written consent of the County. Any disclosure of confidential information by Contractor without the County's written consent is solely and exclusively the legal responsibility of Contractor in all respects.

Notwithstanding anything in the Agreement to the contrary, names of persons receiving public social services are confidential and are to be protected from unauthorized disclosure in accordance with Title 45, Code of Federal Regulations Section 205.50, the Health Insurance Portability and Accountability Act of 1996, and Sections 10850 and 14100.2 of the Welfare and Institutions Code, and regulations adopted pursuant thereto. For the purpose of this Agreement, all information, records, and data elements pertaining to beneficiaries shall be protected by the provider from unauthorized disclosure.

18. CONFLICTS.

Contractor agrees that it has no interest, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the work and services under this Agreement.

19. POST AGREEMENT COVENANT.

Contractor agrees not to use any confidential, protected, or privileged information which is gained from the County in the course of providing services and work under this Agreement, for any personal benefit, gain, or enhancement. Further, Contractor agrees for a period of two years after the termination of this Agreement, not to seek or accept any employment with any entity, association, corporation, or person who, during the term of this Agreement, has had an adverse or conflicting interest with the County, or who has been an adverse party in litigation with the County, and concerning such, Contractor by virtue of this Agreement has gained access to the County's confidential, privileged, protected, or proprietary information.

20. SEVERABILITY.

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state, or county statute, ordinance, or regulation, the remaining provisions of this Agreement, or the application thereof, shall not be invalidated thereby, and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

21. FUNDING LIMITATION.

The ability of County to enter this Agreement is based upon available funding from various sources. In the event that such funding fails, is reduced, or is modified, from one or more sources, County has the option to cancel, reduce, or modify this Agreement, or any of its terms within ten (10) days of its notifying Contractor of the cancellation, reduction, or modification of available funding. Any reduction or modification of this Agreement made pursuant to this provision must comply with the requirements of paragraph twenty-two (22) (Amendment).

22. AMENDMENT.

This Agreement may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement, and attached to the original Agreement to maintain continuity.

23. NOTICE.

Any notice, communication, amendments, additions, or deletions to this Agreement, including change of address of either party during the terms of this Agreement, which Contractor or County shall be required, or may desire, to make, shall be in writing and may be personally served, or sent by prepaid first class mail to, the respective parties as follows:

County of Inyo

_____ Department
Address
City and State

Contractor:

_____ Name
Address
City and State

24. ENTIRE AGREEMENT.

This Agreement contains the entire agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties not embodied herein or incorporated herein by reference, shall be of any force or effect. Further, no term or provision hereof may be changed, waived, discharged, or terminated, unless the same be in writing executed by the parties hereto.

////

////

AGREEMENT BETWEEN COUNTY OF INYO

AND _____

FOR THE PROVISION OF _____ SERVICES

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS _____ DAY OF _____, _____.

COUNTY OF INYO

CONTRACTOR

By: _____
Signature

By: _____
Signature

Print or Type Name

Print or Type Name

Dated: _____

Dated: _____

APPROVED AS TO FORM AND LEGALITY:

County Counsel

APPROVED AS TO ACCOUNTING FORM:

County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

Personnel Services

APPROVED AS TO INSURANCE REQUIREMENTS:

County Risk Manager

ATTACHMENT A

AGREEMENT BETWEEN COUNTY OF INYO

AND _____
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SCOPE OF WORK:

ATTACHMENT B

AGREEMENT BETWEEN COUNTY OF INYO

AND _____
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SCHEDULE OF FEES:

ATTACHMENT C

AGREEMENT BETWEEN COUNTY OF INYO

AND _____
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SEE ATTACHED INSURANCE PROVISIONS

Attachment A-1

Scope of Work

Restrictive Covenant Modification Scope of Work Includes:

- OCR & logical evaluation of every image (reportable)
- Human review of all images flagged by logical system by Kofile (reportable)
- Redaction of all discriminatory restrictive covenants by Kofile (reportable)
- Autofill Restrictive Covenant Modification (RCM) form (reportable)
- Secure County Clerk-Recorder portal for review & approval (reportable)
- Secure County Council portal for final approval (reportable)
- Quality Assurance program (reportable)
- Reporting & Audit Trail for every document & image
- Format images & data using PRIA XML Standards for import into records management system

Minimum Requirements:

- Images must be grouped into documents
- Documents must be accompanied with all index data required for RCM form

Secure Portal Setup & Project Management:

- Setup SFTP server for secure file transfer
- Normalization of incoming images & metadata
- Setup County Clerk-Recorder & County Council Secure Web Portal
- Dedicated Project Manager & Status Reports

Annual Licensing, Hosting, Maintenance, & Support:

- Licenses & hosting of County Clerk-Recorder portal for review & approval
- Licenses & hosting of County Council portal for final approval
- Software Maintenance
- Email Support

Custom Development Professional Services:

- Custom formatting of final images & data
- Other custom development work

(Optional)

PDF/A Versions of Non-Redacted Items

(Optional)

Micrographics/Microforms Scope of Work includes:

- Capture images at 300 dpi in black and white
- Accumulate images as Group IV bi-tonal images in a TIFF format
- Automated threshold clean-up, de-skew, de-speckle, background control, text enhancement, etc.
Auto crop images to remove excess border.
- Split scanned frames into individual images/pages
- Images named by Book # and Page #
- Apply Multi-level Quality Control (QC) for data and images
- For Digitization, the County receives a MASTER (e.g., external hard drive, CD, DVD, SFTP, flash drive) in a medium suitable to the project size. There is no additional cost from Kofile for the County's preferred medium. Use of SFTP eliminates the California Sales & Use Tax.

Attachment A-1

Scope of Work

Image Capture, Processing, File Naming, and System Formatting

- Capture images at a minimum of 300 dpi bi-tonal (black and white).
- Images accumulate as Group IV bi-tonal images in a standard TIFF format.
- At capture, Kofile performs custom image control to ensure a quality image, such as orientation, brightness, contrast adjustments, cropping of blank space, color dropout, deskew, despeckle.
- Images are named (tagged for the directory file structure) by Book/Volume/Page.
- Page Validation (automated PG. numbering for validation).
- Each image is certified and sight-checked to ensure there are no missing pages, double feeds, and to account for “A” pages (added to the original).
- Indexing (file naming) per Book & Page.
- Formatting for the target records management system.
- For Digitization, the County receives a MASTER (e.g., external hard drive, CD, DVD, SFTP, flash drive) in a medium suitable to the project size. There is no additional cost from Kofile for the County’s preferred medium. Use of SFTP eliminates the California Sales & Use Tax.

Services in Addition to the Bullets Above—Image Clean-Up & Zonal Enhancements

- Images accumulate as Group IV greyscale images in a standard TIFF format.
- Utilization of Image Perfect, Kofile’s proprietary software, to ensure the optimum image quality and uniformity with custom image clean up and enhancements, such as border removal, deskew, despeckle, character repair, and zonal processing.
- Photostat polarity reversal (so all characters are black on a positive background). The document certification strip (file strip) is inverted to match the polarity of the final image.

PRICING ASSUMPTIONS

- Pricing is all inclusive of required services, including all labor, equipment, and supplies.
- Any applicable sales tax are the responsibility of the County at the current rate. Taxes Any billing is subject to current effective and applicable tax rates. Taxes on digitization services are waived if images are delivered via SFTP transfer or electronic transfer (see herein for more information).
- Pricing is based on a Good Faith Estimate of page and document counts. Billing occurs on actuals, not to exceed the P.O. without authorization.
- A page is defined as one side of a sheet of paper (which contains two pages). Each page is one image unless it contains multiple record entries (e.g., Deed Record). In those instances, the documents are separated into separate images. Blanks are not imaged, unless otherwise directed by the County. Amendments and attachments are charged as images.
- Pages in which the shortest edge measures <12” are oversized and incur additional charges for imaging.
- Kofile certifies each image. Quality control includes two instances of human eye sight verification for each.
- The County signs off on an inventory prior to commencement of services, and upon acceptance of deliverables.

Attachment A-1

Project Scope – Optional Additional Services

Preservation & Microfilm

(PRV) Preservation—Conservation Treatments, Deacidify, Encapsulate, & Bind

- A permanent log is created for each volume to record condition, page order, and services/treatments. A final quality check references this log.
- Dismantle volumes. Sheets are inspected and control numbered as necessary.
- Surface clean sheets to remove materials and deposits—e.g., dust, soot, airborne particulate, sediment from water damage, mold/mildew residue, active micro-organics, insect detritus, or biological/mineral contaminants. Tools include a microspatula, soft dusting brush, latex sponge, powdered vinyl eraser, or soft block eraser.
- Flatten and humidify sheets, as needed. Tools to ‘flatten’ documents include tacking irons, heat presses, and a custom Ultrasonic Humidification Chamber (also known as a paper suction table).
- Remove any non-archival repairs, adhesives, residual glues, or fasteners to the extent possible without causing damage to paper and inks.
- Mend tears and guard burns on back side of sheets with acid free and reversible mending materials. Sheets are mended with either Japanese tissue and methyl cellulose adhesive or Filmoplast R® (an acrylic-based, heat set tissue). Japanese paper usually utilized is Kozo paper, in both natural and white finish, because of its strength and transparent nature after application.
- Deacidify sheets (each side of each sheet) after careful testing with Bookkeepers®. This commercial solution of magnesium oxide, which neutralizes acidic inks and paper by providing an alkaline reserve (after pH and compatibility testing). Random testing ensures an 8.5 pH with a deviation of no more than $\pm .5$.
- Encapsulate each sheet in a Lay Flat Archival Polyester Pocket™. Each custom envelope is composed of Skyroll SH72S® Mylar and includes a patented lay flat design. Dimensions match the “book block” dimensions, with a 1¼” binding margin.
- Re-bind in custom-fitted and stamped binder. Kofile can manufacture custom binder sizes, shapes, spines, colors, and lettering. Binders feature a durable spine and cover boards to support the pages’ weight. All materials, including the cover boards and adhesives, are acid free. The Heritage Recorder Binder is identified for the all the inventory.
- Tooling is performed with 23-karat gold foil. A stamping sheet is sent to the County for approval. If any titling, dates, or other information from an original volume is noted in error, the County approves any changes.
- Index tabs are repaired or replaced, as necessary.
- A volume may return split, depending on page count and the additional weight of the Mylar encapsulation.
- A dedication/treatment report is included in the binder.

Attachment A-1

Project Scope – CdhjcbU`5 XX]h]cbU`GYfj]Wg

(MM) Archival Microfilm

- Archival silver microfilm is produced in 16mm from the processed digital images. (Large format images are captured on 35mm, as they cannot compress to 16mm without resolution loss.)
- Microfilm serves as a security backup for disaster recovery. Microfilm is EPM's Life Expectancy (LE) 500 years ImageLink. Each box is labeled to identify its contents.

(IM) Imaging

- Imaging being completed during the restrictive covenant modification project.

Attachment B-1 Schedule of Fees

| MEDIA | FORMAT | QUANTITY | SOURCE OF QUANTITY | UNIT PRICE | LINE TOTAL | SOLUTION TOTAL |
|---|---|---|---|------------------------------|--|--------------------|
| RESTRICTIVE COVENANT MODIFICATION | | | | | | |
| Digital Image | Manuscript (Handwritten) | 35,388 Images | RFP & Site Assessment | \$0.10 /Image | \$3,538.80 | \$49,725.32 |
| | Typescript (Typed) | 815,852 Images | | \$0.037/ Image | \$30,186.52 | |
| Secure Portal Setup & Project Management | | | | \$7,500 (One-time) | \$7,500.00 | |
| Annual Licensing, Hosting, Maintenance, & Support | | | | \$8,500 (Annual) | \$8,500.00 | |
| OPTIONAL—Custom Development Professional Services | | | | \$175.00 / Hour | <i>AS NEEDED</i> | |
| OPTIONAL—PDF/A of Non-Redacted Images <i>[Note, all redacted images are output to multi-page PDF/A with an OCR text layer per Kofile’s standard level of service]</i> | | | | \$0.05 / Image | <i>AS NEEDED</i> | |
| RECORDS MODERNIZATION SERVICES - PAPER TO DIGITAL | | | | | | |
| Volume/ Document | Positive Typescript/Loose Leaf | As Needed: <i>Unk.</i> | <i>Unk.</i> | \$0.45 / Image | <i>AS NEEDED</i> | \$12,784.05 |
| | Image Cleanups & Zonal Enhancements* | As Needed: <i>Unk.</i> | <i>Unk.</i> | Addition of \$0.30 / Image* | <i>AS NEEDED</i> | |
| | Bound (e.g., Sewn) Volume | Records Not on Film: (4 Vols. Indexes) 1,020 Images As Needed: <i>Unk.</i> | Site Assessment As Needed: <i>Unk.</i> | \$1.49 / Image* | Site Assessment: \$1,519.80 <i>AS NEEDED</i> | |
| | Oversized (shortest sheet edge measures greater than 12") | Records Not on Film: (16 Vols. Indexes) 6,805 Images As Needed: <i>Unk.</i> | Site Assessment As Needed: <i>Unk.</i> | \$1.65 / Image* | Site Assessment: \$11,228.25 <i>AS NEEDED</i> | |
| | Negative Photostat | As Needed: <i>Unk.</i> | <i>Unk.</i> | \$0.75 / Image** | <i>AS NEEDED</i> | |
| RECORDS MODERNIZATION SERVICES - MICROGRAPHIC TO DIGITAL | | | | | | |
| Microfiche | Step & Repeat | 60,979 Images | RFP | \$0.045 / Image | \$2,744.05 | \$11,548.86 |
| | Jacketed | 145,621 Images | RFP | \$0.045 / Image | \$6,552.94 | |
| | Image Cleanups & Zonal Enhancements** | Approx. 16,185 Images | Good Faith Estimate of 30% of Images | Addition of \$0.35 / Image** | <i>AS NEEDED</i> | |
| Aperture Card | | 30,025 Images (2 Images Per Card) | RFP | \$0.075 / Image | \$2,251.87 | |
| | | | | | PROJECT TOTAL | \$74,022.23 |

As Needed Preservation Services – Records in Good Condition

- Standard Sized Page \$5.50 / page
- Case File \$5.50 / page
- Oversized Page (Up to 20") \$6.60 / page
- Map/Plat (Over 60" Req Special Pricing) \$190.00 per hour

Attachment B-1

Schedule of Fees

This proposal shall be governed by the terms of use found at www.kofile.com/termsandconditions/.

Payment Terms: Pay 25% upon executed agreement and two 25% payments at equal periods through the estimated production completion date, with the balance due upon project completion. Actual payment dates to be determined prior to work beginning.

CUSTOMER ACCEPTANCE

Signature Authorized Official

Title of Authorized Official

Date

KOFILE ACCEPTANCE

Signature Authorized Official

Title of Authorized Official

Date

ACCESSIBILITY OF RECORDS

Records held at Kofile are maintained as private and confidential material. Inyo County is guaranteed access to records via email or toll-free fax at our expense. Upon receipt of a records request, Kofile will flag the requested record and verify inventory control, pull supporting paperwork, and email/fax a response to the approved requester or alternate. The turnaround time for a records request will meet or exceed requirements.

Please note that all records (including volumes, documents, digital images, metadata or microfilm) serviced by Kofile shall remain the property of Inyo County. This policy applies to any agreement, verbal or written, between Inyo County and Kofile.

The records are not used by Kofile other than in connection with providing the services pursuant to any agreement between Kofile and Inyo County. The records are not commercially exploited by or on behalf of Kofile, its employees, officers, agents, in-vitees or assigns, in any respect.

Please let me know if you have any questions. We look forward to serving Inyo County and to working together for the preservation and access of its public and historical assets.

Sincerely,

Angelique Nasser

Angelique Nasser

c: 916.266.3292

e: angelique.nasser@kofile.com

Attachment B-1

Fee Schedule for Optional Additional Services

Without a signed agreement, prices are good for 90 days. Pricing is based on estimated page counts and condition levels. Pricing is finalized upon review at the Kofile lab. Billing occurs on actuals per mutually agreed upon pricing, not to exceed the P.O. without authorization.

| Inyo County | | | | | | | |
|------------------|------------|------------|-------------|-----------|------------------|------------|-----------------|
| Project Overview | | | | | | | |
| Record Series | Page Count | Book Count | Format | Condition | Level of Service | | Estimated Total |
| | | | | | Preservation | Microfilm | |
| Index to Deeds | 1,020 | 4 | Typed | Fair | \$5,610.00 | \$600.00 | \$6,852.60 |
| General Index | 6,805 | 16 | Handwritten | Poor | \$47,993.00 | \$2,400.00 | \$61,621.25 |
| PROJECT TOTAL | | | | | \$53,603.00 | \$3,000.00 | \$68,473.85 |

This proposal shall be governed by the terms of use found at www.kofile.com/termsandconditions/.

Payment Terms: 50% due upon contract execution and balance due upon project completion.

CUSTOMER ACCEPTANCE

KOFILE ACCEPTANCE

Signature Authorized Official

Signature Authorized Official

Title of Authorized Official

Title of Authorized Official

Date

Date

Attachment B-1

Fee Schedule for Optional Additional Services

ACCESSIBILITY OF RECORDS

Records held at Kofile are maintained as private and confidential material. Kings County is guaranteed access to records via email or toll-free fax at our expense. Upon receipt of a records request, Kofile will flag the requested record and verify inventory control, pull supporting paperwork, and email/fax a response to the approved requester or alternate. The turnaround time for a records request will meet or exceed requirements.

Please note that all records (including volumes, documents, digital images, metadata or microfilm) serviced by Kofile shall remain the property of Kings County. This policy applies to any agreement, verbal or written, between Kings County and Kofile.

The records are not used by Kofile other than in connection with providing the services pursuant to any agreement between Kofile and Kings County. The records are not commercially exploited by or on behalf of Kofile, its employees, officers, agents, invitees or assigns, in any respect.

Please let me know if you have any questions. We look forward to serving Kings County and to working together for the preservation and access of its public and historical assets.

Sincerely,

Angelique Nasser

Angelique Nasser

c: 916.266.3292

e: angelique.nasser@Kofile.com



Clerk-Recorder/Elections Office County of Inyo

Danielle M Sexton
Clerk-Recorder, Registrar of Voters

P. O. Drawer F • 168 N. Edwards St • Independence, CA 93526
Tel: (760) 878-0220 • Fax (760) 878-1805
<https://www.inyocounty.us/services/clerk-recorder>
<https://elections.inyocounty.us/>

Request For Proposal (RFP)

Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)

Opening Date: June 12, 2023

Closing Date: July 21, 2023

RFP Website: <https://www.inyocounty.us/services/county-administrators-office/bid-request-rfp>

We are requesting project quotes for implementation and on-going processing of our AB1466 program as outlined in our *Restrictive Covenant Modification (RCM)-Implementation Plan*, posted on our Clerk-Recorder website and with the specifications included within this RFP.

- If your services include any other fees not expressly requested within, please include all and any services and/or expenses that may be incurred.
- Please indicate if the services you are quoting are all-inclusive or if partial services for the full project are available. For clarity, please use the summary table on Page 7 and ensure it is consistent with your detailed response.
- Please include an approximate timeline of implementation.
- Please contact our office per the Contact Information below if you have any questions or require any clarification. All questions we receive will be shared among all bidders that have contacted us expressing interest in submitting a bid.

Clerk-Recorder Contact Information:

Physical/Shipping Location: 168 N. Edwards Street, Independence, CA 93526

Mailing Address: PO Drawer F, Independence, CA 93526

Danielle M. Sexton, Inyo County Clerk Recorder/ROV

760-878-0220

dsexton@inyocounty.us

Caroline Nott, Assistant to the Clerk Recorder

760-878-2155

cnott@inyocounty.us

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| ATTACHMENT C: 2021 Assembly Bill No. 1466 | |
| ATTACHMENT D: Restrictive Covenant Modification Implementation Plan | |
| ATTACHMENT E: Restrictive Covenant Modification Form (recording cover page) | |
| ATTACHMENT F: AB 1466 Restrictive Covenant - Search List | |

Additional Resources

Our RCM website: <https://www.inyocounty.us/services/clerk-recorder/restrictive-covenant-modifications>

- [Restrictive Covenant Modification Implementation Plan \(click on this link, or find on our website\)](#)
- [Restrictive Covenant Modification Form-AB1466 - INYO \(click on this link, or find on our website\)](#)

The [Inyo County Purchasing and Contracting Policy](#) is available on Inyo County’s website <https://www.inyocounty.us/government/publications-reports-plans-proclamations/policies-mous> in the Fiscal Policies section.

Schedule of Events

| Event | Date |
|--|----------------------------|
| RFP made available to prospective bidders | June 12, 2023 |
| Written Confirmation of Vendors with Bid Intention | June 19, 2023 |
| Questions from Vendors about scope or approach due | June 29, 2023 |
| Responses to Vendors about scope or approach due | July 6, 2023 |
| Quote Submissions Due Date & Time | July 21, 2023 – 5:00pm PDT |
| Target Date for Review of Proposals | July 28, 2023 |

General Instructions

Our office follows the [Inyo County Purchasing and Contracting Policy](https://www.inyocounty.us/government/publications-reports-plans-proclamations/policies-mous). The Policy can be found on the county's website <https://www.inyocounty.us/government/publications-reports-plans-proclamations/policies-mous> in the Fiscal Policies section.

Registering as a Respondent. It is strongly recommended that any interested respondent email the contact persons listed above to indicate that they will be submitting a bid and wish to be registered as a respondent. Registering as a respondent is not mandatory, but it will ensure that you receive any updated bid documents or relevant information. Registration emails must contain the Identifying Title in the subject line and should be sent from the email address at which respondents want to receive updates.

Submission process. Respondents must submit responses by mail to: **PO Drawer F, Independence, CA, 93526;** or ship to **168 N. Edwards Street, Independence, CA 93526.** Responses must be received by the closing date noted above. It is recommended that you mail your response well in advance to ensure that it arrives on or before the closing date. Response documents must be placed inside a sealed envelope, which is then placed within a mailing envelope. The inner envelope containing the response documents must be clearly marked with the following:

AB1466 - Restrictive Covenant Modification Project
SEALED QUOTE ENCLOSED. DO NOT OPEN UNTIL JULY 28, 2023.

Public Nature of Submissions. Pursuant to the California Public Records Act ("PRA"), all responses to this RFP/RFP are considered public records that will be disclosable upon request. If you believe that information contained within your bid documents is confidential, trade secret, or otherwise exempt from disclosure under the PRA, you must clearly stamp each page that you believe contains confidential information with a header that states "CONFIDENTIAL" in at least 12-point type. Please note that stamping your response as such does not guarantee that it will never be disclosed. Pursuant to Inyo County's obligations under the PRA, the County will independently assess assertions of confidentiality.

Challenges to the Bidding Process. Any respondent who wishes to challenge the County's handling of the procurement process must do so via the mandatory administrative procedure set forth in Inyo County Code Chapter 6.30.

Contracting Preferences. Pursuant to Inyo County Code Chapter 6.06, Inyo County contracting preference for small and/or local businesses applies. To be eligible for the preferences, a business must provide a certification that it is a small and/or local business as defined by Inyo County Code § 6.06.020 with its bid.

Questions and Additional Information. Respondents who have a question about any aspect of the procurement process must put the question in writing and email it to the contact listed above. The answer to any questions will be publicly posted and emailed to all registered respondents to ensure that all respondents are working from the same information. Respondents should not reveal the anticipated contents of their response when asking questions.

Evaluation of Responses. The County will evaluate all submissions based on the totality of their responses. A respondent's inability to provide a certain service is not necessarily disqualifying, as the County will consider which submission as a whole will provide the best service. Similarly, the County is not obligated to choose the respondent who can provide the requested services for the lowest amount of money. Rather, the County will consider which respondent provides the best overall value, taking into account both price and quality.

The successful respondent will be expected to enter into an Inyo County Standard Contract No. 116, a copy of which is attached.

Background

The Inyo County Clerk-Recorder's Office houses more than 800,000 pages of recorded documents in our repository consisting of a combination of paper, microfiche, and scanned/digital images. It is the goal of the County to convert over 200,000 non-digital records to an interoperable, non-proprietary TIFF format which can be imported into our Tyler Eagle Recorder system, including the pre-population of selected fields such as Book Number, Page Number, Grantor, Grantee, Document Number, or Recording Date. It is additionally our goal to have all 800,000+ pages of records converted to an interoperable, non-proprietary OCR/ICR format which supports high-level indexing for search, retrieval, and information access.

Furthermore, per the regulations of AB 1466, all records need to be reviewed to ensure that discriminatory restrictive covenants are identified and redacted via a multi-departmental workflow involving a combination of automation and human analysis. The conceptual process for this is more fully outlined on page 3 of the *Inyo County Restrictive Covenant Modification Implementation Plan*, though the County is open to recommendations or proposals that would additionally streamline this effort as part of the overall project scope.

Project Definition

As this project is very large in scope, the County will evaluate, based on proposed cost and approach, whether it can be taken on at full-scale, or whether it will need to be carried out incrementally in smaller phases. While our *Implementation Plan* provides an estimated timeline for this work, it is the goal of the County to complete this effort as quickly and efficiently as funding and human capacity can support.

Project Objectives

1. Digitize historic records to an interoperable, non-proprietary TIFF format.
Refer to *Volume of Data* section of this RFP for quantities of these records, which are available in both hardcopy (historic books) and film media, except as otherwise noted.
2. Import the digital images of historic records from Objective 1 into our Tyler Eagle Recorder system with indexing information:
County will identify key fields which need to be auto populated with information obtained from the record.
3. Convert all digitized documents to interoperable, non-proprietary PDF/A format using OCR, or ICR when OCR is not an option:
In addition to the TIFF files imported from Objective 2, there are over 600,000 digital TIFF images currently existing in our Tyler Eagle Recorder system. Each document is to be converted to PDF/A such that all text within is searchable.
4. Scan records to identify potential unlawful restrictive language. A specific set of words and phrases will be provided by the Recorder:
Place any flagged records in a workflow when key words/phrases are found. A specific list of key words & phrases can be found in Attachment F to this RFP. The key words recognized must be identified for review.
5. Document review & approval process:
Once a document is placed in the workflow it will be manually reviewed by our Clerk-Recorder Office staff. When a document deemed by our office to meet the requirements that need County Counsel review, we would like the system to add our custom RCM cover page before it is sent to County Counsel for review/approval.
 - The system must automatically insert our cover page during this step.
 - All relevant form fields, such as original document source and Clerk name, are to auto-populate on the form by the system.
 - The system must allow County Counsel to electronically redact selections and sign the cover page. The documents must remain in digital format through the re-recording process.
 - The Clerk staff and/or Counsel need the ability to compare the new document to the original document and adjust the area for redaction before finalizing. Once confirmed, the redaction becomes permanent to that document.
6. Place unreadable documents in a workflow:
Documents that cannot be read using OCR/ICR technology are to be included in the manual RCM review process, e.g., by placing them in a separate queue where Clerk-Recorder staff can manually review them.

7. Ensure maintenance of all reportable data:

The Recorder must maintain a comprehensive list of all document numbers (original and new recordings) processed through this program. This report and various statistical reports will be needed including, but not limited to, (a) volume of documents processed/scanned for unlawful restrictive language, (b) volume of documents/pages returned to the workflow, (c) documents/pages reviewed by staff, (d) documents/pages sent to County Counsel, (e) documents/pages returned by County Counsel, (f) documents/pages Recorded and Rejected, and (g) amount of time a document was held at each review phase. Vendors must specify how additional types of reports can be created, and the cost, if any, for doing so.

Responses

In your response, please itemize your responses by the Objective that is being addressed. Please use this page as a reference for the outline of your proposal. We recognize that Objectives 2 and 3 which convert historic hardcopy records into digital images and then integrating them into our Tyler Recording system can be handled separately from the document redaction, review, and approval of the Restrictive Covenant Modification workflow solution. Please clarify if your proposed solution is addressing only Objective 2 and 3, just the workflow, all Objectives listed, or a different subset of Objectives. If you are providing a proposal for a solution to all Objectives, please indicate if your services allow for a selection of partial services only. For clarity, please summarize your answer by embedding the following table in your response:

| Objective Number | Objective | Addressed? (Yes/No) |
|--|---|---------------------|
| 1 | Digitize historic records to an interoperable, non-proprietary TIFF format. | |
| 2 | Import the digital images of historic records from Objective 1 into our Tyler Eagle Recorder system with indexing information | |
| 3 | Convert all existing scanned/digitized documents to PDF/A format using OCR, or ICR only when OCR is not an option | |
| 4 | Scan records to identify potential unlawful restrictive language | |
| 5 | Document review & approval process | |
| 6 | Place unreadable documents in a workflow | |
| 7 | Ensure maintenance of all reportable data | |
| Can Objectives be selected a-la carte? (Yes/No) | | |

Based on the information provided:

- How would you approach this overall effort?
- What phasing would you recommend? Specify the phase sequence and duration of each phase.
- What opportunities for efficiency through automation or similar could you recommend?
- Recommend alternatives or options for balancing cost, time, and staff impact.

Objective 1 (*convert historic records to records to an interoperable, non-proprietary TIFF format*):

- Provide the cost, per page/image, based on the type of physical media and content contained therein.
- Specify if your services quote is for obtaining the image from the original book source, or from the microfilm/microfiche source, or provide a quote for both, if applicable.
- Describe how you will ensure quality control, such that each scanned page is clear and the image and text are completely readable.
- Explain how issues with image quality will be addressed. If image quality is deemed unacceptable, or any images are missing, and the images need to be rescanned, how is this handled and what expenses are involved?

Objective 2 (*import historic digital records from Objective 1 into Tyler Eagle with pre-populated indexing fields*):

- Confirm your process will be compatible with importing the digital records with the designated text fields of each record into our Tyler Eagle Recorder system.
- Specify if the converted digital image will be indexed by its existing Book/Page number, and/or if your process will capture and prepopulate fields for Grantor/Grantee indexing, document number, and/or recording date, and how that metadata will be stored and can be accessed.

Objective 3 (*convert digitized documents to OCR PDF/A format, or to ICR when OCR is not an option*):

- In addition to the costs, please specify if this conversion process will retain all field data for each recorded document including indexing fields, or specify otherwise.

Objective 4 (*identify documents with unlawful restrictive language*):

- Specify how the workflow will be established, whether using flags or fields in the existing Tyler Eagle Recording system, or in an external software environment and if that environment is hosted locally or virtually.
- Please itemize one-time costs, ongoing expenses, interface expenses, and any other costs/fees that may apply.

Objective 5 (*workflow process between Recorder and County Counsel*):

- Please indicate how this objective will be achieved, whether in Tyler Eagle or an external software platform.
- Please include all related costs for these services.
- If any of this Objective cannot be achieved fully, describe what/how/why.
- Provide the cost for additional County departments access (including the County Counsel), including total costs for licensing, functionality, etc.

Objective 6 (*workflow for documents not compatible for OCR or ICR format*):

- Explain your workflow process solution for this requirement, and include any additional costs for this service, or specify if this is not available.

Objective 7 (*maintenance of all reportable data*):

- Explain all monitoring functions and report options and/or tools available to accomplish these reporting requirements.

Other

- If your process includes any additional services not specified in this scope, please include any additional services itemized separately within your quote.
- Please provide prices based on the total project and total quantities for all services within this RFP to have a total project quoted expense.
- Please also provide quotes on scaling proportional rates to calculate annual actual costs, and all other related costs.
- Please itemize any one-time expenses, project management, development, implementation, overhead, imaging/data processing, training, and any other specific expenses.

Volume of Data

Physical Books

Our historic Records books listed below are also available on various film media (*except as noted) and are the same sources of the Microfiche/Microfilm quantities within that section, except for the Index Books and Deed Books A1-B1 volumes, as noted. Our books are located in our office and are in good condition.

| Index Books* | Volumes/Ranges | # of books | # of pages |
|---|----------------|------------|----------------------------|
| INDEX-Deeds | 1866-1924 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1924-1948 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1948-1958 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1958-1971 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1971-1981 | 4 | Approx. 275 per book |
| TOTAL INDEX BOOKS: | | 20 | Approx. 5,500 pages |
| Deeds | A-Z *** | 26 | 15,585 |
| Deeds** | A1-B1 (x2) *** | 4 | 1,298 |
| Deeds | C1-F1 *** | 4 | 2,580 |
| Deeds | 1-39 *** | 39 | 24,063 |
| Official Records | 1-165 | 165 | 103,339 |
| TOTAL RECORD BOOKS | | 238 | 146,865 |
| Total Physical Official Record Books | | 258 | 152,365 |

* Some Index Books may not be available on microfilm.

** Deed Books A1-B1 volumes are digitally imaged and available separate on CD.

*** Historic Books of "Deeds" from A through book #25 are hand-written records.

Microfiche/Microfilm

We have microfiche/microfilm images of all books listed above except those noted otherwise, saved on three different media types: film, jacketed microfiche/microfilm, and orange aperture cards. More information of each type is available upon request to clarify each specific media involved. Our Index Books are not included in quantities below. The original books are the only copy available in our office (we have microfilm available for some of the Index Books in our offsite storage). In addition to the books listed in the above section, we have additional volumes that are only available by microfiche/microfilm: Volumes 166 thru 256. (91 volumes; 91,004 images/pages)

| Row Labels | Sum of Total Pages |
|---|--------------------|
| Step & Repeat Microfiche | 60,979 |
| Jacketed Microfiche | 145,621 |
| Orange Aperture Card | 30,025 |
| Total microfiche/microfilm images: | 236,625 |

Digital Images from 1980 to current

Books A1 (x2) & B1 (x2) have been converted to digital images and are available on CDs in our office: Quantity: **1298** pages. These are not included in the below quantities.

| Digital Imaged Recorded Documents | Recorded Docs | Pages/Images |
|---|---------------|--------------|
| All docs thru 01/17/2023 | 229,816 | 607,871 |
| 2022 Totals to calculate current volume | 2,790 | 12,103 |

Inyo County RFP for “Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)” project received bids from the following four vendors. All quotes (redacted per vendor’s confidentiality requirements) are attached within. The below list is interactive with links to their quotes.

-- Danielle Sexton.

- ***BMI Imaging Systems***
- ***First American Data and Analytics***
- ***Kofile Technologies, Inc.***
- ***Western Integrated Systems***



BMI Imaging Systems, Inc.
749 W. Stadium Lane
Sacramento, CA 95834

Michael D. Aufranc
maufranc@bmiimaging.com
916.244.4056



Response to RFP

Restrictive Covenant Modification & Records Modernization Project

Submitted On:
July 18, 2023

Prepared For:
County of Inyo
Clerk-Recorder
Ms. Danielle M. Sexton
Clerk-Recorder



July 18, 2023

Ms. Danielle M. Sexton
Clerk-Recorder
County of Inyo
168 N. Edwards Street
Independence, CA 93526

Dear Ms. Sexton,

BMI Imaging Systems appreciates the opportunity to provide the County of Inyo with this response to your RFP – Restrictive Covenant Modification & Records Modernization Project. Included with this proposal are the following items:

- Section I – BMI Corporate Overview
- Section II - Responses
- Section III – Project Objectives
- Appendix A – AB1466 Site Overview

Since 1958, BMI Imaging Systems has been a leading provider of large-scale microform and document scanning, data entry, and hosting services and has had a consistent record of quality and service. We complement our service offerings with turnkey document management system solutions incorporating state-of-the-art software and comprehensive implementation and technical support services.

We look forward to working with the County of Inyo to make this a successful project for both organizations. If you have any questions or need any additional information, please don't hesitate to contact me at 916.244.4056.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. D. Aufranc", with a long horizontal flourish extending to the right.

Michael D. Aufranc
Vice President



[Redacted]

[Redacted]

[Redacted]

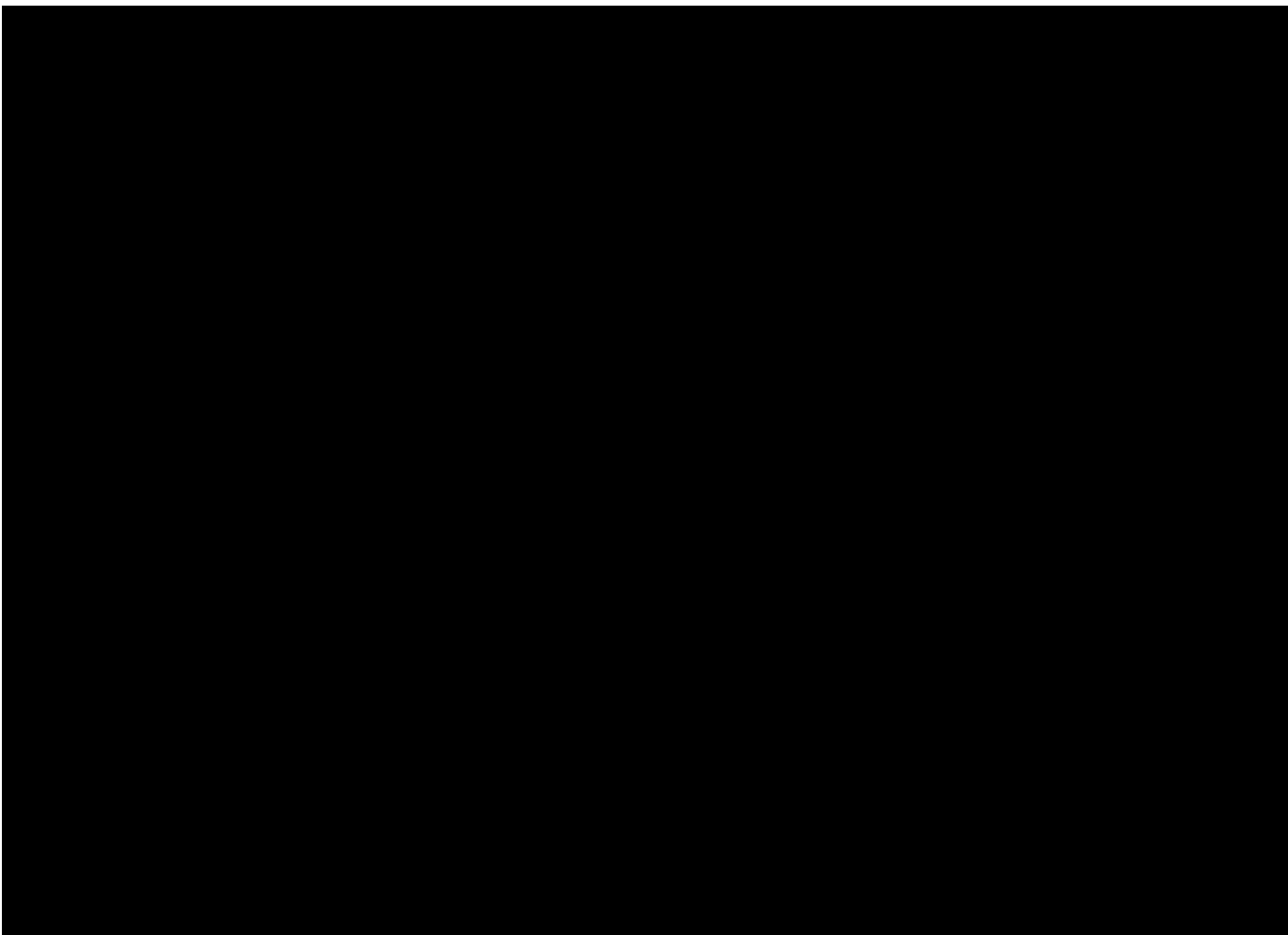
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Key Personnel:

Michael Aufranc, Vice President: Mike has been employed at BMI for 32 years and, overall, has 38 years of account management experience within the Records Management Industry. He has a bachelor's degree in business. Mike has worked directly with numerous California County Recorder's. In his role as the main contact, he will be responsible for negotiating the final contract and coordinating all high-level activities related to the project.

Binduraj Chandrasekaran, Senior Technical Lead/Software Engineer: Binduraj is a highly skilled software engineer who joined BMI Imaging in 2016. With over 20 years of experience in programming, including work on financial applications and as a college instructor, Binduraj is a true expert in the field. He has a bachelor's degree in technical management and Biology, as well as numerous performance awards in software development. As a software security specialist, he is dedicated to developing secure and reliable software that effectively protects users' data and systems from potential threats. Binduraj is a creative problem solver, and he constantly seeks out new and innovative solutions to complex problems. In addition to his technical expertise, Binduraj is also a skilled communicator and team player. He enjoys collaborating with others and is always eager to share his knowledge and ideas with his colleagues and BMI customers.

Brad Gilbert, Vice President, Software Development and Project Management: Brad has been a valuable member of the team since joining in 2002. He has a bachelor's degree in technical management. In his role, he oversees the software team, writes production code, and leads research and development efforts. Brad has played a pivotal role in developing critical components of BMI's internal software systems, including production-based websites, plugin-integrated production systems, and thousands of libraries. He has also contributed to the creation of commercial products used nationwide. Brad will be responsible for ensuring that the process flow is functioning according to plan and that all AB1466 website functionalities are working as expected.

Bill Whitney, President: Bill has been the President of BMI Imaging Systems since 1987. Duties include operational readiness and provisioning, staffing, contracting and process review. Bill has over 40 years of land record experience with both County Recorder requirements along with Title Company plant activities. Bill has participated in many land record projects in microfilming, scanning and indexing and from all levels of involvement - operator, sales person, operations manager and company administrator.

History:

BMI Imaging Systems (originally Bay Microfilm Incorporated) began as a microfilm service bureau, working with county government agencies in the 1950s on the microfilming of land records. In the early '60s, we expanded our archiving services to include preservation microfilming of the rare books and manuscripts of some of California's leading universities. A Library Microfilms Division was also established, working with over 200 newspapers in preserving California local history for libraries and publishers.

A reputation for service, precision, and reliability led to steady expansion of our government, education and commercial clients over the next two decades. By the early 1990's, the records management industry had entered the digital age and BMI was at the forefront of this evolution. Clients were meeting their electronic document management needs by digitizing their microfilm and paper records with BMI installing on- premise document management software solutions. Like many of the companies that



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Section II – Responses

| Objective # | Objective | Addressed (Yes/No) |
|-------------|---|--------------------|
| 1 | Digitize historic records to an interoperable, non-proprietary TIFF format. | Yes |
| 2 | Import the digital images of historic records from objective 1 into Tyler Eagle Recorder system with indexing information | Yes |
| 3 | Convert all existing scanned/digitized documents to PDF/A format using OCR or ICR only with OCR is not an option | Yes |
| 4 | Scan records to identify potential unlawful restrictive language | Yes |
| 5 | Document review and approval process | Yes |
| 6 | Place unreadable document in a workflow | Yes |
| 7 | Ensure maintenance of all reportable data | Yes |
| | Can objectives be selected a-la carte? (Yes/No) | Yes |

Overall project approach/phasing:

Phase 1: Digitization of Historical Land Records

The County has the following inventory of material that needs to be scanned, indexed and uploaded.

- Step & Repeat Microfiche: 4,288
- Jacketed Microfiche: 2,282
- Aperture Cards: 15,012
- Index Books (scanned on-site): 20
- CD’s: 1,298 images
- Tyler: 619,974 images

Job number one for this project will be digitizing and indexing these historical land records by Book/Page. Once that project is complete, all the documents can be loaded into our AB1466 site to begin the OCR/machine learning process to locate the restrictive covenants. During this process, BMI will create deliverables that will be imported into the Tyler recording system. Assuming the County awards this contract on September 1, 2023, the following sample time lines may apply:

September 18, 2023: Secure pick up of microforms listed above from the County. Materials will be transported from County to BMI Sunnyvale, CA for processing. Materials will be transported in BMI vehicles driven by our employees. County to provide BMI with CD’s of Deed Books. BMI will make arrangements with County to send the 600,000+ electronic files in Tyler to BMI via SFTP.

October 16, 2023: BMI staff comes on-site to scan the 20 index books.



November 27, 2023: Historical land records have entered the workflow for OCR/machine learning to locate RC's.

January 8, 2024: AB1466 site goes on live for the Recorder and County Counsel to begin the review process and rerecording documents containing RC's. BMI begins uploading images/indices for import into the Tyler system (sent via SFTP).

Section III – Objectives

Objective 1 - *(convert historic records to records to an interoperable, non-proprietary TIFF format):*

Listed below is our schedule of fees for digitizing, indexing and importing all the documents outlined in the RFP:

| Service | Volume | Unit Price | Total |
|--------------------------------------|---------|--------------|-----------------|
| Scanning of Step & Repeat Microfiche | 4,288 | \$5/each | \$21,440 |
| Scanning of Microfiche Jackets | 2,282 | \$5/each | \$11,410 |
| Scanning of Aperture Cards | 15,021 | \$1/each | \$15,021 |
| Scanning of Index Books On-Site | 20 | \$500/each | \$10,000 |
| Import of Images from CD | 1,298 | Flat fee | \$1,000 |
| Import of Images from Tyler | 619,974 | Flat fee | \$2,500 |
| Project Management Set Up | 1 | \$5,000/each | \$5,000 |
| Total | | | \$66,371 |

Note: The fees quoted above include the cropping and indexing of the Deeds and Official Records by Book/Page. This also includes the formatting of the images/data for import into the Tyler system. Please note that if any physical deliverables are provided to the County for this project, sales tax will be additional. We suggest the use of SFTP electronic delivery if available.

Quality control inspections will be performed to verify successful image capture. The inspection procedure will be based on "ANSI/ASQC Z1.4-2008 Sampling Procedures and Tables for Inspection by Attributes", using a 0.25% AQL (Acceptance Quality Limit), General Inspection Level 1. This AQL-based procedure dictates that a certain number of images from each microfiche and aperture card are inspected. If the quality/completeness of an image is deemed to be unacceptable, the inspection level is escalated to review a larger sample which, ultimately, may result in the roll being re-scanned using alternate settings. If the re-scanned material fails the AQL review, the item will be forwarded to a Microform Quality Expert (MQE), who will inspect the images to determine if the images are representative of the film quality. If the MQE determines the images are representative, the processing of that material will be deemed to be completed, unless the County can furnish a better-quality microfiche, aperture or book for processing.

Objective 2 - (*import historic digital records from Objective 1 into Tyler Eagle with pre-populated indexing fields*):

BMI will utilize all the images from original phase to create documents compliant with Tyler Eagle. Details are below:

- Create single-page tiff documents (300 dpi tiff or PDF)
- Crop the images to eliminate the border
- Key the following for each image
 - Unique ID
 - Book
 - Page
 - Doc Type
 - Image Path
- Provide a deliverable format for import into Tyler
- Sample files will be submitted for each document type

BMI is planning to key the Book/Page indices only. Upon request, we can provide the cost to also key:

Grantor/Grantee
Document Number
Recording Date

The QA mentions that subcontracting is not allowed. If the County would allow BMI to utilize our business partners for this service, we can provide a competitive price quote for the work. It can also be captured in house by BMI staff. If we do this in house, the cost is higher.

Objective 3 - (*convert digitized documents to OCR PDF/A format, or to ICR when OCR is not an option*):

For the Tyler import project, BMI will be provided 300 dpi TIFF images as described. For the AB1466 compliance project, BMI will be utilizing a combination of OCR and machine learning technologies to locate restrictive covenants in the historical land records. This is explained in the following objectives of the RFP.

Objective 4 - (*identify documents with unlawful restrictive language*):

BMI will utilize our hosted site for all AB1466 related activities. Following are all the details related to the project and pricing related to the work performed.



[Redacted]

- [Redacted]

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- [Redacted]
- [Redacted]

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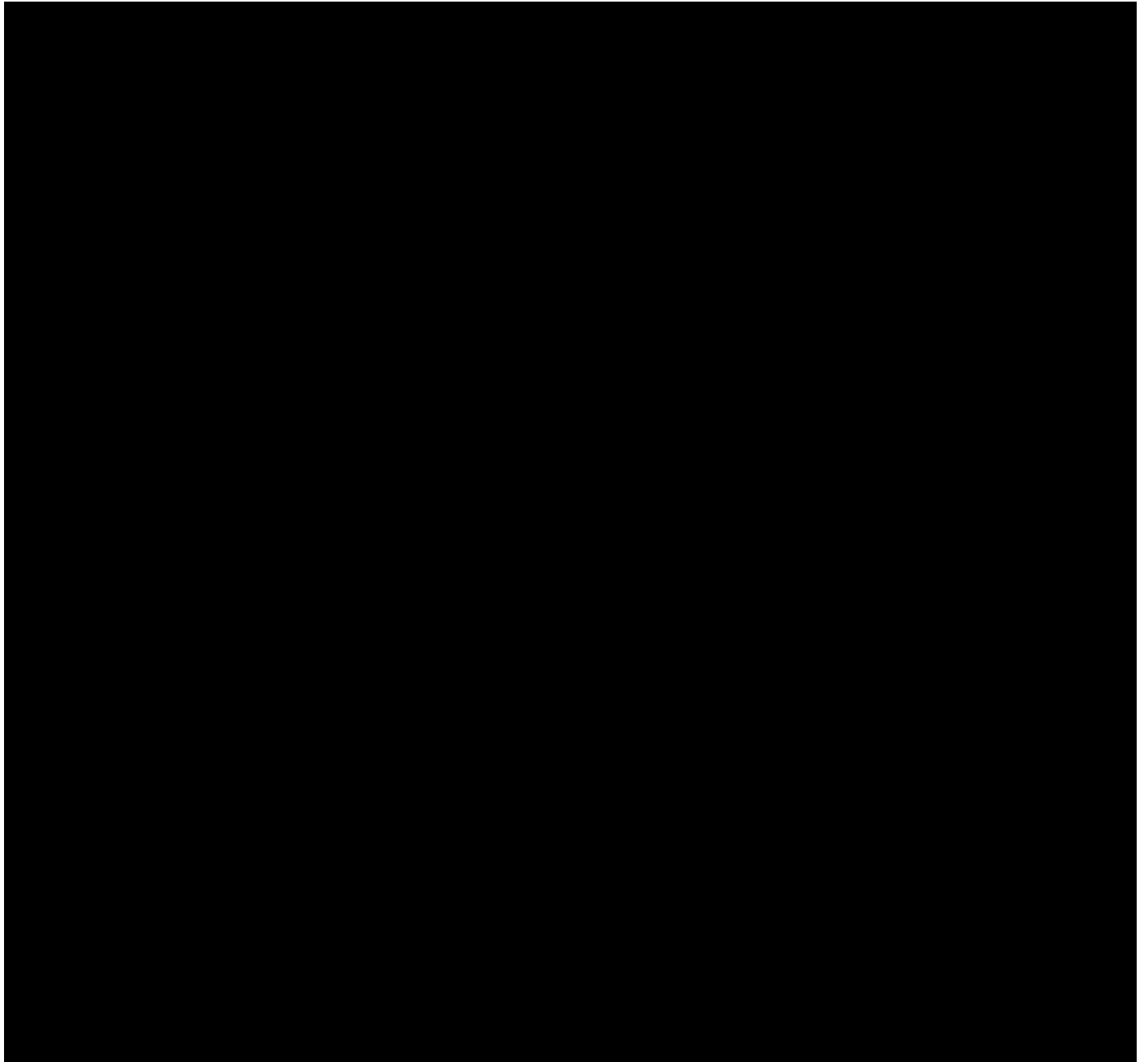
- [Redacted]

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- [Redacted]

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BMI will apply OCR and machine learning technologies to all the digital images for the project. Should illegible images be discovered in the process, BMI will alert the County and pursue an alternate image.

Objective 7 - (maintenance of all reportable data):

Listed below is a table of the data BMI will provide as part of the AB1466 project:

| | BMI Data |
|---|-----------------|
| 1 Document count | Yes |
| 2 Date document received | Yes |
| Original document number and/or Book & Pg | |
| 3 reference | Yes |
| 4 Type of Document | Yes |
| 5 Date forwarded to County Counsel | Yes |
| 6 Date Received by County Counsel | Yes |
| 7 Date received back from County Counsel | Yes |
| 8 County Counsel’s determination | Yes |
| 9 Total count | Yes |

Other – Total Project Fees

Digitization Project:

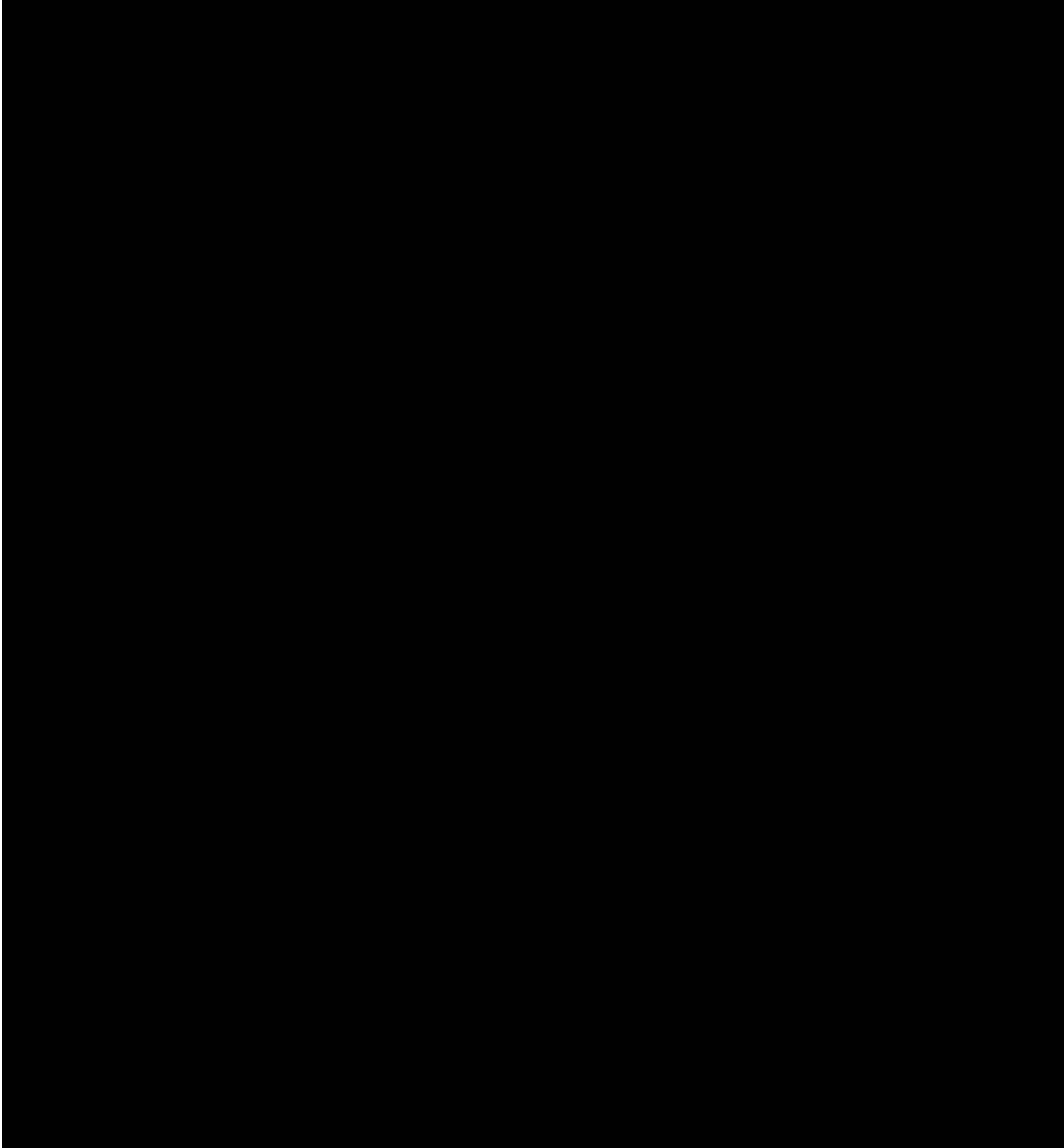
| Service | Volume | Unit Price | Total |
|--------------------------------------|---------|--------------|-----------------|
| Scanning of Step & Repeat Microfiche | 4,288 | \$5/each | \$21,440 |
| Scanning of Microfiche Jackets | 2,282 | \$5/each | \$11,410 |
| Scanning of Aperture Cards | 15,021 | \$1/each | \$15,021 |
| Scanning of Index Books On-Site | 20 | \$500/each | \$10,000 |
| Import of Images from CD | 1,298 | Flat fee | \$1,000 |
| Import of Images from Tyler | 619,974 | Flat fee | \$2,500 |
| Project Management Set Up | 1 | \$5,000/each | \$5,000 |
| Total | | | \$66,371 |

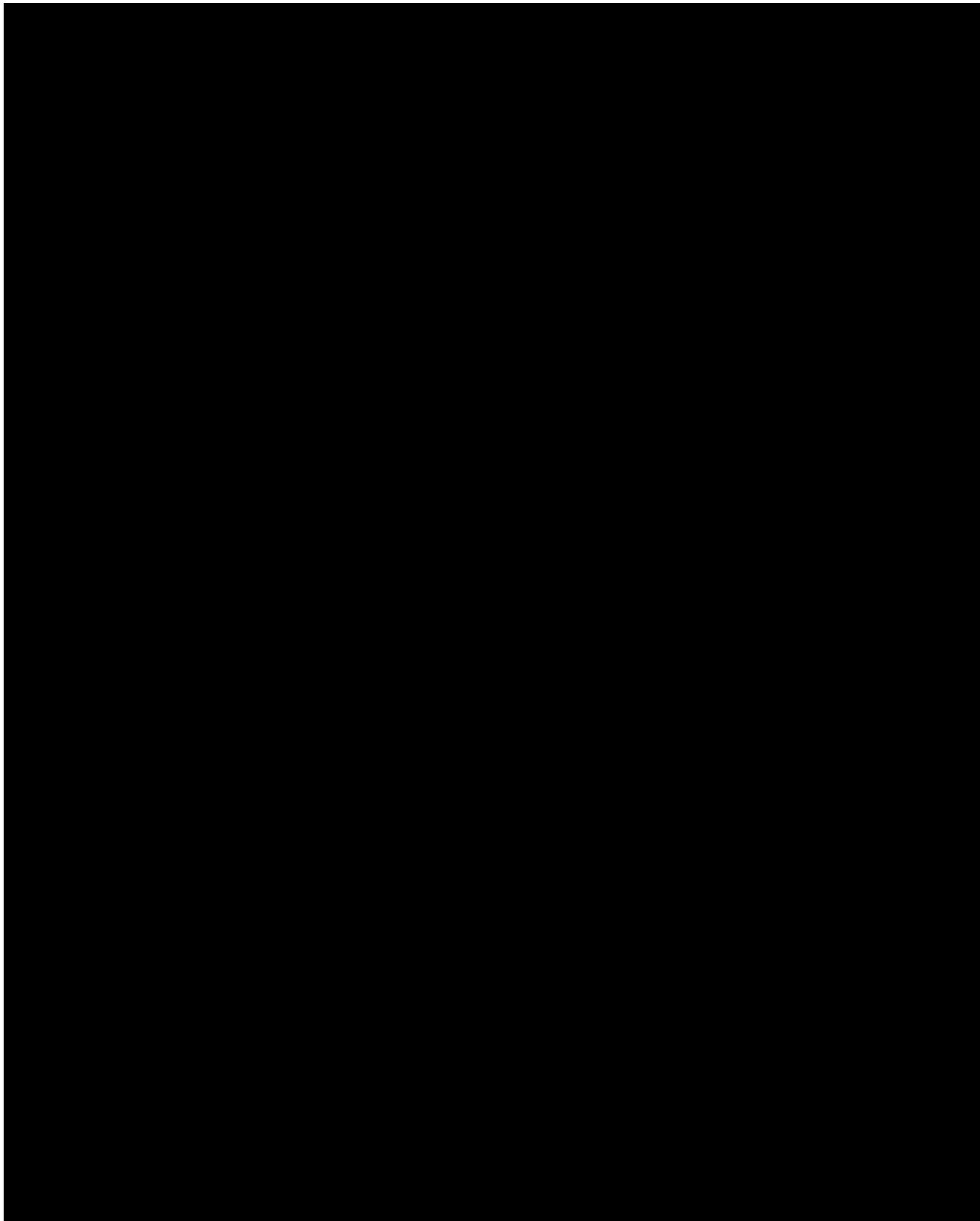
AB 1466 Compliance Project:

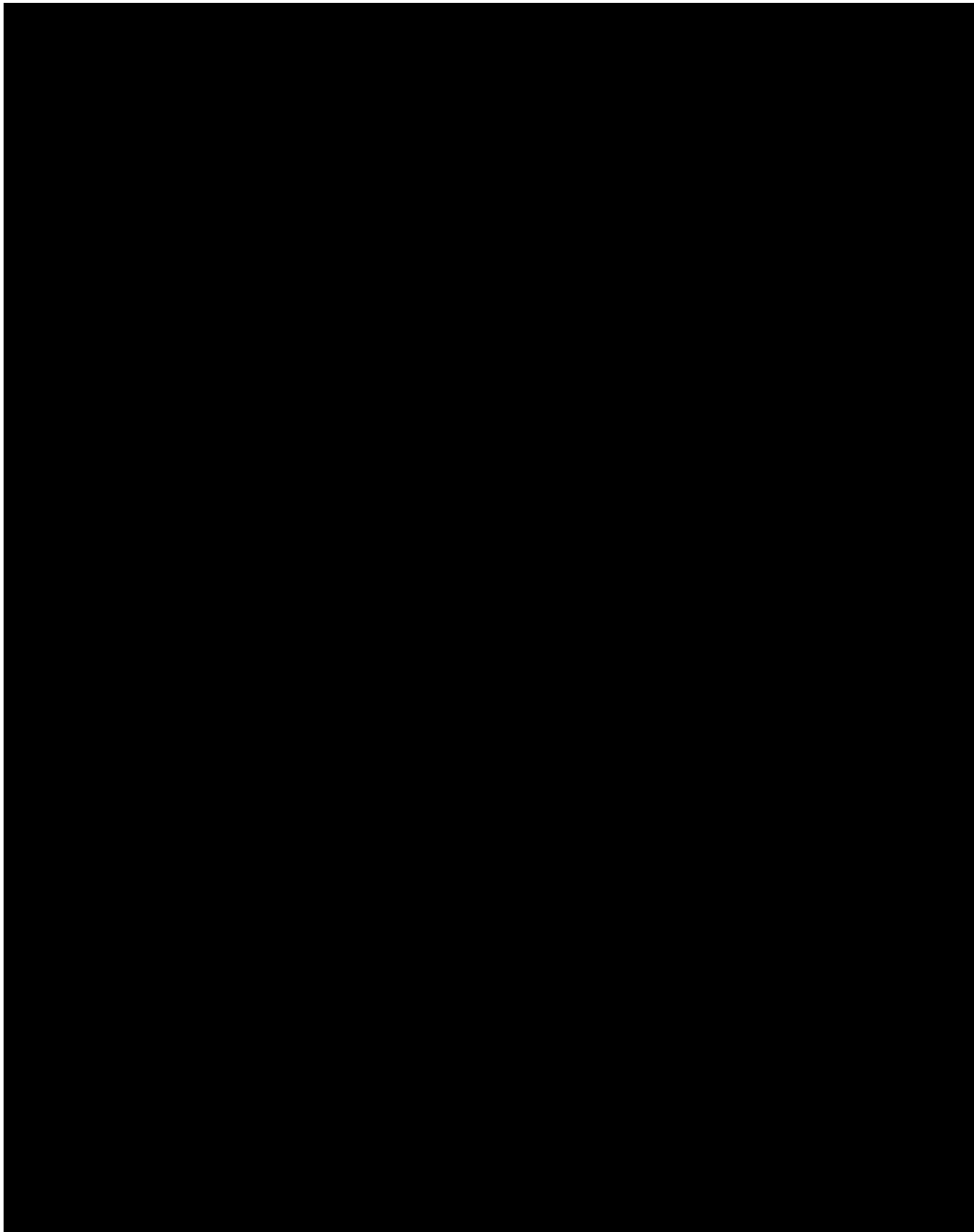
| Service | Volume | Unit Price | Total |
|--|--------|------------|-----------------|
| Project Management – Set Up Hosting | 1 | 20,000 | \$20,000 |
| Review of Potential Restrictive Covenants | 4,000 | \$.10/each | \$400 |
| Assembly of Positive Restrictive Covenants | 400 | \$2/each | \$800 |
| Total | | | \$21,200 |

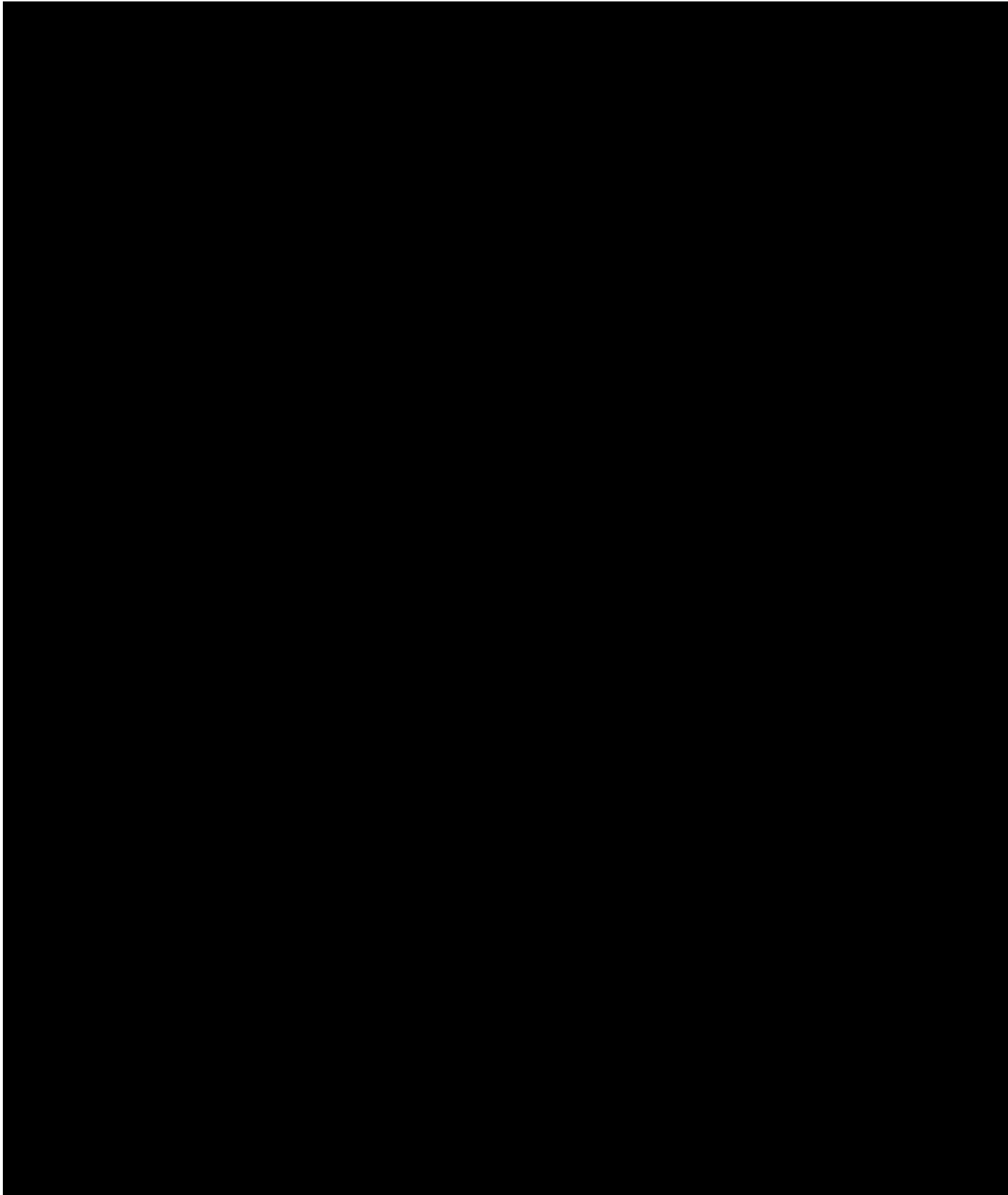
BMI total bid price = **\$87,571** excluding any potential sales tax.

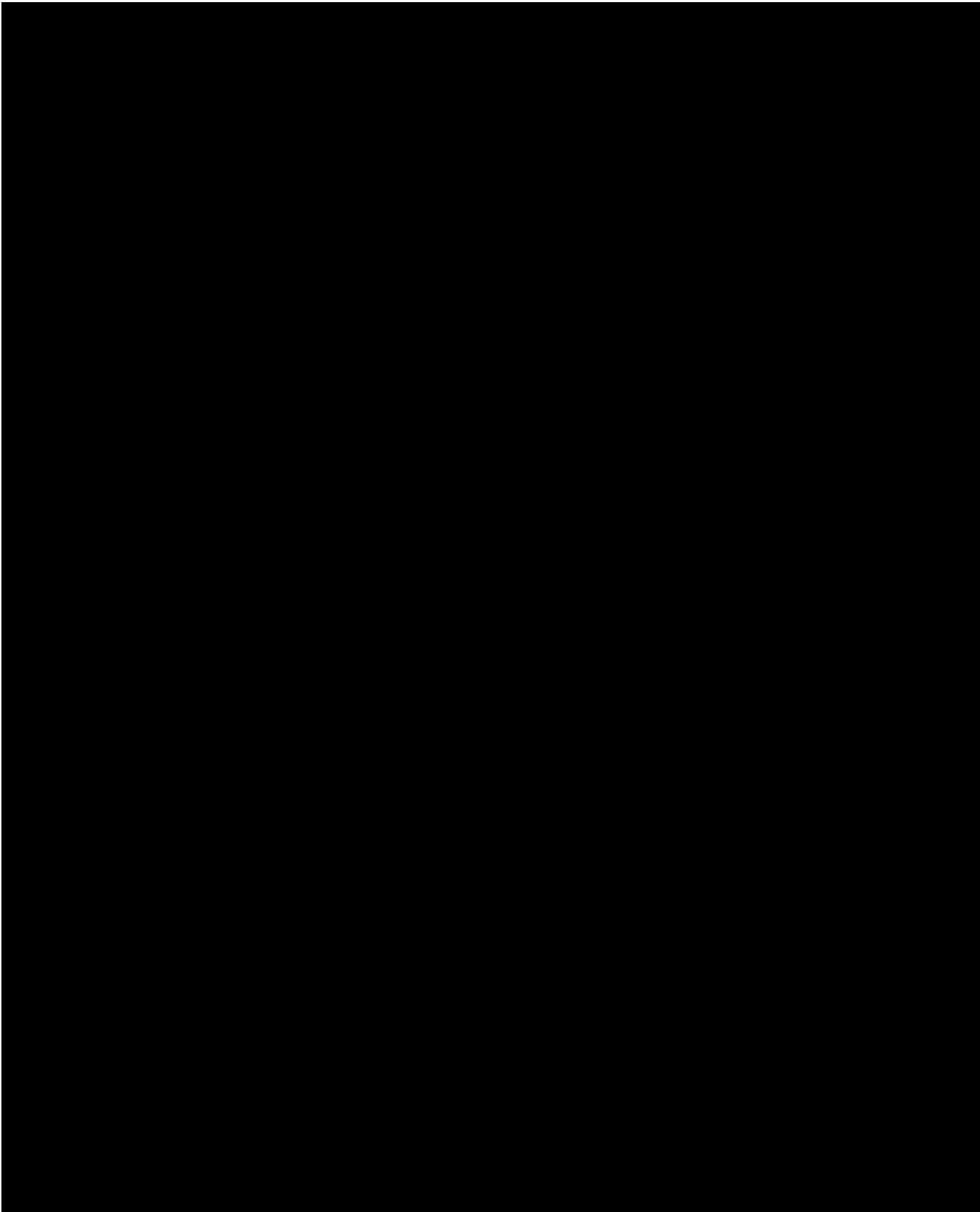
Appendix A – AB1466 Site Overview “Confidential Pages 10 – 16”

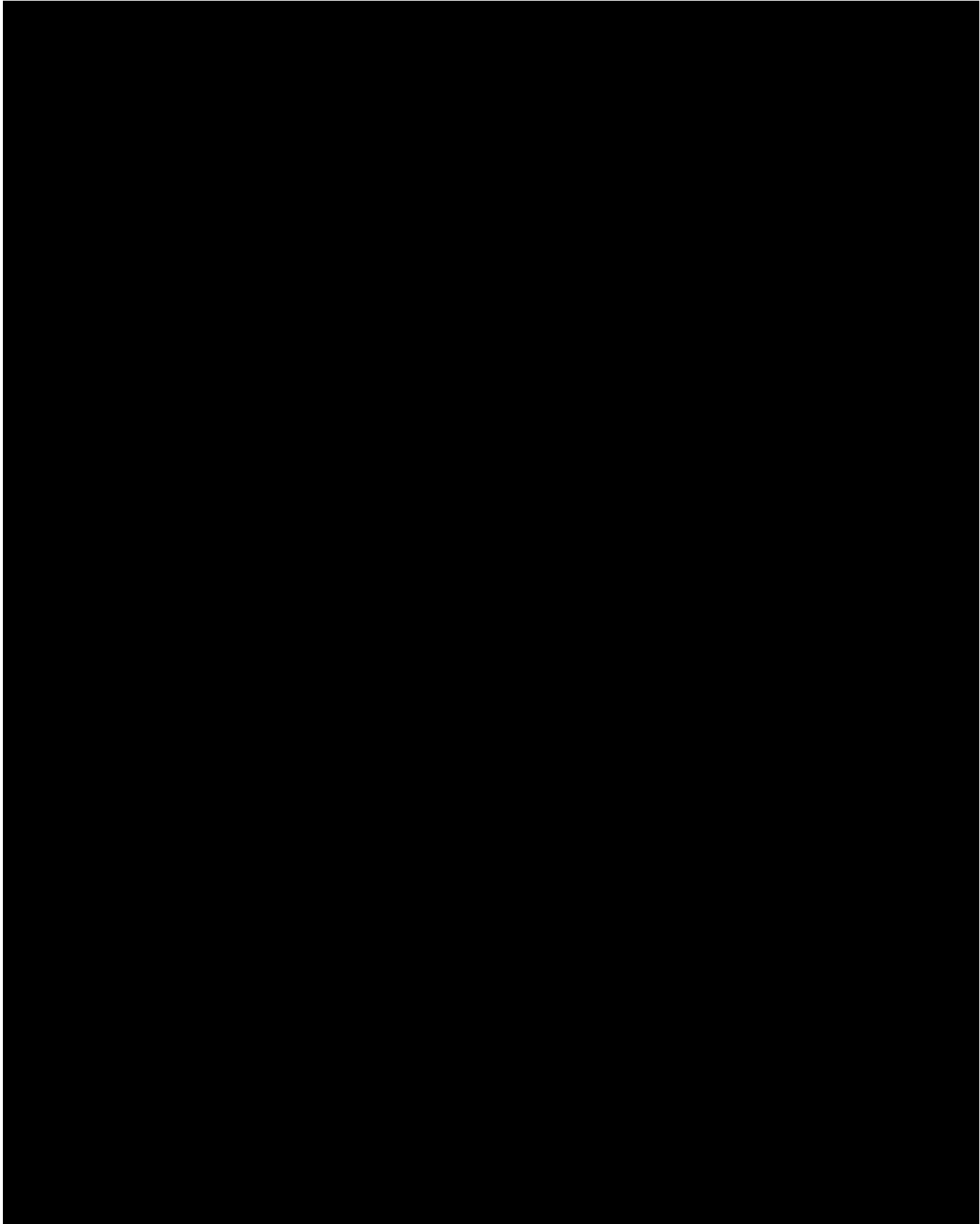


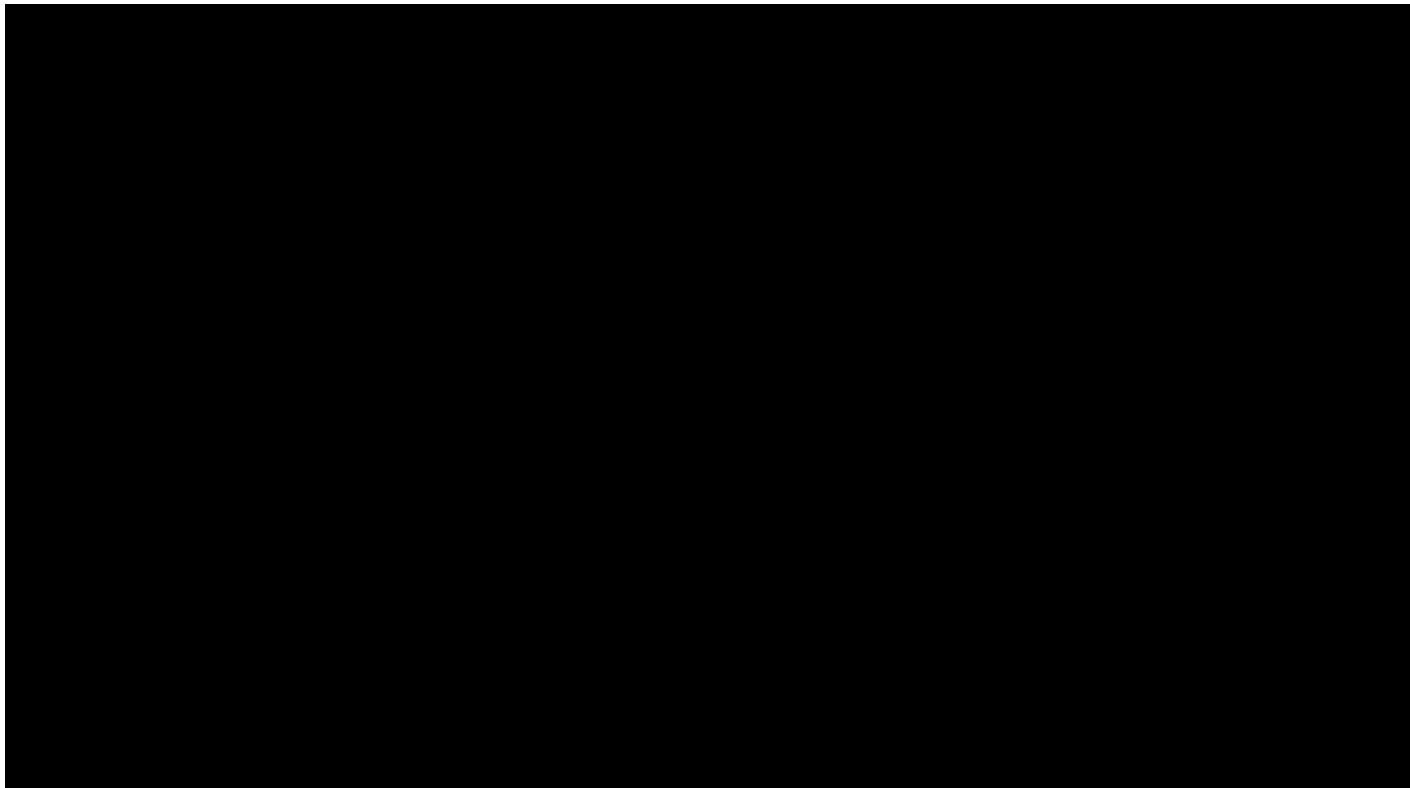


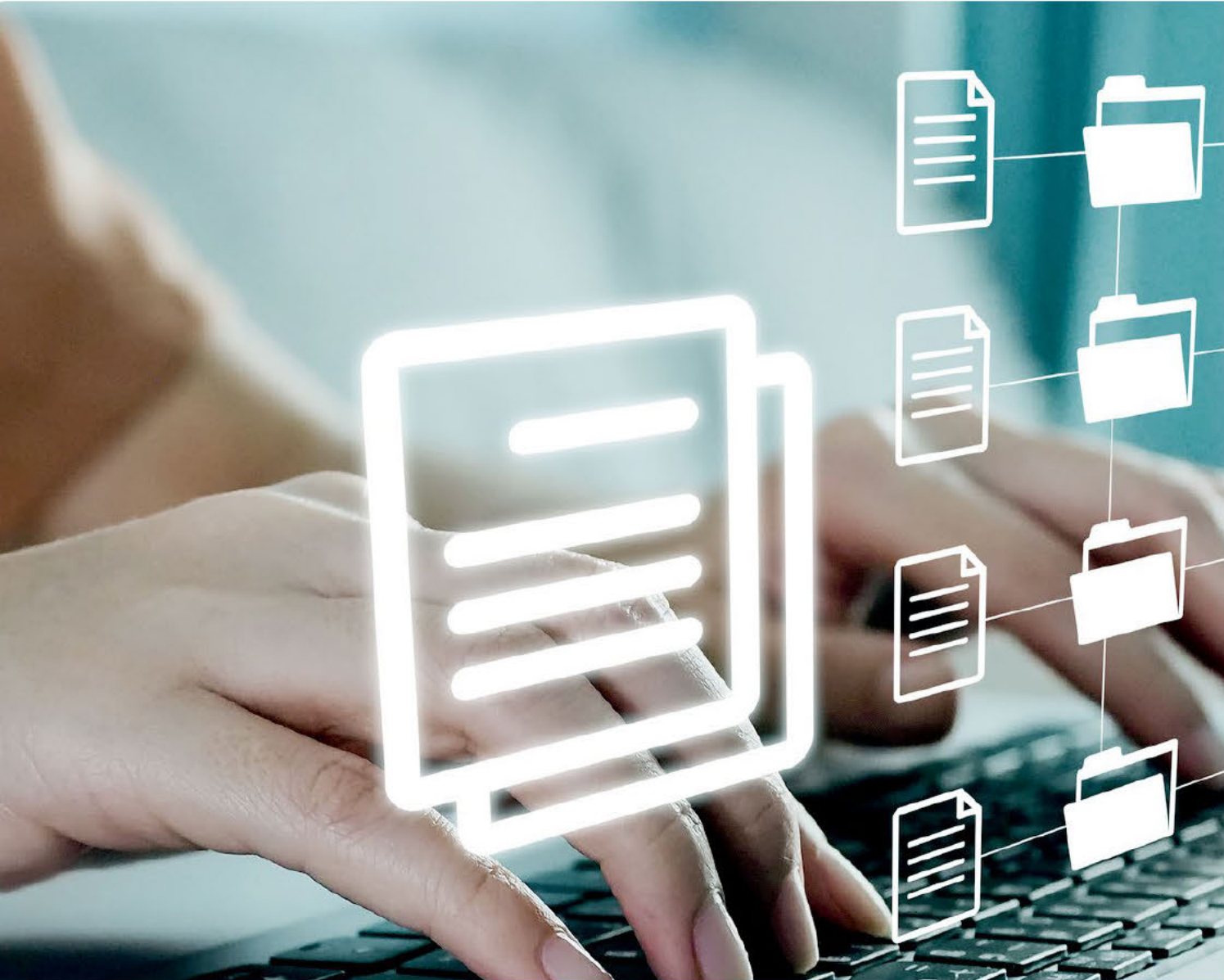












County of Inyo AB1466 Restrictive Covenant Modification & Records Modernization Project RFP

July 21, 2023



First American
DATA & ANALYTICS

July 21, 2023

Dear RFP Evaluation Team,

We are excited to submit our proposal to the Restrictive Covenant Modification & Records Modernization Project RFP for your review and consideration. As the County of Inyo (the County) reviews our detailed pricing and capabilities, we hope that you recognize First American Data & Analytics (FADNA) as the premier industry leader that will provide the highest quality restrictive covenant solution available as measured by accuracy, usability, and completeness, as well as the most competitive pricing on the market. We pride ourselves in being the most client-focused and service-oriented company in our industry and strive to accommodate the needs of our clients with our contractual flexibility. These facts underscore why we can deliver the most effective restrictive covenant solution with the greatest possible value to the County.

If you have any additional questions regarding this proposal or our general offerings, your main point of contact for this proposal is Tracie Wilson, National Account Director. Ms. Wilson's contact information is provided as follows:

Tracie Wilson
National Account Director, Government & Strategic Solutions
Telephone: (714) 250-1356
Email: twilson@firstam.com

We truly believe our industry-leading data expertise, combined with our consultative approach with similar government entities, position us properly to provide restrictive covenant solutions for the County. Our team looks forward to the prospect of working with the County to showcase our solution and later collaborating with the County on this opportunity.

Sincerely,



Robert Karraa
President
First American Data & Analytics



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Executive Summary

First American Financial Corporation, (NYSE: FAF) is a leading provider of title insurance and settlement services to the real estate and mortgage industries. We trace our heritage back to 1889 when Los Angeles County split in two and Orange County was born. Our existence literally began with Los Angeles County land records. Although our roots are in title plant management services, the First American family of companies includes First American Data & Analytics (FADNA), founded in 1987, which collects and maintains document & map images and real estate property data, including assessments, property tax, deeds, mortgages, assignments, releases, pre-foreclosure, and listing data. Additionally, FADNA creates its own data such as owner association, automated valuation models, and new mover. All of these data assets empower our customers to make informed, data-driven business, compliance, and risk decisions.

FADNA is responsible for supporting the Title division of First American by building and managing title plants using the data we acquire. As a data organization we pride ourselves on the quality, currency, and completeness of our data not only because our company bottom line depends on it, but also because our thousands of other customers expect it. FADNA goes beyond data management. We have built dozens of applications, desktop and web-based, that allow customers access to the data and documents we manage.

Company Experience

Founded in 1987, FADNA has collected and maintained document and map images and real estate property data including assessments, property tax, deeds, mortgages, assignments, releases, pre-foreclosure, and listing data for 35 years. Our roots are in title plant management services which requires 100% of documents in a county to be collected, indexed, and verified. Insured title policies are written based on the data managed in the plant, so our bottom line depends on our data accuracy, completeness, and currency. Building high-quality databases and chaining transactions is in our DNA. We are proud of the First American brand and the reputation that comes along with the name.

FADNA offers a broad range of data solutions from bulk data licensing to web-based applications to our newly designed restrictive covenant solution. We serve a highly diverse range of clients across a wide range of industries including real estate services, lending and servicing, insurance, analytics, and government. When companies need a long-term yet innovative data partner who directly sources from counties, title plants and industry-leading third-party partners, they consistently rely on FADNA.

Furthermore, we have had relationships with county governments nationwide for more than 100 years across the larger First American enterprise. More specifically, FADNA has been providing data and services to hundreds of government institutions and commercial clients since our inception in 1889. We have the experience in working with clients of a similar size and complexity as the County and believe we have the unmatched industry resources and data assets to meet all of your program needs.

The solution the County has outlined requires in-depth knowledge of public record documents. FADNA is an expert at ingesting, categorizing, indexing, chaining, storing, and managing documents. Thousands of documents a day are processed from over 1900 counties across the country, including Inyo. They are stored in the First American Document Repository which has over 8.1B images. Every Inyo County document for every day is available in the repository from May 26, 1999, forward. However earlier documents may also be available. Document images are easily accessible to any FADNA product and play a pivotal role in our public record data acquisition strategy. That data, which includes elements used

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for indexing and over one hundred others, is collected using a combination of OCR & Extraction and Machine Learning in a universal format. Over 1700 title plants are built using the document images and data that FADNA oversees. It is without a doubt that we are willing, capable, and ready to offer a solution to support the specific requirements of the County.

Our broad and innovative datasets point to our commitment to a comprehensive data strategy. We are driven to explore all the proprietary data we collect across the First American family of companies and the public record data we can acquire either directly or through third parties in order to expand our offerings and improve our data quality.



Read more about our data online at <https://dna.firstam.com/>.

California Experience

First American has over 130 years of experience with California land records, more than any other data provider. Since May 26, 1999, we have collected and stored in our document repository every Inyo County document as part of our operations to build and maintain a title plant in the County. There is no plan to stop collecting Inyo County documents because the First American title and data divisions both rely on the documents and the data extracted from them. Inyo County wants to scan documents going forward to monitor any new covenants that may be recorded. FADNA can do so when it acquires the County's newly recorded documents.

FADNA has had a complete team in place for over 18 months actively building and supporting our AB1466 solution, CovenantGuard. It is comprised of highly skilled product, project management, development, modeling, database, and networking experts, most of whom have decades of experience in public record data and document collection. The team has successfully launched the product to production (September 2022) for the initial customer, Riverside County. Over 235,000 digitized Riverside documents were scanned for Restrictive Covenants (RC) for the launch. Over 26 million digitized historical Riverside documents in the First American Document Repository are now being scanned for the 2nd phase of the project. Another California county, Yolo, chose to utilize Professional Services instead of getting access to CovenantGuard. The Yolo process included scanning historical documents in the First American Document Repository (Phase 1) and historical documents provided by Yolo (Phase 2). For each phase they received a basic report detailing the documents flagged with Restrictive Covenants, along with copies of the documents flagged.

FADNA is actively in discussions with many other CA counties about the use of CovenantGuard to scan, redact, and re-record their documents to comply with AB1466.

The FADNA team would be happy to demonstrate CovenantGuard to the County so you can see for yourself how the technology and workflow can be implemented for your team.

FADNA Point of Contact

Your primary point of contact for this proposal is Tracie Wilson, National Account Director. Ms. Wilson's contact information is provided as follows:



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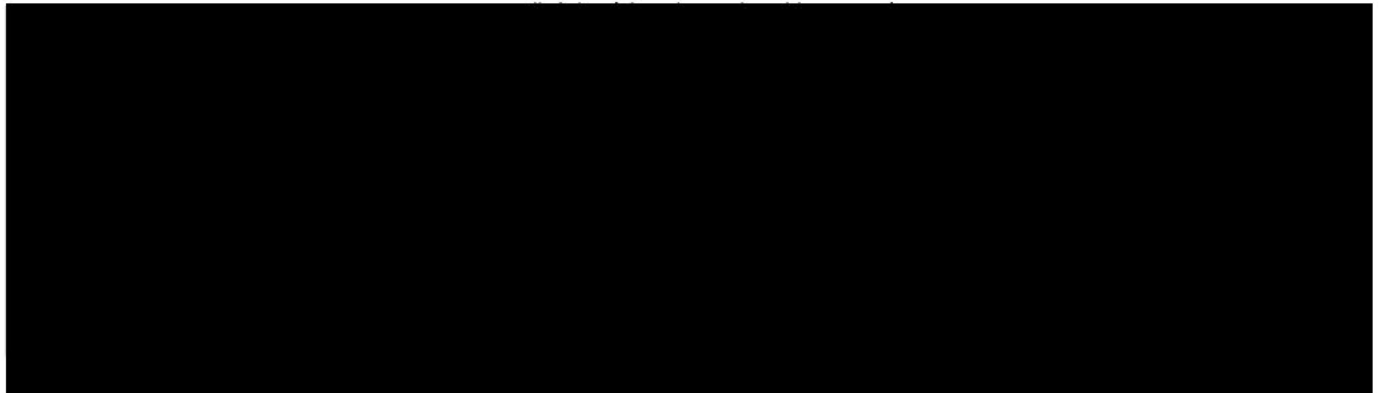
Tracie Wilson
National Account Director, Government & Strategic Solutions
Telephone: (714) 250-1356
Email: twilson@firstam.com

The FADNA staff is dedicated to providing the best public record data available. **Nicole Herold will be the Project Manager for this contract.** Ms. Herold is among the team members who are actively building and supporting the restrictive covenant product, CovenantGuard, and are experts in their fields. The overarching team includes product, project management, development, modeling, database, and networking.

Award-winning Customer Service

FADNA offers award-winning customer service to the County for support of our products and services. The County will receive White Glove service, a step above our standard, which includes a single point of contact from a dedicated project/product manager, 4-hour response time during regular business hours, and the full backing of the Customer Service, Sales, and Executive teams.

The Customer Service team has a [REDACTED] during the first contact, which is completed [REDACTED] even when the team received [REDACTED] (average) calls per month for customers at all levels of service. These statistics are even more impressive considering the nature of the calls – public record data questions which require research and validation against multiple databases. The team can provide such satisfying service because of their product training, data knowledge, and decision-making power.

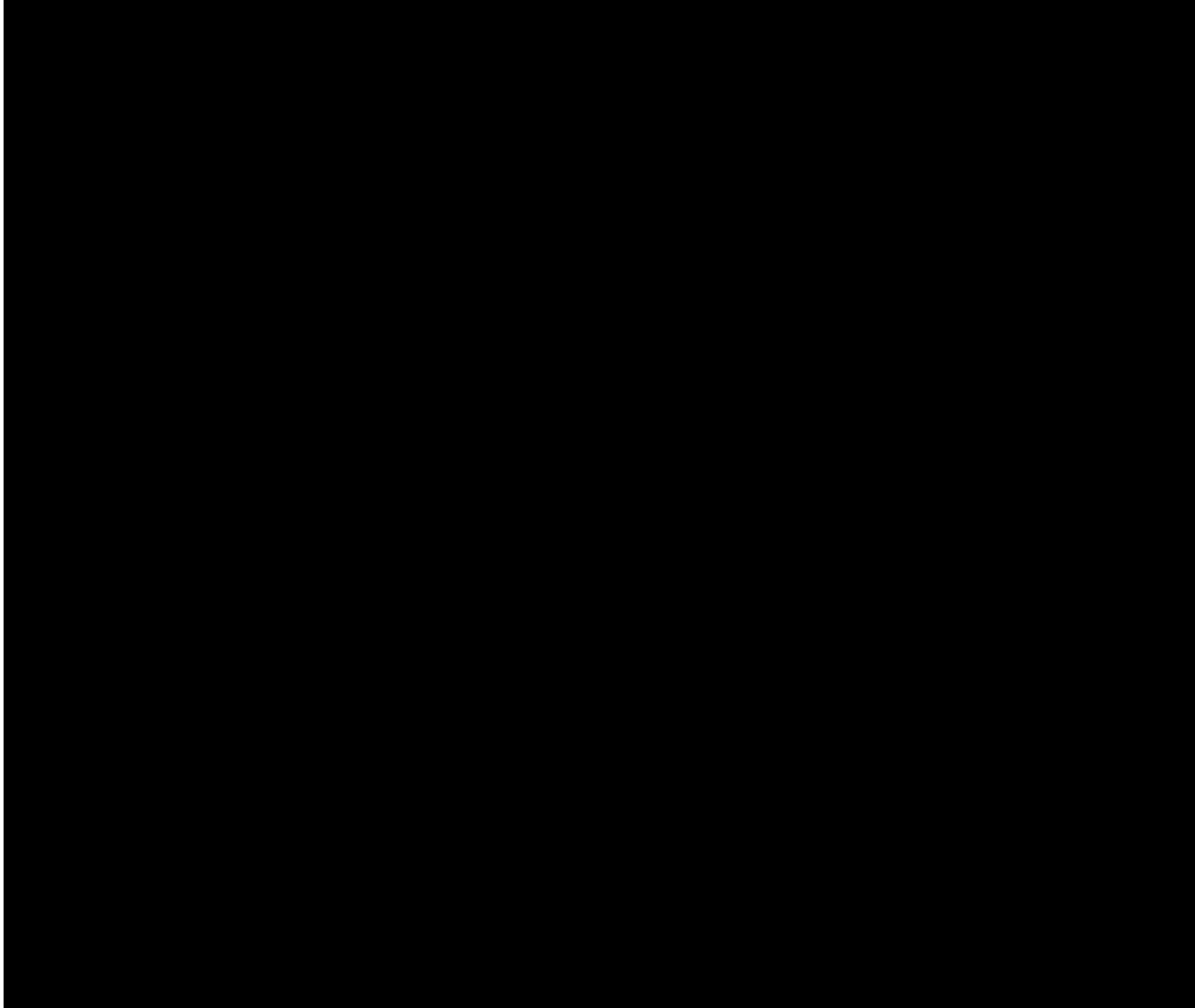




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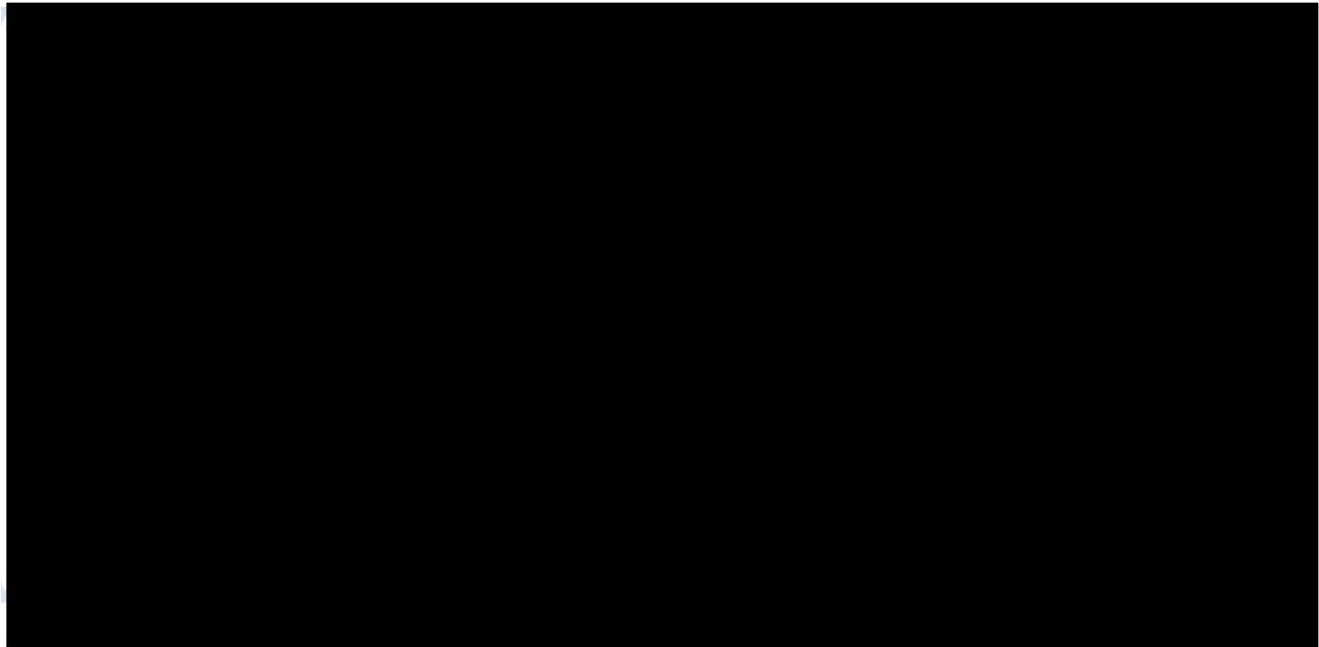
County of Inyo
RCM Modernization RFP
First American Data & Analytics

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Here is a list of the various customer service awards FADNA has won over the last 5 years.

| AWARD | NOMINATION TITLE | CATEGORY GROUP | AWARD PROGRAMS | YEAR |
|----------------------|--|---|---|------|
| Gold Stevie® Award | First American Database Solutions, Santa Ana, CA: Tax Source by First American Data & Analytics - Supporting Lenders and Title Companies | New Product & Service Categories - Content | American Business Awards® | 2022 |
| Gold Stevie® Award | First American Database Solutions' Instant Recordable Legal and Rapid Legal and Vesting Reports | New Product & Service Categories - Content | American Business Awards® | 2021 |
| Gold Stevie® Award | Going Beyond “Thank You for Calling”: Driving Customer Satisfaction by Driving Critical Analysis Skills | Customer Service & Call Center Awards Team Categories | Stevie® Awards for Sales & Customer Service | 2019 |
| Silver Stevie® Award | New Customer Service Marketing Solution: TitleFlex | New Product & Service Awards Categories | Stevie® Awards for Sales & Customer Service | 2018 |
| Bronze Stevie® Award | First American Database Solutions' TITLE IQ - ENTERPRISE | New Product & Service Categories - Content | American Business Awards® | 2021 |



| AWARD | NOMINATION TITLE | CATEGORY GROUP | AWARD PROGRAMS | YEAR |
|----------------------|---|--|---|------|
| Bronze Stevie® Award | Supporting the Real Estate Industry by Integrating Disparate Datasets, Harnessing AI and Driving Workflow Efficiencies in a Single Platform: TitleFlex by DataTrace | Customer Service & Call Center Awards Achievement Categories | Stevie® Awards for Sales & Customer Service | 2020 |
| Bronze Stevie® Award | Meeting Customer Workflow and Efficiency Needs Through AI, OCR, and Big Data: DataTree by First American | Customer Service & Call Center Awards Achievement Categories | Stevie® Awards for Sales & Customer Service | 2020 |
| Bronze Stevie® Award | Is Your Quality Assurance Process Just a Task Checklist or a Customer Satisfaction Driver? Linking QA to CSAT Scores | Customer Service & Call Center Awards Achievement Categories | Stevie® Awards for Sales & Customer Service | 2019 |
| Bronze Stevie® Award | Providing Transparency on Real Property: Leveraging Data to Flag Hidden Threats | New Product & Service Awards Categories | Stevie® Awards for Sales & Customer Service | 2019 |
| Bronze Stevie® Award | Automating Quality Assurance: Taking Your QA Beyond Excel Spreadsheet | Customer Service & Call Center Awards Achievement Categories | Stevie® Awards for Sales & Customer Service | 2019 |
| Bronze Stevie® Award | Providing Game-Changing Support in Existing Platforms | Customer Service & Call Center Awards Achievement Categories | Stevie® Awards for Sales & Customer Service | 2018 |
| Bronze Stevie® Award | The Importance of SOPs, CRM and Organized Workflow in Client Services | Customer Service & Call Center Awards Team Categories | Stevie® Awards for Sales & Customer Service | 2018 |
| Bronze Stevie® Award | First American DBS Client Service Training Team - Driving Customer Success by Driving Internal Success | Customer Service & Call Center Awards Team Categories | Stevie® Awards for Sales & Customer Service | 2018 |
| Bronze Stevie® Award | Combining the Personal Touch with Technology to Support Customers | Customer Service & Call Center Awards Achievement | Stevie® Awards for Sales & Customer Service | 2017 |

Table 1: List of Customer Service Awards



FADNA Response

| Objective Number | Objective | Addressed? (Yes/No) |
|------------------|---|---------------------|
| 1 | Digitize historic records to an interoperable, non-proprietary TIFF format | █ |
| 2 | Import the digital images of historic records from objective 1 into our Tyler Eagle Recorder system with indexing information | █ |
| 3 | Convert all existing scanned/digitized documents to PDF/A format using OCR, or ICR only when OCR is not an option | █ |
| 4 | Scan records to identify potential unlawful restrictive language | █ |
| 5 | Document review & approval process | █ |
| 6 | Place unreadable documents in a workflow | █ |
| 7 | Ensure maintenance of all reportable data | █ |
| | Can objectives be selected a la carte? (Yes/No) | █ |

The County appears to have two separate goals that each require very different expertise and technology.

1. Digitization and Preservation of Historical Documents
2. AB1466 Compliance and Requirements

To best achieve these goals, FADNA recommends that the County should consider these separate projects. That will allow the County to identify the vendor with the most proficiency for each project. By choosing a vendor that is best suited for each project, the County can complete each project with the highest quality quickly and efficiently, therefore minimizing the resource burden of the County staff.

With regards to the timeline of goal 2, AB1466 Compliance, FADNA recommends dividing the project into phases based on available sets of digitized documents. This will create a logical progression of work from digitization to restrictive covenant scanning, redaction, and re-recording. CovenantGuard can scan millions of digitized documents in a matter of weeks. The timeline for the total project can be shrunk by years and is only limited by how quickly the County can supply the digitized documents to FADNA for scanning.

FADNA can also offer efficiencies immediately by using the digitized documents already housed in the FADNA repository (all documents recorded from 5/26/1999 forward).

Other CA Counties have taken this approach as Phase 1, and it allows for an easy introduction to the workflow process for the County staff.

By utilizing the FADNA document image repository, Machine Learning, and the CovenantGuard workflow product, which was custom built to address the needs counties have complying with AB1466, the County will reduce time and effort of resources by automating and minimizing the labor-intensive

task of reviewing documents [REDACTED]

Objective 1: Document Digitization

Objective 2: Import Digital Images Into Tyler Eagle Recorder

Objective 3: Convert Digitized Documents to Searchable PDF/A Format

Objective 4: Scan Records to Identify Potential Unlawful Restrictive Language

Restrictive Covenant Experience

FADNA has had a history of successful application development and service offerings since it started in 1987. For decades our focus has been on public record document image management and public record data collection for our title plants, and our products have allowed customers in all industries and markets to access those images and data. Over the years the breadth of data collected and managed expanded to cover 100% of the country and increased to hundreds of data elements. The number of counties where documents are collected and managed has grown to over 1,900 and covers 85% of the US population. With that volume, it was critical for FADNA to incorporate up-to-the-minute technology to improve the efficiency and speed of data acquisition. It also supplies a larger set of reference documents for building data identification models, like ones to find Restrictive Covenants (RC), than any other solution provider.

Putting together the documents, data, and technology has most recently resulted in building a workflow product specific to AB 1466 called CovenantGuard. CovenantGuard, as it is built today, is a stand-alone cloud-based product that was launched as a Proof of Concept/Phase 1 product in September 2022. FADNA worked closely with the County of Riverside to design, engineer, and build according to mutually agreed upon requirements that satisfied the county's specific application vision. The immediate success of launching CovenantGuard was scanning over 235,000 Riverside documents from the 1930s, 1940s, 1950s, and 1960s to find, redact, and re-record less than 200 documents with RC by the end of December 2022.



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CovenantGuard provides access

[REDACTED]

Our firm was chosen by Riverside County for this solution due to our key differentiators:

- [REDACTED]

What sets FADNA apart is our multi-step process where

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



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Awards

The scanning technology behind CovenantGuard recently won Gold in the Aggregation Platform category of the American Business Awards, Stevie. It was touted as “an innovative and valuable solution to a real-world problem” and that “the product would have a wide-scaling ROI for the counties”.

Also noteworthy, FADNA is a document expert and has extensive experience with providing data and technology for our title business for decades. We have been using our machine learning, OCR, and character extraction technology internally for years to automate the title process. We have multiple patents and an economic interest that drives innovation, automation, and technology related to document data extraction to fuel our own business units where speed and accuracy is paramount. First American itself is the largest user of our technology.

Architecture & Technology

Since this product exists, FADNA can confidently describe the architecture and technology stack already in place.



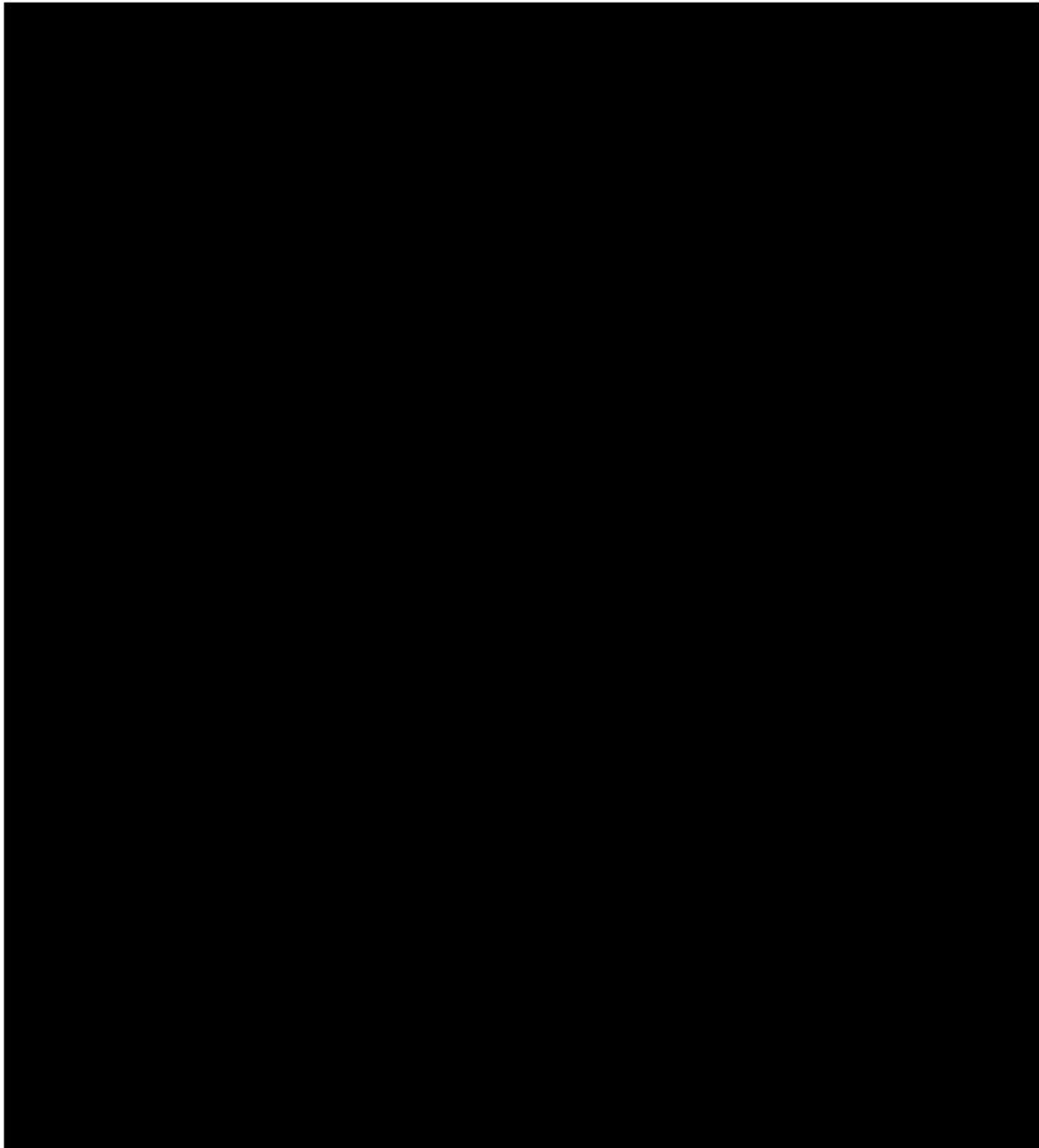


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| [REDACTED] | [REDACTED] | [REDACTED] |
|------------|------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |



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The Machine Learning (ML) System has





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2.

[REDACTED]



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which it is erected, so that the minimum distance between residence buildings shall be 12 feet.

"9. That no fence or boundary wall having a height greater than 5 feet shall be erected upon said property, nor shall any wall, fence or hedge of this kind be erected within the set-back area of any residence building as to any street having a height greater than 3 feet.

"10. That no livery stable, saloon, factory, brewery, asylum, sanitarium or hospital shall be erected or maintained on said property, and that no noxious or offensive trade shall be carried on upon said premises nor shall anything be done thereon which may be or become an annoyance or nuisance to the neighborhood, and that no spirituous or intoxicating liquors shall be sold, dealt in or manufactured on said property.

"11. That no poultry, rabbits, cattle, horses, hogs, goats or similar stock and no poultry yard, rabbit patch, pigeon loft or house shall be kept, maintained or permitted upon said property.

"12. That no garage, bathhouse, shack or other building or tent shall be erected, placed or maintained on said property or occupied as a residence at any time prior to the erection of the main residence building thereon.



"5. That no detached toilet or lavatories shall be erected or placed upon said property.

"15. That no more than one sign and no sign larger than 18 inches by 24 inches shall be erected or maintained on said property, without the consent of the Grantor, its successors or assigns, and no sign shall be erected or maintained in the set-back area of any dwelling house as to any street.

"17. That all building plans for a structure of any kind to be erected upon any of said lots with accompanying specifications shall, during a period of thirty (30) years from October 1, 1936, be submitted for approval of the Grantor of said property at its Main Office, Trust Department, Seventh and Spring Streets, Los Angeles, California, its successor or successors in interest and no structure of any kind shall be erected upon any of said property until said plans therefor have received the written approval of said Grantor, and the construction of any building whatsoever and the location thereof on said premises shall during said thirty (30) year period, come under the supervision of the Grantor.

"18. That after the expiration of one year from the date of the commencement of the erection of any structure, said structure shall, in favor of purchasers and incumbrancers from the owner causing said structure to be erected, be deemed to comply with all the provisions hereinabove set forth, unless actual notice to the contrary shall have been given such purchasers or incumbrancers or legal proceedings shall have been instituted to enforce such compliance.

"19. That each and all of the conditions and restrictions herein contained, except those contained in Paragraph No. 14, shall in all respects terminate and end and be of no further effect, either legal or equitable on and after January 1, 1968, but any and all forfeitures or conversions for breach of any of said conditions and restrictions committed or suffered prior to January 1, 1968, shall be absolute.





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Lot numbered _____ Block _____ of Subdivision No. 2, Mirabel Heights, as said lot and block are delineated and so designated upon that certain map entitled "Mirabel Heights," filed and recorded in the Records of the County of Sonoma, State of California.

Reserving unto the Seller, its successors and assigns, an easement and right of way along, over and under lands of the premises herein described where practicable, and where not so, elsewhere over said premises so as to cause as little inconvenience as practicable for the erection, construction, maintenance and operation of pipe lines, conduits, pole lines and other means of conveying to and from said premises gas, water, electricity, power, telephone and telegraph service, together with the right of entry for the purpose of erecting, constructing, maintaining, repairing and operating the same, together with the further right of entry to any firm, corporation, municipal body, person or persons for said purpose.

This property is conveyed and this conveyance is accepted subject to the following conditions, covenants, restrictions and reservations which shall apply to and be binding upon the Buyer, their heirs, legatees, devisees, executors, administrators,

2. That no part of said premises shall ever at any time be used for the purpose of buying, selling, manufacturing, vending or handling intoxicating liquors.

3. This lot is restricted to use for private residential purposes only.

4. That no residence shall be erected on said lot within or nearer than fifteen feet (15') from the front property line, and no nearer than four feet (4') from the side property line.

5. That a customary outbuilding for garage purposes may be erected, placed or permitted upon said lot, but shall not be erected or placed thereon until after the residence to be erected thereon shall have been commenced.

6. No advertising signs of any kind shall be erected, placed or permitted on said lot.

Provided that each of the foregoing restrictions and conditions shall be and are covenants running with the land; that those contained in Paragraphs 2 to 6, both inclusive, shall terminate and end after January 1, 1947, and those contained in Paragraph 1 shall be perpetual.

Provided further, that a breach of any of the foregoing conditions and restrictions shall cause said premises to revert to the Seller, its successors or assigns, each of whom respectively shall have the right of re-entry immediately upon said premises, in the event of any such breach.

Provided, also, that a breach of any of the foregoing conditions and restrictions, or the re-entry by reason of any such breach, shall not defeat or render invalid the lien of any mortgage or Deed of Trust made in good faith and for value as to said premises, or any part thereof; but such conditions and restrictions shall be binding upon the owner of said premises whose title thereto is acquired under foreclosure, trustee's sale, or otherwise.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

To Have and To Hold all and singular the above mentioned and described premises together with the appurtenances unto the said parties of the second part, their heirs and assigns forever, and successors in interest.

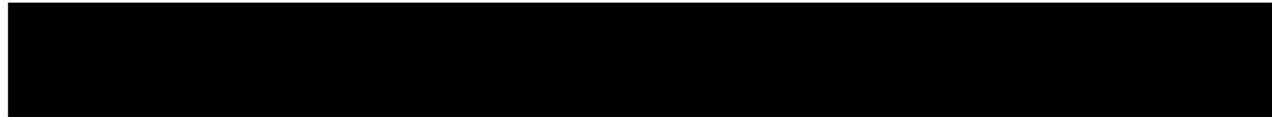
In Witness Whereof the party of the first part, on the day and year first above written, has hereunto caused its corporate name to be signed, and its corporate seal affixed, by its President and Secretary, thereunto duly authorized by resolution of its Board of Directors.

MIRABEL AMUSEMENT COMPANY, LIMITED

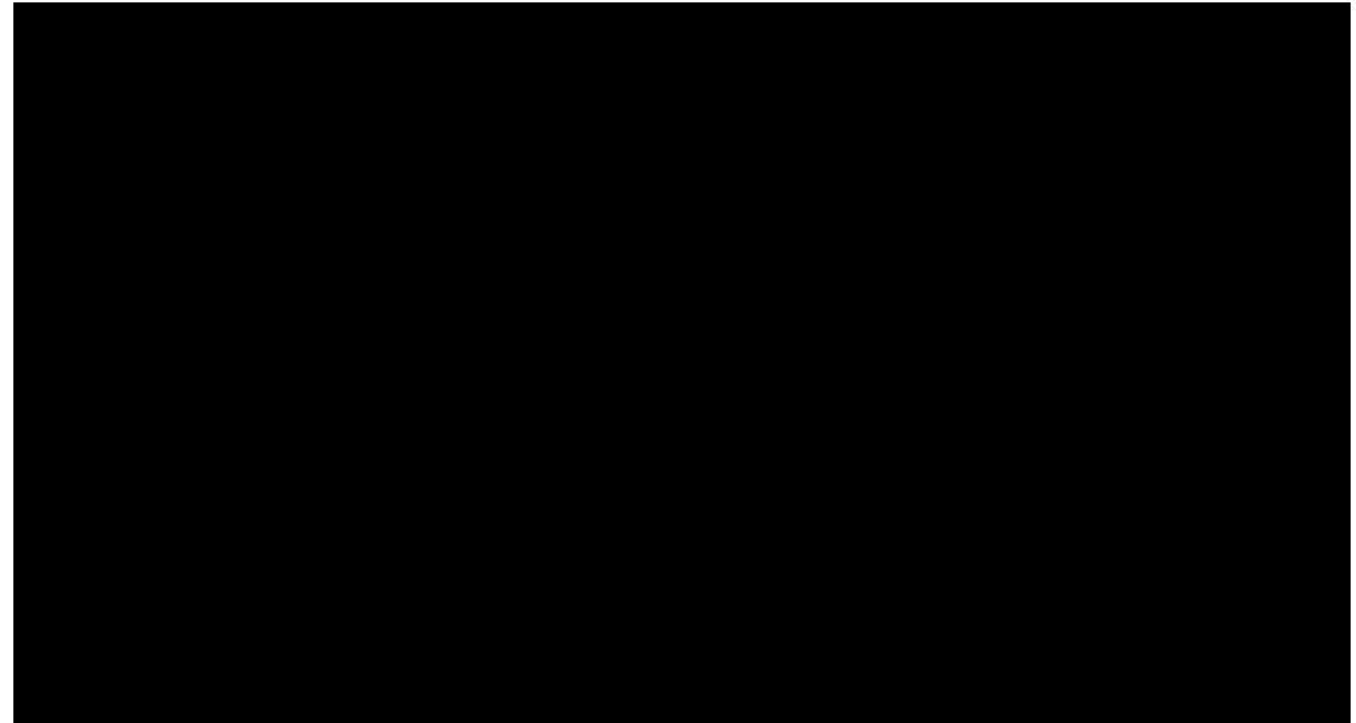
By Henry E. Fetch President
Margie Fetch Secretary



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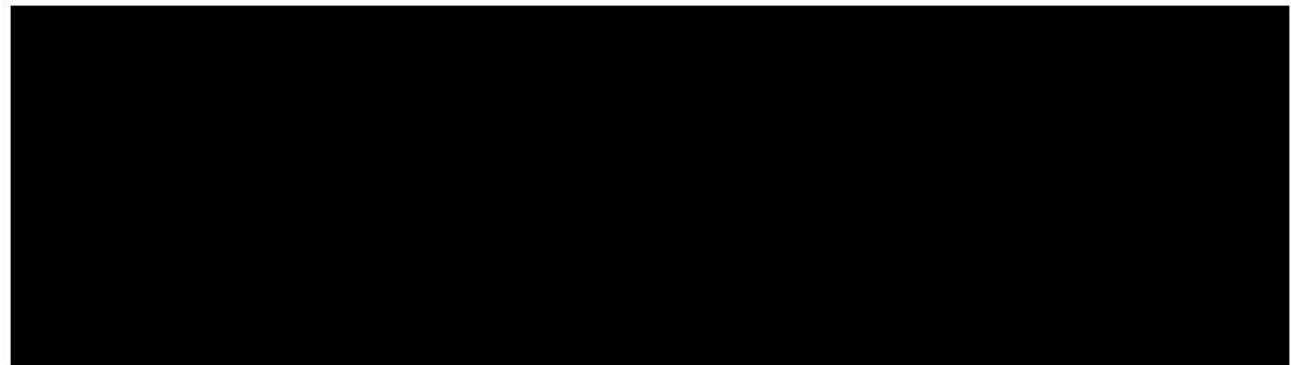


The First American Document Repository already houses over 100,000 Inyo County documents and all of them have been scanned for RC using the list of phrases FADNA has identified and either our OCR/Extraction model or Machine Learning model.



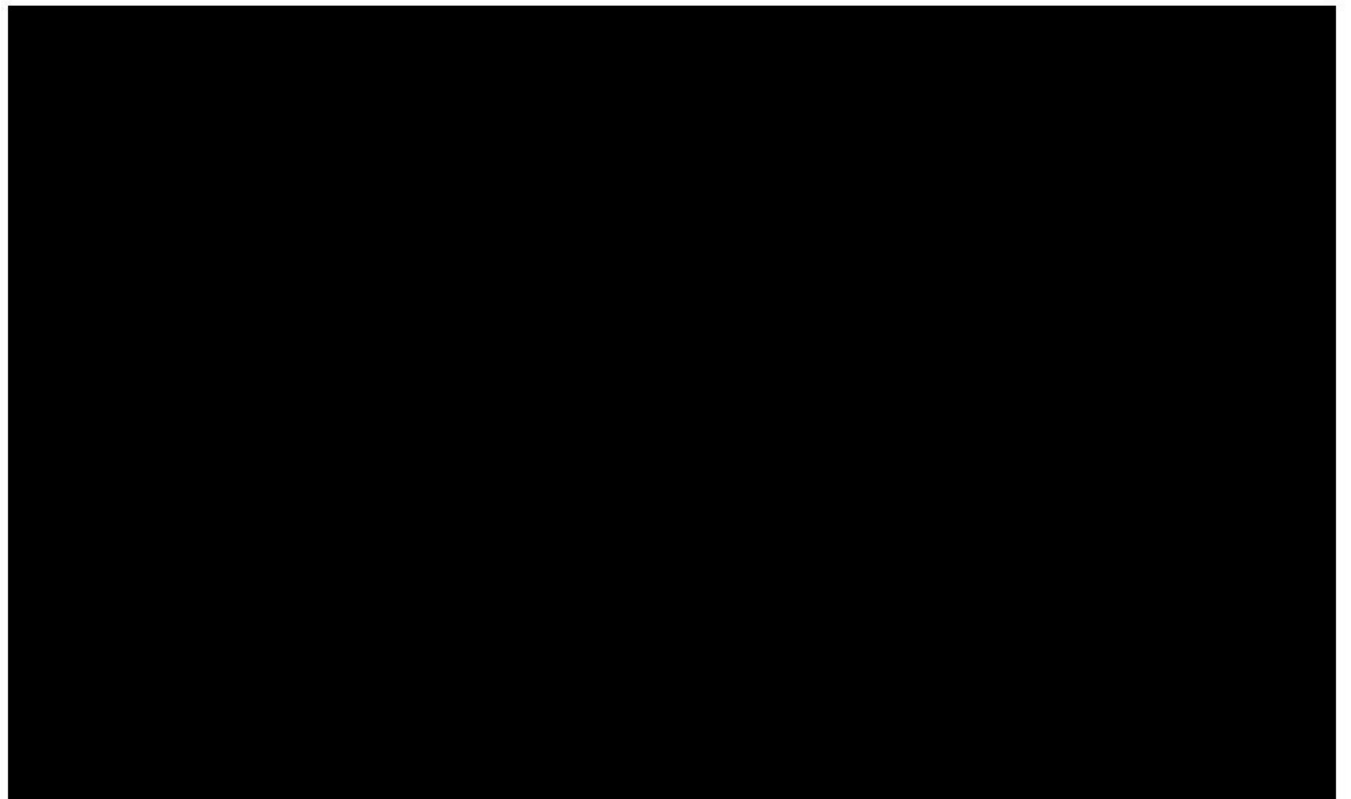
The Optical Character Recognition (OCR)

FADNA already processes every Inyo County document as soon as it's received using OCR & Extraction, as well as Machine Learning, for indexing, data extraction, and storage management. This highly accurate process significantly reduces the time to complete the daily operations by reducing the need for manual keying and data verification.





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Objective 5: Document Review & Approval Process and Objective 6: Place Unreadable Documents in a Workflow

Objectives 5 and 6 are solved by using CovenantGuard.

Approach

Since the launch of FADNA, our methods of data collection, document management, and application development have kept up with current technology. That includes the development of the daily business processes used to identify NPPI and restrictive covenants in every document across over 1800 counties. Due to sheer volume and speed required to maintain the most current title plants possible, automation, Machine Learning, OCR, and Character Extraction of the data was imperative. FADNA is an industry leader in this technology and has over 30 patents related to OCR and extraction. All of this makes us well positioned to be a consultative and valued partner.

OCR is not always successful, particularly with handwritten historical or poor-quality documents. Machine Learning offers an alternative to OCR. It's what sets FADNA apart.

FADNA is well-known for its flagship product, DataTree.com, an online portal to access public record data to verify property information, evaluate trends, and serve as a basis for research. Built from the ground up, the DataTree.com portal is the most advanced property, homeowner, and mortgage information research solution in the market today. DataTree.com is a primary example of how FADNA created, enhances, and maintains Software as a Service by using its development expertise and public record data industry knowledge.

FADNA began tracking what became AB1466 months prior to its passage in 2021 by the California legislature and Governor Gavin Newsom. Earlier versions of the law were written to put the burden on title companies to identify Restrictive Covenants (RC) in recorded documents. Therefore, it was critical for FADNA to be prepared for this potential responsibility by defining a list of RC terms, searching for the terms, and flagging a document that included the terms.

When the language of the law changed to make counties responsible for this task, FADNA quickly realized that we had all the technology and expertise required to build a tool that would help counties satisfy it. So, we pivoted our strategy and enhanced the technology already in use for internal data and document management to support every California county face the task in front of them. As a result, FADNA built a Software as a Service workflow product, CovenantGuard, based on a detailed set of requirements gathered after a comprehensive review of the law as well as discussions with counties about implementation plans and operational needs.

CovenantGuard is a Software as a Service product, but it was built to be customized to meet all the requirements of the County.

The comprehensive review was conducted by the product team who dissected the law line-by-line to create the list of requirements. Some of the important elements of the law are:

- 12956.1. (b) (1) Restrictive Covenants (RC)
- 12956.1. (b) (1) Cover page

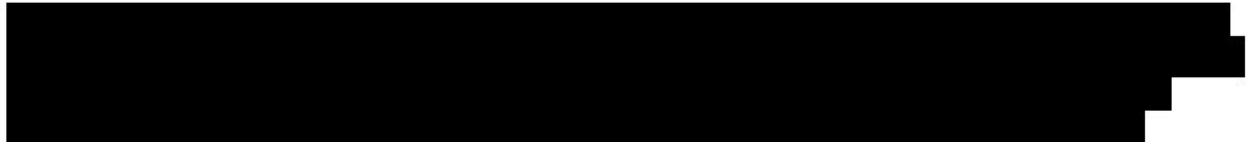
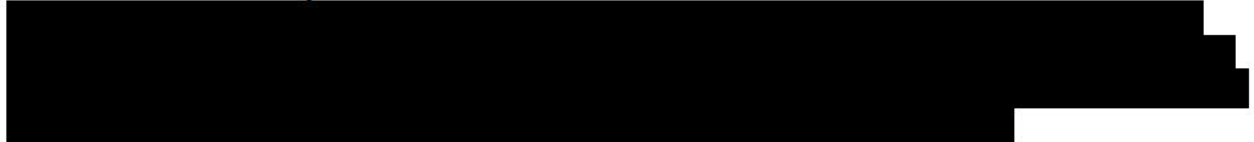


- 12956.2. (a) (1) Redaction of RC
- 12956.2. (a) (1) PDF version of redacted document
- 12956.2. (b) (1) Approval by county counsel
- 12956.3. (a) RC program to assist in redaction
- 12956.3. (b) (1) (A) Outlines how recorder will ID RC
- 12956.3. (b) (1) (C) Track & maintain RC identified
- 12956.3. (b) (2) Identify RC
- 12956.3. (b) (3) Index RC modified document
- 12956.3. (b) (4) Redact RC
- 12956.3. (c) Retain nonredacted record
- 12956.3. (d) (1) Status reports



All of this is why FADNA is best equipped to support the County complete their Restrictive Covenant Modification project goals using CovenantGuard.

CovenantGuard Development



If the County is interested in expanding the scope of the project beyond the original vision outlined in the SOW, FADNA offers Professional Services which are scoped and priced on a per project basis.

Concept & Functionality

CovenantGuard is much more than a concept. It is a production-ready Software as a Service (SaaS) workflow product that enables users to:

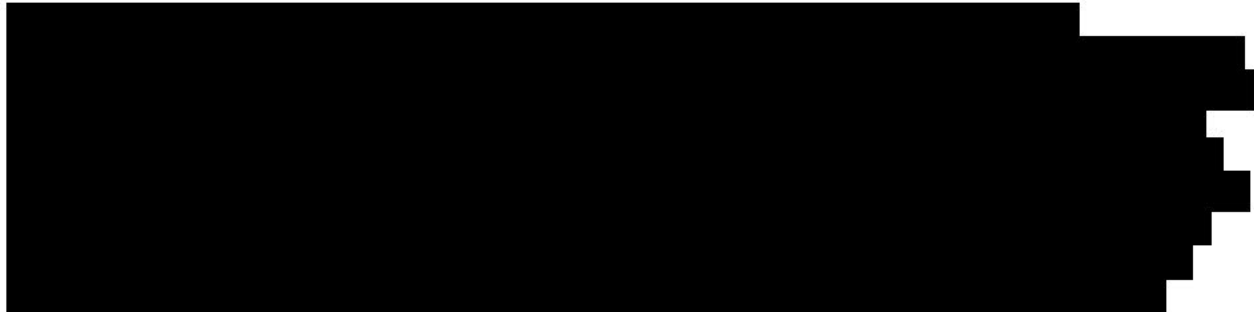
- Review digital documents that have been scanned for Restrictive Covenants (RC)
- Add/Edit/Delete suggested redactions



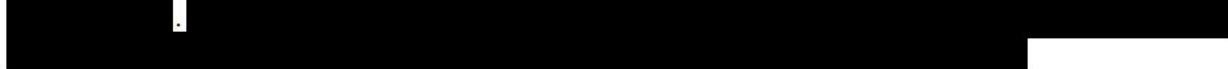
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- Complete the Restrictive Covenant Modification (RCM) form
- Generate a redacted version of the document for recording

All screenshots below



A CCR initiates the workflow by selecting a document identified with RC from the list in the





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[Redacted content]

[Redacted content]

[Redacted content]

[Redacted content]

[Redacted content]



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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Product Customization

There are some product features and functions that the County has requested that are customizations of our off-the-shelf product. Strategically, CovenantGuard is built to be customized.

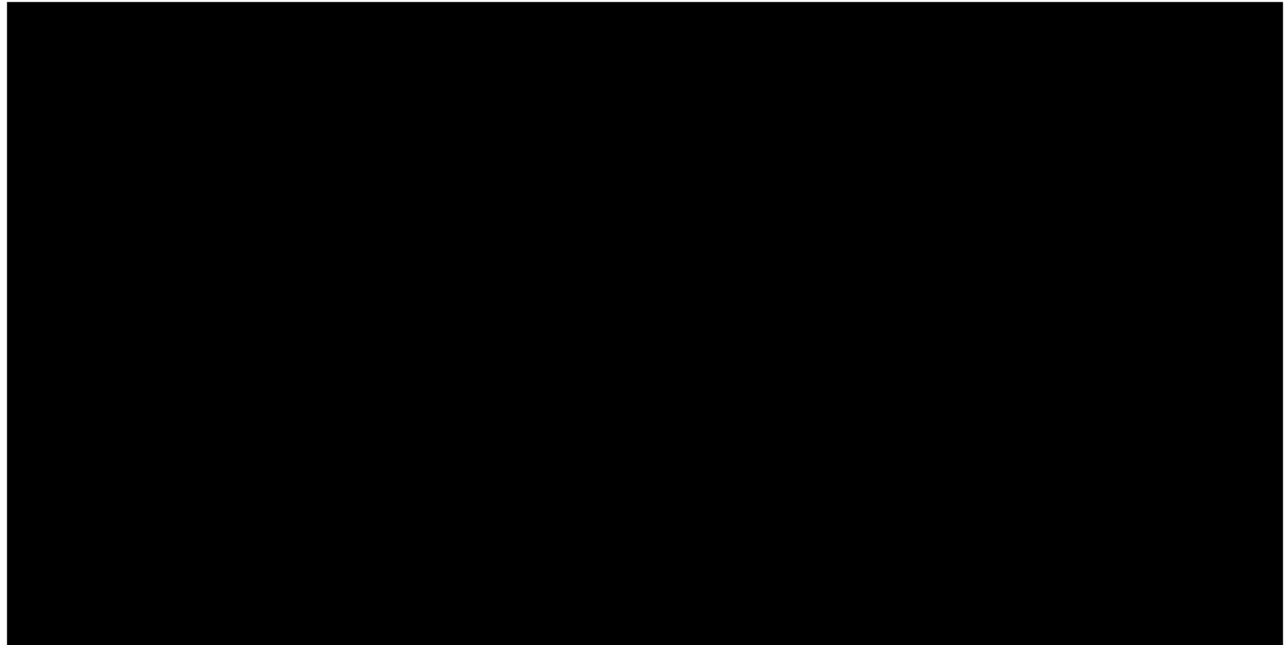
The County has requested that the system be configurable to include a customized RCM form cover page with names, titles, and signatures specific to the logged in user. The product team anticipated this need before a single line of code was written, so CovenantGuard is built to allow for this exact customization. The off-the-shelf product already has a configurable RCM form that is prepended to the completed redacted document. [REDACTED] FADNA can offer the County a customized RCM form as an option.

CovenantGuard can maintain the documents which have been Completed (RC found & redacted and RCM pre-pended) [REDACTED] for the duration of the contract and any extension to enable more seamless future scanning of additional RC terms and phrases. Cost for storing additional documents can be discussed. **Product Customization**



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Objective 7: Maintenance of All Reportable Data



Beyond the Stated Objectives: Maintenance, Project Timeline, and Problem Resolution

CovenantGuard Maintenance

Maintenance of CovenantGuard is the responsibility of FADNA. Since the product is available to all counties and improvements may include requirements beyond those that have been defined by the County, any future enhancements and bug fixes will be immediately accessible to the County once those code changes are pushed to the production environment. All document images that have been processed through CovenantGuard will be available for the life of the contract.

FADNA will provide the project/product manager as the single point of contact (SPOC) for ongoing White Glove support of CovenantGuard. From 8 am – 5 pm Monday through Friday calls and/or emails to the SPOC will be answered within 4 business hours. After hours and on weekends & holidays communication will be answered within 8 business hours. This personalized attention from the product expert who built CovenantGuard is just one way that FADNA shows how much it values the County.

Along with the SPOC, the County will have a full Contract Management team with Executive team oversight.

- Dedicated National Account Director with government expertise
- Dedicated Government Account Manager

- Accounts Payable team that manages hundreds of government contracts; meeting compliance and process requirements to facilitate smooth invoicing and payment processing
- Dedicated Legal Resource with government expertise
- Award-winning white glove dedicated customer service

Additional support includes:

- Product Training – on-demand video conference calls (Teams/Zoom)
- Training materials
- On-demand training and/or troubleshooting
- CovenantGuard User Guide
- Assistance setting up new users

Project Timeline

FADNA can scan millions of documents for RC and load them into CovenantGuard [REDACTED]. The County can be assured that the timeline for completing the project is only limited to how quickly the docs are digitized by the County and provided to FADNA.

To ensure that any customization work is performed effectively and on time, we employ an Agile project management style with Scrum methodology. There are certain artifacts that we feel are critical to the success of a project and should be in place prior the start of development. These artifacts include, but are not limited to, a Project Charter, Stakeholder Register, Communication plan, and Risk Register. Having these artifacts provides a good foundation towards success for the project.

During the development cycle we follow the Scrum methodology. Our Sprints are typically time boxed into 2 weeks in length. This provides enough time to complete defined work and to allow for corrective actions should issues be identified. Our Sprints contain the standard ceremonies of backlog refinement, sprint planning, daily stand ups, sprint review, and retrospectives. Azure DevOps is used for tracking the work (User Stories and Bugs) and progress reporting.

We have found that by aligning the work being tracked with DevOps and the overall project plan we can ensure that goals and agreed upon timelines are achieved.

Problem Resolution

As with all projects, problems may arise during the course of the engagement. FADNA is focused on customer satisfaction, so we excel at creative, thorough, and speedy problem resolution for any type of issue, including but not limited to technical, process, or business, that the team may encounter.

All problem resolutions begin by defining the problem and engaging the correct team of people to assist with resolving it as quickly as possible. The County is considered a White Glove customer, which will secure priority access to resources, technical and human. It also ensures that the team that is engaged from RFP response forward is comprised of Data & Analytic experts in their respective areas and that senior leadership fully supports any government contract.

Technical issues whether related to CovenantGuard functionality, phrase identification, network security, indexing data collection, XML integration, or other system components, will be tracked and prioritized in Azure DevOps. The FADNA instance of DevOps is accessible only to the internal FADNA team per corporate security policy.

Any process and support issues will be managed by the FADNA Project Manager. That team member prioritizes this project over any other and will adjust her schedule to ensure she is available for meetings or conversations that are required. She is also familiar with all aspects of Agile software development and adept at communicating with all internal and external resources associated with the project. She has the authority to pull in additional resources as needed, too. Since she has been involved with defining and building the product since its inception, she is intimately aware of all aspects of the product and process.

Business problems related to the contract or payment will be managed by the National Account Director, Tracie Wilson. She has 20+ years of experience working with government entities and a track record for 100% customer satisfaction. Tracie has a dedicated Account Manager to support her clients who is empowered and committed to resolving issues quickly. Both the National Account Director and the Account Manager are intimately familiar with the internal processes for the departments with which they interact. Legal and Finance department leaders and related staff will be familiar with the contract and the White Glove status of the County.



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Schedule of Fees

| Objective | Line Item | Quantity/Term | Price | Extended Price |
|---|-----------|---------------|-------|----------------|
| 4: Identify potential unlawful restrictive language | | | | |
| Objective 4: Total | | | | |
| 5: Document review and approval process | | | | |
| Objective 5: Total | | | | |
| 6: Place unreadable documents in a workflow | | | | |
| Objective 6: Total | | | | |
| 7: Maintenance of all reportable data | | | | |
| Objective 7: Total | | | | |
| Summary | | | | |
| Objective 4: Total | | | | |
| Objective 5: Total | | | | |
| Objective 6: Total | | | | |
| Objective 7: Total | | | | |
| TOTAL | | | | |

Additional scanning can be purchased at [REDACTED]
Each additional year of CovenantGuard can be licensed at [REDACTED]



Exhibit 1 – FADNA Table of Contract Exceptions

FADNA has reviewed Attachment A – Standard Contract No.116 and has provided the following Table of Contract Exceptions. We look forward to working with the County to establish mutually agreeable terms for the work described in the RFP.

| Inyo County Agreement Section Title | First American Data Tree Contract Exception |
|-------------------------------------|---|
| | |



COUNTY OF INYO, CALIFORNIA

REQUEST FOR PROPOSAL (RFP)

RESTRICTIVE COVENANT MODIFICATION
& RECORDS MODERNIZATION PROJECT
PER CA AB 1466 (2021)

ORIGINAL

DUE: JULY 21, 2023, 5:00 P.M.

SUBMITTED BY: KOFI TECHNOLOGIES, INC.

| TITLE | BOOK |
|--------------|--------|
| Deed Release | |
| " | |
| " | |
| " | |
| " | |
| " | |
| " | |
| Order | |
| Deed | 412 |
| " | 450 |
| " | 14 163 |
| Release | " 163 |
| " | 17 205 |
| Deed | " 205 |



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SECTION I. EXECUTIVE SUMMARY

This proposal addresses the Inyo County Clerk-Recorder/Elections Office's Request for Proposal (RFP) for *Restrictive Covenants Modification & Records Modernization Project Per CA AB 1466 (2021)*. Kofile Technologies, Inc. (Kofile) is committed to a solution that offers professional standards, conforms to the County Clerk-Recorder's technical specifications, and, in terms of quality and longevity of deliverables, provides the highest rate of return on the County's investment.

Kofile representatives have assessed the records identified by this RFP.

| Objective Number | Objective | Addressed? (Yes/No) |
|---|---|--|
| 1 | Digitize historic records to an interoperable, non-proprietary TIFF format. | Yes |
| 2 | Import the digital images of historic records from Objective 1 into our Tyler Eagle Recorder system with indexing information | No (Kofile can format for import with the required indexing (which is Book & Page per the scope of this RFP) |
| 3 | Convert all existing scanned/digitized documents to PDF/A format using OCR, or ICR only when OCR is not an option | Yes |
| 4 | Scan records to identify potential unlawful restrictive language | Yes |
| 5 | Document review & approval process | Yes |
| 6 | Place unreadable documents in a workflow | Yes |
| 7 | Ensure maintenance of all reportable data | Yes |
| Can Objectives be selected a-la carte? (Yes/No) | | Yes |

Kofile is presenting a solution for all required services, with offsite capture at its Labs in Carson City, NV (Paper to Digital) or Sun Valley, CA (Micrographics to Digital)—each is less than 220 miles from Independence. Kofile will complete all services without reliance on subcontractors. Inyo County Clerk-Recorder is welcome to visits any of Kofile's Labs.

Offsite digitization services are in the best interest of the County:

- Independence provides limited accommodations for a long-term onsite team—onsite imaging will require additional costs for travel/lodging/expenses that are not warranted for a project this size (especially if the County requires the work split into multiple phases).
- Quicker turnaround.
- Offsite produces better quality images and services.
- The Clerk-Recorder's Office has limited space for additional people and devices required to scan onsite.
- Any bound (sewn) Record Books or those oversized (e.g., Indexes, measures greater than 12" on the shortest edge) will not fit through the mobile-capable scanners utilized by any on-site vendor. Scanners that address these dimensions are too sensitive to readily travel.
- Kofile provides offsite services for tens of thousands of volumes without loss or compromise. From pickup to delivery, the records do not leave Kofile's custody.
- Inyo County Clerk-Recorder has previously received offsite services by Kofile (with similar services provided for multiple NorCal counties).
- A robust and proven records request service ensures that the Clerk-Recorder has quick access to all records offsite.



How would you approach this overall effort?

By choosing Kofile to complete *all* required services, Inyo County ensures unparalleled security for records from start to finish. Kofile offers the industry's highest insurance, personalized pickup/delivery at the County's convenience, facility security, tracking and handling procedures, guarantee on all deliverables, and quality of workmanship. Kofile's standards of service were designed by paper conservators to ensure no records are compromised in our hands.

- **What phasing would you recommend? Specify the phase sequence and duration of each phase.**
With Kofile, the County can throttle work as needed, or even scale up to expedite (applicable to all aspects of the required scope). Kofile has a large, experienced, and cross-trained team available as needed.
- **What opportunities for efficiency through automation or similar could you recommend?**
Kofile is continually evaluating technological advancements for implementation and cost savings for clients. The services herein are based on decades of experience and familiarity with county recordings. We incorporate the best proven automations, equipment, and software to produce deliverables that both Kofile and are clients proud to reference.
- **Recommend alternatives or options for balancing cost, time, and staff impact.**
Additional hidden costs of other vendors are standard procedures with Kofile (included in the proposed solution). Inyo County is assured of a vendor that specializes in working with local recording offices and understands the essential needs and requirements of any project. This is also why Kofile proposes offsite services—as this is in the best interest of the County.

Solutions Overview

AB-1466 compliance is a complex and time-intensive undertaking. All partners are not equal. The Inyo County Clerk-Recorder deserves a committed and long-term partner to ensure project success and support. Kofile's multiple experts and customer support channels available to the Clerk-Recorder's staff and County Counsel are critical.

Kofile's team is familiar with the County Clerk-Recorder's records, and highly knowledgeable with vast nuances of Restrictive Covenant (RC) language. Kofile closely follows the State of California's commitment to implementing legislation and programs for modification (RCM).



The Inyo County Clerk-Recorder's solution presented herein offers advanced Cloud-Hosted technologies to accommodate the Statement of Work (SOW).



Kofile's Solution differs as its workflow includes a component of human review by Kofile's Redaction Specialists to filter software-identified redactions. Therefore, the RC Library grows, and the burden on the County reduces.



Kofile is positioned to provide long-term solutions tailored to Clerk-Recorder's workflows. As a Cloud-Hosted Solution, reliance on County resources and IT is eliminated. With Kofile, there is no offshore remote access to images and data.



Kofile has the flexibility to evolve with this project in terms of technology and establishing new best practices as the Inyo County Clerk-Recorder leads the State of California. While Kofile knows it is not the lowest bidder, its price points are based on acceptable standards of service to ensure that the County Clerk-Recorder receives the Best Value for its investment. As a forerunner in the State, the goal is that the Clerk-Recorder sets the beacon to achieve, not the pitfall to avoid. Kofile's Solution is solely based on tested and acceptable technologies, shaped by the functional requirements of the Office and RCM initiatives.

This solution combines the science and art of redaction. AI software accelerates the identification of potentially discriminatory language from property documents. Kofile's AB-1466 sales and customer support consultants help navigate the entire process.

Kofile's solution is heralded by a team with unparalleled experience, familiarity with the Inyo County Clerk-Recorder, and a proven history of client partnership. Key personnel hold 15-30+ years of experience working with county recording offices. Inyo County benefits from Kofile's firsthand knowledge in the State of California.

Kofile's key staff are readily available to address any concern. Upon project award, direct contact information is provided. A benefit of Kofile's services is we provide direct contact information for technical support. Therefore, the County Clerk-Recorder can reach highly knowledgeable staff, and not receive canned responses (such as AI or Predictive responses).

With Kofile, the Inyo County Clerk-Recorder is assured of a vendor with the capacity and experience to handle any scale project—from one document to thousands of volumes. Kofile is the oldest and most experienced private firm specializing in the digitization, electronic access, and preservation of permanent and historical/fragile public records. Kofile has a proven history providing projects and deliverables.

For the Records Modernization services (including digitization and conversion), Kofile scans a representative sample of the collection for the County's review. This sample enables resolution of questions and problems prior to production and becomes the project's baseline standard.

Kofile does not subscribe to the "scan it and forget it" philosophy. Kofile addresses any size micrographic or microform, and specializes in addressing originals in advanced states of deterioration. Many Kofile projects involve re-imaging projects that low-bid vendors initially attempted. With Kofile, Inyo County's images are the highest quality and free of distortion and loss of information due to capture failures.

Kofile provides Best Value for any project involving active or permanent records. The Inyo County Clerk-Recorder benefits from Kofile's investments in the best hardware, software, and emerging technologies.

OVERVIEW OF KEY DIFFERENTIATORS



PROVEN WORK HISTORY

Kofile is a proven vendor for the Inyo County Clerk-Recorder and other counties across NorCal, and local government recording offices nationwide for several decades.



COST TRANSPARENCY
Actual cost is not hidden by complicated and multi-layered price points. Kofile's pricing is all inclusive, with no hidden fees, no add-ons, no 'as-needed' gotchas.

ACCURACY RATE
Kofile understands that quality and accuracy are mandatory in any project of this nature. Kofile can commit to a minimum accuracy rate of 99.95% for redaction services.

SUBJECT MATTER EXPERTISE
Second- and third-generation conservators and public records experts lead projects, including pioneers in preservation, imaging, redaction, re-creation, and data entry. Kofile's services are led by trained and experienced Redaction Specialists with proven procedures and software.

- Imaging/Re-creation Manager with 30+ years of experience.
- Data Entry Manager with 30+ years of experience.
- Micrographics Consultants with 40+ years of experience.

WORKFLOW
The County Clerk-Recorder receives project workflow customized to the needs of the project--rather than having its needs squeezed into a cookie-cutter process.

OWNERSHIP OF DATA

- Kofile will not sell, distribute, or grant unauthorized access to Inyo County records.
- The County retains all ownership over records, including physical, digital, or metadata.
- The County receives a MASTER of all digitized images via its preferred medium (SFTP, thumbdrive, harddrive, etc.). If requested, Kofile can keep a security backup of all digital images.

RECORDS REQUESTS
Kofile provides a records request line to efficiently provide scanned copies to the County- approved personnel. Kofile has never charged for fulfillment of ad-hoc requests for copies.









WARRANTIES & GUARANTEE
Kofile stands behind all its services and products. There is a Limited lifetime guarantee on all Kofile's workmanship. Kofile will redo any and all conversion services if Kofile's performance causes the digital images or solution to not meet agreed-upon specifications at no additional cost to the County.

ONSHORE SERVICES
Kofile takes pride in providing services without sole reliance on offshore subcontractors. Low bids by other vendors rely on solely offshore servicing to India, the Philippines, China, etc. These low-bid projects often necessitate additional costs to improve accuracy. There is no offshore remote access to any of the Inyo County's images and data. All work is performed by a US-based team.

CLOUD SECURITY
Kofile provides superior technological security measures, and a native Cloud Solution eliminates reliance on County resources.

SUPERIOR INSURANCE PROVISIONS
Kofile holds some of the industry's highest levels of insurance coverage, including Cyber Liability insurance (see evidenced on herein).



-  **FORMATTING FOR TYLER EAGLE RECORDER**
Annually, Kofile averages 20-30 conversion projects for either Tyler Eagle Recorder or Odyssey. Kofile is highly experienced with the formatting of images/indexes required by these systems.
-  **ADVANCED TECHNICAL EQUIPMENT**
Kofile invests in superior technological scanning equipment, software, and large format planetary/book scanners as part of its commitment to preserving documents and ensuring the best possible image capture. Kofile carefully selects and evaluates equipment based on performance and reliability.
-  **IMAGE PROCESSING: ZONAL ENHANCEMENTS**
Proprietary software provides clean-up such as deskew, despeckle, character repair, and zonal enhancements.
-  **QUALITY ASSURANCE (QA) & CONTROL (QC)**
Services are conducted by trained and experienced technicians with proven procedures and programs. Kofile does not miss pages, produce illegible images, or damage documents. Kofile will QC each image and sight verify each image (QC includes two instances of human eye verification).
-  **COMMUNICATION**
The County is assured of a vendor that understands the language of a local government. Kofile communicates effectively throughout the project.
-  **QUALITY CONTROL**
Kofile is not reactive in quality control, but proactive. The project starts with a sample of images and index data to ensure that each party understands the output and that output meets all requirements.
-  **ACCESS TO THE WORLD LEADERS IN MICROGRAPHICS PRODUCTS AND SERVICES**
 - In 2016, Kofile's parent company purchased PFA, Inc., which is a leader in the micrographics industry for micrographics scanning, creating preservation microfilm, solutions for historical micrographics collections, and brown toning methodologies.
 - In 2022, Kofile purchased the Eastman Park Micrographics, Inc. (EPM) Lab Services business, which provides film writing, processing, duplication, and inspection.
-  **PERMANENT FACILITY**—Kofile's facilities each maintain superior security.
Preservation & Digitization Lab in Carson City, NV, has a 16,000 ft.² floorplan, with over 5,000 ft.² of working lab space and a 5,000 ft.² loading/receiving area. This facility boasts a fire-resistant/rated storage area that can hold 2,000 volumes. Digital surveillance and fire monitoring are active 24/7.
Micrographics & Digitization Lab in Sun Valley, CA, has a 7,920 ft.² floorplan. A media vault protects records. Digital surveillance and fire monitoring are active 24/7.

Kofile projects are always executed efficiently and to the highest professional standards. Kofile is committed to implementing a solution that offers professional standards, conforms to the County's key technical specifications, and, in terms of product quality and longevity, provides the highest rate of return on the Inyo County Clerk-Recorder's investment.



SECTION II. RESPONSES TO OBJECTIVES

OBJECTIVE 1 *(convert historic records to records to an interoperable, non-proprietary TIFF format):*

- Provide the cost, per page/image, based on the type of physical media and content contained therein. Please see the pricing section (Pages 52-54) for any costs.
- Specify if your services quote is for obtaining the image from the original book source, or from the microfilm/microfiche source, or provide a quote for both, if applicable.

Kofile is providing costs for both services. Kofile can work with the County to select the appropriate service level per the specific record set based on desired outcomes, project budget, and condition of the record. In some cases, scanning paper may be required when film is compromised. However, the total project cost is estimated based on scanning from microforms (microfiche and aperture cards) and only 20 vols. of Index Books.
- Describe how you will ensure quality control, such that each scanned page is clear and the image and text are completely readable.

If the original item is unreadable, it is likely that the digital image produced is unreadable. However, Kofile forms its services to ensure that no digital image is unreadable due to failures by Kofile during digitization.

Kofile does not subscribe to the "scan it and forget it" philosophy. Kofile addresses any size micrographic or microform, and specializes in addressing originals in advanced states of deterioration. Many Kofile projects involve re-imaging projects that low-bid vendors initially attempted. With Kofile, Inyo County's images are the highest quality and free of distortion and loss of information due to capture failures.
- Explain how issues with image quality will be addressed. If image quality is deemed unacceptable, or any images are missing, and the images need to be rescanned, how is this handled and what expenses are involved?

If manual enhancements (zonal processing) outside the RFP scope, such as those required to improve legibility, pricing is included herein. Please see Pages 44-45 for information. The County approves any and all charges.

Kofile stands behind all its services and products. There is a Limited lifetime guarantee on all workmanship. Kofile will redo any and all services if Kofile's performance causes the digital images or solution to not meet agreed-upon specifications—at no additional cost to the County.

OBJECTIVE 2 *(import historic digital records from Objective 1 into Tyler Eagle with pre-populated indexing fields):*

- Confirm your process will be compatible with importing the digital records with the designated text fields of each record into our Tyler Eagle Recorder system.

Please see Pages 47-48 for information about Tyler formatting. Images are formatted for import according to Tyler requirements. However, the County is responsible to ensure actual import with its system vendor.



- Specify if the converted digital image will be indexed by its existing Book/Page number, and/or if your process will capture and prepopulate fields for Grantor/Grantee indexing, document number, and/or recording date, and how that metadata will be stored and can be accessed.

Kofile will provide the required Book/Page Number indexing (file naming/tagging). Additional fields would require additional costs.

OBJECTIVE 3 *(convert digitized documents to OCR PDF/A format, or to ICR when OCR is not an option):*

- In addition to the costs, please specify if this conversion process will retain all field data for each recorded document including indexing fields, or specify otherwise.

Please see Pages 23-32 for information. The output PDF/A files from the Restrictive Covenants Modification process are multi-page files. These files will also include an OCR text layer.

The only file outputs from the RCM tool are files which are modified to redact any Restrictive Covenants. Any file which does not get redacted is not converted to PDF/A.

OBJECTIVE 4 *(identify documents with unlawful restrictive language):*

- Specify how the workflow will be established, whether using flags or fields in the existing Tyler Eagle Recording system, or in an external software environment and if that environment is hosted locally or virtually.

Please see Pages 23-32 for information.

- Please itemize one-time costs, ongoing expenses, interface expenses, and any other costs/fees that may apply.

Kofile's cost proposal is all inclusive. Please see the pricing section (Pages 52-54) for any costs.

OBJECTIVE 5 *(workflow process between Recorder and County Counsel):*

- Please indicate how this objective will be achieved, whether in Tyler Eagle or an external software platform. This objective is achieved in an external software platform. Please see Pages 23-32 for information. As a Cloud-Hosted Solution, reliance on County resources and IT is eliminated. With Kofile, there is no offshore remote access to images and data. County users log in through a browser from any device (the system is also mobile friendly).

- Please include all related costs for these services.

Kofile's cost proposal is all inclusive. Please see the pricing section (Pages 52-54) for any costs.

- If any of this Objective cannot be achieved fully, describe what/how/why.

Kofile will fully support all required RFP services. The only exception is that system loading to Tyler Eagle Recorder is per the County's agreement with its system vendor. Kofile will format all digital images per the Tyler requirements.



- Provide the cost for additional County departments access (including the County Counsel), including total costs for licensing, functionality, etc.
Please see the pricing section (Pages 52-54) for any costs. Kofile extends the services and pricing awarded under this RFP to other divisions/units of the County or other governmental agencies.

OBJECTIVE 6 *(workflow for documents not compatible for OCR or ICR format)*

- Explain your workflow process solution for this requirement, and include any additional costs for this service, or specify if this is not available.
Kofile will use commercially reasonable efforts through OCR software to identify all requested fields including the Restrictive Covenant Modification (RCM) Terms as selected by County. The accuracy of OCR software depends upon the quality of the source image. Contractor makes no representation whether such RCM Terms are exhaustive or that OCR software will identify every instance of requested fields including RCM Terms. County reserves final discretion with respect to which text, if any, to redact.

Please see Pages 23-32 for the proposed workflow. Please see the pricing section (Pages 52-54) for any costs for additional image cleanup and zonal enhancements. Kofile's cost proposal is all inclusive.

If the County requests PDF/A versions of non-redacted items, this is an additional process, and pricing is included herein for this level of service.

OBJECTIVE 7 *(maintenance of all reportable data)*

- Explain all monitoring functions and report options and/or tools available to accomplish these reporting requirements.
Please see Pages 26-27 for information.

OTHER

- If your process includes any additional services not specified in this scope, please include any additional services itemized separately within your quote.
Please see the pricing section (Pages 52-54) for any costs. All services are priced per the Site Visits and RFP quantities.
- Please provide prices based on the total project and total quantities for all services within this RFP to have a total project quoted expense.
Please see the pricing section (Pages 52-54) for any costs.
- Please also provide quotes on scaling proportional rates to calculate annual actual costs, and all other related costs.
Please see the pricing section (Pages 52-54) for any costs.
- Please itemize any one-time expenses, project management, development, implementation, overhead, imaging/data processing, training, and any other specific expenses.
Kofile's cost proposal is all inclusive. Please see the pricing section (Pages 52-54) for any costs.

SECTION III. QUALIFICATIONS & EXPERIENCE



| ORGANIZATION INFORMATION | | | |
|---|---|---|--|
| Organization Legal Name | Kofile Technologies, Inc. | | |
| Tax ID | 26-4034328 | | |
| State/Date of Incorporation | 1/8/2009 Delaware (C Corporation) | | |
| SAM.GOV EUI No. | GUUCEJ3BYEB4 | | |
| California Entity No. | C3190214 | | |
| Physical Address | Corporate: 6300 Cedar Springs Road, Dallas, TX 75235 | | |
| Mailing Address | P.O. Box 541028, Dallas, TX 75354 | | |
| Phone Number | (214) 351-4800 | | |
| Website | www.kofile.com | | |
| Organization Representative Name and Contact Information | <table border="0"> <tr> <td style="vertical-align: top;"> Signatory for this RFP: Michael Hill, Chief Revenue Officer 600 Cedar Springs Road Dallas, TX 75235 preserve@kofile.com <i>Office Phone: 214/351.4800</i> </td> <td style="vertical-align: top; padding-left: 20px;"> Authority to Clarify Proposal: Angelique Nasser, Account Executive 600 Cedar Springs Road Dallas, TX 75235 angelique.nasser@kofile.com <i>Cell Phone: 916/266.3292</i> </td> </tr> </table> | Signatory for this RFP: Michael Hill, Chief Revenue Officer 600 Cedar Springs Road Dallas, TX 75235 preserve@kofile.com <i>Office Phone: 214/351.4800</i> | Authority to Clarify Proposal: Angelique Nasser, Account Executive 600 Cedar Springs Road Dallas, TX 75235 angelique.nasser@kofile.com <i>Cell Phone: 916/266.3292</i> |
| Signatory for this RFP: Michael Hill, Chief Revenue Officer 600 Cedar Springs Road Dallas, TX 75235 preserve@kofile.com <i>Office Phone: 214/351.4800</i> | Authority to Clarify Proposal: Angelique Nasser, Account Executive 600 Cedar Springs Road Dallas, TX 75235 angelique.nasser@kofile.com <i>Cell Phone: 916/266.3292</i> | | |

PROPOSER'S CAPABILITY

Kofile was formed in 2009; with root companies, ownership, and key staff operating and leading the industry since 1961. Kofile is the oldest and most experienced private firm specializing in the preservation, archival digitization (including indexing, redaction, and OCR), and management of permanent public records in the U.S. For nearly six decades, the leaders of Kofile have worked with states, counties, municipalities, and private archives across the nation.

Kofile has the required years of experience providing systems and micrographics services for local government records. Kofile's key staff hold 10-40 years of experience with similar projects and managing similar projects.

Kofile is the division of a parent company, Kofile, Inc. (which owns 100% of Kofile). Please note that the *Micrographics Lab* in this proposal was previous known as Kofile Services, Inc. (f/k/a PFA, Inc.) —this changed in January 2021 as it merged into its parent company, Kofile Technologies, Inc. Previously, the Sun Valley lab operated under the name of Kofile Services, Inc. from 2019-2021, and PFA, Inc. from 1969-2019.

While the name has changed, the County is assured of the same continued services from the Sun Valley Lab and staff. Kofile's mission remains to migrate and integrate existing records into modern document management systems.



Kofile is a national company. Its principal place of business is its Dallas location (a 119,000 ft.² building), which is a standalone facility.

Kofile's projects typically address permanent retention, historical, and active records. Our clients are primarily local governments—addressing the needs of local records as held by Elections, Board of Supervisors, County/District Clerks, Assessors, Recorders, Court Clerks, Register of Wills, Register of Deeds., various Courts, District Attorneys, Tax Assessors, Sherriff's, and Judges. Other projects address state records, historical societies, libraries, cemeteries, water districts, fire departments, boroughs, local archives, academic institutions, churches or dioceses, museums, private collections, etc.

Kofile has regional facilities located in:

- Dallas, TX (*Corporate, Conservation & Digitization Lab*)
- Carson City, NV (*Conservation & Digitization Lab*)
- Sun Valley, CA (*Digitization & Micrographics Lab*)
- Essex, VT (*Conservation & Digitization Lab*)
- Greensboro, NC (*Conservation & Digitization Lab*)
- Peachtree Corners, GA (*Digitization & Indexing Lab*)

PROPOSER'S CAPACITY

Kofile has the capacity to start this project immediately without any disruption to its other commitments, as all necessary equipment and staff are in place. Kofile does not know of any factors that could materially impair its ability to carry out its duties and obligations or affect the County's decision. Kofile is highly capable to complete this project successfully and timely. Kofile does not seek work that cannot professionally complete within a reasonable and agreed-upon time schedule. Kofile's references can verify this statement. Kofile works with its clients and any budget or timing constraints to ensure that the project is completed to satisfaction.

- Kofile has not been, within the past five (5) years or at any time, involved in any contract or performance-related claims, litigation, or investigations.
- Kofile has no adverse actions sanctioned by regulatory authorities.
- There are no pending or prior performance or contract-related litigation which Kofile is, or has been, involved. Kofile has had no contracts terminated due to non-performance.

With Kofile, the Inyo County Clerk-Recorder is assured of:

- Unparalleled experience and professionalism (Kofile's methods are grounded in professional practices and not trial and error guesswork)
- Investment in security of valuable assets (both government and private collections)—e.g., physical security, handling, transport, cyber security of data, and insurance
- Access to revolutionary processes based on development and research of the needs of local recording offices
- Commitment to the physical and digital access to scanned data for posterity and online access

RELEVANT EXPERIENCE

Kofile companies can provide solutions that address many aspects of a local government—from binders, preservation, restoration, imaging, image processing and enhancements, re-creation, re-indexing, index verification, film to image conversion, archival microfilm, microfilm duplication, complete document indexing, recording, workflow, imaging systems, Internet hosting and data access, and electronic recording.

Many services that result in additional costs with other vendors are standard procedures with Kofile. The Inyo County Clerk-Recorder is assured of a vendor that specializes in working with local government recording offices and understands the essential needs of any redaction project. Kofile intimately understands the responsibility and required functions of recording offices.



Kofile's objective is to provide local governments with the tools, technology, and services to effectively and efficiently record, secure, and access public records. Many counties face limited budgets and resources, outdated legacy systems, and constantly changing statutory mandates. Counties choose Kofile as a partner, not a vendor. Kofile sets new standards for innovation, service, and support—driven by a commitment to its customers.

Digitization

Kofile digitization is implemented with the input of professional paper conservators. Kofile invests in the best scanning equipment and software. Clients are assured that the original source is unharmed during scanning. Kofile digitization services available include indexing, OCR, redaction of sensitive information (e.g., Social Security Nos.), and formatting for target system loads.

Kofile maintains data integrity, order, and identification of records. All images produced are the highest quality, and free of distortion and loss of information due to capture failures. Many of Kofile's projects involve re-imaging collections that low-bid vendors have already imaged. Kofile ensures the survival of the Best Original Image for the application of current and future technologies.

For clients struggling with outdated legacy systems, incompatible data, and outdated media and systems, Kofile can convert virtually any digital data or media storage format. This includes migrating information between incompatible computer systems, media types, file structures and software packages.

Micrographics

From its inception in 1974, Kofile has worked primarily with local government. At that time, the leaders saw that automated document imaging technology would impact the management of public records. Kofile saw an opportunity to integrate legacy document collections into these new systems. Kofile blended state-of-the-art technology, thoughtful planning, and client input to create document conversion solutions to meet expectations.



Past Successes

With multiple regional locations and more than 300 employees, Kofile has the ability to deliver both large- and small-scale projects. Kofile has a proven history includes:

- Award and completion of 10+ multi-million dollar projects.
- Annually, Kofile digitally captures over 25 million pages for Local Governments in the U.S.
- Annually provides archival indexing for 2.8 million documents. Daily indexing captures 200,000 documents per month. In 2020, Kofile provided indexing verification for more than 1,000,000 documents.
- Redaction of sensitive information for multiple clients across the U.S.
- Annually preserves over six million pages for Local Governments in the U.S.

Kofile has unparalleled experience with similar collections—especially real property (land) records—including multiple departments in counties such as Los Angeles, Wayne, Harris, San Diego, Orange, and Dallas. In the State of California, Kofile has performed services in nearly every county over the past 20 years. Kofile has provided redaction services for local governments across the nation (including dozens of clients in California, Ohio, Georgia, and Texas).

Since its inception, Kofile pooled the nation's forerunning leaders in recording systems for local governments. In 2015, Kofile's leadership had the vision to build the first native cloud recording enterprise system.

Kofile first developed *QUICKLINK*® a decade ago after identifying the need in recording offices. Since, Kofile has improved the application and its features. Kofile expanded support to 24/7/365 a couple years ago, which verifies its commitment to this application. Today, *QUICKLINK*® has public-facing applications active in six states and 73 local government offices. Today, this system remains proprietary to Kofile. It is a custom software solution that provides a digital search of Index Book images with links to the actual digitized Page. It expedites a county's digital imaging and indexing initiatives. It quickly gains popularity when introduced to a state.



Visit kofilequicklinks.com to view public-facing applications in action.

This system was initially developed for Real Property/Land Records (e.g., Deeds, Deeds of Trust, Plats, Oil & Gas, Power of Attorney, Mechanics Liens). However, with its popularity, other records series and offices requested solutions too. Today, there are counties using QuickLink® as digital repositories for records such as Misc. Records, Civil Cases, Criminal Cases, Minutes, Naturalization Records, and Commissioners Court Minutes. This system was even tailored in 2018 for internal use as a repository for Tract Books in the Wayne County Register of Deeds, Detroit, MI.

Kofile maintains a longstanding contract with The Georgia Clerk Authority (GSCCA: Georgia Superior Court Clerks' Cooperative Authority). Of the 159 counties in Georgia, Kofile has performed services for 150 counties during the last four years. Services to the GSCCA includes Daily Indexing for 75 counties. Redaction is ongoing for recordings. Biennially, Kofile performs Historical/Backfile indexing and/or imaging over 120 counties.



INDUSTRY PARTICIPATION

Kofile has an extensive history with local government and specifically recording offices. Kofile's products and services were developed for the needs of these entities. Kofile is a longtime, active participant in the following national/international organizations:

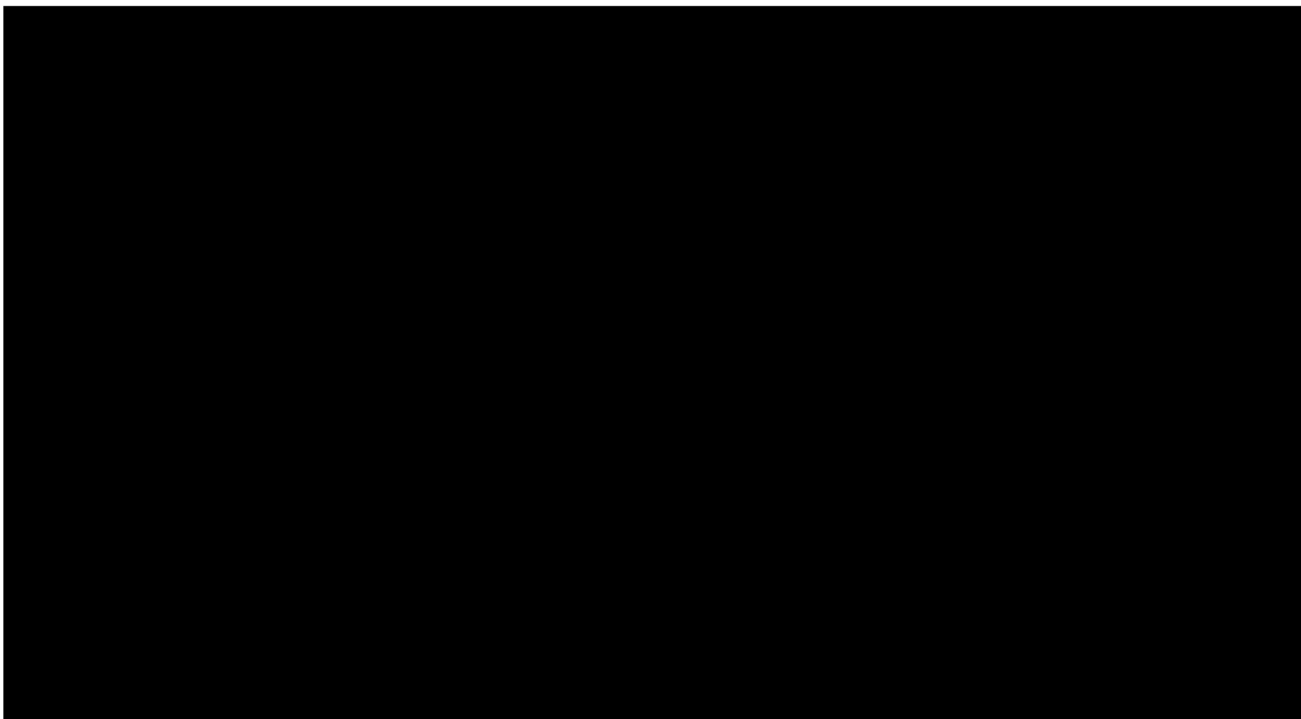
Property Records Industry & Association (PRIA)
International Association of Government Officials (iGO)
National Association of Counties (NACO)

Kofile is also an active participant in statewide and regional organizations in California that support the functions of recording offices (see below).

California Assessors Assoc. (CAA)
Calif. County Information Services Directors Assoc. (CCISDA)
California State Assoc. of Counties (CSAC)
County Recordors Assoc. of California (CRAC)
Bay Area Assessors Assoc. & CAA-IT (BAAAA & CAA-IT)
Central-Southern Calif. Assessors Assoc. (CSCAA & CAA-IT)
California Assoc. of Clerks & Election Officials (CACEO)
Northern California Assessors Assoc. (NCAA/CAA)
County Administrative Officers (California Assoc. of County Executives) (CACE)

REFERENCES

Kofile projects are often long-term and based on budgets that often fluctuate. This type of partnership illustrates Kofile's interest in the success of each and every project. As the references document, Kofile establishes enduring professional relationships with customers. Kofile remains loyal to each project. Excellent customer service and continued devotion to serving the public good motivate each aspect of a Kofile project.





STAFFING ORGANIZATION & KEY PERSONNEL

Kofile staff hold extensive experience assessing and treating a wide range of media—including manuscripts, volumes, plats, maps, negative Photostats, microfilm, digital images, photographs, etc. Key personnel hold 10—30+ years of experience with public records documents. Kofile prides itself on serving as an equal employment opportunity employer.

This project will have a specific workgroup led by management with incomparable experience. Kofile's corporate team is based from its *Digitization & Conservation Lab* in Dallas, TX. Kofile also has Western Regional Facilities in both Sun Valley, CA, and Carson City, NV. Both local labs have processed digitization, indexing, redaction, and OCR projects for California counties.

For this project, any human tier redaction and quality assurance occurs directly from Kofile's Dallas Offices. Kofile anticipates only a small number of technicians are needed. More are available due to cross-training initiatives should the County ever wish to expediate the project schedule.

Only trained staff work on the County's project. Before working with confidential records, a technician graduates from a series of work-effort tiers. Employees complete intensive training with a mentor. During this time, one learns guidelines and security policies for handling protected information. All technicians start with entry level tasks. To progress, each must progress a series of tiered assessments and progression points to build a level of trust.

Kofile practices strict Quality Control/Assurance policies. Prior to or after each new phase of work, a system of checks to ensure quality of services rendered. Within each department or team, leaders daily inspect the work of each employee.

When working on redaction projects, management stresses the importance of the project goal. The project occurs in a secure and confidential workspace with restricted access (even above and beyond any other department or workspace at Kofile). This workspace is not open to visitors or facility tours (if needed, the specific county officials can view their specific work in progress, but no other confidential projects are viewed).

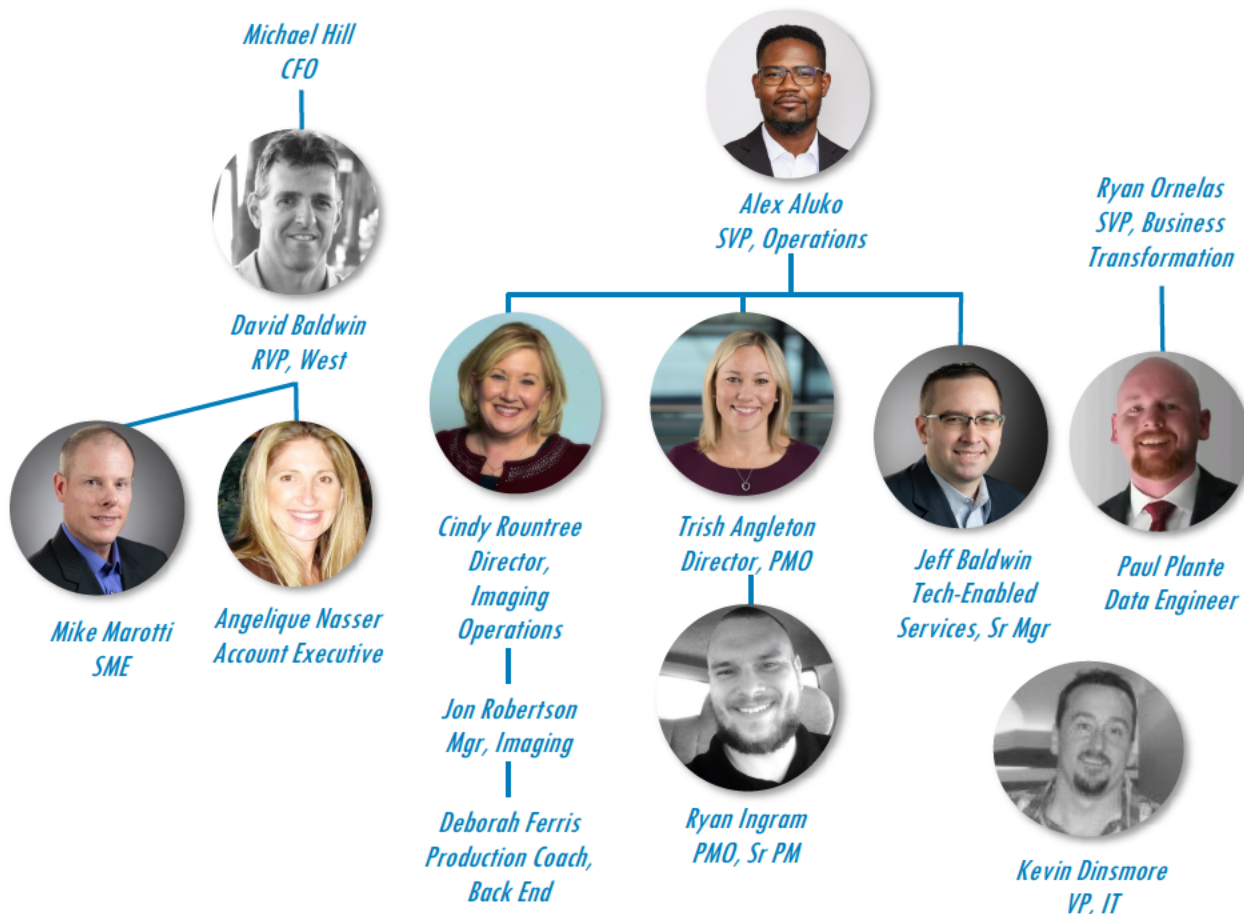
All decisions and solutions regarding this project are based on Kofile's vast experience with the redaction of documents for recording offices. In conjunction with counties across the State of California, Kofile has used its experience to tailor solutions for the Restrictive Covenants Modification initiatives.

Kofile's Redaction Team is experienced working with files that hold personal and sensitive data for redaction, such as real property transactions, vitals (birth, death, marriage), and case files (e.g., criminal, civil, adoptions, tax suits).



Please note that resumes are available upon request.

| KEY PERSONNEL | | | | |
|------------------|--|---------------|------------|----------------------------|
| NAME | ROLE | YEARS w/ FIRM | EXPERIENCE | RFP RESPONSIBILITY |
| Angelique Nasser | Account Executive | 2 years | 25 years | Account Management |
| David Baldwin | Regional VP, West | 3 years | 34 years | Account Management |
| Alex Aluko | SVP, Operations | 3 years | 12 years | Executive |
| Cindy Rountree | Operations Director, Imaging | 1 year | 29 years | Deliverables & Output |
| Jeff Baldwin | SME, Sr. Manager Tech-Enabled Services | 11 years | 20 years | SME, Backup Technical Lead |
| Paul Plante | Technical Lead/Data Engineer | 1 year | 15 years | Technical Lead |
| Trish Angleton | Director, PMO | 2 years | 19 years | Project Director |
| Ryan Ingram | Senior Project Manager, PMO | 1 year | 8 years | Alternate Project Director |
| Deborah Ferris | Production Coach Back End | 3 years | 23 years | Lead Redaction Technician |
| Mike Marotti | SME, Consultant | 12 years | 35 years | SME, CA Recording Offices |
| Kevin Dinsmore | VP, Information Technology | 3 years | 37 years | Infrastructure Security |





SECTION IV. PROJECT APPROACH

FACILITY STRUCTURE & LOCATION

Inyo County's records are serviced at a Kofile facility. Each Kofile facility offers superior protection. Once a collection enters Kofile's hands, it goes directly to the Kofile facility, and nowhere else, until it returns to the Inyo County Clerk-Recorder's Office.

Kofile possesses a history of responsibility, and it has invested in a facility with superior security to mitigate loss and destruction before it occurs. Kofile's investment in security is apparent in facility construction and location, expert staff, transport services, climate control, insurance coverage, and strong financial backing.

Digitization & Conservation Lab— Carson City, NV

Kofile's Conservation & Digitization Lab located at 1558 Forrest Way, Carson City, NV, was established in 2003. It was expanded to its current location in 2014, increasing all work areas by at least two-fold. This lab boasts a 16,000 ft.^{sq} floorplan and over 5,000 ft.^{sq} of working lab space. This lab area is enhanced with special lighting and ergonomic countertops to maximize technicians' abilities. There is also a 5,000 ft.^{sq} loading and receiving area to accept pallets and stage outgoing work.

A stand-alone structure, it sits on a hill with no risk of flooding. It is intentionally located above flood plains, and the location is unlikely to suffer hurricane, tornado, or other natural disasters.

A sophisticated security system monitors all motion and access points. Fire and security communicate via cell phone so wires cannot be cut to disable the reporting to the respective monitoring companies. All premises are fully alarmed against forcible entry and fire; this includes automatic and remote 24-hour monitoring. The facility has window breaks, glass breaks, forced entry detectors, and digital cameras throughout. A fire detection system runs throughout the building, and meets OSHA and NFPA standards.

An independent HVAC system connects to a drop for spot chemical treatments, fume hood vents, and deacidification booths. The lab's special lighting enhances



Kofile's Facility in Carson City, NV.



the ability to spot rips and tears. The lab area is supplied with an air handler system connected to a drop for spot chemical treatment, full fume hood, and deacidification booths. Deacidification spray is connected to a large compressor through a pressurized line. The team is educated and trained to respond to disaster situations.



The work area at the Western Regional Facility.

The facility has an expansive temperature-controlled storage area with metal shelving to house large projects. The storage containment room is controlled via fingerprint ID smart lock access only. The room is fire monitored and under constant digital surveillance. It holds approximately 2,000 records. Records are housed here at all times, except when undergoing services. The storage containment room is temperature controlled and is under constant digital surveillance and fire monitoring.



The vault at the Western Regional Facility.



The loading area at the Western Regional Facility.





Micrographics & Digitization Lab—Sun Valley, CA

Kofile provides Micrographics Inspection and Scanning Services at its *Micrographics & Digitization Lab* (9980 Glenoaks Blvd., Suite F, Sun Valley, CA). This facility holds all necessary government permits to operate a microfilm processing lab. Business hours are 8:00 a.m. to 5:00 p.m. PST, Monday through Friday. This facility has operated since the 1960s, and is 7,920 ft.^{sq}.

This Kofile facility is equipped with a climate controlled secure vault. This vault has a 2-hour fire rating and maintains a temperature of 68°F and 30% RH (relative humidity). These values are consistent with the storage requirements in *ISO 18911:2010, Imaging materials – Processed safety photographic films – Storage practices*.

The facility is protected by an electronic security system that includes motion detectors at each entrance/exit. This system is monitored 24/7. An alarm sounds upon activation, and police and Kofile staff are automatically notified. The facility is also protected by a heat-activated fire suppression system that notifies the Fire Department when triggered. Access points to the production areas are electronically locked using biometric technology and monitored with a video recording system.

Kofile's self-contained darkroom meets all safety requirements mandated by Cal/ OSHA, and has permits issued by the City of Los Angeles Industrial Waste Department, who inspects the facility regularly for compliance.

Kofile operates high production/quality roll microfilm scanners for analogue to digital and for digital to analogue. All software is up to date, and the machines are regularly maintained. The scanners scan any size microform (film or fiche) image.

Kofile recently upgraded several of its devices. However, Kofile maintains older systems as well, as these excel in controlling image quality for tight frame spacing. Prior to the upgrades, each system could convert approx. 6,000-12,000 images per hour. This translates to over 500,000 images per day.

Digitization & Conservation Lab— Dallas, TX

This facility is located at 6300 Cedar Springs Road, Dallas, TX 75235 (see pictured to the right). This is a permanent facility employing full-time, permanent employees since July 2011. This is a 150,000 ft.^{sq} facility with three stories (119,000 ft.^{sq} used for production and executive offices). The entire structure is fire-resistant brick, walls,



Kofile's Flagship Facility in Dallas, TX.



ceiling, and flooring with structural steel support members. The building is a “locked down” facility. No one is allowed in unless employed or are escorted by management. All access points are monitored, and a security fence limits facility access.

Regulated Facility Environment—Kofile has 24-hour temperature and Relative Humidity (RH) controls. All work areas for original documents meet archival climate control standards. Kofile has four independent HVAC systems with programmable thermostats. Each vault has a separate and independent HVAC system. The HVACs for the work and storage areas are constantly set at 70°F. The level of relative humidity (RH) is also maintained.

Vaults —The Dallas facility has three vaults in its facility. One is for media (microfilm), one for works in progress (books/paper), and the third is for long-term storage (book/paper).



The Level 5 door of the Long-Term Storage Vault (same model used for each vault).

Daily protocol requires that records removed from the vault for work be in the custody of a technician at all times.

Each vault is secured with Level 5 vault doors with a 4-Hour UL Rating of at least 350°F. Each vault has its own independent HVAC system, monitors for humidity and temperature, and controls for airborne particulates (monitored by analog methods). Kofile actively monitors for micro-organic growth.

SYSTEM SECURITY

Due to the data's confidentiality and security, Kofile implements multiple security measures. The Kofile facilities are designed to ensure the safety of its clients' data. Kofile has taken substantial safeguards to protect clients from release of information through “social engineering” exploits. Kofile has sensitivity policies that are enforced and circulated to classify the sensitivity of data within its possession, however short its stay.

Operator terminals are configured to ensure data cannot leave any facility. Any technician assigned to the project is issued a username and password to access images. Kofile works in a secured, directory-based environment. Rights are assigned to individual images as “read only.” Only approved staff have the passwords to change image permissions. No one can delete or modify images without authorization. All activity of this nature is logged.

Back-Ups

Kofile delivers a true native cloud security for its images and data. All Labs save images and data to a local server. Each night this server synchronizes with the



cloud. Each day, a snapshot of all data occurs. All data is accessible in realtime via the cloud. Within the cloud are multiple levels of redundancy and failover to various datacenters regionally situated across the U.S.

Servers are locked and managed in a secure environment with temperature and moisture monitoring with badge access limited to only key personnel. *All digital data in the possession of Kofile and used for production purposes is as follows:*

All data is kept in secure locations with controlled and limited access both physically and electronically. Only such personnel that require access to the data for either production-related purposes or Information Technology (IT) - related maintenance is allowed.

- All production data (with the exception of specific projects) is copied to the primary site daily (nightly).
- All data at rest is encrypted.
- All data is restricted to a “need to access” basis.
- All data is nightly backed-up (with encryption).
 - ◊ A secondary copy of this backup is copied offsite to a secure co-location over VPN tunnel.
- All data is both weekly and monthly backed-up to a tape archive.
 - ◊ A copy of this archive is stored in the Media Vault on the Dallas primary site.

Kofile follows the industry standard backup and archive principle of 3->2->1:

- 3 copies of the data (and generally more); 2 Different media formats; 1 Copy offsite

Chain of Custody Control

An integral part of project management relates to the cataloguing of tracking incoming items (physical or digital). Kofile uses NetSuite as its enterprise resource planning system (ERP) to produce unique IDs via barcodes for each physical control unit. Each workstation has a tablet device that technicians use to check in and out work as it moves through production. This ERP provides the tools necessary to establish positive control of the project and continuously manage inventory (e.g., book, document, image, microfilm). Kofile can track the individual status of each item traveling through its system. ERP is also used for audit tracking purposes for each employee.

OWNERSHIP OF DATA

All Inyo County records (including volumes, document, digital images, metadata, microform) serviced by Kofile shall remain the property of Inyo County. This policy is applicable to any agreement, verbal or written, between Inyo County and Kofile.

- The records are not used by Kofile other than in connection with providing the services pursuant to any agreement between Kofile and the Inyo County.
- The records are not commercially exploited by or on behalf of Kofile, its employees, officers, agents, invitees, or assigns, in any respect.



INFORMATION REQUESTS

Kofile has never charged for fulfillment of ad-hoc requests for copies of records in its possession. This is a standard level of service for any project, as we understand the functionality of local governments.

Records held at Kofile are viewed as private and confidential and treated as such. The County Clerk-Recorder's Office is guaranteed access to records via email or toll-free fax at Kofile's expense. Kofile has never charged for fulfillment of ad-hoc requests for copies of records in its possession by the County. This is a standard level of service for any project.

Upon receipt of a records request, Kofile flags the requested record and verifies inventory control, pulls supporting paperwork, and emails/faxes a response to the approved requester or alternate. The turnaround time is expeditious and will meet or exceed the County Clerk-Recorder's requirements.

Requests for plats or oversized documents are handled accordingly. If the County has a plat printer, then Kofile can email a working copy image for immediate printing. If not, and a reasonable number of hard copies are required, Kofile prints and ships directly.

PROJECT MANAGEMENT

Kofile has never experienced an event in which unauthorized access resulted in any unsanctioned distribution of information.

- Issues are resolved with direct and open communication with the designated County personnel.
- Kofile will meet any reasonable tracking requirements set by the County and maintain adequate files and records and meet statistical reporting requirements.
- The County is open to inspect the records at any point of the project without notice.
- At every stage, Kofile will advise the County of unusual or unexpected conditions and proceed only with authorization by the County's authorized designee.
- Upon award and approval, Kofile will confirm all necessary reporting required.
- Kofile will disclose any loss, damage to, or theft of the documents immediately upon becoming aware of such damage. Kofile will provide information about security incidents in the secure rooms to the County within (24) hours of detection. Included in these reports are incidences involving the server, workstations, physical space, or the County's documents.

The Project Manager (PM) is responsible for project supervision along with the Account Executive. The PM leads Kofile's performance team and has the following responsibilities:

- Project planning and kickoff
- Project phase management
- Execution, monitoring, and reporting
- Risk management
- Stakeholder and customer communication
- Single source contact for customers
- On time deliverables

The PM provides a work breakdown structure (WBS) and task structure for each project. This is the basis for Kofile's Project Management Office (PMO) - allowing for communication between stakeholders, seamless transitions between project phases, risk management, resource management, and concise reporting on project health and delivery.

To ensure agreed upon schedules are met, both parties will be aware of the status of the various tasks in progress at any given time due to regular reporting and communication.



SERVICE DELIVERY PLAN

Kofile takes pride in being a prompt and efficient company providing an 'off the shelf and on the shelf' service. The Kofile team is experienced working with public records. Records pickup and delivery is managed by dedicated Kofile personnel.

Kofile coordinates the packing and/or palletization of items for transportation, and the inventory and receipt records. Client records are not secured with another client's records. Documents are unloaded directly into the Kofile building through a dock. They are never left in a vulnerable location or accessible to unauthorized persons. A coordinated staff effort at all levels maintains security and chain of custody for the documents.



One of Kofile's privately operated vehicles.

Kofile differs from other vendors because it has invested in its own transport vehicles and does not have to rely on third-party transportation services. This capability enables Kofile to expedite projects that would otherwise lag due to dependence on third party freight limitations and costs.

Kofile transport personnel maintain a Class B CDL with an air brake endorsement. Cargo is transferred in a climate-controlled environment that is regulated to prescribed archival standards.

Kofile largest privately-owned vehicle boasts a 4000 lb. lift gate, air suspension, and air brakes. This truck is also equipped with several extra security features, including back-up cameras and an anti-lock braking system.

Batches stagger pickup and delivery.

- Kofile's largest vehicle can pickup a batch of 400 12" boxes or 500-700 volumes per trip.
- If the collection size is substantial, Kofile personnel can operate a rented 53' tractor trailer to transport up to 1,250 boxes in one trip.

SECTION V. PROJECT METHODOLOGY— RESTRICTIVE COVENANT MODIFICATION



Kofile is highly capable to provide Inyo County the services in support of the RFP. With Kofile, Inyo County is assured of a vendor that can quickly and efficiently provide the required solution even to the scale required.

COMPREHENSIVE PLAN

Kofile has reviewed the RFP SOW and is prepared to meet all requirements. Kofile proposes its redaction service for Restrictive Covenants (RC) redaction, SmartRedact, which is a Cloud-Hosted Solution. As a Cloud-Based (Web-Based) Solution, the need for County Clerk-Recorder and IT support is eliminated.

The documents enter the Kofile workflows upon receipt from the Inyo County. There is no offshore remote access to images and data.

Please note the following abbreviations:

RC—Restrictive Covenant

RCM—Restrictive Covenant Modification

SME—Subject Matter Experts

OCR—Optical Character Recognition

SOW—Statement of Work

 **STEP 1** Documents enter workflow (receipt from County to Kofile)



As the project progresses, frequency of false positives reduce due to reinforcement learning.

Export of final outputs per County-requirements & PRIA Standards

 **STEP 7** Delivery of all images and data to County



Kofile understands that each project and its organization is different and remains flexible in its project management approach. To this end, Kofile works closely with the Clerk-Recorder's Project Manager to tailor the project management methodology.

Kofile key staff are readily available to address any concerns. Upon project award, direct contact information is provided. This ensures any technical support relies on highly knowledgeable staff, and not canned responses (such as AI or Predictive).

PROJECT TIMELINE



With Kofile, the County can throttle work as needed, but also scale up if needed to speed up the project. Kofile has a large and experienced team with cross-trained technicians available for the Inyo County project as needed.

| PROJECT PLAN AND CRITICAL PATH | | | | | | |
|--------------------------------------|--|-------------------|--------|-----------------|--------|-------------------------|
| CATEGORY | ACTION ITEM DESCRIPTION | RESPONSIBLE PARTY | STATUS | COMPLETION DATE | | COMMENT |
| | | | | TARGET | ACTUAL | |
| Project Initiation, Kickoff/Timeline | Kickoff presentation delivered | Kofile | | 9/11/23 | | |
| | Kickoff meeting | Kofile & CCR | | | | |
| | Recorder to clearly designate the primary contacts | Recorder | | | | |
| Project Management | Weekly meeting scheduled | Kofile & CCR | | 9/18/23 | | |
| Project Management | Weekly status reports | Kofile | | | | <i>Recurring weekly</i> |
| Project Management | Detailed current/future state workflow diagrams; Discuss additional details as a group before revising diagram | Kofile | | 9/20/23 | | |
| Solution Design | Recorder delivers sample documents to Kofile with associated terms & locations | Recorder | | | | |
| Project Management | SOW Created & Delivered | Kofile | | 9/25/23 | | |
| Solution Design | Recorder creates folder structure in test & production based upon workflow | CCR | | | | |
| Project Management | SOW Signed | CCR | | 9/29/23 | | |
| Solution Design | Testing | CCR | | 10/2/23 | | |
| Solution Design | VPN access granted to Kofile | CCR | | | | |
| Solution Design | Create expected values | Kofile | | 10/9/23 | | |
| Solution Design | Finalize list of initial RC search terms | CCR | | | | |
| Solution Design | Rule Writing commences | Kofile | | 10/16/23 | | |
| Solution Design | Rule Writing complete | Kofile | | | | |
| Go-Live | Finalize Workflow & Pilot Run | Kofile & CCR | | 10/18/23 | | |
| Batch WorkFlow | Software Review, Human Review | Kofile | | 10/30/23 | | |
| | Route to County Clerk - Recorder for Comments | CCR | | — | | |
| | Route to County Counsel for Determination | County | | 12/31/24 | | |
| | Kofile performs RCM | CCR | | | | |
| | Documents (Images & Data) Output to County/TYLER | Kofile & CCR | | | | |



QUALITY CONTROL PLAN

All Kofile implementations are assigned a Project Manager and monitored closely across Professional Services, Sales, Development, and Data Capture Teams. Kofile uses a variety of tools and processes to manage quality.

Salesforce—All client data is maintained in Salesforce (e.g., contracted products, contract renewal dates, points of contact). For specific requirements regarding notification of expirations of terms or contract sum milestones, Kofile builds those requirements into its Salesforce reports and notifications. This ensures clients are contacted at specific milestones. A Project Management Dept. (PMO) works with Kofile's Accounting Dept. to monitor Salesforce for all finance-related communications.

Statement of Work (SOW)—The SOW is the foundation for each project. It includes a definition of the scope, timeline, assumptions, and specific milestone dates. This document is mutually prepared and agreed upon by both parties.

Critical Path—A critical path document is created to outline critical project pieces, ownership, and completion date. Like the SOW, Kofile works directly with client teams to create and maintain this document to track project status.

Regularly Scheduled Meetings (Kofile and Client)—Each installation requires regularly scheduled meetings. Depending on the timeline and complexity, multiple meetings are scheduled with different teams at different intervals. Meetings are attended by the Kofile Professional Services representative(s), sales, and, occasionally, the development/data capture team. Executives may also attend on occasion, as needed.

Regularly Scheduled Meetings (Kofile Internal)—Kofile has a weekly meeting between its entire Professional Services team, the sales team, and executives. Each active project is discussed in detail to ensure that all projects are moving at the appropriate pace with the desired success. Any items requiring escalation or special attention are specially called out and action plans are created to ensure all projects are successful.

Ticketing System (Zendesk)—After the product is live, all issues and escalations are tracked in a ticketing system (Zendesk). This allows Kofile to track turn-around times and root causes as well as the ultimate solution to each issue encountered by a customer.

JIRA—All implementations, development projects, and data capture projects are documented and tracked in JIRA. This facilitates weekly scrum meetings where Kofile actively reviews and monitors progress. This facilitates both internal and external tracking mechanisms to ensure projects are on track and risks are identified and communicated.

Count Notifications—Following implementation, the system actively tracks the number of pages processed. Alerts are configurable for both Kofile and the client at specific intervals, depending on the burn rate. This proactively notifies both organizations as



specific processing milestones are reached.

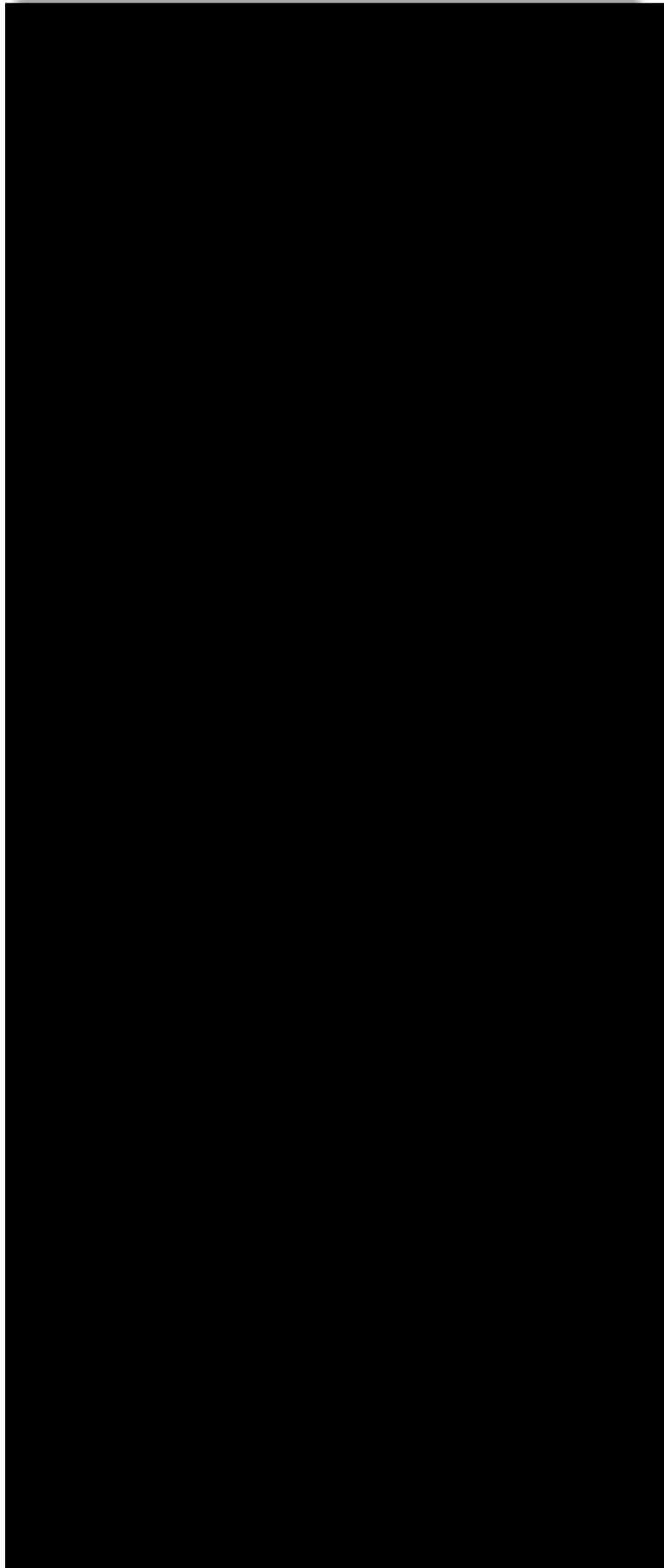
Analytics Dashboards—Kofile provides analytics dashboards to include details on capture rates, volume, turn-around time, user processing rates, and more. These dashboards are accessible to monitor user and system performance, and proactively identify system and operational changes.

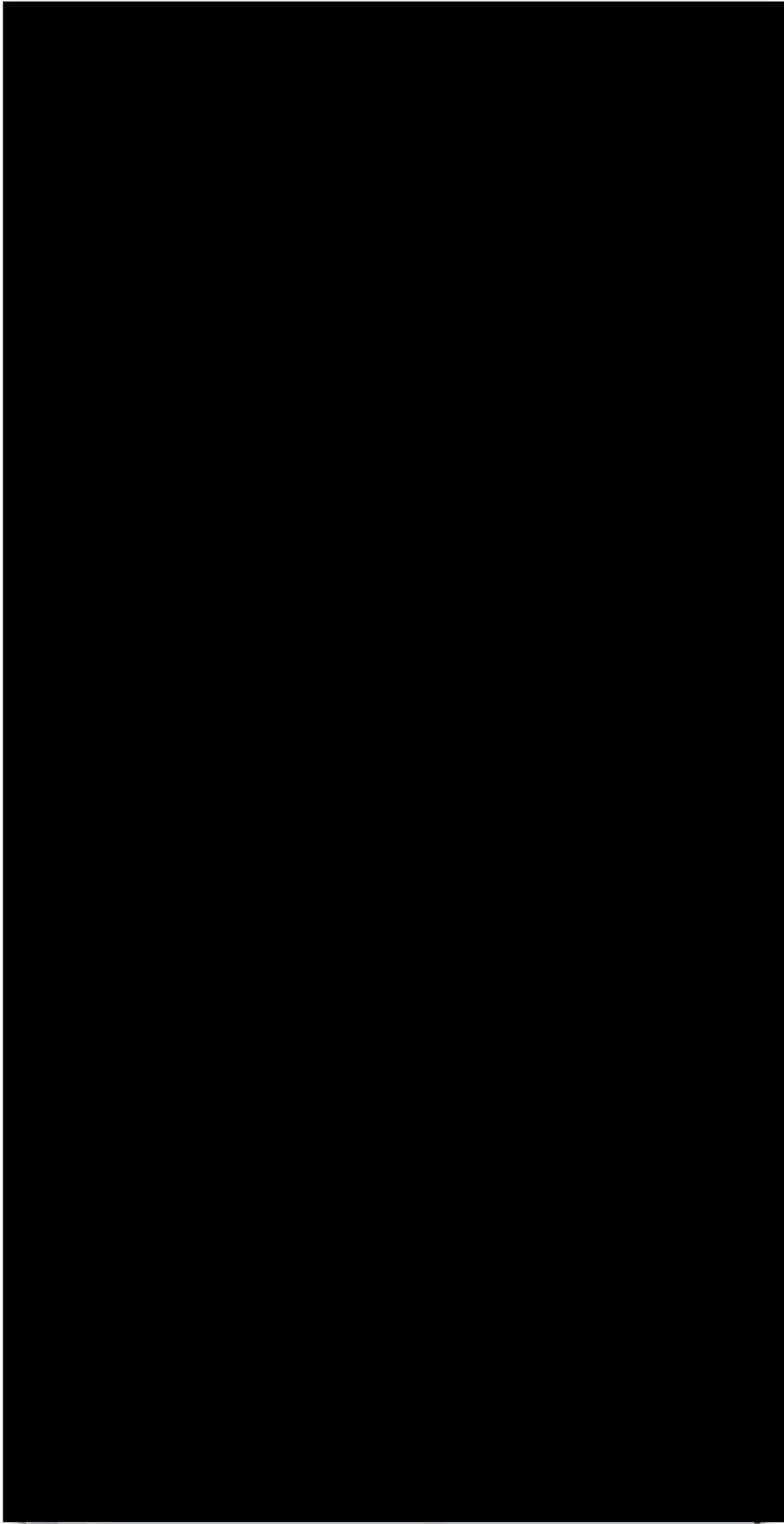
REPORTING

Kofile logs every event in a document's lifecycle. Kofile has standard reports and dashboards to report on this data. Information such as a complete list of documents processed or user activity, including when users accessed documents, how long they had those documents open, and what redactions were added/edited/deleted are stored in a searchable/reportable form accessible by database query.

Any information stored in Kofile's database can display in a dashboard. Any information can export to a report for the County to submit to the State of California.

For custom reports or dashboard, Kofile can configure requirements at a professional services hourly rate. Or, Kofile can train the Inyo County team to generate its own reports and/or dashboards.







RCM SOLUTION BACKUP & REDUNDANCY

Kofile offsite backup facility is in Carrollton, TX, in Vazata's secure datacenter. Kofile is connected via direct connection over VPN encrypted tunnel. The facility is monitored 24x7 with physical security and entry requires card reader and biometric access. If necessary to operate from the remote facility systems redirect to the private network containing the servers and backup data. This is not an automated process and only for events that would lead to primary systems being offline.

Kofile has several ways to identify and recover from outages (in many cases automatically) before reported by an end user.

Failure Detection & Reporting System (FDRS)—Kofile utilizes FDRS to trigger automatic emails to supervisor(s) or administrator(s) upon:

- (a) more than 'x' number of exceptions are logged in a user-defined period
- (b) CPU usage on the machine drops below 'x%' for a continuous user-defined period
- (c) processing application terminates or crashes unexpectedly

FDRS notices occur in real time, enabling the team to react to and resolve issues with minimal downtime. FDRS runs as a Windows Service or standard Windows application.

Automatic Failure Detection & Recovery—Kofile's software automatically detects and recovers from (infrequent) failures. Examples include momentarily dropped network connections (e.g., a bad switch or hub in the server room), dropped connections to the license manager or database manager, memory leaks, and file sharing violations (automatic retry), etc.

These automatic recovery features allow SmartRedact to “just keep running.” Even running on one or more processing machines, without intervention, the software can recover from a database or file server reboot during live redaction processing.

Kofile coordinates processing of documents via a SQL database. The workflow to process each document contains several “actions”—each with a corresponding configuration to dictate the document processing to occur in the given action. As documents join the workflow, the database coordinates the assignment of each to servers running processing configurations against each workflow action.

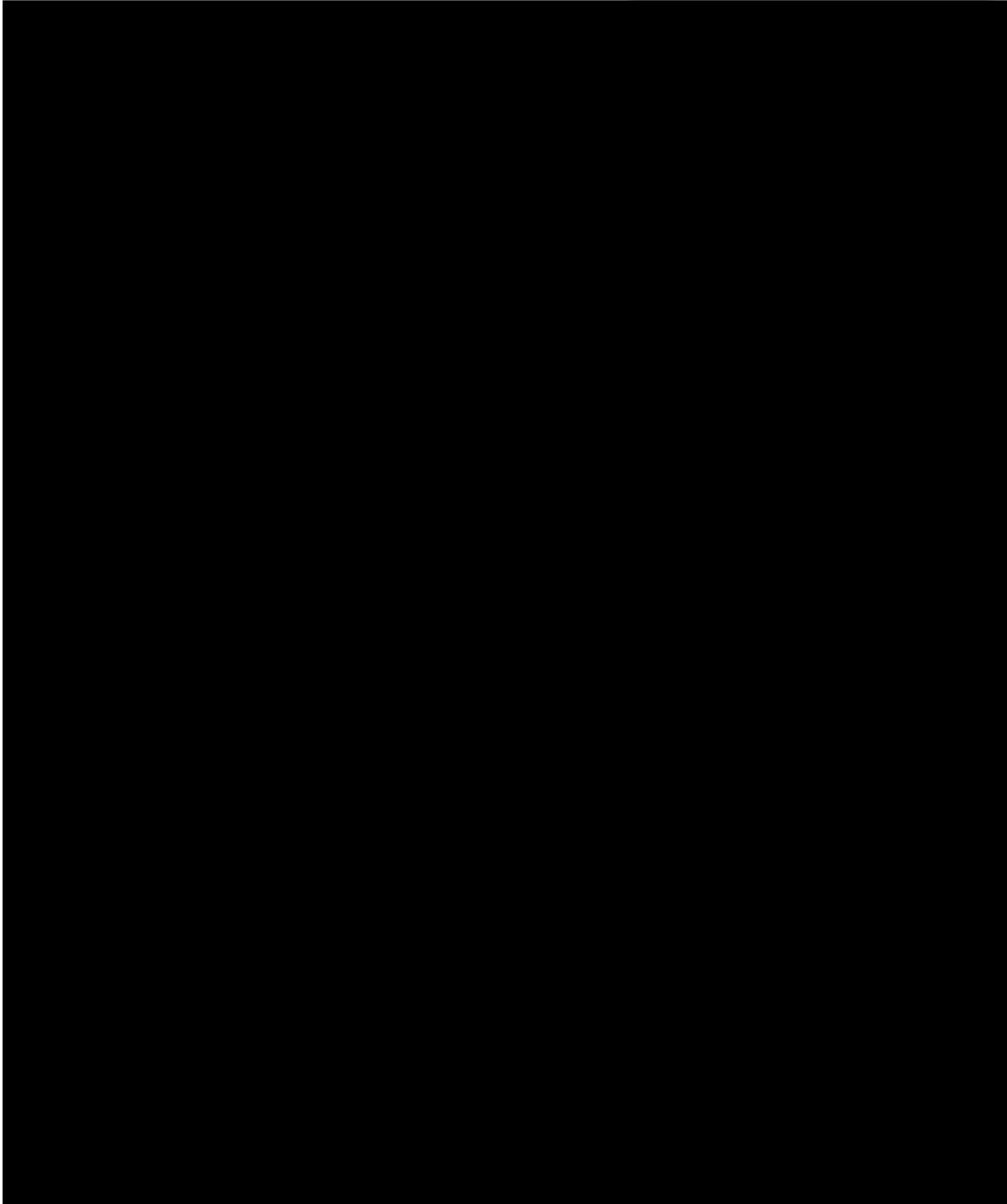
In the event of system downtime, a restoration of the SQL database allows resumption of processing of all documents per the last backup. Depending on the interval of backups, processing resumes, and some documents repeat processing steps. Otherwise, processing is completed as intended. However, recently submitted documents may not reflect in the database.

Following disaster recovery, Kofile provides resources to validate that all documents are properly accounted and processed (including a detailed audit trail). These are exposed in Kofile dashboards/reports regarding the progress of documents navigating the Kofile Solution.



SOLUTION FUNCTIONALITY

Here, Kofile describes the functionality of its redaction software. Screenshots demonstrate the continuous ML model trainer. This section concludes with screenshots, system architecture diagram, and workflow diagrams.



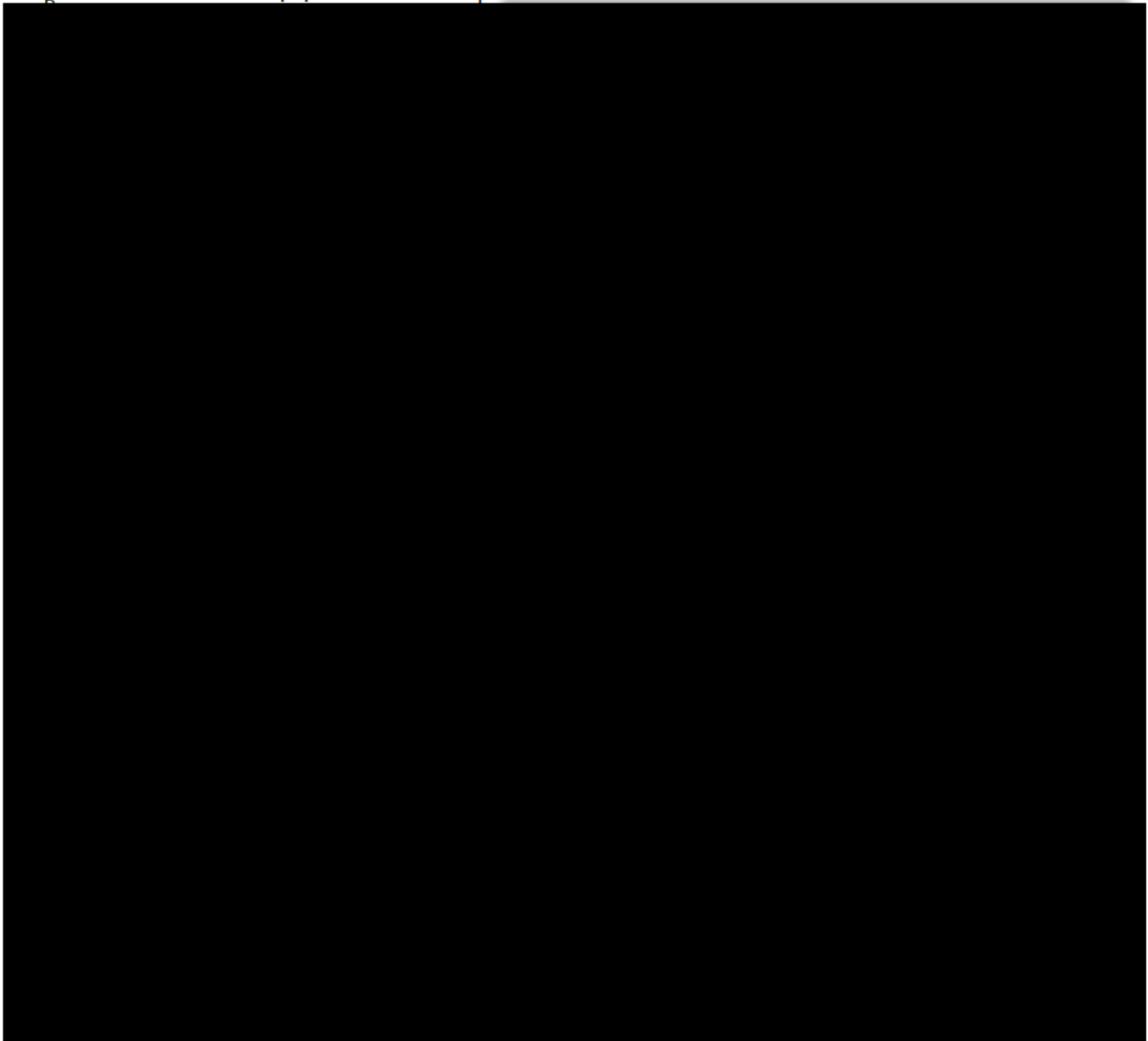


Kofile establishes review queues for both the County Clerk-Recorder and County Counsel. The system supports multiple review queues that are customizable based on the needs of the County throughout the project.

As a Cloud-Hosted Solution, users log in through a browser from any device (the system is also mobile friendly).

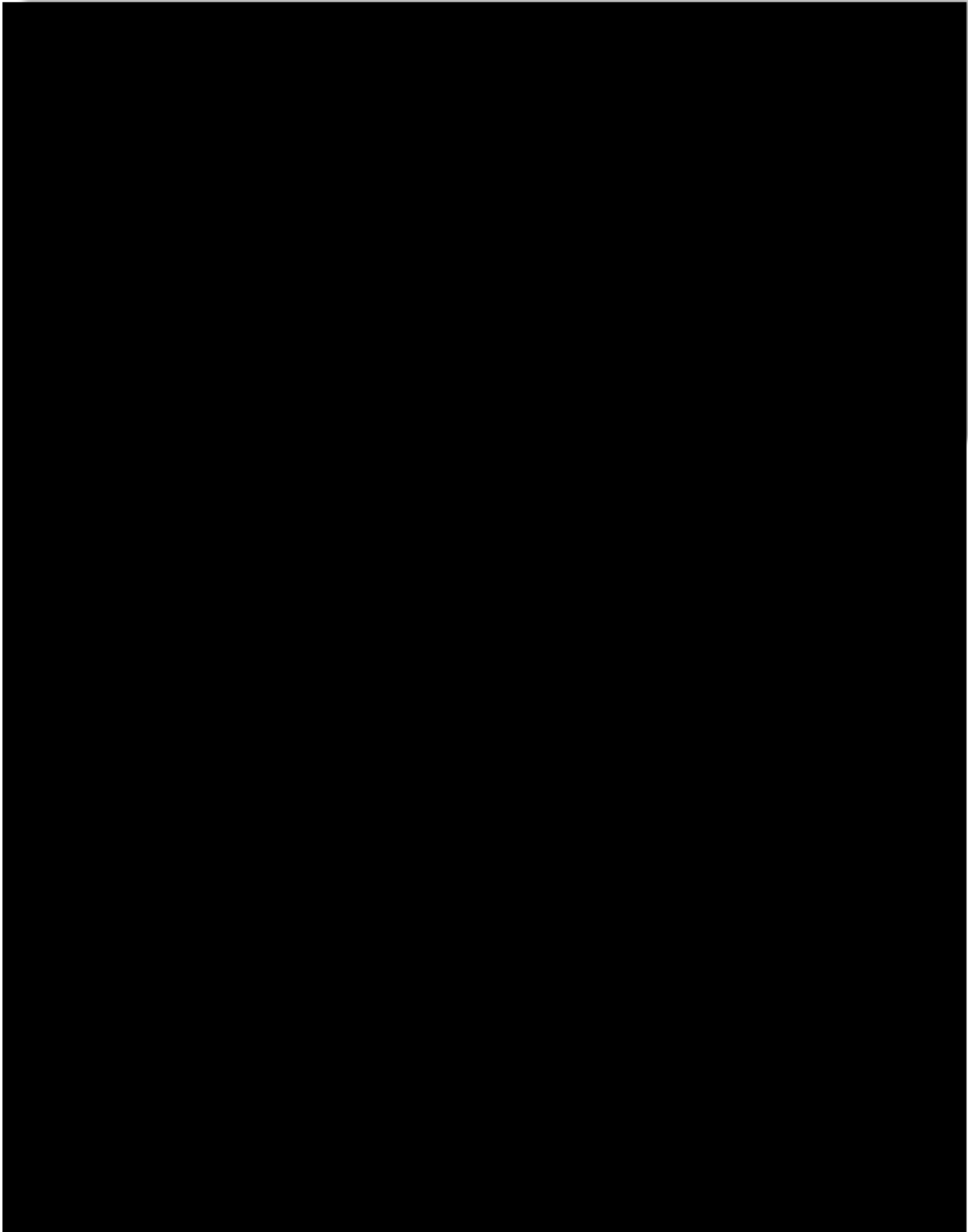
This web portal provides the following benefits:

- Secure Portal
- Intuitive Paths
- Customer Support
- Live Chat
- Mobile Support
- Remote Work



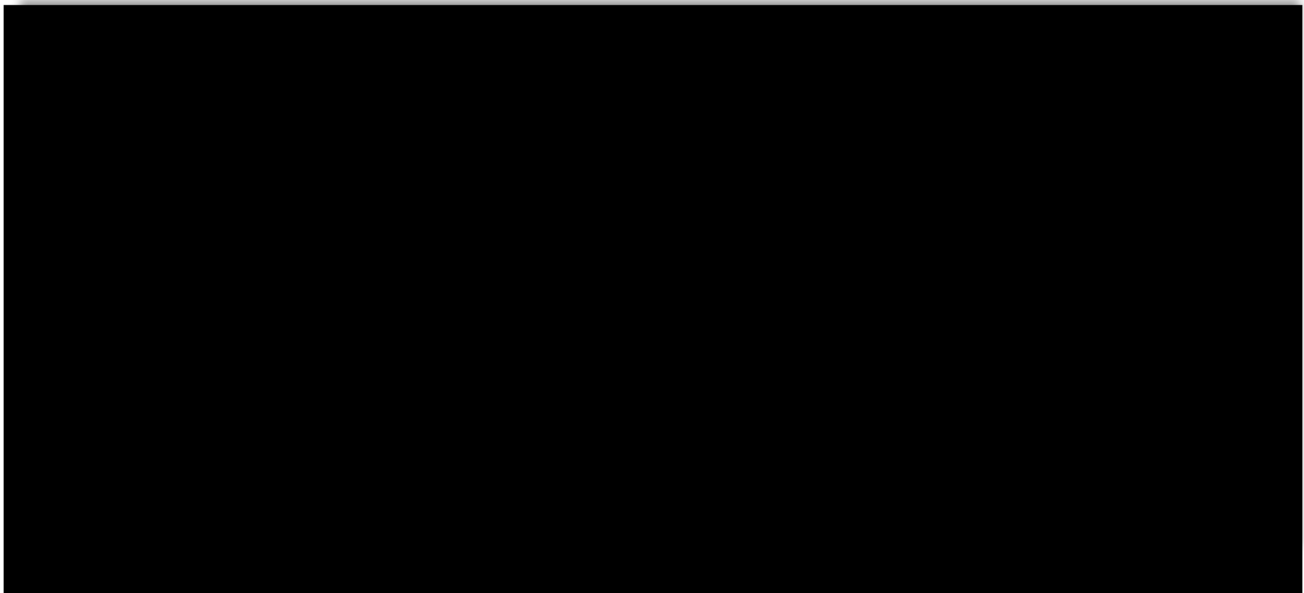


Screenshot exemplifying keyword search and highlighted terms.





Screenshot of the verification screen viewable by both County Clerk-Recorder staff and County Counsel.



A Comment button allows Inyo County Clerk-Recorder staff to enter comments for County Counsel and vice versa.



CONFIDENTIALITY OF CUSTOMER INFORMATION

Kofile has numerous security procedures in place to protect Inyo County. Kofile holds some of the industry's highest levels of insurance coverage, including Cyber Liability insurance. Kofile's highly experienced teamwork with confidential records every day without loss or exposure.

Onboarding—Kofile's employees pass extensive interviews. Kofile holds insurance on all services. Staff are drug-free and pass a background check upon employment. All candidates pass a face-to-face meeting with a manager, which includes information about previous jobs, responsibilities, skill sets, tenure, and reason for leaving the former employment.

All Kofile employees must review and sign confidentiality agreements during onboarding (applicable to both permanent and temporary staff).

All employees pass training programs regarding confidential information through Paylocity.

Office Access—Kofile's facilities are all "locked down." No one is allowed in unless employed or are escorted by management. In Dallas, all access points are monitored, and a security fence limits facility access. The primary gate is open during business hours, but the premises are locked and gates only accessible after hours with a security card.

Visitors are buzzed in after confirmation of identity via a video and voice system. Staff are positioned at department access points for an extra level of security.

Server Access—Servers are locked and managed in a secure environment with temperature and moisture monitoring with badge access limited to only key personnel.

Security System—Due to the sensitive nature of the information recorded in local public records, Kofile provides multiple security measures. Kofile also follows rigorous end-of-day closing and lock-down inspection protocol at each facility. Kofile's corporate facility in Dallas, TX, boasts a Motion Detector Security System to protect the entire building, with installation of more than 50 internal and external security cameras. The entire building is equipped with a fire suppression system.

Kofile has taken substantial safeguards to protect clients from release of information through "social engineering" exploits. Kofile has sensitivity policies that are enforced and circulated to classify the sensitivity of data within its possession, however short its stay.

Operator terminals are configured to ensure data cannot leave any facility. Any technician assigned to the project is issued a username and password to access images. Kofile works in a secured, directory-based environment. Rights are assigned to individual images as "read only." Only approved staff have the passwords to change image permissions. No one can delete or modify images without authorization. All activity of this nature is logged.



Regularly Scheduled Network and Security Audits—All digital data in the possession of Kofile and used for production purposes is kept in secure locations with controlled and limited access both physically and electronically. Only such personnel that require access to the data for either production-related purposes or Information Technology (IT) -related maintenance is allowed.

- All production data (with the exception of specific projects) is copied to the primary site daily (nightly).
- All data at rest is encrypted.
- All data is restricted to a “need to access” basis.
- All data is nightly backed-up (with encryption).
 - ◇ A secondary copy of this backup is copied offsite to a secure co-location over VPN tunnel.
- All data is both weekly and monthly backed-up to a tape archive.
 - ◇ A copy of this archive is stored in the Media Vault (Dallas primary site).

Kofile follows the industry standard backup and archive principle of 3->2->1:

- 3 copies of the data (and generally more); 2 Different media formats; 1 Copy offsite

Installation of Software on Kofile Machines—All software installed on local machines must be approved by the Kofile IT team prior to installation. Kofile does not simply click through license agreements assuming they have no implications to Kofile or customers. Certain types of software are strictly forbidden, including applications such as BitTorrent and Tor.

External Access by Third Parties—Vendors and subcontractors are held to the very same standards as employees. Each vendor or subcontractor who accesses any system is required to sign a BAA with data sharing policies.

Employee System Access—Employees access internal servers, directories, and systems, as well as customer systems based on role and appropriateness of the access. Each employee has unique user IDs and passwords. Access to customer systems is never granted without customer consent. Employees only access customer networks using customer-approved secure remote access methods.

Upon termination of employment, all physical and electronic access to the office and Kofile systems is revoked.

System access group policies enforce an automatic timeout after 15 minutes with no activity, and systems lock down after ten failed login attempts. Network passwords expire and must be re-set every 60 days. Complexity requirements are enforced when passwords are changed or created.

Removable Media—No removable media devices, including phones, should be connected to Kofile machines without explicit permission from the Kofile security team.

Firewall—Kofile currently has a dedicated business-class firewall to protect our network from outside intrusion attempts.



System Maintenance—Kofile maintains all servers to the latest operating systems and security patches. All servers are assessed every two months, patches and hotfixes are installed as needed.

Endpoint Security Software—Kofile currently uses Symantec Endpoint security on all servers and user machines. The software protects against viruses and malware. There is an active scan weekly on all servers and full scan setup for workstations. Email and files downloaded from the internet are scanned.

DISASTER RECOVERY/BUSINESS CONTINUITY PLAN

System failure recovery scenario(s)

General Architecture

(3 copy with cold spares)

Maintain 3 copies of the data.

- One copy of WIP (Work in Progress) data on the primary systems.

- One copy of daily backup data on County storage Servers.

- One copy of daily backup data maintained offsite at a secure co-location.

- Onsite cold spare for hardware failures (immediate replacement).

- Redundant UPS array that is tested and monitored.

General System Failures

(SLA – 72 hours)

In the event of a full system failure (unusable system), the entire chassis is replaced, and fixed drives moved to the new chassis. Any data loss during the downtime is restored or reacquired.

Complete System Failures

(SLA - ~7 days)

If system replacement is not successful a new system is built and working data imported.

Data is backed up in two separate locations for restoration.

Catastrophic Failures

(variable SLA)

Including, but not limited to fire, flood, tornado, electrical storms, acts of terrorism, and sabotage.

Option #1

All new system hardware is put in place and either the data re-imported or restored. If time does not permit a new system can be mirrored from the backup system at the secure colocation and shipped on-site in ~7-10 days SLA.

Option #2

Machines backed up to secure colocation can be exported as new virtual machines and brought online. ~5-10 days SLA.

SECTION VI. PROJECT METHODOLOGY— RECORDS MODERNIZATION



DIGITIZATION OF PAPER RECORDS

Imaging a document creates an electronic representation of the original. This process is not meant to replace the archival record, but to aid in its preservation. The image serves as a reference tool and is a back-up if the original is damaged or destroyed.

Upon request, Kofile stores an electronic security back up of all images in case of loss, damage, or destruction by fire or natural disaster.

Many of Kofile's projects involve re-work for collections already imaged or indexed by low-bid vendors. Kofile's basis for success is decades of experience, realistic solutions, and professional analysis.

Kofile's imaging standard operating procedures (SOPs) were designed and implemented with the input of professional paper conservators. Technicians are trained to handle fragile documents. Services differ because Kofile guarantees Clerk-Recorder that materials are addressed according to their specific condition and fold endurance (state of fragility) without blind, automatic scanner feeds.

Imaging Standards

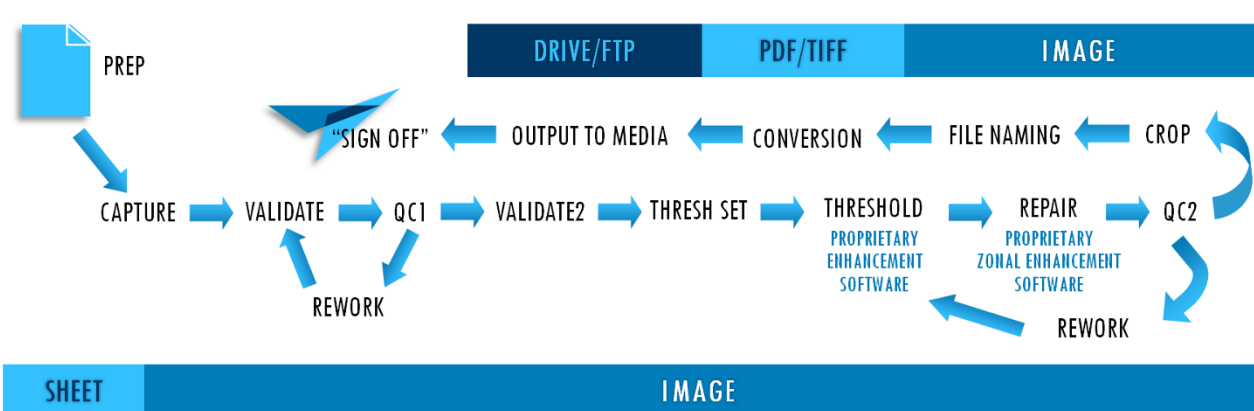
Kofile is highly capable of providing all standards in accordance with Clerk-Recorder's specifications. Images are captured at a minimum of 300 dpi at 256 bi-tonal or gray levels. This ensures the highest image quality for documents with poor contrast and difficult-to-read information.

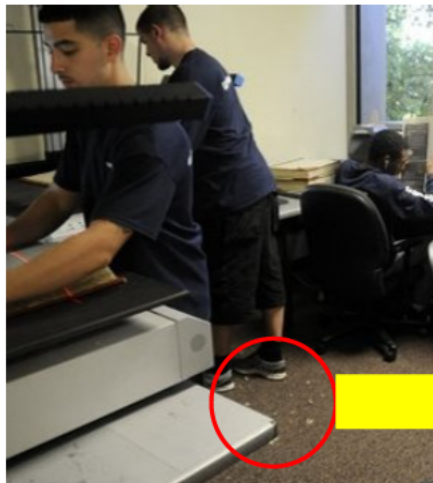
Images accumulate as Group IV bi-tonal images in a standard TIFF or PDF format (or PDF/A). Images are optimized and scaled for output to the target system. Final images are delivered via SFTP (or CD/DVD/thumb drive/external hard drive).

Kofile always defaults to *National Archives & Records Administration (NARA)* technical guidelines for digitization.

It is Kofile's standard procedure that the client signs off on a pilot run prior to the commencement of full-scale scanning.

SAMPLE PHASE DELINEATION—PAPER TO DIGITAL





The article implies that partial document destruction is normal. This is unacceptable and contrary to any preservation standard. Kofile has the experience and expertise to handle fragile documents and address the physical preservation of the source document.

Source: Higgins, Jessie. "Recorder's Office Preserving Oldest County Records by Digitizing Them: Some Century-Old Pages Crumble When Touched." Evansville Courier & Press, August 21, 2013.

Prep

Domain specific knowledge is necessary for this project. A vendor that does not understand permanent asset collections may address the Inyo County records as disposable. Kofile understands that these are not disposable records.

Kofile will maintain file order and identification. Sequential document order is maintained and controlled by batch or page—as determined by client. Page order can be maintained by hand numbering with a light pencil.

Files are physically prepared for scanning. Prep may include staple and brad removal, disassembly of binder components, orientation of documents, and unfolding.

At this stage, fragile documents are flagged for exception handling and placement in Mylar, as necessary.

If applicable to the project, any volumes with bound/sewn bindings are imaged with a book scanner without compromising the binding's integrity.

Confidential/Sealed Files & Physical Evidence

Kofile will cooperate with the County to process such files as mutually agreed upon. Kofile's SOP is to scan everything as received. However, for sealed and secure documents/envelopes, Kofile's SOP is to leave unopened.

Kofile's SOP for unscannable physical evidence is to pull the evidence, insert a Proxy Indicator page into the file for imaging, create a control list, and bag/box with labels correlating to the specific case number accordingly for return to the County.



Image Capture

Operators observe each page during capture. Kofile's high-speed scanners utilize large wall-mounted monitors for observation.

Kofile's Image Certification team reviews each page against the scanned image to certify each page is scanned and that each image is the best copy.

For faint or illegible pages, the operator marks the page, readjusts the scanner, and employs contrast tools until the best copy of the image is captured. If unsuccessful, the operator indicates and inserts a review form for the quality assurance team to assess. The page is treated with a "Best Possible Image Indicator" or further enhancements. The image processing team can apply zonal enhancements for further enhancements, as necessary.



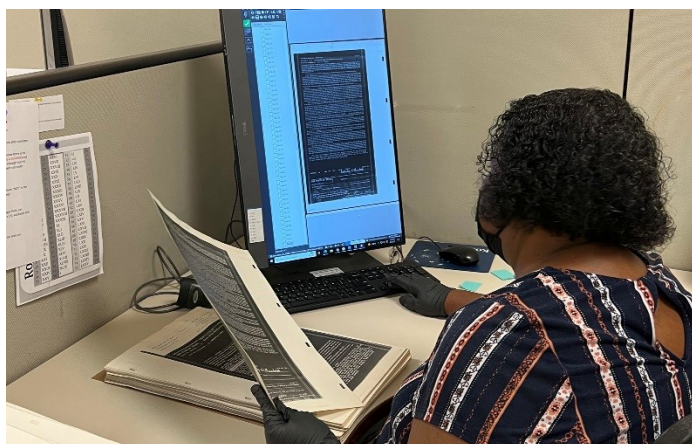
A Kofile Imaging Technician captures a historical document on a flatbed scanner.

Quality Control (QC)

Kofile's QC process ensures that each images is certified. **Each and every image is sight checked by human eye.** Each page is viewed to ensure there are no missing pages, double feeds, or "A" pages (those added to the original book or file). Each image is inspected prior to delivery to the customer. The Register of Wills can receive an image log noting the steps employed.

Kofile's quality assurance involves three major thresholds for 100% review inspection: during preparation, at capture, and post-scan. Prior to delivery, all work undergoes a statistical, random, batch-based review of 8% of the inventory.

The three checkpoints for 100% review combined with the batch-based 8% review all establish the control levels for inspection of the finished product. In total, human eye verification occurs twice—first with comparison of the paper record to the captured digital image. Second, with comparison of the raw scan to the zonally enhanced image.



A Kofile Imaging Technician performs a page-by-page visual review of the original page to the captured digital image.



Technical Scanning Equipment

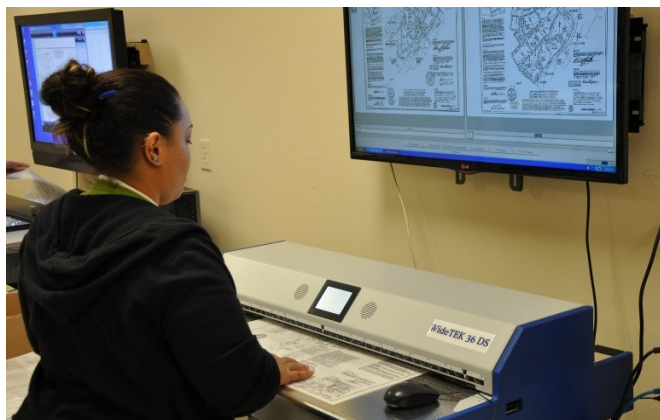
Kofile employs a range of scanners to tailor imaging services. Kofile's scanning capability includes mixed-sized and large-format documents. Each scanner employs page detection to adjust for varying sheet sizes and, more importantly, thicknesses (to reduce "pull-throughs" on thin papers following thick bond). Document fragility and stability determine which device is employed. This selection process also ensures a historical document is addressed by its specify density.

- Kodak i5850
- Kodak i5200
- Fujitsu® fi-5950
- Fujitsu® fi-6770C
- OPEX® Falcon
- OPEX® Gemini
- Zeutschel OS12000 A1
- Image Access BookEye® 4 Professional
- Image Access WideTEK® 36DS
- Image Access WideTEK® 60CL

Zeutschel—an overhead planetary tabletop scanner for books and large format items (e.g., certificates, drawings, maps, newspaper). A high end scanner for maximum performance and perfect images. It provides correction and automatic document detection with integrated color management, contrast improvement, image rotation, de-speckle, de-skew, cropping, masking, and scanning with dynamic threshold. Other advantages include:



- Perfect Book – 3D technology for perfect book curve
- High scan speed
- ROI-scan feature (limitation of scan area)
- Superior automatic color management
- Eliminates UV/IR radiation
- Scans with low exposure to light (illumination only activates at scan)
- No reflections with high-gloss originals



WideTEK® —This wide-format duplex scanner digitizes two-sided sheets. Kofile Labs have multiple models of WideTEK® devices to capture sheets up to 36"W and 60"W. In a single pass, this scanner captures both the front and back of a sheet in only 2.5 seconds in a single pass (even capable at a resolution of 300 dpi). The sheet no longer requires flipping over for verso capture. These scanners ensure the best possible gentle transport of a sheet without damage.



MICROGRAPHICS CONVERSION

Kofile provides requested Micrographics Inspection and Scanning Services at its Micrographics Facility (9980 Glenoaks Blvd., Suite F, Sun Valley, CA). This facility holds all necessary government permits to operate a microfilm processing lab. Business hours are 8:00 a.m. to 5:00 p.m. PST, Monday through Friday. All System specifications are managed from Kofile's corporate facility in Dallas, TX.

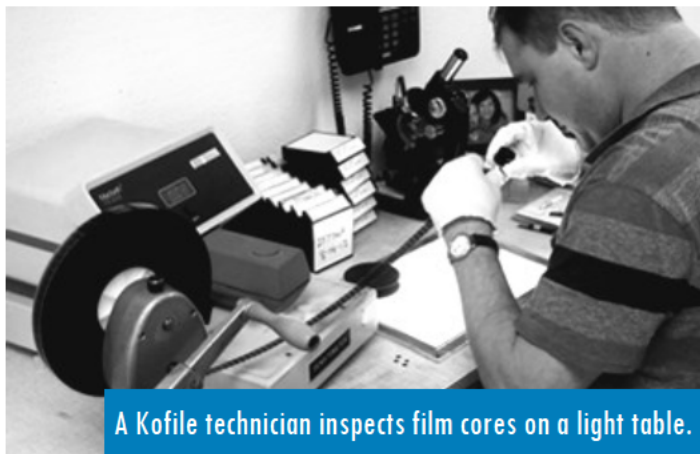
Shipping

Completed film is shipped to the County using FedEx. A packing list with contents is provided in each delivery. The FedEx tracking number can be provided to the County Clerk-Recorder's contacts via email. Following the acceptance of the film shipment by the County Clerk-Recorder, Kofile deletes image files from its system.

Production Process – Evaluation

The roll or item is viewed end-to-end using one of Kofile's industry-standard microfilm inspection stations. These inspection station have a table with a light well, film rewinds, a densitometer, 15X Loupe, microscope, and splicer for film repair.

At each station, measurements for background density and image quality are taken at various points in the roll and recorded in a log sheet. During this process, splices and tears in the film are repaired to ensure that the film travels through the scanner without being damaged. The purpose of this inspection is to assess the image quality and frame formatting in each film roll. This information is used to properly setup Kofile's microfilm scanners to capture all data available. This setup is critical as Kofile's quality process commences at image capture.



A Kofile technician inspects film cores on a light table.

Also, this evaluation process includes the discovery of evidence of Vinegar Syndrome or VS (a problem for acetate film only) and redox (a potential problem for all silver halide film). If either is evident, then Kofile has solutions to enable a successful scan.



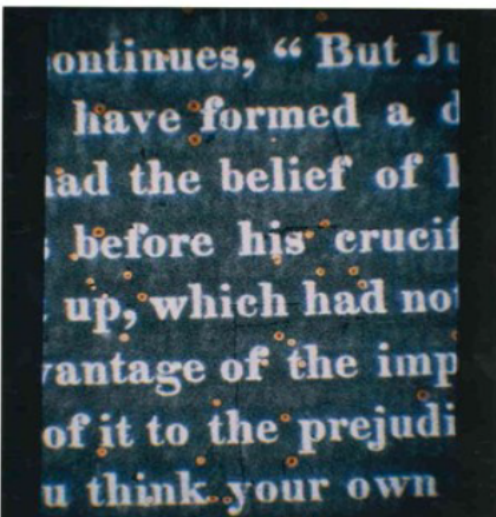
Examples of film distortion caused by advanced Vinegar Syndrome (VS).



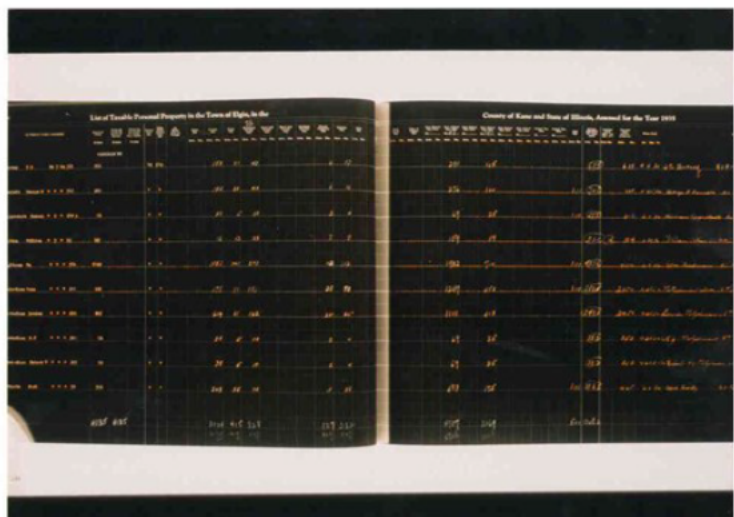
Vinegar Syndrome (VS)

VS is the term for a chemical reaction that occurs in cellulose acetate base film. The name is derived from the release of acid (producing a vinegar odor) resulting from the acetyl group breaking away from the molecular chain of cellulose acetate. The vinegar-like smell is first outward sign that VS is active. Once started, VS can be slowed, but it cannot be stopped. High temperatures, humidity, and atmospheric acid increase the rate of deterioration. However, VS deterioration progresses slowly—it is important to identify VS deterioration before the damage becomes so severe that the roll cannot be duplicated.

Kofile has extensive experience duplicating deformed acetate film. Kofile's experience with VS began in the 1970s and continues today. Kofile currently rescues information from deteriorating film by making a new, high-quality duplicate on equipment specifically designed to handle VS. Few companies with the equipment and experience to manage this problem remain in operation.



Typical Redox spots.



Redox affecting the edge of characters.



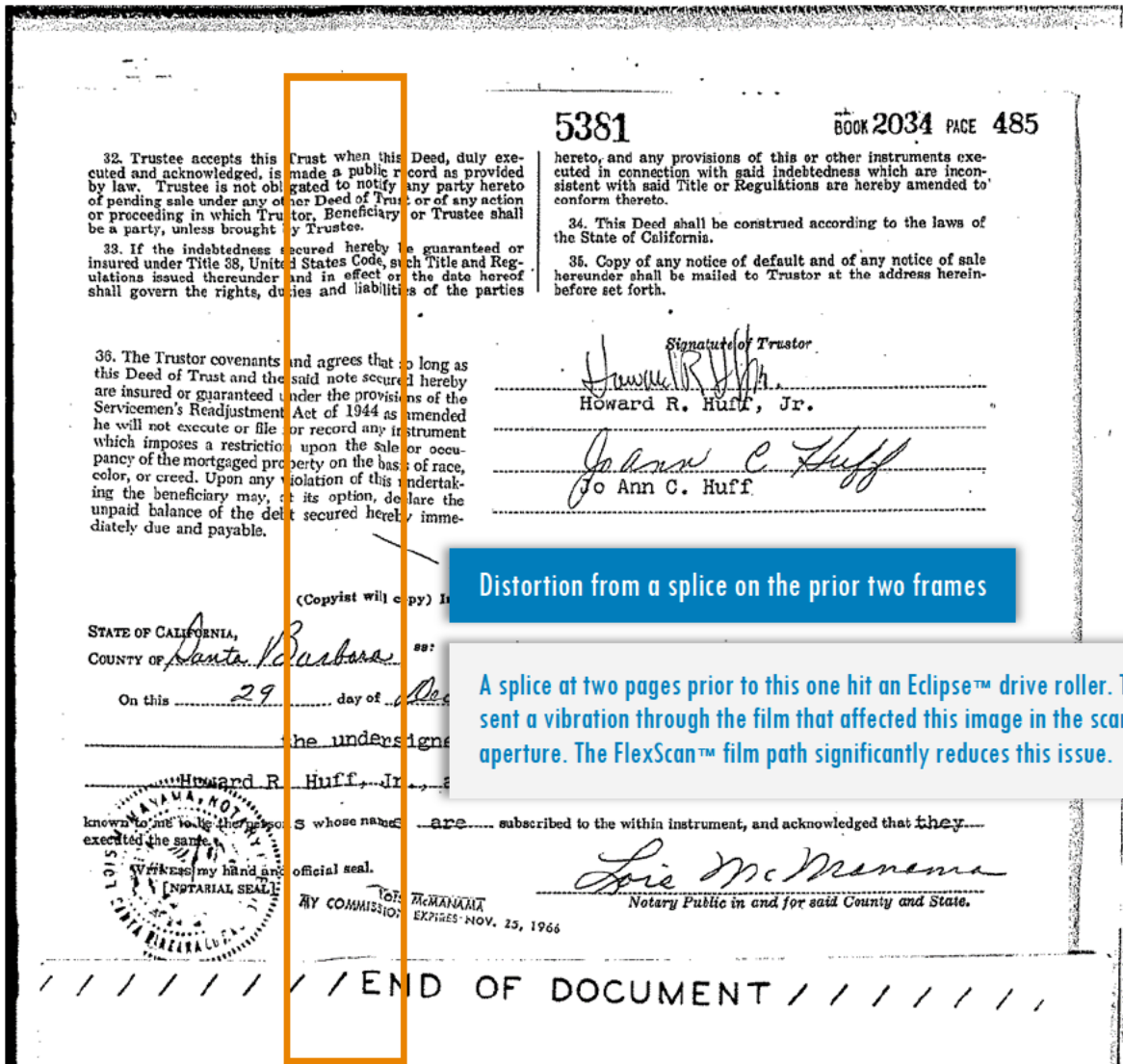
Redox

Redox, or "measles," are small orange spots appearing in the dark areas of microfilm leader and frames. These spots are caused by a chemical reaction between airborne oxidants and the metallic silver that forms the image on the film. It is evidence of high levels of oxidants in the air accompanied by warm temperature and high humidity. Although redox is not contagious, rolls stored together under the same conditions are likely equally affected. As the pictured below, redox can range from cosmetic to severe.

Like VS, redox deterioration progresses slowly. However, unlike VS, it can be arrested (but not reversed) by maintaining cool, dry, oxidant-free storage conditions.

Production Process – Image Capture

After inspection, the rolls move to the image capture stations. Kofile uses nextScan film scanners. These systems scan an entire roll into a single, grayscale "ribbon file," which insures that all of the pages on a roll are captured. Although nextScan's software contains tools for cropping, image rotation/de-skew, and image





enhancement, Kofile only uses the cropping function in its production process. Instead, Kofile uses its more sophisticated processing programs that produce better and more reliable results than those included with nextStar.

Notes from Kofile's end-to-end film evaluation are passed to the scanner operators to assist in customizing the scanner setup. This is the foundation of the capture process to secure the best capture without re-scanning. If a more optimal setup is discovered during the quality control process, then the roll is rescanned with new settings.

The splice sent a vibration through the media that affected this image in the scan aperture. The FlexScan™ film path significantly reduces vibrations that occur when a splice encounters a drive and guide roller. As this amount of character distortion has a negative effect on OCR accuracy, then Kofile carefully checks any splices located in the County's micrographics collection.

Thresholding

Each image is converted from grayscale to bitonal in a process called thresholding. Each black and white bitonal image is viewed on a high resolution monitor to determine if the baseline enhancement produced an acceptable result. If not, Kofile manually identifies zones in the image for additional improvement and applies customized enhancement settings to those zones.

Deskewing

During the original process, pages may not have been consistently located on the copyboard. If a page is cocked to one direction or another, the digital image is similarly "skewed". For cropping to work well, the page must be straightened and this is done as a post process step using specialized software and, in some cases, human intervention.

Cropping

Placement of the page on the copyboard was often inconsistent, so Kofile scans the entire area in the film frame. This ensures the entire page is contained in the scan matrix. To view and properly print the document, the boundaries of the page are identified. Then, the document is cropped from the overall scan matrix. This involves both software and human involvement. The parameters of the cropping algorithm are set up and tested.

Each image is viewed to ensure the integrity of the page was not effected by the cropping process. Pages that fail this visual inspection are reprocessed using modified settings or hand cropped by the Quality Assurance (QA) operator.

Quality Assurance (QA)

Each scanned document is viewed on a high-resolution monitor after each processing step to determine if image quality is sufficient to move to the next step.



IMAGE PROCESSING & ENHANCEMENT

[Optional /As Needed Level of Service ; Additional Cost]

IMAGE PERFECT, Kofile's proprietary software, ensures optimum image quality. When sheets vary in size and density, this custom programming ensures image uniformity. It provides proprietary algorithms to achieve superior image quality. Utilization of algorithms is critical to address the varying densities and quality levels in any local public records collection.

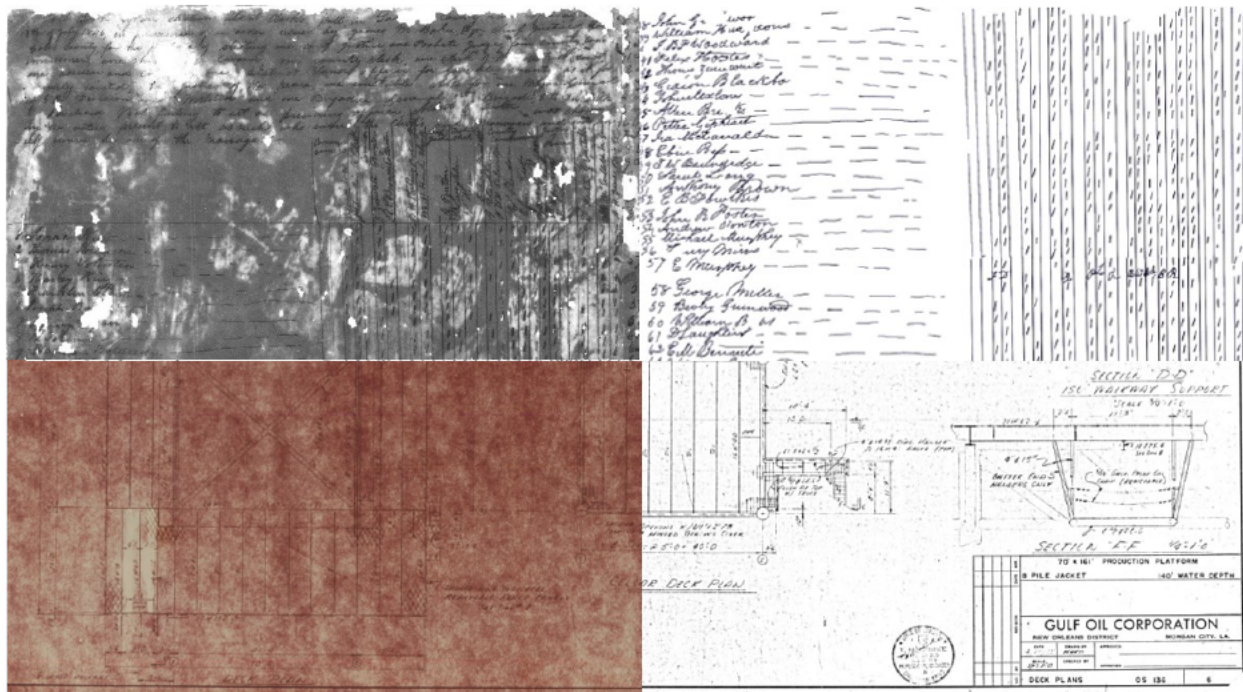
This proprietary software is a digital SLR-based system. Kofile utilizes the Microsoft® SQL database as the underpinning for production. Operators can interactively build and edit image processing scripts. The image processing scripts can be saved for batch processing. It also boasts progress tracking capabilities and exceptions identification. Supervisors quickly and efficiently manage and correct problems.

At capture, this software automatically addresses many common problems:

- White-on-white images
- Synchronizing images from different scanners
- Floating page cropping & segmentation
- Rotating & de-skewing images
- Tone correction
- Resolution adjustments
- Metadata Normalization

IMAGE PERFECT uses custom image clean up and enhancements such as deskew, despeckle, character repair, and zonal processing. Images are zonal enhanced to improve legibility.

Kofile maintains 100% document integrity and image control with exclusive Image Locking. During image repair, *IMAGE PERFECT* allows repair of the currently displayed image without rescanning additional images (which compromises image integrity). When a re-scan is required, the processing procedures do not permit information from rescanned pages to accidentally cut and paste into the incorrect page.

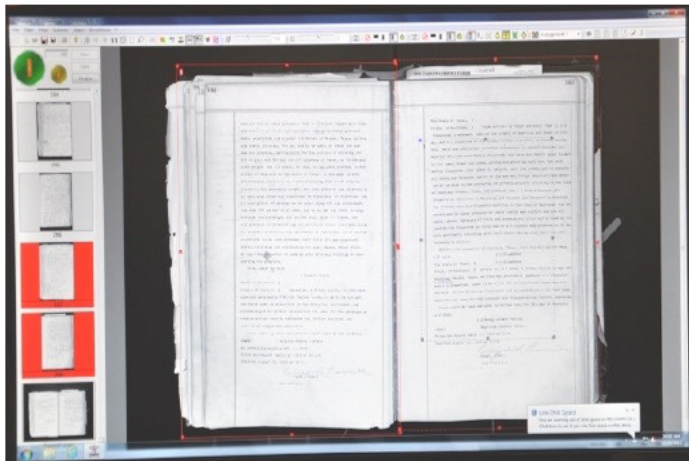


Examples of imaging before (L) and after (R) advanced levels of image cleanup and enhancements by Kofile technicians.



Quality Targets (pictured) establish the scanner's baseline digital capture quality. This permits Kofile to measure the digitization physics at capture. Quality Target are the foundation of Kofile's quality assurance. IMAGE PERFECT measures each image for:

- Target dpi
- Target Tone scale & correction
- Color Management
- Brightness/Contrast Correction
- Gamma Adjustment
- White Balancing
- Page Orientation
- Exposure uniformity
- Color reproduction data

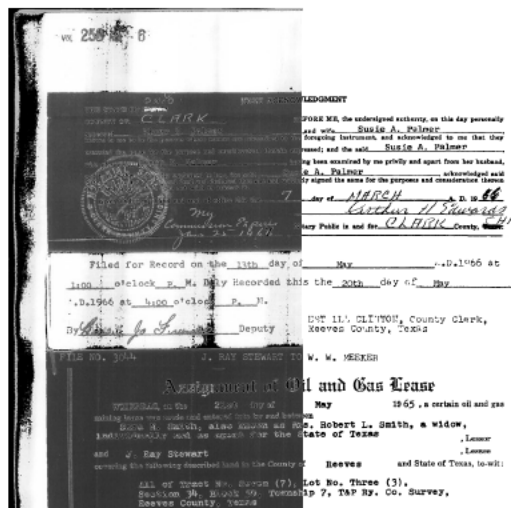


Quality Targets permit operators to view image quality at scan. Images, even when scanned on different devices, are "normalized" as if captured from one device. Rather than using ad-hoc algorithms and tricks, this software measures image quality and propagates this data through the imaging chain.

If requested, annotations are supported to allow the addition of Book/Vol./Page on the digital image.

Image quality metadata is captured as part of the image header along with a secured digital signature that certifies the fidelity and integrity of every image scanned.

In the instance of negative Photostats, this level of service ensures that all characters are black on a positive background. The document certification strip (file strip) is inverted to match the polarity of the final image—see exemplar herein: before (left) and after (right) further image processing.





FILE NAMING (TAGGING)

After completion of the final QA step, images are named with Book & Page.

OUTPUT FORMAT

Kofile is highly capable to provide all standards in accordance with Inyo County's specifications. Images are captured at a minimum of 300 dpi at 256 bi-tonal levels. This ensures the highest image quality for documents with poor contrast and difficult-to-read information.

Images accumulate as Group IV bi-tonal images in a standard TIFF format. Images are optimized and scaled for output to the target system. Kofile always defaults to *National Archives & Records Administration (NARA)* technical guidelines for digitization. If required, Kofile is experienced and equipped to provide PDF/A. Kofile has provided this service to both the City of Los Angeles and the County of Los Angeles at no additional cost. Not many vendors provide this deliverable, as most clients default to TIFF, JPEG, or PDF. However, this output is gaining in popularity, as noted in the sources following.

"The Library of Congress Recommended Format Statement (RFS) includes PDF/A as a preferred format" [Source: <https://www.loc.gov/preservation/digital/formats/fdd/fdd000318.shtml>]

"PDF/A is widely recommended for page-oriented documents as a format that is ready for archiving, particularly those intended for printing." In the references section, PRIA recommends PDF/A for property records [Source: https://member.pria.us/i4a/doclibrary/getfile.cfm?doc_id=165].

SYSTEM FORMATTING

Images are optimized and scaled for system output. Kofile has worked with several records management system vendors, including homegrown systems, GovOS (Vanguard, CountyFusion™, and TownFusion™), iDocket, NetData, Deketo, COTT, Tyler Technologies, Inc., Laserfiche, Granicus Legistor, etc.



BENEFITS OF TYLER EAGLE RECORDER & KOFILE

- Faster import of images & indexes into Tyler Odyssey & Eagle Recorder.
- Eliminate conversion errors due to improper formatting.
- Reduce hours & invoices for Tyler's technical assistance.
- Assistance with sign-off & acceptance testing.
- Clerks are not required to check thousands of files alone.

The expertise outlined applies to both Tyler Technologies, Inc.'s (hereby Tyler) Eagle Recorder and Odyssey systems. Despite Odyssey's convenience, users struggle to maximize its potential. Few companies properly format paper case files into Odyssey and Eagle Recorder.

Kofile has worked closely with Tyler's development and conversion teams to create a customized import experience. Kofile's specialized process and application simplifies this conversion process for Tyler too.



Importation Process

Kofile's process for importing case files into the Tyler Eagle Recorder system differs depending on whether the files have an existing index. The process for importing case files that have a pre-existing index includes the export of the existing index, matching the index with the appropriate files, importing the images, and merging images with the index.

If no index exists, Kofile indexes each case file by following Tyler's required fields. The new indexes and corresponding images are imported into Eagle Recorder and displayed as "Historical Conversion" or "Archived Images" in the "Documents" tab in this system.

Imaging & Individual Events

While Kofile can load images to custom areas within Tyler Eagle Recorder (including loading individual events into existing or new indexes), Kofile does not recommend attaching images to individual events. If done, each case's imaged document requires separation from the case and indexing by event or document type and date. Often the date and document type will not match the pre-existing index, and technicians must manually attach mis-matched indexes and images. This manual process results in additional costs that instead could be allocated to more detailed indexing or additional imaging.

References can attest to the convenience when an entire document is imaged under a single line in the "Documents" tab. This maximizes the number of complete document imaged. Otherwise, attaching a smaller percentage of file images to individual events requires a constant need to reference the original documents. Eliminating the need to access and re-shelve records liberates the County employees to perform other tasks.

DELIVERY OF IMAGES

Final images are delivered via Secure File Transmission Process (SFTP) or CD/DVD/thumb drive/external hard drive). This is a point-to-point delivery, and there are two methods to use SFTP:

- Kofile FTP into the County system and upload files (push)
- County FTP into the Kofile system and downloads files (pull)

Kofile partners with Inyo County Clerk-Recorder resources to establish and test an SFTP connection. Kofile will document (whitelist) County-provided IP address(es), assign a unique username and a secure County-specific password. Access is restricted to the data directory specifically created for the County/project. Kofile's FTP server is equipped with two independent internet connections allowing for automatic failover and redundancy.



RECORDS MODERNIZATION TIMELINE

Kofile is available to begin the project upon award of contract. A kickoff call will occur within 30 days of contract execution and will set mutually-agreed-upon timelines. Upon award, Kofile will discuss with the Inyo County Clerk-Recorder whether the project is addressed batches (with staggered transmittal and deliveries).

Kofile does not have any commitments or potential commitments that may impact our ability to perform this Contract. There are no other factors known to Kofile that could materially impair the ability of Kofile to carry out its duties and obligations under this Contract or that could materially affect Inyo County's decision.

Kofile can complete the entire project in one phase or in batches of work. The quantity of records addressed are dependent of the storage space available in the transport vehicle. Each batch will require 12-16 weeks to complete. Kofile does its best to present realistic project timelines and our vast experience helps us head off any issues or problems. Should Inyo County require an expedited turnaround, the Project Manager is available to discuss possibilities.

| OFF-SITE ARCHIVAL DIGITIZATION SERVICES PLAN OF WORK BY STAGES | |
|---|--|
| PHASE | TASKS |
| Kick-Off | <ul style="list-style-type: none"> ■ A kick-off meeting with Kofile and the County's representatives to review the project scope, logistics, and introduce Project Managers for both Kofile and the County. |
| Initial Batch Pickup & Transport | <ul style="list-style-type: none"> ■ Items for transport are identified and correlated with a pre-arranged batch list. ■ A courier third party pickups up the first batch of records. |
| Arrival | <ul style="list-style-type: none"> ■ At the Kofile facility, the batch is unpacked and inventoried. |
| Prep | <ul style="list-style-type: none"> ■ Prepare physical files for scanning. ■ Fragile pages are flagged for exception handling and placement in Mylar, as necessary. ■ Sequential order is maintained and controlled by batch or page for loose leaf documents. |
| Scan | <ul style="list-style-type: none"> ■ Coordinate with County to assure data integrity for each record. Obtain approvals to proceed and begin full-scale image scanning. ■ Each image is compared to the physical page with human eye verification to ensure there are no missing pages, double feeds, and to account for "A" pages (added to the original). |
| Quality Control (QC) | <ul style="list-style-type: none"> ■ Each image is viewed to ensure standards per the following factors: size, readability, resolution, and sequence. Each digital image is certified. ■ Work through any issues encountered including re-work. |
| Conversion | <ul style="list-style-type: none"> ■ The image is converted into the correct format, naming, and digital file format. ■ Necessary metadata is recorded in accordance with the required organization and file naming. |
| De-Prep | Pages are placed into respective housing according to original order. The team begins with a small sample and progress through the entire process, and verifies that the process is sound. This process is repeated until there are no issues. |
| Delivery | <ul style="list-style-type: none"> ■ Kofile returns the batch to the County's facility, if applicable. ■ Other project requirements are addressed as appropriate. ■ Final images are delivered via the requested medium (e.g., ftp, harddrive, thumbdrive, DVD). |



If applicable and storage is not designated, batch pick-up and delivery can overlap, so that Kofile will deliver completed work periodically. The quantity of records addressed are dependent of the storage space available in the transport vehicle. A Kofile vehicle can pick up a batch of 500-700 volumes per trip.

Kofile believes in a deliberate and methodical approach to any project. Image conversion is a collaborative process that requires careful review, routine feedback, clarification, and validation from the production team and the client.

Micrographics projects often have hidden issues that arise during the project (due to the original camera and/or development process and effects of the storage environments). These cause unforeseen delays or gains (which increase as familiarity with the collection increases). With Kofile's unparalleled expertise, the County Clerk-Recorder is assured of a trusted partner to ensure superior deliverables.

During the kickoff meeting, Kofile requests a representative sample of the microfiche or microfilm for conversion under the agreed-upon process. This sample conversion assures the County Clerk-Recorder of Kofile's ability to perform deliverables. It provides the opportunity to ask questions or request changes to the process. Depending on the size of the sample, this sample process requires two to four weeks.

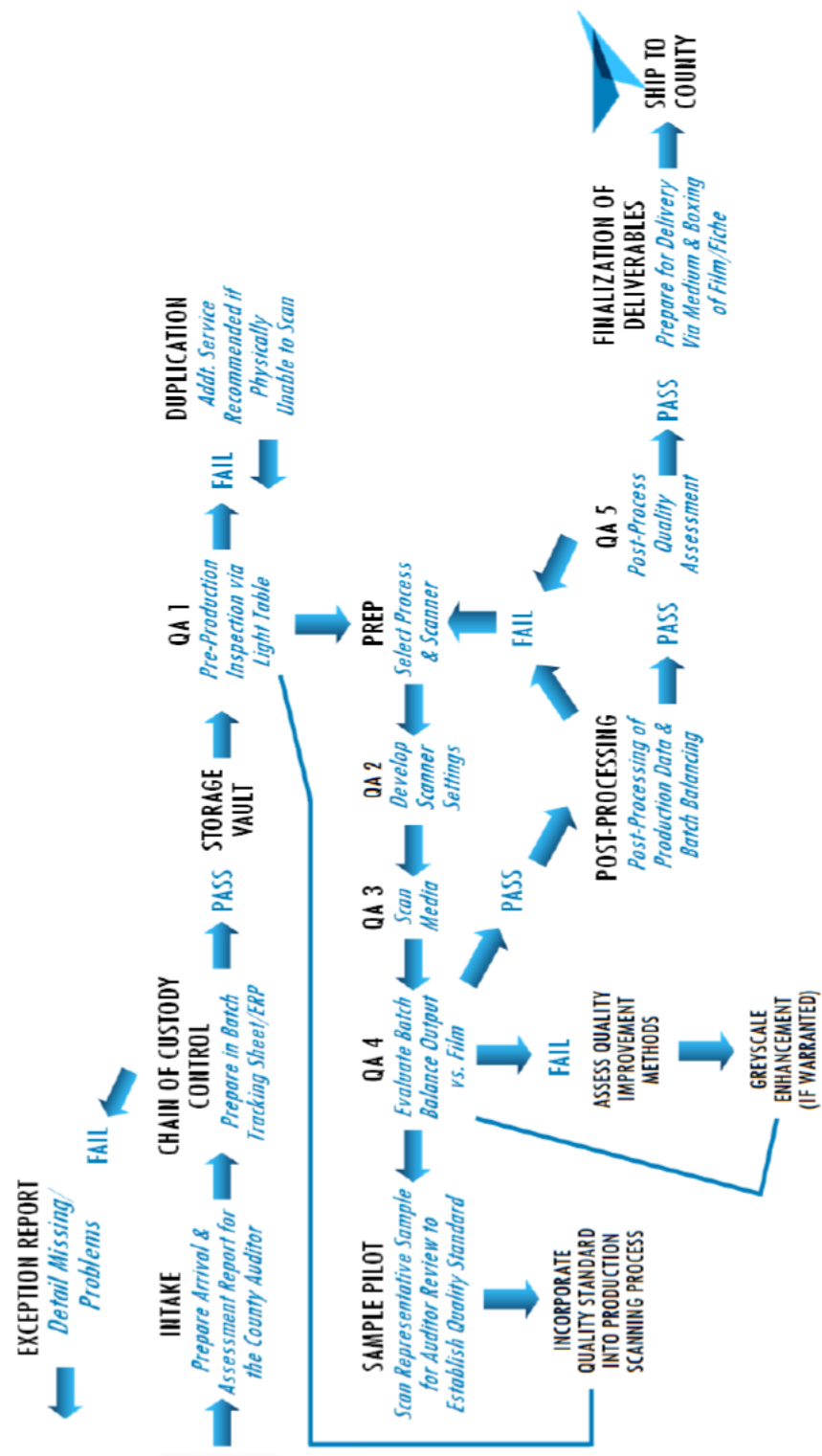
Overview of Kofile's Micrographics Scanning procedures:

- Receipt of media (microfilm and/or microfiche).
- Maintain log of the contents of each shipment received.
- Track the data from each roll/item as it completes the each step of the conversion process.
- Perform batch-balancing functions after each step to insure all image and index data are accounted.
- Preview each roll prior to scanning to establish appropriate scanner setup and image enhancement settings.
- Scan the images from each roll of film at the required resolution.
- Rotate, crop and de-skew the scanned images.
- View the images for quality on a high-resolution monitor.
- Re-scan rolls or images that do not meet the quality standard.
- Key and verify a unique number(s) from the images to link the image file to an existing index database.
- Verify that the index data is accurate and correctly associated with the corresponding digital images and the image file is complete.
- Group images together based on visual instructions from County Clerk-Recorder or from the index file.
- Other project requirements are addressed as appropriate, including OCR of identified documents.
- Deliver the images, index data, exception reports, and micrographic media to the County Clerk-Recorder for importation and review.

Please see the following page for a graphic flowchart of the conversion process.

KOFILE RECEIVES
FILM/FICHE

IMAGE ARCHIVE (IA)
DEPT.





SECTION VII. COST OF SERVICE

RESTRICTIVE COVENANT MODIFICATION

\$0.10/Manuscript Image (handwritten)

\$0.037/Typescript Image (typed)

- OCR & logical evaluation of every image (reportable)
- Human review of all images flagged by logical system by Kofile (reportable)
- Redaction of all discriminatory restrictive covenants by Kofile (reportable)
- Autofill Restrictive Covenant Modification (RCM) form (reportable)
- Secure County Clerk-Recorder portal for review & approval (reportable)
- Secure County Council portal for final approval (reportable)
- Quality Assurance program (reportable)
- Reporting & Audit Trail for every document & image
- Format images & data using PRIA XML Standards for import into records management system

Minimum Requirements:

- Images must be grouped into documents
- Documents must be accompanied with all index data required for RCM form

Secure Portal Setup & Project Management: \$7,500 (One-time)

- Setup SFTP server for secure file transfer
- Normalization of incoming images & metadata
- Setup County Clerk-Recorder & County Council Secure Web Portal
- Dedicated Project Manager & Status Reports

Annual Licensing, Hosting, Maintenance, & Support: \$8,500 (Annually)

- Licenses & hosting of County Clerk-Recorder portal for review & approval
- Licenses & hosting of County Council portal for final approval
- Software Maintenance
- Email Support

Custom Development Professional Services: \$175.00 / Hour (Optional)

- Custom formatting of final images & data
- Other custom development work

PDF/A Versions of Non-Redacted Items \$0.05 / Image (Optional)

RECORDS MODERNIZATION SERVICES

For Digitization, the County receives a MASTER (e.g., external hard drive, CD, DVD, SFTP, flash drive) in a medium suitable to the project size. There is no additional cost from Kofile for the County's preferred medium. Use of SFTP eliminates the California Sales & Use Tax.

| | |
|---|-----------------------------------|
| Digitization of Microfiche | \$0.045 Per Image |
| ↳ Addition of Manual Image Cleaning (if required) | Addition of \$0.35 / Image |
| Digitization of Aperture Cards (Two Images Per Card) | \$0.075 Per Image |

Micrographics/Microforms Scope of Work includes:

- Capture images at 300 dpi in black and white
- Accumulate images as Group IV bi-tonal images in a TIFF format
- Automated threshold clean-up, de-skew, de-speckle, background control, text enhancement, etc. Auto crop images to remove excess border.
- Split scanned frames into individual images/pages



- Images named by Book # and Page #
- Apply Multi-level Quality Control (QC) for data and images

Digitization of Paper Record

| | |
|---|-------------------------------------|
| Positive Typescript & Loose Leaf | \$0.45 / Image* |
| ↳ Addition of Image Cleanup & Zonal Enhancements | Addition of \$0.30 / Image** |
| Bound Volume (not Oversized) | \$1.49 / Image** |
| Oversized Page | \$1.65 / Image** |
| (Shortest Sheet Edge Greater Than 12") | |
| Negative Photostat | \$0.75 / Image** |

***Image Capture, Processing, File Naming, and System Formatting**

- Capture images at a minimum of 300 dpi bi-tonal (black and white).
- Images accumulate as Group IV bi-tonal images in a standard TIFF format.
- At capture, Kofile performs custom image control to ensure a quality image, such as orientation, brightness, contrast adjustments, cropping of blank space, color dropout, deskew, despeckle.
- Images are named (tagged for the directory file structure) by Book/Volume/Page.
- Page Validation (automated PG. numbering for validation).
- Each image is certified and sight-checked to ensure there are no missing pages, double feeds, and to account for "A" pages (added to the original).
- Indexing (file naming) per Book & Page.
- Formatting for the target records management system.

****Services in Addition to the Bullets Above—Image Clean-Up & Zonal Enhancements**

- Images accumulate as Group IV greyscale images in a standard TIFF format.
- Utilization of Image Perfect, Kofile’s proprietary software, to ensure the optimum image quality and uniformity with custom image clean up and enhancements, such as border removal, deskew, despeckle, character repair, and zonal processing.
- Photostat polarity reversal (so all characters are black on a positive background). The document certification strip (file strip) is inverted to match the polarity of the final image.

PRICING ASSUMPTIONS

- Pricing is all inclusive of required services, including all labor, equipment, and supplies.
- Any applicable sales tax are the responsibility of the County at the current rate. Taxes Any billing is subject to current effective and applicable tax rates. Taxes on digitization services are waived if images are delivered via SFTP transfer or electronic transfer (see herein for more information).
- Pricing is based on a Good Faith Estimate of page and document counts. Billing occurs on actuals, not to exceed the P.O. without authorization.
- A page is defined as one side of a sheet of paper (which contains two pages). Each page is one image unless it contains multiple record entries (e.g., Deed Record). In those instances, the documents are separated into separate images. Blanks are not imaged, unless otherwise directed by the County. Amendments and attachments are charged as images.
- Pages in which the shortest edge measures <12" are oversized and incur additional charges for imaging.
- Kofile certifies each image. Quality control includes two instances of human eye sight verification for each.
- The County signs off on an inventory prior to commencement of services, and upon acceptance of deliverables.



**REQUEST FOR PROPOSAL (RFP) - RESTRICTIVE COVENANT MODIFICATION
& RECORDS MODERNIZATION PROJECT PER CA AB 1466 (2021)**

| MEDIA | FORMAT | QUANTITY | SOURCE OF QUANTITY | UNIT PRICE | LINE TOTAL | SOLUTION TOTAL |
|---|--|--|---|------------------------------|---|----------------|
| RESTRICTIVE COVENANT MODIFICATION | | | | | | |
| Digital Image | Manuscript (Handwritten) | 35,388 Images | RFP & Site Assessment | \$0.10 /Image | \$3,538.80 | \$49,725.32 |
| | Typescript (Typed) | 815,852 Images | | \$0.037/ Image | \$30,186.52 | |
| Secure Portal Setup & Project Management | | | | \$7,500 (One-time) | \$7,500.00 | |
| Annual Licensing, Hosting, Maintenance, & Support | | | | \$8,500 (Annual) | \$8,500.00 | |
| OPTIONAL—Custom Development Professional Services | | | | \$175.00 / Hour | <i>AS NEEDED</i> | |
| OPTIONAL—PDF/A of Non-Redacted Images <i>[Note, all redacted images are output to multi-page PDF/A with an OCR text layer per Kofile's standard level of service]</i> | | | | \$0.05 / Image | <i>AS NEEDED</i> | |
| RECORDS MODERNIZATION SERVICES - PAPER TO DIGITAL | | | | | | |
| Volume/ Document | Positive Typescript/Loose Leaf | As Needed: <i>Unk.</i> | <i>Unk.</i> | \$0.45 / Image | <i>AS NEEDED</i> | \$12,784.05 |
| | ↳ Image Cleanups & Zonal Enhancements* | As Needed: <i>Unk.</i> | <i>Unk.</i> | Addition of \$0.30 / Image* | <i>AS NEEDED</i> | |
| | Bound (e.g., Sewn) Volume | Records Not on Film: (4 Vols. Indexes) 1,020 Images As Needed: <i>Unk.</i> | Site Assessment As Needed: <i>Unk.</i> | \$1.49 / Image* | Site Assessment: \$1,519.80 <i>AS NEEDED</i> | |
| | Oversized (shortest sheet edge measures greater than 12") | Records Not on Film: (16 Vols. Indexes) 6,805 Images As Needed: <i>Unk.</i> | Site Assessment As Needed: <i>Unk.</i> | \$1.65 / Image* | Site Assessment: \$11,228.25 <i>AS NEEDED</i> | |
| | Negative Photostat | As Needed: <i>Unk.</i> | <i>Unk.</i> | \$0.75 / Image** | <i>AS NEEDED</i> | |
| RECORDS MODERNIZATION SERVICES - MICROGRAPHIC TO DIGITAL | | | | | | |
| Microfiche | Step & Repeat | 60,979 Images | RFP | \$0.045 / Image | \$2,744.05 | \$11,548.86 |
| | Jacketed | 145,621 Images | RFP | \$0.045 / Image | \$6,552.94 | |
| | ↳ Negative Photostat Image Cleanups & Zonal Enhancements** | Approx. 16,185 Images | Good Faith Estimate of 30% of Images | Addition of \$0.35 / Image** | <i>AS NEEDED</i> | |
| Aperture Card | | 30,025 Images (2 Images Per Card) | RFP | \$0.075 / Image | \$2,251.87 | |
| PROJECT TOTAL | | | | | \$74,022.33 | |

*Optimum image quality and uniformity with custom image clean up and enhancements, such as border removal, deskew, despeckle, character repair, and zonal processing.

**Photostat polarity reversal (so all characters are black on a positive background). The document certification strip (file strip) is inverted to match polarity. Custom image clean up and enhancements, such as border removal, deskew, despeckle, character repair, and zonal processing.

SECTION VIII. CONTRACT TERMS



Kofile requests inclusion of the following terms and conditions and/or clarifications into the County's contract.

10. DEFENSE, INDEMNIFICATION, AND LIMITATION OF LIABILITY

Contractor shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with Contractor's willful misconduct or negligent performance of work hereunder or its failure to comply with any of its obligations contained in the agreement, except such loss or damages which was caused by the sole negligence or willful misconduct of the County.

IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY CLAIMS, PENALTIES OR DAMAGES, WHETHER IN CONTRACT, TORT, OR BY WAY OF INDEMNIFICATION, IN AN AMOUNT EXCEEDING \$<To be Agreed Upon>.

UNDER NO CIRCUMSTANCES WILL EITHER PARTY TO THIS AGREEMENT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, INTRINSIC VALUE, OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, HOWEVER CAUSED AND BASED ON ANY THEORY OF LIABILITY.

11. RECORDS AND AUDIT.

A. Records. Contractor shall prepare and maintain all records required by the various provisions of this Agreement, federal, state, county, municipal, ordinances, regulations, and directions. Contractor shall maintain these records for a minimum of four (4) years from the termination or completion of this Agreement. Contractor may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, micrographs, or other authentic reproduction of such records. For clarity, this section does not require Contractor to maintain a copy of deliverables provided by Contractor to County (e.g. County records in TIFF or PDF/A format).

14. ASSIGNMENT.

This is an Agreement for the Services of Contractor. County has relied upon the skills, knowledge, experience, and training of Contractor as an inducement to enter into this Agreement. Contractor shall not assign or subcontract this Agreement, or any part of it, without the express written consent of County. Notwithstanding the foregoing, Contractor may assign this Agreement in the event of the sale of all, or substantially all of, its assets. Further Contractor shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

APPENDIX A. SAMPLE CERTIFICATE OF INSURANCE

COUNTY OF INYO
REQUEST FOR PROPOSAL (RFP) - RESTRICTIVE
COVENANT MODIFICATION & RECORDS
MODERNIZATION PROJECT PER CA AB 1466 (2021)
DUE: FRIDAY, JULY 21, 2023, 5:00 P.M.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/11/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| | | | |
|--|--|--|-----------------------|
| PRODUCER Willis Towers Watson Northeast, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA | | CONTACT NAME: Willis Towers Watson Certificate Center PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com | |
| | | INSURER(S) AFFORDING COVERAGE | |
| | | INSURER A: National Fire Insurance Company of Hartford | NAIC# 20478 |
| | | INSURER B: Continental Insurance Company | 35289 |
| | | INSURER C: Endurance American Specialty Insurance Company | 41718 |
| | | INSURER D: Ascot Specialty Insurance Company | 45055 |
| | | INSURER E: | |
| | | INSURER F: | |
| INSURED Kofile Group Holdings, L.P. 6300 Cedar Springs Road Dallas, TX 75235 | | | |

COVERAGES **CERTIFICATE NUMBER:** W26659348 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSD | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS |
|----------|---|-----------|----------|----------------|-------------------------|-------------------------|---|
| A | <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER: | Y | Y | 7011759995 | 11/08/2022 | 11/08/2023 | EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPIOP AGG \$ 2,000,000 |
| A | AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY | Y | Y | 7011760001 | 11/08/2022 | 11/08/2023 | COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ |
| B | <input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000 | Y | Y | 7011760032 | 11/08/2022 | 11/08/2023 | EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 |
| B | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below | N/A | Y | 7011760029 | 11/08/2022 | 11/08/2023 | <input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000 |
| C | Professional/Cyber Security Liab | | | PRX30001481803 | 11/08/2022 | 11/08/2023 | See Below See Below |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Named Insured is completed to read:
 Kofile Group Holdings, LP
 Kofile Intermediate Holdings, Inc.
 Kofile Software Parent Holdings, Inc.
 Kofile Technologies, Inc.
SEE ATTACHED

| | |
|---------------------------|--|
| CERTIFICATE HOLDER | CANCELLATION |
| | SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. |
| | AUTHORIZED REPRESENTATIVE |

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ACORD 25 (2016/03)

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SR ID: 23318541

BATCH: 2739844





AGENCY CUSTOMER ID: _____
 LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

| | | | |
|--|-------------------------|---|--|
| AGENCY Willis Towers Watson Northeast, Inc. | | NAMED INSURED Kofile Group Holdings, L.P. 6300 Cedar Springs Road Dallas, TX 75235 | |
| POLICY NUMBER See Page 1 | | EFFECTIVE DATE: See Page 1 | |
| CARRIER See Page 1 | NAIC CODE See Page 1 | | |

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
 FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Kofile Products, Inc.
 GovOS, Inc.
 MUNIRevs, Inc.
 MUNIRevs, Inc. d/b/a LODGINGRevs
 Bizodo, Inc. d/b/a SeamlessDocs
 Kofile Shared Services, Inc.
 Kofile Management Services, Inc.
 Kofile, Inc.
 Kofile Services, Inc.
 Kofile Software Intermediate Holdings, L.P.

Professional Liability/Technology Services Liability - Each Claim \$5,000,000
 Media Liability - Each Claim \$5,000,000
 Privacy/Network Security & Privacy - Each Claim - \$5,000,000
 Privacy and Network Security Breach Costs \$5,000,000
 Direct Business Interruption Loss \$5,000,000
 Cyber Extortion Threat \$5,000,000
 Contingent Business Interruption Loss \$5,000,000
 Digital Asset Loss \$50,000
 Professional Liability/Technology Services Liability Retro Date: 10/30/2009

Umbrella/Excess is follow form.

Cert Holder is included as an Additional Insured as respects to General Liability and Auto Liability as required by written contract.

General Liability policy shall be Primary and Non-contributory with any other insurance in force for or which may be purchased by Additional Insured as required by written contract.

The General Liability, Auto Liability and Workers Compensation policies provide an automatic Waiver of Subrogation as required by written contract and as permitted by law.

INSURER AFFORDING COVERAGE: Ascot Specialty Insurance Company NAIC#: 45055
 POLICY NUMBER: EOXs2210001130-02 EFF DATE: 11/08/2022 EXP DATE: 11/08/2023

| TYPE OF INSURANCE: | LIMIT DESCRIPTION: | LIMIT AMOUNT: |
|---------------------------|--------------------|---------------|
| Excess Cyber/Professional | Aggregate | \$5,000,000 |

ACORD 101 (2008/01)

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SR ID: 23318541 BATCH: 2739844 CERT: W26659348





AB 1466 RCM Modernization RFP for Inyo
County, California

July 18, 2023



Western Integrated Systems

Cover Page and Executive Summary

Western Integrated Systems

3657 Grand Avenue

Oakland, CA

Email: jim.hughes@westint.com

www.westint.com

Danielle M. Sexton, Inyo County Clerk Recorder/ROV

760-878-0220

dsexton@inyocounty.us

Dear Ms. Sexton:

On behalf of the entire Western Integrated Systems (WIS) team, we thank you for the opportunity to present Inyo County with a focused AB 1466 RCM Modernization RFP Response. We appreciate the opportunity to demonstrate that WIS is best suited to partner with you to provide a roadmap to immediate and continuous improvement in your AB 1466 RCM Modernization Process.

With over 42 years of experience transforming manual and cumbersome processes into streamlined and efficient technology solutions – and with specialized records management and business consulting practices, we believe our Western Integrated assessment methodologies, which include best practices of both Lean and Six Sigma methodologies, i [REDACTED] [REDACTED] [REDACTED] is the most appropriate first step to understanding Inyo County's needs for complying with the mandated AB 1466 Restrictive Covenant Language Initiative. We will provide Inyo County with a comprehensive road map, including recommendations with pricing, and realistic procedures and processes that can be put in place for your review. Our goal is to provide you with the best possible information by which you can make informed decisions.

Cheryl Young, CSM, CSPO, IGP, CTT+, CSM, CSPO, erm^M, ecm^P, who holds many Records Management and Information Governance certifications from the ARMA, AIIM, and IOFM, will be the lead consultant. She is based in Los Angeles County and will be working from WIS' Oakland office. WIS also has an office in Roseville, CA. Susan Grunenwald is your account executive; she is based in Reno, NV.

Thank you again for this opportunity. We look forward to discussing the proposal and determining what steps need to be taken.

Sincerely,

James E. Hughes, Owner

Western Integrated Systems

Firm Information and Qualifications

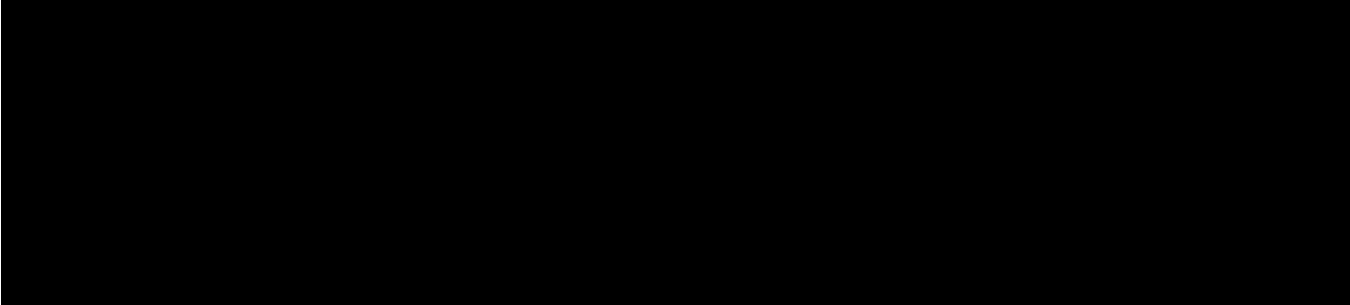
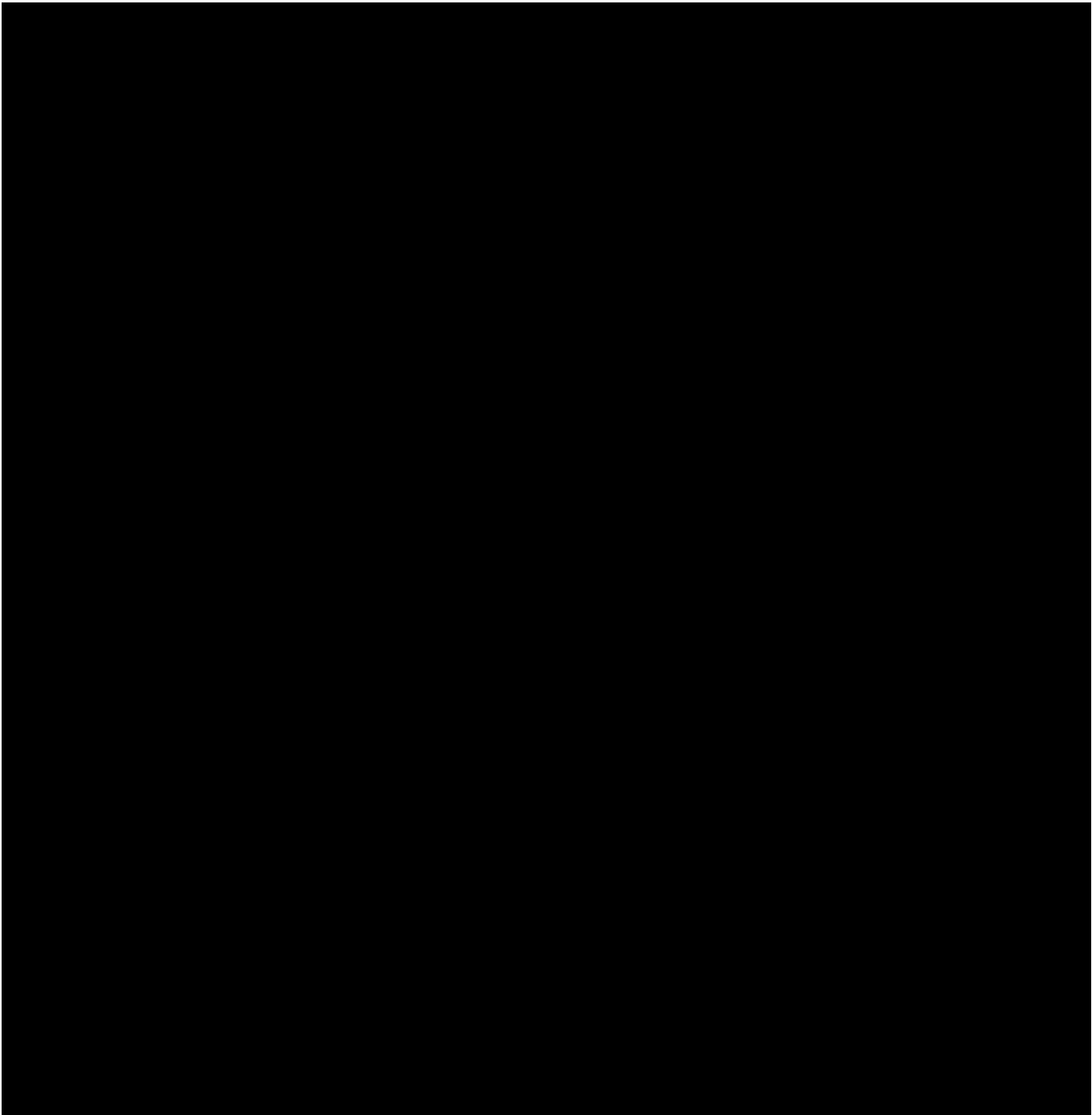
Founded in 1981, [Western Integrated Systems](#) (WIS) has been providing digital transformation solutions and professional services for its clients for more than four decades. WIS is a DVBE, SMB, PEPPM and CMAS certified organization and is a nationally focused Management Services and Value Added Reseller (VAR) of industry leading software and services. With over 42 years of experience transforming manual and cumbersome processes into streamlined and efficient technology solutions – and with specialized records management and business consulting practices, we believe our Western Integrated assessment methodologies, which include best practices of both Lean and Six Sigma methodologies, [REDACTED] [REDACTED] is most appropriate first step to understanding Inyo County's current needs. Once our assessment is complete, we will provide Inyo County with a comprehensive road map, including recommendations with pricing, and realistic procedures and processes that can be put in place with existing resources, for your review. Our goal is to provide you with the best possible process, technology and compliance information by which you can make informed decisions.

What sets WIS apart is our team members, our technical experience, and our process expertise. We are unique in the consulting industry because aside from our vast expertise at reviewing, updating, and aligning business processes to technology, we have actual experience implementing and supporting complex and highly technical systems as well. Our real world vs. hypothetical theory experience sets us apart. Many of our clients have worked with us for multiple years at their organization – or in cases where a client contact might move to another organization, we often are invited to follow on engagements at the client contact's new organization.

Along with our strong team of IT and process engineers, our lead consultant who would be dedicated to this engagement, Cheryl Young, has been immersed in the information governance industry for 38 years. During that time, she has served as a business process consultant, records manager, trainer, information analyst, and project/contracts manager. Cheryl Young, CSM, CSPO, IGP, CTT+, CSM, CSPO, erm^M, ecm^P, who holds many Records Management and Information Governance certifications from the ARMA, AIIM, and IOFM, will be the lead consultant. She is based in Los Angeles County. WIS also has an offices in Oakland and in Roseville, CA. Cheryl is a highly respected business practice specialist and a frequent speaker at AIIM and other industry organizations. More detail associated with Cheryl's experience can be found under section three under header, "Key Personnel."

Susan Grunenwald is your dedicated Account executive, who is based in Reno, Nevada. Susan holds a degree in Computer Sciences and has over 18 years of experience working with government agencies and large corporations to streamline and automate financial and business processes. Susan will provide frequent, strategic and focused account management – working with the rest of the WIS team to ensure clear expectations setting and strong communication.

Susan and Cheryl will be assisted by Jeremy Olford, our Director of Professional Services. Jeremy has been with WIS for over 15 years and is very sophisticated at alignment of technology to business practices. His specialties include Workflow and Database Integration, Electronic Capture and Content
Inyo County AB 1466 RCM Modernization RFP – Western Integrated Systems' Response -

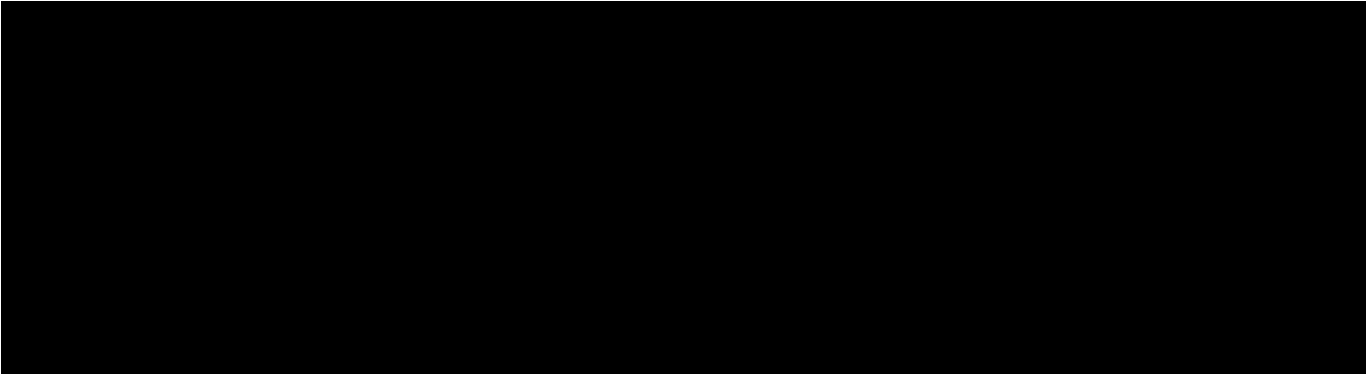


Work Plan Approach

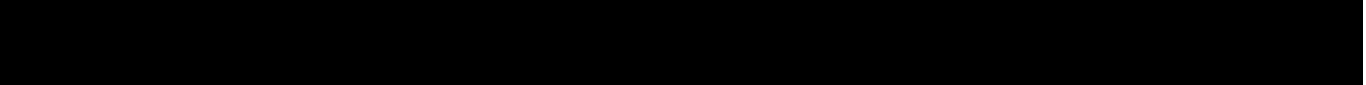
The purpose of this Proposal is to convey WIS' understanding of Inyo County's short and long-term objectives and align specific areas for review, benchmarking, and recommendations for further development. The proposal includes the due diligence and steps necessary to provide Inyo County with a comprehensive AB 1466 RCM Modernization solution. With your direction and a combination of an information and operational review, and key stake holder meeting, WIS will assess Inyo County's AB 1466 compliance requirements.

The analysis will provide updated recommendations and timelines, if necessary, so that you are fully equipped to implement the solution within Inyo County. In addition, our continued support and guidance is available to you as you move to implement and make changes to the process. In many ways, we become a true business partner who continues with Inyo County as a resource to ensure your investment in the project is realized.

Listed below is what we understand your goals to be through this engagement:



Every agency which we partner with is different and each requires flexibility in approach. This approach was created in response to the need in and demand made by the legal requirements, legal considerations, operational and historical value, as well as constituents' and other stakeholders' interests. As precedent is created, agencies have found they can no longer avoid addressing records and information management in a systematic manner as a standard business practice.

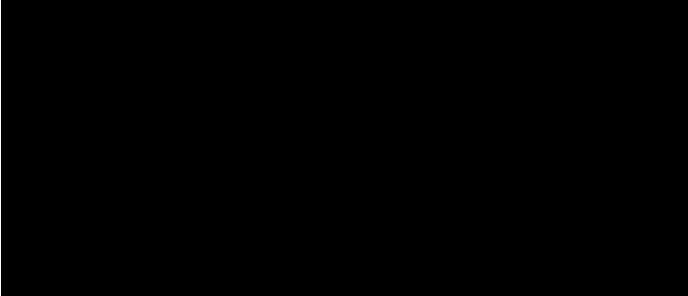


WIS Project Overview

In today's competitive market, the increased demands on customer service and communication, escalating electronic transactions, internet dependence and global connectivity mean that all agencies are continually being challenged to ensure that their business, client and personal records and data are effectively managed throughout their lifecycles and that authentic, reliable records with integrity are created and maintained, and, available, when allowed, for PRR requests.

With the continuing growth of information in the foreseeable future, an agency must continuously review its information governance policies and the related procedures and processes to ensure that the

appropriate procedures are in place. Automating processes is the first objective. Western Integrated Systems takes a holistic approach in analyzing and understanding an agency's processes.

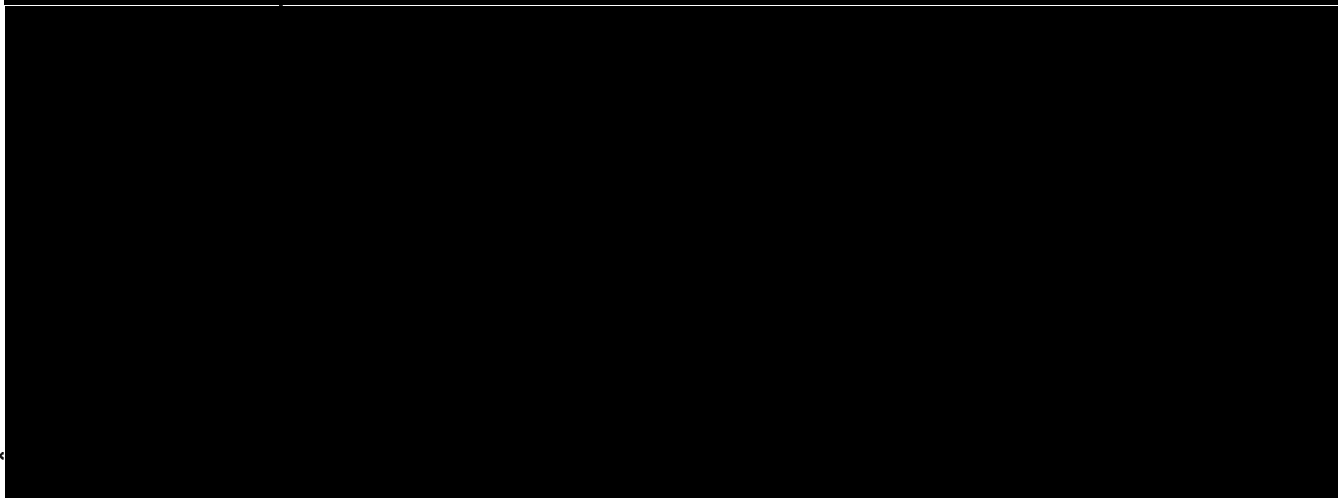
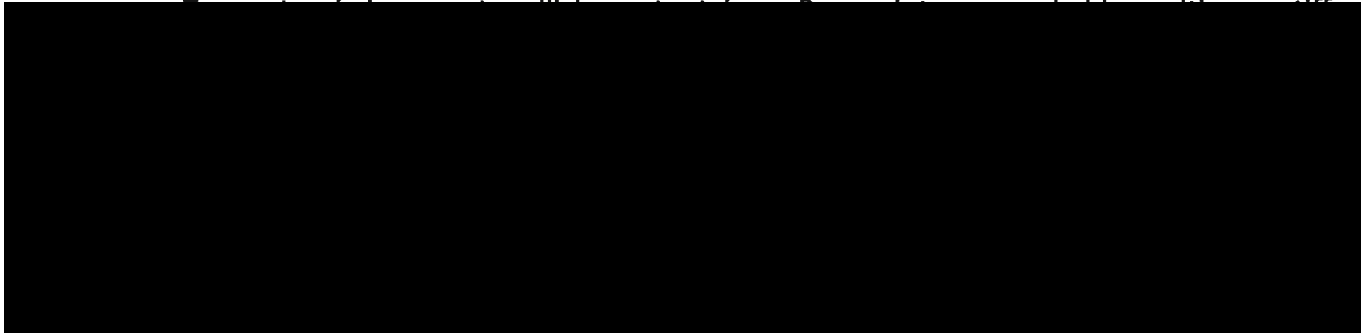


in the

Training Strategy

Training provided will be specific to the workflow in our proposed solution for Inyo County's AB 1466 RCM Modernization project.

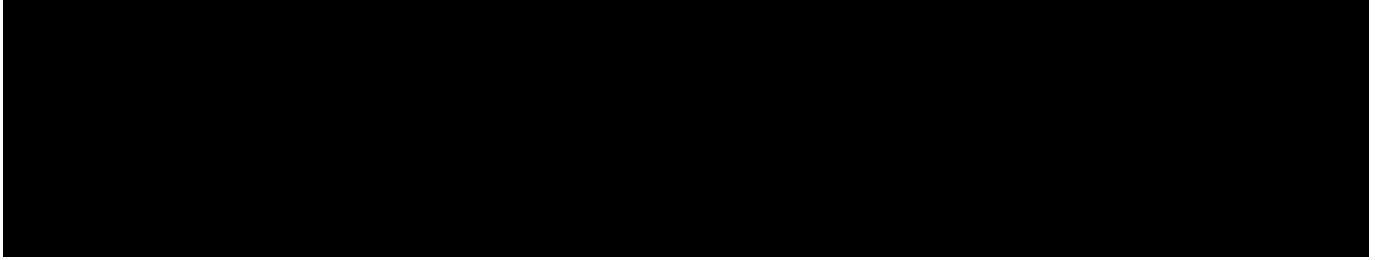
- Digitization of Inyo County's Deeds / Titles



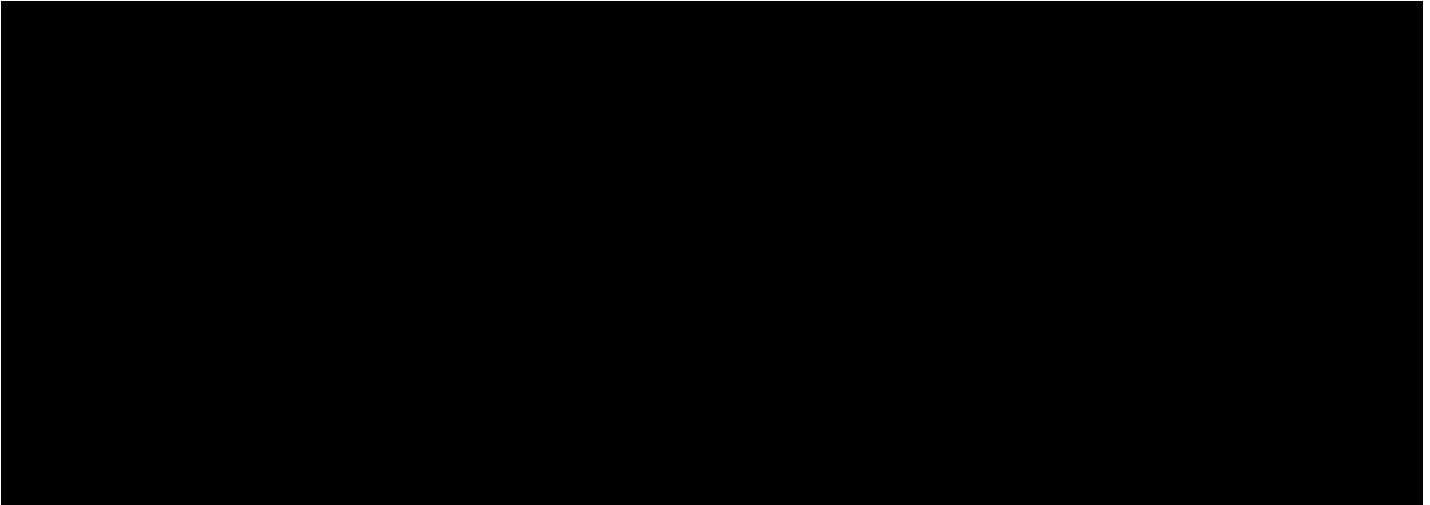
*

The WIS Approach

Wis Foundations of Quality Areas:

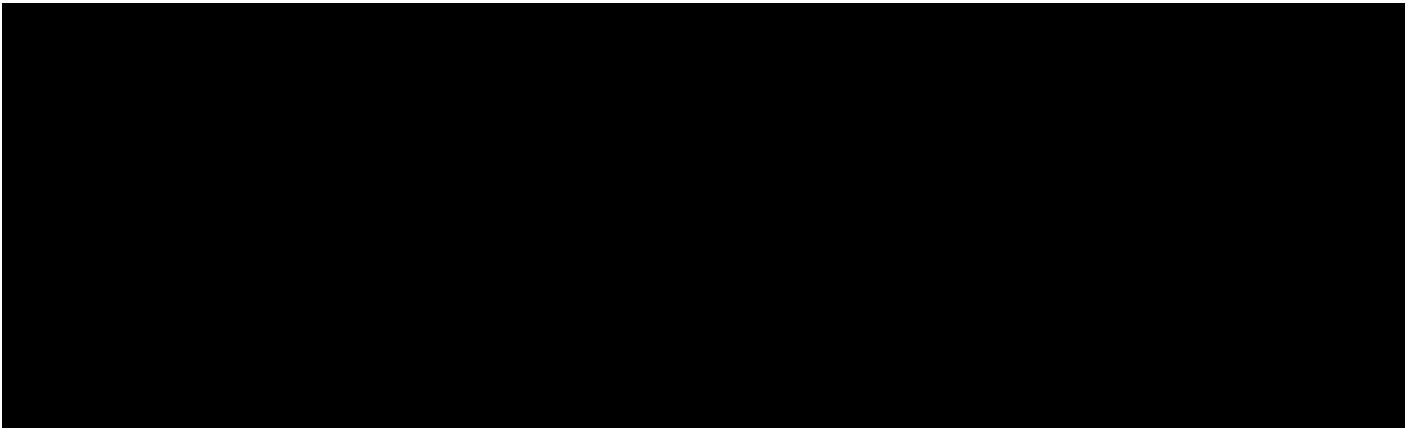


Inyo County Participation:



WIS Participation & Qualifications

WIS will commit to the following general obligations:



References



Conflicts

We see no conflicts of interest related to this engagement.

Lawsuit / Litigation History

N/A – Western Integrated Systems has not been involved in any litigation in the last five years.



Clerk-Recorder/Elections Office County of Inyo

Danielle M Sexton
Clerk-Recorder, Registrar of Voters

P. O. Drawer F • 168 N. Edwards St • Independence, CA 93526
Tel: (760) 878-0220 • Fax (760) 878-1805
<https://www.inyocounty.us/services/clerk-recorder> <https://elections.inyocounty.us/>

Request For Proposal (RFP)

Restrictive Covenant Modification & Records Modernization Project per CA AB 1466 (2021)

Opening Date: June 12, 2023

Closing Date: July 21, 2023

RFP Website: <https://www.inyocounty.us/services/county-administrators-office/bid-request-rfp>

We are requesting project quotes for implementation and on-going processing of our AB1466 program as outlined in our *Restrictive Covenant Modification (RCM)-Implementation Plan*, posted on our Clerk-Recorder website and with the specifications included within this RFP.

- If your services include any other fees not expressly requested within, please include all and any services and/or expenses that may be incurred.
- Please indicate if the services you are quoting are all-inclusive or if partial services for the full project are available. For clarity, please use the summary table on Page 7 and ensure it is consistent with your detailed response.
- Please include an approximate timeline of implementation.
- Please contact our office per the Contact Information below if you have any questions or require any clarification. All questions we receive will be shared among all bidders that have contacted us expressing interest in submitting a bid.

Clerk-Recorder Contact Information

- **Physical/Shipping Location:** 168 N. Edwards Street, Independence, CA 93526 **Mailing Address:** PO Drawer F, Independence, CA 93526

Danielle M. Sexton, Inyo County Clerk Recorder/ROV
760-878-0220
dsexton@inyocounty.us

Caroline Nott, Assistant to the Clerk Recorder
760-878-2155
cnott@inyocounty.us

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Additional Resources

Our RCM website: <https://www.inyocounty.us/services/clerk-recorder/restrictive-covenant-modifications>

- [Restrictive Covenant Modification Implementation Plan \(click on this link, or find on our website\)](#)
- [Restrictive Covenant Modification Form-AB1466 - INYO \(click on this link, or find on our website\)](#)

Schedule of Events

The [Inyo County Purchasing and Contracting Policy](#) is available on Inyo County's website <https://www.inyocounty.us/government/publications-reports-plans-proclamations/policies-mous> in the [Fiscal Policies](#) section.

| Event | Date |
|--|----------------------------|
| RFP made available to prospective bidders | June 12, 2023 |
| Written Confirmation of Vendors with Bid Intention | June 19, 2023 |
| Questions from Vendors about scope or approach due | June 29, 2023 |
| Responses to Vendors about scope or approach due | July 6, 2023 |
| Quote Submissions Due Date & Time | July 21, 2023 – 5:00pm PDT |
| Target Date for Review of Proposals | July 28, 2023 |

General Instructions

Our office follows the [Inyo County Purchasing and Contracting Policy](#). The Policy can be found on the county's website <https://www.inyocounty.us/government/publications-reports-plans-proclamations/policies-mous> in the Fiscal Policies section.

Registering as a Respondent. It is strongly recommended that any interested respondent email the contact persons listed above to indicate that they will be submitting a bid and wish to be registered as a respondent. Registering as a respondent is not mandatory, but it will ensure that you receive any updated bid documents or relevant information. Registration emails must contain the Identifying Title in the subject line and should be send from the email address at which respondents want to receive updates.

Submission process. Respondents must submit responses by mail to: **PO Drawer F, Independence, CA, 93526**; or ship to **168 N. Edwards Street, Independence, CA 93526**. Responses must be received by the closing date noted above. It is recommended that you mail your response well in advance to ensure that it arrives on or before the closing date. Response documents must be placed inside a sealed envelope, which is then placed within a mailing envelope. The inner envelope containing the response documents must be clearly marked with the following:

AB1466 - Restrictive Covenant Modification Project
SEALED QUOTE ENCLOSED. DO NOT OPEN UNTIL JULY 28, 2023.

Public Nature of Submissions. Pursuant to the California Public Records Act (“PRA”), all responses to this RFP/RFP are considered public records that will be disclosable upon request. If you believe that information contained within your bid documents is confidential, trade secret, or otherwise exempt from disclosure under the PRA, you must clearly stamp each page that you believe contains confidential information with a header that states “**CONFIDENTIAL**” in at least 12-point type. Please note that stamping your response as such does not guarantee that it will never be disclosed. Pursuant to Inyo County’s obligations under the PRA, the County will independently assess assertions of confidentiality.

Challenges to the Bidding Process. Any respondent who wishes to challenge the County’s handling of the procurement process must do so via the mandatory administrative procedure set forth in Inyo County Code Chapter 6.30.

Contracting Preferences. Pursuant to Inyo County Code Chapter 6.06, Inyo County contracting preference for small and/or local businesses applies. To be eligible for the preferences, a business must provide a certification that it is a small and/or local business as defined by Inyo County Code § 6.06.020 with its bid.

Questions and Additional Information. Respondents who have a question about any aspect of the procurement process must put the question in writing and email it to the contact listed above. The answer to any questions will be publicly posted and emailed to all registered respondents to ensure that all respondents are working from the same information. Respondents should not reveal the anticipated contents of their response when asking questions.

Evaluation of Responses. The County will evaluate all submissions based on the totality of their responses. A respondent’s inability to provide a certain service is not necessarily disqualifying, as the County will consider which submission as a whole will provide the best service. Similarly, the County is not obligated to choose the respondent who can provide the requested services for the lowest amount of money. Rather, the County will consider which respondent provides the best overall value, taking into account both price and quality.

The successful respondent will be expected to enter into an Inyo County Standard Contract No. 116, a copy of which is attached.

Background

The Inyo County Clerk-Recorder’s Office houses more than 800,000 pages of recorded documents in our repository consisting of a combination of paper, microfiche, and scanned/digital images. It is the goal of the County to convert over 200,000 non-digital records to an interoperable, non-proprietary TIFF format which can be imported into our Tyler Eagle Recorder system, including the pre-population of selected fields such as Book Number, Page Number, Grantor, Grantee, Document Number, or Recording Date. It is additionally our goal to have all 800,000+ pages of records converted to an interoperable, non-proprietary OCR/ICR format which supports high-level indexing for search, retrieval, and information access.

Furthermore, per the regulations of AB 1466, all records need to be reviewed to ensure that discriminatory restrictive covenants are identified and redacted via a multi-departmental workflow involving a combination of automation and human analysis. The conceptual process for this is more fully outlined on page 3 of the *Inyo County Restrictive Covenant Modification Implementation Plan*, though the County is open to recommendations or proposals that would additionally streamline this effort as part of the overall project scope.

Project Definition

As this project is very large in scope, the County will evaluate, based on proposed cost and approach, whether it can be taken on at full-scale, or whether it will need to be carried out incrementally in smaller phases. While our *Implementation Plan* provides an estimated timeline for this work, it is the goal of the County to complete this effort as quickly and efficiently as funding and human capacity can support.

Project Objectives

1. Digitize historic records to an interoperable, non-proprietary TIFF format.
Refer to *Volume of Data* section of this RFP for quantities of these records, which are available in both hardcopy (historic books) and film media, except as otherwise noted.
2. Import the digital images of historic records from Objective 1 into our Tyler Eagle Recorder system with indexing information:
County will identify key fields which need to be auto populated with information obtained from the record.
3. Convert all digitized documents to interoperable, non-proprietary PDF/A format using OCR, or ICR when OCR is not an option:
In addition to the TIFF files imported from Objective 2, there are over 600,000 digital TIFF images currently existing in our Tyler Eagle Recorder system. Each document is to be converted to PDF/A such that all text within is searchable.
4. Scan records to identify potential unlawful restrictive language. A specific set of words and phrases will be provided by the Recorder:
Place any flagged records in a workflow when key words/phrases are found. A specific list of key words & phrases can be found in Attachment F to this RFP. The key words recognized must be identified for review.
5. Document review & approval process:
Once a document is placed in the workflow it will be manually reviewed by our Clerk-Recorder Office staff. When a document deemed by our office to meet the requirements that need County Counsel review, we would like the system to add our custom RCM cover page before it is sent to County Counsel for review/approval.
 - The system must automatically insert our cover page during this step.

- All relevant form fields, such as original document source and Clerk name, are to auto-populate on the form by the system.
- The system must allow County Counsel to electronically redact selections and sign the cover page. The documents must remain in digital format through the re-recording process.
- The Clerk staff and/or Counsel need the ability to compare the new document to the original document and adjust the area for redaction before finalizing. Once confirmed, the redaction becomes permanent to that document.

6. Place unreadable documents in a workflow:

Documents that cannot be read using OCR/ICR technology are to be included in the manual RCM review process, e.g., by placing them in a separate queue where Clerk-Recorder staff can manually review them.

7. Ensure maintenance of all reportable data:

The Recorder must maintain a comprehensive list of all document numbers (original and new recordings) processed through this program. This report and various statistical reports will be needed including, but not limited to, (a) volume of documents processed/scanned for unlawful restrictive language, (b) volume of documents/pages returned to the workflow, (c) documents/pages reviewed by staff, (d) documents/pages sent to County Counsel, (e) documents/pages returned by County Counsel, (f) documents/pages Recorded and Rejected, and (g) amount of time a document was held at each review phase. Vendors must specify how additional types of reports can be created, and the cost, if any, for doing so

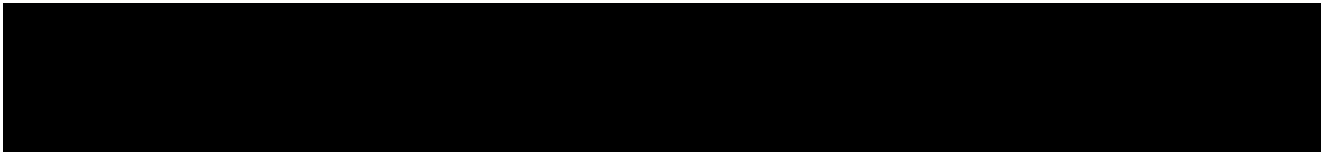
Responses

In your response, please itemize your responses by the Objective that is being addressed. Please use this page as a reference for the outline of your proposal. We recognize that Objectives 2 and 3 which convert historic hardcopy records into digital images and then integrating them into our Tyler Recording system can be handled separately from the document redaction, review, and approval of the Restrictive Covenant Modification workflow solution. Please clarify if your proposed solution is addressing only Objective 2 and 3, just the workflow, all Objectives listed, or a different subset of Objectives. If you are providing a proposal for a solution to all Objectives, please indicate if your services allow for a selection of partial services only. For clarity, please summarize your answer by embedding the following table in your response:

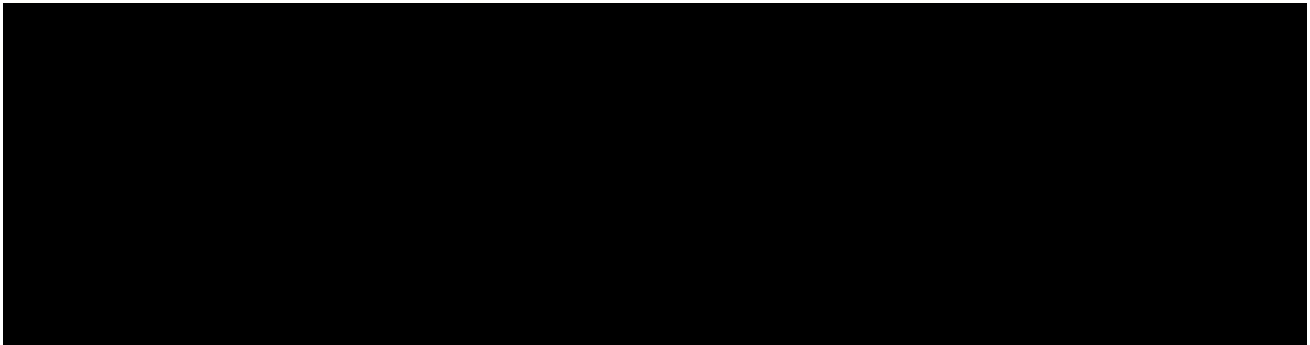
| Objective Number | Objective | Addressed? (Yes/No) |
|--|---|---------------------|
| 1 | Digitize historic records to an interoperable, non-proprietary TIFF format. | Yes |
| 2 | Import the digital images of historic records from Objective 1 into our Tyler Eagle Recorder system with indexing information | Yes |
| 3 | Convert all existing scanned/digitized documents to PDF/A format using OCR, or ICR only when OCR is not an option | Yes |
| 4 | Scan records to identify potential unlawful restrictive language | Yes |
| 5 | Document review & approval process | Yes |
| 6 | Place unreadable documents in a workflow | Yes |
| 7 | Ensure maintenance of all reportable data | Yes |
| Can Objectives be selected a-la carte? (Yes/No) | | Yes |


Based on the information provided:

- How would you approach this overall effort?

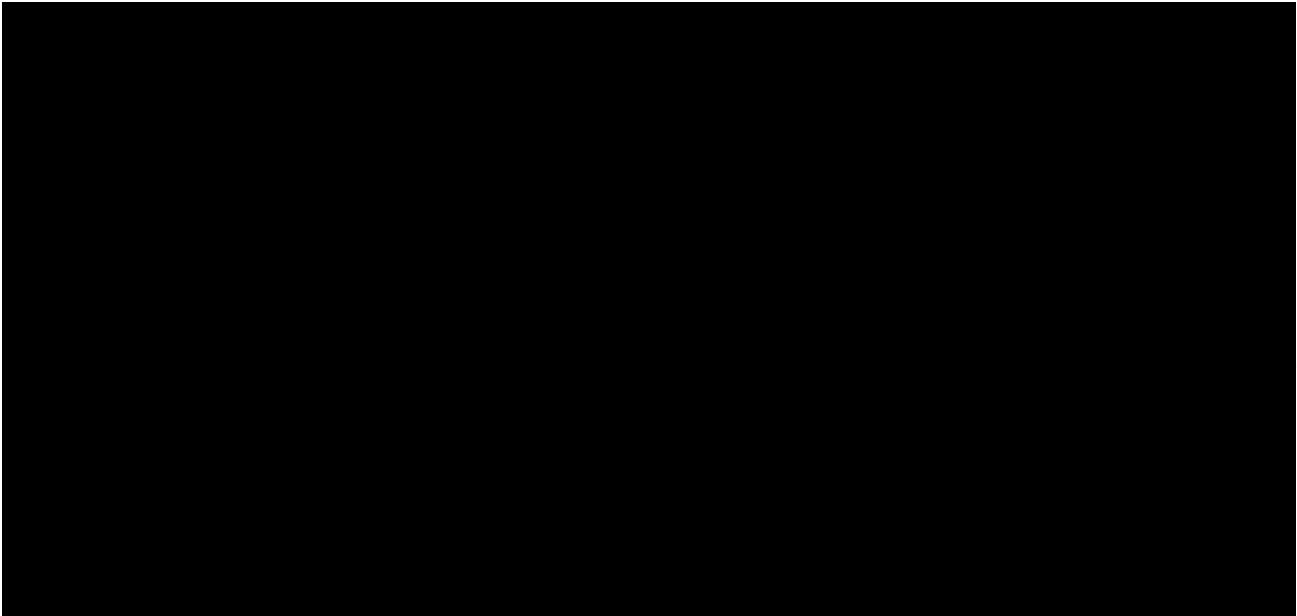


- What phasing would you recommend? Specify the phase sequence and duration of each phase.

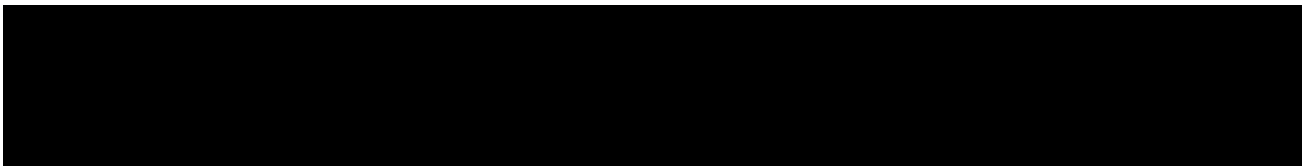


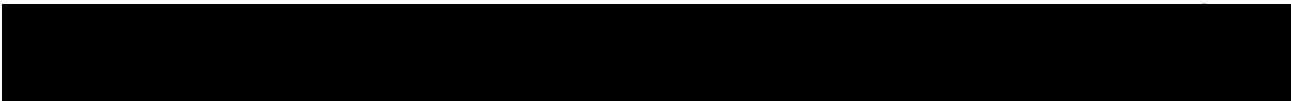
| Document Type | # of Images | Duration of the phase in months |
|--|-------------|---------------------------------|
|  | | |

- What opportunities for efficiency through automation or similar could you recommend?



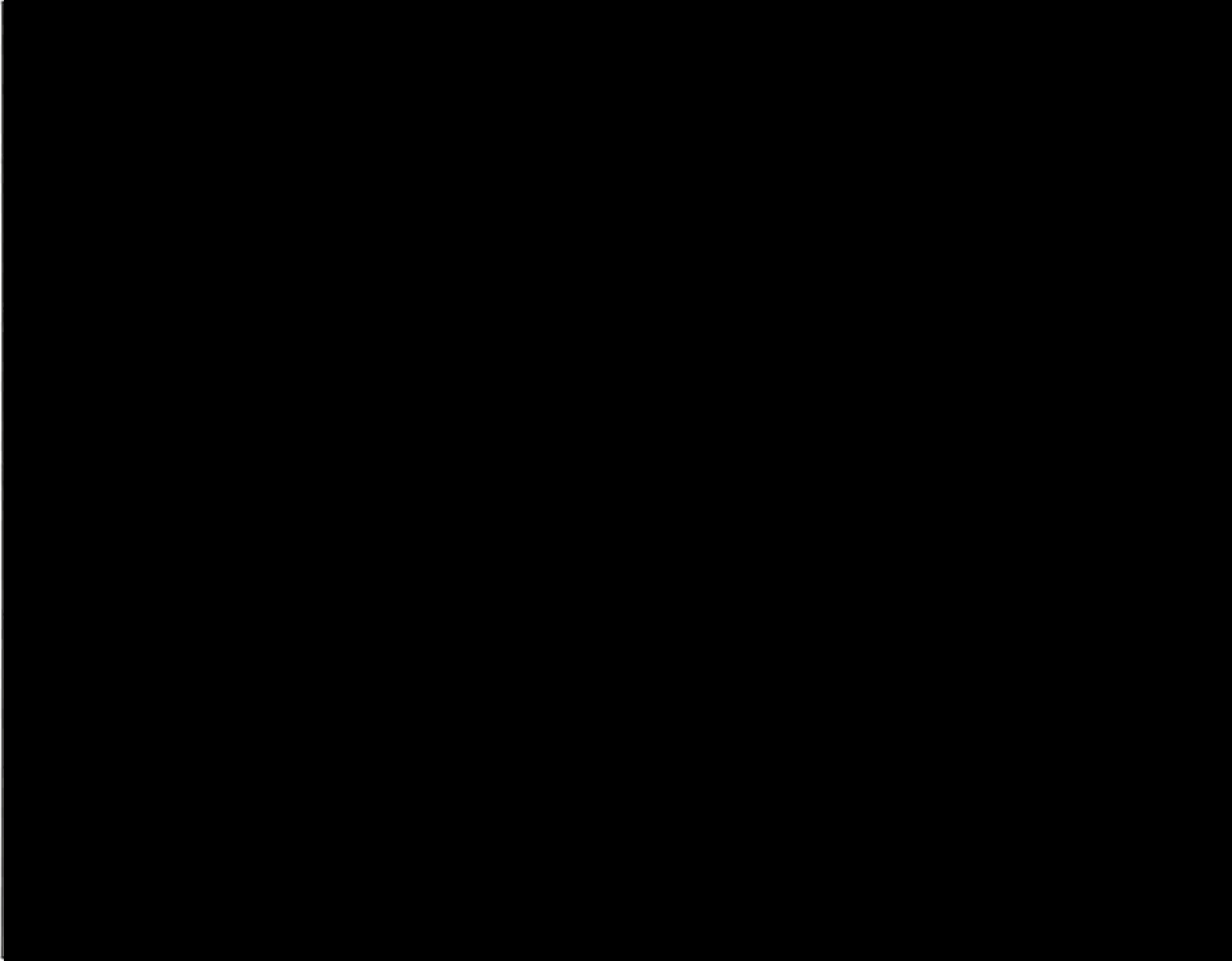
- Recommend alternatives or options for balancing cost, time, and staff impact.





Objective 1 (*convert historic records to records to an interoperable, non-proprietary TIFF format*):

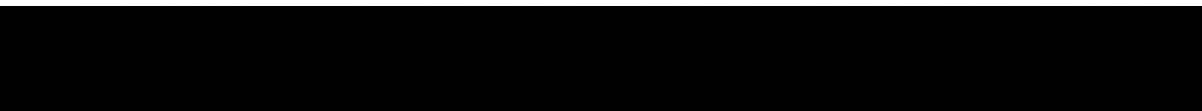
- Provide the cost, per page/image, based on the type of physical media and content contained therein.



- Specify if your services quote is for obtaining the image from the original book source, or from the microfilm/microfiche source, or provide a quote for both, if applicable.



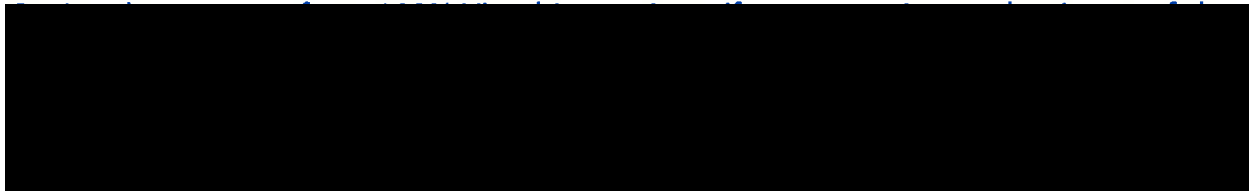
- Describe how you will ensure quality control, such that each scanned page is clear and the image and text are completely readable.



[REDACTED]

[REDACTED]

- Explain how issues with image quality will be addressed. If image quality is deemed unacceptable, or any images are missing, and the images need to be rescanned, how is this handled and what expenses are involved?

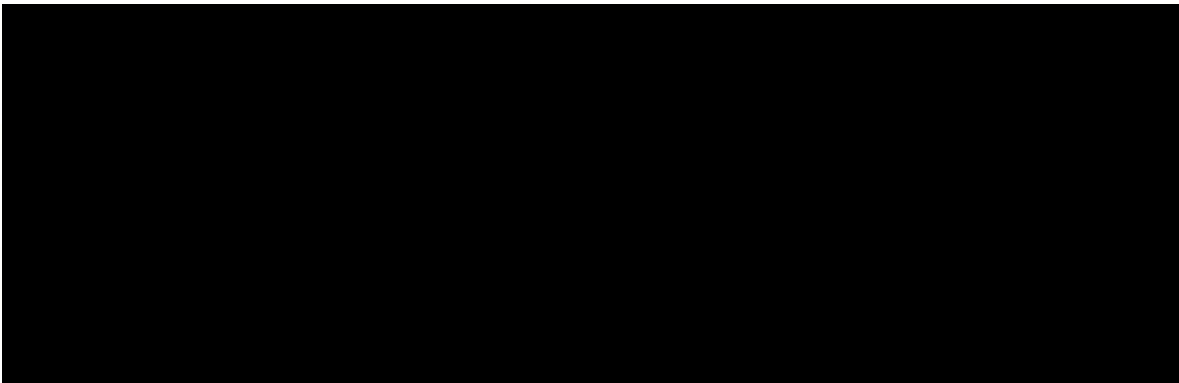


Objective 2 (import historic digital records from Objective 1 into Tyler Eagle with pre-populated indexing fields):

- Confirm your process will be compatible with importing the digital records with the designated text fields of each record into our Tyler Eagle Recorder system.



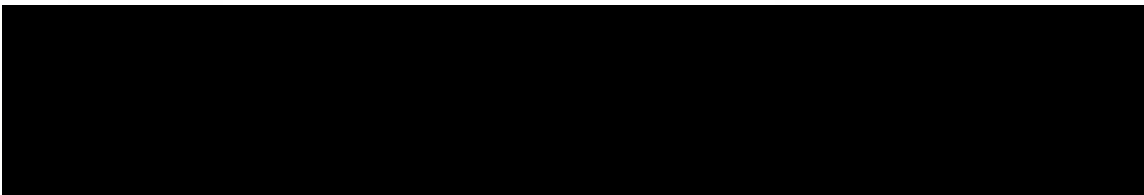
- Specify if the converted digital image will be indexed by its existing Book/Page number, and/or if your process will capture and prepopulate fields for Grantor/Grantee indexing, document number, and/or recording date, and how that metadata will be stored and can be accessed.



Jeremy's team

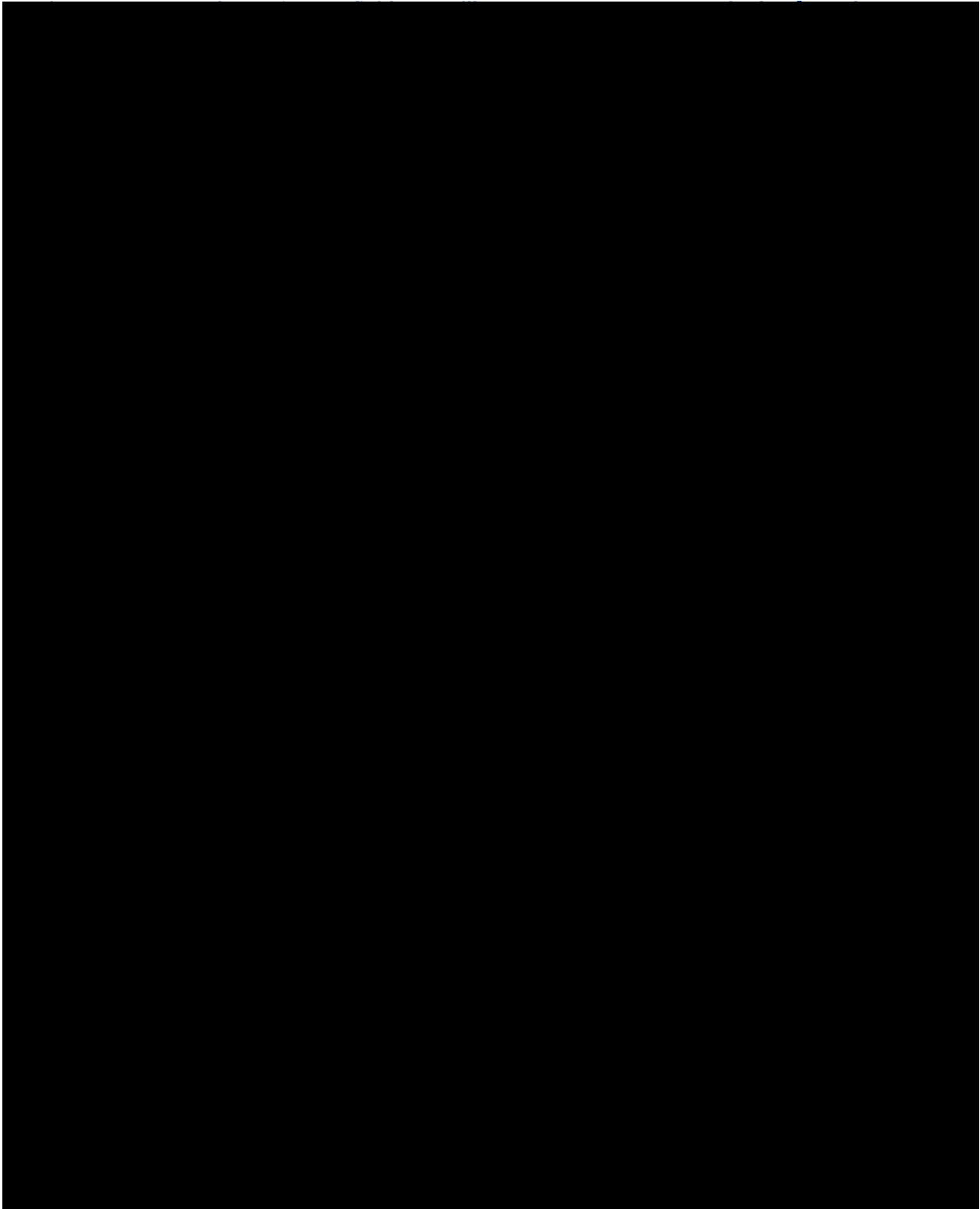
Objective 3 (convert digitized documents to OCR PDF/A format, or to ICR when OCR is not an option):

- In addition to the costs, please specify if this conversion process will retain all field data for each recorded document including indexing fields, or specify otherwise.



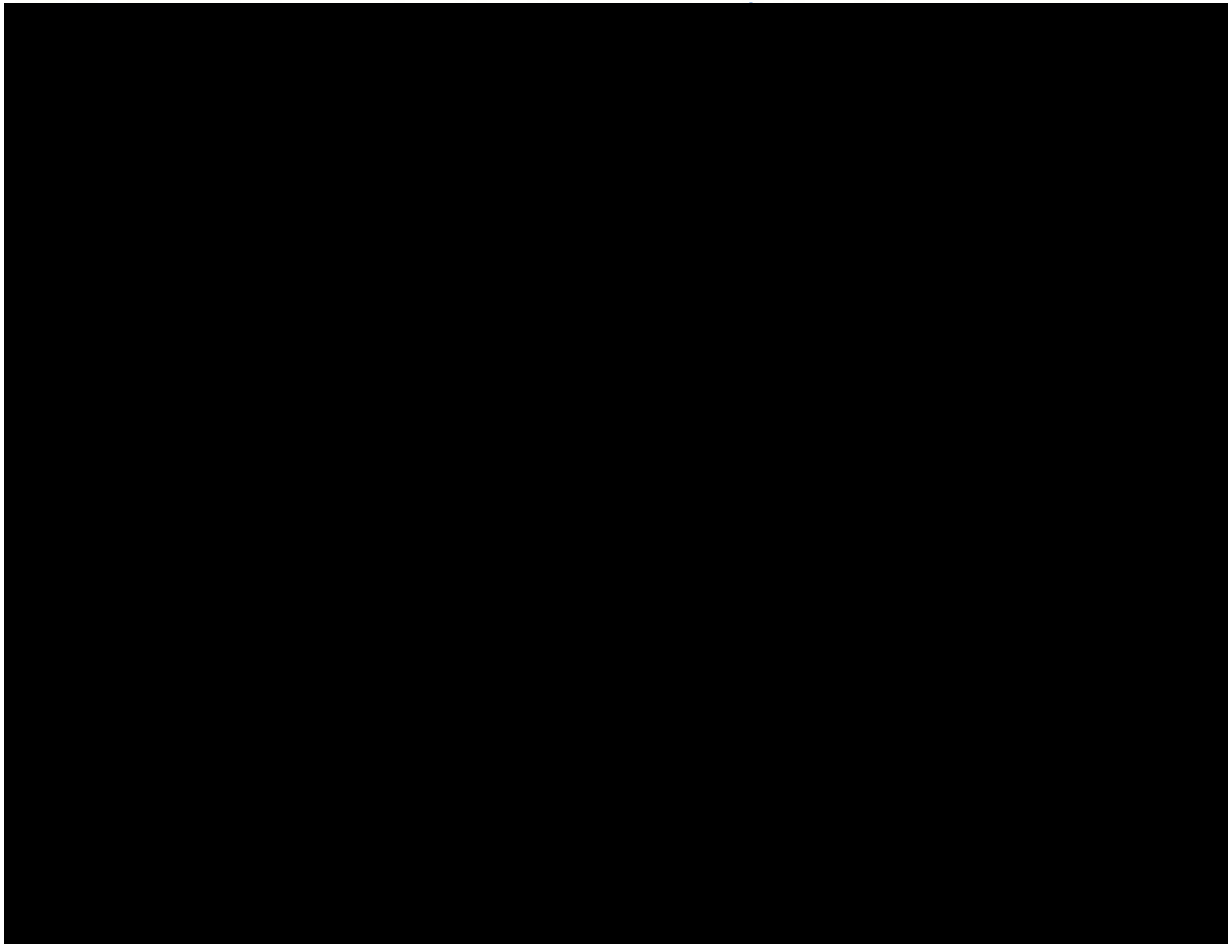
Objective 4 (*identify documents with unlawful restrictive language*):

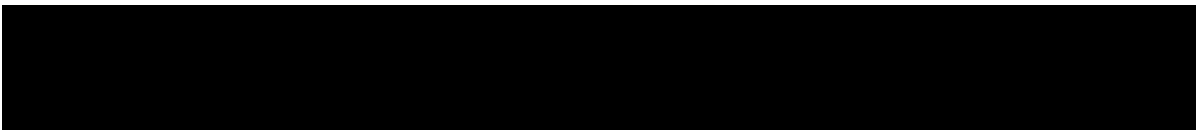
- Specify how the workflow will be established, whether using flags or fields in the existing Tyler Eagle Recording system, or in an external software environment and if that environment is hosted locally or virtually.





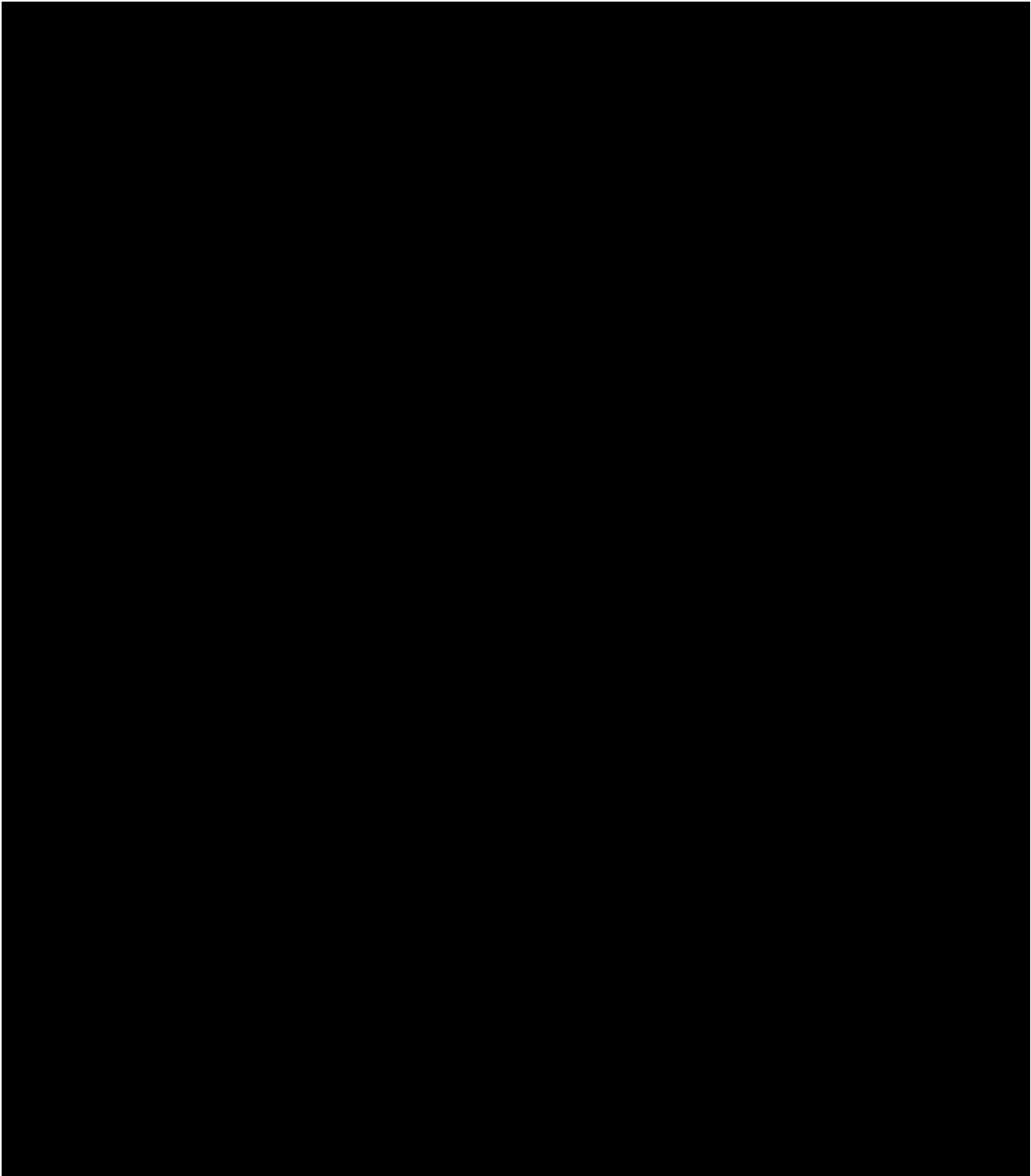
- Please itemize one-time costs, ongoing expenses, interface expenses, and any other costs/fees that may apply.

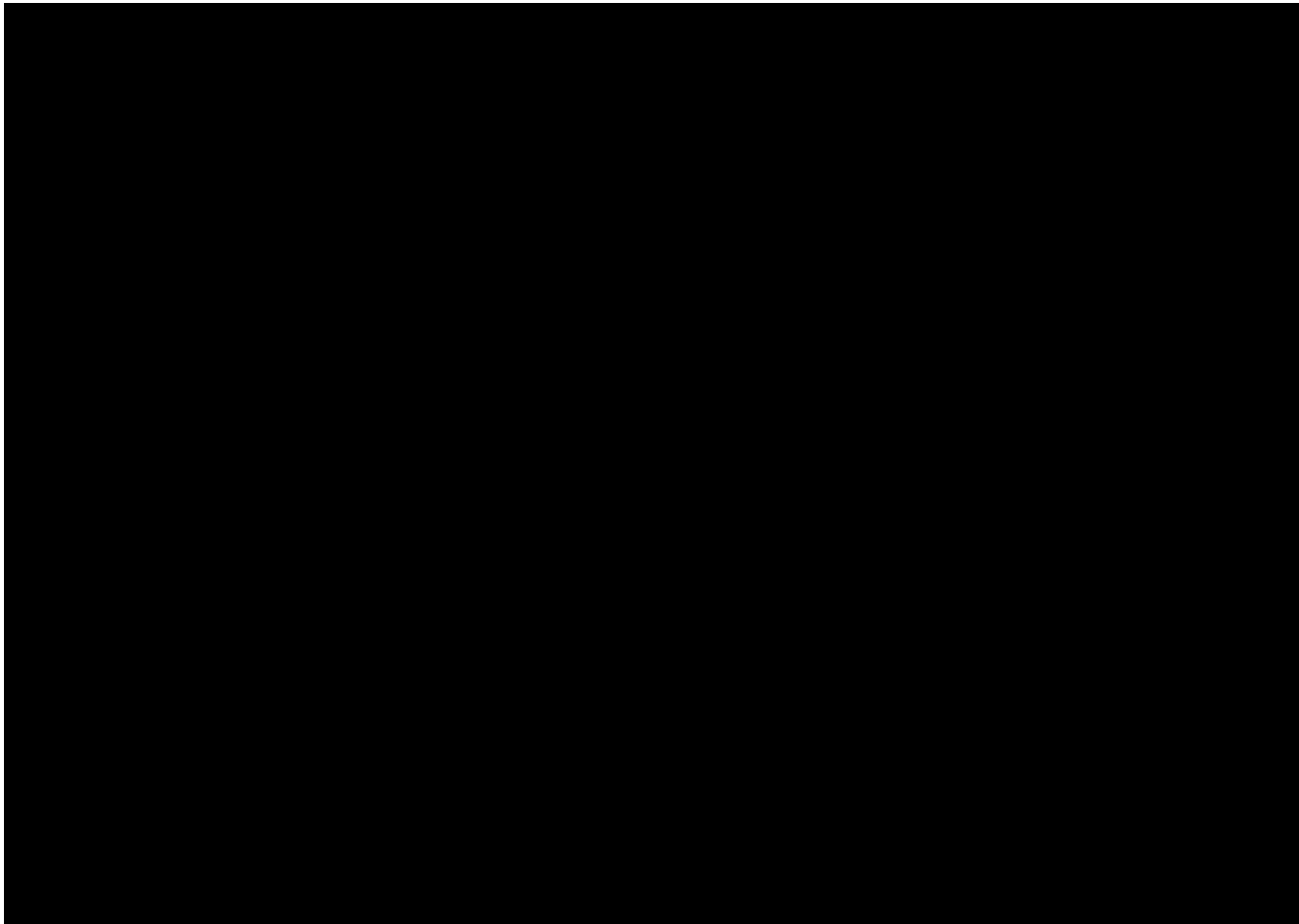




Objective 5 (*workflow process between Recorder and County Counsel*):

- Please indicate how this objective will be achieved, whether in Tyler Eagle or an external software platform.

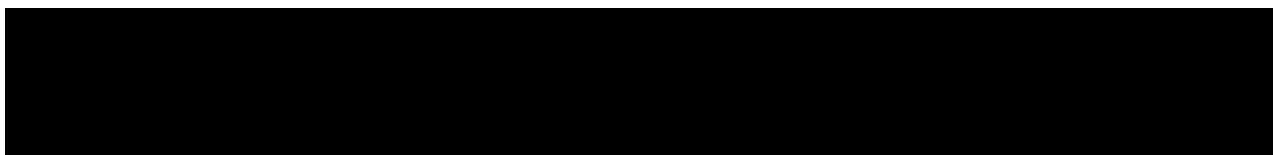


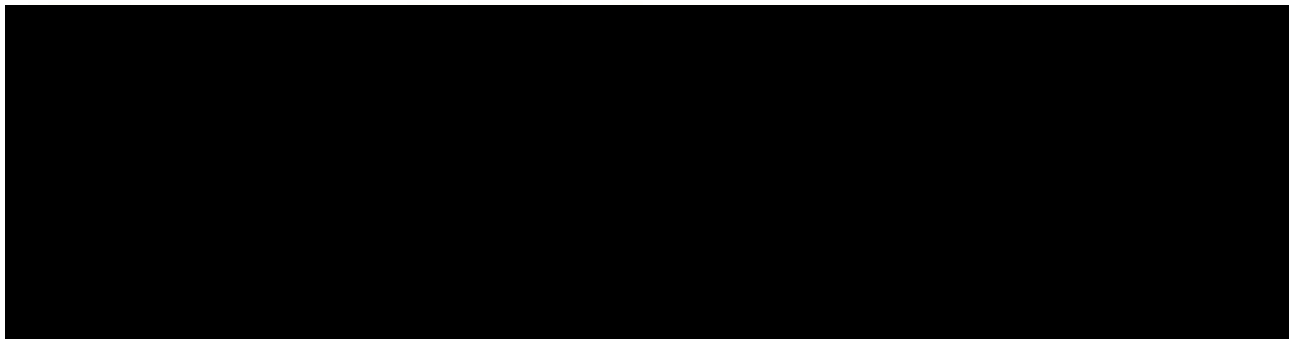


- Please include all related costs for these services.
All costs are itemized in Addendum 1 - Pricing
- If any of this Objective cannot be achieved fully, describe what/how/why.
WIS will fully achieve all of Objective 5
- Provide the cost for additional County departments access (including the County Counsel), including total costs for licensing, functionality, etc.
All Costs are included in the In Addendum 1 - Pricing. Our solution allows for unlimited users so no additional costs will be required for access by other departments, users, or by County Counsel.

Objective 6 (*workflow for documents not compatible for OCR or ICR format*):

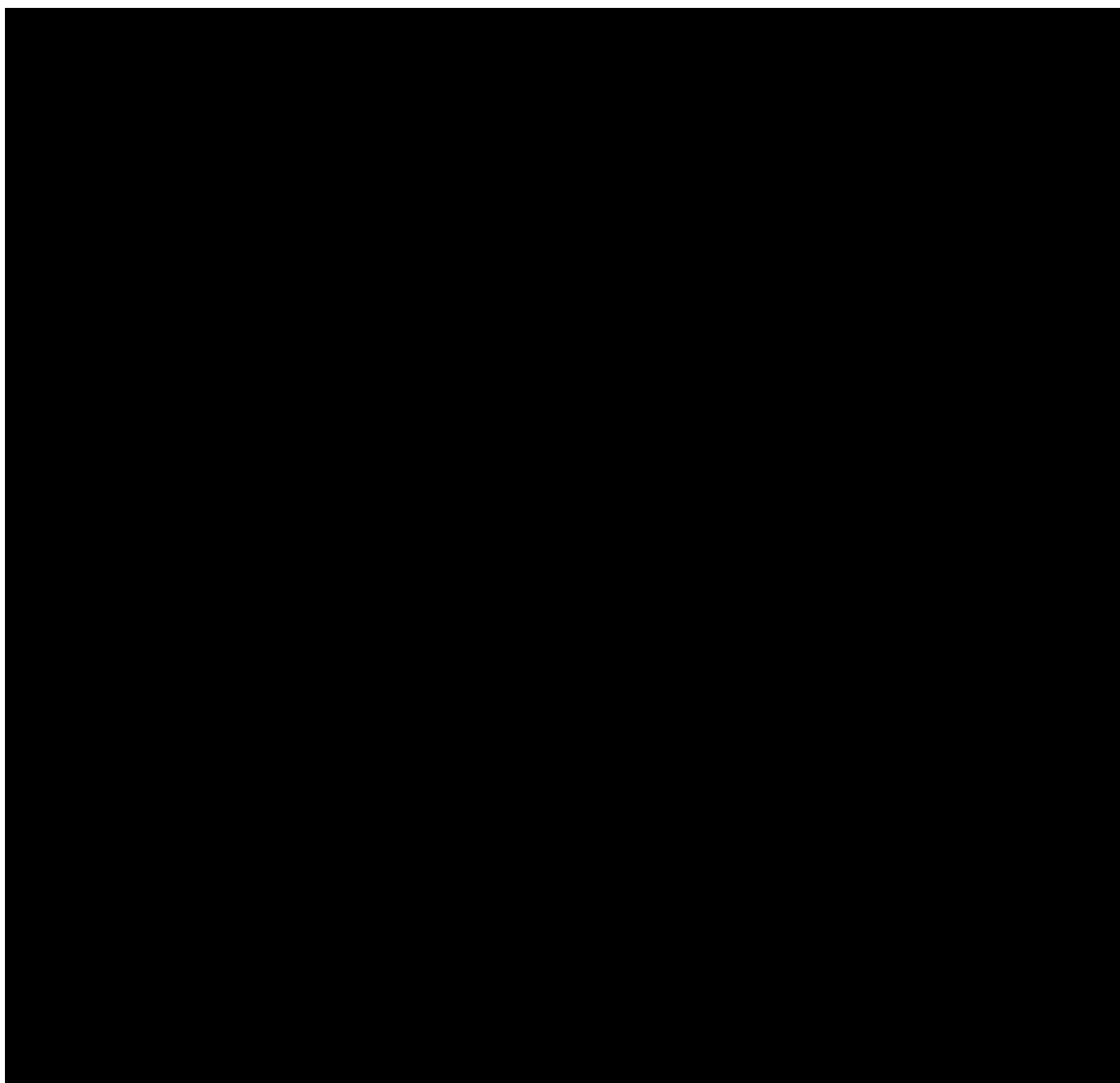
- Explain your workflow process solution for this requirement, and include any additional costs for this service, or specify if this is not available.

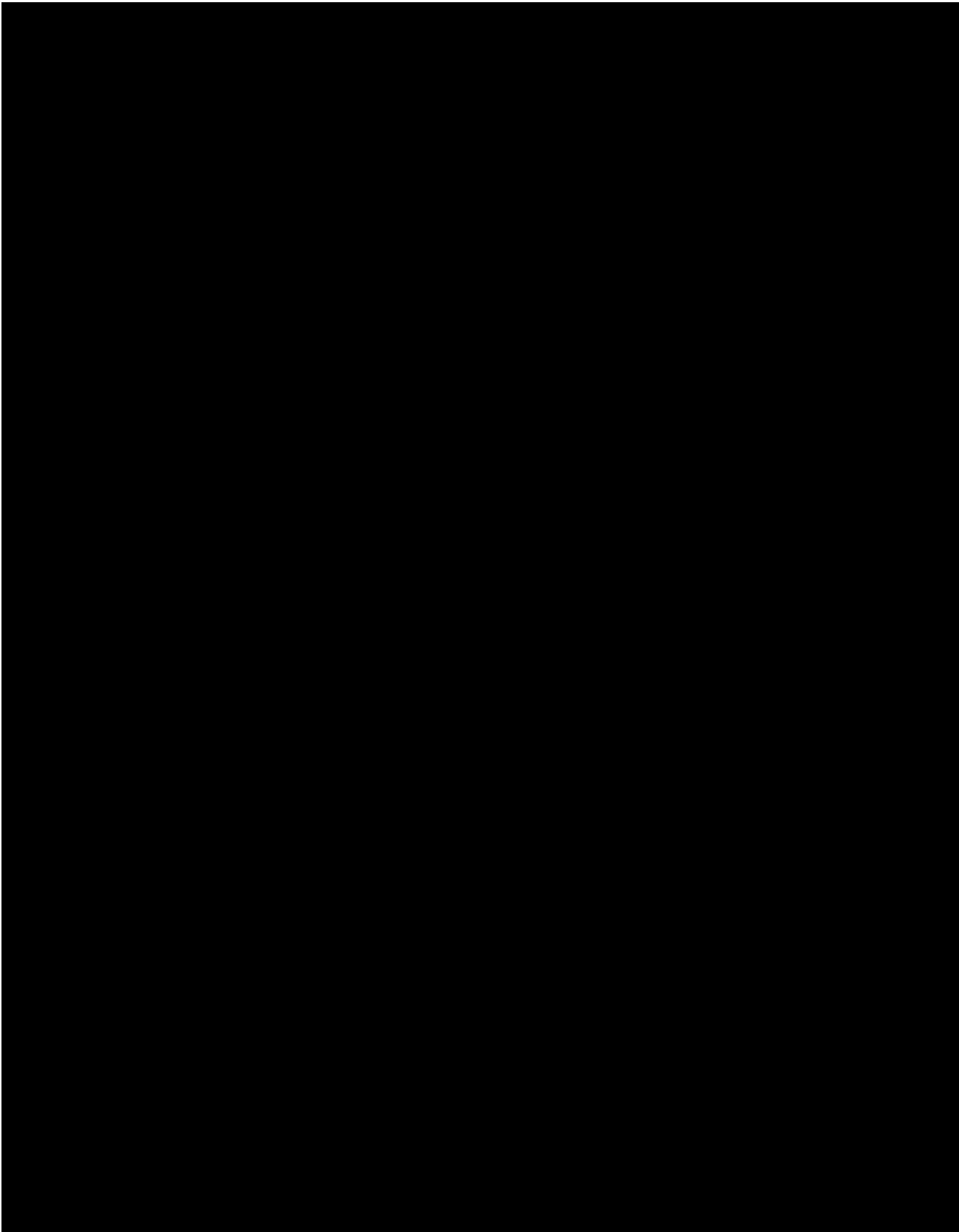


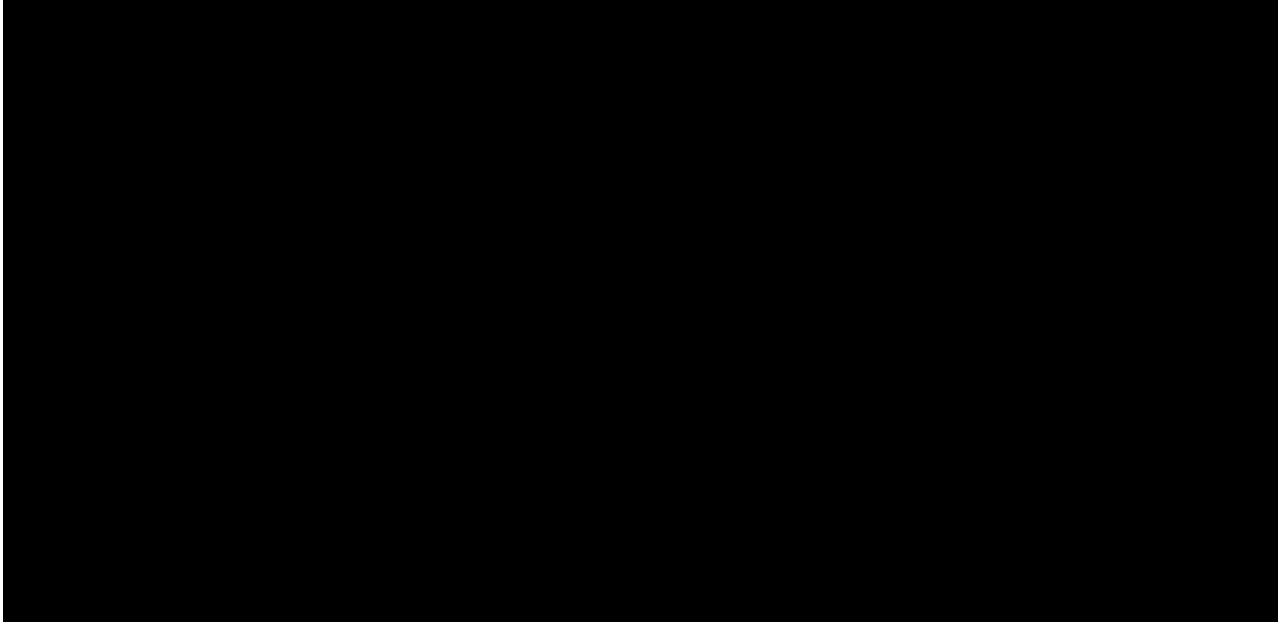


Objective 7 (*maintenance of all reportable data*):

- Explain all monitoring functions and report options and/or tools available to accomplish these reporting requirements.







Other

- If your process includes any additional services not specified in this scope, please include any additional services itemized separately within your quote.
[Understand and agree – all pricing is included in Addendum 1 - Pricing.](#)
- Please provide prices based on the total project and total quantities for all services within this RFP to have a total project quoted expense.
[Understand and agree – all pricing is included in Addendum 1 - Pricing.](#)
- Please also provide quotes on scaling proportional rates to calculate annual actual costs, and all other related costs.
[Understand and agree – all pricing is included in Addendum 1 - Pricing.](#)
- Please itemize any one-time expenses, project management, development, implementation, overhead, imaging/data processing, training, and any other specific expenses.
[Understand and agree – all pricing is included in Addendum 1 - Pricing.](#)

Volume of Data

Physical Books

Our historic Records books listed below are also available on various film media (*except as noted) and are the same sources of the Microfiche/Microfilm quantities within that section, except for the Index Books and Deed Books A1-B1 volumes, as noted. Our books are located in our office and are in good condition.

| Index Books* | Volumes/Ranges | # of books | # of pages |
|---|----------------|------------|----------------------------|
| INDEX-Deeds | 1866-1924 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1924-1948 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1948-1958 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1958-1971 | 4 | Approx. 275 per book |
| INDEX-Official Records | 1971-1981 | 4 | Approx. 275 per book |
| TOTAL INDEX BOOKS: | | 20 | Approx. 5,500 pages |
| Deeds | A-Z *** | 26 | 15,585 |
| Deeds** | A1-B1 (x2) *** | 4 | 1,298 |
| Deeds | C1-F1 *** | 4 | 2,580 |
| Deeds | 1-39 *** | 39 | 24,063 |
| Official Records | 1-165 | 165 | 103,339 |
| TOTAL RECORD BOOKS | | 238 | 146,865 |
| Total Physical Official Record Books | | 258 | 152,365 |

* Some Index Books may not be available on microfilm.

** Deed Books A1-B1 volumes are digitally imaged and available separate on CD.

*** Historic Books of "Deeds" from A through book #25 are hand-written records.

Microfiche/Microfilm

We have microfiche/microfilm images of all books listed above except those noted otherwise, saved on three different media types: film, jacketed microfiche/microfilm, and orange aperture cards. More information of each type is available upon request to clarify each specific media involved. Our Index Books are not included in quantities below. The original books are the only copy available in our office (we have microfilm available for some of the Index Books in our offsite storage). In addition to the books listed in the above section, we have additional volumes that are only available by microfiche/microfilm: Volumes 166 thru 256. (91 volumes; 91,004 images/pages)

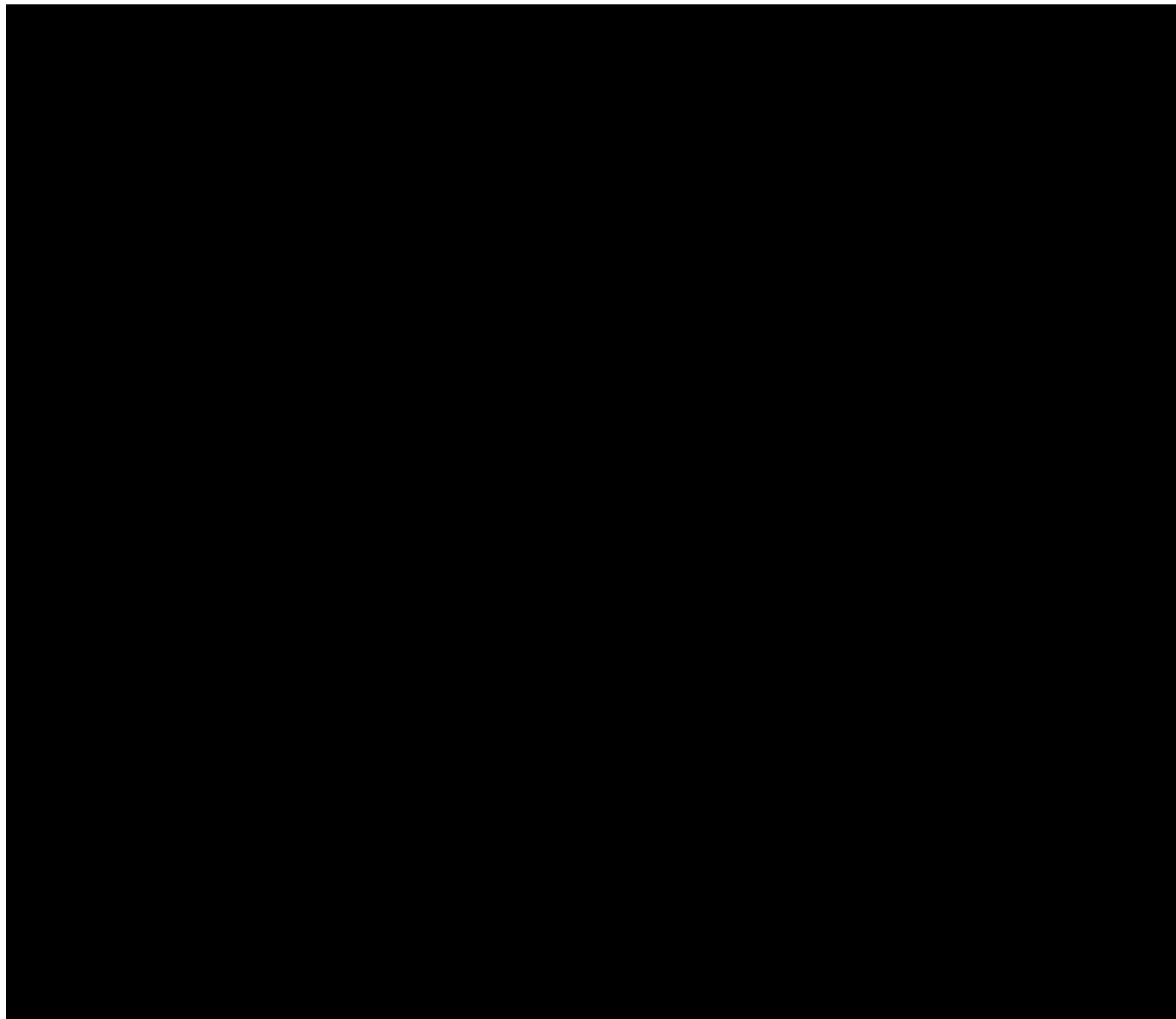
| Row Labels | Sum of Total Pages |
|---|--------------------|
| Step & Repeat Microfiche | 60,979 |
| Jacketed Microfiche | 145,621 |
| Orange Aperture Card | 30,025 |
| Total microfiche/microfilm images: | 236,625 |

Digital Images from 1980 to current

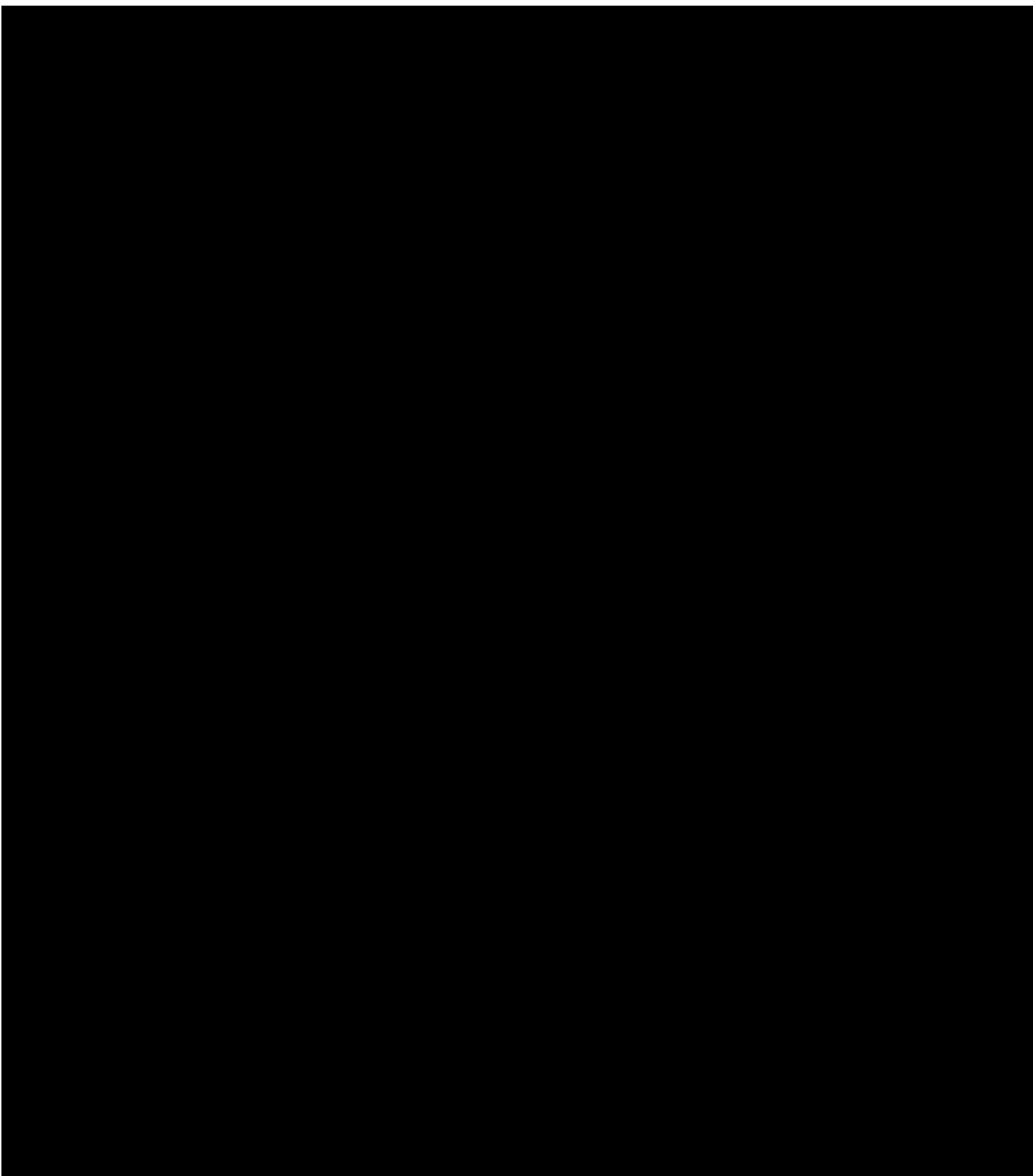
Books A1 (x2) & B1 (x2) have been converted to digital images and are available on CDs in our office: Quantity: **1298** pages. These are not included in the below quantities.

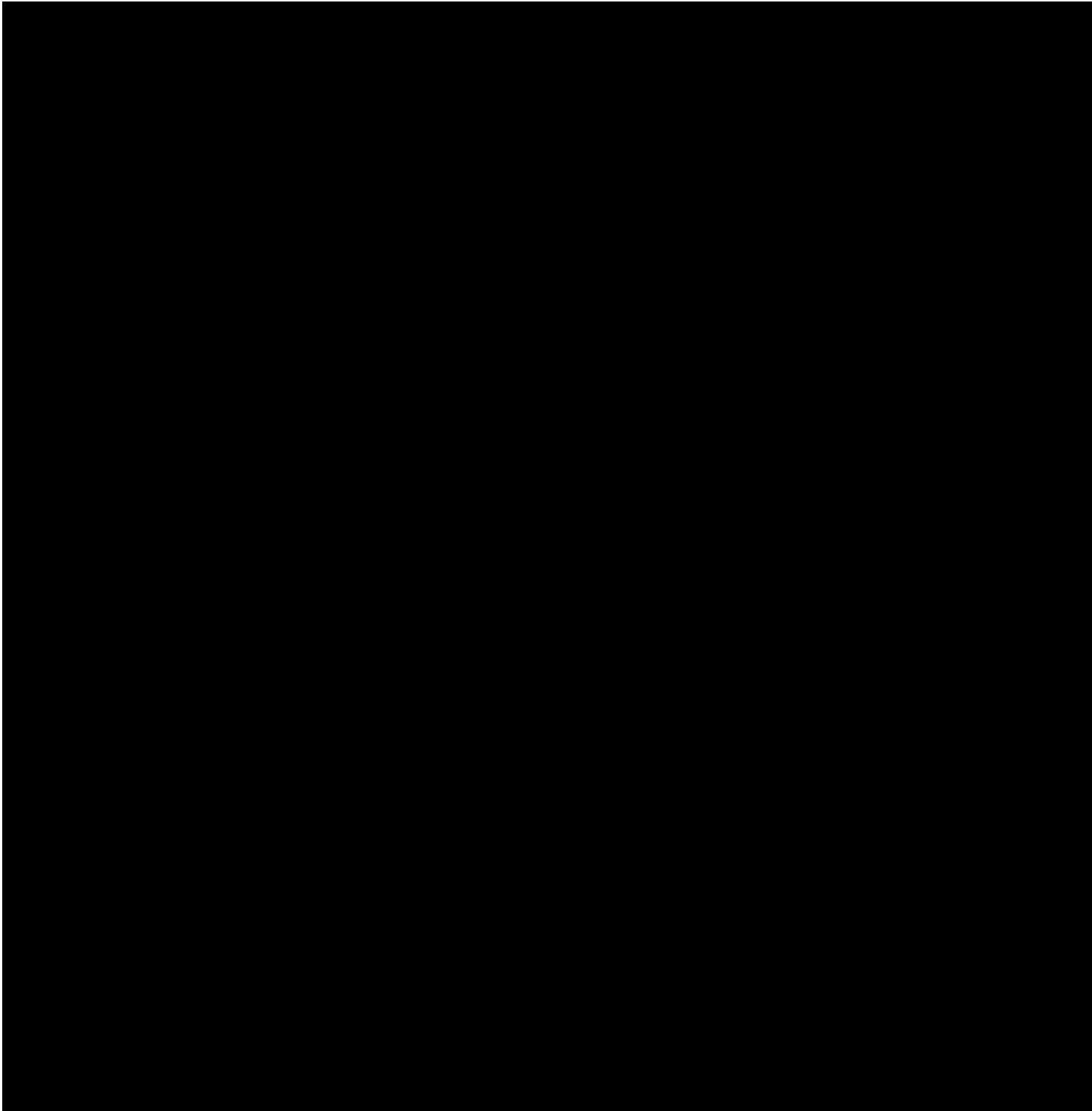
| Digital Imaged Recorded Documents | Recorded Docs | Pages/Images |
|---|---------------|--------------|
| All docs thru 01/17/2023 | 229,816 | 607,871 |
| 2022 Totals to calculate current volume | 2,790 | 12,103 |

Addendum 1 - Pricing

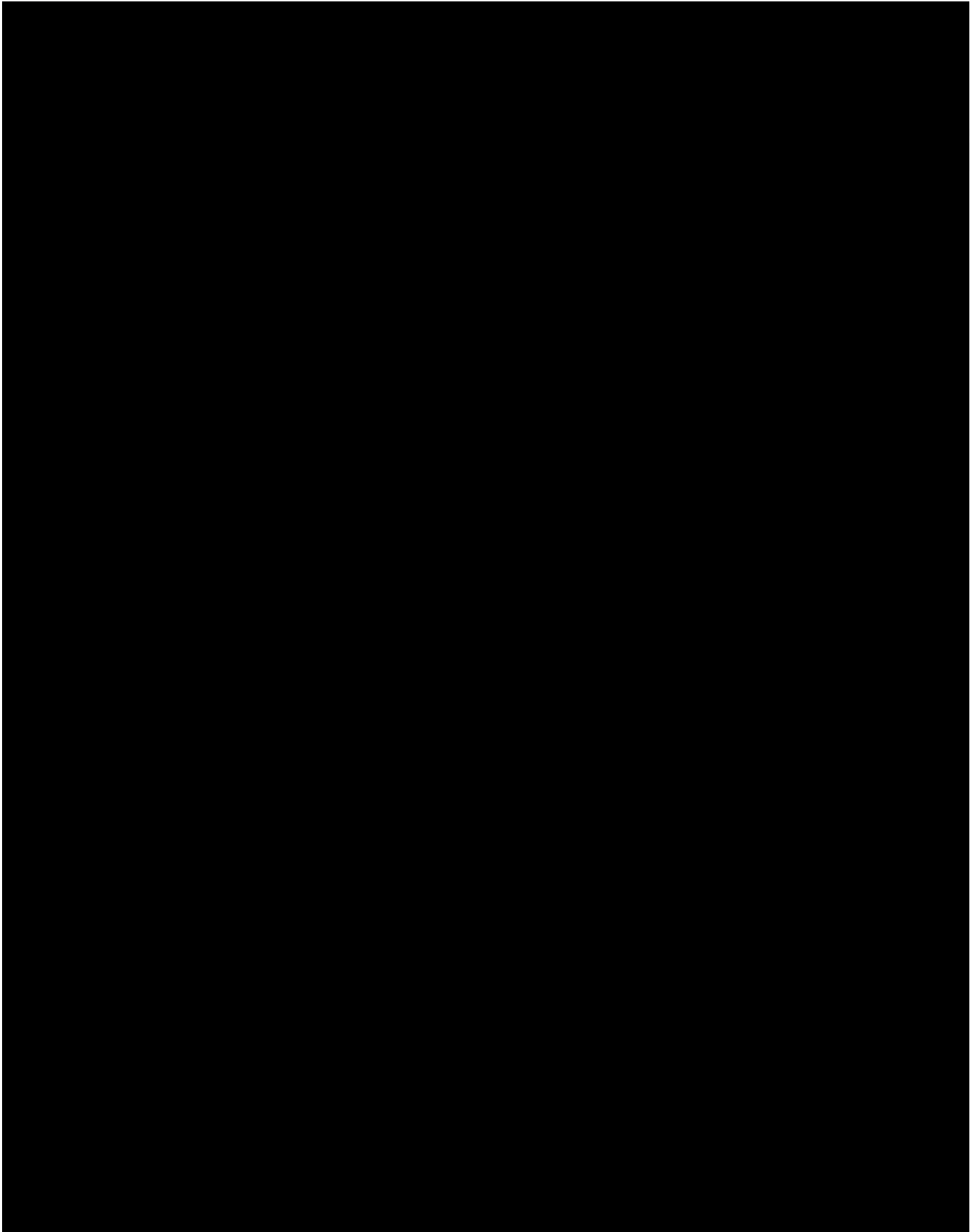


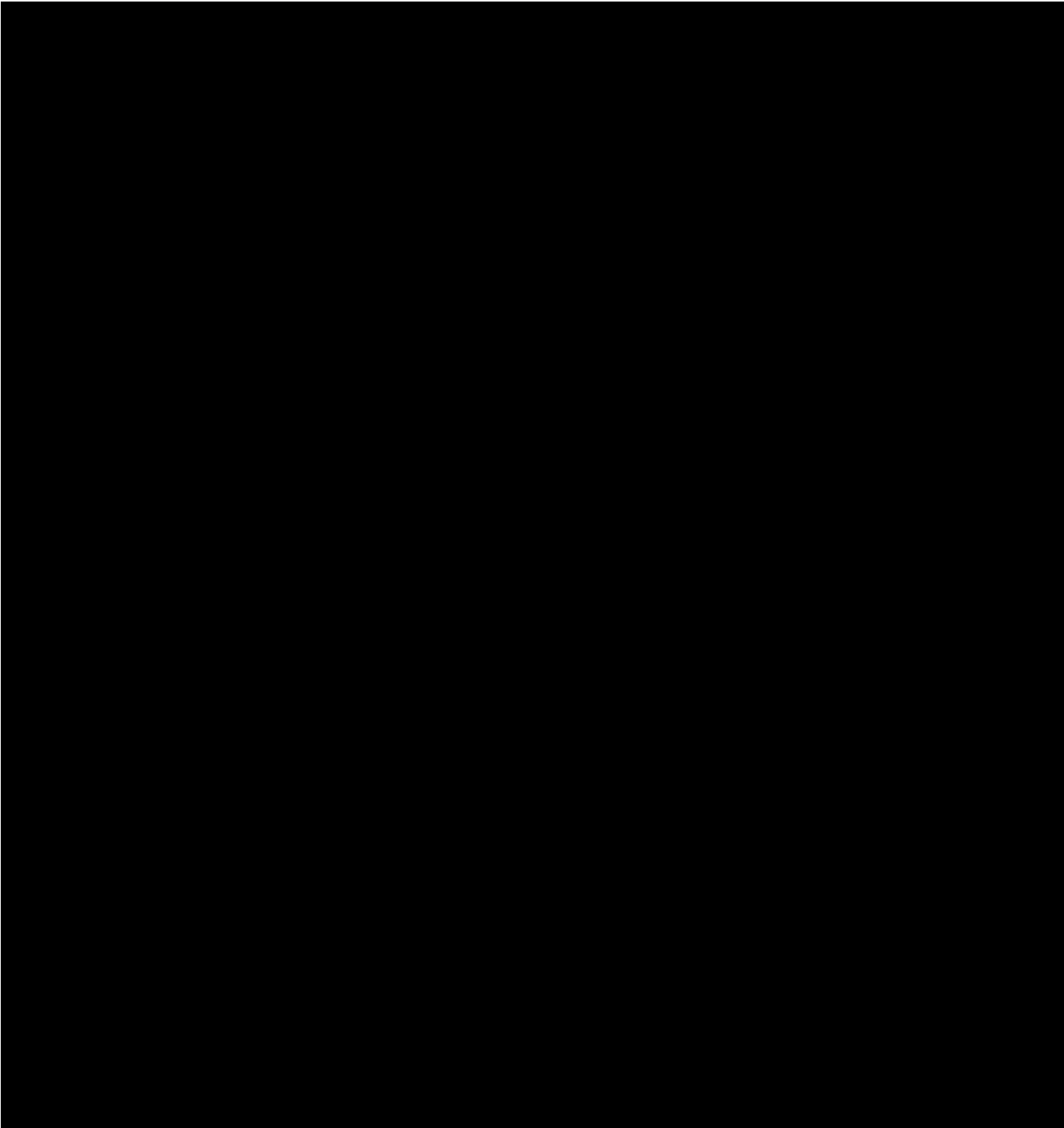
Option 1

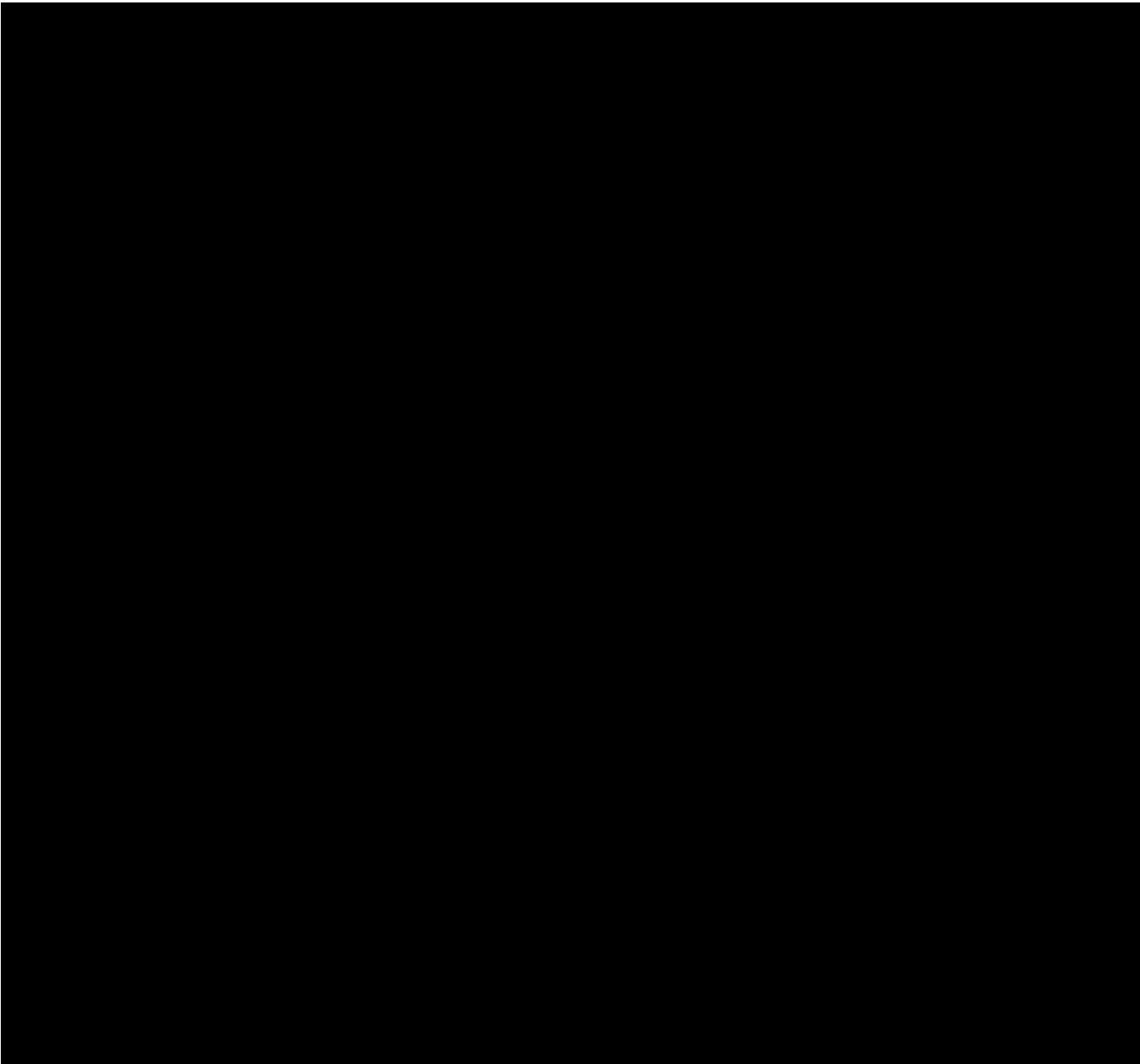




Option 2







Addendum 2 - Western Integrated Systems DGS Small Business and Disabled Veteran Certification

Printed on: 4/14/2023 10:42:07 AM

To verify most current certification status go to: <https://www.caleprocure.ca.gov>



Office of Small Business & DVBE Services

Certification ID: 15814
Legal Business Name:
 James E. Hughes
Doing Business As (DBA) Name 1:
 Western Integrated Systems
Doing Business As (DBA) Name 2:
 dba Western Integrated Systems
Address:
 PO Box 26830
 San Francisco
 CA 94126 6830

Email Address:
jim.hughes@westint.com
Business Web Page:
<https://www.westint.com>
Business Phone Number:
 4159891777714
Business Fax Number:
 415/989-1776
Business Types:
 Non-Manufacturer , Service

| Certification Type | Status | From | To |
|--------------------|----------|------------|------------|
| DVBE | Approved | 07/27/2022 | 07/31/2024 |
| SB(Micro) | Approved | 11/15/2021 | 07/31/2024 |

Stay informed! KEEP YOUR CERTIFICATION PROFILE UPDATED!

LOG IN at [CaleProcure.CA.GOV](https://www.caleprocure.ca.gov)

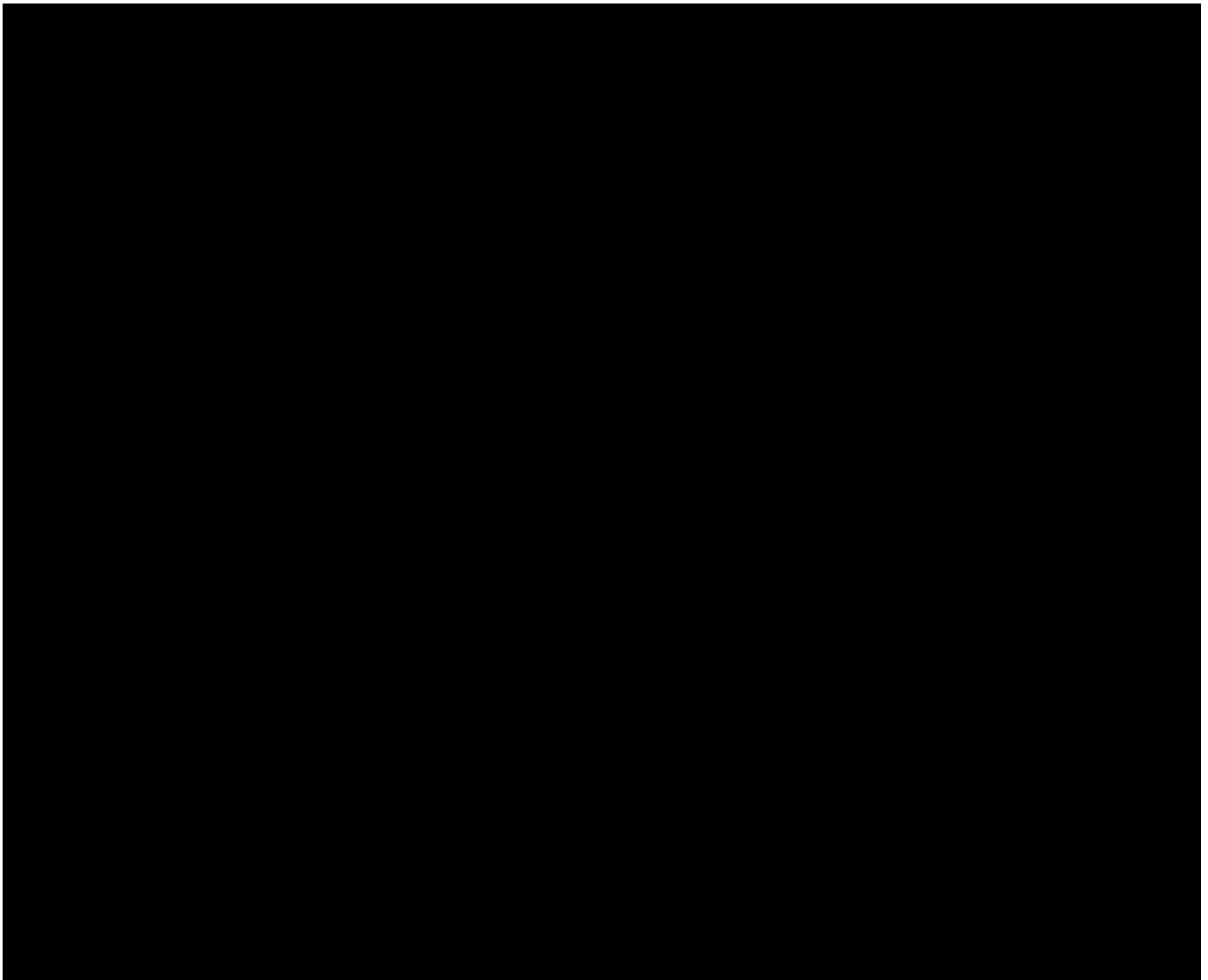
Questions?

Email: OSDSHELP@DGS.CA.GOV

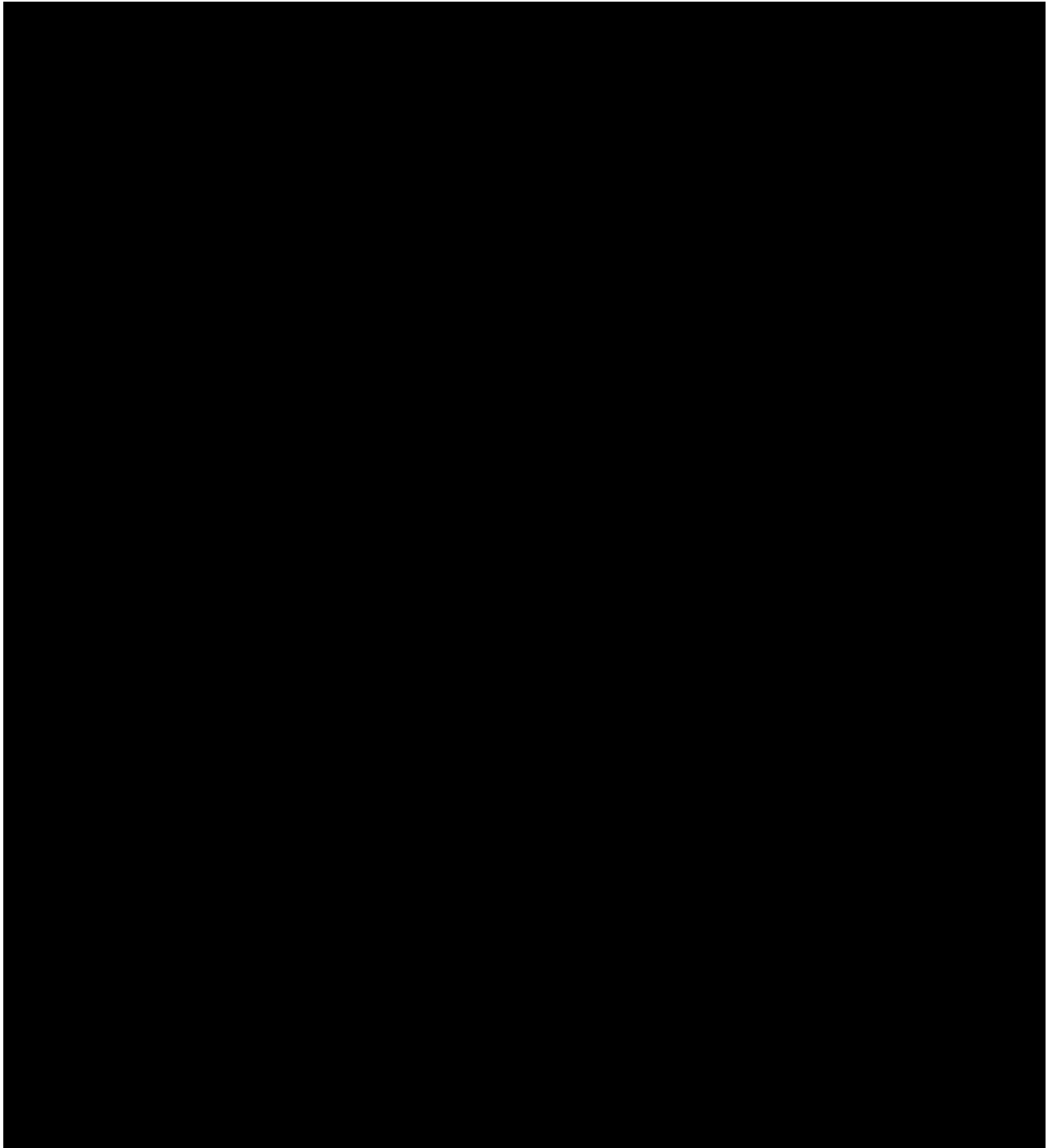
Call OSDS Main Number: 916 375 4940

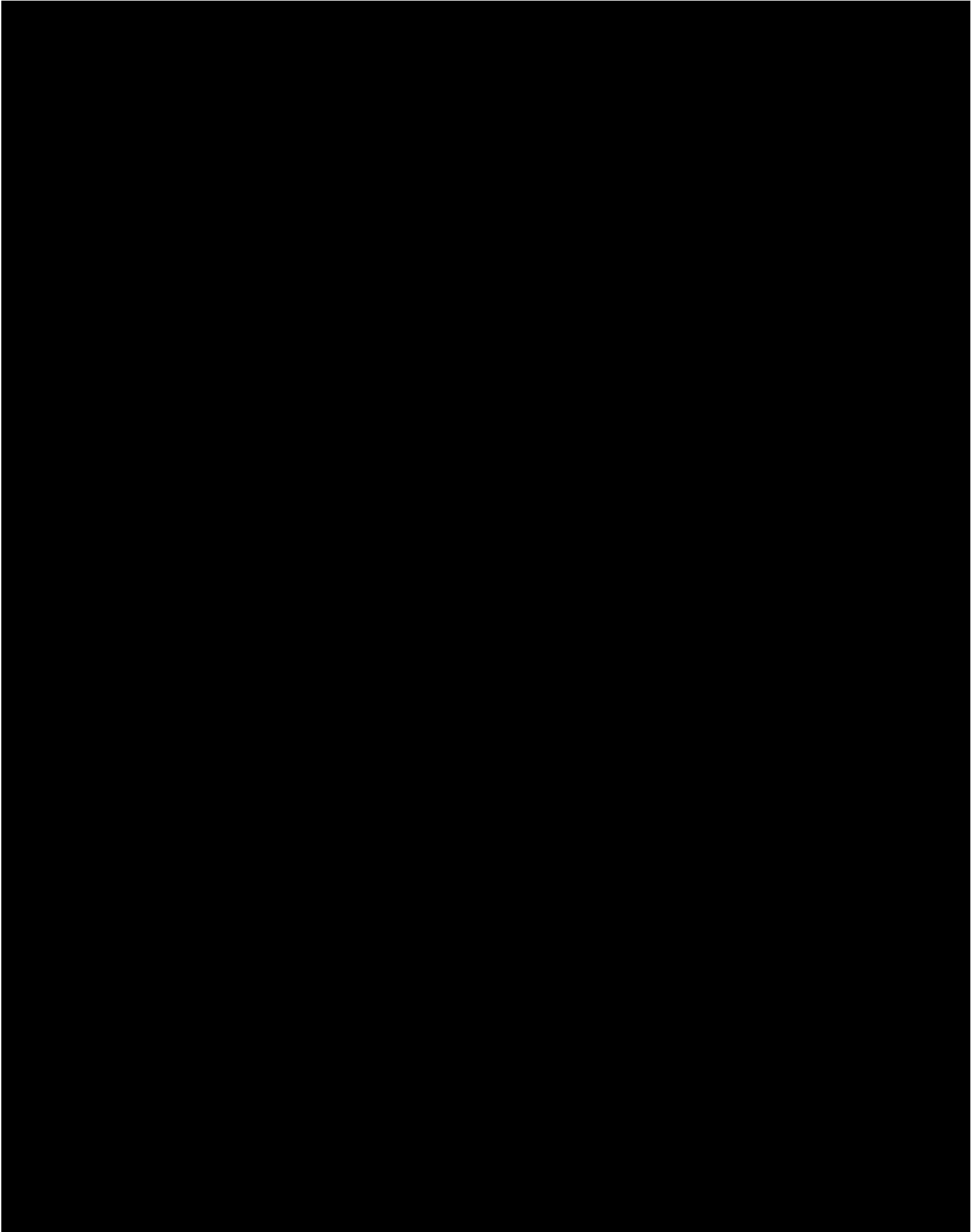
707 3rd Street, 1-400, West Sacramento, CA 95605

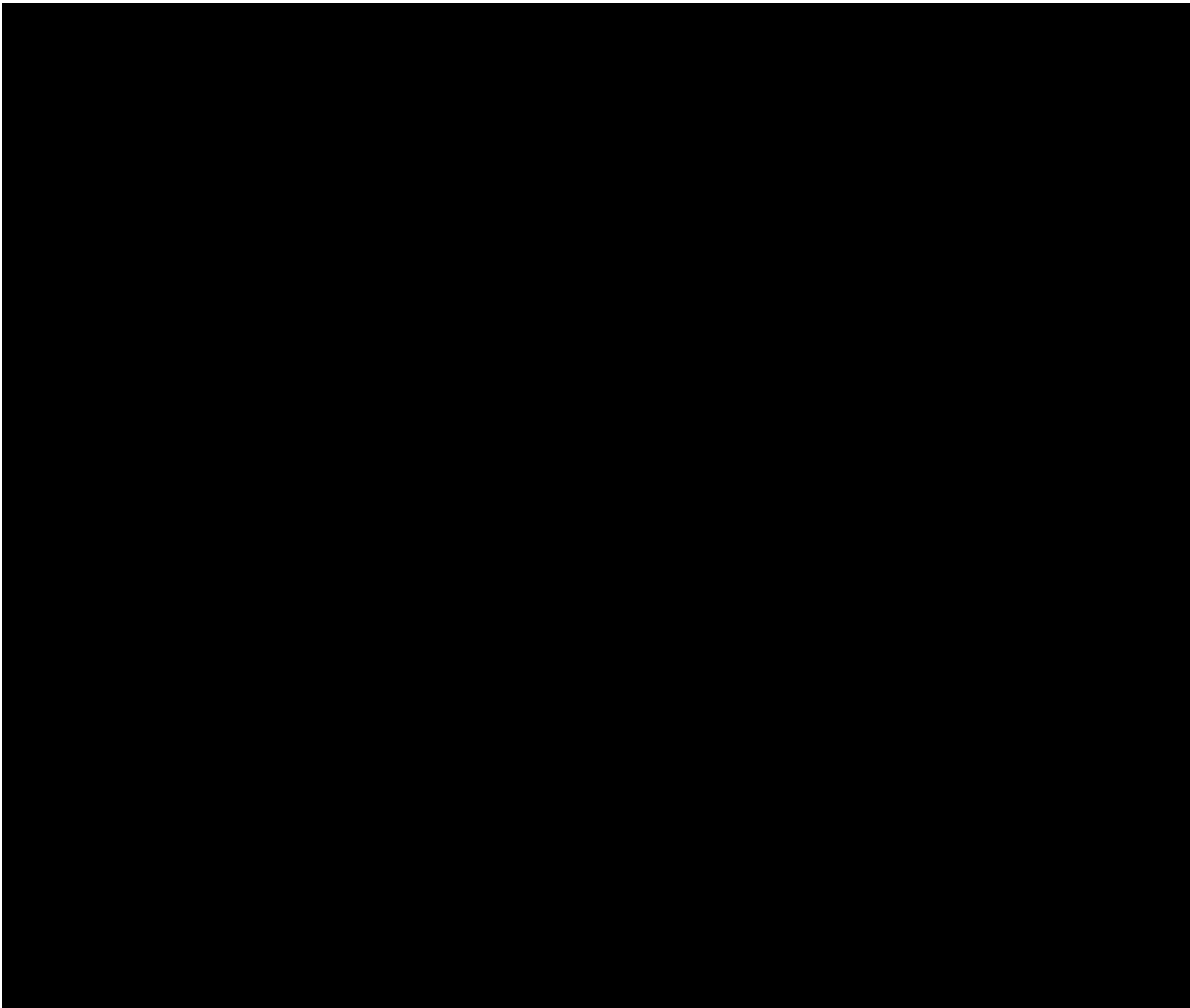
Addendum 3 – Timeline for Implementation

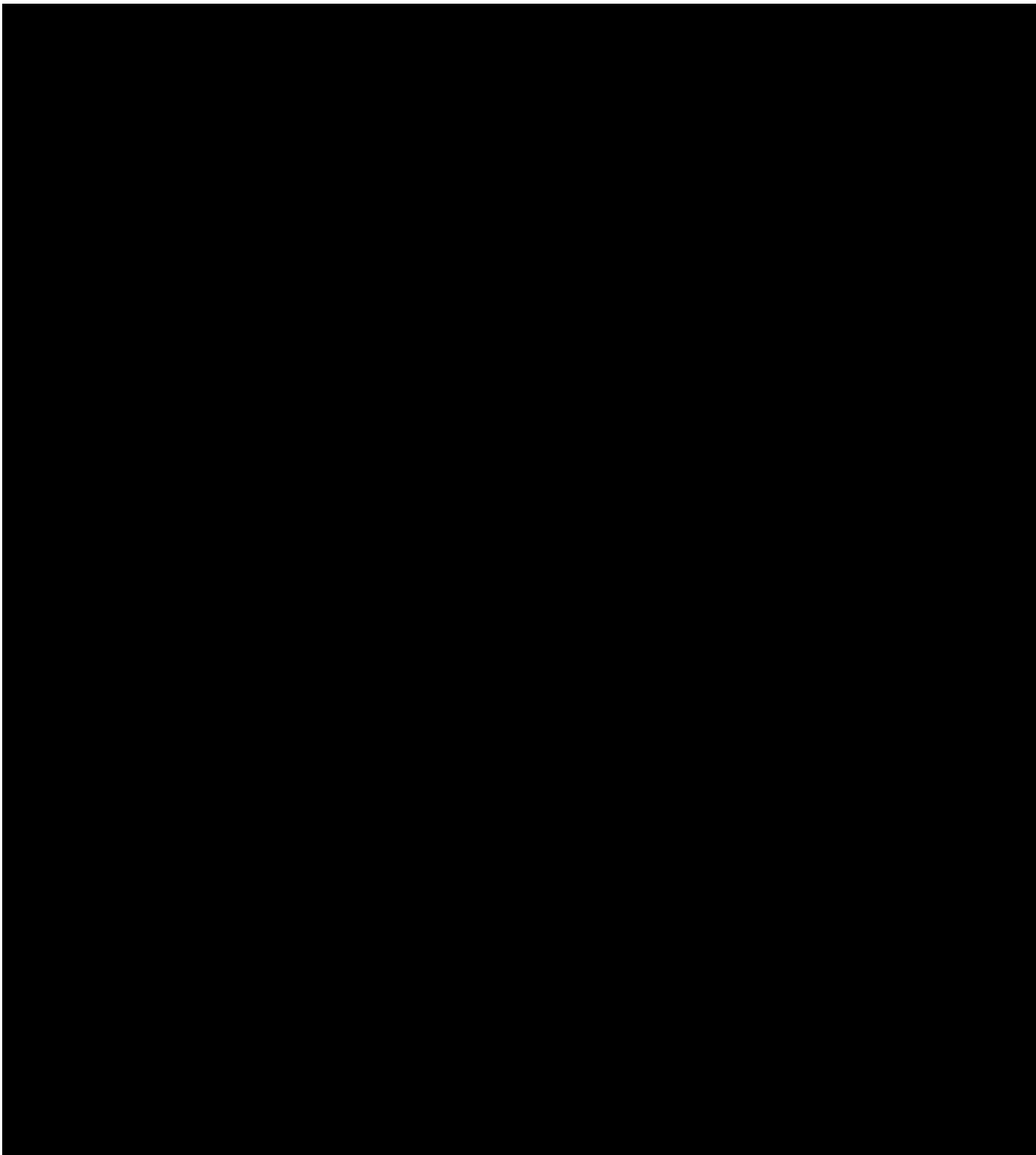


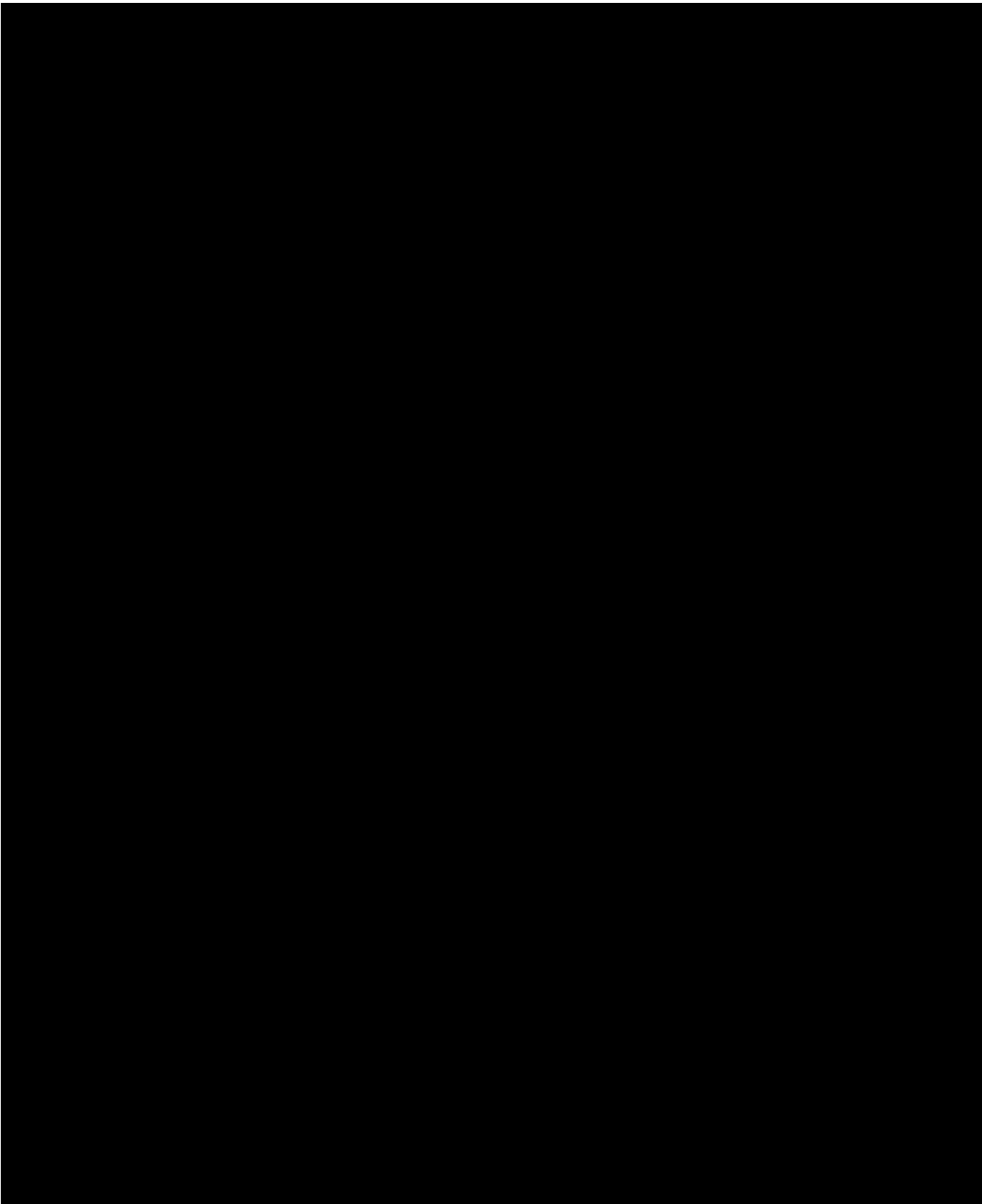
Addendum 4 - Project Approach



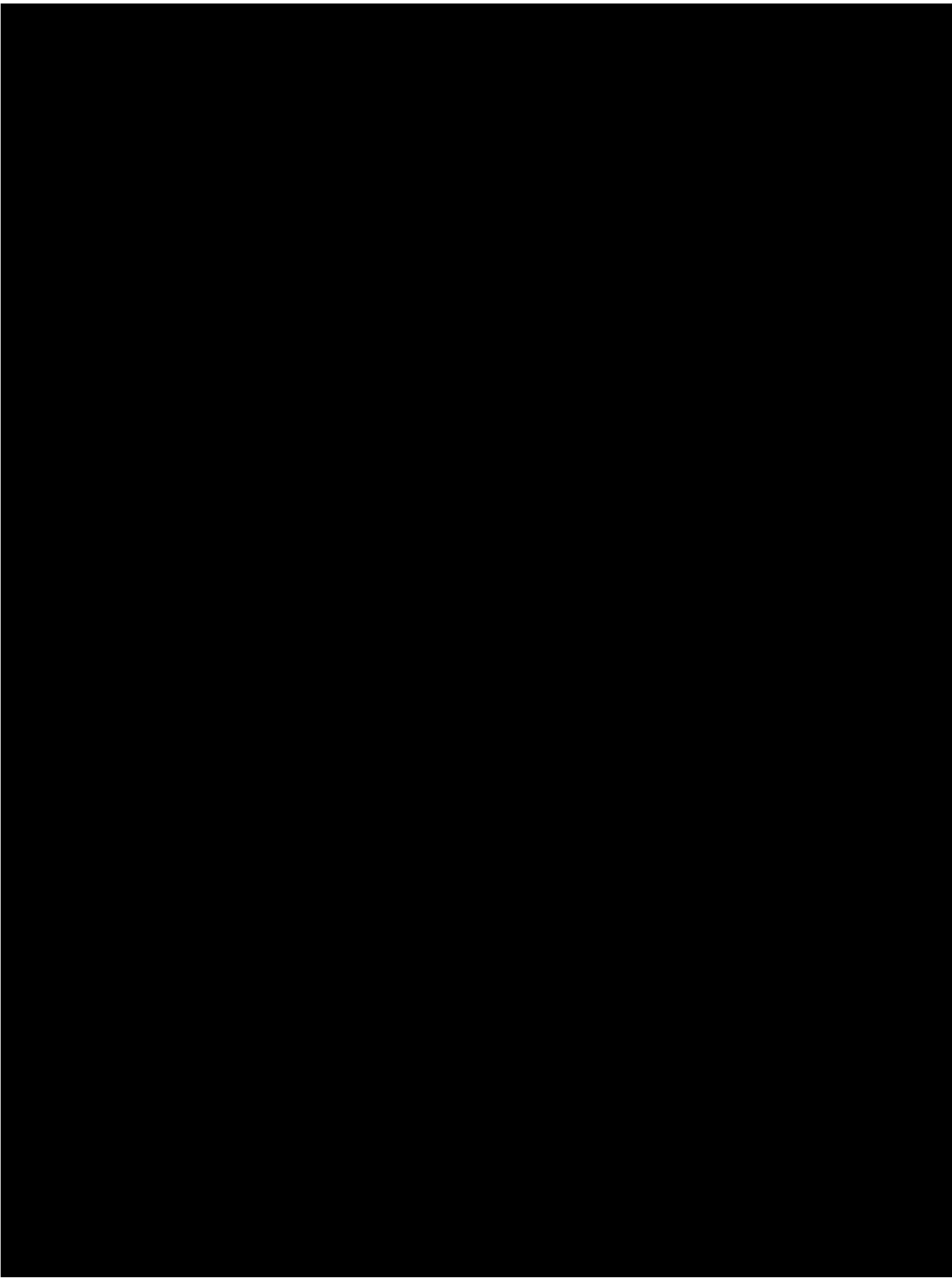


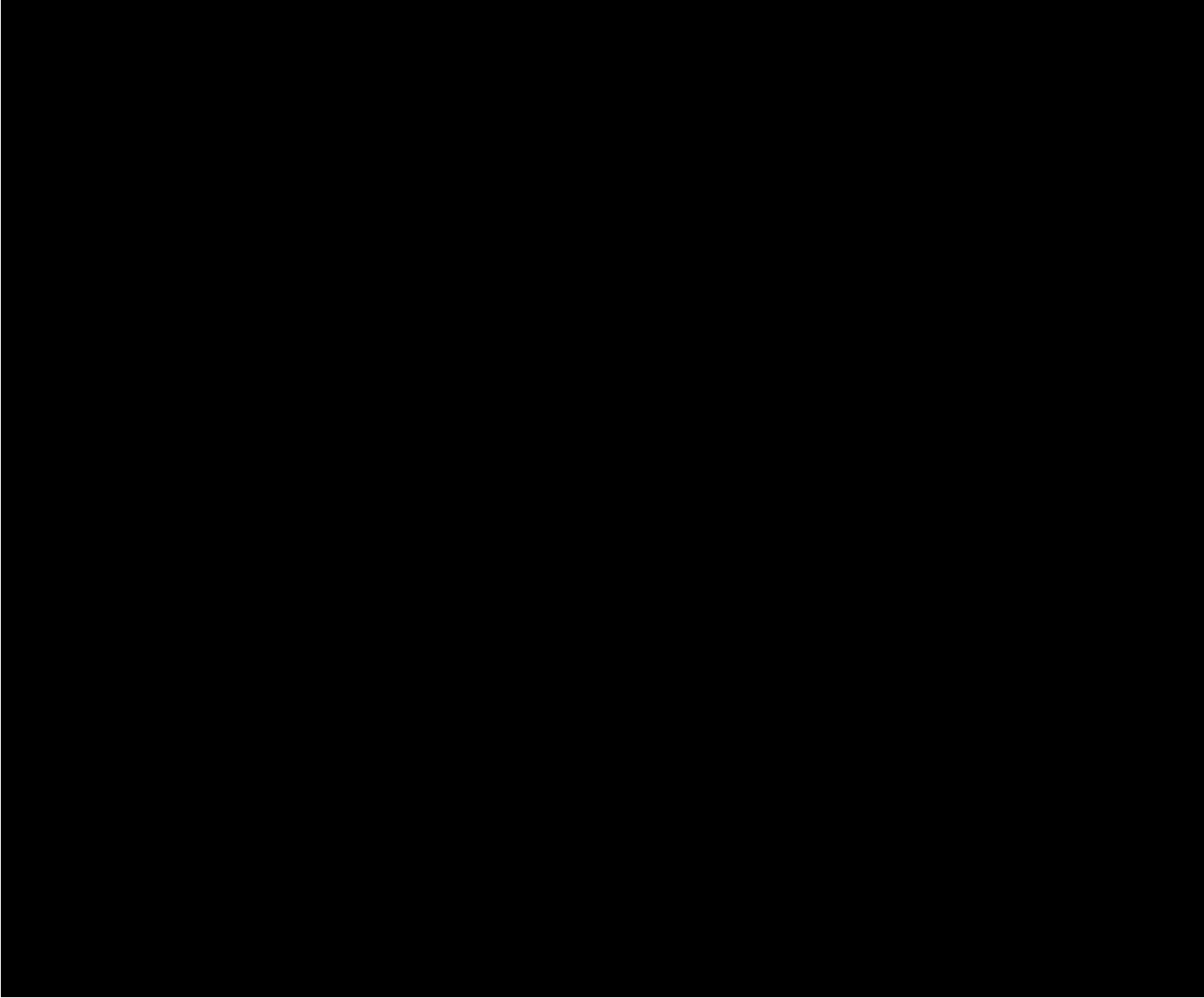




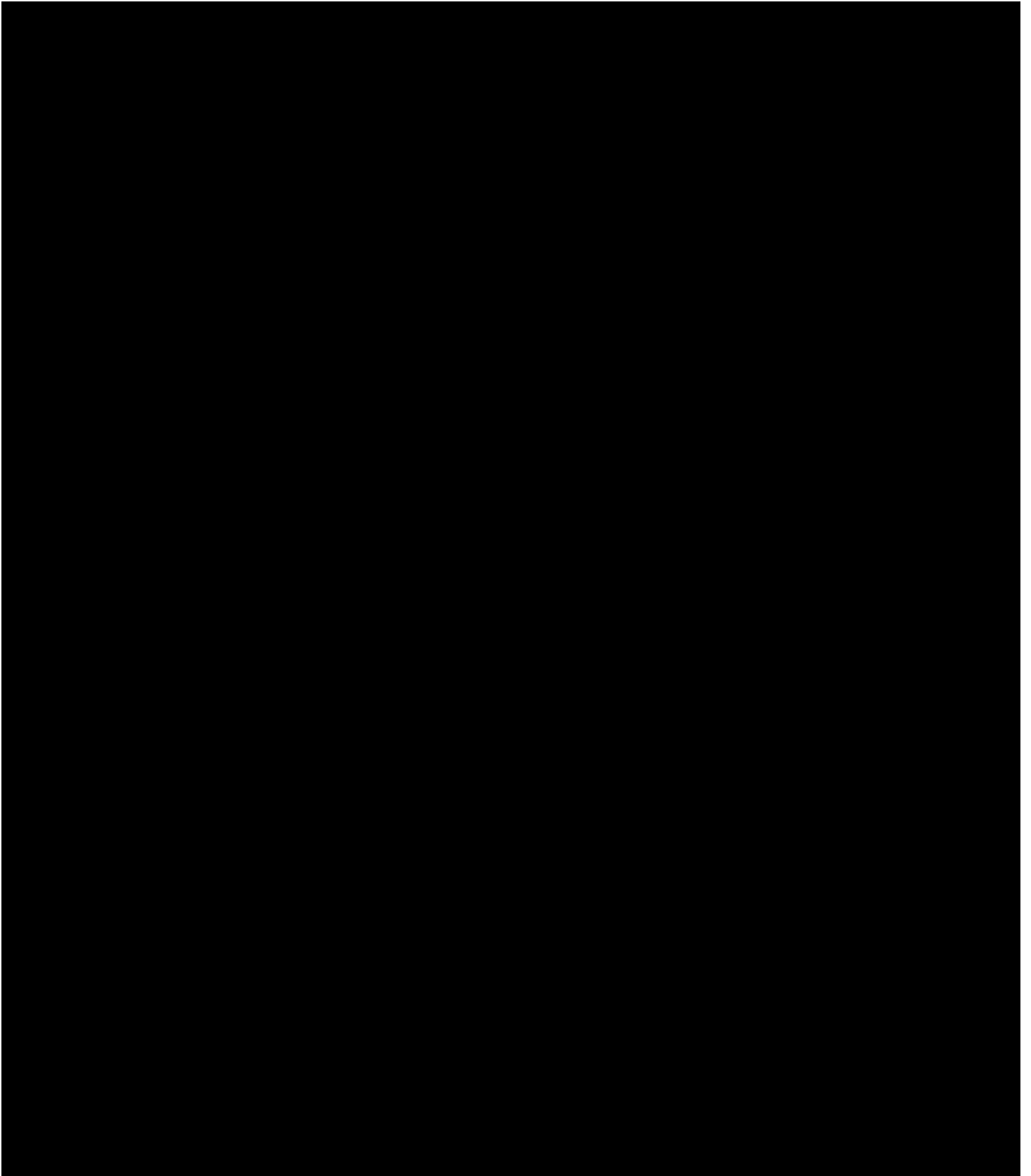


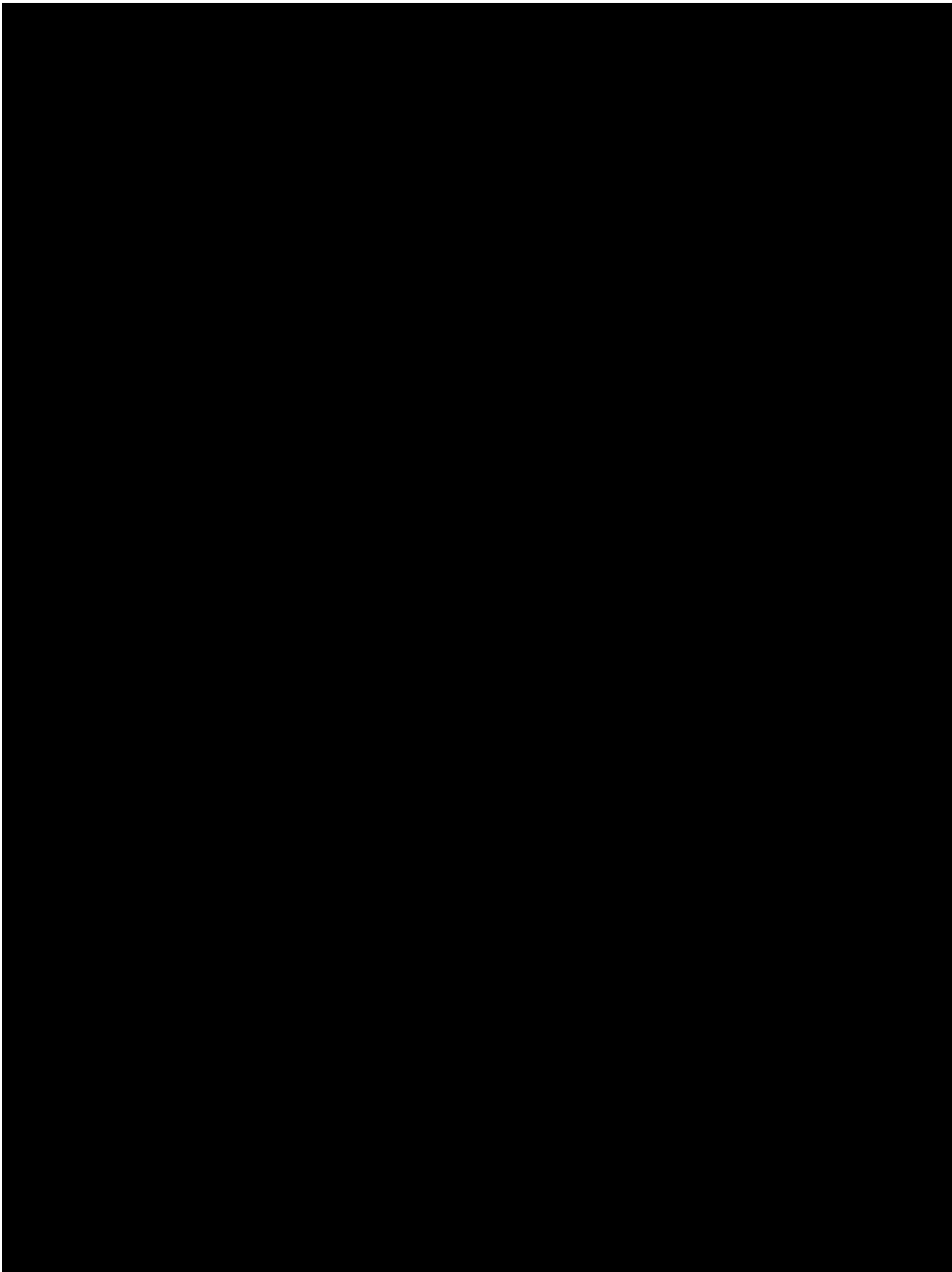
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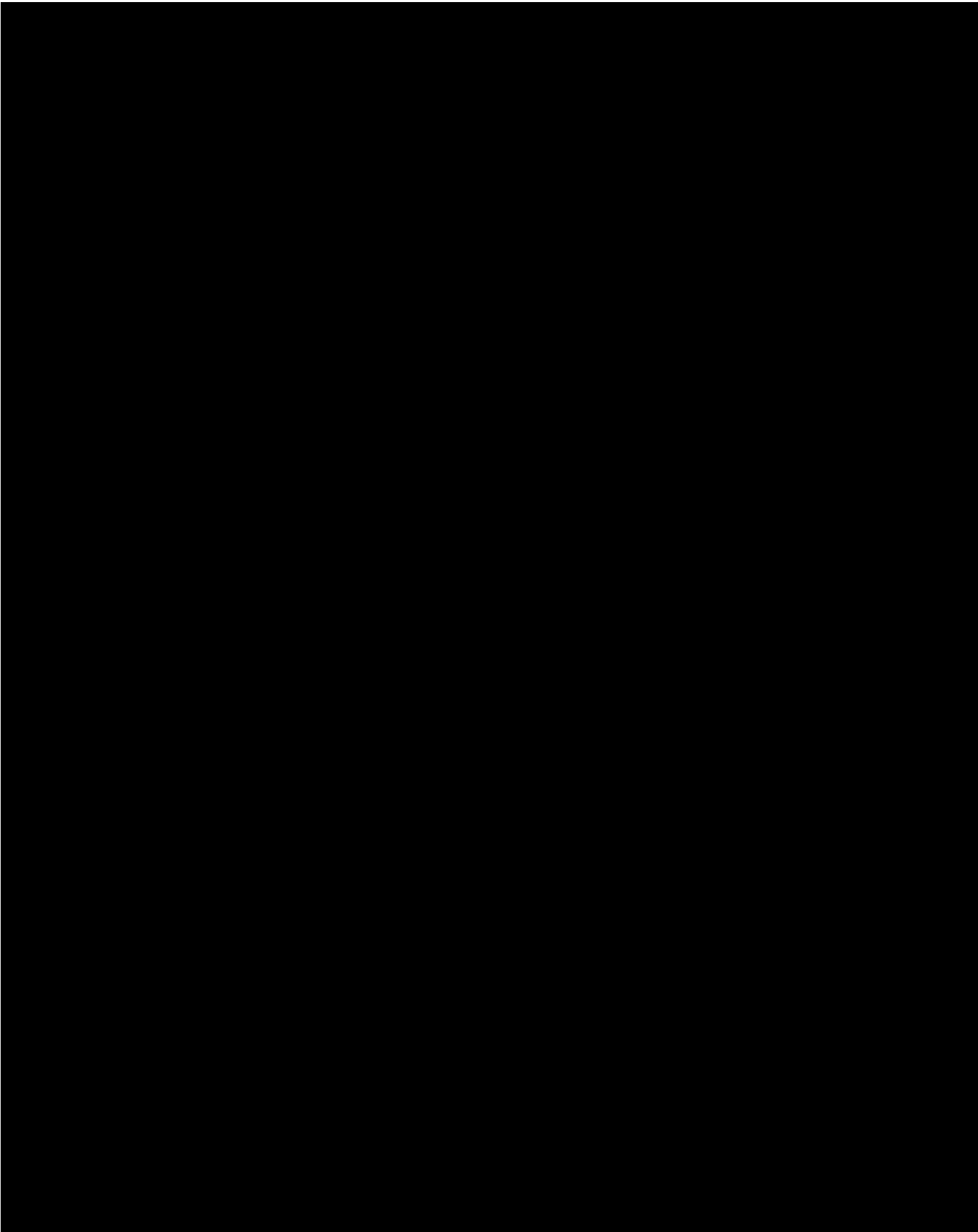


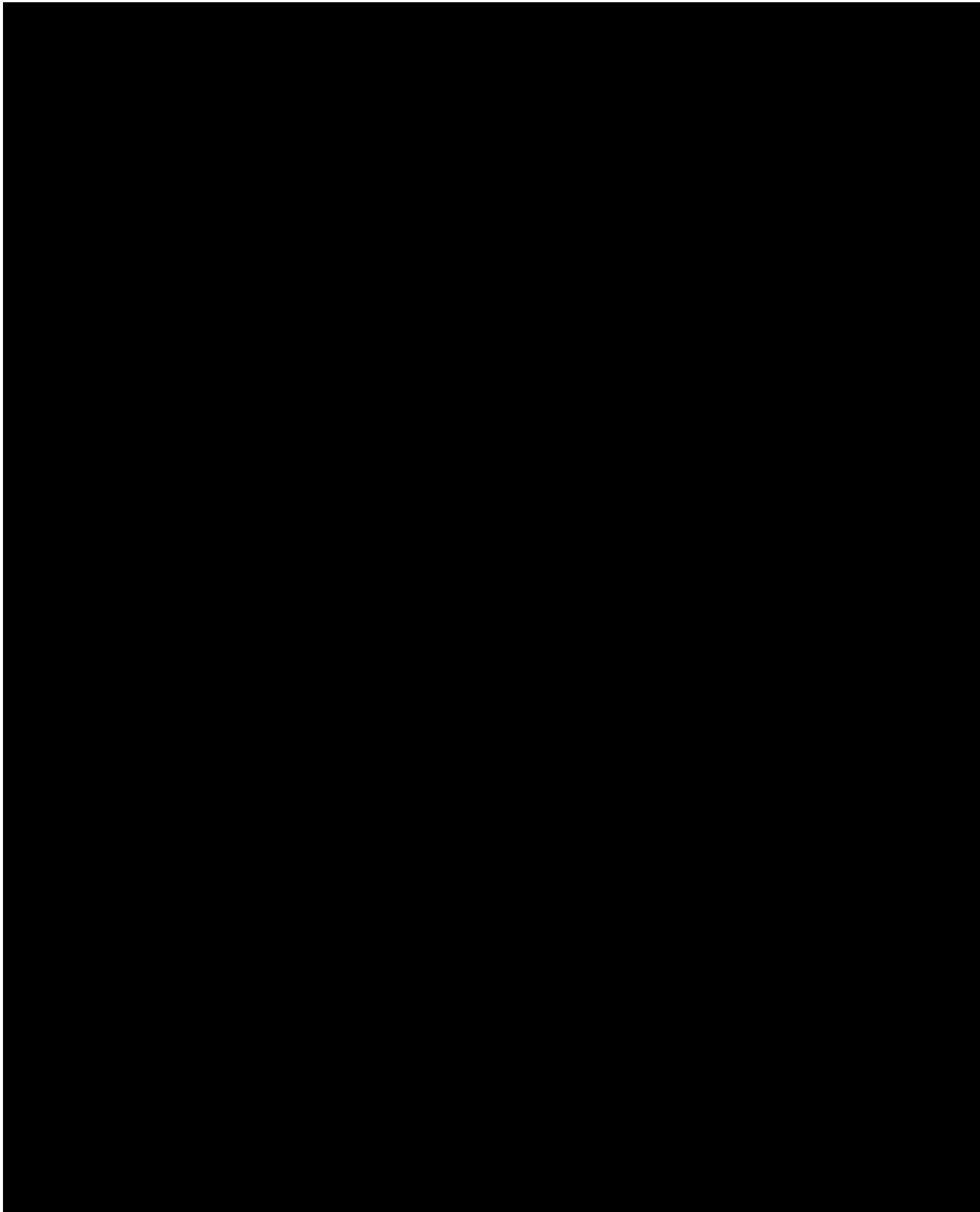


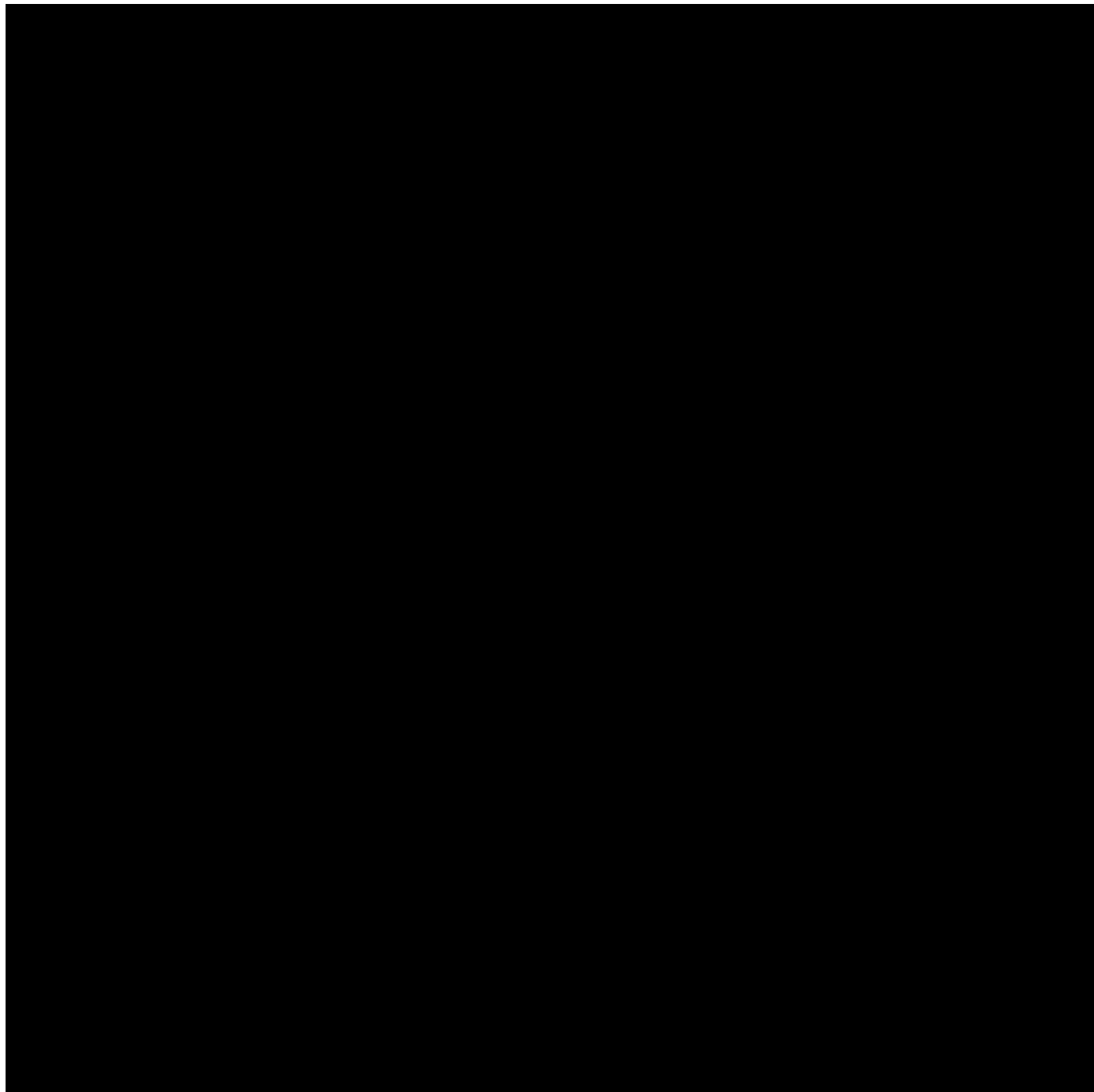
Addendum 5 – Western Integrated Systems’ Imaging Center Process



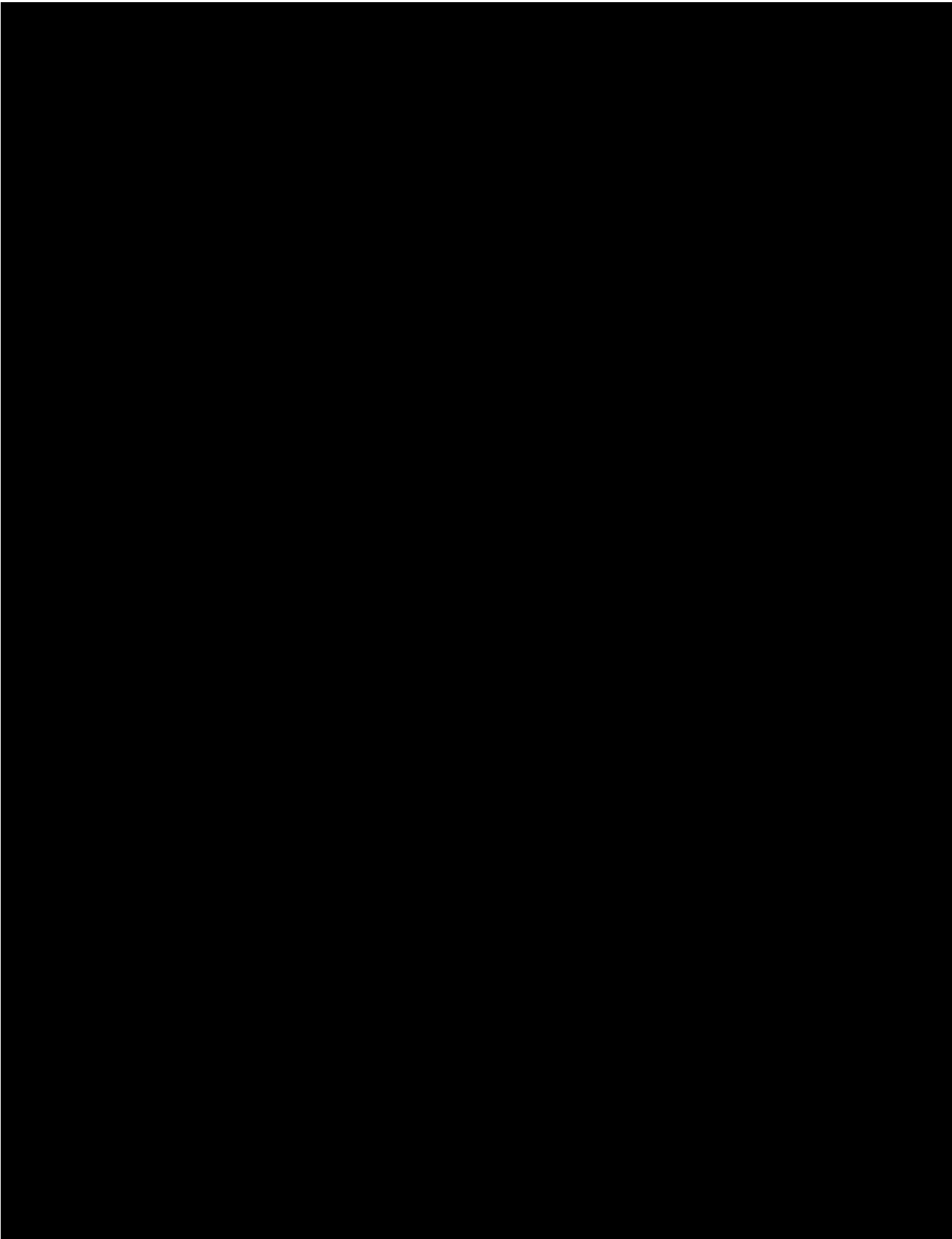


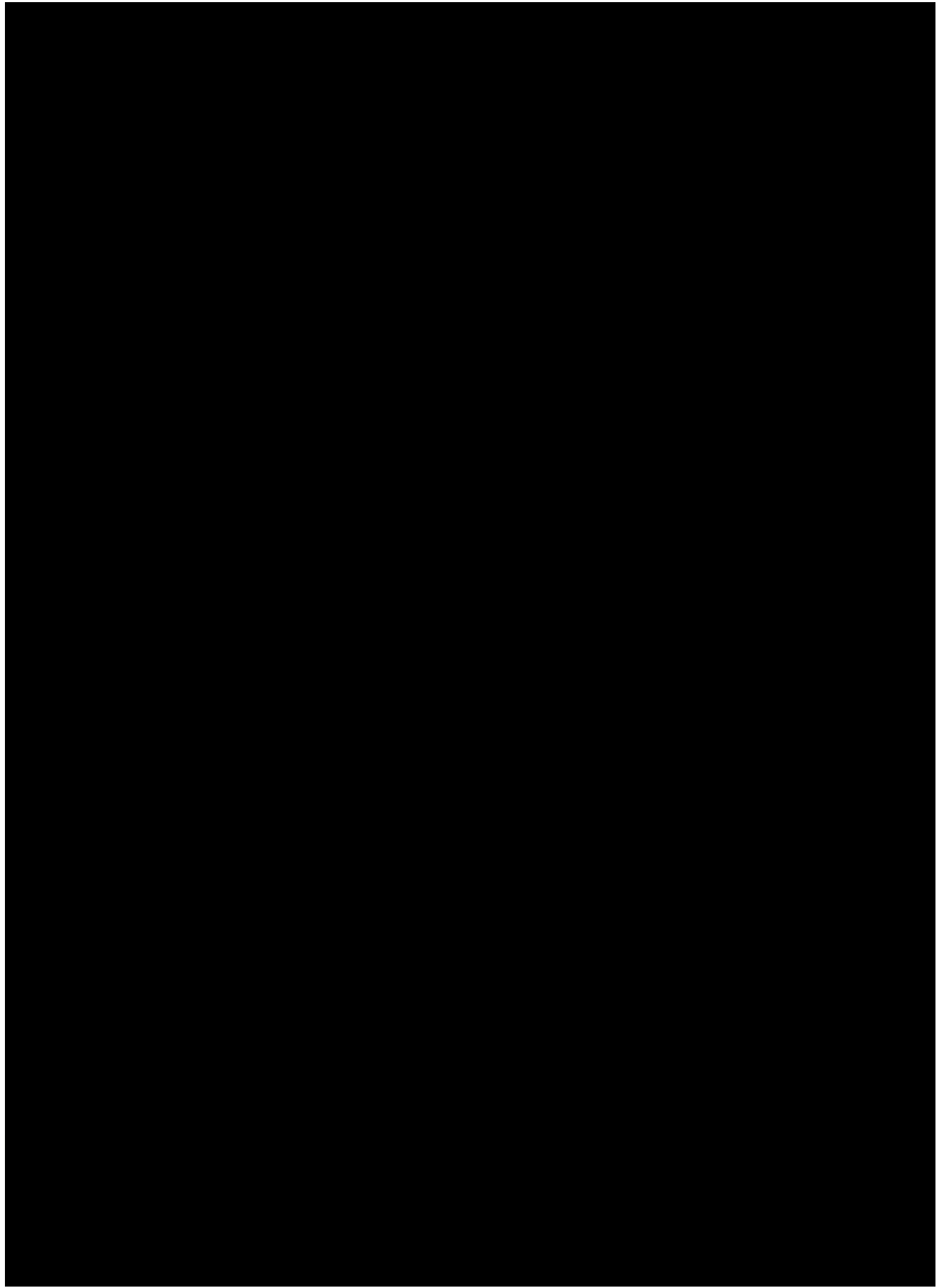


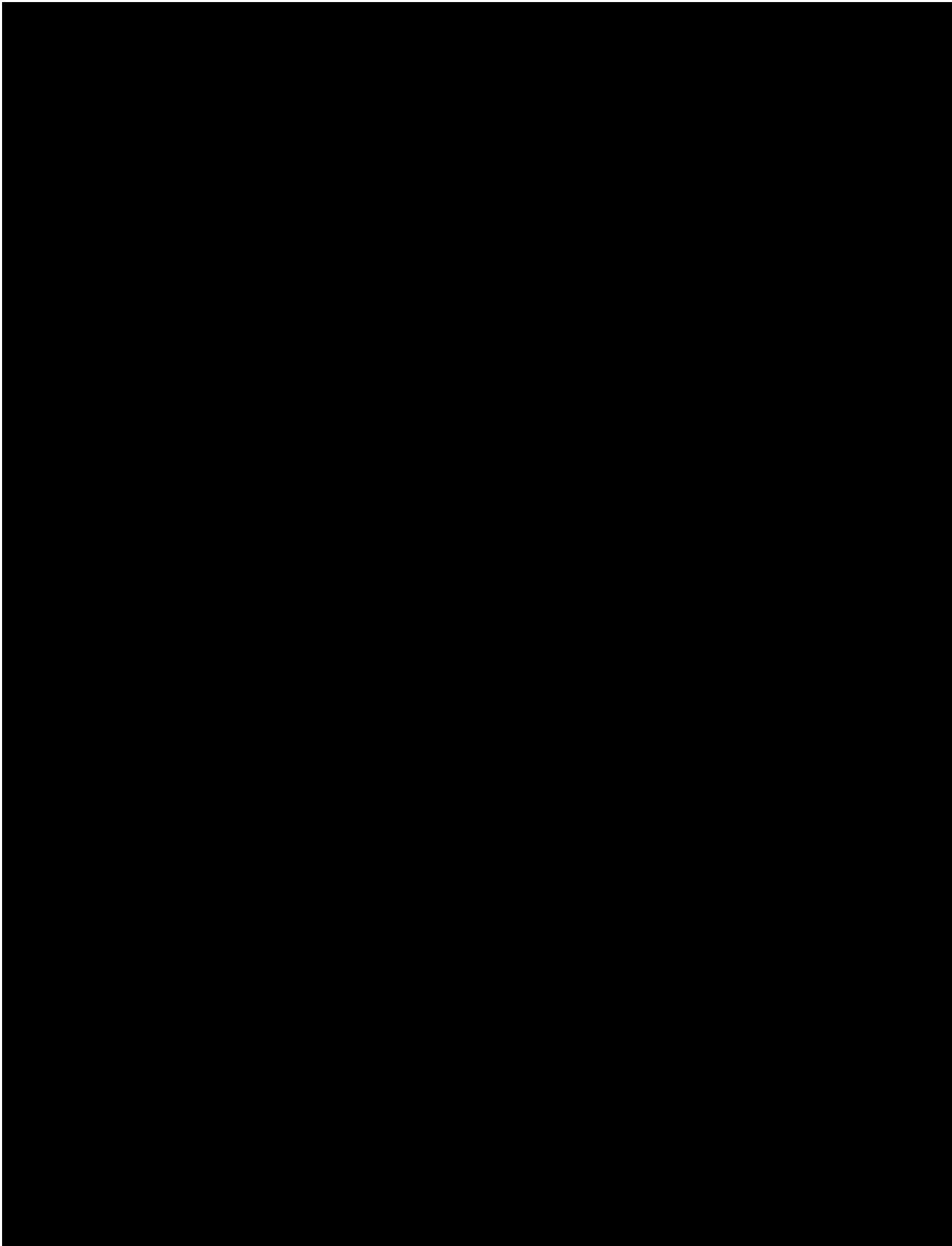


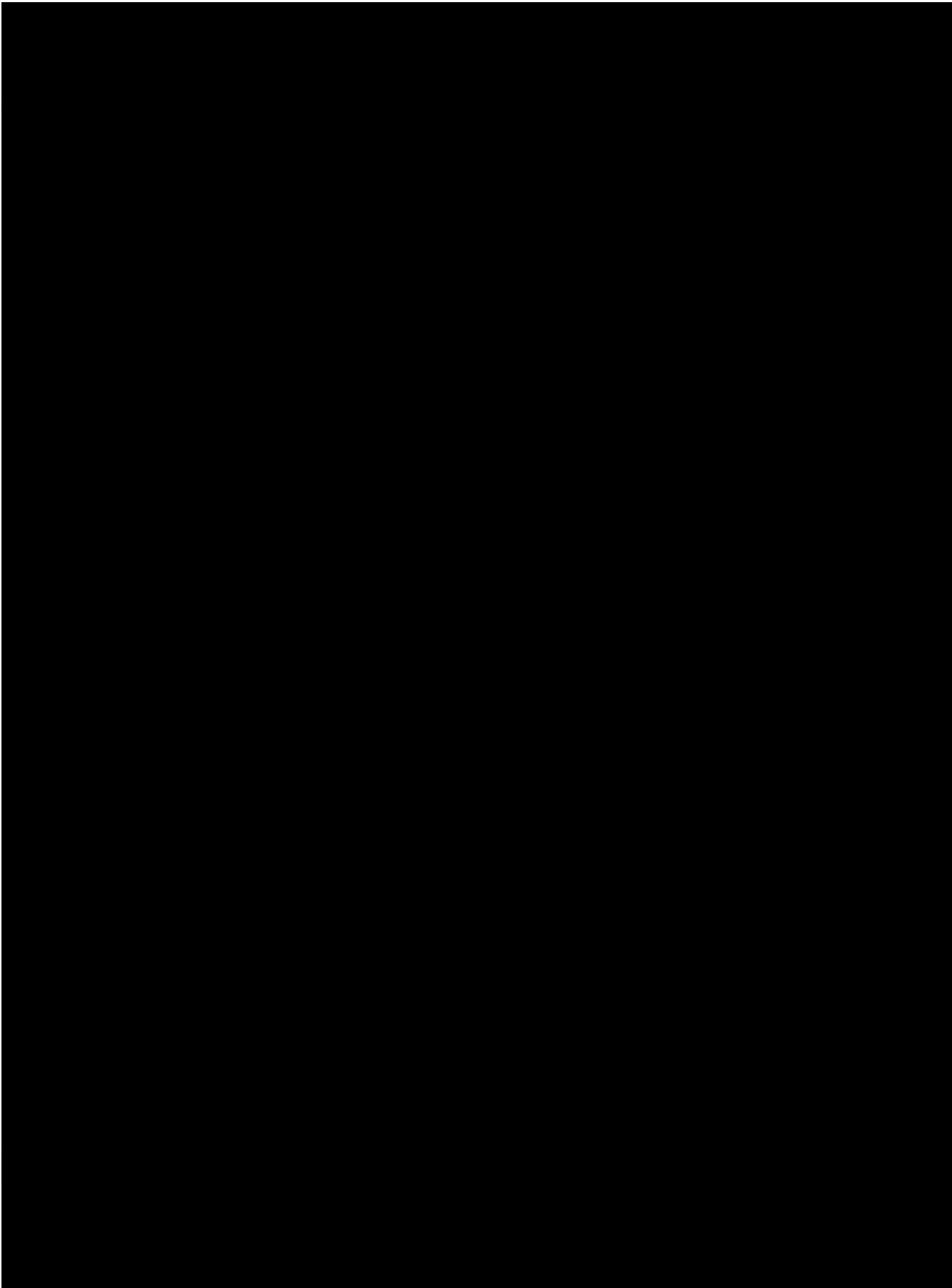


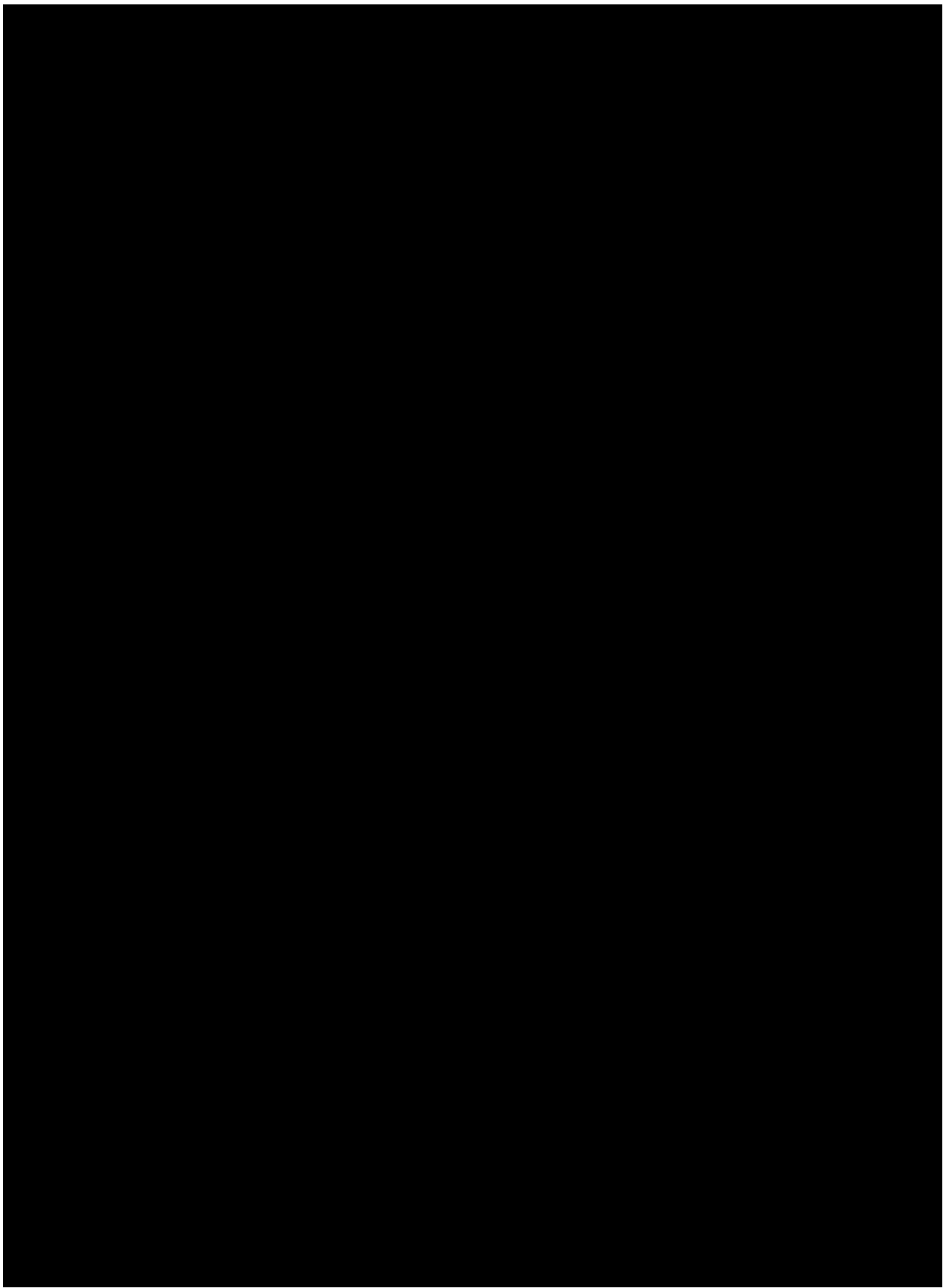
Addendum 6 – Vendor Information [REDACTED]

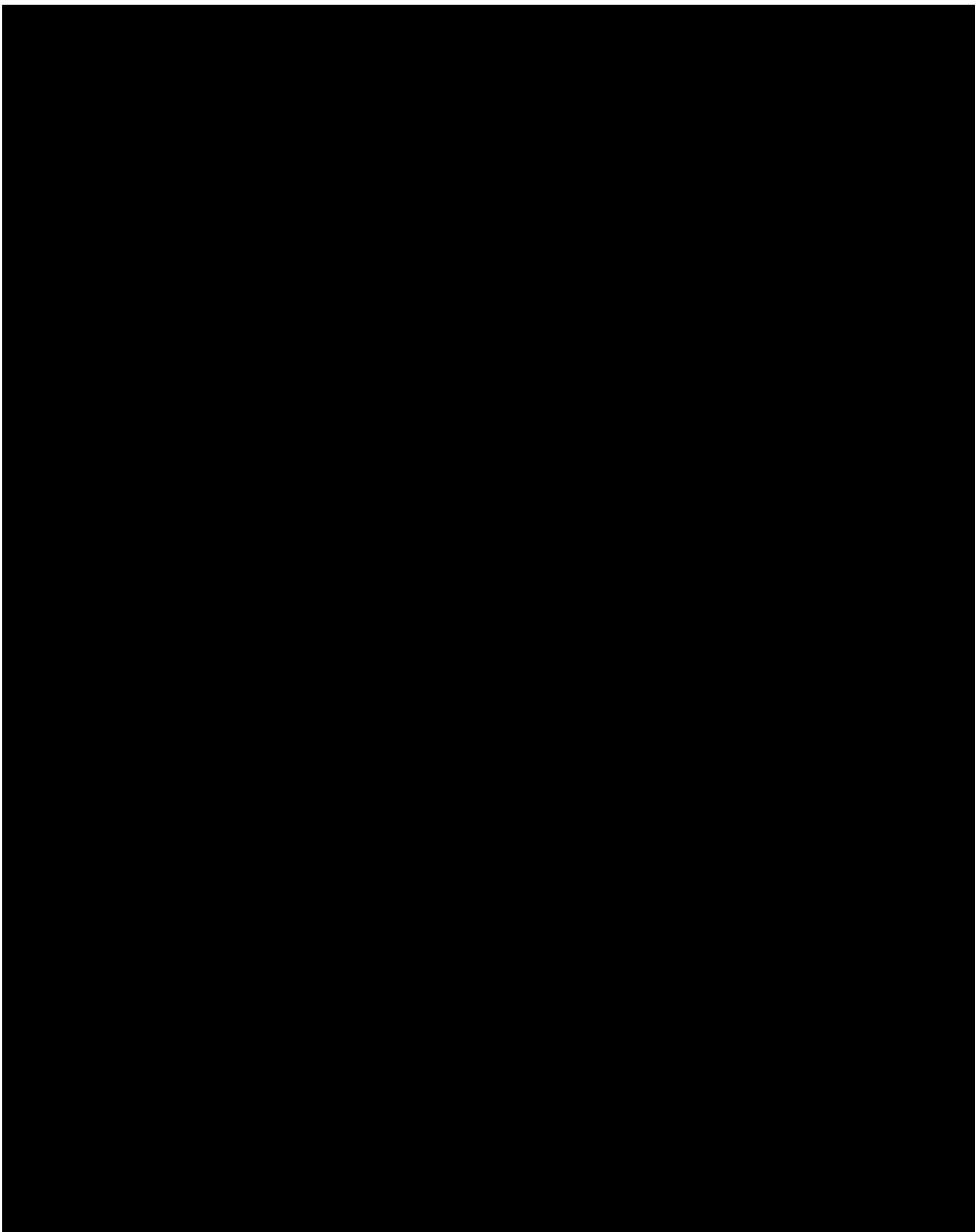


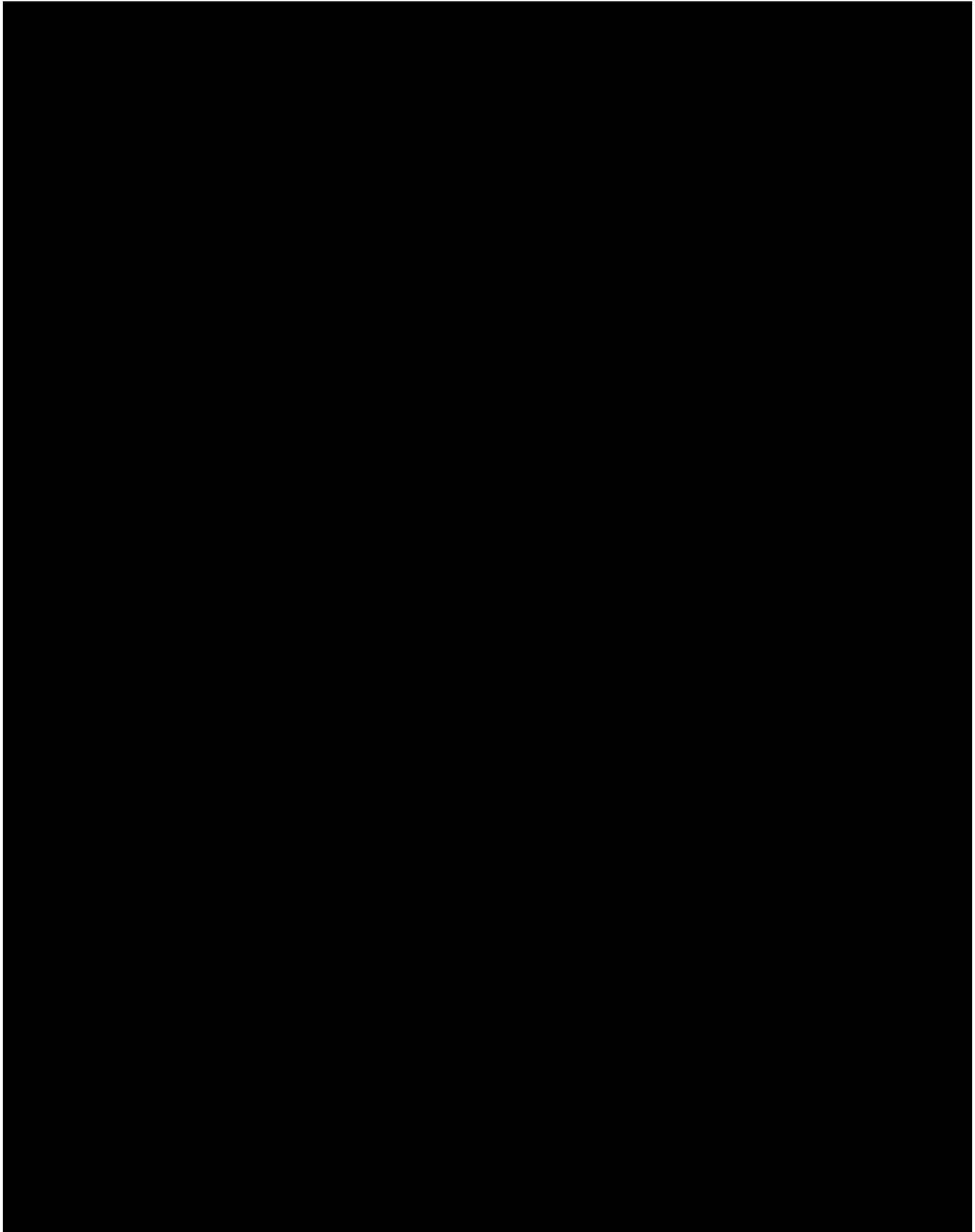




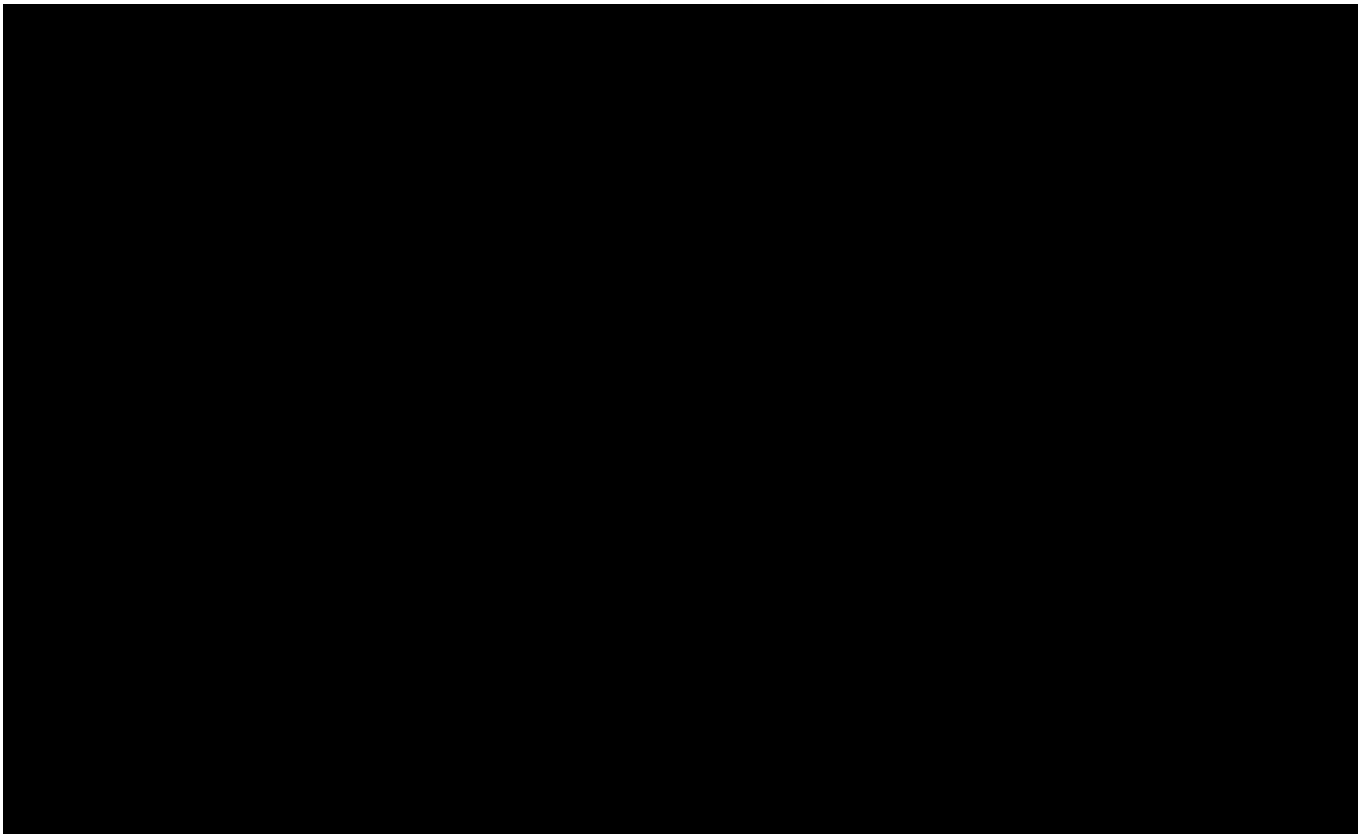
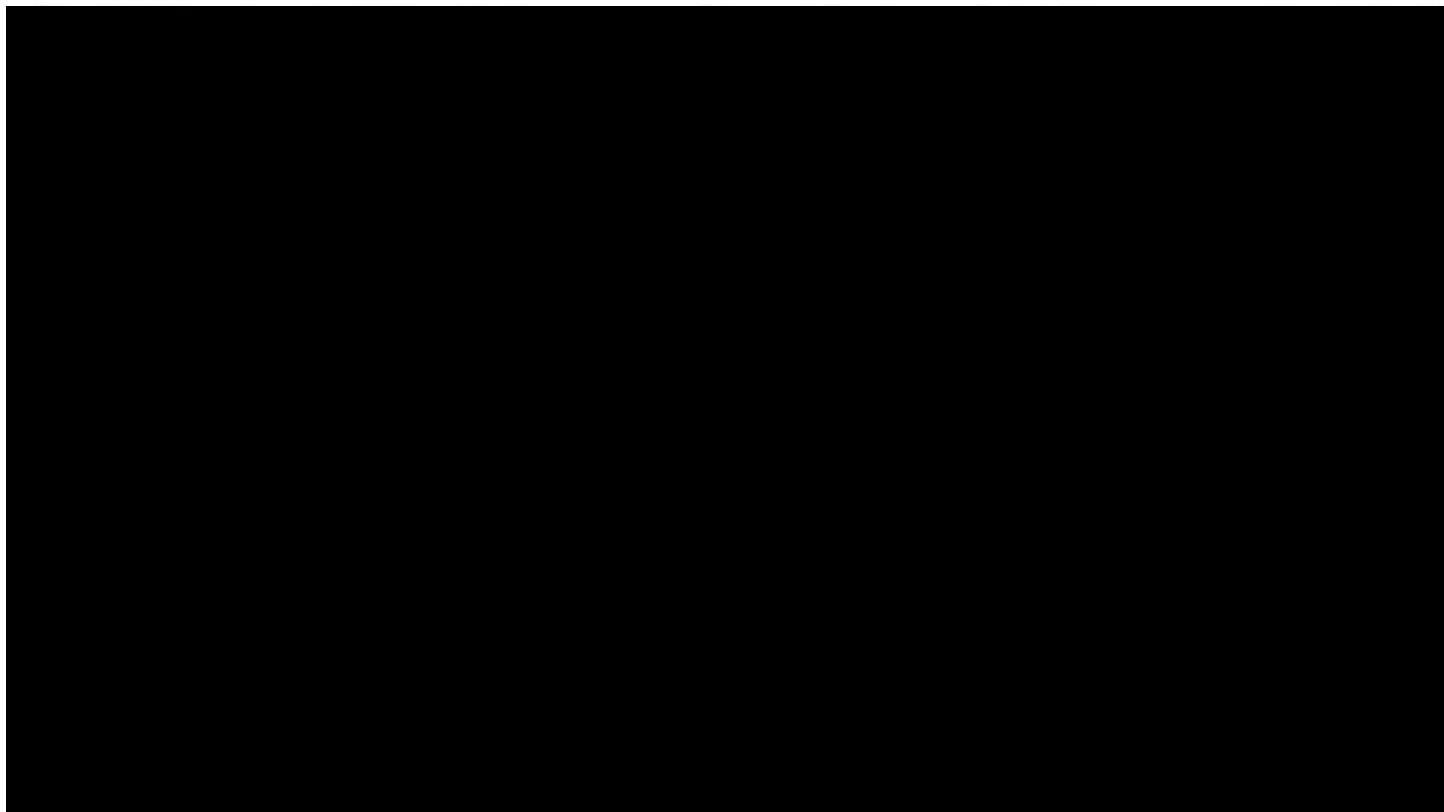


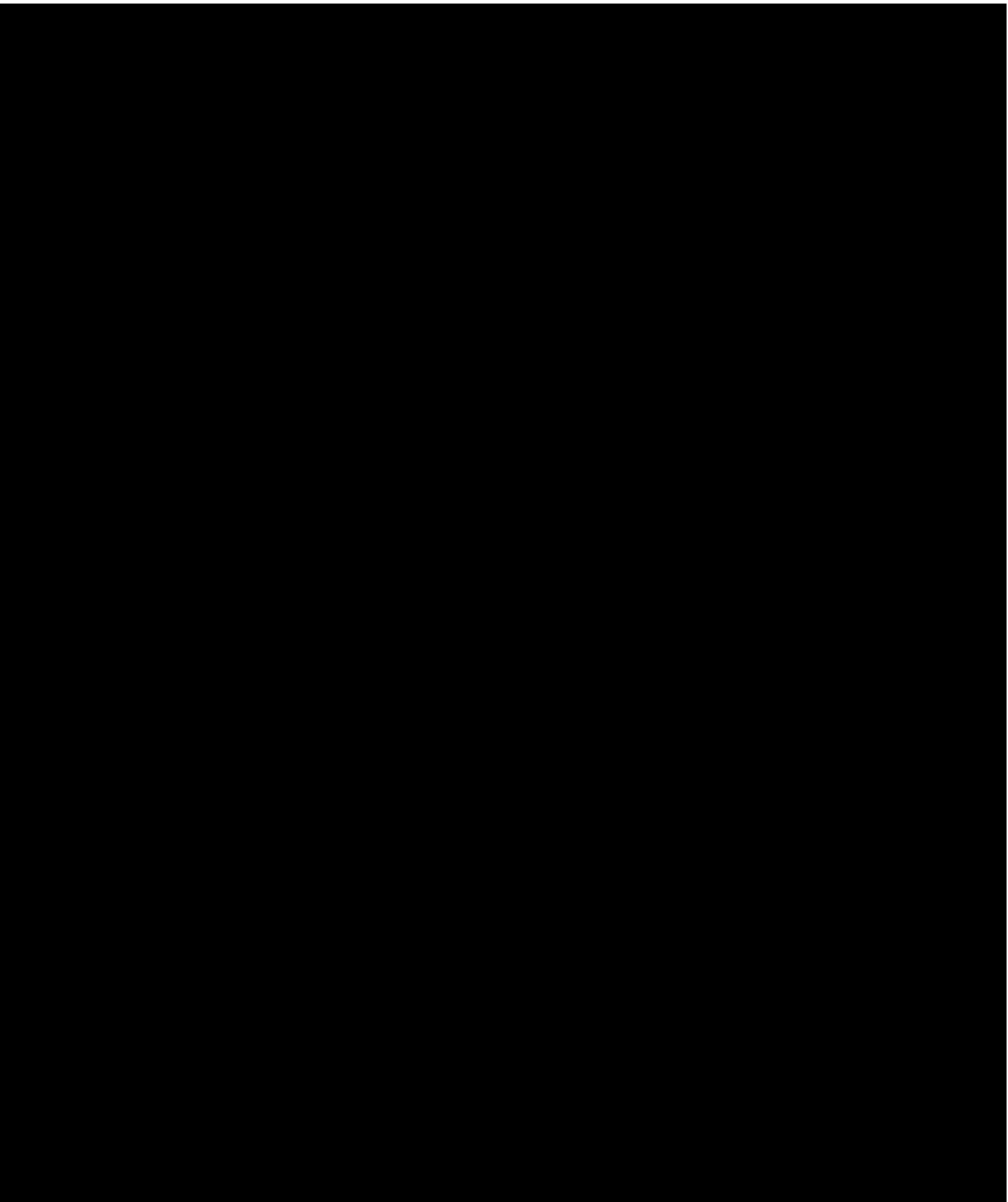


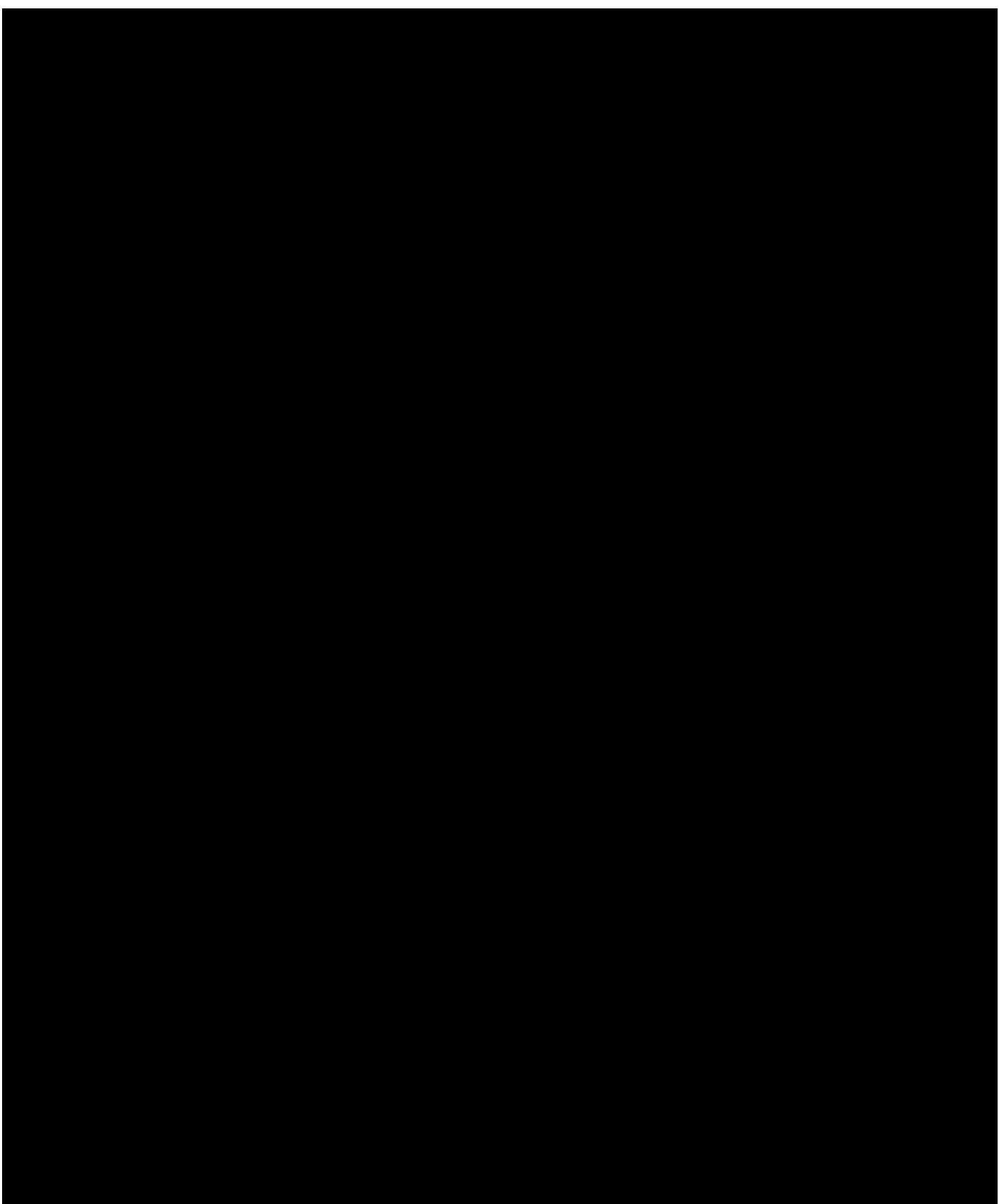


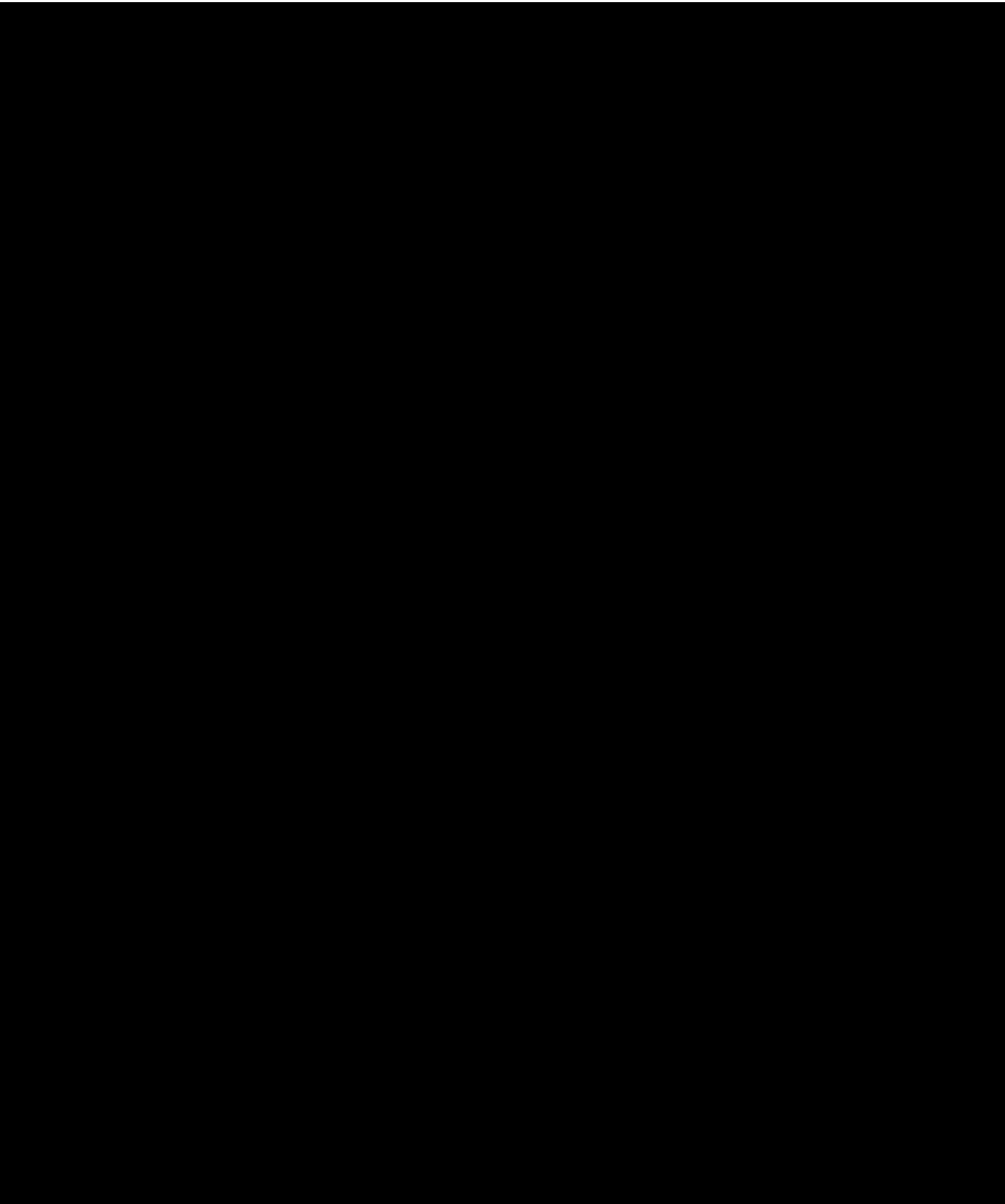


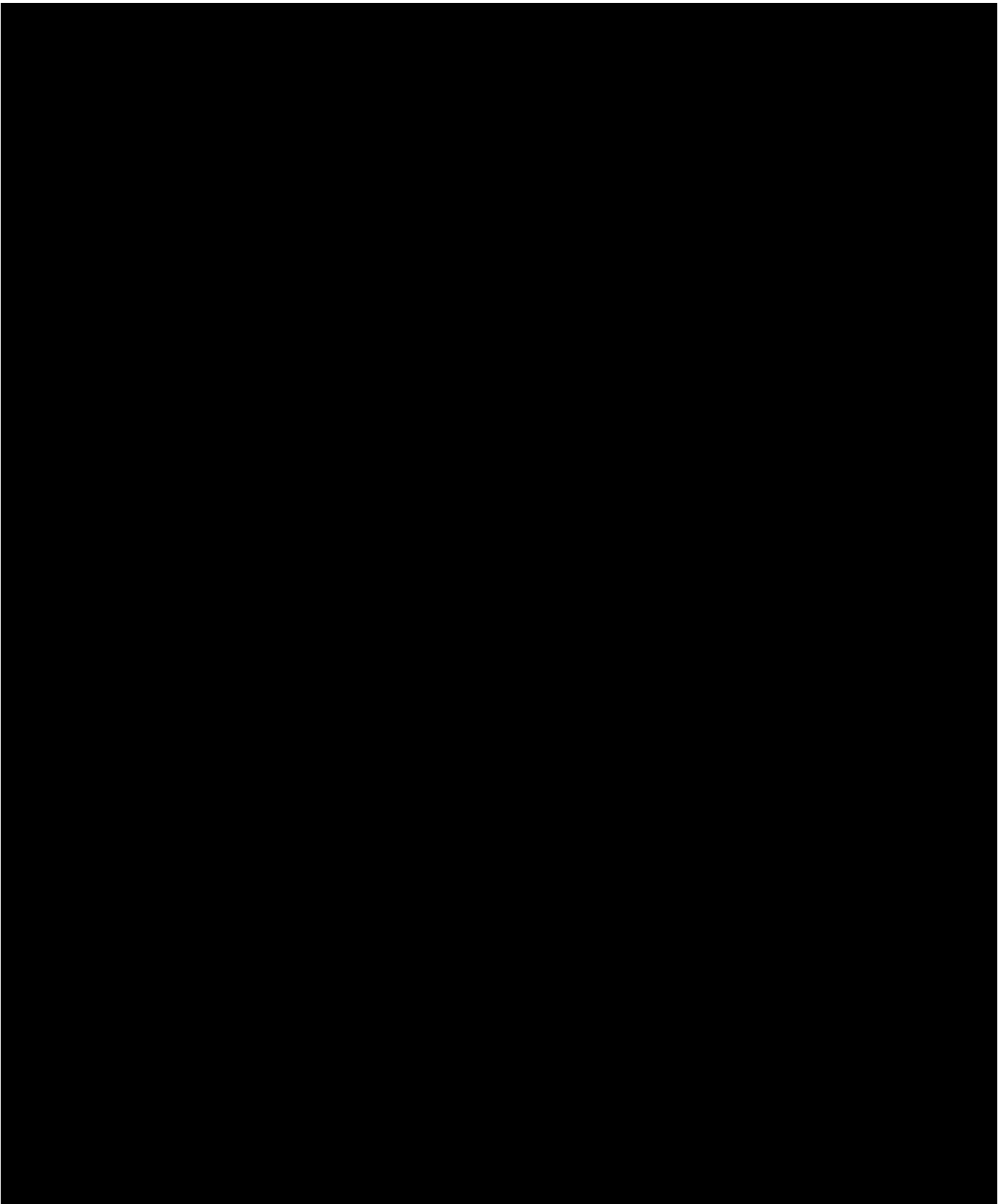
Addendum 7 – Vendor Information (WISDM)

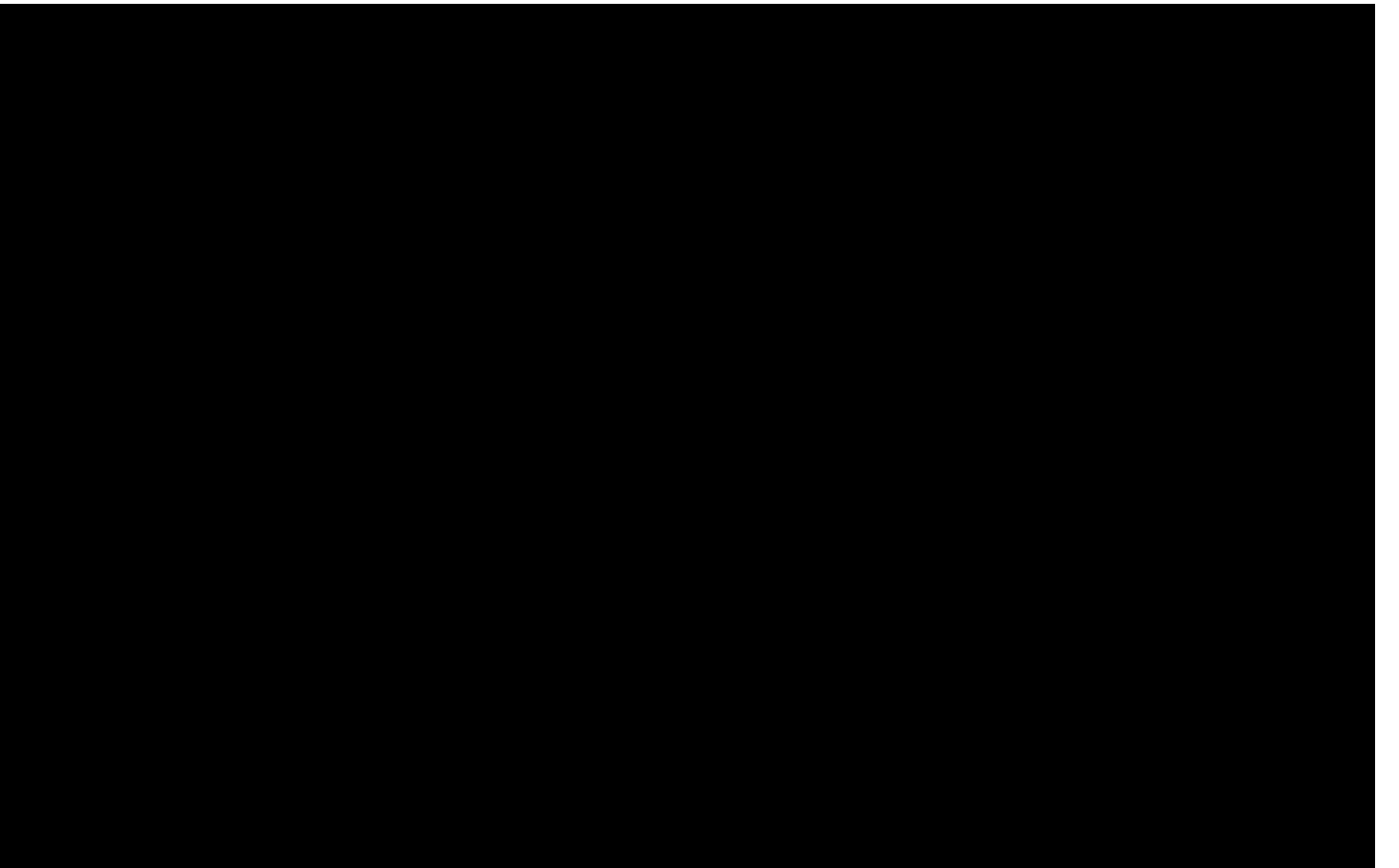
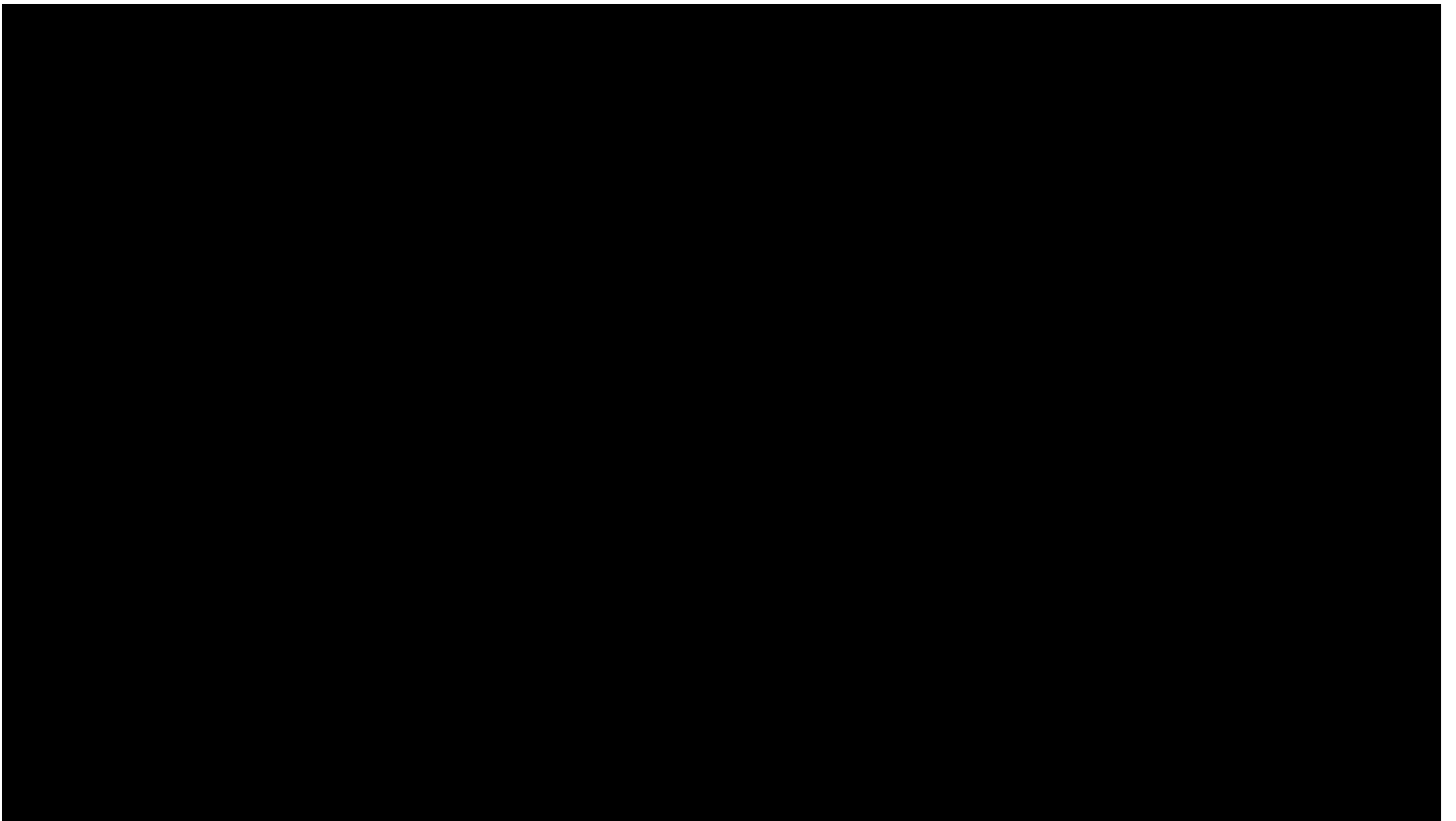














INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4226

Termination of Local Emergency for March 2023 Storms and Spring Runoff

County Administrator - Emergency Services

ACTION REQUIRED

ITEM SUBMITTED BY

Emergency Services

ITEM PRESENTED BY

Mikaela Torres, Emergency Services Manager

RECOMMENDED ACTION:

Approve staff's recommendation to terminate the local emergency proclaimed in response to the 2023 storms and projected spring runoff in March 2023.

BACKGROUND / SUMMARY / JUSTIFICATION:

During your March 14, 2023 Board of Supervisors meeting, your Board took action to approve resolution 2023-08, ratifying the Director of Emergency Services's March 7, 2023 proclamation of the existence of a local emergency. The local emergency was proclaimed in response to the consecutive severe storm systems that swept across Inyo County, the Eastern Sierra, and the State of California in January and February 2023, bringing record amounts of snow and rain to Inyo County, and in anticipation of excessive spring runoff.

Per State law, the governing body shall review the need for continuing the local emergency at least once every 60 days until the governing body terminates the local emergency. Staff recommends the Board conclude this review, and move the County from the Response stage to the Recovery stage of the March 2023 Storms and Spring Runoff.

FISCAL IMPACT:

| | | | |
|---|-----|--------------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| The emergency declaration clears the way for Inyo County applying for disaster aid funding. | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board can choose not to terminate this emergency. This is not recommended as we are well into the recovery stage and the impacts from the March 2023 Storms and Spring Runoff no longer pose a threat to life or property.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:**ATTACHMENTS:**

1. Spring Runoff 2023 Declaration
2. Resolution No. 2023-08 - Ratifying Local Emergency Proclamation

APPROVALS:

| | |
|----------------|--------------------------------|
| Darcy Ellis | Created/Initiated - 11/29/2023 |
| Mikaela Torres | Approved - 11/29/2023 |
| John Vallejo | Approved - 11/29/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

**DECLARATION BY THE DIRECTOR OF EMERGENCY SERVICES
FOR THE COUNTY OF INYO, STATE OF CALIFORNIA,
PROCLAIMING EXISTENCE OF A LOCAL EMERGENCY**

WHEREAS, consecutive severe storm systems resulting from atmospheric river weather phenomena swept across Inyo County, the Eastern Sierra, and the State of California in January and February 2023 bringing record amounts of snow and rain to Inyo County; and,

WHEREAS, the compounding effects of these storm systems damaged County roads and resulted in isolated flooding that necessitated the Inyo County Board of Supervisors proclaiming a local emergency known as the January 2023 Flood Emergency; and,

WHEREAS, these same storm events resulted in the Governor of the State of California issuing a state of emergency proclamation on January 12 and March 1, and the President of the United States approving major disaster declaration on January 14, 2023; and,

WHEREAS, the State of California Department of Water Resources March 2, 2023 Statewide Snow Water Equivalent reports that the Southern Sierra had 232% of normal-to-date snow water equivalent; and,

WHEREAS, additional atmospheric river events are expected to occur on March 9 and March 14, at temperatures warmer than previous storms, as predicted by the National Weather Service, resulting in rain on snow conditions and an increased likelihood of avalanches and flooding; and

WHEREAS, the City of Los Angeles owns the property rights to 90-percent of the surface water in the Owens Valley and, through its Department of Water and Power, maintains and operates an extensive conveyance system to collect and deliver Owens Valley water to the City of Los Angeles; and,

WHEREAS, even in years of normal, or slightly-above normal snowpack, the runoff can result in isolated flooding and damage to private, Tribal, and public property and infrastructure, including County roads, bridges, and campgrounds; and,

WHEREAS, based on its current forecasts, LADWP estimates that overall April, 2023 through March, 2024 runoff in the Owens River drainage will be 800,000 to 1 million acre-feet of water, and may be more than double the normal amount of runoff of 412,284 acre-feet; and,

WHEREAS, current climate trends toward warmer air temperatures may contribute to and exacerbate periods of excessive snowmelt runoff; and,

WHEREAS, in any year, the timing and volume of snowpack runoff is dependent on temperature and precipitation events which may continue throughout the spring and summer and are intrinsically difficult to predict; and,

WHEREAS, the County of Inyo is not a flood control agency and does not have a flood control district; and,

WHEREAS, the ability to avoid or minimize flooding associated with additional storms and runoff is dependent on LADWP's ability to successfully manage its property, diverting water from creeks and

other conveyance structures, and spreading water through its diversion structures, flood basins, and infrequently used ditches and canals; and,

WHEREAS, 2023 storms and runoff conditions threaten the safety of property and persons in Inyo County by flooding private, Tribal, and public property; damaging or destroying infrastructure including roads, bridges, water conveyance and diversion structures, dust control apparatus, sanitary facilities, and campgrounds; creating conditions that propagate mosquitoes and other vectors that harbor disease and threaten public health; and, posing long-term environmental threats associated with the spread of invasive species; and,

WHEREAS, proactively mitigating and responding to the threatened effects of the 2023 storms and anticipated runoff will help ensure the relative safety and enjoyment of millions of visitors that come to Inyo County to enjoy the unparalleled natural wonders of Inyo County and, in turn, protect the County's tourism economy; and,

WHEREAS, the Director of Emergency Services for the County of Inyo found that threatened conditions of disaster and of extreme peril to the safety of persons and property have arisen in Inyo County as the result of additional storm and projected runoff events in 2023; and,

WHEREAS, the Director of Emergency Services finds that these emergency conditions will require additional resources, services, personnel, equipment, and any other assistance, including the combined forces of the mutual aid region to mitigate the effects of the local emergency. These resources are necessary to address immediate threats and to assist in recovery efforts; and,

WHEREAS, Government Code Section 8630, and Inyo County Code Section 2.56.060 empowers the Director of Emergency Services to proclaim the existence of a local emergency when the County Board of Supervisors is not in session and Inyo County is threatened or likely to be threatened by the conditions of disaster or of extreme peril to the safety of persons and property that are or are likely to be beyond the control of the services, personnel, equipment and facilities of this County; and

WHEREAS, the Inyo County Board of Supervisors is not currently in session and cannot immediately be called into session; and

WHEREAS, the Inyo County Board of Supervisors shall take action to ratify this Proclamation within seven days thereafter or the Proclamation shall have no further force or effect.

NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED by the Director of Emergency Services for the County of Inyo that, for the reasons set forth herein, a local emergency now exists throughout Inyo County; and,

BE IT FURTHER RESOLVED AND REQUESTED that the Director of the Governor's Office of Emergency Services concur in this declaration of a local emergency; and,

BE IT FURTHER RESOLVED AND REQUESTED that Governor of the State of California proclaim a State Emergency in Inyo County; and,

BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED that during the existence of this local emergency the powers, functions, and duties of the emergency organization of this County shall be those prescribed by State law, by ordinances, and resolutions, and that this emergency shall be deemed

to continue to exist until either the Governor of the State of California, or the Board of Supervisors of the County of Inyo, State of California, proclaims its termination, or if the Board of Supervisors of the County of Inyo does not ratify this proclamation within seven days of its issuance. Further, it is directed that this emergency proclamation be forwarded to the Director of the Governor's Office of Emergency Services and the Governor of the State of California, with a request for additional resources, services, personnel, and equipment.

APPROVED AND ADOPTED on this 7 day of March, 2023, by the Inyo County Inyo County
Director of Emergency Services.



Nate Greenberg, County Administrative Officer
Director of Emergency Services
County of Inyo, State of California

RESOLUTION NO. 2023-08

**A RESOLUTION OF THE
BOARD OF SUPERVISORS, COUNTY OF INYO, STATE OF CALIFORNIA,
PROCLAIMING THE EXISTENCE OF A LOCAL EMERGENCY RESULTING FROM 2023
STORMS AND PROJECTED SPRING RUNOFF CONDITIONS**

WHEREAS, consecutive severe storm systems resulting from atmospheric river weather phenomena swept across Inyo County, the Eastern Sierra, and the State of California in January and February 2023 bringing record amounts of snow and rain to Inyo County; and,

WHEREAS, the compounding effects of these storm systems damaged County roads and resulted in isolated flooding that necessitated the Inyo County Board of Supervisors proclaiming a local emergency known as the January 2023 Flood Emergency; and,

WHEREAS, these same storm events resulted in the Governor of the State of California issuing a state of emergency proclamation on January 12 and March 1, and the President of the United States approving major disaster declaration on January 14, 2023; and,

WHEREAS, the State of California Department of Water Resources March 2, 2023 Statewide Snow Water Equivalent reports that the Southern Sierra had 232% of normal-to-date snow water equivalent; and,

WHEREAS, additional atmospheric river events are expected to occur on March 9 and March 14, at temperatures warmer than previous storms, as predicted by the National Weather Service, resulting in rain on snow conditions and an increased likelihood of avalanches and flooding; and

WHEREAS, the City of Los Angeles owns the property rights to 90-percent of the surface water in the Owens Valley and, through its Department of Water and Power, maintains and operates an extensive conveyance system to collect and deliver Owens Valley water to the City of Los Angeles; and,

WHEREAS, even in years of normal, or slightly-above normal snowpack, the runoff can result in isolated flooding and damage to private, Tribal, and public property and infrastructure, including County roads, bridges, and campgrounds; and,

WHEREAS, based on its current forecasts, LADWP estimates that overall April, 2023 through March, 2024 runoff in the Owens River drainage will be 800,000 to 1 million acre-feet of water, and may be more than double the normal amount of runoff of 412,284 acre-feet; and,

WHEREAS, current climate trends toward warmer air temperatures may contribute to and exacerbate periods of excessive snowmelt runoff; and,

WHEREAS, in any year, the timing and volume of snowpack runoff is dependent on temperature and precipitation events which may continue throughout the spring and summer and are intrinsically difficult to predict; and,

WHEREAS, the County of Inyo is not a flood control agency and does not have a flood control district; and,

WHEREAS, the ability to avoid or minimize flooding associated with additional storms and runoff is dependent on LADWP's ability to successfully manage its property, diverting water from creeks and other conveyance structures, and spreading water through its diversion structures, flood basins, and infrequently used ditches and canals; and,

WHEREAS, 2023 storms and runoff conditions threaten the safety of property and persons in Inyo County by flooding private, Tribal, and public property; damaging or destroying infrastructure including roads, bridges, water conveyance and diversion structures, dust control apparatus, sanitary facilities, and campgrounds; creating conditions that propagate mosquitoes and other vectors that harbor disease and threaten public health; and, posing long-term environmental threats associated with the spread of invasive species; and,

WHEREAS, proactively mitigating and responding to the threatened effects of the 2023 storms and anticipated runoff will help ensure the relative safety and enjoyment of millions of visitors that come to Inyo County to enjoy the unparalleled natural wonders of Inyo County and, in turn, protect the County's tourism economy; and,

WHEREAS, the Director of Emergency Services for the County of Inyo found that threatened conditions of disaster and of extreme peril to the safety of persons and property have arisen in Inyo County as the result of the storms and projected runoff from precipitation events in 2023, and that these conditions are likely to be beyond the capacity and control of the services, equipment, personnel, facilities and the fiscal resources of the County of Inyo; and,

WHEREAS, the Director of Emergency Services did proclaim the existence of a local emergency within the county on March 7, 2023, a copy of which is attached to this Resolution as Attachment A.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED as follows

Section 1: The Inyo County Board of Supervisors does hereby ratify the declaration of the Director of Emergency Services and proclaims the existence of a Local Emergency in Inyo County as a result of the reasons set forth herein; and,

Section 2: The Inyo County Board of Supervisor's requests the Director of the Governor's Office of Emergency Services concur in this proclamation of a local emergency.

Section 3: A copy of this declaration shall be forwarded to the Governor of California with the request that he proclaim the County of Inyo to be a state of emergency.

Section 4: The Inyo County Board of Supervisors request that this emergency proclamation be forwarded to the Director of the Governor's Office of Emergency Services and the Governor of the State of California, with a request for assistance to mitigate and recover from the threats and effects of the 2023 storms and runoff to the safety of property and persons in Inyo County including threats to private, Tribal, and public property and infrastructure, public health, environmental health, and the County's economy described but not limited herein, including additional resources, services, personnel, and equipment.

Section 5: The Inyo County Board of Supervisors will review the need for continuing the Local Emergency at least every 60 days and, if appropriate, take action to terminate the local emergency as of

the earliest possible date that conditions warrant, pursuant to California Government Code Section 8630(c),

APPROVED AND ADOPTED on this 14th day of March, 2023, by the Inyo County Board of Supervisors, County of Inyo:

AYES: -5- Supervisors Griffiths, Kingsley, Marcellin, Orrill, Roeser
NOES: -0-
ABSTAIN: -0-
ABSENT: -0-



Chair, Board of Supervisors
County of Inyo

ATTEST: Nate Greenberg
Clerk of the Board

By: 

Assistant Clerk of the Board

**DECLARATION BY THE DIRECTOR OF EMERGENCY SERVICES
FOR THE COUNTY OF INYO, STATE OF CALIFORNIA,
PROCLAIMING EXISTENCE OF A LOCAL EMERGENCY**

WHEREAS, consecutive severe storm systems resulting from atmospheric river weather phenomena swept across Inyo County, the Eastern Sierra, and the State of California in January and February 2023 bringing record amounts of snow and rain to Inyo County; and,

WHEREAS, the compounding effects of these storm systems damaged County roads and resulted in isolated flooding that necessitated the Inyo County Board of Supervisors proclaiming a local emergency known as the January 2023 Flood Emergency; and,

WHEREAS, these same storm events resulted in the Governor of the State of California issuing a state of emergency proclamation on January 12 and March 1, and the President of the United States approving major disaster declaration on January 14, 2023; and,

WHEREAS, the State of California Department of Water Resources March 2, 2023 Statewide Snow Water Equivalent reports that the Southern Sierra had 232% of normal-to-date snow water equivalent; and,

WHEREAS, additional atmospheric river events are expected to occur on March 9 and March 14, at temperatures warmer than previous storms, as predicted by the National Weather Service, resulting in rain on snow conditions and an increased likelihood of avalanches and flooding; and

WHEREAS, the City of Los Angeles owns the property rights to 90-percent of the surface water in the Owens Valley and, through its Department of Water and Power, maintains and operates an extensive conveyance system to collect and deliver Owens Valley water to the City of Los Angeles; and,

WHEREAS, even in years of normal, or slightly-above normal snowpack, the runoff can result in isolated flooding and damage to private, Tribal, and public property and infrastructure, including County roads, bridges, and campgrounds; and,

WHEREAS, based on its current forecasts, LADWP estimates that overall April, 2023 through March, 2024 runoff in the Owens River drainage will be 800,000 to 1 million acre-feet of water, and may be more than double the normal amount of runoff of 412,284 acre-feet; and,

WHEREAS, current climate trends toward warmer air temperatures may contribute to and exacerbate periods of excessive snowmelt runoff; and,

WHEREAS, in any year, the timing and volume of snowpack runoff is dependent on temperature and precipitation events which may continue throughout the spring and summer and are intrinsically difficult to predict; and,

WHEREAS, the County of Inyo is not a flood control agency and does not have a flood control district; and,

WHEREAS, the ability to avoid or minimize flooding associated with additional storms and runoff is dependent on LADWP's ability to successfully manage its property, diverting water from creeks and

other conveyance structures, and spreading water through its diversion structures, flood basins, and infrequently used ditches and canals; and,

WHEREAS, 2023 storms and runoff conditions threaten the safety of property and persons in Inyo County by flooding private, Tribal, and public property; damaging or destroying infrastructure including roads, bridges, water conveyance and diversion structures, dust control apparatus, sanitary facilities, and campgrounds; creating conditions that propagate mosquitoes and other vectors that harbor disease and threaten public health; and, posing long-term environmental threats associated with the spread of invasive species; and,

WHEREAS, proactively mitigating and responding to the threatened effects of the 2023 storms and anticipated runoff will help ensure the relative safety and enjoyment of millions of visitors that come to Inyo County to enjoy the unparalleled natural wonders of Inyo County and, in turn, protect the County's tourism economy; and,

WHEREAS, the Director of Emergency Services for the County of Inyo found that threatened conditions of disaster and of extreme peril to the safety of persons and property have arisen in Inyo County as the result of additional storm and projected runoff events in 2023; and,

WHEREAS, the Director of Emergency Services finds that these emergency conditions will require additional resources, services, personnel, equipment, and any other assistance, including the combined forces of the mutual aid region to mitigate the effects of the local emergency. These resources are necessary to address immediate threats and to assist in recovery efforts; and,

WHEREAS, Government Code Section 8630, and Inyo County Code Section 2.56.060 empowers the Director of Emergency Services to proclaim the existence of a local emergency when the County Board of Supervisors is not in session and Inyo County is threatened or likely to be threatened by the conditions of disaster or of extreme peril to the safety of persons and property that are or are likely to be beyond the control of the services, personnel, equipment and facilities of this County; and

WHEREAS, the Inyo County Board of Supervisors is not currently in session and cannot immediately be called into session; and

WHEREAS, the Inyo County Board of Supervisors shall take action to ratify this Proclamation within seven days thereafter or the Proclamation shall have no further force or effect.

NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED by the Director of Emergency Services for the County of Inyo that, for the reasons set forth herein, a local emergency now exists throughout Inyo County; and,

BE IT FURTHER RESOLVED AND REQUESTED that the Director of the Governor's Office of Emergency Services concur in this declaration of a local emergency; and,

BE IT FURTHER RESOLVED AND REQUESTED that Governor of the State of California proclaim a State Emergency in Inyo County; and,

BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED that during the existence of this local emergency the powers, functions, and duties of the emergency organization of this County shall be those prescribed by State law, by ordinances, and resolutions, and that this emergency shall be deemed

to continue to exist until either the Governor of the State of California, or the Board of Supervisors of the County of Inyo, State of California, proclaims its termination, or if the Board of Supervisors of the County of Inyo does not ratify this proclamation within seven days of its issuance. Further, it is directed that this emergency proclamation be forwarded to the Director of the Governor's Office of Emergency Services and the Governor of the State of California, with a request for additional resources, services, personnel, and equipment.

APPROVED AND ADOPTED on this 7 day of March, 2023, by the Inyo County Inyo County Director of Emergency Services.

A handwritten signature in blue ink, appearing to read "Nate Greenberg", written over a horizontal line.

Nate Greenberg, County Administrative Officer
Director of Emergency Services
County of Inyo, State of California



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4227

Continuation of Local Emergency for Tropical Storm Hilary

County Administrator - Emergency Services

ACTION REQUIRED

ITEM SUBMITTED BY

Emergency Services

ITEM PRESENTED BY

Mikaela Torres, Emergency Services Manager

RECOMMENDED ACTION:

Discuss, consider, and approve staff's recommendation to continue the local emergency proclaimed in response to Tropical Storm Hilary.

BACKGROUND / SUMMARY / JUSTIFICATION:

During your August 25, 2023 Board of Supervisors meeting, your Board took action to approve Resolution 2023-24, ratifying the Director of Emergency Services's August 21, 2023 proclamation of the existence of a local emergency. The local emergency was proclaimed in response to the formidable storm system, including heavy rain, flooding, lightning, and strong gusty winds, that passed through the area as a result of Tropical Storm Hilary from August 19-22, 2023.

Per State law, the governing body shall review the need for continuing the local emergency at least once every 60 days until the governing body terminates the local emergency. Staff recommends the Board continue this review, and that Resolution 2023-24 be updated as necessary, until further evaluation of conditions is completed and staff makes the recommendation to end the emergency.

FISCAL IMPACT:

| | | | |
|-----------------------------------|-----|--------------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board can choose not to continue this emergency. This is not recommended as we are still dealing with response and recovery to this emergency.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

ATTACHMENTS:

1. Hurricane Hilary Disaster Declaration
2. Resolution No. 2023-24 - Ratifying Local Emergency Proclamation

APPROVALS:

| | |
|----------------|--------------------------------|
| Darcy Ellis | Created/Initiated - 11/29/2023 |
| Mikaela Torres | Approved - 11/29/2023 |
| John Vallejo | Approved - 11/29/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

**EMERGENCY SERVICES DIRECTOR OF INYO, STATE OF CALIFORNIA
PROCLAIMING EXISTENCE OF A LOCAL EMERGENCY**

WHEREAS, on August 18, 2023, Hurricane Hilary initiated a series of severe weather events, including heavy rain, flooding, lightning, and strong gusty winds, affecting Southern California, particularly Inyo County;

WHEREAS, in response to the developing situation, the National Weather Service issued a sequence of Flood Watches on August 18, 2023, forewarning of the potential for major to historic flooding within Inyo County, spanning the period from August 19, 2023, through August 22, 2023;

WHEREAS, this formidable storm system engendered widespread flooding, necessitating the closure of vital roadways. Notably, a full closure of Highway 395, a critical artery connecting the County with southern California. Furthermore, a full closure of Highway 190 left both inhabitants and visitors within Death Valley National Park stranded. The ramifications extended to essential infrastructure and public transportation systems, compelling the issuance of evacuation advisories and orders;

WHEREAS, the ongoing assessment of the damage incurred by County roads and highways confronts challenges posed by compromised accessibility. Impassable conditions due to washouts and persisting floods have impeded the expeditious evaluation of the extent of destruction;

WHEREAS, Hurricane Hilary's impact, coupled with the consequent debris flow, continues to pose imminent threats to vital infrastructure, both public and private properties, as well as the safety and well-being of the populace residing within the County;

WHEREAS, the Director of Emergency Services finds that these emergency conditions will require additional resources, services, personnel, equipment, and any other assistance, including the combined forces of the mutual aid region to mitigate the effects of the local emergency. These resources are necessary to address immediate threats and to assist in recovery efforts; and,

WHEREAS, Government Code Section 8630, and Inyo County Code Section 2.56.060 empowers the Director of Emergency Services to proclaim the existence of a local emergency when the County Board of Supervisors is not in session and Inyo County is threatened or likely to be threatened by the conditions of disaster or of extreme peril to the safety of persons and property that are or are likely to be beyond the control of the services, personnel, equipment and facilities of this County; and

WHEREAS, the Inyo County Board of Supervisors is not currently in session and cannot immediately be called into session; and

WHEREAS, the Inyo County Board of Supervisors shall take action to ratify this Proclamation within seven days thereafter or the Proclamation shall have no further force or

effect.

NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED by the Director of Emergency Services for the County of Inyo that, for the reasons set forth herein, a local emergency now exists throughout Inyo County; and,

BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED that during the existence of this local emergency the powers, functions, and duties of the emergency organization of this County shall be those prescribed by State law, by ordinances, and resolutions, and that this emergency shall be deemed to continue to exist until either the Governor of the State of California, or the Board of Supervisors of the County of Inyo, State of California, proclaims its termination, or if the Board of Supervisors of the County of Inyo does not ratify this proclamation within seven days of its issuance. Further, it is directed that this emergency proclamation be forwarded to the Director of the Governor's Office of Emergency Services and the Governor of the State of California, with a request for additional resources, services, personnel, and equipment.

APPROVED AND ADOPTED on this 21st day of August, 2023, by the Inyo County Director of Emergency Services.



Nate Greenberg,
County Administrative Officer
Director of Emergency Services
County of Inyo, State of California

RESOLUTION NO. 2023-24

**A RESOLUTION OF THE
BOARD OF SUPERVISORS, COUNTY OF INYO, STATE OF CALIFORNIA,
PROCLAIMING THE EXISTENCE OF A LOCAL EMERGENCY RESULTING
FROM HURRICANE HILARY**

WHEREAS, on August 18, 2023, Hurricane Hilary initiated a series of severe weather events, including heavy rain, flooding, lightning, and strong gusty winds, affecting Southern California, particularly Inyo County;

WHEREAS, in response to the developing situation, the National Weather Service issued a sequence of Flood Watches on August 18, 2023, forewarning of the potential for major to historic flooding within Inyo County, spanning the period from August 19, 2023, through August 22, 2023;

WHEREAS, this formidable storm system engendered widespread flooding, necessitating the closure of vital roadways. Notably, a full closure of Highway 395, a critical artery connecting the County with southern California. Furthermore, a full closure of Highway 190 left both inhabitants and visitors within Death Valley National Park stranded. The ramifications extended to essential infrastructure and public transportation systems, compelling the issuance of evacuation advisories and orders;

WHEREAS, the ongoing assessment of the damage incurred by County roads and highways confronts challenges posed by compromised accessibility. Impassable conditions due to washouts and persisting floods have impeded the expeditious evaluation of the extent of destruction;

WHEREAS, Hurricane Hilary's impact, coupled with the consequent debris flow, continues to pose imminent threats to vital infrastructure, both public and private properties, as well as the safety and well-being of the populace residing within the County;

WHEREAS, the Director of Emergency Services finds that these emergency conditions will require additional resources, services, personnel, equipment, and any other assistance, including the combined forces of the mutual aid region to mitigate the effects of the local emergency. These resources are necessary to address immediate threats and to assist in recovery efforts; and,

WHEREAS, the Director of Emergency Services did proclaim the existence of a local emergency within the county on August 21, 2023, a copy of which is attached to this Resolution as Attachment A.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED as follows

Section 1: The Inyo County Board of Supervisors does hereby ratify the declaration of the Director of Emergency Services and proclaims the existence of a Local Emergency in Inyo County as a result of the reasons set forth herein; and,

Section 2: The Inyo County Board of Supervisors request that this emergency proclamation be forwarded to the Director of the Governor’s Office of Emergency Services and the Governor of the State of California, with a request for assistance to recover from the threats and effects of Hurricane Hilary to the safety of property and persons in Inyo County including threats to private, Tribal, and public property and infrastructure, public health, environmental health, and the County’s economy described but not limited herein, including additional resources, services, personnel, and equipment.

Section 3: The Inyo County Board of Supervisors will review the need for continuing the Local Emergency at least every 30 days and, if appropriate, take action to terminate the local emergency as of the earliest possible date that conditions warrant, pursuant to California Government Code Section 8630(c),

APPROVED AND ADOPTED on this 25th day of August, 2023, by the Inyo County Board of Supervisors, County of Inyo:

AYES:
NOES:
ABSTAIN:
ABSENT:

Chair, Board of Supervisors
County of Inyo

Attest: Nate Greenberg
Clerk of the Board

By: _____
Assistant Clerk of the Board



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4255

Resolutions Approving the Application for Outdoor Equity Grants Program Funds

Health & Human Services

ACTION REQUIRED

ITEM SUBMITTED BY

Stephanie Tanksley, Deputy Director - Public Health Anna Scott, Health & Human Services Director & Prevention

ITEM PRESENTED BY

RECOMMENDED ACTION:

Approve Resolution Nos. 2023-38 and 2023-39, authorizing Health and Human Services to apply for grant funding through the Outdoor Equity Grants Program administered by the California Department of Parks and Recreation.

BACKGROUND / SUMMARY / JUSTIFICATION:

This grant will increase the ability of residents in underserved communities, with an emphasis on students eligible for free or reduced-price meals, foster youth, and students of limited English proficiency, to participate in outdoor experiences in state parks and other public lands. The focus is on providing funding for transportation, logistics, program operations, and capacity costs associated with reaching historically underserved rural communities throughout California. This grant will improve the health and wellness of Californians through new educational and recreational activities, service learning, career pathways, and leadership opportunities that strengthen a connection to the natural world. We aim to have a Community Hub in North and South County and will work with multiple community partners to bring activities within our community, natural area trips, and support educational activities.

Health & Human Services (HHS) currently funds 1 FTE Prevention Specialist assigned to limited outdoor activities through a time-limited Prop 64 grant, in collaboration with Probation, and that funding ends on April 1, 2024. The grant funding in this request will be used to sustain this position and add additional target populations, as well as provide mini-grants within the communities to achieve our goals.

Each resolution delegates the authority to the HHS Deputy Director of Public Health and Prevention to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests, which may be necessary for the completion of the Grant Scope.

The grant application is due December 14, 2023.

FISCAL IMPACT:

| | | | |
|---|--|--------------------|--------|
| Funding Source | Grant Funded (California Department of Parks and Recreation) | Budget Unit | 045100 |
| Budgeted? | No | Object Code | 4499 |
| Recurrence | Ongoing staff expenses | | |
| Current Fiscal Year Impact | | | |
| We will not be using this funding for FY 23/24. | | | |
| Future Fiscal Year Impacts | | | |
| We will use this funding for staff salaries in future budget years when current grants end. | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. Authorizing Resolution - South County
2. Authorizing Resolution - North County

APPROVALS:

| | |
|--------------------|--------------------------------|
| Stephanie Tanksley | Created/Initiated - 10/23/2023 |
| Darcy Ellis | Approved - 10/25/2023 |
| Stephanie Tanksley | Approved - 10/25/2023 |
| Melissa Best-Baker | Approved - 11/1/2023 |
| Anna Scott | Approved - 11/16/2023 |
| Keri Oney | Approved - 11/27/2023 |
| John Vallejo | Approved - 11/27/2023 |
| Amy Shepherd | Approved - 11/28/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

**RESOLUTION OF THE _____ OF _____
Approving the Application for
OUTDOOR EQUITY GRANTS PROGRAM GRANT FUNDS**

WHEREAS, the State Department of Parks and Recreation has been delegated the responsibility by the Legislature of the State of California for the administration of the Outdoor Equity Grants Program, setting up necessary procedures governing the application; and

WHEREAS, said procedures established by the State Department of Parks and Recreation require the Applicant to certify by resolution the approval of the application before submission of said application to the State; and

WHEREAS, successful Applicants will enter into a contract with the State of California to complete the Grant Scope program;

NOW, THEREFORE, BE IT RESOLVED that the _____ hereby:

APPROVES THE FILING OF AN APPLICATION FOR THE _____; AND

1. Certifies that said Applicant has or will have available, prior to commencement of any work on the program(s) included in this application, the sufficient funds to complete the program(s); and
2. Certifies that if the grant is awarded, the Applicant has or will have sufficient funds to operate the program(s) as described in the Grant Selection Criteria response, and
3. Certifies that the Applicant has reviewed, understands, and agrees to the General Provisions contained in the contract shown in the Grant Administration Guide; and
4. Delegates the authority to _____ to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests, which may be necessary for the completion of the Grant Scope; and
5. Agrees to comply with all applicable federal, state and local laws, ordinances, rules, regulations and guidelines.

Approved and adopted the ____ day of _____, _____

I, the undersigned, hereby certify that the foregoing Resolution Number _____ was duly adopted by the _____ following a roll call vote:

Ayes: ____

Noes: ____

Absent: _____(Clerk)

**RESOLUTION OF THE _____ OF _____
Approving the Application for
OUTDOOR EQUITY GRANTS PROGRAM GRANT FUNDS**

WHEREAS, the State Department of Parks and Recreation has been delegated the responsibility by the Legislature of the State of California for the administration of the Outdoor Equity Grants Program, setting up necessary procedures governing the application; and

WHEREAS, said procedures established by the State Department of Parks and Recreation require the Applicant to certify by resolution the approval of the application before submission of said application to the State; and

WHEREAS, successful Applicants will enter into a contract with the State of California to complete the Grant Scope program;

NOW, THEREFORE, BE IT RESOLVED that the _____ hereby:

APPROVES THE FILING OF AN APPLICATION FOR THE _____; AND

1. Certifies that said Applicant has or will have available, prior to commencement of any work on the program(s) included in this application, the sufficient funds to complete the program(s); and
2. Certifies that if the grant is awarded, the Applicant has or will have sufficient funds to operate the program(s) as described in the Grant Selection Criteria response, and
3. Certifies that the Applicant has reviewed, understands, and agrees to the General Provisions contained in the contract shown in the Grant Administration Guide; and
4. Delegates the authority to _____ to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests, which may be necessary for the completion of the Grant Scope; and
5. Agrees to comply with all applicable federal, state and local laws, ordinances, rules, regulations and guidelines.

Approved and adopted the ____ day of _____, _____

I, the undersigned, hereby certify that the foregoing Resolution Number _____ was duly adopted by the _____ following a roll call vote:

Ayes: ____

Noes: ____

Absent: _____(Clerk)



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4318

Contract with Thurmond Consulting for Continuum of Care Grants Management Health & Human Services ACTION REQUIRED

ITEM SUBMITTED BY

Melissa Best-Baker, Deputy Director - Fiscal Oversight and Special Operations

ITEM PRESENTED BY

Anna Scott, Health & Human Services Director

RECOMMENDED ACTION:

- A) Declare Thurmond Consulting, LLC of Sacramento, California a sole-source provider of Continuum of Care (CoC) Grants Management and CoC Coordination;
- B) Ratify and approve the contract between the County of Inyo and Thurmond Consulting, LLC of Sacramento, California for the provision of Continuum of Care (CoC) Grants Management and CoC Coordination in an amount not to exceed \$250,000.00 for the period of July 1, 2023 through June 30, 2025, contingent upon the Board's approval of future budgets; and
- C) Authorize the HHS Director to sign, contingent upon all appropriate signatures being obtained.

BACKGROUND / SUMMARY / JUSTIFICATION:

This item is coming before your board as a ratification due to negotiation of the scope of work details to reflect the full scope of consultation services needed on behalf of the Eastern Sierra Continuum of Care.

In the last year, with Thurmond Consultants' assistance, HHS has successfully submitted Homeless Housing, Assistance and Prevention (HHAP) rounds 3 and 4 funding applications, and is working with IMACA to transfer HHAP rounds 1 and 2 funds to Inyo on behalf of ESCoC. Thurmond Consulting's guidance and direct support in the application and reporting process for these funds has helped us ensure that there are funds available (Estimated at this time to be \$1,475,161) to Inyo, Mono, and Alpine counties for housing projects and client supports.

Thurmond Consulting continues to work with HHS and ESCoC members to complete the timely submission of required annual HUD Planning Grant applications and also provides technical assistance to apply for HUD-Emergency Solutions Grant funding.

Thurmond Consulting has provided technical assistance to Inyo County HHS and the ESCoC for the past year as the CoC responsibilities transitioned from IMACA to Inyo County. HHS is requesting a sole source contract due to Thurmond Consulting's experience with the ESCoC and other rural CoCs in California. Also, renewing this contract will allow for continuity of guidance to meet funding deadlines and knowledge of local issues in Alpine, Inyo, and Mono.

FISCAL IMPACT:

| | | | |
|-----------------------------------|-----------------------------------|--------------------|--------|
| Funding Source | Grant Funded (HUD Federal grants) | Budget Unit | 055900 |
| Budgeted? | Yes | Object Code | 5265 |
| Recurrence | Ongoing Expenditure | | |
| Current Fiscal Year Impact | | | |
| This contract has been budgeted. | | | |
| Future Fiscal Year Impacts | | | |
| N/A | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board could chose not to approve this contract, which could result in the Department missing opportunities to secure local and regional grant funding for housing services and meet reporting requirements on behalf of the regional CoC.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

Mono County Behavioral Health and Social Services, Alpine County Social Services, Eastern Sierra Community Housing, and MediCal Managed Care Plans

ATTACHMENTS:

1. Thurmond FY 23-24 Contract

APPROVALS:

| | |
|--------------------|--------------------------------|
| Melissa Best-Baker | Created/Initiated - 11/15/2023 |
| Darcy Ellis | Approved - 11/16/2023 |
| Anna Scott | Approved - 11/16/2023 |
| Keri Oney | Approved - 11/27/2023 |
| John Vallejo | Approved - 11/28/2023 |
| Amy Shepherd | Approved - 11/29/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

AGREEMENT BETWEEN COUNTY OF INYO
AND _____
FOR THE PROVISION OF _____ **SERVICES**

INTRODUCTION

WHEREAS, the County of Inyo (hereinafter referred to as "County") has the need for the _____ services of _____ of _____ (hereinafter referred to as "Contractor"), and in consideration of the mutual promises, covenants, terms, and conditions hereinafter contained, the parties hereby agree as follows:

TERMS AND CONDITIONS

1. SCOPE OF WORK.

The Contractor shall furnish to the County, upon its request, those services and work set forth in Attachment **A**, attached hereto and by reference incorporated herein. Requests by the County to the Contractor to perform under this Agreement will be made by _____, whose title is: _____. Requests to the Contractor for work or services to be performed under this Agreement will be based upon the County's need for such services. The County makes no guarantee or warranty, of any nature, that any minimum level or amount of services or work will be requested of the Contractor by the County under this Agreement. County by this Agreement incurs no obligation or requirement to request from Contractor the performance of any services or work at all, even if County should have some need for such services or work during the term of this Agreement.

Services and work provided by the Contractor at the County's request under this Agreement will be performed in a manner consistent with the requirements and standards established by applicable federal, state, and County laws, ordinances, regulations, and resolutions. Such laws, ordinances, regulations, and resolutions include, but are not limited to, those which are referred to in this Agreement.

2. TERM.

The term of this Agreement shall be from _____ to _____ unless sooner terminated as provided below.

3. CONSIDERATION.

A. Compensation. County shall pay Contractor in accordance with the Schedule of Fees (set forth as Attachment **B**) for the services and work described in Attachment A which are performed by Contractor at the County's request.

B. Travel and per diem. County shall reimburse Contractor for the travel expenses and per diem which Contractor incurs in providing services and work requested by County under this Agreement. Contractor shall request approval by the County prior to incurring any travel or per diem expenses. Requests by Contractor for approval to incur travel and per diem expenses shall be submitted to _____, whose title is: _____. Travel and Per diem expenses will be reimbursed in accordance with the rates set forth in the Schedule of Travel and Per Diem Payment (Attachment **C**). County reserves the right to deny reimbursement to Contractor for travel or per diem expenses which are either in excess of the amounts that may be paid under the rates set forth in Attachment C, or which are incurred by the Contractor without the prior approval of the County.

C. No additional consideration. Except as expressly provided in this Agreement, Contractor shall not be entitled to, nor receive, from County, any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement. Specifically, Contractor shall not

be entitled, by virtue of this Agreement, to consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays, or other paid leaves of absence of any type or kind whatsoever.

D. Limit upon amount payable under Agreement. The total sum of all payments made by the County to Contractor for services and work performed under this Agreement, including travel and per diem expenses, if any, shall not exceed _____ Dollars (\$ _____) (hereinafter referred to as "contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed, including travel or per diem, which is in excess of the contract limit.

E. Billing and payment. Contractor shall submit to the County, once a month, an itemized statement of all hours spent by Contractor in performing services and work described in attachment A, which were done at the County's request. This statement will be submitted to the County not later than the fifth (5th) day of the month. The statement to be submitted will cover the period from the first (1st) day of the preceding month through and including the last day of the preceding month. This statement will identify the date on which the hours were worked and describe the nature of the work which was performed on each day. Contractor's statement to the County will also include an itemization of any travel or per diem expenses, which have been approved in advance by County, incurred by Contractor during that period. The itemized statement for travel expenses and per diem will include receipts for lodging, meals, and other incidental expenses in accordance with the County's accounting procedures and rules. Upon timely receipt of the statement by the fifth (5th) day of the month, County shall make payment to Contractor on the last day of the month.

F. Federal and State taxes.

(1) Except as provided in subparagraph (2) below, County will not withhold any federal or state income taxes or social security from any payments made by County to Contractor under the terms and conditions of this Agreement.

(2) County will withhold California State income taxes from payments made under this Agreement to non-California resident independent contractors when it is anticipated that total annual payments to Contractor under this Agreement will exceed one thousand four hundred ninety nine dollars (\$1,499.00).

(3) Except as set forth above, County has no obligation to withhold any taxes or payments from sums paid by County to Contractor under this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Contractor. County has no responsibility or liability for payment of Contractor's taxes or assessments.

(4) The total amounts paid by County to Contractor, and taxes withheld from payments to non-California residents, if any, will be reported annually to the Internal Revenue Service and the California State Franchise Tax Board. To facilitate this reporting, Contractor shall complete and submit to the County an Internal Revenue Service (IRS) Form W-9 upon executing this Agreement.

4. WORK SCHEDULE.

Contractor's obligation is to perform, in a timely manner, those services and work identified in Attachment A which are requested by the County. It is understood by Contractor that the performance of these services and work will require a varied schedule. Contractor will arrange his/her own schedule, but will coordinate with County to ensure that all services and work requested by County under this Agreement will be performed within the time frame set forth by County.

5. REQUIRED LICENSES, CERTIFICATES, AND PERMITS.

A. Any licenses, certificates, or permits required by the federal, state, county, or municipal governments for contractor to provide the services and work described in attachment **A** must be procured by Contractor and be valid at the time Contractor enters into this Agreement or as otherwise may be required. Further, during the term of this Agreement, Contractor must maintain such licenses, certificates, and permits in full force and effect. Licenses, certificates, and permits may include, but are not limited to, driver's

licenses, professional licenses or certificates, and business licenses. Such licenses, certificates, and permits will be procured and maintained in force by Contractor at no expense to the County. Contractor will provide County, upon execution of this Agreement, with evidence of current and valid licenses, certificates and permits which are required to perform the services identified in Attachment A. Where there is a dispute between Contractor and County as to what licenses, certificates, and permits are required to perform the services identified in Attachment A, County reserves the right to make such determinations for purposes of this Agreement.

B. Contractor warrants that it is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in covered transactions by any federal department or agency. Contractor also warrants that it is not suspended or debarred from receiving federal funds as listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs issued by the General Services Administration available at: <http://www.sam.gov>.

6. OFFICE SPACE, SUPPLIES, EQUIPMENT, ETC.

Contractor shall provide such office space, supplies, equipment, vehicles, reference materials, and telephone service as is necessary for Contractor to provide the services identified in Attachment A to this Agreement. County is not obligated to reimburse or pay Contractor, for any expense or cost incurred by Contractor in procuring or maintaining such items. Responsibility for the costs and expenses incurred by Contractor in providing and maintaining such items is the sole responsibility and obligation of Contractor.

7. COUNTY PROPERTY.

A. Personal Property of County. Any personal property such as, but not limited to, protective or safety devices, badges, identification cards, keys, etc. provided to Contractor by County pursuant to this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of County. Contractor will use reasonable care to protect, safeguard and maintain such items while they are in Contractor's possession. Contractor will be financially responsible for any loss or damage to such items, partial or total, which is the result of Contractor's negligence.

B. Products of Contractor's Work and Services. Any and all compositions, publications, plans, designs, specifications, blueprints, maps, formulas, processes, photographs, slides, video tapes, computer programs, computer disks, computer tapes, memory chips, soundtracks, audio recordings, films, audio-visual presentations, exhibits, reports, studies, works of art, inventions, patents, trademarks, copyrights, or intellectual properties of any kind which are created, produced, assembled, compiled by, or are the result, product, or manifestation of, Contractor's services or work under this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of the County. At the termination of the Agreement, Contractor will convey possession and title to all such properties to County.

8. INSURANCE.

For the duration of this Agreement Contractor shall procure and maintain insurance of the scope and amount specified in Attachment D and with the provisions specified in that attachment.

9. STATUS OF CONTRACTOR.

All acts of Contractor, its agents, officers, and employees, relating to the performance of this Agreement, shall be performed as independent contractors, and not as agents, officers, or employees of County. Contractor, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of County. Except as expressly provided in Attachment A, Contractor has no authority or responsibility to exercise any rights or power vested in the County. No agent, officer, or employee of the Contractor is to be considered an employee of County. It is understood by both Contractor and County that this Agreement shall not under any circumstances be construed or considered to create an employer-employee relationship or a joint venture. As an independent contractor:

A. Contractor shall determine the method, details, and means of performing the work and services to be provided by Contractor under this Agreement.

B. Contractor shall be responsible to County only for the requirements and results specified in this Agreement, and except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Contractor in fulfillment of this Agreement.

C. Contractor, its agents, officers, and employees are, and at all times during the term of this Agreement shall, represent and conduct themselves as independent contractors, and not as employees of County.

10. DEFENSE AND INDEMNIFICATION.

Contractor shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with Contractor's performance of work hereunder or its failure to comply with any of its obligations contained in the agreement, except such loss or damages which was caused by the sole negligence or willful misconduct of the County.

11. RECORDS AND AUDIT.

A. Records. Contractor shall prepare and maintain all records required by the various provisions of this Agreement, federal, state, and municipal law, ordinances, regulations, and directions. Contractor shall maintain these records for a minimum of four (4) years from the termination or completion of this Agreement. Contractor may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, microphotographs, or other authentic reproduction of such records.

B. Inspections and Audits. Any authorized representative of County shall have access to any books, documents, papers, records, including, but not limited to, financial records of Contractor, which County determines to be pertinent to this Agreement, for the purposes of making audit, evaluation, examination, excerpts, and transcripts during the period such records are to be maintained by Contractor. Further, County has the right, at all reasonable times, to audit, inspect, or otherwise evaluate the work performed or being performed under this Agreement.

12. NONDISCRIMINATION.

During the performance of this Agreement, Contractor, its agents, officers, and employees shall not unlawfully discriminate in violation of any federal, state, or local law, against any employee, or applicant for employment, or person receiving services under this Agreement, because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex. Contractor and its agents, officers, and employees shall comply with the provisions of the Fair Employment and Housing Act (Government Code section 12900, et seq.), and the applicable regulations promulgated thereunder in the California Code of Regulations. Contractor shall also abide by the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said act.

13. CANCELLATION.

This Agreement may be canceled by County without cause, and at will, for any reason by giving to Contractor thirty (30) days written notice of such intent to cancel. Contractor may cancel this Agreement without cause, and at will, for any reason whatsoever by giving thirty (30) days written notice of such intent to cancel to County.

14. ASSIGNMENT.

This is an agreement for the services of Contractor. County has relied upon the skills, knowledge, experience, and training of Contractor as an inducement to enter into this Agreement. Contractor shall not assign or subcontract this Agreement, or any part of it, without the express written consent of County.

Further, Contractor shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

15. DEFAULT.

If the Contractor abandons the work, or fails to proceed with the work and services requested by County in a timely manner, or fails in any way as required to conduct the work and services as required by County, County may declare the Contractor in default and terminate this Agreement upon five (5) days written notice to Contractor. Upon such termination by default, County will pay to Contractor all amounts owing to Contractor for services and work satisfactorily performed to the date of termination.

16. WAIVER OF DEFAULT.

Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided in paragraph twenty-two (22) below.

17. CONFIDENTIALITY.

Contractor further agrees to comply with the various provisions of the federal, state, and county laws, regulations, and ordinances providing that information and records kept, maintained, or accessible by Contractor in the course of providing services and work under this Agreement, shall be privileged, restricted, or confidential. Contractor agrees to keep confidential all such information and records. Disclosure of such confidential, privileged, or protected information shall be made by Contractor only with the express written consent of the County. Any disclosure of confidential information by Contractor without the County's written consent is solely and exclusively the legal responsibility of Contractor in all respects.

Notwithstanding anything in the Agreement to the contrary, names of persons receiving public social services are confidential and are to be protected from unauthorized disclosure in accordance with Title 45, Code of Federal Regulations Section 205.50, the Health Insurance Portability and Accountability Act of 1996, and Sections 10850 and 14100.2 of the Welfare and Institutions Code, and regulations adopted pursuant thereto. For the purpose of this Agreement, all information, records, and data elements pertaining to beneficiaries shall be protected by the provider from unauthorized disclosure.

18. CONFLICTS.

Contractor agrees that it has no interest, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the work and services under this Agreement.

19. POST AGREEMENT COVENANT.

Contractor agrees not to use any confidential, protected, or privileged information which is gained from the County in the course of providing services and work under this Agreement, for any personal benefit, gain, or enhancement. Further, Contractor agrees for a period of two years after the termination of this Agreement, not to seek or accept any employment with any entity, association, corporation, or person who, during the term of this Agreement, has had an adverse or conflicting interest with the County, or who has been an adverse party in litigation with the County, and concerning such, Contractor by virtue of this Agreement has gained access to the County's confidential, privileged, protected, or proprietary information.

20. SEVERABILITY.

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state, or

county statute, ordinance, or regulation, the remaining provisions of this Agreement, or the application thereof, shall not be invalidated thereby, and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

21. FUNDING LIMITATION.

The ability of County to enter this Agreement is based upon available funding from various sources. In the event that such funding fails, is reduced, or is modified, from one or more sources, County has the option to cancel, reduce, or modify this Agreement, or any of its terms within ten (10) days of its notifying Contractor of the cancellation, reduction, or modification of available funding. Any reduction or modification of this Agreement made pursuant to this provision must comply with the requirements of paragraph twenty-two (22) (Amendment).

22. AMENDMENT.

This Agreement may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement, and attached to the original Agreement to maintain continuity.

23. NOTICE.

Any notice, communication, amendments, additions, or deletions to this Agreement, including change of address of either party during the terms of this Agreement, which Contractor or County shall be required, or may desire, to make, shall be in writing and may be personally served, or sent by prepaid first class mail to, the respective parties as follows:

County of Inyo:

_____ Name
Address
City and State

Contractor:

_____ Name
Address
City and State

24. ENTIRE AGREEMENT.

This Agreement contains the entire agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties not embodied herein or incorporated herein by reference, shall be of any force or effect. Further, no term or provision hereof may be changed, waived, discharged, or terminated, unless the same be in writing executed by the parties hereto.

///

////

AGREEMENT BETWEEN COUNTY OF INYO
AND _____
FOR THE PROVISION OF _____ **SERVICES**

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS THIS
____ DAY OF _____, _____.

COUNTY OF INYO

CONTRACTOR

By: _____

By: D. Scott Thurmond

Type or Print Name

Type or Print Name

Dated: _____

Dated: _____

APPROVED AS TO FORM AND LEGALITY:

Grace Weitz

County Counsel

APPROVED AS TO ACCOUNTING FORM:

County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

Personnel Services

APPROVED AS TO INSURANCE REQUIREMENTS:

County Risk Manager

ATTACHMENT A

AGREEMENT BETWEEN COUNTY OF INYO
AND _____
FOR THE PROVISION OF _____ **SERVICES**

TERM:

FROM: _____ **TO:** _____

SCOPE OF WORK:

ATTACHMENT B

AGREEMENT BETWEEN COUNTY OF INYO

AND
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SCHEDULE OF FEES:

ATTACHMENT C

AGREEMENT BETWEEN COUNTY OF INYO

AND
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SCHEDULE OF TRAVEL AND PER DIEM PAYMENT:

ATTACHMENT D

AGREEMENT BETWEEN COUNTY OF INYO

AND
FOR THE PROVISION OF _____ SERVICES

TERM:

FROM: _____ TO: _____

SEE ATTACHED INSURANCE PROVISIONS



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4308

Authorization to Purchase a New Caterpillar Wheel Loader

Public Works - Recycling & Waste Management

ACTION REQUIRED

ITEM SUBMITTED BY

Cap Aubrey, Public Works Deputy Director, Solid Waste

ITEM PRESENTED BY

Michael Errante, Public Works Director

RECOMMENDED ACTION:

Authorize issuance of a purchase order in the amount not to exceed \$311,274, payable to Quinn Company of Lancaster, CA , for one (1) 2024 Caterpillar 938 M Wheel Loader.

BACKGROUND / SUMMARY / JUSTIFICATION:

On August 3, 2021, Your Board approved a 5-year equipment replacement plan for replacing heavy equipment at the Inyo County landfills. Inyo County Recycling and Waste Management (RWM) is in need of a new wheel loader for use at the Bishop landfill. While our current loader is still operational, it is a critical piece of equipment subject to grueling conditions. If your Board approves this purchase, the new machine will be utilized at the Bishop landfill. The addition of this loader is needed at the Bishop Landfill as we have three operators and only two loaders. The addition of the third loader will allow maintenance to be performed and the proper amount of equipment for staff.

Recycling and Waste Management is utilizing Sourcewell, a cooperative purchasing program that provides nationally leveraged pricing. Quinn Company has been authorized to sell this contract directly. The discount offered through Sourcewell provides the County with thirty-eight percent savings off the list price, which makes it highly competitive against comparable products offered on the market. In situations where another government agency has already engaged in a competitive procurement process and the vendor is willing to offer the same contract terms to Inyo County as the other government agency, Inyo County is permitted to procure goods or services from that vendor without engaging in the competitive process. This exception exists because, if another government agency has already taken the time to obtain competitive bids, then there is little value to be gained by having Inyo County repeat the same process. Before engaging in "piggyback" purchasing, the department must review the purchasing and procurement policies of the original government agency to ensure that that agency's standards are at least as rigorous as Inyo County's and to ensure that the price of the good or service offered is at or below the market rate.

FISCAL IMPACT:

| | | | |
|-----------------------|------------------|--------------------|--------|
| Funding Source | Non-General Fund | Budget Unit | 045700 |
|-----------------------|------------------|--------------------|--------|

| | | | |
|-----------------------------------|----------------------|--------------------|------|
| Budgeted? | Yes | Object Code | 5650 |
| Recurrence | One-Time Expenditure | | |
| Current Fiscal Year Impact | | | |
| 2023/2024 | | | |
| Future Fiscal Year Impacts | | | |
| N/A | | | |
| Additional Information | | | |

The funds for the wheel loader will be transferred from the Recycling & Waste Management Capital Improvement und 045701 utilizing the Operating Transfers Out object code 5801, to the Solid Waste budget 045700 Operating Transfers In object code 4998 once the purchase has been made. This purchase will be paid for out of the Recycling & Waste Management Budget 045700 from the Equipment object code 5650.

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board could choose not to authorize the purchase of this loader at this time, however, this is not recommended. Given the age of the equipment currently in use, a major breakdown could substantially hinder operations at the Bishop landfill.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. Quinn Loader Quote

APPROVALS:

| | |
|-----------------|--------------------------------|
| Teresa Elliott | Created/Initiated - 11/13/2023 |
| Darcy Ellis | Approved - 11/13/2023 |
| Teresa Elliott | Approved - 11/15/2023 |
| Breanne Nelums | Approved - 11/15/2023 |
| John Vallejo | Approved - 11/15/2023 |
| Amy Shepherd | Approved - 11/15/2023 |
| Michael Errante | Approved - 11/21/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |



171923-01

Nov 13, 2023

INYO COUNTY SOLID WASTE
Attention: Account Payable
1360 N MAIN STREET
BISHOP, California 93514

Attention: FRED AUBREY

Dear Sir,

We would like to thank you for your interest in our company and our products, and are pleased to quote the following for your consideration.

One (1) New Caterpillar Inc. Model: 938 Wheel Loader

YEAR: 2024

We wish to thank you for the opportunity of quoting on your equipment needs. This quotation is valid for 30 days, after which time we reserve the right to re-quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Daniel Eckels
Machine Sales Representative

One (1) New Caterpillar Inc. Model: 938 Wheel Loader**Standard Equipment****POWERTRAIN**

Cat C7.1 ACERT engine
 -Auto Idle shut down feature
 -Auto Engine RPM
 -Power modes (Standard and Performance)
 -Power by range (High power in range 4)
 -Tier 4 final/Stage V compliant
 -Turbocharged and aftercooled
 -Filtered crankcase breather
 -Diesel particulate filter
 -Selective catalyst reduction
 Dry type air cleaner
 Coolant protection to -34C (-29F)
 Fuel priming pump, automatic
 Fuel Water separator
 Auto Differential lock in front axle
 Axle seal guards
 Enclosed wet disc full hydraulic brakes

Parking brake, electric
 Lubed for life driveshafts
 Hydrostatic transmission with electronic control
 -Operator modes(TC, Hystat, Single Pedal and Ice)
 -Directional shift aggressiveness (Fast, Medium, Slow)
 -Auto Rimpull control, adjust wheel torque
 -Creeper control, adjust ground speed
 Single plane cooling package wide 6 fins per inch density
 Hydraulically driven demand cooling fan
 S-O-S port,engine,coolant,transmission oil

HYDRAULICS

Automatic lift and bucket kickouts, adjustable in-cab
 Bucket and fork modes, adjustable in-cab
 Cylinder damping at kickout and mechanical end stops
 Fine mode control (fast, medium, slow) in Fork Mode
 Hydraulic response setting (fast,

medium, slow)
 Hydraulic diagnostic connectors and S-O-S ports
 Hydraulic sight gauge, visible
 Load sensing hydraulics and steering
 Seat mounted hydraulic joystick controls
 Cat Payload 250 hours of Demo

ELECTRICAL

Alternator, 115-amp, heavy duty
 12V power supply in cab (2)
 Batteries, 1,000 CCA (2) 24 volt system, disconnect switch
 Back up alarm
 Emergency shutdown switch
 LED rear stop and turn lights

Heavy duty gear reduction starter
 Product Link
 Remote jump start post
 Resettable main and critical function breakers
 Rooding lights front and rear

OPERATOR ENVIRONMENT

75 mm (3 in) retractable seatbelt
 Automatic temperature control
 Cab, enclosed ROPS/FOPS pressurized and sound suppressed
 Push to Start
 8 Inch Touch Screen

Sliding glass on the side windows
 Column mounted multi function control
 -lights, wipers, turn signal
 Suspension seat, fabric
 Tilt steering wheel
 Tinted front glass

Jog Dial with Screen Control
Programmable Joystick
Cup holders
External heated mirrors with lower parabolic
Ground level cab door release
Hydraulic control lockout
Interior cab lighting, door
Lunch box storage
Operator warning system indicators
Radio ready speakers
Rear window defrost, electric
Seat mounted electronic implement controls, adjustable

OTHER STANDARD EQUIPMENT

Large-access enclosure doors with adjustable close/open force
Parallel lift loader linkage
Recovery hitch with pin
Remote mounted lubrication points

Wet arm wiper/washer, 2-speed and intermittent, front
Wet arm wiper washer, rear
Mounting Provision
Gauges
-Digital hour meter, odometer and tachometer
-Digital ground speedometer and direction indicator
-Engine coolant temperature gauge
-Fuel and diesel exhaust fluid level indicator
-Hydraulic oil temperature gauge

Vandalism protection-
lockable compartments
1000 hour Service Intervals
(after initial 500)

MACHINE SPECIFICATIONS

| | |
|--------------------------------|----------|
| 938 SWL WASTE CFG2 | 633-0637 |
| LANE 3 ORDER | 0P-9003 |
| PREP PACK, UNITED STATES | 593-8900 |
| STANDARD LIFT, COUPLER READY | 593-8941 |
| HYDRAULICS, 3V | 593-8943 |
| HYDRAULICS, STANDARD | 536-5284 |
| STEERING WHEEL, STANDARD | 579-7718 |
| JOYSTICK 3V, STEERING WHEEL | 593-8916 |
| DIFFERENTIAL, OPEN REAR | 349-8014 |
| ENVIRONMENT, MEDIUM DEBRIS | 579-7722 |
| WEATHER, STANDARD | 579-7730 |
| CAB, STANDARD | 578-1363 |
| CONDITIONER, AIR, R134A | 579-7735 |
| ENGINE | 593-8993 |
| PUSH START, PASSCODE SECURITY | 579-7738 |
| CAMERA, REAR VIEW | 579-7761 |
| MIRRORS, HEAT, ELEC ADJUST | 578-1409 |
| SEAT, DELUXE, TILT AND TELE | 593-8962 |
| LIGHTS, STD, LED | 590-8869 |
| LIGHTS, ROADING, LED, RH | 633-0598 |
| STANDARD RADIO (12V) | 590-8872 |
| PRODUCT LINK, CELLULAR PLE643 | 573-8455 |
| FILM GP, WARNING, PL, ANSI | 638-5475 |
| WINDSHIELD ACCESS STEPS, NONE | 612-1012 |
| TIRES,20.5R25TR TL538S+ *** L5 | 376-0819 |
| FENDERS, DEFLECTORS | 593-8959 |
| CTWT, HEAVY,3770LBS,7PCS | 467-7990 |
| TOOLBOX AUX, NONE | 519-8081 |
| HYDRAULIC OIL, STANDARD | 619-8439 |
| LINES, AUX 3RD, NONE | 536-5329 |
| RIDE CONTROL | 579-7697 |
| BEACON,WARN STROBE, LED AMBER | 600-3781 |
| LIGHTS,WARNING,REVERSE STROBE | 616-0040 |
| MIRRORS, INTERNAL 1X REAR VIEW | 596-5866 |
| VISOR GP-CAB | 342-0215 |
| GUARD, TILT CYLINDER, STD LIFT | 433-9751 |
| GUARD, REAR LIGHTS | 377-1560 |
| GUARD, FRONT LIGHTS | 631-8725 |
| GUARD, POWERTRAIN, LOWER | 349-8165 |
| GUARD, POWERTRAIN, SIDE | 425-1425 |
| GUARD, CRANKCASE | 349-8163 |
| GUARD, DRIVESHAFT | 349-8164 |
| GUARD, HITCH | 391-1990 |
| GUARD, STEERING CYLINDER | 631-3992 |
| PACK, DOMESTIC TRUCK | 0P-0210 |
| QUICK COUPLER,FUSION,EXT DUTY | 579-9949 |
| JUMPER LINES, NONE | 536-5339 |
| BUCKET-GP, 3.5 YD3, FUS, BOCE | 345-2427 |
| FILM GP, WASTE HANDLER | 387-4096 |

| | |
|---------------------------------|---------------------|
| Sell Price | \$389,385.78 |
| Sourcewell Contract #020223-CAT | (\$90,977.76) |
| Freight, Prep, And Delivery | \$11,271.95 |
| Additional Discount | (\$20,801.89) |
| Net Balance Due | \$288,878.08 |
| Sales Tax (7.75%) | \$22,388.05 |
| California State Tire Fee | \$7.00 |
| After Tax Balance | \$311,273.13 |

WARRANTY & COVERAGE

Standard Warranty: 12 Months Full Machine
Extended Coverage: 48 Month/7,000 Hour Powertrain, Hydraulic, and Tech

F.O.B/TERMS:

Bishop Yard/NET 30

Accepted by _____ on _____

Signature



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4309

Approval of Amendment No. 2 to the American Refuse Agreement Public Works - Recycling & Waste Management ACTION REQUIRED

ITEM SUBMITTED BY

Cap Aubrey, Public Works Deputy Director, Solid Waste

ITEM PRESENTED BY

Michael Errante, Public Works Director

RECOMMENDED ACTION:

Approve and ratify Amendment No. 2 to the contract between the County of Inyo and American Refuse of Wasco, CA increasing the contract to an amount not to exceed \$245,000 for waste tire hauling and recycling, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained.

BACKGROUND / SUMMARY / JUSTIFICATION:

On April 20, 2021 your Board approved a three-year agreement with American Refuse to provide for tire hauling and recycling services. Tires cannot be disposed of at the landfill and must be transported to an approved recycling facility. Significantly more tires have been removed than anticipated from the Bishop landfill. However, a backlog still exists. Therefore, it is necessary to increase the not to exceed figure in the contract in order to allow American Refuse to continue to remove tires. The attached amendment increases the not to exceed amount by \$60,000. It is expected that this amount will allow for removal of tires through June 30, 2024 when the current contract expires.

FISCAL IMPACT:

| | | | |
|-----------------------------------|---------------------|--------------------|--------|
| Funding Source | Non-General Fund | Budget Unit | 045700 |
| Budgeted? | Yes | Object Code | 5265 |
| Recurrence | Ongoing Expenditure | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| N/A | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

If the amendment is not approved by your Board, tires will not be removed from the landfill. The County will be in violation of CalRecycle regulations regarding the number of tires allowed on landfill grounds.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. American Refuse Amendment 2
2. American Refuse Amendment 1
3. American Refuse Contract 2021-2024

APPROVALS:

| | |
|-----------------|--------------------------------|
| Teresa Elliott | Created/Initiated - 11/15/2023 |
| Darcy Ellis | Approved - 11/16/2023 |
| Teresa Elliott | Approved - 11/16/2023 |
| Breanne Nelums | Approved - 11/16/2023 |
| Keri Oney | Approved - 11/27/2023 |
| John Vallejo | Approved - 11/27/2023 |
| Amy Shepherd | Approved - 11/28/2023 |
| Michael Errante | Approved - 11/28/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

**AMENDMENT NUMBER 2 TO
AGREEMENT BETWEEN THE COUNTY OF INYO AND
American Refuse Inc
FOR THE PROVISION OF Tire Hauling and Recycling**

WHEREAS, the County of Inyo (hereinafter referred to as "County") and American Refuse Inc, of Wasco, CA (hereinafter referred to as "Contractor"), have entered into an Agreement for the Provision of Independent Contractor Services dated April 20, 2021, on County of Inyo Standard Contract No. 116, for the term from July 1, 2021 to June 30, 2024.

WHEREAS, County and Contractor do desire and consent to amend such Agreement as set forth below;

The first sentence of paragraph 3.D Limit upon amount payable under this agreement is amended to read as follows:

The total sum of all payments made by the County to Contractor for services and work performed under this agreement shall not exceed Two Hundred Forty-Five Thousand Dollars (hereinafter referred to as ("contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed which is in excess of the contract limit.

County will pay contractor amount not to exceed \$245,000 for all work listed in Attached A,

All other items to remain in full force and effect.

The effective date of this Amendment to the Agreement is November 1, 2023.

All the other terms and conditions of the Agreement are unchanged and remain the same.

**AMENDMENT NUMBER 2 TO
AGREEMENT BETWEEN THE COUNTY OF INYO AND
American Refuse Inc
FOR THE PROVISION OF Tire Hauling and Recycling**

WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS _____ DAY OF _____.

COUNTY OF INYO

By: _____

Dated: _____

CONTRACTOR

By: *[Signature]* _____
Signature

Jeff Martin _____
Type or Print

Dated: 11-17-23 _____

APPROVED AS TO FORM AND LEGALITY:

Grace Weitz _____
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Christie Martindale _____
County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

K. Oney _____
Personnel Services

APPROVED AS TO RISK ASSESSMENT:

County Risk Manager

**AMENDMENT NUMBER 2 TO
AGREEMENT BETWEEN THE COUNTY OF INYO AND
American Refuse Inc
FOR THE PROVISION OF Tire Hauling and Recycling**

WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS _____ DAY OF _____.

COUNTY OF INYO

By: _____

Dated: _____

CONTRACTOR

By: _____

Signature

Type or Print

Dated: _____

APPROVED AS TO FORM AND LEGALITY:

Grace Weitz
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Christie Martindale
County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

K. Oney
Personnel Services

APPROVED AS TO RISK ASSESSMENT:

Aaron Holmberg
County Risk Manager

**AMENDMENT NUMBER 1 TO
AGREEMENT BETWEEN THE COUNTY OF INYO AND
American Refuse Inc
FOR THE PROVISION OF Tire Hauling and Recycling**

WHEREAS, the County of Inyo (hereinafter referred to as "County") and American Refuse Inc, of Wasco, CA (hereinafter referred to as "Contractor"), have entered into an Agreement for the Provision of Independent Contractor Services dated April 20, 2021, on County of Inyo Standard Contract No. 116, for the term from July 1, 2021 to June 30, 2024.

WHEREAS, County and Contractor do desire and consent to amend such Agreement as set forth below;

The first sentence of paragraph 3.D Limit upon amount payable under this agreement is amended to read as follows:

The total sum of all payments made by the County to Contractor for services and work performed under this agreement shall not exceed One Hundred Eighty-Five Thousand Dollars (hereinafter referred to as ("contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed which is in excess of the contract limit.

County will pay contractor amount not to exceed \$185,000 for all work listed in Attached A,

All other items to remain in full force and effect.

The effective date of this Amendment to the Agreement is March 1, 2023.

All the other terms and conditions of the Agreement are unchanged and remain the same.

AMENDMENT NUMBER 1 TO
AGREEMENT BETWEEN THE COUNTY OF INYO AND
American Refuse Inc
FOR THE PROVISION OF Tire Hauling and Recycling

WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS 7th DAY OF March, 2023.

COUNTY OF INYO

By: [Signature]

Dated: 03/07/2023

CONTRACTOR

By: [Signature] Signature

Jeff S. Martin
Type or Print

Dated: 1/18/2023

APPROVED AS TO FORM AND LEGALITY:

[Signature]
County Counsel

APPROVED AS TO ACCOUNTING FORM:

[Signature]
County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

[Signature]
Personnel Services

APPROVED AS TO RISK ASSESSMENT:

[Signature]
County Risk Manager

AGREEMENT BETWEEN COUNTY OF INYO

AND AMERICAN REFUSE INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING **SERVICES**

INTRODUCTION

WHEREAS, the County of Inyo (hereinafter referred to as "County") may have the need for the TIRE HAULING & RECYCLING services of AMERICAN REFUSE INCORPORATED of WASCO, CA (hereinafter referred to as "Contractor"), and in consideration of the mutual promises, covenants, terms, and conditions hereinafter contained, the parties hereby agree as follows:

TERMS AND CONDITIONS

1. SCOPE OF WORK.

The Contractor shall furnish to the County, upon its request, those services and work set forth in Attachment A, attached hereto and by reference incorporated herein. Requests by the County to the Contractor to perform under this Agreement will be made by CAP AUBREY, whose title is: RECYCLING SUPERINTENDENT. Requests to the Contractor for work or services to be performed under this Agreement will be based upon the County's need for such services. The County makes no guarantee or warranty, of any nature, that any minimum level or amount of services or work will be requested of the Contractor by the County under this Agreement. County by this Agreement incurs no obligation or requirement to request from Contractor the performance of any services or work at all, even if County should have some need for such services or work during the term of this Agreement.

Services and work provided by the Contractor at the County's request under this Agreement will be performed in a manner consistent with the requirements and standards established by applicable federal, state, and County laws, ordinances, regulations, and resolutions. Such laws, ordinances, regulations, and resolutions include, but are not limited to, those which are referred to in this Agreement.

2. TERM.

The term of this Agreement shall be from JULY 1, 2021 to JUNE 30, 2024 unless sooner terminated as provided below.

3. CONSIDERATION.

A. Compensation. County shall pay to Contractor in accordance with the Schedule of Fees (set forth as Attachment B) for the services and work described in Attachment A which are performed by Contractor at the County's request.

B. Travel and per diem. Contractor will not be paid or reimbursed for travel expenses or per diem which Contractor incurs in providing services and work requested by County under this Agreement.

C. No additional consideration. Except as expressly provided in this Agreement, Contractor shall not be entitled to, nor receive, from County, any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement. Specifically, Contractor shall not be entitled, by virtue of this Agreement, to consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays, or other paid leaves of absence of any type or kind whatsoever.

D. Limit upon amount payable under Agreement. The total sum of all payments made by the County to Contractor for services and work performed under this Agreement shall not exceed ONE HUNDRED THIRTY FIVE THOUSAND DOLLARS Dollars

(\$ 135,000) (hereinafter referred to as "contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed which is in excess of the contract limit.

E. Billing and payment. Contractor shall submit to the County, once a month, an itemized statement of all services and work described in Attachment A, which were done at the County's request. This statement will be submitted to the County not later than the fifth (5th) day of the month. The statement to be submitted will cover the period from the first (1st) day of the preceding month through and including the last day of the preceding month. This statement will identify the date on which the services and work were performed and describe the nature of the services and work which were performed on each day. Upon timely receipt of the statement by the fifth (5th) day of the month, County shall make payment to Contractor on the last day of the month.

F. Federal and State taxes.

(1) Except as provided in subparagraph (2) below, County will not withhold any federal or state income taxes or social security from any payments made by County to Contractor under the terms and conditions of this Agreement.

(2) County will withhold California State income taxes from payments made under this Agreement to non-California resident independent contractors when it is anticipated that total annual payments to Contractor under this Agreement will exceed one thousand four hundred ninety nine dollars (\$1,499.00).

(3) Except as set forth above, County has no obligation to withhold any taxes or payments from sums paid by County to Contractor under this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Contractor. County has no responsibility or liability for payment of Contractor's taxes or assessments.

(4) The total amounts paid by County to Contractor, and taxes withheld from payments to non-California residents, if any, will be reported annually to the Internal Revenue Service and the California State Franchise Tax Board. To facilitate this reporting, Contractor shall complete and submit to the County an Internal Revenue Service (IRS) Form W-9 upon executing this Agreement.

4. WORK SCHEDULE.

Contractor's obligation is to perform, in a timely manner, those services and work identified in Attachment A which are requested by the County. It is understood by Contractor that the performance of these services and work will require a varied schedule. Contractor will arrange his/her own schedule, but will coordinate with County to ensure that all services and work requested by County under this Agreement will be performed within the time frame set forth by County.

5. REQUIRED LICENSES, CERTIFICATES, AND PERMITS.

A. Any licenses, certificates, or permits required by the federal, state, county, municipal governments, for contractor to provide the services and work described in Attachment A must be procured by Contractor and be valid at the time Contractor enters into this Agreement or as otherwise may be required. Further, during the term of this Agreement, Contractor must maintain such licenses, certificates, and permits in full force and effect. Licenses, certificates, and permits may include, but are not limited to, driver's licenses, professional licenses or certificates, and business licenses. Such licenses, certificates, and permits will be procured and maintained in force by Contractor at no expense to the County. Contractor will provide County, upon execution of this Agreement, with evidence of current and valid licenses, certificates and permits which are required to perform the services identified in Attachment A. Where there is a dispute between Contractor and County as to what licenses, certificates, and permits are required to perform the services identified in Attachment A, County reserves the right to make such determinations for purposes of this Agreement.

B. Contractor warrants that it is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in covered transactions by any federal department or agency. Contractor also warrants that it is not suspended or debarred from receiving federal funds as listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs issued by the General Services Administration available at: <http://www.sam.gov>.

6. OFFICE SPACE, SUPPLIES, EQUIPMENT, ET CETERA.

Contractor shall provide such office space, supplies, equipment, vehicles, reference materials, and telephone service as is necessary for Contractor to provide the services identified in Attachment A to this Agreement. County is not obligated to reimburse or pay Contractor, for any expense or cost incurred by Contractor in procuring or maintaining such items. Responsibility for the costs and expenses incurred by Contractor in providing and maintaining such items is the sole responsibility and obligation of Contractor.

7. COUNTY PROPERTY.

A. Personal Property of County. Any personal property such as, but not limited to, protective or safety devices, badges, identification cards, keys, etc. provided to Contractor by County pursuant to this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of County. Contractor will use reasonable care to protect, safeguard and maintain such items while they are in Contractor's possession. Contractor will be financially responsible for any loss or damage to such items, partial or total, which is the result of Contractor's negligence.

B. Products of Contractor's Work and Services. Any and all compositions, publications, plans, designs, specifications, blueprints, maps, formulas, processes, photographs, slides, video tapes, computer programs, computer disks, computer tapes, memory chips, soundtracks, audio recordings, films, audio-visual presentations, exhibits, reports, studies, works of art, inventions, patents, trademarks, copyrights, or intellectual properties of any kind which are created, produced, assembled, compiled by, or are the result, product, or manifestation of, Contractor's services or work under this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of the County. At the termination of the Agreement, Contractor will convey possession and title to all such properties to County.

8. INSURANCE.

For the duration of this Agreement Contractor shall procure and maintain insurance of the scope and amount specified in Attachment C and with the provisions specified in that attachment.

9. STATUS OF CONTRACTOR.

All acts of Contractor, its agents, officers, and employees, relating to the performance of this Agreement, shall be performed as independent contractors, and not as agents, officers, or employees of County. Contractor, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of County. Except as expressly provided in Attachment A, Contractor has no authority or responsibility to exercise any rights or power vested in the County. No agent, officer, or employee of the Contractor is to be considered an employee of County. It is understood by both Contractor and County that this Agreement shall not under any circumstances be construed or considered to create an employer-employee relationship or a joint venture. As an independent contractor:

A. Contractor shall determine the method, details, and means of performing the work and services to be provided by Contractor under this Agreement.

B. Contractor shall be responsible to County only for the requirements and results specified in this Agreement, and except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Contractor in fulfillment of this Agreement.

C. Contractor, its agents, officers, and employees are, and at all times during the term of this Agreement shall, represent and conduct themselves as independent contractors, and not as employees of County.

10. DEFENSE AND INDEMNIFICATION.

Contractor shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with Contractor's performance of work hereunder or its failure to comply with any of its obligations contained in the agreement, except such loss or damages which was caused by the sole negligence or willful misconduct of the County.

11. RECORDS AND AUDIT.

A. Records. Contractor shall prepare and maintain all records required by the various provisions of this Agreement, federal, state, county, municipal, ordinances, regulations, and directions. Contractor shall maintain these records for a minimum of four (4) years from the termination or completion of this Agreement. Contractor may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, microphotographs, or other authentic reproduction of such records.

B. Inspections and Audits. Any authorized representative of County shall have access to any books, documents, papers, records, including, but not limited to, financial records of Contractor, which County determines to be pertinent to this Agreement, for the purposes of making audit, evaluation, examination, excerpts, and transcripts during the period such records are to be maintained by Contractor. Further, County has the right, at all reasonable times, to audit, inspect, or otherwise evaluate the work performed or being performed under this Agreement.

12. NONDISCRIMINATION.

During the performance of this Agreement, Contractor, its agents, officers, and employees shall not unlawfully discriminate in violation of any federal, state, or local law, against any employee, or applicant for employment, or person receiving services under this Agreement, because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex. Contractor and its agents, officers, and employees shall comply with the provisions of the Fair Employment and Housing Act (Government Code section 12900, et seq.), and the applicable regulations promulgated thereunder in the California Code of Regulations. Contractor shall also abide by the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said act.

13. CANCELLATION.

This Agreement may be canceled by County without cause, and at will, for any reason by giving to Contractor thirty (30) days written notice of such intent to cancel. Contractor may cancel this Agreement without cause, and at will, for any reason whatsoever by giving thirty (30) days written notice of such intent to cancel to County.

14. ASSIGNMENT.

This is an agreement for the services of Contractor. County has relied upon the skills, knowledge, experience, and training of Contractor as an inducement to enter into this Agreement. Contractor shall not assign or subcontract this Agreement, or any part of it, without the express written consent of County. Further, Contractor shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

15. DEFAULT.

If the Contractor abandons the work, or fails to proceed with the work and services requested by County in a timely manner, or fails in any way as required to conduct the work and services as required by County, County may declare the Contractor in default and terminate this Agreement upon five (5) days written notice to Contractor. Upon such termination by default, County will pay to Contractor all amounts owing to Contractor for services and work satisfactorily performed to the date of termination.

16. WAIVER OF DEFAULT.

Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided in paragraph twenty-two (22) below.

17. CONFIDENTIALITY.

Contractor further agrees to comply with the various provisions of the federal, state, and county laws, regulations, and ordinances providing that information and records kept, maintained, or accessible by Contractor in the course of providing services and work under this Agreement, shall be privileged, restricted, or confidential. Contractor agrees to keep confidential all such information and records. Disclosure of such confidential, privileged, or protected information shall be made by Contractor only with the express written consent of the County. Any disclosure of confidential information by Contractor without the County's written consent is solely and exclusively the legal responsibility of Contractor in all respects.

Notwithstanding anything in the Agreement to the contrary, names of persons receiving public social services are confidential and are to be protected from unauthorized disclosure in accordance with Title 45, Code of Federal Regulations Section 205.50, the Health Insurance Portability and Accountability Act of 1996, and Sections 10850 and 14100.2 of the Welfare and Institutions Code, and regulations adopted pursuant thereto. For the purpose of this Agreement, all information, records, and data elements pertaining to beneficiaries shall be protected by the provider from unauthorized disclosure.

18. CONFLICTS.

Contractor agrees that it has no interest, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the work and services under this Agreement.

19. POST AGREEMENT COVENANT.

Contractor agrees not to use any confidential, protected, or privileged information which is gained from the County in the course of providing services and work under this Agreement, for any personal benefit, gain, or enhancement. Further, Contractor agrees for a period of two years after the termination of this Agreement, not to seek or accept any employment with any entity, association, corporation, or person who, during the term of this Agreement, has had an adverse or conflicting interest with the County, or who has been an adverse party in litigation with the County, and concerning such, Contractor by virtue of this Agreement has gained access to the County's confidential, privileged, protected, or proprietary information.

20. SEVERABILITY.

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state, or county statute, ordinance, or regulation, the remaining provisions of this Agreement, or the application thereof, shall not be invalidated thereby, and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

21. FUNDING LIMITATION.

The ability of County to enter this Agreement is based upon available funding from various sources. In the event that such funding fails, is reduced, or is modified, from one or more sources, County has the option to cancel, reduce, or modify this Agreement, or any of its terms within ten (10) days of its notifying Contractor of the cancellation, reduction, or modification of available funding. Any reduction or modification of this Agreement made pursuant to this provision must comply with the requirements of paragraph twenty-two (22) (Amendment).

22. AMENDMENT.

This Agreement may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement, and attached to the original Agreement to maintain continuity.

23. NOTICE.

Any notice, communication, amendments, additions, or deletions to this Agreement, including change of address of either party during the terms of this Agreement, which Contractor or County shall be required, or may desire, to make, shall be in writing and may be personally served, or sent by prepaid first class mail to, the respective parties as follows:

County of Inyo
RECYCLING & WASTE MANAGEMENT Department
1360 N MAIN ST Address
BISHOP, CA 93514 City and State

Contractor:
AMERICAN REFUSE, INC Name
1316 J STREET Address
WASCO, CA 93280 City and State

24. ENTIRE AGREEMENT.

This Agreement contains the entire agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties not embodied herein or incorporated herein by reference, shall be of any force or effect. Further, no term or provision hereof may be changed, waived, discharged, or terminated, unless the same be in writing executed by the parties hereto.

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AGREEMENT BETWEEN COUNTY OF INYO
AND AMERICAN REFUSE INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING **SERVICES**

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS 18th DAY OF May, 201

COUNTY OF INYO

CONTRACTOR

By: 
Signature

By: _____
Signature

Jeff Griffiths
Print or Type Name

Print or Type Name

Dated: 05/18/2021

Dated: _____

APPROVED AS TO FORM AND LEGALITY:

County Counsel

Signature

APPROVED AS TO ACCOUNTING FORM:


Signature

County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:


Signature

Personnel Services

APPROVED AS TO INSURANCE REQUIREMENTS:


Signature

County Risk Manager

**AGREEMENT BETWEEN COUNTY OF INYO
AND AMERICAN REFUSE INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING SERVICES**

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS
THIS _____ DAY OF _____, _____

COUNTY OF INYO

CONTRACTOR

By: _____
Signature

By: J. Marnett
Signature

Print or Type Name

Scott Smith
Print or Type Name

Dated: _____

Dated: 4-26-21

APPROVED AS TO FORM AND LEGALITY:

County Counsel

APPROVED AS TO ACCOUNTING FORM:

County Auditor

APPROVED AS TO PERSONNEL REQUIREMENTS:

Personnel Services

APPROVED AS TO INSURANCE REQUIREMENTS:

County Risk Manager

ATTACHMENT A

**AGREEMENT BETWEEN COUNTY OF INYO
AND AMERICAN REFUSE, INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING SERVICES**

TERM:

FROM: 7/01/2021 **TO:** 6/30/2024

SCOPE OF WORK:

The project scope shall include, but not be limited to, all labor, materials, equipment, supplies and permits necessary for the loading, securing, transporting, and recycling of tires, whole or cut. Said scope of work shall include the following:

1. Material to be transported may include waste tires up to 11:24.5 in size including loader and grader tires. Tires may be in an altered state, i.e., cut quartered or sliced.

2. For the County's waste tire diversion program, Contractor shall furnish two (2) empty roll-off bins or truck trailer at the Bishop Sunland Landfill, which shall then be loaded on an as-needed basis by landfill personnel. Upon reaching capacity, and at the County's request, Contractor shall furnish an empty replacement trailer or roll-off bin and remove the full trailer or roll-off bin for hauling to a tire recycling facility. Regardless of the ultimate destination, waste tires shall be used solely for fuel, recycling or other waste diversion purposes or beneficial use, consistent with the intent of the Integrated Waste Management Act of 1989.

3. For the waste tire diversion program, Contractor shall complete the appropriate documentation required by law, including waste manifest forms and tire trip logs developed by the California Integrated Waste Management Board.

4. Prior to payment being made by the County, Contractor shall furnish copies of manifest or bill of lading to the County for each trip performed at the County's request.

ATTACHMENT B

**AGREEMENT BETWEEN COUNTY OF INYO
AND AMERICAN REFUSE, INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING SERVICES**

TERM:

FROM: 7/1/2021 **TO:** 6/30/2024

SCHEDULE OF FEES:

PROVIDE TRAILER OR ROLL-OFF BINS, PICK UP, HAULING AND RECYCLING OF WHOLE AND CUT TIRES,
\$240.00 PER TON.

ATTACHMENT C

**AGREEMENT BETWEEN COUNTY OF INYO
AND AMERICAN REFUSE INC
FOR THE PROVISION OF TIRE HAULING AND RECYCLING SERVICES**

TERM:

FROM: 7/01/2021 **TO:** 6/30/2024

SEE ATTACHED INSURANCE PROVISIONS



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4314

Plans and Specifications for Independence Courthouse HVAC Project Public Works ACTION REQUIRED

ITEM SUBMITTED BY

Michael Errante, Public Works Director

ITEM PRESENTED BY

Michael Errante, Public Works Director

RECOMMENDED ACTION:

Approve the plans and specifications for the Independence Courthouse HVAC Project and authorize the Public Works Director to advertise for bids.

BACKGROUND / SUMMARY / JUSTIFICATION:

In January 2021 the Great Basin Unified Air Pollution Control District (GBUAPCD) took action to provide block grants to each of the four agencies with membership on the District Board for projects that reduce air pollution. The Board of Supervisors approved the nomination of the Inyo County Courthouse HVAC Upgrade Design Project (part of a larger construction scope) as a project that fit the GBUAPCD requirements.

On October 18, 2022, your Board approved awarding the contract for Engineering Consultant Services for the Inyo County Courthouse HVAC Upgrade Design Project to Etchemendy Engineering, Inc. of Reno, NV. The design is complete and ready to go out to advertise for bidding. The Public Works Director is requesting Board approval of the plans and specifications for the Independence County Courthouse HVAC Project and authorization to advertise for bids.

FISCAL IMPACT:

| | | | |
|-----------------------------------|---|--------------------|--------|
| Funding Source | Non-General Fund (Great Basin Funding) | Budget Unit | 011501 |
| Budgeted? | Yes | Object Code | 5640 |
| Recurrence | Ongoing Expenditure through contract completion | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board could choose not to approve the plans and specifications for the Independence Courthouse HVAC project, but this is not recommended since block grant funds from Great Basin Unified Air Pollution Control District have been programmed for this project and not moving forward will result in losing these funds for this highly needed project to improve the efficiency of climate control in the Independence Courthouse.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

Great Basin Unified Air Pollution Control District (GBUAPCD)

ATTACHMENTS:

1. Independence Courthouse HVAC Bid Package

APPROVALS:

| | |
|-----------------|--------------------------------|
| Teresa Elliott | Created/Initiated - 11/15/2023 |
| Darcy Ellis | Approved - 11/15/2023 |
| Breanne Nelums | Approved - 11/17/2023 |
| Michael Errante | Approved - 11/28/2023 |
| John Vallejo | Approved - 11/28/2023 |
| Amy Shepherd | Approved - 11/28/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |

BID PACKAGE AND SPECIAL PROVISIONS



FOR CONSTRUCTION OF

INDEPENDENCE COURT HOUSE HVAC PROJECT

Project No. ZP 22-002

**FOR USE IN CONNECTION WITH INYO COUNTY
STANDARD SPECIFICATIONS, DATED MAY 2020,
GENERAL PREVAILING WAGE RATES IN EFFECT
ON THE DATE THE WORK IS ACCOMPLISHED**

December 2023

Prepared By: Inyo County Public Works

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NOTICE INVITING BIDS FOR

INDEPENDENCE COURT HOUSE HVAC PROJECT
Independence, CA

COUNTY OF INYO

DEPARTMENT OF PUBLIC WORKS

NOTICE INVITING BIDS

The Inyo County Public Works Department is soliciting bids for:

INDEPENDENCE COURT HOUSE HVAC PROJECT

Bid Packages, which include the Notice Inviting Bids, Bid Proposal Forms, Contract and Bond Forms, Special Provisions, and Plans, may only be obtained from the Inyo County (County) Public Works Department (Department) at 168 North Edwards, P. O. Drawer Q, Independence, CA 93526, telephone (760) 878-0201. A non-refundable price of \$15.00 will be charged for each set of Bid Packages requested. The Bid Packages are available for inspection at the Department during regular business hours. Checks are to be made out to "Inyo County Public Works Department." The Bid Package is also available at no charge at the County of Inyo website at www.inyocounty.us. Bidders who obtain Bid Packages over the internet are responsible for notifying Inyo County Public Works Department that they are plan holders. Bidders who fail to notify the Department that they are plan holders may not be notified should any Addenda be issued. If the Department issues any Addenda to the Bid Package that is not acknowledged, the Bid Proposal may be rejected. This project is subject to the State of California Department of Industrial Relations (DIR) prevailing wage labor rates.

Bids must be submitted in a sealed envelope clearly marked with the bidder's name and address, the word "BID", and the Project Title:

INDEPENDENCE COURT HOUSE HVAC PROJECT

To be considered, **bids must be received by the Inyo County Clerk of the Board of Supervisors, 224 North Edwards Street (mailing address: P.O. Box N), Independence, California 93526 at or before 3:30 P.M. on January 3rd, 2024** at which time they will be publicly opened and read aloud. No oral, telegraphic, telephonic, or fax proposals or modifications will be accepted.

General Work Description: Remove and replace the HVAC system at the Inyo County Court House in Independence, CA 93526, per the plans and specifications produced by Etchemendy Engineering of Reno, NV

An optional job walk is scheduled for December 20th, 2023 at 11 A.M. at the Independence Court House located at 168 N. Edwards St, Independence, California. Please RSVP with Greg Waters by email at gwaters@inyocounty.us

All project work is more particularly described in the plans and special provisions. All of the work shall be in accordance with all applicable Federal, State, and local laws, codes, and regulations.

Technical questions related to project work, site conditions, or other related inquiries should be directed to Greg Waters of the Public Works Department at gwaters@inyocounty.us phone: (760) 878-8391. Bids shall conform to and be responsive to the Contract Documents. Bids are required for the entire work described in the Contract Documents.

Each Bid must be submitted on the Bid Proposal Forms furnished as a part of the Bid Package. Each Bid must be accompanied by a Proposal Guarantee in the amount and form described in the Bid Package, in an amount not less than 10% of the amount of the bid, made payable to the order of the County of Inyo. The check or bond shall be given as security that the bidder will enter into the Contract with the County and furnish the required Faithful Performance Bond, Labor and Materials Payment Bond, Certificates and/or original endorsements of insurance, or other required documents. The check or bond may be retained by the County for sixty (60) days or until the Contract is fully executed by the successful bidder and the County, whichever first occurs.

The successful bidder shall be required to furnish a Faithful Performance Bond and a Labor and Materials Payment Bond on the forms provided in the Bid Package and in the amount of 100% of the Contract amount.

The successful bidder must be licensed as required by law, and consistent with the Contract Documents, at the time the contract is awarded, which license shall be a current California Class B - General Building Contractor license or a combination of all specialty classifications that will be required for complete performance of all of the work in accordance with the Contract Documents, and if applicable, a joint venture license as defined in the **Business and Professions Code, Section 7029**. Failure of the bidder to obtain proper and adequate licensing for an award of a contract shall constitute failure to execute the contract and shall result in the forfeiture of the security of the bidder.

In addition to the requirements set forth in this Notice Inviting Bids, all bids shall be subject to the requirements set forth in the Special Provisions, Standard Specifications of the Inyo County Public Works Department, dated May 2020, Contract Documents and other applicable law.

The Contract is subject to the State Contract nondiscrimination and compliance requirements pursuant to **Government Code, Section 12990**, and other applicable law.

The Contract is also subject to and incorporates by reference the provisions of **Public Contract Code, Section 22300**, pursuant to which, the Contractor is permitted to substitute securities for earned retention or have them placed in escrow at the Contractor's expense, as also set forth in Section 1150.15 of the Standard Specifications.

Pursuant to **Section 1725.5 of the Labor Code**, the bidder is required to certify that they, and all subcontractors listed on the submitted Bid Form documents, are registered with the California Department of Industrial Relations.

Pursuant to **Section 1773 of the Labor Code**, the general prevailing wage rates in Inyo County have been determined by the Director of the State Department of Industrial Relations. These wage rates appear in the Department of Transportation publication entitled "General Prevailing Wage Rates," in effect at the time the project is advertised. Future effective wage rates, which

have been predetermined and are on file with the State Department of Industrial Relations, are referenced, but not printed, in said publication. Such rates of wages are on file with the State Department of Industrial Relations and the Public Works Department of the County of Inyo and are available to any interested party upon request.

Inyo County reserves the right at any stage of these proceedings to reject any or all Bids or to waive any immaterial defect in any Bid if it is deemed to be in the best interest of the County.

The definition and meanings of the words used in this Notice Inviting Bids are the same as set forth in **Section 1070, "Abbreviations, Symbols, and Definitions,"** of the Standard Specifications of the Inyo County Public Works Department, dated May 2020.

Each bidder must supply all the information required by the Contract Documents, Special Provisions and Standard Specifications.

County of Inyo
Department of Public Works



Michael Errante,
Director of Public Works

Dated: 11/28, 2023

BID PROPOSAL FORMS FOR

INDEPENDENCE COURT HOUSE HVAC PROJECT Independence, CA

ENCLOSURES:

Bid Proposal Form
Bid Bond
Cashier's or Certified Check Form
Designation of Subcontractors
Certification Regarding Equal Employment Opportunity
Labor Code Section 3700 Contractor's Labor Code Certification
Labor Code Section 1725.5 Contractor and Subcontractor Registration
Public Contract Code Section 7106 (Non-Collusion Affidavit)
Public Contract Code Section 10162 Questionnaire
Public Contract Code Statement (Section 10232)
Inyo County Ordinance No. 1156 (Contracting Preference)
Small Business Enterprise Commitment (Construction Contracts)
Small Business Enterprise Final Report of Utilization of Small Business Enterprise

Independence Court House HVAC Project

BID PROPOSAL FORM

TO: COUNTY OF INYO
Attn.: Inyo County Clerk of Board of Supervisors
224 North Edwards Street, P.O. Box N
Independence, California 93526
(Herein called the "County")

FROM: _____

(Herein called "Bidder")

FOR: **INDEPENDENCE COURT HOUSE HVAC PROJECT**
(Herein called "Project")

In submitting this Bid, Bidder understands and agrees that:

1. BID DEADLINE. Bids must be received no later than 3:30 P.M. on January 3rd, 2023 by the Inyo County Assistant Board Clerk, 224 North Edwards Street (mailing address: P.O. Box N), Independence, CA 93526, at which time they will be publicly opened and read aloud. No oral, telegraphic, telephonic or fax proposals or modifications will be accepted.

2. BID AMOUNT TOTAL. The total amount of this Bid for provision of the services and materials for completion of the Project in accordance with the Contract Documents is set forth herein as:

BID PROPOSAL FORM (con't)

PROJECT BID AMOUNT:

| Description | Quantity | Units | \$/Unit | Total |
|--------------------------|----------|-------|---------|-------|
| Mobilization | 1 | LS | | |
| Housekeeping Pads | 1 | LS | | |
| Pre-Core XRAY Scanning | 1 | LS | | |
| Concrete Cores | 65 | EA | | |
| Structural Reinforcement | 1 | LS | | |
| Piping Enclosures | 180 | LF | | |
| Condensate Piping | 780 | LF | | |
| Demolition & Abatement | 1 | LS | | |
| Rooftop Air Handlers | 1 | LS | | |
| VRF Equipment | 1 | LS | | |
| VRF Piping | 5700 | LF | | |
| Rooftop Ducting | 260 | LF | | |
| Crane | 1 | LS | | |
| Installation | 1 | LS | | |
| Controls | 1 | LS | | |
| Test & Balance | 1 | LS | | |
| Comissioning Units | 1 | LS | | |
| Misc. Patch & Put Back | 1 | LS | | |
| Electrical Modifications | 1 | LS | | |
| | | | | |
| Total | | | | |

LUMP SUM FOR PROJECT (IN NUMBERS): \$ _____

BID TOTAL (IN WORDS): _____

Please see Special Provisions Section for details on what this lump sum must include. No provision in this section is intended or shall be construed to alter the terms and conditions specified in the Contract Documents for payment of any amounts in the event the Project contract is awarded to Bidder pursuant to this Bid.

3. INCLUSION OF ALL COSTS. This Bid includes all costs for all labor, materials, tools, taxes, insurance, transportation, and other related supplies and services to perform all services

Independence Court House HVAC Project

and provide all materials as required by, and in accordance with, the Contract Documents for the Project.

4. CONTRACT DOCUMENTS. The Contract Documents shall constitute the Contract between the parties, which will come into full force and effect upon acceptance, approval, and execution by the Inyo County Board of Supervisors. The Contract Documents are complementary and are incorporated herein by reference and made a part hereof with like force and effect as if all of said documents were set forth in full herein. The Contract Documents include all documents defined as "Contract Documents" in the Standard Specifications of the Inyo County Public Works Department, dated May 2020.

5. ACCEPTANCE. County reserves the right to reject any and all Bids, or part of any Bid, to postpone the scheduled Bid deadline date(s), to make an award in its own best interest, and to waive any irregularities or technicalities that do not significantly affect or alter the substance of an otherwise responsible Bid and that would not affect a Bidder's ability to perform the work adequately as specified. However, this Bid shall remain open and shall not be withdrawn for a period of sixty (60) calendar days after the date designated in the Notice Inviting Bids for publicly opening this Bid. If Bidder receives written notice of the award of the Project Contract to Bidder on or before the sixtieth day, Bidder shall execute the Contract and deliver to County the executed Contract and all of the bonds, certificates and/or endorsements of insurance coverage, and other required documents no later than fifteen (15) calendar days after the date on which Bidder receives such notice.

This solicitation in no way obligates County to award a Bid Contract described herein, nor will County assume any liability for the costs incurred in the preparation and transmittal of Bids in response to this solicitation. County reserves the right to not accept any Bid, to reject any or all Bids, to reject any part of any Bid proposal, to negotiate and modify any Bid, and to waive any defects or irregularities in any Bid at County's sole discretion. Furthermore, County shall have the sole discretion to award a Bid Contract as it may deem appropriate to best serve the interests of County. In this regard, County may consider demonstrated quality of work, responsiveness, comparable experience, professional qualifications, references, and proposed fees. Awards will not be based on cost alone. County does not guarantee a minimum or maximum dollar value for any Contract(s) resulting from this solicitation.

If the Contract Documents require or permit this Bid to include two or more Alternates, County reserves the right to award the Contract for that Alternate which County, in its sole discretion, determines at the time of award to be in County's best interest.

6. TIME OF COMPLETION. The Bidder further specifically agrees to complete all the work no later than the Time for Completion specified in the Contract Special Provisions.

7. ADDENDA. The Bidder acknowledges receipt of the following Addenda and has provided for all Addenda changes in this Bid.

(Fill in Addendum numbers and dates Addenda have been received.)

Independence Court House HVAC Project

If none have been received, enter "NONE".)

WARNING: IF AN ADDENDUM OR ADDENDA HAVE BEEN ISSUED BY THE COUNTY AND NOT NOTED ABOVE AS BEING RECEIVED BY THE BIDDER, THIS PROPOSAL MAY BE REJECTED.

8. BIDDER'S BUSINESS INFORMATION. Bidder provides the following information concerning its business:

Bidder's Name: _____

Address: _____

_____ Zip Code _____
(The above address will be used to send notices or requests for additional information.)

Telephone: () _____

Federal Identification No.: _____

Contractor's License No.: _____ State: _____

Classification: _____ Expiration Date: _____

Type of Business (check one):

Individual (), Partnership (), Joint Venture ()

Corporation (), Other (Specify): _____ ()

Owners, Officers, Partners, or Other Authorized Representatives:

IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation above and list below, names of the president, secretary, treasurer, and chief executive officer/manager thereof; if a partnership, joint venture, or other business entity, state true name of firm above and list below, names of all partners, joint venturers, or for other entities, parties having authority to act on behalf of the entity, such as officers, owners, directors; if bidder or other interested person is an individual, state first, middle, and last names in full above and write "N/A" below.

9. PROPOSAL GUARANTEE. As security for the Bid, this Bid includes one of the following proposal guarantee instruments (the "Proposal Guarantee"), in the amount required by this section, as checked:

- (a) ___ Bid Bond from a corporate surety admitted to issue such bonds in the State of California; or
- (b) ___ Cashier's Check or Certified Check, made payable to the County of Inyo, attached to the form entitled Cashier's or Certified Check; or
- (c) ___ Cash, in legal tender of the United States of America, enclosed in a separate envelope marked "Cash Proposal Guarantee."

The Proposal Guarantee is in the amount of Ten Percent (10%) of the total amount of the Bid. If the Contract Documents require or permit this Bid to include two or more Alternates, the amount of the Proposal Guarantee must not be less than Ten Percent (10%) of the amount of the bid total submitted for the alternate having the highest total bid amount. Only one form of Proposal Guarantee may be submitted with each Bid.

Bidder hereby agrees that County shall be entitled to payment by forfeiture of the Proposal Guarantee if County awards the Project Contract to Bidder, but Bidder fails or refuses to execute the Contract and/or furnish all of the bonds, certificates and/or endorsements of insurance coverage, and other required documents no later than fifteen (15) calendar days after the date on which Bidder receives notice of the award from County.

10. BID PROTEST. In the event a dispute arises concerning the bid process prior to the award of the contract, the party wishing resolution of the dispute shall submit an appeal request in writing to the County Director of Purchasing. Bidder may appeal the recommended award or denial of award, provided the following stipulations are met:

1. Only a bidder who has actually submitted a Bid Proposal is eligible to submit an appeal request/bid protest against another bidder. Subcontractors are not eligible to submit bid protests. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.
2. Appeal must be in writing. The appeal must contain a complete statement of the basis for the protest and all supporting documentation. Materials submitted after the Bid Protest Deadline will not be considered. The protest must refer to the specific portion or portions of the Contract Documents upon which the protest is based. The protest must include the name, address and telephone number of the person representing the protesting bidder if different from the protesting bidder.
3. A copy of the protest and all supporting documents must also be transmitted by fax or by e-mail, by or before the Bid Protest Deadline, to the protested bidder and any other bidder who has a reasonable prospect of receiving an award depending upon the outcome of the protest.

Independence Court House HVAC Project

4. Must be submitted within ten (10) calendar days of the date of the recommended award or denial of award letters.
5. An appeal of a denial of award can only be brought on the following grounds:
 - a. Failure to follow the selection procedures and adhere to requirements specified in the Bid Package or any addenda or amendments.
 - b. There has been a violation of conflict of interest as provided by California Government Code Section 87100 et seq.
 - c. A violation of State or Federal law.
6. Appeals will not be accepted for any other reasons than those stated above. All appeals must be sent to:

Nate Greenberg, Director
County of Inyo
Purchasing Department
224 N. Edwards St.
Independence, CA 93526

County's Purchasing Director shall make a decision concerning the appeal, and notify the Proposer making the appeal, within a reasonable timeframe prior to the tentatively scheduled date for awarding the contract. The decision of County's Purchasing Director shall be deemed final.

11. ADDITIONAL REQUIRED DOCUMENTS. Bidder agrees that, in addition to the Proposal Guarantee, Bidder is required to submit, as a part of this Bid, the following forms properly completed, and signed as required, all of which accompany this Bid Proposal Form and are incorporated herein by this reference:

- (1) Designation of Subcontractors (Public Contract Code section 4100 et seq.)
- (2) Certification Regarding Equal Employment Opportunity (Government Code section 12900 et seq., sections 11135-11139.5)
- (3) Contractor's Labor Code Certification (Labor Code section 3700)
- (4) Contractor and Subcontractor Dept. of Industrial Relations (DIR) Registration (Labor Code section 1725.5)
- (5) Non-Collusion Affidavit (Public Contract Code Section 7106)
- (6) Public Contract Code Section 10162 Questionnaire
- (7) Public Contract Code Statement (Section 10232)
- (8) Small Business Enterprise Commitment (Construction Contracts)
- (9) Small Business Enterprise Final Report of Utilization of Small Business Enterprise

12. DEFINITIONS. The definition and meaning of the words used in this Bid Proposal Form are the same as set forth in **Section 1070, "Abbreviations, Symbols and Definitions,"** of the Standard Specifications of the Inyo County Public Works Department, dated May 2020.

Independence Court House HVAC Project

THE UNDERSIGNED HEREBY DECLARES, UNDER PENALTY OF PERJURY ACCORDING TO THE LAWS OF THE STATE OF CALIFORNIA, THAT THE STATEMENTS, DESIGNATIONS, CERTIFICATIONS, AND REPRESENTATIONS MADE IN THIS BID PROPOSAL, INCLUDING ALL ATTACHMENTS, ARE TRUE AND CORRECT AND HE OR SHE IS THE INDIVIDUAL, MANAGING PARTNER, CORPORATE OFFICER, OR OTHER REPRESENTATIVE, DULY AUTHORIZED BY LAW TO MAKE THIS BID ON BEHALF OF BIDDER, AND BY SIGNING BELOW, MAKES THIS BID ON BEHALF OF BIDDER ACCORDING TO ALL OF THE TERMS AND CONDITIONS SET FORTH OR INCORPORATED BY REFERENCE HEREIN.

(Signature of Authorized Person)

(Date)

(Printed Name)

(Printed Title)

INYO COUNTY PUBLIC WORKS DEPARTMENT

INDEPENDENCE COURT HOUSE HVAC PROJECT

**BID BOND
(BID PROPOSAL GUARANTEE)**

(Not required if a certified or cashier's check or a cash deposit accompanies the bid as a proposal guarantee)

KNOW ALL MEN BY THESE PRESENTS: That we, _____

_____ as Principal, and
(Name of Bidder)

(Name of Corporate Surety)

as Corporate Surety admitted to issue such bonds in the State of California, are held and firmly bound unto the County of Inyo, State of California, in the sum of _____ Dollars (\$ _____) for the payment whereof we hereby bind ourselves, our successors, heirs, executors, and administrators, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that whereas the above bounded Principal is about to submit to the Board of Supervisors of the County of Inyo a bid for the construction of the **INDEPENDENCE COURT HOUSE HVAC PROJECT**, in compliance with the Contract therefor:

Now, if the bid of the Principal shall be accepted and the Contract awarded to the Principal by said Board of Supervisors, and if the Principal shall fail or neglect to enter into the Contract therefor in accordance with the terms of the Principal's bid and the terms set forth in the Bid Package, or to furnish the required Faithful Performance and Labor and Materials Payment Bonds, Certificates of insurance, and other required documents, to the satisfaction of the Board of Supervisors of said County, no later than fifteen (15) calendar days after the Principal has received notice from the County that the Contract has been awarded to the Principal, then the sum guaranteed by this Bond is forfeited to the County of Inyo.

It is expressly agreed and understood that any errors, clerical, mathematical, or otherwise, in the bid shall not be or constitute a defense to a forfeiture of this Bond.

WITNESS our hands and seals this _____ day of _____, 20 ____ A.D.

Principal

(SEAL)

By: _____
(Title of Authorized Person)

(Address for Notices to be sent)

Surety

(SEAL)

By: _____
(Title of Authorized Person)

(Address for Notices to be sent)

NOTE:

THE SIGNATURES OF THE PRINCIPAL (BIDDER) AND THE SURETY MUST EACH BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC (OR OTHER OFFICER AUTHORIZED UNDER CALIFORNIA LAW) AND THE ACKNOWLEDGMENTS MUST BE ATTACHED TO THIS BOND. The Bid Bond must be executed on this form by a corporate surety admitted to issue such bonds in the State of California. No substitutions will be accepted. If an attorney-in-fact signs for the surety, an acknowledged statement from the surety appointing and empowering the attorney-in-fact to execute such bonds in such amounts on behalf of the surety, must accompany the Bid Bond.

ADDRESS OF COUNTY FOR NOTICES TO BE SENT:

**County of Inyo (Attn.: Public Works Director)
224 North Edwards Street, P.O. Box N
Independence, California 93526**

INDEPENDENCE COURT HOUSE HVAC PROJECT

**CASHIER'S OR CERTIFIED CHECK
(BID PROPOSAL GUARANTEE)**

(Not required if Bid Bond accompanies the bid as a proposal guarantee)

A cashier's or certified check in the amount required as a proposal guarantee for the Bid and made payable to the County of Inyo is attached below:

[]

ATTACH CHECK HERE

[]

Bidder (print name): _____

INDEPENDENCE COURT HOUSE HVAC PROJECT

DESIGNATION OF SUBCONTRACTORS

In compliance with the provisions of the **Subletting and Subcontracting Fair Practices Act (Section 4100 et. seq. of the Public Contract Code of the State of California)**, the undersigned bidder has set forth below the full name, and the location of the place of business of each Subcontractor who will perform work or labor or render service to the Prime Contractor in or about the construction of the work or improvement, or a Subcontractor licensed by the State of California who, under subcontract to the Prime Contractor, specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications to which the attached bid is responsive, and the portion of the work which will be done by each Subcontractor for each subcontract in excess of one-half of one percent of the Prime Contractor's total bid, or \$10,000.00, whichever is greater.

The Bidder understands that if he fails to specify a Subcontractor for any portion of the work to be performed under the Contract in excess of one-half of one percent of his bid, or \$10,000.00, whichever is greater, he shall be deemed to have agreed to perform such portion himself, and that he shall not be permitted to sublet or subcontract that portion of the work except in cases of public emergency or necessity, and then only after a finding, produced to writing as a public record of the Awarding Authority, setting forth the facts constituting the emergency or necessity. If no Subcontractors are to be employed on the project, enter the word "none".

| ITEM NO. | DESCRIPTION OF WORK | % OF TOTAL CONTRACT | SUBCONTRACTOR'S LICENSE TYPE, NUMBER, EXPIRATION DATE | NAME, ADDRESS, PHONE NUMBER |
|----------|---------------------|---------------------|---|-----------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Signature of Authorized Person)

(Title)

(Printed Name)

(Date)

CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY
(Government Code Section 12900 et seq., Sections 11135-11139.7)

INDEPENDENCE COURT HOUSE HVAC PROJECT

During the performance of this Contract, the Contractor and its subcontractors shall not unlawfully deny the Contract's benefits to any person, nor shall any person be unlawfully subjected to discrimination under the contract and its performance on the basis of religion, color, ethnic group identification, sex, age, or disability. In addition, the Contractor and its subcontractors shall not discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, age, or sex. The Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free from such discrimination.

The Contractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12900 et seq.), the regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.), and the Provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Government Code, Sections 11135-11139.7).

Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

(Name and Title of Signer)

Signature

Date

Company Name _____

Business Address _____

CONTRACTOR'S LABOR CODE CERTIFICATION
(Labor Code Section 3700 et seq.)

INDEPENDENCE COURT HOUSE HVAC PROJECT

I am aware of the provisions of Section 3700 and following of the Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

(Name and Title of Signer)

Signature

Date

Company Name _____

Business Address _____

CONTRACTOR AND SUBCONTRACTOR REGISTRATION
With
CA Department of Industrial Relations (DIR)
(CA LABOR CODE SECTION 1725.5)

Bidder hereby certifies that they, and all subcontractors listed on the submitted Bid Form documents, are registered with the CA Department of Industrial Relations pursuant to requirements of CA Labor Code Section 1725.5 and will comply with all requirements as noted in the aforementioned CA Labor Code Section.

Signed Name

Date

Printed Name

CA DIR Registration No.

NON-COLLUSION AFFIDAVIT
(Public Contract Code Section 7106)
(Code of Civil Procedure Section 2015.5)

INDEPENDENCE COURT HOUSE HVAC PROJECT

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose. Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on

_____, at _____, _____.
(Date) (City) (State)

(Name and Title of Signer)

Signature

Date

Company Name

Business Address

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

INDEPENDENCE COURT HOUSE HVAC PROJECT

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation:

Yes _____ No _____

If the answer is yes, explain the circumstances in the following space.

By bidder's signature on the Bid Proposal Form, Bidder certifies, under penalty of perjury under the laws of the State of California, that the foregoing statements in accordance with Public Contract Code Section 10162 are true and correct.

PUBLIC CONTRACT CODE STATEMENT (SECTION 10232)

INDEPENDENCE COURT HOUSE HVAC PROJECT

In accordance with **Public Contract Code Section 10232**, the Contractor hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

By Bidder's signature on the Bid Proposal Form, Bidder certifies, under penalty of perjury under the laws of the State of California, that the foregoing statements in accordance with **Public Contract Code Section 10232** are true and correct.

(Name and Title of Signer)

Signature

Date

Company Name _____

Business Address _____

**LOCAL BUSINESS PREFERENCES
INYO COUNTY ORDINANCE NO. 1258
(BY REFERENCE ONLY)**

INDEPENDENCE COURT HOUSE HVAC PROJECT

Local Business Preference (Inyo County Ordinance No. 1258
is by reference only. Please contact Inyo
County Public Works for further information.

INSTRUCTIONS – Small Business Enterprise Commitment (CONSTRUCTION CONTRACTS)
(05/10)

ALL BIDDERS:

PLEASE NOTE: It is the bidder's responsibility to verify that the Small Business Enterprise (SBE) subcontractors are certified by the proper certifying authorities, and submit evidence of that certification with the bid. If a SBE prime contractor is not certified on the date of the bid opening, the SBE prime contractor will not qualify for the contracting preference. If the SBE subcontractor or subcontractors are not certified on the date of bid opening, that portion of that firm's participation will not count toward the minimum ten percent of the monetary value of the work needed to qualify for the contracting preference.

The form requires specific information regarding the construction contract: Total Contract Amount, Bid Opening Date, and Bidder's Name.

Indicate the appropriate bid item number (or numbers); Item of Work and description or services to be subcontracted or materials to be provided by the SBE; the SBE's business license information/expiration date, certification number and its expiration date; the SBE's contact information, including company and contact name, address, and telephone number; and the dollar amount expected to be paid to the SBE.

IMPORTANT: Identify **all** SBE firms participating in the project regardless of tier, including the prime contractor, if an SBE. Names of the First Tier SBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid. **Provide copies of the SBEs' quotes, and if applicable,** a copy of joint venture agreements pursuant to the Subcontractors Listing Law and the Special Provisions.

There is a column for the total SBE dollar amount. Enter the Total Claimed SBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the special provisions. (If 100% of item is not to be performed or furnished by the SBE, describe exact portion of time to be performed or furnished by the SBE.)

This form must be submitted with the bid if the bidder is attempting to qualify for the SBE contracting preference. If the bidder is not attempting to qualify for the SBE contracting preference the form does not need to be submitted.

FINAL REPORT – UTILIZATION OF SMALL BUSINESS ENTERPRISES (SBE), FIRST-TIER SUBCONTRACTORS

| PROJECT: Independence Court House HVAC Project | | | | | CONTRACT COMPLETION DATE | | |
|---|---|-------------------------------|---------------------|--------------------------|---------------------------|--------------------------|-----------------------------|
| PRIME CONTRACTOR | | | BUSINESS ADDRESS | | ESTIMATED CONTRACT AMOUNT | | |
| BID ITEM NO. | SUBCONTRACTOR NAME, BUSINESS ADDRESS, AND PHONE | DESCRIPTION OF WORK PERFORMED | SBE CERT. NUMBER | CONTRACT PAYMENTS | | DATE WORK COMPLETE | DATE OF FINAL PAYMENT |
| | | | | NON-SBE | SBE | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | | \$ | \$ | | |
| | | | TOTAL | \$ | \$ | | |
| (i) Original Commitment | | | | | | | |
| \$ _____ | | | | | | | |
| 2) I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT | | | | | | | |
| CONTRACTOR REPRESENTATIVES SIGNATURE | | | | BUSINESS PHONE NUMBER | | DATE | |
| 4) TO THE BEST OF MY KNOWLEDGE, THE ABOVE INFORMATION IS COMPLETE AND CORRECT | | | | | | | |
| RESIDENT ENGINEER'S SIGNATURE | | | | BUSINESS PHONE NUMBER | | DATE | |

To be completed by the contractor and submitted to the Resident Engineer upon project completion

INSTRUCTIONS - FINAL REPORT – UTILIZATION OF SMALL BUSINESS ENTERPRISES (SBE), FIRST-TIER SUBCONTRACTORS

The form requires specific information regarding the construction project, including the prime contractor name and address, contract completion date, and estimated contract amount. The objective of the form is to describe who did what by bid item numbers and description, asking for specific dollar values of item work completed broken down by subcontractors who performed the work, SBE and non-SBE work forces. SBE prime contractors are required to show the date of work performed by their own forces along with the corresponding dollar value of work.

Indicate appropriate bid item number or numbers, a description of work performed or materials provided, and subcontractor name and address. For those firms who are SBE, enter the SBE certification number. The SBE shall provide their certification number to the contractor and notify the contractor in writing with the date of decertification if their status changes during the course of the project.

The form has two columns for the dollar value to be entered for the item work performed by the subcontractor. The non-SBE column is used to enter the dollar value of work performed by firms who are not certified SBEs. Enter the dollar value of work performed by firms who are SBEs in the SBE column.

If the prime contractor or a subcontractor performing work as a SBE on the project becomes decertified and still performs work after their decertification date, enter the total value performed by the contractor/subcontractor under the appropriate SBE identification column.

If the prime contractor or a subcontractor performing work as a non-SBE on the project becomes certified as a SBE, enter the dollar value of all work performed after certification as a SBE under the appropriate SBE identification column.

Enter the total of each column on the form.

CONTRACT AND BOND FORMS FOR

INDEPENDENCE COURT HOUSE HVAC PROJECT
Independence, CA

ENCLOSURES:

Contract
Faithful Performance Bond
Labor and Material Payment Bond
Insurance Attachment

**CONTRACT
BY AND BETWEEN
THE COUNTY OF INYO
and**

_____, **CONTRACTOR**

for the

_____ **PROJECT**

THIS CONTRACT is awarded by the COUNTY OF INYO to CONTRACTOR on and made and entered into effective, _____, 20____, by and between the COUNTY OF INYO, a political subdivision of the State of California, (hereinafter referred to as "COUNTY"), and _____ (hereinafter referred to as "CONTRACTOR"), for the construction or removal of _____ **PROJECT** (hereinafter referred to as "PROJECT"), which parties agree, for and in consideration of the mutual promises, as follows:

1. SERVICES TO BE PERFORMED. CONTRACTOR shall furnish, at his/her own expense, all labor, materials, methods, processes, implements, tools, machinery, equipment, transportation, permits, services, utilities, and all other items, and related functions and otherwise shall perform all work necessary or appurtenant to construct the Project in accordance with the any and all Contract Documents specified within section 4 of this Contract, within the Time for Completion set forth, as well as in all other in the Contract Documents, for:

Title: _____ **PROJECT**

2. TIME OF COMPLETION. Project work shall begin within _____ calendar days after receipt of the Notice to Proceed (NTP) (or on the start of work date identified in the NTP) and shall continue until all requested services are completed. Said services shall be completed no later than the Time of Completion as noted in the Project's Special Provisions or Scope of Work Attachment. Procedures for any extension of time shall be complied with as noted in the Project's Special Provisions or Scope of Work Attachment.

3. PAYMENT/CONSIDERATION. For the performance of all such work, COUNTY shall pay to CONTRACTOR for said work the total amount of: _____ dollars (\$_____), adjusted by such increases or decreases as authorized in accordance with the Contract Documents, and payable at such times and upon such conditions as otherwise set forth in the Contract Documents.

4. ALL PROVISIONS SET FORTH HEREIN. CONTRACTOR and COUNTY agree that this Contract shall include and consist of (collectively "the Contract Documents"):

- ___ The Bid Proposal Form
- ___ The Bid Bond
- ___ The Faithful Performance Bond

- ___ The Labor and Materials Payment Bond
- ___ Insurance Specifications
- ___ All documents as described in **Section 5-1.02, "Definitions,"** of the Standard Specifications of the Inyo County Public Works Department, dated May 2020
- ___ The Standard Specifications of the Inyo County Public Works Department, dated May 2020
- ___ The Special Provisions concerning this Project including the Appendices and the Plans
- ___ Scope of Work Attachment [negotiated contracts only]
- ___ Any and all amendments or changes to any of the above-listed documents including, without limitation, contract change orders, and any and all documents incorporated by reference into any of the above-listed documents.

All Contract Documents are attached hereto.

5. STANDARD OF PERFORMANCE. Contractor represents that he/she is qualified and licensed to perform the work to be done as required in this Contract. County relies upon the representations of Contractor regarding professional and/or trade training, licensing, and ability to perform the services as a material inducement to enter into this Contract. Acceptance of work by the County does not operate to release Contractor from any responsibility to perform work to professional and/or trade standards. Contractor shall provide properly skilled professional and technical personnel to perform all services under this Contract. Contractor shall perform all services required by this Contract in a manner and according to the standards observed by a competent practitioner of the profession. All work products of whatsoever nature delivered to the County shall be prepared in a manner conforming to the standards of quality normally observed by a person practicing in Contractor's profession and/or trade.

6. INDEPENDENT CONTRACTOR. Nothing contained herein or any document executed in connection herewith, shall be construed to create an employer-employee, partnership or joint venture relationship between County and Contractor, nor to allow County to exercise discretion or control over the manner in which Contractor performs the work or services that are the subject matter of this Contract; provided, however, the work or services to be provided by Contractor shall be provided in a manner consistent with reaching the County's objectives in entering this Contract.

Contractor is an independent contractor, not an employee of County or any of its subsidiaries or affiliates. Contractor will not represent him/herself to be nor hold her/himself out as an employee of County. Contractor acknowledges that s/he shall not have the right or entitlement in or to any of the pension, retirement or other benefit programs now or hereafter available to County's employees. The consideration set forth in Paragraph 3 shall be the sole consideration due Contractor for the services rendered hereunder. It is understood that County will not withhold any amounts for payment of taxes from the Contractor's compensation hereunder. Any and all sums due under any applicable state, federal or municipal law or union or professional and/or trade guild regulations shall be Contractor's sole responsibility. Contractor shall indemnify and hold County harmless from any and all damages, claims and expenses arising out of or resulting from any claims asserted by any third party, including but not limited to a taxing authority, as a result of or in connection with payments due it from Contractor's compensation.

7. ASSIGNMENT AND SUBCONTRACTING. The parties recognize that a substantial inducement to County for entering into this Contract is the professional reputation, experience and competence of Contractor. Assignments of any and/or all rights, duties or obligations of the Contractor under this Contract will be permitted only with the express consent of the County. Contractor shall not subcontract any portion of the work to be performed under this Contract without the written authorization of the County. If County consents to such subcontract, Contractor shall be fully responsible to County for all acts or omissions of the subcontractor. Nothing in this Contract shall create any contractual relationship between County and subcontractor, nor shall it create any obligation on the part of the County to pay any monies due to any such subcontractor, unless otherwise required by law.

8. INDEMNIFICATION. Contractor shall hold harmless, defend and indemnify County and its officers, officials, employees and volunteers from and against all claims, damages, losses, and expenses, including attorney fees arising out of the performance of the work described herein, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the County.

9. POLITICAL REFORM ACT. Contractor is not a designated employee within the meaning of the Political Reform Act because Contractor:

a. Will conduct research and arrive at conclusions with respect to his/her rendition of information, advice, recommendation or counsel independent of the control and direction of the County or of any County official, other than normal Contract monitoring; and

b. Possesses no authority with respect to any County decision beyond rendition of information, advice, recommendation or counsel [FPPC Reg. 18700(a)(2)].

10. COMPLIANCE WITH ALL LAWS.

Performance Standards: Contractor shall use the standard of care in its profession and/or trade to comply with all applicable federal, state and local laws, codes, ordinances and regulations that relate to the work or services to be provided pursuant to this Contract.

a. Safety Training:

i. Contractor shall provide such safety and other training as needed to assure work will be performed in a safe and healthful manner "in a language" that is understandable to employees receiving the training. The training shall in all respects be in compliance with CAL OSHA; and

ii. Contractor working with employees shall maintain a written Injury and Illness Prevention (IIP) Program, a copy of which must be maintained at each worksite or at a central worksite identified for the employees, if the Contractor has non-fixed worksites; and

iii. Contractor using subcontractors with the approval of the County to perform the work which is the subject of this Contract shall require each subcontractor working with employees to comply with the requirements of this section.

b. Child, Family and Spousal Support reporting Obligations:

i. Contractor shall comply with the state and federal child, family and spousal support reporting requirements and with all lawfully served wage and earnings assignment orders or notices of assignment relating to child, family and spousal support obligations.

c. Nondiscrimination:

i. Contractor shall not discriminate in employment practices or in the delivery of services on the basis of membership in a protected class which includes any class recognized by law and not limited to race, color, religion, sex (gender), sexual orientation, marital status, national origin (Including language use restrictions), ancestry, disability (mental and physical, including HIV and Aids), medical Conditions (cancer/genetic characteristics), age (40 and above) and request for family care leave.

ii. Contractor represents that it is in compliance with federal and state laws prohibiting discrimination in employment and agrees to stay in compliance with the Americans with Disabilities Act of 1990 (42 U.S.C. sections 12101, et. seq.), Age Discrimination in Employment Act of 1975 (42 U.S.C. 5101, et. seq.), Title VII (42 U.S.C. 2000, et. seq.), the California Fair Employment Housing Act (California Government Code sections 12900, et. seq.) and regulations and guidelines issued pursuant thereto.

11. LICENSES. Contractor represents and warrants to County that it has all licenses, permits, qualifications, insurance and approvals of whatsoever nature which are legally required of Contractor to practice its trade and/or profession. Contractor represents and warrants to County that Contractor shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Contract, any licenses, permits, insurance and approvals which are legally required of Contractor to practice its profession.

12. PREVAILING WAGE. Pursuant to **Section 1720 et seq. of the Labor Code**, Contractor agrees to comply with the Department of Industrial Relations regulations, to which this Contract is subject, the prevailing wage per diem rates in Inyo County have been determined by the Director of the State Department of Industrial Relations. These wage rates appear in the Department publication entitled "General Prevailing Wage Rates," in effect at the time the project is advertised. Future effective wage rates, which have been predetermined and are on file with the State Department of Industrial Relations are referenced but not printed in said publication. Such rates of wages are also on file with the State Department of Industrial Relations and the offices of the Public Works Department of the County of Inyo and are available to any interested party upon request. Contractor agrees to comply with County and the Department of Industrial Relations regulations in submitting the certified payroll.

13. CONTROLLING LAW VENUE. This Contract is made in the County of Inyo, State of California. The parties specifically agree to submit to the jurisdiction of the Superior Court of California for the County of Inyo.

14. WRITTEN NOTIFICATION. Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other party shall be in writing and either served personally or sent prepaid, first class mail. Any such notice, demand, et cetera, shall be addressed to the other party at the address set forth herein below. Either party may change its address by notifying the other party of the change of address. Notice shall be deemed communicated within 48 hours from the time of mailing if mailed as provided in this section.

If to County: County of Inyo
Public Works Department
Attn: _____

168 N. Edwards
PO Drawer Q
Independence, CA 93526

If to Contractor: _____

- 15. AMENDMENTS.** This Contract may be modified or amended only by a written document executed by both Contractor and County and approved as to form by Inyo County Counsel.
- 16. WAIVER.** No failure on the part of either party to exercise any right or remedy hereunder shall operate as a waiver of any other right or remedy that party may have hereunder.
- 17. TERMINATION.** This Contract may be terminated for the reasons stated below:
- a. Immediately for cause, if either party fails to perform its responsibilities under this Contract in a timely and professional manner and to the satisfaction of the other party or violates any of the terms or provisions of this Contract; or
 - b. By County upon oral notice from the Board of Supervisors based on funding ending or being materially decreased during the term of this Contract.
- 18. TIME IS OF THE ESSENCE.** Time is of the essence for every provision.
- 19. SEVERABILITY.** If any provision of this Contract is held to be invalid, void or unenforceable, the remainder of the provision and/or provisions shall remain in full force and effect and shall not be affected, impaired or invalidated.
- 20. CONTRACT SUBJECT TO APPROVAL BY BOARD OF SUPERVISORS.** It is understood and agreed by the parties that this Contract is subject to the review and approval by the Inyo County Board of Supervisors upon Notice. In the event that the Board of Supervisors declines to enter into or approve said Contract, it is hereby agreed to that there is, in fact, no binding agreement, either written or oral, between the parties herein.
- 21. ATTACHMENTS.** All attachments referred to are incorporated herein and made a part of this Contract.
- 22. EXECUTION.** This Contract may be executed in several counterparts, each of which shall constitute one and the same instrument and shall become binding upon the parties. In approving this Contract, it shall not be necessary to produce or account for more than one such counterpart.
- 23. ENTIRE AGREEMENT.** This Contract, including the Contract Documents and all other documents which are incorporated herein by reference, constitutes the complete and exclusive agreement between the County and Contractor. All prior written and oral communications, including correspondence, drafts, memoranda, and representations, are

superseded in total by this Contract.

---o0o---

IN WITNESS WHEREOF, COUNTY and CONTRACTOR have each caused this Contract to be executed on its behalf by its duly authorized representative, effective as of the day and year first above written.

COUNTY

CONTRACTOR

COUNTY OF INYO

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Dated: _____

Dated: _____

APPROVED AS TO FORM AND LEGALITY:

County Counsel

APPROVED AS TO ACCOUNTING FORM:

County Auditor

APPROVED AS TO INSURANCE REQUIREMENTS:

County Risk Manager

ATTACHMENT 1

PROJECT

**FAITHFUL PERFORMANCE BOND
(100% OF CONTRACT AMOUNT)**

KNOW ALL MEN BY THESE PRESENTS: That _____

_____ as Principal, hereinafter "Contractor,"
(Name of Contractor)

and _____
(Name of Corporate Surety)

as Corporate Surety, hereinafter called Surety, are held and firmly bound unto the County of Inyo as Obligee, hereinafter called County, in the amount of _____ dollars (\$ _____), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assignees, jointly and severally, firmly by these presents.

WHEREAS, Contractor has, by written Contract, dated _____, 20____, entered into an Contract with the County for the Construction of the _____ **PROJECT** (hereinafter referred to as "Project"), to be constructed in accordance with the terms and conditions set forth in the Contract for the Project, which contract is by reference incorporated herein and is hereinafter referred to as the "Contract."

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the County.

Whenever Contractor shall be, and is declared by County to be, in default under the Contract, the County having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly either:

1. Complete the Contract in accordance with its terms and conditions; or,
2. Obtain a Bid or Bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible Bidder, or if the County elects, upon determination by the County and the Surety jointly of the lowest responsible Bidder, arrange for a Contract between such Bidder and County, and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The

term "balance of the Contract price", as used in this paragraph, shall mean the total amount payable by County to Contractor under the Contract and any amendments thereto, less the amount properly paid by County to Contractor.

Any suit under this Bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due, or the date on which any warranty or guarantee period expires, whichever is later.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the County named herein.

---o0o---

Signed and sealed this _____ day of _____, 20 ____.

(Name of Corporate Surety)

By: _____
(Signature)

(SEAL)

(Title of Authorized Person)

(Address for Notices to be Sent)

(Name of Contractor)

By: _____
(Signature)

(SEAL)

(Title of Authorized Person)

(Address for Notices to be Sent)

NOTE: THE SIGNATURES OF THE CONTRACTOR AND THE SURETY MUST EACH BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC (OR OTHER OFFICER AUTHORIZED UNDER CALIFORNIA LAW) AND THE ACKNOWLEDGMENTS MUST BE ATTACHED TO THIS BOND.

The Faithful Performance Bond must be executed by a corporate surety on this form. No substitutions will be accepted. If an attorney-in-fact signs for the surety, an acknowledged statement from the surety appointing and empowering the attorney-in-fact to execute such bonds in such amounts on behalf of the surety must accompany the Faithful Performance Bond.

ADDRESS OF COUNTY FOR NOTICES TO BE SENT:

County of Inyo
224 North Edwards Street, P.O. Box N
Independence, California 93526

(SEAL)

(Name of Contractor)

By: _____
(Signature)

(Title of Authorized Person)

(Address for Notices to be Sent)

County of Inyo

Obligee

By: _____
(Signature)

(Title of Authorized Person)

(Address for Notices to be Sent)

Department of Parks and Recreation,
Division of Boating and Waterways

Obligee

By: _____
(Signature)

(Title of Authorized Person)

(Address for Notices to be Sent)

ATTACHMENT 2

PROJECT

**LABOR AND MATERIALS PAYMENT BOND
(100% OF CONTRACT AMOUNT)**

KNOW ALL MEN BY THESE PRESENTS, that _____
(Name of Contractor)

_____ as Principal, hereinafter "CONTRACTOR,"

and _____
(Name of Corporate Surety)

as Corporate Surety, hereinafter called SURETY, are held and firmly bound unto the County of Inyo as Obligee, hereinafter called COUNTY, for the use and benefit of claimants as hereinafter defined in the amount of _____ dollars (\$ _____) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assignees, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written contract dated _____, 20 _____, entered into an Contract with the County for the construction of the _____ **PROJECT** (hereinafter referred to as "PROJECT"), to be constructed in accordance with the terms and conditions set forth in the contract for the PROJECT, which contract is by reference incorporated herein, and is hereinafter referred to as the "CONTRACT."

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly make payment to all claimants as hereinafter defined, for all labor and materials used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Contractor, or with a Subcontractor of the Contractor, for labor, materials, or both, used or reasonably required for use in the performance of the Contract. Labor and materials is construed to include, but not limited to, that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Contractor and Surety hereby jointly agree with the County that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) calendar days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this Bond for the benefit of such claimant, prosecute the suit to final judgment for such sum or sums

as may be justly due claimant, and have execution thereon. The County shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

- a) Unless claimant, other than one having a direct contract with the Contractor, shall have given written notice to any two of the following: the Contractor, the County, or the Surety above named, within ninety (90) calendar days after such claimant did or performed the last of the work or labor, or furnished the last of the material for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in any envelope addressed to the Contractor, County, or Surety, at the address below, or at any place where an office is regularly maintained for the transaction of their business. Such notice may also be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
- b) After the expiration of one (1) year following the date on which County accepted the work done under the Contract. However, if any limitation embodied in this Bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
- c) Other than in a State Court of competent jurisdiction in and for the County or other political subdivision of the state in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed or recorded against said Project, whether or not claim for the amount of such lien be presented under and against this Bond.

---o0o---

Signed and sealed this _____ day of _____, 20 ____.

(Name of Contractor)

By: _____
(Signature)

(SEAL)

(Title of Authorized Person)

(Address for Notices to be Sent)

(Name of Corporate Surety)

By: _____
(Signature)

(SEAL)

(Title of Authorized Person)

(Address for Notices to be Sent)

NOTE:

THE SIGNATURES OF THE CONTRACTOR AND THE SURETY MUST BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC (OR OTHER OFFICER AUTHORIZED UNDER CALIFORNIA LAW).

The Labor and Materials Payment Bond must be executed by a corporate surety on this form. No substitutions will be accepted. If an attorney-in-fact signs for the surety, an acknowledged statement from the surety appointing and empowering the attorney-in-fact to execute such bonds in such amounts on behalf of the surety, must accompany the Labor and Materials Payment Bond.

ADDRESS OF COUNTY FOR NOTICES TO BE SENT TO:

**County of Inyo
224 N. Edwards, P.O. Box N
Independence, California 93526**

AGREEMENT BETWEEN THE COUNTY OF INYO AND

FOR THE _____ PROJECT

INSURANCE PROVISIONS

Attachment C: 2023 Insurance Requirements for Most Contracts Including Light Construction not covered under Civil Code 2783 or 2782.5

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, or employees.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
1. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
2. **Workers’ Compensation** insurance as required by the State of California, with **Statutory Limits**, and Employer’s Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease. (Not required if consultant provided written verification it has no employees.)
3. **Professional Liability (Errors and Omissions):** Insurance appropriate to the Contractor’s profession, with limit no less than **\$2,000,000** per occurrence or claim, **\$2,000,000** aggregate.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, Inyo County requires and shall be entitled to the broader coverage and/or the higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to Inyo County.

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status: Inyo County, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor’s insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 if a later edition is used).

Primary Coverage: For any claims related to this contract, the **Contractor’s insurance coverage shall be primary and non-contributory** and at least as broad as ISO CG 20 01 04 13 as respects Inyo County, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by Inyo County, its officers, officials, employees, or volunteers shall be excess of the Contractor’s insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies.

Umbrella or Excess Policy: The Contractor may use Umbrella or Excess Policies to provide the liability limits as required in this agreement. This form of insurance will be acceptable provided that all of the

**Attachment C: 2023 Insurance Requirements for Most Contracts
Including Light Construction not covered under Civil Code 2783 or 2782.5**

Primary and Umbrella or Excess Policies shall provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true “following form” or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor’s primary and excess liability policies are exhausted.

Notice of Cancellation: Each insurance policy required above shall state that coverage shall not be canceled, except with notice to Inyo County.

Waiver of Subrogation: Contractor hereby grants to Inyo County a waiver of any right to subrogation which any insurer of said Contractor may acquire against Inyo County by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not Inyo County has received a waiver of subrogation endorsement from the insurer.

Self-Insured Retentions: Self-insured retentions must be declared to and approved by Inyo County. Inyo County may require the Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Inyo County. The CGL and any policies, including Excess liability policies, may not be subject to a self-insured retention (SIR) or deductible that exceeds \$25,000 unless approved in writing by Inyo County. Any and all deductibles and SIRs shall be the sole responsibility of Contractor or subcontractor who procured such insurance and shall not apply to the Indemnified Additional Insured Parties. Inyo County may deduct from any amounts otherwise due Contractor to fund the SIR/deductible. Policies shall NOT contain any self-insured retention (SIR) provision that limits the satisfaction of the SIR to the Named. The policy must also provide that Defense costs, including the Allocated Loss Adjustment Expenses, will satisfy the SIR or deductible. Inyo County reserves the right to obtain a copy of any policies and endorsements for verification.

Acceptability of Insurers: Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best’s rating of no less than A:VII, unless otherwise acceptable to Inyo County.

Claims Made Policies: If any of the required policies provide coverage on a claims-made basis:

1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Contractor must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.

Verification of Coverage: Contractor shall furnish Inyo County with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause **and a copy of the Declarations and Endorsement Page of the CGL policy and any Excess policies listing all policy endorsements.** All certificates and endorsements and copies of the Declarations and

**Attachment C: 2023 Insurance Requirements for Most Contracts
Including Light Construction not covered under Civil Code 2783 or 2782.5**

Endorsements pages are to be received and approved by Inyo County before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. Inyo County reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. Inyo County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Subcontractors: Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that Inyo County is an additional insured on insurance required from subcontractors.

Duration of Coverage: CGL & Excess liability policies for any construction related work, including, but not limited to, maintenance, service, or repair work, shall continue coverage for a minimum of 5 years for Completed Operations liability coverage. Such Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

Special Risks or Circumstances: Inyo County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

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SPECIAL PROVISIONS

FOR

INDEPENDENCE COURT HOUSE HVAC PROJECT
Independence, CA

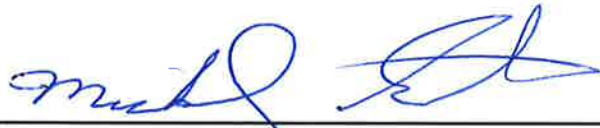
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COUNTY OF INYO
DEPARTMENT OF PUBLIC WORKS

SPECIFICATIONS APPROVAL

INDEPENDENCE COURT HOUSE HVAC PROJECT Independence, CA

These Special Provisions have been prepared by the Inyo County Public Works Department under the direction of the undersigned and are approved for the work contemplated herein.



Director of Public Works

11/28/23
Specifications Approval Date

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SPECIAL PROVISIONS
INDEPENDENCE COURT HOUSE HVAC PROJECT
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I. INTRODUCTION / GENERAL:

The Independence Court House HVAC (Project), a public works project of Inyo County, is to be constructed and completed in accordance with these Special Provisions, the Project Plans, and, insofar as they are referenced herein, the Standard Specifications of the Inyo County Public Works Department dated May 2020 (Standard Specifications). The Special Provisions, the Project Plans, and the sections of the Standard Specifications referenced herein, constitute a portion of the “Contract Documents” (as that term is defined in section 1-1.07 of the Standard Specifications) governing the project and shall therefore be binding upon and observed by the person/entity with whom the County of Inyo enters into contract for construction of the Project.

Copies of the Project Plans and the Standard Specifications may be obtained from the Inyo County Public Works Department in Independence, California.

Unless indicated otherwise, all references in this document to sections are to those in the Inyo County Standard Specifications May 2020 or to other sections in these Special Provisions. In case of any irreconcilable conflict between the requirements of the Inyo County Standard Specifications May 2020 referenced herein or the Caltrans Standard Specifications and these Special Provisions, these Special Provisions shall prevail and be observed.

II. PROJECT DESCRIPTION:

This project consists of the removal and replacement of HVAC equipment at the Independence Courthouse according to the plans and specifications produced by Etchemendy Engineering of Reno, NV

An optional job walk is scheduled for December 20th, 2023, at 11 A.M. at the Independence Court House located at 168 N. Edwards St, Independence, California.

III. CONTRACT AWARD AND EXECUTION - SECTION 3:

3-1.04 CONTRACT AWARD

Section 3-1.04 of the Standard Specifications shall be amended as follows:

Whenever possible, the award to the lowest bidder, if made, will be made no later than thirty (30) calendar days after the opening of bid proposals. However, failure of the County to make award within thirty (30) calendar days after the opening of the bid proposals shall not relieve the Contractor of its requirement to deliver an executed contract and bonds, and any other required documents, within 15 days of Notification of Award, as further described in Section 3-1.18: Contract Execution.

3-1.05 CONTRACT BONDS (PUB CONT CODE §§ 10221 AND 10222)

The successful bidder must furnish 2 bonds:

1. Payment bond to secure the claim payments of laborers, workers, mechanics, or materialmen providing goods, labor, or services under the Contract. This bond must be equal to at least 100 percent of the Contract amount.
2. Performance bond to guarantee the faithful performance of the Contract. This bond must be equal to at least 100 percent of the Contract amount.

The bond forms are in the Bid Book.

3-1.06 CONTRACTOR LICENSE

For a federal-aid contract, the Contractor must be properly licensed as a contractor from contract award through Contract acceptance (Pub Cont Code § 10164).

For a non-federal-aid contract:

1. The Contractor must be properly licensed as a contractor from bid opening through Contract acceptance (Bus & Prof Code § 7028.15)
2. Joint venture bidders must obtain a joint venture license before contract award (Bus & Prof Code § 7029.1)

3-1.07 INSURANCE POLICIES

The successful bidder must submit:

1. Copy of its commercial general liability policy and its excess policy or binder until such time as a policy is available, including the declarations page, applicable endorsements, riders, and other modifications in effect at the time of contract execution. Standard ISO form no. CG 0001 or similar exclusions are allowed if not inconsistent with section 7-1.06. Allowance of additional exclusions is at the discretion of the Department.
2. Certificate of insurance showing all other required coverages. Certificates of insurance, as evidence of required insurance for the auto liability and any other required policy, shall set forth deductible amounts applicable to each policy and all exclusions that are added by endorsement to each policy. The evidence of insurance shall provide that no cancellation, lapse, or reduction of coverage will occur without 10 days prior written notice to the Department.
3. A declaration under the penalty of perjury by a CPA certifying the accountant has applied GAAP guidelines confirming the successful bidder has sufficient funds and resources to cover any selfinsured retentions if the self-insured retention is over \$50,000.

If the successful bidder uses any form of self-insurance for workers compensation in lieu of an insurance policy, it shall submit a certificate of consent to self-insure under Labor Code § 3700.

3-1.08 SMALL BUSINESS ENTERPRISE PARTICIPATION

Section 3-1.08 is amended as follows.

This project is subject to Inyo County Ordinance No. 1156, An Ordinance of the Board of Supervisors of the County of Inyo, State of California, Adding Chapter 6.06 to the Inyo County Code to Provide Contacting Preferences for Local and Small Businesses, which is included in the bid package.

The bidder must:

- 1) Take necessary and reasonable steps to ensure that small business enterprises (SBEs) have opportunity to participate in the contract.
- 2) Make work available to SBEs and select work parts consistent with available SBE subcontractors and suppliers.

To qualify for the SBE contracting preference as described in Inyo County Ordinance No. 1156 (Ordinance No. 1156), Section 6.06.040, the bidder must show that he/she is a SBE as described in Ordinance No. 1156 Section 6.06.020.

To qualify for the SBE subcontracting preference as described in Ordinance No. 1156, Section 6.06.050, the bidder must show that the subcontractor(s) proposed for work on the project is/are a SBE(s) as described in Ordinance No. 1156 Section 6.06.020.

It is the bidders' responsibility to verify that the SBE(s) is certified as a small business enterprise at the date of bid opening.

SBE CONTRACTING PREFERENCE COMMITMENT SUBMITTAL:

If the bidder is claiming the SBE contracting preference, the bidder must submit SBE information on the "Small Business Enterprise Commitment (Construction Contracts)," form included in the Bid Package. If the bidder is not claiming the SBE contracting preference, remove the form from the Bid Package before submitting your bid.

The bidder must Submit written confirmation from each SBE subcontractor stating that it is participating in the contract. Include confirmation with the SBE Commitment form. A copy of a SBE subcontractor's quote will serve as written confirmation that the SBE is participating in the contract.

SUBCONTRACTOR AND SBE RECORDS:

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every SBE subcontractor, SBE vendor of materials and SBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. SBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on “Final Report – Utilization of Small Business Enterprises - (SBE), First-Tier Subcontractors,” certified correct by the Contractor or his authorized representative, and submitted to the Engineer. The form shall be furnished to the Engineer within 90 days from the date of contract acceptance.

3-1.18 CONTRACT EXECUTION

The successful bidder must sign the Contract form.

Deliver two (2) fully executed (except for the County’s signature) to the Office Engineer:

1. Signed Contract form
2. Contract bonds
3. Documents identified in section 3-1.07
4. Payee Data Record
5. Small Business (SB) Participation Report form
6. For a federal-aid contract, Caltrans Bidder - DBE Information form

The Office Engineer must receive these documents before the 10th business day after the bidder receives the contract.

The bidder's security may be forfeited for failure to execute the contract within the time specified (Pub Cont Code §§ 10181, 10182, and 10183).

A copy of the Contract form is included in your bid book.

IV. LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC – SECTION 7:

Section 7 of the Standard Specifications are amended to read as follows:

7-1.02K (2) WAGES

The general prevailing wage rates, determined by the Department of Industrial Relations, for Inyo County, are available at the County of Inyo address or the California DIR web site at <http://www.dir.ca.gov>. Changes are available at the same locations. These wage rates are not included in the Contract Documents. All labor will be paid at not less than these minimum wage rates.

7-1.02K (3) Certified Payroll Records (Labor Code §1776)

Contractor must keep accurate payroll records, and submit a copy of your certified payroll records weekly, including those of subcontractors to the following:

1. Inyo County Department of Public Works
2. Division of Labor Standards Enforcement of the Department of Industrial Relations
3. Division of Apprenticeship Standards of the Department of Industrial Relations

Include in the certified payroll:

1. Each employee's:
 - 1.1. Full name
 - 1.2. Address
 - 1.3. Social security number
 - 1.4. Work classification
 - 1.5. Straight time and overtime hours worked each day and week
 - 1.6. Actual wages paid for each day to each:
 - 1.6.1. Journeyman
 - 1.6.2. Apprentice
 - 1.6.3. Worker
 - 1.6.4. Other employee you employ for the work
 - 1.7. Pay rate
 - 1.8. Itemized deductions made
 - 1.9. Check number issued
2. Apprentices and the apprentice-to-journeyman ratio
3. A Statement of Compliance signed under penalty of perjury that declares:
 - a) The information contained in the payroll record is true, correct, and complete
 - b) The employer has complied with the requirements of sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project
 - c) The wage rates paid are at least those required by the Contract

7-1.05 INDEMNIFICATION

Contractor shall hold harmless, defend, and indemnify the County of Inyo and its officers, officials, employees, and volunteers from and against all claims, damages, losses, and expenses including attorney fees and litigation costs, arising out of the performance of the work described herein, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the County.

7-1.06A GENERAL INSURANCE

1. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII if admitted in the State of California. If Contractors Pollution Liability, Asbestos Pollution and/or Errors & Omissions coverages are not available from an admitted insurer, the coverage may be written by a non-admitted insurance company. A non-admitted company should have an A.M. Best rating of A:X or higher. Exception may be made for the California State Compensation Insurance Fund if not rated.
2. **VERIFICATION OF COVERAGE:** Contractor shall furnish the Entity with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements

are to be received and approved by the Entity before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. **Obtain** a copy of the policy declarations and endorsement page to facilitate verification of coverages and spot any undesirable policy limitations or exclusions.

3. **SUBCONTRACTORS:** Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that Entity is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.
4. **SPECIAL RISKS or CIRCUMSTANCES:** Entity reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.
5. **CONTRACTOR'S LIABILITY NOT LIMITED BY INSURANCE:** Nothing contained in the insurance requirements is to be construed as limiting the liability of the Contractor or the Contractor's sureties.

7-1.06C WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

Insurance minimums for the project are described in the Insurance Attachment to the sample contract, which is provided earlier in this Bid Package.

7-1.06D LIABILITY INSURANCE

Insurance minimums for the project are described in the Insurance Attachment to the sample contract, which is provided earlier in this Bid Package.

V. PROSECUTION AND PROGRESS – SECTION 8

Amended to read as follows:

8-1.05 TIME

The Contractor shall complete all designated portions of the work required to be provided pursuant to the contract no later than **One Hundred Twenty Calendar Days (120)** from and including the Starting Date, plus such additional days, if any, which are expressly granted as extensions of time by Contract Change Orders signed and issued by the County. Such total number of days shall be referred to herein as the "Time for Completion."

Failure of the Contractor to perform any covenant or condition contained in the Contract Documents within the time period specified shall constitute material breach of this Contract entitling the County to terminate the Contract unless the Contractor applies for, and receives, an

extension of time in accordance with the procedures set forth in Section 8-107B SS, “Time Adjustments.”

8-1.10 LIQUIDATED DAMAGES

In accordance with Government Code Section 53069.85, the Contractor shall pay to the County of Inyo, liquidated damages in the amounts of:

\$500.00 per day for each and every calendar day delay in finishing work in excess of the Time for Completion specified.

The County shall be entitled to deduct the amounts of liquidated damages from any payment otherwise due to the Contractor.

VI. CLAIMS RESOLUTION

PUBLIC CONTRACT CODE SECTION 9204

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) “Claim” means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) “Contractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) “Public entity” means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) “Public entity” shall not include the following:

- (i) The Department of Water Resources as to any project under the jurisdiction of that department.
- (ii) The Department of Transportation as to any project under the jurisdiction of that department.
- (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
- (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
- (v) The Military Department as to any project under the jurisdiction of that department.
- (vi) The Department of General Services as to all other projects.
- (vii) The High-Speed Rail Authority.

(4) “Public works project” means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) “Subcontractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity’s written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral

mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2020, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2020, deletes or extends that date.

PART 1: GENERAL

1.01 SCOPE OF WORK

This section shall include all labor, materials and appliances required to complete all of the work shown on the plans and in the specifications as produced by Etchemendy Engineering

1.02 BIDDER QUALIFICATIONS

The selected Bidder shall supply the following within 14 days of the bid opening date:

- A. Verification of insurance in the form of a sample insurance certificate. The contract shall carry a minimum of \$1,000,000 in general liability insurance on a continuing basis.
- B. A current license status printout from the Contractor's State License Board at <http://www.cslb.ca.gov> to demonstrate that the license is in good standing.
- C. The contractor shall cooperate as required in performance of the specified inspecting and testing.

1.03 SUBMITTALS

If requested, successful bidder shall submit all shop drawings, product data cut sheets, MSDS sheets, color and texture samples

1.04 WARRANTY AND CERTIFICATION

Entire project to be warrantied by the contractor for a period of one year from the date of Owner's final acceptance. All equipment to be warrantied beyond one year as specified by the equipment manufacturer.

1.05 QUALITY ASSURANCE

PART 2 PRODUCTS

2.01 SUMMARY

END OF SECTION

SPECIFICATIONS & PLANS

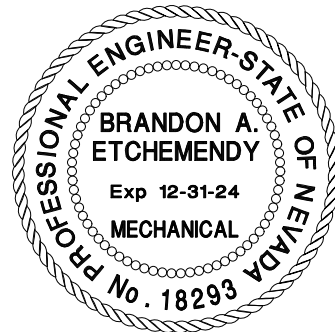
FOR

INDEPENDENCE COURT HOUSE HVAC PROJECT
Independence, California



10597 Double R Blvd, Suite 1
Reno, Nevada 89521
(775) 853-1131 – Fax (775) 852-2352

**Inyo Court House
HVAC retrofit
168 N Edwards St.
Independance, CA 93526**



**Project Manual
October 26, 2023**

10/26/23

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Miscellaneous steel trim.
- B. Products furnished, but not installed, under this Section include the following:
 - 1. Loose steel lintels.
 - 2. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.
 - 3. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.

1.2 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Prefabricated building columns.
 - 2. Metal nosings and treads.
 - 3. Paint products.
 - 4. Grout.
- B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.
- C. Delegated-Design Submittal: For ladders, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design ladders.

2.2 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

2.3 FASTENERS

- A. General: Unless otherwise indicated, provide Type 304 or Type 316 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
 - 1. Provide stainless-steel fasteners for fastening aluminum.
- B. Post-Installed Anchors: Torque-controlled expansion anchors.
 - 1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, unless otherwise indicated.

2.4 MISCELLANEOUS MATERIALS

- A. Shop Primers: Provide primers that comply with Section 099113 "Exterior Painting" or Section 099123 Interior Painting" depending on the location.
- B. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
 - 1. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.

2.5 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Use connections that maintain structural value of joined pieces.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
- C. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

2. Obtain fusion without undercut or overlap.
 3. Remove welding flux immediately.
 4. At exposed connections, finish exposed welds and surfaces smooth and blended.
- D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Locate joints where least conspicuous.
- E. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- F. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors not less than 8 inches from ends and corners of units and 24 inches o.c.

2.6 MISCELLANEOUS STEEL TRIM

- A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.
- B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.
- C. Prime and paint interior and exterior miscellaneous steel trim per Section 099113 "Exterior Painting" or Section 099123 Interior Painting" depending on the location.

2.7 FINISHES, GENERAL

- A. Finish metal fabrications after assembly.

2.8 STEEL AND IRON FINISHES

- A. Preparation for Shop Priming and painting: Prepare surfaces to comply with:
1. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

3.2 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

END OF SECTION 055000

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Steel and iron.
 - 2. Aluminum (not anodized or otherwise coated).

1.2 DEFINITIONS

- A. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- D. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- E. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- F. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
- B. Sustainable Design Submittals:
 - 1. Product VOC levels and limits.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..
 - b. Other Items: Architect will designate items or areas required.
2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide product listed in the Interior Painting Schedule for the paint category indicated.

2.2 PAINT, GENERAL

- A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products Lists."
- B. Material Compatibility:
 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. Paint shall have a VOC content less than or equal to the current California regulations; calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- D. Colors: Colors: Match existing adjacent surface colors.
- E. EXECUTION

2.3 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- C. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

2.4 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.

2.5 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

2.6 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

2.7 EXTERIOR PAINTING SCHEDULE

- A. Steel and Iron Substrates:
 - 1. Institutional Low-Odor/VOC Latex System MPI INT 5.1S:

- a. Prime Coat: Primer, rust inhibitive, water based.
- b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
- c. Topcoat: Latex, interior, institutional low odor/VOC, color and sheen to match adjacent surface

B. Aluminum Substrates:

1. Water-Based Light Industrial Coating System MPI EXT 5.4G:
 - a. Prime Coat: Primer, quick dry, for aluminum, MPI #95.
 - b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
 - c. Topcoat: Light industrial coating, exterior, water based color and sheen to match existing adjacent surface.

END OF SECTION 099113

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
 - 1. Steel and iron.
 - 2. ASJ insulation covering.

1.2 DEFINITIONS

- A. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. MPI Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Include Printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
- B. Sustainable Design Submittals:
 - 1. Product VOC levels and limits.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Engineer will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..
 - b. Other Items: Architect will designate items or areas required.
 - 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide product listed in the Interior Painting Schedule for the paint category indicated.

2.2 PAINT, GENERAL

- A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products Lists."
- B. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. Paint shall have a VOC content less than or equal to the current California regulations; calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- D. Colors: Match existing adjacent surface colors.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- C. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 INTERIOR PAINTING SCHEDULE

- A. Steel Substrates:
 - 1. Institutional Low-Odor/VOC Latex System MPI INT 5.1S:

- a. Prime Coat: Primer, rust inhibitive, water based.
- b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
- c. Topcoat: Latex, interior, institutional low odor/VOC, color and sheen to match adjacent surface

B. ASJ Insulation-Covering Substrates: Including pipe and duct coverings.

1. Institutional Low-Odor/VOC Latex System MPI INT 10.1D:

- a. Prime Coat: Primer sealer, latex, interior, MPI #50.
- b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
- c. Topcoat: Latex, interior, institutional low odor/VOC, color and sheen to match existing.

END OF SECTION 099123

SECTION 230500 - MECHANICAL GENERAL CONDITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Drawings and General provisions of the Contract including the "General Conditions", "Supplementary Conditions", and "General Requirements" of the Contract as written and referred to here are adopted and made part of Division 16.
- B. The Contract Agreement, Bidding documents, and all Addenda issued prior to Contract Agreement execution form a part of these specifications and apply to all Contracts or Subcontracts relating to the Mechanical systems.

1.2 SUMMARY

- A. The work under this Division shall consist of all labor, materials, equipment, services and related accessories, etc., necessary and required to complete all work as shown or inferred on the Drawings and in the Specifications (Contract Documents).
- B. Provide fixed Mechanical, except where specifically noted otherwise.
- C. Provide portable Mechanical equipment for the complete system(s).
- D. Provide equipment, ducting, piping etc. normally furnished or required for complete Mechanical systems but not specifically specified on the drawings and/or in specifications, as though specified by both.
- E. All equipment, ducting, piping etc. shall be new, except where specifically shown or specified otherwise.

1.3 WORK INCLUDED IN THIS DIVISION

- A. Mechanical work includes, but is not limited to
 - 1. Alterations and additions to existing Mechanical systems.
 - 2. Connection of all appliances and equipment including Owner furnished equipment.
- A. Install work under this Division per drawings, specifications, latest adopted edition of the Local adopted Building Codes, and any special codes having jurisdiction over specific portions of work within complete installation. In event of conflict, install work per most stringent code requirements determined by Engineer. This does not relieve the Contractor from furnishing and installing work shown or specified which may exceed the requirements of such ordinances, laws, regulations and codes.
- B. All materials, products, devices, fixtures, forms or types of construction included in this project shall meet or exceed the published requirements of American Society of Mechanical Engineers (ASME), American National Standards Institute (ANSI), and Institute of Mechanical and Electronics Engineers (IEEE). All equipment shall bear the Under

writer's Laboratories (UL) label or equivalent from approved independent testing laboratory.

- C. Arrange, pay fees for and complete work to pass required tests by agencies having authority over work. Deliver to Engineer copies of the Certificates of Inspection and approval issued by authorities and provide original copy of each certificate to Owner.
- D. When required by law or regulations, the governmental agency having jurisdiction for inspections shall be given reasonable notice and opportunity to inspect the work. Any work that is enclosed or covered up before such inspection and test shall be uncovered at the Contractor's expense; after it has been inspected, the Contractor shall restore the work to its original condition at his own expense.

1.8 INSURANCE

- A. The Contractor shall procure and maintain, at his expense, such insurance as required by law and/or specified in the General Conditions.

1.9 DRAWINGS AND SPECIFICATIONS

- A. Drawings and specifications are complementary. Work called for by one is binding as if called for by both. Any discrepancies between drawings and specifications shall be brought to the attention of the Engineer for clarification during the bidding period. No allowance shall subsequently be made to the Contractor by reason of his failure to have brought said discrepancies to the attention of the Consultant during the bidding period or by reason of any error on the Contractor's part.
- B. Drawings are schematic and diagrammatic in nature. Drawings show general run of distribution and approximate location of equipment. The contractor shall review drawings of all trades to assure coordination prior to placement of work. Right is reserved to change location of equipment and devices, and routing of pipes and ducts within 10 feet, without extra cost to Owner.
- C. Use dimensions in figures, shop drawings, etc. and actual site measurements in preference to scaled dimensions. Do not scale drawings for exact sizes or locations – use dimensioned details or actual field conditions. Verify item mounting heights as required by project conditions prior to rough-in.
- D. Discrepancies between different drawings or between drawings and specifications, or regulations and codes governing the installation shall be brought to the attention of the Engineer in writing for determination.
- E. Layout equipment as shown on drawings as close as possible. Verify access requirements for equipment actually furnished.
- F. Contractor is responsible to field measure and confirm the mounting heights and location of Mechanical equipment with respect to counters, doorways, and other architectural, electrical, fire or structural work. Do not scale distances off the Mechanical drawings: Use actual building dimensions.
- G. Execution of Contract is evidence that Contractor has examined all existing conditions, drawings and specifications related to work, and is informed to extent and character of

work. Later claims for labor and materials required due to difficulties encountered, which could have been foreseen had examination been made, will not be recognized.

- H. All work called for in this Section of the plans and specifications shall be performed under this Section, regardless of whether such work may also have been called for in other Section(s). Discrepancies in or conflicts among the various parts of the contract drawings shall not relieve Contractor of his obligation to perform.
- I. No attempt has been made to establish the required sections or splits of equipment relative to the size of access into the space, building, etc. Contractor shall establish all said splits, sections, etc. necessary to install equipment complete without undue disassembly of equipment or demolition of building parts at site of work.
- J. Charges for extra work are not allowed unless work is authorized by written order from the Owner's Representative approving charges for work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All material shall be new, and have a UL label where available. If UL label is not available, material shall be manufactured in accordance with applicable ASME, ANSI, IEEE and Federal Standards. Use UL labeled components in assemblies that do not have overall UL label.
- B. Utilize one of the manufacturers listed to furnish all of the major equipment required for this project.

2.2 SUBSTITUTIONS

- A. All equipment and materials scheduled on the drawings or listed in the specifications are the "basis of design;" equipment and materials used on the project are subject to compliance with all listed requirements. In submitting a bid to complete services in this project, the contractor represents that its bid is based on materials and equipment described in the contract documents, including addenda. Contractors are encouraged to request a review of substitute materials and equipment. Substitutes will be considered only if they keep with the general intent of the contract documents, including quality of work and product, and are fully documented. All requests for review of alternates shall be submitted to the engineer 7 working days prior to the date of bid opening. Substitutes not properly submitted may be rejected without cause. In requesting a review of substitutes the contractor is to provide and item-by-item comparison of the alternate product to the basis of design. Comparisons shall include but are not limited to: size, weight, capacity, construction, warranty, finish, etc. Contractors will not be granted extended contract time or fees in connection with the rejection of a substitute product. Contractor shall fabricate, furnish, install and pay for any additional materials and/or services by any other trade required to facilitate the use of a substituted item.

2.3 SUBMITTALS

- A. Before ordering any equipment contractor is to provide 6 sets of submittals for all equipment, accessories, test and balance, startup, fixtures, etc. That bare importance on proper project completion. All certifications for welders, balance contractors and startup technicians are to be provided in their appropriate sections. Submittals expected for fi

nal review are to be submitted a minimum of 14 working days prior to the required review and return time. The contractor is included 2 reviews of said submittals; any time incurred by additional submittal reviews caused by rejected or unacceptable submittals will be charged to the contractor at the engineer's hourly billing rate. Submittals will not be accepted that have not been reviewed and approved by the general contractor and/or construction manager having authority on the project. Incomplete submittals will not be accepted; a single fully encompassing submittal is to be provided by each trade. Contractors will not be granted extended contract time or fees in connection with the rejection of submittals or delays caused by unhurried submittal delivery.

- B. Standard factory brochures will not suffice as product submittals; factory submittal packages indicating the products, performance, dimensions, clearances, colors, testing and listing certifications and all accessories to be used are to be provided. In the case of alternates comparison documentation is to be provided showing proof of equality.
- C. In the case that additional design services are required by a registered professional the contractor is to provide sealed and signed documentation of work to be completed depicting necessary designs, and performance in accordance with all adopted codes.

PART 3 - EXECUTION

3.1 VISIT TO SITE

- A. Visit site, and survey existing conditions affecting work prior to bid. Include necessary materials and labor to accomplish the Mechanical work, including relocation of existing services and utilities on building site in bid. No consideration shall be given to future claims due to existing conditions. Any discrepancies or interference's shall be reported immediately to the Engineer.

3.2 WORKMANSHIP

- A. All work performed shall be first class work in every aspect. The work shall be performed by mechanics skilled in their respective trades, who shall at all times be under the supervision of competent persons.
- B. Work under this Division shall be first class with emphasis on neatness and workmanship. All work shall be installed square and plumb and concealed where possible. Work that is deficient, defective, poorly laid out, not perfectly aligned, or that is not consistent with the requirements generally accepted in the trade for "first class work" will not be acceptable.
- C. In addition to the materials specified elsewhere, furnish and install all other miscellaneous items necessary for the completion of the work to the extent that all systems are complete and operative.
- D. All work under this Section shall be performed in cooperation with the work performed under all other Sections of the Specifications for the Project in order to avoid interference with other work and to secure the proper installation of all work. Refer the Drawings and Specifications covering the work to be performed under all Sections, so that the relation and extent of the work of this Section with respect to the work of all other Sections is understood. Give right of way to raceways and piping systems installed at a required slope.

- E. Install work using competent mechanics, under supervision of foreman, all duly certified by local authorities. The installation shall be subject to the Engineer's observation, and final acceptance. The Engineer may reject unsuitable work.

3.3 CHANGE ORDERS

- A. Additional work may be required on the project, which is outside the scope of the contract. Such additional work will be described in Supplemental Instructions and/or Clarifications, to be estimated and priced by the Contractor, and accepted by the Owner, prior to commencing work.
- B. Acceptable charges will be limited to the following:
 - a. Labor hours shall be calculated, and shall be priced based on actual paid cost, not to exceed local Prevailing Wage Rates.
 - b. Supervision and Support shall not exceed 15% of labor charges. This blanket percentage shall cover foreman, tools, vehicles, record drawings, etc.
 - c. Charges for material shall be charged at actual unit prices quoted by suppliers, supported by a true copy of the written price quotation.
 - d. Major equipment items shall be charged at actual unit prices quoted by suppliers, supported by a true copy of the written price quotation.
 - e. Handling charges for material shall not exceed 5% of material and equipment charges. This blanket percentage shall cover freight, cartage, wastage, etc.
 - f. Should the Owner or Engineer find reason to dispute or challenge the Contractor's pricing of additional work, one of the following solutions may be imposed
 - g. Contractor shall be directed to proceed with the work, and submit his proposed charges for arbitration at the conclusion of the project.
 - h. Contractor shall maintain a separate labor log and obtain daily signatures thereon, and shall be prepared to submit a certified, audited payroll report to support his claims.
 - i. Owner shall purchase the disputed equipment and/or material, and provide same to Contractor at job site for installation, along with a copy of the invoice. Contractor may add a 10% charge to cover handling and warranty administration.
 - j. Owner shall contract with a separate licensed Mechanical Contractor to perform the extra work. In this event, the originally-contracted work shall be completed by Contractor and accepted by the Owner, following inspection and recommendation by the Engineer. This Contractor shall cause no impediment to the work of the separate contractor, and shall maintain full warranty on his originally-installed equipment and workmanship.

3.4 GUARANTEE

- A. Furnish the Owner a written guarantee, stating that if the workmanship and/or material executed under this Division are proven defective within one (1) year after final acceptance by the Owner, such defects and other work damaged will be repaired and/or replaced. Submit with Operations and Maintenance Manuals.
- B. Obtain from the various manufacturers or vendors guarantees or warranties for their particular equipment or components, and deliver them to the Owner. All guarantees and warranties provided shall be referenced to this project.
- C. In event that systems are placed in operation in several phases at the Owner's request, guarantee will begin on date each system or item of equipment is accepted for service by the Owner. Provide O&M manuals for all equipment when equipment is accepted for service by the Owner.
- D. All guarantees and warranties shall include labor and material at the site of installation for the duration of the guarantee period.

3.5 COOPERATION

- A. Carefully coordinate work with other contractors and subcontractors. Refer conflicts between trades to Engineer. Provide necessary information to other trades for such coordination. Such information shall include Shop Drawings, Product Data and all other required data.
- B. Whenever such information is not provided in a timely manner or whenever such information is incorrect, this contractor shall bear all costs for providing or correcting affected work of related trades with no change to the Contract Price or Construction Schedule.
- C. Work to be installed as progress of project will allow. Schedule of work determined by General Contractor, Owner, and/or Architect/Engineer.

3.6 HVAC CONTROL WIRING

- A. Control Wiring including low voltage and line voltage interlock wiring will be furnished and installed under Division 16.

3.8 PROTECTING

- A. Provide warning lights, bracing, shoring, rails, guards and covers necessary to prevent damage or injury. All persons working around Mechanical equipment shall have Mechanical shock and flash protection per OSHA 1910.301-309 & 331-335.
- B. Do not leave exposed or unprotected, Mechanical items carrying current. Protect visitors and workers from exposure to contact with Mechanically energized surfaces, parts, etc. in accordance with OSHA standards.

3.10 DELIVERY, STORAGE AND HANDLING

- A. Deliver equipment and materials to job site in original, unopened, labeled container. Products shall be properly identified with names, model numbers, types, grades, compliance labels and other information needed for identification. Store to prevent damage and injury. Store materials to prevent corroding. Store finished materials and equipment

to prevent staining and discoloring. Store materials affected by condensation in warm dry areas. Provide heaters. Contractor shall verify the availability of on site storage space, if no on site storage space is available then the contractor shall cover the cost for off site storage. Materials stored at the project site that becomes soiled with construction dirt, concrete, or moisture shall be removed from the site and replaced with new. Do not install soiled material.

- B. Protect work and materials from damage by weather, entrance of water or dirt. Cap and mark piping and ductwork during installation.
- C. Avoid damage to materials and equipment in place. Repair, or remove and replace damaged work and materials.
- D. Protection and safekeeping of products stored on premises is responsibility of Contractor supplying products.
- E. Schedule of deliveries and unloading to prevent traffic congestion blocking of access or interference with work. Arrange deliveries to avoid larger accumulations of materials than can be suitably stored at site.
- F. Install equipment per manufacturer's recommendations. Conflicts between contract documents and these recommendations shall be referred to Engineer for remedy.
- G. Mechanical or electronic equipment that has been damaged, exposed to weather or is, in the opinion of the Engineer or Architect, otherwise unsuitable because of improper fabrication, storage or installation shall be removed and replaced by this Contractor at his expense.

3.11 CLEANING AND PAINTING

- A. Clean equipment furnished in this Division after completion of work. Clean wipe the interior of all ducting, pipes, equipment soiled with dirt and debris prior to installation of wiring.
- B. Touch-up or re-paint damaged painted finishes as determined by the Engineer.
- C. Contractor is to paint out all diffuser, grille and internal ductwork portions visible behind terminations in space. All ductwork installed exposed within the space is to be painted per the architectural requirements. Coordinate exact requirements with architectural drawings.
- D. Remove debris, packing cartons, scrap, etc., from site daily.

3.12 STARTUP

- A. All mechanical and high efficiency plumbing equipment is to be started up by a factory trained and certified technician

3.13 TRAINING

- A. Training for operation and maintenance of new systems or modifications to existing systems is specified in Technical sections. Contractor shall submit with record documents an itemized receipt signed by Owner's representative that all specified training has been received.

3.14 ACCESS PANELS

- A. The contractor shall furnish all access panels for walls, partitions, etc., and shall give access panel to the General Contractor for installation at locations as directed by the Mechanical Contractor. It shall be the responsibility of the Mechanical Contractor that access panels are provided for access to all equipment and accessories, which may be concealed by building construction to provide adequate service space and comply with the manufacturers listed requirements. Access panels shall be installed so as not to interfere with building and other system arrangements.

END OF SECTION 230500

SECTION 230517 - SLEEVES AND SLEEVE SEALS FOR HVAC PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Sleeves.
 - 2. Stack-sleeve fittings.
 - 3. Sleeve-seal systems.
 - 4. Sleeve-seal fittings.
 - 5. Grout.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

PART 2 - PRODUCTS

2.1 SLEEVES

- A. Cast-Iron Wall Pipes: Cast or fabricated of cast or ductile iron and equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop unless otherwise indicated.
- B. Galvanized-Steel Wall Pipes: ASTM A 53/A 53M, Schedule 40, with plain ends and welded steel collar; zinc coated.
- C. Galvanized-Steel-Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, zinc coated, with plain ends.
- D. PVC-Pipe Sleeves: ASTM D 1785, Schedule 40.
- E. Galvanized-Steel-Sheet Sleeves: 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint.

- F. Molded-PE or -PP Sleeves: Removable, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.
- G. Molded-PVC Sleeves: With nailing flange for attaching to wooden forms.

2.2 STACK-SLEEVE FITTINGS

- A. Description: Manufactured, cast-iron sleeve with integral clamping flange. Include clamping ring, bolts, and nuts for membrane flashing.
 - 1. Underdeck Clamp: Clamping ring with setscrews.

2.3 SLEEVE-SEAL SYSTEMS

- A. Description: Modular sealing-element unit, designed for field assembly, for filling annular space between piping and sleeve.
 - 1. Sealing Elements: EPDM-rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
 - 2. Pressure Plates: Stainless steel.
 - 3. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements.

2.4 SLEEVE-SEAL FITTINGS

- A. Description: Manufactured plastic, sleeve-type, waterstop assembly made for imbedding in concrete slab or wall. Unit has plastic or rubber waterstop collar with center opening to match piping OD.

2.5 GROUT

- A. Standard: ASTM C 1107/C 1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- B. Characteristics: Nonshrink; recommended for interior and exterior applications.
- C. Design Mix: 5000-psi, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

PART 3 - EXECUTION

3.1 SLEEVE INSTALLATION

- A. Install sleeves for piping passing through penetrations in floors, partitions, roofs, and walls.
- B. For sleeves that will have sleeve-seal system installed, select sleeves of size large enough to provide 1-inch annular clear space between piping and concrete slabs and walls.
- C. Install sleeves in concrete floors, concrete roof slabs, and concrete walls as new slabs and walls are constructed.
 - 1. Permanent sleeves are not required for holes in slabs formed by molded-PE or -PP sleeves.
 - 2. Cut sleeves to length for mounting flush with both surfaces.
 - a. Exception: Extend sleeves installed in floors of mechanical equipment areas or other wet areas 2 inches above finished floor level.
 - 3. Using grout, seal the space outside of sleeves in slabs and walls without sleeve-seal system.
- D. Install sleeves for pipes passing through interior partitions.
 - 1. Cut sleeves to length for mounting flush with both surfaces.
 - 2. Install sleeves that are large enough to provide 1/4-inch annular clear space between sleeve and pipe or pipe insulation.
 - 3. Seal annular space between sleeve and piping or piping insulation; use joint sealants appropriate for size, depth, and location of joint. Comply with requirements for sealants specified in Section 079200 "Joint Sealants."
- E. Fire-Barrier Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at pipe penetrations. Seal pipe penetrations with firestop materials. Comply with requirements for firestopping specified in Section 078413 "Penetration Firestopping."

3.2 STACK-SLEEVE-FITTING INSTALLATION

- A. Install stack-sleeve fittings in new slabs as slabs are constructed.
 - 1. Install fittings that are large enough to provide 1/4-inch annular clear space between sleeve and pipe or pipe insulation.

2. Secure flashing between clamping flanges for pipes penetrating floors with membrane waterproofing. Comply with requirements for flashing specified in Section 076200 "Sheet Metal Flashing and Trim."
 3. Install section of cast-iron soil pipe to extend sleeve to 2 inches above finished floor level.
 4. Extend cast-iron sleeve fittings below floor slab as required to secure clamping ring if ring is specified.
 5. Using grout, seal the space around outside of stack-sleeve fittings.
- B. Fire-Barrier Penetrations: Maintain indicated fire rating of floors at pipe penetrations. Seal pipe penetrations with firestop materials. Comply with requirements for firestopping specified in Section 078413 "Penetration Firestopping."

3.3 SLEEVE-SEAL-SYSTEM INSTALLATION

- A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at service piping entries into building.
- B. Select type, size, and number of sealing elements required for piping material and size and for sleeve ID or hole size. Position piping in center of sleeve. Center piping in penetration, assemble sleeve-seal system components, and install in annular space between piping and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make a watertight seal.

3.4 SLEEVE-SEAL-FITTING INSTALLATION

- A. Install sleeve-seal fittings in new walls and slabs as they are constructed.
- B. Assemble fitting components of length to be flush with both surfaces of concrete slabs and walls. Position waterstop flange to be centered in concrete slab or wall.
- C. Secure nailing flanges to concrete forms.
- D. Using grout, seal the space around outside of sleeve-seal fittings.

3.5 SLEEVE AND SLEEVE-SEAL SCHEDULE

- A. Use sleeves and sleeve seals for the following piping-penetration applications:
 1. Exterior Concrete Walls below Grade:
 - a. Piping Smaller Than NPS 6: Galvanized-steel wall sleeves with sleeve-seal system, Galvanized-steel-pipe sleeves with sleeve-seal system or Sleeve-seal fittings.

- 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
- b. Piping NPS 6 and Larger: Galvanized-steel-pipe sleeves with sleeve-seal system or Sleeve-seal fittings.
 - 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
2. Concrete Slabs-on-Grade:
 - a. Piping Smaller Than NPS 6: Galvanized-steel-pipe sleeves with sleeve-seal system or Sleeve-seal fittings.
 - 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
 - b. Piping NPS 6 and Larger: Galvanized-steel-pipe sleeves with sleeve-seal system.
 - 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
 - c. Piping Smaller Than NPS 6 Galvanized-steel-pipe sleeves.
 - d. Piping NPS 6 and Larger: Galvanized-steel-sheet sleeves.

END OF SECTION 230517

SECTION 230518 - ESCUTCHEONS FOR HVAC PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Escutcheons.
 - 2. Floor plates.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

PART 2 - PRODUCTS

2.1 ESCUTCHEONS

- A. One-Piece, Cast-Brass Type: With polished, chrome-plated finish and setscrew fastener.
- B. One-Piece, Stamped-Steel Type: With chrome-plated finish and spring-clip fasteners.

2.2 FLOOR PLATES

- A. One-Piece Floor Plates: Cast-iron flange with holes for fasteners.
- B. Split-Casting Floor Plates: Cast brass with concealed hinge.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install escutcheons for piping penetrations of walls, ceilings, and finished floors.

- B. Install escutcheons with ID to closely fit around pipe, tube, and insulation of insulated piping and with OD that completely covers opening.
 - 1. Escutcheons for New Piping:
 - a. Piping with Fitting or Sleeve Protruding from Wall: One-piece.
 - b. Chrome-Plated Piping: One-piece, cast-brass type with polished, chrome-plated finish.
 - c. Insulated Piping: One-piece, stamped-steel type.
 - d. Bare Piping at Wall and Floor Penetrations in Finished Spaces: One-piece, cast-brass type with polished, chrome-plated finish.
 - e. Bare Piping at Ceiling Penetrations in Finished Spaces: One-piece, cast-brass type with polished, chrome-plated finish.
 - f. Bare Piping in Unfinished Service Spaces: One-piece, stamped-steel type.
 - g. Bare Piping in Equipment Rooms: One-piece, stamped-steel type.
- C. Install floor plates for piping penetrations of equipment-room floors.
- D. Install floor plates with ID to closely fit around pipe, tube, and insulation of piping and with OD that completely covers opening.
 - 1. New Piping: One-piece, floor-plate type.
 - 2. Existing Piping: Split-casting, floor-plate type.

3.2 FIELD QUALITY CONTROL

- A. Replace broken and damaged escutcheons and floor plates using new materials.

END OF SECTION 230518

SECTION 230529 - HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Metal pipe hangers and supports.
 - 2. Trapeze pipe hangers.
 - 3. Metal framing systems.
 - 4. Thermal-hanger shield inserts.
 - 5. Fastener systems.
- B. Related Sections:
 - 1. Section 233113 "Metal Ducts" and for duct hangers and supports.

1.3 DEFINITIONS

- A. MSS: Manufacturers Standardization Society of The Valve and Fittings Industry Inc.

1.4 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Design trapeze pipe hangers and equipment supports, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- B. Structural Performance: Hangers and supports for HVAC piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
 - 1. Design supports for multiple pipes, including pipe stands, capable of supporting combined weight of supported systems, system contents, and test water.

2. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.
3. Design seismic-restraint hangers and supports for piping and equipment and obtain approval from authorities having jurisdiction.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Signed and sealed by a qualified professional engineer. Show fabrication and installation details and include calculations for the following; include Product Data for components:
 1. Trapeze pipe hangers.
 2. Metal framing systems.
 3. Pipe stands.
- C. Delegated-Design Submittal: For trapeze hangers indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 1. Detail fabrication and assembly of trapeze hangers.
 2. Design Calculations: Calculate requirements for designing trapeze hangers.

1.6 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

1.7 QUALITY ASSURANCE

- A. Structural Steel Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Pipe Welding Qualifications: Qualify procedures and operators according to ASME Boiler and Pressure Vessel Code.

PART 2 - PRODUCTS

2.1 METAL PIPE HANGERS AND SUPPORTS

- A. Carbon-Steel Pipe Hangers and Supports:

1. Description: MSS SP-58, Types 1 through 58, factory-fabricated components.
2. Galvanized Metallic Coatings: Pregalvanized or hot dipped.
3. Nonmetallic Coatings: Plastic coating, jacket, or liner.
4. Padded Hangers: Hanger with fiberglass or other pipe insulation pad or cushion to support bearing surface of piping.
5. Hanger Rods: Continuous-thread rod, nuts, and washer made of zinc plate carbon steel.

2.2 TRAPEZE PIPE HANGERS

- A. Description: MSS SP-69, Type 59, shop- or field-fabricated pipe-support assembly made from structural carbon-steel shapes with MSS SP-58 carbon-steel hanger rods, nuts, saddles, and U-bolts.

2.3 METAL FRAMING SYSTEMS

- A. MFMA Manufacturer Metal Framing Systems:
 1. Description: Shop- or field-fabricated pipe-support assembly for supporting multiple parallel pipes.
 2. Standard: MFMA-4.
 3. Channels: Continuous slotted steel channel with intumed lips.
 4. Channel Nuts: Formed or stamped steel nuts or other devices designed to fit into channel slot and, when tightened, prevent slipping along channel.
 5. Hanger Rods: Continuous-thread rod, nuts, and washer made of carbon steel.
 6. Metallic Coating: Electroplated zinc, Hot-dipped galvanized or In-line, hot galvanized.

2.4 THERMAL-HANGER SHIELD INSERTS

- A. Insulation-Insert Material for Cold Piping: ASTM C 552, Type II cellular glass with 100-psig or ASTM C 591, Type VI, Grade 1 polyisocyanurate with 125-psig minimum compressive strength and vapor barrier.
- B. Insulation-Insert Material for Hot Piping: Water-repellent treated, ASTM C 533, Type I calcium silicate with 100-psig or ASTM C 552, Type II cellular glass with 100-psig, or ASTM C 591, Type VI, Grade 1 polyisocyanurate with 125-psig minimum compressive strength.

- C. For Trapeze or Clamped Systems: Insert and shield shall cover entire circumference of pipe.
- D. For Clevis or Band Hangers: Insert and shield shall cover lower 180 degrees of pipe.
- E. Insert Length: Extend 2 inches beyond sheet metal shield for piping operating below ambient air temperature.

2.5 FASTENER SYSTEMS

- A. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.
- B. Mechanical-Expansion Anchors: Insert-wedge-type, stainless- steel anchors, for use in hardened portland cement concrete; with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.

2.6 MISCELLANEOUS MATERIALS

- A. Structural Steel: ASTM A 36/A 36M, carbon-steel plates, shapes, and bars; black and galvanized.
- B. Grout: ASTM C 1107, factory-mixed and -packaged, dry, hydraulic-cement, nonshrink and nonmetallic grout; suitable for interior and exterior applications.
 - 1. Properties: Nonstaining, noncorrosive, and nongaseous.
 - 2. Design Mix: 5000-psi, 28-day compressive strength.

PART 3 - EXECUTION

3.1 HANGER AND SUPPORT INSTALLATION

- A. Metal Pipe-Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Install hangers, supports, clamps, and attachments as required to properly support piping from the building structure.
- B. Metal Trapeze Pipe-Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Arrange for grouping of parallel runs of horizontal piping, and support together on field-fabricated trapeze pipe hangers.
 - 1. Pipes of Various Sizes: Support together and space trapezes for smallest pipe size or install intermediate supports for smaller diameter pipes as specified for individual pipe hangers.

2. Field fabricate from ASTM A 36/A 36M, carbon-steel shapes selected for loads being supported. Weld steel according to AWS D1.1/D1.1M.
- C. Metal Framing System Installation: Arrange for grouping of parallel runs of piping, and support together on field-assembled metal framing systems.
- D. Thermal-Hanger Shield Installation: Install in pipe hanger or shield for insulated piping.
- E. Fastener System Installation:
 1. Install powder-actuated fasteners for use in lightweight concrete or concrete slabs less than 4 inches thick in concrete after concrete is placed and completely cured. Use operators that are licensed by powder-actuated tool manufacturer. Install fasteners according to powder-actuated tool manufacturer's operating manual.
 2. Install mechanical-expansion anchors in concrete after concrete is placed and completely cured. Install fasteners according to manufacturer's written instructions.
- F. Pipe Stand Installation:
 1. Pipe Stand Types except Curb-Mounted Type: Assemble components and mount on smooth roof surface. Do not penetrate roof membrane.
- G. Install hangers and supports complete with necessary attachments, inserts, bolts, rods, nuts, washers, and other accessories.
- H. Equipment Support Installation: Fabricate from welded-structural-steel shapes.
- I. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- J. Install lateral bracing with pipe hangers and supports to prevent swaying.
- K. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- L. Load Distribution: Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- M. Pipe Slopes: Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

N. Insulated Piping:

1. Attach clamps and spacers to piping.
 - a. Piping Operating above Ambient Air Temperature: Clamp may project through insulation.
 - b. Piping Operating below Ambient Air Temperature: Use thermal-hanger shield insert with clamp sized to match OD of insert.
 - c. Do not exceed pipe stress limits allowed by ASME B31.9 for building services piping.
2. Install MSS SP-58, Type 39, protection saddles if insulation without vapor barrier is indicated. Fill interior voids with insulation that matches adjoining insulation.
 - a. Option: Thermal-hanger shield inserts may be used. Include steel weight-distribution plate for pipe NPS 4 and larger if pipe is installed on rollers.
3. Install MSS SP-58, Type 40, protective shields on cold piping with vapor barrier. Shields shall span an arc of 180 degrees.
 - a. Option: Thermal-hanger shield inserts may be used. Include steel weight-distribution plate for pipe NPS 4 and larger if pipe is installed on rollers.
4. Shield Dimensions for Pipe: Not less than the following:
 - a. NPS 1/4 to NPS 3-1/2: 12 inches long and 0.048 inch thick.
 - b. NPS 4: 12 inches long and 0.06 inch thick.
5. Thermal-Hanger Shields: Install with insulation same thickness as piping insulation.

3.2 EQUIPMENT SUPPORTS

- A. Fabricate structural-steel stands to suspend equipment from structure overhead or to support equipment above floor.
- B. Grouting: Place grout under supports for equipment and make bearing surface smooth.
- C. Provide lateral bracing, to prevent swaying, for equipment supports.

3.3 METAL FABRICATIONS

- A. Cut, drill, and fit miscellaneous metal fabrications for trapeze pipe hangers and equipment supports.

- B. Fit exposed connections together to form hairline joints. Field weld connections that cannot be shop welded because of shipping size limitations.
- C. Field Welding: Comply with AWS D1.1/D1.1M procedures for shielded, metal arc welding; appearance and quality of welds; and methods used in correcting welding work; and with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. Finish welds at exposed connections so no roughness shows after finishing and so contours of welded surfaces match adjacent contours.

3.4 ADJUSTING

- A. Hanger Adjustments: Adjust hangers to distribute loads equally on attachments and to achieve indicated slope of pipe.
- B. Trim excess length of continuous-thread hanger and support rods to 1 inch.

3.5 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide a minimum dry film thickness of 2.0 mils.
- B. Touchup: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal are specified in Section 099123 "Interior Painting"
- C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

3.6 HANGER AND SUPPORT SCHEDULE

- A. Specific hanger and support requirements are in Sections specifying piping systems and equipment.

- B. Comply with MSS SP-69 for pipe-hanger selections and applications that are not specified in piping system Sections.
- C. Use hangers and supports with galvanized metallic coatings for piping and equipment that will not have field-applied finish.
- D. Use nonmetallic coatings on attachments for electrolytic protection where attachments are in direct contact with copper tubing.
- E. Use carbon-steel pipe hangers and supports, metal trapeze pipe hangers and metal framing systems and attachments for general service applications.
- F. Use padded hangers for piping that is subject to scratching.
- G. Use thermal-hanger shield inserts for insulated piping and tubing.
- H. Horizontal-Piping Hangers and Supports: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
 - 1. Adjustable, Steel Clevis Hangers (MSS Type 1): For suspension of noninsulated or insulated, stationary pipes NPS 1/2 to NPS 30.
 - 2. Yoke-Type Pipe Clamps (MSS Type 2): For suspension of up to 1050 deg F, pipes NPS 4 to NPS 24, requiring up to 4 inches of insulation.
 - 3. Carbon- or Alloy-Steel, Double-Bolt Pipe Clamps (MSS Type 3): For suspension of pipes NPS 3/4 to NPS 36, requiring clamp flexibility and up to 4 inches of insulation.
 - 4. Steel Pipe Clamps (MSS Type 4): For suspension of cold and hot pipes NPS 1/2 to NPS 24 if little or no insulation is required.
 - 5. Pipe Hangers (MSS Type 5): For suspension of pipes NPS 1/2 to NPS 4, to allow off-center closure for hanger installation before pipe erection.
 - 6. Adjustable, Swivel Split- or Solid-Ring Hangers (MSS Type 6): For suspension of noninsulated, stationary pipes NPS 3/4 to NPS 8.
 - 7. Adjustable, Steel Band Hangers (MSS Type 7): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 - 8. Adjustable Band Hangers (MSS Type 9): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 - 9. Adjustable, Swivel-Ring Band Hangers (MSS Type 10): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 - 10. Split Pipe Ring with or without Turnbuckle Hangers (MSS Type 11): For suspension of noninsulated, stationary pipes NPS 3/8 to NPS 8.

11. Extension Hinged or Two-Bolt Split Pipe Clamps (MSS Type 12): For suspension of noninsulated, stationary pipes NPS 3/8 to NPS 3.
 12. U-Bolts (MSS Type 24): For support of heavy pipes NPS 1/2 to NPS 30.
 13. Clips (MSS Type 26): For support of insulated pipes not subject to expansion or contraction.
 14. Pipe Saddle Supports (MSS Type 36): For support of pipes NPS 4 to NPS 36, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate.
 15. Pipe Stanchion Saddles (MSS Type 37): For support of pipes NPS 4 to NPS 36, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate, and with U-bolt to retain pipe.
 16. Adjustable Pipe Saddle Supports (MSS Type 38): For stanchion-type support for pipes NPS 2-1/2 to NPS 36 if vertical adjustment is required, with steel-pipe base stanchion support and cast-iron floor flange.
 17. Single-Pipe Rolls (MSS Type 41): For suspension of pipes NPS 1 to NPS 30, from two rods if longitudinal movement caused by expansion and contraction might occur.
 18. Adjustable Roller Hangers (MSS Type 43): For suspension of pipes NPS 2-1/2 to NPS 24, from single rod if horizontal movement caused by expansion and contraction might occur.
 19. Complete Pipe Rolls (MSS Type 44): For support of pipes NPS 2 to NPS 42 if longitudinal movement caused by expansion and contraction might occur but vertical adjustment is not necessary.
 20. Pipe Roll and Plate Units (MSS Type 45): For support of pipes NPS 2 to NPS 24 if small horizontal movement caused by expansion and contraction might occur and vertical adjustment is not necessary.
 21. Adjustable Pipe Roll and Base Units (MSS Type 46): For support of pipes NPS 2 to NPS 30 if vertical and lateral adjustment during installation might be required in addition to expansion and contraction.
- I. Vertical-Piping Clamps: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Extension Pipe or Riser Clamps (MSS Type 8): For support of pipe risers NPS 3/4 to NPS 24.
 2. Carbon- or Alloy-Steel Riser Clamps (MSS Type 42): For support of pipe risers NPS 3/4 to NPS 24 if longer ends are required for riser clamps.

- J. Hanger-Rod Attachments: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel Turnbuckles (MSS Type 13): For adjustment up to 6 inches for heavy loads.
 2. Steel Clevises (MSS Type 14): For 120 to 450 deg F piping installations.
 3. Swivel Turnbuckles (MSS Type 15): For use with MSS Type 11, split pipe rings.
 4. Malleable-Iron Sockets (MSS Type 16): For attaching hanger rods to various types of building attachments.
 5. Steel Weldless Eye Nuts (MSS Type 17): For 120 to 450 deg F piping installations.
- K. Building Attachments: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel or Malleable Concrete Inserts (MSS Type 18): For upper attachment to suspend pipe hangers from concrete ceiling.
 2. Top-Beam C-Clamps (MSS Type 19): For use under roof installations with bar-joint construction, to attach to top flange of structural shape.
 3. Side-Beam or Channel Clamps (MSS Type 20): For attaching to bottom flange of beams, channels, or angles.
 4. Center-Beam Clamps (MSS Type 21): For attaching to center of bottom flange of beams.
 5. Welded Beam Attachments (MSS Type 22): For attaching to bottom of beams if loads are considerable and rod sizes are large.
 6. C-Clamps (MSS Type 23): For structural shapes.
 7. Top-Beam Clamps (MSS Type 25): For top of beams if hanger rod is required tangent to flange edge.
 8. Side-Beam Clamps (MSS Type 27): For bottom of steel I-beams.
 9. Steel-Beam Clamps with Eye Nuts (MSS Type 28): For attaching to bottom of steel I-beams for heavy loads.
 10. Linked-Steel Clamps with Eye Nuts (MSS Type 29): For attaching to bottom of steel I-beams for heavy loads, with link extensions.
 11. Malleable-Beam Clamps with Extension Pieces (MSS Type 30): For attaching to structural steel.

12. Welded-Steel Brackets: For support of pipes from below or for suspending from above by using clip and rod. Use one of the following for indicated loads:
 - a. Light (MSS Type 31): 750 lb.
 - b. Medium (MSS Type 32): 1500 lb.
 - c. Heavy (MSS Type 33): 3000 lb.
 13. Side-Beam Brackets (MSS Type 34): For sides of steel or wooden beams.
 14. Plate Lugs (MSS Type 57): For attaching to steel beams if flexibility at beam is required.
 15. Horizontal Travelers (MSS Type 58): For supporting piping systems subject to linear horizontal movement where headroom is limited.
- L. Saddles and Shields: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel-Pipe-Covering Protection Saddles (MSS Type 39): To fill interior voids with insulation that matches adjoining insulation.
 2. Protection Shields (MSS Type 40): Of length recommended in writing by manufacturer to prevent crushing insulation.
 3. Thermal-Hanger Shield Inserts: For supporting insulated pipe.
- M. Spring Hangers and Supports: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Restraint-Control Devices (MSS Type 47): Where indicated to control piping movement.
 2. Spring Cushions (MSS Type 48): For light loads if vertical movement does not exceed 1-1/4 inches.
 3. Spring-Cushion Roll Hangers (MSS Type 49): For equipping Type 41, roll hanger with springs.
 4. Spring Sway Braces (MSS Type 50): To retard sway, shock, vibration, or thermal expansion in piping systems.
 5. Variable-Spring Hangers (MSS Type 51): Preset to indicated load and limit variability factor to 25 percent to allow expansion and contraction of piping system from hanger.
 6. Variable-Spring Base Supports (MSS Type 52): Preset to indicated load and limit variability factor to 25 percent to allow expansion and contraction of piping system from base support.

7. Variable-Spring Trapeze Hangers (MSS Type 53): Preset to indicated load and limit variability factor to 25 percent to allow expansion and contraction of piping system from trapeze support.
8. Constant Supports: For critical piping stress and if necessary to avoid transfer of stress from one support to another support, critical terminal, or connected equipment. Include auxiliary stops for erection, hydrostatic test, and load-adjustment capability. These supports include the following types:
 - a. Horizontal (MSS Type 54): Mounted horizontally.
 - b. Vertical (MSS Type 55): Mounted vertically.
 - c. Trapeze (MSS Type 56): Two vertical-type supports and one trapeze member.
- N. Comply with MSS SP-69 for trapeze pipe-hanger selections and applications that are not specified in piping system Sections.
- O. Comply with MFMA-103 for metal framing system selections and applications that are not specified in piping system Sections.
- P. Use powder-actuated fasteners or mechanical-expansion anchors instead of building attachments where required in concrete construction.

END OF SECTION 230529

SECTION 230548 - SEISMIC CONTROLS FOR HVAC

PART 1 - GENERAL

1.1 GENERAL

- A. Seismic bracing for mechanical systems (equipment, ductwork, piping, and conduit) shall comply with all applicable requirements of the 2018 California Building Code (CBC) including all applicable provisions of the American Society of Civil Engineers (ASCE) Minimum Design Loads for Buildings and Other Structures (ASCE Standard 7-10). Basic seismic design criteria for each project shall be as listed on the structural drawings for that project.
- B. Compliance with the applicable seismic bracing requirements shall be accomplished utilizing the most current version of one of the following design manuals (no exceptions):
 - International Seismic Application Technology (ISAT) Design Manual
 - Mason Industries Seismic Restraint Design Manual
 - Kinetics Noise Control Seismic Design Manual
- C. A complete bound copy of the applicable design manual shall be provided to the Owner at the beginning of the construction period for use/reference during the course of the project.
- D. Component Importance Factors (I_p) for all mechanical equipment, ductwork, piping, and conduit shall be determined and assigned in accordance with ASCE Standard 7-10 Section 13.1.3.

1.2 SUBMITTALS

- A. The Contractor shall provide the required number of seismic shop drawing submittal sets for review and approval by the Owner. Submittals shall include a comprehensive set of shop drawings clearly depicting the seismic bracing requirements for all mechanical equipment, ductwork, piping, and conduit. Any equipment that does not require seismic bracing shall be specifically identified in the submittal, and the reason for exemption shall be provided.
- B. Submittals shall be fully coordinated with the structural drawings and shall include all applicable structural attachment details. Seismic bracing shop drawings shall include all vertical support anchorage loads and all seismic bracing anchorage loads. Each specific load shall be indicated and the structural element that the support is attached to shall be clearly depicted/identified. Seismic bracing submittals shall be stamped and signed by a structural or civil engineer licensed in the State of Nevada.
- C. Seismic shop drawing submittals will be reviewed by both the mechanical engineer and the structural engineer.

1.3 SITE VISITS

- A. An authorized representative of the seismic bracing system manufacturer shall visit the job site during the construction period to confirm that the seismic bracing installation complies with the shop drawings, with all applicable code requirements, and with the seismic bracing system manufacturer's written installation requirements and associated details. A minimum of three site visits shall be provided, with the first visit scheduled just prior to installation of the first seismic braces, the second visit at the approximate midpoint of construction, and the third visit when the seismic bracing installation is complete (and prior to installation of ceilings).
- B. A written report shall be issued within one week of each site visit summarizing the observations made during the site visit and listing all required corrective actions and/or deficiencies.
- C. Site visits shall be coordinated with the Owner and shall be scheduled in writing a minimum of two weeks prior to the proposed site visit date.
- D. After all equipment installation is complete and all seismic bracing has been verified, the authorized representative that conducted the field verification shall issue a letter certifying that the installation is complete and that the installation complies with the specified requirements.

1.4 Special Inspection

- A. Special inspections will be arranged and paid for by the Owner when and if required by 2012 IBC Section 1704. When special inspection is required for a particular system or item of equipment the Contractor shall be available on site during each special inspection to facilitate the on-site review process.

END OF SECTION 230548

SECTION 230548.13 - VIBRATION CONTROLS FOR HVAC

PART 1: GENERAL

1.1 WORK INCLUDED

- A. This section provides minimum acceptance requirements for vibration isolation for all heating, ventilating, and air-conditioning equipment, ductwork and piping.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Concrete work is provided in Division 03.
- B. Ductwork flexible connections are specified elsewhere in Division 23.

1.3 QUALITY ASSURANCE

- A. Unless otherwise directed by the local authority having jurisdiction, the following codes and standards will apply:
 - 1. 2018 California Building Code
 - 2. American Society of Civil Engineers 7-10
- B. Manufacturer's Qualifications: Firms regularly engaged in manufacture of vibration control products of type, size, and capacity required, whose products have been in satisfactory use in similar service for not less than 5 years.

1.4 SUBMITTALS

- A. All vibration isolation systems shall be by one manufacturer.
- B. Submit shop drawings for all devices specified herein and as indicated and scheduled on the drawings. Submittals shall indicate full compliance with the device specification in Part 2. Any deviation shall be specifically noted and subject to engineer approval. Submittals shall include device dimensions, placement, attachment and anchorage requirements.
- C. Provide calculations for selection of seismic/wind restraints, certified by a qualified professional engineer, licensed in the state of the project.
- D.

PART 2: PRODUCTS

2.1 VIBRATION ISOLATION:

- A. Springs: All springs shall have a minimum additional travel to solid equal to 50% of the rated deflection. All springs except internal nested springs shall have an outside diameter not less than 0.8 of the compressed height of the spring. Ends of springs shall be square and ground for stability. Laterally stable springs shall have k_x/k_y ratios of at least 0.9. All springs shall be fully color-coded to indicate capacity – color striping is not considered adequate.
- B. Corrosion Protection: All springs shall be powder-coated enamel. Housings shall be hot dipped galvanized (located outdoors), powder-coated enamel, or painted with rust-resistant paint.
- C. Equipment requiring vibration isolation:
 - 1. Outdoor Heat Pumps
 - 2. Indoor Air Handlers
 - 3. Unit Heater
 - 4. Exhaust Fans
- D. Isolators:
 - 1. Vibration Isolation Pads: Type NSN – Sandwich neoprene pad type isolators, with 3/8" (10 mm) minimum thick ribbed neoprene pads bonded to each side of a 10 ga (3.5 mm) minimum galvanized metal plate. Isolator pads shall be selected to ensure that deflection does not exceed 20% of isolator free height.
 - 2. Grommet Washers: Type GW - Neoprene grommet washers of sufficient size to accommodate USS standard washers, long enough to sleeve through 1/4" (6 mm) plate material, and with at least 1/8" (3 mm) thick material around the bolt hole.
 - 3. Housed Spring Floor Mounted Isolators: Type HS – Housed, spring isolators with components for leveling and securing equipment. Springs shall be supported by a steel top and bottom frame separated by an elastomeric material.
 - 4. Spring Hangers: Vibration isolator hanger supports with steel springs and welded steel housings. Hangers shall be designed for a minimum of 15 degree angular misalignment from vertical before support rod contacts housing; hangers serving lightweight loads 0.90 kN (200 lbs) and less may be exempt from this requirement. Provide a vertical uplift stop-washer on spring hangers for seismically restrained equipment, duct or piping.
 - a. Type SHRB – Spring hanger with neoprene and bottom cup isolators complete with spring, compression cup, neoprene

“double-deflection” element at top of hanger, and neoprene cup under the spring.

PART 3: EXECUTION

3.1 GENERAL:

- A. Coordinate size, doweling, and reinforcing of concrete equipment housekeeping pads and piers with vibration isolation device manufacturer to ensure adequate space and prevent edge breakout failures. Pads and piers must be adequately doweled in to structural slab.
- B. Coordinate locations and sizes of structural supports with locations of vibration isolators (e.g., fans.).
- C. Isolated equipment, duct and piping located on roofs must be attached to the structure. Intermediate supports between the restraint and structure that are not attached to the structure must be approved by the restraint manufacturer.

3.2 VIBRATION ISOLATION:

- A. Block and shim all bases level so that all ductwork, piping and electrical connections can be made to a rigid system at the proper operating level, before isolators are adjusted. Ensure that there are no rigid connections or incidental physical contacts between isolated equipment and the building structure or nearby systems.
- B. Ensure housekeeping pads have adequate space to mount equipment and isolator housings and shall also be large enough to ensure adequate edge distance for isolator anchors.
- C. Select and locate vibration isolation equipment to give uniform loading and deflection, according to weight distribution of equipment.
 - 1. Deflection – 1”
- D. Mount fans, as indicated on the drawings, on structural steel vibration bases common to both fan and motor. There shall be a minimum operating clearance of 1” (25 mm) between steel bases and the structure.

END OF SECTION 230548.13

SECTION 230553 - IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Equipment labels.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For color, letter style, and graphic representation required for each identification material and device.
- C. Equipment Label Schedule: Include a listing of all equipment to be labeled with the proposed content for each label.
- D. Valve numbering scheme.
- E. Valve Schedules: For each piping system to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 EQUIPMENT LABELS

- A. Metal Labels for Equipment:
 - 1. Material and Thickness: Brass, 0.032-inch, stainless steel, 0.025-inch, aluminum, 0.032-inch or anodized aluminum, 0.032-inch minimum thickness, and having predrilled or stamped holes for attachment hardware.
 - 2. Letter Color: White.
 - 3. Background Color: Black.
 - 4. Minimum Label Size: Length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.

5. Minimum Letter Size: 1/4 inch for name of units if viewing distance is less than 24 inches, 1/2 inch for viewing distances up to 72 inches, and proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-quarters the size of principal lettering.
 6. Fasteners: Stainless-steel rivets.
 7. Adhesive: Contact-type permanent adhesive, compatible with label and with substrate.
- B. Plastic Labels for Equipment:
1. Material and Thickness: Multilayer, multicolor, plastic labels for mechanical engraving, 1/8 inch thick, and having predrilled holes for attachment hardware.
 2. Letter Color: White.
 3. Background Color: Black.
 4. Maximum Temperature: Able to withstand temperatures up to 160 deg F.
 5. Minimum Label Size: Length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.
 6. Minimum Letter Size: 1/4 inch for name of units if viewing distance is less than 24 inches, 1/2 inch for viewing distances up to 72 inches, and proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-quarters the size of principal lettering.
 7. Fasteners: Stainless-steel rivets.
 8. Adhesive: Contact-type permanent adhesive, compatible with label and with substrate.
- C. Label Content: Include equipment's Drawing designation or unique equipment number, Drawing numbers where equipment is indicated (plans, details, and schedules), and the Specification Section number and title where equipment is specified.
- D. Equipment Label Schedule: For each item of equipment to be labeled, on 8-1/2-by-11-inch bond paper. Tabulate equipment identification number, and identify Drawing numbers where equipment is indicated (plans, details, and schedules) and the Specification Section number and title where equipment is specified. Equipment schedule shall be included in operation and maintenance data.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean piping and equipment surfaces of substances that could impair bond of identification devices, including dirt, oil, grease, release agents, and incompatible primers, paints, and encapsulants.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- B. Coordinate installation of identifying devices with locations of access panels and doors.
- C. Install identifying devices before installing acoustical ceilings and similar concealment.

3.3 EQUIPMENT LABEL INSTALLATION

- A. Install or permanently fasten labels on each major item of mechanical equipment.
- B. Locate equipment labels where accessible and visible.

END OF SECTION 230553

SECTION 230593 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Balancing Air Systems:
 - a. Constant-volume air systems.

1.2 DEFINITIONS

- A. AABC: Associated Air Balance Council.
- B. NEBB: National Environmental Balancing Bureau.
- C. TAB: Testing, adjusting, and balancing.
- D. TABB: Testing, Adjusting, and Balancing Bureau.
- E. TAB Specialist: An independent entity meeting qualifications to perform TAB work.
- F. TDH: Total dynamic head.

1.3 ACTION SUBMITTALS

- A. <Double click to insert sustainable design text for air balancing or HVAC flushing.>
- B. TAB Report: Documentation indicating that Work complies with ASHRAE/IES 90.1, Section 6.7.2.3 - "System Balancing."

1.4 INFORMATIONAL SUBMITTALS

- A. Strategies and Procedures Plan: With the mechanical submittals, submit TAB strategies and step-by-step procedures as specified in "Preparation" Article.
- B. Certified TAB reports.

1.5 QUALITY ASSURANCE

- A. TAB Specialists Qualifications: Certified by AABC.
 - 1. TAB Field Supervisor: Employee of the TAB specialist and certified by AABC.

2. TAB Technician: Employee of the TAB specialist and certified by AABC as a TAB technician.
- B. TAB Specialists Qualifications: Certified by AABC.
1. TAB Field Supervisor: Employee of the TAB specialist and certified by AABC.
 2. TAB Technician: Employee of the TAB specialist and certified by AABC as a TAB technician.
- C. Instrumentation Type, Quantity, Accuracy, and Calibration: Comply with requirements in ASHRAE 111, Section 4, "Instrumentation."
- D. ASHRAE/IES 90.1 Compliance: Applicable requirements in ASHRAE/IES 90.1, Section 6.7.2.3 - "System Balancing."

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine the Contract Documents to become familiar with Project requirements and to discover conditions in systems designs that may preclude proper TAB of systems and equipment.
- B. Examine installed systems for balancing devices, such as test ports, gage cocks, thermometer wells, flow-control devices, balancing valves and fittings, and manual volume dampers. Verify that locations of these balancing devices are applicable for intended purpose and are accessible.
- C. Examine the approved submittals for HVAC systems and equipment.
- D. Examine design data including HVAC system descriptions, statements of design assumptions for environmental conditions and systems output, and statements of philosophies and assumptions about HVAC system and equipment controls.
- E. Examine ceiling plenums and underfloor air plenums used for supply, return, or relief air to verify that they are properly separated from adjacent areas. Verify that penetrations in plenum walls are sealed and fire-stopped if required.
- F. Examine equipment performance data including fan and pump curves.
 1. Relate performance data to Project conditions and requirements, including system effects that can create undesired or unpredicted conditions that cause reduced capacities in all or part of a system.

2. Calculate system-effect factors to reduce performance ratings of HVAC equipment when installed under conditions different from the conditions used to rate equipment performance. To calculate system effects for air systems, use tables and charts found in AMCA 201, "Fans and Systems," or in SMACNA's "HVAC Systems - Duct Design." Compare results with the design data and installed conditions.
- G. Examine system and equipment installations and verify that field quality-control testing, cleaning, and adjusting specified in individual Sections have been performed.
- H. Examine test reports specified in individual system and equipment Sections.
- I. Examine HVAC equipment and verify that bearings are greased, belts are aligned and tight, filters are clean, and equipment with functioning controls is ready for operation.
- J. Examine terminal units, such as variable-air-volume boxes, and verify that they are accessible and their controls are connected and functioning.
- K. Examine strainers. Verify that startup screens have been replaced by permanent screens with indicated perforations.
- L. Examine control valves for proper installation for their intended function of throttling, diverting, or mixing fluid flows.
- M. Examine heat-transfer coils for correct piping connections and for clean and straight fins.
- N. Examine operating safety interlocks and controls on HVAC equipment.
- O. Report deficiencies discovered before and during performance of TAB procedures. Observe and record system reactions to changes in conditions. Record default set points if different from indicated values.

3.2 PREPARATION

- A. Prepare a TAB plan that includes strategies and step-by-step procedures for balancing the systems.
- B. Perform system-readiness checks of HVAC systems and equipment to verify system readiness for TAB work. Include, at a minimum, the following:
 1. Airside:
 - a. Duct systems are complete with terminals installed.
 - b. Volume, smoke, and fire dampers are open and functional.
 - c. Clean filters are installed.
 - d. Fans are operating, free of vibration, and rotating in correct direction.

- e. Variable-frequency controllers' startup is complete and safeties are verified.
- f. Automatic temperature-control systems are operational.
- g. Ceilings are installed.
- h. Windows and doors are installed.
- i. Suitable access to balancing devices and equipment is provided.

3.3 GENERAL PROCEDURES FOR TESTING AND BALANCING

- A. Perform testing and balancing procedures on each system according to the procedures contained in AABC's "National Standards for Total System Balance" and in this Section.
- B. Cut insulation, ducts, pipes, and equipment cabinets for installation of test probes to the minimum extent necessary for TAB procedures.
 - 1. After testing and balancing, patch probe holes in ducts with same material and thickness as used to construct ducts.
 - 2. After testing and balancing, install test ports and duct access doors that comply with requirements in Section 233300 "Air Duct Accessories."
 - 3. Install and join new insulation that matches removed materials. Restore insulation, coverings, vapor barrier, and finish according to Section 230713 "Duct Insulation," Section 230716 "HVAC Equipment Insulation," and Section 230719 "HVAC Piping Insulation."
- C. Mark equipment and balancing devices, including damper-control positions, valve position indicators, fan-speed-control levers, and similar controls and devices, with paint or other suitable, permanent identification material to show final settings.
- D. Take and report testing and balancing measurements in inch-pound (IP) units.

3.4 GENERAL PROCEDURES FOR BALANCING AIR SYSTEMS

- A. Prepare test reports for both fans and outlets. Obtain manufacturer's outlet factors and recommended testing procedures. Cross-check the summation of required outlet volumes with required fan volumes.
- B. Prepare schematic diagrams of systems' "as-built" duct layouts.
- C. For variable-air-volume systems, develop a plan to simulate diversity.
- D. Determine the best locations in main and branch ducts for accurate duct-airflow measurements.
- E. Check airflow patterns from the outdoor-air louvers and dampers and the return- and exhaust-air dampers through the supply-fan discharge and mixing dampers.

- F. Locate start-stop and disconnect switches, electrical interlocks, and motor starters.
- G. Verify that motor starters are equipped with properly sized thermal protection.
- H. Check dampers for proper position to achieve desired airflow path.
- I. Check for airflow blockages.
- J. Check condensate drains for proper connections and functioning.
- K. Check for proper sealing of air-handling-unit components.
- L. Verify that air duct system is sealed as specified in Section 233113 "Metal Ducts."

3.5 PROCEDURES FOR CONSTANT-VOLUME AIR SYSTEMS

- A. Adjust fans to deliver total indicated airflows within the maximum allowable fan speed listed by fan manufacturer.
 - 1. Measure total airflow.
 - a. Set outside-air, return-air, and relief-air dampers for proper position that simulates minimum outdoor-air conditions.
 - b. Where duct conditions allow, measure airflow by main Pitot-tube traverse. If necessary, perform multiple Pitot-tube traverses, close to the fan and prior to any outlets, to obtain total airflow.
 - c. Where duct conditions are not suitable for Pitot-tube traverse measurements, a coil traverse may be acceptable.
 - 2. Measure fan static pressures as follows:
 - a. Measure static pressure directly at the fan outlet or through the flexible connection.
 - b. Measure static pressure directly at the fan inlet or through the flexible connection.
 - c. Measure static pressure across each component that makes up the air-handling system.
 - d. Report artificial loading of filters at the time static pressures are measured.
 - 3. Review Record Documents to determine variations in design static pressures versus actual static pressures. Calculate actual system-effect factors. Recommend adjustments to accommodate actual conditions.
 - 4. Obtain approval from Engineer for adjustment of fan speed higher or lower than indicated speed. Comply with requirements in HVAC Sections for air-handling units for adjustment of fans, belts, and pulley sizes to achieve indicated air-handling-unit performance.

5. Do not make fan-speed adjustments that result in motor overload. Consult equipment manufacturers about fan-speed safety factors. Modulate dampers and measure fan-motor amperage to ensure that no overload occurs. Measure amperage in full-cooling, full-heating, economizer, and any other operating mode to determine the maximum required brake horsepower.
- B. Adjust volume dampers for main duct, submain ducts, and major branch ducts to indicated airflows.
1. Measure airflow of submain and branch ducts.
 2. Adjust submain and branch duct volume dampers for specified airflow.
 3. Re-measure each submain and branch duct after all have been adjusted.
- C. Adjust air inlets and outlets for each space to indicated airflows.
1. Set airflow patterns of adjustable outlets for proper distribution without drafts.
 2. Measure inlets and outlets airflow.
 3. Adjust each inlet and outlet for specified airflow.
 4. Re-measure each inlet and outlet after they have been adjusted.

3.6 TOLERANCES

- A. Set HVAC system's airflow rates and water flow rates within the following tolerances:
1. Supply, Return, and Exhaust Fans and Equipment with Fans: Plus or minus 10 percent.
 2. Air Outlets and Inlets: Plus or minus 10 percent.
- B. Maintaining pressure relationships as designed shall have priority over the tolerances specified above.

3.7 FINAL REPORT

- A. General: Prepare a certified written report; tabulate and divide the report into separate sections for tested systems and balanced systems.
1. Include a certification sheet at the front of the report's binder, signed and sealed by the certified testing and balancing engineer.
 2. Include a list of instruments used for procedures, along with proof of calibration.
 3. Certify validity and accuracy of field data.

- B. Final Report Contents: In addition to certified field-report data, include the following:
1. Fan curves.
 2. Manufacturers' test data.
 3. Field test reports prepared by system and equipment installers.
 4. Other information relative to equipment performance; do not include Shop Drawings and Product Data.
- C. General Report Data: In addition to form titles and entries, include the following data:
1. Title page.
 2. Name and address of the TAB specialist.
 3. Project name.
 4. Project location.
 5. Architect's name and address.
 6. Engineer's name and address.
 7. Contractor's name and address.
 8. Report date.
 9. Signature of TAB supervisor who certifies the report.
 10. Table of Contents with the total number of pages defined for each section of the report. Number each page in the report.
 11. Summary of contents including the following:
 - a. Indicated versus final performance.
 - b. Notable characteristics of systems.
 - c. Description of system operation sequence if it varies from the Contract Documents.
 12. Nomenclature sheets for each item of equipment.
 13. Notes to explain why certain final data in the body of reports vary from indicated values.
 14. Test conditions for fans and pump performance forms including the following:
 - a. Settings for outdoor-, return-, and exhaust-air dampers.
 - b. Conditions of filters.

- c. Cooling coil, wet- and dry-bulb conditions.
 - d. Fan drive settings including settings and percentage of maximum pitch diameter.
 - e. Other system operating conditions that affect performance.
- D. System Diagrams: Include schematic layouts of air and hydronic distribution systems. Present each system with single-line diagram and include the following:
1. Quantities of outdoor, supply, return, and exhaust airflows.
 2. Duct, outlet, and inlet sizes.
- E. Air-Handling-Unit Test Reports: For air-handling units with coils, include the following:
1. Unit Data:
 - a. Unit identification.
 - b. Location.
 - c. Make and type.
 - d. Model number and unit size.
 - e. Manufacturer's serial number.
 - f. Unit arrangement and class.
 - g. Discharge arrangement.
 - h. Sheave make, size in inches, and bore.
 - i. Center-to-center dimensions of sheave and amount of adjustments in inches.
 - j. Number, make, and size of belts.
 - k. Number, type, and size of filters.
 2. Motor Data:
 - a. Motor make, and frame type and size.
 - b. Horsepower and rpm.
 - c. Volts, phase, and hertz.
 - d. Full-load amperage and service factor.
 - e. Sheave make, size in inches, and bore.
 - f. Center-to-center dimensions of sheave and amount of adjustments in inches.
 3. Test Data (Indicated and Actual Values):
 - a. Total airflow rate in cfm.
 - b. Total system static pressure in inches wg.
 - c. Fan rpm.
 - d. Discharge static pressure in inches wg.
 - e. Filter static-pressure differential in inches wg.
 - f. Preheat-coil static-pressure differential in inches wg.
 - g. Cooling-coil static-pressure differential in inches wg.
 - h. Heating-coil static-pressure differential in inches wg.

- i. Outdoor airflow in cfm.
- j. Return airflow in cfm.
- k. Outdoor-air damper position.
- l. Return-air damper position.
- m. Vortex damper position.

F. Fan Test Reports: For supply, return, and exhaust fans, include the following:

1. Fan Data:

- a. System identification.
- b. Location.
- c. Make and type.
- d. Model number and size.
- e. Manufacturer's serial number.
- f. Arrangement and class.
- g. Sheave make, size in inches, and bore.
- h. Center-to-center dimensions of sheave and amount of adjustments in inches.

2. Motor Data:

- a. Motor make, and frame type and size.
- b. Horsepower and rpm.
- c. Volts, phase, and hertz.
- d. Full-load amperage and service factor.
- e. Sheave make, size in inches, and bore.
- f. Center-to-center dimensions of sheave, and amount of adjustments in inches.
- g. Number, make, and size of belts.

3. Test Data (Indicated and Actual Values):

- a. Total airflow rate in cfm.
- b. Total system static pressure in inches wg.
- c. Fan rpm.
- d. Discharge static pressure in inches wg.
- e. Suction static pressure in inches wg.

G. Round, Flat-Oval, and Rectangular Duct Traverse Reports: Include a diagram with a grid representing the duct cross-section and record the following:

1. Report Data:

- a. System and air-handling-unit number.
- b. Location and zone.
- c. Traverse air temperature in deg F.
- d. Duct static pressure in inches wg.
- e. Duct size in inches.

- f. Duct area in sq. ft..
- g. Indicated airflow rate in cfm.
- h. Indicated velocity in fpm.
- i. Actual airflow rate in cfm.
- j. Actual average velocity in fpm.
- k. Barometric pressure in psig.

H. Instrument Calibration Reports:

1. Report Data:

- a. Instrument type and make.
- b. Serial number.
- c. Application.
- d. Dates of use.
- e. Dates of calibration.

3.8 VERIFICATION OF TAB REPORT

- A. Engineer may randomly select measurements, documented in the final report, to be rechecked. Rechecking shall be limited to either 10 percent of the total measurements recorded or the extent of measurements that can be accomplished in a normal 8-hour business day.
- B. If rechecks yield measurements that differ from the measurements documented in the final report by more than the tolerances allowed, the measurements shall be noted as "FAILED."
- C. If the number of "FAILED" measurements is greater than 10 percent of the total measurements checked during the final inspection, the testing and balancing shall be considered incomplete and shall be rejected.
- D. If TAB work fails, proceed as follows:
 - 1. TAB specialists shall recheck all measurements and make adjustments. Revise the final report and balancing device settings to include all changes; resubmit the final report and request a second final inspection.
 - 2. If the second final inspection also fails, Owner may contract the services of another TAB specialist to complete TAB work according to the Contract Documents and deduct the cost of the services from the original TAB specialist's final payment.
 - 3. If the second verification also fails, Engineer may contact AABC Headquarters regarding the AABC National Performance Guaranty.
- E. Prepare test and inspection reports.

3.9 ADDITIONAL TESTS

- A. Within 90 days of completing TAB, perform additional TAB to verify that balanced conditions are being maintained throughout and to correct unusual conditions.
- B. Seasonal Periods: If initial TAB procedures were not performed during near-peak summer and winter conditions, perform additional TAB during near-peak summer and winter conditions.

END OF SECTION 230593

SECTION 230719 - HVAC PIPING INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes insulation for HVAC piping systems.
- B. Related Sections:
 - 1. Section 230713 "Duct Insulation" for duct insulation.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Material test reports.
- C. Field quality-control reports.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Skilled mechanics who have successfully completed an apprenticeship program or another craft training program certified by the Department of Labor, Bureau of Apprenticeship and Training.
- B. Surface-Burning Characteristics: For insulation and related materials, as determined by testing identical products in accordance with ASTM E84, by a testing agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing agency.
 - 1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
 - 2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.

1.5 COORDINATION

- A. Coordinate sizes and locations of supports, hangers, and insulation shields specified in Section 230529 "Hangers and Supports for HVAC Piping and Equipment."

- B. Coordinate clearance requirements with piping Installer for piping insulation application. Before preparing piping Shop Drawings, establish and maintain clearance requirements for installation of insulation and field-applied jackets and finishes and for space required for maintenance.
- C. Coordinate installation and testing of heat tracing.

1.6 SCHEDULING

- A. Schedule insulation application after pressure testing systems and, where required, after installing and testing heat tracing. Insulation application may begin on segments that have satisfactory test results.
- B. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

PART 2 - PRODUCTS

2.1 INSULATION MATERIALS

- A. Comply with requirements in "Piping Insulation Schedule, General," "Indoor Piping Insulation Schedule," "Outdoor, Aboveground Piping Insulation Schedule," and "Outdoor, Underground Piping Insulation Schedule" articles for where insulating materials shall be applied.
- B. Products shall not contain asbestos, lead, mercury, or mercury compounds.
- C. Products that come into contact with stainless steel shall have a leachable chloride content of less than 50 ppm when tested in accordance with ASTM C871.
- D. Insulation materials for use on austenitic stainless steel shall be qualified as acceptable in accordance with ASTM C795.
- E. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process.
- A. Flexible Elastomeric: Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C534/C534M, Type I for tubular materials, Type II for sheet materials.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Aeroflex USA.
 - b. Airex Manufacturing.
 - c. Armacell LLC.
 - d. K-Flex USA.

2.2 ADHESIVES

- A. Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated unless otherwise indicated.
- B. Flexible Elastomeric and Polyolefin Adhesive: Solvent-based adhesive.
 - 1. VOC content not greater than 80g/l in accordance with EPA Method 24.
 - 2. Flame-spread index shall be 25 or less and smoke-developed index shall be 50 or less as tested in accordance with ASTM E84.
 - 3. Wet Flash Point: Below 0 deg F.
 - 4. Service Temperature Range: 40 to 200 deg.
 - 5. Color: Black.
- C. ASJ Adhesive, and FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.
 - 1. VOC content not greater than 80g/l in accordance with EPA Method 24.
- D. PVC Jacket Adhesive: Compatible with PVC jacket.
 - 1. VOC content not greater than 80g/l in accordance with EPA Method 24.
 - 2.

2.3 MASTICS

- A. Materials shall be compatible with insulation materials, jackets, and substrates; comply with MIL-PRF-19565C, Type II.
 - 1. VOC content not greater than 80g/l in accordance with EPA Method 24.
- B. Vapor-Barrier Mastic: Water based; suitable for indoor use on below-ambient services.
 - 1. Water-Vapor Permeance: ASTM E 96/E 96M, Procedure B, 0.013 perm at 43-mil dry film thickness.
 - 2. Service Temperature Range: Minus 20 to plus 180 deg F.
 - 3. Solids Content: ASTM D 1644, 58 percent by volume and 70 percent by weight.
 - 4. Color: White.

- C. Vapor-Barrier Mastic: Solvent based; suitable for outdoor use on below-ambient services.
 - 1. Water-Vapor Permeance: ASTM F 1249, 0.05 perm at 30-mil dry film thickness.
 - 2. Service Temperature Range: Minus 50 to plus 220 deg F.
 - 3. Solids Content: ASTM D 1644, 33 percent by volume and 46 percent by weight.
 - 4. Color: White.

- D. Breather Mastic: Water based; suitable for indoor and outdoor use on above-ambient services.
 - 1. Water-Vapor Permeance: ASTM F 1249, 1.8 perms at 0.0625-inch dry film thickness.
 - 2. Service Temperature Range: Minus 20 to plus 180 deg F.
 - 3. Solids Content: 60 percent by volume and 66 percent by weight.
 - 4. Color: White.

2.4 SEALANTS

- A. Joint Sealants for Cellular-Glass and Phenolic Products:
 - 1. Materials shall be compatible with insulation materials, jackets, and substrates.
 - 2. Permanently flexible, elastomeric sealant.
 - 3. Service Temperature Range: Minus 100 to plus 300 deg F.
 - 4. Color: White or gray.
 - 5. VOC content not greater than 80g/l in accordance with EPA Method 24.
 - 6. Comply with the requirements of the California Department of Health Services "Standard practice for the testing of volatile organic emissions from various sources using small Scale Environmental Chambers. Flexible elastomeric and polyolefin adhesive: comply with Mil-A-24179A, Type II, Class I.

- B. FSK and Metal Jacket Flashing Sealants:
 - 1. Materials shall be compatible with insulation materials, jackets, and substrates.
 - 2. Fire- and water-resistant, flexible, elastomeric sealant.
 - 3. Service Temperature Range: Minus 40 to plus 250 deg F.

4. Color: Aluminum.
 5. VOC content not greater than 80g/l in accordance with EPA Method 24.
 6. Comply with the requirements of the California Department of Health Services "Standard practice for the testing of volatile organic emissions from various sources using small Scale Environmental Chambers.
- C. ASJ Flashing Sealants, and Vinyl, PVDC, and PVC Jacket Flashing Sealants:
1. Materials shall be compatible with insulation materials, jackets, and substrates.
 2. Fire- and water-resistant, flexible, elastomeric sealant.
 3. Service Temperature Range: Minus 40 to plus 250 deg F.
 4. Color: White.
 5. VOC content not greater than 80g/l in accordance with EPA Method 24.
 6. Comply with the requirements of the California Department of Health Services "Standard practice for the testing of volatile organic emissions from various sources using small Scale Environmental Chambers. Flexible elastomeric and polyolefin adhesive: comply with Mil-A-24179A, Type II, Class I.

2.5 FACTORY-APPLIED JACKETS

- A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following:
1. ASJ: White, kraft-paper, fiberglass-reinforced scrim with aluminum-foil backing; complying with ASTM C1136, Type I.
 2. ASJ-SSL: ASJ with self-sealing, pressure-sensitive, acrylic-based adhesive covered by a removable protective strip; complying with ASTM C1136, Type I.
 3. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C1136, Type II.

2.6 FIELD-APPLIED JACKETS

- A. PVC Jacket: High-impact-resistant, UV-resistant PVC complying with ASTM D1784, Class 16354-C; thickness as scheduled; roll stock ready for shop or field cutting and forming. Thickness is indicated in field-applied jacket schedules.
1. Adhesive: As recommended by jacket material manufacturer.
 2. Color: White.

3. Factory-fabricated fitting covers to match jacket if available; otherwise, field fabricate.
 - a. Shapes: 45- and 90-degree, short- and long-radius elbows, tees, valves, flanges, unions, reducers, end caps, soil-pipe hubs, traps, mechanical joints, and P-trap and supply covers for lavatories.
- B. Metal Jacket:
 1. Aluminum Jacket: Comply with ASTM B209, Alloy 3003, 3005, 3105, or 5005, Temper H-14.
 - a. Thickness as indicated in field-applied jacket schedules.
 - b. Finish: Mill unless otherwise noted
 - 1) Paintable where piping/jacket is to be painted.
 - c. Moisture Barrier for Outdoor Applications: 3-mil-thick, heat-bonded polyethylene and kraft paper.
 - d. Factory-Fabricated Fitting Covers:
 - 1) Same material, finish, and thickness as jacket.
 - 2) Preformed two-piece or gore, 45- and 90-degree, short- and long-radius elbows.
 - 3) Tee covers.
 - 4) Flange and union covers.
 - 5) End caps.
 - 6) Beveled collars.
 - 7) Valve covers.
 - 8) Field fabricate fitting covers only if factory-fabricated fitting covers are not available.

2.7 TAPES

- A. ASJ Tape: White vapor-retarder tape matching factory-applied jacket with acrylic adhesive, complying with ASTM C 1136.
 1. Width: 3 inches.
 2. Thickness: 11.5 mils.
 3. Adhesion: 90 ounces force/inch in width.
 4. Elongation: 2 percent.
 5. Tensile Strength: 40 lbf/inch in width.
 6. ASJ Tape Disks and Squares: Precut disks or squares of ASJ tape.
- B. FSK Tape: Foil-face, vapor-retarder tape matching factory-applied jacket with acrylic adhesive; complying with ASTM C 1136.

1. Width: 3 inches.
 2. Thickness: 6.5 mils.
 3. Adhesion: 90 ounces force/inch in width.
 4. Elongation: 2 percent.
 5. Tensile Strength: 40 lbf/inch in width.
 6. FSK Tape Disks and Squares: Precut disks or squares of FSK tape.
- C. PVC Tape: White vapor-retarder tape matching field-applied PVC jacket with acrylic adhesive; suitable for indoor and outdoor applications.
1. Width: 2 inches.
 2. Thickness: 6 mils.
 3. Adhesion: 64 ounces force/inch in width.
 4. Elongation: 500 percent.
 5. Tensile Strength: 18 lbf/inch in width.
- D. Aluminum-Foil Tape: Vapor-retarder tape with acrylic adhesive.
1. Width: 2 inches.
 2. Thickness: 3.7 mils.
 3. Adhesion: 100 ounces force/inch in width.
 4. Elongation: 5 percent.
 5. Tensile Strength: 34 lbf/inch in width.

2.8 SECUREMENTS

- A. Bands:
1. Stainless Steel: ASTM A 167 or ASTM A 240/A 240M, Type 304 or Type 316; 0.015-inch-thick, 1/2-inch-wide with wing seal.
- B. Staples: Outward-clinching insulation staples, nominal 3/4-inch-wide, stainless steel or Monel.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.
- B. Clean and prepare surfaces to be insulated. Before insulating, apply a corrosion coating to insulated surfaces as follows:
 - 1. Stainless Steel: Coat 300 series stainless steel with an epoxy primer 5 mils thick and an epoxy finish 5 mils thick if operating in a temperature range between 140 and 300 deg F. Consult coating manufacturer for appropriate coating materials and application methods for operating temperature range.
 - 2. Carbon Steel: Coat carbon steel operating at a service temperature of between 32 and 300 deg F with an epoxy coating. Consult coating manufacturer for appropriate coating materials and application methods for operating temperature range.
- C. Coordinate insulation installation with the tradesman installing heat tracing. Comply with requirements for heat tracing that apply to insulation.
- D. Mix insulating cements with clean potable water; if insulating cements are to be in contact with stainless steel surfaces, use demineralized water.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of piping, including fittings, valves, and specialties.
- B. Install insulation materials, forms, vapor barriers or retarders, jackets, and of thicknesses required for each item of pipe system, as specified in insulation system schedules.
- C. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket in either wet or dry state.
- D. Install insulation with longitudinal seams at top and bottom of horizontal runs.
- E. Install multiple layers of insulation with longitudinal and end seams staggered.
- F. Do not weld brackets, clips, or other attachment devices to piping, fittings, and specialties.

- G. Keep insulation materials dry during storage, application, and finishing. Replace insulation materials that get wet.
- H. Install insulation with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by insulation material manufacturer.
- I. Install insulation with least number of joints practical.
- J. Where vapor barrier is indicated, seal joints, seams, and penetrations in insulation at hangers, supports, anchors, and other projections with vapor-barrier mastic.
 - 1. Install insulation continuously through hangers and around anchor attachments.
 - 2. For insulation application where vapor barriers are indicated, extend insulation on anchor legs from point of attachment to supported item to point of attachment to structure. Taper and seal ends attached to structure with vapor-barrier mastic.
 - 3. Install insert materials and insulation to tightly join the insert. Seal insulation to insulation inserts with adhesive or sealing compound recommended by insulation material manufacturer.
 - 4. Cover inserts with jacket material matching adjacent pipe insulation. Install shields over jacket, arranged to protect jacket from tear or puncture by hanger, support, and shield.
- K. Apply adhesives, mastics, and sealants at manufacturer's recommended coverage rate and wet and dry film thicknesses.
- L. Install insulation with factory-applied jackets as follows:
 - 1. Draw jacket tight and smooth.
 - 2. Cover circumferential joints with 3-inch-wide strips, of same material as insulation jacket. Secure strips with adhesive and outward-clinching staples along both edges of strip, spaced 4 inches o.c.
 - 3. Overlap jacket longitudinal seams at least 1-1/2 inches. Install insulation with longitudinal seams at bottom of pipe. Clean and dry surface to receive self-sealing lap. Staple laps with outward-clinching staples along edge at 4 inches o.c.
 - a. For below-ambient services, apply vapor-barrier mastic over staples.
 - 4. Cover joints and seams with tape, in accordance with insulation material manufacturer's written instructions, to maintain vapor seal.
 - 5. Where vapor barriers are indicated, apply vapor-barrier mastic on seams and joints and at ends adjacent to pipe flanges and fittings.

- M. Cut insulation in a manner to avoid compressing insulation more than 25 percent of its nominal thickness.
- N. Finish installation with systems at operating conditions. Repair joint separations and cracking due to thermal movement.
- O. Repair damaged insulation facings by applying same facing material over damaged areas. Extend patches at least 4 inches beyond damaged areas. Adhere, staple, and seal patches in similar fashion to butt joints.
- P. For above-ambient services, do not install insulation to the following:
 - 1. Vibration-control devices.
 - 2. Testing agency labels and stamps.
 - 3. Nameplates and data plates.

3.3 PENETRATIONS

- A. Insulation Installation at Roof Penetrations: Install insulation continuously through roof penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation above roof surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joints with joint sealant.
 - 3. Extend jacket of outdoor insulation outside roof flashing at least 2 inches below top of roof flashing.
 - 4. Seal jacket to roof flashing with flashing sealant.
- B. Insulation Installation at Aboveground Exterior Wall Penetrations: Install insulation continuously through wall penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation inside wall surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joints with joint sealant.
 - 3. Extend jacket of outdoor insulation outside wall flashing and overlap wall flashing at least 2 inches.
 - 4. Seal jacket to wall flashing with flashing sealant.

- C. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.
- D. Insulation Installation at Floor Penetrations:
 - 1. Pipe: Install insulation continuously through floor penetrations.
 - 2. Seal penetrations through fire-rated assemblies. Comply with requirements in firestopping details.

3.4 GENERAL PIPE INSULATION INSTALLATION

- A. Requirements in this article generally apply to all insulation materials, except where more specific requirements are specified in various pipe insulation material installation articles.
- B. Insulation Installation on Fittings, Valves, Strainers, Flanges, Mechanical Couplings, and Unions:
 - 1. Install insulation over fittings, valves, strainers, flanges, mechanical couplings, unions, and other specialties with continuous thermal and vapor-retarder integrity unless otherwise indicated.
 - 2. Insulate pipe elbows using preformed fitting insulation made from same material and density as that of adjacent pipe insulation. Each piece shall be butted tightly against adjoining piece and bonded with adhesive. Fill joints, seams, voids, and irregular surfaces with insulating cement finished to a smooth, hard, and uniform contour that is uniform with adjoining pipe insulation.
 - 3. Insulate tee fittings with sectional pipe insulation of same material and thickness as that used for adjacent pipe. Cut sectional pipe insulation to fit. Butt each section closely to the next and hold in place with tie wire. Bond pieces with adhesive.
 - 4. Insulate valves using sectional pipe insulation of same material, density, and thickness as that used for adjacent pipe. Overlap adjoining pipe insulation by not less than 2 times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. For valves, insulate up to and including the bonnets, valve stuffing-box studs, bolts, and nuts. Fill joints, seams, and irregular surfaces with insulating cement.
 - 5. Insulate flanges, mechanical couplings, and unions using a section of oversized preformed pipe insulation to fit. Overlap adjoining pipe insulation by not less than 2 times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. Stencil or label the outside insulation jacket of each union with the word "union" matching size and color of pipe labels.

6. Cover segmented insulated surfaces with a layer of finishing cement and coat with a mastic. Install vapor-barrier mastic for below-ambient services and a breather mastic for above-ambient services. Reinforce the mastic with fabric-reinforcing mesh. Trowel the mastic to a smooth and well-shaped contour.
 7. For services not specified to receive a field-applied jacket, except for flexible elastomeric and polyolefin, install fitted PVC cover over elbows, tees, strainers, valves, flanges, and unions. Terminate ends with PVC end caps. Tape PVC covers to adjoining insulation facing, using PVC tape.
- C. Insulate instrument connections for thermometers, pressure gages, pressure temperature taps, test connections, flow meters, sensors, switches, and transmitters on insulated pipes. Shape insulation at these connections by tapering it to and around the connection with insulating cement and finish with finishing cement, mastic, and flashing sealant.
- D. Install removable insulation covers. Installation shall conform to the following:
1. Make removable flange and union insulation from sectional pipe insulation of same thickness as that on adjoining pipe. Install same insulation jacket as that of adjoining pipe insulation.
 2. When flange and union covers are made from sectional pipe insulation, extend insulation from flanges or union at least 2 times the insulation thickness over adjacent pipe insulation on each side of flange or union. Secure flange cover in place with stainless steel or aluminum bands. Select band material compatible with insulation and jacket.
 3. Construct removable valve insulation covers in same manner as for flanges, except divide the two-part section on the vertical center line of valve body.
 4. When covers are made from block insulation, make two halves, each consisting of mitered blocks wired to stainless steel fabric. Secure this wire frame, with its attached insulation, to flanges with tie wire. Extend insulation at least 2 inches over adjacent pipe insulation on each side of valve. Fill space between flange or union cover and pipe insulation with insulating cement. Finish cover assembly with insulating cement applied in two coats. After first coat is dry, apply and trowel second coat to a smooth finish.
 5. Unless a PVC jacket is indicated in field-applied jacket schedules, finish exposed surfaces with a metal jacket.

3.5 INSTALLATION OF FLEXIBLE ELASTOMERIC INSULATION

- A. Seal longitudinal seams and end joints with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- B. Insulation Installation on Pipe Flanges:

1. Install pipe insulation to outer diameter of pipe flange.
2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.
3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with cut sections of sheet insulation of same thickness as that of pipe insulation.
4. Secure insulation to flanges and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

C. Insulation Installation on Pipe Fittings and Elbows:

1. Install mitered sections of pipe insulation.
2. Secure insulation materials and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

D. Insulation Installation on Valves and Pipe Specialties:

1. Install preformed valve covers manufactured of same material as that of pipe insulation when available.
2. When preformed valve covers are not available, install cut sections of pipe and sheet insulation to valve body. Arrange insulation to permit access to packing and to allow valve operation without disturbing insulation.
3. Install insulation to flanges as specified for flange insulation application.
4. Secure insulation to valves and specialties, and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

3.6 FIELD-APPLIED JACKET INSTALLATION

A. Where glass-cloth jackets are indicated, install directly over bare insulation or insulation with factory-applied jackets.

1. Draw jacket smooth and tight to surface with 2-inch overlap at seams and joints.
2. Embed glass cloth between two 0.062-inch-thick coats of lagging adhesive.
3. Completely encapsulate insulation with coating, leaving no exposed insulation.

B. Where FSK jackets are indicated, install as follows:

1. Draw jacket material smooth and tight.
 2. Install lap or joint strips with same material as jacket.
 3. Secure jacket to insulation with manufacturer's recommended adhesive.
 4. Install jacket with 1-1/2-inch laps at longitudinal seams and 3-inch-wide joint strips at end joints.
 5. Seal openings, punctures, and breaks in vapor-retarder jackets and exposed insulation with vapor-barrier mastic.
- C. Where metal jackets are indicated, install with 2-inch overlap at longitudinal seams and end joints. Overlap longitudinal seams arranged to shed water. Seal end joints with weatherproof sealant recommended by insulation manufacturer. Secure jacket with stainless steel bands 12 inches o.c. and at end joints.

3.7 FINISHES

- A. Insulation with ASJ, Glass-Cloth, or Other Paintable Jacket Material: Paint jacket with paint system identified below and as specified in Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."
1. Flat Acrylic Finish: Two finish coats over a primer that is compatible with jacket material and finish coat paint. Add fungicidal agent to render fabric mildew proof.
 - a. Finish Coat Material: Interior, flat, latex-emulsion size.
- B. Flexible Elastomeric Thermal Insulation: After adhesive has fully cured, apply two coats of insulation manufacturer's recommended protective coating.
- C. Color: Final color as selected by Architect. Vary first and second coats to allow visual inspection of the completed Work.
- D. Only paint aluminum jackets where indicated on the plans.

3.8 FIELD QUALITY CONTROL

- A. Perform tests and inspections with the assistance of a factory-authorized service representative.
- B. Tests and Inspections: Inspect pipe, fittings, strainers, and valves, randomly selected by Architect, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to three locations of straight pipe, for each pipe service defined in the "Piping Insulation Schedule, General" Article.
- C. All insulation applications will be considered defective if they do not pass tests and inspections.

- D. Prepare test and inspection reports.

3.9 PIPING INSULATION SCHEDULE, GENERAL

- A. Insulation conductivity and thickness per pipe size shall comply with schedules in this Section or with requirements of authorities having jurisdiction, whichever is more stringent.
- B. Acceptable preformed pipe and tubular insulation materials and thicknesses are identified for each piping system and pipe size range. If more than one material is listed for a piping system, selection from materials listed is Contractor's option.
- C. Items Not Insulated: Unless otherwise indicated, do not install insulation on the following:
 - 1. Underground piping.
 - 2. Chrome-plated pipes and fittings unless there is a potential for personnel injury.

3.10 INDOOR PIPING INSULATION SCHEDULE

- A. Refrigerant Suction and Hot-Gas Piping:
 - 1. All Pipe Sizes: Insulation shall be the following:
 - a. Flexible Elastomeric: 2 inch thick.
- B. Refrigerant Liquid Piping:
 - 1. All Pipe Sizes: Insulation shall be the following:
 - a. Flexible Elastomeric: 1 inch thick.

3.11 OUTDOOR, ABOVEGROUND PIPING INSULATION SCHEDULE

- A. Refrigerant Suction and Hot-Gas Piping:
 - 1. All Pipe Sizes: Insulation shall be the following:
 - a. Flexible Elastomeric: 2 inch thick.
- B. Refrigerant Liquid Piping:
 - 1. All Pipe Sizes: Insulation shall be the following:
 - a. Flexible Elastomeric: 1 inch thick.

3.12 INDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket.
- B. If more than one material is listed, selection from materials listed is Contractor's option.
- C. Piping, Concealed:
 - 1. None.
- D. Piping, Exposed:
 - 1. None.

3.13 OUTDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket.
- B. If more than one material is listed, selection from materials listed is Contractor's option.
- C. Piping, Exposed:
 - 1. Aluminum, Stucco Embossed with Z-Shaped Locking Seam: 0.016 inch
 - a. Jacket to be painted where indicated on the plans.

END OF SECTION 230719

SECTION 232300
REFRIGERANT PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Refrigerant pipes and fittings.
 - 2. Refrigerants.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of valve, refrigerant piping, and piping specialty.
 - 1. Include pressure drop, based on manufacturer's test data, for the following:
 - a. Thermostatic expansion valves.
 - b. Solenoid valves.
 - c. Hot-gas bypass valves.
 - d. Filter dryers.
 - e. Strainers.
 - f. Pressure-regulating valves.
- B. Sustainable Design Submittals:
 - 1. Product Data: For refrigerants, indicating compliance with refrigerant management practices.
- C. Shop Drawings:
 - 1. Show layout of refrigerant piping and specialties, including pipe, tube, and fitting sizes; flow capacities; valve arrangements and locations; slopes of horizontal runs; oil traps; double risers; wall and floor penetrations; and equipment connection details.
 - 2. Show piping size and piping layout, including oil traps, double risers, specialties, and pipe and tube sizes to accommodate, as a minimum, equipment provided, elevation difference between compressor and evaporator, and length of piping to ensure proper operation and compliance with warranties of connected equipment.

3. Show interface and spatial relationships between piping and equipment.

1.4 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For refrigerant valves and piping specialties to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to 2010 ASME Boiler and Pressure Vessel Code: Section IX, "Welding and Brazing Qualifications."
- B. Comply with ASHRAE 15, "Safety Code for Refrigeration Systems."
- C. Comply with ASME B31.5, "Refrigeration Piping and Heat Transfer Components."

1.7 PRODUCT STORAGE AND HANDLING

- A. Store piping with end caps in place to ensure that piping interior and exterior are clean when installed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Line Test Pressure for Refrigerant R-410A:
 1. Suction Lines for Heat-Pump Applications: 600 psig.
 2. Hot-Gas and Liquid Lines: 600 psig.

2.2 COPPER TUBE AND FITTINGS

- A. Copper Tube: ACR.
- B. Wrought-Copper Fittings: ASME B16.22.
- C. Wrought-Copper Unions: ASME B16.22.
- D. Brazing Filler Metals: AWS A5.8/A5.8M.

E. Flexible Connectors:

1. Body: Tin-bronze bellows with woven, flexible, tinned-bronze-wire-reinforced protective jacket.
2. End Connections: Socket ends.
3. Offset Performance: Capable of minimum 3/4-inch misalignment in minimum 7-inch-long assembly.
4. Working Pressure Rating: Factory test at minimum 500 psig.
5. Maximum Operating Temperature: 250 deg F.

2.3 VALVES AND SPECIALTIES

A. Service Valves:

1. Body: Forged brass with brass cap including key end to remove core.
2. Core: Removable ball-type check valve with stainless-steel spring.
3. Seat: Polytetrafluoroethylene.
4. End Connections: Copper spring.
5. Working Pressure Rating: 600 psig.

PART 3 - EXECUTION

3.1 PIPING APPLICATIONS FOR REFRIGERANT R-410A

- A. Hot-Gas and Liquid Lines, and Suction Lines for Heat-Pump Applications: Copper, Type ACR, annealed- or drawn-temper tubing and wrought-copper fittings with brazed joints.

3.2 VALVE AND SPECIALTY APPLICATIONS

- A. Install service valves on all inlets to and outlets from distribution boxes.
- B. Install service valves for gage taps at inlet and outlet of hot-gas bypass valves and strainers if they are not an integral part of valves and strainers.
- C. Install receivers sized to accommodate pump-down charge.
- D. Install flexible connectors at compressors.

3.3 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems; indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on Shop Drawings.

- B. Install refrigerant piping according to ASHRAE 15.
- C. Install piping in concealed locations unless otherwise indicated and except in equipment rooms and service areas.
- D. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- E. Paint piping as indicated on the drawings.
- F. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.
- G. Install piping adjacent to machines to allow service and maintenance.
- H. Install piping free of sags and bends.
- I. Install fittings for changes in direction and branch connections.
- J. Select system components with pressure rating equal to or greater than system operating pressure.
- K. Install piping as short and direct as possible, with a minimum number of joints, elbows, and fittings.
- L. Arrange piping to allow inspection and service of refrigeration equipment. Install valves and specialties in accessible locations to allow for service and inspection.
- M. Install refrigerant piping in protective conduit where installed belowground.
- N. Install refrigerant piping in sheet metal enclosures where indicated on the plans.
- O. Install refrigerant piping in rigid or flexible conduit in locations where exposed to mechanical injury.
- P. Slope refrigerant piping as follows:
 - 1. Install horizontal hot-gas discharge piping with a uniform slope downward away from compressor.
 - 2. Install horizontal suction lines with a uniform slope downward to compressor.
 - 3. Install traps and double risers to entrain oil in vertical runs.
 - 4. Liquid lines may be installed level.
- Q. When brazing or soldering, remove solenoid-valve coils and sight glasses; also remove valve stems, seats, and packing, and accessible internal parts of refrigerant specialties. Do not apply heat near expansion-valve bulb.
- R. Install piping with adequate clearance between pipe and adjacent walls and hangers or between pipes for insulation installation.

- S. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 230518 "Escutcheons for HVAC Piping."

3.4 PIPE JOINT CONSTRUCTION

- A. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- C. Fill pipe and fittings with an inert gas (nitrogen or carbon dioxide), during brazing or welding, to prevent scale formation.
- D. Brazed Joints: Construct joints according to AWS's "Brazing Handbook," Chapter "Pipe and Tube."
 - 1. Use Type BCuP (copper-phosphorus) alloy for joining copper socket fittings with copper pipe.
 - 2. Use Type BAg (cadmium-free silver) alloy for joining copper with bronze or steel.
- E. Threaded Joints: Thread steel pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and to restore full ID. Join pipe fittings and valves as follows:
 - 1. Apply appropriate tape or thread compound to external pipe threads unless dry-seal threading is specified.
 - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

3.5 HANGERS AND SUPPORTS

- A. Comply with requirements for pipe hangers and supports specified in Section 230529 "Hangers and Supports for HVAC Piping and Equipment."
- B. Install the following pipe attachments:
 - 1. Adjustable steel clevis hangers for individual horizontal runs less than 20 feet long.
 - 2. Roller hangers and spring hangers for individual horizontal runs 20 feet or longer.
 - 3. Pipe Roller: MSS SP-58, Type 44 for multiple horizontal piping 20 feet or longer, supported on a trapeze.
 - 4. Spring hangers to support vertical runs.
 - 5. Copper-clad hangers and supports for hangers and supports in direct contact with copper pipe.

- C. Install hangers for copper tubing with the following maximum spacing and minimum rod diameters:
 - 1. NPS 1/2: Maximum span, 60 inches; minimum rod, 1/4 inch.
 - 2. NPS 5/8: Maximum span, 60 inches; minimum rod, 1/4 inch.
 - 3. NPS 1: Maximum span, 72 inches; minimum rod, 1/4 inch.
 - 4. NPS 1-1/4: Maximum span, 96 inches; minimum rod, 3/8 inch.
- D. Support multifloor vertical runs at least at each floor.

3.6 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Comply with ASME B31.5, Chapter VI.
 - 2. Test refrigerant piping, specialties, and receivers. Isolate compressor, condenser, evaporator, and safety devices from test pressure if they are not rated above the test pressure.
 - 3. Test high- and low-pressure side piping of each system separately at not less than the pressures indicated in "Performance Requirements" Article.
 - a. Fill system with nitrogen to the required test pressure.
 - b. System shall maintain test pressure at the manifold gage throughout duration of test.
 - c. Test joints and fittings with electronic leak detector or by brushing a small amount of soap and glycerin solution over joints.
 - d. Remake leaking joints using new materials, and retest until satisfactory results are achieved.
- B. Prepare test and inspection reports.

3.7 SYSTEM CHARGING

- A. Charge system using the following procedures:
 - 1. Install core in filter dryers after leak test but before evacuation.
 - 2. Evacuate entire refrigerant system with a vacuum pump to 500 micrometers. If vacuum holds for 12 hours, system is ready for charging.
 - 3. Break vacuum with refrigerant gas, allowing pressure to build up to 2 psig.
 - 4. Charge system with a new filter-dryer core in charging line.

3.8 ADJUSTING

- A. Adjust thermostatic expansion valve to obtain proper evaporator superheat.

- B. Adjust high- and low-pressure switch settings to avoid short cycling in response to fluctuating suction pressure.
- C. Adjust set-point temperature of air-conditioning or chilled-water controllers to the system design temperature.
- D. Perform the following adjustments before operating the refrigeration system, according to manufacturer's written instructions:
 - 1. Open shutoff valves in condenser water circuit.
 - 2. Verify that compressor oil level is correct.
 - 3. Open compressor suction and discharge valves.
 - 4. Open refrigerant valves except bypass valves that are used for other purposes.
 - 5. Check open compressor-motor alignment and verify lubrication for motors and bearings.
- E. Replace core of replaceable filter dryer after system has been adjusted and after design flow rates and pressures are established.

END OF SECTION

SECTION 233113 - METAL DUCTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Single-wall rectangular ducts and fittings.
2. Double-wall rectangular ducts and fittings.
3. Single-wall round ducts and fittings.
4. Sheet metal materials.
5. Sealant and gaskets.
6. Hangers and supports.
7. Seismic-restraint devices.

- B. Related Sections:

1. Section 230593 "Testing, Adjusting, and Balancing for HVAC" for testing, adjusting, and balancing requirements for metal ducts.
2. Section 233300 "Air Duct Accessories" for dampers, sound-control devices, duct-mounting access doors and panels, turning vanes, and flexible ducts.

1.3 PERFORMANCE REQUIREMENTS

- A. Delegated Duct Design: Duct construction, including sheet metal thicknesses, seam and joint construction, reinforcements, and hangers and supports, shall comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" and performance requirements and design criteria indicated in "Duct Schedule" Article.
- B. Structural Performance: Duct hangers and supports and seismic restraints shall withstand the effects of gravity and seismic loads and stresses within limits and under conditions described in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" and ASCE/SEI 7.

- C. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of the following products:
 - 1. Liners and adhesives.
 - 2. Sealants and gaskets.
 - 3. Seismic-restraint devices.
- B. Delegated-Design Submittal:
 - 1. Sheet metal thicknesses.
 - 2. Joint and seam construction and sealing.
 - 3. Reinforcement details and spacing.
 - 4. Materials, fabrication, assembly, and spacing of hangers and supports.
 - 5. Design Calculations: Calculations including analysis data signed and sealed by the qualified professional engineer responsible for their preparation for selecting hangers and supports and seismic restraints.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Duct installation in congested spaces, indicating coordination with general construction, building components, and other building services. Indicate proposed changes to duct layout.
 - 2. Suspended ceiling components.
 - 3. Structural members to which duct will be attached.
 - 4. Size and location of initial access modules for acoustical tile.
 - 5. Penetrations of smoke barriers and fire-rated construction.
 - 6. Items penetrating finished ceiling including the following:
 - a. Lighting fixtures.
 - b. Air outlets and inlets.

- c. Speakers.
 - d. Sprinklers.
 - e. Access panels.
 - f. Perimeter moldings.
- B. Welding certificates.
- C. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel," for hangers and supports. AWS D9.1M/D9.1, "Sheet Metal Welding Code," for duct joint and seam welding.
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
1. AWS D1.1/D1.1M, "Structural Welding Code - Steel," for hangers and supports.
 2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum," for aluminum supports.
 3. AWS D9.1M/D9.1, "Sheet Metal Welding Code," for duct joint and seam welding.
- C. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1, Section 5 - "Systems and Equipment" and Section 7 - "Construction and System Start-up."
- D. ASHRAE/IESNA Compliance: Applicable requirements in ASHRAE/IESNA 90.1, Section 6.4.4 - "HVAC System Construction and Insulation."

PART 2 - PRODUCTS

2.1 SINGLE-WALL RECTANGULAR DUCTS AND FITTINGS

- A. General Fabrication Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" based on indicated static-pressure class unless otherwise indicated.
- B. Transverse Joints: Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-1, "Rectangular Duct/Transverse Joints," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
- C. Longitudinal Seams: Select seam types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-2, "Rectangular Duct/Longitudinal Seams," for static-pressure class, applicable sealing requirements,

materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

- D. Elbows, Transitions, Offsets, Branch Connections, and Other Duct Construction: Select types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 4, "Fittings and Other Construction," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

2.2 DOUBLE-WALL RECTANGULAR DUCTS AND FITTINGS

- A. Rectangular Ducts: Fabricate ducts with indicated dimensions for the inner duct.
- B. Outer Duct: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" based on indicated static-pressure class unless otherwise indicated.
- C. Transverse Joints: Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-1, "Rectangular Duct/Transverse Joints," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
- D. Longitudinal Seams: Select seam types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-2, "Rectangular Duct/Longitudinal Seams," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
- E. Interstitial Insulation: Fibrous-glass liner complying with ASTM C 1071, NFPA 90A, or NFPA 90B; and with NAIMA AH124, "Fibrous Glass Duct Liner Standard."
 - 1. Maximum Thermal Conductivity: $0.125 \text{ Btu} \times \text{in./h} \times \text{sq. ft.} \times \text{deg Fat } 75 \text{ deg F}$ mean temperature.
 - 2. Install spacers that position the inner duct at uniform distance from outer duct without compressing insulation.
 - 3. Coat insulation with antimicrobial coating.
 - 4. Cover insulation with polyester film complying with UL 181, Class 1.
- F. Inner Duct: Minimum 0.028-inch solid galvanized sheet steel.
- G. Formed-on Transverse Joints (Flanges): Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-1, "Rectangular Duct/Transverse Joints," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

- H. Longitudinal Seams: Select seam types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 2-2, "Rectangular Duct/Longitudinal Seams," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

2.3 SINGLE-WALL ROUND DUCTS AND FITTINGS

- A. General Fabrication Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 3, "Round, Oval, and Flexible Duct," based on indicated static-pressure class unless otherwise indicated.
- B. Flat-Oval Ducts: Indicated dimensions are the duct width (major dimension) and diameter of the round sides connecting the flat portions of the duct (minor dimension).
- C. Transverse Joints: Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 3-1, "Round Duct Transverse Joints," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
 - 1. Transverse Joints in Ducts Larger Than 32 Inches in Diameter: Flanged.
- D. Longitudinal Seams: Select seam types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 3-2, "Round Duct Longitudinal Seams," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
 - 1. Fabricate round ducts larger than 90 inches in diameter with butt-welded longitudinal seams.
 - 2. Fabricate flat-oval ducts larger than 72 inches in width (major dimension) with butt-welded longitudinal seams.
- E. Tees and Laterals: Select types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 3-5, "90 Degree Tees and Laterals," and Figure 3-6, "Conical Tees," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

2.4 SHEET METAL MATERIALS

- A. General Material Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for acceptable materials, material thicknesses, and duct construction methods unless otherwise indicated. Sheet metal materials shall be

free of pitting, seam marks, roller marks, stains, discolorations, and other imperfections.

- B. Galvanized Sheet Steel: Comply with ASTM A 653/A 653M.
 - 1. Galvanized Coating Designation: G90.
 - 2. Finishes for Surfaces Exposed to View: Mill phosphatized.
- C. Reinforcement Shapes and Plates: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.
 - 1. Where black- and galvanized-steel shapes and plates are used to reinforce aluminum ducts, isolate the different metals with butyl rubber, neoprene, or EPDM gasket materials.
- D. Tie Rods: Galvanized steel, 1/4-inch minimum diameter for lengths 36 inches or less; 3/8-inch minimum diameter for lengths longer than 36 inches.

2.5 SEALANT AND GASKETS

- A. General Sealant and Gasket Requirements: Surface-burning characteristics for sealants and gaskets shall be a maximum flame-spread index of 25 and a maximum smoke-developed index of 50 when tested according to UL 723; certified by an NRTL.
- B. Two-Part Tape Sealing System:
 - 1. Tape: Woven cotton fiber impregnated with mineral gypsum and modified acrylic/silicone activator to react exothermically with tape to form hard, durable, airtight seal.
 - 2. Tape Width: 4 inches.
 - 3. Sealant: Modified styrene acrylic.
 - 4. Water resistant.
 - 5. Mold and mildew resistant.
 - 6. Maximum Static-Pressure Class: 10-inch wg, positive and negative.
 - 7. Service: Indoor and outdoor.
 - 8. Service Temperature: Minus 40 to plus 200 deg F.
 - 9. Substrate: Compatible with galvanized sheet steel (both PVC coated and bare), stainless steel, or aluminum.
 - 10. For indoor applications, sealant shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

11. Sealant shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Water-Based Joint and Seam Sealant:
1. Application Method: Brush on.
 2. Solids Content: Minimum 65 percent.
 3. Shore A Hardness: Minimum 20.
 4. Water resistant.
 5. Mold and mildew resistant.
 6. VOC: Maximum 75 g/L (less water).
 7. Maximum Static-Pressure Class: 10-inch wg, positive and negative.
 8. Service: Indoor or outdoor.
 9. Substrate: Compatible with galvanized sheet steel (both PVC coated and bare), stainless steel, or aluminum sheets.
- D. Flanged Joint Sealant: Comply with ASTM C 920.
1. General: Single-component, acid-curing, silicone, elastomeric.
 2. Type: S.
 3. Grade: NS.
 4. Class: 25.
 5. Use: O.
 6. For indoor applications, sealant shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 7. Sealant shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- E. Flange Gaskets: Butyl rubber, neoprene, or EPDM polymer with polyisobutylene plasticizer.
- F. Round Duct Joint O-Ring Seals:

1. Seal shall provide maximum leakage class of 3 cfm/100 sq. ft. at 1-inch wg and shall be rated for 10-inch wg static-pressure class, positive or negative.
2. EPDM O-ring to seal in concave bead in coupling or fitting spigot.
3. Double-lipped, EPDM O-ring seal, mechanically fastened to factory-fabricated couplings and fitting spigots.

2.6 HANGERS AND SUPPORTS

- A. Hanger Rods for Noncorrosive Environments: Cadmium-plated steel rods and nuts.
- B. Strap and Rod Sizes: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 5-1, "Rectangular Duct Hangers Minimum Size," and Table 5-2, "Minimum Hanger Sizes for Round Duct."
- C. Duct Attachments: Sheet metal screws, blind rivets, or self-tapping metal screws; compatible with duct materials.
- D. Trapeze and Riser Supports:
 1. Supports for Galvanized-Steel Ducts: Galvanized-steel shapes and plates.
 2. Supports for Stainless-Steel Ducts: Stainless-steel shapes and plates.
 3. Supports for Aluminum Ducts: Aluminum or galvanized steel coated with zinc chromate.

PART 3 - EXECUTION

3.1 DUCT INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of duct system. Indicated duct locations, configurations, and arrangements were used to size ducts and calculate friction loss for air-handling equipment sizing and for other design considerations. Install duct systems as indicated unless deviations to layout are approved on Shop Drawings and Coordination Drawings.
- B. Install ducts according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" unless otherwise indicated.
- C. Install round ducts in maximum practical lengths.
- D. Install ducts with fewest possible joints.
- E. Install factory- or shop-fabricated fittings for changes in direction, size, and shape and for branch connections.

- F. Unless otherwise indicated, install ducts vertically and horizontally, and parallel and perpendicular to building lines.
- G. Install ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building.
- H. Install ducts with a clearance of 1 inch, plus allowance for insulation thickness.
- I. Route ducts to avoid passing through transformer vaults and electrical equipment rooms and enclosures.
- J. Where ducts pass through non-fire-rated interior partitions and exterior walls and are exposed to view, cover the opening between the partition and duct or duct insulation with sheet metal flanges of same metal thickness as the duct. Overlap openings on four sides by at least 1-1/2 inches.
- K. Where ducts pass through fire-rated interior partitions and exterior walls, install fire dampers. Comply with requirements in Section 233300 "Air Duct Accessories" for fire and smoke dampers.
- L. Protect duct interiors from moisture, construction debris and dust, and other foreign materials. Comply with SMACNA's "IAQ Guidelines for Occupied Buildings Under Construction," Appendix G, "Duct Cleanliness for New Construction Guidelines."

3.2 INSTALLATION OF EXPOSED DUCTWORK

- A. Protect ducts exposed in finished spaces from being dented, scratched, or damaged.
- B. Trim duct sealants flush with metal. Create a smooth and uniform exposed bead. Do not use two-part tape sealing system.
- C. Grind welds to provide smooth surface free of burrs, sharp edges, and weld splatter. When welding stainless steel with a No. 3 or 4 finish, grind the welds flush, polish the exposed welds, and treat the welds to remove discoloration caused by welding.
- D. Maintain consistency, symmetry, and uniformity in the arrangement and fabrication of fittings, hangers and supports, duct accessories, and air outlets.
- E. Repair or replace damaged sections and finished work that does not comply with these requirements.
- F. Tape is not to be used on exposed duct.

3.3 DUCT SEALING

- A. Seal ducts for duct static-pressure, seal classes, and leakage classes specified in "Duct Schedule" Article according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."

- B. Seal ducts to the following seal classes according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible":
1. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."
 2. Outdoor, Supply-Air Ducts: Seal Class A.
 3. Outdoor, Exhaust Ducts: Seal Class C.
 4. Outdoor, Return-Air Ducts: Seal Class C.
 5. Unconditioned Space, Supply-Air Ducts in Pressure Classes 2-Inch wg and Lower: Seal Class B.
 6. Unconditioned Space, Supply-Air Ducts in Pressure Classes Higher Than 2-Inch wg: Seal Class A.
 7. Unconditioned Space, Exhaust Ducts: Seal Class C.
 8. Unconditioned Space, Return-Air Ducts: Seal Class B.
 9. Conditioned Space, Supply-Air Ducts in Pressure Classes 2-Inch wg and Lower: Seal Class C.
 10. Conditioned Space, Supply-Air Ducts in Pressure Classes Higher Than 2-Inch wg: Seal Class B.
 11. Conditioned Space, Exhaust Ducts: Seal Class B.
 12. Conditioned Space, Return-Air Ducts: Seal Class C.

3.4 HANGER AND SUPPORT INSTALLATION

- A. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 5, "Hangers and Supports."
- B. Building Attachments: Concrete inserts, powder-actuated fasteners, or structural-steel fasteners appropriate for construction materials to which hangers are being attached.
1. Where practical, install concrete inserts before placing concrete.
 2. Install powder-actuated concrete fasteners after concrete is placed and completely cured.
 3. Use powder-actuated concrete fasteners for standard-weight aggregate concretes or for slabs more than 4 inches thick.

4. Do not use powder-actuated concrete fasteners for lightweight-aggregate concretes or for slabs less than 4 inches thick.
 5. Do not use powder-actuated concrete fasteners for seismic restraints.
- C. Hanger Spacing: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 5-1, "Rectangular Duct Hangers Minimum Size," and Table 5-2, "Minimum Hanger Sizes for Round Duct," for maximum hanger spacing; install hangers and supports within 24 inches of each elbow and within 48 inches of each branch intersection.
- D. Hangers Exposed to View: Threaded rod and angle or channel supports.
- E. Support vertical ducts with steel angles or channel secured to the sides of the duct with welds, bolts, sheet metal screws, or blind rivets; support at each floor and at a maximum intervals of 16 feet.
- F. Install upper attachments to structures. Select and size upper attachments with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.

3.5 SEISMIC-RESTRAINT-DEVICE INSTALLATION

- A. Install ducts with hangers and braces designed to support the duct and to restrain against seismic forces required by applicable building codes. Comply with ASCE/SEI 7.
1. Space lateral supports per the delegated design requirements.
 2. Brace a change of direction longer per the delegated design requirements.
- B. Select seismic-restraint devices with capacities adequate to carry present and future static and seismic loads.
- C. Install cables so they do not bend across edges of adjacent equipment or building structure.
- D. Install cable restraints on ducts that are suspended with vibration isolators.
- E. Install seismic-restraint devices using methods approved by an agency acceptable to authorities having jurisdiction.
- F. Attachment to Structure: If specific attachment is not indicated, anchor bracing and restraints to structure, to flanges of beams, to upper truss chords of bar joists, or to concrete members.

3.6 CONNECTIONS

- A. Make connections to equipment with flexible connectors complying with Section 233300 "Air Duct Accessories."
- B. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for branch, outlet and inlet, and terminal unit connections.

3.7 PAINTING

- A. Paint interior of metal ducts that are visible through registers and grilles and that do not have duct liner. Apply one coat of flat, black, latex paint over a compatible galvanized-steel primer. Paint materials and application requirements are specified in Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."

3.8 FIELD QUALITY CONTROL

- A. Independent 3rd party commissioning agent to perform tests and inspections including, but not limited to, that listed below.
- B. Leakage Tests:
 - 1. Comply with SMACNA's "HVAC Air Duct Leakage Test Manual." Submit a test report for each test.
- C. Duct System Cleanliness Tests:
 - 1. Visually inspect duct system to ensure that no visible contaminants are present.
 - 2. Test sections of metal duct system, chosen randomly by Owner, for cleanliness according to "Vacuum Test" in NADCA ACR, "Assessment, Cleaning and Restoration of HVAC Systems."
 - a. Acceptable Cleanliness Level: Net weight of debris collected on the filter media shall not exceed 0.75 mg/100 sq. cm.
- D. Duct system will be considered defective if it does not pass tests and inspections.
- E. Prepare test and inspection reports.

3.9 DUCT CLEANING

- A. Clean new duct system(s) before testing, adjusting, and balancing.
- B. Use service openings for entry and inspection.

1. Create new openings and install access panels appropriate for duct static-pressure class if required for cleaning access. Provide insulated panels for insulated or lined duct. Patch insulation and liner as recommended by duct liner manufacturer. Comply with Section 233300 "Air Duct Accessories" for access panels and doors.
 2. Disconnect and reconnect flexible ducts as needed for cleaning and inspection.
 3. Remove and reinstall ceiling to gain access during the cleaning process.
- C. If duct system is considered defective due to cleanliness the entire duct system shall be mechanically, and surface, cleaned per the specifications below.
- D. Particulate Collection and Odor Control:
1. When venting vacuuming system inside the building, use HEPA filtration with 99.97 percent collection efficiency for 0.3-micron-size (or larger) particles.
 2. When venting vacuuming system to outdoors, use filter to collect debris removed from HVAC system, and locate exhaust downwind and away from air intakes and other points of entry into building.
- E. Clean the following components by removing surface contaminants and deposits:
1. Air outlets and inlets (registers, grilles, and diffusers).
 2. Supply, return, and exhaust fans including fan housings, plenums (except ceiling supply and return plenums), scrolls, blades or vanes, shafts, baffles, dampers, and drive assemblies.
 3. Air-handling unit internal surfaces and components including mixing box, coil section, air wash systems, spray eliminators, condensate drain pans, humidifiers and dehumidifiers, filters and filter sections, and condensate collectors and drains.
 4. Coils and related components.
 5. Return-air ducts, dampers, actuators, and turning vanes except in ceiling plenums and mechanical equipment rooms.
 6. Supply-air ducts, dampers, actuators, and turning vanes.
 7. Dedicated exhaust and ventilation components and makeup air systems.
- F. Mechanical Cleaning Methodology:
1. Clean metal duct systems using mechanical cleaning methods that extract contaminants from within duct systems and remove contaminants from building.

2. Use vacuum-collection devices that are operated continuously during cleaning. Connect vacuum device to downstream end of duct sections so areas being cleaned are under negative pressure.
3. Use mechanical agitation to dislodge debris adhered to interior duct surfaces without damaging integrity of metal ducts, duct liner, or duct accessories.
4. Clean fibrous-glass duct liner with HEPA vacuuming equipment; do not permit duct liner to get wet. Replace fibrous-glass duct liner that is damaged, deteriorated, or delaminated or that has friable material, mold, or fungus growth.
5. Clean coils and coil drain pans according to NADCA 1992. Keep drain pan operational. Rinse coils with clean water to remove latent residues and cleaning materials; comb and straighten fins.
6. Provide drainage and cleanup for wash-down procedures.
7. Antimicrobial Agents and Coatings: Apply EPA-registered antimicrobial agents if fungus is present. Apply antimicrobial agents according to manufacturer's written instructions after removal of surface deposits and debris.

3.10 START UP

- A. Air Balance: Comply with requirements in Section 230593 "Testing, Adjusting, and Balancing for HVAC."

3.11 DUCT SCHEDULE

A. Supply Ducts:

1. Ducts:
 - a. Pressure Class: Positive at pressures indicated in the project schedules.
 - b. Minimum SMACNA Seal Class: A.
 - c. SMACNA Leakage Class for Rectangular: 12.
 - d. SMACNA Leakage Class for Round and Flat Oval: 6.
2. All ductwork installed outside of the building to be double wall.

B. Return Ducts:

1. Ducts Connected to Air-Handling Units:
 - a. Pressure Class: Negative at pressures indicated in the project schedules.
 - b. Minimum SMACNA Seal Class: A.
 - c. SMACNA Leakage Class for Rectangular: 6.
 - d. SMACNA Leakage Class for Round and Flat Oval: 3.

2. All ductwork installed outside of the building to be double wall.
- C. Ducts Connected to Equipment Not Listed Above:
- a. Pressure Class: Positive or negative at pressures indicated in the project schedules.
 - b. Minimum SMACNA Seal Class: A.
 - c. SMACNA Leakage Class for Rectangular: 6.
 - d. SMACNA Leakage Class for Round and Flat Oval: 3.
2. All ductwork installed outside of the building to be double wall.
- D. Intermediate Reinforcement:
1. Galvanized-Steel Ducts: Galvanized steel.
- E. Elbow Configuration:
1. Rectangular Duct: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-2, "Rectangular Elbows."
 - a. Velocity 1000 fpm or Lower:
 - 1) Radius Type RE 1 with minimum 0.5 radius-to-diameter ratio.
 - 2) Mitered Type RE 4 without vanes.
 - b. Velocity 1000 to 1500 fpm:
 - 1) Radius Type RE 1 with minimum 1.0 radius-to-diameter ratio.
 - 2) Radius Type RE 3 with minimum 0.5 radius-to-diameter ratio and two vanes.
 - 3) Mitered Type RE 2 with vanes complying with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-3, "Vanes and Vane Runners," and Figure 4-4, "Vane Support in Elbows."
 - c. Velocity 1500 fpm or Higher:
 - 1) Radius Type RE 1 with minimum 1.5 radius-to-diameter ratio.
 - 2) Radius Type RE 3 with minimum 1.0 radius-to-diameter ratio and two vanes.
 - 3) Mitered Type RE 2 with vanes complying with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-3, "Vanes and Vane Runners," and Figure 4-4, "Vane Support in Elbows."
 2. Rectangular Duct: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-2, "Rectangular Elbows."

- a. Radius Type RE 1 with minimum 1.5 radius-to-diameter ratio.
 - b. Radius Type RE 3 with minimum 1.0 radius-to-diameter ratio and two vanes.
 - c. Mitered Type RE 2 with vanes complying with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-3, "Vanes and Vane Runners," and Figure 4-4, "Vane Support in Elbows."
3. Round Duct: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 3-4, "Round Duct Elbows."
- a. Minimum Radius-to-Diameter Ratio and Elbow Segments: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 3-1, "Mitered Elbows." Elbows with less than 90-degree change of direction have proportionately fewer segments.
 - 1) Velocity 1000 fpm or Lower: 0.5 radius-to-diameter ratio and three segments for 90-degree elbow.
 - 2) Velocity 1000 to 1500 fpm: 1.0 radius-to-diameter ratio and four segments for 90-degree elbow.
 - 3) Velocity 1500 fpm or Higher: 1.5 radius-to-diameter ratio and five segments for 90-degree elbow.
 - 4) Radius-to Diameter Ratio: 1.5.
 - b. Round Elbows, 12 Inches and Smaller in Diameter: Stamped or pleated.
 - c. Round Elbows, 14 Inches and Larger in Diameter: Standing seam.
- F. Branch Configuration:
1. Rectangular Duct: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 4-6, "Branch Connection."
 - a. Rectangular Main to Rectangular Branch: 45-degree entry.
 2. Round and Flat Oval: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Figure 3-5, "90 Degree Tees and Laterals," and Figure 3-6, "Conical Tees." Saddle taps are permitted in existing duct.
 - a. Velocity 1500 fpm or Higher: 45-degree lateral.

END OF SECTION 233113

SECTION 233300 - AIR DUCT ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Manual volume dampers.
 - 2. Flange connectors.
 - 3. Turning vanes.
 - 4. Flexible connectors.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For duct accessories. Include plans, elevations, sections, details and attachments to other work.
 - 1. Detail duct accessories fabrication and installation in ducts and other construction. Include dimensions, weights, loads, and required clearances; and method of field assembly into duct systems and other construction. Include the following:
 - a. Special fittings.
 - b. Manual volume damper installations.
 - c. Control-damper installations.
 - d. Fire-damper, smoke-damper, combination fire- and smoke-damper, ceiling, and corridor damper installations, including sleeves; and duct-mounted access doors and remote damper operators.
 - e. Duct security bars.
 - f. Wiring Diagrams: For power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which ceiling-mounted access panels and access doors required for access to duct accessories are shown and coordinated with each other, using input from Installers of the items involved.
- B. Source quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For air duct accessories to include in operation and maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Fusible Links: Furnish quantity equal to 10 percent of amount installed.

PART 2 - PRODUCTS

2.1 ASSEMBLY DESCRIPTION

- A. Comply with NFPA 90A, "Installation of Air Conditioning and Ventilating Systems," and with NFPA 90B, "Installation of Warm Air Heating and Air Conditioning Systems."
- B. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for acceptable materials, material thicknesses, and duct construction methods unless otherwise indicated. Sheet metal materials shall be free of pitting, seam marks, roller marks, stains, discolorations, and other imperfections.

2.2 MATERIALS

- A. Galvanized Sheet Steel: Comply with ASTM A 653/A 653M.
 - 1. Galvanized Coating Designation: G90.
 - 2. Exposed-Surface Finish: Mill phosphatized.
- B. Stainless-Steel Sheets: Comply with ASTM A 480/A 480M, Type 304, and having a No. 2 finish for concealed ducts and finish for exposed ducts.

- C. Aluminum Sheets: Comply with ASTM B 209, Alloy 3003, Temper H14; with mill finish for concealed ducts and standard, 1-side bright finish for exposed ducts.
- D. Extruded Aluminum: Comply with ASTM B 221, Alloy 6063, Temper T6.
- E. Reinforcement Shapes and Plates: Galvanized-steel reinforcement where installed on galvanized sheet metal ducts; compatible materials for aluminum and stainless-steel ducts.
- F. Tie Rods: Galvanized steel, 1/4-inch minimum diameter for lengths 36 inches or less; 3/8-inch minimum diameter for lengths longer than 36 inches.

2.3 MANUAL VOLUME DAMPERS

- A. Low-Leakage, Steel, Manual Volume Dampers:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Nailor Industries Inc.
 - b. Pottorff.
 - c. Ruskin Company.
 - d. Vent Products Co., Inc.
 - 2. Comply with AMCA 500-D testing for damper rating.
 - 3. Low-leakage rating, with linkage outside airstream, and bearing AMCA's Certified Ratings Seal for both air performance and air leakage.
 - 4. Suitable for horizontal or vertical applications.
 - 5. Frames:
 - a. Raised Hat shape.
 - b. 0.094-inch-thick, galvanized sheet steel.
 - c. Mitered and welded corners.
 - d. Flanges for attaching to walls and flangeless frames for installing in ducts.
 - 6. Blades:
 - a. Multiple or single blade.
 - b. Parallel- or opposed-blade design.
 - c. Stiffen damper blades for stability.
 - d. Galvanized, roll-formed steel, 0.064 inch thick.
 - 7. Blade Axles: Stainless steel.
 - 8. Blade Seals: Vinyl or Neoprene.

9. Jamb Seals: Cambered stainless steel or aluminum.
 10. Tie Bars and Brackets: Galvanized steel.
 11. Accessories:
 - a. Include locking device to hold single-blade dampers in a fixed position without vibration.
- B. Jackshaft:
1. Size: 0.5-inch diameter.
 2. Material: Galvanized-steel pipe rotating within pipe-bearing assembly mounted on supports at each mullion and at each end of multiple-damper assemblies.
 3. Length and Number of Mountings: As required to connect linkage of each damper in multiple-damper assembly.
- C. Damper Hardware:
1. Zinc-plated, die-cast core with dial and handle made of 3/32-inch-thick zinc-plated steel, and a 3/4-inch hexagon locking nut.
 2. Include center hole to suit damper operating-rod size.
 3. Include elevated platform for insulated duct mounting.

2.4 FLANGE CONNECTORS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. CL WARD & Family Inc.
 2. Ductmate Industries, Inc.
 3. Hardcast, Inc.
 4. Nexus PDQ.
 5. Ward Industries; a brand of Hart & Cooley, Inc.
- B. Description: Add-on or roll-formed, factory-fabricated, slide-on transverse flange connectors, gaskets, and components.
- C. Material: Galvanized steel.
- D. Gage and Shape: Match connecting ductwork.

2.5 TURNING VANES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. CL WARD & Family Inc.
 - 2. Ductmate Industries, Inc.
 - 3. Duro Dyne Inc.
 - 4. METALAIRE, Inc.
 - 5. SEMCO LLC.
- B. Manufactured Turning Vanes for Metal Ducts: Curved blades of galvanized sheet steel; support with bars perpendicular to blades set; set into vane runners suitable for duct mounting.
 - 1. Acoustic Turning Vanes: Fabricate airfoil-shaped aluminum extrusions with perforated faces and fibrous-glass fill.
- C. Manufactured Turning Vanes for Nonmetal Ducts: Fabricate curved blades of resin-bonded fiberglass with acrylic polymer coating; support with bars perpendicular to blades set; set into vane runners suitable for duct mounting.
- D. General Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible"; Figures 4-3, "Vaness and Vane Runners," and 4-4, "Vane Support in Elbows."
- E. Vane Construction: Single and Double wall.
- F. Vane Construction: Single wall for ducts up to 48 inches wide and double wall for larger dimensions.

2.6 FLEXIBLE CONNECTORS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. CL WARD & Family Inc.
 - 2. Ductmate Industries, Inc.
 - 3. Duro Dyne Inc.
- B. Materials: Flame-retardant or noncombustible fabrics.

- C. Coatings and Adhesives: Comply with UL 181, Class 1.
- D. Metal-Edged Connectors: Factory fabricated with a fabric strip 5-3/4 inches wide attached to two strips of 2-3/4-inch-wide, 0.028-inch-thick, galvanized sheet steel or 0.032-inch-thick aluminum sheets. Provide metal compatible with connected ducts.
- E. Indoor System, Flexible Connector Fabric: Glass fabric double coated with neoprene.
 - 1. Minimum Weight: 26 oz./sq. yd..
 - 2. Tensile Strength: 480 lbf/inch in the warp and 360 lbf/inch in the filling.
 - 3. Service Temperature: Minus 40 to plus 200 deg F.
- F. Outdoor System, Flexible Connector Fabric: Glass fabric double coated with weatherproof, synthetic rubber resistant to UV rays and ozone.
 - 1. Minimum Weight: 24 oz./sq. yd..
 - 2. Tensile Strength: 530 lbf/inch in the warp and 440 lbf/inch in the filling.
 - 3. Service Temperature: Minus 50 to plus 250 deg F.
- G. Thrust Limits: Combination coil spring and elastomeric insert with spring and insert in compression, and with a load stop. Include rod and angle-iron brackets for attaching to fan discharge and duct.
 - 1. Frame: Steel, fabricated for connection to threaded rods and to allow for a maximum of 30 degrees of angular rod misalignment without binding or reducing isolation efficiency.
 - 2. Outdoor Spring Diameter: Not less than 80 percent of the compressed height of the spring at rated load.
 - 3. Minimum Additional Travel: 50 percent of the required deflection at rated load.
 - 4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 - 5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.
 - 6. Elastomeric Element: Molded, oil-resistant rubber or neoprene.
 - 7. Coil Spring: Factory set and field adjustable for a maximum of 1/4-inch movement at start and stop.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install duct accessories according to applicable details in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for metal ducts and in NAIMA AH116, "Fibrous Glass Duct Construction Standards," for fibrous-glass ducts.
- B. Install duct accessories of materials suited to duct materials; use galvanized-steel accessories in galvanized-steel and fibrous-glass ducts, stainless-steel accessories in stainless-steel ducts, and aluminum accessories in aluminum ducts.
- C. Compliance with ASHRAE/IESNA 90.1-2004 includes Section 6.4.3.3.3 - "Shutoff Damper Controls," restricts the use of backdraft dampers, and requires control dampers for certain applications. Install backdraft dampers at inlet of exhaust fans or exhaust ducts as close as possible to exhaust fan unless otherwise indicated.
- D. Install volume dampers at points on supply, return, and exhaust systems where branches extend from larger ducts. Where dampers are installed in ducts having duct liner, install dampers with hat channels of same depth as liner, and terminate liner with nosing at hat channel.
 - 1. Install steel volume dampers in steel ducts.
 - 2. Install aluminum volume dampers in aluminum ducts.
- E. Set dampers to fully open position before testing, adjusting, and balancing.
- F. Install flexible connectors to connect ducts to equipment.
- G. For fans developing static pressures of 5-inch wg and more, cover flexible connectors with loaded vinyl sheet held in place with metal straps.
- H. Install thrust limits at centerline of thrust, symmetrical on both sides of equipment. Attach thrust limits at centerline of thrust and adjust to a maximum of 1/4-inch movement during start and stop of fans.

3.2 FIELD QUALITY CONTROL

- A. Tests and Inspections:
 - 1. Operate dampers to verify full range of movement.
 - 2. Inspect locations of access doors and verify that purpose of access door can be performed.

3. Operate fire, smoke, and combination fire and smoke dampers to verify full range of movement and verify that proper heat-response device is installed.
4. Inspect turning vanes for proper and secure installation.
5. Operate remote damper operators to verify full range of movement of operator and damper.

END OF SECTION 233300

SECTION 237343.16 - OUTDOOR, SEMI-CUSTOM AIR-HANDLING UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes outdoor, semi-custom air-handling units that are factory assembled using multiple section components; including:
 - 1. Unit casings.
 - 2. Fan, drive, and motor section.
 - 3. Coil section.
 - 4. Air filtration section.
 - 5. Dampers.
 - 6. Roof curbs.

1.2 ACTION SUBMITTALS

- A. Product Data: For each air-handling unit.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
 - 3. Include unit dimensions and weight.
 - 4. Include cabinet material, metal thickness, finishes, insulation, and accessories.
 - 5. Fans:
 - a. Include certified fan-performance curves with system operating conditions indicated.
 - b. Include certified fan-sound power ratings.
 - c. Include fan construction and accessories.
 - d. Include motor ratings, electrical characteristics, and motor accessories.
 - 6. Include certified coil-performance ratings with system operating conditions indicated.
 - 7. Include certified coil-performance ratings with system operating conditions indicated.

8. Include dampers, including housings, linkages, and operators.
- B. Shop Drawings: For each outdoor, semi-custom air-handling unit.
1. Include plans, elevations, sections, and mounting and attachment details.
 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 3. Detail fabrication and assembly of outdoor, semi-custom air-handling units, as well as procedure and diagrams.
 4. Include diagrams for power, signal, and control wiring.
- C. Delegated-Design Submittal: For vibration isolation and seismic restraints indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
1. Include design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.

1.3 INFORMATIONAL SUBMITTALS

- A. Sample Warranty: For manufacturer's warranty.
- B. Seismic Qualification Data: Certificates for air-handling units, accessories, and components, from manufacturer.
- C. Product Certificates: Submit certification that specified equipment will withstand wind forces identified in "Performance Requirements" Article and in Section 230548 "Vibration and Seismic Controls for HVAC."
- D. Source quality-control reports.
- E. Startup service reports.
- F. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For air-handling units to include in emergency, operation, and maintenance manuals.
- B. Startup sheets.

1.5 WARRANTY

- A. Warranty: Manufacturer agrees to repair or replace components of outdoor, semi-custom, air-handling unit that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period for Entire Unit: Manufacturer's standard but not less than one year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. NFPA Compliance: Comply with NFPA 90A for design, fabrication, and installation of air-handling units and components.
- C. ASHRAE 62.1 Compliance: Applicable requirements in ASHRAE 62.1, Section 5 - "Systems and Equipment" and Section 7 - "Construction and Startup."
- D. ASHRAE/IES 90.1 Compliance: Applicable requirements in ASHRAE/IES 90.1, Section 6 - "Heating, Ventilating, and Air-Conditioning."
- E. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design vibration isolation and seismic restraints, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- F. Structural Performance:
 - 1. Casing Panels: Self-supporting and capable of withstanding positive/negative 8-inch wg internal static pressure, without exceeding a midpoint deflection of 0.0042 inch/inch of panel span.
 - 2. Floor and Roof Panels: Self-supporting and capable of withstanding 300-lb static load at midspan, without exceeding a midpoint deflection of 0.0042 inch/inch.
 - 3. Roof Panels: Self-supporting and capable of withstanding a static snow load of 30 lb/sq. ft., without exceeding a midpoint deflection of 0.0042 inch/inch.
- G. Casing Leakage Performance: ASHRAE 111, Class 6 leakage or better at plus or minus 8-inch wg.

- H. Seismic Performance: Air-handling units shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
 - 2. Component Importance Factor: 1.0.

2.2 CAPACITIES AND CHARACTERISTICS

- A. Per the project drawings.

2.3 MANUFACTURERS

- A. Shall be one of the following:
 - 1. AAON
 - 2. Daikin
 - 3. Dunham-Bush
 - 4. Johnson Controls
 - 5. Trane

2.4 UNIT CASINGS

- A. Frame: Modular and providing overall structural integrity without reliance on casing panels for structural support.
- B. Base Rail:
 - 1. Material: Galvanized steel.
 - 2. Height: 6 inches.
- C. Casing Joints: Hermetically sealed at each corner and around entire perimeter.
- D. Double-Wall Construction:
 - 1. Outside Casing Wall:
 - a. Material, Galvanized Steel: Minimum 18 gauge thick.
 - b. Factory Finish: Provide manufacturer's standard finish.
 - 2. Inside Casing Wall:

- a. Material, Galvanized Steel: Solid, minimum 18 gauge thick.
- E. Floor Plate:
 - 1. Outside Casing Wall:
 - a. Material, Galvanized Steel: Minimum 18 gauge thick.
 - b. Factory Finish: Provide manufacturer's standard finish.
 - 2. Inside Casing Wall:
 - a. Material, Galvanized Steel: Solid, minimum 18 gauge thick.
- F. Roof: Cross-broken and pitched with "C" caps over joints to provide watertight seal.
- G. Casing Insulation:
 - 1. Materials: Injected polyurethane foam insulation.
 - 2. Casing Panel R-Value: Minimum R-13.
 - 3. Insulation Thickness: 2 inches.
 - 4. Thermal Break: Provide continuity of insulation with no through-casing metal in casing walls, floors, or roofs of air-handling unit.
- H. Airstream Surfaces: Surfaces in contact with airstream shall comply with requirements in ASHRAE 62.1.
- I. Static-Pressure Classifications:
 - 1. For Unit Sections Upstream of Fans: Minus 4-inch wg.
 - 2. For Unit Sections Downstream and Including Fans: 4-inch wg.
- J. Doors:
 - 1. Doors:
 - a. Fabrication: Formed and reinforced, double-wall and insulated panels of same materials and thicknesses as casing.
 - b. Hinges: A minimum of two ball-bearing hinges or stainless-steel piano hinge and two wedge-lever latches, operable from inside and outside. Arrange doors to be opened against airflow. Provide safety latch retainers on doors so that doors do not open uncontrollably.
 - c. Gasket: Neoprene, applied around entire perimeters of panel frames.
 - d. Size: Large enough to allow for unobstructed access for inspection and maintenance of air-handling unit's internal components. At least 24 inches wide by full height of unit casing up to a maximum height of 60 inches.

2. Convenience Outlets: One 20-A duplex GFCI receptacle per location with junction box located on outside casing wall.

K. Condensate Drain Pans:

1. Location: Each type of cooling coil.
2. Construction:
 - a. Double-wall, galvanized-steel sheet with space between walls filled with foam insulation and moisture-tight seal.
3. Drain Connection:
 - a. Located at lowest point of pan and sized to prevent overflow. Terminate with threaded nipple on one end of pan.
4. Slope: Minimum 0.125-in./ft slope, to comply with ASHRAE 62.1, in at least two planes to collect condensate from cooling coils (including coil piping connections, coil headers, and return bends) and from humidifiers and to direct water toward drain connection.
5. Length: Extend drain pan downstream from leaving face for distance to comply with ASHRAE 62.1.
6. Width: Entire width of water producing device.
7. Depth: A minimum of 2 inches deep.

2.5 FAN, DRIVE, AND MOTOR SECTION

- A. Fan and Drive Assemblies: Statically and dynamically balanced and designed for continuous operation at maximum-rated fan speed and motor horsepower.
- B. Fans: Centrifugal, rated according to AMCA 210; galvanized steel; mounted on solid-steel shaft.
 1. Shafts: With field-adjustable alignment.
 - a. Turned, ground, and polished hot-rolled steel with keyway.
 2. Housings: Formed- and reinforced-steel panels to form curved scroll housings with shaped cutoff and spun-metal inlet bell.
 - a. Bracing: Steel angle or channel supports for mounting and supporting fan scroll, wheel, motor, and accessories.
 3. Housings, Plenum Fans: Steel frame and panel; fabricated without fan scroll and volute housing. Provide inlet screens for Type SWSI fans.

4. Mounting: For internal vibration isolation and seismic control. Factory-mount fans with manufacturer's standard restrained vibration isolation mounting devices having a minimum static deflection of 1 inch.
 5. Shaft Lubrication Lines: Extended to a location outside the casing.
 6. Flexible Connector: Factory fabricated with a fabric strip minimum 3-1/2 inches wide, attached to two strips of minimum 2-3/4-inch-wide by 0.028-inch-thick, galvanized-steel sheet.
 - a. Flexible Connector Fabric: Glass fabric, double coated with neoprene. Fabrics, coatings, and adhesives shall comply with UL 181, Class 1.
 - 1) Fabric Minimum Weight: 26 oz./sq. yd..
 - 2) Fabric Minimum Tensile Strength: 480 lbf/inch in the warp and 360 lbf/inch in the filling.
 - 3) Fabric Minimum Service Temperature Range: Minus 40 to plus 200 deg F.
- C. Drive, Direct: Factory-mounted, direct drive.
- D. Motors:
1. Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements for motors specified in Section 230513 "Common Motor Requirements for HVAC Equipment."
 2. Motor Sizes: Minimum size as indicated. If not indicated, large enough so driven load will not require motor to operate in service factor range above 1.0.
 3. Enclosure Type: Open, drip proof.
 4. Unusual Service Conditions:
 - a. Ambient Temperature: 104 deg F.
 - b. Altitude: 4,000 above sea level.
 5. Efficiency: Premium efficient as defined in NEMA MG 1.
 6. Controllers, Electrical Devices, and Wiring: Comply with requirements for electrical devices and connections specified in electrical Sections.
 7. Mount unit-mounted disconnect switches on exterior of unit.
- E. Variable-Frequency Motor Controller: Serving each fan individually in fan array.
1. Variable frequency drives shall be provided, mounted and wired by the AHU manufacturer as indicated on the schedule and drawings. All standard and optional features shall be included within the VFD enclosure, unless otherwise

specified. The VFDs shall be UL listed. The listing shall allow mounting in plenum or other air handling compartments.

2. The VFD shall convert incoming fixed frequency three-phase AC power into a variable frequency and voltage for controlling the speed of three-phase AC motors. The motor current shall closely approximate a sine wave. Motor voltage shall be varied with frequency to maintain desired motor magnetization current suitable for centrifugal pump and fan control and to eliminate the need for motor derating.
3. With the motor's rated voltage applied to the VFD input, the VFD shall allow the motor to produce full rated power at rated amps, RMS fundamental volts, and speed without using the motor's service factor. VFDs utilizing sine weighted/coded modulation (with or without 3rd harmonic injection) must provide data verifying that the motors will not draw more than full load current during full load and full speed operation.
4. The VFD shall include an input full-wave bridge rectifier and maintain a fundamental power factor near unity regardless of speed or load.
5. The VFD and options shall be tested to ANSI/UL Standard 508. The complete VFD, including all specified options, shall be assembled by the manufacturer, which shall be UL 508 certified for the building and assembly of option panels. Assembly of separate panels with options by a third-party is not acceptable. The appropriate UL stickers shall be applied to both the VFD and option panel, in the case where these are not contained in one panel.
6. The VFD shall have DC link reactors on both the positive and negative rails of the DC bus to minimize power line harmonics. VFDs without DC link reactors shall provide a minimum 3% impedance line reactor.
7. The VFDs full load amp rating shall meet or exceed NEC Table 430-150. The VFD shall be able to provide full rated output current continuously, 110% of rated current for 60 seconds and 160% of rated current for up to 0.5 second while starting.
8. The VFD shall be able to provide full torque at any selected frequency from 28 Hz to base speed to allow driving direct drive fans without derating.
9. An automatic energy optimization selection feature shall be provided standard in the VFD. This feature shall automatically and continually monitor the motor speed and load and adjust the applied voltage to maximize energy savings and provide up to an additional 3% to 10% energy savings.
10. Input and output power circuit switching shall be able to be accomplished without interlocks or damage to the VFD. Switching rate may be up to 1 time per minute on the input and unlimited on the output.

11. An automatic motor adaptation test algorithm shall measure motor stator resistance and reactance to optimize performance and efficiency. It shall not be necessary to run the motor or de-couple the motor from the load to run the test.
12. Galvanic and/or optical isolation shall be provided between the VFDs power circuitry and control circuitry to ensure operator safety and to protect connected electronic control equipment from damage caused by voltage spikes, current surges, and ground loop currents. VFDs not including either galvanic or optical isolation on both analog I/O and discrete I/O shall include additional isolation modules.
13. The VFD shall minimize the audible motor noise through the use of an adjustable carrier frequency. The carrier frequency shall be automatically adjusted to optimize motor and VFD efficiencies while reducing motor noise.
14. Protective Features
 - a. Protection shall be provided against input transients, loss of AC line phase, output short circuit, output ground fault, overvoltage, undervoltage, VFD overtemperature and motor overtemperature. The VFD shall display all faults as words. Codes are not acceptable.
 - b. The VFD shall be protected from sustained power or phase loss. The VFD shall provide full rated output with an input voltage as low as 90% of the nominal. The VFD shall continue to operate with reduced output with an input voltage as low as 164 V AC for 208/230 volt units, 313 V AC for 460 volt units, and 394 volts for 600 volt units.
 - c. The VFD shall incorporate a motor preheat circuit to keep the motor warm and prevent condensation build up in the stator.
 - d. The VFD package shall include semi-conductor rated input fuses to protect power components.
 - e. To prevent breakdown of the motor winding insulation, the VFD shall be designed to comply with IEC Part 34-17. Otherwise the AHU manufacturer shall ensure that inverter rated motors are supplied.
 - f. The VFD shall include a "signal loss detection" circuit to sense the loss of an analog input signal such as 4 to 20 mA or 2 to 10 V DC, and shall be programmable to react as desired in such an instance.
 - g. The VFD shall function normally when the keypad is removed while the VFD is running and continue to follow remote commands. No warnings or alarms shall be issued as a result of removing the keypad.
 - h. The VFD shall catch a rotating motor operating forward or reverse up to full speed.
 - i. The VFD shall be rated for 100,000 amp interrupting capacity (AIC).
 - j. The VFD shall include current sensors on all three output phases to detect and report phase loss to the motor. The VFD shall identify which of the output phases is low or lost.
 - k. The VFD shall continue to operate without faulting until input voltage reaches 300 V AC on 208/230 volt units, 539 V AC on 460 volt units, and 690 volts on 600 volt units.

15. Interface Features

- a. Hand/Start, Off/Stop and Auto/Start selector switches shall be provided to start and stop the VFD and determine the speed reference. On units with bypass, a VFD/Off/Bypass selector switch shall be provided.
- b. The VFD shall be able to be programmed to provide a 24 V DC output signal to indicate that the VFD is in Auto/Remote mode.
- c. The VFD shall provide digital manual speed control. Potentiometers are not acceptable.
- d. A lockable, alphanumeric backlit display keypad shall be provided. The keypad shall be remotely mountable up to 10 feet away using standard 9-pin cable.
- e. The keypads for all sizes of VFDs shall be identical and interchangeable.
- f. To set up multiple VFDs, it shall be possible to upload all setup parameters to the VFDs keypad, place that keypad on all other VFDs in turn and download the setup parameters to each VFD. To facilitate setting up VFDs of various sizes, it shall be possible to download from the keypad only size independent parameters.
- g. The display shall be programmable to display in English, Spanish and French at a minimum.
- h. A red FAULT light, a yellow WARNING light and a green POWER-ON light shall be provided. These indications shall be visible both on the keypad and on the VFD when the keypad is removed.
- i. A quick setup menu with factory preset typical HVAC parameters shall be provided on the VFD eliminating the need for macros.
- j. The VFD shall include a standard EIA-485 communications port and capabilities to be connected at a future date to a Johnson Controls N2 Metasys or Siemens FLN system at no additional cost to the owner. The connection shall be software selectable by the user.
- k. At a minimum, the following points shall be controlled and/or accessible:
 - 1) VFD Start/Stop
 - 2) Speed reference
 - 3) Fault diagnostics
 - 4) Meter points
- l. Four additional Form C 230 volt programmable relays shall be available for field installation within the VFD.
- m. LonWorks® communication shall be available for factory or field installation within the VFD.
- n. Two set-point control interfaces (PID control) shall be standard in the unit. The VFD shall be able to look at two feedback signals, compare with two set-points and make various process control decisions.
- o. Floating point control interface shall be provided to increase/decrease speed in response to contact closures.
- p. Four simultaneous displays shall be available. They shall include frequency or speed, run time, output amps and output power. VFDs unable to show these four displays simultaneously shall provide panel meters.
- q. Sleep mode shall be provided to automatically stop the VFD when its speed drops below set sleep level for a specified time. The VFD shall

- automatically restart when the speed command exceeds the set wake level.
- r. The sleep mode shall be functional in both follower mode and PID mode.
 - s. A run permissive circuit shall be provided to accept a system ready signal to ensure that the VFD does not start until dampers or other auxiliary equipment are in the proper state for VFD operation. The run permissive circuit shall also be capable of sending an output signal as a start command to actuate external equipment before allowing the VFD to start.
 - t. The following displays shall be accessible from the control panel in actual units: Reference Signal Value, Output Frequency in Hz or percent, Output Amps, Motor HP, Motor kW, kWhr, Output Voltage, DC Bus Voltage, VFD Temperature in degrees, and unit CFM.
 - u. The display shall be programmed to read in inches of water column (in-wg).
 - v. The VFD shall be able to be programmed to sense the loss of load and signal a no load/broken belt warning or fault.
 - w. If the temperature of the VFDs heat sink rises to 80°C, the VFD shall automatically reduce its carrier frequency to reduce the heat sink temperature. If the temperature of the heat sink continues to rise the VFD shall automatically reduce its output frequency to the motor. As the VFDs heat sink temperature returns to normal, the VFD shall automatically increase the output frequency to the motor and return the carrier frequency to its normal switching speed.
 - x. The VFD shall have temperature controlled cooling fans for quiet operation and minimized losses.
 - y. The VFD shall store in memory the last 10 faults and related operational data.
 - z. Eight programmable digital inputs shall be provided for interfacing with the systems control and safety interlock circuitry.
 - aa. Two programmable relay outputs, one Form C 240 V AC, one Form A 30 V AC, shall be provided for remote indication of VFD status.
 - bb. Three programmable analog inputs shall be provided and shall accept a direct-or-reverse acting signal. Analog reference inputs accepted shall include two voltage (0 to 10 V DC, 2 to 10 V DC) and one current (0 to 20 mA, 4 to 20 mA) input.
 - cc. Two programmable 0 to 20 mA analog outputs shall be provided for indication of VFD status. These outputs shall be programmable for output speed, frequency, current and power. They shall also be programmable to provide a selected 24V DC status indication.
 - dd. Under fire mode conditions, the VFD shall be able to be programmed to automatically default to a preset speed.
16. Adjustments
- a. The VFD shall have an adjustable carrier frequency in steps of not less than 0.1 kHz to allow tuning the VFD to the motor.
 - b. A minimum of sixteen preset speeds shall be provided.
 - c. Four acceleration and four deceleration ramps shall be provided. Accel and decel time shall be adjustable over the range from 0 to 3,600 seconds

to base speed. The shape of these curves shall be automatically contoured to ensure no-trip acceleration and deceleration.

- d. Four current limit settings shall be provided.
 - e. If the VFD trips on one of the following conditions, the VFD shall be programmable for automatic or manual reset: undervoltage, overvoltage, current limit and inverter overload.
 - f. The number of restart attempts shall be selectable from 0 through 20 or infinitely and the time between attempts shall be adjustable from 0 through 600 seconds.
 - g. An automatic on delay shall be selectable from 0 to 120 seconds.
17. Service Conditions
- a. VFDs shall provide full output in an ambient temperature from -10 to 50°C (14 to 104°F).
 - b. VFDs shall provide full output in a relative humidity from 0 to 95%, non-condensing.
 - c. VFDs shall provide full output up to 3,300 feet elevation without derating.
 - d. VFDs shall provide full output with an AC line voltage variation from -10 to +10% of nominal voltage.
 - e. No side clearance shall be required for cooling of any units. All power and control wiring shall be done from the bottom.
18. Warranty
- a. The VFD shall be warranted by the manufacturer for a period of 42 months from date of shipment, or 36 months from start-up, whichever ever occurs first. The warranty shall include parts, labor, travel costs and living expenses incurred by the manufacturer to provide factory-authorized on-site service.

F. General Requirements for Coil Section:

- 1. Comply with AHRI 410.
- 2. Fabricate coil section to allow removal and replacement of coil for maintenance and to allow in-place access for service and maintenance of coil(s).
- 3. For multizone units, provide air deflectors and air baffles to balance airflow across coils.
- 4. Coils shall not act as structural component of unit.

G. Coils:

- 1. Refrigerant Coil:
 - a. Tubes: Copper.
 - b. Fins:
 - 1) Material: Aluminum or Copper.

- c. Fin and Tube Joints: Mechanical bond.
 - d. Headers: Seamless-copper headers with brazed connections.
 - e. Frames: Galvanized steel.
 - f. Ratings: Designed, tested, and rated according to ASHRAE 33 and AHRI 410.
- 1) Working Pressure: Minimum 300 psig.

2.6 AIR FILTRATION SECTION

A. Panel Filters:

- 1. Description: Pleated factory-fabricated, self-supported, disposable air filters with holding frames.
- 2. Filter Unit Class: UL 900.
- 3. Media: Interlaced glass, synthetic, or cotton fibers coated with nonflammable adhesive.

B. Adhesive, Sustainability Projects: As recommended by air-filter manufacturer and with a VOC content of 80 g/L or less.

C. Side-Access Filter Mounting Frames:

- 1. Particulate Air Filter Frames: Match inner casing and outer casing material, and insulation thickness. Galvanized steel track.
 - a. Prefilters: Incorporate an integral 2-inch thick track with same access as primary filter.
 - b. Sealing: Incorporate positive-sealing device to ensure seal between gasketed material on channels to seal top and bottom of filter cartridge frames to prevent bypass of unfiltered air.

2.7 DAMPERS

A. Outdoor- and Return-Air Dampers: Ultra low-leakage, double-skin, airfoil-blade, galvanized-steel or aluminum dampers with compressible jamb seals and extruded-vinyl blade edge seals Leakage rate shall not exceed 3cfm/sq. ft. at 1-inch wg and 8 cfm/sq. ft. at 4-inch wg.

B. Electronic Damper Operators:

- 1. Direct-coupled type designed for minimum 60,000 full-stroke cycles at rated torque.

2. Electronic damper position indicator shall have visual scale indicating percent of travel and 2- to 10-V dc, feedback signal.
3. Operator Motors:
 - a. Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements for motors specified in Section 230513 "Common Motor Requirements for HVAC Equipment."
 - b. Size to operate with sufficient reserve power to provide smooth modulating action or two-position action.
 - c. Permanent Split-Capacitor or Shaded-Pole Type: Gear trains completely oil immersed and sealed. Equip spring-return motors with integral spiral-spring mechanism in housings designed for easy removal for service or adjustment of limit switches, auxiliary switches, or feedback potentiometer.
4. Spring-Return Motors for Dampers Larger Than 25 Sq. Ft.: Size for running and breakaway torque of 150 in. x lbf.
5. Size dampers for running torque calculated as follows:
 - a. Parallel-Blade Damper with Edge Seals: 7 inch-lb/sq. ft. of damper.
 - b. Opposed-Blade Damper with Edge Seals: 5 inch-lb/sq. ft. of damper.
 - c. Parallel-Blade Damper without Edge Seals: 4 inch-lb/sq. ft. of damper.
 - d. Opposed-Blade Damper without Edge Seals: 3 inch-lb/sq. ft. of damper.
 - e. Dampers with 2- to 3-Inch wg of Pressure Drop or Face Velocities of 1000 to 2500 fpm: Increase running torque by 1.5.
 - f. Dampers with 3- to 4-Inch wg of Pressure Drop or Face Velocities of 2500 to 3000 fpm: Increase running torque by 2.0.
6. Coupling: V-bolt and V-shaped, toothed cradle.
7. Overload Protection: Electronic overload or digital rotation-sensing circuitry.
8. Fail-Safe Operation: Mechanical, spring-return mechanism with external.
9. Power Requirements (Modulating): Maximum 10 VA at 24 V ac or 8 W at 24 V dc.
10. Proportional Signal: 2 to 10 V dc or 4 to 20 mA, and 2- to 10-V dc position feedback signal.

2.8 ROOF CURBS

- A. Roof curbs with vibration isolators and wind or seismic restraints are specified in Section 230548 " Seismic Controls for HVAC," and 230548.13 "Vibration Controls for HVAC."

- B. Materials: Galvanized steel with corrosion-resistant coating, watertight gaskets, and factory-installed wood nailer; complying with NRCA standards.
 - 1. Curb Insulation and Adhesive: Comply with NFPA 90A or NFPA 90B.
 - a. Materials: ASTM C1071, Type I or II.
 - b. Thickness: 2 inches.
 - 2. Application: Factory applied with adhesive and mechanical fasteners to the internal surface of curb.
 - a. Liner Adhesive: Comply with ASTM C916, Type I.
 - b. Mechanical Fasteners: Galvanized steel, suitable for adhesive attachment, mechanical attachment, or welding attachment to duct without damaging liner when applied as recommended by manufacturer and without causing leakage in cabinet.
 - c. Liner materials applied in this location shall have airstream surface coated with a temperature-resistant coating or faced with a plain or coated fibrous mat or fabric depending on service air velocity.
 - d. Liner Adhesive: Comply with ASTM C916, Type I.
- C. Curb Dimensions: Height of 14 inches.
- D. Wind and Seismic Restraints: Metal brackets compatible with the curb and casing, painted to match unit, used to anchor unit to the curb, and designed for loads at Project site. Comply with requirements in Section 230548 "Vibration and Seismic Controls for HVAC" for wind-load requirements.

2.9 INTAKE AND RELIEF AIR OPENINGS

- A. Provide hood, including moisture eliminator, over all unit intake and relief openings. Match material and finish of casing exterior.

2.10 FACTORY-ENGINEERED AUTOMATIC TEMPERATURE CONTROLS

- 1. Unit shall be provided with a factory wired, installed and tested unit controller, capable of standalone unit control, or tied into a building automation system through Bacnet communication. All control points in unit shall be tested at the unit manufacturers facility prior to shipment.
- 2. Damper actuators shall be selected, provided, and mounted by the AHU manufacturer on each damper. Actuators shall be of sufficient size and quantity to ensure complete damper operation. Actuators shall be direct coupled to minimize linkage.
- 3. On variable volume units, a discharge temperature sensors shall be provided and mounted on the fans by the AHU manufacturer. Temperature sensors

mounted within the AHU shall have sensor material selected to integrate with the BAS controller.

4. Averaging temperature sensors shall be provided by the AHU manufacturer. Sensors shall be factory engineered to accurately measure mixed air temperatures. Capillary radius clips shall be used at capillary bends to ensure no crimping or wear of the tube. Temperature sensors mounted within the AHU shall have sensor material selected to integrate with the BAS controller.

B. Unit DDC Controller

1. One programmable DDC controller shall be provided by the AHU manufacturer for each AHU as indicated on the schedule and drawings. Control of multiple units from a single controller is not acceptable. Each programmable DDC controller shall use the LonTalk protocol and shall be LonMark certified to ensure open communication with other open BASs. Complete communications and diagnostics including all AI, BI, AO, BO, set points and alarms shall only require a twisted pair of wires between the unit controller and the BAS. Each unit controller shall be factory wired to the unit end devices. For indoor units, each controller shall have a user display touch screen for user interface. The display on indoor units shall be unit mounted in the factory. For outdoor units, one portable user display touch screen for user interface shall be provided for all controllers. Displays shall give user access to AHU status, set points and alarms.
2. The programmable DDC controller and the control components shall be selected, mounted, wired and tested by the AHU manufacturer to ensure delivery of specified performance and to minimize jobsite startup time. Testing shall be performed to ensure wiring continuity between the controller and all devices, and to ensure proper operation of the end devices. DDC controllers shall be located on unit as indicated on the drawings.

2.11 MATERIALS

A. Steel:

1. ASTM A36/A36M for carbon structural steel.
2. ASTM A568/A568M for steel sheet.

B. Stainless Steel:

1. Manufacturer's standard grade for casing.
2. Manufacturer's standard type, ASTM A240/A240M for bare steel exposed to airstream or moisture.

C. Galvanized Steel: ASTM A653/A653M.

- D. Aluminum: ASTM B209.

2.12 SOURCE QUALITY CONTROL

- A. AHRI 430 Certification: Air-handling units and their components shall be factory tested according to AHRI 430 and shall be listed and labeled by AHRI.
- B. AMCA 301 or AHRI 260: Air-handling unit fan sound ratings shall comply with AMCA 301, "Methods for Calculating Fan Sound Ratings from Laboratory Test Data," or AHRI 260, "Sound Rating of Ducted Air Moving and Conditioning Equipment."
- C. Fan Sound-Power Level Ratings: Comply with AMCA 301, "Methods for Calculating Fan Sound Ratings from Laboratory Test Data." Test fans according to AMCA 300, "Reverberant Room Method for Sound Testing of Fans." Fans shall bear AMCA-certified sound ratings seal.
- D. Fan Performance Rating: Factory test fan performance for airflow, pressure, power, air density, rotation speed, and efficiency. Rate performance according to AMCA 210, "Laboratory Methods of Testing Fans for Aerodynamic Performance Rating."
- E. Refrigerant Coils: Factory tested to minimum 450-psig internal pressure and to minimum 300-psig internal pressure while underwater, according to AHRI 410 and ASHRAE 33.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Examine roughing-in for steam, hydronic, and condensate drainage piping systems and electrical services to verify actual locations of connections before installation.
- B. Roof Curb: Install on roof structure or concrete base, level and secure, according AHRI Guideline B. Install units on curbs and coordinate roof penetrations and flashing with roof construction specified in structural plans. Secure units to upper curb rail, and secure curb base to roof framing or concrete base with anchor bolts. Coordinate sizes and locations of roof curbs with actual equipment provided.
- C. Unit Support: Install unit level on structural curbs. Coordinate roof penetrations and flashing with roof construction. Secure units to structural support with anchor bolts. Coordinate sizes and locations of curbs with actual equipment provided.
 - 1. Comply with requirements for vibration isolation and seismic-control devices specified in Section 230548 "Seismic Controls for HVAC."
 - 2. Comply with requirements for vibration isolation devices specified in Section 230548.13 "Vibration Controls for HVAC."

- D. Arrange installation of units to provide access space around air-handling units for service and maintenance.
- E. Do not operate fan system until filters (temporary or permanent) are in place. Replace temporary filters used during construction and testing, with new, clean filters.
- F. Install filter-gauge, static-pressure taps upstream and downstream of filters. Mount filter gauges on outside of filter housing or filter plenum in accessible position. Provide filter gauges on filter banks, installed with separate static-pressure taps upstream and downstream of filters.
- G. Connect duct to air-handling units with flexible connections. Comply with requirements in Section 233300 "Air Duct Accessories."

3.2 PIPING CONNECTIONS

- A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Where installing piping adjacent to air-handling unit, allow space for service and maintenance.
- C. Connect piping to air-handling units mounted on vibration isolators with flexible connectors.
- D. Connect condensate drain pans using, ASTM B88, Type L copper tubing. Extend as indicated on the drawings. Construct deep trap at connection to drain pan and install cleanouts at changes in direction.
- E. Refrigerant Piping: Comply with applicable requirements in Section 232300 "Refrigerant Piping." Install shutoff valve and union or flange at each supply and return connection.

3.3 ELECTRICAL CONNECTIONS

- A. Connect wiring according to electrical drawings and specifications.
- B. Ground equipment according to electrical drawings and specifications.
- C. Install electrical devices furnished by manufacturer, but not factory mounted, according to NFPA 70 and NECA 1.
- D. Install nameplate for each electrical connection, indicating electrical equipment designation and circuit number feeding connection.
 - 1. Nameplate shall be laminated acrylic or melamine plastic signs, as specified in Section 260553 "Identification for Electrical Systems."

2. Nameplate shall be laminated acrylic or melamine plastic signs with a black background and engraved white letters at least 1/2 inch high.

3.4 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 1. Leak Test: After installation, fill water and steam coils with water, and test coils and connections for leaks.
 2. Charge refrigerant coils with refrigerant and test for leaks.
 3. Fan Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 4. HEPA Filters: Pressurize housing to a minimum of 3-inch wg or to designed operating pressure, whichever is higher; test housing joints, door seals, and sealing edges of filter with soapy water to check for air leaks.
 5. HEPA Filters: Pressurize housing to a minimum of 3-inch wg or to designed operating pressure, whichever is higher; test housing joints, door seals, and sealing edges of filter for air leaks according to ASME AG-1, pressure-decay method.
 6. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- B. Air-handling unit and components will be considered defective if unit or components do not pass tests and inspections.
- C. Prepare test and inspection reports.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain air-handling units.

END OF SECTION 237343.16

SECTION 238129 - VARIABLE-REFRIGERANT-FLOW HVAC SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes complete VRF HVAC system(s) including, but not limited to, delegated design and the following components to make a complete operating system(s) according to requirements indicated:
1. Indoor, exposed, floor-mounted units.
 2. Indoor, exposed, wall-mounted units.
 3. Indoor, recessed, ceiling-mounted units.
 4. Indoor, suspended, ceiling-mounted units.
 5. Outdoor, air-source heat recovery units.
 6. Heat recovery control units.
 7. System controls.
 8. System refrigerant and oil.
 9. System condensate drain piping.
 10. System refrigerant piping.
 11. Piping and tubing insulation.
 12. System control cable and raceways.

1.2 DEFINITIONS

- A. Air-Conditioning System Operation: System capable of operation with all zones in cooling only.
- B. Heat-Pump System Operation: System capable of operation with all zones in either heating or cooling, but not with simultaneous heating and cooling zones that transfer heat between zones.
- C. Heat Recovery System Operation: System capable of operation with simultaneous heating and cooling zones that transfer heat between zones.
- D. HRCU: Heat Recovery Control Unit. HRCUs are used in heat recovery VRF HVAC systems to manage and control refrigerant between indoor units to provide simultaneous heating and cooling zones. "Heat Recovery Control Unit" is the term

used by ASHRAE for what different manufacturers term as branch circuit controller, branch selector box, changeover box, flow selector unit, mode change unit, and other such terms.

- E. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.
- F. Plenum: A space forming part of the air distribution system to which one or more air ducts are connected. An air duct is a passageway, other than a plenum, for transporting air to or from heating, ventilating, or air-conditioning equipment.
- G. Three-Pipe System Design: One high pressure refrigerant vapor line, one low pressure refrigerant vapor line, and one refrigerant liquid line connect a single outdoor unit or multiple manifold outdoor units in a single system to associated system HRCUs. One liquid line and refrigerant vapor line connect HRCUs to associated indoor units.
- H. Two-Pipe System Design: One refrigerant vapor line and one refrigerant liquid line connect a single outdoor unit or multiple manifold outdoor units in a single system to associated system HRCUs. One refrigerant liquid line and refrigerant vapor line connect HRCUs to associated indoor units. HRCUs used in two pipe systems act as an intermediate heat exchanger and include diverting valves and gas/liquid separators to move high and low pressure refrigerant between indoor units.
- I. VRF: Variable refrigerant flow.

1.3 ACTION SUBMITTALS

- A. Product data.
- B. Shop Drawings: For VRF HVAC systems.
 - 1. Include plans, elevations, sections, and mounting and attachment details.
 - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 3. Include diagrams and details of refrigerant piping and tubing showing installation requirements for manufacturer-furnished divided flow fittings.
 - 4. Include diagrams for power, signal, and control wiring.
 - 5. Include coordinated shop drawings of exposed mounted units. Documents to included mounting and routing of refrigerant piping, condensate piping, electrical, controls wiring and sheet metal enclosures.
 - a. A shop drawing is to be prepared for each unique air handler and installation.

C. Delegated-Design Submittals:

1. Include design calculations and design drawings for seismic restraints stamped and signed by a California registered engineer per "230548 - Seismic Controls for HVAC."
2. Include design calculations with corresponding diagram of refrigerant piping and tubing sizing for each system installed.
3. Include calculations showing that system travel distance for refrigerant piping and controls cabling are within horizontal and vertical travel distances set by manufacturer. Provide a comparison table for each system installed.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Plans, elevations, sections, and details, drawn to scale, using input from installers of the items involved.
- B. Qualification Data:
 1. For Installer.
 2. For VRF HVAC system manufacturer.
 3. For VRF HVAC system provider.
 4. For VRF HVAC manufacturer's startup technician.
- C. Seismic Qualification Data: Certificates, for equipment, outdoor heat pumps and rooftop mounted air handlers, accessories, and components, from manufacturer.
- D. Product Certificates: For each type of product.
- E. Product test reports.
- F. Source quality-control reports.
- G. Field quality-control reports.
- H. Sample warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.
- B. Manufacturer's startup technicians' startup reports
- C. Manufacturer's startup technicians' commissioning reports

D. Software and Firmware Operational Documentation:

1. Software operating and upgrade manuals.
2. Program Software Backup: On CD or DVD, USB media, or approved cloud storage platform, complete with data files.
3. Device address list.
4. Printout of software application and graphic screens.

1.6 QUALITY ASSURANCE

A. Factory-Authorized Service Representative Qualifications:

1. Factory representative of VRF HVAC system manufacturer.
2. Demonstrated past experience with products being installed for period within three consecutive years before time of bid.
3. Demonstrated past experience on 3 projects of similar complexity and scope.
 - a. Each person assigned to Project shall have demonstrated past experience.
4. Staffing resources of competent and experienced full-time employees that are assigned to execute work according to schedule.
5. Service and maintenance staff assigned to support Project during warranty period.
6. VRF HVAC system manufacturer's backing to take over execution of Work if necessary to comply with requirements indicated. Include Project-specific written letter, signed by manufacturer's corporate officer, if requested.

B. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by VRF HVAC system manufacturer.

1. Each employee shall be certified by manufacturer for proper installation of systems, including, but not limited to, equipment, piping, controls, and accessories indicated and furnished for installation.
2. Installer certification shall be valid and current for duration of Project.
3. Retain copies of Installer certificates on-site and make available on request.
4. Each person assigned to Project shall have demonstrated past experience.

- a. Demonstrated past experience with products being installed for period within three consecutive years before time of bid.
 - b. Demonstrated past experience on three projects of similar complexity and scope.
- C. ISO Compliance: System equipment and components furnished by VRF HVAC system manufacturer shall be manufactured in an ISO 9001 and ISO 14001 facility.
- D. All units must meet or exceed the 2010 Federal minimum efficiency requirements and the ASHRAE 90.1 efficiency requirements for VRF systems. Efficiency shall be published in accordance with the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 1230.

1.7 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace equipment and components that fail(s) in materials or workmanship within specified warranty period.
- 1. Warranty Period:
 - a. For Compressor: ten year(s) from date of Substantial Completion.
 - 1) Installing contractor shall meet manufacturer requirements to obtain extended manufacturer's limited parts and compressor warranty for a period of ten (10) years to the original owner from date of installation. This warranty shall not include labor.
 - b. For Parts, Including Controls: two year(s) from date of Substantial Completion.
 - c. For Labor: two year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Equipment Manufacturers shall be one of the following:
- 1. Daikin
 - 2. LG
 - 3. Hitachi
 - 4. Mitsubishi
 - 5. Panasonic

2.2 SYSTEM DESCRIPTION

- A. Direct-expansion (DX) VRF HVAC system(s) with variable capacity in response to varying cooling and heating loads. System shall consist of multiple indoor units, HRCUs, outdoor unit(s), piping, controls, and electrical power to make complete operating system(s) complying with requirements indicated.
 - 1. Two-pipe system design with heat recovery units.
 - 2. System(s) operation, heat recovery as indicated on Drawings.
 - 3. Each system with one refrigerant circuit shared by all indoor units connected to system.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. AHRI Compliance: System and equipment performance certified according to AHRI 1230 and products listed in AHRI directory.
- D. ASHRAE Compliance:
 - 1. ASHRAE 15: For safety code for mechanical refrigeration.
 - 2. ASHRAE 62.1: For indoor air quality.
 - 3. ASHRAE 135: For control network protocol with remote communication.
 - 4. ASHRAE/IES 90.1 Compliance: For system and component energy efficiency.
- E. UL Compliance: Comply with UL 1995.

2.3 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional specialist, as defined in Section 014000 "Quality Requirements," to design complete and operational VRF HVAC system(s) complying with requirements indicated.
 - 1. Provide system refrigerant calculations.
 - a. Refrigerant concentration limits shall be within allowable limits of ASHRAE 15 and governing codes.
 - b. Indicate compliance with manufacturer's maximum vertical and horizontal travel distances. Prepare a comparison table for each system showing calculated distances compared to manufacturer's maximum allowed distances.

2. System Refrigerant Piping and Tubing:
 - a. Arrangement: Arrange piping to interconnect indoor units, HRCUs, and outdoor unit(s) in compliance with manufacturer requirements and requirements indicated.
 - b. Routing: Conceal piping above ceilings and behind walls to maximum extent possible.
 - c. Sizing: Size piping system, using a software program acceptable to manufacturer, to provide performance requirements indicated. Consider requirements to accommodate future change requirements.
 3. System Controls:
 - a. Network arrangement.
 - b. Network interface with other building systems.
 - c. Product selection.
 - d. Sizing.
- B. Service Access:
1. Provide and document service access requirements.
 2. Locate equipment, system isolation valves, and other system components that require service and inspection in easily accessible locations. Avoid locations that are difficult to access if possible.
 3. Where serviceable components are installed behind walls and above inaccessible ceilings, provide finished assembly with access doors or panels to gain access. Properly size the openings to allow for service, removal, and replacement.
 4. If less than full and unrestricted access is provided, locate components within an 18-inch reach of the finished assembly.
 5. Where ladder access is required to service elevated components, provide an installation that provides for sufficient access within ladder manufacturer's written instructions for use.
 6. Comply with OSHA regulations.
- C. System Design and Installation Requirements:
1. Design and install systems indicated according to manufacturer's recommendations and written instructions.
 2. Where manufacturer's requirements differ from requirements indicated, contact Architect for direction. The most stringent requirements should apply unless otherwise directed in writing by Architect.

- D. Isolation of Equipment: Provide isolation valves to isolate each HRCU, indoor unit and outdoor unit for service, removal, and replacement without interrupting system operation.
- E. System Capacity Ratio: The sum of connected capacity of all indoor units shall be within the following range of outdoor-unit rated capacity:
 - 1. Not less than 60 percent.
 - 2. Not more than 130 percent.
 - 3. Range acceptable to manufacturer.
- F. System Turndown: Stable operation down to 20 percent of outdoor-unit capacity.
- G. Outdoor Conditions:
 - 1. Suitable for outdoor ambient conditions encountered.
 - a. Design equipment and supports to withstand wind loads of governing code and ASCE/SEI 7.
 - b. Design equipment and supports to withstand snow and ice loads of governing code.
 - 2. Maximum System Operating Outdoor Temperature: 109°F.
 - 3. Minimum System Operating Outdoor Temperature: -25°F.
- H. Seismic Performance: VRF HVAC system(s) shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 - 1. The term "withstand" means "the system will remain in place without separation of any parts when subjected to the seismic.
 - 2. Component Importance Factor: 1.0.
- I. Sound Performance: Sound levels generated by operating HVAC equipment shall be within requirements indicated.
 - 1. Outdoor:
 - a. Outdoor unit shall have a sound rating no higher than 68 dB(A) individually or 70 dB(A) twinned. Units shall have a sound rating no higher than 52 dB(A) individually or 55 dB(A) twinned while in night mode operation. Units shall have 5 levels sound adjustment via dip switch selectable fan speed settings. If an alternate manufacturer is selected, any additional material, cost, and labor to meet published sound levels shall be incurred by the contractor.

- J. Thermal Movements: Allow for controlled thermal movements from ambient, surface, and system temperature changes.
- K. Capacities and Characteristics: As indicated on Drawings.

2.4 INDOOR, EXPOSED, FLOOR-MOUNTED UNITS

- A. Description: Factory-assembled and -tested complete unit with components, piping, wiring, and controls required for mating to piping, power, and controls field connections.
- B. Cabinet:
 - 1. Material: Painted steel, or coated steel frame covered by a plastic cabinet, with an architectural acceptable finish suitable for tenant occupancy on exposed surfaces.
 - 2. Insulation: Manufacturer's standard internal insulation to provide thermal resistance and prevent condensation.
 - 3. Mounting: Manufacturer-designed provisions for field installation.
 - 4. Internal Access: Removable panels of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. DX Coil Assembly:
 - 1. The indoor coil shall be of nonferrous construction with smooth plate fins on copper tubing. The tubing shall have inner grooves for high efficiency heat exchange. All tube joints shall be brazed with phos-copper or silver alloy.
 - 2. Field Piping Connections: Manufacturer's standard.
 - 3. Factory Charge: Dehydrated air or nitrogen.
 - 4. Testing: Factory pressure tested and verified to be without leaks.
- D. Drain Assembly:
 - 1. Pan: Non-ferrous material, with bottom sloped to low point drain connection.
 - 2. Condensate Removal: Gravity.
 - a. Provide unit with field-installed condensate pump accessory as necessary.
 - 3. Field Piping Connection: Non-ferrous material.
- E. Fan and Motor Assembly:

1. Fan(s):
 - a. Direct-drive arrangement.
 - b. Single or multiple fans connected to a common motor shaft and driven by a single motor.
 - c. Materials: Non-ferrous components or ferrous components with corrosion-resistant finish.
 - d. Statically and dynamically balanced.
 2. Motor: Brushless dc or electronically commutated with permanently lubricated bearings.
 3. Motor Protection: Integral protection against thermal, overload, and voltage fluctuations.
 4. Speed Settings and Control: Two (low, high).
 5. Vibration Control: Integral isolation to dampen vibration transmission.
- F. Filter Assembly:
1. Access: Front, to accommodate filter replacement without the need for tools.
 2. Washable Media: Manufacturer's standard filter with antimicrobial treatment.
- G. Grille Assembly: Manufacturer's standard discharge grille mounted in top of unit cabinet.
- H. Unit Accessories:
1. Remote Room Temperature Sensor Kit: Wall-mounted, hardwired room temperature sensor kit for use in rooms that do not have room temperature measurement.
 2. Condensate Pump: Integral reservoir and control with electrical power connection through unit power.
- I. Unit Controls:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Factory-Installed Controller: Configurable digital control.
 3. Factory-Installed Sensors:
 - a. Unit inlet air temperature.
 - b. Coil entering refrigerant temperature.
 - c. Coil leaving refrigerant temperature.

4. Field-Customizable I/O Capability:
 - a. Digital Inputs: Four for use in customizable control strategies.
 - b. Digital Outputs: Three for use in customizable control strategies.
 5. Features and Functions:
 - a. Self-diagnostics.
 - b. Time delay.
 - c. Auto-restart.
 - d. Auto operation mode.
 - e. Manual operation mode.
 - f. Filter service notification
 6. Communication: Network communication with other indoor units and outdoor unit(s).
 7. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 8. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
- J. Unit Electrical:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Field Connection: Single point connection to power entire unit and integral controls.
 3. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
 4. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 5. Raceways: Enclose line voltage wiring in raceways NFPA 70.

2.5 INDOOR, EXPOSED, WALL-MOUNTED UNITS

- A. Description: Factory-assemble, and -tested, complete unit with components, piping, wiring, and controls required for mating to piping, power, and controls field connections.
- B. Cabinet:
 1. Material: Painted steel, or coated steel frame covered by a plastic cabinet, with an architectural acceptable finish suitable for tenant occupancy on exposed surfaces.

2. Insulation: Manufacturer's standard internal insulation to provide thermal resistance and prevent condensation.
 3. Mounting: Manufacturer-designed provisions for field installation.
 4. Internal Access: Removable panels of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. DX Coil Assembly:
1. The indoor coil shall be of nonferrous construction with smooth plate fins on copper tubing. The tubing shall have inner grooves for high efficiency heat exchange. All tube joints shall be brazed with phos-copper or silver alloy.
 2. Field Piping Connections: Manufacturer's standard.
 3. Factory Charge: Dehydrated air or nitrogen.
 4. Testing: Factory pressure tested and verified to be without leaks.
- D. Drain Assembly:
1. Pan: Non-ferrous material, with bottom sloped to low point drain connection.
 2. Condensate Removal: Gravity.
 - a. Provide unit with field-installed condensate pump accessory as necessary.
 3. Field Piping Connection: Non-ferrous material.
- E. Fan and Motor Assembly:
1. Fan(s):
 - a. Direct-drive arrangement.
 - b. Single or multiple fans connected to a common motor shaft and driven by a single motor.
 - c. Fabricated from non-ferrous components or ferrous components with corrosion protection finish.
 - d. Wheels statically and dynamically balanced.
 2. Motor: Brushless dc or electronically commutated with permanently lubricated bearings.
 3. Motor Protection: Integral protection against thermal, overload, and voltage fluctuations.
 4. Speed Settings and Control: More than three speed settings or variable speed with a speed range of least 50 percent.
 5. Vibration Control: Integral isolation to dampen vibration transmission.

- F. Filter Assembly:
 - 1. Access: Front, to accommodate filter replacement without the need for tools.
 - 2. Washable Media: Manufacturer's standard filter with antimicrobial treatment.
- G. Grille Assembly: Manufacturer's standard discharge grille mounted in top or front face of unit cabinet.
- H. Unit Accessories:
 - 1. Remote Room Temperature Sensor Kit: Wall-mounted, hardwired room temperature sensor kit for use in rooms that do not have room temperature measurement.
 - 2. Condensate Pump: Integral reservoir and control with electrical power connection through unit power.
- I. Unit Controls:
 - 1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 - 2. Factory-Installed Controller: Configurable digital control.
 - 3. Factory-Installed Sensors:
 - a. Unit inlet air temperature.
 - b. Coil entering refrigerant temperature.
 - c. Coil leaving refrigerant temperature.
 - 4. Field-Customizable I/O Capability:
 - a. Digital Inputs: Four for use in customizable control strategies.
 - b. Digital Outputs: Three for use in customizable control strategies.
 - 5. Features and Functions:
 - a. Self-diagnostics.
 - b. Time delay.
 - c. Auto-restart.
 - d. Auto operation mode.
 - e. Manual operation mode.
 - f. Filter service notification
 - 6. Communication: Network communication with other indoor units and outdoor unit(s).
 - 7. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.

8. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
- J. Unit Electrical:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Field Connection: Single point connection to power entire unit and integral controls.
 3. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
 4. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 5. Raceways: Enclose line voltage wiring in raceways to comply with NFPA 70.

2.6 INDOOR, RECESSED, CEILING-MOUNTED UNITS

- A. Description: Factory-assembled and -tested complete unit with components, piping, wiring, and controls required for mating to ductwork, piping, power, and controls field connections.
- B. Cabinet:
1. Material: Painted steel, or coated steel frame covered by a plastic cabinet, with an architectural acceptable finish suitable for tenant occupancy on exposed surfaces.
 2. Insulation: Manufacturer's standard internal insulation to provide thermal resistance and prevent condensation.
 3. Mounting: Manufacturer-designed provisions for field installation.
 4. Internal Access: Removable panels of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. DX Coil Assembly:
1. The indoor coil shall be of nonferrous construction with smooth plate fins on copper tubing. The tubing shall have inner grooves for high efficiency heat exchange. All tube joints shall be brazed with phos-copper or silver alloy.
 2. Field Piping Connections: Manufacturer's standard.
 3. Factory Charge: Dehydrated air or nitrogen.
 4. Testing: Factory pressure tested and verified to be without leaks.

D. Drain Assembly:

1. Pan: Non-ferrous material, with bottom sloped to low point drain connection.
2. Condensate Removal: Gravity.
 - a. Provide unit with field-installed condensate pump accessory as necessary.
3. Field Piping Connection: Non-ferrous material.

E. Fan and Motor Assembly:

1. Fan(s):
 - a. Direct-drive arrangement.
 - b. Single or multiple fans connected to a common motor shaft and driven by a single motor.
 - c. Fabricated from non-ferrous components or ferrous components with corrosion protection finish.
 - d. Wheels statically and dynamically balanced.
2. Motor: Brushless dc or electronically commutated with permanently lubricated bearings.
3. Motor Protection: Integral protection against thermal, overload, and voltage fluctuations.
4. Speed Settings and Control: More than three speed settings or variable speed with a speed range of least 50 percent.
5. Vibration Control: Integral isolation to dampen vibration transmission.

F. Filter Assembly:

1. Access: Bottom, to accommodate filter replacement without the need for tools.
2. Washable Media: Manufacturer's standard filter with antimicrobial treatment.

G. Discharge-Air Grille Assembly: Mounted in bottom of unit cabinet.

1. Discharge Pattern: One-, two-, three-, or four-way throw as indicated on Drawings.
 - a. Discharge Pattern Adjustment: Field-adjustable limits for up and down range of motion.
 - b. Discharge Pattern Closure: Ability to close individual discharges of units with multiple patterns.

2. Motorized Vanes: Modulating up and down flow pattern for uniform room air distribution.
 3. Additional Branch Supply Duct Connection: Sheet metal knockout for optional connection to one additional supply branch duct.
 4. Grille shall include a factory-installed "3D i-see" sensor, or equal, to work in conjunction with indoor unit control sequence to prevent unnecessary cooling or heating in unoccupied areas of the zone without decreasing comfort levels. Sensor must detect occupancy (not simply motion) and location of occupants by measuring size & temperature of objects within a detecting diameter.
- H. Return-Air Grille Assembly: Manufacturer's standard grille mounted in bottom of unit cabinet.
- I. Outdoor Air Ventilation Connection: Sheet metal knockout for optional connection to outdoor air ventilation duct.
- J. Unit Accessories:
1. Outdoor Air Ventilation Kit: Connection, motorized damper, and control to satisfy unit control sequence of operation indicated on Drawings.
 2. Remote Room Temperature Sensor Kit: Wall-mounted, hardwired room temperature sensor kit for use in rooms that do not have room temperature measurement.
- K. Unit Controls:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Factory-Installed Controller: Configurable digital control.
 3. Factory-Installed Sensors:
 - a. Unit inlet air temperature.
 - b. Coil entering refrigerant temperature.
 - c. Coil leaving refrigerant temperature.
 4. Field-Customizable I/O Capability:
 - a. Digital Inputs: Four for use in customizable control strategies.
 - b. Digital Outputs: Three for use in customizable control strategies.
 5. Features and Functions:
 - a. Self-diagnostics.
 - b. Time delay.
 - c. Auto-restart.
 - d. Auto operation mode.

- e. Manual operation mode.
 - f. Filter service notification
6. Communication: Network communication with other indoor units and outdoor unit(s).
 7. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 8. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 9. A factory-installed drain pan sensor shall provide protection against drain pan overflow by sensing a high condensate level in the drain pan. Should this occur the control shuts down the indoor unit before an overflow can occur. A thermistor error code will be produced should the sensor activate indicating a fault which must be resolved before the unit re-starts.
- L. Unit Electrical:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Field Connection: Single point connection to power entire unit and integral controls.
 3. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
 4. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 5. Raceways: Enclose line voltage wiring in raceways to comply with NFPA 70.

2.7 INDOOR, SUSPENDED, CEILING-MOUNTED UNITS

- A. Description: Factory-assembled and -tested complete unit with components, piping, wiring, and controls required for mating to piping, power, and controls field connections.
- B. Cabinet:
1. Material: Painted steel, or coated steel frame covered by a plastic cabinet, with an architectural acceptable finish suitable for tenant occupancy on exposed surfaces.
 2. Insulation: Manufacturer's standard internal insulation to provide thermal resistance and prevent condensation.
 3. Mounting: Manufacturer-designed provisions for field installation.

4. Internal Access: Removable panels of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. DX Coil Assembly:
1. The indoor coil shall be of nonferrous construction with smooth plate fins on copper tubing. The tubing shall have inner grooves for high efficiency heat exchange. All tube joints shall be brazed with phos-copper or silver alloy.
 2. Field Piping Connections: Manufacturer's standard.
 3. Factory Charge: Dehydrated air or nitrogen.
 4. Testing: Factory pressure tested and verified to be without leaks.
- D. Drain Assembly:
1. Pan: Non-ferrous material, with bottom sloped to low point drain connection.
 2. Condensate Removal: Gravity.
 - a. Provide unit with field-installed condensate pump accessory as necessary.
 3. Field Piping Connection: Non-ferrous material.
- E. Fan and Motor Assembly:
1. Fan(s):
 - a. Direct-drive arrangement.
 - b. Single or multiple fans connected to a common motor shaft and driven by a single motor.
 - c. Fabricated from non-ferrous components or ferrous components with corrosion protection finish.
 - d. Wheels statically and dynamically balanced.
 2. Motor: Brushless dc or electronically commutated with permanently lubricated bearings.
 3. Motor Protection: Integral protection against thermal, overload, and voltage fluctuations.
 4. Speed Settings and Control: Four (low, mid 1, mid 2, high).
 5. Vibration Control: Integral isolation to dampen vibration transmission.
- F. Filter Assembly:
1. Access: Front, to accommodate filter replacement without the need for tools.

2. Washable Media: Manufacturer's standard filter with antimicrobial treatment.
- G. Discharge-Air Grille Assembly: Mounted in front of unit cabinet.
1. Discharge Pattern: One-way throw.
 2. Discharge Pattern Adjustment: Field-adjustable limits for range of pattern.
 3. Motorized Vanes: Modulating up and down flow pattern for uniform room air distribution.
- H. Return-Air Grille Assembly: Manufacturer's standard.
- I. Outdoor Air Ventilation Connection: Sheet metal knockout for optional connection to outdoor air ventilation duct.
- J. Unit Accessories:
1. Remote Room Temperature Sensor Kit: Wall-mounted, hardwired room temperature sensor kit for use in rooms that do not have room temperature measurement.
 2. Condensate Pump: Integral reservoir and control with electrical power connection through unit power.
- K. Unit Controls:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Factory-Installed Controller: Configurable digital control.
 3. Factory-Installed Sensors:
 - a. Unit inlet air temperature.
 - b. Coil entering refrigerant temperature.
 - c. Coil leaving refrigerant temperature.
 4. Field-Customizable I/O Capability:
 - a. Digital Inputs: Four for use in customizable control strategies.
 - b. Digital Outputs: Three for use in customizable control strategies.
 5. Features and Functions:
 - a. Self-diagnostics.
 - b. Time delay.
 - c. Auto-restart.
 - d. Auto operation mode.
 - e. Manual operation mode.
 - f. Filter service notification

6. Communication: Network communication with other indoor units and outdoor unit(s).
7. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
8. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
9. Manufacturer to provide drain pan level sensor powered by a 20-year life lithium battery. Sensor shall require no external power for operation and shall have an audible indication of low battery condition.
 - a. The drain pan sensor shall provide protection against drain pan overflow by sensing a high condensate level in the drain pan. Should this occur the control shuts down the indoor unit before an overflow can occur. A thermistor error code will be produced should the sensor activate indicating a fault which must be resolved before the unit re-starts.

L. Unit Electrical:

1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
2. Field Connection: Single point connection to power entire unit and integral controls.
3. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
4. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
5. Raceways: Enclose line voltage wiring in raceways to comply with NFPA 70.

2.8 OUTDOOR, AIR-SOURCE HEAT RECOVERY UNITS

- A. Description: Factory-assembled and -tested complete unit with components, piping, wiring, and controls required for mating to piping, power, and controls field connections.
 1. Specially designed for use in systems with simultaneous heating and cooling.
 2. Systems shall consist of one unit, or multiple unit modules that are designed by variable refrigerant system manufacturer for field interconnection to make a single refrigeration circuit that connects multiple indoor units.
 3. All units installed shall be from the same product development generation.
- B. Cabinet:

1. Galvanized steel and coated with a corrosion-resistant finish.
 - a. Coating with documented salt spray test performance of 960 hours according ASTM B117 surface scratch test (SST) procedure.
 2. Mounting: Manufacturer-designed provisions for field installation.
 3. Internal Access: Removable panels or hinged doors of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. Compressor and Motor Assembly:
1. One or more positive-displacement, direct-drive and hermetically sealed scroll compressor(s) with inverter drive and turndown to 15 percent of rated capacity.
 2. Protection: Integral protection against the following:
 - a. High refrigerant pressure.
 - b. Low oil level.
 - c. High oil temperature.
 - d. Thermal and overload.
 - e. Voltage fluctuations.
 - f. Phase failure and phase reversal.
 - g. Short cycling.
 3. Speed Control: Variable to automatically maintain refrigerant suction and condensing pressures while varying refrigerant flow to satisfy system cooling and heating loads.
 4. Vibration Control: Integral isolation to dampen vibration transmission.
 5. Oil management system to ensure safe and proper lubrication over entire operating range.
 6. Crankcase heaters with integral control to maintain safe operating temperature.
 7. Each compressor shall be equipped with a multi-port discharge mechanism to eliminate over compression at part load.
 8. Field-installed oil equalization lines between modules are not allowed. Prior to bidding, manufacturers requiring equalization must submit oil line sizing calculations specific to each system and module placement for this project.
 9. Fusible plug.
- D. Condenser Coil Assembly:
1. Plate Fin Coils:

- a. Zinc coated aluminum construction with turbulating flat tube construction. The coil fins shall have a factory applied corrosion resistant finish. Uncoated aluminum coils/fins are not allowed.
 2. Coating: Corrosion resistant.
 3. Outdoor Coil shall be elevated at least 12" from the base on the unit to protect coil from freezing and snow build up in cold climates. Manufacturer's in which their coil extends to within a few inches from the bottom of their cabinet frame shall provide an additional 12" of height to their stand or support structure to provide protection from elements. Any additional support costs, equipment fencing, and tie downs required to meet this additional height shall be responsibility of Mechanical Contractor to provide.
- E. Condenser Fan and Motor Assembly:
1. Fan(s): Propeller type.
 - a. Direct-drive arrangement.
 - b. Fabricated from non-ferrous components or ferrous components with corrosion protection finish to match performance indicated for condenser coil.
 - c. Statically and dynamically balanced.
 2. Fan Guards: Removable safety guards complying with OSHA regulations. If using metal materials, coat with corrosion-resistant coating to match performance indicated for condenser coil.
 3. Motor(s): Brushless dc or electronically commutated with permanently lubricated bearings and rated for outdoor duty.
 4. Motor Protection: Integral protection against thermal, overload, and voltage fluctuations.
 5. Speed Settings and Control: Variable speed with a speed range of least 75 percent.
 6. Vibration Control: Integral isolation to dampen vibration transmission.
- F. Drain Pan: If required by manufacturer's design, provide unit with non-ferrous drain pan with bottom sloped to a low point drain connection.
- G. Unit Controls:
1. Enclosure: Manufacturer's standard, and suitable for unprotected outdoor locations.
 2. Factory-Installed Controller: Configurable digital control.
 3. Factory-Installed Sensors:

- a. Refrigerant suction temperature.
 - b. Refrigerant discharge temperature.
 - c. Outdoor air temperature.
 - d. Refrigerant high pressure.
 - e. Refrigerant low pressure.
 - f. Oil level.
4. Features and Functions: Self-diagnostics, time delay, auto-restart, fuse protection, auto operation mode , manual operation mode, night setback control, run test switch and equalize run time between multiple same components.
 5. Communication: Network communication with indoor units and other outdoor unit(s).
 6. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 7. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
- H. Unit Electrical:
1. Enclosure: Metal, similar to enclosure, and suitable for unprotected outdoor locations.
 2. Field Connection: Single point connection to power entire unit and integral controls.
 3. Disconnecting Means: Factory-mounted circuit breaker or switch, complying with NFPA 70.
 4. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
 5. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 6. Raceways: Enclose line voltage wiring in raceways to comply with NFPA 70.
- I. Unit Hardware: Zinc-plated steel, or stainless steel. Coat exposed surfaces with additional corrosion-resistant coating if required to prevention corrosion when exposed to salt spray test for 960 hours according ASTM B117.
- J. Unit Piping:
1. Unit Tubing: Copper tubing with brazed joints.

2. Unit Tubing Insulation: Manufacturer's standard insulation, of thickness to prevent condensation.
3. Field Piping Connections: Manufacturer's standard.
4. Factory Charge: Dehydrated air or nitrogen.
5. Testing: Factory pressure tested and verified to be without leaks.

2.9 HEAT RECOVERY CONTROL UNITS (HRCUs)

- A. Description: Factory-assembled and -tested complete unit with components, piping, wiring, and controls required for mating to piping, power, and controls field connections.
 1. Specially designed for use in systems with simultaneous heating and cooling.
 2. Systems shall consist of one unit, or multiple unit that are designed by variable refrigerant system manufacturer for field interconnection to make a single refrigeration circuit that connects multiple indoor units.
- B. Cabinet:
 1. Galvanized-steel construction.
 2. Insulation: Manufacturer's standard internal insulation to provide thermal resistance and prevent condensation.
 3. Mounting: Manufacturer-designed provisions for field installation.
 4. Internal Access: Removable panels or hinged doors of adequate size for field access to internal components for inspection, cleaning, service, and replacement.
- C. Drain Pan: If required by manufacturer's design, provide unit with non-ferrous drain pan with bottom sloped to a low point drain connection.
- D. Refrigeration Assemblies and Specialties:
 1. Specially designed by manufacturer for type of VRF HVAC system being installed, either two or three pipe.
 2. Each refrigerant branch circuit shall have refrigerant control valve(s) to control refrigerant flow.
 3. Each system piping connection upstream of heat recovery unit shall be fitted with an isolation valve to allow for service to any heat recovery control unit in the system without interrupting operation of the system.

4. Each branch circuit connection shall be fitted with an isolation valve and capped service port to allow for service to any individual branch circuit without interrupting operation of the system.
 - a. If not available as an integral part of the heat recovery control unit, isolation valves shall be field installed adjacent to the unit pipe connection.
- E. Unit Controls:
1. Enclosure: Manufacturer's standard, and suitable for indoor locations.
 2. Factory-Installed Controller: Configurable digital control.
 3. Features and Functions: Self-diagnostics, fuse protection.
 4. Communication: Network communication with indoor units and outdoor unit(s).
 5. Cable and Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 6. Field Connection: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
- F. Unit Electrical:
1. Enclosure: Metal, similar to enclosure, and suitable for indoor locations.
 2. Field Connection: Single point connection to power entire unit and integral controls.
 3. Disconnecting Means: Factory-mounted circuit breaker or switch, complying with NFPA 70.
 4. Control Transformer: Manufacturer's standard. Coordinate requirements with field power supply.
 5. Wiring: Manufacturer's standard with each connection labeled and corresponding to a unit-mounted wiring diagram.
 6. Raceways: Enclose line voltage wiring in raceways to comply with NFPA 70.
- G. Unit Piping:
1. Unit Tubing: Copper tubing with brazed joints.
 2. Unit Tubing Insulation: Manufacturer's standard insulation, of thickness to prevent condensation.
 3. Field Piping Connections: Manufacturer's standard.

4. Factory Charge: Dehydrated air or nitrogen.
5. Testing: Factory pressure tested and verified to be without leaks.

2.10 SYSTEM CONTROLS

A. General Requirements:

1. Network: Indoor units, HRCUs, and outdoor units shall include integral controls and connect through a manufacturer-selected low voltage control network.
2. Network Communication Protocol: Open control communication between interconnected units.
3. Integration with Building Automation System: ASHRAE 135, BACnet IP and certified by BACnet Testing Lab (BTL), including the following:
 - a. Ethernet connection via RJ-45 connectors and port.
4. Operator Interface:
 - a. Operators shall interface with system and unit controls through the following:
 - 1) Operator interfaces integral to controllers.
 - 2) Owner-furnished PC connected to central controller(s).
 - 3) Web interface through web browser software.
 - 4) Integration with Building Automation System.
 - b. Users shall be capable of interface with controllers for control of indoor units to extent privileges are enabled. Control features available to users shall include the following:
 - 1) On/off control.
 - 2) Temperature set-point adjustment.

B. VRF HVAC System Operator Software for PC:

1. Software offered by VRF HVAC system manufacturer shall provide system operators with ability to monitor and control VRF HVAC system(s) from a single dedicated Owner-furnished PC.
2. Software shall provide operator with a graphic user interface to allow monitoring and control of multiple central controllers from a single device location through point-and-click mouse exchange.
3. Plan views shall show building plans with location of indoor units and identification superimposed on plans.

4. Controls operation mode of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units. Operation modes available through central controller shall match those operation modes of controllers for indoor units.
 5. Schedules operation of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units. Schedules daily, weekly, and annual events.
 6. Changes operating set points of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units.
 7. Optimized start feature to start indoor units before scheduled time to reach temperature set-point at scheduled time based on operating history.
 8. Night setback feature to operate indoor units at energy-conserving heating and cooling temperature set-points during unoccupied periods.
 9. Supports Multiple Languages: English.
 10. Supports Imperial and Metric Temperature Units: Fahrenheit.
 11. Displays service notifications and error codes.
 12. Monitors and displays up to 3000 item error history and 10000 item operation history for regular reporting and further archiving.
 13. Monitors and displays cumulative operating time of indoor units.
 14. Able to disable and enable operation of individual controllers for indoor units.
 15. Information displayed on individual controllers shall also be available for display.
 16. Information displayed for outdoor units, including refrigerant high and low pressures.
- C. Central Controllers:
1. Centralized control for all indoor and outdoor units from a single central controller location.
 - a. Include multiple interconnected controllers as required.
 2. Controls operation mode of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units. Operation modes available through central controller shall match those operation modes of controllers for indoor units.
 3. Schedule operation of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units.

- a. Sets schedule for daily, weekly, and annual events.
 - b. Schedule options available through central controller shall at least include the schedule options of controllers for indoor units.
4. Changes operating set points of indoor units as individual units, by selected groups of indoor units, or as collection of all indoor units.
 5. Optimized start feature to start indoor units before scheduled time to reach temperature set-point at scheduled time based on operating history.
 6. Night setback feature to operate indoor units at energy-conserving heating and cooling temperature set-points during unoccupied periods.
 7. Service diagnostics tool.
 8. Able to disable and enable operation of individual controllers for indoor units.
 9. Information displayed on individual controllers shall also be available for display through central controller.
 10. Information displayed for outdoor units, including refrigerant high and low pressures.
 11. Multiple RJ-45 ports for direct connection to a local PC and an Ethernet network switch.
 12. Operator interface through a backlit, high-resolution color display touch panel and web accessible through standard web browser software.
- D. Wired Controllers for Indoor Units:
1. Single controller capable of controlling multiple indoor units as group.
 2. Auto Timeout Touch Screen LCD: Timeout duration shall be adjustable.
 3. Multiple Language: English.
 4. Temperature Units: Fahrenheit.
 5. On/Off: Turns indoor unit on or off.
 6. Hold: Hold operation settings until hold is released.
 7. Temperature Display: 1-degree increments.
 8. Temperature Set-Point: Separate set points for Cooling, Heating, and Setback. Adjustable in 1-degree increments between.
 9. Fan Speed Setting: Select between available options furnished with the unit.

10. Service Notification Display: "Filter" .
11. Service Run Tests: Limit use by service personnel to troubleshoot operation.
12. Error Code Notification Display: Used by service personnel to troubleshoot abnormal operation and equipment failure.
13. User and Service Passwords: Capable of preventing adjustments by unauthorized users.
14. Setting stored in nonvolatile memory to ensure that settings are not lost if power is lost. Battery backup for date and time only.
15. Low-voltage power required for controller shall be powered through non-polar connections to indoor unit.

2.11 SYSTEM REFRIGERANT AND OIL

A. Refrigerant:

1. As required by VRF HVAC system manufacturer for system to comply with performance requirements indicated.
2. R-410a

B. Oil:

1. As required by VRF HVAC system manufacturer and to comply with performance requirements indicated.

2.12 SYSTEM CONDENSATE DRAIN PIPING

A. If more than one material is listed, material selection is Contractor's option.

B. Copper Tubing:

1. Drawn-Temper Tubing: According to ASTM B88, Type L or Type DWV according to ASTM B306.
2. Wrought-Copper Fittings: ASME B16.22.
3. Wrought-Copper Unions: ASME B16.22.
4. Solder Filler Metals: ASTM B32, lead-free alloys, and water-flushable flux according to ASTM B813.

2.13 SYSTEM REFRIGERANT PIPING

- A. Comply with requirements in Section 232300 "Refrigerant Piping" for system piping requirements.

2.14 SYSTEM CONTROL CABLE AND RACEWAYS

- A. Low-Voltage Control Cabling:
 - 1. Plenum-Rated, Paired Cable: NFPA 70, Type CMP.
- B. TIA-485A Network Cabling:
 - 1. Standard Cable: NFPA 70, Type CMG.
 - 2. Plenum-Rated Cable: NFPA 70, Type CMP.
- C. Ethernet Network Cabling: TIA-568-C.2 Category 6 cable with RJ-45 connectors.
- D. Comply with requirements in electrical specifications for raceways and boxes for electrical systems for control wiring and cable raceways.

2.15 MATERIALS

- A. Steel:
 - 1. ASTM A36/A36M for carbon structural steel.
 - 2. ASTM A568/A568M for steel sheet.
- B. Stainless Steel:
 - 1. Manufacturer's standard grade for casing.
 - 2. Manufacturer's standard type, ASTM A240/A240M for bare steel exposed to airstream or moisture.
- C. Galvanized Steel: ASTM A653/A653M.
- D. Aluminum: ASTM B209.
- E. Comply with Section 230546 "Coatings for HVAC" for corrosion-resistant coating.

2.16 SOURCE QUALITY CONTROL

- A. Factory Tests: Test and inspect factory-assembled equipment.

- B. Equipment will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports for historical record. Submit reports only if requested.

PART 3 - EXECUTION

3.1 EQUIPMENT INSTALLATION

- A. Clearance:
 - 1. Maintain manufacturer's recommended clearances for service and maintenance.
 - 2. Maintain clearances required by governing code.
- B. Loose Components: Install components, devices, and accessories furnished by manufacturer, with equipment, that are not factory mounted.
 - 1. Loose components shall be installed by manufacturer's service representative or system Installer under supervision of manufacturer's service representative.
- C. Equipment Restraint Installation: Install equipment with seismic-restraint device. Comply with requirements for seismic-restraint devices specified in Section 230548 "Seismic Controls for HVAC," and Section 230548.13 "Vibration Controls for HVAC."
- D. Indoor Unit Installations:
 - 1. Install units to be level and plumb while providing a neat and finished appearance.
 - 2. Unless otherwise required by VRF HVAC system manufacturer, support ceiling-mounted units from structure above using threaded rods; minimum rod size of 3/8 inch.
 - 3. Adjust supports of exposed and recessed units to draw units tight to adjoining surfaces.
 - 4. Protect finished surfaces of ceilings, floors, and walls that come in direct contact with units. Refinish or replaced damaged areas after units are installed.
 - 5. In rooms with ceilings, conceal piping and tubing, controls, and electrical power serving units above ceilings.
 - 6. In rooms, where indicated on the drawings, where equipment and piping is exposed, arrange piping and tubing, controls, and electrical power serving units to provide a neat and finished appearance. All piping, wiring and pumps shall be concealed from view withing the sheet metal pipe chases.

- a. In the case of electrical conduit for disconnects, all conduit shall be rigid and as short as possible. Exposed conduit shall be painted to match the walls.
 7. Provide lateral bracing if needed to limit movement of suspended units to not more than 0.25 inch.
 8. For floor- and wall-mounted units that are exposed, where indicated, conceal piping and tubing, controls, and electrical power serving units within walls, units or sheet metal chases.
 9. Install floor-mounted units on support structure indicated on Drawings.
 10. Attachment: Install hardware for proper attachment to supported equipment.
- E. Outdoor Unit Installations:
1. Install units to be level and plumb while providing a neat and finished appearance.
 2. Install outdoor units on support structures indicated on Drawings.
 3. Pad-Mounted Installations: Install outdoor units on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified the structural specifications.
 - a. Attachment: Install anchor bolts to elevations required for proper attachment to supported equipment.
 - b. Grouting: Place grout under equipment supports and make bearing surface smooth.
 4. Roof-Mounted Installations: Install outdoor units on equipment on roof curbs per the mechanical and structural drawings.

3.2 GENERAL REQUIREMENTS FOR PIPING AND TUBING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping and tubing systems. Install piping and tubing as indicated unless deviations to layout are approved on coordination drawings.
- B. Install piping and tubing in concealed locations unless otherwise indicated and except in equipment rooms and service areas.
- C. Install piping and tubing at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- D. Install piping and tubing above accessible ceilings to allow sufficient space for ceiling panel removal.
- E. Install piping and tubing to permit valve servicing.

- F. Install piping and tubing at indicated slopes.
- G. Install piping and tubing free of sags.
- H. Install fittings for changes in direction and branch connections.
- I. Install piping and tubing to allow application of insulation.
- J. Install groups of pipes and tubing parallel to each other, spaced to permit applying insulation with service access between insulated piping and tubing.
- K. Install sleeves for piping and tubing penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 230517 "Sleeves and Sleeve Seals for HVAC Piping."
- L. Install escutcheons for piping and tubing penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 230518 "Escutcheons for HVAC Piping."
- M. All exposed piping to be painted to match the adjacent wall.

3.3 CONDENSATE DRAIN PIPE AND TUBING INSTALLATION

- A. General Requirements for Drain Piping and Tubing:
 - 1. Install a union in piping at each threaded unit connection.
 - 2. Install an adjustable stainless-steel hose clamp with adjustable gear operator on unit hose connections. Tighten clamp to provide a leak-free installation.
 - 3. If required for unit installation, provide a trap assembly in drain piping to prevent air circulated through unit from passing through drain piping. Comply with more stringent of the following:
 - a. Details indicated on Drawings.
 - b. Manufacturer's requirements.
 - c. Governing codes.
 - d. In the absence of requirements, comply with requirements of ASHRAE handbooks.
 - 4. Extend drain piping from units with drain connections to drain receptors as indicated on Drawings. If not indicated on Drawings, terminate drain connection at nearest accessible location that is not exposed to view by occupants.
 - 5. Provide each 90-degree change in direction with a Y- or T-fitting. Install a threaded plug connection in the dormant side of fitting or future use as a service cleanout.

6. Where indicated on the drawings, all condensate piping to be routed in sheet metal pipe chases.
- B. Gravity Drains:
1. Slope piping from unit connection toward drain termination at a constant slope of not less than one percent.
- C. Pumped Drains:
1. If unit condensate pump or lift mechanism is not included with an integral check valve, install a full-size check valve in each branch pipe near unit connection to prevent backflow into unit.

3.4 REFRIGERANT PIPING AND TUBING INSTALLATION

- A. Comply with requirements in Section 232300 "Refrigerant Piping" for system piping requirements.

3.5 PIPE AND TUBING INSULATION INSTALLATION

- A. Comply with requirements in Section 232300 "Refrigerant Piping" for system piping requirements.

3.6 DUCT, ACCESSORIES, AND AIR OUTLETS INSTALLATION

- A. Where installing ductwork adjacent to equipment, allow space for service and maintenance.
- B. Comply with requirements for metal ducts specified in Section 233113 "Metal Ducts."
- C. Comply with requirements for air duct accessories specified in Section 233300 "Air Duct Accessories."

3.7 SOFTWARE

- A. Cybersecurity:
1. Software:
 - a. Coordinate security requirements with IT department.
 - b. Ensure that latest stable software release is installed and properly operating.
 - c. Disable or change default passwords to password using a combination of uppercase and lower letters, numbers, and symbols at least eight

characters in length. Record passwords and turn over to party responsible for system operation and administration.

2. Hardware:
 - a. Coordinate location and access requirements with IT department.
 - b. Enable highest level of wireless encryption that is compatible with Owner's ICT network.
 - c. Disable dual network connections.

3.8 FIRESTOPPING

- A. Comply with requirements in on drawings.

3.9 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of manufacturer's startup representative:
 1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 2. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
 3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation. This is to be verified by the manufacturer's startup representative.
 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment. This is to be verified by the manufacturer's startup representative.
- B. Refrigerant Tubing Positive Pressure Testing:
 1. Comply with more stringent of VRF HVAC system manufacturer's requirements and requirements indicated.
 2. After completion of tubing installation, pressurize tubing systems to a test pressure indicated by the manufacturer, but not less than 600 psig, using dry nitrogen.
 3. Successful testing shall maintain a test pressure for a continuous and uninterrupted period of 24 hours. Allowance for pressure changes attributed to changes in ambient temperature are acceptable.
 4. Prepare test report to record the following information for each test:

- a. Name of person starting test, company name, phone number, and e-mail address.
 - b. Name of manufacturer's service representative witnessing test, company name, phone number, and e-mail address.
 - c. Detailed description of extent of tubing tested.
 - d. Date and time at start of test.
 - e. Test pressure at start of test.
 - f. Outdoor temperature at start of test.
 - g. Name of person ending test, company name, phone number, and e-mail address.
 - h. Date and time at end of test.
 - i. Test pressure at end of test.
 - j. Outdoor temperature at end of test.
 - k. Remarks:
5. Submit test reports for Project record.
- C. Refrigerant Tubing Evacuation Testing:
1. Comply with more stringent of VRF HVAC system manufacturer's requirements and requirements indicated.
 2. After completion of tubing positive-pressure testing, evacuate tubing systems to a pressure indicated by the manufacturer.
 3. Successful testing shall maintain a test pressure for a continuous and uninterrupted period of 24 hour(s) with no change.
 4. Prepare test report to record the following information for each test:
 - a. Name of person starting test, company name, phone number, and e-mail address.
 - b. Name of manufacturer's service representative witnessing test, company name, phone number, and e-mail address.
 - c. Detailed description of extent of tubing tested.
 - d. Date and time at start of test.
 - e. Test pressure at start of test.
 - f. Outdoor temperature at start of test.
 - g. Name of person ending test, company name, phone number, and e-mail address.
 - h. Date and time at end of test.
 - i. Test pressure at end of test.
 - j. Outdoor temperature at end of test.
 - k. Remarks:
 5. Submit test reports for Project record.

6. Upon successful completion of evacuation testing, system shall be charged with refrigerant.
- D. System Refrigerant Charge:
1. Using information collected from the refrigerant tubing evacuation testing, system Installer shall consult variable refrigerant system manufacturer to determine the correct system refrigerant charge.
 2. Installer shall charge system following VRF HVAC system manufacturer's written instructions.
 3. System refrigerant charging shall be witnessed by system manufacturer's representative.
 4. Total refrigerant charge shall be recorded and permanently displayed at the system's outdoor unit.
- E. Products will be considered defective if they do not pass tests and inspections.
- F. Prepare test and inspection reports.

3.10 STARTUP SERVICE

- A. Engage a VRF HVAC system manufacturer's startup representative to perform system(s) startup service.
1. Service representative shall be an employee or a certified, factory-trained and - authorized, startup representative of VRF HVAC system manufacturer.
 2. Complete startup service of each separate system.
 3. Complete system startup service according to manufacturer's written instructions.
- B. Startup checks shall include, but not be limited to, the following:
1. Check control communications of equipment and each operating component in system(s).
 2. Check each indoor unit's response to demand for cooling and heating.
 3. Check each indoor unit's response to changes in airflow settings.
 4. Check each indoor unit, HRCU, and outdoor unit for proper condensate removal.
 5. Check sound levels of each indoor and outdoor unit.

- C. Installer shall accompany manufacturer's service representative during startup service and provide manufacturer's service representative with requested documentation and technical support during startup service.
 - 1. Installer shall correct deficiencies found during startup service for reverification.
- D. System Operation Report:
 - 1. After completion of startup service, manufacturer shall issue a report for each separate system.
 - 2. Report shall include complete documentation describing each startup check, the result, and any corrective action required.
 - 3. Manufacturer shall electronically record not less than two hours of continuous operation of each system and submit with report for historical reference.
 - a. All available system operating parameters shall be included in the information submitted.
- E. Witness:
 - 1. Invite Engineer to witness startup service procedures.
 - 2. Provide written notice not less than 20 business days before start of startup service.

3.11 COMMISSIONING

- A. Engage a VRF HVAC system manufacturer's startup representative to perform system(s) commissioning service.
- B. COMMISSIONING PROCEEDURE
 - 1. Scope of HVAC&R testing shall include entire HVAC&R installation, from central equipment for heat generation and refrigeration through distribution systems to each conditioned space. Testing shall include measuring capacities and effectiveness of operational and control functions.
 - 2. Test all operating modes, interlocks, control responses, and responses to abnormal or emergency conditions, and verify proper response of building automation system controllers and sensors.
 - 3. The manufacturer's startup representative along with the HVAC&R Contractor, testing and balancing Subcontractor, and HVAC&R Instrumentation and Control Subcontractor shall prepare detailed testing plans, procedures, and checklists for HVAC&R systems, subsystems, and equipment.

4. Tests will be performed using design conditions whenever possible.
5. Simulated conditions may need to be imposed using an artificial load when it is not practical to test under design conditions. Before simulating conditions, calibrate testing instruments. Provide equipment to simulate loads. Set simulated conditions as directed by the manufacturer's startup representative and document simulated conditions and methods of simulation. After tests, return settings to normal operating conditions.
6. Certify that HVAC&R systems, subsystems, and equipment have been installed, calibrated, and started and are operating according to the Contract Documents.
7. The manufacturer's startup representative may direct that set points be altered when simulating conditions is not practical.
8. The manufacturer's startup representative may direct that sensor values be altered with a signal generator when design or simulating conditions and altering set points are not practical.
9. If tests cannot be completed because of a deficiency outside the scope of the HVAC&R system, document the deficiency and report it to the Owner. After deficiencies are resolved, reschedule tests.
10. If the testing plan indicates specific seasonal testing, complete appropriate initial performance tests and documentation and schedule seasonal tests.

3.12 ADJUSTING

- A. Adjust equipment and components to function smoothly, and lubricate as recommended by manufacturer.
- B. Adjust initial temperature and humidity set points. Adjust initial airflow settings and discharge airflow patterns.
- C. Set field-adjustable switches and circuit-breaker trip ranges according to VRF HVAC system manufacturer's written instructions, and as indicated.
- D. Occupancy Adjustments: When requested within 18 months from date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.

3.13 SOFTWARE SERVICE AGREEMENT

- A. Technical Support: Beginning at Substantial Completion, service agreement shall include software support for two years.

- B. Upgrade Service: At Substantial Completion, update software to latest version. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system and new or revised licenses for using software.
 - 1. Upgrade Notice: At least 30 days to allow Owner to schedule and access the system and to upgrade computer equipment if necessary.

3.14 DEMONSTRATION

- A. Engage a VRF HVAC system manufacturer's employed training instructor or Factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain entire system.

END OF SECTION 238129

HVAC RETROFIT INYO COUNTY COURT HOUSE

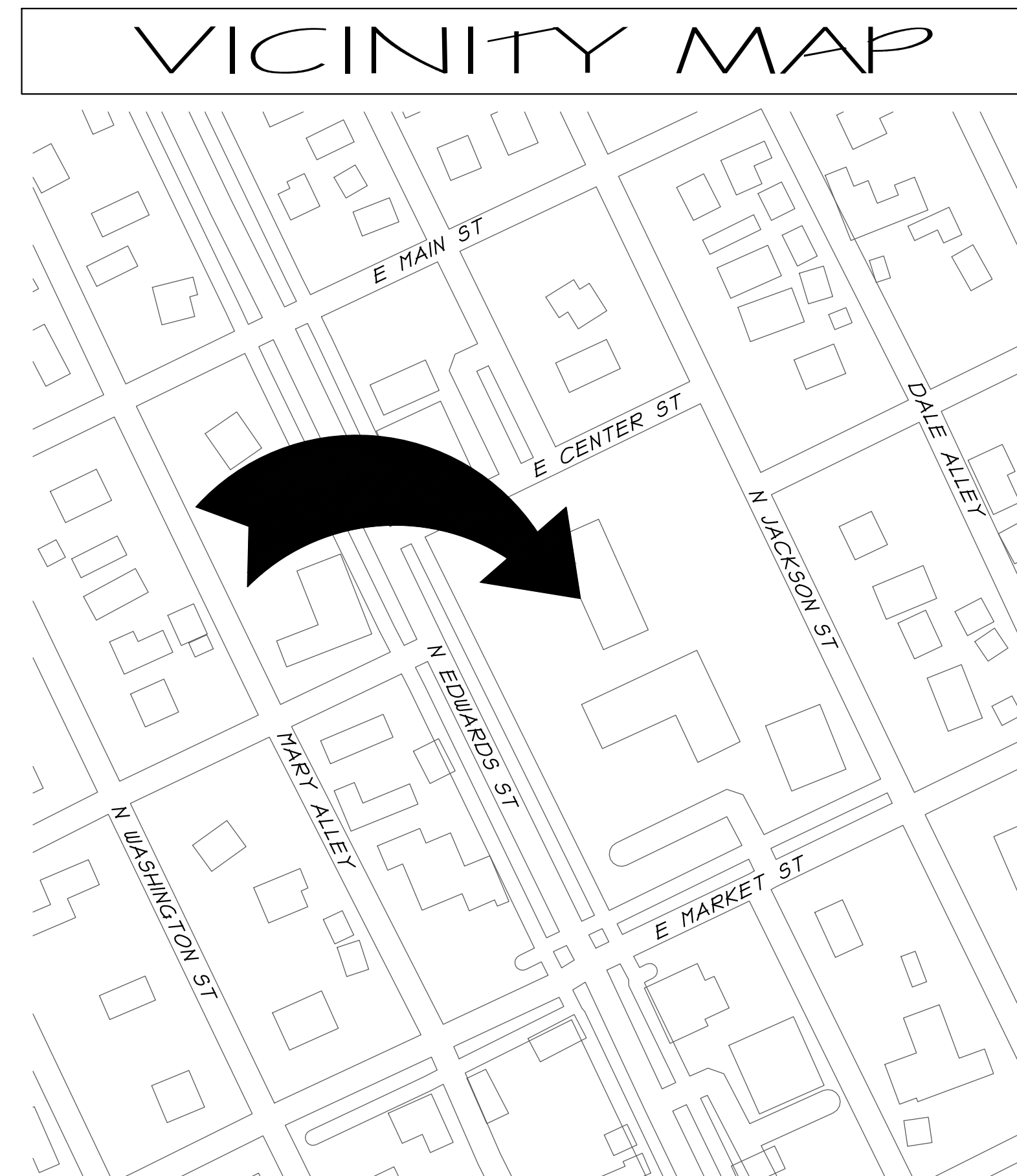
168 N. EDWARDS ST.
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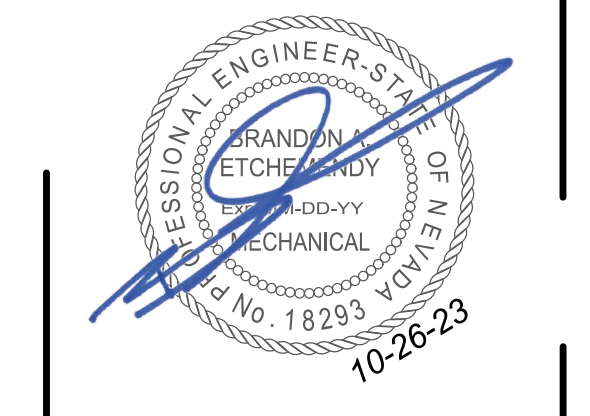
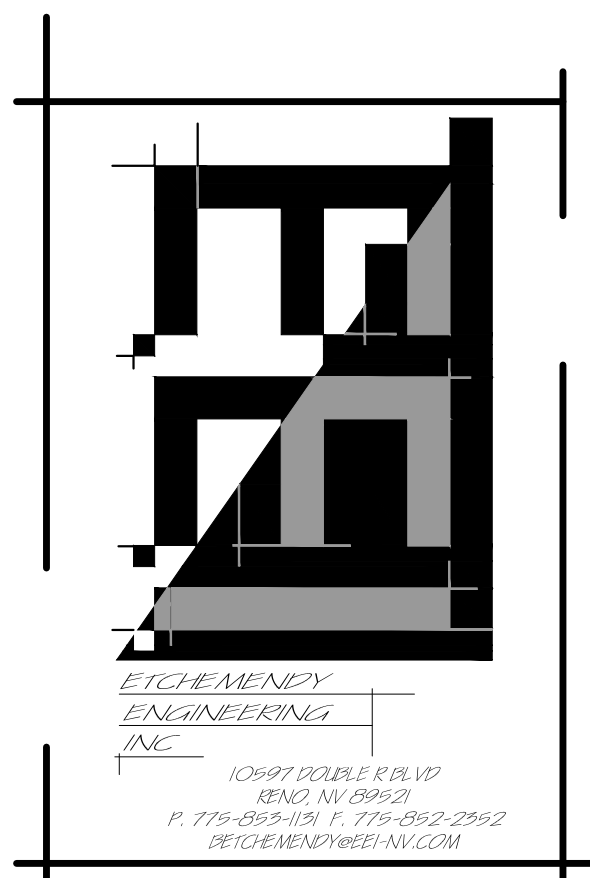
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APPLICABLE CODES: INTERNATIONAL BUILDING CODE 2018
CALIFORNIA MECHANICAL CODE 2016
CALIFORNIA PLUMBING CODE 2014
NATIONAL ELECTRICAL CODE 2017

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HVAC RETROFIT
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168 N. EDWARDS ST.
INDEPENDENCE, CA 93526

REVISIONS

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DRAWING TITLE
TITLE SHEET

date: 10-26-23
job number: 22125
drawn: SME
checked: BAE

10.1

STRUCTURAL GENERAL NOTES

QUALITY REQUIREMENTS - SECTION 014000

- A. NOTES APPLY TO ALL WORK SHOWN ON THE STRUCTURAL DRAWINGS.
B. COMPLY WITH THE BUILDING CODE AND LOCAL JURISDICTION DETAILED IN THE DESIGN CRITERIA OF THE GENERAL NOTES.
C. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE CODE AND FOR THE LOADS PRESCRIBED IN THE DESIGN CRITERIA.
D. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING, WORKERS AND PEDESTRIANS DURING CONSTRUCTION AS WELL AS FOR CONSTRUCTION METHODS. PROVIDE SHORING, TEMPORARY BRACING, ETC., AS NECESSARY TO PREVENT OVERSTRESSES DURING CONSTRUCTION. THESE ELEMENTS MAY REQUIRE THAT THE CONTRACTOR RETAIN HIS OWN ENGINEER FOR THEIR DESIGN.
E. SPECIAL INSPECTION: THIS STRUCTURE HAS BEEN DESIGNED WITH MATERIALS THAT REQUIRE SPECIAL INSPECTION AND/OR MATERIALS TESTING. THE LIST OF OWNER REQUIRED INSPECTION ITEMS OUTLINED IN THE VERIFICATION AND SPECIAL INSPECTION SECTION OF THE GENERAL NOTES SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE CALIFORNIA BUILDING CODE. FOR STANDARDS, FREQUENCY AND AN ITEMIZED BREAKDOWN OF MATERIAL SUBSETS SEE THE REFERENCED CBC TABLES. IF THE CONTRACTOR OR OWNER DOES NOT HAVE A COPY OF THE CBC CONTACT TECTONICS DESIGN GROUP.
F. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
1. PROVIDE SERVICES THAT INCLUDE ALL ITEMS LISTED IN THE VERIFICATION AND SPECIAL INSPECTION SECTION OF THE GENERAL NOTES. THE SPECIAL INSPECTOR SHALL INDICATE IN WRITING TO THE GC, OWNER AND E.O.R. THAT THEY HAVE REVIEWED THIS TABLE AND THE RELEVANT DETAILS FOR EACH OF THESE ITEMS. THIS LETTER SHOULD INCLUDE A LIST OF THESE UNIQUE/CRITICAL ITEMS AS WELL AS EACH OF THEIR CORRESPONDING DETAILS. THIS DOES NOT PRECLUDE THE NEED FOR AN EQUAL AMOUNT OF CARE ON THE MORE STANDARD INSPECTION ITEMS.
2. FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROJECT DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
3. SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE BUILDING CODE.
G. STRUCTURAL WELDING MUST BE PERFORMED BY AN AISC APPROVED FABRICATOR. THE FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS TO THE BUILDING OFFICIAL AND TO THE ENGINEER OF RECORD. THE APPROVED FABRICATOR'S QUALIFICATIONS SHALL BE CONTINGENT ON COMPLIANCE WITH THE FOLLOWING:
1. THE FABRICATOR HAS DEVELOPED AND SUBMITTED A DETAILED FABRICATION PROCEDURAL MANUAL REFLECTING KEY QUALITY CONTROL PROCEDURES WHICH WILL PROVIDE A BASIS FOR INSPECTION.
2. VERIFICATION OF THE FABRICATOR'S QUALITY CONTROL CAPABILITIES. PLANT AND PERSONNEL AS OUTLINED IN THE FABRICATION PROCEDURAL MANUAL SHALL BE BY AN APPROVED INSPECTION AGENCY.
H. EPOXY ANCHORS: USE SIMPSON SET-3G EPOXY OR APPROVED EQUAL. EPOXY ANCHORS MUST BE INSTALLED BY QUALIFIED PERSONNEL, TRAINED TO INSTALL ADHESIVE ANCHORS PER ACI 318, D.9. PROVIDE SPECIAL INSPECTION PER ICC REPORT. ENGINEER MUST APPROVE SUBSTITUTIONS IN WRITING.

CAST IN PLACE CONCRETE - SECTION 033000, CONTINUED

- 2. EXPOSED FORMED SURFACES - IMMEDIATELY AFTER FORMS ARE REMOVED, REMOVE SURFACE PROJECTIONS AND SACK AND PATCH ALL SURFACE DEFECTS. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4" OR TOOLED TO A 1/2" RADIUS.
3. FORMED SURFACES NO EXPOSED - STRIP FORMS, PATCH LARGE HOLES OR DEFECTS.
G. SLAB SURFACES TOLERANCES SHALL MEET THE FOLLOWING REQUIREMENTS PER ASTM E1155-87:
1. INTERIOR SLABS ON GRADE: F₁ GREATER THAN OR EQUAL TO 50, F₂ GREATER THAN OR EQUAL TO 35.
H. CONCRETE CURING:
1. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVE HOT OR COLD TEMPERATURES FOR A MINIMUM OF (5) DAYS.
2. INTERIOR SLABS: APPLY (1) COAT OF EUCLID SUPER REZ-SEAL COMPOUND, OR APPROVED EQUAL, AS SOON AS POSSIBLE AFTER FINISHING. WHEN WEATHER OR OTHER CONDITIONS FALL OUTSIDE MANUFACTURED RECOMMENDATIONS DO NOT PROCEED UNTIL APPROPRIATE MODIFICATIONS TO CURING PROCESS ARE AGREED UPON. JUST PRIOR TO PROJECT COMPLETION, APPLY (1) COAT EUCLID SUPER REZ-SEAL, OR APPROVED EQUAL, TO ALL INTERIOR SURFACES.
3. REAPPLY CURING COMPOUND TO SAWCUT JOINTS IMMEDIATELY AFTER CUTTING IF MEMBRANE WAS APPLIED PRIOR TO CUTTING.
I. WEATHER PROTECTION:
1. IN HOT WEATHER, FOLLOW "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING," ACI 305. WHEN COMBINED EFFECTS OF RELATIVE HUMIDITY, CONCRETE TEMPERATURE, AMBIENT TEMPERATURE, AND WIND RESULT IN A SURFACE EVAPORATION RATE IN EXCESS OF 0.2 LB./SQ. FT./HR., PROVIDE WIND BREAKS, FOGGING, COOLING, EVAPORATION RETARDANT, AS NECESSARY, TO PREVENT PLASTIC SHRINKAGE CRACKING OF CONCRETE SURFACES. CONTACT TECTONICS FOR EVAPORATION RATE CHART IF REQUIRED.
2. IN COLD WEATHER, FOLLOW "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING," ACI 306.
J. DEFECTIVE WORK:
1. ANY CONCRETE NOT FORMED AS SHOWN OR NOT TRUE TO THE INTENDED LINES, GRADES OR TOLERANCES, OR THAT HAS ROCK POCKETS, VOIDES, OR DEBRIS EMBEDDED IN IT SHALL BE DEEMED DEFECTIVE. DEFECTIVE WORK SHALL BE REMOVED AND REPLACED WITH CONFORMING WORK OR, AT THE OPTION OF THE ENGINEER, REPAIR TO THE ENGINEER'S SATISFACTION.
2. SLAB SHRINKAGE CRACKS, EDGE CURLS OR SURFACE OUT OF TOLERANCE ARE DEFECTS WHICH MUST BE REPAIRED OR REPLACED AS FOLLOWS:
2.1. SLABS COVERED WITH CARPET OR VINYL TILE - FILL ALL CRACKS WITH CEMENT MORTAR, GRIND ALL EDGE CURL AND GRIND OR FILL WITH FLOOR STONE ANY SURFACE IRREGULARITIES.
2.2. SLABS EXPOSED TO VIEW AS FINISHED FLOOR:
2.2.a. HAIRLINE CRACKS LESS THAN 1/16" WIDE: NO REPAIR REQUIRED.
2.2.b. CRACKS LESS THAN 1/4" WIDE: REPAIR SLAB SECTION.
2.2.c. CRACKS MORE THAN 1/4" WIDE: REPLACE SLAB SECTION.
2.2.d. SLAB CURL OR HIGH SPOTS: DRILL HOLES AND FILL VOIDES BELOW SLAB WITH NON-SHRINK GROUT, THEN GRIND FLUSH AND RESTORE SURFACE COLOR AND TEXTURE WITH EPOXY MORTAR.
2.2.e. SLAB DEPRESSIONS: FILL WITH EPOXY MORTAR TO MATCH ADJACENT AREAS.
K. EPOXY BONDING, PATCHING AND ANCHORS - USE THE FOLLOWING MATERIALS AND PROCEDURES WHERE EPOXY MATERIAL ARE CALLED FOR:
1. PREPARE SURFACES BY CLEANING, CHIPPING, BUSHHAMMER OR SANDBLAST AS NECESSARY TO ROUGHEN SURFACE: REMOVE LAITANCE AND EXPOSE AGGREGATE. CLEAN STEEL SURFACES.
2. PRIME SURFACES WITH "EUCO" #352 OR EQUAL. THIN AND APPLY PER MANUFACTURER'S RECOMMENDATIONS.
3. PATCH SURFACES BY PREPARING AS ABOVE AND THEN TROWEL APPLYING "EUCO" #456 EPOXY MORTAR OR APPROVED EQUAL. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION AND AGGREGATE FILLERS.
4. E.A. = EPOXY ALL THREAD ANCHORS. USE SIMPSON SET-3G EPOXY OR APPROVED EQUAL. EPOXY ANCHORS MUST BE INSTALLED BY QUALIFIED PERSONNEL, TRAINED TO INSTALL ADHESIVE ANCHORS PER ACI 318, D.9. PROVIDE SPECIAL INSPECTION PER ICC REPORT. ENGINEER MUST APPROVE SUBSTITUTIONS IN WRITING.
L. NO CONDUIT SHALL BE PLACED IN THE SLABS ON GRADE.
M. CLEAN UP: LEAVE CONCRETE SURFACES BROOM CLEAN. REMOVE ALL DEBRIS FROM CONCRETE WORK FROM THE SITE.

CONCRETE FORMWORK - SECTION 031000

- A. DESIGN FORMS AS RECOMMENDED IN ACI 347. CONSTRUCT FORMS OF ADEQUATE STRENGTH AND STIFFNESS TO OBTAIN REQUIRED FINISHED CONCRETE SURFACE AND LINE TOLERANCES. FORMS SHALL BE TIGHT ENOUGH TO PREVENT LEAKAGE OF MORTAR FINES.
B. USE NEW OR PROPERLY CLEANED USED FORM MATERIALS.
C. REMOVE ALL DIRT, SAWDUST, RUBBISH, WATER AND ICE FROM FORM PRIOR TO PLACEMENT OF CONCRETE.
D. COMPLY WITH THE CURING REQUIREMENTS OF SECTION 033000 PRIOR TO STRIPPING OF FORMS.
E. FORMWORK TOLERANCES:
1. SLAB ON GRADE THICKNESS: PLUS 1/2", MINUS 1/4"
2. ALL OTHER: 1/4" IN 10 FEET AND 1/2" OVERALL, EXCEPT VISIBLE LINES SHALL APPEAR STRAIGHT, TRUE AND FREE FROM SUDDEN TRANSITION, FORM FACING DEFLECTION LESS THAN L/240.

CONCRETE REINFORCEMENT - SECTION 032000

- A. REINFORCING SHALL BE ASTM A 615, GRADE 60. ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A 706.
B. SECURE REINFORCING IN PLACE WITH CHAIRS, TIES, OR DOBIES AS RECOMMENDED IN CRSI MANUAL OF STANDARD PRACTICES. LAP BARS AS DETAILED HEREIN.
C. LAP SPLICES ARE TO CONFORM TO LAP SPLICE SCHEDULE, SEE 2/S5.1.
D. STRUCTURAL WELDED WIRE REINFORCING (SWWR) SHALL BE GRADE 80, F_y = 80 ksi.

CAST IN PLACE CONCRETE - SECTION 033000

- A. CONCRETE MIX DESIGNS SHALL BE AS OUTLINED ON THE DETAILS IN THESE DRAWINGS, SEE 6/S2.1.
B. CONCRETE SHALL BE PLACED AT THE MINIMUM PRACTICAL SLUMP NOT EXCEEDING THE SPECIFIED MAXIMUM. IF ADDITIONAL WORKABILITY AND SLUMP IS DESIRED, IT MAY BE OBTAINED WITH APPROVED ADMIXTURES WHICH DO NOT INCREASE WATER CONTENT OR SHRINKAGE OF SPECIFIED MIXES, SEE NOTE A.
C. THE FOLLOWING ITEMS SHALL BE INSPECTED PRIOR TO PLACING CONCRETE TO ENSURE CONFORMANCE WITH THE APPROVED CONCRETE MIX DESIGN:
1. SLUMP, AIR CONTENT AND COMPRESSIVE STRENGTH
2. ADMIXTURE(S) AND WATER QUANTITY PLACED BOTH AT PLANT AND JOBSITE
3. WEATHER CONDITION AND TIME/DATE OF POUR
D. CLEAN AND ROUGHEN CONSTRUCTION JOINTS, WET FORMS AND SUBGRADE PRIOR TO PLACING CONCRETE.
E. PLACE CONCRETE USING METHODS WHICH AVOID SEGREGATION. MECHANICALLY VIBRATE ALL CONCRETE TO CONSOLIDATE IT IN FORMS.
F. CONCRETE FINISHES:
1. INTERIOR FLOORS - SCREED TO AN EVEN, LEVEL PLANE, FLOAT AND STEEL TROWEL TO A SMOOTH DENSE, HARD FINISH.

DESIGN CRITERIA

Table with 2 columns: APPLICABLE BUILDING CODE (2022 CALIFORNIA BUILDING CODE), JURISDICTION (INYO COUNTY)

QUALITY ASSURANCE AND SPECIAL INSPECTION

FOR SPECIAL INSPECTION INFORMATION AND QUALITY ASSURANCE CRITERIA, SEE SECTION 014000 OF STRUCTURAL GENERAL NOTES.

SNOW & LIVE LOAD DESIGN DATA

Table with 2 columns: LOAD TYPE (ROOF LIVE LOAD, GROUND SNOW LOAD, FLAT ROOF SNOW LOAD, SNOW EXPOSURE FACTOR, SNOW LOAD IMPORTANCE FACTOR, THERMAL FACTOR) and VALUE (20 psf, 50 psf, 34.65 psf, 0.9, 1.1, 1.0)

WIND DESIGN DATA

Table with 2 columns: WIND SPEED (102 MPH), RISK CATEGORY (III), WIND EXPOSURE (C)

SEISMIC DESIGN DATA

Table with 2 columns: SEISMIC IMPORTANCE FACTOR, RISK CATEGORY, MAPPED SPECTRAL RESPONSE ACCELERATION, SITE CLASS, SPECTRAL RESPONSE COEFFICIENT, SEISMIC DESIGN CATEGORY

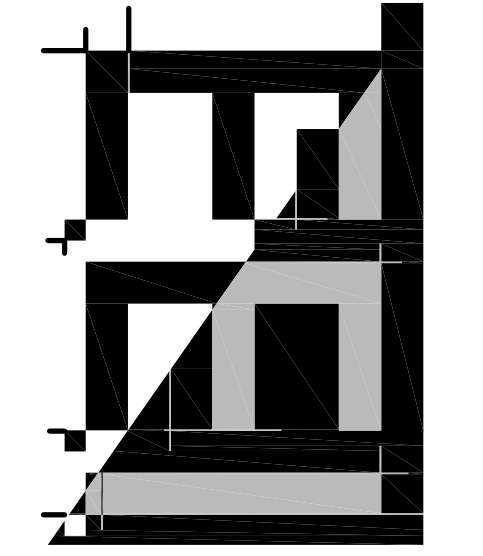
VERIFICATION AND SPECIAL INSPECTION

- A. THIS SECTION APPLIES TO THE STRUCTURAL PORTIONS OF THE PROJECT REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR'S DUTIES ARE OUTLINED IN CBC SECTION 1704.2 AND 1704.3, AND THE QUALITY REQUIREMENTS OF THE GENERAL NOTES.
B. ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY.
C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING INSPECTION FIRM WITH A SCHEDULE TO FACILITATE COORDINATION.
CONCRETE CONSTRUCTION IN ACCORDANCE WITH CBC TABLE 1705.3
A. STEEL PLACEMENT AND FORMWORK PLACEMENT
B. VERIFICATION OF MIX DESIGNS, CURING TEMP. AND METHOD
C. FRESH CONCRETE SAMPLING FOR SLUMP, TEMPERATURE, STRENGTH, AIR CONTENT, AND VERIFICATION OF PROPER PLACEMENT TECHNIQUES
D. SPECIAL INSPECTOR SHALL NOTE AMOUNT, IF ANY, OF WATER OR ADMIXTURES WITHHELD FROM MIX AT BATCH PLANT, AND THE ADDITION OF ANY WATER OR ADMIXTURES ON SITE.
E. CERTIFIED MILL TEST REPORTS SHALL BE PROVIDED FOR EA. SHIPMENT OF REINFORCING STEEL
F. REINF. CHAIR HEIGHTS AND CLEAR DISTANCES
G. INSTALLATION OF MECHANICAL AND EPOXY POST INSTALLED ANCHORS INTO HARDENED CONCRETE
STEEL CONSTRUCTION IN ACCORDANCE WITH AISC 360 CHAPTER N, AISC 341 AND CBC TABLE 17.05.2.2
A. MATERIAL VERIFICATION
B. HIGH STRENGTH BOLTING
C. WELDING (EXCEPT FOR SHOP WELDING PERFORMED BY AISC APPROVED FABRICATOR)
1. SINGLE PASS FILLET
2. SINGLE AND MULTI PASS OVER 5/16", COMPLETE AND PARTIAL PEN WELDS

- NOTES:
1. ALL DIMENSIONS TO BE VERIFIED WITH EXISTING STRUCTURE AND WITH MECHANICAL REQUIREMENTS.
2. CONFIRM ALL DIMENSIONS AND LOCATIONS WITH MECH'L FOR UNIT DIMENSIONS AND FIELD VERIFY TO AVOID CONFLICTS WITH EXISTING CONDITIONS.
3. 6" THICK HOUSEKEEPING PAD WITH #4 AT 18" O.C. EACH WAY, CENTERED. TURN-DOWN ALL EDGES PER DETAIL 1/S2.1. ATTACH MECH'L UNITS TO CONCRETE PAD WITH 1/2" DIAMETER STAINLESS STEEL TITEN HD X 2 1/2" EMBED IN EACH PROVIDED HOLE (6 PER UNIT).
4. MAINTAIN MIN 36" IN FRONT OF EACH PUMP - TYP. PROVIDE 6" MIN. ON ALL SIDES OF PERIMETER.
5. TOOL JOINTS PER DETAIL 2/S2.1.
6. (N) REMOVABLE BOLLARD, TYP. PER DETAIL 3/S2.1.

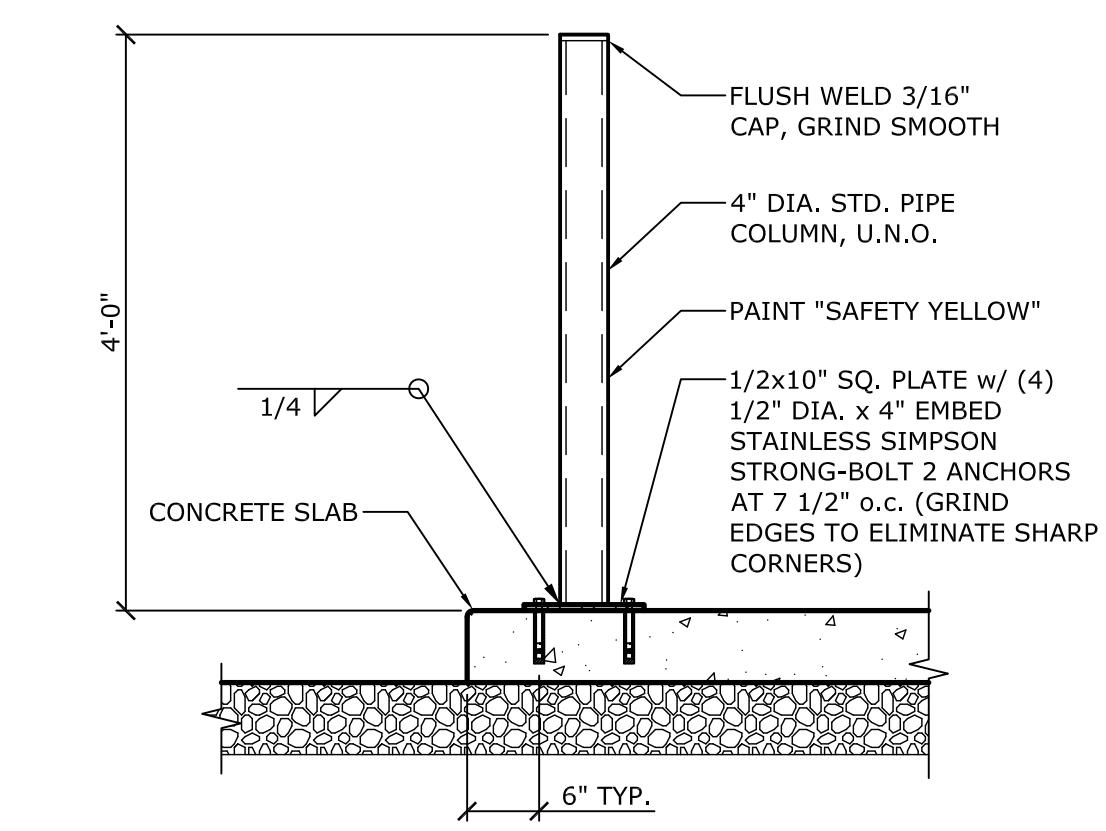


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REGISTERED PROFESSIONAL ENGINEER No. 5641 Edgar B. Gabriel STRUCTURAL CIVIL ENGINEER STATE OF CALIFORNIA

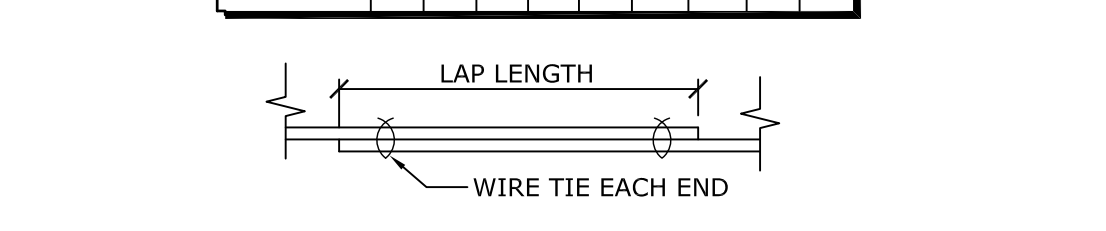
10/26/23



3 PIPE BOLLARD W/ANCHORS SCALE: 3/4" = 1'-0" S006

6 CONCRETE MIX DESIGNS SCALE: 1" = 1'-0" S008

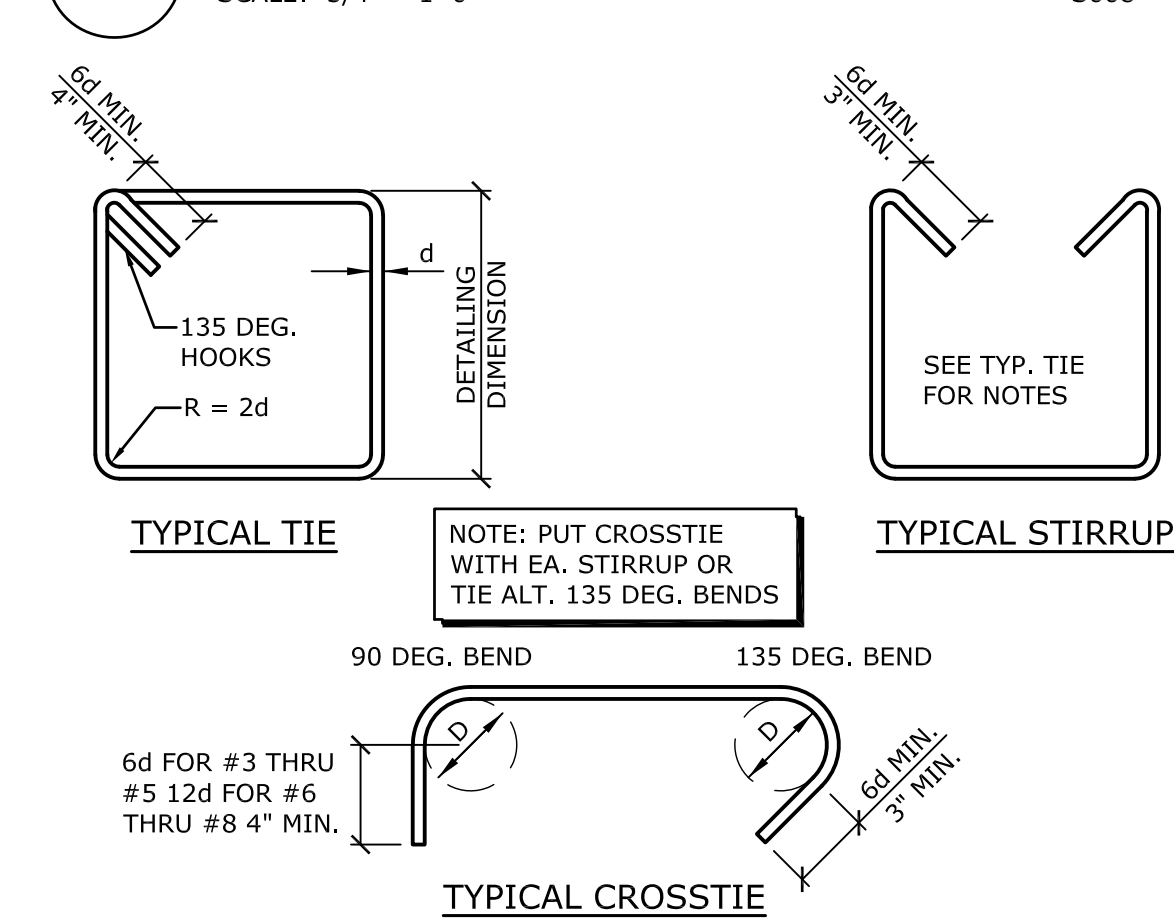
Table for LAP SPLICE LENGTH (INCHES) showing values for different bar sizes and concrete strengths.



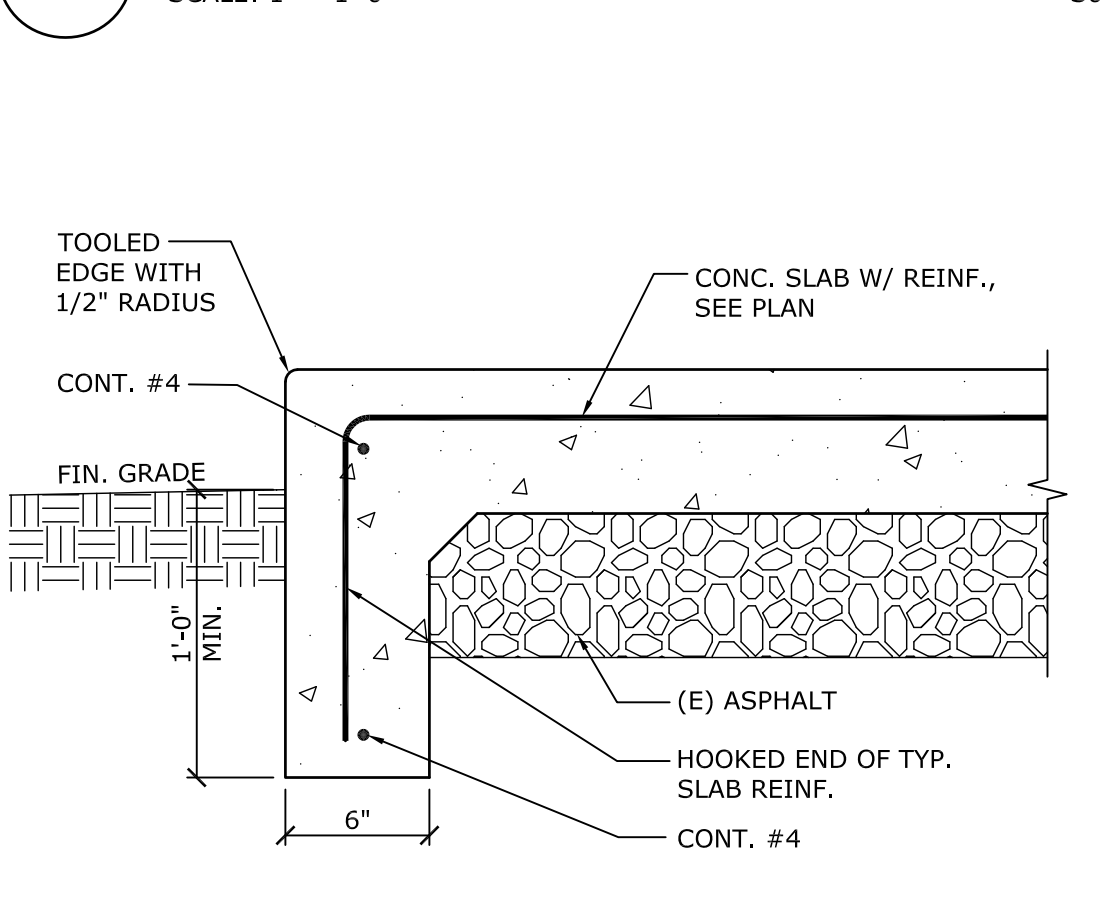
- 1. LAP LENGTHS GIVEN MAY BE DECREASED 30% FOR NORMAL WEIGHT CONCRETE.
2. BARS LARGER THAN #11 SHALL NOT BE LAP SPLICED. PROVIDE APPROVED MECH. COUPLERS OR CP BUTT WELDS AT SPLICES OF BARS GREATER THAN #11.
3. LAP LENGTHS GIVEN SHALL BE INCREASED 20% FOR BUNDLED BARS.
4. INCREASE LAP LENGTHS AN ADDITIONAL 30% IF MORE THAN 12" OF CONCRETE IS POURED BELOW THE LAP AT ONE TIME.

5 TYP. REINF. LAP SPLICE LENGTHS SCALE: 3/4" = 1'-0" S008

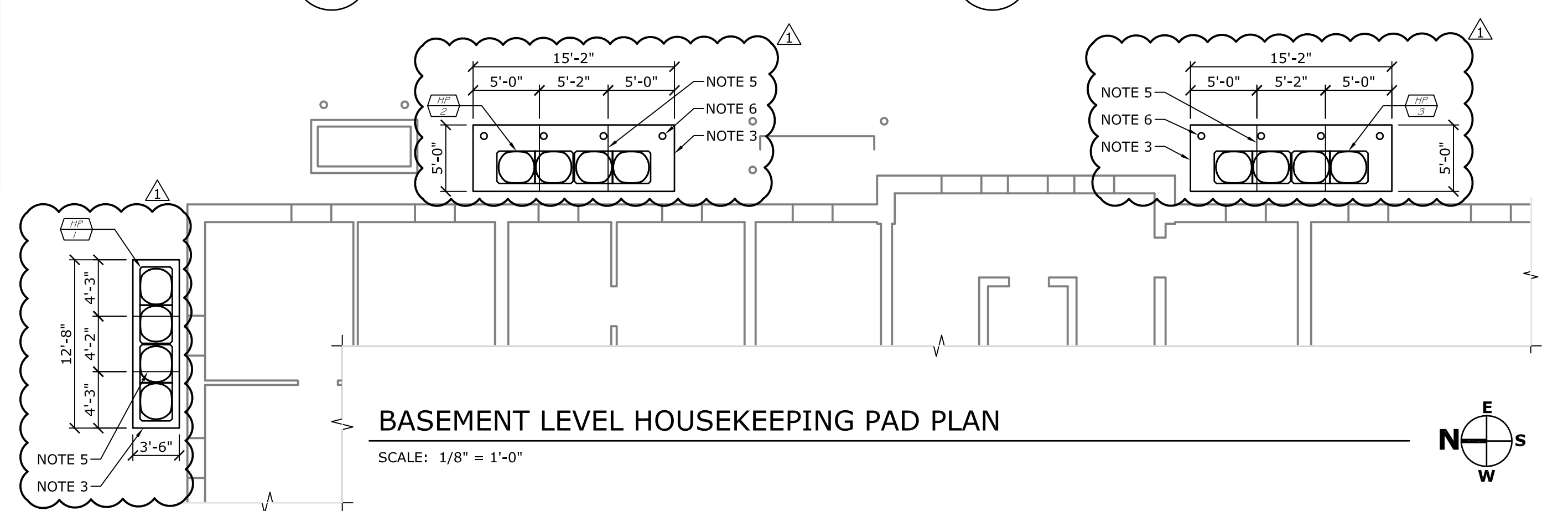
2 TOOL JOINT (TJ) SCALE: 1" = 1'-0" S011



4 TYPICAL STIRRUP, TIE HOOKS AND BENDS SCALE: 1" = 1'-0" S009



1 TURNED DOWN SLAB SCALE: 1 1/2" = 1'-0" S010



BASEMENT LEVEL HOUSEKEEPING PAD PLAN SCALE: 1/8" = 1'-0"

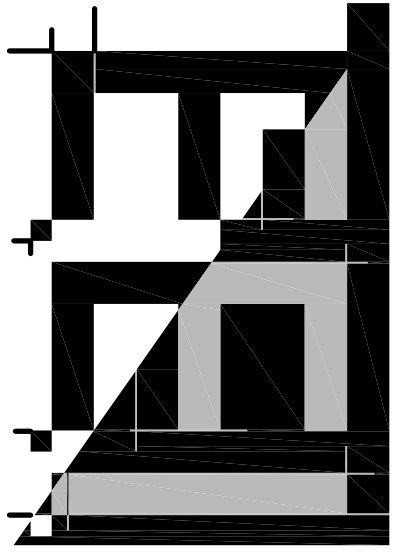
INYO COUNTY COURT HOUSE HVAC RETROFIT 168 N. EDWARDS ST. INDEPENDENCE, CA 95326

Table with 2 columns: REVISIONS, DATE (10/26/23)

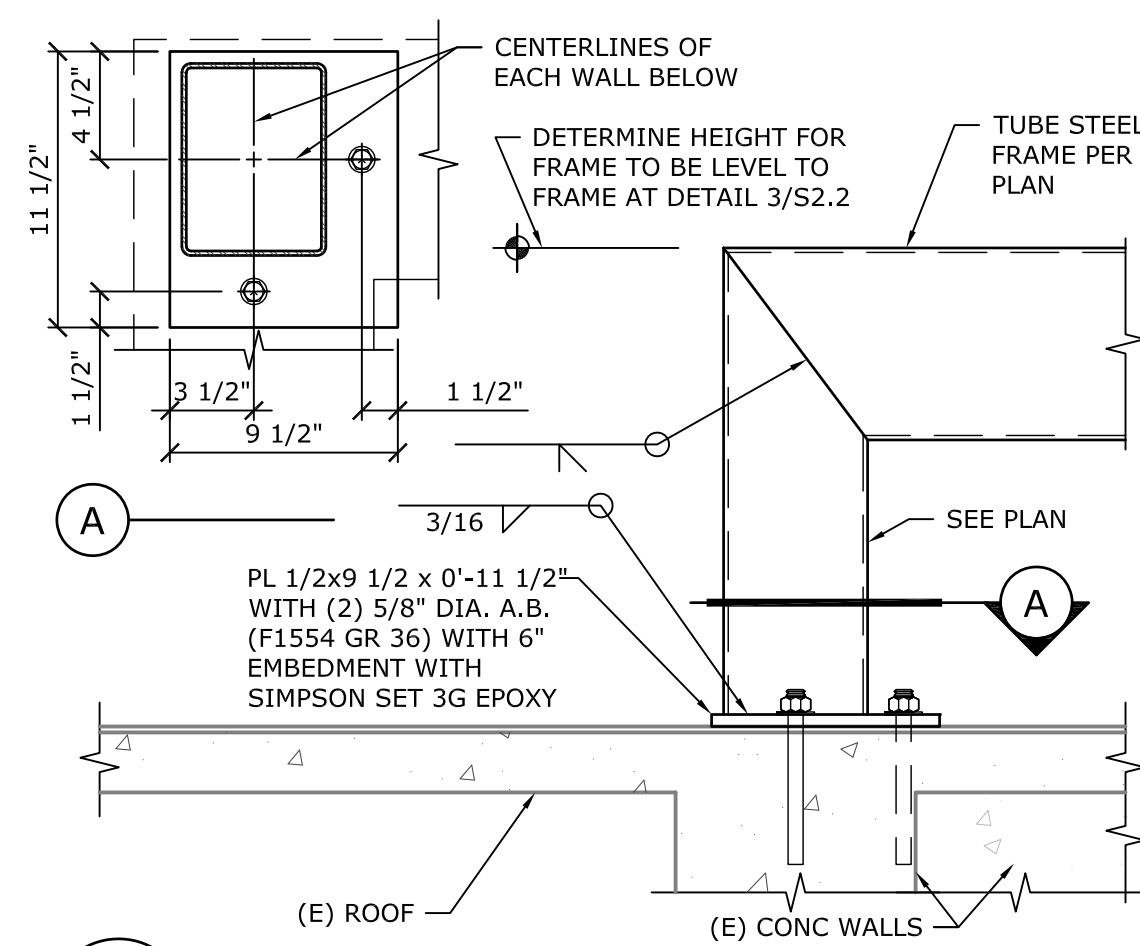
DRAWING TITLE: BASEMENT LEVEL HOUSEKEEPING PAD PLAN

date: 08/11/23 job number: 230A2 drawn: JTS checked: MG

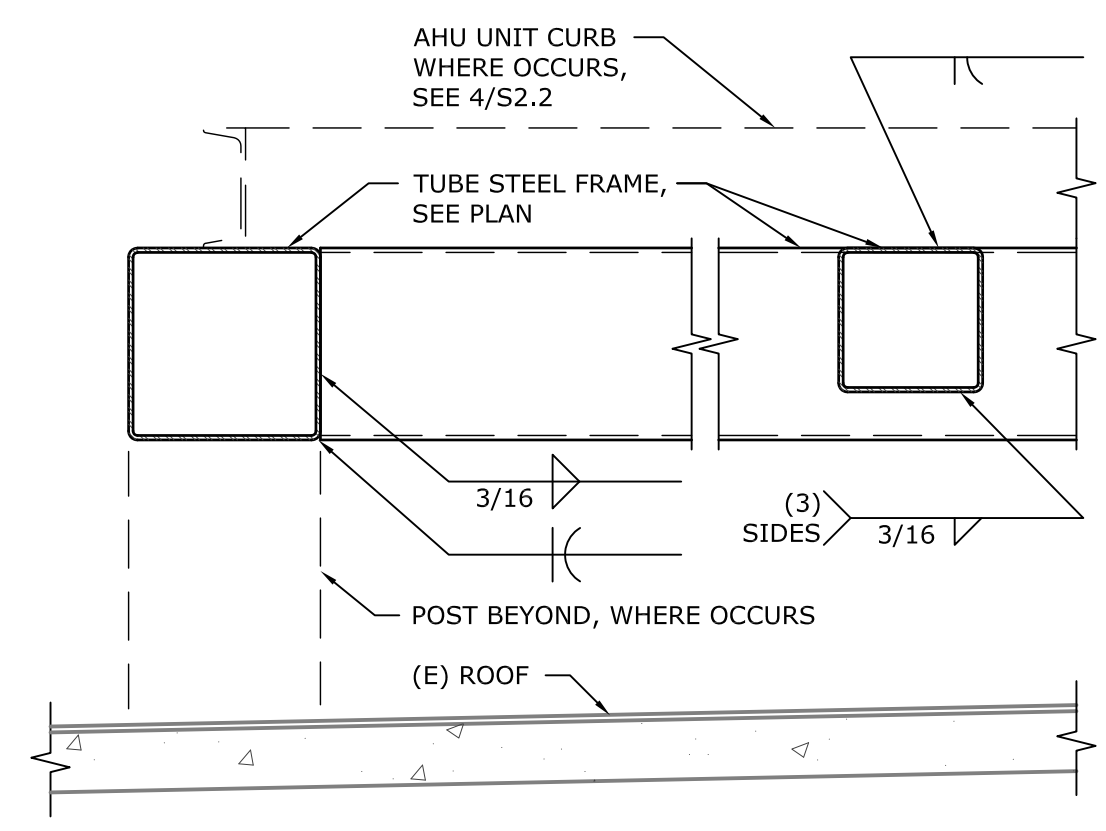
52.1



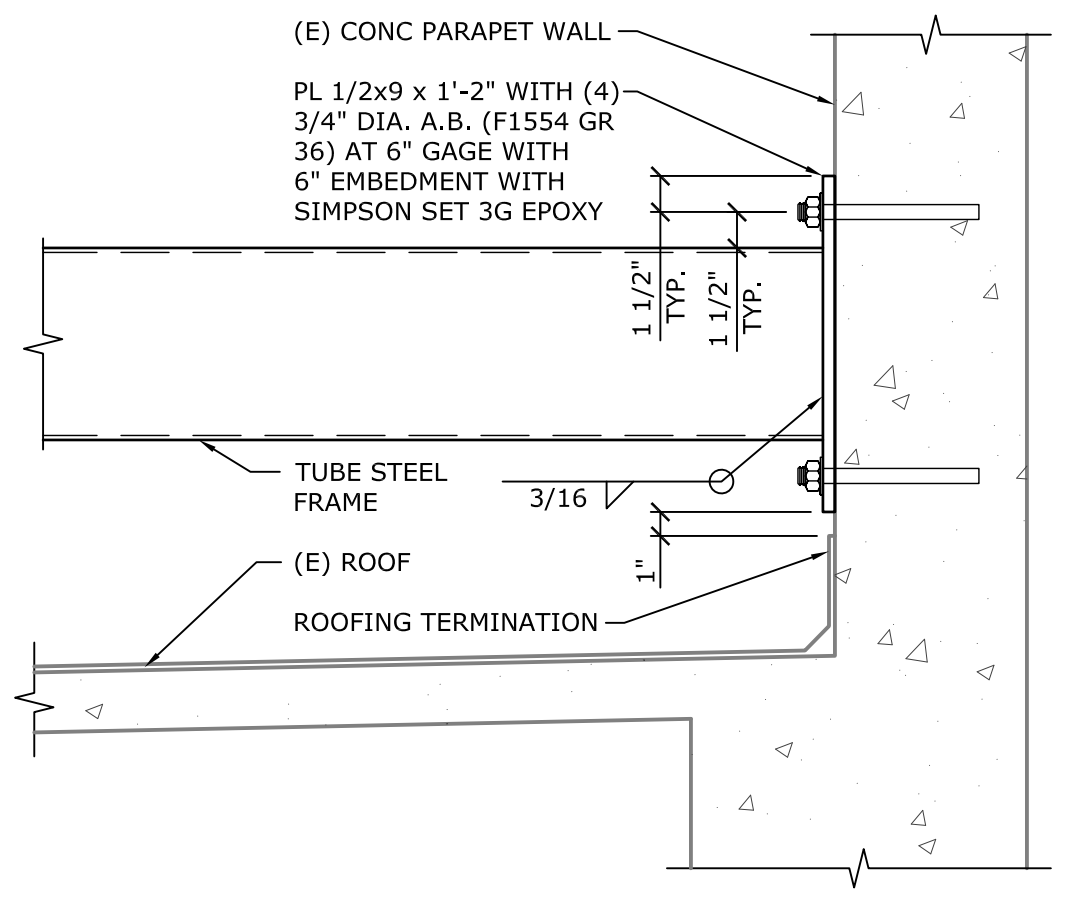
REGISTERED PROFESSIONAL ENGINEER
 EDGAR B. GABRIEL
 No. 5641
 STRUCTURAL
 STATE OF CALIFORNIA
 10/26/23



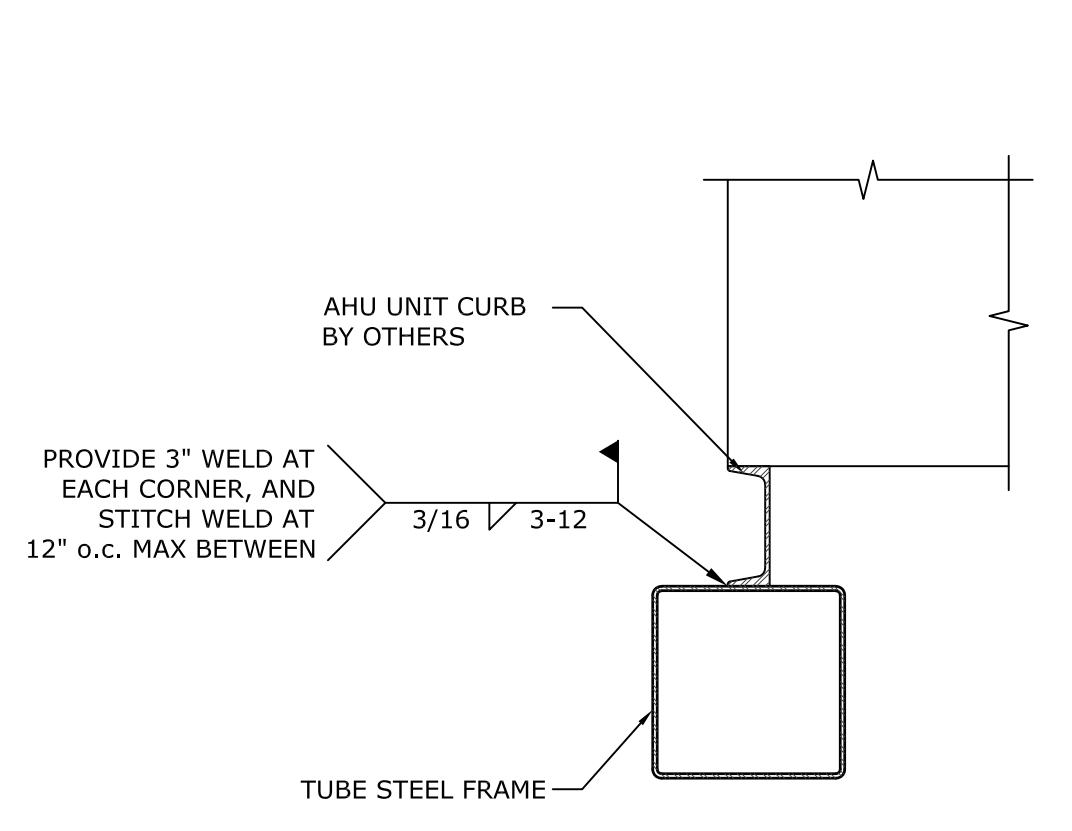
1 FRAME TO ROOF
 SCALE: 1 1/2" = 1'-0" S002



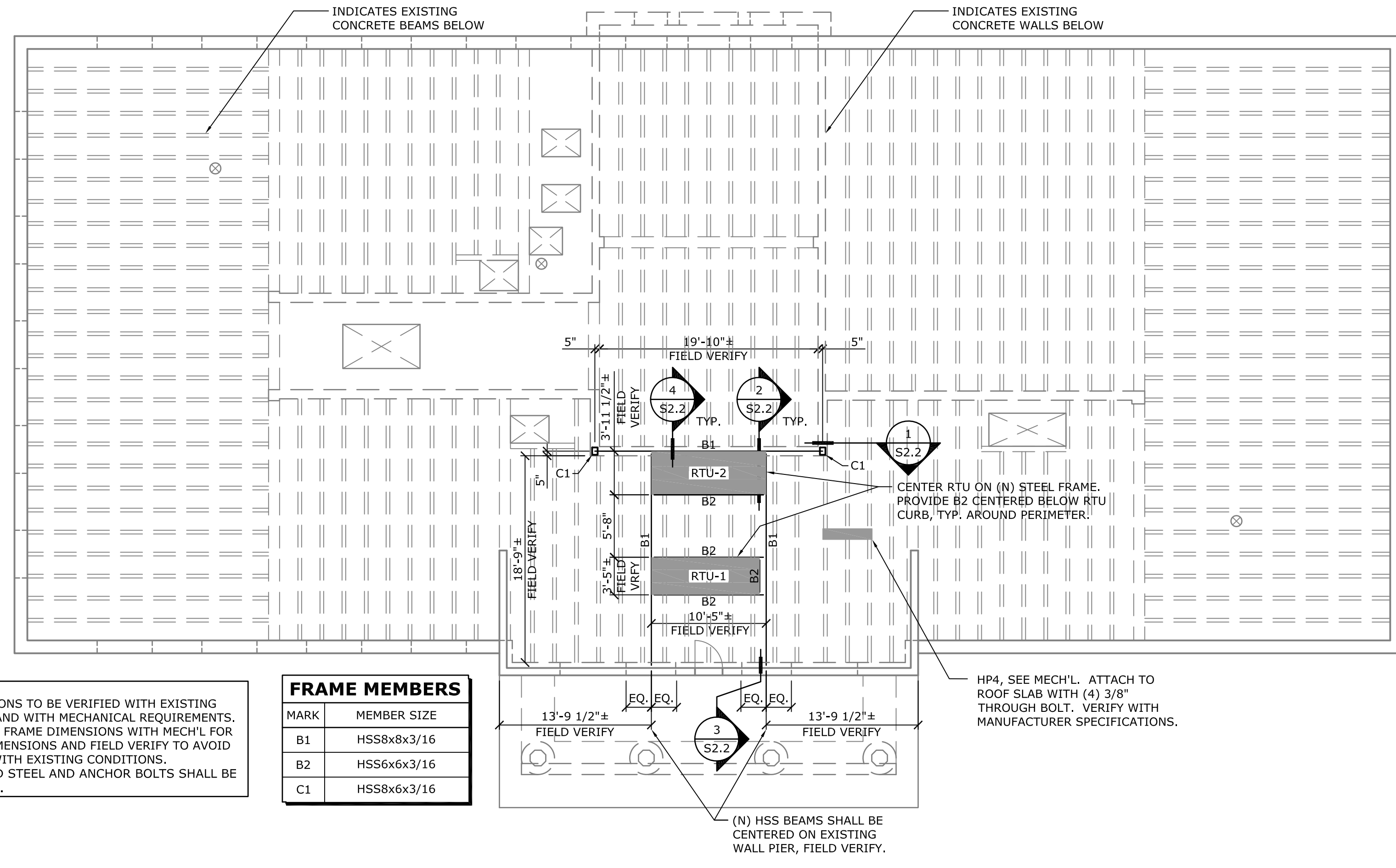
2 FRAME CONNECTION
 SCALE: 1 1/2" = 1'-0" S003



3 FRAME TO WALL
 SCALE: 1 1/2" = 1'-0" S004



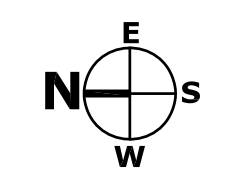
4 AHU CONNECTION TO FRAME
 SCALE: 1 1/2" = 1'-0" S005



- NOTES:**
1. ALL DIMENSIONS TO BE VERIFIED WITH EXISTING STRUCTURE AND WITH MECHANICAL REQUIREMENTS.
 2. CONFIRM ALL FRAME DIMENSIONS WITH MECH'L FOR RTU UNIT DIMENSIONS AND FIELD VERIFY TO AVOID CONFLICTS WITH EXISTING CONDITIONS.
 3. ALL EXPOSED STEEL AND ANCHOR BOLTS SHALL BE GALVANIZED.

| MARK | MEMBER SIZE |
|------|-------------|
| B1 | HSS8x8x3/16 |
| B2 | HSS6x6x3/16 |
| C1 | HSS8x6x3/16 |

ROOF MECHANICAL FRAMING PLAN
 SCALE: 1/8" = 1'-0"



HVAC RETROFIT
INYO COUNTY COURT HOUSE
 168 N. EDWARDS ST.
 INDEPENDENCE, CA 95126

REVISIONS

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| 10/26/23 | |
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DRAWING TITLE
 ROOF MECHANICAL FRAMING PLAN

date: 08/11/23
 job number: 230A2
 drawn: JTS
 checked: MG

S2.2

GENERAL NOTES:

STANDARDS AND CODES: LATEST EDITION OF THE CALIFORNIA MECHANICAL CODE (CMC), AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. THIS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING WORK SHOWN OR SPECIFIED WHICH MAY EXCEED THE REQUIREMENTS OF SUCH ORDINANCES, LAWS, REGULATIONS AND CODES.

COMPLETE INSTALLATION, PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, ACCESSORIES, ETC., NECESSARY TO ACCOMPLISH A COMPLETE MECHANICAL SYSTEM IN ACCORDANCE WITH THE PLANS TOGETHER WITH THE SPECIFICATIONS.

PERMITS: OBTAIN AND PAY FOR ALL BUILDING AND WORKING PERMITS AND INSPECTION FEES REQUIRED FOR THIS PROJECT.

DRAWINGS: DATA PRESENTED ON THESE DRAWINGS SHALL BE FIELD VERIFIED SINCE ALL DIMENSIONS, LOCATIONS, AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS. REVIEW ALL ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL AND SPECIALTY SYSTEMS DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS ON CONDITIONS SHOWN THEREON. DO NOT SCALE MECHANICAL PLANS FOR EQUIPMENT, DUCTING, PIPING, APPLIANCE ETC. LOCATIONS. USE CONFIGURED DIMENSIONS IF GIVEN OR CHECK ARCHITECTURAL DRAWINGS.

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LOCATIONS: INDICATED LOCATIONS OF ALL EQUIPMENT, DUCTING, PIPING ETC. ARE SUBJECT TO CHANGE. SHFT/RELOCATE/RECONFIGURE ANY OR CONNECTION POINT UP TO 10' AS DIRECTED BY ENGINEER, AT NO ADDED COST.

RECORD DRAWINGS: CONTRACTOR SHALL PROVIDE, PRIOR TO FINAL ACCEPTANCE AND OBSERVATION, ONE SET OF REVISED RECORD MECHANICAL CONSTRUCTION DOCUMENTS ON REPRODUCIBLE MEDIUM, INDICATING THE FOLLOWING ADDITIONAL INFORMATION:

RECORD NOTATIONS SHALL BE CLEARLY DRAWN AT A DRAFTING APPEARANCE EQUAL TO THE ORIGINAL DRAWINGS. CONTRACTOR SHALL ALSO PROVIDE ALL OPERATING AND MAINTENANCE MANUALS PRIOR TO FINAL PAYMENT.

EXAMINATION OF SITE AND EXISTING CONDITIONS: BEFORE SUBMITTING A PROPOSAL, CONTRACTOR SHALL EXAMINE THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND LIMITATIONS. NO EXTRA WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S MISUNDERSTANDING OF THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE DRAWINGS OR SPECIFICATIONS FROM THE EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER BEFORE SUBMITTING A PROPOSAL.

SEISMIC RESTRAINT: ALL BUILDING HVAC SYSTEMS, INCLUDING DUCTWORK, IS TO BE SEISMICALLY RESTRAINED PER THE UNIFORM MECHANICAL CODES, INTERNATIONAL BUILDING CODE, AMERICAN SOCIETY OF CIVIL ENGINEERS AND STRUCTURAL ENGINEERING INSTITUTE. RESTRAINT SYSTEMS ARE TO BE COMPLETED IN A "DESIGN BUILD" FASHION BY THE AWARDED CONTRACTOR AND ARE TO BE INCLUDED IN THE PROJECT BID. THE CONTRACTOR IS TO ENSURE QUALIFIED PROFESSIONAL TO PROVIDE COMPREHENSIVE DESIGN CALCULATIONS AND SHOP DRAWINGS FOR SAID SYSTEMS. ALL DESIGN DATA AND DETAILED DRAWINGS ARE TO BE PROVIDED TO THE ENGINEER AND AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL DURING THE SUBMITTAL PROCESS.

EXISTING CONDITIONS: ALL (E) SIZES AND LOCATIONS ARE APPROXIMATIONS AND ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR COMMENCEMENT OF ANY WORK. NO ADDITIONAL FEES WILL BE ALLOWED DUE TO LACK OF FIELD VERIFICATION.

EQUIPMENT: ALL HVAC AND REFRIGERATION EQUIPMENT SHALL NOT CONTAIN CFC OR HALONS.

DUCT LEAKAGE & VERIFICATION: ALL DUCT CONSTRUCTION SHALL COMPLY WITH TITLE 24 SECTION 00.4.1 (M)00.00 FOR ALTERED SYSTEMS. DUCT LEAKAGE FOR ENTIRELY NEW OR REPLACEMENT DUCT SYSTEMS SHALL BE EQUAL TO OR LESS THAN 4 PERCENT OF THE SYSTEM AIR HANDLER AIRFLOW. THIS IS TO BE CONFIRMED BY FIELD VERIFICATION AND DIAGNOSTIC TESTING BY THE AIR BALANCE CONTRACTOR. TESTING SHALL BE PER THE PROJECT SPECIFICATIONS (AABC CONTRACTOR) AND THE TITLE 24 NONRESIDENTIAL APPENDIX SECTION 04.2.1.2.1

LISTINGS: ALL MECHANICAL EQUIPMENT AND DUCTWORK SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY. INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED LISTING

PROJECT NOTES:

1. BUILDING TO REMAIN OPERATIONAL DURING CONSTRUCTION AND IMPACTS TO BUSINESS OPERATIONS ARE TO BE MINIMIZED TO ONLY THOSE ABSOLUTELY NECESSARY. ANY DISRUPTION TO BUSINESS OPERATIONS TO BE COORDINATED A MINIMUM OF 7 DAYS IN ADVANCE.

2. ALL HVAC SYSTEMS TO REMAIN FULLY OPERATIONAL, IN CURRENT CONDITIONS, UNTIL COMPLETION OF NEW WORK.

MECHANICAL LEGEND

| SYMBOL | ABBREVIATION | INTENT |
|----------|--------------|--|
| [Symbol] | | RIGID DUCT |
| [Symbol] | | INTERNALLY LINED DUCTWORK |
| [Symbol] | | RIGID EXHAUST DUCT |
| [Symbol] | | DUCT DOWN |
| [Symbol] | | DUCT UP |
| [Symbol] | | TURNING VANES |
| [Symbol] | D | SUPPLY AIR |
| [Symbol] | G | RETURN AIR |
| [Symbol] | EXH | EXHAUST AIR |
| [Symbol] | D | SUPPLY AIR |
| [Symbol] | G | RETURN AIR |
| [Symbol] | HVD | MANUAL VOLUME DAMPER |
| [Symbol] | AD | AUTOMATIC DAMPER (MOTORIZED) |
| [Symbol] | FLEX | FLEXIBLE DUCTWORK |
| [Symbol] | | VERTICAL BRANCH WITH DAMPER |
| [Symbol] | DOWN | PIPE DOWN |
| [Symbol] | UP | PIPE UP |
| [Symbol] | Ø | DIAMETER ROUND |
| [Symbol] | NO | NEW |
| [Symbol] | (E) | EXISTING |
| [Symbol] | ● | POINT OF CONNECTION |
| [Symbol] | ⊕ | POINT OF DISCONNECT |
| [Symbol] | AFB | ABOVE FINISHED FLOOR |
| [Symbol] | BFB | BELOW FINISHED FLOOR |
| [Symbol] | AFG | ABOVE FINISHED GRADE |
| [Symbol] | TYP | TYPICAL |
| [Symbol] | MIN | MINIMUM |
| [Symbol] | CFM | CUBIC FEET PER MINUTE |
| [Symbol] | OSA | OUTSIDE AIR |
| [Symbol] | ESP | EXTERNAL STATIC PRESSURE |
| [Symbol] | BTU, BTUH | BRITISH THERMAL UNIT PER HOUR |
| [Symbol] | MBH | THOUSAND BTU |
| [Symbol] | CLG | COOLING |
| [Symbol] | HTG | HEATING |
| [Symbol] | CAP | CAPACITY |
| [Symbol] | SENS | SENSIBLE |
| [Symbol] | LTWT | LATENT |
| [Symbol] | RL | REFRIGERATION LIQUID LINE |
| [Symbol] | RS | REFRIGERATION SUCTION LOW PRESSURE |
| [Symbol] | RS | REFRIGERATION SUCTION HIGH PRESSURE |
| [Symbol] | | BALL VALVE |
| [Symbol] | | BALANCING VALVE |
| [Symbol] | | BUTTERFLY VALVE |
| [Symbol] | | AUTOMATIC CONTROL VALVE (2-WAY) |
| [Symbol] | | MOTORIZED VALVE |
| [Symbol] | | PRESSURE REDUCING VALVE |
| [Symbol] | | STRAINER |
| [Symbol] | | TRIPLE DUTY VALVE |
| [Symbol] | | CHECK VALVE |
| [Symbol] | | PRESSURE REDUCING VALVE |
| [Symbol] | | SOLENOID VALVE |
| [Symbol] | | DRAIN VALVE |
| [Symbol] | | PRESSURE & TEMPERATURE COMBINATION GAUGE |
| [Symbol] | | SENSOR WELL |
| [Symbol] | | PETE'S PLUG |
| [Symbol] | | UNION |

RTU/INDOOR AIR HANDLER SEQUENCE OF OPERATION

OCCUPIED MODE:

A. THE FAN SHALL BE ENABLED TO RUN CONTINUOUSLY, AND THE HEATING/COOLING CONTROLS SHALL BE STAGED/SEQUENCED TO MAINTAIN THE ROOM TEMPERATURE SETPOINT INITIALLY 75F, WITH A 3F DEADBAND, COOLING ON AT 78F AND HEATING ON AT 72F. BOTH SETPOINT AND DEADBAND SHALL BE ADJUSTABLE.

B. DURING OCCUPIED MODE THE OUTSIDE AIR DAMPER IS TO DRIVE TO THE MINIMUM OSA POSITION AS DEFINED BY THESE DRAWINGS.

UNOCCUPIED COOLING MODE:

A. THE FAN SHALL BE ENABLED AND THE AIR HANDLER COOLING CONTROLS SHALL BE STAGED/SEQUENCED TO MAINTAIN THE ROOM TEMPERATURE SETPOINT INITIALLY 85F, WITH A 5F DEADBAND, COOLING ON AT 85F AND COOLING OFF AT 80F. BOTH SETPOINT AND DEADBAND SHALL BE ADJUSTABLE.

UNOCCUPIED HEATING MODE:

A. THE FAN SHALL BE ENABLED AND THE AIR HANDLER HEATING CONTROLS SHALL BE STAGED/SEQUENCED TO MAINTAIN THE ROOM TEMPERATURE SETPOINT INITIALLY 55F, WITH A 5F DEADBAND, HEATING ON AT 55F AND HEATING OFF AT 60F. BOTH SETPOINT AND DEADBAND SHALL BE ADJUSTABLE.

UNOCCUPIED OVERIDE MODE:

A. WHENEVER THE ROOM SENSOR OVERRIDE BUTTON IS PRESSED DURING THE UNOCCUPIED TIME PERIOD THE AIR HANDLER SHALL BE ENABLED AND CONTROLLED IN THE NORMAL OCCUPIED MODE FOR A PERIOD OF 2 HOURS (ADJUSTABLE).

MORNING WARM UP:

A. WARM-UP OCCURS ONE HOUR BEFORE OCCUPIED START TIME OR AS CALCULATED BY BUILDING MANAGE SYSTEM BASED ON SYSTEM PERFORMANCE HISTORY AND OUTSIDE AIR TEMPERATURE.

B. DURING WARM-UP THE OUTSIDE AIR DAMPER IS TO BE FULLY CLOSED AND THE UNIT IN 100% RECIRCULATION MODE.

C. THE INTENT OF THIS SEQUENCE IS THAT THE AIR HANDLING SYSTEM BE STARTED EARLY ENOUGH SO THAT THE MAXIMUM NEGATIVE DEVIATION OF SPACE TEMPERATURE FROM THE OCCUPIED HEATING SET POINT FOR ALL ZONES IN THE SYSTEM IS LESS THAN 0.5 °F NO MORE THAN 20 MINUTES PRIOR TO OR 10 MINUTES AFTER SCHEDULED OCCUPANCY. SPACES SHOULD NOT BE HEATED UP ABOVE OCCUPIED HEATING SPACE TEMPERATURE SET POINTS.

MORNING COOL DOWN:

A. COOL-UP OCCURS ONE HOUR BEFORE OCCUPIED START TIME OR AS CALCULATED BY BUILDING MANAGE SYSTEM BASED ON SYSTEM PERFORMANCE HISTORY AND OUTSIDE AIR TEMPERATURE.

B. DURING COOL-UP THE OUTSIDE AIR DAMPER IS TO BE FULLY CLOSED AND THE UNIT IN 100% RECIRCULATION MODE.

C. THE INTENT OF THIS SEQUENCE IS THAT THE AIR HANDLING SYSTEM BE STARTED EARLY ENOUGH SO THAT THE MAXIMUM POSITIVE DEVIATION FROM THE SPACE TEMPERATURE TO THE OCCUPIED COOLING SET POINT FOR ALL ZONES IN THE SYSTEM IS LESS THAN 0.5 °F NO MORE THAN 20 MINUTES PRIOR TO OR 10 MINUTES AFTER SCHEDULED OCCUPANCY. SPACES SHOULD NOT BE COOLED DOWN BELOW OCCUPIED COOLING SPACE TEMPERATURE SET POINTS.

SPLIT SYSTEM ROOFTOP AIR HANDLER SCHEDULE

| TAG | MANUF | MODEL | COOLING CAPACITY | | | | HEATING CAPACITY | | | FAN SECTION | | | OSA | | ELECTRICAL | | | | WEIGHT | REMARKS |
|---------|-------|---------|------------------|-------|------|----------------|------------------|-------|-------|-------------|-------|------|-----|-----|------------|-------|-------|------|--------|---------------------------------------|
| | | | TOTAL | SENS | LTNT | EAT | LAT | TOTAL | EAT | LAT | CFM | ESP | HP | CFM | VOLTAGE | PHASE | MCA | MOCP | | |
| [RTU-1] | TRANE | UCCAAGN | 94.7 | 43.2 | 31.5 | 77'DB 40"WB | 53'DB 57"WB | 39.0 | 47'DB | 10'DB | 2,000 | 0.8" | 3 | 85 | 460 | 3 | 4.91 | 15 | 1650 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13 |
| [RTU-2] | TRANE | UCCAAGB | 138.5 | 100.9 | 37.4 | 80'DB 44"WB | 57'DB 54"WB | 77.8 | 54'DB | 8'DB | 3,500 | 0.8" | 5 | 735 | 460 | 3 | 12.91 | 20 | 1900 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13 |

REMARKS:
 1. MOTORIZED 0-100% DRY BULB ECONOMIZER W/ BAROMETRIC RELIEF
 2. FACTORY INSTALLED SUPPLY AIR SMOKE DETECTOR
 3. UNIT MOUNTED BY RECEPTACLE - FIELD WIRE
 4. 1" SEISMIC ROOF CURB
 5. REFRIGERANT SERVICE VALVES
 6. 2" PLEATED MERV 8 AIR FILTER - (2) SETS
 7. R-404A REFRIGERANT
 8. HINGED ACCESS PANELS
 9. FACTORY TOUCHSCREEN 7 DAY PROGRAMMABLE AUTOCHANGEOVER THERMOSTAT
 10. MITSUBISHI LEV KIT MODEL PAC-LVMA-C-
 11. (2) MITSUBISHI LEV KITS MODEL PAC-LVMA-C-
 12. MITSUBISHI WIRE THERMOSTAT - PAR-CT01MAU-SB
 13. FACTORY CONTROLLER TO INTEGRATE WITH LEV CONTROLLER

NOTES:
 1. SMOKE DETECTOR ARE TO BE WIRED BACK TO THE FIRE ALARM SYSTEM AS REQUIRED BY THE UNIFORM MECHANICAL CODE, NATIONAL FIRE CODE, AND INTERNATIONAL BUILDING CODE.
 2. PACKAGE UNITS ARE TO ACTIVATE 1 HR PRIOR TO BUILDING OCCUPANCY.
 3. SMOKE DETECTORS ARE TO BE SUPPLIED AND INSTALLED BY THE ROOFTOP MANUFACTURER. SMOKE DETECTORS ARE TO BE INDEPENDENTLY POWERED FROM THE BUILDING FIRE ALARM SYSTEM

ELECTRIC WALL HEATER SCHEDULE

| TAG | MANUF | MODEL | CAPACITY | ELECTRICAL | | | WEIGHT | REMARKS |
|---------|-------|----------|------------------|------------|-------|------|--------|---------|
| | | | | VOLTAGE | PHASE | AMPS | | |
| [EWH-1] | QMARK | CWH3DSAF | 15 #8 520 BTU | 120 | 1 | 12.5 | 20 | 1 |

REMARKS:
 1. INTEGRAL THERMOSTAT

NOTES:
 1. SET THERMOSTAT TO MAINTAIN 65°F MINIMUM

HEAT RECOVERY BRANCH BOX SCHEDULE

| SYMBOL | DESCRIPTION | MODEL | SYSTEM CONNECTIONS | | | | PORT CONNECT | | ELECTRICAL | WT (LBS) | REMARKS |
|----------|----------------------------------|------------------------------------|--------------------|------|------|--------|--------------|-----------------|------------|----------|---------|
| | | | LIQUID | HIGH | LOW | LIQUID | VAPOR | LIQUID | | | |
| [HR-B-1] | HEAT RECOVERY BRANCH BOX 16 PORT | MITSUBISHI MODEL CHB-PRO16U-KAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 16 A | 185 | L 2 | |
| [HR-B-2] | HEAT RECOVERY BRANCH BOX 8 PORT | MITSUBISHI MODEL CHB-PRO8U-JAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 8 A | 110 | L 2 | |
| [HR-B-3] | HEAT RECOVERY BRANCH BOX 8 PORT | MITSUBISHI MODEL CHB-PRO8U-JAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 8 A | 110 | L 2 | |
| [HR-B-4] | HEAT RECOVERY BRANCH BOX 8 PORT | MITSUBISHI MODEL CHB-PRO8U-JAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 8 A | 110 | L 2 | |
| [HR-B-5] | HEAT RECOVERY BRANCH BOX 16 PORT | MITSUBISHI MODEL CHB-PRO16U-KAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 16 A | 185 | L 2 | |
| [HR-2-1] | HEAT RECOVERY BRANCH BOX 16 PORT | MITSUBISHI MODEL CHB-PRO16U-KAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 16 A | 185 | L 2 | |
| [HR-2-2] | HEAT RECOVERY BRANCH BOX 4 PORT | MITSUBISHI MODEL CHB-PRO4U-JAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 0.8 A | 110 | L 2 | |
| [HR-2-3] | HEAT RECOVERY BRANCH BOX 4 PORT | MITSUBISHI MODEL CHB-PRO4U-JAI-BV | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 208V, 1Ø, 0.8 A | 110 | L 2 | |

REMARKS:
 1. BALL VALVES AT EACH PORT CONNECTION
 2. CONDENSATE PUMP

NOTES:
 1. MECHANICAL CONTRACTOR TO COORDINATE WITH SYSTEM PIPING TREES AND SYSTEM WIRING DIAGRAMS ON SHEETS HS.3 THRU HS.5

MINI SPLIT SCHEDULE

| SYMBOL | DESCRIPTION | MODEL | CAPACITY | EFFECENCY | AIRFLOW | MIN OSA | ELECTRICAL | WT (LBS) | REMARKS |
|--------|--|--|----------------|------------------------------------|---------|---------|--|--------------------|--------------|
| [HP-1] | SINGLE ZONE SPLIT SYSTEM AIR CONDITIONING UNIT | MITSUBISHI MODEL HP-PUZ-AMKAT-AH1-PKA-ABLA | 18 MBH COOLING | 24.4 SEER 14.4 SEER 1.0 HSPF | 385 | - | 208/230V, 1Ø, 60HZ AHU MCA: 1A HP MCA: 1A, MOCP: 28A | HP: 125 AHU: 42 | L 2, 3, 4, 5 |

REMARKS:
 1. LOW AMBIENT WITH WIND BAFFLE
 2. AUTOMATIC DEFROST CYCLE
 3. 20V CONDENSATE PUMP
 4. WIRED THERMOSTAT
 5. HEATING MODE TO BE DISABLED AT OUTDOOR UNIT

NOTES:
 1.

SPLIT SYSTEM OUTDOOR VRF HEAT PUMP WITH HEAT RECOVERY SCHEDULE

| SYMBOL | DESCRIPTION | MODEL | CAPACITY | EFF | SUCTION | LIQUID | WEIGHT | ELECTRICAL | REMARKS |
|----------|---|-----------------------------------|------------------------------|-------------------|---------|--------|--------|-------------------------------------|---------|
| [HP-1-3] | AIR COOLED VRF HEAT PUMP WITH HEAT RECOVERY | MITSUBISHI MODEL FURY-EP4321SNU-A | CLG: 432 MBH HTG: 480 MBH | 10 EER 3.7 COP | 1-1/2" | 1-1/2" | 2,300 | (2) 40V, 3Ø (2) 33 MCA, (2) 50 MOCP | L 2, 3 |

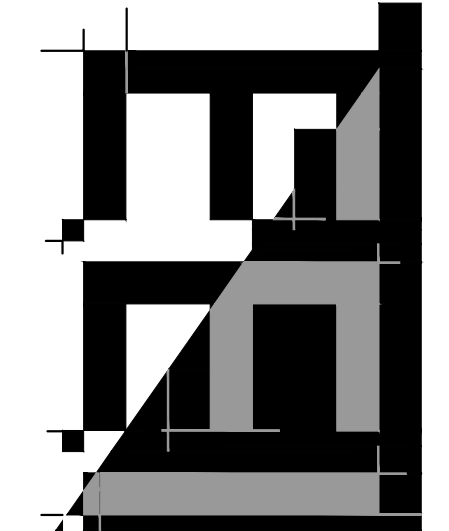
REMARKS:
 1. LOW AMBIENT WITH WIND BAFFLE
 2. CENTRAL CONTROLLER TE-200
 3. TUBING KIT
 4. BC CONTROLLER
 5. SNOW/HAIL GUARD

THERMOSTAT SCHEDULE

| TAG | DESCRIPTION | MODEL | ELECTRICAL | MOUNT HEIGHT | REMARKS |
|-------|------------------------------------|---------------------------------|------------|--------------|---------|
| [T-1] | PROGRAMMABLE COMMERCIAL THERMOSTAT | MITSUBISHI MODEL PAR-CT01MAU-SB | 24V | 42" | L 2 |

REMARKS:
 1. ALL MOUNTING HARDWARE

NOTES:
 1. SEE SHEETS HS.3 THRU HS.5 FOR THERMOSTAT CONTROL WIRING



ETCHERENDY ENGINEERING INC.
 10947 DUBLIN BLVD
 DUBLIN, CA 94568
 P: 770-883-1011 F: 770-882-2592
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HVAC RETROFIT
 INYO COUNTY COURT HOUSE
 168 N. EDWARDS ST.
 INDEPENDENCE, CA 95126

REVISIONS

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| | |

DRAWING TITLE
 MECHANICAL NOTES & SCHEDULES

date: 10-26-23
 job number: 22125
 drafter: SME
 checker: BAE

MO.I

SPLIT SYSTEM INDOOR AIR HANDLER SCHEDULE - BASEMENT LEVEL

| SYMBOL | DESCRIPTION | MODEL | CAPACITY | AIRFLOW | MIN OSA | ELECTRICAL | WT (LBS) | REMARKS |
|----------|--|----------------------------------|--------------------------------|---------|---------|---------------------------------|----------|---------|
| AHU B-1 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P08NLU-E | CLG: 5.1 MBH HTG: 3.9 MBH | 190 | - | 208V, M, 0.2 NCA, 5 NOCP | 25 | 2, 3 |
| AHU B-2 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P20NLU-E | CLG: 14 MBH HTG: 5.4 MBH | 240 | - | 208V, M, 0.2 NCA, 5 NOCP | 25 | 2, 3 |
| AHU B-3 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 2, 3 |
| AHU B-4 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P20NLU-E | CLG: 14 MBH HTG: 5.4 MBH | 240 | - | 208V, M, 0.2 NCA, 5 NOCP | 25 | 2, 3 |
| AHU B-5 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P08NLU-E | CLG: 5.1 MBH HTG: 3.9 MBH | 190 | - | 208V, M, 0.2 NCA, 5 NOCP | 25 | 2, 3 |
| AHU B-6 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 2, 3 |
| AHU B-7 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 2, 3 |
| AHU B-8 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 2, 3 |
| AHU B-9 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 2, 3 |
| AHU B-10 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 2, 3 |
| AHU B-11 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P08NLU-E | CLG: 5.1 MBH HTG: 3.9 MBH | 190 | - | 208V, M, 0.2 NCA, 5 NOCP | 25 | 2, 3 |
| AHU B-12 | MULTI-ZONE CEILING SUSPENDED HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-ERI | CLG: 19.0 MBH HTG: 14.2 MBH | 900 | - | 208V, M, 0.2 NCA, 5 NOCP | 100 | 1, 2 |
| AHU B-13 | MULTI-ZONE CEILING SUSPENDED HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-ERI | CLG: 19.0 MBH HTG: 14.2 MBH | 900 | - | 208V, M, 0.2 NCA, 5 NOCP | 100 | 1, 2 |
| AHU B-14 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.4 MBH | 450 | - | 208V, M, 0.43 NCA, 5 NOCP | 85 | 1, 2 |

REMARKS:
1. INTEGRAL CONDENSATE PUMP
2. WIRED THERMOSTAT - PAR-CT01MAU-SB
3. G0B1 & CONDENSATE PUMP

NOTES:
1. WHERE MULTIPLE AIR HANDLERS ARE LOCATED IN THE SAME ROOM PROVIDE A SINGLE THERMOSTAT
2. SEE MECHANICAL PIPING AND WIRING DIAGRAMS ARE LOCATED ON SHEETS 15.3 THRU 15.5

SPLIT SYSTEM INDOOR AIR HANDLER SCHEDULE - 1ST LEVEL

| SYMBOL | DESCRIPTION | MODEL | CAPACITY | AIRFLOW | MIN OSA | ELECTRICAL | WT (LBS) | REMARKS |
|----------|--|---------------------------------|--------------------------------|---------|---------|---------------------------------|----------|---------|
| AHU 1-1 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-2 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-3 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-4 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-5 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 15.2 MBH HTG: 8.1 MBH | 495 | - | 208V, M, 0.51 NCA, 5 NOCP | 90 | 1 |
| AHU 1-6 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-7 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-8 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-9 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-10 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.4 MBH | 450 | - | 208V, M, 0.48 NCA, 5 NOCP | 85 | 1 |
| AHU 1-11 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.4 MBH | 450 | - | 208V, M, 0.48 NCA, 5 NOCP | 85 | 1 |
| AHU 1-12 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-13 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-14 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P18NLU-E | CLG: 8.4 MBH HTG: 8.3 MBH | 340 | - | 208V, M, 0.2 NCA, 5 NOCP | 30 | 1 |
| AHU 1-15 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-16 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-17 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-18 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |
| AHU 1-19 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NKRU-E2 | CLG: 15.1 MBH HTG: 8.3 MBH | 750 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1 |

REMARKS:
1. WIRED THERMOSTAT - PAR-CT01MAU-SB

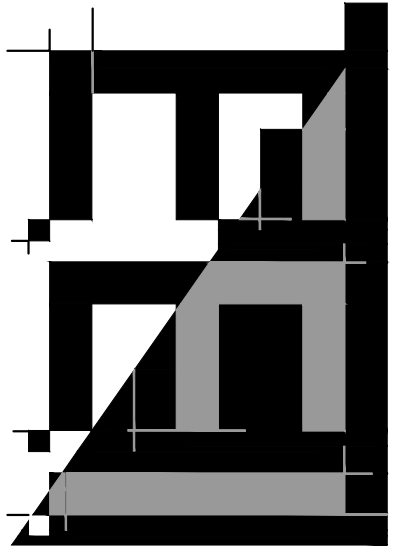
NOTES:
1. WHERE MULTIPLE AIR HANDLERS ARE LOCATED IN THE SAME ROOM PROVIDE A SINGLE THERMOSTAT
2. SEE MECHANICAL PIPING AND WIRING DIAGRAMS ARE LOCATED ON SHEETS 15.3 THRU 15.5

SPLIT SYSTEM INDOOR AIR HANDLER SCHEDULE - 2ND LEVEL

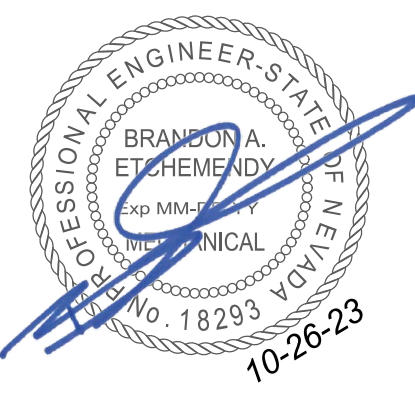
| SYMBOL | DESCRIPTION | MODEL | CAPACITY | AIRFLOW | MIN OSA | ELECTRICAL | WT (LBS) | REMARKS |
|----------|---|-----------------------------------|--------------------------------|---------|---------|---------------------------------|----------|---------|
| AHU 2-1 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 3.2 MBH HTG: 1.8 MBH | 230 | - | 208V, M, 0.24 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-2 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 3.4 MBH HTG: 4.5 MBH | 280 | - | 208V, M, 0.51 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-3 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 3.4 MBH HTG: 4.5 MBH | 280 | - | 208V, M, 0.51 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-4 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-ERI | CLG: 16.2 MBH HTG: 8.1 MBH | 740 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-5 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 7.4 MBH HTG: 4.4 MBH | 245 | - | 208V, M, 0.51 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-6 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 7.4 MBH HTG: 4.4 MBH | 245 | - | 208V, M, 0.51 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-7 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-EP24NFRU-ERI | CLG: 16.2 MBH HTG: 8.9 MBH | 740 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-8 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-EP24NFRU-ERI | CLG: 16.2 MBH HTG: 8.9 MBH | 740 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-9 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-EP24NFRU-ERI | CLG: 16.2 MBH HTG: 8.9 MBH | 740 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-10 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-P05NFRU-E | CLG: 3.4 MBH HTG: 4.5 MBH | 280 | - | 208V, M, 0.51 NCA, 5 NOCP | 35 | 1, 2 |
| AHU 2-11 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-EP30NFRU-ERI | CLG: 19.0 MBH HTG: 11 MBH | 80 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-12 | MULTI-ZONE CEILING CASSETTE HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PLFY-EP30NFRU-ERI | CLG: 30.4 MBH HTG: 11.4 MBH | 1000 | - | 208V, M, 0.51 NCA, 5 NOCP | 55 | 1, 2 |
| AHU 2-13 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NFRU-E | CLG: 16.2 MBH HTG: 8.1 MBH | 495 | - | 208V, M, 0.51 NCA, 5 NOCP | 90 | 1, 2 |
| AHU 2-14 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NFRU-E | CLG: 16.2 MBH HTG: 8.1 MBH | 495 | - | 208V, M, 0.51 NCA, 5 NOCP | 90 | 1, 2 |
| AHU 2-15 | MULTI-ZONE FLOOR MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P24NFRU-E | CLG: 16.2 MBH HTG: 8.1 MBH | 495 | - | 208V, M, 0.51 NCA, 5 NOCP | 90 | 1, 2 |
| AHU 2-16 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1, 2 |
| AHU 2-17 | MULTI-ZONE WALL MOUNT HEAT PUMP AIR HANDLER | MTSUBISHI MODEL PKFY-P30NKRU-E2 | CLG: 19.0 MBH HTG: 14.2 MBH | 850 | - | 208V, M, 0.43 NCA, 5 NOCP | 50 | 1, 2 |

REMARKS:
1. INTEGRAL CONDENSATE PUMP
2. WIRED THERMOSTAT - PAR-CT01MAU-SB

NOTES:
1. WHERE MULTIPLE AIR HANDLERS ARE LOCATED IN THE SAME ROOM PROVIDE A SINGLE THERMOSTAT
2. SEE MECHANICAL PIPING AND WIRING DIAGRAMS ARE LOCATED ON SHEETS 15.3 THRU 15.5



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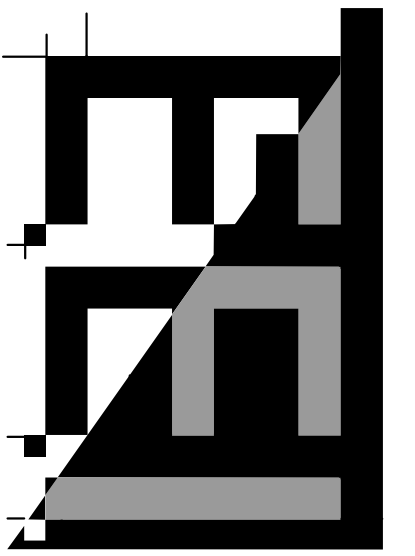
HVAC RETROFIT
INYO COUNTY COURT HOUSE
 168 N. EDWARDS ST.
 INDEPENDANCE, CA 95526

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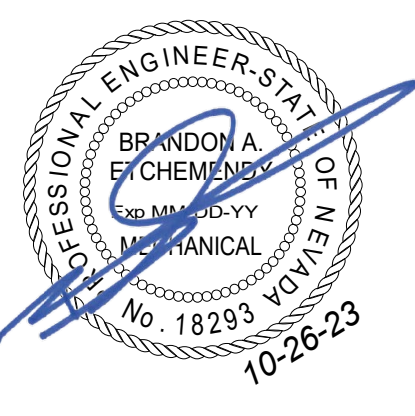
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MECHANICAL SCHEDULES

date: **10-26-23**
job number: **22125**
drawn: **SME**
checked: **BAE**

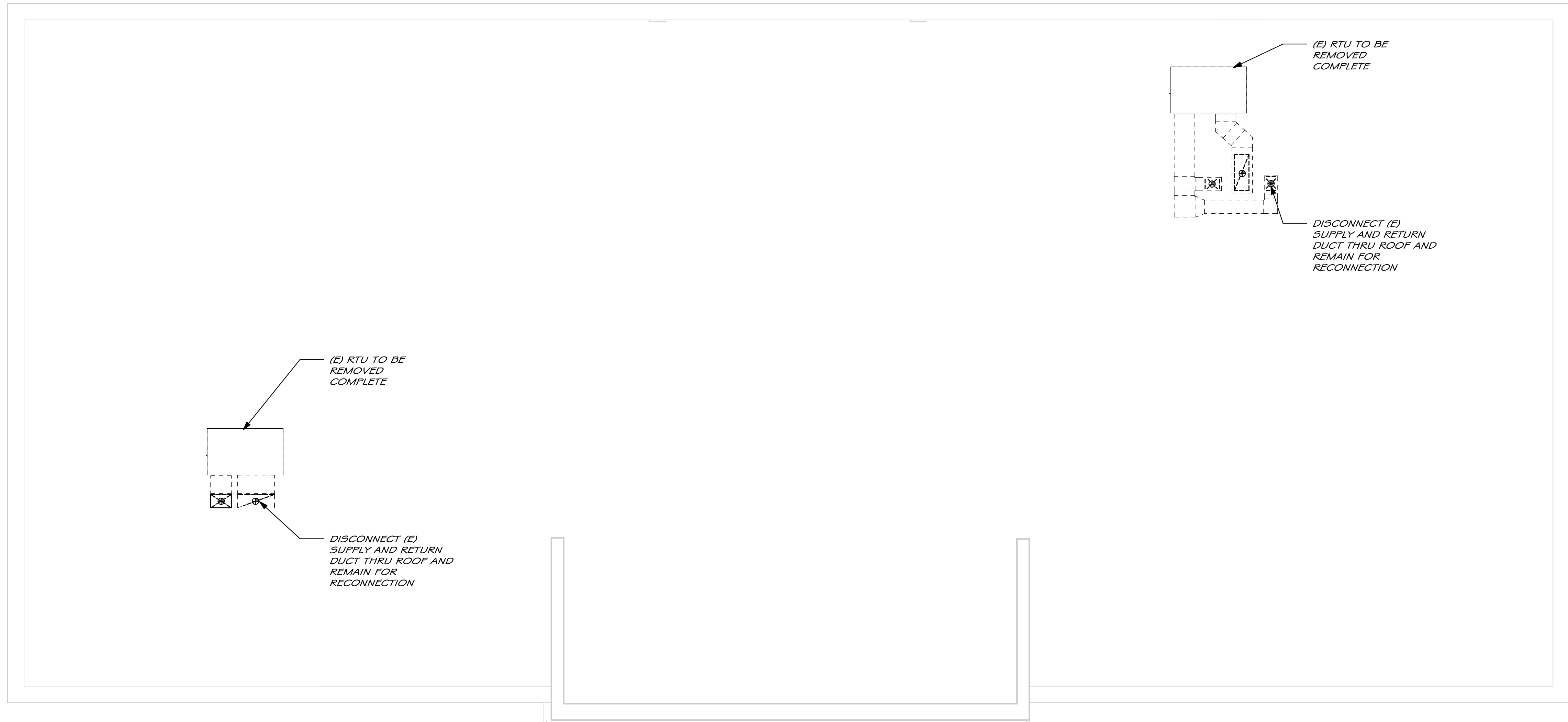
MO.2



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DRAWING TITLE
ROOF MECHANICAL DEMOLITION PLAN

date 10-26-23
job number 22129
drawn SME
checked BAE

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ROOF MECHANICAL DEMOLITION PLAN
SCALE: 3/16" = 1'-0"

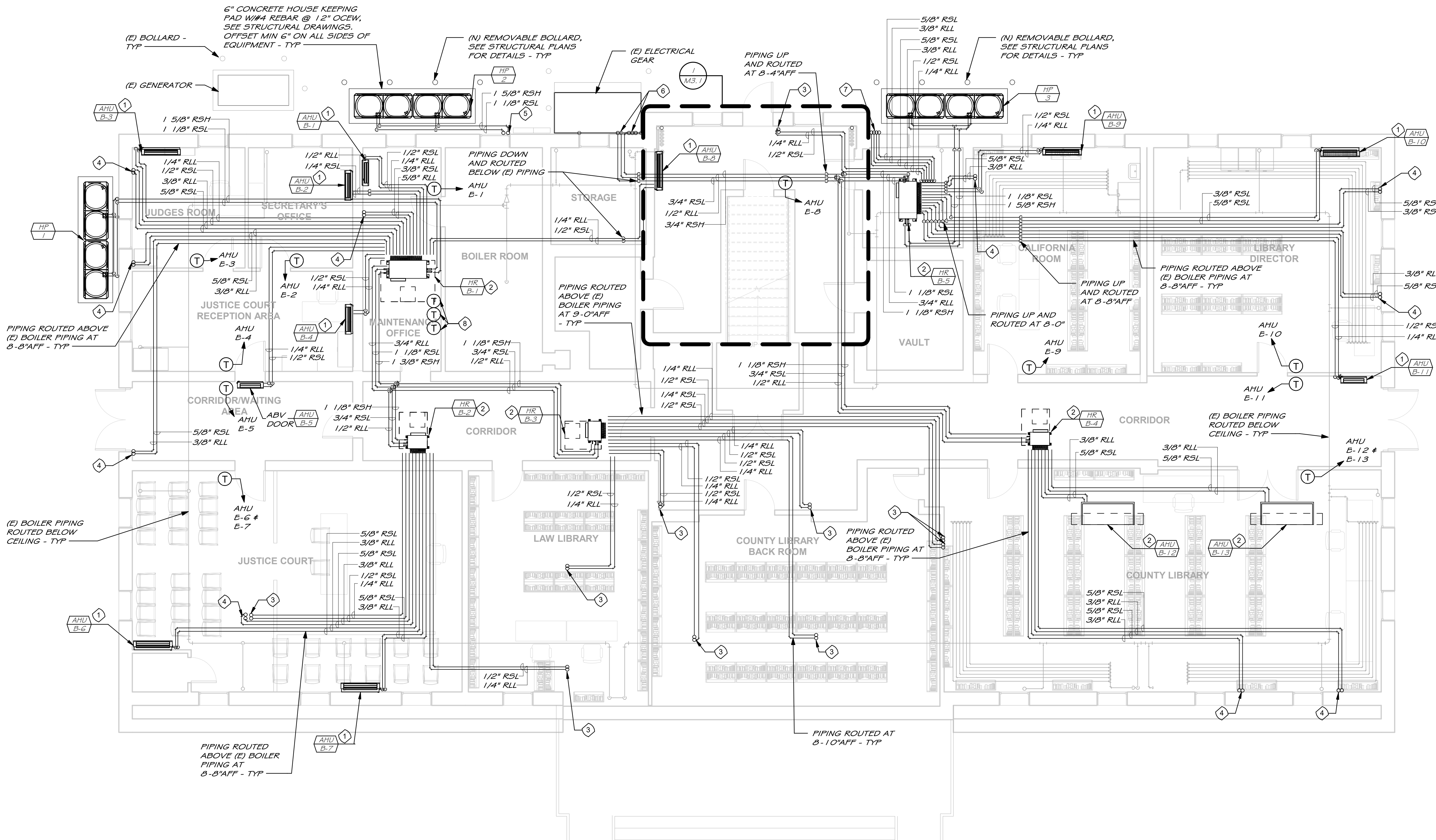


SHEET NOTES:

1. ALL EXPOSED PIPING AND CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING AND CONDUIT ROUTED IN BASMENT TO BE PAINTED TO MATCH (E) PIPING IN BASMENT
3. ALL EXPOSED INSULATED PIPING TO BE COATED WITH ARMAFLEX WB FINISH AND TINTED TO MATCH (E) PIPING IN BASMENT
4. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORCEMENTS
5. ALL ELECTRICAL CONDUIT POWER TO BE ROUTED ALONG SIDE REFRIGERANT PIPING
6. ALL CONTROL WIRING TO BE COMPLETELY CONCEALED FROM OCCUPANT VIEW OR TO BE ROUTED IN CONDUIT PIPE ALONG SIDE REFRIGERANT PIPE
7. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTICALLY ON WALL IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR

KEYED NOTES:

- 1 AHU MOUNTED ON WALL AT 7'-0"
- 2 UNIT SUSPENDED FROM CEILING AS HIGH AS POSSIBLE, FIELD VERIFY
- 3 1/4" RLL # 1/2" RSL UP THRU FLOOR TO AHU ON LEVEL ABOVE
- 4 3/8" RLL # 5/8" RSL UP THRU FLOOR TO AHU ON LEVEL ABOVE
- 5 1-1/8" RSL # 1-5/8" RSH FROM HF-2 UP ON WALL TO LEVEL 2 CEILING
- 6 1/2" RLL, 3/4" RSL # 3/4" RSH FROM BR-5 UP ON WALL TO LEVEL 2 CEILING
- 7 (2) 3/8" RLL # (2) 5/8" RSL UP ON WALL TO AHU 2-16 # 2-17
- 8 HF-1 THRU HF-3 CENTRAL CONTROLLER, COORDINATE EXACT LOCATION WITH OWNER



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| NO. | DESCRIPTION |
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DRAWING TITLE
BASEMENT LEVEL MECHANICAL PLAN

BASEMENT LEVEL MECHANICAL PLAN
SCALE: 3/16" = 1'-0"

date 10-26-23
job number 22129
drawn SME
checked BAE

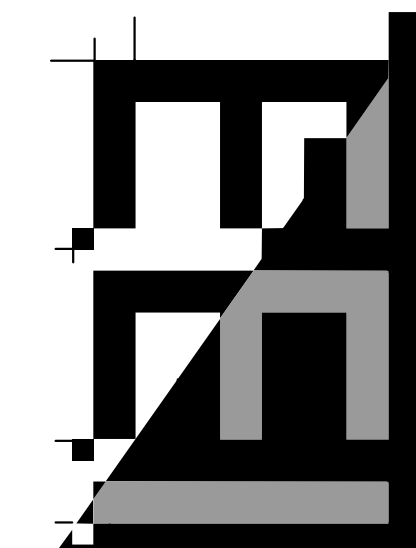
M2.1

SHEET NOTES:

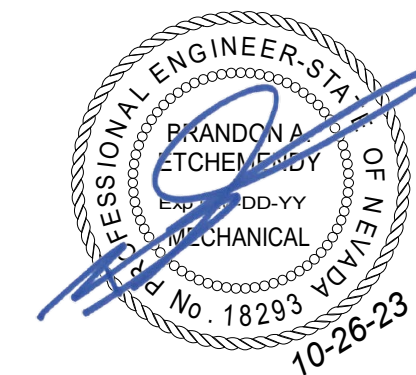
1. ALL EXPOSED PIPING AND CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL PIPING, CONTROL WIRING AND CONDUIT ON WALL TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 4/M5.1 AND PAINTED TO MATCH (E) WALL COLOR
3. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORCEMENTS
4. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTIALLY UP WALL FROM BASEMENT IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR

KEYED NOTES:

- ① AHU MOUNTED ON WALL AT 9'-0"
- ② AHU FLOOR MOUNTED
- ③ 1/4" RLL & 1/2" RSL UP THRU FLOOR ON WALL TO AHU, SEE DETAIL 4/M5.1 FOR SHEET METAL ENCLOSURE REQUIREMENTS
- ④ 3/8" RLL & 5/8" RSL UP THRU FLOOR ON WALL TO AHU, SEE DETAIL 4/M5.1 FOR SHEET METAL ENCLOSURE REQUIREMENTS
- ⑤ 1/4" RLL & 1/2" RSL UP THRU FLOOR AND ROUTED ON WALL ABOVE DOOR TO AHU 1-14, SEE DETAIL 4/M5.1 FOR SHEET METAL ENCLOSURE REQUIREMENTS
- ⑥ 1-1/8" RSL & 1-5/8" RSH FROM HF-2 UP ON WALL TO LEVEL 2 CEILING
- ⑦ 1/2" RLL, 3/4" RSL & 3/4" RSH FROM BR-5 UP ON WALL TO LEVEL 2 CEILING
- ⑧ (2) 3/8" RLL & (2) 5/8" RSL UP ON WALL TO AHU 2-16 & 2-17



BRANDON A. ETCHEMENDY
 PROFESSIONAL ENGINEER
 No. 18293
 MECHANICAL
 10-26-23



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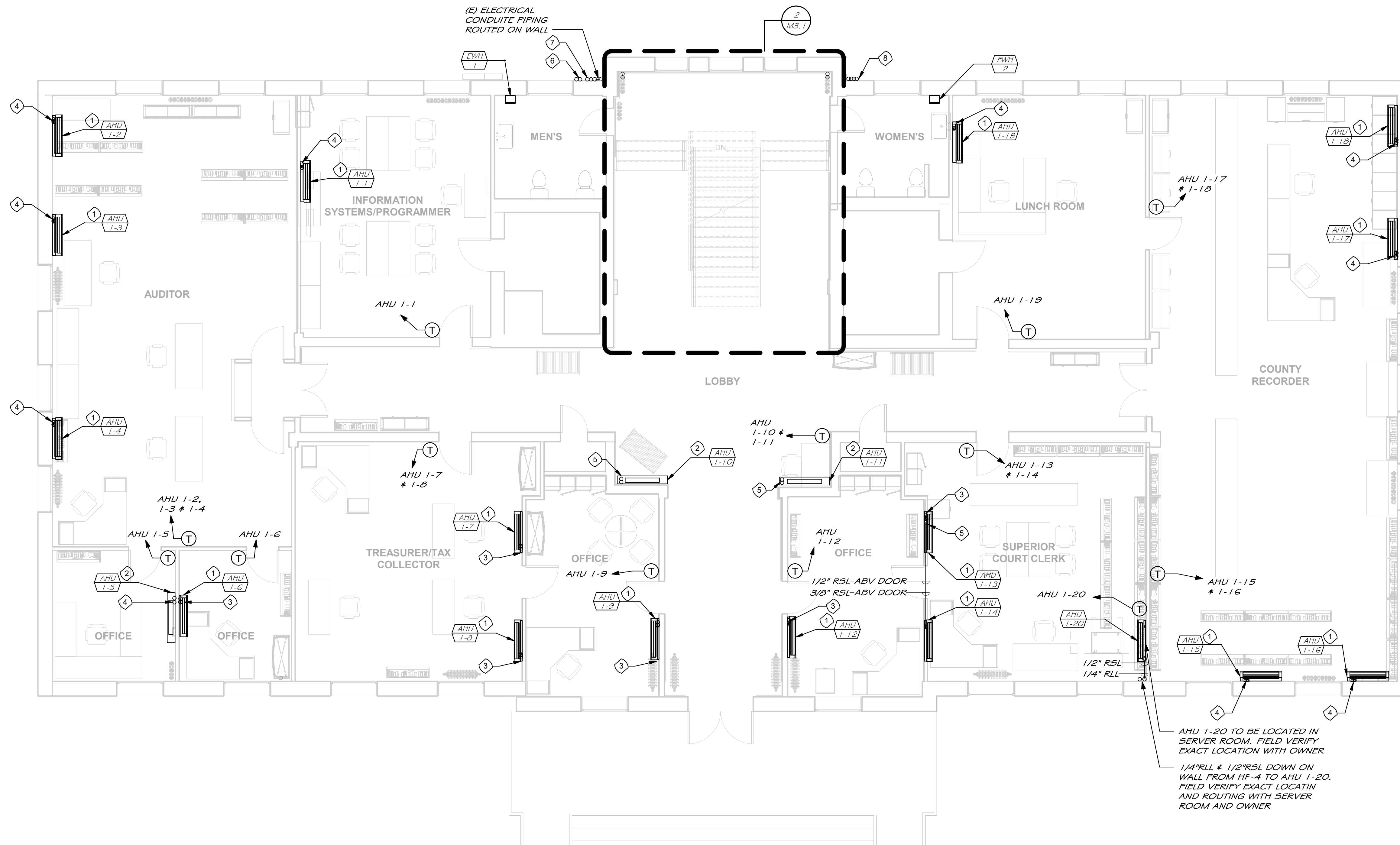
REVISIONS

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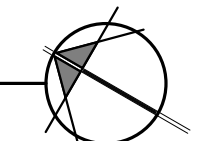
DRAWING TITLE
LEVEL 1 MECHANICAL PLAN

date: 10-26-23
 job number: 22129
 drawn: SME
 checked: BAE

M2.2



LEVEL 1 MECHANICAL PLAN
 SCALE: 3/16" = 1'-0"

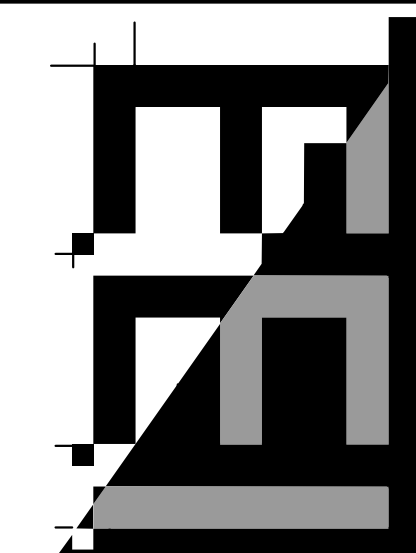


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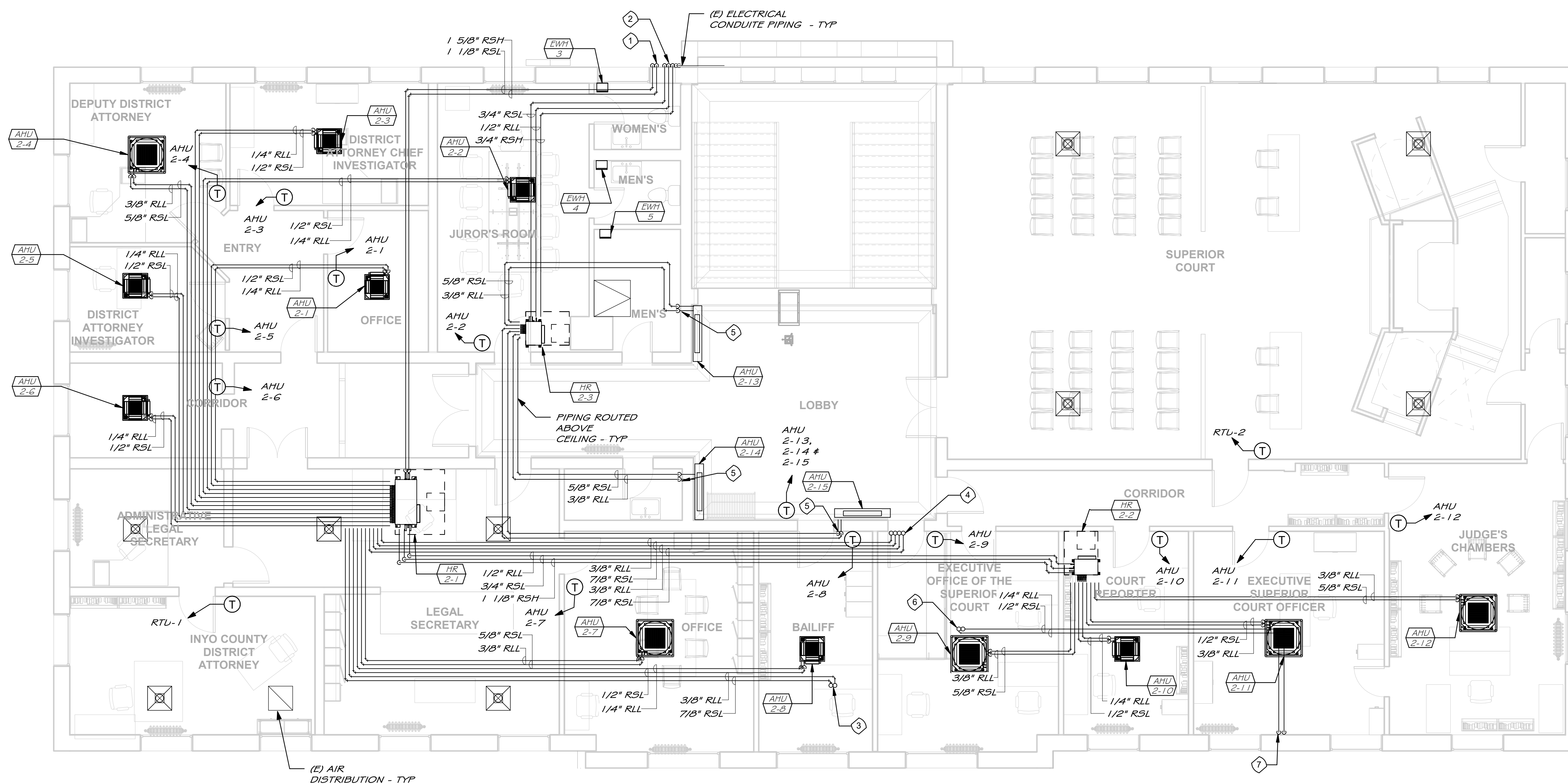
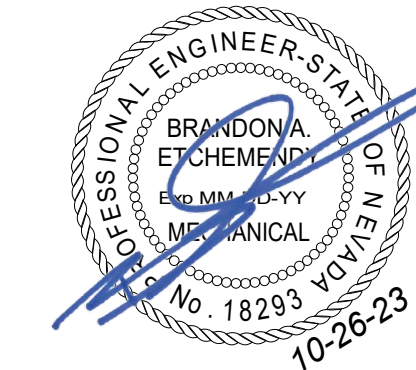
1. ALL EXPOSED PIPING OR CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR.
2. ALL PIPING, CONTROL WIRING AND CONDUIT ON WALL TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 4/M5.1 & PAINTED TO MATCH (E) WALL COLOR.
3. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORCEMENTS.
4. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTIALLY ON WALL FROM CEILING IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR.
5. ALL HORIZONTAL PIPING, CONTROL WIRING AND CONDUIT IS TO BE COMPLETELY CONCEALED AND ROUTED ABOVE CEILING

KEYED NOTES:

- ① 1-1/8" RSL & 1-5/8" RSH FROM HF-2 UP ON WALL TO LEVEL 2 CEILING
- ② 1/2" RLL, 3/4" RSL & 3/4" RSH FROM BR-5 UP ON WALL TO LEVEL 2 CEILING
- ③ 3/8" RLL & 7/8" RSL UP THRU ROOF TO RTU-1, SEE DETAIL 3/M5.1
- ④ (2) 3/8" RLL & (2) 7/8" RSL UP THRU ROOF TO RTU-2, SEE DETAIL 3/M5.1
- ⑤ 3/8" RLL & 5/8" RSL DOWN ON WALL TO FLOOR MOUNTED AHU, SEE DETAIL 3/M5.1
- ⑥ 1/4" RLL & 1/2" RSL UP THRU ROOF TO HF-4, SEE DETAIL 3/M5.1
- ⑦ 1/4" RLL & 1/2" RSL FROM HF-4 DOWN ON WALL TO LEVEL BELOW



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DRAWING TITLE
**LEVEL 2
 MECHANICAL PLAN**

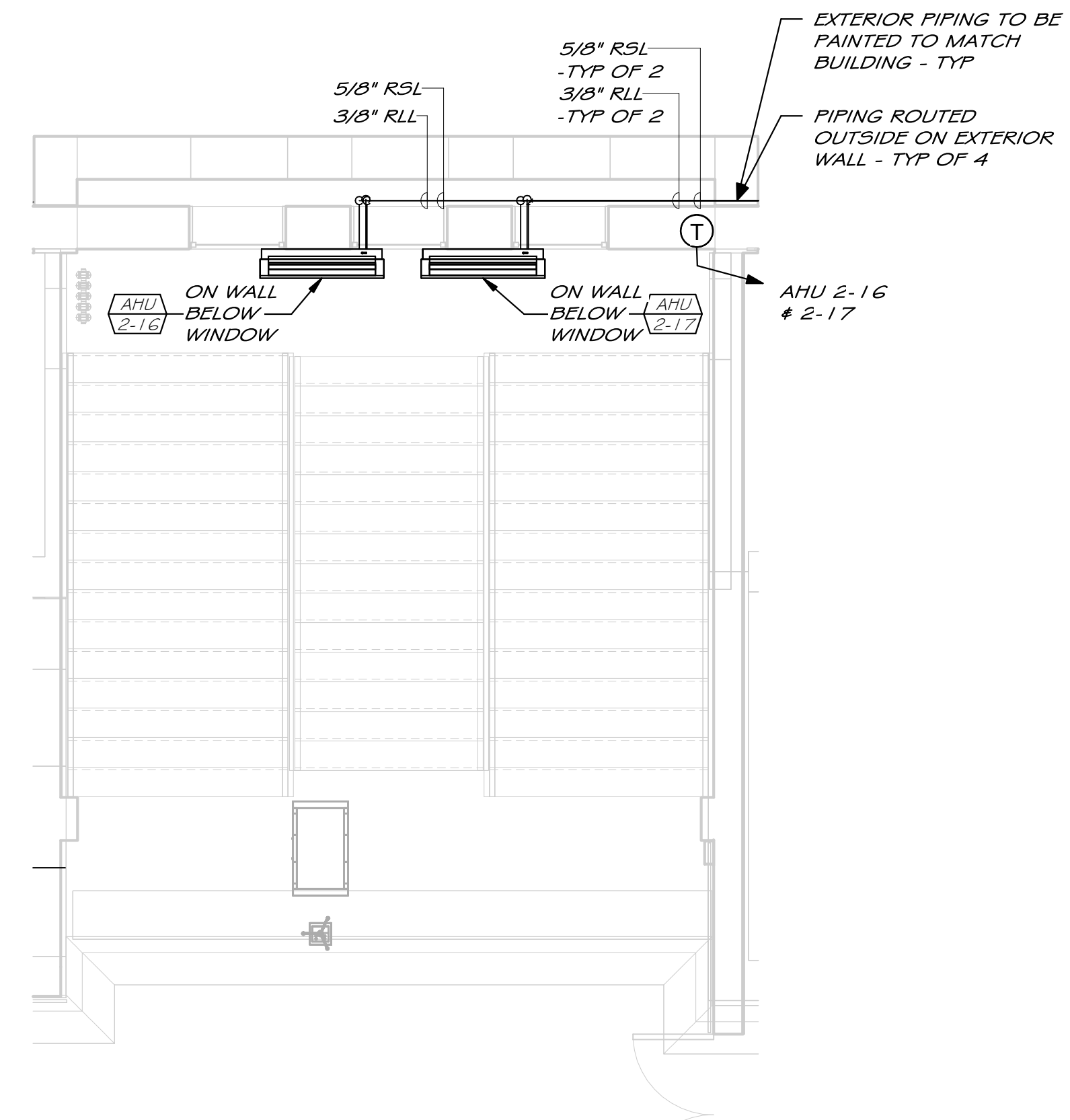
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| job number | 22129 |
| drawn | SME |
| checked | BAE |

M2.3

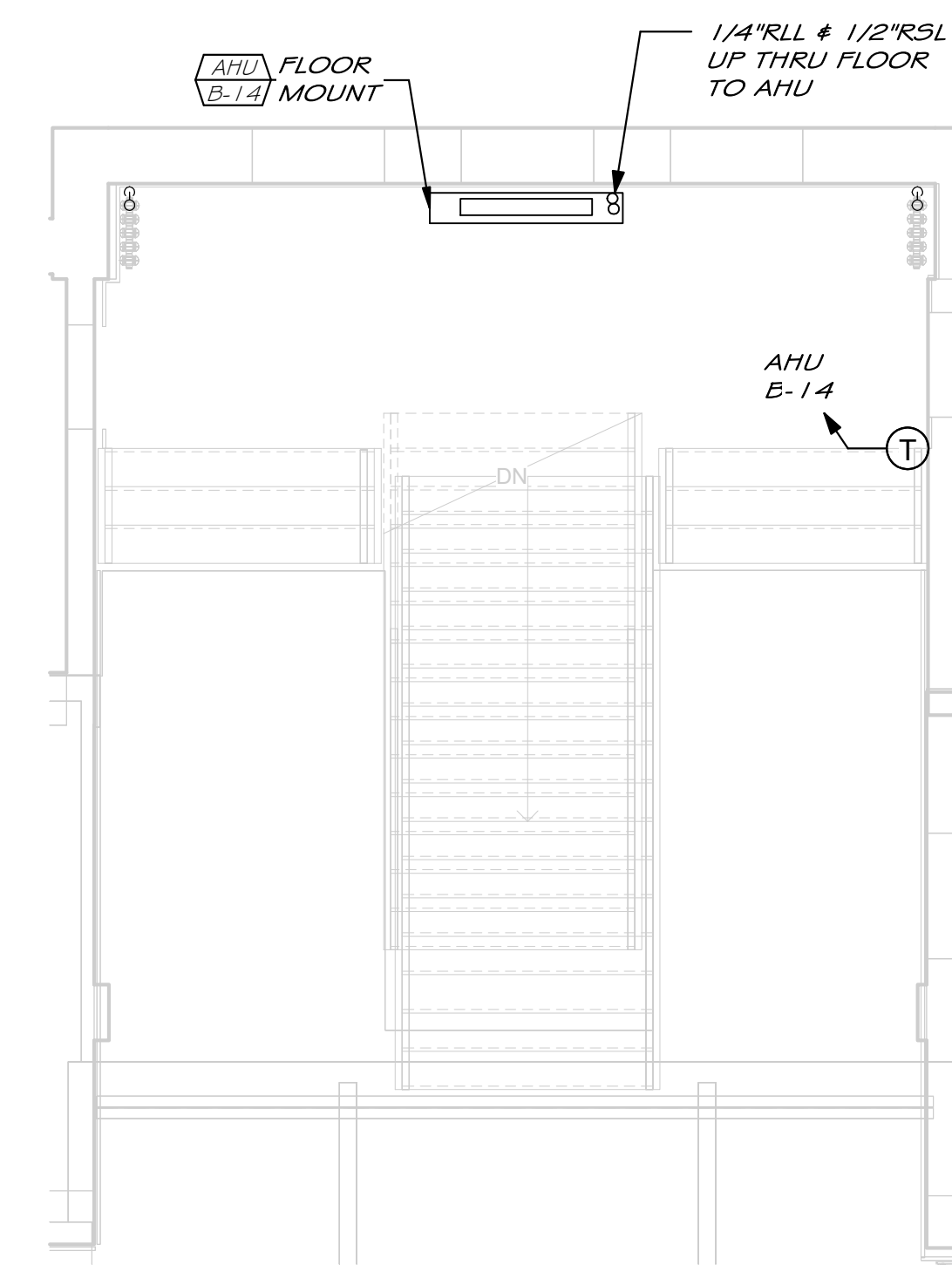
LEVEL 2 MECHANICAL PLAN
 SCALE: 3/16" = 1'-0"

SHEET NOTES:

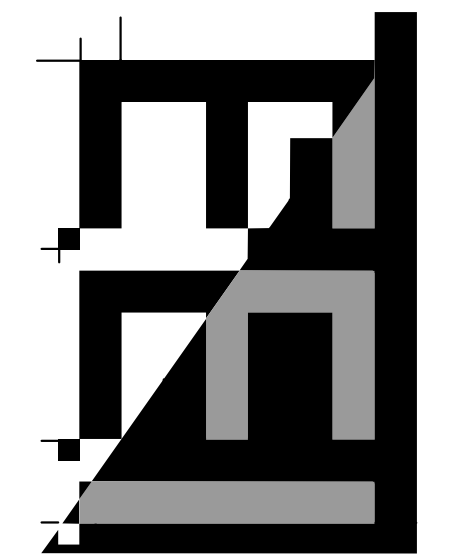
1. ALL EXPOSED PIPING ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR.
2. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORMENTS



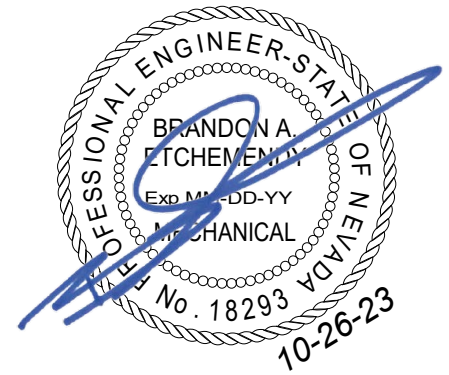
② STAIRLANDING TO LEVEL 2
MECHANICAL PLAN
1/4" = 1'-0"



① STAIRLANDING TO BASEMENT
MECHANICAL PLAN
1/4" = 1'-0"



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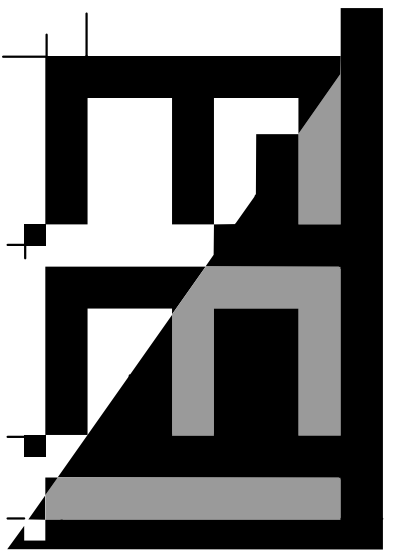
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**PARTIAL
MECHANICAL
PLANS**

date 10-26-23
job number 22129
drawn SME
checked BAE

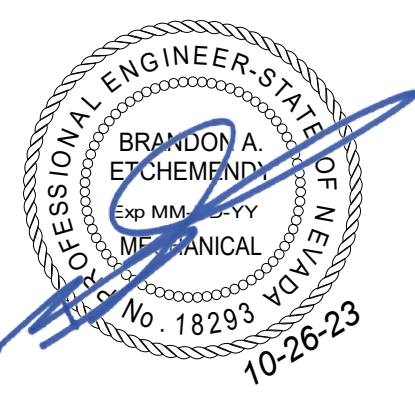
M3.1

SHEET NOTES:

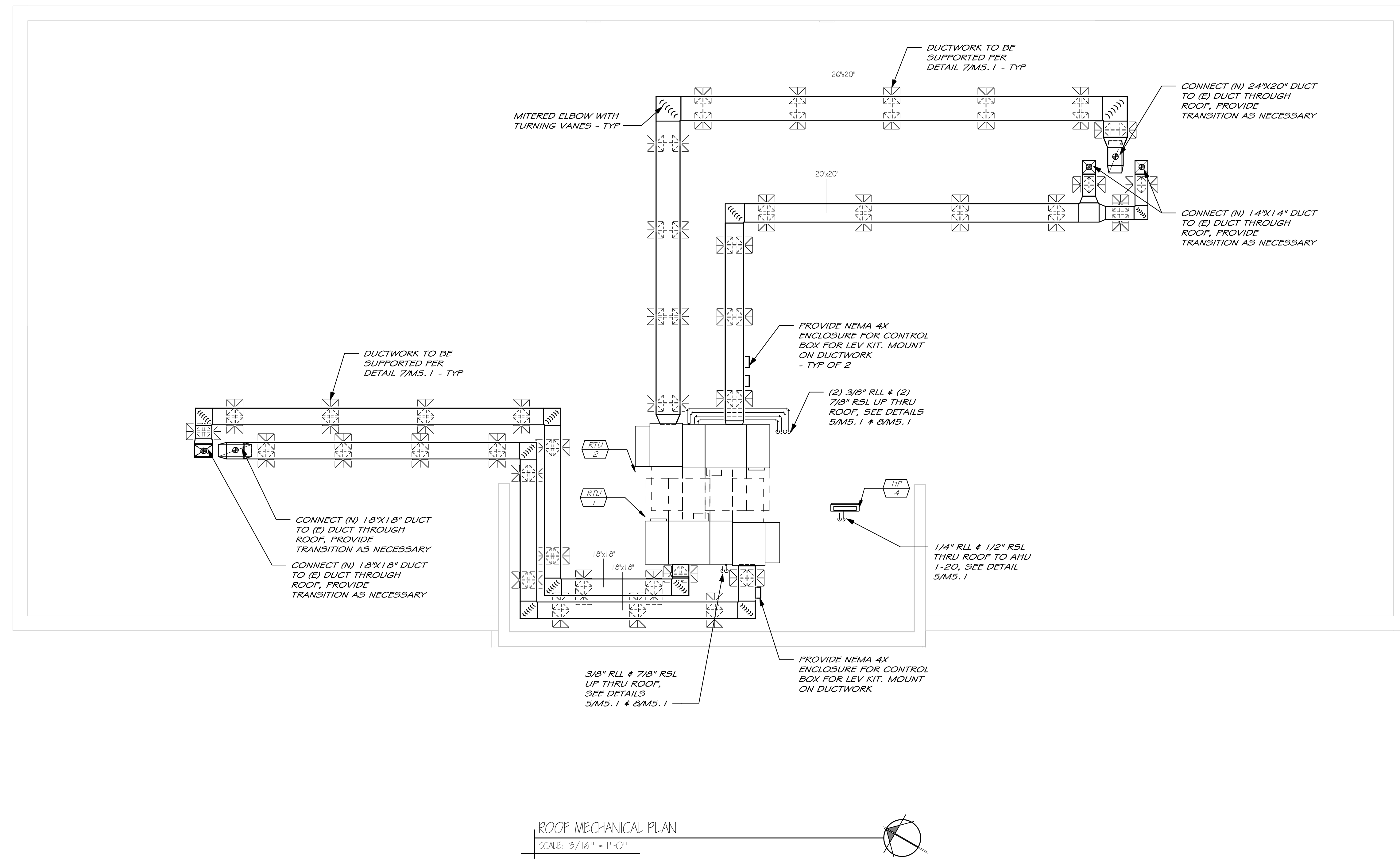
1. SEE DETAIL 7M5.1 FOR ROOF MOUNTED DUCT SUPPORT REQUIREMENTS
2. MAXIMUM SUPPORT SPACING ON HORIZONTAL DUCT RUNS IS 10'
3. PROVIDE DUCT SUPPORT WITHIN 24" OF ELBOWS ON EITHER SIDE OF ELBOW
4. PROVIDE DUCT SUPPORT WITHIN 48" OF BRANCH INTERSECTIONS ON ALL SIDES OF BRANCH FITTING



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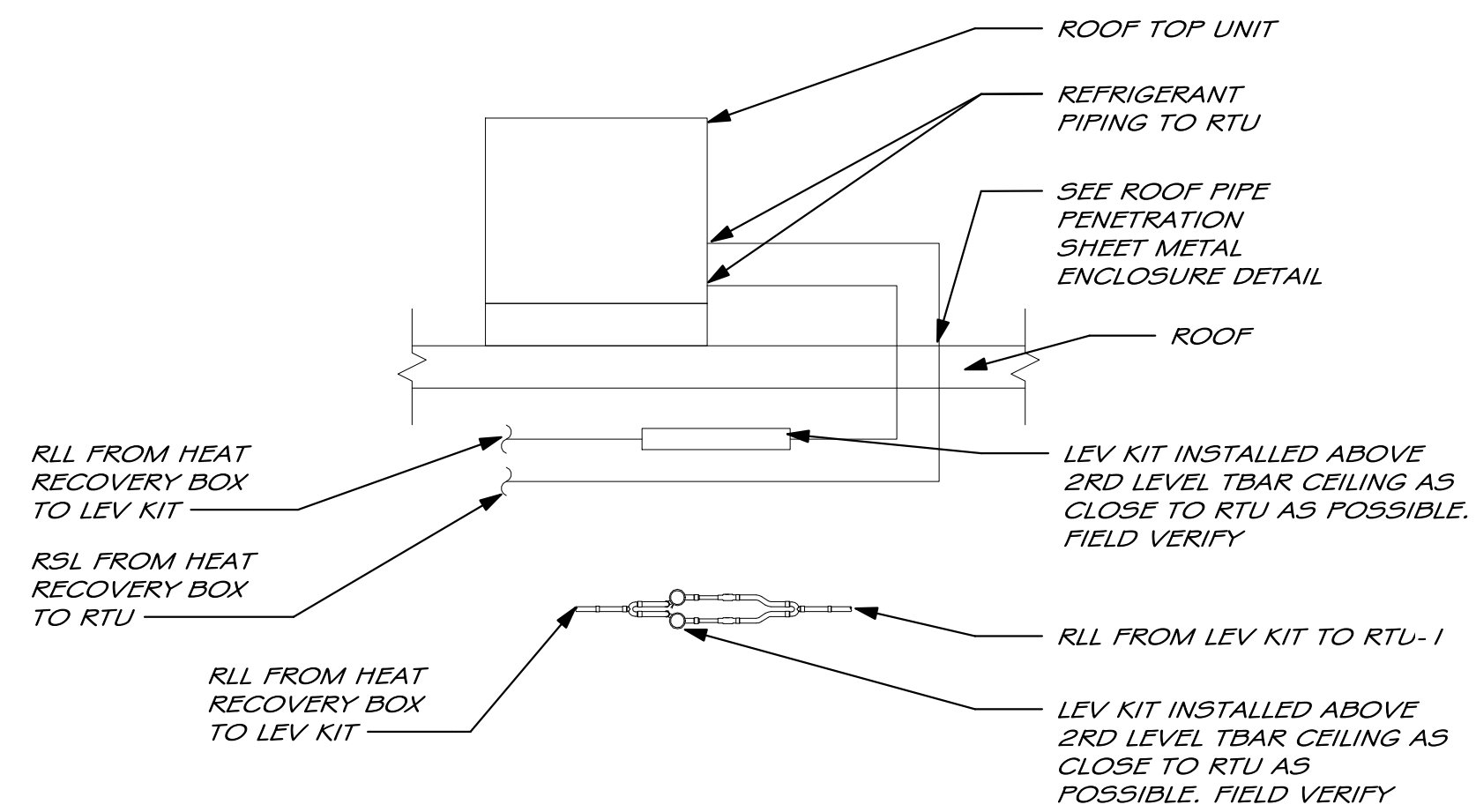


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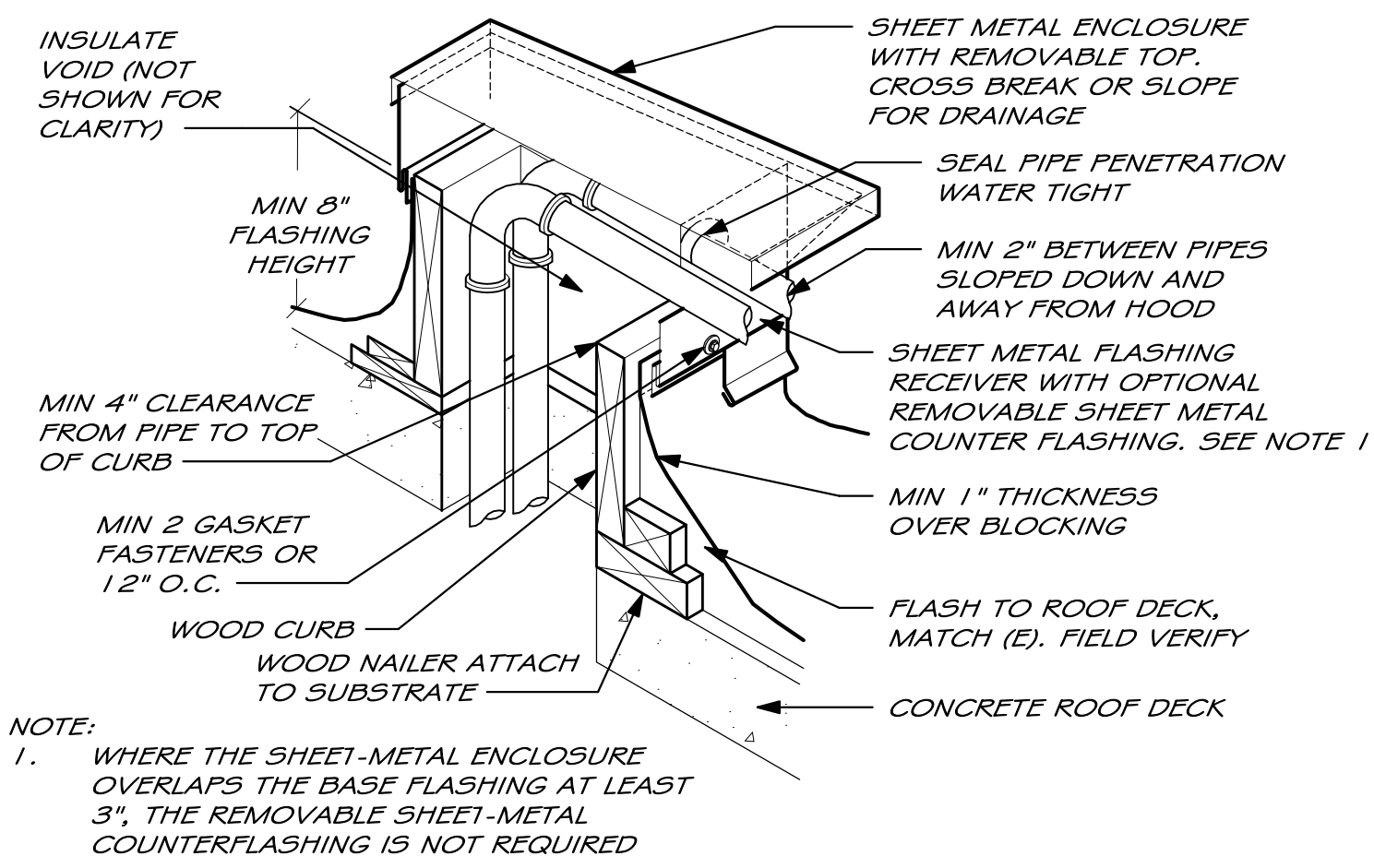
DRAWING TITLE
ROOF MECHANICAL PLAN

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| date | 10-26-23 |
| job number | 22129 |
| drawn | SME |
| checked | BAE |

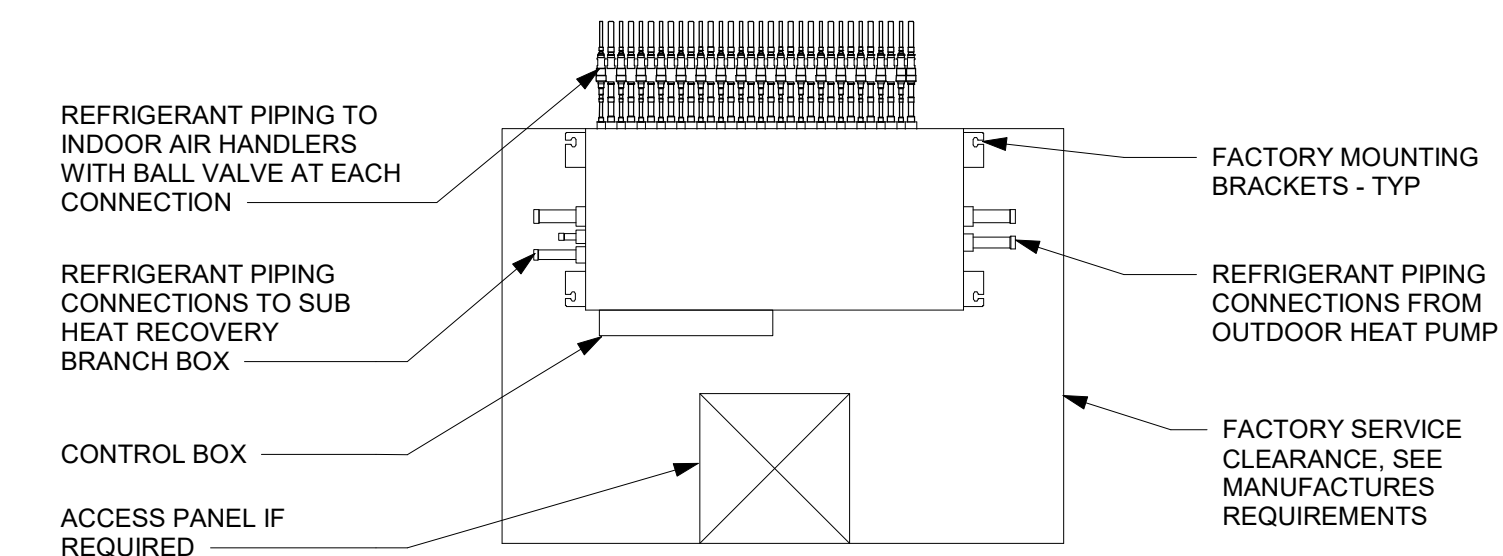
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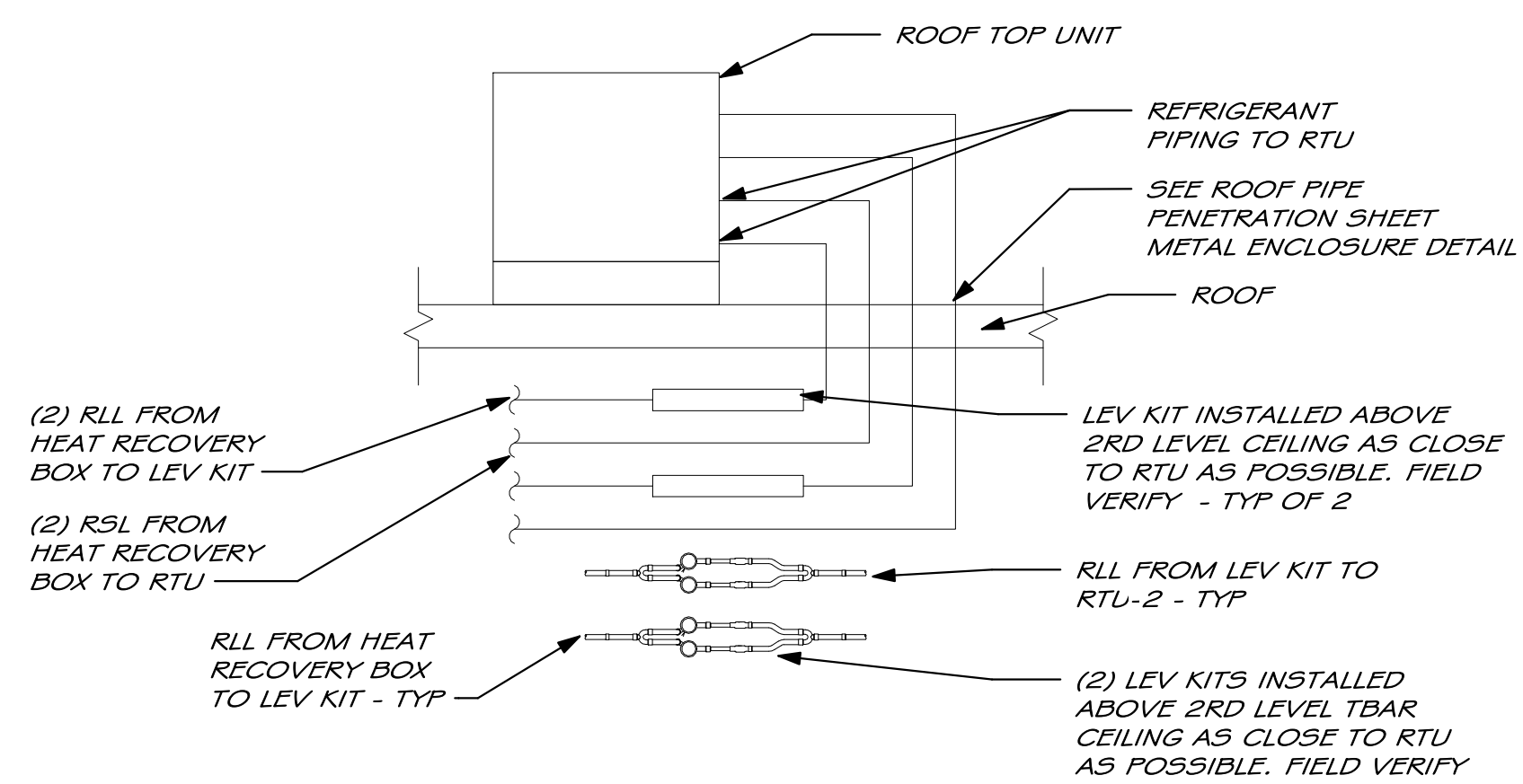
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SCALE: NOT TO SCALE



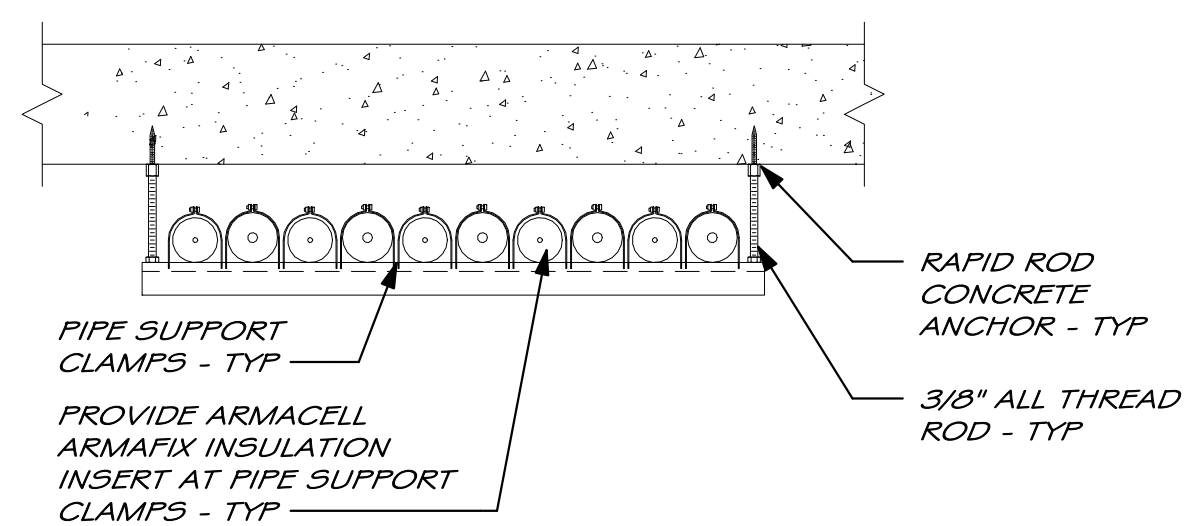
ROOF PIPE PENETRATION SHEET METAL ENCLOSURE DETAIL
SCALE: NOT TO SCALE



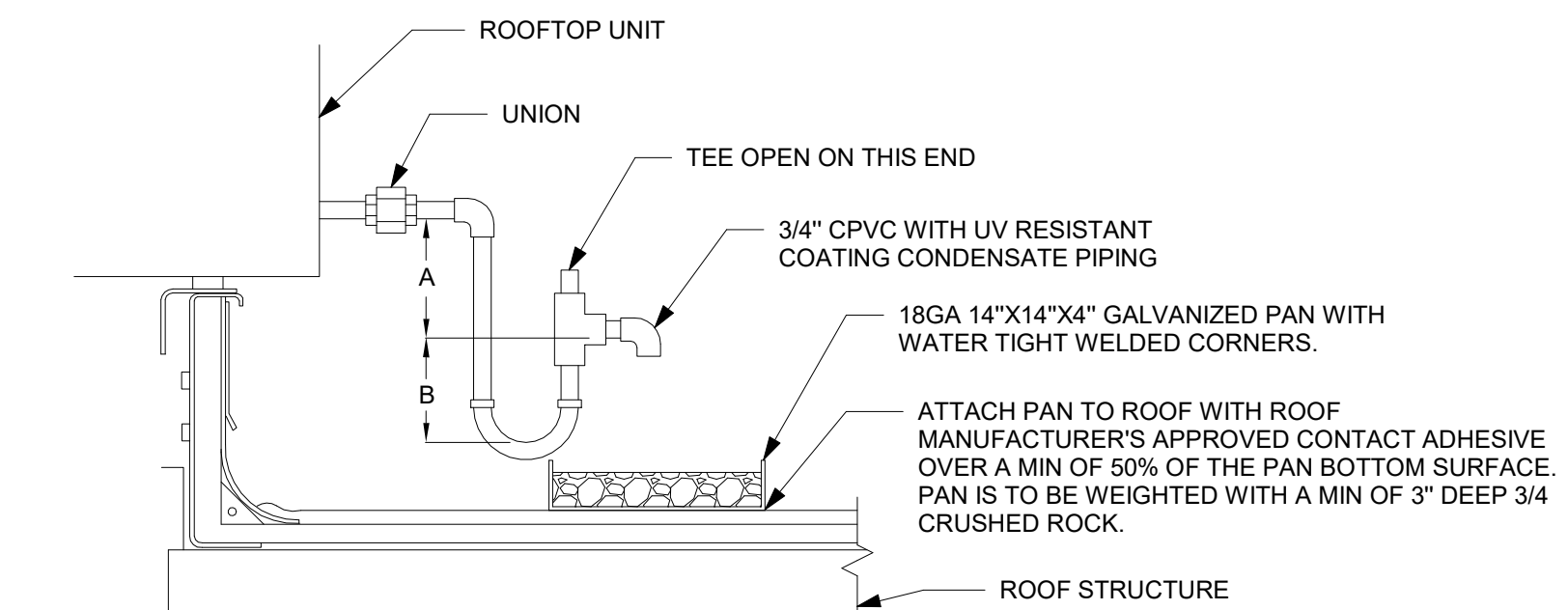
HEAT RECOVERY BRANCH BOX DETAIL
SCALE: NOT TO SCALE



LEV KIT INSTALLATION FOR RTU-2
SCALE: NOT TO SCALE

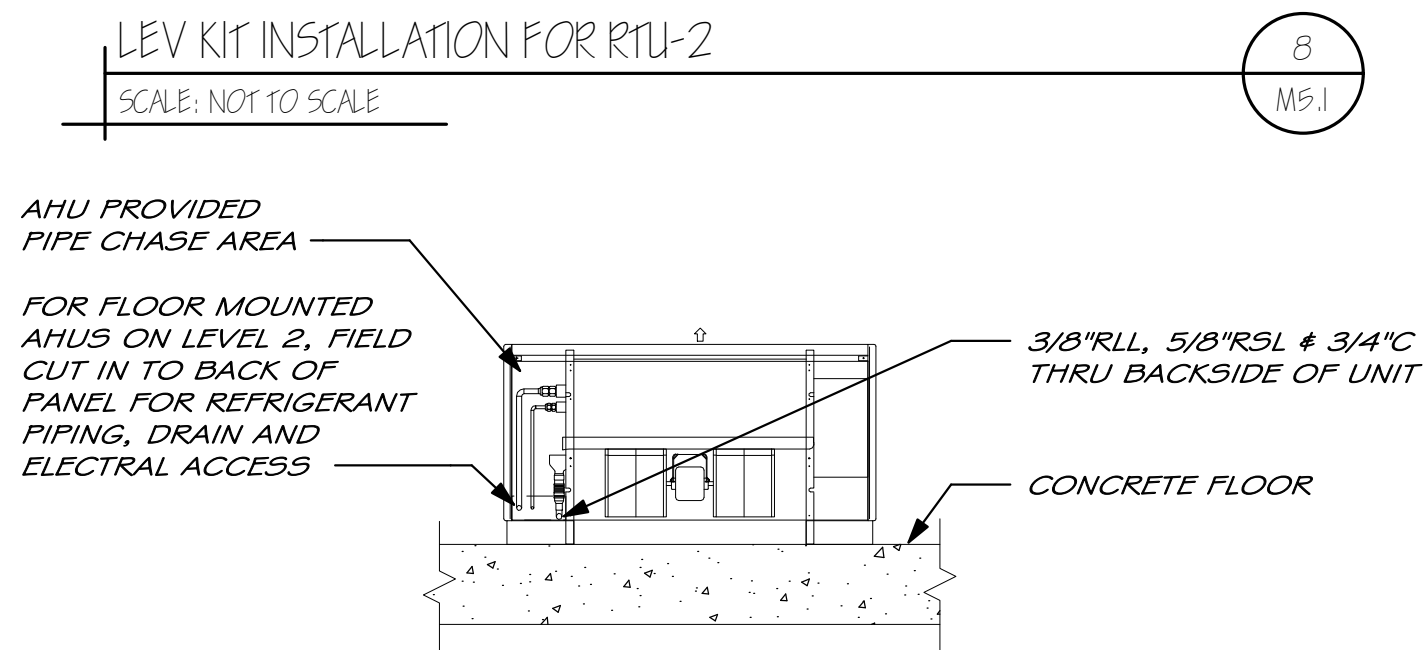


MULTIPLE PIPE HANGER DETAIL
SCALE: NOT TO SCALE

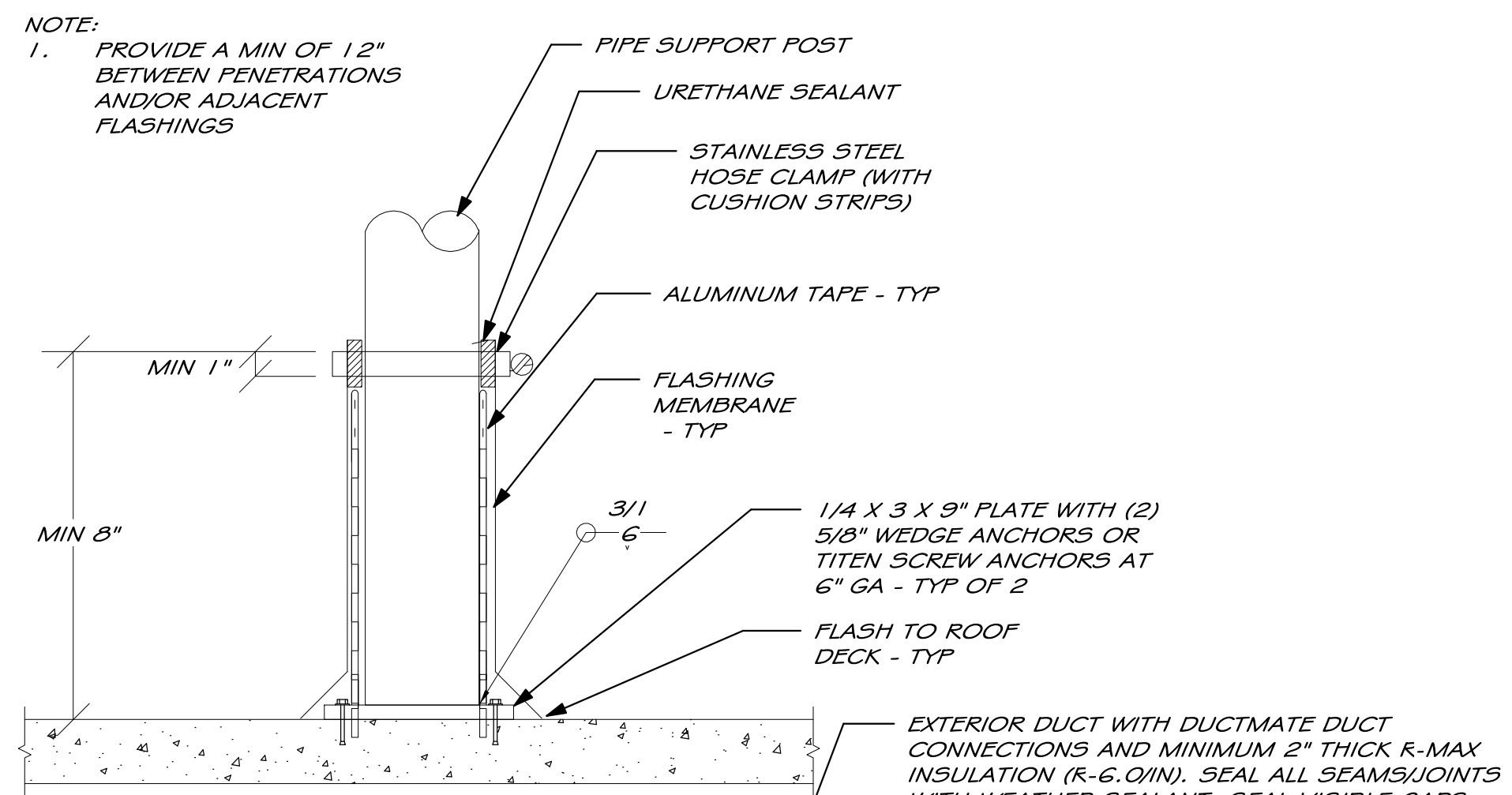


| UNIT TYPE | A | B |
|-----------|--------|------|
| DRAW THRU | 2" + X | X |
| BLOW THRU | 1" MIN | 2" X |

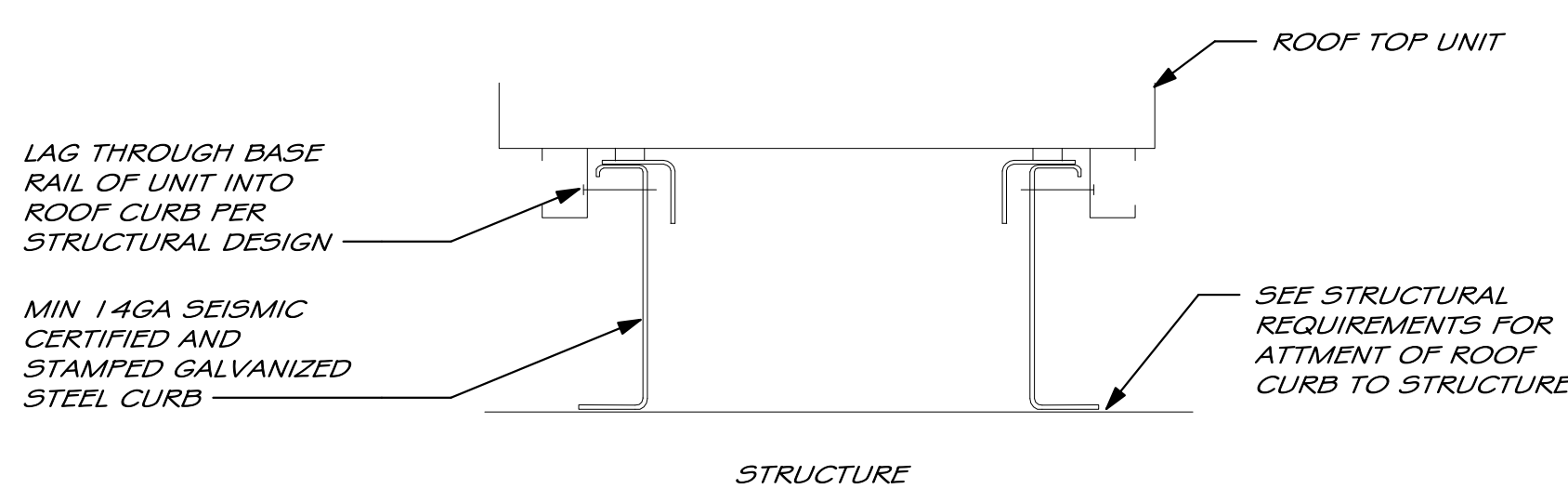
PACKAGE UNIT CONDENSATE
SCALE: NOT TO SCALE



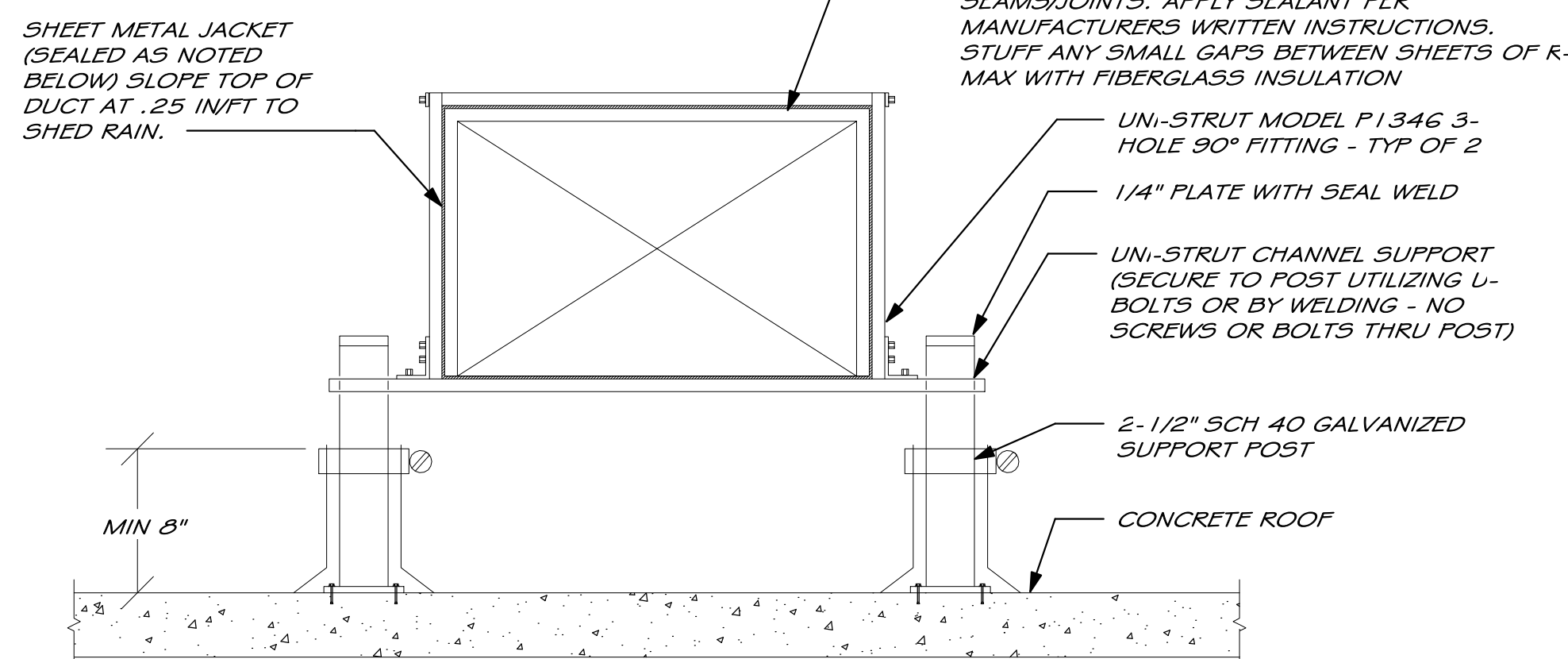
FLOOR MOUNTED AHU
SCALE: 1/4" = 1'-0"



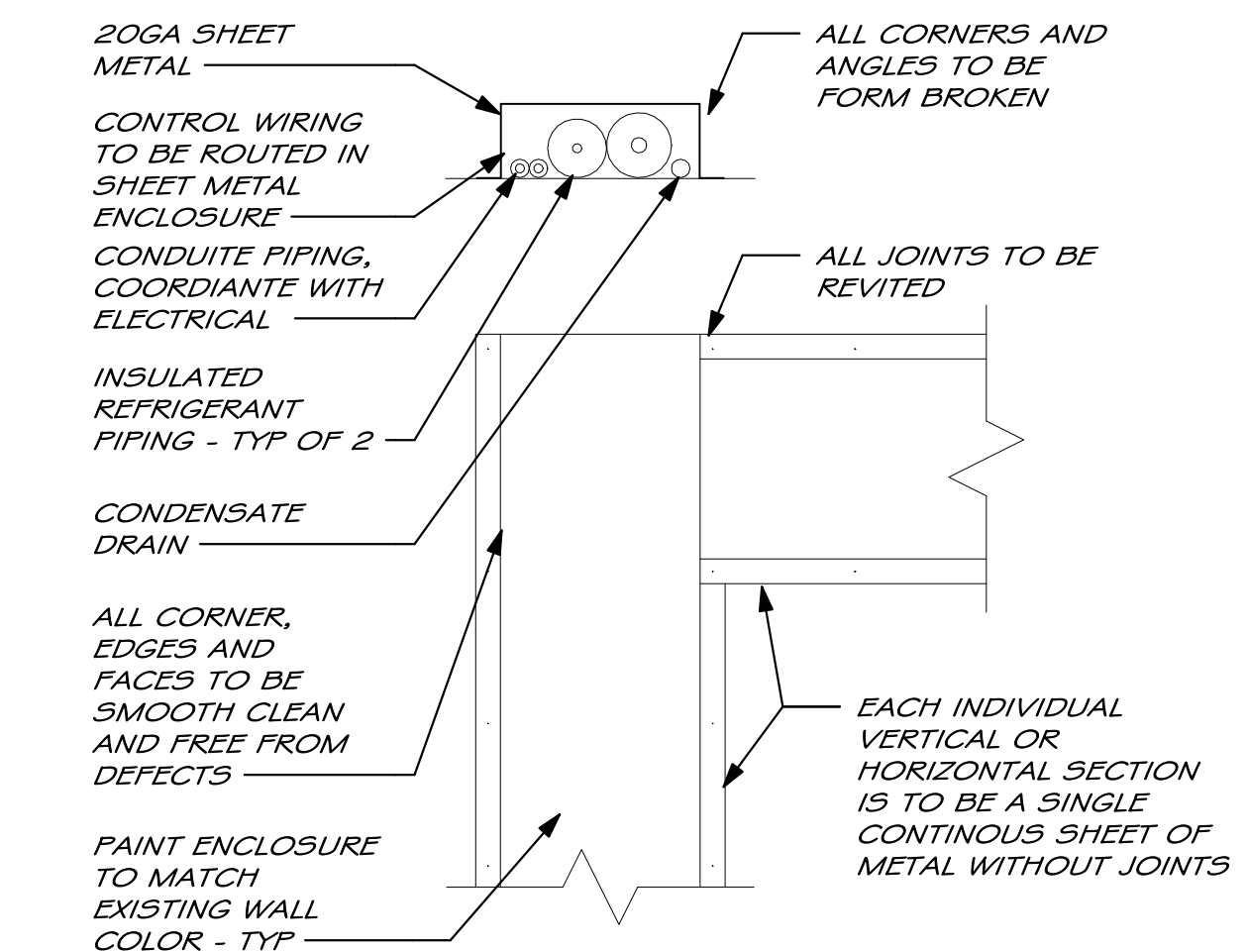
PIPE SUPPORT TO CONCRETE MOUNTING DETAIL
SCALE: NOT TO SCALE



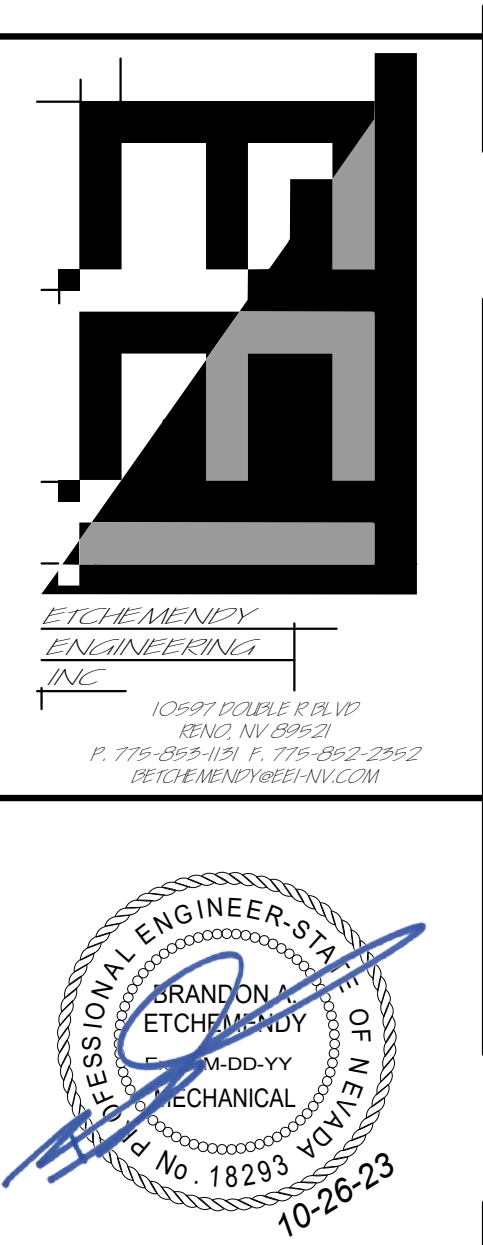
ROOF CURB DETAIL
SCALE: NOT TO SCALE



ROOF MOUNTED DUCT SUPPORT DETAIL
SCALE: NOT TO SCALE



SINGLE AHU SHEET METAL ENCLOSURE
SCALE: NOT TO SCALE

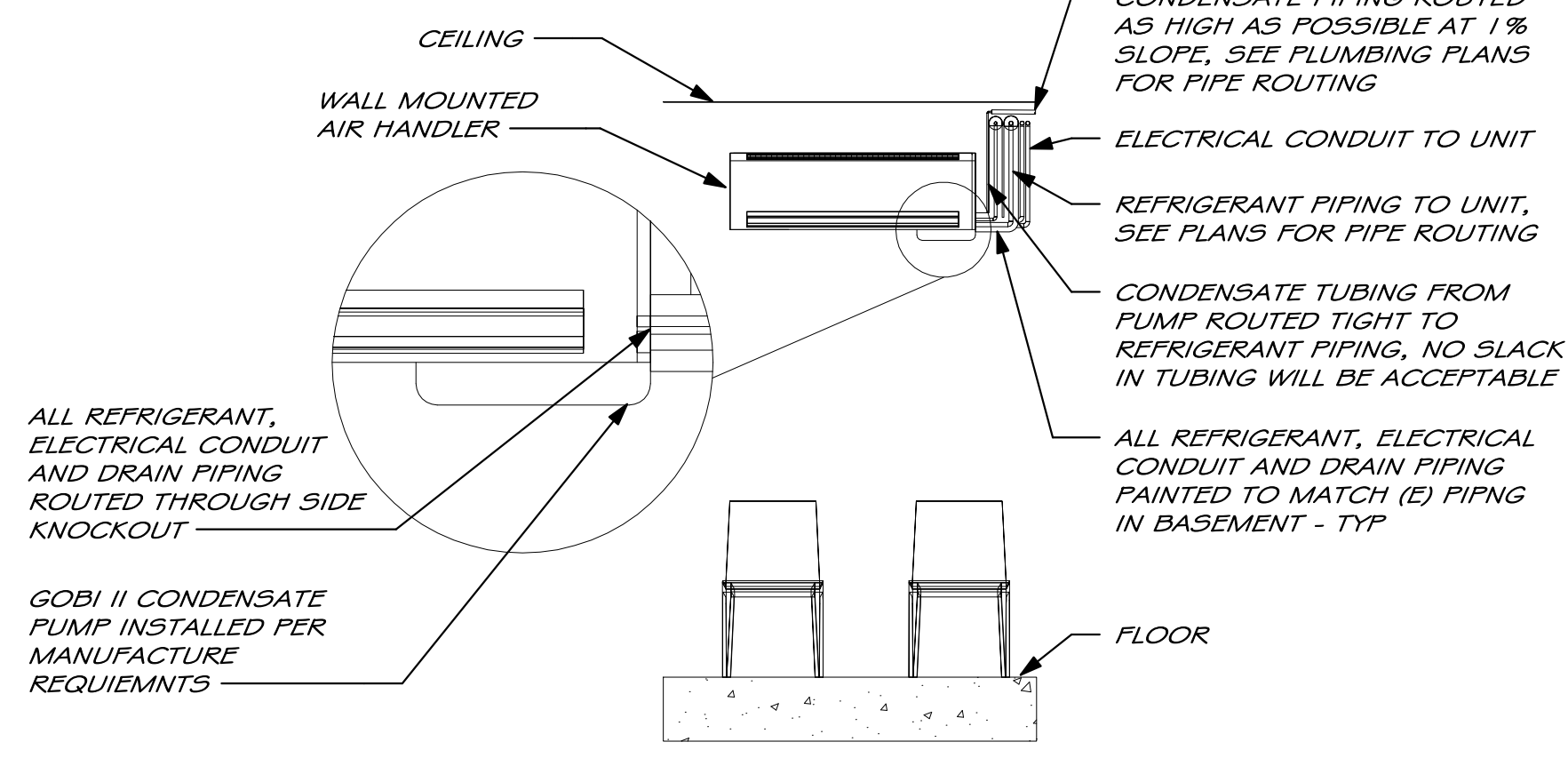


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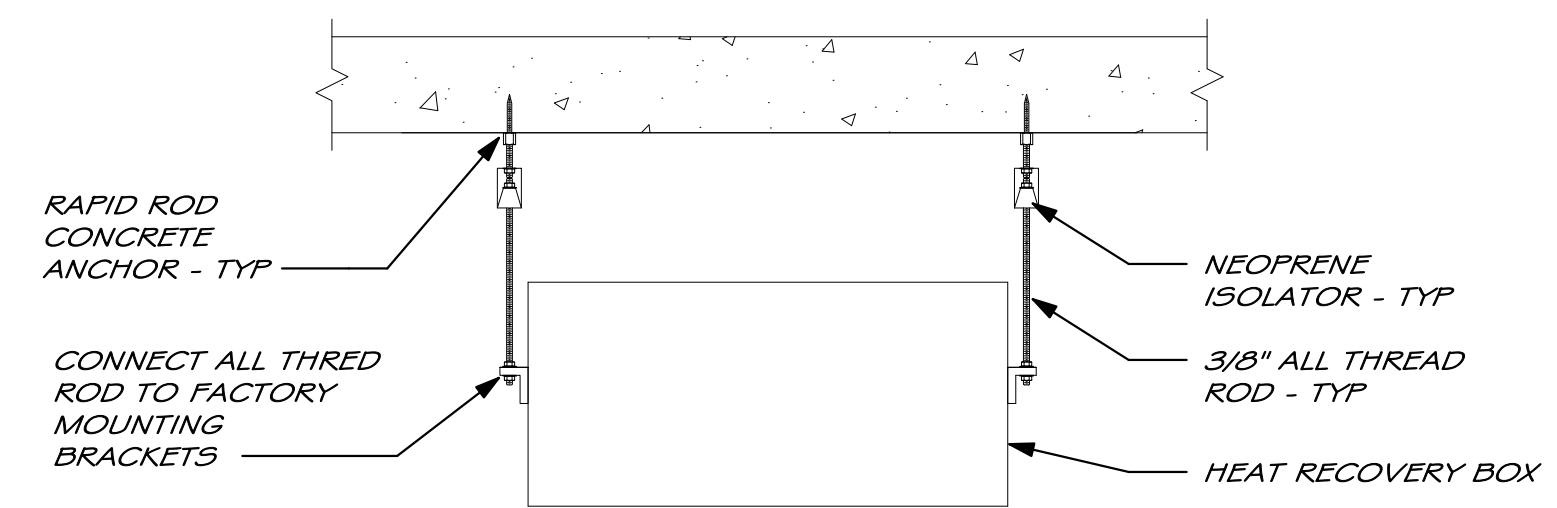
| REVISIONS | |
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| DRAWING TITLE | |
|--------------------|----------|
| MECHANICAL DETAILS | |
| date | 10-26-23 |
| job number | 22129 |
| drawn | SME |
| checked | BAE |

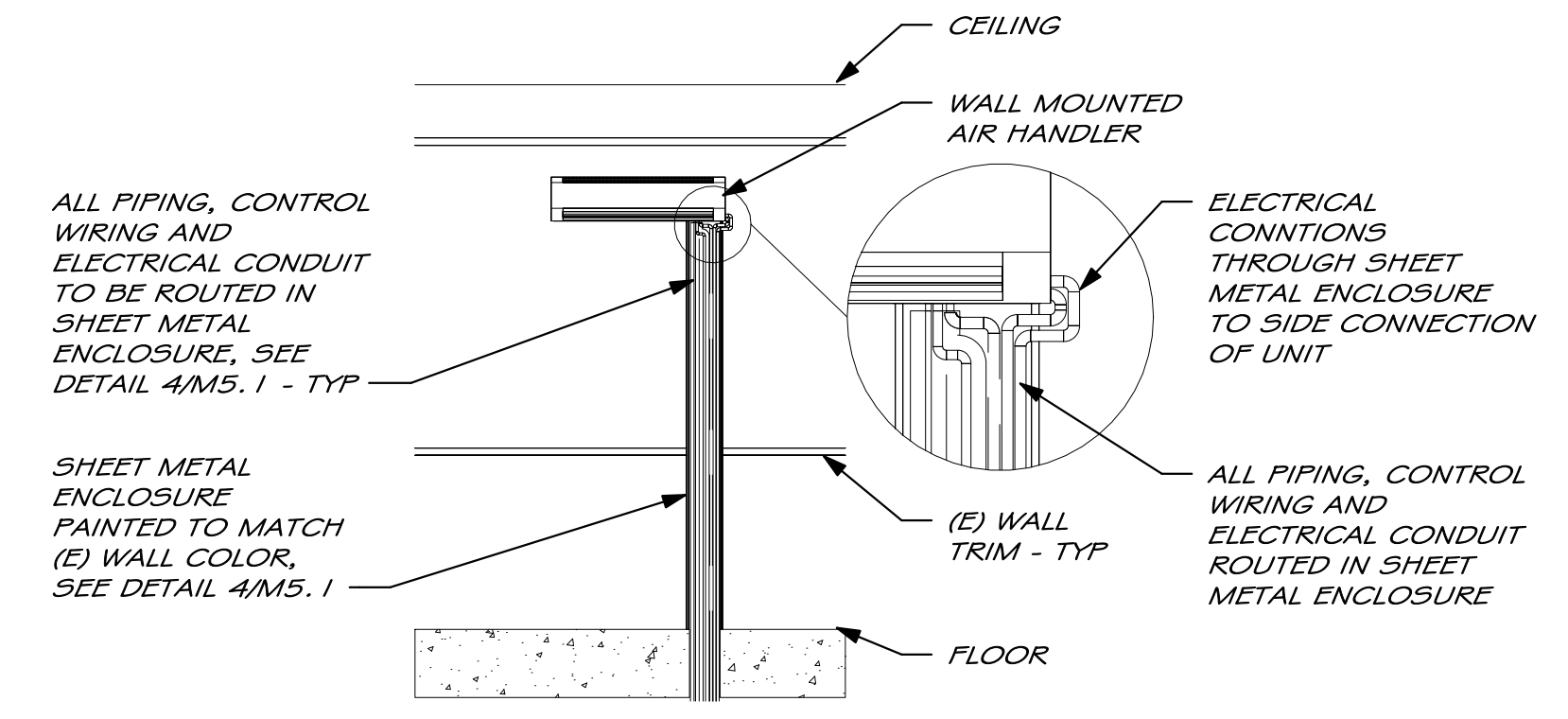
M5.1



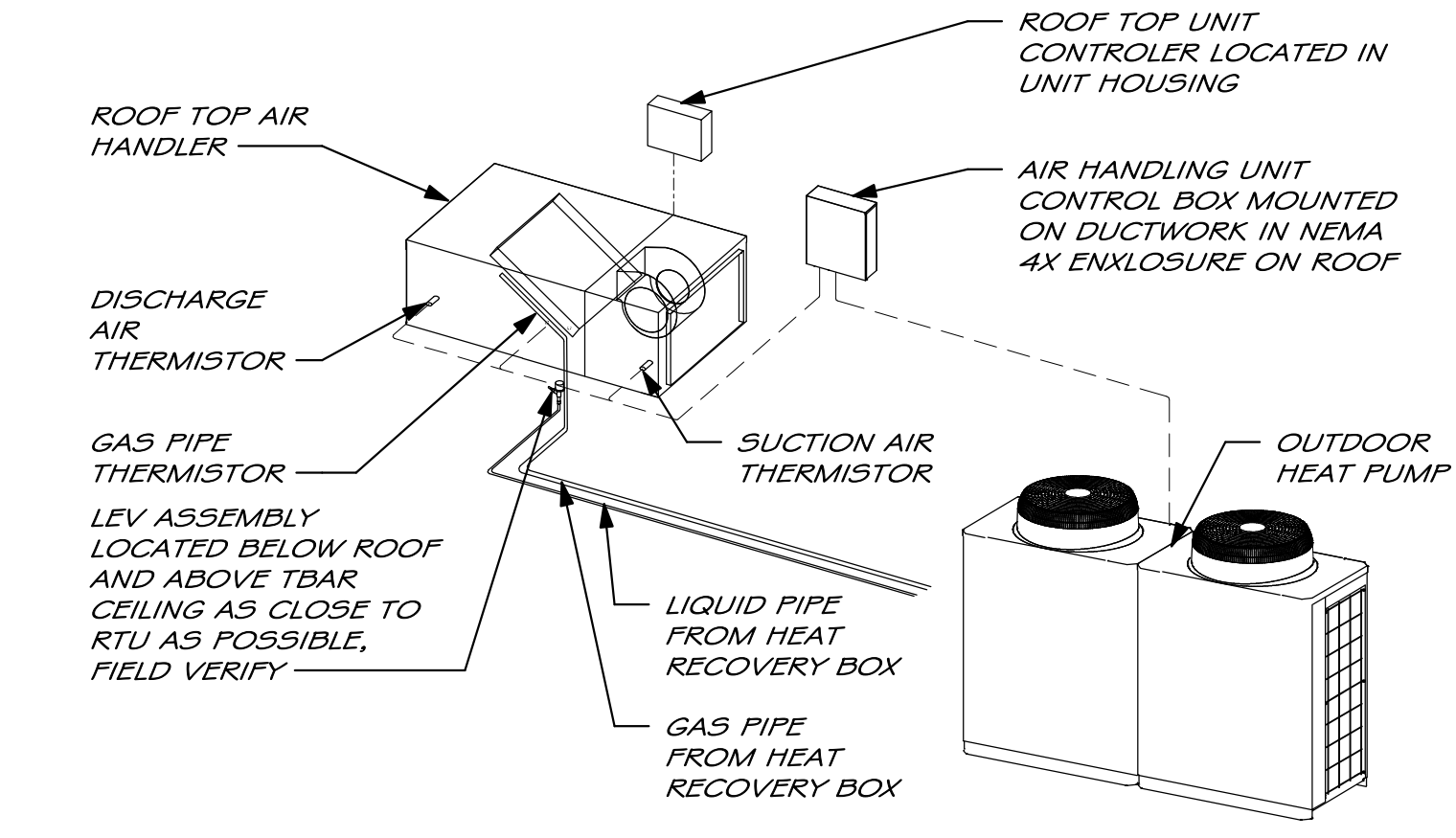
BASEMENT WALL MOUNT AIR HANDLER DETAIL
SCALE: NOT TO SCALE



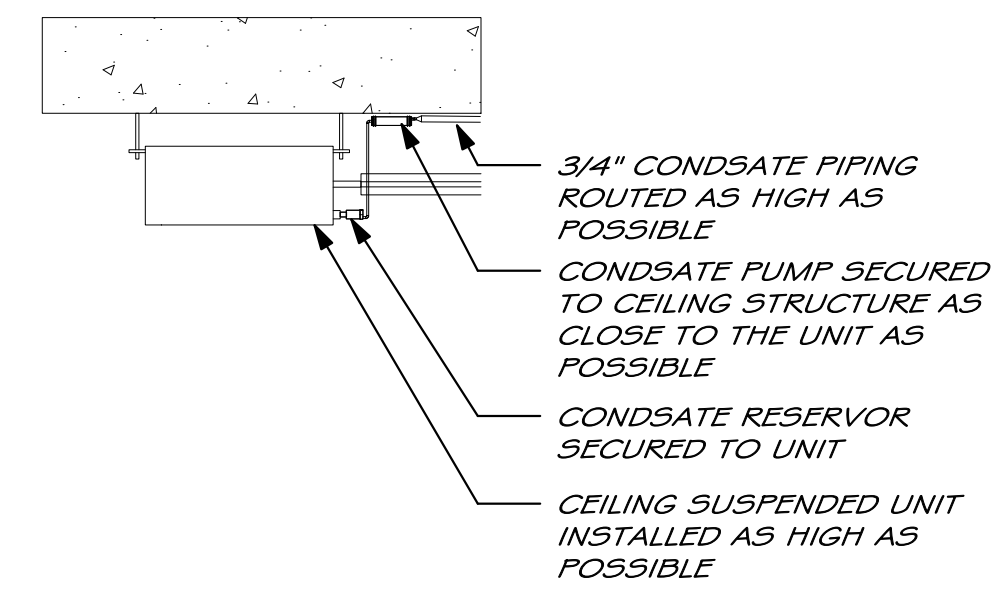
HEAT RECOVERY BOX MOUNTING DETAIL
SCALE: NOT TO SCALE



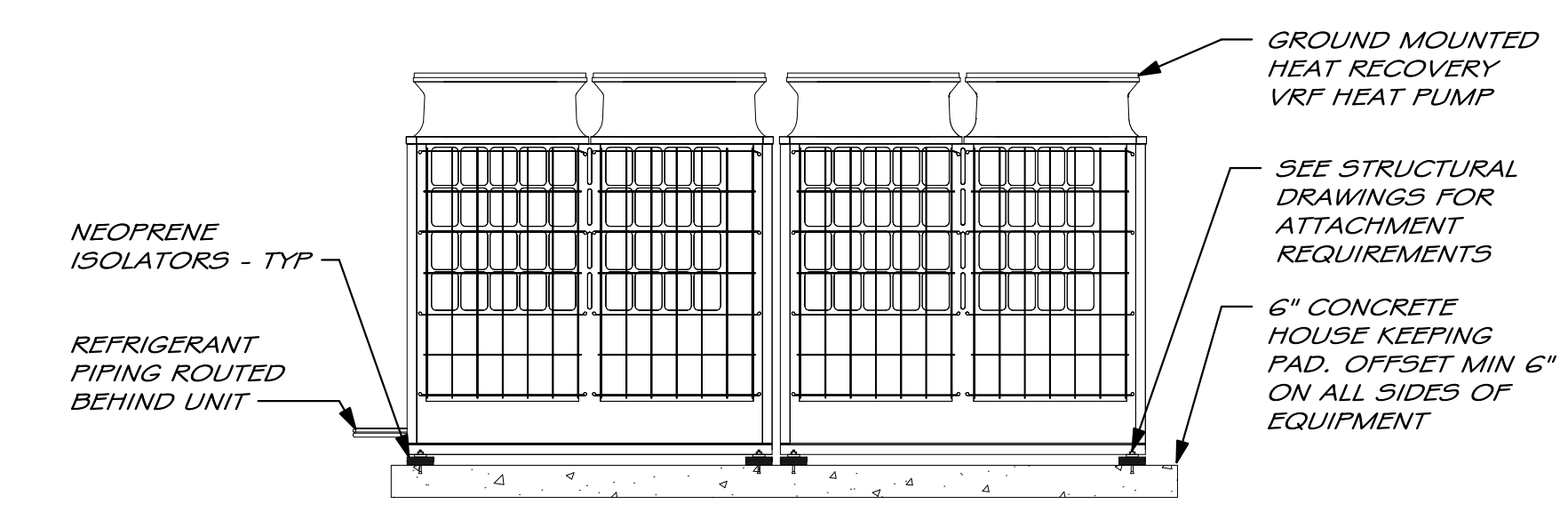
LEVEL 1 WALL MOUNT AIR HANDLER DETAIL
SCALE: NOT TO SCALE



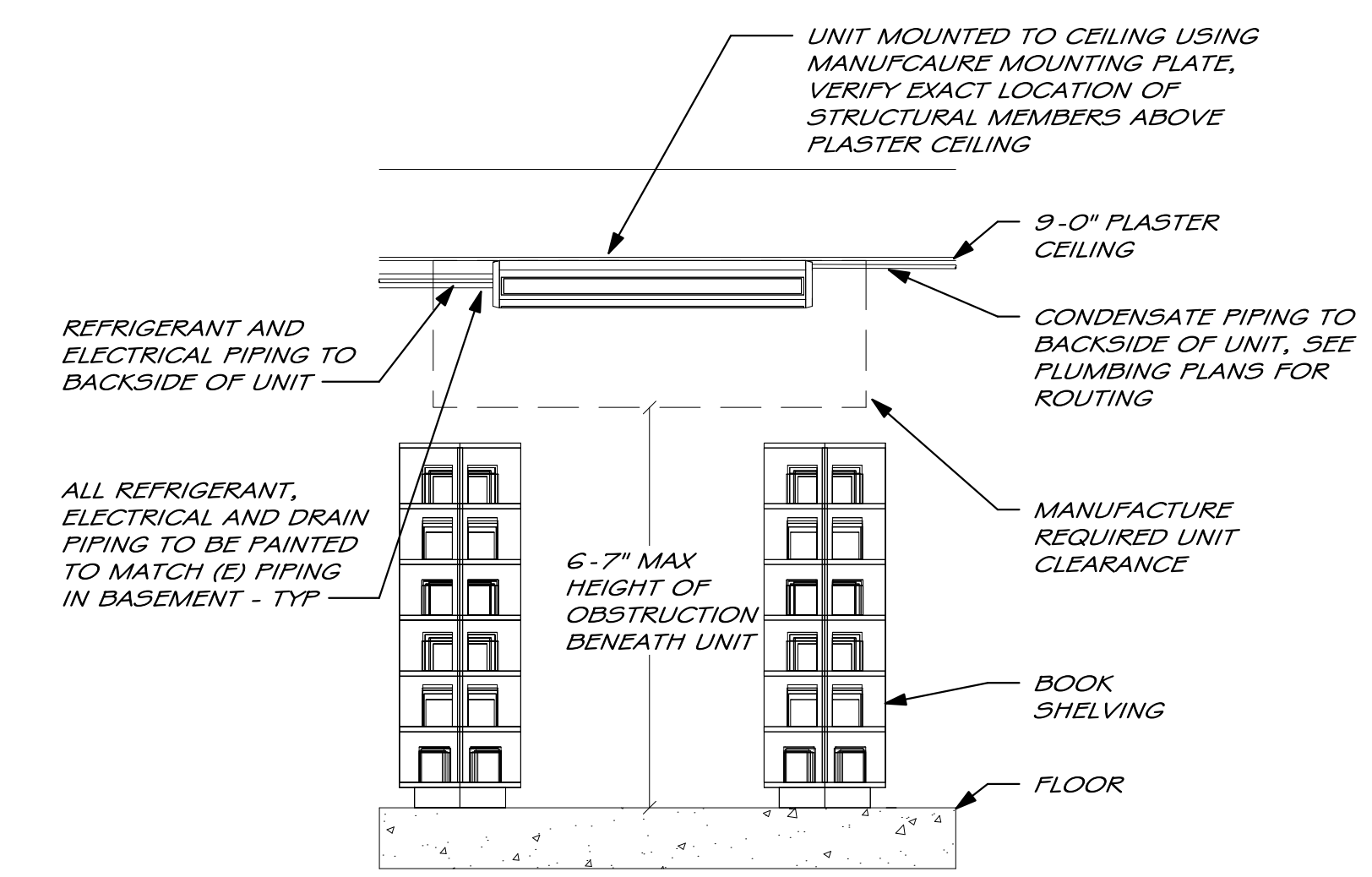
ROOF TOP AIR HANDLER PIPING AND WIRING DETAIL
SCALE: NOT TO SCALE



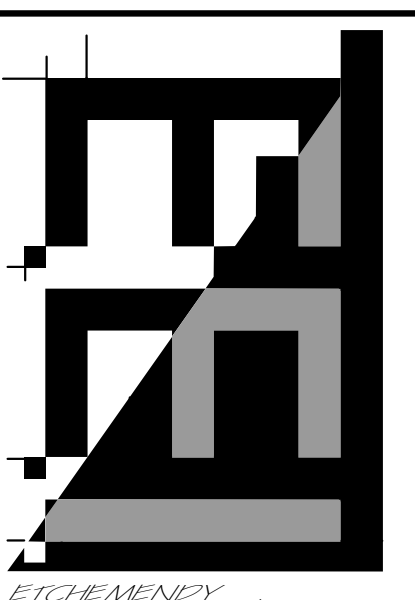
BASEMENT LEVEL CEILING SUSPENDED CONDENSATE PUMP
SCALE: NOT TO SCALE



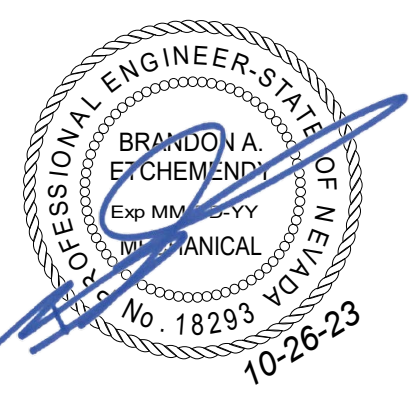
GROUND MOUNTED HEAT PUMP
SCALE: NOT TO SCALE



CEILING SUSPENDED UNIT MOUNTING DETAIL
SCALE: NOT TO SCALE



BRANDON A. FICHEMENDY
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HVAC RETROFIT

INYO COUNTY COURT HOUSE

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INDEPENDENCE, CA 95526

REVISIONS

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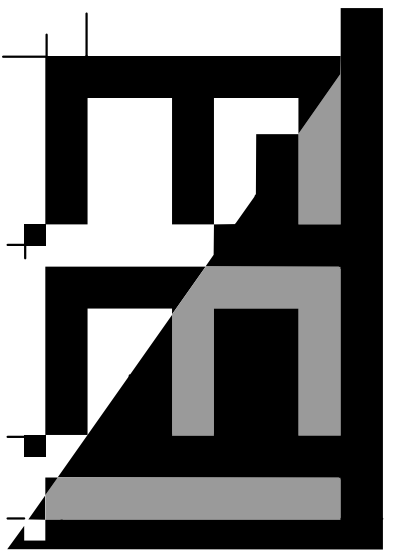
DRAWING TITLE
MECHANICAL
DETAILS

date 10-26-23
job number 22129
drawn SME
checked BAE

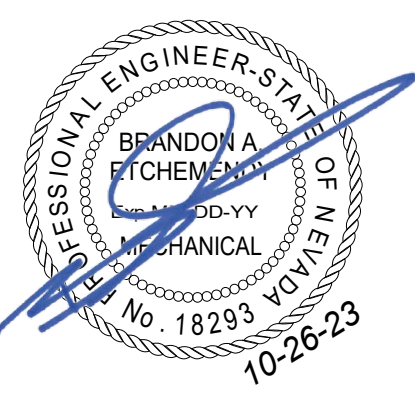
M5.2

SHEET NOTES:

1. ALL EXPOSED PIPING OR CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING AND CONDUIT ROUTED IN BASEMENT TO BE PAINTED TO MATCH (E) PIPING IN BASEMENT
3. ALL EXPOSED INSULATED PIPING TO BE COATED WITH ARMAFLEX WB FINISH AND TINTED TO MATCH (E) PIPING IN BASEMENT
4. ALL EXPOSED ELECTRICAL CONDUIT POWER TO BE ROUTED ALONG SIDE REFRIGERANT PIPING IN BASEMENT. ALL CONTROL WIRING TO BE COMPLETELY CONCEALED FROM OCCUPANT VIEW OR TO BE ROUTED IN CONDUIT PIPE ALONG SIDE REFRIGERANT PIPE.
5. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTICALLY ON WALL IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR
6. ON LEVEL 1 & 2, ALL PIPING, CONTROL WIRING AND CONDUIT ON WALL TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 4MS.1 AND PAINTED TO MATCH (E) WALL COLOR
7. ON LEVEL 2, ALL HORIZONTALLY ROUTED PIPING, CONTROL WIRING AND CONDUIT TO BE ROUTED ABOVE CEILING.



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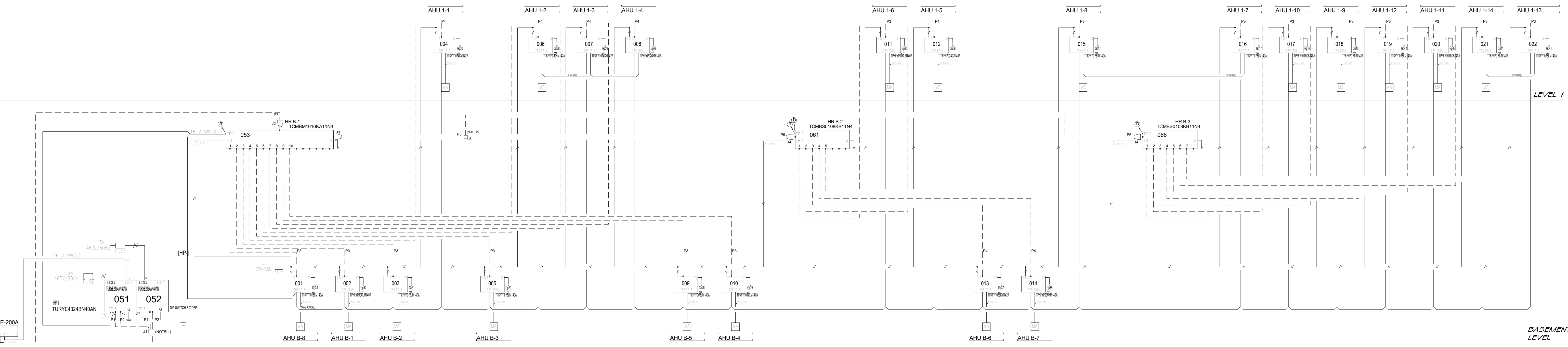


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LEVEL 2

LEVEL 1

BASEMENT LEVEL



REVISIONS

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CITY MULTI
SYSTEM SCHEMATIC DWG.

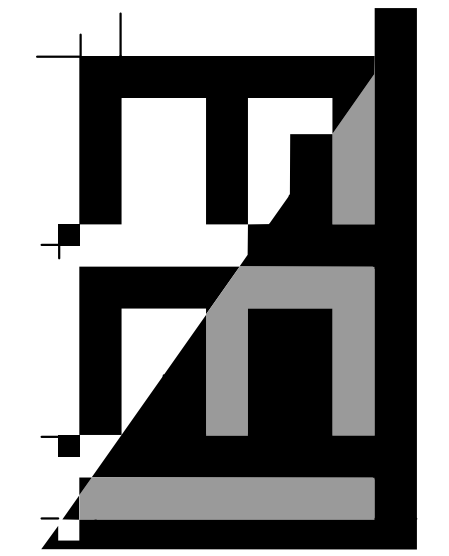
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PIPING AND CONTROLS

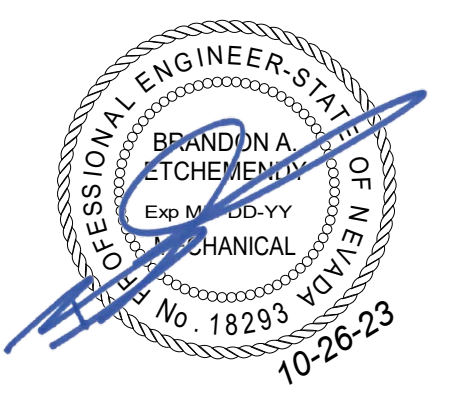
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| 02 | 1/2" |
| 03 | 3/4" |
| 04 | 1" |
| 05 | 1 1/2" |
| 06 | 2" |
| 07 | 2 1/2" |
| 08 | 3" |
| 09 | 3 1/2" |
| 10 | 4" |
| 11 | 4 1/2" |
| 12 | 5" |
| 13 | 6" |
| 14 | 8" |
| 15 | 10" |
| 16 | 12" |
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| 21 | 24" |
| 22 | 30" |
| 23 | 36" |
| 24 | 42" |
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| 27 | 60" |
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| 31 | 108" |
| 32 | 120" |
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| 34 | 168" |
| 35 | 192" |
| 36 | 216" |
| 37 | 240" |
| 38 | 270" |
| 39 | 300" |
| 40 | 360" |
| 41 | 420" |
| 42 | 480" |
| 43 | 540" |
| 44 | 600" |
| 45 | 660" |
| 46 | 720" |
| 47 | 780" |
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| 52 | 1080" |
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SHEET NOTES:

1. ALL EXPOSED PIPING OR CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING AND CONDUIT ROUTED IN BASEMENT TO BE PAINTED TO MATCH (E) PIPING IN BASEMENT
3. ALL EXPOSED INSULATED PIPING TO BE COATED WITH ARMAFLEX WB FINISH AND TINTED TO MATCH (E) PIPING IN BASEMENT
4. ALL EXPOSED ELECTRICAL CONDUIT POWER TO BE ROUTED ALONG SIDE REFRIGERANT PIPING IN BASEMENT. ALL CONTROL WIRING TO BE COMPLETELY CONCEALED FROM OCCUPANT VIEW OR TO BE ROUTED IN CONDUIT PIPE ALONG SIDE REFRIGERANT PIPE.
5. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTICALLY ON WALL IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR
6. ON LEVEL 1 & 2, ALL PIPING, CONTROL WIRING AND CONDUIT ON WALL TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 4MS.1 AND PAINTED TO MATCH (E) WALL COLOR
7. ON LEVEL 2, ALL HORIZONTALLY ROUTED PIPING, CONTROL WIRING AND CONDUIT TO BE ROUTED ABOVE CEILING.



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ETCHEMENDY@EEI.COM



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INDEPENDENCE, CA 95526

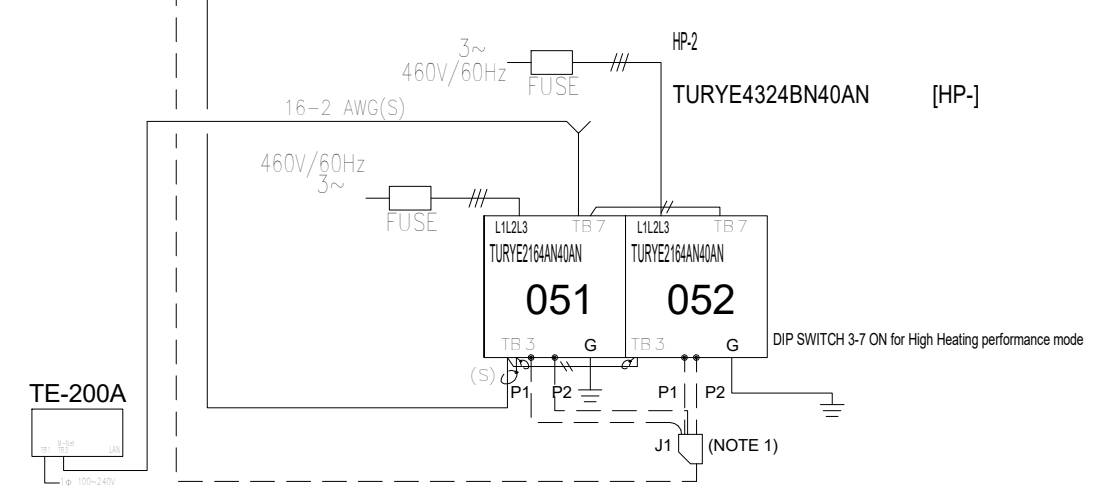
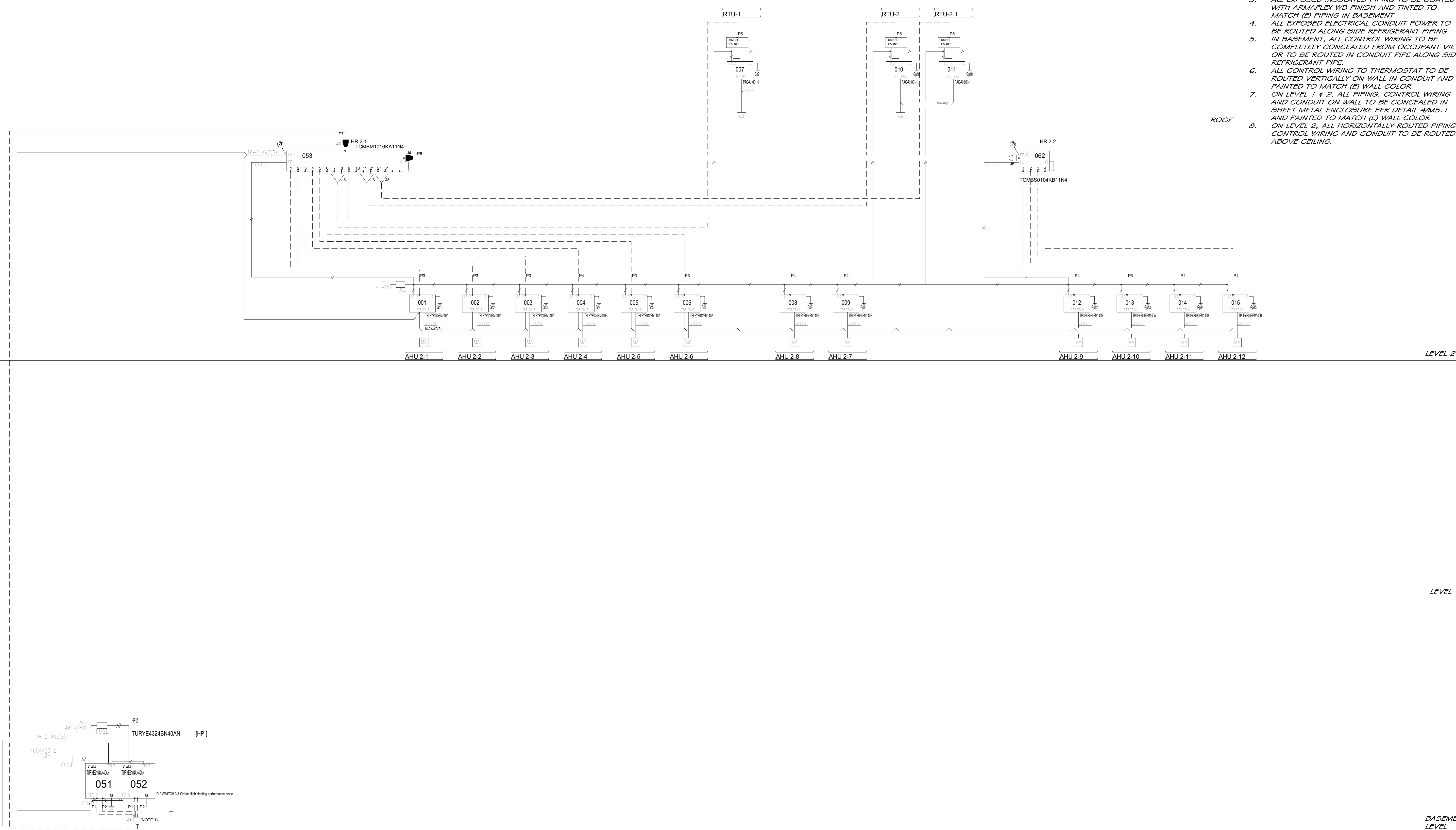
REVISIONS

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DRAWING TITLE
MECHANICAL PIPING & WIRING DIAGRAM

date: **10-26-23**
job number: **22129**
drawn: **SME**
checked: **BAE**

M5.4



CITY MULTI
SYSTEM SCHEMATIC DWG.

| SYMBOL | SYMBOL Legend | CONVING | PAGE |
|--------|---------------|---------|------|
| --- | POWER WIRE | | |
| --- | CONTROL WIRE | | |
| --- | REF. PIPE | | |

PIPING AND CONTROLS

SYMBOL DESCRIPTION

J1 CMV-R200NCBK
J2 CMV-R20AS-G1
J3 CMV-R160-J1
J4 CMV-R20SS-G1
J5 CMV-R20SS-G

SYMBOL LIQUID PRESSURE SIZE

P1 7/8"
P2 1 1/8"
P3 1 1/2"
P4 1 3/8"
P5 1 1/2"
P6 1 1/2"
P7 1 1/2"
P8 1 1/2"
P9 1 1/2"
P10 1 1/2"

This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record. Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned in the data book.
1.25mm(1/2" AWC) + 1.25mm(1/2" AWC) or
min. 0.75mm(3/32" AWC) - between 1.5mm(1/16" AWC) and 0.75mm(3/32" AWC)

Notes:
NOTE 1: Install hangers 1/4" within 15 degrees of level and with 20 inches of straight pipe on converging connection - reference installation manual for additional details including, but not limited to special hanger requirements when hangers and pipe slope requirements.

BASEMENT LEVEL

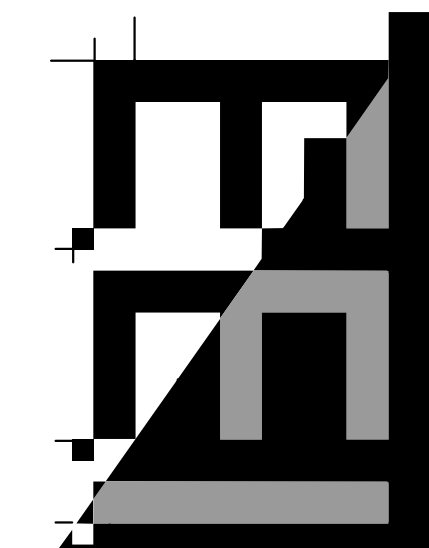
LEVEL 1

LEVEL 2

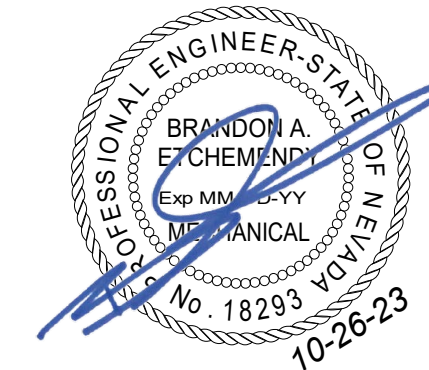
ROOF

SHEET NOTES:

1. ALL EXPOSED PIPING OR CONDUIT ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING AND CONDUIT ROUTED IN BASEMENT TO BE PAINTED TO MATCH (E) PIPING IN BASEMENT
3. ALL EXPOSED INSULATED PIPING TO BE COATED WITH ARMAFLEX WB FINISH AND TINTED TO MATCH (E) PIPING IN BASEMENT
4. ALL EXPOSED ELECTRICAL CONDUIT POWER TO BE ROUTED ALONG SIDE REFRIGERANT PIPING IN BASEMENT. ALL CONTROL WIRING TO BE COMPLETELY CONCEALED FROM OCCUPANT VIEW OR TO BE ROUTED IN CONDUIT PIPE ALONG SIDE REFRIGERANT PIPE.
5. ALL CONTROL WIRING TO THERMOSTAT TO BE ROUTED VERTICALLY ON WALL IN CONDUIT AND PAINTED TO MATCH (E) WALL COLOR
6. ON LEVEL 1 & 2, ALL PIPING, CONTROL WIRING AND CONDUIT ON WALL TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 4MS.1 AND PAINTED TO MATCH (E) WALL COLOR
7. ON LEVEL 2, ALL HORIZONTALLY ROUTED PIPING, CONTROL WIRING AND CONDUIT TO BE ROUTED ABOVE CEILING.



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 INDEPENDENCE, CA 95526

REVISIONS

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DRAWING TITLE
MECHANICAL PIPING & WIRING DIAGRAM

date: **10-26-23**
 job number: **22129**
 drawn: **SME**
 checked: **BAE**

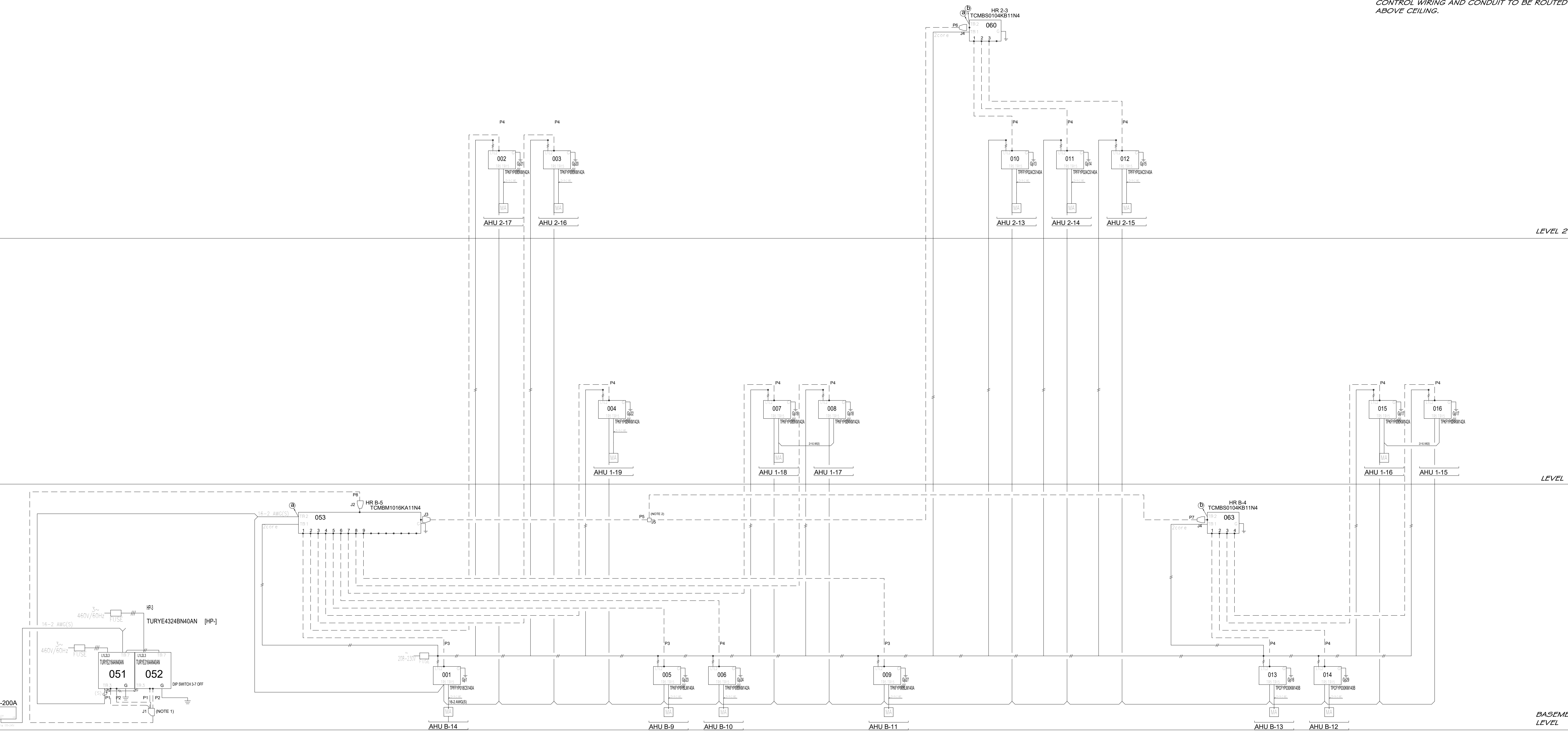
M5.5

ROOF

LEVEL 2

LEVEL 1

BASEMENT LEVEL



CITY MULTI SYSTEM SCHEMATIC DWG.

| DIAGRAM | SYMBOL | LEGEND | CONTINUED | PAGE |
|---------|--------|--------------|-----------|------|
| — | — | DESCRIPTION | | |
| — | — | POWER WIRE | | |
| — | — | CONTROL WIRE | | |
| — | — | REF. PIPE | | |

PIPING AND CONTROLS

| | |
|----|--------------|
| J1 | CMV-R204S-G1 |
| J2 | CMV-R204S-G1 |
| J3 | CMV-R204S-G1 |
| J4 | CMV-R204S-G1 |
| J5 | CMV-R204S-G1 |

PIPE SIZES

| | |
|-----|------|
| P1 | 1/2" |
| P2 | 1/2" |
| P3 | 1/2" |
| P4 | 3/8" |
| P5 | 3/4" |
| P6 | 1/2" |
| P7 | 1/2" |
| P8 | 1/2" |
| P9 | 1/2" |
| P10 | 1/2" |

SYMBOL MODE NUMBER

| | |
|----|----------|
| MA | PR-204AU |
| MB | PR-204AU |

This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record. Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer to the amount of pre-charge and the formula of calculation which is mentioned in the data book.
 1.25mm (1/20") (1.25mm (1/20") or 0.75mm (3/64") between 0.5mm (1/64") and 0.75mm (3/64").

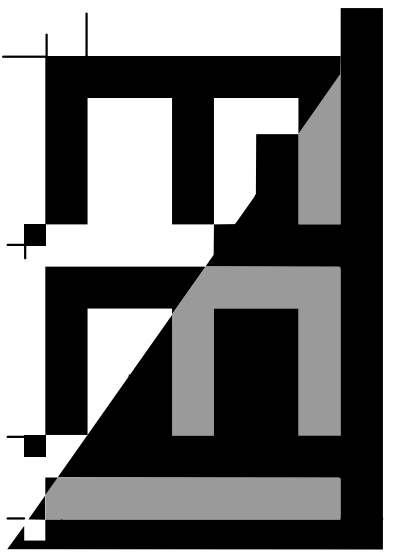
Notes:
 NOTE 1: Install tubing 1" within 15 degrees of level and with 20 inches of straight pipe on charging connector, reference installation manual for additional details including but not limited to special trapping requirements when leveling, and pipe slope requirements.
 NOTE 2: All the joints in Sub-BC connections must be installed on or near the high liquid line that are running in the horizontal plane. All branch connections to Sub-BC must connect vertically to the main line work, except horizontal connections - reference installation manual for additional details.

SHEET NOTES:

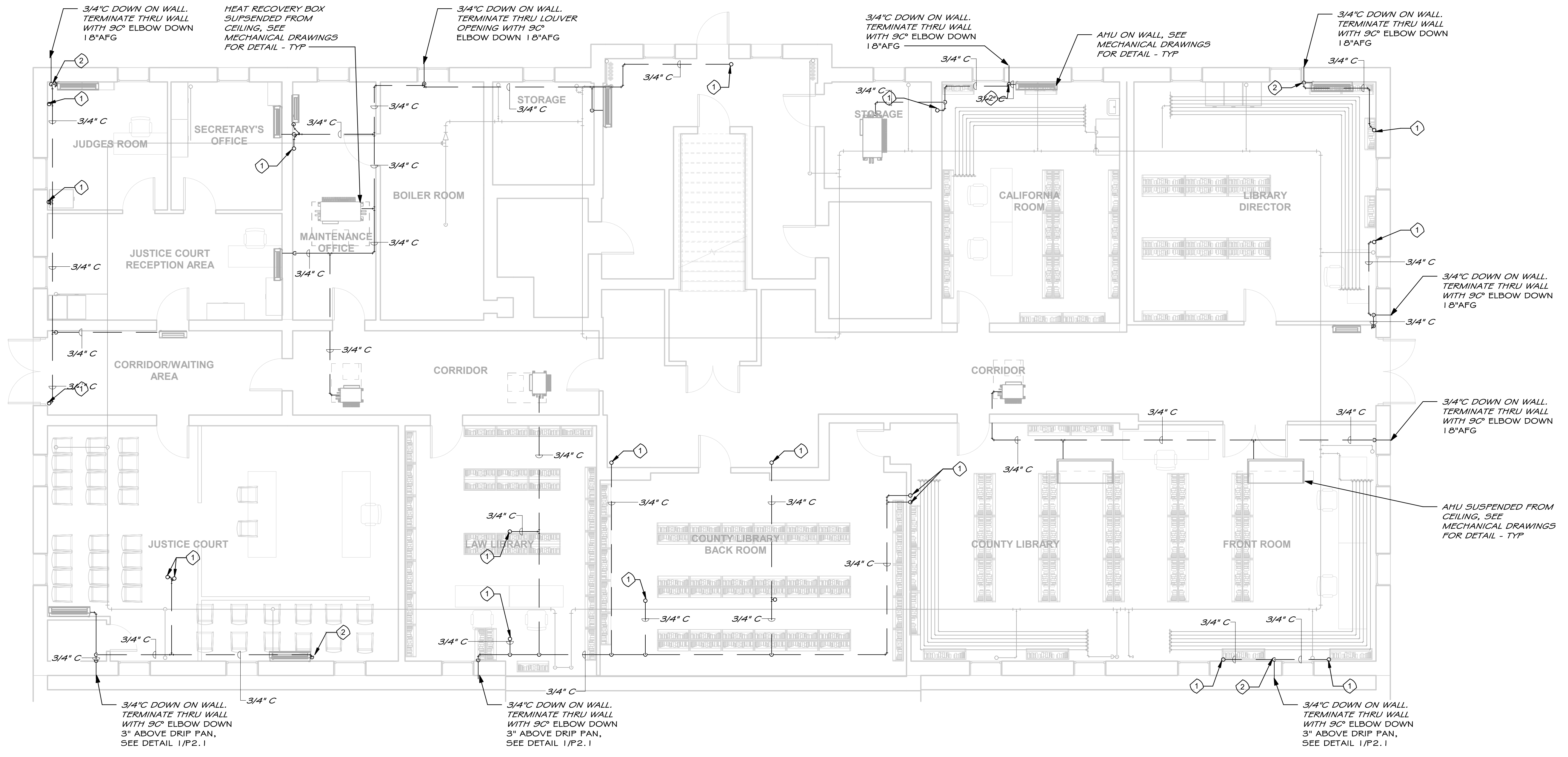
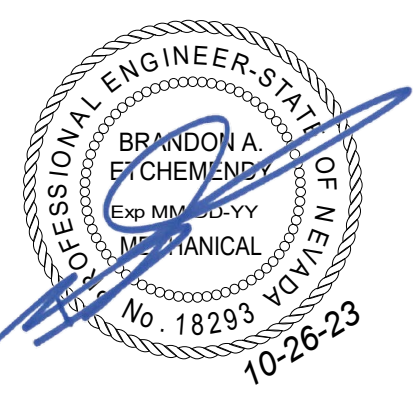
1. ALL EXPOSED PIPING ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING ROUTED IN BASEMENT TO BE PAINTED TO MATCH (E) PIPING IN BASEMENT
3. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORCEMENTS
4. CONDENSATE PIPING IN BASEMENT TO BE ROUTED AS HIGH AS POSSIBLE AND SLOPED AT 1%
5. SEE DETAIL 5/M5.2 FOR CONDENSATE PIPING INSTALL REQUIREMENTS FOR UNITS MOUNTED ON THE WALL
6. SEE DETAIL 7/M5.2 FOR CONDENSATE PIPING INSTALL REQUIREMENTS FOR UNITS SUSPENDED FROM THE CEILING

KEYED NOTES:

- ① 3/4" C DOWN THRU FLOOR AND ROUTED BELOW CEILING, SEE DETAIL 2/P2.1
- ② 3/4" C FROM AHU DOWN ON WALL



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DRAWING TITLE

BASEMENT LEVEL PLUMBING PLAN

| | |
|------------|----------|
| date | 10-26-23 |
| job number | 22129 |
| drawn | SME |
| checked | BAE |

PI.1

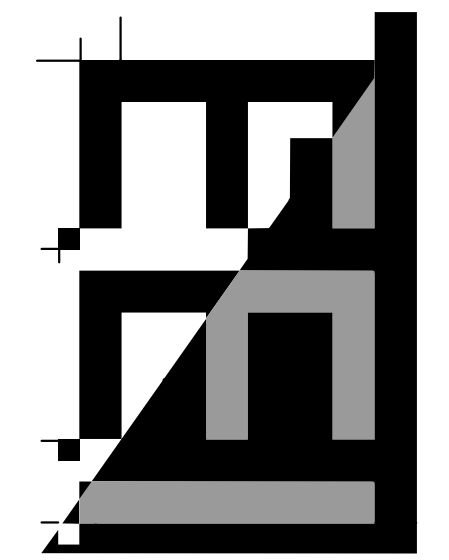
BASEMENT LEVEL PLUMBING PLAN
 SCALE: 3/16" = 1'-0"

SHEET NOTES:

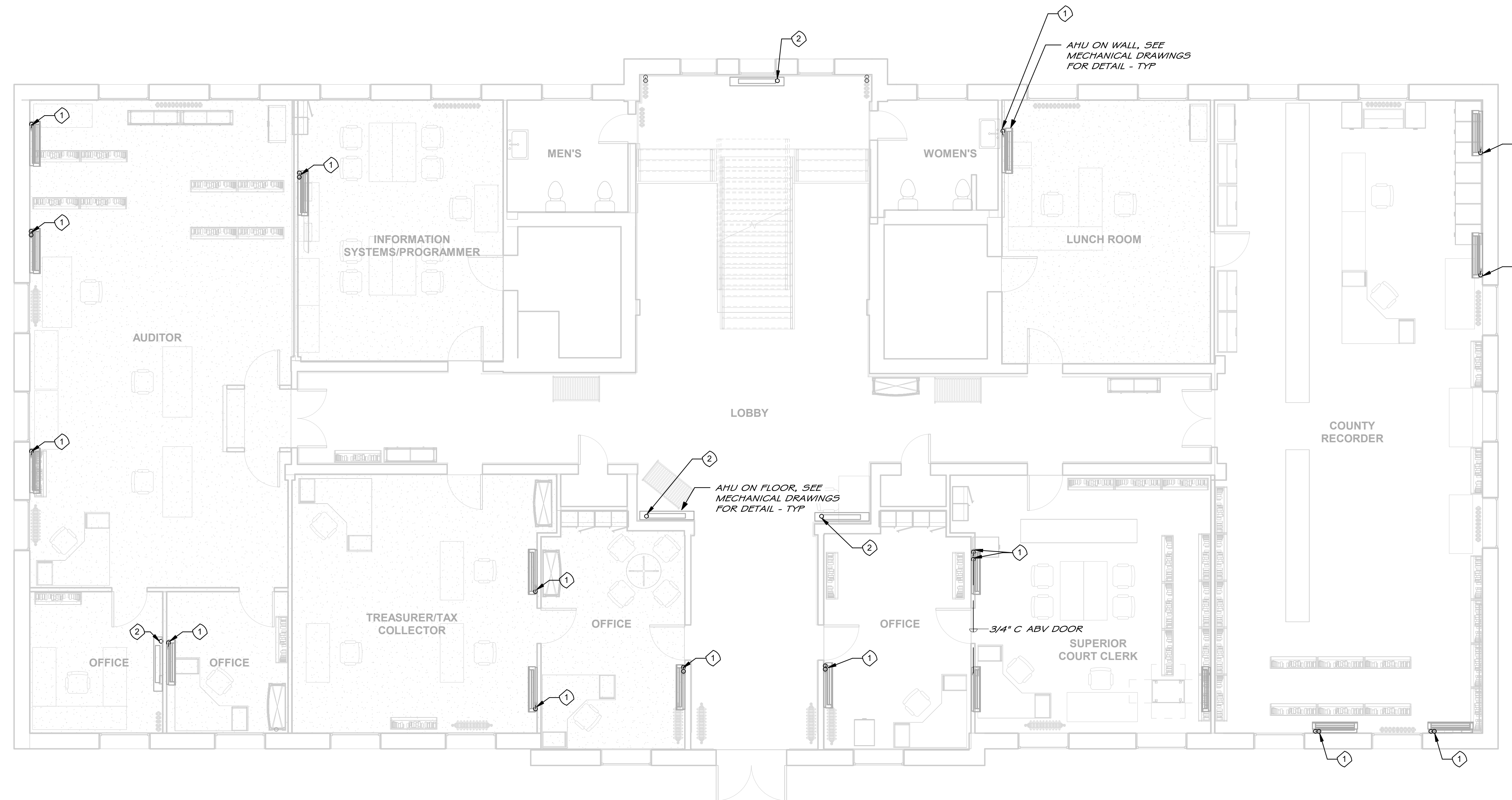
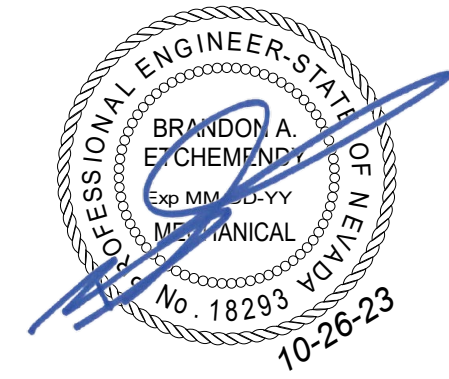
1. ALL EXPOSED PIPING TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 3/P2.1 AND PAINTED TO MATCH (E) WALL COLOR.
2. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORMENTS
3. CONDENSATE PIPING TO BE ROUTED IN SHEET METAL ENCLOSURE TO BASEMENT LEVEL BELOW, SEE DETAIL 6/M5.2

KEYED NOTES:

- ① 3/4" C DOWN ON WALL THRU FLOOR TO CEILING BELOW, SEE DETAIL 3/P2.1
- ② 3/4" C FROM AHU DOWN THRU FLOOR TO CEILING BELOW



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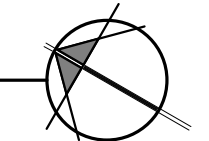
| REVISIONS |
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DRAWING TITLE
LEVEL 1 PLUMBING PLAN

| | |
|------------|----------|
| date | 10-26-23 |
| job number | 22129 |
| drawn | SME |
| checked | BAE |

PI.2

LEVEL 1 PLUMBING PLAN
SCALE: 3/16" = 1'-0"

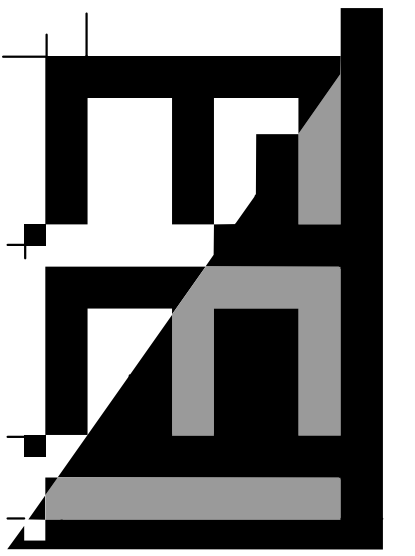


SHEET NOTES:

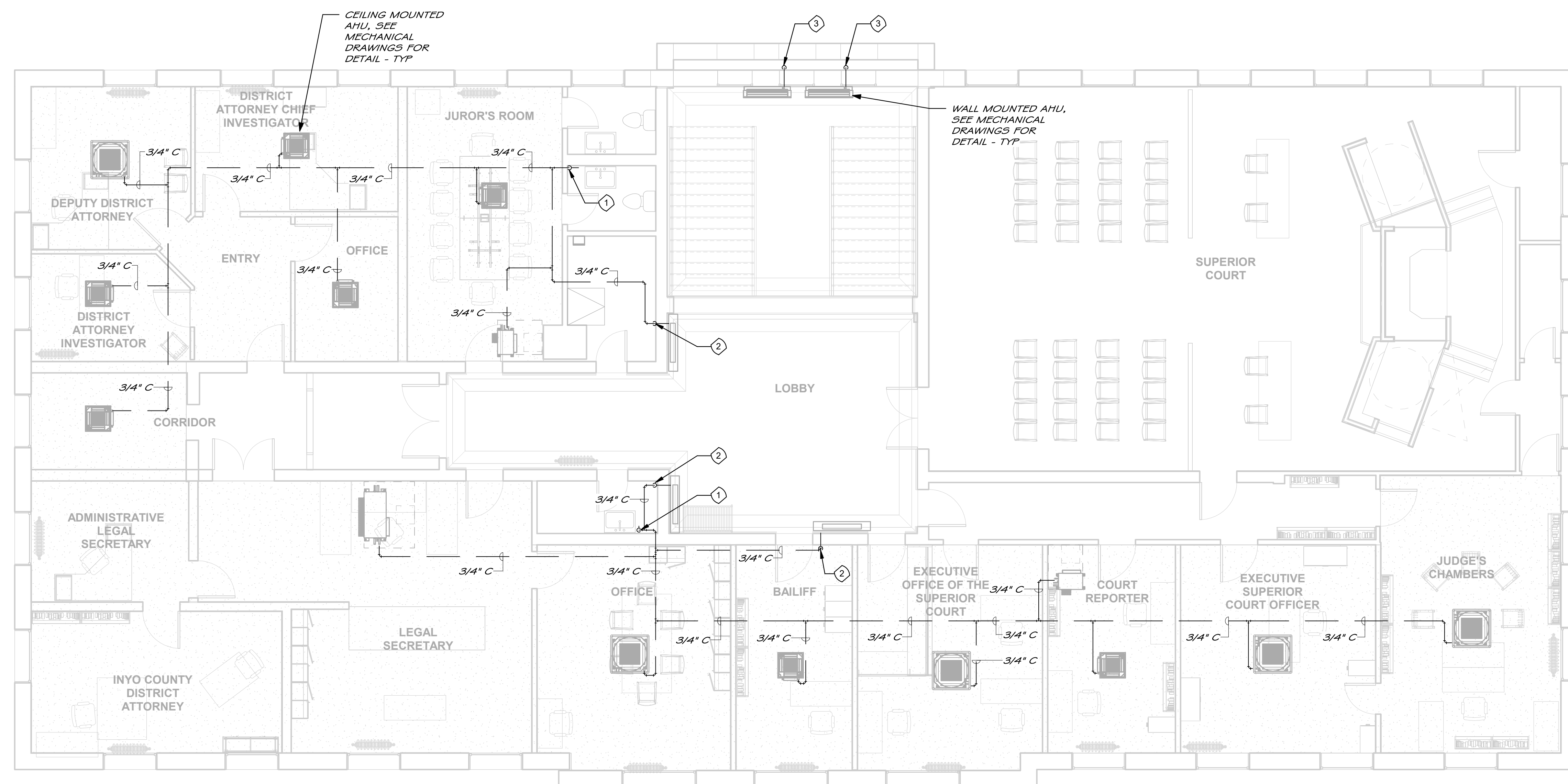
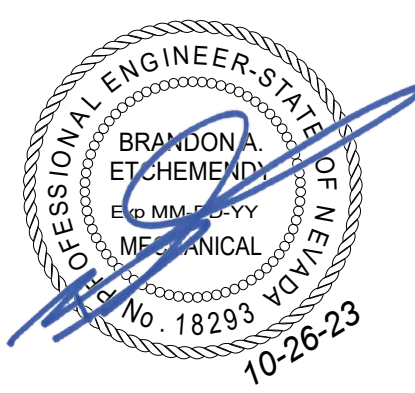
1. ALL EXPOSED PIPING ON EXTERIOR OF THE BUILDING TO BE PAINTED TO MATCH THE (E) BUILDING COLOR
2. ALL EXPOSED PIPING TO BE CONCEALED IN SHEET METAL ENCLOSURE PER DETAIL 3/P2.1 & PAINTED TO MATCH (E) WALL COLOR
3. XRAY EXISTING CONCRETE PRIOR TO ANY CORING OR CUTTING TO AVOID STRUCTURAL REINFORCEMENTS
4. CONDENSATE PUMPS SHALL BE ABOVE CEILING IN ACCESSIBLE LOCATION
5. CONDENSATE PIPING ABOVE CEILING SHALL BE SLOPED AT 1%

KEYED NOTES:

- ① 3/4" C DOWN ON WALL AND TERMINATED AT LAV TAILPIECE
- ② 3/4" C UP ON WALL AND ROUTED ABOVE CEILING
- ③ 3/4" C THRU WALL AND TERMINATED ON LOW ROOF WITH 90° ELBOW DOWN



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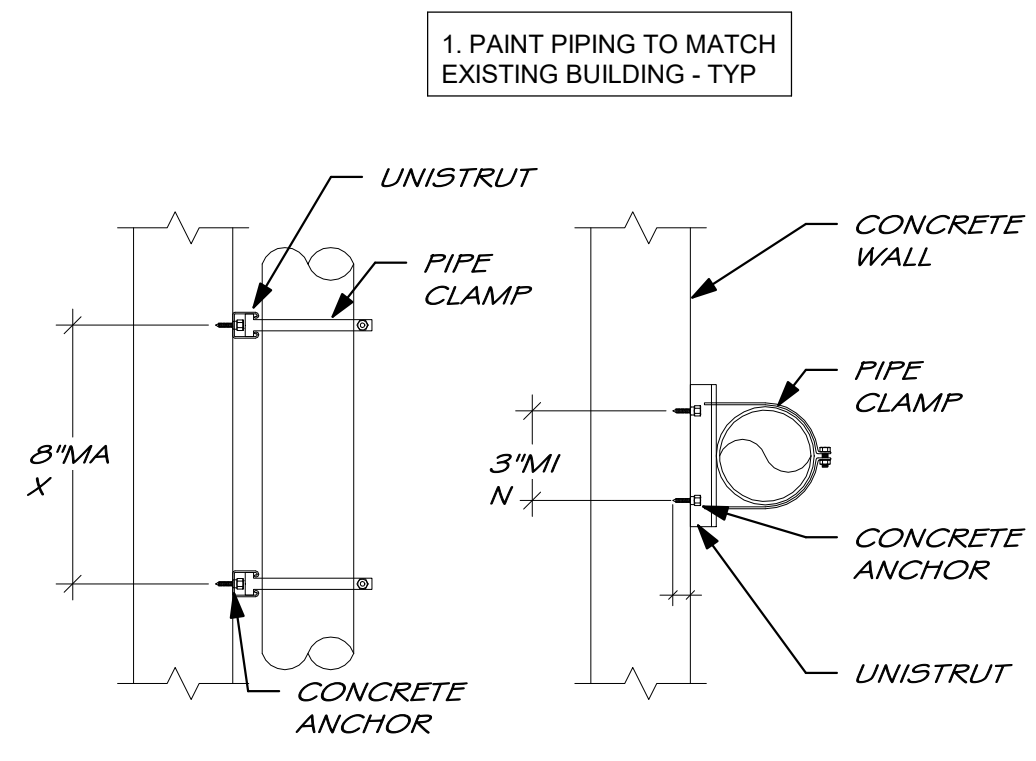
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DRAWING TITLE
**LEVEL 2
 PLUMBING PLAN**

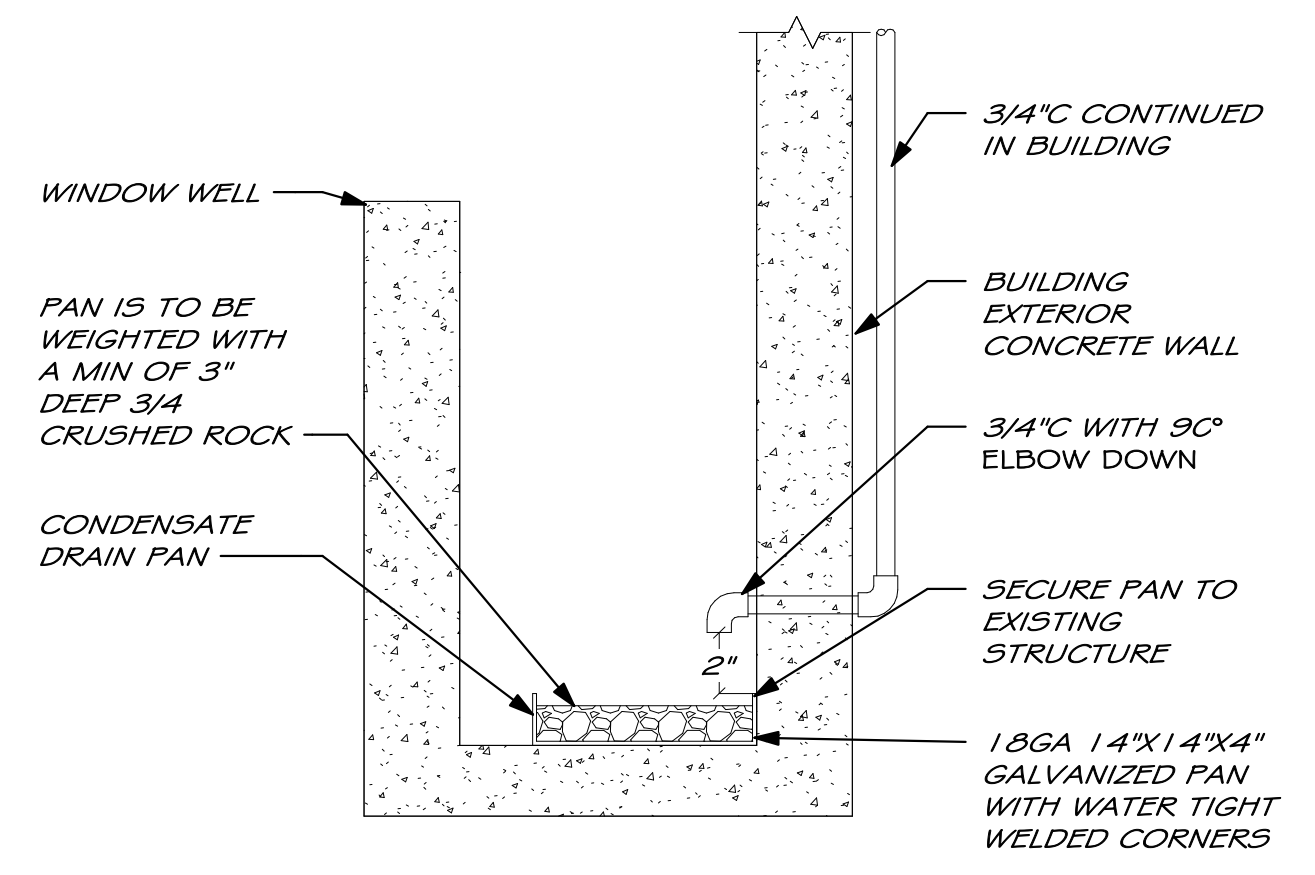
date: 10-26-23
 job number: 22129
 drawn: SME
 checked: BAE

P1.3

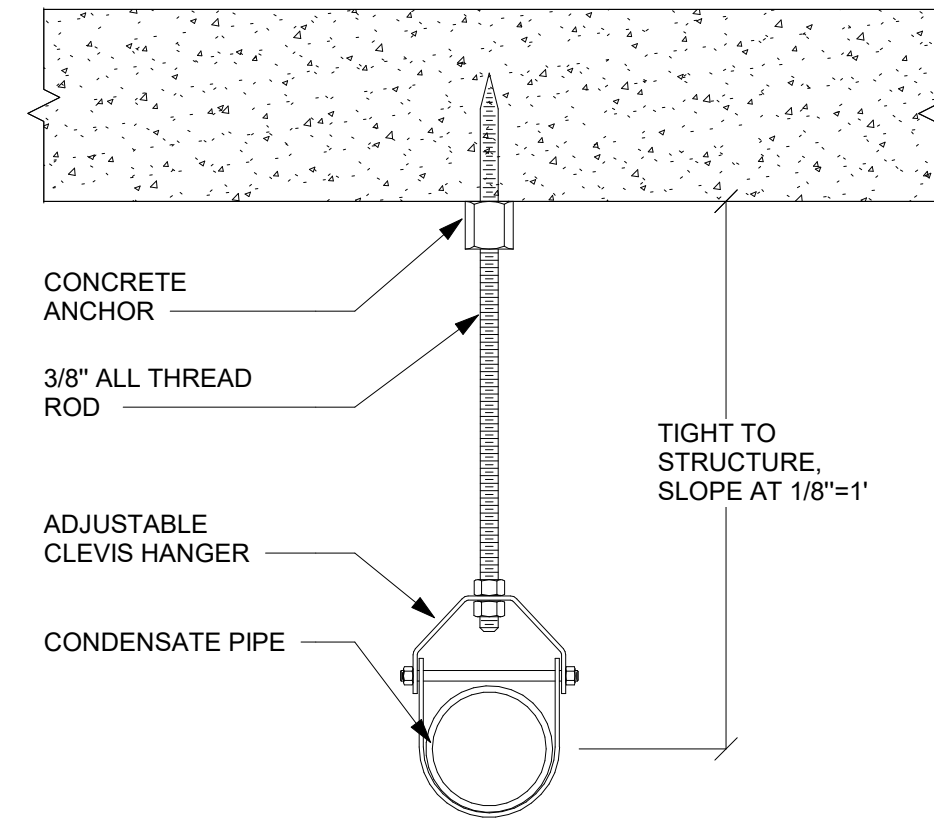
LEVEL 2 PLUMBING PLAN
 SCALE: 3/16" = 1'-0"



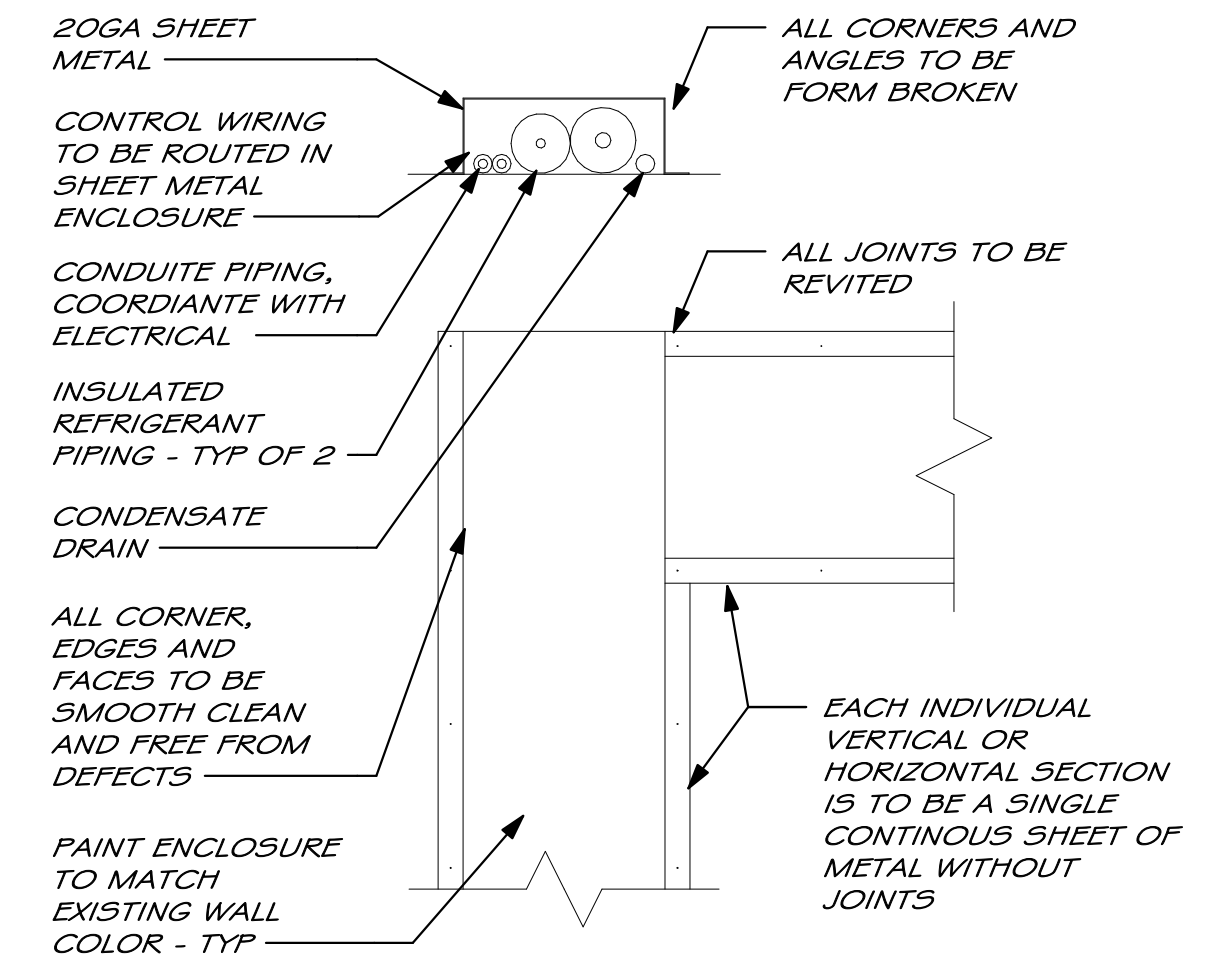
PIPING WALL SUPPORT DETAIL
SCALE: NOT TO SCALE



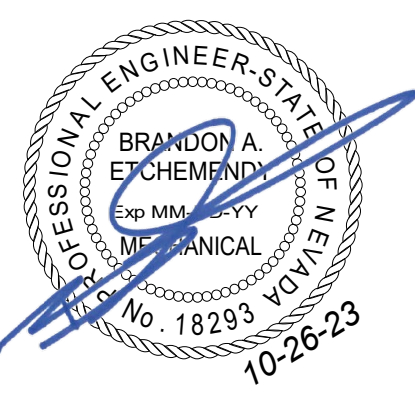
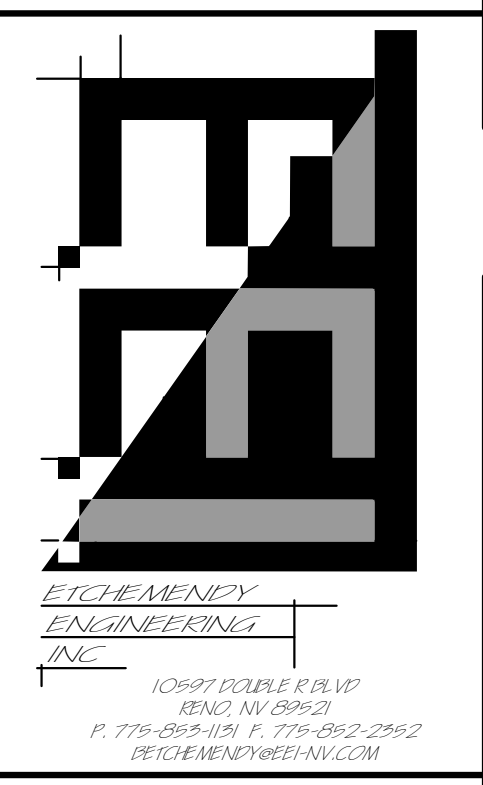
CONDENSATE TO DRAIN PAN
SCALE: NOT TO SCALE



PIPE HANGER - SINGLE MOUNTING DETAIL
SCALE: NOT TO SCALE



4111 SHEET METAL ENCLOSURE
SCALE: NOT TO SCALE



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DRAWING TITLE
PLUMBING DETAILS

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| date | 10-26-23 |
| job number | 22129 |
| drawn | SME |
| checked | BAE |

P2.1

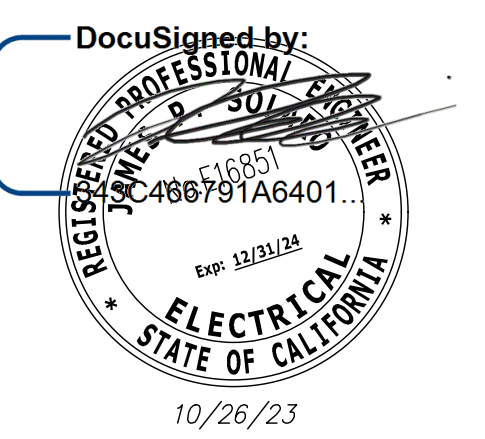
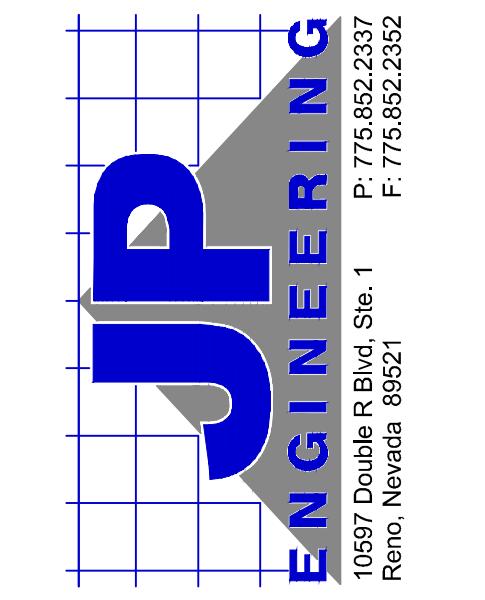
SPECIFICATIONS

Table with 2 columns: ITEM, DESCRIPTION. Contains 16.1 to 16.30 specifications for electrical work, including standards, installation, permits, drawings, and equipment requirements.

NOTE: THIS IS A MASTER SYMBOL LIST, ALL SYMBOLS SHOWN MAY NOT BE USED WITHIN THIS SET OF PLANS

MASTER SYMBOL LIST

Table with 3 columns: SIGNAL OUTLETS, RECEPTACLES, ABBREVIATIONS. Lists various electrical symbols and their corresponding abbreviations and descriptions.



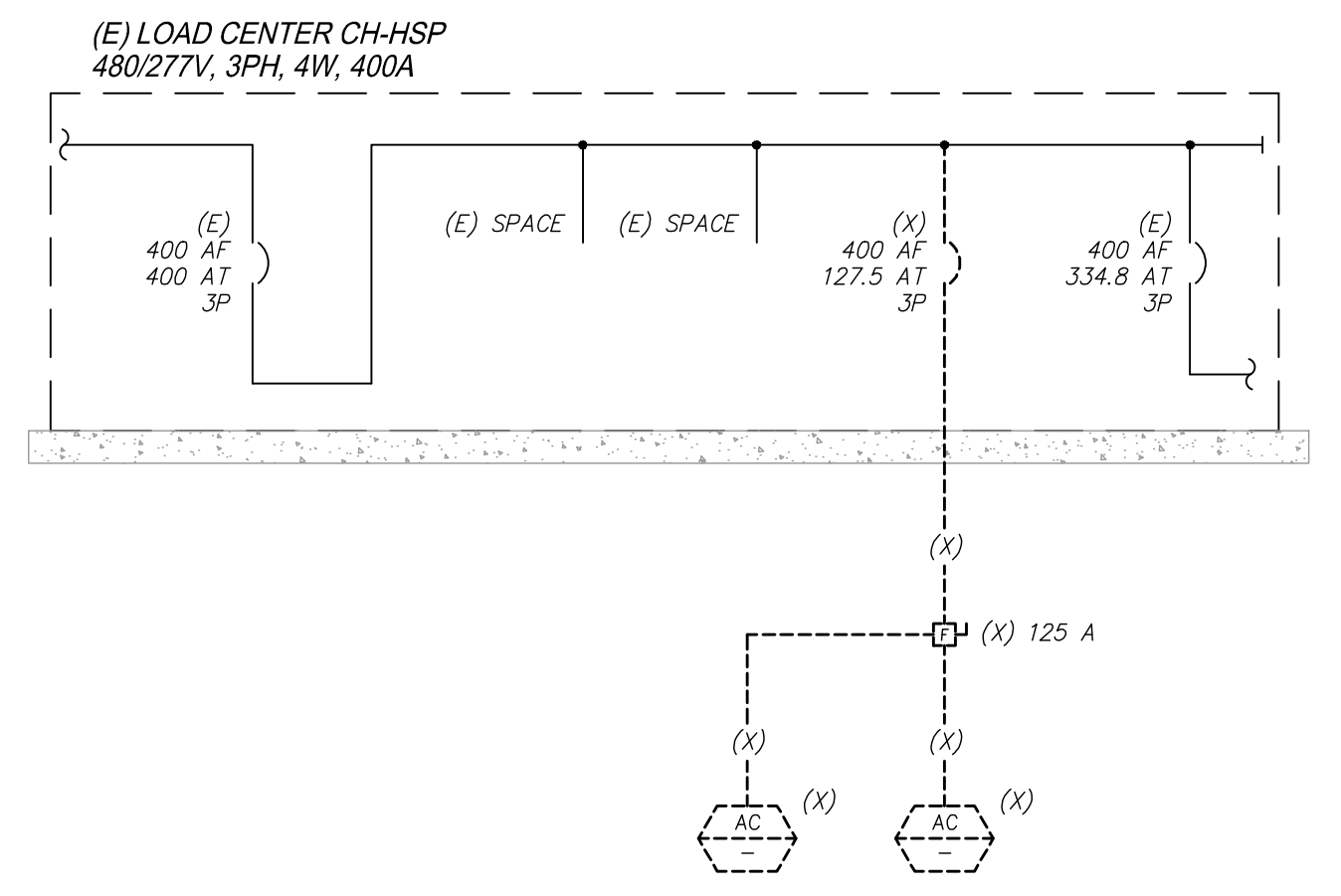
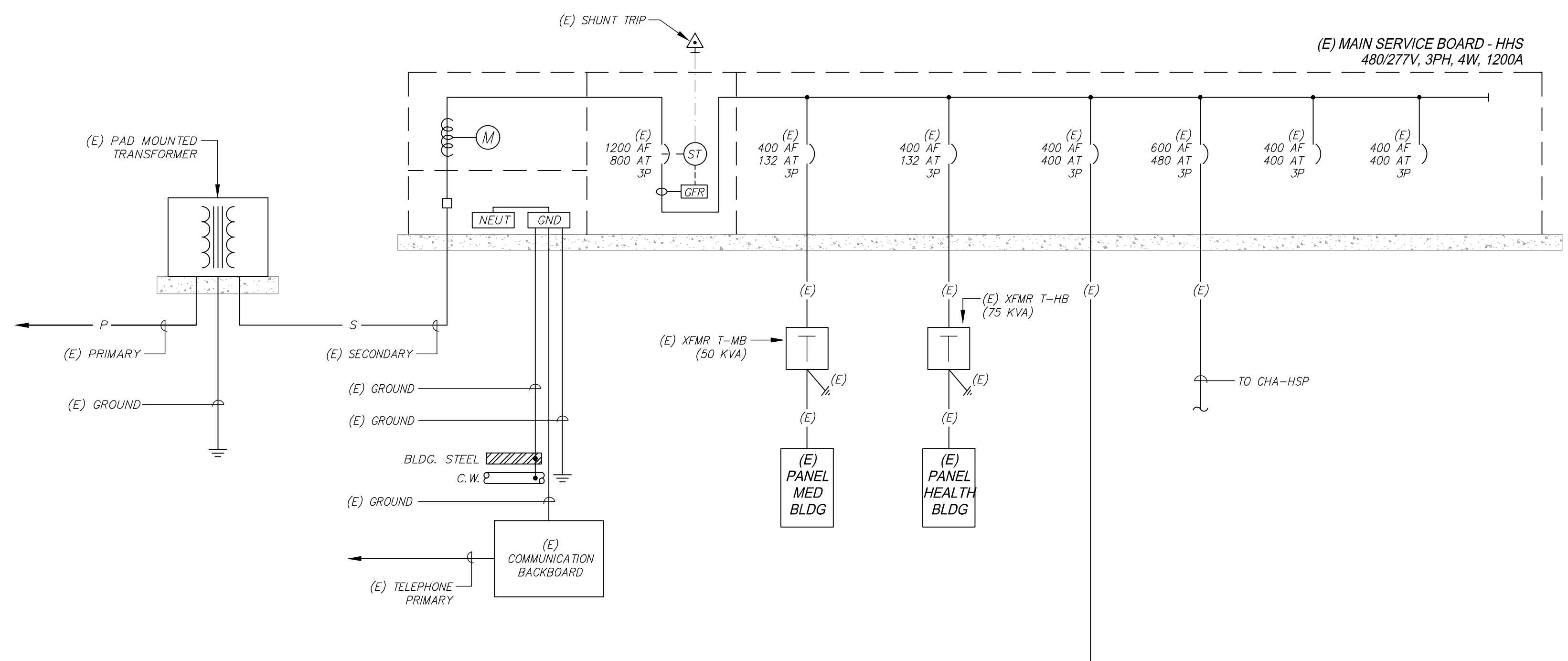
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Table with 2 columns: REVISIONS, with empty rows for recording changes.

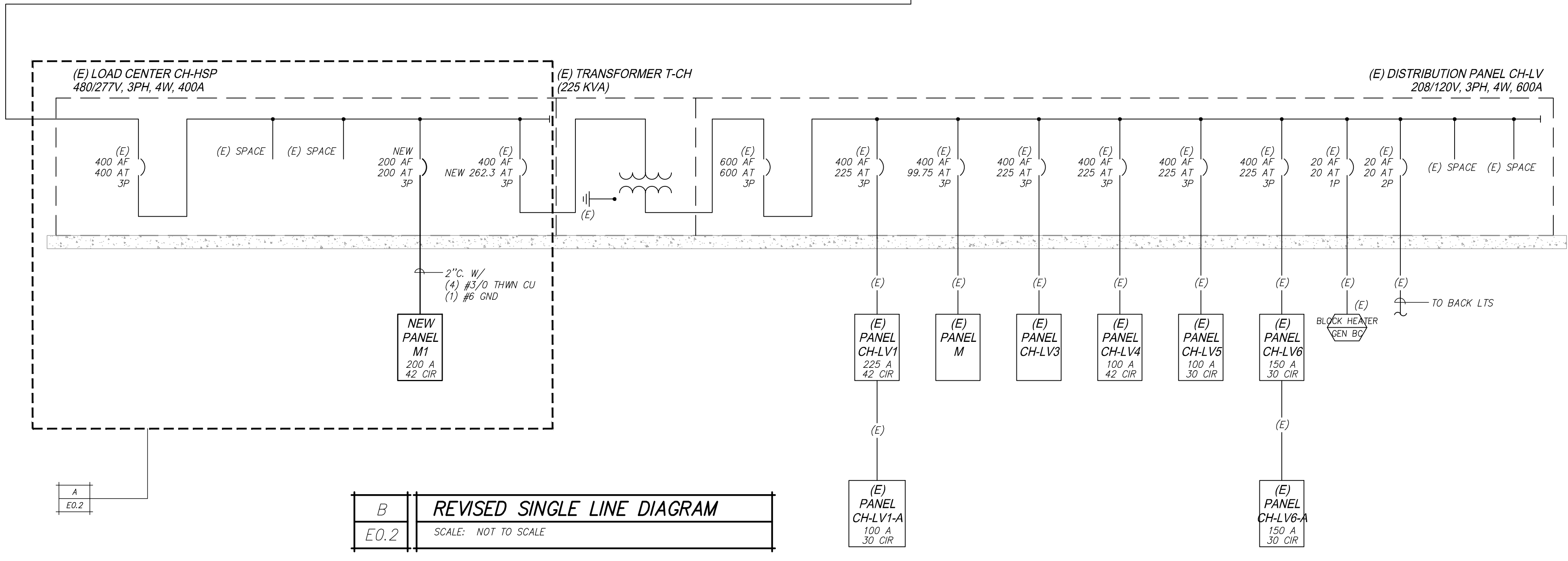
DRAWING TITLE
SYMBOL LIST AND SPECIFICATIONS

date 26 OCTOBER 2023
job number JP# 22184
drawn MT
checked JS

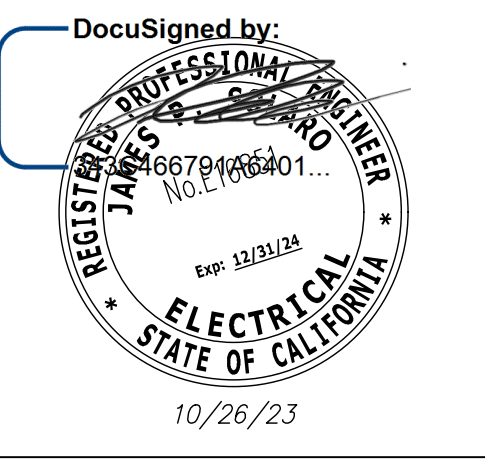
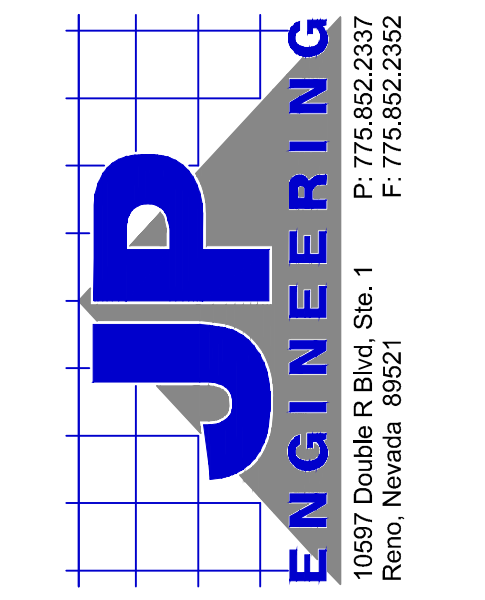
EO.I



| | |
|------|---|
| A | PARTIAL DEMO SINGLE LINE DIAGRAM |
| EO.2 | SCALE: NOT TO SCALE |



| | |
|------|------------------------------------|
| B | REVISED SINGLE LINE DIAGRAM |
| EO.2 | SCALE: NOT TO SCALE |



HVAC RETROFIT

INYO COUNTY COURT HOUSE

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INDEPENDENCE, CA 95526

| REVISIONS |
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DRAWING TITLE

ELECTRICAL SCHEDULES AND DETAILS

date 26 OCTOBER 2023
 job number JP # 22184
 drawn MT
 checked JS

EO.2

| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|---------------------------|--------------|-------------|----------------------------------|-------------------|----------|------|-----------|------|------|---------------|----|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| R | (E) QUAD S WALL RECORD | 1152 | 20/1 | 30 | 2304 | | | 29 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) QUAD S WALL RECORD | 1152 | 20/1 | 28 | | 2304 | | 27 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) DUPLEX W WALL N OFF | 1152 | 20/1 | 26 | | | 2304 | 25 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) QUAD W WALL N OFF | 1152 | 20/1 | 24 | 2304 | | | 23 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) QUAD N WALL N OFF | 1152 | 20/1 | 22 | | 2304 | | 21 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) NE OFF WM RECPT COURT | 996 | 20 | 20 | | | 2150 | 19 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) NE OFF WM RECPT COURT | 996 | 2 | 18 | 2150 | | | 17 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) LUNCH RM RECPT | 1152 | 20/1 | 16 | | 2150 | | 15 | 20 | 996 | EXISTING LOAD | E |
| R | (E) WATER HEATER REC OFF | 1152 | 20/1 | 14 | | | 2150 | 13 | 2 | 996 | | E |
| E | BWH-2 | 1200 | 20/1 | 12 | 1200 | | | 11 | | | | |
| | | | | 10 | | | | 9 | | | | |
| | | | | 8 | | | | 7 | | | | |
| | | | | 6 | 0 | | | 5 | | | | |
| | | | | 4 | | 0 | | 3 | | | | |
| R | (E) QUAD BELOW PANEL | 1152 | 20/1 | 2 | | | 2304 | 1 | 20/1 | 1152 | EXISTING LOAD | R |
| | | | | | 7958 | 6758 | 8908 | | | | | |
| AMPS: | 100 | NEUTRAL BUS: | 100% | CON. KVA: | 23.6 | | | | | | | |
| VOLTAGE: | 208 | GROUND BUS: | STANDARD | CON. AMPS: | 65.6 | | | | | | | |
| PHASE/WIRE: | 3-PH, 4W | AIC RATING: | EXISTING | NET KVA: | 18.4 | | | | | | | |
| MAIN: | | NEMA RATING: | 1 | NET AMPS: | 51.1 | | | | | | | |
| LUGS: | MLO | PANEL: | | Notes: | | | | | | | | |
| MOUNTING: | SURFACE | | | BOLD INDICATES ADDED LOAD | | | | | | | | |
| BUS: | COPPER | | | | | | | | | | | |
| DOOR: | STANDARD | | | | | | | | | | | |
| | | | | | (E) CH-LV5 | | | | | | | |

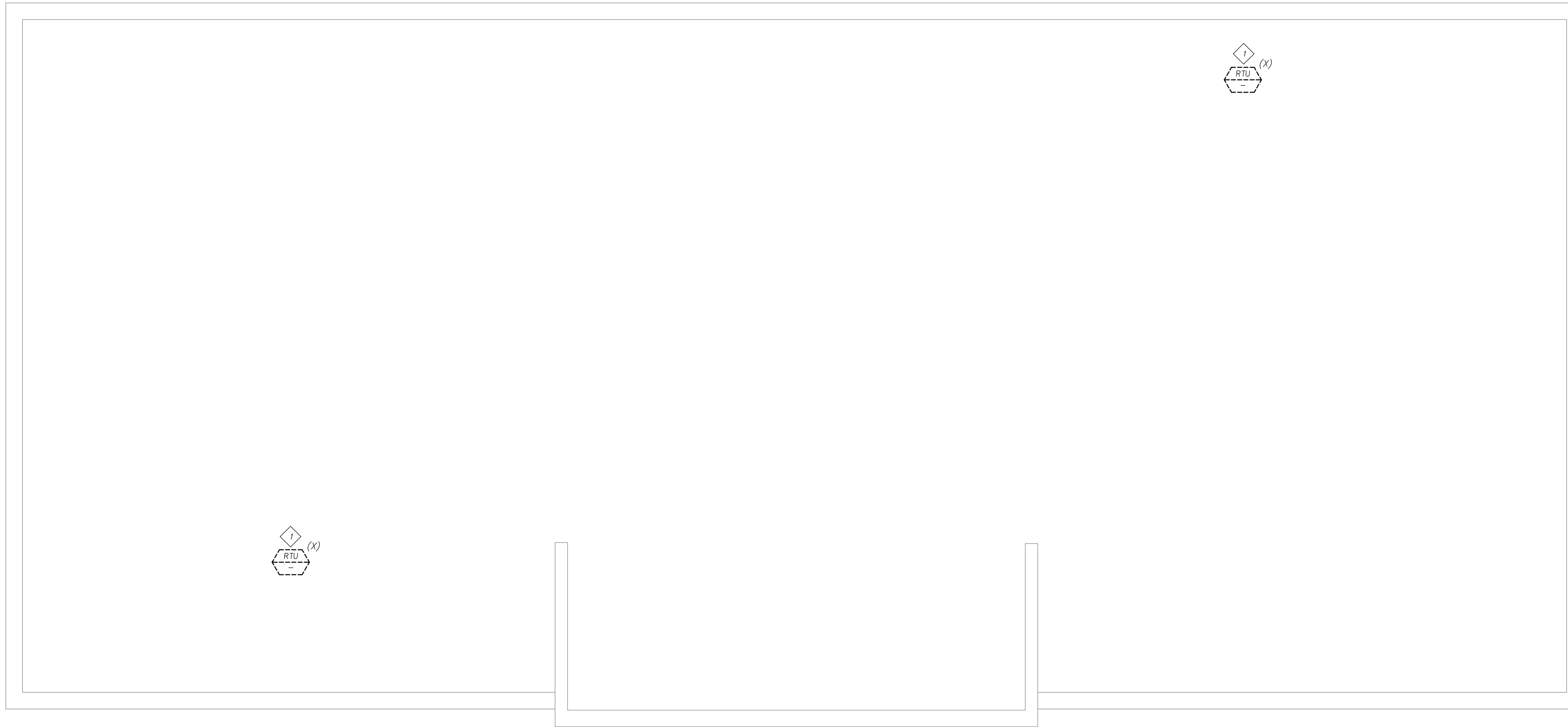
| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|-----------------------|--------------|-----------|----------------------------------|-------------------|-------|-------|-----|-----------|------------|-------------------------|----------|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| R | EXISTING LOAD | 1152 | 20/1 | 1 | 2304 | | | 2 | 20/1 | 1152 | (E) GINNY & RCDR RECPTS | R |
| R | EXISTING LOAD | 1152 | 20/1 | 3 | | 2304 | | 4 | 20/1 | 1152 | (E) COURT OFF RECPTS | R |
| R | EXISTING LOAD | 1152 | 20/1 | 5 | | | 2304 | 6 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) DA RECPTS | 1152 | 20/1 | 7 | 2304 | | | 8 | 20/1 | 1152 | (E) DA | R |
| R | EXISTING LOAD | 1152 | 20/1 | 9 | | 2304 | | 10 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 11 | | | 2304 | 12 | 20/1 | 1152 | (E) COURT RM LTS | L |
| L | (E) DA LTS | 1152 | 20/1 | 13 | 2304 | | | 14 | 20/1 | 1152 | (E) DA LTS - JURY BOX | L |
| R | (E) CHILD SUPPORT | 1152 | 20/1 | 15 | | 2304 | | 16 | 20/1 | 1152 | (E) DA LTS RECEPTION | L |
| R | EXISTING LOAD | 1152 | 20/1 | 17 | | | 2304 | 18 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 19 | 2304 | | | 20 | 20/1 | 1152 | (E) JURY RM LTS | L |
| E | | 7733 | 70 | 21 | | 8885 | | 22 | 20/1 | 1152 | (E) EXISTING LOAD | R |
| E | (E) PANEL CH-LV-6A | 7733 | - | 23 | | | 8885 | 24 | 20/1 | 1152 | (E) WATER COOLER | E |
| E | | 7733 | 3 | 25 | 8885 | | | 26 | 20/1 | 1152 | (E) COURT RM RECPTS | R |
| E | AHUS 2ND LEVEL | 727 | 20 | 27 | | 1726 | | 28 | 30 | 999 | HP-4/AHU-20 | H |
| E | | 727 | 2 | 29 | | | 1726 | 30 | 2 | 999 | | H |
| | | | | | 18101 | 17523 | 17523 | | | | | |
| AMPS: | 150 | NEUTRAL BUS: | 100% | CON. KVA: | 53.1 | | | | | | | |
| VOLTAGE: | 208 | GROUND BUS: | STANDARD | CON. AMPS: | 147.5 | | | | | | | |
| PHASE/WIRE: | 3-PH, 4W | AIC RATING: | EXISTING | NET KVA: | 48.4 | | | | | | | |
| MAIN: | | NEMA RATING: | 1 | NET AMPS: | 134.2 | | | | | | | |
| LUGS: | MLO | PANEL: | | Notes: | | | | | | | | |
| MOUNTING: | SURFACE | | | BOLD INDICATES ADDED LOAD | | | | | | | | |
| BUS: | COPPER | | | | | | | | | | | |
| DOOR: | STANDARD | | | | | | | | | | | |
| | | | | | (E) CH-LV6 | | | | | | | |

| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|-----------------------|--------------|-------------|--------------------------------------|--------------------|------------|----------|-----------|-------------|------------|-----------------------|----------|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| R | EXISTING LOAD | 1152 | 20/1 | 1 | 2304 | | | 2 | 20/1 | 1152 | (E) GAILS AC | E |
| R | EXISTING LOAD | 1152 | 20/1 | 3 | | 2304 | | 4 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 5 | | | 2304 | 6 | 20/1 | 1152 | (E) GINNY S AC | E |
| R | EXISTING LOAD | 1152 | 20/1 | 7 | 2304 | | | 8 | 20/1 | 1152 | (E) RECORDERS AC | E |
| R | EXISTING LOAD | 1152 | 20/1 | 9 | | 2304 | | 10 | 20/1 | 1152 | (E) DA CONT AC | E |
| R | EXISTING LOAD | 1152 | 20/1 | 11 | | | 2304 | 12 | 20/1 | 1152 | (E) JUDGES AC | E |
| R | EXISTING LOAD | 996 | 20 | 13 | 2150 | | | 14 | 20/1 | 1152 | (E) CLAUDIAS AC | E |
| R | EXISTING LOAD | 996 | 2 | 15 | | 2150 | | 16 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 17 | | | 2304 | 18 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) JUDGES PRINTER | 1152 | 20/1 | 19 | 2304 | | | 20 | 20/1 | 1152 | (E) GINNY S RECPT | R |
| R | EXISTING LOAD | 1152 | 20/1 | 21 | | 2304 | | 22 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) GAILS COPIER | 1152 | 20/1 | 23 | | | 1512 | 24 | 20/1 | 360 | RTU RECEPTS | R |
| E | LEV CONTROLS * | 500 | 20/1 | 25 | 1000 | | | 26 | 20/1 | 500 | LEV CONTROLS * | E |
| | | | | 27 | | 500 | | 28 | 20/1 | 500 | LEV CONTROLS * | E |
| | | | | 29 | | | 0 | 30 | | | | |
| | | | | | 10062 | 9562 | 8424 | | | | | |
| AMPS: | 100 | NEUTRAL BUS: | 100% | CON. KVA: | 28.0 | | | | | | | |
| VOLTAGE: | 208 | GROUND BUS: | STANDARD | CON. AMPS: | 77.9 | | | | | | | |
| PHASE/WIRE: | 3-PH, 4W | AIC RATING: | EXISTING | NET KVA: | 23.2 | | | | | | | |
| MAIN: | | NEMA RATING: | 1 | NET AMPS: | 64.5 | | | | | | | |
| LUGS: | MLO | PANEL: | | Notes: | | | | | | | | |
| MOUNTING: | SURFACE | | | BOLD INDICATES ADDED LOAD | | | | | | | | |
| BUS: | COPPER | | | *= PROVIDE GFCI TYPE CIRCUIT BREAKER | | | | | | | | |
| DOOR: | STANDARD | | | | | | | | | | | |
| | | | | | (E) CH-LV6A | | | | | | | |

| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|--------------------------|--------------|-------------|----------------------------------|-------------------|-------|-------|-----|-----------|-------------|-------------------------|----------|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| R | EXISTING LOAD | 1152 | 20/1 | 41 | | | 2304 | 42 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 40 | | 2304 | | 39 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 996 | 20 | 38 | | | 2150 | 37 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 996 | 2 | 36 | 2150 | | | 35 | 20/1 | 1152 | EXISTING LOAD | R |
| R | (E) SPACE | | | 34 | | 1152 | | 33 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 32 | | | 2304 | 31 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 30 | 2304 | | | 29 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 28 | | 2304 | | 27 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 26 | | | 2304 | 25 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 24 | 1152 | | | 23 | | | (E) SPACE | |
| R | (E) J-BOX E WALL AUD OFF | 1152 | 20/1 | 22 | | 2304 | | 21 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 20 | | | 2304 | 19 | 20/1 | 1152 | EXISTING LOAD | R |
| R | EXISTING LOAD | 1152 | 20/1 | 18 | 1152 | | | 17 | | | (E) SPACE | |
| R | EXISTING LOAD | 1152 | 20/1 | 16 | | 2304 | | 15 | 20/1 | 1152 | (E) RECPT, AUD OFF | R |
| R | EXISTING LOAD | 1728 | 30/1 | 14 | | | 3226 | 13 | 30 | 1496 | (E) PANEL M - MECH RM | E |
| R | EXISTING LOAD | 1152 | 20/1 | 12 | 2650 | | | 11 | 2 | 1496 | | E |
| R | EXISTING LOAD | 1152 | 20/1 | 10 | | 2261 | | 9 | 20 | 1109 | AHU'S SOUTH/MAIN | E |
| E | AHU'S NORTH | 927 | 20 | 8 | | | 2036 | 7 | 2 | 1109 | | E |
| E | 927 | 2 | 6 | 927 | | | | 5 | | | (E) SPACE | |
| R | EXTERIOR GFCI | 540 | 20/1 | 4 | | 8860 | | 3 | 125 | 8320 | (E) PANEL CH-LV1-A | E |
| (E) SPACE | | | | 2 | | | | 1 | 2 | 8320 | | E |
| | | | | | 12639 | 21489 | 22644 | | | | | |
| AMPS: | 250 | NEUTRAL BUS: | 100% | CON. KVA: | 56.8 | | | | | | | |
| VOLTAGE: | 208 | GROUND BUS: | STANDARD | CON. AMPS: | 157.6 | | | | | | | |
| PHASE/WIRE: | 3-PH, 4W | AIC RATING: | EXISTING | NET KVA: | 44.7 | | | | | | | |
| MAIN: | | NEMA RATING: | 1 | NET AMPS: | 124.0 | | | | | | | |
| LUGS: | MLO | PANEL: | | Notes: | | | | | | | | |
| MOUNTING: | SURFACE | | | BOLD INDICATES ADDED LOAD | | | | | | | | |
| BUS: | COPPER | | | | | | | | | | | |
| DOOR: | STANDARD | | | | | | | | | | | |
| | | | | | (E) CH-LV1 | | | | | | | |

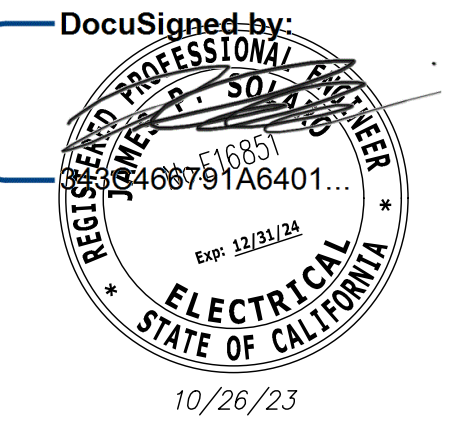
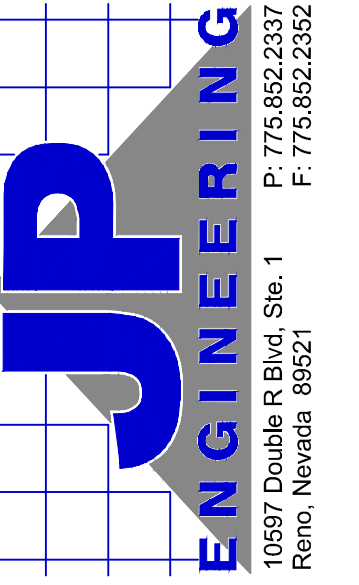
| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|--------------------------|--------------|-------------|----------------------------------|-------------------|------|------|-----|------|------|---------------------------|----|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| E | (E) WINDOW COOLER NW OFF | 1152 | 20/1 | 1 | 2150 | | | 2 | 20 | 996 | (E) WINDOW COOLER E AUD | E |
| E | (E) WINDOW COOLER SW OFF | 1152 | 20/1 | 3 | | 2150 | | 4 | - | 996 | | E |
| R | (E) N WALL QUAD | 1152 | 20/1 | 5 | | | 2304 | 6 | 20/1 | 1152 | (E) INFO SERV RECPT | R |
| R | (E) N WALL QUAD | 1152 | 20/1 | 7 | 2304 | | | 8 | 20/1 | 1152 | (E) RECPT S WALL AUD | R |
| R | (E) SW OFF RECPT | 1152 | 20/1 | 9 | | 2304 | | 10 | 20/1 | 1152 | (E) WINDOW COOLER INFO SR | E |
| E | BWH-1 | 1200 | 20/1 | 11 | | | 2352 | 12 | 20/1 | 1152 | (E) RECPT E WALL AUD | R |
| E | BWH-3 | 1200 | 20/1 | 13 | 2352 | | | 14 | 20/1 | 1152 | (E) RECPT S WALL AUD | R |
| E | BWH-4 | 1200 | 20/1 | 15 | | 2352 | | 16 | 20/1 | 1152 | (E) QUAD E WALL AUD | R |
| E | BWH-5 | 1200 | 20/1 | 17 | | | 1200 | 18 | | | (E) SPACE | |
| | (E) SPACE | | | 19 | 0 | | | 20 | | | (E) SPACE | |
| | (E) SPACE | | | 21 | | 0 | | 22 | | | (E) SPACE | |
| | (E) SPACE | | | 23 | | | 0 | 24 | | | (E) SPACE | |
| | (E) SPACE | | | 25 | 0 | | | 26 | | | (E) SPACE | |
| | (E) SPACE | | | 27 | | 0 | | 28 | | | (E) SPACE | |
| | (E) SPACE | | | 29 | | | 0 | 30 | | | (E) SPACE | |
| | (E) SPACE | | | 31 | 0 | | | 32 | | | (E) SPACE | |
| | (E) SPACE | | | 33 | | 0 | | 34 | | | (E) SPACE | |
| | (E) SPACE | | | 35 | | | 0 | 36 | | | (E) SPACE | |
| | (E) SPACE | | | 37 | 0 | | | 38 | | | (E) SPACE | |
| | (E) SPACE | | | 39 | | 0 | | 40 | | | (E) SPACE | |
| | (E) SPACE | | | 41 | | | 0 | 42 | | | (E) SPACE | |
| | | | | | 6806 | 6806 | 5856 | | | | | |
| AMPS: | 100 | NEUTRAL BUS: | 100% | CON. KVA: | 19.5 | | | | | | | |
| VOLTAGE: | 208 | GROUND BUS: | STANDARD | CON. AMPS: | 54.0 | | | | | | | |
| PHASE/WIRE: | 3-PH, 4W | AIC RATING: | EXISTING | NET KVA: | 19.5 | | | | | | | |
| MAIN: | | NEMA RATING: | 1 | NET AMPS: | 54.0 | | | | | | | |
| LUGS: | MLO | PANEL: | | Notes: | | | | | | | | |
| MOUNTING: | SURFACE | | | BOLD INDICATES ADDED LOAD | | | | | | | | |
| BUS: | COPPER | | | | | | | | | | | |
| DOOR: | STANDARD | | | | | | | | | | | |
| | | | | | (E) CH-LV4 | | | | | | | |

| E=Equipment, K=Kitchen, L=Lighting, LW=Warehouse Lighting, H=Heat, M=Motor, M1=Motor(Largest), R=Recepts LOCATION: | | | | | | | | | | | | |
|--|-------------|------|-----|-----|-------|-------|---|-----|-----|------|-------------|----|
| DF | DESCRIPTION | LOAD | BKR | CIR | A | B | C | CIR | BKR | LOAD | DESCRIPTION | DF |
| M | | 7307 | 50 | 1 | 14614 | | | 2 | 50 | 7307 | | M |
| M | HP-1 | 7307 | - | 3 | | 14614 | | 4 | - | 7307 | HP- | |



| SHEET NOTES | |
|-------------|--|
| 1 | DISCONNECT ROOF TOP UNIT. REMOVE CONDUCTORS BACK TO THEIR SOURCE. CAP AND ABANDON CONDUITS IN PLACE. |

| | | |
|------|---------------------------------|--|
| A | ROOF ELECTRICAL DEMOLITION PLAN | |
| E1.1 | SCALE: 3/16" = 1'-0" | |



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DRAWING TITLE

ROOF ELECTRICAL
DEMOLITION PLAN

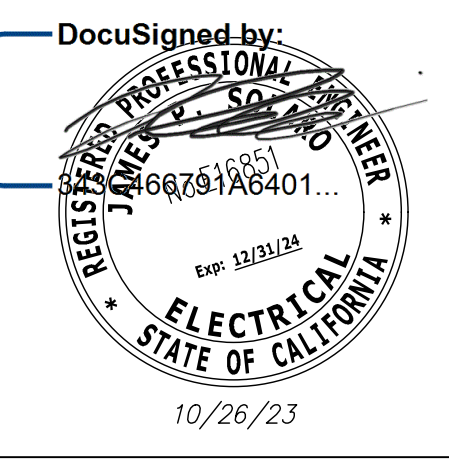
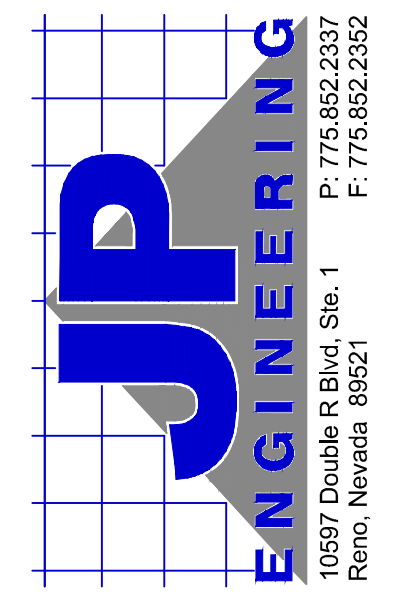
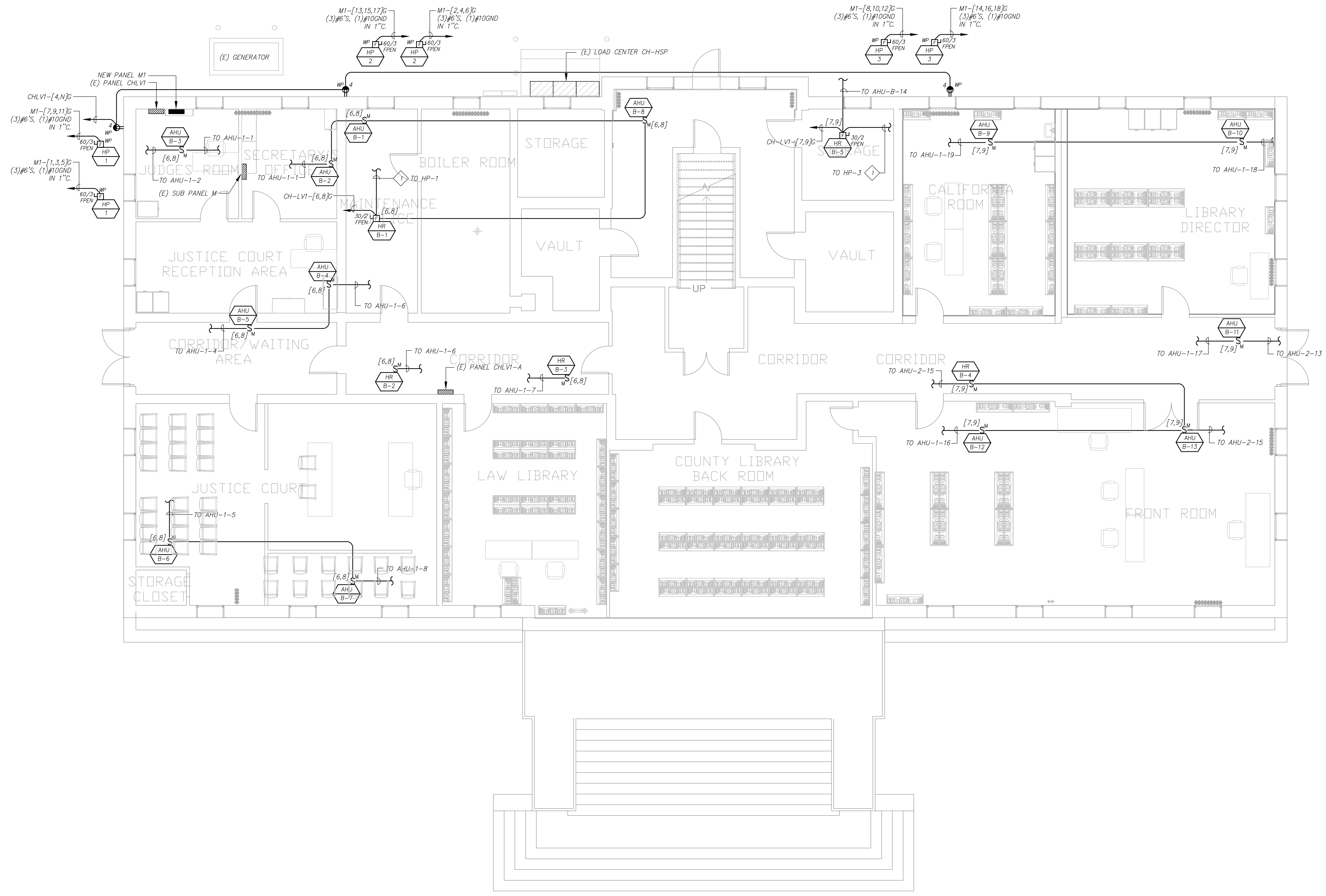
date 26 OCTOBER 2023

job number JP # 22184

drawn MT

checked JS

E1.1



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DRAWING TITLE
BASEMENT ELECTRICAL PLAN

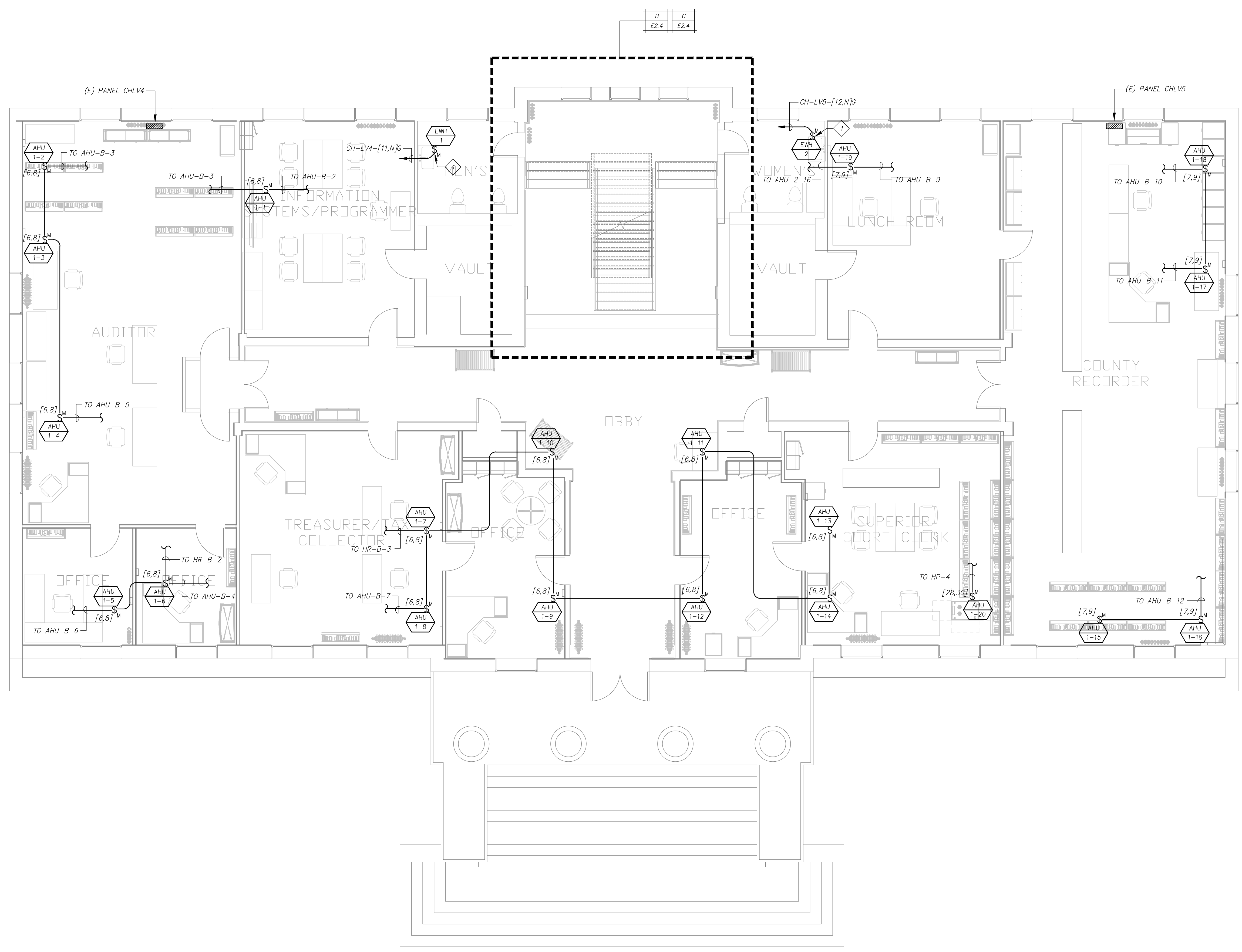
date: 26 OCTOBER 2023
 job number: JP# 22184
 drawn: MT
 checked: JS

E2.1

SHEET NOTES
 REFER TO MECHANICAL DRAWINGS FOR CONNECTION DETAILS.

A
E2.1
BASEMENT ELECTRICAL PLAN
 SCALE: 3/16" = 1'-0"

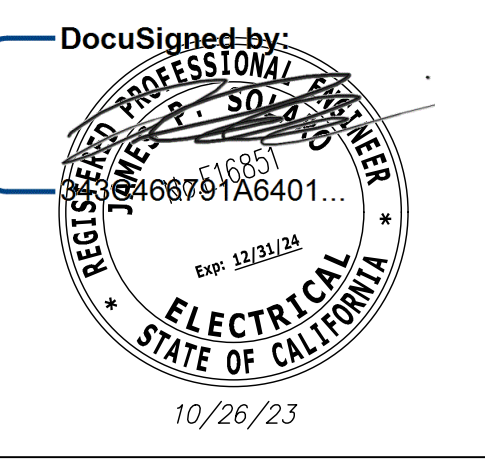
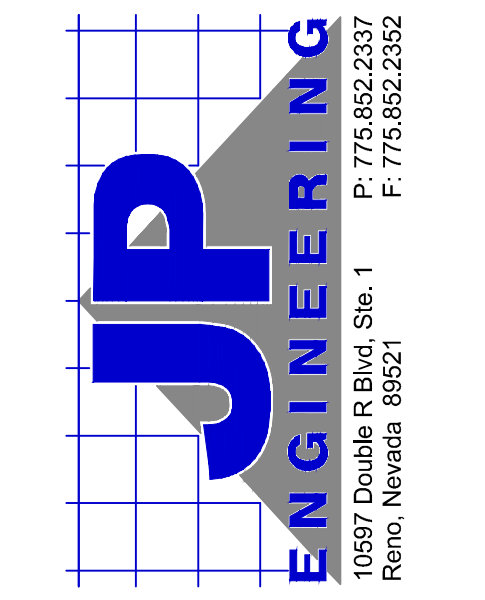
- GENERAL NOTES**
- CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO ROUTE ELECTRICAL CONDUIT ALONGSIDE MECHANICAL PIPING.
 - ALL EXPOSED CONDUIT ON EXTERIOR OF BUILDING SHALL BE PAINTED TO MATCH THE EXISTING BUILDING COLOR.
 - REFER TO MECHANICAL DRAWINGS FOR COLOR REQUIREMENTS OF ALL EXPOSED CONDUITS ROUTED IN BASEMENT. ENSURE ALL NEW WORK IS PAINTED THE SAME COLOR.



| SHEET NOTES | |
|-------------|--|
| | MOTOR RATED SWITCH BUILT INTO MECHANICAL UNIT. |

| | | |
|------|--------------------------------|--|
| A | LEVEL 1 ELECTRICAL PLAN | |
| E2.2 | SCALE: 3/16" = 1'-0" | |

| GENERAL NOTES | |
|---------------|---|
| 1. | CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO ROUTE ELECTRICAL CONDUIT ALONGSIDE MECHANICAL PIPING. |
| 2. | ALL EXPOSED INTERIOR CONDUIT SHALL BE CONCEALED IN SHEET METAL ENCLOSURE. REFER TO MECHANICAL DRAWINGS DETAIL 4/M5.1. |
| 3. | ALL EXPOSED CONDUIT ON EXTERIOR OF BUILDING SHALL BE PAINTED TO MATCH THE EXISTING BUILDING COLOR. |



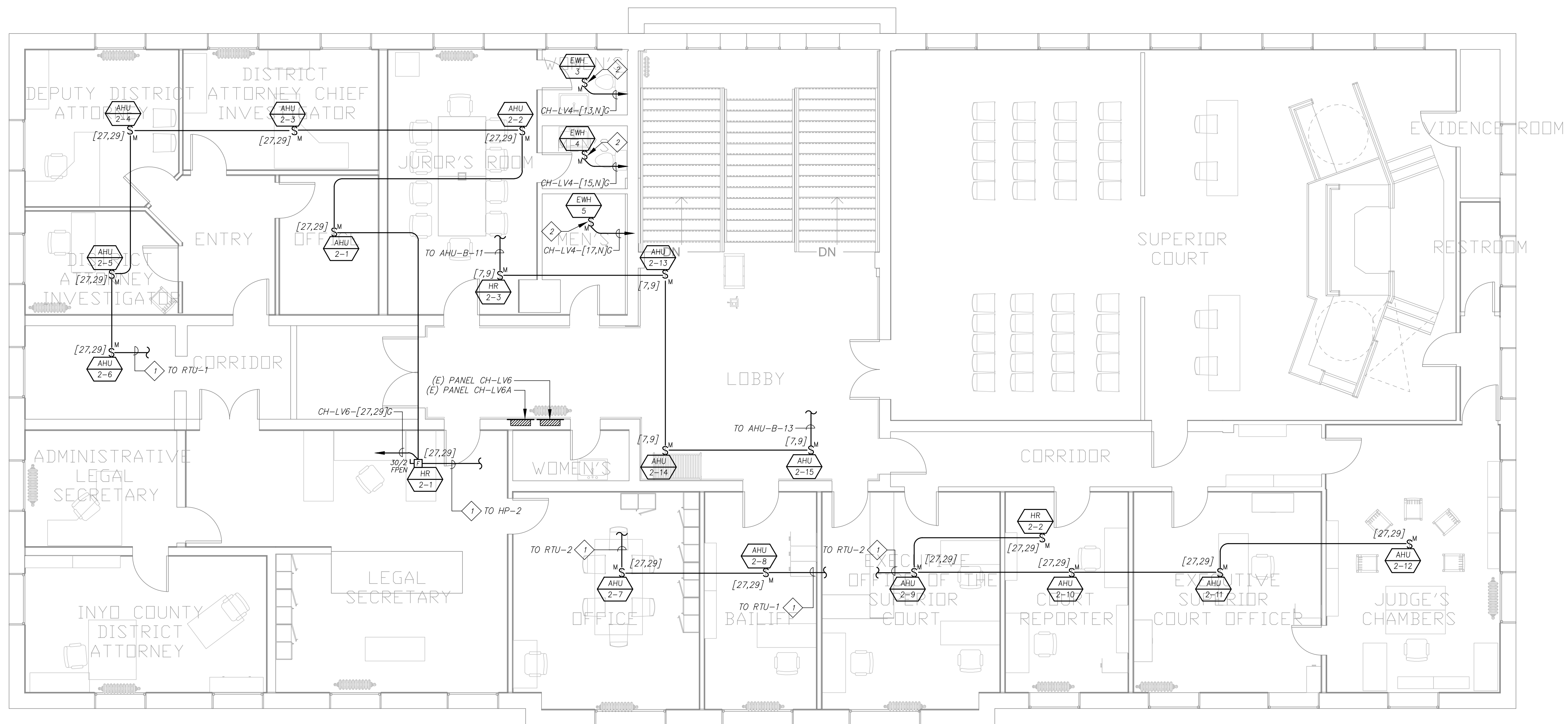
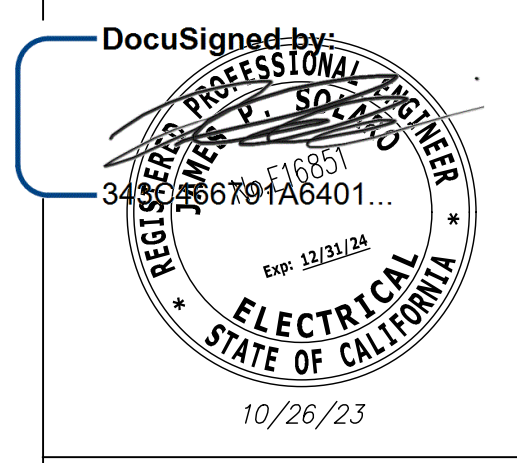
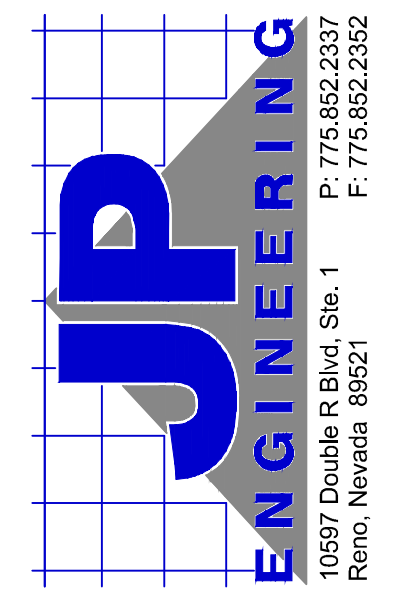
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DRAWING TITLE
LEVEL 1 ELECTRICAL PLAN

| | |
|------------|-----------------|
| date | 26 OCTOBER 2023 |
| job number | JP# 22184 |
| drawn | MT |
| checked | JS |

E2.2



| SHEET NOTES | |
|-------------|--|
| 1 | REFER TO MECHANICAL DRAWINGS FOR CONNECTION DETAILS. |
| 2 | MOTOR RATED SWITCH BUILT INTO MECHANICAL UNIT. |

| | | |
|-------|--------------------------------|--|
| A | LEVEL 2 ELECTRICAL PLAN | |
| E.2.3 | SCALE: 3/16" = 1'-0" | |

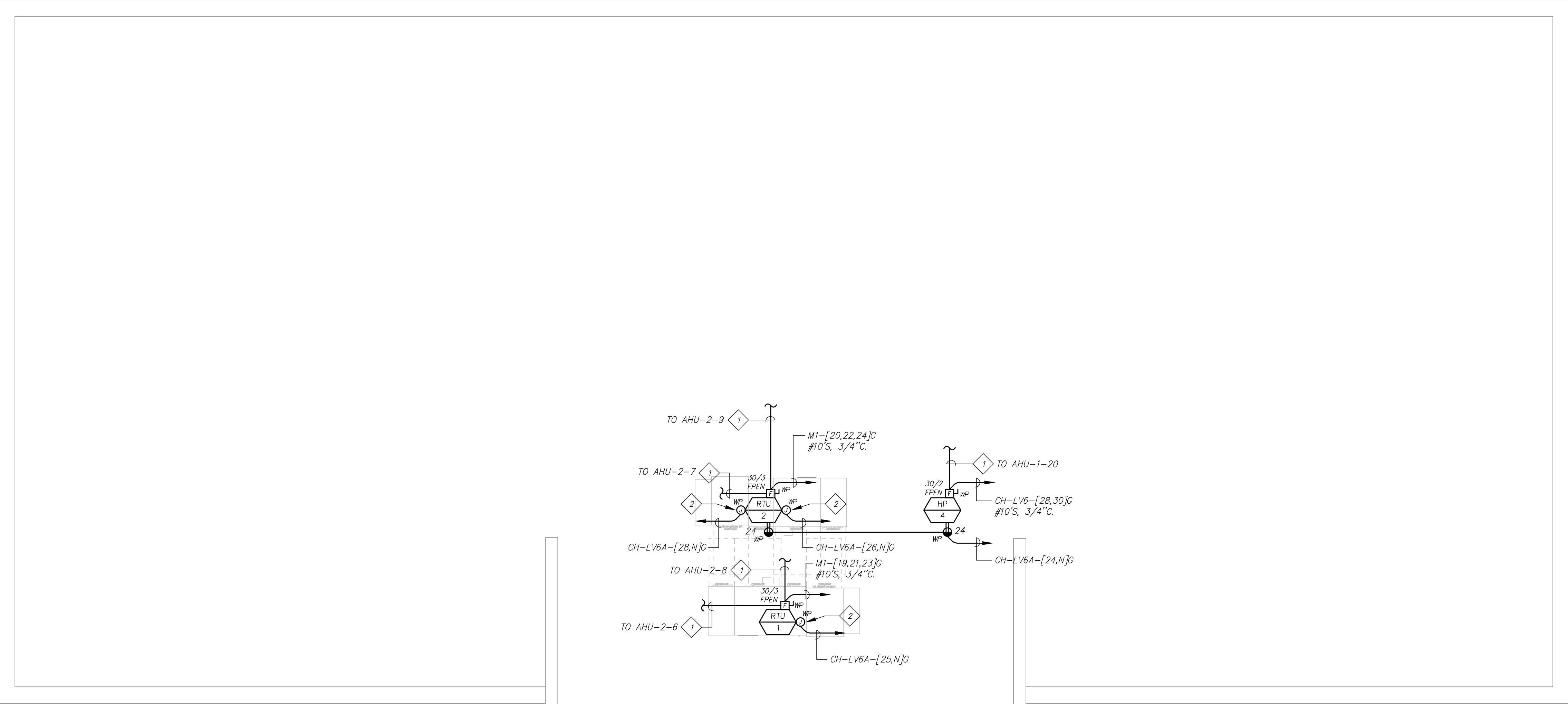
| GENERAL NOTES | |
|---------------|---|
| 1. | CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO ROUTE ELECTRICAL CONDUIT ALONGSIDE MECHANICAL PIPING. |
| 2. | ALL EXPOSED INTERIOR CONDUIT SHALL BE CONCEALED IN SHEET METAL ENCLOSURE. REFER TO MECHANICAL DRAWINGS DETAIL 4/MS.1. |
| 3. | ALL EXPOSED CONDUIT ON EXTERIOR OF BUILDING SHALL BE PAINTED TO MATCH THE EXISTING BUILDING COLOR. |

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| DRAWING TITLE | LEVEL 2 ELECTRICAL PLAN |
| DATE | 26 OCTOBER 2023 |
| JOB NUMBER | JP# 22184 |
| DRAWN | MT |
| CHECKED | JS |

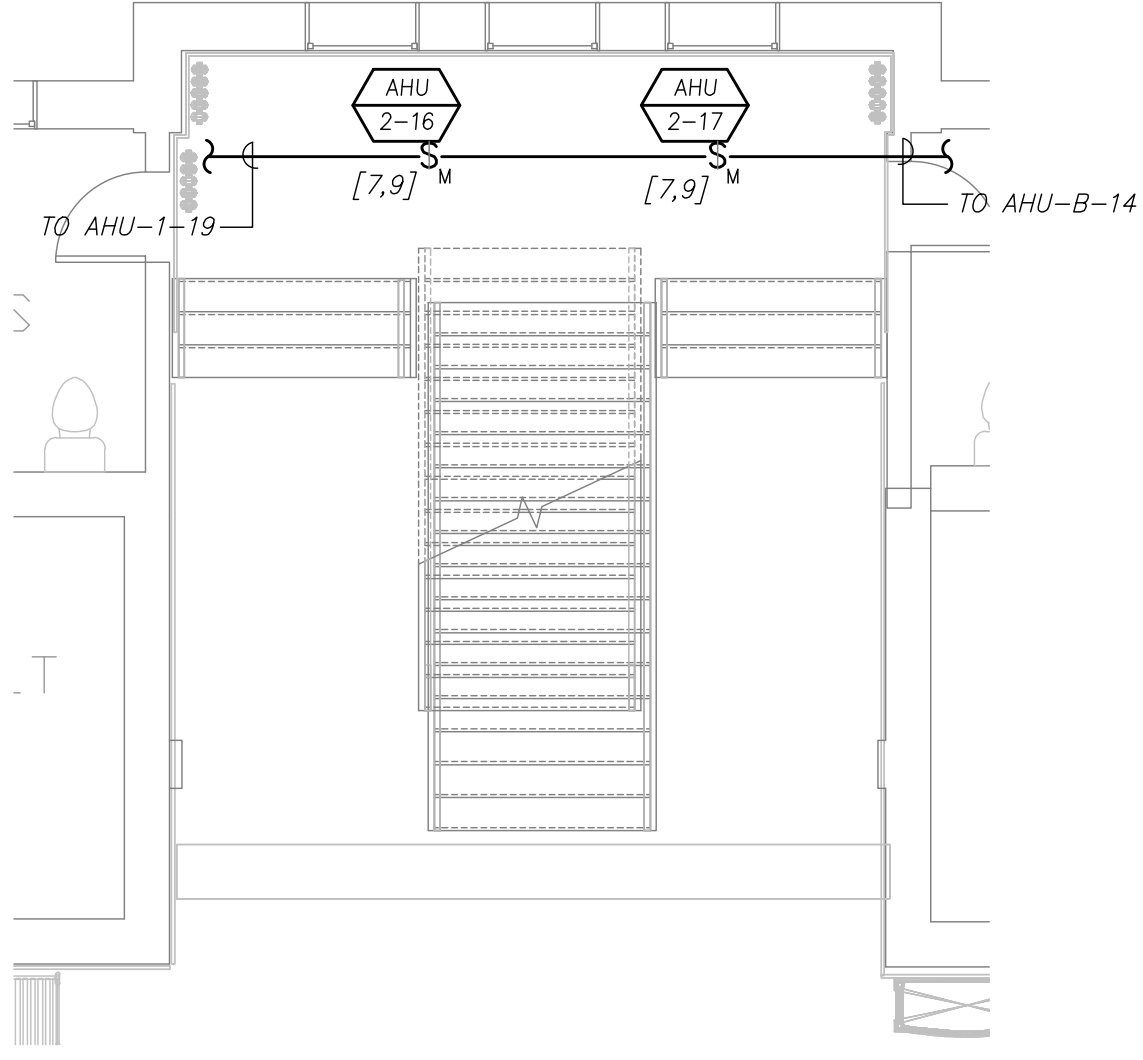
E2.3



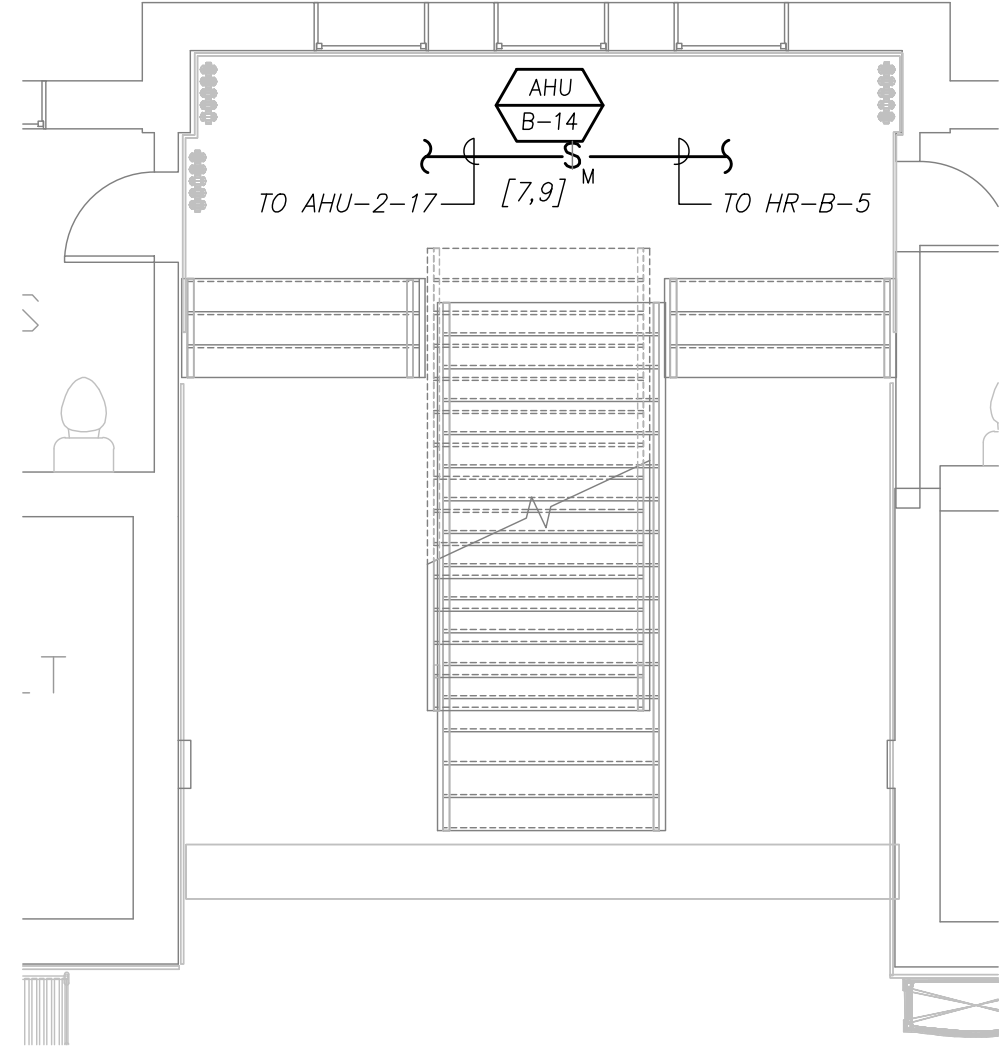
| SHEET NOTES | |
|-------------|--|
| 1 | REFER TO MECHANICAL DRAWINGS FOR CONNECTION DETAILS. |
| 2 | PROVIDE WEATHER-PROOF (NEMA 3R) JUNCTION BOX FOR CONNECTION OF LEV KIT. COORDINATE EXACT ELECTRICAL AND CONNECTION REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH IN. LEV KIT ENCLOSURE BY OTHERS. |

| A | ROOF ELECTRICAL PLAN | N |
|------|----------------------|---|
| E2.4 | SCALE: 3/16" = 1'-0" | |

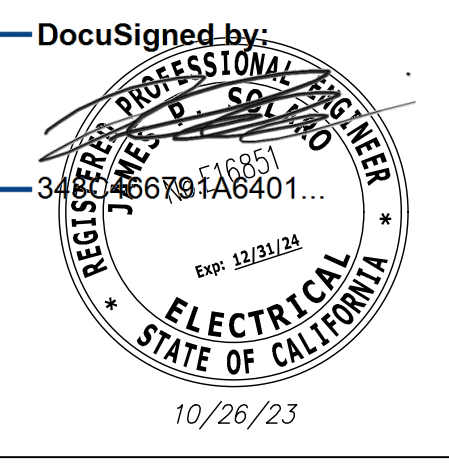
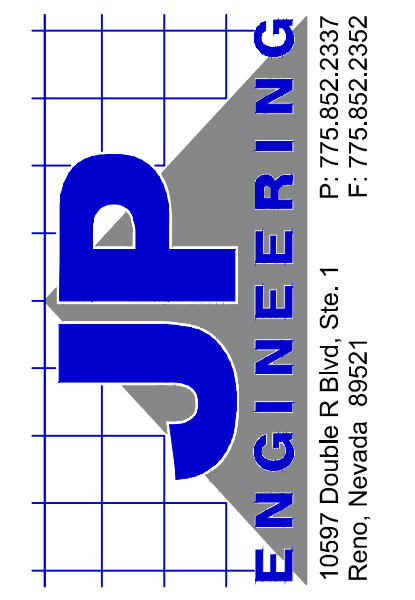
| GENERAL NOTES | |
|---------------|---|
| 1. | CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO ROUTE ELECTRICAL CONDUIT ALONGSIDE MECHANICAL PIPING. |
| 2. | ALL EXPOSED CONDUIT ON EXTERIOR OF BUILDING SHALL BE PAINTED TO MATCH THE EXISTING BUILDING COLOR. |



| C | STAIRLANDING TO LEVEL 2 ELECTRICAL PLAN | S |
|------|---|---|
| E2.4 | SCALE: 3/16" = 1'-0" | |



| B | STAIRLANDING TO BASEMENT ELECTRICAL PLAN | S |
|------|--|---|
| E2.4 | SCALE: 3/16" = 1'-0" | |



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DRAWING TITLE
ROOF ELECTRICAL PLAN

date 26 OCTOBER 2023
 job number JP# 22184
 drawn MT
 checked JS

E2.4



INYO COUNTY BOARD OF SUPERVISORS

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NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4329

Comment Letter for Little Lake Aqueduct Crossover Project Mitigated Negative Declaration Water Department ACTION REQUIRED

ITEM SUBMITTED BY

Holly Alpert, Water Director

ITEM PRESENTED BY

Holly Alpert, Water Director

RECOMMENDED ACTION:

Approve a comment letter in response to the Notice of Intent to Adopt a Mitigated Negative Declaration for the Little Lake Aqueduct Crossover Project and authorize the County Administrator to sign.

BACKGROUND / SUMMARY / JUSTIFICATION:

The Los Angeles Department of Water and Power has released a Notice of Intent to Adopt a Mitigated Negative Declaration for the Little Lake Aqueduct Crossover Project. The proposed project would connect Los Angeles Aqueduct 1 (LAA 1) with LAA 2 west of Little Lake reservoir in Rose Valley. The aqueducts would be connected through the installation of approximately 183 feet of 60-inch diameter pipe. The stated objective of the project is to increase the functionality and flexibility of the LAA system. Because the project will approximately double "the existing water flow capacity from South Haiwee Reservoir through LAA2", the question has been raised whether the project could result in increased water exports from Inyo County. Water Department staff posed this question informally to LADWP staff and received the response that the project would not increase exports but is aimed at improving system resiliency. We are requesting your Board's approval of a comment letter that requests a formal written confirmation that the project will not result in additional water exports from Inyo County.

Comments are due December 8, 2023.

FISCAL IMPACT:

| | | | |
|-----------------------------------|-----|--------------------|-----|
| Funding Source | N/A | Budget Unit | N/A |
| Budgeted? | N/A | Object Code | N/A |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| N/A | | | |
| Future Fiscal Year Impacts | | | |
| N/A | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board does not approve the letter, and no comments are submitted in response to the MND

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. Letter Responding to LAA Crossover MND

APPROVALS:

| | |
|----------------|--------------------------------|
| Holly Alpert | Created/Initiated - 11/27/2023 |
| Darcy Ellis | Approved - 11/27/2023 |
| John Vallejo | Approved - 11/28/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |



COUNTY OF INYO
ADMINISTRATOR'S OFFICE
NATHAN GREENBERG
COUNTY ADMINISTRATIVE OFFICER



December 8, 2023

Los Angeles Department of Water and Power
111 North Hope St, Room 1044
Los Angeles, CA 90012
Attn: Ms. Kathryn Laudeman

RE: Little Lake Aqueduct Crossover Project

Dear Ms. Laudeman:

On behalf of the Inyo County Board of Supervisors, I would like to thank the Los Angeles Department of Water and Power for providing the opportunity to submit comments in response to the Notice of Intent to adopt a Mitigated Negative Declaration for the Little Lake Aqueduct Crossover Project.

Section 1.2.1 of the MND states “The LAA Crossover Project will also increase operational flexibility by approximately doubling the existing water flow capacity from South Haiwee Reservoir through LAA2”, and the Project Description in Section 1.3 states “**Operating Criteria.** The flow capacity through the LAA Crossover will be limited by a topographical control point of the Little Lake Pipeline which has a centerline elevation of 3,440.47 feet above msl. Under normal operations, LAA2 operates at a higher hydraulic grade than LAA1, preventing operation of the LAA Crossover while LAA2 is in service. Flow through the LAA Crossover will not exceed 145 cfs to maintain freeboard in LAA1.”

The expanded capacity in LAA2 raises the question of whether LADWP could increase overall water exports from Inyo County. Inyo County has received an informal response from LADWP that the project is aimed at improving system resiliency and will not result increased exports. However, Inyo County requests a formal written confirmation in the form of a response to this letter commenting on the Mitigated Negative Declaration that the Little Lake Aqueduct Crossover Project will not result in additional water exports from Owens Valley.

Thank you for your consideration.

Respectfully,

Nate Greenberg,
Inyo County CAO

cc:

Supervisor Jennifer Roeser

Supervisor Scott Marcellin

Supervisor Jeff Griffiths

Supervisor Trina Orrill

Supervisor Matt Kingsley

Nate Greenberg, County Administrative Officer



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4332

Workshop on the Community Economic Resilience Fund (CERF)

County Administrator

NO ACTION REQUIRED

ITEM SUBMITTED BY

Meaghan McCamman, Assistant County Administrator

ITEM PRESENTED BY

Stacy Corless - Sierra Business Council, Meaghan McCamman, Assistant County Administrator

RECOMMENDED ACTION:

- A) Receive an update regarding the Community Economic Resiliency Fund (CERF) from Sierra Business Council Government and Community Affairs Director Stacy Corless;
- B) Conduct a workshop on Inyo's participation in the CERF; and
- C) Provide any follow-up direction to staff as necessary.

BACKGROUND / SUMMARY / JUSTIFICATION:

California Jobs First/the Community Economic Resilience Fund (CERF) is a statewide program that was created to promote new strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs for all Californians. This \$600 million program is meant to ensure that local communities are empowered to identify their own paths to adapt to climate change and other economic challenges, and that state funding is available to support communities in implementing their local strategies to provide well-paying jobs in every region of California.

The Sierra Business Council (SBC) is under contract with the State of California to serve as the convener and fiscal agent for the Eastern Sierra Region, which includes Amador, Calaveras, Tuolumne, Mariposa, Alpine, Inyo, and Mono Counties. SBC's role is to convene local representatives from each of the participating counties and help the Eastern Sierra Region identify projects, get prepared, and successfully compete for funding under the CERF program. Participating counties have a variety of representatives participate in the process through a series of sub-committees that feed into one 21-member voting council.

The CERF program guidelines are ever-changing, but are currently set up to provide funding opportunities for planning, catalyzing, and implementation of projects through a series of phases. The first phase included the selection and funding of SBC as the Convener and Fiscal Agent for our region, the setup of the voting Council and sub-committees, and the creation of several reports and documents about the economy and future of the region. These efforts are currently underway.

The "Catalyst" phase provides up to \$9 million to each region to complete pre-development activities such as feasibility studies, market analyses, CEQA, permitting, site acquisition and planning, and capacity building for projects that need a little boost before the final Implementation Phase. The Catalyst

phase is just kicking off, and projects that could receive funding for pre-development planning will be selected in the coming months.

In the summer of 2024 the Implementation Phase will begin, during which time hundreds of millions of dollars will be available statewide for implementation of projects through a competitive process. The Eastern Sierra region will need to have coalesced around shovel-ready, competitive projects by this time in order to compete with other regions for Implementation funding.

| FISCAL IMPACT: | | | |
|-----------------------------------|-----|--------------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board could decline to participate in the workshop and provide direction to staff. This is not recommended, as Inyo County representatives need to begin to coalesce around specific recommendations and projects that could be submitted for CERF funding in 2024.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

Sierra Business Council, ESCOG, Amador, Calaveras, Tuolumne, Mariposa, Alpine, and Mono Counties

ATTACHMENTS:

1. CERF Fact Sheet
2. High Road Transition Collaborative (HRTC) Roster
3. Letter to Sierra Business Council Regarding CERF Priority Industries 11.9.23

APPROVALS:

| | |
|------------------|--------------------------------|
| Meaghan McCamman | Created/Initiated - 11/29/2023 |
| Nate Greenberg | Approved - 11/29/2023 |
| John Vallejo | Approved - 11/30/2023 |
| Darcy Ellis | Approved - 11/30/2023 |
| Meaghan McCamman | Final Approval - 11/30/2023 |



Community Economic Resilience Fund

Charting California's Economic Future in Partnership with Communities

Over the last few decades, economic wealth generated in California has not been shared equally, with many communities and families feeling the squeeze of low-paying jobs and rising costs. At the same time, California is on an accelerated path to transition to a clean energy economy, with the goal of reaching carbon neutrality by 2045. The goal of the Community Economic Resilience Fund, a \$600 million state program, is to ensure that as California's economy grows and adapts to climate change and other challenges, that good-paying jobs and prosperous communities are created for the benefit of all Californians. Key to the program is empowering the state's diverse regions and residents to meaningfully participate as leaders in this process.

The Community Economic Resilience Fund is a new approach to economic development that seeks to center disadvantaged communities as part of California's transition to a clean energy, carbon neutral economy, creating good-paying jobs and prosperous communities for all.



CERF PROGRAM STRUCTURE

Creating pathways for investment that will bring **bottom up, regionally governed** economic blueprints to life – creating good-paying jobs, prosperous communities, and a clean energy economy

CERF PHASES AND OBJECTIVES

| Phase | Allocation | Objective | Timeline |
|-------------------------------------|----------------------|---|---|
| Planning Phase | \$65 million | Invest \$5 million into each of the 13 regions to (i) establish regional inclusive economic planning entities, (ii) lead research and development activities to inform economic development strategy and (iii) define the Regional Economic Plans | RFP – May 2022 Award – October 2022 Period of Performance – March 2023- September 2024 |
| Economic Development Pilot Projects | \$39 million | Invest in ready-to-launch projects that align with CERF objectives to serve as demonstration projects for Implementation Phase | RFP – January 2023 Award – May 2023 Period of Performance – September 2023 – September 2025 |
| Catalyst Program | \$182 million | Invest up to \$14 million into each of the 13 regions to (i) strengthen sustainability of regional inclusive economic planning entities and (ii) build a pipeline of viable projects that align with CERF objectives | RFP – September 2023 Award – January 2024 Period of Performance – May 2024-September 2026 |
| Tribal Funding Opportunity | \$25 million | Invest in economic planning and implementation projects in partnership with California Native American Tribes. | RFP – July 2023 Award – Fall 2023 Period of Performance – May 2024-September 2026 |
| Implementation Phase | \$268 million | Invest total of \$268 million into ready-to-launch projects that align with Regional Economic Development Strategy plans | TBD |
| Total | \$579 million | | |

PROGRAM OUTCOMES

- » **ESTABLISH & MAINTAIN** 13 regional governance bodies, called 'High Road Transition Collaboratives' responsible for bringing together diverse partners and organizations and delivering the work products across the Planning Phase, Catalyst Fund, and Implementation Phase.
- » **DEVELOP** regional economic plans that chart the economic development strategies for each of California's 13 CERF regions, including priority industries, projects, and other investments.
- » **CREATE** a portfolio of ready-to-go programs and projects that accelerate California's progress to a carbon neutral economy while creating good-paying jobs and prosperous communities for all Californians.
- » **BRING TO LIFE** projects and programs identified throughout the CERF process that create good-paying jobs, address economic disparities, and support California's transition to a clean energy economy.



Updated 11/6/23

High Road Transition Collaborative (HRTC)

Alpine County

Jane Freeman – Resident, Tahoe Conservancy

Mark Schwartz - California Alps Cycling

One Open Position

Amador County

Michael DeSpain – Buena Vista Rancheria of Me-Wuk Indians, Chief Operations Officer/Natural Resource Director

Andrew Gardner – Director, Career and Technical Education, Amador County Unified School District

Manuel Duarte – Business Owner

Calaveras County

Kathy Gallino – Calaveras County

Jared Martin – Anthem Blue Cross, Program Director

One Open Position

Inyo County

Meryl Picard – Bishop Paiute Tribal Chairwoman, Bishop Paiute tribe

Meaghan McCamman – County of Inyo

Angelica Mora – Lone Pine Chamber of Commerce

Mariposa County

Sandra Chapman – Chair of the Southern Sierra Miwuk Nation

Gabe Edwards – Past Chair, Mariposa County Chamber of Commerce

Will Fassett - Grants Analyst, Mariposa County

Mono County

Debbie Painter – Bridgeport Indian Colony, Cultural Coordinator

Sandra Moberly – Town of Mammoth Lakes

Jeff Simpson – Mono County - Economic Development Director

Tuolumne County

Lena Tran – Columbia College, President

David Thoeny – Mother Lode Workforce Development Board, Executive Director

Maureen Frank – Tuolumne County, Capital Projects Director



Updated 11/6/23

Regional Tribal Representative

Jimmy John Thompson - Timbisha Shoshone Tribe

Regional Latino Representative

Jose Garcia - City of Bishop

Non-Voting HRTC Chair

Barbara Hayes - Rural County Representatives of California Chief Economic Development Officer

Business Subcommittee

Alpine County

JT Chevalier – Alpine County (*non-voting member due to residency requirements*)
Open Position

Amador County

Frank S Leschinsky – Public Sector Manager, Volcano Communications Group

Calaveras County

Sherri Reusche – Calaveras Chamber of Commerce, President

Susan Weatherby – Owner, Moke Hill Nuts & Candies & CEO, Calaveras County Chamber of Commerce

Inyo County

Doug Thompson – Lone Pine Economic Development Corp

Tawni Thomson – Bishop Chamber of Commerce & Information Center, Executive Director

Robin C Bolser – Great Basin Bakery

Jenn Whitney - Independent Businessperson

Mariposa County

Open Position

Mono County

Ken Brengle – Mammoth Lakes Chamber of Commerce

Tuolumne County

Tom Crosby – Tuolumne County Business Council, President

Robbie Bergstrom – County of Tuolumne, Economic Development



Updated 11/6/23

Cross-County Representation

Les Fong – San Joaquin SBDC, Director

Kenji Shimabukuoro - San Joaquin, Program Manager

Workforce, Education, & Training Subcommittee

Alpine County

Open Position

Amador County

Karen Dickerson – Amador College Connect, Founding Board Member

Steve Christensen - Amador County DCC

John Tillman - Amador Community College Foundation

Calaveras County

Open Position

Inyo County

Barry Simpson – Inyo Office of Education

Kimberly Blackwell – Cerro Coso Community College, ESCC Director Bishop & Mammoth Lakes

Mariposa County

Open Position

Mono County

Carol Blanchette – University of California, Director of Valentine Reserve and SNARL

Tuolumne County

James Hanson - Mother Lode Job Training

Amy Frost - Mother Lode Job Training

Brandon Price - Columbia College

Cross-County Representation

Jenny Hatch – Sierra Nevada Alliance (*non-voting member due to residency requirements*)

Kelsey Glastetter - Sierra Nevada Alliance



Updated 11/6/23

Equity, Climate, & Labor Subcommittee

Alpine County

Open Position

Amador County

Open Position

Calaveras County

Open Position

Inyo County

Pam Close Bold – High Sierra Energy Foundation, Executive Director

Mariposa County

Tyson Wellcome – The Alliance for Community Transformation

Mono County

Jennifer Kreitz – Mono County Supervisor

Tuolumne County

Andrea-Victoria Lisbon – Stand Up! Speak Up! Speak Out!

Cindy Chen - UC Agriculture & Natural Resources



Updated 11/6/23

Project Identification Subcommittee

Alpine County

Open Position

Amador County

Frank Axe - Amador County Supervisor

Jon Hopkins - Amador County

Calaveras County

Donna Vial - CHIPS

Inyo County

Kody Jaeger – Bishop Paiute Tribe, Chief Operations Office II

Elaine Kabala – Eastern Sierra Council of Governments, Executive Director

Mariposa County

Melinda Barrett – Mariposa Resource Conservation District

Mono County

John Wentworth – CEO/Board Chair, Mammoth Lakes Trails & Public Access and Mayor, Mammoth Lakes

Tuolumne County

Stan Dodson – Central Sierra Environmental Resource Center (CSERC), Program Manager

Cross-County Representation

Peter Fulks – Cerro Coso Community College, Department Chair and Director of Public Services
(non-voting member)



Updated 11/6/23

Local Government Subcommittee

Alpine County

David Griffith – Supervisor, Alpine County

Irvin Jim - Supervisor, Alpine County; Washoe Tribe

Amador County

Richard Forster – Supervisor, Amador County

Calaveras County

Michael Minkler – Calaveras County Water District

Inyo County

Jen Roeser – Supervisor, Inyo County

Mariposa County

Rosemarie Smallcombe – Supervisor, Mariposa County

Mono County

Lynda Salcido – District 5 Supervisor, Mono County

Tuolumne County

Jaron Brandon – District 5 Supervisor, County of Tuolumne



COUNTY OF INYO

A POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA



November 9, 2023

Sierra Business Council
C/O Steve Frisch, President
P.O. Box 2428
Truckee, CA 96160

Subject: Comments on the five Priority Economic Sectors for CERF Catalyst Funding

Dear SBC Colleagues,

I write today to provide feedback on the five Priority Economic Sectors that the Sierra Business Council (SBC) proposes to submit to the CERF Catalyst Pre-Development Program by November 30, 2023.

First, I want to thank SBC for your commitment to inclusivity in this process and acknowledge the time and effort that has gone into collecting data "on the ground." Generally, I believe the five proposed Priority Economic Sectors do represent the needs of the seven-county Eastern Sierra CERF region and it makes sense that these sectors emerged as common priorities through the process of public input throughout the seven counties.

However, unlike most of the counties within the Eastern Sierra CERF region, Inyo County includes both wooded, mountainous, high-elevation Sierra communities, and a substantial expanse of high and low desert area with geography that differs greatly from the rest of the region. While the number of individual people in Inyo County's outlying and desert communities is few, those communities and their needs deserve equal representation and recognition in the CERF process. Where possible, we ask that you ensure the scope of the five selected Priority Economic Sectors is broad enough to meet the needs of ALL of Inyo County's communities. As such, we ask that you please consider the inclusion of the following in the SBC Catalyst Pre-Development Program application:

Sector 1: Sustainable Recreation and Tourism

While Inyo County sees a substantial number of visitors each year, a big portion of those tourists participate only minimally in Inyo County's economy; tourists pass through on their way to spend time and money in nearby Mammoth, or go camping and hiking out of trailheads that are far from local towns. For tourism to serve as an economic driver in Inyo, we need to invest in our small towns' main streets and local businesses, which will allow us to capitalize on tourism AND create high quality of life for residents. We also need a way to connect campsites and trailheads to our towns, through access trails and public transit options.

- Potential Projects:
 - Complete downtown master plans for communities and complete CEQA for those plans.
 - Invest in critical infrastructure to support additional tourism, including upgraded water, sewer, and landfill infrastructure.

- Make towns a destination themselves by expanding investment in arts and culture, including festivals, street art, and sports and recreation facilities.
- Allocate funding for small business supports and services, utilizing the facilities available at the Small Business Resource Center in Bishop.
- Connect towns to trailheads through trails and/or public transit.

Sector 2: Forest Economy

Large swaths of Inyo County's high country are a part of the Inyo National Forest, and both the Sierra Nevada and the White Mountains in Inyo include some forested sections. However, Inyo County is not forested the same way the other six counties in the Eastern Sierra CERF region are forested. Moreover, with more than 98% of the County's landmass owned by various state, federal, and local agencies, there is no available private land that could house large industrial facilities such as a biomass plant. The projects and ideas in the "Forest Economy" Industry Sector overview, which seem to focus largely on biomass use, feel largely inapplicable to Inyo County.

However, northern Inyo County is a commutable distance from the forested areas in Mono County, and specifically the 55,000-acre forest-thinning project known as "The Donut" around Mammoth Lakes. The Inyo County economy can benefit from investments in workforce development and training to support The Donut and other forestry projects, and we advocate on behalf of workforce investments in this sector, rather than focusing specifically on biomass facilities or other physical infrastructure in heavily forested areas.

Despite not being thickly forested, Inyo County still contends with regular wildfires which greatly impact tourism and recreation through closures and poor air quality. Investment in firefighting capacity, training, and local landscape hardening efforts are also a worthwhile economic development opportunity in our area.

- Potential Projects

- Workforce development, especially for the Eastern Sierra Communities and Climate Resiliency Project (the "Mammoth Donut" project). Cerro Coso Community College has just developed four certificate programs and a degree program in Climate Innovations, including certificates in wildland firefighting, cultural resource management, outdoor recreation management, and conservation. We propose wraparound services for graduates from these programs to connect them with local businesses and build opportunities for internships, externships, and on-the-job training.
- Support on-the-ground fire hardening for local communities by funding the creation and staffing of a regional Resource Conservation District, potentially combining the Inyo and Mono RDCs. The regional RDC would provide administrative support and grant-writing for local fire-safe councils and fire departments, as well as region-wide programs to support fire-adapted communities.

Sector 3: Clean Energy/Energy Resilience

Inyo County's great potential in impacting clean energy and energy resilience is to provide options for individual homeowners to reduce their energy consumption by upgrading their homes to meet Title 24 energy standards, creating incentives for rooftop solar, examining the possibility of local community microgrids, and investing in EV infrastructure along the Highway 395 corridor and through the deserts of Southeast Inyo. Inyo County does experience somewhat regular energy interruptions, and among the Eastern Sierra counties is probably best positioned to really take advantage of scattered-site solar if a with an investment in energy storage, especially given the availability of local geothermal power.

Overall, with the exception of biomass energy generation, Inyo County fits cleanly into the Clean Energy/Energy Resilience Priority Economic Sector as proposed by SBC.

- Potential Projects:
 - Loans, grants, and other incentives for homeowners and business owners to upgrade their energy efficiency.
 - Investment in construction trades workforce development through the community college, job training, and pipelining from public high school. In Inyo County, anecdotally there seems to be more interest in upgrades, rehabilitation, and remodeling than the existing workforce can handle.
 - Inyo County has already pulled down a grant to perform an EV infrastructure study. Catalyst funds may not be necessary, but we may want to seek implementation funding for EV infrastructure, as planning is already in-flight.
 - Study to examine the potential of scattered site solar microgrid(s) and/or local geothermal microgrid(s).

Sector 4: Sustainable Agriculture and Ranching

Much of Inyo County has a long, proud history in agriculture, with economically significant production in cattle, sheep, eggs, wool, and alfalfa, among other products. Historically, much of the production consists of large-scale commodity products sold outside the area. As interest in locally produced, all-natural, grassfed and organic foods grows in California, and as local demographics change, Inyo County is interested in studying the feasibility of developing a local and tourist market for locally grown, finished, value-added products in the region. Examples could include grassfed local beef, locally grown grapes and wines, local orchards and commercial gardens, and boutique dairies and fromageries. The first step in this process is identifying the agricultural sectors with interest, capacity, and market potential and developing a step-by-step plan for development and growth.

Future steps would include helping to develop local markets for localvore products, which may take the form of entrepreneur and small business assistance, revolving loan funds specifically for localvore startups or seasonal businesses; development of a shared commercial kitchen for small businesses, popups, and seasonal businesses; and workforce development in agricultural sciences. Workforce development should include investment in elementary, middle, and high school agriculture programs and internships.

- Potential Projects:
 - Agriculture economic impact study, examining questions specifically about what options exist to add economic value and sustainability to local agricultural production. Ideally, we would partner with Mono County on a study, as the two counties' agricultural efforts are inextricably intertwined.
 - A study to determine the highest and best use of 80 acres of County-owned property currently used as a long-term grazing lease. With private property at a premium in the County, this land in Big Pine represents a valuable opportunity and a neutral third party could help the County and community of Big Pine navigate the process of a master development plan.
 - Investment and support for elementary, middle, and high-school agricultural programs, including investment in facilities such as a commercial kitchen and/or butchery which could serve as an internship opportunity as well as support local businesses and entrepreneurs.

Sector 5: Community Healthcare

Like the rest of the Eastern Sierra region, Inyo County's healthcare system is struggling financially. Northern Inyo Hospital, which serves much of southern Mono and northern Inyo County and has the region's only labor and delivery department from Ridgecrest to Carson City, is running deep monthly deficits and has performed mass layoffs in 2023. The Bishop area lost its longtime EMS provider, and then lost its replacement EMS provider, and the County, City, and Bishop Paiute Reservation are now subsidizing a third provider in order to maintain EMS services in the Bishop area. Volunteer fire departments, responsible for EMS services from the southern county line in Pearsonville up through Big Pine and east all the way to Tecopa, are warning of dire lack of EMTs and volunteer recruits and are struggling to provide BLS services. Inyo County's healthcare system is in deep financial straits.

We are open and interested in hearing what ideas and project proposals are submitted for this Priority Economic Sector. From our (admittedly limited) understanding of the issues plaguing Inyo County's healthcare system, the fundamental drivers of this dysfunction appear to be low reimbursement rates from government payers, specifically Medicare and Medi-Cal. Until those fundamental drivers are corrected by the state and federal governments, it's not clear what exponential impact we could expect from CERF investment in the healthcare sector.

- Potential projects:
 - To deliver EMS through a mostly volunteer approach, expenses and accessibility have hampered consistent and quality training within EMS. Perhaps there is a way that CERF funds could support expanded, no-cost EMT training.
 - Hospital grant programs for sustainable investment in infrastructure, with a business plan.
 - Help with obtaining and financing health care staff housing.

Again, thank you for the time and effort that has gone into this inclusive process. These project ideas and specific feedback will also be submitted via the various survey tools that were recently released from SBC.

Sincerely,



Meaghan McCamman
High Road Transition Council Member
Inyo County
760-937-1253
Mmccamman@inyocounty.us



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4311

Accept United States Department of Agriculture Rural Development Broadband Technical Assistance Grant for Furnace Creek and Park Village

County Administrator

ACTION REQUIRED

ITEM SUBMITTED BY

Scott Armstrong, Regional Broadband Coordinator

ITEM PRESENTED BY

Scott Armstrong, Regional Broadband Coordinator

RECOMMENDED ACTION:

- A) Accept the US Department of Agriculture (USDA) Rural Development (RD), Rural Utilities Service (RUS) Grant Award for the Inyo County Application #GRANT13921206; and
- B) Approve the USDA RD RUS Cooperative Agreement and Assurance Agreement in order to receive up to \$110,500 in reimbursable grant funding for Broadband Technical Assistance (BTA) to develop detailed last-mile broadband engineering designs for the Furnace Creek area, including Park Village; and
- C) Authorize the County Administrator to sign.

BACKGROUND / SUMMARY / JUSTIFICATION:

Inyo County submitted a grant application (GRANT13921206) on June 20, 2023, for United States Department of Agriculture (USDA) Rural Development (RD) Broadband Technical Assistance (BTA) funding to develop shovel-ready, last-mile, detailed network engineering designs for broadband Internet service in the exceptionally rural area of Furnace Creek, California. This project area includes the residential area for Death Valley National Park Service (NPS) employees at Park Village near Cow Creek, located about 4 miles north of Furnace Creek, to the resort about one mile south-southeast of Furnace Creek. The USDA selected this project proposal for funding in the amount of \$110,500 -- \$93,500 for contractor design work and \$17,000 for staff time. The Award Letter dated November 13, 2023 is attached.

Tasks associated with this grant award include: 1) hire a design engineering contractor through the County's RFP process; 2) catalog all locations to be included in the detailed engineering designs; 3) develop and deliver detailed engineering designs along with all required environmental review documentation. The resulting designs will support the required minimum grant speed of 100Mbps download and 20Mbps upload, with the stated preference of 1Gbps symmetrical service. All tasks are required to be completed in close coordination with USDA RD staff. This work will likely be completed by August or September, 2024, and the grant funds must be expended by September 30, 2025.

In order to formally accept this grant, Inyo County must sign the Award Letter, the Cooperative Agreement, and the Assurance Agreement before December 13, 2023.

FISCAL IMPACT:

| | | | |
|---|--|--------------------|-----|
| Funding Source | Grant Funded - USDA Rural Development, Rural Utilities Service | Budget Unit | TBD |
| Budgeted? | Budget will be amended to include at Mid-Year | Object Code | TBD |
| Recurrence | One-Time Award -- 22 Month Performance Period | | |
| Current Fiscal Year Impact | | | |
| Up to \$110,500 beginning in December, 2023 through September 2025, based on reimbursable work tasks. | | | |
| Future Fiscal Year Impacts | | | |
| Up to \$110,500 beginning in December, 2023 through September 2025, based on reimbursable work tasks. | | | |
| Additional Information | | | |

This is a reimbursement grant based on actual expenditures and costs incurred; therefore, budget amounts are provided for the upper limit for the grant. A new budget unit will be created to support these work efforts and effectively track the funding.

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board could choose to not accept the grant and not approve cooperative and assurance agreements, in which case we will not use grant funds to develop engineering plans for broadband deployment to support future broadband construction in the Furnace Creek area.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. BTA Award Letter - County of Inyo, CA
2. Broadband Technical Assistance Cooperative Agreement
3. Assurance Agreement
4. Grant Application Narrative - Furnace Creek - Inyo CA
5. Vendor Form

APPROVALS:

| | |
|-----------------|--------------------------------|
| Scott Armstrong | Created/Initiated - 11/15/2023 |
| Darcy Ellis | Approved - 11/15/2023 |
| Scott Armstrong | Approved - 11/15/2023 |
| John Vallejo | Approved - 11/15/2023 |
| Amy Shepherd | Approved - 11/15/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |



Rural Development

November 13, 2023

Rural Utilities Service

1400 Independence Ave SW,
Room 2868 Stop 1599
Washington, DC 20250

Voice 202.720.0677

TO: Mr. Scott Armstrong
Regional Broadband Coordinator
County of Inyo, CA
224 N. Edwards Street
Independence, CA, 93526-1700

SUBJECT: Re: Grants.gov Application # GRANT13921206

Dear Mr. Scott Armstrong,

The Rural Utilities Service (RUS) is pleased to inform County of Inyo, CA that its proposal in the amount of \$110,500 for a Broadband Technical Assistance (BTA) award has been selected for funding.

Please review, sign and return the attached Cooperative Agreement to RUS within thirty (30) days or notify RUS if there are any errors with respect to information provided by the agency. Otherwise, the standard agreement is non-negotiable.

Through the receipt of federal funds, the RUS reminds County of Inyo, CA of its accountability and compliance obligations with civil rights laws as outlined in the Funding Opportunity Announcement, 88 Fed. Reg. 24154 (Apr. 19, 2023), for which it applied to the BTA Program.

Additionally, before the award funds can be disbursed, you must:

Please indicate acceptance of this award by having the appropriate authorized or designated official sign and return this letter by email to:

Mr. Kenneth Kuchno, Deputy Assistant Administrator
Policy and Outreach Assessment Division
USDA, Rural Utilities Service
Stop 1590, Room 4121, South Building
1400 Independence Avenue, S.W.
Washington, D.C. 20250-1590
Email: SM.Telecom.TA@usda.gov

If you have any questions concerning the conditions set forth above, please email SM.Telecom.TA@usda.gov.

We look forward to working with you to bring the benefits of advanced telecommunications services to rural America.

Sincerely,

Kenneth Kuchno
 Deputy Assistant Administrator
 Policy and Outreach Division
 Telecommunications Program
 Rural Utilities Service

ACCEPTANCE:
County of Inyo, CA

By: _____
 Name: _____
 Title: _____
 Date: _____

Enclosures:
Cooperative Agreement
FMMI Vendor Code Request Form
Form RD 400-4

cc: Maria Gallegos Herrera, California State Director
Robert Machado, General Field Representative

BROADBAND TECHNICAL ASSISTANCE

COOPERATIVE AGREEMENT

dated as of November 13, 2023

between

County of Inyo

and

THE UNITED STATES OF AMERICA

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**BROADBAND TECHNICAL ASSISTANCE
COOPERATIVE AGREEMENT**

THIS COOPERATIVE AGREEMENT (this "Agreement"), dated as of November 13, 2023 is between **County of Inyo** ("Awardee"), a County Government existing under the laws of California, and the **UNITED STATES OF AMERICA**, acting through the Administrator of the Rural Utilities Service ("RUS").

The Awardee has applied for financial assistance from RUS (the "Application") to receive or deliver broadband technical assistance and training that promotes the expansion of broadband into rural areas.

RUS is willing to extend financial assistance, in the form of a cooperative agreement grant to the Awardee, pursuant to the Consolidated Appropriations Act, 2018, Pub. L. 115-141, § 779 (the "FY2018 Appropriations"), the Infrastructure Investment and Jobs Act, Pub. L. 117-58 (the "IIJA"), the Funding Opportunity Announcement ("FOA") published at 88 Fed. Reg. 24154 (Apr. 19, 2023), and Title VI of the Rural Electrification Act of 1936, 7 U.S.C. §§ 901 *et seq.* (the "RE Act"), and all applicable federal regulations, on the terms and conditions stated herein.

THEREFORE, in consideration of the promises and mutual covenants herein contained, the parties agree and bind themselves as follows:

ARTICLE I – DEFINITIONS

The terms defined herein include both the plural and the singular. Unless otherwise specifically provided herein or in the FOA, all accounting terms not otherwise defined herein shall have the meanings assigned to them, and all determinations and computations herein provided for shall be made in accordance with Accounting Requirements.

"Advance" or "Advances" shall mean the disbursement of grant funds in accordance with this Agreement.

"Affiliate" or "Affiliated Company" of any specified person or entity means any other person or entity directly or indirectly controlling of, controlled by, under direct or indirect common control with, or related to, such specified person or entity, or which exists for the sole purpose of providing any service to one company or exclusively to companies which otherwise meet the definition of affiliate. This definition includes Variable Interest Entities as described in Financial Accounting Standards Board Interpretation (FIN) No. 46(R), *Consolidation of Variable Interest Entities*. For the purpose of this definition, "control" means the possession directly or indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement with, one or more other companies, and whether such power is established through a majority or minority ownership voting of securities, common directors, officers, or stockholders, voting trust, holding trusts (other than money exchanged) for property or services.

"Award" shall mean the grant described in Article III.

"Application" shall mean all information submitted to the RUS requesting financial assistance for broadband technical assistance, including the certifications and representations made in the standard forms.

"Budget" shall mean the line-item budget for the Scope of Work, approved by the RUS, attached hereto as Schedule 2.

"Eligible Purposes" shall mean purposes and expenses which are specified in the FOA as being eligible for funding.

"Event of Default" shall have the meaning as defined in Article X.

"Expiration Date" shall have the meaning as defined in Section 3.1(b).

"Grant" shall mean the grant described in Section 3.1.

"Material Adverse Effect" shall mean a material adverse effect on, or change in, the condition, financial or otherwise, operations, properties, business, or prospects of the Awardee or on the ability of the Awardee to perform its obligations under the Grant Agreement as determined by RUS.

"Scope of Work" shall mean all work, as approved by the Agency, to receive or deliver broadband technical assistance and training that promotes the expansion of broadband into rural areas, as outlined in the Application, attached hereto as Schedule 3.

"SF 270" shall have the meaning as defined in Section 4.3(e).

"Subsidiaries" shall mean the subsidiaries listed in Schedule 1.

ARTICLE II - REPRESENTATIONS AND WARRANTIES

Recognizing that RUS is relying hereon, the Awardee represents and warrants, as of the date of this Agreement, as follows:

- (a) *Organization; Power, Etc.* The Awardee: (i) is the type of organization specified in the first paragraph hereof, duly organized, validly existing, and in good standing under the laws of the State identified in the first paragraph hereof; (ii) is duly qualified to do business and is in good standing in each jurisdiction in which the transaction of its business make such qualification necessary; and (iii) is eligible to obtain the financial assistance from RUS contemplated by this Agreement.
- (b) *Authority.* The execution, delivery and performance by the Awardee of this Agreement and the performance of the transactions contemplated herein have been duly authorized by all necessary.
- (c) *Litigation.* There are no pending or threatened legal, arbitration or governmental actions or proceedings to which the Awardee is a party which, if adversely determined, could have a Material Adverse Effect.
- (d) *Information Submitted with Application.* All information submitted to RUS in connection with the Application was, at the time furnished, complete, and correct in all material respects. Awardee acknowledges that all such information submitted shall be incorporated into this Agreement. Awardee also represents that since the submission of the Application, there has been no material adverse change in the financial condition or operations of the Awardee.
- (e) *Principal Place of Business.* The principal place of business and chief executive office of the Awardee is at the address of the Awardee specified in Schedule 1 hereto.
- (f) *Organization Number.* The Awardee's organization number is correctly identified in Schedule 1 hereto.
- (g) *Subsidiaries and Parent.* Any subsidiaries or parent of the Awardee are disclosed on the attached Schedule 1.

ARTICLE III – THE COOPERATIVE GRANT

Section 3.1 Cooperative Grant Amount and Expiration Date.

- (a) *Grant Amount.* RUS agrees to make and the Awardee agrees to accept, on the terms and conditions stated in this Agreement and subject to 31 U.S.C. 1551 and 1552, a grant, in the amount specified in Schedule 1 hereto (the “Grant”) to be used for broadband technical assistance and training, as further described in the Application and this Agreement.
- (b) *Expiration Date.* The obligation of RUS to advance the Award, or any portion thereof, shall expire on September 30, 2025 (“Expiration Date”).

Section 3.2 Scope of Work

- (a) *Grant Purpose.* The grant has been made solely for the receipt or delivery of broadband technical assistance and training that promotes the expansion of broadband into rural areas (the "Scope of Work"), as enumerated in Schedule 3.
- (b) *Changes to Scope of Work.* The Awardee shall obtain the prior written approval of RUS for any material change to the Scope of Work.

Section 3.3 ACH Payments

The Awardee consents to the use of the Automated Clearing House (ACH) Payment System and to the deposit of award funds directly into the Pledged Deposit Account.

ARTICLE IV – CONDITIONS OF FINANCIAL ASSISTANCE

Section 4.1 Conditions Precedent to Closing

In connection with the execution and delivery of this Agreement, each of the following conditions shall be satisfied (all documents, certificates and other evidence of such conditions are to be satisfactory to RUS in its discretion):

- (a) *Legal Matters.* All legal matters incident to the consummation of the transactions hereby contemplated shall be satisfactory to counsel for RUS;
- (b) *Cooperative Agreement.* RUS shall receive duly executed originals of this Agreement;
- (c) *Articles of Incorporation, Charter, Bylaws and Organizational Documents.* With respect to corporate and cooperative Awardees, RUS shall have received certified copies of the Awardee’s most recent articles of incorporation or charter and bylaws. With respect to limited liability companies or similar organizations, RUS shall have received certified copies of the Awardee’s most recent organization documents; and
- (d) *Certificate of Authority.* RUS has received from the Awardee a duly authorized and executed certification Form 675, "Certification of Authority," designating an officer, employee, or agent of the Awardee as the person or persons authorized to execute and submit, on behalf of the Awardee, a completed Standard Form 270, "Request for Advance or Reimbursement" (hereinafter "SF 270").

Section 4.2 Conditions to Individual Advances

The obligations of RUS to approve any Advance are subject to the satisfaction of each of the following conditions precedent on or before the date of such Advance (all documents, certificates and other evidence of such conditions precedent are to be satisfactory to RUS in its discretion):

- (a) *Continuing Representations and Warranties.* That the representations and warranties of the Awardee contained in this Agreement be true and correct on and as of the date of such Advance as though made on and as of such date;
- (b) *Material Adverse Effect.* That no event has occurred which has had or could have a Material Adverse Effect;
- (c) *Event of Default.* That no Event of Default and no event which with the passage of time or giving of notice, or both, would constitute an Event of Default shall have occurred and be continuing, or shall have occurred after giving effect to any Advances on the books of the Awardee;
- (d) *Requisitions and Supporting Documentation.* That RUS shall have received not more frequently than once a quarter, unless otherwise agreed to by RUS, an SF 270, bearing the original signature of the officer, employee, or agent of the Awardee authorized to receive, disburse, or receive and disburse the Award, with supporting documentation from the Awardee. Advances shall be limited to the minimum amounts required for the Awardee's immediate disbursement needs and shall be requested by the Awardee only for actual immediate cash requirements of the Awardee. Such advances shall be provided on a reimbursement basis, or based on unpaid third-party invoices for Eligible Purposes, or contracts approved by RUS;
- (e) *Compliance with Cooperative Agreement.* That the Awardee is in material compliance with this Agreement; and
- (f) *Additional Documents.* That the Awardee agrees to provide RUS with such additional documents as RUS may request.

ARTICLE V – AFFIRMATIVE COVENANTS

Section 5.1 General

Unless otherwise agreed to in writing by RUS, while this Agreement is in effect, the Awardee shall duly observe each of the affirmative covenants contained in this Article V.

Section 5.2 Use of Advances

The Awardee shall expend Award funds only for Eligible Purposes in accordance with the RUS approved line-item Scope of Work and SF 270s submitted to RUS prior to the advance of funds.

Section 5.3 Unused and Disallowed Advances

- (a) The Awardee shall return to RUS forthwith all or any advanced portion of the grant not disbursed by the Awardee for the Scope of Work with any interest earned thereon when deposited in the Pledged Deposit Account.
- (b) The Awardee shall reimburse RUS for any advanced funds whose original expenditure has been disallowed by an RUS grant audit. Disallowances shall be satisfied, as directed by RUS, by either administrative offset against other approved purposes on SF 270s or repaying the disallowed amount directly to the United States Treasury. Such disallowed amounts shall accrue interest payable to RUS from the date RUS delivers to the Awardee

a written demand for payment. Interest shall accrue on disallowed grant Advances at the then current United States Treasury rate as prescribed by the Secretary of the Treasury. Closeout of this Agreement will not affect the right of RUS to disallow expenditures and recover, in full, any amount on the basis of a subsequent audit or other review or the Awardee's obligation to return any disallowed expenditures.

Section 5.4 Deposit of Advances into Pledged Deposit Account

- (a) The Awardee shall open and maintain a deposit account pledged to RUS ("Pledged Deposit Account,") in a bank or depository whose deposits are insured by the Federal Deposit Insurance Corporation or other federal agency acceptable to RUS and shall be identified by the RUS' designation of the Awardee followed by the words "Pledged Deposit Account." The Awardee shall promptly deposit proceeds from all Advances, including previously advanced funds whose original expenditure has been disallowed by an RUS audit into the Pledged Deposit Account. Moneys in the Pledged Deposit Account shall be used solely for the purposes for which Advances were made, or for such other purposes as may be approved in writing by RUS.
- (b) *First Lien on Pledged Deposit Account.* The Awardee shall perfect and maintain a first and prior lien in the Pledged Deposit Account (pursuant to a deposit account agreement or similar agreement or mechanism for perfecting as provided by applicable law) in form acceptable to RUS.

Section 5.5 Miscellaneous Notices

The Awardee shall furnish to RUS:

- (a) *Notice of Default.* Promptly after becoming aware thereof, notice of the occurrence of any default under the Grant Agreement or the receipt of any notice given pursuant to the Grant Agreement with respect to the occurrence of any event which with the giving of notice or the passage of time, or both, could become an Event of Default hereunder or under any other part of the Grant Agreement.
- (b) *Notice of Litigation.* Promptly after the commencement thereof, notice of the commencement of all actions, suits or proceedings before any court, arbitrator, or governmental department, commission, board, bureau, agency, or instrumentality affecting the Awardee or any Affiliate which, if adversely determined, could have a Material Adverse Effect.
- (c) *Material Adverse Effect.* Promptly after becoming aware thereof, notice of any matter which has resulted or may result in a Material Adverse Effect.
- (d) *Corporate Document Changes.* Thirty (30) days prior to their effectiveness, any amendments, supplements or modifications to the Awardee's Articles of Incorporation, Charter, Bylaws, Operating Agreement, Members Agreements or other Organizational Documents.

Section 5.6 Travel Expenses

All travel using Award funds must be directly related to the approved Statement of Work and Budget and must comply with 31 U.S.C. § 1345, *Federal Travel Regulations*, and applicable cost principles.

Section 5.7 Use and Publication of Information

- (a) Awardee shall not make available to other persons, except as authorized by RUS, any unpublished confidential data or information obtained or developed under and during this Agreement. Awardee shall not use such identifying data or information for any purpose other than for carrying out its obligations under this Agreement.
- (b) Awardee shall be free to publish in professional journals data or information obtained or developed, except as provided in subsection (a) above, resulting from the activities under this Agreement. Awardee agrees to submit a copy of any such publication to RUS sixty (60) calendar days prior to publication for review to ensure that confidentiality of the deliverables is maintained and that RUS and the program have been accurately represented, as determined by RUS. All educational and technical assistance materials developed by Awardee remains the property of Awardee; however, RUS has a non-exclusive, royalty-free, non-transferable, irrevocable license to reproduce, prepare derivative work and distribute copies of the deliverables so long as such deliverables are used for non-commercial educational or government purposes.
- (c) Awardee shall acknowledge USDA support in any publication written or published with respect to this Award and, if feasible, that such publication states the following: "This material is based upon work supported by the U.S. Department of Agriculture, Rural Utilities Service."
- (d) Awardee will utilize the logo provided by RUS on all educational and promotional materials developed for the Scope of Work. Awardee may also use its and its partners' logos where appropriate.

Section 5.8 Section 508 Compliance

Section 508 of the Americans with Disabilities Act requires Federal departments and agencies that develop, procure, maintain, or use electronic and information technology to ensure that Federal employees and members of the public with disabilities have access to and use of information and data, comparable to that of the employees and members of the public without disabilities. Awardees providing services or products to, and on behalf of, Federal agencies must provide Section 508 compliant deliverables. For further information, visit www.Section508.gov.

ARTICLE VI – ACCOUNTING AND REPORTING

Section 6.1 Financial Records

Awardees must account for all funds advanced under this Agreement and shall maintain, at its premises, such books, documents, papers, or other records and supporting documents, including, but not limited to, invoices, receipts, payroll records and bills of sale, adequate to identify the purposes for which, and the manner in which grant funds were expended on the Scope of Work. The Awardee shall maintain copies of all documents submitted to RUS in connection with the Award until the longer of (i) all audits have been completed, (ii) the term of this Agreement or (iii) three years subsequent to closeout of the Award.

Section 6.2 Rights of Inspection

The Awardee shall afford RUS, the Office of the Inspector General of USDA, and the Government Accountability Office, through their representatives, reasonable opportunity, at all times during business hours and upon prior notice, to have access to and right to inspect records related to the Scope of Work, including electronic books, accounts and electronic mail messages, regardless of the physical form or characteristics, invoices, contracts, leases, payroll records, canceled checks, statements, and other documents,

and papers of every kind belonging to or in any way pertaining to the Scope of Work, including its Subsidiaries, if such entities received for work under this Agreement, and to make copies or extracts therefrom.

Section 6.3 Annual Audit

- (a) Non-Federal Entities, which include Awardees that are States, local governments, Indian tribes, institutions of higher education, or nonprofit organizations, shall provide RUS with an audit pursuant to 2 C.F.R. part 200, Subpart F (Audit Requirements). The Awardee must follow subsection 200.502 in determining federal awards expended. All RUS loans impose an ongoing compliance requirement for the purpose of determining federal awards expended during a fiscal year. In addition, the Awardee must include the value of new federal loans made along with any grant expenditures from all federal sources during the Awardee's fiscal year. Therefore, the audit submission requirement for this program begins in the Awardee's fiscal year that the loan is made and thereafter, based on the balance of federal loan(s) at the beginning of the audit period. All required audits must be submitted within the earlier of: (i) 30 calendar days after receipt of the auditor's report; or (ii) nine months after the end of the Awardee's audit period.
- (b) For all other entities, Awardees shall provide RUS with an audit within 120 days after the as of audit date in accordance with 7 C.F.R. part 1773, Policy on Audits of RUS Borrowers. Note that with respect to Advances that contain loan funds, the audit is required after an Advance has been made, and, thereafter, from the close of each subsequent fiscal year until the loan is repaid in full. With respect to Advances that only contain grant funds, the audit is required until all grant funds have been expended or rescinded. While an audit is required, Awardees must also submit a report on compliance and internal controls over financial reporting, as well as a report on compliance with aspects of contractual agreements and regulatory requirements.

Section 6.4 Reporting

- (a) *Annual Reporting.* The Awardee shall submit an annual Federal Financial Report on SF-425.
- (b) *Performance Report.* The Awardee shall deliver an annual performance report to RUS until the project is complete and funds are expended. The performance report shall address:
 - (i) a comparison of actual accomplishments to the objectives set forth in the Application;
 - (ii) a description of problems, delays, or adverse conditions that occurred, or which affected the attainment of overall Scope of Work objectives, prevented the meeting of time schedules or objectives, or precluded the attainment of particular work elements. This disclosure shall be accompanied by a statement of the action taken or planned to resolve the situation; and
 - (iii) objectives and timetable established for next reporting period.
- (c) *Closeout Report.* The Awardee shall deliver a closeout report to RUS no later than one hundred twenty (120) days after the expiration or termination of the Award or expenditure of all Award funds. The close out report shall address: (i) a comparison of actual accomplishments to the objectives set forth in the Application; (ii) a description of problems, delays, or adverse conditions that occurred, or which affected the attainment of overall Scope of Work objectives, prevented the meeting of time schedules or objectives, or precluded the attainment of particular work elements; and (iii) a comparison of how funds were spent against the budget submitted with the Application, approved by RUS, and attached hereto as Schedule 3.

ARTICLE VII – NEGATIVE COVENANTS

Section 7.1 General

Unless otherwise agreed to in writing by RUS, while this Agreement is in effect, the Awardee shall duly observe each of the negative covenants set forth in this Article VII.

Section 7.2 Contracts

The Awardee shall not, without the prior written consent of RUS, enter into any contract or contracts for the performance of any part of the Scope of Work. With respect to approved Scope of Work to be performed by Affiliates, such work will be limited to an amount which is the lower of cost or market rate and which is subject to verification by RUS and its representatives having access to the books and records of the Affiliate.

Section 7.3 Restrictions on Changes to Line-Item Budget

The Awardee agrees that the Budget for the Scope of Work is a line-item Budget and agrees not to make any revisions to the RUS approved line-item Budget, without the prior written approval of RUS.

ARTICLE VIII – GRANTOR’S RIGHTS

Section 8.1 Termination of Award Offer

RUS, in its sole discretion, may terminate this Agreement if it does not receive a duly executed counterpart to this Agreement with all conditions in Section 4.1 satisfied within sixty (60) days from the date of receipt of the Agency’s signed Agreement.

Section 8.2 Audits and Compliance Reviews

After giving prior notification to the Awardee, RUS has the right to conduct compliance reviews and audits of the Awardee to assure compliance with this Agreement.

Section 8.3 Disallowed Expenditures

Upon a determination by RUS that the Awardee did not expend Award funds on Eligible Purposes in accordance with the RUS approved line-item Scope of Work and the SF 270s approved by RUS prior to the advance of funds, RUS may, in its sole discretion:

- (a) Disallow all or a part of the expenditures and disbursements of the Award and require the Awardee to deposit such funds in the Pledged Deposit Account to be applied toward other approved Scope of Work purposes on SF 270s or to reimburse the Government, as provided in Section 5.3 hereof;
- (b) Suspend future Advances; and/or
- (c) Take any other action RUS determines to be necessary including, without limitation, exercising any right or remedy available under this Agreement or law.

Section 8.4 Suspension of Advances

RUS may, in its absolute discretion, suspend approving Advances on the Award upon making a determination that an event has occurred that is likely to have a Material Adverse Effect. RUS may also suspend approving advances of the Award upon the occurrence of an Event of Default.

ARTICLE IX - EVENTS OF DEFAULT

Section 9.1 Events of Default

The following shall be events of default (each an "Event of Default") under this Agreement:

- (a) Representations and Warranties. Any representation or warranty made by the Awardee in this Agreement, SF 270s or any certificate furnished to RUS under this Agreement, or in the Application shall prove to have been incorrect in any material respect at the time made;
- (b) Improper Expenditures. The Awardee expends Award funds on costs which are not Eligible Purposes in accordance with the RUS approved line-item Scope of Work and the SF 270s approved by RUS prior to the advance of funds;
- (c) Failure to Keep Adequate Records. The Awardee fails to keep adequate records, including the failure to document Award fund expenditures for Eligible Purposes as required herein;
- (d) Failure to Comply with Accounting and Reporting Requirements. The Awardee fails to comply with the accounting and reporting requirements in Article VI;
- (e) Bankruptcy. A court having jurisdiction in the premises shall enter a decree or order for relief with respect to the Awardee in an involuntary case under any applicable bankruptcy, insolvency, or other similar law now or hereafter in effect: (1) appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator, or similar official, or (2) ordering the winding up or liquidation of its affairs; or the Awardee shall commence a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or under any such law, or consent to the appointment or taking possession by a receiver, liquidator, assignee, custodian or trustee, of a substantial part of its property, or make any general assignment for the benefit of creditors; and
- (f) Dissolution or Liquidation. Other than as provided in the immediately preceding subsection, the dissolution or liquidation of the Awardee, or the filing of such by the Awardee.

ARTICLE X - REMEDIES

Section 10.1 General

Upon the occurrence of an Event of Default, RUS may pursue all rights and remedies available to RUS that are contemplated by the Grant Agreement in the manner, upon the conditions, and with the effect provided in the Grant Agreement, and may pursue such other remedies that are generally available at law or in equity including, without limitation, a suit for specific performance, injunctive relief or damages. Nothing herein shall limit the right of RUS to pursue all rights and remedies available to a creditor following the occurrence of an Event of Default listed in Article X hereof. Each right, power and remedy of RUS shall be cumulative and concurrent, and recourse to one or more rights or remedies shall not constitute a waiver of any other right, power or remedy.

Section 10.2 Remedies

In addition to the remedies referred to in Section 11.1 hereof, upon the occurrence of an Event of Default, RUS may:

- (a) Refuse to make any advance or further advance on account of the Award, but any advance thereafter made by RUS shall not constitute a waiver of such default;
- (b) Terminate the obligation to further advance on account of the Award; and/or
- (c) RUS shall have, in addition to any other rights and remedies contained in this Agreement, all of the rights and remedies of a secured party under the Uniform Commercial Code in force in the state identified in the first paragraph hereof, as well as the state where the Collateral is located, as of the date hereof, all of which rights and remedies shall be cumulative, and nonexclusive.

ARTICLE XI - MISCELLANEOUS

Section 11.1 Notices

All notices, requests and other communications provided for herein including, without limitation, any modifications of, or waivers, requests or consents under, this Agreement shall be given or made in writing (including, without limitation, by email) delivered to the intended recipient at the "Address for Notices" specified below; or, as to any party, at such other address as shall be designated by such party in a notice to each other party. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given when transmitted by email delivered or, in the case of a mailed notice, upon receipt, in each case given or addressed as provided for herein. The Addresses for Notices of the respective parties are as follows:

| | |
|---|----------------------------------|
| <u>RUS</u> Rural Utilities Service United States Department of Agriculture 1400 Independence Avenue, S.W. Washington, D.C. 20250-1510 Attention: Administrator Email:reconnect@usda.gov | <u>Awardee</u> See Schedule 1 |
|---|----------------------------------|

| | |
|---|--|
| <u>With a copy to:</u> Rural Utilities Service United States Department of Agriculture 1400 Independence Avenue, S.W. Stop 1590, Room No. 4121 Washington, D.C. 20250-1590 Attention: Peter Amiable | <u>With a copy to:</u> See Schedule 1 |
|---|--|

Section 11.2 No Waiver

No failure on the part of RUS to exercise, and no delay in exercising any right hereunder shall operate as a waiver thereof nor shall any single or partial exercise by RUS of any right hereunder preclude any other or further exercise thereof or the exercise of any other right.

Section 11.3 Governing Law

This Agreement shall be governed by and construed in accordance with applicable federal law and, in the absence of controlling federal law, by the laws of the State identified in the first paragraph herein, except those that would render such choice of law ineffective.

Section 11.4 Consent to Jurisdiction

The Awardee hereby irrevocably submits to the jurisdiction of the U.S. District Court for the District of Columbia and the US Court of Appeals for the Federal Circuit (both the "DC Federal Courts") for any action or proceeding arising out of or relating to this Agreement, and hereby irrevocably agrees that all claims in respect of such action or proceeding shall be heard and determined in such federal courts. The Awardee irrevocably consents to the service of process out of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to the Awardee's address set forth in Schedule 1. The Awardee hereby irrevocably waives any objection which it may now or hereafter have to the laying of venue of any of the aforesaid actions or proceedings arising out of or in connection with this Agreement brought in the DC Federal Courts and hereby further irrevocably waives and agrees not to plead or claim in such court that any such action or proceeding brought in any such court has been brought in a forum *non conveniens*. Nothing herein shall affect the right of the Government to serve process in any other manner permitted by law or to commence legal proceedings or otherwise proceed against the Awardee in its own jurisdiction.

Section 11.5 Waiver of Jury Trial

EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, SECURED PARTY, OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 11.6 Rescission

The Awardee may elect to rescind this Agreement, in which event RUS shall release the Awardee from its obligations hereunder, provided the Awardee complies with such terms and conditions as RUS may impose for such release.

Section 11.7 Successors and Assigns

- (a) This Agreement shall be binding upon and inure to the benefit of the Awardee and RUS and their respective successors and assigns, except that the Awardee may not assign or transfer its rights or obligations hereunder without the prior written consent of RUS.
- (b) Pursuant to federal claims collection laws, RUS' claims hereunder may be transferred to other agencies of the United States of America; in the event of such a transfer, all rights and remedies hereby granted or conferred on RUS shall pass to and inure to the benefit of any such successor agency.

Section 11.8 Complete Agreement; Waivers and Amendments

Subject to RUS Regulations, this Agreement and all parts of the Grant Agreement are intended by the parties to be a complete and final expression of their agreement. However, RUS reserves the right to waive its rights to compliance with any provision of this Agreement. No amendment, modification, or waiver of any provision hereof or thereof, and no consent to any departure of the Awardee herefrom or therefrom, shall be effective unless approved in writing by RUS, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

Section 11.9 Liability

Awardee and RUS agree to be responsible and assume liability for their own wrongful or negligent acts or omissions, or those of its officers, agents, or employees, to the full extent required by law.

Section 11.10 Headings

The headings and sub-headings contained in the titling of this Agreement are intended to be used for convenience only and do not constitute part of this Agreement.

Section 11.11 Severability

If any term, provision, condition, or any part thereof, of this Agreement or the Security Documents shall for any reason be found or held invalid or unenforceable by any governmental agency or court of competent jurisdiction, such invalidity or unenforceability shall not affect the remainder of such term, provision, or condition nor any other term, provision, or condition, and this Agreement and the Security Documents shall survive and be construed as if such invalid or unenforceable term, provision or condition had not been contained therein.

Section 11.12 Schedules

The Schedules attached hereto and referred to herein is an integral part of this Agreement.

Section 11.13 Authority of Representatives of RUS

In the case of any consent, approval or waiver from RUS that is required under this Agreement, such consent, approval or waiver must be in writing and signed by an authorized RUS representative to be effective. As used in this section, "authorized RUS representative" means the Administrator of RUS, and also means a person to whom the Administrator has officially delegated specific or general authority to take the action in question.

Section 11.14 Term

This Agreement shall remain in effect until one of the following two events has occurred:

- (a) The Awardee and RUS replace this Agreement with another written agreement; or
- (b) All of the Awardee's obligations under this Agreement, including the Service Obligation, have been discharged and paid.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

County of Inyo

by _____
Name:
Title:

(Seal)

Attested to by: _____
Secretary

UNITED STATES OF AMERICA

by _____
Administrator
of the Rural Utilities Service |

SCHEDULE 1

Article II Representations and Warranties

1. Paragraph (e) Awardee's Principal Place of Business:
224 N. Edwards Street
Independence, California 93526-1700
2. Paragraph (f) Awardee's Organization Number: EU9KBPLKZ5K5
3. Paragraph (g) Awardee's Subsidiaries: N/A
4. Paragraph (g) Awardee's Parent: N/A

Article III The Cooperative Grant

1. Section 3.1(a) Grant amount: \$110,500.00

Article XII Miscellaneous

1. Section 11.1 Awardee's address for purposes of notification:

224 N. Edwards Street
Independence, California 93526-1700
2. Section 11.1 Address for Awardee's notification copy:

224 N. Edwards Street
Independence, California 93526-1700

**SCHEDULE 2
BUDGET**

| Line Item | Item Category | Item Cost |
|---|----------------------|---------------------|
| 1 | Personnel | \$17,000.00 |
| 2 | Contractual | \$93,500.00 |
| Total Project Cost to be Funded by Award | | \$110,500.00 |

**SCHEDULE 3
STATEMENT OF WORK**

I. OBJECTIVES & DELIVERABLES

The County of Inyo application for the USDA Rural Development Broadband Technical Assistance Grant is intended to result in shovel-ready, last-mile, detailed network engineering designs for broadband Internet service in the exceptionally rural area of Furnace Creek, California. Our project area includes the residential area for Death Valley National Park Service (NPS) employees at Park Village near Cow Creek, located about 4 miles north of Furnace Creek, to the resort about 1 mile south-southeast of Furnace Creek.

Anticipated Deliverables:

- Detailed last-mile network designs in a high-resolution, digital format, that can be used by any relatively competent network construction contractor to build last-mile network infrastructure supporting speeds of 100Mbps download and 20Mbps upload or better, preferably synchronous 1Gbps speeds or better.
- Designs should accommodate multiple Internet connection options, including the State’s expected open-access, middle-mile network in 2025 or 2026.
- Transition Plans with the design to change from temporary Internet connections to the State’s expected middle-mile network.

II. STATEMENT OF WORK

Work Plan Approach

Project Objectives:

- Hire a qualified network design contractor through the County-required competitive selection process.
- With the contractor, identify and catalog all locations in the Furnace Creek area, including residences, businesses, and organizations, that may benefit from being connected to broadband Internet infrastructure.
- Through a contractor, develop creative and flexible, shovel-ready, last-mile detailed engineering designs to connect as many of the cataloged locations in the Furnace Creek area as practicable to multiple broadband Internet service delivery connection locations.
 - The resulting network designs should be detailed enough for any reasonably capable and qualified network construction company to construct last-mile fiber-to-the-premise network infrastructure.
 - The resulting network designs should support speeds of 100Mbps download and 20Mbps upload or better, preferably synchronous 1Gbps speeds or better.
 - The resulting network designs should provide for near-term Internet service connections with support for multiple satellite or fixed wireless broadband service connections, as well as long-term Internet service connections to the future State-owned, open-access, middle-mile, fiber-optic network. Construction of the State-owned middle-mile network is required to be completed by December, 2026.

Project Key Goals:

- Through a contractor, develop shovel-ready, last-mile detailed engineering designs for the Furnace Creek area that can be used for construction of last-mile network infrastructure for near-term Internet service connections with support for multiple satellite or fixed wireless broadband service connections, as well as long-term Internet service connections to the future middle-mile network at speeds of 100Mbps download and 20Mbps upload or better, preferably at synchronous 1Gbps speeds or better.
- These design plans will be used for future last-mile network infrastructure construction projects that will do the following:
 - Provide additional and improved economic and market opportunities in the Furnace Creek area.

- Provide easier access to online Rural Utilities Service programs for agricultural companies to the north and east of the region.
- Provide online access to a variety of services that would otherwise require 2-3 hours of travel by vehicle to do so, reducing impact of vehicle exhaust emissions on the environment.

Work Plan Implementation

- Technical Assistance will be provided by a contractor in the form of pre-construction, detailed network engineering designs for network infrastructure that will support broadband Internet service delivery.
- Having detailed network engineering designs and an environmental compliance pathway completed would make a construction project in this area much more enticing for a company. The engineering designs will also help to establish construction cost estimates for grant funding to construct the network.

Major Tasks:

- Task 1: County-required process to hire a contractor
 - Subtask 1: Broadband Coordinator & County Staff: Create and post a Request for Proposals for design work, coordinate with USDA RD Staff
 - Subtask 2: Broadband Coordinator & County Staff, USDA RD Staff: Evaluate responses and select the winning bidder.
 - Subtask 3: Broadband Coordinator & County Staff: Enter into a contract for the design work, coordinate with USDA RD Staff
- Task 2: Identify and catalog the locations to be included in the designs
 - Subtask 1: Broadband Coordinator & County Staff, USDA RD Staff: work with the Contractor to review and validate the locations for the design project.
- Task 3: Contractor design work
 - Subtask 1: Contractor: develop and deliver detailed, last-mile network infrastructure designs including environmental compliance and evaluation.
 - Subtask 2: Broadband Coordinator & County Staff, USDA RD Staff: respond to Contractor questions any coordinate environmental reviews.

Time Period of Major Tasks:

- Task 1, Subtask 1: Award notification to Month 1 (Create and Post RFP)
- Task 1, Subtask 2: Month 1 to Month 3 (Select the Winning Bidder)
- Task 1, Subtask 3: Month 3 to Month 4 (Enter into Contract)
- Task 2, Subtask 1: Month 4 to Month 5 (Review & Validate Locations)
- Task 3, Subtask 1: Month 5 (Contractor Design Work Delivered)
- Task 3, Subtask 2: Month 5 (Staff coordination with Contractor)

Statement of work for contractor or consultant:

- Develop shovel-ready, last-mile detailed engineering designs that can be used by any reasonably capable and qualified network construction company to construct last-mile fiber-to-the-premise network infrastructure.
 - Provide detailed, shovel-ready, engineering designs for last-mile network infrastructure that is capable of supporting Internet service at 100Mbps download and 20Mbps upload or better, preferably at synchronous 1Gbps speeds or better.
 - Engineering designs should include network infrastructure connections from middle-mile network to all unserved communities, households and businesses.
 - The engineering designs should accommodate multiple Internet connection options, including the State’s expected open-access, middle-mile network in 2025 or 2026.
 - If your designs include middle-mile network to support your last-mile designs, identify those network segments in your designs as such.
 - Complete any required environmental review pursuant to CEQA or NEPA, including any required technical studies necessary to complete them. In the event of any scope change due to project site conditions, provide all required professional environmental services necessary to obtain environmental clearance. Ensure that the project design

documents comply with the requirements set forth in the environmental documents and any required regulatory agency permits.

- Designs must comply with: Federal laws; State laws; local laws; rules and regulations of governing utility districts; and rules and regulations of other authorities with jurisdiction over the construction of network infrastructure.

III. AWARDEE RESPONSIBILITIES

The awardee agrees to the responsibilities detailed in the approved project work plan.

IV. RUS RESPONSIBILITIES

RUS will be responsible for providing the following activities under this Agreement:

| Activity Number | Proposed Substantial Involvement by RD Staff |
|-----------------|--|
| 1 | Assist with contractor RFP coordination; contract coordination; location validation; design input; and contractor inquiry responses. |

The document you are trying to load requires Adobe Reader 8 or higher. You may not have the Adobe Reader installed or your viewing environment may not be properly configured to use Adobe Reader.

For information on how to install Adobe Reader and configure your viewing environment please see http://www.adobe.com/go/pdf_forms_configure.

USDA RD BTA Grant Application Narrative

Project Location: Furnace Creek, Inyo County, California

Funding Category: Technical Assistance Recipient

The County of Inyo application for the USDA Rural Development Broadband Technical Assistance Grant is intended to result in shovel-ready, last-mile, detailed network engineering designs for broadband Internet service in the exceptionally rural area of Furnace Creek, California. Our project area includes the residential area for Death Valley National Park Service (NPS) employees at Park Village near Cow Creek, located about 4 miles north of Furnace Creek, to the resort about 1 mile south-southeast of Furnace Creek. We intend to hire a contractor through the County-required competitive selection process, and to work with that contractor to develop the shovel-ready, last-mile detailed network engineering designs for the Furnace Creek area.

There is currently no wireline Internet service available in Death Valley National Park, which includes the Furnace Creek area. Despite the popularity of Death Valley National Park—the Park sees approximately 1.7 million visitors annually—Internet service providers have expressed little interest over the last several years in constructing and providing wireline broadband Internet service in that area because the communities are too small to provide a reliable return on investment that includes constructing infrastructure.

With funding from this BTA grant, we plan to develop a creative and flexible, last-mile Internet service solution design for the Furnace Creek area that will enable community-based cooperatives to provide faster, more reliable Internet service to that area until the State’s middle-mile network is constructed in the region in 2025 or 2026. Following the completion of the network engineering designs, we plan to seek funding for the construction of the last-mile infrastructure, making it more feasible for Internet service providers to deliver services in this area. We also expect that this creative and flexible approach to designing and constructing last-mile network infrastructure will be used as a model for internet connectivity solutions in other very remote and exceptionally rural areas in our County.

Project Work Plan (30 points)

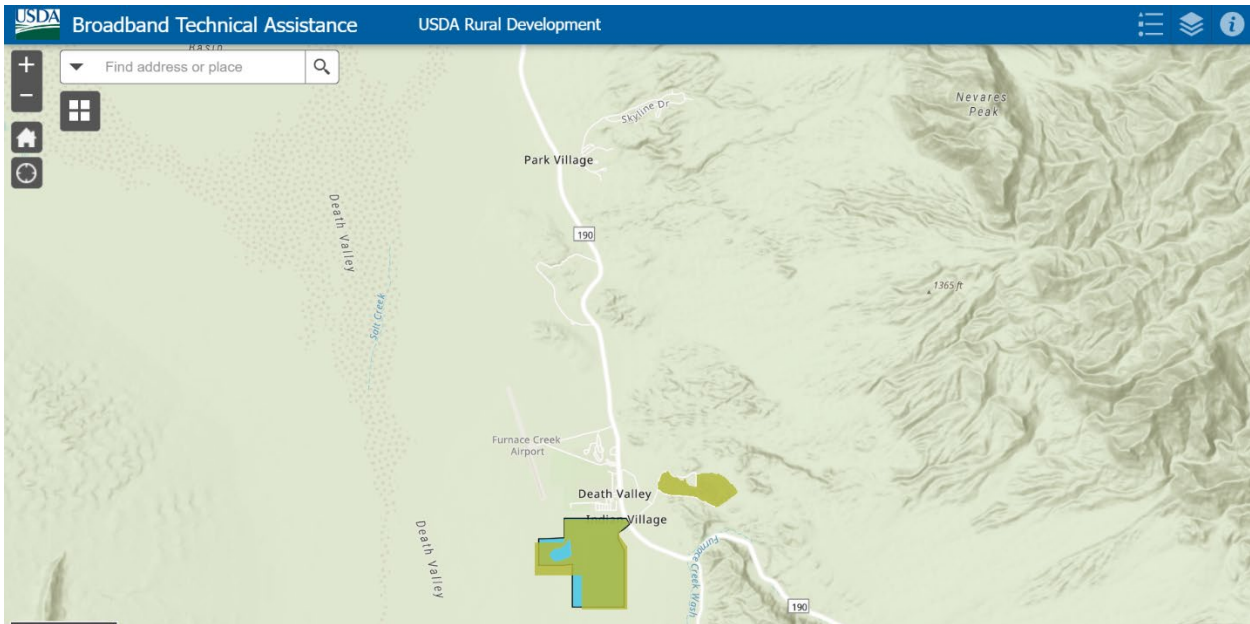
Work Plan Approach:

- Project Objectives:
 - o Hire a qualified network design contractor through the County-required competitive selection process.
 - o With the contractor, identify and catalog all locations in the Furnace Creek area, including residences, businesses, and organizations, that may benefit from being connected to broadband Internet infrastructure.

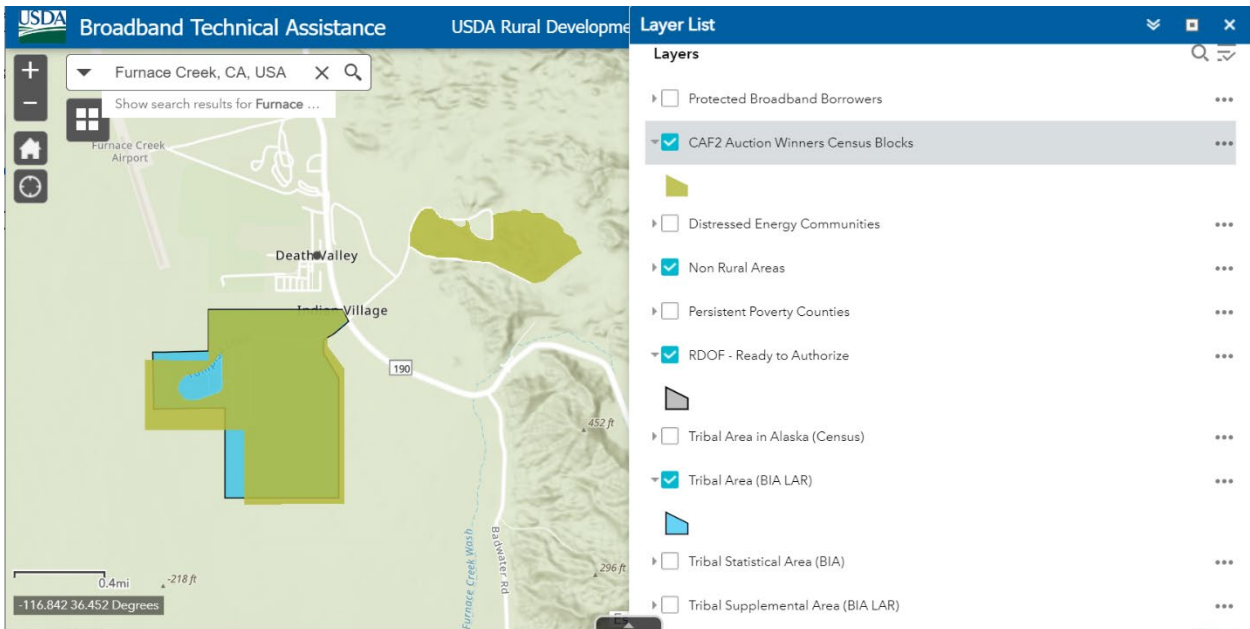
- Through a contractor, develop creative and flexible, shovel-ready, last-mile detailed engineering designs to connect as many of the cataloged locations in the Furnace Creek area as practicable to multiple broadband Internet service delivery connection locations.
 - The resulting network designs should be detailed enough for any reasonably capable and qualified network construction company to construct last-mile fiber-to-the-premise network infrastructure.
 - The resulting network designs should support speeds of 100Mbps download and 20Mbps upload or better, preferably synchronous 1Gbps speeds or better.
 - The resulting network designs should provide for near-term Internet service connections with support for multiple satellite or fixed wireless broadband service connections, as well as long-term Internet service connections to the future [State-owned, open-access, middle-mile, fiber-optic network](#). Construction of the State-owned middle-mile network is required to be completed by December, 2026.

- Communities to be served:
 - The Furnace Creek project area is in Death Valley, California, and includes Park Village near Cow Creek, Furnace Creek, and the two Xanterra resort locations, one immediately south of the Death Valley NPS Visitor Center and the other about 1 mile south-southeast of the Visitor Center.

 - The Furnace Creek project area includes the following census blocks:
 - 060270008001027 Block 1027 (partial, see below)
 - 060270008001029 Block 1029
 - 060270008001030 Block 1030
 - 060270008001031 Block 1031
 - 060270008001032 Block 1032
 - 060270008001034 Block 1034
 - 060270008001035 Block 1035
 - 060270008001037 Block 1037
 - 060270008001038 Block 1038
 - 060270008001039 Block 1039
 - 060270008001044 Block 1044
 - 060270008001074 Block 1074
 - 060270008001075 Block 1075
 - 060270008001347 Block 1347
 - 060270008001348 Block 1348
 - 060270008001349 Block 1349
 - 060270008001350 Block 1350



- This project area does not include the portion of Block 1027 that is adjacent to Block 1032, the Texas Springs Campground. California Internet was the CAF2 auction winner for that portion of Block 1027. The project area also does not include Block 1043, also won by California Internet in the CAF2 auction, or Block 1353, which is fully encircled by Block 1043. Blocks 1043 and 1353 are not in the list above. The excluded portion of Block 1027 as well as the excluded Blocks 1043 and 1353 are shown in the image below for reference.



- Project Key Goals:
 - Through a contractor, develop shovel-ready, last-mile detailed engineering designs for the Furnace Creek area that can be used for construction of last-mile network infrastructure for near-term Internet service connections with support for multiple satellite or fixed wireless broadband service connections, as well as long-term Internet service connections to the future middle-mile network at speeds of 100Mbps download and 20Mbps upload or better, preferably at synchronous 1Gbps speeds or better.
 - These design plans will be used for future last-mile network infrastructure construction projects that will do the following:
 - Provide additional and improved economic and market opportunities in the Furnace Creek area.
 - Provide easier access to online Rural Utilities Service programs for agricultural companies to the north and east of the region.
 - Provide online access to a variety of services that would otherwise require 2-3 hours of travel by vehicle to do so, reducing impact of vehicle exhaust emissions on the environment.
- Partnerships developed or to be developed:
 - The County of Inyo has a good working relationship with Death Valley NPS and the cooperation on this project will result in an even closer partnership for broadband deployment as well as other projects in the future.
 - The County of Inyo will develop a closer partnership with the Xanterra Resort management as well because of the detailed and engaging nature of this project.
 - The County of Inyo also expects to develop a partnership with the Timbisha-Shoshone Tribe as we work with them to deconflict our broadband projects.
 - County of Inyo has a very good working relationship with the Inyo County Office of Education (ICOE), and we expect that this project will provide meaningful options for the future use of their existing, currently-unused school building in Park Village.
 - As a natural result of the grant requirements, we expect to develop a sound partnership with USDA Rural Development and its mission, allowing us to better assist our County in being aware of USDA RD opportunities and programs through training sessions and outreach materials.
- Anticipated Deliverables:

- Detailed last-mile network designs in a high-resolution, digital format, that can be used by any relatively competent network construction contractor to build last-mile network infrastructure supporting speeds of 100Mbps download and 20Mbps upload or better, preferably synchronous 1Gbps speeds or better.
- Designs should accommodate multiple Internet connection options, including the State's expected open-access, middle-mile network in 2025 or 2026.
- Transition Plans with the design to change from temporary Internet connections to the State's expected middle-mile network.

Work Plan Implementation:

- Technical Assistance will be provided by a contractor in the form of pre-construction, detailed network engineering designs for network infrastructure that will support broadband Internet service delivery.
- Having detailed network engineering designs and an environmental compliance pathway completed would make a construction project in this area much more enticing for a company. The engineering designs will also help to establish construction cost estimates for grant funding to construct the network.
- Major Tasks
 - Task 1: County-required process to hire a contractor
 - Subtask 1: Broadband Coordinator & County Staff: Create and post a Request for Proposals for design work, coordinate with USDA RD Staff
 - Subtask 2: Broadband Coordinator & County Staff, USDA RD Staff: Evaluate responses and select the winning bidder
 - Subtask 3: Broadband Coordinator & County Staff: Enter into a contract for the design work, coordinate with USDA RD Staff
 - Task 2: Identify and catalog the locations to be included in the designs
 - Subtask 1: Broadband Coordinator & County Staff, USDA RD Staff: work with the Contractor to review and validate the locations for the design project.
 - Task 3: Contractor design work
 - Subtask 1: Contractor: develop and deliver detailed, last-mile network infrastructure designs including environmental compliance and evaluation
 - Subtask 2: Broadband Coordinator & County Staff, USDA RD Staff: respond to Contractor questions any coordinate environmental reviews

- Involvement of key personnel
 - o Staff
 - Regional Broadband Coordinator
 - Public Works Department staff
 - Planning Department staff
- Time period of tasks
 - o Task 1, Subtask 1: Award notification to Month 1 (Create and Post RFP)
 - o Task 1, Subtask 2: Month 1 to Month 3 (Select the Winning Bidder)
 - o Task 1, Subtask 3: Month 3 to Month 4 (Enter into Contract)
 - o Task 2, Subtask 1: Month 4 to Month 5 (Review & Validate Locations)
 - o Task 3, Subtask 1: Month 5 to June 28, 2024 (Contractor Design Work Delivered)
 - o Task 3, Subtask 2: Month 5 to June 28, 2024 (Staff coordination with Contractor)
- Substantial Involvement from RD staff
 - o Coordination with RD Staff will consist of collaboration on each of the subtasks except for Task 3, Subtask 1 (Contractor Design Work): RFP coordination; contract coordination; location validation; design input; and contractor inquiry responses. We will verify performance measures with the RD Staff as well.
- Expected Deliverables
 - o The contractor deliverables for this project are the shovel-ready, last-mile, detailed network engineering designs for broadband Internet service in the exceptionally rural area of Furnace Creek, California.

Work Plan and Budget Alignment:

- Detailed budget (Total \$110,500)
 - o Task 1, Subtask 1: \$6,000 – Coordinator & Staff Time (Create and Post RFP)
 - o Task 1, Subtask 2: \$2,000 – Coordinator & Staff Time (Select the Winning Bidder)
 - o Task 1, Subtask 3: \$4,000 – Coordinator & Staff Time (Enter into Contract)
 - o Task 2, Subtask 1: \$3,000 – Coordinator & Staff Time (Review & Validate Locations)

- Task 3, Subtask 1: \$93,500 – Contractor (Deliver Design Work, ~85 locations @ \$1100/location)
- Task 3, Subtask 2: \$2,000 – Coordinator & Staff Time (Staff coordination with Contractor)
- Budget justification
 - Describe how the budget specifically supports the proposed activities in Project Key Tasks
 - This budget supports the work required to develop detailed last-mile network infrastructure for the delivery of broadband internet services. The long-term results of this project include:
 - Assisting rural communities recover economically through more and better market opportunities and through improved infrastructure.
 - Ensuring all rural residents have equitable access to RUS programs and benefits from RUS funded projects.
 - Reducing climate pollution and increasing resilience to the impacts of climate change through economic support to rural communities.
- Budget Worksheet

| BTA Program Budget Worksheet - Furnace Creek, CA | | | | | |
|--|---------------|--------------------------|----------------------|-----------------------------|--|
| Name of Applicant: County of Inyo, CA | | | | | |
| (Insert additional rows as needed) | | | | | |
| **Applicants should review eligible and ineligible project costs in the BTA Funding Opportunity Announcement | | | | | |
| **Only include items to be funded by Award | | | | | |
| Line Item | Item Category | Item Description | Item Cost | Communities Served | Work Plan Alignment and Item Justification |
| 1 | Personnel | Coordinator & Staff Time | \$ 6,000.00 | Furnace Creek, Park Village | Task 1, Subtask 1 - Post RFP |
| 2 | Personnel | Coordinator & Staff Time | \$ 2,000.00 | Furnace Creek, Park Village | Task 1, Subtask 2 - Select Winning Bidder |
| 3 | Personnel | Coordinator & Staff Time | \$ 4,000.00 | Furnace Creek, Park Village | Task 1, Subtask 3 - Enter into Contract |
| 4 | Personnel | Coordinator & Staff Time | \$ 3,000.00 | Furnace Creek, Park Village | Task 2, Subtask 1 - Validate Locations |
| 5 | Contractual | Network Design | \$ 93,500.00 | Furnace Creek, Park Village | Task 3, Subtask 1 - Deliver Network Designs |
| 6 | Personnel | Coordinator & Staff Time | \$ 2,000.00 | Furnace Creek, Park Village | Task 3, Subtask 2 - Coordinate with Contractor |
| Total Project Cost to be funded by Award | | | \$ 110,500.00 | | |

- Statement of work for contractor or consultant
 - Develop shovel-ready, last-mile detailed engineering designs that can be used by any reasonably capable and qualified network construction company to construct last-mile fiber-to-the-premise network infrastructure.
 - Provide detailed, shovel-ready, engineering designs for last-mile network infrastructure that is capable of supporting Internet service at 100Mbps download and 20Mbps upload or better, preferably at synchronous 1Gbps speeds or better.

- Engineering designs should include network infrastructure connections from middle-mile network to all unserved communities, households and businesses.
- The engineering designs should accommodate multiple Internet connection options, including the State’s expected open-access, middle-mile network in 2025 or 2026.
- If your designs include middle-mile network to support your last-mile designs, identify those network segments in your designs as such.
- Complete any required environmental review pursuant to CEQA or NEPA, including any required technical studies necessary to complete them. In the event of any scope change due to project site conditions, provide all required professional environmental services necessary to obtain environmental clearance. Ensure that the project design documents comply with the requirements set forth in the environmental documents and any required regulatory agency permits.
- Designs must comply with: Federal laws; State laws; local laws; rules and regulations of governing utility districts; and rules and regulations of other authorities with jurisdiction over the construction of network infrastructure.

Organizational Capacity (20 points)

- As Technical Assistance Recipients of this grant, we have sufficient, qualified personnel available to work with the contractor, once selected, on this project to develop detailed last-mile network engineering designs for Broadband service in the Furnace Creek area. Most of the coordination with the contractor and USDA RD Staff will be handled by the Regional Broadband Coordinator, with assistance from the County’s Planning Department for environmental compliance, and from the Public Works department for construction-related design questions and requirements.
- Regarding the contracting of a Technical Assistance Provider, there is continued interest in our region’s network design projects from at least two companies. One of these companies was involved in the design and construction of the Digital 395 open-access, middle-mile fiber-optic network project, a 432-strand fiber-optic cable from Reno, Nevada to Barstow, California. The other company specializes in fiber-optic network design, has corporate experience with the major incumbent telephone and broadband carriers, and 24 years of experience in network design consulting. We expect that at least these two companies will compete to be the contractor for our design project.

Targeted Communities (20 points)

- Our project is not in a persistent poverty county or in distressed energy communities. Additionally, there are no colonias in our regions.

- While our project does not include last-mile network design work for Tribal lands, it will include areas adjacent to Timbe-sha Tribal Land in Furnace Creek, specifically Census Blocks 1043 and 1353. We will collaborate with the local Timbe-sha Tribe and the CAF2 auction winner for that area during the last-mile network design project to avoid duplicated efforts and infrastructure.

Rurality (20 points)

- This project region is exceptionally rural, and all areas adjacent to this project region are exceptionally rural. Furnace Creek Census 2010 P1 population report reflects 24 residents, and the Census Designated Place 2020 overview report reflects 136 residents. The Death Valley NPS residential area at Park Village is not identified as a Census Designated Place in the US Census data. The Communities Worksheet 508 describes the project areas and is included in this application as well.

The screenshot shows the United States Census Bureau data portal. The search results for 'Furnace Creek CDP, California' are displayed. The main table shows the following data:

| Label | Furnace Creek CDP, California |
|-------|-------------------------------|
| Total | 24 |

The screenshot shows the United States Census Bureau data portal with a filter applied for 'Furnace Creek CDP, California'. The search results for 'Total Population in Furnace Creek CDP; California is 136' are displayed. The main table shows the following data:

| Table | View |
|---|----------------------|
| Decennial Census P1 RACE 2020 Decennial Census | View This Result |
| American Community Survey DPO5 ACS DEMOGRAPHIC AND HOUSING ESTIMATES | View All 12 Products |
| American Community Survey S0101 AGE AND SEX | View All 12 Products |
| American Community Survey | |

Additional statistics for Furnace Creek CDP, California:

- Total Population: 136
- Median Household Income: \$42,813
- Bachelor's Degree or Higher: 48.0%
- Employment Rate: 88.3%
- Total Housing Units: 135
- Without Health Care Coverage: 4.9%
- Total Households: 58
- Hispanic or Latino (of any race): 33

FY 2023 BTA Program Communities Worksheet - Furnace Creek CA

Name of Applicant: County of Inyo, California

| Community to be served (city/town/county) | Targeted Community to be served (select all that apply) | Census Population (from 2010 Census data) | Is the community contiguous and adjacent to a city or town with a population greater than 50,000? | Name of Adjacent City or Town (if yes in previous column) |
|---|---|---|---|---|
| Furnace Creek, Inyo County, CA | | 24 | No | |
| Dark Village, Inyo County, CA | | not available | No | |
| Pin at Furnace Creek, Inyo County, CA | | not available | No | |

Economic Need (20 points)

- Economic Need for our project area based on the US Census SAIFE tool reflects the [County Poverty Percentage](#) of 12.8% (Inyo County, all ages) and the relevant [School District Poverty Percentage](#) of 17% (Death Valley Unified School District, ages 5-17 in families).

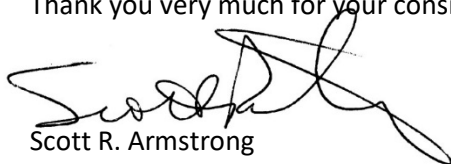
Performance Measures (10 points)

- Qualified network design contractor is hired.
- Locations in the Furnace Creek area that may benefit from being connected are validated.
- Complete, detailed last-mile network designs to connect broadband Internet service to all residences, businesses, offices and other structures in the Furnace Creek area from temporary, community locations as well as from the planned State’s middle-mile network are delivered.
- Designs are delivered on schedule, based on the timeline in the scope of work in the contract.
- Designs provide for Internet connectivity options before the State-owned middle-mile network is functional.
- Designs provide for Internet connectivity to the State-owned middle-mile network once it has been constructed and is in operation.

This Broadband Technical Assistance grant application is intended to help us plan for broadband connectivity in one of our most remote regions as we work to methodically deploy broadband Internet services to our remote and rural communities.

We welcome any suggestions or questions that you may have regarding our grant application.

Thank you very much for your consideration.



Scott R. Armstrong
 Regional Broadband Coordinator
 Eastern Sierra Council of Governments
 (Inyo & Mono Counties, City of Bishop, Town of Mammoth Lakes)

FMMI **Vendor** Interim PVND Form Version 1.1

| | | | |
|---|----------|--|--|
| Requestor Name | | | |
| Self Tracking Reference Number | | | |
| Completion of request will be notified by e-mail. | | | |
| Requestor E-mail | | | |
| Requestor Phone | | Request Date | |
| Agency | | | |
| Action Requested | | <input type="checkbox"/> ADD | <input type="checkbox"/> CHANGE <input type="checkbox"/> BLOCK |
| FMMI Vendor Code (for changes and blocks): | | | |
| GovTrip Pseudo | | | |
| VENDOR ACCOUNT GROUPS Check only one | | | |
| <input type="checkbox"/> ZEMP (Z2) – EMPLOYEES | | <input type="checkbox"/> ZNFV (Z1) – Non-Federal Vendors | |
| <input type="checkbox"/> ZFDN (Z3) – Federal Non-USDA Vendors | | <input type="checkbox"/> ZFDU (Z4) – Federal USDA Vendors | |
| <input type="checkbox"/> ZSAL (Z5) – State and Local Government | | <input type="checkbox"/> ZFOR (Z6) – Foreign Vendors | |
| <input type="checkbox"/> ZTPA (Z7) – Non-Federal 3 rd Party Assignee | | <input type="checkbox"/> ZINT (Z2) – Invitational Traveler | |
| <input type="checkbox"/> ZPFD (Z8) – Producers | | <input type="checkbox"/> ZSET (Z2) – Settlement and | |
| Vendor Name | Injuries | | |
| DBA: Name | | | |
| Street Address 1 | | | |
| Street Address 2 | | | |
| Zip | | | |
| City | | | |
| Country | | | |
| State | | | |
| Vendor Contact Name | | | |
| Vendor Contact Phone | | | |
| SSN | | In FMMI there are separate fields for Social Security Numbers and Taxpayer Identification Numbers please populate the appropriate box. | |
| TIN | | | |
| Industry Check Only One required for ZNFV Non-Federal Vendors Account Group | | | |
| <input type="checkbox"/> Z001 – Commercial/Consumer | | <input type="checkbox"/> Z004 – Permits | |
| <input type="checkbox"/> Z002 – Sovereign | | <input type="checkbox"/> Z005 – Settlements / Injured | |
| <input type="checkbox"/> Z003 – Non-Profit Entity | | <input type="checkbox"/> Z006 - Supplemental Employee | |
| Banking Information | | | |
| Bank Name | | | |
| Routing Number | | | |
| Bank Account | | | |
| Bank Account Type Check One | | <input type="checkbox"/> Checking | <input type="checkbox"/> Savings |
| Waiver Code when EFT is not used | | | |
| <input type="checkbox"/> 01 No Bank Account | | <input type="checkbox"/> 02 Hardship | |
| <input type="checkbox"/> 03 Foreign Entity | | <input type="checkbox"/> 04 Disaster Area | |
| <input type="checkbox"/> 05 Military ops | | <input type="checkbox"/> 06 National Security | |
| <input type="checkbox"/> 07 One Time Payment | | <input type="checkbox"/> 08 Emergency pmt | |
| ALC (Required for Federal Vendors) | | | |
| Comments | | | |

FMMI Vendor Interim Form Instructions

| | |
|--------------------------------|---|
| Requestor Name | Place the name of the person submitting the request |
| Self Tracking Reference Number | We recommend you number your requests and track them. We will reference this number on the e-mail notification upon completion of your request. We will not send any PII (Personally Identifiable Information) via the internet. |
| Requestor E-mail | We will send an e-mail notification upon completion of requests. It is very important that we be able to send the new Vendor code to you. The vendor codes in FMMI do not contain the SSN/TIN in their construct. |
| Requestor Phone | As a backup to e-mail communications please include your phone number. Please include extension. |
| Request Date | Enter the date of your request. |
| Agency | Enter the agency requesting the change or add. Normally this will be your agency, unless you are cross servicing. |
| Action Requested | <ol style="list-style-type: none"> 1. Add check add if this is a new record. 2. Change check change if you are modifying an existing FMMI vendor. Be sure to provide the Vendor Code in the Vendor Code field. 3. Block this is the equivalent of inactivating a vendor. Be sure to provide the Vendor Code in the Vendor Code field. |
| Vendor Code | Only fill this out with the FMMI Vendor code for existing records. DO NOT ENTER AN OLD FFIS VENDOR CODE HERE. You need to fill this out for changes and blocks. |
| GovTrip Pseudo | For employees and non-employee travelers. We will adjust the Pseudo to GovTrip when needed. |
| Vendor Account Groups | Check the appropriate account group. |
| Vendor Name | Vendors Legal Name will be used to TIN match with the IRS |
| DBA Name | Doing Business As |
| Street Address 1 | First line of address |
| Street Address 2 | Second line of address |
| Zip | Note ZIP code is before city in FMMI. FMMI is based on SAP a German company. The equivalent field to ZIP in Europe is placed before City. We will need to get used to this.. |
| City | City |
| State | Enter the two digit postal state abbreviation. |
| Vendor Contact Name | Enter the name of the point of contact with the vendor. |
| Vendor Contact Number | Enter the phone number of the point of contact with the vendor. |
| SSN | Enter the SSN for the vendor |
| TIN | Enter the TIN for the vendor. |
| Industry | Check the appropriate Industry, only required if the ZNFV Account Group is checked. |
| Bank Name | Optional but include if you know it. |
| Routing number | Enter the bank routing number |
| Bank Account Type | Check either Savings or Checking |
| Waiver Code | Check the appropriate waiver code when banking is not present. |
| ALC | Eight digit ALC code only required for Federal Vendors. |



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4196

Wildfire Coordinator Presentation County Administrator - Emergency Services NO ACTION REQUIRED

ITEM SUBMITTED BY

Kristen Pfeiler, Wildfire Preparedness Coordinator

ITEM PRESENTED BY

Kristen Pfeiler, Wildfire Preparedness Coordinator

RECOMMENDED ACTION:

Receive presentation on wildfire mitigation efforts from the County Wildfire Coordinator.

BACKGROUND / SUMMARY / JUSTIFICATION:

This presentation is a year-end review from the county's Wildfire Coordinator, providing an overview of the work performed in 2023 and planned work for 2024 and beyond.

FISCAL IMPACT:

| | | | |
|----------------------------|-----|-------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

The Board could choose not to receive this presentation. That is not recommended, as the county Wildfire Coordinator is serving an important role in developing wildfire mitigation plans for the County.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

APPROVALS:

Mikaela Torres
Darcy Ellis

Created/Initiated - 11/29/2023
Final Approval - 11/29/2023



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4262

Amendment No. 2 to the Agreement with Armstrong Consultants, Budget Amendments Public Works ACTION REQUIRED

ITEM SUBMITTED BY

Ashley Helms, Deputy Public Works Director - Airports

ITEM PRESENTED BY

Ashley Helms, Deputy Public Works Director - Airports

RECOMMENDED ACTION:

Contingent upon the FAA's agreement to reimburse expenses incurred prior to grant award:

- A) Amend the Fiscal Year 2023-2024 Bishop Air Comm Terminal Budget (630500) as follows: Increase estimated revenue in Federal Grants Revenue Code 4555 by \$89,488; increase appropriation in Operating Transfers In Object Code 4998 by \$9,944; increase appropriation in Professional Services Object Code 5265 by \$99,432 *(4/5ths vote required)*;
- B) Amend the Fiscal Year 2023-2024 Bishop Airport Operating Budget 150100 as follows: Increase appropriations in Operating Transfers Out Object Code 5801 by \$9,944 and decrease appropriations in Professional Services Object Code 5265 by \$9,944 *(4/5ths vote required)*;
- C) Approve Amendment No. 2 to the agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO, increasing the contract to an amount not to exceed \$195,132, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained.

BACKGROUND / SUMMARY / JUSTIFICATION:

On November 1, 2022, your Board awarded a five-year on-call professional service agreement for airport engineering, architecture and planning services to Armstrong Consultants of Grand Junction, CO. Amendment 2 adds the preparation of a planning study for the Bishop Airport. The study will include a passenger enplanement forecast, which will assess the existing passenger demand, evaluate factors influencing aviation demand and develop a forecast for a 10-year planning period. Once the forecast has been approved by the FAA, Armstrong's architectural sub-consultant, Gensler, will use the anticipated passenger loads to create a conceptual design/floorplan for the future commercial service terminal.

On December 20, 2022, Inyo County learned that the Fiscal Year 2023 Omnibus Appropriations bill included \$2 million in Congressionally Directed funding for the Bishop Airport Commercial Terminal Project. Recently, the FAA Los Angeles Area District Office (LA ADO) determined that the County can draw from this funding to cover the planning, environmental, and design phases of the terminal project, which will allow the County to compete for construction funds in the final year of the Airport Terminal Program (ATP). The ATP was created by the Bipartisan Infrastructure Legislation; it provides

approximately \$1 billion each year from 2022 to 2026 for airport terminal upgrades.

A grant application will be submitted to the FAA once the scope of work and cost estimates are finalized for the environmental review and preliminary design. The grant will cover 90% of the costs associated with these project development phases. The LA ADO is seeking clarity from FAA headquarters as to whether the County can move forward with the forecast document and receive reimbursement once the grant is awarded. Certain types of FAA funding are eligible for this type of reimbursement, and we are awaiting a determination that the Congressionally Directed funding qualifies. The Board actions are being requested at this time, contingent upon written confirmation from the FAA, because of the approaching holiday season and the expectation that FAA approval is forthcoming.

FISCAL IMPACT:

| | | | |
|---|--|--------------------|--------|
| Funding Source | General Fund / Grant Funded (FAA appropriations grant forthcoming) | Budget Unit | 630500 |
| Budgeted? | Yes, with this budget amendment | Object Code | 5265 |
| Recurrence | One-Time Expenditure | | |
| Current Fiscal Year Impact | | | |
| This scope of work will likely be completed this fiscal year. | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board could choose not to award the amendment, or to wait until grant funding is awarded. This is not recommended due to the tight timeframe to apply for construction funding through the FAA's Airport Terminal Program.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

1. Armstrong Amendment 2
2. Armstrong Amendment 1
3. Armstrong Master Services Agreement

APPROVALS:

| | |
|--------------------|--------------------------------|
| Ashley Helms | Created/Initiated - 10/24/2023 |
| Darcy Ellis | Approved - 10/24/2023 |
| Ashley Helms | Approved - 11/11/2023 |
| Breanne Nelums | Approved - 11/16/2023 |
| Michael Errante | Approved - 11/16/2023 |
| John Vallejo | Approved - 11/16/2023 |
| Denelle Carrington | Approved - 11/16/2023 |
| Amy Shepherd | Approved - 11/17/2023 |
| Nate Greenberg | Final Approval - 11/18/2023 |

AMENDMENT NO. 2
To
Agreement Between COUNTY OF INYO and
ARMSTRONG CONSULTANTS
For
On-Call Airport Engineering, Architecture and Planning Services

BISHOP AIRPORT PASSENGER ENPLANEMENT FORECAST AND
TERMINAL BUILDING CONCEPTUAL DESIGN

WHEREAS, the County of Inyo (hereinafter referred to as “County”) and Armstrong Consultants (hereinafter referred to as “Consultant”), have entered into an Agreement for the provision of engineering and planning services dated November 1, 2022, on County of Inyo Standard Contract No. 161, for the term from November 1, 2022 to October 31, 2027.

WHEREAS, County and Consultant do desire and consent to amend such Agreement as set forth below:

WHEREAS, such Agreement provides that it may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties thereto, if such amendment or change is in written form, and executed with the same formalities as such Agreement, and attached to the original Agreement to maintain continuity.

County and Consultant hereby amend such Agreement as follows:

1. Section 3D, Limit upon amount payable under Agreement. The first sentence is revised as follows:

“The total sum of all payments made by the County to Consultant for services and work performed under this Agreement shall not exceed one hundred and ninety-five thousand, one hundred and thirty two dollars (\$195,132.00) (hereinafter referred to as “Contract limit”).
2. Attachment A to the Contract, Scope of Work, shall be revised to include the additional tasks required for the Passenger Enplanement Forecast and Terminal Study as described Attachment A-2 to the Contract.
3. The Consultant’s fee for the scope of work described in Attachment A-2 to the Contract shall be the lump-sum, fixed-price fee of \$99,432.00.

The effective date of this amendment to the Agreement is 11/28/2023.

All other terms and conditions of the Agreement are unchanged and shall remain the same.

AMENDMENT NO. 2
To
Agreement Between COUNTY OF INYO and
ARMSTRONG CONSULTANTS
For
On-Call Airport Engineering, Architecture and Planning Services

BISHOP AIRPORT PASSENGER ENPLANEMENT FORECAST AND
TERMINAL BUILDING CONCEPTUAL DESIGN

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS THIS
____ DAY OF _____, 2023.

COUNTY OF INYO

CONSULTANT: ARMSTRONG CONSULTANTS

By: _____

By: _____

Dated: _____

Dated: _____

APPROVED AS TO FORM AND
LEGALITY:

County Counsel

APPROVED AS TO ACCOUNTING
FORM:

County Auditor

**AGREEMENT BETWEEN THE COUNTY OF INYO AND
ARMSTRONG CONSULTANTS
FOR THE PROVISION OF ON-CALL AIRPORT ENGINEERING, ARCHITECTURE AND
PLANNING SERVICES**

TERM:

FROM: November 1, 2022 **TO:** October 31, 2027

SCOPE OF WORK

The scope of work described in the original Contract, dated November 1, 2022, is revised to include additional tasks required for the completion of the design and construction phase services of the Bishop Airport Passenger Enplanement Forecast and Terminal Building Conceptual Design, as further described in the attached *Task Order C*, dated October 2, 2023 from Armstrong Consultants.

**TASK ORDER C
ATTACHMENT TO
PROFESSIONAL SERVICES AGREEMENT
BETWEEN OWNER AND ENGINEER,
DATED OCTOBER 2, 2023**

FURTHER DESCRIPTION OF SERVICES OF ENGINEER

1. This Attachment is made a part of and incorporated by reference into the Professional Services Agreement made on December 28th, 2022 between **INYO COUNTY, CALIFORNIA (Owner)** and **ARMSTRONG CONSULTANTS, INC., (Engineer)** providing for professional engineering services. The Services of Engineer as described in Section 1 of the Agreement are amended or supplemented as indicated below and the time periods for the performance of certain services are stipulated as indicated below.

2. **LOCATION** – Bishop Airport, Bishop California

3. **WORK PROGRAM** – Attached

4. **FEES**

Passenger Enplanement Forecast and Terminal Study: \$99,432

OWNER:
INYO COUNTY, CALIFORNIA

ENGINEER:
ARMSTRONG CONSULTANTS, INC.

By _____

By _____
Justin Pietz, National Planning Lead

BISHOP AIRPORT PASSENGER ENPLANEMENT FORECAST AND TERMINAL BUILDING CONCEPTUAL DESIGN

FINAL SCOPE OF WORK

OVERVIEW

The Bishop Airport (BIH) is a primary commercial service airport located within Inyo County, along the eastern Sierra's of California. The airport is currently served by United Airlines with service to Denver International Airport (DEN) and San Francisco International Airport (SFO). United Airlines is currently operating the Canadair Regional Jet 700 aircraft.

The planning study will include enplanement forecasts to assist in determining facility requirements and serve as a guideline for the terminal building development. A facilities implementation plan will be established, identifying improvements in a phased manner based upon the existing and forecasted demand.

BIH Commercial Activity Level Forecast Elements

Element 1 - Project Management

- Task 1.1 Project Management and Quality Control

Element 2 – Enplanement Forecasts

- Task 2.1 Review of Historical Data and Forecasts

- Task 2.2 Establish Existing Baseline for Enplanement Demand

- Task 2.3 Evaluate Factors Influencing Enplanement Demand

- Task 2.4 Establish Existing and Future Critical Aircraft

- Task 2.5 Forecast Coordination and Approval

Element 3 – Future Terminal Building Facility Requirements

- Task 3.1 Terminal Building Requirements and Conceptual Design

Element 4 – Update Airport Layout Plan

- Task 4.1 Update Airport Layout Plan

ELEMENT 1
PROJECT MANAGEMENT

Task 1.1 Project Management and Quality Control

Description: To provide appropriate direction and project management for the development of the BIH Enplanement Forecast as each assignment is undertaken and completed, Armstrong Consultants will maintain close liaison with the Bishop Airport staff, interested parties and the Federal Aviation Administration (FAA).

Armstrong Consultants, Inc. will be responsible to ensure consistency throughout the project in terms of written and graphic communication, through regular in-house meetings and communications, quality control, final word processing, proof-reading, editing, final artwork and graphics, presentation graphics, and production of all documents.

Ongoing coordination will be held among the Consultants Team for the purpose of quality control, coordination, and strategy. Periodic study updates will be held between the Consultant Team and the Sponsor, as needed, via conference calls and written progress reports. The purpose of the updates will be to report progress made on the study, receive input from the Consultant Team and Sponsor, report phases and sub-phases that have been completed, identify any unforeseen problems for purpose of resolution, and allow for various stages of review of findings throughout the process.

Invoices will be submitted to the Sponsor at key project milestones based on the percentage of completed tasks.

ELEMENT 2
ENPLANEMENT FORECASTS

Task 2.1 Review of Historical Data and Forecasts

Description: Review previous forecasts including FAA National Plan of Integrated Airport Systems (NPIAS), published FAA enplanement Terminal Area Forecast data (TAF), for comparison and guidance in developing short (1-5 year), and intermediate (5-10 year) enplanement forecast methodologies.

Deliverable: Historical enplanement data and forecasts will be collected and summarized to assist in the development of enplanement demand forecasts.

Task 2.2 Establish Existing Baseline for Enplanement Demand

Description: Collect data based on actual enplanement count reports provided by Airport/Airline Management for calendar and fiscal year 2022 at BIH. The data will be utilized to provide an updated baseline of existing enplanements.

Deliverable: A baseline for 2022 enplanement demand will be established. A summary of actual enplanements will be provided for comparison to the FAA TAF data. Any discrepancies between actual enplanements and FAA TAF data will be detailed.

Task 2.3 Evaluate Factors Influencing Aviation Demand and Develop Enplanement Forecast

Description: Review local, regional and national trends influencing and affecting planning activity levels (PALs) for enplanement demand at the airport. Economic characteristics, demographic characteristics and geographic attributes of the established service area will be considered and applied to selected methodologies to develop enplanement forecasts for the planning period. The 10-year planning period will be for the Calendar and Fiscal Years 2023-2033.

Methodologies for developing enplanement forecasts may include:

- a. Comparative analysis of the previous and existing forecasts listed above.
- b. Trend analysis of historical activity levels projected forward.
- c. Per Capita Analysis correlating future growth to future population growth.
- d. Cohort analysis or a combination of the other forecasting analysis.

Deliverables: Annual enplanement forecast activity projected for the 10-year planning period.

Task 2.4 Establish Existing and Future Critical Aircraft

Description: Collect and review existing operations data of commercial aircraft at BIH to identify the existing critical aircraft. Review regional and national trends occurring within the commercial air carrier fleets to assist in determining the future critical aircraft. Coordinate with airline representatives currently operating at BIH to determine any trends in future aircraft operations at the airport.

Deliverables: Establish existing critical aircraft and forecasted future critical aircraft for terminal building demand.

Task 2.5 Forecast Coordination and Approval

Description: Forecasts will be submitted to FAA for review and approval. General guidance for FAA forecast approval in comparison to the most recent TAF.

Deliverables: Consultant will submit and coordinate forecast approval with FAA.

ELEMENT 3 **FUTURE TERMINAL BUILDING FACILITY REQUIREMENTS**

Task 3.1 Future Terminal Building Requirements and Conceptual Design

Description:

Provide design services for the architectural design. This assumes up to two site visits during the concept design phase.

Conduct a kick off meeting for the Project. The purpose of the meeting is to establish the parties' mutual understanding of the Project objectives, Schedule, budget, and delivery process.

The agenda shall include the following:

- a) Introduction of key team members, including each party's primary contact and the person authorized to make decisions
- b) Discussion of Project performance targets
- c) Discussion of Schedule milestones, including process and durations for Client's review and approval
- d) Discussion of the process for establishing the Project Budget and developing check estimates at key design milestones
- e) Review and discussion of existing site conditions
- f) Discussion of communication protocols
- g) Identification of key personnel and protocols for invoicing and payment
- h) Discussion of LEED or other sustainability objectives and any specialty consultants to be engaged to provide related services.

The forecast information will be used for the development program and terminal building size.

The architect will review record documentation provided by Inyo County of the existing site conditions, including topographical surveys, geotechnical reports, etc. The architect may visit the Project site to verify reasonably observable conditions.

Deliverables:

Based on the approved program, the architect will develop design diagrams and digital massing models that depict the basic design concept for the project. At the completion of the Concept Design phase the architect will deliver:

- a) Conceptual Site plan, illustrating proposed building siting and associated parking/site improvements
- b) Conceptual floor plan, illustrating program requirements and established adjacencies
- c) Conceptual program chart listing interior building functions
- d) 1 to 2 conceptual renderings or visualizations of digital massing models
- e) ROM cost estimate

The architect will provide the Concept Design Documents in PDF. Deliverables will be an 11x17 design package. The architect will incorporate such changes in the Concept Design phase within the first three weeks of the concept design schedule.

ELEMENT 4
AIRPORT LAYOUT PLAN UPDATE

Task 4.1 Update the Airport Layout Plan

Description: Upon the completion of the conceptual terminal design, Armstrong will prepare an update to the Airport Layout Plan and Terminal Area Drawing to ensure setback requirements are met and to accurately reflect the future terminal building development.

Deliverables: Updated ALP and TAD in full-size PDF format for approval.

**AGREEMENT BETWEEN THE COUNTY OF INYO AND
ARMSTRONG CONSULTANTS
FOR THE PROVISION OF ON-CALL AIRPORT ENGINEERING, ARCHITECTURE AND
PLANNING SERVICES**

TERM:
FROM: November 1, 2022 **TO:** October 31, 2027

SCHEDULE OF FEES

The County agrees to pay the Consultant for services performed under the conditions of this agreement the lump sum fixed price amount of \$99,432 for the services detailed in Attachment A-2.

In the Rooms of the Board of Supervisors

County of Inyo, State of California

I, HEREBY CERTIFY, that at a meeting of the Board of Supervisors of the County of Inyo, State of California, held in their rooms at the County Administrative Center in Independence on the 21st day of March 2023 an order was duly made and entered as follows:

*Public Works –
Armstrong
Consultants
Agreement
Amendment No. 1*

Moved by Supervisor Kingsley and seconded by Supervisor Orrill to: A) Amend the Fiscal Year 2022-2023 Lone Pine/Death Valley Airport Improvement Budget (Budget 150502) as follows: 1. Increase estimated revenue in Federal Grants (Revenue Code No. 4555) by \$44,496, 2. and Increase estimated revenue in Operating Transfer In (Revenue Code No. 4998) by \$4,944, and 3. Increase appropriation in Construction in Progress (Object Code 5700) by \$49,440 (4/5ths vote required); B) Amend the Fiscal Year 2022-2023 LP/DV Airport Operating Budget (Budget 150500) by increasing appropriations in Operating Transfer Out (Object Code 5801) by \$4,944 (4/5ths vote required); C) Approve and ratify Amendment No. 1 to the agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO, increasing the contract to an amount not to exceed \$95,700, contingent on approval of future budgets, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained; and D) Authorize the Public Works Director to sign the forthcoming Federal Aviation Administration (FAA) grant for the Lone Pine/Death Valley Airport Taxiway A Resurfacing Project. Motion carried 4-1-0.

WITNESS my hand and the seal of said Board this 21st
Day of March, 2023



NATHAN GREENBERG
Clerk of the Board of Supervisors

A handwritten signature in blue ink, appearing to read "Nathan Greenberg", written over a horizontal line.

By: _____

| |
|--|
| <i>Routing</i> |
| |
| CC Purchasing Personnel Auditor CAO Other: Public Works DATE: March 29, 2023 |



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

March 21, 2023

Reference ID:
2023-3582

Amendment No. 1 to the Agreement with Armstrong Consultants Public Works ACTION REQUIRED

ITEM SUBMITTED BY

Ashley Helms, Deputy Public Works Director - Airports

ITEM PRESENTED BY

Ashley Helms, Deputy Public Works Director - Airports

RECOMMENDED ACTION:

A) Amend the Fiscal Year 2022-2023 Lone Pine/Death Valley Airport Improvement Budget (Budget 150502) as follows:

1. Increase estimated revenue in Federal Grants (Revenue Code No. 4555) by \$44,496, and
2. Increase estimated revenue in Operating Transfer In (Revenue Code No. 4998) by \$4,944, and
3. Increase appropriation in Construction in Progress (Object Code 5700) by \$49,440 (4/5ths vote required);

B) Amend the Fiscal Year 2022-2023 LP/DV Airport Operating Budget (Budget 150500) by increasing appropriations in Operating Transfer Out (Object Code 5801) by \$4,944 (4/5ths vote required);

C) Approve and ratify Amendment No. 1 to the agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO, increasing the contract to an amount not to exceed \$95,700, contingent on approval of future budgets, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained; and

D) Authorize the Public Works Director to sign the forthcoming Federal Aviation Administration (FAA) grant for the Lone Pine/Death Valley Airport Taxiway A Resurfacing Project.

BACKGROUND / SUMMARY / JUSTIFICATION:

On November 1, 2022, your Board awarded a five-year on-call contract for airport engineering, architecture and planning services to Armstrong Consultants of Grand Junction, CO. The Lone Pine/Death Valley Airport Resurface Taxiway A Project (Project) will be the first project carried out under this contract.

This project will include crack filling, a seal coat and new markings on Taxiway A, the parallel taxiway to Runway 16-34, and connectors. The scope of work in Amendment 1 includes the design and construction phase services.

FISCAL IMPACT:

| | | | |
|-----------------------|--|--------------------|--------|
| Funding Source | Grant Funded: The upcoming FAA Airport Improvement Program Grant will fund 90% | Budget Unit | 150502 |
|-----------------------|--|--------------------|--------|

| | | | |
|---|---|--------------------|------|
| Budgeted? | Budget amendment included in this agenda item | Object Code | 5700 |
| Recurrence | One-Time Expenditure | | |
| Current Fiscal Year Impact | | | |
| \$49,440 for design services | | | |
| Future Fiscal Year Impacts | | | |
| \$36,260 in FY23/24 for construction phase services | | | |
| Additional Information | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

Your Board could choose not to approve these requests, however the Lone Pine/Death Valley Airport would lose \$150,000 in federal entitlement funds this year if those funds are not used towards this project.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

FAA

ATTACHMENTS:

1. Armstrong Contract Amendment 1
2. Armstrong Consultants Master Services Agreement

APPROVALS:

| | |
|--------------------|------------------------------|
| Ashley Helms | Created/Initiated - 3/2/2023 |
| Darcy Ellis | Approved - 3/6/2023 |
| Ashley Helms | Approved - 3/14/2023 |
| Breanne Nelums | Approved - 3/14/2023 |
| John Vallejo | Approved - 3/14/2023 |
| Breanne Nelums | Approved - 3/14/2023 |
| John Pinckney | Approved - 3/14/2023 |
| Amy Shepherd | Approved - 3/14/2023 |
| Michael Errante | Approved - 3/14/2023 |
| Denelle Carrington | Approved - 3/14/2023 |
| Nate Greenberg | Final Approval - 3/16/2023 |

AMENDMENT NO. 1
To
Agreement Between COUNTY OF INYO and
ARMSTRONG CONSULTANTS
For
On-Call Airport Engineering, Architecture and Planning Services

LONE PINE/DEATH VALLEY AIRPORT – RESURFACE TAXIWAY A AND
CONNECTING TAXIWAYS PROJECT
DESIGN AND CONSTRUCTION PHASE SERVICES

WHEREAS, the County of Inyo (hereinafter referred to as “County”) and Armstrong Consultants (hereinafter referred to as “Consultant”), have entered into an Agreement for the provision of engineering and planning services dated November 1, 2022, on County of Inyo Standard Contract No. 161, for the term from November 1, 2022 to October 31, 2027.

WHEREAS, County and Consultant do desire and consent to amend such Agreement as set forth below:

WHEREAS, such Agreement provides that it may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties thereto, if such amendment or change is in written form, and executed with the same formalities as such Agreement, and attached to the original Agreement to maintain continuity.

County and Consultant hereby amend such Agreement as follows:

1. Section 3D, Limit upon amount payable under Agreement. The first sentence is revised as follows:

“The total sum of all payments made by the County to Consultant for services and work performed under this Agreement shall not exceed ninety five thousand, seven hundred dollars (\$95,700.00) (hereinafter referred to as “Contract limit”).

2. Attachment A to the Contract, Scope of Work, shall be revised to include the additional tasks required for the Lone Pine/Death Valley Airport – Resurface Taxiway A and Connecting Taxiways, as described Attachment A-1 to the Contract.
3. The Consultant’s fee for the scope of work described in Attachment A-1 to the Contract shall be the lump-sum, fixed-price fee of \$85,700.00.

The effective date of this amendment to the Agreement is 2/1/2023.

All other terms and conditions of the Agreement are unchanged and shall remain the same.

AMENDMENT NO. 1
To
Agreement Between COUNTY OF INYO and
ARMSTRONG CONSULTANTS
For
On-Call Airport Engineering, Architecture and Planning Services

LONE PINE/DEATH VALLEY AIRPORT – RESURFACE TAXIWAY A AND
CONNECTING TAXIWAYS PROJECT
DESIGN AND CONSTRUCTION PHASE SERVICES

IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS THIS
____ DAY OF _____, 2023.

COUNTY OF INYO

CONSULTANT: ARMSTRONG CONSULTANTS

By: _____

By: _____

Dated: _____

Dated: _____

APPROVED AS TO FORM AND
LEGALITY:

County Counsel

APPROVED AS TO ACCOUNTING
FORM:

County Auditor

**AGREEMENT BETWEEN THE COUNTY OF INYO AND
ARMSTRONG CONSULTANTS
FOR THE PROVISION OF ON-CALL AIRPORT ENGINEERING, ARCHITECTURE AND
PLANNING SERVICES**

TERM:
FROM: November 1, 2022 **TO:** October 31, 2027

SCOPE OF WORK

The scope of work described in the original Contract, dated November 1, 2022, is revised to include additional tasks required for the completion of the design and construction phase services of the Lone Pine/Death Valley – Resurface Taxiway A and Connecting Taxiways Project, as further described in the attached Task Order B, dated February 22, 2023 from Armstrong Consultants.

**TASK ORDER B
ATTACHMENT TO
PROFESSIONAL SERVICES AGREEMENT
BETWEEN SPONSOR AND ENGINEER,
DATED FEBRUARY 22, 2023**

FURTHER DESCRIPTION OF SERVICES OF ENGINEER

1. This Attachment is made a part of and incorporated by reference into the Professional Services Agreement made on November 1, 2022, between **COUNTY OF INYO, CALIFORNIA (Sponsor)** and **ARMSTRONG CONSULTANTS, INC., (Engineer)** providing for professional engineering services. The Services of Engineer as described in the Agreement are amended or supplemented as indicated below and the time periods for the performance of certain services are stipulated as indicated below.

2. **LOCATION** – Lone Pine Airport | Lone Pine, California

3. **WORK PROGRAM** – Attached

Element 1 – Resurfacing Taxiway A and Associated Connector Taxiways (35' x 4,100')

4. **FEES** - The fees will be as noted below. (All lump sums unless noted otherwise)

Element 1 – Project Development \$3,460.00

Element 1 – Design

Preliminary Design \$12,850.00

Final Design \$16,780.00

Element 1 – Bidding Services \$8,090.00

Element 1 – Construction Period Services

Construction Administration Services \$8,380.00

Construction Inspection Services \$24,440.00

Element 1 – Project Closeout \$3,440.00

Element 1 – Special Services

Update Categorical Exclusion \$1,870.00

DBE Program Assistance \$6,390.00

Engineering Total **\$85,700.00**

5. **ATTACHMENTS** - Required Contract Provisions for A/E Contracts Under Airport Improvement Program

SPONSOR:
COUNTY OF INYO, CALIFORNIA

ENGINEER:
ARMSTRONG CONSULTANTS, INC.

Dennis Corsi, President

**SCOPE OF WORK
LONE PINE AIRPORT
AIP NO. 3-06-0126-018-2023**

ELEMENT #1 RESURFCE TAXIWAY A and ASSOCIATED CONNECTOR TAXIWAYS (35'x4,100')

1. This project consists of crack sealing/repairing, applying a surface, and remarking Taxiway A and its associated connector taxiways at Lone Pine Airport. The included project sketch depicts the general layout for the project.
 - 1.1. Crack sealing will consist of applying a rubber asphalt crack sealant in all pavement cracks that are less than 1 ½ inches in width within the identified pavement area. Crack repair will consist of applying a crack repair mastic in all pavement cracks that are greater than 1 ½ inches, but less than 4 inches, in width within the identified pavement area. Larger cracks and defects will be repaired using a hot applied repair mastic/patch product based on manufacturer recommendations.
 - 1.2. Surface treatment will either consist of applying an emulsified asphalt seal coat meeting P-608 specifications per FAA AC 150/5370-10H, or applying an emulsified asphalt slurry seal surface treatment meeting P-626 specifications per FAA AC 150/5370-10H. Sand will not be applied to the P-608 treatment application. The Contractor will not be required to perform friction testing. A final decision regarding the selected surface treatment will be reached during the preliminary design for this project.
 - 1.3. New pavement markings will be designed meet FAA AC 150/5340-1M. Type I, Gradation A glass beads will be specified for the painted surfaces. Given the degree of deterioration and that certain existing markings do not meet FAA AC 150/5340-1M requirements, all existing markings will be removed prior to surface treatment.

Estimated Construction Cost (Element 1) is: \$125,000 to \$182,000

Estimated Construction Period is: 14 days¹



Element 1 Pavement Areas

Note: ¹ Should the Contractor exceed the specified construction period, additional construction period fees will be assessed at a rate of \$2,000/day. The Sponsor may offset these fees by charging the Contractor liquidated damages in accordance with the Contract Agreement and Special Provisions developed as part of the bid documents for the project.

I. PROJECT DEVELOPMENT

The project development phase is intended to complete the necessary preliminary actions required to initiate the project in accordance with established Federal, State and Local policies and procedures.

Activities include:

1. Conduct a pre-design meeting/scoping conference with the Sponsor, FAA, and State to establish parameters for the project definition and work areas, budget, and schedule.
2. Develop preliminary cost estimates for the proposed work.
3. Develop a draft Scope of Work narrative for review and approval. The Sponsor may be required to have an independent fee estimate (IFE) performed to validate the proposed engineering fees. The Engineer will assist the Sponsor in getting reimbursed for the cost of this IFE as part of the grant by preparing a request for reimbursement. Upon receiving approval of the scope of work narrative, engineering fees will be calculated and provided with the final Scope of Work. The Engineer will assist the Sponsor with the submittal of a Record of Negotiations to document the fee negotiation performed for the project.
4. Prepare final Scope of Work and Contract.
5. Prepare Preliminary FAA Grant Application. Preparation of the application will include the following:
 - a. Prepare the following forms: SF424 and FAA Form 5100-100.
 - b. Prepare Project Narrative and Sketch.
 - c. Prepare Preliminary Estimate.
 - d. Prepare the Sponsor's Certifications.
 - e. Attach the current Grant Assurances.

The Engineer will submit the application to the Sponsor for approval and signatures.

II. PRELIMINARY DESIGN

The preliminary design phase is intended to identify and evaluate cost effective and practical solutions for the work items identified. The designer will complete its evaluation of alternatives through contacts with local authorities, field investigations, and a practical design approach. The design will take advantage of local knowledge and experience and utilize expertise from recent construction projects to design a cost-effective project. Cost efficiencies will be realized in a lower initial cost and in lower long-term maintenance costs.

Activities include:

1. A topographical survey will not be required nor completed as part of this project.
2. A geotechnical investigation will not be required nor completed as part of the project.
3. Prepare an overall Construction Safety and Phasing Plan (CSPP) in order to maximize project constructability and operational safety. A draft CSPP will be submitted to the FAA for review and comment when the design is approximately 25-35% complete. This final CSPP will be submitted to the FAA when plans are 95% completed. The final CSPP will be coordinated, by the FAA Program Manager, with other FAA Lines of Business (LOBs). Comments received by the FAA LOBs will be incorporated into the CSPP prior to submitting the bid advertisement for the project.
4. Review and evaluate project layout.
 - a. Determine aircraft usage through coordination with Sponsor and FAA
 - b. Verify existing ALP dimensions and data.
5. Evaluate local conditions:
 - a. Inventory local material suppliers, sources and capabilities.
 - b. Review available record drawings of the project site.
 - c. Conduct one (1) design site visit by the Project Manager for familiarity with the site.
6. Prepare preliminary construction plans. Construction plans will be prepared depicting all of the work involved for Element 1. The following list of drawings will be used as a guideline.

| DESCRIPTION | | ELEMENT 1 |
|-------------|--|-----------------|
| a | Cover Sheet | 1 Sheet |
| b | General Notes, Legend and Survey Control | 1 Sheet |
| c | Marking Removals Plan | 2 Sheets |
| d | Pavement Maintenance and Marking Layout Plans | 2 Sheets |
| e | Typical Details | 1 Sheets |
| f | Construction Safety and Phasing Plan | 2 Sheets |
| | TOTAL SHEET COUNT | 9 Sheets |

Drawings may be added or deleted during the design phase if required.

7. Prepare preliminary contract documents. The Engineer will prepare the contract documents including invitation for bids, instructions to bidders, proposal, equal employment opportunity clauses and applicable wage rates, construction contract agreement, performance bond, payment bond, general and special provisions. Preparation will include establishing the location for the bid opening and description of the work schedule. Contract documents will be prepared early during the design phase and submitted to the FAA and Sponsor for review. Sponsor is ultimately

responsible for reviewing and ensuring construction contract terms comply with local law and requirements.

8. Prepare preliminary technical specifications. The Engineer will assemble the technical specifications necessary for the intended work. Standard FAA specifications will be utilized where possible. Additional specifications will be prepared to address work items or material that is not covered by the FAA specifications.

The standard specifications to be utilized for Elements 1 and 2 may include the following items:

| | |
|------------|---|
| Item C-105 | Mobilization |
| Item P-101 | Preparation/Removal of Existing Pavements |
| Item P-608 | Emulsified Asphalt Seal Coat |
| Item P-626 | Emulsified Asphalt Slurry Seal Surface Treatment (Optional) |
| Item P-620 | Runway and Taxiway Marking |

9. Prepare preliminary special provisions to address conditions that require additional clarification and/or definition beyond what is described in the standard general provisions or technical specifications. Items may include:
 - a. Project Location Information
 - b. Insurance Requirements
 - c. Contract Period and Work Schedule and Phasing
 - d. Pre-Construction Conference
 - e. Utilities
 - f. Permits, Taxes and Compliance with Laws
 - g. Field Office Requirements
 - h. Haul Roads
 - i. Testing and Staking
 - j. Airport Security, Closure of Air Operations Areas
 - k. Accident Prevention
 - l. Warranty
10. Prepare and submit FAA design Modifications to Standards, in necessary.
11. Conduct preliminary review of the construction plans, technical specifications, contract documents and special provisions by submitting copies of the preliminary documents to the FAA, State and Sponsor and solicit preliminary design review comments.

III. FINAL DESIGN

In the final design phase, the designer will provide well-defined construction requirements, with selected bid alternatives as appropriate to solicit competitive construction bids. Construction schedules will be coordinated around good weather conditions and as little as practical interference with airport operations.

Activities include:

Final Design

1. Incorporate preliminary design comments and respond as necessary to requests for additional information.
2. Calculate Estimated Quantities. The Engineer will calculate all necessary quantities for the various work items in each Element.
3. Prepare Estimate of Probable Construction Cost for each Element. Using the final quantities calculated following the completion of the plans and specifications, the Engineer will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers and other databases available.
4. Prepare Engineer's Design Report. During the preparation of the construction plans and specifications, an engineer design report will be prepared. The report will include the summary of the project, pavement, drainage design, schedule and cost estimate for the completion of the project. The design report will follow the current FAA Airports guidance where applicable. The design report will be submitted for Sponsor and FAA review. Review comments will be incorporated in the final revised report.
5. Develop work schedules for construction. This task involves dividing the construction work into schedules to allow for maximum contract award flexibility in cases of limited available funds, and allow the project to be executed in a manner that minimizes the disruption of the airport aircraft operations.
6. Submit final CSPP by uploading it to the OE/AAA website. Alternatively, at the request of the FAA PM, the CSPP may be submitted directly to the FAA PM.
7. Prepare 95% design construction plans, technical specifications, contract documents and special provisions.
8. Submit 95% design review package to the FAA, State, and Sponsor and solicit design review comments.
9. Incorporate 95% design review comments and respond as necessary to requests for additional information.
10. Conduct final internal review of all design documents and incorporate any necessary changes. Final review will include one (1) site visit by the Senior Project Manager and Project Engineer to field verify project plans and specifications and to attend a user meeting to discuss the project.
11. Prepare and submit final plans and specifications. Copies will be submitted to the FAA and Sponsor. A final set of plans, specifications and contract documents will be prepared which incorporates

revisions, modifications and corrections determined during the FAA and Sponsor's review. After final plan acceptance, plan sets will be provided to the FAA and Sponsor.

12. Prepare and/or assist with necessary forms:
 - a. Sponsor Quarterly Report
 - b. Strategic Event Coordination Form
 - c. Standard Form 271
 - d. Standard Form 425

IV. BIDDING SERVICES

During the bidding phase of the project, the Engineer will assist the Airport in advertising and letting the project for bid. Engineer will assist in dialogue with potential bidders to quantify bidder questions assist Sponsor in attaining economic bids. Activities outlined below and the fees listed on pages 1-2 cover one iteration of the bidding process. Preparing multiple bid processes, packages, or re-bidding may incur additional or repeated services.

Activities include:

1. Assist the Sponsor with advertising and interpretation of the project requirements. Plans and specifications will be available via the web site of Armstrong Consultants. The Sponsor, State, and FAA will be given a hard copy set of the final plans, specifications and contract documents.
2. Provide technical assistance and recommendations to the Airport during construction bidding.
3. Attend and assist with pre-bid conference. Answer Contractor questions and issue necessary clarifications and addenda. The pre-bid conference will be held on-site by the Senior Project Manager.
4. Provide an on-line bidding platform and read the bids aloud via online video conference at the date, and time agreed by the Sponsor.
5. Prepare an abstract of bids, perform necessary review of the bids to determine responsiveness, and prepare award recommendation letter.
6. Update preliminary Federal Grant Application prepared during Project Development phase based on bids. The Engineer will submit the application to the Sponsor for approval and signatures.
7. Assist in award notification to successful bidder and notify and return bid bonds to the unsuccessful bidders. The DBE goal and all bidding requirements will be reviewed for responsiveness. Any issues or concerns that arise from the bidding documents will be brought to the attention of the Sponsor for clarification.

V. CONSTRUCTION PERIOD SERVICES

During the construction phase of the project, the Engineer will assist the Airport with monitoring, documenting progress for quality and cost control and overall grant administration during construction.

Activities include:

A. Construction Administration Services

1. Coordinate construction contract documents for successful bidder, including contract agreement, bond forms, certificates of inclusion, and Notice to Proceed. Review contractor's bonds, insurance certificates, construction schedules. Review contractor's sub-contracts.
2. Provide Sponsor and FAA with hard copies of the Contract Documents, Specifications, and Construction Plans (digital copies upon request). Provide Contractor with hard and digital copies (one each) of the Contract Documents, Specifications, and Construction Plans; complete with all addenda.
3. Review and accept the Contractor's Safety Plan Compliance Documents prior to issuing the Notice to Proceed.
4. Prepare and submit a Strategic Event Coordination Form.
5. Conduct pre-construction conference. It is assumed that the preconstruction conference will either be held on site the first day of construction or it will be conducted via video conference at some time prior to construction starting.
6. Identify local survey control points used for project design and layout. Engineering staff will assist, as necessary, the resident inspector and Contractor's surveyor during construction by compiling and sending supplemental information regarding issues arising related to construction surveying. Work may include developing alternative survey control based on site conditions discovered during construction and/or findings of the Contractor's surveyor.
7. Provide technical assistance and recommendations to the airport during construction. This item also includes daily construction coordination from the office that does not fit in another item such as phone calls to and from the Contractor, inspector and Owner for project updates, questions, and instruction.
8. Construction Site Visits. This item includes one (1) additional trip to the job site for on-site clarification by the Project Manager.
9. Prepare change orders and supplemental agreements, if required; including appropriate cost/price analyses. All coordination of change orders will be provided by the Engineer.
10. Prepare and confirm monthly payment requests. Payment requests will be reviewed for accuracy with contractor and resident project representative. Engineer will prepare FAA payment documents for the Sponsor. The Sponsor will be required to complete the payment reimbursement through the FAA e-invoicing system.

B. Construction Inspection Services

1. Provide review of all submittals for materials to be used on the project. Review all shop drawings items as required during construction.
2. Provide a full-time resident project representative to monitor and document construction progress for Element 1, confirm conformance with schedules, plans and specifications, measure and document construction pay quantities, document significant conversations or situations, document input or visits by local authorities, etc. Maintain daily log of construction activities. Conduct interviews of the Contractor's and Subcontractor's employees regarding Davis Bacon wage rates and the review of their weekly payroll reports.
3. Prepare and submit weekly inspection reports. Reports will be submitted to the FAA and Sponsor no later than the following week that the report refers to.
4. Conduct final project inspection with the Sponsor, FAA and the contractor. Any punch list items will be noted and coordinated with the contractor for necessary action. It is assumed that the final inspection will be conducted on the final day of inspection and attended by the RPR.

VI. PROJECT CLOSEOUT

During the project closeout phase of the project, the Engineer will assist the Sponsor with compiling all of the reports, documents, and other items necessary to successfully close out the associated grant and provide an accurate historical record for the project.

Activities include:

1. Assist the Sponsor with completing all necessary grant closeout certifications and forms, including final SF425, SF271, draft grant closeout request letter.
2. Prepare record drawings, indicating changes made to the design during construction. The FAA, State, and Sponsor will each receive one copy of the record drawings in half size (11"x17") format, as well as one in electronic format.
3. Prepare Final Engineers Report. The final report will follow the current FAA AIP Final Report guidance.

VII. SPECIAL SERVICES

Special Services are those services that aren't considered "basic" services such as those listed above. When a Special Service is needed that we do not provide in-house, we will contract with other firms that provide those services. The following are activities that are included in this project that fall under Special Service tasks.

Activities include:

1. Assist the Sponsor in updating the Categorical Exclusion package that was originally submitted in 2018. Work is anticipated to include updating the narrative and exhibits to better reflect the actual work proposed by this project.
2. Assist the Sponsor with the Disadvantage Business Enterprise (DBE) Program.
 - a. Update the Sponsor's DBE Plan
 - b. Calculate a new 3-year DBE goal. Research the current State DOT certified DBE listings and area contractors to determine the availability of potential DBE contractors. Use the preliminary cost estimate, developed during the Project Development phase, to determine potential DBE work items.
 - c. Coordinate with Sponsor to assign DBE Liaison and Reconsideration officials.
 - d. Advertise developed DBE goal.
 - e. Finalize the DBE plan and goals and assist the Sponsor in submitting these items to the FAA Civil Rights Office
 - f. Assist the Sponsor with annual DBE utilization reporting.

**AGREEMENT BETWEEN THE COUNTY OF INYO AND
ARMSTRONG CONSULTANTS
FOR THE PROVISION OF ON-CALL AIRPORT ENGINEERING, ARCHITECTURE AND
PLANNING SERVICES**

TERM:
FROM: November 1, 2022 **TO:** October 31, 2027

SCHEDULE OF FEES

The County agrees to pay the Consultant for services performed under the conditions of this agreement the lump sum fixed price amount of \$85,700 for the services detailed in Attachment A-1. The compensation includes reimbursement for all labor, travel, lodging, meals, supplies, field and laboratory testing during the construction phase.

In the Rooms of the Board of Supervisors

County of Inyo, State of California

I, HEREBY CERTIFY, that at a meeting of the Board of Supervisors of the County of Inyo, State of California, held in their rooms at the County Administrative Center in Independence on the 1st day of November 2022 an order was duly made and entered as follows:

*Public Works –
Armstrong
Consultants Master
Services Agreement*

Deputy Public Works Director-Airports Ashley Helms introduced the following members of the Armstrong Consultants team to the Board: Director of Planning Justin Pietz, Director of Engineering Chris Nocks, and Reno Office Manager Mike Dikun.

Public comment was made by Linda Chapman.

Moved by Supervisor Griffiths and seconded by Supervisor Pucci to approve the master services agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO for the provision of Airport Planning, Engineering and Architectural Services in an amount not to exceed \$10,000 for the period of November 1, 2022 through October 31, 2027, contingent upon the Board's approval of future budgets, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained. Motion carried 4-0, with Supervisor Totheroh absent.

WITNESS my hand and the seal of said Board this 1st
Day of November, 2022



NATHAN GREENBERG
Clerk of the Board of Supervisors

A handwritten signature in blue ink, appearing to read "Nathan Greenberg".

By: _____

| |
|---|
| <i>Routing</i> |
| |
| CC Purchasing Personnel Auditor CAO Other: Public Works DATE: November 10, 2022 |



County of Inyo



Public Works

DEPARTMENTAL - ACTION REQUIRED

MEETING: November 1, 2022

FROM: Ashley Helms

SUBJECT: Airport Planning, Engineering and Architectural Services Agreement with Armstrong Consultants

RECOMMENDED ACTION:

Request Board approve the master services agreement between the County of Inyo and Armstrong Consultants of Grand Junction, CO for the provision of Airport Planning, Engineering and Architectural Services in an amount not to exceed \$10,000 for the period of November 1, 2022 through October 31, 2027, contingent upon the Board's approval of future budgets, and authorize the Chairperson to sign, contingent upon all appropriate signatures being obtained.

SUMMARY/JUSTIFICATION:

The Public Works Department advertised two Requests for Qualifications (RFQ) for airport consultant service on May 26, 2022. By the deadline on June 30, two Statements of Qualification (SOQ) were received for Airport Architecture and Engineering (A&E) Services, and four SOQs were received for Airport Planning Services:

- A&E
 - Armstrong Consultants, Grand Junction, CO (with an office in Reno, NV)
 - Tartaglia Engineering, Atascadero, CA
- Planning
 - Armstrong Consultants, Grand Junction, CA
 - Coffman Associates, Scottsdale, AZ
 - Dubois & King, Randolph, VT
 - Environmental Science Associates, Los Angeles, CA

The SOQs were reviewed and scored by the selection panel, and Armstrong Consultants was chosen as the most qualified firm to provide both A&E and Planning Services for the County's airports. Armstrong has extensive experience with airfield engineering and planning projects for agencies similar to Inyo County across the western US - small, but growing, commercial service airports; geographically isolated airports; and clients with multiple airports. Their proposed sub-consultants include Gensler, for terminal architectural services, who recently completed the *Multi-Functional Terminal Building Conceptual Design* for the Bishop Airport (2020); Wilson & Company, who provided architectural services for the Terminal Expansion Project last year; and local firm Eastern Sierra Engineering for geotechnical services; in addition to other well qualified subs for other specialties.

This Master Services Agreement (Agreement) includes a small initial scope and a fee not to exceed \$10,000; all

future services for FAA funded projects will be added to the Agreement via amendment.

BACKGROUND/HISTORY OF BOARD ACTIONS:

ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:

Your Board could choose not to award the Agreement to Armstrong Consultants. This is not recommended as they were the top scoring consultant in the RFQ process.

OTHER AGENCY INVOLVEMENT:

FAA

FINANCING:

Any costs associated with the initial scope will be paid from the Bishop Airport Operating Budget (150100), Object Code 5265 (Professional Services). Although an agreement of this size would not require the approval of your Board, the eventual Not-to-Exceed amount will very likely exceed the threshold requiring Board action - for example, past County five-year airport consulting contracts have exceeded \$2,000,000. For this reason, we are requesting your Board approve the initial Master Service Agreement.

ATTACHMENTS:

1. Armstrong Airport Consultant Contract

APPROVALS:

| | |
|-----------------|--------------------------------|
| Ashley Helms | Created/Initiated - 10/21/2022 |
| Darcy Ellis | Approved - 10/21/2022 |
| Ashley Helms | Approved - 10/21/2022 |
| John Pinckney | Approved - 10/24/2022 |
| Breanne Nelums | Approved - 10/24/2022 |
| John Vallejo | Approved - 10/27/2022 |
| Amy Shepherd | Approved - 10/27/2022 |
| Michael Errante | Approved - 10/27/2022 |
| Ashley Helms | Final Approval - 10/27/2022 |

AGREEMENT BETWEEN COUNTY OF INYO

AND Armstrong Consultants

FOR THE PROVISION OF Engineering, Architecture and Planning **SERVICES**

INTRODUCTION

WHEREAS, the County of Inyo (hereinafter referred to as "County") has the need for Airport Engineering, Architecture and Planning services of Armstrong Consultants (hereinafter referred to as "Consultant"), and in consideration of the mutual promises, covenants, terms, and conditions hereinafter contained, the parties hereby agree as follows:

TERMS AND CONDITIONS

1. SCOPE OF WORK

The Consultant shall furnish to the County, upon its request, those services and work set forth in Attachment A, attached hereto and by reference incorporated herein. Requests by the County to the Consultant to perform under this Agreement will be made by the Public Works Director. Requests to the Consultant for work or services to be performed under this Agreement will be based upon the County's need for such services. The County makes no guarantee or warranty, of any nature, that any minimum level or amount of services or work will be requested of the Consultant by the County under this Agreement. County by this Agreement incurs no obligation or requirement to request from Consultant the performance of any services or work at all, even if County should have some need for such services or work during the term of this Agreement.

Services and work provided by the Consultant at the County's request under this Agreement will be performed in a manner consistent with the requirements and standards established by applicable federal, state, and County laws, ordinances, regulations, and resolutions.

2. PERFORMANCE PERIOD

(Choose Option 1 or Option 2)

Option 1 – Standard Contract

A. This Contract shall go into effect on _____, contingent upon approval by County, and Consultant shall commence work after notification to proceed by County's Contract Administrator. The Contract shall end on _____, unless extended by Contract amendment.

B. Consultant is advised that any recommendation for Contract award is not binding on County until the Contract is fully executed and approved by County.

Option 2 – On-Call Contracts

A. This Contract shall go into effect on November 1, 2022, contingent upon approval by County, and Consultant shall commence work after notification to proceed by County's Contract Administrator. The Contract shall end on October 31, 2027, unless extended by Contract amendment.

B. Consultant is advised that any recommendation for Contract award is not binding on County until the Contract is fully executed and approved by County.

C. The period of performance for each specific project shall be in accordance with the Task Order for that project. If work on a Task Order is in progress on the expiration date of this Contract, the terms of the Contract shall be extended by Contract amendment.

3. CONSIDERATION

A. Compensation. County shall pay Consultant in accordance with the Schedule of Fees (set forth as Attachment B) for the services and work described in Attachment A which are performed by Consultant at the County's request.

B. Travel and per diem. County shall reimburse Consultant for the travel expenses and per diem which Consultant incurs in providing services and work requested by County under this Agreement. Consultant shall request approval by the County prior to incurring any travel or per diem expenses. Requests by Consultant for approval to incur travel and per diem expenses shall be submitted to the Public Works Director. Travel and per diem expenses will be reimbursed in accordance with the rates set forth in the Schedule of Travel and Per Diem Payment (Attachment C). County reserves the right to deny reimbursement to Consultant for travel or per diem expenses which are either in excess of the amounts that may be paid under the rates set forth in Attachment C, or which are incurred by the Consultant without the prior approval of the County.

C. No additional consideration. Except as provided in this Agreement, Consultant shall not be entitled to, nor receive, from County, any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement. Specifically, Consultant shall not be entitled to, by virtue of this Agreement consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays, or other paid leaves of absence of any type or kind whatsoever.

D. Limit upon amount payable under Agreement. The total sum of all payments made by the County to Consultant for services and work performed under this Agreement shall not exceed ten thousand \$ 10,000 .00 Dollars (hereinafter referred to as "contract limit"). County expressly reserves the right to deny any payment or reimbursement requested by Consultant for services or work performed which is in excess of the contract limit.

E. Billing and payment. Consultant shall submit to the County, once a month, an itemized statement of all hours spent by Consultant in performing services and work described in

Attachment A, which were done at the County's request. This statement will be submitted to the County not later than the fifth (5th) day of the month. The statement to be submitted will cover the period from the first (1st) day of the preceding month through and including the last day of the preceding month. This statement will identify the date on which the hours were worked and describe the nature of the work which was performed on each day. Consultant 's statement to the County will also include an itemization of any travel or per diem expenses, which have been approved in advance by County, incurred by Consultant during that period. The itemized statement for travel expenses and per diem will include receipts for lodging, meals, and other incidental expenses in accordance with the County's accounting procedures and rules. Upon timely receipt of the statement by the fifth (5th) day of the month, County shall make payment to Consultant on the last day of the month.

F. Federal and State taxes.

- (1) Except as provided in subparagraph (2) below, County will not withhold any federal or state income taxes or social security from any payments made by County to Consultant under the terms and conditions of this Agreement.
- (2) County will withhold California State income taxes from payments made under this Agreement to non-California resident independent Consultant's when it is anticipated that total annual payments to Consultant under this Agreement will exceed one thousand four hundred ninety nine dollars (\$1,499.00).
- (3) Except as set forth above, County has no obligation to withhold any taxes or payments from sums paid by County to Consultant under this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Consultant. County has no responsibility or liability for payment of Consultant's taxes or assessments.
- (4) The total amounts paid by County to Consultant, and taxes withheld from payments to non-California residents, if any, will be reported annually to the Internal Revenue Service and the California State Franchise Tax Board. To facilitate this reporting, Consultant shall complete and submit to the County an Internal Revenue Service (IRS) Form W-9 upon executing this Agreement.

4. WORK SCHEDULE

Consultant's obligation is to perform, in a timely manner, those services and work identified in Attachment A, which are requested by the County. It is understood by Consultant that the performance of these services and work will require a varied schedule. Consultant will arrange his/her own schedule, but will coordinate with County to insure that all services and work requested by County under this Agreement will be performed within the time frame set forth by County.

5. REQUIRED LICENSES, CERTIFICATES, AND PERMITS

Any licenses, certificates, or permits required by the federal, state, county, or municipal governments for Consultant to provide the services and work described in Attachment A must be procured by Consultant and be valid at the time Consultant enters into this Agreement or as otherwise may be required. Further, during the term of this Agreement, Consultant must maintain such licenses, certificates, and permits in full force and effect. Licenses, certificates, and permits may include, but are not limited to, driver's licenses, professional licenses or certificates, and business licenses. Such licenses, certificates, and permits will be procured and maintained in force by Consultant at no expense to the County. Consultant will provide County, upon execution of this Agreement, with evidence of current and valid licenses, certificates and permits which are required to perform the services identified in Attachment A. Where there is a dispute between Consultant and County as to what licenses, certificates, and permits are required to perform the services identified in Attachment A, County reserves the right to make such determinations for purposes of this Agreement.

6. CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it, Consultant nor its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in covered transactions by any federal department or agency from participation in this transaction. Consultant also warrants that it is not suspended or debarred from receiving federal funds as listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs issued by the General Services Administration available at: <http://www.sam.gov>.

7. CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must verify each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offerer/Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

8. OFFICE SPACE, SUPPLIES, EQUIPMENT, ET CETERA

Consultant shall provide such office space, supplies, equipment, vehicles, reference materials, and telephone service as is necessary for Consultant to provide the services identified in Attachment A to this Agreement. County is not obligated to reimburse or pay Consultant, for any expense or cost incurred by Consultant in procuring or maintaining such items. Responsibility for

the costs and expenses incurred by Consultant in providing and maintaining such items is the sole responsibility and obligation of Consultant.

9. DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13)

The Consultant or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the County deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Consultant from future bidding as non-responsible.

Prompt Payment (§26.29)

The prime Consultant agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 14 days from the receipt of each payment the prime Consultant receives from County. The prime Consultant agrees further to return retainage payments to each subcontractor within 14 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the County. This clause applies to both DBE and non-DBE subcontractors.

10. TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

In support of this initiative, the County encourages the Consultant to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Consultant must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

11. CLEAN AIR AND WATER POLLUTION CONTROL

(Applies to all contracts that exceed \$150,000)

Consultant agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control

Act as amended (33 USC § 1251-1387). The Consultant agrees to report any violation to the County immediately upon discovery. The County assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration. Contractor must include this requirement in all subcontracts that exceeds \$150,000.

12. ENERGY CONSERVATION REQUIREMENTS

Consultant and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq.*).

13. FEDERAL FAIR LABOR STANDARDS ACT (FLSA)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The Consultant has full responsibility to monitor compliance to the referenced statute or regulation. The Consultant must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

14. TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the County if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Consultant must require subcontractors provide immediate written notice to the Consultant if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or

- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Consultant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Consultant may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Consultant or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the County cancellation of the contract or subcontract for default at no cost to the County or the FAA.

15. CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

16. OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor’s compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

17. CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

- 1) The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.
- 3) **Term Definitions**
- 4) **Felony conviction:** Felony conviction means a conviction within the preceding twenty-four
- 5) (24) months of a felony criminal violation under any Federal law and includes
- 6) conviction of an offense defined in a section of the U.S. code that specifically classifies
- 7) the offense as a felony and conviction of an offense that is classified as a felony under 18
- 8) U.S.C. § 3559.
- 9) **Tax Delinquency:** A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

18. VETERAN’S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Consultant and all sub-tier Consultants must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled

veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

19. COUNTY PROPERTY

A. Personal Property of County. Any personal property such as, but not limited to, protective or safety devices, badges, identification cards, keys, etc. provided to Consultant by County pursuant to this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of County. Consultant will use reasonable care to protect, safeguard and maintain such items while they are in Consultant's possession. Consultant will be financially responsible for any loss or damage to such items, partial or total, which is the result of Consultant's negligence.

B. Products of Consultant's Work and Services. Any and all compositions, publications, plans, specifications, blueprints, maps, formulas, processes, photographs, slides, video tapes, computer programs, computer disks, computer tapes, memory chips, soundtracks, audio recordings, films, audio-visual presentations, exhibits, reports, studies, works of art, inventions, patents, trademarks, copyrights, or intellectual properties of any kind which are created, produced, assembled, compiled by, or are the result, product, or manifestation of, Consultant 's services or work under this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of the County. At the termination of the Agreement, Consultant will convey possession and title to all such properties to County.

20. INSURANCE REQUIREMENTS FOR PROFESSIONAL SERVICES

For the duration of this Agreement Consultant shall procure and maintain insurance of the scope and amount specified in Attachment D and with the provisions specified in that attachment.

21. STATUS OF CONSULTANT

All acts of Consultant, its agents, officers, and employees, relating to the performance of this Agreement, shall be performed as independent Consultant's, and not as agents, officers, or employees of County. Consultant, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of County. Except as expressly provided in Attachment A, Consultant has no authority or responsibility to exercise any rights or power vested in the County. No agent, officer, or employee of the Consultant is to be considered an employee of County. It is understood by both Consultant and County that this Agreement shall not under any circumstances be construed or considered to create an employer-employee relationship or a joint venture. As an independent Consultant:

A. Consultant shall determine the method, details, and means of performing the work and services to be provided by Consultant under this Agreement.

B. Consultant shall be responsible to County only for the requirements and results specified in this Agreement, and except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Consultant in fulfillment of this Agreement.

C. Consultant, its agents, officers, and employees are, and at all times during the term of this Agreement shall, represent and conduct themselves as independent Consultant's, and not as employees of County.

22. DEFENSE AND INDEMNIFICATION

For professional services rendered under this Contract, Consultant agrees to indemnify, including the cost to defend, entity and its officers, officials, employees, and volunteers from and against any and all claims, demands, costs, or liability that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant and its employees or agents in the performance of services under this contract, but this indemnity does not apply to liability for damages arising from the sole negligence, active negligence, or willful acts of the County; and does not apply to any passive negligence of the County unless caused at least in part by the Consultant.

To the extent permitted by law, County shall defend, indemnify, and hold harmless Consultant, its agents, officers, and employees from and against all claims, damages, losses, judgments, liabilities, expenses, and other costs, including litigation costs and attorney's fees, arising out of, or resulting from, the active negligence, or wrongful acts of County, its officers, or employees.

23. ACCESS TO RECORDS, REPORTS AND AUDIT

A. Records. Consultant must prepare and maintain an acceptable cost accounting system and maintain all records required by the various provisions of this Agreement, federal, state, and municipal law, ordinances, regulations, and directions. The Consultant agrees to provide the County, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Consultant which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. Consultant shall maintain these records for a minimum of four (4) years after final payment is made and the termination or completion of this Agreement. Consultant may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, microphotographs, or other authentic reproduction of such records.

B. Inspections and Audits. Any authorized representative of County shall have access to any books, documents, papers, records, including, but not limited to, financial records of Consultant, which County determines to be pertinent to this Agreement, for the purposes of making audit, evaluation, examination, excerpts, and transcripts during the period such records are to be maintained by Consultant. Further, County has the right, at all reasonable times, to audit, inspect, or otherwise evaluate the work performed or being performed under this Agreement.

24. EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Consultant agrees as follows:

(1) The Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be

limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The Consultant will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Consultant's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Consultant will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Consultant will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Consultant's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Consultant may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Consultant will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Consultant will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a Consultant becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

25. GENERAL CIVIL RIGHTS PROVISIONS

The Consultant agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color,

national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Consultant and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

26. TITLE VI – COMPLIANCE WITH NONDISCRIMINATION REQUIREMENTS

During the performance of this contract, the Consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. **Compliance with Regulations:** The Consultant (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Consultant, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Consultant of the Consultant’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Consultant will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish the information, the Consultant will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Consultant’s noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the Consultant under the contract until the Consultant complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Consultant will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Consultant will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Consultant becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Consultant may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Consultant may request the United States to enter into the litigation to protect the interests of the United States.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and Consultants, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;

- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

27. ASSIGNMENT

This is an agreement for the services of Consultant. County has relied upon the skills, knowledge, experience, and training of Consultant as an inducement to enter into this Agreement. Consultant shall not assign or subcontract this Agreement, or any part of it, without the express written consent of County. Further, Consultant shall not assign any monies due or to become due under this Agreement without the prior written consent of County.

28. BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the Consultant or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

County will provide Consultant written notice that describes the nature of the breach and corrective actions the Consultant must undertake in order to avoid termination of the contract. County reserves the right to withhold payments to Consultant until such time the Consultant corrects the breach or the County elects to terminate the contract. The County’s notice will identify a specific date by which the Consultant must correct the breach. County may proceed with termination of the contract if the Consultant fails to correct the breach by the deadline indicated in the County’s notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

29. TERMINATION FOR CONVENIENCE

The County may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the County, the Consultant must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the County all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

County agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

County further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

30. TERMINATION FOR DEFAULT

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party [7] days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

a) **Termination by County:** The County may terminate this Agreement in whole or in part, for the failure of the Consultant to:

1. Perform the services within the time specified in this contract or by County approved extension;
2. Make adequate progress so as to endanger satisfactory performance of the Project; or
3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the County all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

County agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

County further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

If, after finalization of the termination action, the County determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the County issued the termination for the convenience of the County.

- b) **Termination by Consultant:** The Consultant may terminate this Agreement in whole or in part, if the County:
1. Defaults on its obligations under this Agreement;
 2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
 3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

Upon receipt of a notice of termination from the Consultant, County agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If County and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the County's breach of the contract.

In the event of termination due to County breach, the Engineer is entitled to invoice County and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. County agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

31. WAIVER OF DEFAULT

Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach, and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided in paragraph thirty-seven (37) "Amendment" below.

32. CONFIDENTIALITY

Consultant further agrees to comply with the various provisions of the federal, state, and county laws, regulations, and ordinances providing that information and records kept, maintained, or accessible by Consultant in the course of providing services and work under this Agreement, shall be privileged, restricted, or confidential. Consultant agrees to keep confidential all such information and records. Disclosure of such confidential, privileged, or protected information shall be made by Consultant only with the express written consent of the County. Any disclosure of confidential information by Consultant without the County's written consent is solely and exclusively the legal responsibility of Consultant in all respects.

Notwithstanding anything in the Agreement to the contrary, names of persons receiving public social services are confidential and are to be protected from unauthorized disclosure in accordance with Title 45, Code of Federal Regulations Section 205.50, the Health Insurance Portability and Accountability Act of 1996, and Sections 10850 and 14100.2 of the Welfare and Institutions Code, and regulations adopted pursuant thereto. For the purpose of this Agreement, all information, records, and data elements pertaining to beneficiaries shall be protected by the provider from unauthorized disclosure.

33. CONFLICTS

Consultant agrees that it has no interest, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the work and services under this Agreement.

34. POST AGREEMENT COVENANT

Consultant agrees not to use any confidential, protected, or privileged information which is gained from the County in the course of providing services and work under this Agreement, for any personal benefit, gain, or enhancement. Further, Consultant agrees for a period of two years after the termination of this Agreement, not to seek or accept any employment with any County, association, corporation, or person who, during the term of this Agreement, has had an adverse or conflicting interest with the County, or who has been an adverse party in litigation with the County, and concerning such, Consultant by virtue of this Agreement has gained access to the County's confidential, privileged, protected, or proprietary information.

35. SEVERABILITY

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state, or county statute, ordinance, or regulation, the remaining provisions of this Agreement, or the application thereof, shall not be invalidated thereby, and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

36. FUNDING LIMITATION

The ability of County to enter this Agreement is based upon available funding from various sources. In the event that such funding fails, is reduced, or is modified, from one or more sources, County has the option to cancel, reduce, or modify this Agreement, or any of its terms within ten (10) days of its notifying Consultant of the cancellation, reduction, or modification of available funding. Any reduction or modification of this Agreement made pursuant to this provision must comply with the requirements of paragraph thirty-seven (37) "Amendment."

37. AMENDMENT

This Agreement may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement, and attached to the original Agreement to maintain continuity.

38. NOTICE

Any notice, communication, amendments, additions, or deletions to this Agreement, including change of address of either party during the terms of this Agreement, which Consultant or County shall be required, or may desire, to make, shall be in writing and may be personally served, or sent by prepaid first class mail to, the respective parties as follows:

County of Inyo:

| | |
|-------------------------------|----------------|
| <u>Public Works</u> | Department |
| <u>168 N Edwards St</u> | Address |
| <u>Independence, CA 93526</u> | City and State |

Consultant:

| | |
|------------------------------------|----------------|
| <u>ARMSTRONG CONSULTANTS, INC.</u> | Name |
| <u>751 HORIZON CT</u> | Address |
| <u>GRAND JUNCTION, CO 81506</u> | City and State |

39. ENTIRE AGREEMENT

This Agreement contains the entire agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties not embodied herein or incorporated herein by reference, shall be of any force or effect. Further, no term or provision hereof may be changed, waived, discharged, or terminated, unless the same be in writing executed by the parties hereto.


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AGREEMENT BETWEEN COUNTY OF INYO
AND Armstrong Consultants

FOR THE PROVISION OF Engineering, Architecture and Planning **SERVICES**


IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS THIS 28th DAY OF December, 2022.

COUNTY OF INYO

By: 
Signature
Jennifer Roeser
Print or Type Name

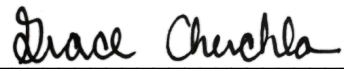
Dated: 12/28/20

CONSULTANT

By: 
Signature
DENNIS CORSI
Print or Type Name

Dated: 12.20.22

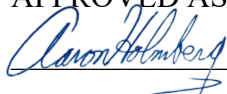
APPROVED AS TO FORM AND LEGALITY:


County Counsel

APPROVED AS TO ACCOUNTING FORM:


County Auditor

APPROVED AS TO INSURANCE REQUIREMENTS:


County Risk Manager

ATTACHMENT A

AGREEMENT BETWEEN COUNTY OF INYO

AND Armstrong Consultants

FOR THE PROVISION OF Airport Engineering, Architecture and Planning **SERVICES**

TERM:

FROM: November 1, 2022

TO: October 21, 2027

SCOPE OF WORK:

This is a five year, on-call Master Services Agreement (Agreement) with Armstrong Consultants (Consultant) for Airport Engineering, Architectural, and Planning Services to be funded by Airport Improvement Program grants through the Federal Aviation Administration (FAA) or other sources. Upon receipt of funding opportunities, the County shall request a Scope of Work and Schedule of Fees for the project from the Consultant. Each new project assigned to the Consultant shall be incorporated into this Agreement by amendment, through action of the Inyo County Board of Supervisors. There is no guarantee that future projects will be assigned to the Consultant under this Agreement; projects are contingent on the availability of project funding.

The initial scope of the Agreement includes the services described in the attached Task Order A.

**TASK ORDER A
ATTACHMENT TO
PROFESSIONAL SERVICES AGREEMENT
BETWEEN SPONSOR AND ENGINEER,
DATED NOVEMBER 1, 2022**

FURTHER DESCRIPTION OF SERVICES OF ENGINEER

1. This Attachment is made a part of and incorporated by reference into the Professional Services Agreement made on November 1, 2022, between **INYO COUNTY (Owner)** and **ARMSTRONG CONSULTANTS, INC., (Engineer)** providing for professional engineering services. The Services of Engineer as described in Section 1 of the Agreement are amended or supplemented as indicated below and the time periods for the performance of certain services are stipulated as indicated below.

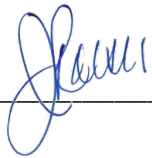
2. **LOCATION** – Inyo County, California

3. **WORK PROGRAM** – On-Call Engineering and Consulting Services
(See Attached Scope of Work)

4. **FEES** - The fees will be Time and Materials (See Attached Rate Table)

Fees shall not exceed \$10,000.00 without prior approval from the Sponsor

SPONSOR:
INYO COUNTY



ENGINEER:
ARMSTRONG CONSULTANTS, INC.



Dennis Corsi, President

**TASK ORDER A
SCOPE OF WORK
INYO COUNTY
MISCELLANEOUS ON-CALL SERVICES**

This Scope of Work is intended to provide On-Call Planning, Engineering and Consulting Services to support Inyo County for miscellaneous Tasks requested by the Sponsor. The work covered in this scope is generally not funded by Federal or State sources. The intent of this Task Order is to provide an efficient and effective method of executing and completing the various items as needed.

Said Tasks may include, but are not limited to, the preparation and/or update of various drawings, plans, sketches or visual aids, cost estimates, minor design or engineering assignments, feasibility studies, reports and documentation, facilitation or participation in conferences or meetings, reviewing other consultant work products, and/or site visits and evaluation of conditions.

Engineer's services for the above described Tasks will be provided in accordance with mutually agreed upon assignments and may include one or more of the services listed above. Tasks will be assigned and/or agreed upon in writing with sufficient description to ensure the deliverables, level of effort and timeframe are understood. Invoices will be submitted monthly or upon completion of a specific Task or milestone.

Rate Table

Work activities will be billed in accordance with hourly rate table listed below. Cumulative fees under this Task Order shall not exceed \$10,000 without prior approval from the Sponsor. Cumulative and current balance updates for the overall Task Order contract limit will be provided with each invoice.

| DESCRIPTION | HOURLY RATE |
|---------------------------------|-------------|
| Principal | \$242/hr |
| Senior Project Manager | \$193/hr |
| Project Manager | \$175/hr. |
| Project Engineer | \$147/hr. |
| Project Planner | \$143/hr. |
| Senior Drafter / Designer | \$147/hr |
| Designer | \$121/hr. |
| Field Eng. Supervisor | \$147/hr. |
| Resident Project Representative | \$135/hr. |
| Project Coordinator | \$99/hr. |

ATTACHMENT B

AGREEMENT BETWEEN COUNTY OF INYO

AND Armstrong Consultants

FOR THE PROVISION OF Airport Engineering, Architecture and Planning **SERVICES**

TERM:

FROM: November 1, 2022

TO: October 21, 2027

SCHEDULE OF FEES:

This is a five year, on-call master service agreement (Agreement) with Armstrong Consultants (Consultant) for Airport Engineering, Architectural, and Planning Services to be funded by Airport Improvement Program grants through the Federal Aviation Administration (FAA) or other funding sources. Any future work assigned to the Consultant shall be incorporated into this Agreement by amendment, through action of the Inyo County Board of Supervisors, and would include a Scope of Work and Schedule of Fees. There is no guarantee that future projects will be assigned to the Consultant under this Agreement; projects are contingent on the availability of project funding.

The schedule of fees for the initial scope of this Agreement is included in the document Task Order A, included in Attachment A: Scope of Work of this Agreement.

ATTACHMENT C

AGREEMENT BETWEEN COUNTY OF INYO

AND Armstrong Consultants

FOR THE PROVISION OF Airport Engineering, Architecture and Planning **SERVICES**

TERM:

FROM: November 1, 2022

TO: October 21, 2027

SCHEDULE OF TRAVEL AND PER DIEM PAYMENT:

This is a five year, on-call Master Services Agreement (Agreement) with Armstrong Consultants (Consultant) for Airport Engineering, Architectural, and Planning Services to be funded by Airport Improvement Program grants through the Federal Aviation Administration (FAA) or other sources. Upon receipt of funding opportunities, the County shall request a Scope of Work and Schedule of Fees for the project from the Consultant. Each new project assigned to the Consultant shall be incorporated into this Agreement by amendment, through action of the Inyo County Board of Supervisors. There is no guarantee that future projects will be assigned to the Consultant under this Agreement; projects are contingent on the availability of project funding.

No travel or per diem payments are included in the initial Agreement.

ATTACHMENT D

AGREEMENT BETWEEN COUNTY OF INYO
AND Armstrong Consultants

FOR THE PROVISION OF Airport Engineering, Architecture and Planning **SERVICES**

TERM:

FROM: November 1, 2022 **TO:** October 21, 2027

SEE ATTACHED INSURANCE PROVISIONS

The following insurance requirements will apply to all work carried out under this Agreement unless modified for a specific project by amendment.

2022 Insurance Requirements for Professional Services

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, or employees.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$2,000,000 per occurrence for engineering services** and no less than **\$1,000,000 per occurrence for planning services**. If a general aggregate limit applies, either the general aggregate limit shall apply separate to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **\$1,000,000** per accident for bodily injury and property damage. Provision may be waived with signed letter on contractor's letterhead certifying that no auto or mobile equipment will be used for/during the execution of the contract.
3. **Workers' Compensation** insurance as required by the State of California, with **Statutory Limits**, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease. May be waived with signed letter on contractor's letterhead certifying that contractor has no employees.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the Contractor's profession, with limit no less than **\$2,000,000** per occurrence or claim, **\$4,000,000** aggregate.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, Inyo County requires and shall be entitled to the broader coverage and/or the higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to Inyo County.

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

2022 Insurance Requirements for Professional Services

Additional Insured Status: Inyo County, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 if a later edition is used).

Primary Coverage: For any claims related to this contract, the **Contractor's insurance coverage shall be primary and non-contributory** and at least as broad as ISO CG 20 01 04 13 as respects Inyo County, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by Inyo County, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies.

Umbrella or Excess Policy: The Contractor may use Umbrella or Excess Policies to provide the liability limits as required in this agreement. This form of insurance will be acceptable provided that all of the Primary and Umbrella or Excess Policies shall provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's primary and excess liability policies are exhausted.

Notice of Cancellation: Each insurance policy required above shall state that coverage shall not be canceled, except with notice to Inyo County.

Waiver of Subrogation: Contractor hereby grants to Inyo County a waiver of any right to subrogation which any insurer of said Contractor may acquire against Inyo County by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not Inyo County has received a waiver of subrogation endorsement from the insurer.

Self-Insured Retentions: Self-insured retentions must be declared to and approved by Inyo County. Inyo County may require the Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Inyo County. The CGL and any policies, including Excess liability policies, may not be subject to a self-insured retention (SIR) or deductible that exceeds \$25,000 unless approved in writing by Inyo County. Any and all deductibles and SIRs shall be the sole responsibility of Contractor or subcontractor who procured such insurance and shall not apply to the Indemnified Additional Insured Parties. Inyo County may deduct from any amounts otherwise due Contractor to fund the SIR/deductible. Policies shall NOT contain any self-insured retention (SIR) provision that limits the satisfaction of the SIR to the Named. The policy must also provide that Defense costs, including the Allocated Loss Adjustment Expenses, will satisfy the SIR or deductible. Inyo County reserves the right to obtain a copy of any policies and endorsements for verification.

2022 Insurance Requirements for Professional Services

Acceptability of Insurers: Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to Inyo County.

Claims Made Policies: If any of the required policies provide coverage on a claims-made basis:

1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Contractor must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

Verification of Coverage: Contractor shall furnish Inyo County with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause **and a copy of the Declarations and Endorsement Page of the CGL policy and any Excess policies listing all policy endorsements.** All certificates and endorsements and copies of the Declarations and Endorsements pages are to be received and approved by Inyo County before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. Inyo County reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. Inyo County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Subcontractors: Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that Inyo County is an additional insured on insurance required from subcontractors.

Duration of Coverage: CGL & Excess liability policies for any construction related work, including, but not limited to, maintenance, service, or repair work, shall continue coverage for a minimum of 5 years for Completed Operations liability coverage. Such Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

Special Risks or Circumstances: Inyo County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.
-end-



INYO COUNTY BOARD OF SUPERVISORS

TRINA ORRILL • JEFF GRIFFITHS • SCOTT MARCELLIN • JENNIFER ROESER • MATT KINGSLEY

NATE GREENBERG
COUNTY ADMINISTRATIVE OFFICER

DARCY ELLIS
ASST. CLERK OF THE BOARD



AGENDA ITEM REQUEST FORM

December 5, 2023

Reference ID:
2023-4330

2023 State of the Arts Report Community Organization/Outside Agency NO ACTION REQUIRED

ITEM SUBMITTED BY

Supervisor Jeff Griffiths

ITEM PRESENTED BY

Lynn Cooper - ICA, Sharon Freilich - ICA

RECOMMENDED ACTION:

Receive a year-end "State of the Arts" report from the Inyo Council for the Arts.

BACKGROUND / SUMMARY / JUSTIFICATION:

The Inyo Council for the Arts produces a year-end "State of the Arts" report, and has requested the opportunity this year to present it to your Board. Certain Arts Council activities are partially funded throughout the year by grants from the County of Inyo, such as the Millpond Music Festival and Community Arts Days in Bishop, Big Pine, Independence, and Lone Pine.

This is also an opportunity for your Board to meet incoming Executive Director Sharon Freilich, who is replacing longtime Executive Director Lynn Cooper upon her retirement.

FISCAL IMPACT:

| | | | |
|-----------------------------------|-----|--------------------|--|
| Funding Source | N/A | Budget Unit | |
| Budgeted? | N/A | Object Code | |
| Recurrence | N/A | | |
| Current Fiscal Year Impact | | | |
| | | | |
| Future Fiscal Year Impacts | | | |
| | | | |
| Additional Information | | | |
| | | | |

ALTERNATIVES AND/OR CONSEQUENCES OF NEGATIVE ACTION:

This is an informational item only.

OTHER DEPARTMENT OR AGENCY INVOLVEMENT:

None.

ATTACHMENTS:

APPROVALS:

| | |
|----------------|--------------------------------|
| Darcy Ellis | Created/Initiated - 11/29/2023 |
| Darcy Ellis | Approved - 11/29/2023 |
| Nate Greenberg | Final Approval - 11/29/2023 |