

## ADDENDUM 1

PROJECT NAME: FIRE STATION #24 REPLACEMENT

DATE: 07/29/2020

This Addendum 1 shall be included in and considered part of the solicitation documents for the construction of the Fire Station #24 Replacement.

RFCSP: #061720DR

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### PROPOSAL DUE DATE AND REVISED RFCSP FORM

1. The Proposal Due Date and Bid Opening date have been re-scheduled to Tuesday, August 11, 2020 at 2:00p.m. CST. The WebEx information is listed below.

Join by phone: 1-415-655-0001  
Meeting number (access code): 133 478 6148  
Meeting password: mJXCVQAM376

Join meeting through the WebEx site:

<https://sanantonio.webex.com/sanantonio/j.php?MTID=mdbc36d7cd5131a2a7c13a22821ef1d84>

The RFSCP Advertisement Form is revised per the attached document.

### BIDDER INQUIRY RESPONSES

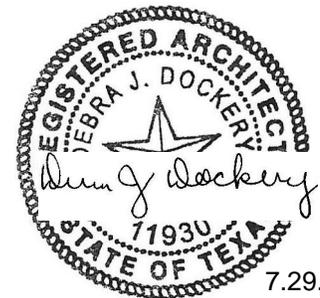
2. See the attached list of bidder questions and responses submitted in CivCast.

### REFERENCE DOCUMENTS

3. See updated Fire Flow Test attached.

### SPECIFICATIONS

4. Replace Section 033000 Cast in Concrete with the attached.
5. Clarification to Section 074113 Formed Metal Roof, Wall and Soffit Panels, 2.2 Standing Seam Metal Roof Panels B. 4.): Panel Coverage – Roof panels may be 16” or 18” in width.
6. Clarification to Section 074113 Formed Metal Roof, Wall and Soffit Panels, 2.3 Metal Wall Panels B. 1. (a.) Delete HR-16 panel reference. Metal Wall Panels shall be MBCI FW-120-1 or approved manufacturers’ equivalent.
7. Replace Section 105500 Postal Specialties with the attached.



8. Clarification to Section 122413 Roller Window Shades: Provide roller window shades for all Type A and Type C windows shown on the drawings.
9. Add Section 133419 Metal Building Systems per the attached.

## DRAWINGS

### Civil

10. Sheet C3.0 Dimensional Control Plan: Replace Sheet C3.0 with the attached revised drawing. Move site plan 3'-0" towards Austin Highway and add pavement repair.
11. Sheet C3.1 Key Plan: Replace Sheet C3.1 with the attached revised drawing. Move site plan 3' feet towards Austin Highway and add pavement repair.
12. C3.1 Key Plan, Key Legend M2: Revise Fence M2 Pre-slatted fence to 8'-0" high. This applies to M2 fence locations only, not to M1 fence.
13. Sheet C4.3 Off-Site Drainage Plan: Replace C4.3 with the attached revised drawing, Revise storm drainage layout and vertical design.
14. Sheet C4.4 Off-Site Drainage Details: Replace C4.4 with the attached revised drawing. Revise details at downstream structure.
15. Sheet C7.3 Detail, Typical Pre-slatted Fence Elevation / Section: Revise to 8'-0" height where Fence Type M2 is noted on the Key Plan Sheet C3.1.

### Landscape

16. Sheet L3.02 Bed Surfacing Plan: Replace Sheet L3.02 with the attached revised drawing. Provide mulch at all new and existing trees. Mulch areas shall be free of gravel.

### Architectural

17. Sheet A2.02 New Site Plan: Revise detail reference for bicycle rack located at the building entry to 4/A2.04. Add the installation of a bicycle rack near Porch 152 location to be coordinated with the Owner.
18. Sheet A3.03 Partition Types:
  - Partition Type A – Revise title to “3-5/8” Metal Stud Wall Partition to Roof Deck”.
  - Partition Type E – Revise title to “6” Metal Stud Wall Partition to Roof Deck”.
  - Partition Type F – Revise title to “6” Metal Stud Wall Partition to Roof Deck”.
  - Partition Type G – Revise title to “3 5/8” Metal Stud Smoke and Sound Barrier Wall STC 50.”

19. Sheet A4.01, Exterior Elevations – Revise East Elevation and a portion of the North and South Elevations per the attached revised A4.01. Elevations fronting Austin Highway to be stone and brick masonry with stucco in the base bid. The West Elevation and the primary portions of the North and South Elevations to remain metal wall panel in the base bid. The Bid Alternate will replace the metal wall panel on these three elevations with stone, brick and stucco as shown in the A10 series drawings.
20. Sheet A9.01 Enlarged Floor Plans – Revise Enlarged Plans 1, 2 and 6 per the attached. Add Interior Elevation of Kitchen Island east side per the attached. Toilet Accessory Clarification: Recessed paper towel dispensers shall be installed where indicated at metal stud wall locations. Surface mounted paper towel dispensers shall be installed at all masonry wall locations.
21. Sheet A9.03 Interior Elevations – Revise Interior Elevations 3, 4, 5 and 7 per the attached.
22. Sheet A9.05 Millwork and Interior Details – Revise Millwork Sections 4, 6, 7 and 10 per the attached.
23. Sheet A10.12 Alternate #1 Roof Details, Detail 1: Clarification of wall system at stucco – ¾” stucco on self-furring metal lath is installed over ½” gypsum sheathing applied over rigid insulation. Rigid insulation is installed over air barrier applied to ½” gypsum sheathing nailed to metal stud wall framing.

#### Structural

24. Sheet 1.01 Revise Design Loads, Note DL-7 Wind Loads – Risk Category to Risk Category IV.

#### Electrical

25. Sheet E2.01, Revise Key Note 3 and add arc fault protection for branch circuits serving dorm rooms and areas associated with dorm rooms. See attached revised Sheet E2.01.

Sheet E2.01 (narrative only): Revise Keyed Note #1 to indicate 30A, 120V circuits for EL-17, EL-18, EL-19, EL-36 & EL-37. Provide 30A cord cap & matching plug for each circuit, NEMA L5-30R & L5-30P, with #10 AWG Cu supply circuits and #10 AWG Cu Type SOOW cord. Provide all components previously indicated, but with the change to 30A / #10 AWG.

26. Sheet E2.03, Plan 1 Enlarged /service Yard, Electrical Room, Mechanical Room and Data Room: Revise Generator rating to 60 kw at 0.8 Power Factor = 75 kVA (kiloVoltsAmperes).
27. Sheet E4.01, Revise Detail 2 and remove equipment grounding conductors from service laterals. See attached revised Sheet E4.01.

28. Sheet E5.01 (Narrative Only): Revise Panelboard 'EL1' Schedule to indicate 30A, 120V circuit breaker for circuits EL-17, EL-18, EL-19, EL-36 & EL-37.
29. Sheet E5.02, Revise receptacles in kitchen to GFCI and add arc fault protection for branch circuits serving dorm rooms and areas associated with dorm rooms. See attached revised Sheet E5.02.

### Plumbing

30. Sheet P1.01, Revise FS-1 location to coordinate with shifted ice maker per attached revised drawing.

Room 150, Electrical Room – Clarification: A drain box is acceptable for the mini-split condensate in lieu of washing machine box.

31. Sheet P1.02, Provide gas shut-off valve, revise SH-1 location in EMS Shower Room 133 and Fire Fighter Bath 125, and revise WSB location to coordinate with shifted ice maker. per revised Sheet P1.02 attached.
32. Sheet P2.02, Revise SH-1 location in EMS Shower Room 133 and Fire Fighter Bath 125.
- 33 Sheet P3.02, Revise Gas Riser Diagram. Add gas shut-off valve per revised sheet P3.02 attached.

### Technology and Data

34. Sheet T3.02, Revise drawing per the attached Sheet T3.02:  
Special Systems Floor Plan, Symbol MR, has been revised to MR2.  
Room 137, MR2 relocated from plan north wall to plan south center wall.  
Room 112, MR2 relocated to plan north center wall.  
Room 129, Add MR2 to plan north wall.  
Room 129, Relocated CIR as indicated on the drawing.  
Deleted ceiling speaker.
35. Sheet T5.02, Revise drawing per the attached Sheet T5.02: Floor Special Systems Plan Detail, US Digital Designs drawing revised as noted.

END OF ADDENDUM 1

**CITY OF SAN ANTONIO**  
**PUBLIC WORKS DEPARTMENT**



**REQUEST FOR COMPETITIVE SEALED PROPOSALS  
(RFCSP)**

for

**FIRE STATION #24 REPLACEMENT  
RFCSP: #061720DR**

**Release Date: June 17, 2020  
Proposals Due: August 11, 2020; 2:00 PM Central Standard Time (CST)**

**This solicitation has been identified as High-Profile.**

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**PROHIBITED CAMPAIGN CONTRIBUTIONS**

**Notice Regarding Prohibition on Campaign or Officeholder Contributions for Individuals and Entities Seeking High-Profile Contracts.** Under Section 2-309 of the Municipal Campaign Finance Code, the following are prohibited from making a campaign or officeholder contribution to any member of City Council, candidate for City Council or political action committee that contributes to City Council elections beginning on the \*10th business day after a contract solicitation has been released through the 30<sup>th</sup> calendar day following the approval by City Council ("blackout" period):

- (1) Any individual seeking a high-profile contract;
- (2) Any owner, officer, officer of board, and executive committee member of an entity seeking a high-profile contract, excluding board officers and executive committee members of 501 (c)(3), 501(c)(4) and 501 (c)(6) non-profit organizations not created or controlled by the City whose board service is done strictly as a volunteer with no financial compensation and no economic gain from the non-profit entity;
- (3) The legal signatory of the high-profile contract;
- (4) Any attorney, lobbyist or consultant hired or retained to assist the individual or entity in seeking a high-profile contract;
- (5) Subcontractors hired or retained to provide services under the high-profile contract; and
- (6) Any first-degree member of the household of any person listed in (1), (2), (3) or (5) of this subsection.

**A high-profile contract cannot be awarded to the individual or entity if a prohibited contribution was made by any of these individuals during the "blackout" period**

***\*For this solicitation, the first-day contributions are prohibited is Wednesday, July 1, 2020.  
The first day contributions may be made is the 31st day after the contract is approved at a City Council "A" Session.***

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**RESTRICTIONS ON COMMUNICATIONS**

In accordance with and as authorized by Section 2-61 of the City Code, the following restrictions on communications apply to this solicitation: Respondents are prohibited from contacting 1) City officials, as defined by §2-62 of the City Code of the City of San Antonio, regarding the RFCSP or proposal from the time the RFCSP has been released until the contract is posted for consideration as an agenda item during a meeting designated as an A session; and 2) City employees from the time the RFCSP has been released until the contract is approved at a City Council "A" session.

Restrictions extend to "thank you" letters, phone calls, emails and any contact that results in the direct or indirect discussion of the RFCSP and/or proposal submitted by Respondent.

Violation of this provision by Respondent and/or its agent may lead to disqualification of Respondent's proposal from consideration.

For additional information, see the section of this RFCSP entitled "Restrictions on Communication".

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**ATTACHMENTS**

<b>General Conditions</b>	Exhibit A
<b>General Wage Decision Number TX20200231 02/14/2020</b>	Exhibit B
<b>Payment and Performance Bond Templates</b>	Exhibit C
<b>SBEDA Ordinance Contract Provisions</b>	Exhibit D
<b>Insurance Requirements</b>	Exhibit E

**Forms for Submittal with Statement of Qualifications:**

Submittal Checklist and Table of Contents	Form 1
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**Required Forms (to be submitted in separate packet):**

Submittal Cover/Signature Sheet	Form 2
Contracts Disclosure Form	Form 3
Litigation Disclosure Form	Form 4
SBEDA: Subcontractor/Supplier Utilization Plan	Form 5

# **FIRE STATION #24 REPLACEMENT (RFCSP: #061720DR)**

## **I. BACKGROUND**

The City of San Antonio (City), Public Works Department (Public Works) is seeking qualifications and Requests for Competitive Sealed Proposals (RFCSP) from qualified firms to provide construction services for the **Fire Station #24 Replacement Project** (Project), a 2017 Bond Program project.

## **II. SCOPE OF WORK AND GENERAL REQUIREMENTS**

The Fire Station #24 Replacement project, located at 2265 Austin Highway, provides for a new fire station of approximately 16,000 square-feet, comprised of three (3) apparatus bays, one EMS bay, a kitchen, dining and living areas, dormitories, offices, an exercise room, laundry rooms and associated site and utilities work. The site improvements include concrete paved fire apparatus circulation and parking for 35 cars, driveways, fire lane, service areas, water, fire line and fire sprinkler, sanitary sewer, storm drainage, electrical and telecommunications services.

Additionally, one (1) alternate is being proposed:

1. Provide brick and stone masonry veneer and stucco exterior facing materials as shown on Sheets A10.00 thru A10.13 in lieu of metal wall panel exterior facing included in the base bid proposal.

**Plans and Specifications of the Construction Documents:** Documents may be downloaded on the CivCast website at <https://www.civcastusa.com/bids>. Answers by Consultant and/or City shall be posted on the CivCast website or given in writing to all prospective Respondents in Addendum form to this solicitation. All provisions and requirements of such issued addenda shall supersede or modify affected portions of the Specifications. All addenda shall be made a part of the Project's Contract Documents. No other explanation or interpretation, with regard to provisions and/or requirements shall be considered official or binding upon City. Addenda shall be posted on the CivCast website at <https://www.civcastusa.com/bids>, along with the Project solicitation documents. Respondent understands and agrees that Respondent is responsible for obtaining all issued Addenda and adhering to all requirements in any issued Addenda. City shall not be responsible for incorrect information obtained through other sources.

**Calendar Days:** Respondent understands and agrees that this is a **12 month construction contract (365 Calendar Days)**.

**Contract Budget:** The estimated budget for this contract is **\$6,200,000.00**.

**Liquidated Damages for Delay in Substantial Completion and Final Completion:** The Contractor will be expected to begin construction in accordance with Article 1 –General Provisions, Section 1.2.4, Notice to Proceed and Commencement of Contract Times in the General Conditions–City of San Antonio Construction Contracts. In the event the selected Respondent fails to achieve Substantial Completion and/or Final Completion of the Project by the dates established for Substantial Completion and/or Final Completion, Respondent hereby accepts and agrees it shall pay City the sum indicated on the table below for each and every calendar day of unexcused delay in achieving Substantial Completion and/or Final Completion beyond the Scheduled Completion/Final Completion dates.

Any sums due and payable hereunder to City shall be payable, not as a penalty, but as Liquidated Damages representing an estimate of delay damages sustained by City, estimated at the time of executing the Contract. Such Liquidated Damages shall apply regardless of whether Respondent has been terminated by City prior to Substantial Completion, so long as Respondent's actions or inactions contributed to the delay. Such Liquidated Damages shall be in addition to and not in preclusion of any recovery of actual damages resulting from other defects in Respondent's performance hereunder, for matters other than delays in Substantial Completion/Final Completion.

When City reasonably believes that Substantial Completion/Final Completion will be inexcusably delayed, City shall be entitled, but not required, to withhold from any amounts otherwise due to Respondent an amount then believed by City to be adequate to recover liquidated damages applicable to such delays. If and when Respondent overcomes the delay in achieving Substantial Completion and/or Final Completion or any part thereof, for which City has withheld payment, City promptly shall release to Respondent those funds withheld but no longer applicable as Liquidated Damages. The Liquidated Damages are displayed in the following table:

Contractual Milestone	Contractual Milestone Description and Requirements	From	To	Liquidated Damages
1	Substantial Completion	NTP	365 Calendar Days	<b>\$1,800.00 per day</b>
2	Final Completion	Substantial Completion	30 Calendar Days	<b>\$1,000.00 per day</b>

**General Conditions for City of San Antonio Construction Contracts:** Respondent shall review City’s General Conditions for City of San Antonio Construction Contracts, provided and attached hereto, labeled as **Exhibit A** and incorporated herein by reference, and provide written comments and/or concerns regarding said General Conditions in Respondent’s submitted proposal under “**Tab 3**”. If Respondent does not have any comments and/or concerns, Respondent shall indicate this in Respondent’s submitted proposal under “**Tab 3**”. If no objections are submitted by the Respondent, City shall presume that Respondent accepts the terms, conditions and requirements of City’s General Conditions.

**Wage & Labor Standard Provisions & Prevailing Wage Rates:** The selected Respondent shall comply with City Ordinance Number 2008-11-20-1045, concerning Wage and Hour Labor Standard Provisions for City of San Antonio Construction Projects (amending City Ordinance Number 71312). This is a Public Works Contract and Chapter 2258 of the Texas Government Code requires that not less than the prevailing wage rate for work of a similar character in this locality shall be paid to all laborers, workmen and mechanics employed in the construction of this Project. This prevailing wage requirement includes overtime regulations. Respondent shall refer to the General Wage Decision Number **TX20200231 02/14/2020**, attached hereto, incorporated by reference herein and labeled as “**Exhibit B**”.

**Payment and Performance Bonds:** Upon City Council approval, the selected Respondent shall furnish City with payment and performance bonds, in accordance with the provisions of Chapter 2253 of the Texas Government Code required for this Project have been attached hereto, incorporated by reference herein and labeled as “**Exhibit C**”.

### III. SCHEDULE OF EVENTS

The following tentative schedule has been prepared for this project:

<b>Pre-Submittal Conference:</b>	<b>June 29, 2020 at 10:00a.m. CST</b>
<b>Deadline for Submission of Written Questions:</b>	<b>July 13, 2020 at 4:00p.m. CST</b>
<b>Responses Due:</b>	<b>August 11, 2020 at 2:00p.m. CST</b>
<b>Evaluation of Proposals - (Interviews, if necessary)</b>	<b>August 2020 - (September 2020)</b>
<b>Anticipated City Council Consideration</b>	<b>December 2020</b>

### IV. PRE-SUBMITTAL CONFERENCE

A Pre-Submittal Conference is scheduled, for **June 29, 2020 at 10:00 a.m. CST**. The Pre-Submittal Conference will be held via WebEx meeting. Prospective Respondents may join the WebEx using the following instructions:

**Join by phone: 1-415-655-0001**  
**Meeting number (access code): 133 462 1149**  
**Meeting password: H93PmYt2pQj**

Join meeting:

<https://sanantonio.webex.com/sanantonio/j.php?MTID=m1b5798bc394d104e774d75c506c3bcfa>

Attendance at the Pre-Submittal Conference is optional, but highly encouraged.

Respondents who join the WebEx Pre-Submittal Conference are highly encouraged to email the solicitation's point of contact person confirming Respondent attendance and participation through the WebEx.

Respondent is encouraged to submit written questions concerning this RFCSP through the CivCast website at least five (5) calendar days in advance of the Pre-Submittal Conference, in order to expedite the proceedings.

City's responses to questions received by this due date may be distributed at the Pre-Submittal Conference, as well as being posted on the CivCast website at <https://www.civcastusa.com/bids>.

Any oral responses provided by City staff at the Pre-Submittal Conference shall be preliminary. A written summary of the Pre-Submittal Conference shall contain City's official responses to issues raised during the Pre-Submittal Conference and posted on the CivCast website at <https://www.civcastusa.com/bids>. Any oral response given at the Pre-Submittal Conference that is not confirmed in the posted written summary from the Pre-Submittal Conference or in a subsequent addendum shall not be official or binding on City. Only written responses shall be official. All other forms of communication with any officer, employee or agent of City shall not be binding on City.

## **V. PROPOSAL DOCUMENT REQUIREMENTS AND EVALUATION CRITERIA**

City will conduct a comprehensive, fair and impartial evaluation of all proposals received in response to this RFCSP. City may appoint a selection committee to perform the evaluation(s) of the received proposals. Each proposal received by City shall be analyzed to determine overall responsiveness and qualifications to the RFCSP. The selection committee may select all, some or one of the Respondents to move forward to the interview phase of the evaluation process. If City elects to conduct interviews, Respondent may be interviewed and re-scored based upon these same criteria or other criteria, to be determined by the selection committee.

Respondent's proposal shall include the following items included in Submittal Checklist & Table of Contents in the following sequence combined in PDF format:

1. **SUBMITTAL CHECKLIST AND TABLE OF CONTENTS (Form #1) (Indexed and labeled as "Tab 1")** – Respondent shall complete this form, which shall be used as the Table of Contents and as a checklist for Respondent's submittal.
2. **EXECUTIVE SUMMARY (Indexed and labeled as "Tab 2")** – Respondent shall include a one (1) page Executive Summary at the beginning of the Statement of Qualifications. Respondent's Executive Summary shall state the number of years Respondent's team has been in business, Respondent's number of years in business in its local office, Respondent's local office address and the number of employees employed in Respondent's local office.
3. **GENERAL CONDITIONS REVIEW (Indexed and labeled as "Tab 3")** – Respondent shall review the General Conditions, provided hereto and made a part hereof and labeled as RFCSP **Exhibit A**, and provide written comments and/or concerns regarding the General Conditions. If Respondent does not have any comments and/or concerns, Respondent shall indicate this in this **Tab 3**. If no objections are submitted by the Respondent, City and Respondent agree Respondent shall sign the Contract as presented, if a contract is awarded.
4. **LETTERS OF REFERENCE (required) (Indexed and labeled as "Tab 4")** – Respondent shall provide a maximum of five (5) letters of reference including contact information.
5. **STATEMENT OF QUALIFICATIONS** – Respondent shall provide a narrative document, as outlined in the **Statement of Qualifications** below, addressing all evaluation criteria in **Section V** of this RFCSP considering the project defined in this solicitation. Sufficient information regarding Respondent's past projects and key personnel's experience shall be provided in Respondent's proposal to indicate its team has met or exceeded the minimum qualifications provided in **Section V** of this RFCSP in proposal.

City shall conduct a comprehensive, fair and impartial evaluation of all proposals received, in response to this RFCSP. It currently is anticipated City shall appoint and utilize a selection committee to perform said evaluation.

The following Evaluation Criteria shall be used, in recommending the award of this Contract:

**A. Experience, Background, Qualifications of Firm, Key Personnel, and Key Sub-Consultant (25 Points)**

Respondent shall respond to the following items, as they relate to Scope of Work:

1. **Experience (Indexed and Labeled as “Tab 5”)** – City shall consider the relevance of past experience of Respondent. Respondent shall provide a narrative, on (1) page, describing the Respondent’s qualifications, as they relate to the referenced scope of services in this solicitation.
2. **Project Sheets (Indexed and Labeled as “Tab 6”)** – Respondent’s proposal shall include a maximum of three (3) project sheets, limited to one (1) page for each project included, which shall describe similar construction projects Respondent has completed within the last five (5) years. Each project sheet shall include the following:
  - Name and Description of the completed project, including any similarity to the Project defined in this solicitation;
  - Year(s) of work on the cited project;
  - Respondent’s role in the cited project;
  - Project Manager;
  - Superintendent;
  - Cited project’s original and final construction contract amounts (explain inconsistencies);
  - Cited project’s proposed completion date and the actual completion date achieved (explain inconsistencies);
  - Cited project’s owner’s name and the name of the representative (if different) who served as the day-to-day liaison for the cited project, in the following format:
    - a. Name of Owner: \_\_\_\_\_
    - b. Name of Owner’s representative: \_\_\_\_\_
    - c. Representative’s Phone Number: \_\_\_\_\_
    - d. Representative’s E-mail: \_\_\_\_\_
3. **Proposed Key Personnel/Organizational Chart (Indexed and Labeled as “Tab 7”)** – Provide a detailed organizational chart of Respondent’s proposed team, identifying key personnel who will be committed to work on the various tasks for this Contract.

Label assignments as:

- Project Manager
- Superintendent
- Safety Coordinator
- Chief Estimator

4. **Resumes (Indexed and Labeled as “Tab 8”)** – Respondent shall submit one (1) page resumes for all its key team members. Resumes should link to project sheets and may include additional previously-completed relevant projects not highlighted in the project sheets.

Resumes also shall include:

- the license type (if applicable) and number of years licensed,
- Number of years employed with the firm
- Number of years’ experience in proposed role corresponding to the assignments included in the organizational chart
- City of residence

**B. Understanding of the Project and Construction Management Plan (15 Points)**

Respondent shall describe its understanding of the Project and specific issues and challenges Respondent likely sees shall be involved, as well as the availability of labor resources (Respondent’s capacity to perform) in executing the scope of work required. Respondent shall submit information in a brief narrative plan clearly and concisely describing the challenges it foresees and its approach to managing the Project.

**1. Project Understanding (Indexed and Labeled as “Tab 9”)**

Respondent shall limit its response to the following items to one (1) page:

- Describe Respondent’s understanding of the primary objectives of the Project; and
- Describe the constraints and technical challenges related to design and construction Respondent foresees and Respondent’s approach to addressing each.

**2. Construction Management Plan (Indexed and Labeled as “Tab 10”)**

Respondent shall limit its response to the following items to a total of two (2) pages:

- Describe Respondent’s project management approach and team organization, for the provision of the services outlined in this solicitation;
- Describe Respondent’s Quality Control/Quality Assurance process, approach and capabilities to maintain quality control of the construction documents and construction;
- Describe Respondent’s approach to managing the quality of Subcontractors;
- Describe Respondents ability to coordinate work with all Project stakeholders;
- Describe Respondent’s approach to assuring timely completion of construction, including methods for schedule recovery, if necessary.

**C. Experience with issues in the San Antonio Region & past experience with the City of San Antonio Contracts - (10 Points) (Indexed and Labeled as “Tab 11”)**

The City is interested in evaluating Respondent’s team (including Sub-consultant(s), if applicable) experience with local processes and practices, as may be evidenced by work in San Antonio and/or the surrounding area, during the past five (5) years. In narrative form, using a maximum of two (2) pages for Respondent’s response and one (1) page for Sub-consultant(s) response, if applicable, briefly describe Respondent’s team experience in the areas listed below, referencing projects relating to that experience. (Note: You may reference projects included in the project sheets under **Criteria A** above, but no additional project sheets shall be provided for this criterion, as the response shall be in narrative form.)

- Local area construction costs and practices;
- Local environmental community, conditions and constraints;
- Firm’s experience with private and public utilities within the San Antonio or surrounding area;
- Local site development; and
- Building code requirements

**D. Price Proposal (35 Points)**

City shall evaluate Respondent’s **Price Proposal**. Respondent’s Price Proposal will be entered in the **Bid Form** section of the CivCast website at <https://www.civcastusa.com/bids>. The submitted Price Proposal reflecting the lowest price total including the base proposal, allowances (if any) and all City-accepted alternates (if any) shall receive the maximum thirty-five (35) points. Kindly refer to formula and example listed below:

**Formula:** Lowest price proposal/Firm's price proposal X 35 points = Score

**Example:**

RESPONDENT:	PROPOSAL AMOUNT (INCLUDING ALLOWANCES AND ALL DEDUCTIVE ALTERNATES):	CALCULATION:	POINTS AWARDED:
A	\$650,000.00	575,000/650,000 x 35	31
B	\$625,000.00	575,000/625,000 x 35	32.20
C	\$600,000.00	575,000/600,000 x 35	33.54
D	\$575,000.00	575,000/575,000 x 35	35

**E. SBEDA – (15 Points)**

**SBE Prime Contract Program – 10 pts.**

Certified SBE firms (see Small Business Enterprise definition) headquartered or having a Significant Business Presence within the San Antonio Metropolitan Statistical Area responding to this solicitation as Prime CONTRACTORS

proposing at least 51% SBE participation (Prime and/or Subcontractor) will receive ten (10) evaluation criteria points, and

**M/WBE Prime Contract Program – 5 pts.**

Certified M/WBE firms (see Minority/Women Business Enterprise definition) headquartered or having a Significant Business Presence within the San Antonio Metropolitan Statistical Area responding to this solicitation as Prime CONTRACTORs proposing at least 51% M/WBE participation (Prime and/or Subcontractor) will receive five (5) evaluation criteria points.

No evaluation criteria points will be awarded to non-SBE or non-M/WBE Prime CONTRACTORs through subcontracting to certified SBE or M/WBE firms.

Each proposal shall be analyzed, to determine overall responsiveness, and consideration shall be given to a combination of price and other factors, such that City may determine which Respondents’ proposal will provide the best value to City. If City elects to conduct interviews of one or more Respondents, in connection with this solicitation, Respondent(s) shall be notified in writing and an interview date shall be scheduled.

<b>Evaluation Criteria Summary</b>	<b>Maximum Points</b>
<b>A. Experience, Background, Qualifications of Firm, Key Personnel, and Key Sub-Consultants</b>	<b>25</b>
<b>B. Understanding of the Project and Proposed Management Plan</b>	<b>15</b>
<b>C. Experience with issues in the San Antonio Region &amp; past experience with the City of San Antonio Contracts</b>	<b>10</b>
<b>D. Price Proposal</b>	<b>35</b>
<b>E. SBEDA –SBE and M/WBE Prime Contract Program</b>	<b>15</b>
<b>Total Maximum</b>	<b>100 Points</b>

**Required Forms (to be uploaded individually):**

**City shall conduct due diligence and analysis of the following required forms:**

- SUBMITTAL COVER/SIGNATURE SHEET (Form #2)** – Respondent shall include the completed Submittal Cover/Signature Sheet with the other required forms. The Submittal Cover/Signature Sheet shall be signed by a person (or persons) authorized to bind Respondent and the entity/entities submitting the response. Signature pages signed by a person other than an officer of the company or partner of the firm shall be accompanied by evidence of authority. Joint ventures submittals require signatures from all firms participating in the joint venture. Submitting joint ventures are required to provide legal proof of the joint venture, such as a joint venture agreement.
- CONTRACTS DISCLOSURE FORM (Form #3)** – Respondent shall complete the form online at: <https://www.sanantonio.gov/eforms/atty/ContractsDisclosureForm.pdf>, print a copy of the completed form and include in the packet of required forms. If Respondent is proposing as a team or joint venture, each party to that team or joint venture shall complete and submit a separate Discretionary Contracts Disclosure Form.
- LITIGATION DISCLOSURE FORM (Form #4)** – Respondent shall complete a Litigation Disclosure form, utilizing additional pages for explanation, if necessary, and submit the completed form. If Respondent is proposing as a team or joint venture, each party to that team or joint venture shall complete and submit a separate Litigation Disclosure Form.
- SMALL BUSINESS ECONOMIC DEVELOPMENT UTILIZATION PLAN (Form #5)** – Respondent shall submit a completed and signed Subcontractor/Supplier Utilization Plan indicating Respondent’s firm

commitment to satisfy the established **(21%)** subcontracting goal to Minority/Women Business Enterprise (M/WBE) and **(2%)** African American Business Enterprise (AABE) for this Project. If Respondent believes they cannot meet the subcontracting goal, Respondent must also submit a Waiver Request Form as part of the required forms. The Waiver Request Form may be download at <https://www.sanantonio.gov/SBO/Form>.

5. **PROPOSAL GUARANTEE** – Each Offer Proposal must be accompanied by an original Proposal Guarantee issued by a corporate surety company licensed to conduct business in the State of Texas, in the amount of not less than five percent (5%) of the greatest total amount of Proposal.
6. **PROOF OF INSURABILITY** – Respondent shall submit a copy of its current insurance certificate.
7. **CERTIFICATE OF INTERESTED PARTIES TEC FORM 1295** – Effective January 1, 2016, the City of San Antonio is required to comply with Texas Government Code, Chapter 2252, Subchapter Z, and Section 2252.908 (the Code). The Code states City shall not enter into a contract with a business entity unless and until the business entity has submitted a Certificate of Interested Parties (Form 1295) to City for filing with the Texas Ethics Commission (TEC). The Form 1295 requirement imposed upon the City applies to **all** contracts:
  - a. Having a value greater than \$50,000
  - b. Requiring San Antonio City Council approval and/or
  - c. Renewals, extensions or amendments requiring the approval of the San Antonio City Council.

TEC has made available on its website the new filing application that must be used by Respondent to file its Form 1295 with City. Respondent shall use TEC's application to enter the required information on Form 1295 and print a copy of the form containing a unique certification number for that response.

An authorized agent of Respondent then must sign the printed copy of the form. The completed Form 1295 containing the unique certification number then must be submitted with Respondent's submittal to City, pursuant to this solicitation, to ensure City and Respondent meet the Code requirements.

Form 1295 must be completed on-line by the business entity. It is accessible at:

[https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm)

As a result of this new requirement imposed upon City by the Code, City is requiring all Respondents submitting on each project to complete Form 1295, print a copy showing the unique Certification Number and Date Filed in the Certification of Filing box at the upper right corner of Form 1295 for that submittal, sign it, and submit it with its submitted proposal.

City shall review Form 1295 as part of the Minimum Requirements Review performed upon all proposals received. Deficiencies in or missing Form 1295 shall not be a disqualifying error. Instead, City shall notify a Respondent of any requirements to cure the deficiency and/or to submit/re-submit Form 1295 within two (2) days of notice to remain eligible to be considered for a contract award. City shall include the selected Respondent's Form 1295 in its package prepared for the San Antonio City Council's consideration for contract award.

## **VI. SUBMISSION INSTRUCTIONS**

Online proposal submission will be via CivCast at <https://www.civcastusa.com/bids>. Online submission services will open for submitting proposals on **June 17, 2020** and close on **August 11, 2020 at 2:00 p.m. CST**. Follow submittal instructions on <https://www.civcastusa.com/>.

For Proposal Opening or reading aloud of proposals, proposals will be publicly read aloud online through WebEx meeting at **2:00 p.m., CST**, on the day the proposals are due. Respondents may join the WebEx using the following instructions:

**Join by phone: 1-415-655-0001**  
**Meeting number (access code): 133 478 6148**  
**Meeting password: mJXCVQAM376**

Join meeting:

<https://sanantonio.webex.com/sanantonio/j.php?MTID=mdbc36d7cd5131a2a7c13a22821ef1d84>

**Hard Copies, proposals sent by facsimile or email will not be accepted.**

Please adhere to the following criteria:

- No smaller than 11 point font.
- Be succinct and clear.
- Keep your submittal relevant to the target project.
- Each submittal shall include the sections and attachments in the sequence listed in the **Section V**, Submittal Document Requirements & Evaluation Criteria, with each section divided by tabs and indexed, as indicated in this RFCSP.
- All pages shall be numbered and all sections shall adhere to page limits. If a section does not have a page limit specified; there are not page limits for that section.

To correctly submit a response to this RFCSP, Respondent shall reveal, disclose and state the true and correct name of the individual, proprietorship, corporation and/or partnership (clearly identifying the responsible general partner and all other partners who would be associated with the contract, if any) submitting the response. The true and correct name shall comport exactly with the corporate and franchise records of the Texas Secretary of State and Texas Comptroller of Public Accounts. Individuals and proprietorships, if operating under other than an individual name, shall match with exact Assumed Name filings. Corporate Respondents and limited liability company Respondents shall include the 11-digit Comptroller's Taxpayer Number on the signature page of the Proposal.

**VII. AMENDMENTS TO RFCSP**

Changes, amendments or written responses to questions received in compliance with **Section VIII**, Restrictions on Communication herein, will be posted on the CivCast website at <https://www.civcastusa.com/bids>. It is Respondent's responsibility to review this site and ascertain whether any amendments have been made prior to submission of its proposal. If Respondent does not have access to the Internet, Respondent shall notify City, in accordance with **Section VIII**, Restrictions on Communication, it wishes to receive copies of changes, amendments or written responses to questions by mail or facsimile.

No oral statement of any person shall modify or otherwise change or affect the terms, conditions or specifications stated in this RFCSP and all changes to this RFCSP – if any – shall be made by City only in writing.

**VIII. RESTRICTION ON COMMUNICATIONS**

Respondents are prohibited from contacting 1) City officials, as defined by §2-62 of the City Code of the City of San Antonio, regarding the RFCSP or proposal from the time the RFCSP has been released until the contract is posted for consideration as an agenda item during a meeting designated as an A session; and 2) City employees from the time the RFCSP has been released until the contract is approved at a City Council "A" session.

Restrictions extend to "thank you" letters, phone calls, emails and any contact that results in the direct or indirect discussion of the RFCSP and/or proposal submitted by Respondent.

Violation of this provision by Respondent and/or its agent may lead to disqualification of Respondent's proposal from consideration.

As used herein, City Official is defined as the Mayor; members of City Council; Municipal Court Judges and Magistrates; City Manager; Deputy City Manager; City Clerk; Deputy City Clerk; Assistant City Clerk; Assistant City Managers; Assistants to City Manager; all City department heads and assistant department heads; Internal Auditor and Assistant Internal Auditors; Compliance Auditor; Assistant to City Council; Assistants to City Council, including contract personnel; Assistant to Mayor; Assistants to the Mayor, including contract personnel; Executive Secretaries; Public Utilities Supervisor; members of bid committees; members of the Historic and Design Review Commission; Zoning Commission; and members of any board or commission that is more than advisory in nature.

Exceptions to the restrictions on communication with City employees include:

1. Respondent may ask verbal questions concerning this RFCSP at the Project's Pre-Submittal Conference.
2. Respondent must submit questions concerning this RFCSP through the CivCast website at <https://www.civcastusa.com/bids> until **4:00 p.m. CST, July 13, 2020**. Questions received after the stated deadline shall not be answered.

Questions must be sent to the CivCast website at: <https://www.civcastusa.com/bids>

3. Respondents and/or their agents are encouraged to contact the Small Business Office of the Economic Development Department for assistance or clarification with issues specifically related to the City's Small Business Economic Development Advocacy (SBEDA) Program policy and/or completion of the required SBEDA forms. The point of contact may be reached by telephone at (210) 207-3932 or by e-mail at [SBEDAdocs@sanantonio.gov](mailto:SBEDAdocs@sanantonio.gov).
4. This exception to the restriction on communication does not apply to the Small Business Office during the solicitation period. After the solicitation closing date, there is no contact permitted to the Small Business Office regarding this solicitation.
5. Respondent shall provide responses to any questions asked of it by City's Staff Contact Person and/or his/her designee about City's SBEDA Program both before and after responses are received and opened. During the interview stage of this selection, if any, verbal questions to Respondent and Respondent's answers and explanations shall be permitted. If interviews are conducted, Respondent shall not bring lobbyists. City reserves the right to exclude any persons from such selection committee meetings/interviews as it deems in City's best interests.

## IX. AWARD OF CONTRACT AND RESERVATION OF RIGHTS

City reserves the right to award one, more than one or no contract(s) in response to this RFCSP.

- A. Contract, if awarded, shall be awarded to a Respondent whose proposal is deemed most advantageous to City, as determined by the selection committee and upon the approval by the San Antonio City Council.
- B. City may accept any proposal in whole or in part. If subsequent contract negotiations are conducted, such negotiations shall not constitute a rejection or alternate RFCSP on the part of City. However, final selection of a Respondent is subject to San Antonio City Council approval.
- C. City reserves the right to accept one or more proposals or reject any or all proposals received in response to this RFCSP and to waive informalities and irregularities in any proposal received. City also reserves the right to terminate this RFCSP, reissue a subsequent solicitation and/or remedy technical errors in the RFCSP process.
- D. By executing the Submittal Cover/Signature Sheet, Respondent agrees to be bound by the terms therein. Respondent acknowledges it has received all Addenda and agrees to be bound by the terms, conditions and requirements of this submitted proposal, all documents listed in the RFCSP Submittal Checklist and Table of Contents, the enabling City Ordinance and all of the associated documentation that form the entire Contract to which Respondent shall be bound, upon the approval of the San Antonio City Council. All Contract documents are not binding on City until approved by the San Antonio City Attorney's office and the San Antonio City Council. No work shall commence on the subject Project until Respondent provides the necessary evidence of bonds and insurance required in City's General Conditions for City of San Antonio Construction Contracts and until City signs the Notice to Proceed. In the event the parties cannot negotiate within the time specified by City, City reserves the right to terminate negotiations with the selected Respondent and commence negotiations with another Respondent.
- E. This RFCSP does not commit City to enter to an agreement or award any services related to this RFCSP, nor does it obligate City to pay any costs incurred by Respondent in the preparation or submission of a response or in anticipation of a contract.
- F. City administers its design and construction management through an Internet-based management system. All vendors shall be required to use City's system and submit Project schedules as City dictates.
- G. **Conflicts of Interest:** Respondent acknowledges that it is informed that the Charter of City of San Antonio and its Ethics Code prohibit a City officer or employee, as those terms are defined in the Ethics Code, from having a financial interest in any contract entered into with City or any City agency, such as City-owned utilities. An officer or employee has a "prohibited financial interest" in a contract with City or in the sale to City of land, materials, supplies or service, if any of the following individual(s) or entities is a party to the contract or sale: City officer or employee; his/her parent, child or spouse; a business

entity in which he/she or his/her parent, child or spouse owns ten percent (10%) or more of the voting stock or shares of the business entity, or ten percent (10%) or more of the fair market value of the business entity; or a business entity in which any individual or entity listed by Respondent is a Subcontractor on a City contract, a partner or a parent or subsidiary business entity.

- H. Respondent is required to warrant and certify that it, its officers, employees and agents are neither officials nor employees of City, as defined in Section 2-42 of City's Ethics Code. (Contracts Disclosure Form) – Instructions and web-link to electronic form are included in **Form 3** of RFCSP.
- I. **Independent Contractor:** Respondent understands, accepts and agrees, if selected, it and all persons designated by it to provide services in connection with a contract, is/are and shall be deemed to be an Independent Contractor(s), responsible for its/their respective acts or omissions, that City shall in no way be responsible for Respondent's actions and that none of the parties to this award shall have authority to bind the other or to hold out to third parties that it has such authority.
- J. Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that persons or their agents who seek to contract for the sale or purchase of property, goods or services with City shall file a completed Conflict of Interest Questionnaire (hereafter referred as "CIQ"), with City Clerk not later than the seventh (7<sup>th</sup>) business day after the date that the person:
- (1) begins contract discussions or negotiations with City; or
  - (2) submits to City an application, response to a request for proposal, offers, correspondence or another writing related to a potential agreement with City. The CIQ form is available from the Texas Ethics Commission at:

<http://www.ethics.state.tx.us/forms/CIQ.pdf>

In addition to the CIQ form, City requires individuals to submit a CIQ Addendum. The CIQ Addendum is available from City:

<http://www.sanantonio.gov/atty/ethics/pdf/OCC-CIQ-Addendum.pdf>

Completed CIQ forms and CIQ addendum forms may be mailed to the Office of the City Clerk, P.O. Box 839966, San Antonio, TX 78283-3966. Respondent shall consult its own legal advisor if it has any questions regarding the statute, CIQ form or CIQ Addendum.

- K. All proposals become the property of City upon receipt and shall not be returned. Any information deemed to be confidential by Respondent clearly should be noted on the page(s) where confidential information is contained; however, City cannot guarantee that it shall not be compelled to disclose all or part of any public record under the Texas Public Information Act, since information deemed to be confidential by Respondent may not be considered confidential under Texas law or pursuant to a Court order.
- L. Any cost or expense incurred by the Respondent associated with the preparation of its proposal, the Pre-Submittal Conference or during any phase of the selection process, if any, shall be borne solely by Respondent.
- M. **Solicitation Process Review:** If Respondent desires a review of the solicitation process followed by City, Respondent shall deliver a written request to the Director of Public Works within seven (7) calendar days from the date the Notice of Non-Selection was sent. When the Public Works Director receives a timely written request, the Public Works Director (or his/her designee) shall review Respondents concerns and City's solicitation process for legitimacy and procedural correctness. After performing a full review, the Public Works Director shall notify Respondent in writing of his/her determination.
- N. **Debriefings:** In an effort to improve solicitation responses, Public Works is making available on its website a "Solicitation Response Tip List" that includes the top common items historically that "make or break" submissions to City. Providing this information prior to the due date of the proposal may provide Respondent with an opportunity to develop a better response for a solicitation. As a result of this up-front effort, each Respondent is entitled to one (1) debriefing per calendar year – available after the San Antonio City Council has made the award sought by Respondent – if Respondent:
- (a) is not the selected Respondent; and
  - (b) has not been debriefed since January 1, 2020.

Once Respondent has been debriefed, it shall not be eligible for future debriefings within that calendar year. Any Respondent meeting the above criteria that desires an individual proposal debriefing shall deliver a written request to the Public Works Contract Services Division within seven (7) calendar days from the date a Notice of Non-Selection was sent.

- O. City reserves the right to verify any and all information submitted by Respondents at any time during the solicitation/evaluation process.
- P. Final approval of a selected firm(s) is subject to the action of the San Antonio City Council.
- Q. City reserves the right to contact any Respondent to negotiate a contract, if such action is deemed desirable by City.

**R. TEXAS GOVERNMENT CODE §2270.002:**

**Texas Government Code §2270.002** provides that a governmental entity may not enter into a contract with a company for goods or services, unless the contract contains a written verification from the company that it:

- (1) does not boycott Israel; and
- (2) will not boycott Israel during the term of the contract.

"Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

"Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company, or affiliate of those entities or business associations that exists to make a profit.

**By submitting an offer to or executing contract documents with the City of San Antonio, Company hereby verifies that it does not boycott Israel, and will not boycott Israel during the term of the contract. City hereby relies on Company's verification. If affirmation is found to be false, City may terminate the contract for material breach.**

**S. TEXAS GOVERNMENT CODE § 2252.152:**

Contracts with companies engaged in business with Iran, Sudan, or foreign terrorist organization prohibited.

**Texas Government Code §2252.152** provides that a governmental entity may not enter into a governmental contract with a company that is identified on a list prepared and maintained under Texas Government Code §2270.0201 or §2252.153 "Listed Companies". Consultant/Contractor hereby certifies that it is not identified on such a list and that it will notify City should it be placed on such a list while under contract with City. City hereby relies on Consultant's/Contractor's certification. If found to be false, or if Consultant/Contractor is identified on such list during the course of its contract with City, City may terminate this Agreement for material breach.

**T. S.B. 943 – Disclosure Requirements for Certain Government Contracts.**

S.B. 943 – Disclosure Requirements for Certain Government Contracts. For contracts (1) with a stated expenditure of at least \$1 million in public funds for the purchase of goods or services by the City, or (2) that result in the expenditure of at least \$1 million in public funds for the purchase of goods or services by the City in a given fiscal year, Respondent acknowledges that the requirements of the Texas Public Information Act, Government Code, Chapter 552, Subchapter J, pertaining to the preservation and disclosure of Contracting Information maintained by the City or sent between the City and a vendor, contractor, potential vendor, or potential contractor, may apply to this RFCSP and any resulting contract. Respondent agrees that the contract can be terminated if Respondent knowingly or intentionally fails to comply with a requirement of that subchapter.

By submitting a proposal, Respondent warrants and certifies, and a contract awarded pursuant to this RFCSP is made in reliance thereon, that it, has not knowingly or intentionally failed to comply with this subchapter in a previous RFCSP or contract. City hereby relies on Respondent's certification, and if found to be false, City may reject the proposal or terminate the Contract for material breach.

Fire Station #24 Replacement - Bidder Questions

#1	LarMar DFW	6/23/2020 3:07 PM	Can you please confirm the size of generator being requested for this project? 60KVA or 60KW?  Electrical Drawing Sheet E4.01 correctly calls out the generator rating. The Enlarged Partial Plan on Sheet E2.03 is incorrect. The Generator rating is 60 kW (kiloWatts), at 0.8 Power Factor = 75 kVA (kiloVoltAmperes).
#2	Champion Roofing	6/29/2020 10:55 AM	Roofing Contractor: Will you accept 18" inch metal panels in lieu of 16" metal panels? Coils for 16" panels special order coils which would potentially add cost to the project. Metal roof panels with 18" panel coverage (width) are acceptable.
#3	gensler	6/29/2020 11:30 AM	Can you please confirm that no architectural services are needed for this project and that Dockery Architects will be Architect of Record? Debra J. Dockery, Architect, P.C. is the Architect of Record and no other architectual services are anticipated.
#4	Flintco	6/30/2020 8:04 AM	If a small business registered SCTRCA database and is an MBE firm wants to JV with a large business (and the small business is 51% of the JV) for this project, will the JV receive the 15 points (10 for SBEDA and 5 for MBE)?
		7/06/2020 8:03 AM	For this solicitation, City has applied the SBE Prime Contract Program at 10 pts and the MWBE Prime Contract Program at 5 points. Evaluation preference points will be awarded to SBEDA eligible PRIME respondents that are certified as an Small Business Enterprise (SBE) and/or Minority/Women-Owned Business Enterprise (M/WBE) from South Central Texas Regional Certification Agency (SCTRCA) AND must be headquartered or have a significant business presence in the San Antonio Metropolitan Statistical Area. At this time, SCTRCA does not certify joint venture entities, hence for a Joint Venture to receive the fifteen (15) evaluation criteria points, the Joint Venture itself as its own entity must be certified. For further clarification, please contact Small Business Office at (210) 207-3922. SBEDA eligibility can be verified through the following link: <a href="http://www.sanantonio.gov/purchasing/vendorinformation/cosavendorlisting">http://www.sanantonio.gov/purchasing/vendorinformation/cosavendorlisting</a> .
#5	Flintco, LLC	6/30/2020 11:16 AM	The RFCSP lists the "General Conditions for City of San Antonio Construction Contracts", labeled as Exhibit A. The Exhibit A - General Conditions, reference I.1.12 Contract Documents, lists several items as part of the Contract Documents: Items a-g. Please confirm there is not an additional "contract" document for which the awarded Contractor will be expected to sign and has not yet been provided with the RFCSP.
		7/06/2020 8:01 AM	There is not an additional "contract" document for which the awarded Contractor will be expected to sign.
#6	American Standard Steel Building Systems	7/07/2020 2:58 PM	Is there a specification for the pre-engineered steel building (apparatus bays). I don't see one in the spec book.

Specifications Section 133419 Metal Building Systems is included with Addendum #1. The metal building system requirements are covered on the Structural Notes on the Structural Drawings.

#7 American Standard Steel Buildings Systems 7/07/2020 3:04 PM

We are asking that American Standard Steel Buildings systems be added as an approved manufacturer of the pre engineered steel buildings. We are currently not on your list of pre-approved manufactures, and we would like to be added so we can submit our proposal to the general contractors with confidence and good conscience.

We would be providing the pre-engineered steel building. With that being said, I have attached our specifications as well as some photos of our recently completed projects for your review.

Our specifications meet or exceed your current written specifications. In addition, please consider the following:

- Single source manufacture
- Can meet all LEED requirements
- Buy-American certified
- 100% American manufactured
- 100% Engineered and detailed in America
- Compliance with energy codes as applicable
- Over 30 colors to choose from for roofing and siding
- 5 standing seam roof systems available
- 4 wall siding systems available
- 6 pre-insulated wall and roof panels systems available
- 20 year weathertightness warranty
- 25 year finish warranty

Any feedback regarding approval would be appreciated.  
I look forward to working with you.  
[www.americanstandardbuildings.com](http://www.americanstandardbuildings.com)

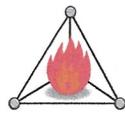
American Steel Buildings, Inc is listed as an acceptable manufacturer in the Section 133419 Metal Building Systems specification included in Addendum #1.

#8 Tejas Premier Building Contractor Inc. 7/13/2020 12:20 PM

page L-302 - several areas show KN8 for shredded bark mulch in areas shown by legend as "Texas Blend Gravel 2"-3" diameter". Does the shredded bark go over the gravel in these areas?

Mulch is required at all new and existing trees. Install mulch where shown in gravel areas. Mulch areas to be free of gravel. A revised sheet L3.02 is included in Addendum 1.

#9	Tejas Premier Building Contractor Inc.	7/13/2020 12:20 PM	<p>Page P1.01, electrical room 150 shows a "washing machine box" in the Eastern wall. Please confirm if this is to be a washing machine box or a drain box for condensate from the mini split systems</p> <p>A drain box is acceptable for mini-split condensate in lieu of washing machine box.</p>
#10	Byrne Construction Services	7/13/2020 1:52 PM	<p>Fire Station #2:</p> <p>1)C4.0; Please provide the 8" PVC spec for the drainage pipe  2)C4.0; Please confirm all RCP to be Class IV, Gasket pipe. Conflicts in language between notes and specs.  3)C6.0; Please provide the PVC type for the 2-1/2" domestic water pipe  4)C1.0; Please provide lengths and/or limits for existing underground pipe to be removed</p> <p>Fire Station #3:</p> <p>5)C4.0; Please provide the 8"/12" PVC type for the drainage pipe  6)C4.0; Please confirm all RCP to be Class IV, Gasket pipe  7)C5.0; Please provide the PVC spec for the 2" domestic water pipe  8)C1.0; Please provide lengths and/or of existing underground pipe that to be removed</p> <p>1. Refer to Storm Sewerage Specification Section 2.01.B. 2. All RCP to be Class III, Tongue and Groove pipe as per the Storm Sewerage Specification Section 2.01.G. 3. Refer to Water Systems Specification Section 2.02.K. 4. Underground pipe removal is omitted. A revised plan sheet C4.3 with updated limits of offsite storm sewer piping will be provided in Addendum 1. 5. Refer to Storm Sewerage Specification Section 2.01.B. 6. All RCP to be Class III, Tongue and Groove pipe as per the Storm Sewerage Specification Section 2.01.G. 7. Refer to Water Systems Specification Section 2.02.K. 8. Underground pipe removal is omitted. A revised plan sheet C4.3 with updated limits of offsite storm sewer piping will be provided in Addendum 1.</p>
#11	Byrne Construction Services	7/13/2020 1:53 PM	<p>Will materials testing be paid for directly by the client or will the contractors be responsible for covering these cost?</p> <p>Materials testing is provided the the Owner.</p>
#12	Byrne Construction Services	7/13/2020 3:32 PM	<p>Specifications include 122413 Roller Shades, but the drawings do not indicate which windows are want to be covered. Can you please clarify this?</p> <p>Provide roller shades for all Type A and Type C windows.</p>
#13	Byrne Construction	7/13/2020 3:57 PM	<p>1. On this project, they show 122413 Roller Shades in the specs but the drawings do not show what windows they want to cover. Which windows are to receive window treatments?</p> <p>See answer to Item #12.</p>



## SAWS Fire Flow Test Form

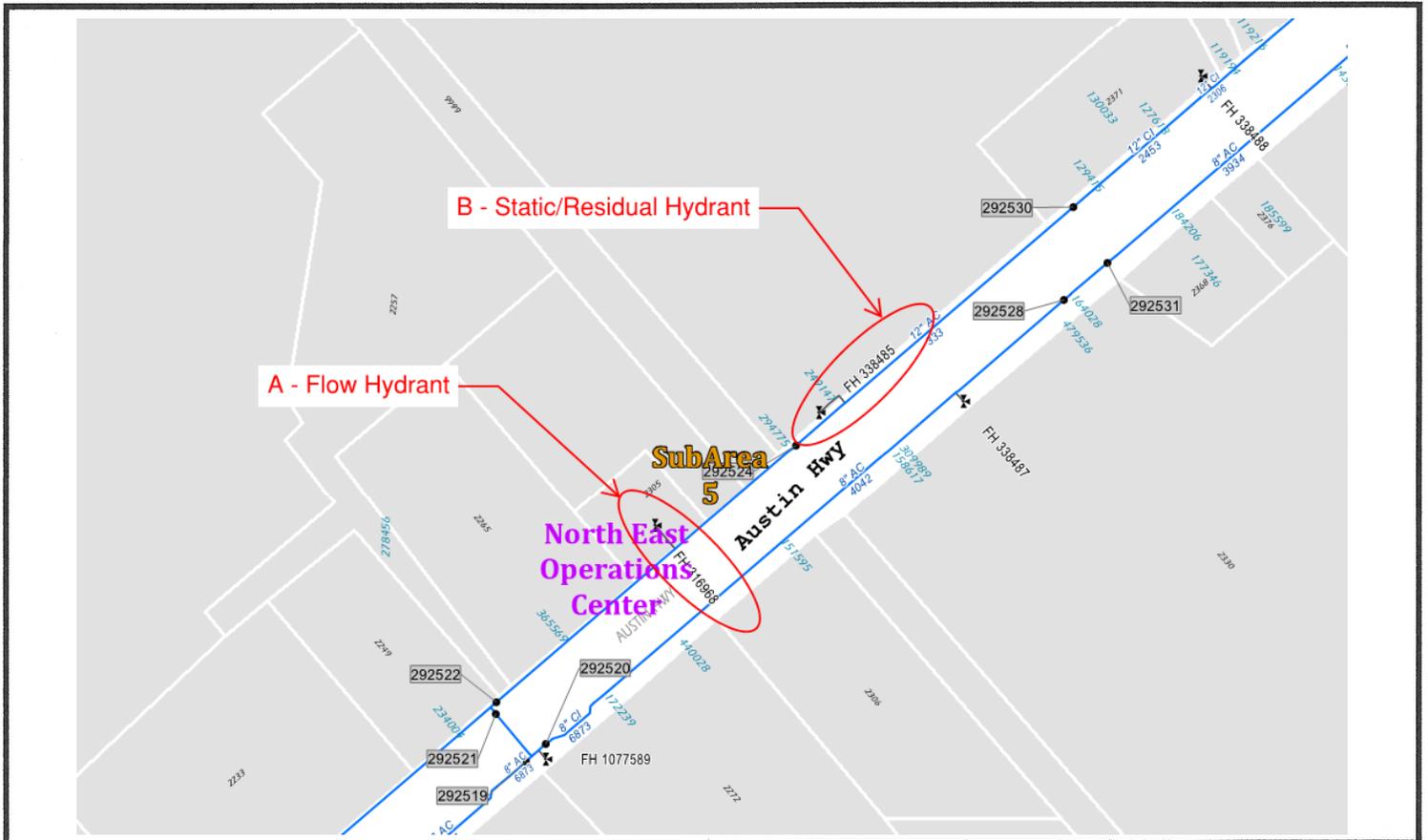
Project: <b>20-266 Fire Station 24 FT</b>	Flow Hydrant: A	Static/Residual Hydrant: B
City: <b>San Antonio</b>	Static Pressure (B): <b>78</b>	psi
Date: <b>7-2-2020</b>	Residual Pressure (B): <b>72</b>	psi
Time: <b>10:00 AM</b>	Pitot Reading 2.5" Outlet (A-1): <b>45</b>	psi
Map #: <b>186608</b>	Pitot Reading 2.5" Outlet (A-2): <b>45</b>	psi
Location: <b>Austin Hwy</b>	Flow at Residual Pressure: <b>2251</b>	gpm
Comments:	<b>Flow at 25 psi: 7300 gpm</b>	
	Coefficient: .8 <b>.9</b> Line Size: <b>12-in</b>	

Conducted By: Robert Carrillo of Fire Protection Consulting Group (FPCG)

Signature: *[Signature]*

Witnessed By: Rigo Arambula of SAWS

Signature: *[Signature]*





Project: 20-266 Fire Station 24 FT

Date: 7/2/2020

Static Pressure: 78 psi

Residual Pressure: 72 psi

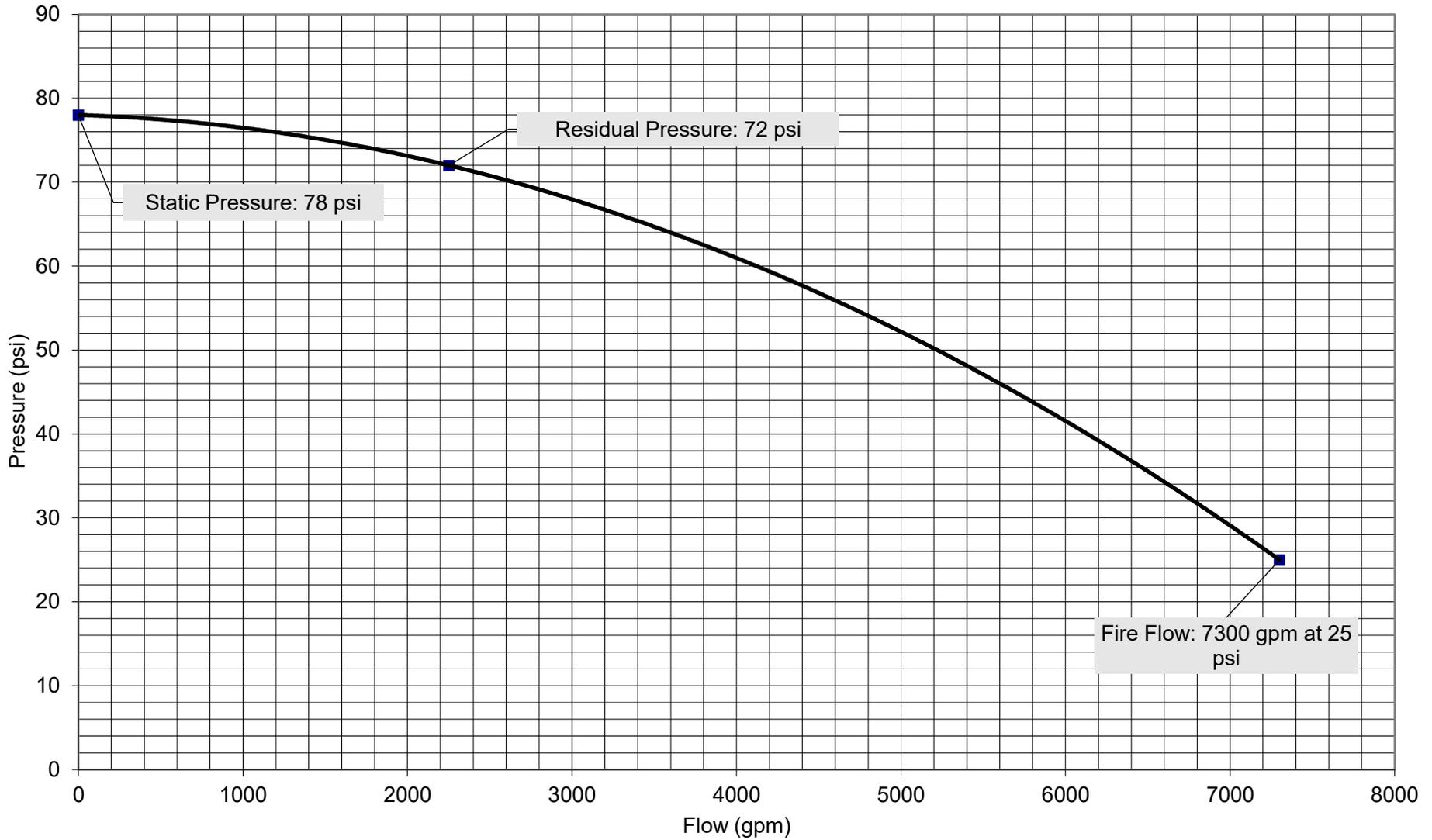
Residual Flow: 2251 gpm

Robert Carrillo

210-394-8639

[rcarrillo@firepcg.com](mailto:rcarrillo@firepcg.com)

[www.firepcg.com](http://www.firepcg.com)



**SECTION 033000****CAST-IN-PLACE CONCRETE****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Concrete formwork.
- B. Floors and slabs on grade.
- C. Concrete reinforcement steel and reinforcing steel supports and accessories.
- D. Joint devices associated with concrete work.
- E. Miscellaneous concrete elements, including equipment pads.
- F. Concrete curing.

**1.02 RELATED REQUIREMENTS**

- A. Section 033543 – Polished Concrete Finishes: Densifiers, hardeners, applied coatings, and polishing.
- B. Section 079200 - Joint sealants: Products and installation for sealants for saw cut joints and isolation joints in slabs.

**1.03 REFERENCE STANDARDS**

- A. ACI SP-66 - ACI detailing manual; American Concrete Institute International; 2004.
- B. ACI 117 - Standard specifications for tolerances for concrete construction and materials; American Concrete Institute International; 2006.
- C. ACI 211.1 - Standard practice for selecting proportions for normal, heavyweight, and mass concrete; 1991 (reapproved 2009).
- D. ACI 301 - Specifications for structural concrete; 2010 (errata 2012).
- E. ACI 302.1R - Guide for concrete floor and slab construction; 2004 (errata 2007).
- F. ACI 304R - Guide for measuring, mixing, transporting, and placing concrete; 2000.
- G. ACI 305.1 - Hot weather concreting; 2010.
- H. ACI 306.1 - Cold weather concreting; 2010.
- I. ACI 308.1 - Guide to curing concrete; 2001 (reapproved 2008).
- J. ACI 318 - Building code requirements for structural concrete and commentary; 2011.
- K. ACI 347R - Guide to formwork for concrete; 2014.
- L. A1064 - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
- M. ASTM A615/A615M - Standard specification for deformed and plain carbon steel bars for concrete reinforcement; 2015.
- N. ASTM A706/A706M - Standard specification for low-alloy steel deformed and plain billet bars for concrete reinforcement; 2009b.
- O. ASTM C33/C33M - Standard specification for concrete aggregates; 2013.
- P. ASTM C39/C39M - Standard test method for compressive strength of cylindrical concrete specimens; 2015a.
- Q. ASTM C94/C94M - Standard specification for ready-mixed concrete; 2015.
- R. ASTM C109/C109M - Standard test method for compressive strength of hydraulic cement mortars (using 2-in. or (50-mm) cube specimens); 2013.

- S. ASTM C143/C143M - Standard test method for slump of hydraulic-cement concrete; 2012.
- T. ASTM C150/C150M - Standard specification for Portland cement; 2015.
- U. ASTM C171 - Standard specification for sheet materials for curing concrete; 2007.
- V. ASTM C173/C173M - Standard test method for air content of freshly mixed concrete by the volumetric method; 2014.
- W. ASTM C260/C260M - Standard specification for air-entraining admixtures for concrete; 2010a.
- X. ASTM C309 - Standard specification for liquid membrane-forming compounds for curing concrete; 2011.
- Y. ASTM C494/C494M - Standard specification for chemical admixtures for concrete; 2013.
- Z. ASTM C618 - Standard specification for coal fly ash and raw or calcined natural pozzolan for use in concrete; 2015.
- AA. ASTM C685/C685M - Standard specification for concrete made by volumetric batching and continuous mixing; 2014.
- BB. ASTM C827/C827M - Standard test method for change in height at early ages of cylindrical specimens of cementitious mixtures; 2010.
- CC. ASTM C881/C881M - Standard specification for epoxy-resin-base bonding systems for concrete; 2014.
- DD. ASTM C1059/C1059M - Standard specification for latex agents for bonding fresh to hardened concrete; 2013.
- EE. ASTM C1107/C1107M - Standard specification for packaged dry, hydraulic-cement grout (non-shrink); 2014.
- FF. ASTM C1240 - Standard specification for silica fume used in cementitious mixtures; 2014.
- GG. ASTM D994/D994M - Standard specification for preformed expansion joint filler for concrete (bituminous type); 2011.
- HH. ASTM D1751 - Standard specification for preformed expansion joint filler for concrete paving and structural construction (non-extruding and resilient bituminous types); 2004 (reapproved 2013).
- II. ASTM E1155 - Standard test method for determining f(f) floor flatness and f(l) floor levelness numbers; 1996 (reapproved 2008).
- JJ. ASTM E1155M - Standard test method for determining f(f) floor flatness and f(l) floor levelness numbers (metric); 2014.
- KK. ASTM E1643 - Standard practice for selection, design, installation and inspection of water vapor retarders used in contact with earth or granular fill under concrete slabs; 2011.
- LL. ASTM E1745 - Standard specification for plastic water vapor retarders used in contact with soil or granular fill under concrete slabs; 2011.
- MM. AWS D1.4/D1.4M - Structural welding code - reinforcing steel; American Welding Society; 2005.
- NN. COE CRD-C 48 - Method of test for water permeability of concrete; 1992.
- OO. COE CRD-C 513 - COE Specifications for rubber waterstops; 1974.
- PP. COE CRD-C 572 - Corps of Engineers Specifications for polyvinylchloride waterstop; 1974.
- QQ. CRSI (DA4) - Manual of standard practice; Concrete Reinforcing Steel Institute; 2001.
- RR. CRSI (P1) - Placing reinforcing bars; Concrete Reinforcing Steel Institute; eighth edition.
- SS. NSF 61 - Drinking water system components - health effects; 2014 (errata 2015).

#### 1.04 SUBMITTALS

- A. See section 01 3000 - Contractor requirements.

- B. Submit a complete list of all concrete mix designs, with documentation from the supplier showing the extraction site and the manufacturing site of each component in the mix design, post-consumer and pre-consumer recycled content percentages of each component in the mix design, and material cost for each component in the mix design (excluding labor and other fees).
- C. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
  - 1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- D. Mix design: Submit proposed concrete mix design.
  - 1. Indicate proposed mix design complies with requirements of aci 318, chapter 5 - concrete quality, mixing and placing.
- E. Samples: Submit samples of underslab vapor retarder to be used.
- F. SAMPLES: Submit two, 12 inch (305 mm) long samples of waterstops and construction joint devices.
- G. Manufacturer's installation instructions: For concrete accessories, indicate installation procedures and interface required with adjacent construction.
- H. Construction joints: Submit drawing of proposed construction joints for slab on grade, etc. where they are not specifically indicated on the drawings.
- I. Concrete reinforcing shop drawings: Comply with requirements of aci sp-66. include bar schedules, shapes of bent bars, spacing of bars, and location of splices.
- J. Manufacturer's certificate: Certify that reinforcing steel and accessories supplied for this project meet or exceed specified requirements.
- K. Reports: Submit certified copies of mill test report of reinforcement materials analysis.

### 1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with CRSI (da4), CRSI (pi), ACI SP-66, ACI 301, ACI 318 and ASTM a184/a184m.
  - 1. Maintain one copy of each document on site.
- B. Follow recommendations of ACI 305r when concreting during hot weather.
- C. Follow recommendations of ACI 306r when concreting during cold weather.

## PART 2 - PRODUCTS

### 2.01 FORMWORK

- A. Formwork design and construction: Comply with guidelines of ACI 347r to provide formwork that will produce concrete complying with tolerances of ACI 117.
- B. Form materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
  - 1. Form facing for exposed finish concrete: Contractor's choice of materials that will provide smooth, stain-free final appearance. Steel pan forms must be new or like new condition. Rusted, bent, uneven, misaligned pan forms and pan forms with holes are not allowed at exposed concrete surface areas and must be removed and replaced.
  - 2. Earth cuts: Do not use earth cuts as forms for vertical surfaces. Natural rock formations that maintain a stable vertical edge may be used as side forms.
  - 3. Form coating: Release agent that will not adversely affect concrete or interfere with application of coatings.

4. Form ties: Cone snap type that will leave no metal within 1-1/2 inches (38 mm) of concrete surface.

## 2.02 REINFORCEMENT

- A. Reinforcing steel: ASTM a615/a615m, grade 60 (60,000 psi) (420 mpa).
  1. Type: Deformed billet-steel bars.
  2. Finish: Unfinished, unless otherwise indicated.
- B. Reinforcing steel: ASTM a706/a706m, deformed low-alloy steel bars, unfinished.
- C. Steel welded wire reinforcement: ASTM a 185/a 185m, plain type.
  1. Mesh size and wire gage: As indicated on drawings.
- D. Reinforcement accessories:
  1. Tie wire: Annealed, minimum 16 gage, 0.0508 inch (1.29 mm).
  2. Chairs, bolsters, bar supports, spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
  3. Provide stainless steel, galvanized, plastic, or plastic coated steel components for placement within 1-1/2 inches (38 mm) of weathering surfaces.
- E. Fabricate concrete reinforcing in accordance with CSRI (da4) - manual of standard practice, ACI 315R - Guide to Presenting Reinforcing Steel Design Details, ACI 318 and ASTM A184/A184m.
- F. Welding of reinforcing is permitted only with the specific approval of the engineer. Perform welding in accordance with AWS d1.4.
- G. Locate reinforcing splices not indicated on the drawings at points of minimum stress.
  1. Review splice locations with the engineer.

## 2.03 CONCRETE MATERIALS

- A. Cement: ASTM c150, type i/ii Portland type. Use one brand of cement throughout the project.
- B. Fine and coarse aggregates: ASTM c 33.
  1. Acquire all aggregates for entire project from same source for exposed concrete only.
- C. Fly ash: ASTM c618, class c or f.
- D. Water: ASTM C1602, Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete

## 2.04 ADMIXTURES

- A. Prohibited admixtures: Calcium chloride, thiocyanates or admixtures containing more than 0.05% chloride ions are not permitted.
- B. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- C. Air entrainment admixture: ASTM c260/c260m.
- D. High range water reducing and retarding admixture: ASTN c494/c494m type g.
- E. High range water reducing admixture: ASTM c494/c494m type f.
- F. Water reducing and accelerating admixture: ASTM c494/c494m type e.
- G. Water reducing and retarding admixture: ASTM c494/c494m type d.
- H. Accelerating admixture: ASTM c494/c494m type c.
- I. Retarding admixture: ASTM c494/c494m type b.

- J. Water reducing admixture: ASTM c494/c494m type a.
- K. Do not use chemical admixtures that will react adversely with flooring adhesive products.

## 2.05 ACCESSORY MATERIALS

- A. Underslab vapor retarder: Multi-layer, fabric-, cord-, grid-, or aluminum-reinforced polyethylene or equivalent, complying with ASTM e1745, class a and perm. Rating per construction documents; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. The use of single ply polyethylene is prohibited.
  - 1. Accessory products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations in vapor retarder.
- B. Chemical hardener: Fluosilicate solution designed for densification of cured concrete slabs.
- C. Non-shrink cementitious grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
  - 1. Minimum compressive strength at 48 hours: 2,000 pounds per square inch (13.7 mpa).
  - 2. Minimum compressive strength at 28 days: 7,000 pounds per square inch (48 mpa).
  - 3. Flowable products:
    - A. Five star products, inc ; five star fluid grout 100: [www.fivestarprouducts.com](http://www.fivestarprouducts.com).
    - B. L&M Construction chemicals, inc, a subsidiary of laticrete international, inc. ; duragrout: [www.lmcc.com](http://www.lmcc.com).
    - C. Specchem, llc ; sc precision grout: [www.specchemllc.com/sle](http://www.specchemllc.com/sle).
    - D. Specchem, llc ; specrock: [www.specchemllc.com/sle](http://www.specchemllc.com/sle).
    - E. W. R. Meadows, inc.; 588-10k: [www.wrmeadows.com/sle](http://www.wrmeadows.com/sle).
    - F. W. R. Meadows, inc.; speed-e-roc: [www.wrmeadows.com/sle](http://www.wrmeadows.com/sle).
    - G. Substitutions: See section 01 6000 - product requirements.
  - 4. Low-slump, dry pack products:
    - A. Five star products, inc ; five star grout: [www.fivestarprouducts.com](http://www.fivestarprouducts.com).
    - B. L&M Construction chemicals, inc., a subsidiary of laticrete international, inc. ; duragrout: [www.lmcc.com](http://www.lmcc.com).
    - C. Specchem, llc ; sc multipurpose grout: [www.specchemllc.com/sle](http://www.specchemllc.com/sle).
    - D. W. R. Meadows, inc.; pac-it: [www.wrmeadows.com/sle](http://www.wrmeadows.com/sle).
    - E. Substitutions: See section 01 6000 - product requirements.
- D. Non-shrink epoxy grout: Moisture-insensitive, two-part; consisting of epoxy resin, non-metallic aggregate, and activator.
  - 1. Composition: high solids content material exhibiting positive expansion when tested in accordance with ASTM c827/c827m.
    - A. Maximum height change: plus 4 percent.
    - B. minimum height change: plus 1 percent.
  - 2. Minimum compressive strength at 7 days, ASTM d695: 12,000 pounds per square inch (82.7 mpa).
- E. Moisture-retaining cover: ASTM c171; regular curing paper, white curing paper, clear polyethylene, white polyethylene, or white burlap-polyethylene sheet.
- F. Liquid curing compound: ASTM c 309, type 1, clear or translucent. do not use curing compounds that will react adversely with flooring adhesive products.

## 2.06 BONDING AND JOINTING PRODUCTS

- A. Latex bonding agent: Non-redispersible acrylic latex, complying with ASTM c1059/c1059m, type ii.
- B. Epoxy bonding system:
- C. All adhesives and sealants used on the interior of the building must comply with the requirements of ieq credit 4.1.
  - 1. manufacturers:
    - A. W.R. Meadows, inc.; rezi-weld gel paste, rezi-weld gel paste state, rezi-weld 1000: [www.wrmeadows.com/sle](http://www.wrmeadows.com/sle).
    - B. Substitutions: See section 01 6000 - product requirements.
- D. Waterstops: Rubber, complying with coe crd-c 513.
  - 1. Configuration: As indicated on the drawings.
  - 2. Size: As indicated on the drawings.
- E. Waterstops: Pvc, complying with coe crd-c 572.
  - 1. Configuration: As indicated on the drawings.
  - 2. Size: As indicated on the drawings.
- F. Reglets: Formed steel sheet, galvanized, with temporary filler to prevent concrete intrusion during placement.
  - 1. Size: As indicated on drawings.
- G. Slab isolation joint filler: 1/2 inch (13 mm) thick, height equal to slab thickness, with removable top section that will form 1/2 inch (13 mm) deep sealant pocket after removal.
  - 1. Material: ASTM d1751, cellulose fiber.
  - 2. Manufacturers:
    - A. W.R. Meadows, inc; Fiber expansion joint filler with snap-cap: [www.wrmeadows.com/sle](http://www.wrmeadows.com/sle).
    - B. Substitutions: See section 01 6000 - product requirements.
- H. Joint filler: Nonextruding, resilient asphalt impregnated fiberboard or felt, complying with ASTM d 1751, thickness as indicated on drawings and width/depth as indicated .
- I. Joint filler: Compressible asphalt mastic with felt facers, complying with ASTM d 994, thickness as indicated on drawings and depth/width as indicated.

## 2.07 CURING MATERIALS

- A. Evaporation reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.
- B. Curing compound, naturally dissipating: Clear, water-based, liquid membrane-forming compound; complying with ASTM c309 type 1, class b, acrylic curing compounds are not recommended.
- C. Water: Potable, not detrimental to concrete.

## 2.08 CONCRETE MIX DESIGN

- A. Proportioning normal weight concrete: comply with aci 211.1 recommendations.
- B. Concrete strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.

1. For trial mixtures method, employ independent testing agency acceptable to architect for preparing and reporting proposed mix designs.
- C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.
- D. Normal weight concrete:
  1. Compressive strength, when tested in accordance with ASTM c39/c39m at 28 days: As indicated on drawings.
  2. Fly ash content: As indicated on drawings
  3. Calcined pozzolan content: Maximum 10 percent of cementitious materials by weight.
  4. water-cement ratio: As indicated on drawings
  5. Total air content: 4 percent, determined in accordance with ASTM c173/c173m.
  6. Maximum slump: 5 inches (127 mm) unless noted otherwise on the drawings.
  7. Maximum slump for drilled pier construction: 6 inches minimum to 8 inches maximum.
  8. Maximum aggregate size: As indicated on drawings

## **2.09 MIXING**

- A. Transit mixers: Comply with ASTM c94/c94m.
- B. does not add water to concrete at job site.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Verify lines, levels, and dimensions before proceeding with work of this section.

### **3.02 PREPARATION**

- A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.
- B. verify that forms are clean and free of rust before applying release agent.
- C. coordinates placement of embedded items with erection of concrete formwork and placement of form accessories.
- D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
  1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
  2. Use latex bonding agent only for non-load-bearing applications.
- E. In locations where new concrete is doweled to existing work, drill holes in existing concrete and set steel dowels using adhesive products as indicated on the drawings.
- F. Structural slabs on grade: Install vapor retarder under interior slabs on grade. lap joints per manufactures recommendations. seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. repair damaged vapor retarder before covering.

### **3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS**

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.

- B. complies with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.
- C. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- D. Reinforcement shall be accurately placed and securely saddle tied at every other intersection with no. 18 gauge black annealed wire and shall be rigidly held during the placing of concrete by means of metal chairs or spacers.
- E. Conform to the reinforcing concrete cover requirements as indicated on the drawings.
- F. Do not displace or damage vapor retarder.
- G. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.
- H. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with concrete placement.

### 3.04 PLACING CONCRETE

- A. Place concrete in accordance with aci 304r.
- B. Place concrete for floor slabs in accordance with aci 302.1r.
- C. Notify architect not less than 24 hours prior to commencement of placement operations.
- D. hot-weather placement: comply with aci 301, aci 305r and the following:
  - 1. Maintain concrete temperature below 90 deg f (32 deg c) at time of placement. chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. using liquid nitrogen to cool concrete is contractor's option.
  - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. keep subgrade uniformly moist without standing water, soft spots, or dry areas.
- E. Cold-weather placement: Comply with aci 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  - 1. When average high and low temperature is expected to fall below 40 deg f (4.4 deg c) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by aci 301.
  - 2. Do not use frozen materials or materials containing ice or snow. do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- F. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- G. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.
- H. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.
- I. Repair underslab vapor retarder damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.
- J. Separate slabs on grade from vertical surfaces with joint filler.

- K. Place joint filler in pattern placement sequence. set top to required elevations. Secure to resist movement by wet concrete.
- L. Extend joint filler from bottom of slab to within 1/4 inch of finished slab surface. Conform to section 07 90 05 for finish joint sealer requirements.
- M. Install joint devices in accordance with manufacturer's instructions.
- N. Install construction joint devices in coordination with drawing pattern placement sequence. set top to required elevations. secure to resist movement by wet concrete.
- O. Install joint device anchors for expansion joint assemblies specified in section 07 95 13. Maintain correct position to allow joint cover to be flush with floor, and wall finish.
- P. Apply sealants in joint devices.
- Q. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- R. Place concrete continuously between predetermined expansion, control, and construction joints.
- S. Do not interrupt successive placement; do not permit cold joints to occur.
- T. Where applicable, saw cut joints within 24 hours after placing. Use 3/16 inch (5 mm) thick blade, cut into 1/4 depth of slab thickness.
- U. Screed floors level, maintaining surface flatness of maximum 1/4 inch in 10 ft (6 mm /3 m).
- V. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.

### 3.05 SLAB JOINTING

- A. Locate joints as indicated on the drawings.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation joints: use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
- D. Load transfer construction and contraction joints: install load transfer devices as indicated; saw cut joint at surface as indicated for contraction joints.
- E. Saw cut contraction joints: saw cut joints before concrete begins to cool, within 4 to 12 hours after placing; use 3/16 inch (5 mm) thick blade and cut at least 1 inch (25 mm) deep but not less than one quarter (1/4) the depth of the slab.
- F. Construction joints: where not otherwise indicated, use metal combination screed and key form, with removable top section for joint sealant.
- G. Screed floors level, maintaining the following minimum f(f) floor flatness and f(l) floor levelness values when measured in accordance with ASTM e1155/ASTM e1155m.
  - 1. f(f): Specified overall value (sov) of 35; minimum localized value (mlv) of 24.
  - 2. f(l): Specified overall value (sov) of 20; minimum localized value (mlv) of 13.

### 3.06 SEPARATE FLOOR TOPPINGS

- A. Prior to placing floor topping, roughen substrate concrete surface and remove deleterious material. Broom and vacuum clean.
- B. Place required dividers, edge strips, reinforcing, and other items to be cast in.
- C. Apply bonding agent to substrate in accordance with manufacturer's instructions.
- D. Place concrete floor toppings to required lines and levels.

**3.07 FLOOR FLATNESS AND LEVELNESS TOLERANCES**

- A. An independent testing agency, as specified in section 01 4000, will inspect finished slabs for conformance to specified tolerances.
- B. Minimum f(f) floor flatness and f(l) floor levelness values:
  - 1. Exposed to view and foot traffic: f(f) of 20; f(l) of 15 , on-grade only.
  - 2. Under thick-bed tile: f(f) of 20; f(l) of 15 , on-grade only.
  - 3. Under carpeting: f(f) of 25; f(l) of 20 , on-grade only.
  - 4. Under thin resilient flooring and thinset tile: f(f) of 35; f(l) of 25 , on-grade only.
- C. Measure f(f) floor flatness and f(l) floor levelness in accordance with ASTM e1155 (ASTM e1155m), within 48 hours after slab installation; report both composite overall values and local values for each measured section.
- D. Correct the slab surface if composite overall value is less than specified and if local value is less than two-thirds of specified value or less than f(f) 13/f(l) 10.
- E. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

**3.08 CONCRETE FINISHING**

- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Unexposed form finish: rub down or chip off fins or other raised areas 1/4 inch (6 mm) or more in height.
- C. Exposed form finish: rub down or chip off and smooth fins or other raised areas 1/4 inch (6 mm) or more in height. Provide finish as follows:
  - 1. Smooth rubbed finish: wet concrete and rub with carborundum brick or other abrasive, not more than 24 hours after form removal.
  - 2. Grout cleaned finish: wet areas to be cleaned and apply grout mixture by brush or spray; scrub immediately to remove excess grout. After drying, rub vigorously with clean burlap, and keep moist for 36 hours.
- D. Concrete slabs: finish to requirements of aci 302.1r, and as follows:
  - 1. Surfaces to receive thick floor coverings: "wood float" as described in aci 302.1r; thick floor coverings include quarry tile, ceramic tile, and portland cement terrazzo with full bed setting system.
  - 2. Surfaces to receive thin floor coverings: "steel trowel" as described in aci 302.1r; thin floor coverings include carpeting, resilient flooring, seamless flooring, resinous matrix terrazzo, thin set quarry tile, and thin set ceramic tile.
  - 3. Decorative exposed surfaces: trowel as described in aci 302.1r; use steel-reinforced plastic trowel blades instead of steel blades to avoid black-burnish marks; decorative exposed surfaces include surfaces to be stained or dyed, pigmented concrete, surfaces to receive liquid hardeners, surfaces to receive dry-shake hardeners, surfaces to be polished, and all other exposed slab surfaces.
- E. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at 1:100 nominal.

**3.09 CURING AND PROTECTION**

- A. Comply with requirements of aci 308r. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
  - 1. Normal concrete: not less than 7 days.
  - 2. High early strength concrete: not less than 4 days.
- C. Formed surfaces: cure by moist curing with forms in place for full curing period.
- D. Surfaces not in contact with forms:
  - 1. Slabs and floors to receive adhesive-applied flooring: curing compounds and other surface coatings are usually considered unacceptable by flooring and adhesive manufacturers. If such materials must be used, either obtain the approval of the flooring and adhesive manufacturers prior to use or remove the surface coating after curing to flooring manufacturer's satisfaction.
  - 2. Initial curing: start as soon as free water has disappeared and before surface is dry.
    - A. Keep continuously moist for not less than seven days by water ponding or water-fog spray.
      - 1) Ponding: maintain 100 percent coverage of water over floor slab areas, continuously for 7 days.
      - 2) spraying: spray water over floor slab areas and maintain wet.
    - B. Membrane forming compounds:
      - 1) compounds shall conform to ASTM c309, type 1, class b, all resin dissipating cure.
  - 3. Final curing: begin after initial curing but before surface is dry.
    - A. Moisture-retaining cover: seal in place with waterproof tape or adhesive.
    - B. Curing compound: apply in two coats at right angles, using application rate recommended by manufacturer.

### 3.10 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in section 01 45 29.
- B. Provide free access to concrete operations at project site and cooperate with appointed firm.
- C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
- D. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.
- E. Compressive strength tests: ASTM c39/c39m. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards (76 cu m) or less of each class of concrete placed.
- F. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- G. Perform one slump test for each set of test cylinders taken, following procedures of ASTM c143/c143m.
- H. An independent testing agency will inspect all installed reinforcing for conformance to the contract documents before concrete placement.
- I. Reinforcing steel in structural concrete shall be observed by the structural engineer prior to pouring structural concrete. Refer to the schedule of preferred site observations by structural engineer on sheet s1.0 for required reinforcing site observations for structural concrete.
- J. Perform composite sampling by ASTM C172.
- K. Perform air content by ASTM C231 or C173.

- L. Perform test temperature by ASTM C1064.
- M. Perform test density by ASTM C138.
- N. Prepare compressive strength test cylinders by ASTM C31 and testing cylinders by ASTM C39.

**3.11 DEFECTIVE CONCRETE**

- A. Test results: the testing agency shall report test results in writing to the architect and contractor within 24 hours of test.
- B. Defective concrete: concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- C. Repair or replacement of defective concrete will be determined by the architect . The cost of additional testing shall be borne by contractor when defective concrete is identified.
- D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of architect for each individual area.

**3.12 PROTECTION**

- A. Do not permit traffic over unprotected concrete floor surface until fully cured.

**END OF SECTION**

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SECTION 105500 – POSTAL SPECIALTIES

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 mail slot and receptacle, wall mounted.

1.3 REFERENCES

- A. Architectural and Transportation Barriers Compliance Board (ATBCB).
- B. Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).
- C. International Building Code (IBC).
- D. ASTM International (ASTM):
  - 1. ASTM A 666 - Specification for Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar.
  - 2. ASTM A 1008 - Specification for Steel, Sheet Cold-Rolled, Carbon, Structural High Strength Low-Allow and High Strength Low-Allow with Improved Formability.
  - 3. ASTM B 209 - Specification Aluminum and Aluminum Alloy Sheet and Plate.
  - 4. ASTM B 221 - Specification Aluminum and Aluminum Alloy Extruded Bar, Rods, Wire, Shapes, and Tubes.
- E. United States Postal Service (USPS):
  - 1. USPS STD 4C: United States Postal Service Standard 4C, Wall-Mounted, Surface Mounted and Free-Standing Centralized Mail Receptacles.
  - 2. USPS Publication 16.
  - 3. USPS Regulations.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, fittings, accessories, and finishes.

- B. Shop Drawings: Include dimensions, wall cuts, plans, elevations, details, and attachments to other work. Show general arrangement, jointing, fittings, accessories, grounding, anchoring, and support.
- C. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.

#### 1.5 REGULATORY REQUIREMENTS

- A. Comply with USPS-B-1118 Specification.
- B. Comply with Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Texas Accessibility Standards.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall have a Quality System in place to ensure and be able to substantiate that manufactured units conform to requirements and match the approved design and must be ISO 9001:2015 certified.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Inspect the materials upon delivery to ensure that specified products have been received.
- B. Store materials protected from exposure to harmful weather conditions.
- C. Handle materials to prevent damage of marring of finish.

#### 1.8 Warranty

- A. Manufacturer's standard warranty to repair or replace components of postal specialties that fail in materials or workmanship within one year from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Basis of Design - Salsbury Industries, which is located at: 1010 East 62nd Street; Los Angeles, CA 90001-1598; Toll Free Tel: 1-800-MAILBOX (1-800-624-5269); Fax: 1-800-624-5299; Email: request info (salsbury@mailboxes.com); Web:www.mailboxes.com
- B. Other manufacturers shall submit for substitution review approval prior to bid.

#### 2.2 MAIL SLOT WITH RECEPTACLE

- A. Model 2256 ALM Receptacle with 2255 ALM Mail Slot as manufactured by Salsbury Industries.
  - 1. Complies with USPS-STD-7B Specifications. Master postal lock not required.
  - 2. Construction: Aluminum.

3. Unit Dimensions: Mail drop -15" wide by 7-1/2" deep by 19" high. Opening – 12" wide by 6" high. Collection box – minimum 14" wide by 7" deep by 18" high.
4. Finish: Aluminum
5. Access Doors: Rear access. 2 keys per door (keyed alike).
6. Mail is deposited through a non-locking mail slot on the front.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, including foundation; accurate placement, pattern, orientation of anchor bolts, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Prepare surfaces using the methods recommended by the manufacturer.

#### 3.2 INSTALLATION

- A. Install products in strict accordance with manufacturer's instructions, recommendations, and approved submittals.
- B. Test for proper operation and adjust until satisfactory results are obtained.

#### 3.3 PROTECTION OF INSTALLED PRODUCTS

- A. Protect installed products until completion of the project.
- B. Touch-up, repair or replace damaged products before substantial completion.

END OF SECTION 105500

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SECTION 133419 - METAL BUILDING SYSTEMS

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. Structural-steel framing.
- B. Related Sections:
  - 1. Section 053100 "Steel Decking"
  - 2. Section 074113 "Formed Metal Roof, Wall and Soffit Panels"
  - 3. Section 081113 "Hollow Metal Doors and Frames"
  - 4. Section 083323 "Overhead Coiling Doors"
  - 5. Section 087100 "Door Hardware"

1.3 DEFINITIONS

- A. Terminology Standard: See MBMA's "Metal Building Systems Manual" for definitions of terms for metal building system construction not otherwise defined in this Section or in referenced standards.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of metal building system component. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
  - 1. Structural-steel-framing system.
- B. Shop Drawings: For the following metal building system components. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Anchor-Bolt Plans: Submit anchor-bolt plans and templates before foundation work begins. Include location, diameter, and projection of anchor bolts required to attach metal building to foundation. Indicate column reactions at each location.
  - 2. Structural-Framing Drawings: Show complete fabrication of primary and secondary framing; include provisions for openings. Indicate welds and bolted connections, distinguishing between shop and field applications. Include transverse cross-sections.
- C. Delegated-Design Submittal: For metal building systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified erector, manufacturer, and professional engineer.
- B. Manufacturer Accreditation: Statement that metal building system and components were designed and produced by a manufacturer accredited according to the International Accreditation Service's AC472.
- C. Welding certificates.
- D. Metal Building System Certificates: For each type of metal building system, from manufacturer.
  - 1. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:
    - a. Name and location of Project.
    - b. Order number.
    - c. Name of manufacturer.
    - d. Name of Contractor.
    - e. Building dimensions including width, length, height, and roof slope.

- f. Indicate compliance with AISC standards for hot-rolled steel and AISI standards for cold-rolled steel, including edition dates of each standard.
  - g. Governing building code and year of edition.
  - h. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure, seismic design category or effective peak velocity-related acceleration/peak acceleration, and auxiliary loads (cranes).
  - i. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
  - j. Building-Use Category: Indicate category of building use and its effect on load importance factors.
- E. Erector Certificates: For each product, from manufacturer.
- F. Manufacturer Certificates: For each product, from manufacturer.
- G. Material Test Reports: For each of the following products:
- 1. Structural steel including chemical and physical properties.
  - 2. Bolts, nuts, and washers including mechanical properties and chemical analysis.
  - 3. Tension-control, high-strength, bolt-nut-washer assemblies.
  - 4. Shop primers.
  - 5. Non-shrink grout.
- H. Field quality-control reports.
- 1.6 QUALITY ASSURANCE
- A. Manufacturer Qualifications: A qualified manufacturer and member of MBMA.
- 1. Accreditation: According to the International Accreditation Service's AC472.
  - 2. Engineering Responsibility: Preparation of comprehensive engineering analysis and Shop Drawings by a professional engineer who is legally qualified to practice in jurisdiction where Project is located.
- B. Erector Qualifications: An experienced erector who specializes in erecting and installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.
- C. Source Limitations: Obtain metal building system components, including primary and secondary framing and metal panel assemblies, from single source from single manufacturer.
- D. Welding Qualifications: Qualify procedures and personnel according to the following:
- 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.3, "Structural Welding Code - Sheet Steel."
- E. Structural Steel: Comply with AISC 360, "Specification for Structural Steel Buildings," for design requirements and allowable stresses.
- F. Cold-Formed Steel: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" for design requirements and allowable stresses.
- G. Pre-installation Conference: Conduct conference at Project site.
- 1. Review methods and procedures related to metal building systems including, but not limited to, the following:
    - a. Condition of foundations and other preparatory work performed by other trades.
    - b. Structural load limitations.
    - c. Construction schedule. Verify availability of materials and erector's personnel, equipment, and facilities needed to make progress and avoid delays.
    - d. Required tests, inspections, and certifications.
    - e. Unfavorable weather and forecasted weather conditions.
  - 2. Review methods and procedures related to metal roof panel assemblies including, but not limited to, the following:
    - a. Compliance with requirements for purlin and rafter conditions, including flatness and attachment to structural members.
    - b. Structural limitations of purlins and rafters during and after roofing.
- 1.7 DELIVERY, STORAGE, AND HANDLING
- A. Deliver components, so as not to be damaged or deformed.

1.8 COORDINATION

- A. Coordinate sizes and locations of concrete foundations and casting of anchor-bolt inserts into foundation walls and footings. Concrete, reinforcement, and formwork requirements are specified in Section 033000 "Cast-in-Place Concrete."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Alliance Steel, Inc.
  2. American Steel Building Co., Inc.
  3. Butler Manufacturing Company; a BlueScope Steel company.
  4. Ceco Building Systems; Division of NCI Building Systems, L.P.
  5. Mesco Building Solutions; Division of NCI Building Systems, L.P.
  6. Chief Metal Buildings
  7. Metallic Building Company; Division of NCI Building Systems, L.P.
  8. Mid-West Steel Building Company; Division of NCI Building Systems, L.P.
  9. Nucor Building Systems.
  10. Vulcan Steel Structures, Inc.
  11. Whirlwind Building Systems.

2.2 METAL BUILDING SYSTEMS

- A. Description: Provide a complete, integrated set of mutually dependent components and assemblies that form a metal building system capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water into building interior.
1. Provide metal building system of size and with bay spacings, roof slopes, and spans indicated.
- B. Primary-Frame Type:
1. Rigid Clear Span: Solid-member, structural-framing system without interior columns.
- C. End-Wall Framing: Manufacturer's standard, for buildings not required to be expandable, consisting of load-bearing end-wall and corner columns and rafters.
- D. Secondary-Frame Type: Manufacturer's standard purlins and joists and exterior-framed (bypass)] girts.
- E. Eave Height: See drawings.
- F. Bay Spacing: See drawings.
- G. Roof Slope: See drawings.

2.3 METAL BUILDING SYSTEM PERFORMANCE

- A. Delegated Design: Design metal building system, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- B. Structural Performance: Metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual."
1. Design Loads: As indicated on Drawings.
  2. Deflection Limits: Design metal building system assemblies to withstand design loads with deflections as required on the Structural Drawings:
    - a. Design secondary-framing system to accommodate deflection of primary framing and construction tolerances, and to maintain clearances at openings.
  3. Drift Limits: Engineer building structure to withstand design loads with drift limits as required on the Structural Drawings.
- C. Seismic Performance: Metal building systems shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
- D. Thermal Movements: Allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base

engineering calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient, material surfaces.

#### 2.4 STRUCTURAL-STEEL FRAMING

- A. Primary Framing: Manufacturer's standard primary-framing system, designed to withstand required loads and specified requirements. Primary framing includes transverse and lean-to frames; rafter, rake, and canopy beams; sidewall, intermediate, end-wall, and corner columns; and wind bracing.
  1. General: Provide frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide frame span and spacing indicated.
    - a. Slight variations in span and spacing may be acceptable if necessary to comply with manufacturer's standard, as approved by Architect.
  2. Rigid Clear-Span Frames: I-shaped frame sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Interior columns are not permitted.
  3. Frame Configuration: Single gable.
  4. Exterior Column Type: Tapered.
  5. Rafter Type: Tapered.
- B. End-Wall Framing: Manufacturer's standard primary end-wall framing fabricated for field-bolted assembly to comply with the following:
  1. End-Wall and Corner Columns: I-shaped sections fabricated from structural-steel shapes; shop-welded, built-up steel plates; or C-shaped, cold-formed, structural-steel sheet.
  2. End-Wall Rafters: C-shaped, cold-formed, structural-steel sheet; or I-shaped sections fabricated from shop-welded, built-up steel plates or structural-steel shapes.
- C. Secondary Framing: Manufacturer's standard secondary framing, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members. Unless otherwise indicated, fabricate framing from either cold-formed, structural-steel sheet or roll-formed, metallic-coated steel sheet, pre-painted with coil coating, to comply with the following:
  1. Purlins: C- or Z-shaped sections; fabricated from built-up steel plates, steel sheet, or structural-steel shapes; minimum 2-1/2-inch wide flanges.
    - a. Depth: As needed to comply with system performance requirements.
  2. Purlins: Steel joists of depths indicated.
  3. Girts: C- or Z-shaped sections; fabricated from built-up steel plates, steel sheet, or structural-steel shapes. Form ends of Z-sections with stiffening lips angled 40 to 50 degrees from flange, with minimum 2-1/2-inch wide flanges.
    - a. Depth: As required to comply with system performance requirements.
  4. Eave Struts: Unequal-flange, C-shaped sections; fabricated from built-up steel plates, steel sheet, or structural-steel shapes; to provide adequate backup for metal panels.
  5. Flange Bracing: Minimum 2-by-2-by-1/8 structural-steel angles or 1-inch diameter, cold-formed structural tubing to stiffen primary-frame flanges.
  6. Sag Bracing: Minimum 1-by-1-by-1/8-inch structural-steel angles.
  7. Base or Sill Angles: Minimum 3-by-2-inch zinc-coated (galvanized) steel sheet.
  8. Purlin and Girt Clips: Manufacturer's standard clips fabricated from steel sheet. Provide galvanized clips where clips are connected to galvanized framing members.
  9. Secondary End-Wall Framing: Manufacturer's standard sections fabricated from zinc-coated (galvanized) steel sheet.
  10. Framing for Openings: Channel shapes; fabricated from cold-formed, structural-steel sheet or structural-steel shapes. Frame head and jamb of door openings and head, jamb, and sill of other openings.
  11. Miscellaneous Structural Members: Manufacturer's standard sections fabricated from cold-formed, structural-steel sheet; built-up steel plates; or zinc-coated (galvanized) steel sheet; designed to withstand required loads.
- D. Bracing: Provide adjustable wind bracing as follows:
  1. Rigid Portal Frames: Fabricated from shop-welded, built-up steel plates or structural-steel shapes to match primary framing; of size required to withstand design loads.

- E. Bolts: Provide plain-finish bolts for structural-framing components that are primed or finish painted. Provide hot-dip galvanized bolts for structural-framing components that are galvanized.
- F. Materials:
1. W-Shapes: ASTM A 992/A 992M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
  2. Channels, Angles, M-Shapes, and S-Shapes: ASTM A 36/A 36M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
  3. Plate and Bar: ASTM A 36/A 36M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
  4. Steel Pipe: ASTM A 53/A 53M, Type E or S, Grade B.
  5. Cold-Formed Hollow Structural Sections: ASTM A 500, Grade B or C, structural tubing.
  6. Structural-Steel Sheet: Hot-rolled, ASTM A 1011/A 1011M, Structural Steel (SS), Grades 30 through 55 (205 through 380), or High-Strength Low-Alloy Steel (HSLAS), Grades 45 through 70 (310 through 480); or cold-rolled, ASTM A 1008/A 1008M, Structural Steel (SS), Grades 25 through 80 (170 through 550), or High-Strength Low-Alloy Steel (HSLAS), Grades 45 through 70 (310 through 480).
  7. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Structural Steel (SS), Grades 33 through 80 (230 through 550,) or High-Strength Low-Alloy Steel (HSLAS), Grades 50 through 80 (340 through 550); with G60 (Z180) coating designation; mill phosphatized.
  8. Non-High-Strength Bolts, Nuts, and Washers: ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6), carbon-steel, hex-head bolts; ASTM A 563 (ASTM A 563M) carbon-steel hex nuts; and ASTM F 844 plain (flat) steel washers.
    - a. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C.
  9. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563 (ASTM A 563M) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M) hardened carbon-steel washers.
    - a. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C.
  10. Un-headed Anchor Rods: ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6).
    - a. Configuration: Straight.
    - b. Nuts: ASTM A 563 (ASTM A 563M) heavy-hex carbon steel.
    - c. Plate Washers: ASTM A 36/A 36M carbon steel.
    - d. Washers: ASTM F 436 (ASTM F 436M) hardened carbon steel.
    - e. Finish: Plain.
  11. Headed Anchor Rods: ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6).
    - a. Configuration: Straight.
    - b. Nuts: ASTM A 563 (ASTM A 563M) heavy-hex carbon steel.
    - c. Plate Washers: ASTM A 36/A 36M carbon steel.
    - d. Washers: ASTM F 436 (ASTM F 436M) hardened carbon steel.
    - e. Finish: Plain.
  12. Threaded Rods: ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6).
    - a. Nuts: ASTM A 563 (ASTM A 563M) heavy-hex carbon steel.
    - b. Washers: ASTM A 36/A 36M carbon steel.
    - c. Finish: Plain.
  13. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of pre-consumer recycled content not less than 25 percent.
- G. Finish: Factory primed. Apply specified primer immediately after cleaning and pre-treating.
1. Apply primer to primary and secondary framing to a minimum dry film thickness of 1 mil.
    - a. Prime secondary framing formed from uncoated steel sheet to a minimum dry film thickness of 0.5 mil on each side.
  2. Prime galvanized members with specified primer after phosphoric acid pretreatment.
  3. Primer: SSPC-Paint 15, Type I, red oxide.

## 2.5 FABRICATION

- A. General: Design components and field connections required for erection to permit easy assembly.

1. Mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
2. Fabricate structural framing to produce clean, smooth cuts and bends. Punch holes of proper size, shape, and location. Members shall be free of cracks, tears, and ruptures.
- B. Tolerances: Comply with MBMA's "Metal Building Systems Manual" for fabrication and erection tolerances.
- C. Primary Framing: Shop fabricate framing components to indicated size and section, with base plates, bearing plates, stiffeners, and other items required for erection welded into place. Cut, form, punch, drill, and weld framing for bolted field assembly.
  1. Make shop connections by welding or by using high-strength bolts.
  2. Join flanges to webs of built-up members by a continuous, submerged arc-welding process.
  3. Brace compression flange of primary framing with steel angles or cold-formed structural tubing between frame web and purlin web or girt web, so flange compressive strength is within allowable limits for any combination of loadings.
  4. Weld clips to frames for attaching secondary framing.
  5. Shop Priming: Prepare surfaces for shop priming according to SSPC-SP 2. Shop prime primary framing with specified primer after fabrication.
- D. Secondary Framing: Shop fabricate framing components to indicated size and section by roll-forming or break-forming, with base plates, bearing plates, stiffeners, and other plates required for erection welded into place. Cut, form, punch, drill, and weld secondary framing for bolted field connections to primary framing.
  1. Make shop connections by welding or by using non-high-strength bolts.
  2. Shop Priming: Prepare uncoated surfaces for shop priming according to SSPC-SP 2. Shop prime uncoated secondary framing with specified primer after fabrication.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with erector present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Before erection proceeds, survey elevations and locations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments to receive structural framing, with erector present, for compliance with requirements and metal building system manufacturer's tolerances.
  1. Engage land surveyor to perform surveying.
- C. Proceed with erection only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition.
- B. Provide temporary shores, guys, braces, and other supports during erection to keep structural framing secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural framing, connections, and bracing are in place unless otherwise indicated.

#### 3.3 ERECTION OF STRUCTURAL FRAMING

- A. Erect metal building system according to manufacturer's written erection instructions and erection drawings.
- B. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.
- C. Set structural framing accurately in locations and to elevations indicated, according to AISC specifications referenced in this Section. Maintain structural stability of frame during erection.
- D. Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
  1. Set plates for structural members on wedges, shims, or setting nuts as required.

2. Tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
  3. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- E. Align and adjust structural framing before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with framing. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
1. Level and plumb individual members of structure.
  2. Make allowances for difference between temperature at time of erection and mean temperature when structure will be completed and in service.
- F. Primary Framing and End Walls: Erect framing level, plumb, rigid, secure, and true to line. Level base plates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use grout to obtain uniform bearing and to maintain a level base-line elevation. Moist-cure grout for not less than seven days after placement.
1. Make field connections using high-strength bolts installed according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for bolt type and joint type specified.
    - a. Joint Type: Snug tightened or pre-tensioned.
- G. Secondary Framing: Erect framing level, plumb, rigid, secure, and true to line. Field bolt secondary framing to clips attached to primary framing.
1. Provide rake or gable purlins with tight-fitting closure channels and fasciae.
  2. Locate and space wall girts to suit openings such as doors and windows.
  3. Locate canopy framing as indicated.
  4. Provide supplemental framing at entire perimeter of openings, including doors, windows, louvers, ventilators, and other penetrations of roof and walls.
- H. Bracing: Install bracing in roof and sidewalls where indicated on erection drawings.
1. Tighten rod and cable bracing to avoid sag.
  2. Locate interior end-bay bracing only where indicated.
- I. Framing for Openings: Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to structural framing.
- J. Erection Tolerances: Maintain erection tolerances of structural framing within AISC 303.
- 3.4 FIELD QUALITY CONTROL
- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
1. Inspection of fabricators.
  2. Steel construction.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- C. Tests and Inspections:
1. High-Strength, Field-Bolted Connections: Connections shall be inspected during installation according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
  2. Welded Connections: In addition to visual inspection, field-welded connections shall be tested and inspected according to AWS D1.1/D1.1M and the following inspection procedures, at inspector's option:
    - a. Liquid Penetrant Inspection: ASTM E 165.
    - b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
    - c. Ultrasonic Inspection: ASTM E 164.
    - d. Radiographic Inspection: ASTM E 94.
- D. Product will be considered defective if it does not pass tests and inspections.
- E. Prepare test and inspection reports.

3.5 CLEANING AND PROTECTION

- A. Touchup Painting: After erection, promptly clean, prepare, and prime or re-prime field connections, rust spots, and abraded surfaces of prime-painted structural framing, bearing plates, and accessories.
1. Clean and prepare surfaces by SSPC-SP 2, "Hand Tool Cleaning," or by SSPC-SP 3, "Power Tool Cleaning."
  2. Apply a compatible primer of same type as shop primer used on adjacent surfaces.

END OF SECTION 133419

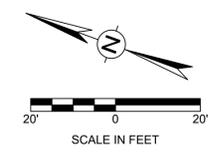


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REVISIONS	
7/22/20 ADDENDUM 1	
SHIFTED SITE PLAN 3' SOUTH &	
ADDED P.W.M.T. REPAIR AREA	
PROJECT NO.	118037
PHASE	100% CONSTRUCTION DOCUMENTS
DATE	APRIL 2020
DESCRIPTION	DIMENSIONAL CONTROL PLAN

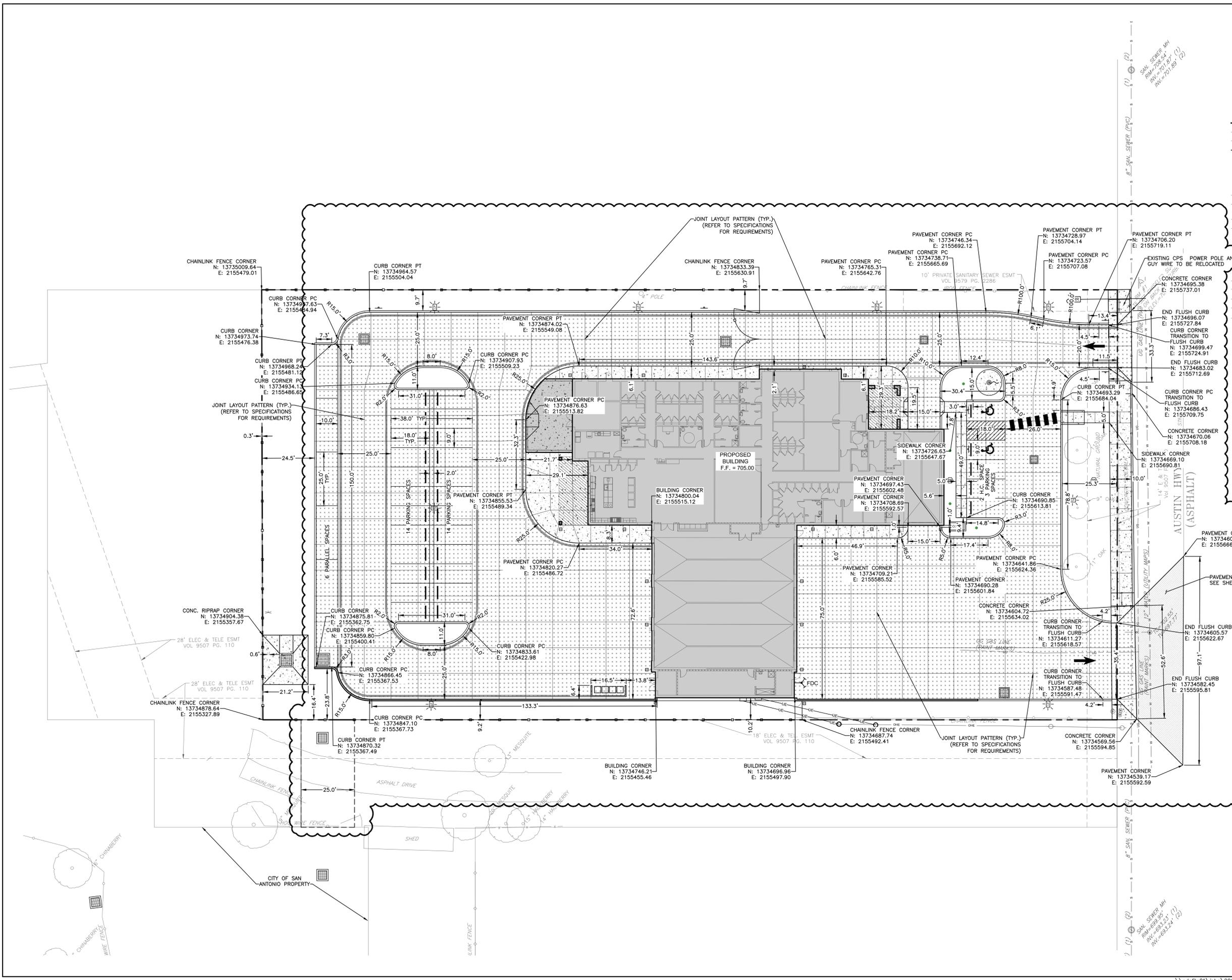
**C3.0**



**LEGEND**

---	EX. SITE PROPERTY
---	EX. EDGE OF PAVEMENT
---	EX. CONTOUR
---	PROPOSED CONTOUR
○	EX. POWER POLE
○	EX. TELEPHONE POLE
○	EX. GUY WIRE
○	EX. LIGHT POLE
○	EX. OVERHEAD ELEC. LINE
○	EX. UNDERGROUND FIBER OPTIC LINE
○	EX. WATER LINE
○	EX. UNDERGROUND COMMUNICATION LINE
○	EX. TELEPHONE PEDESTAL
○	EX. WATER VALVE
○	EX. WATER METER
○	EX. FIRE HYDRANT
○	EX. CHAINLINK FENCE
○	EX. WIRE FENCE
○	EX. CABLE FENCE
○	EX. IRON FENCE
○	EX. GUARD RAIL
○	EX. SIGN WITH CONC. PAD
○	EX. SIGN
○	EX. MAILBOX
○	EX. TREE
○	EX. TREE TO BE REMOVED
□	EX. STRUCTURE
□	PROPOSED CONCRETE WALK/FLATWORK
□	PROPOSED HEAVY DUTY CONCRETE PAVEMENT

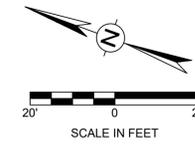
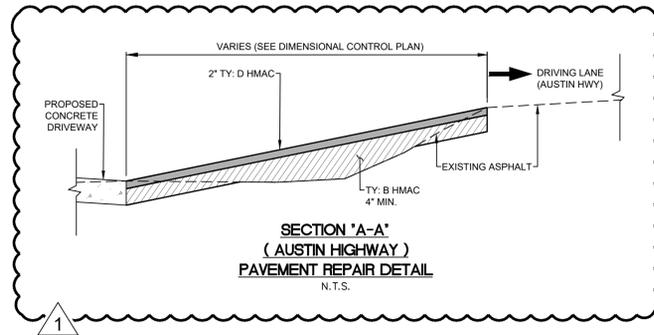
NOTE: ALL CURB CONTROL JOINTS TO BE ALIGNED WITH CONCRETE PAVEMENT JOINTS



**KEY NOTES**

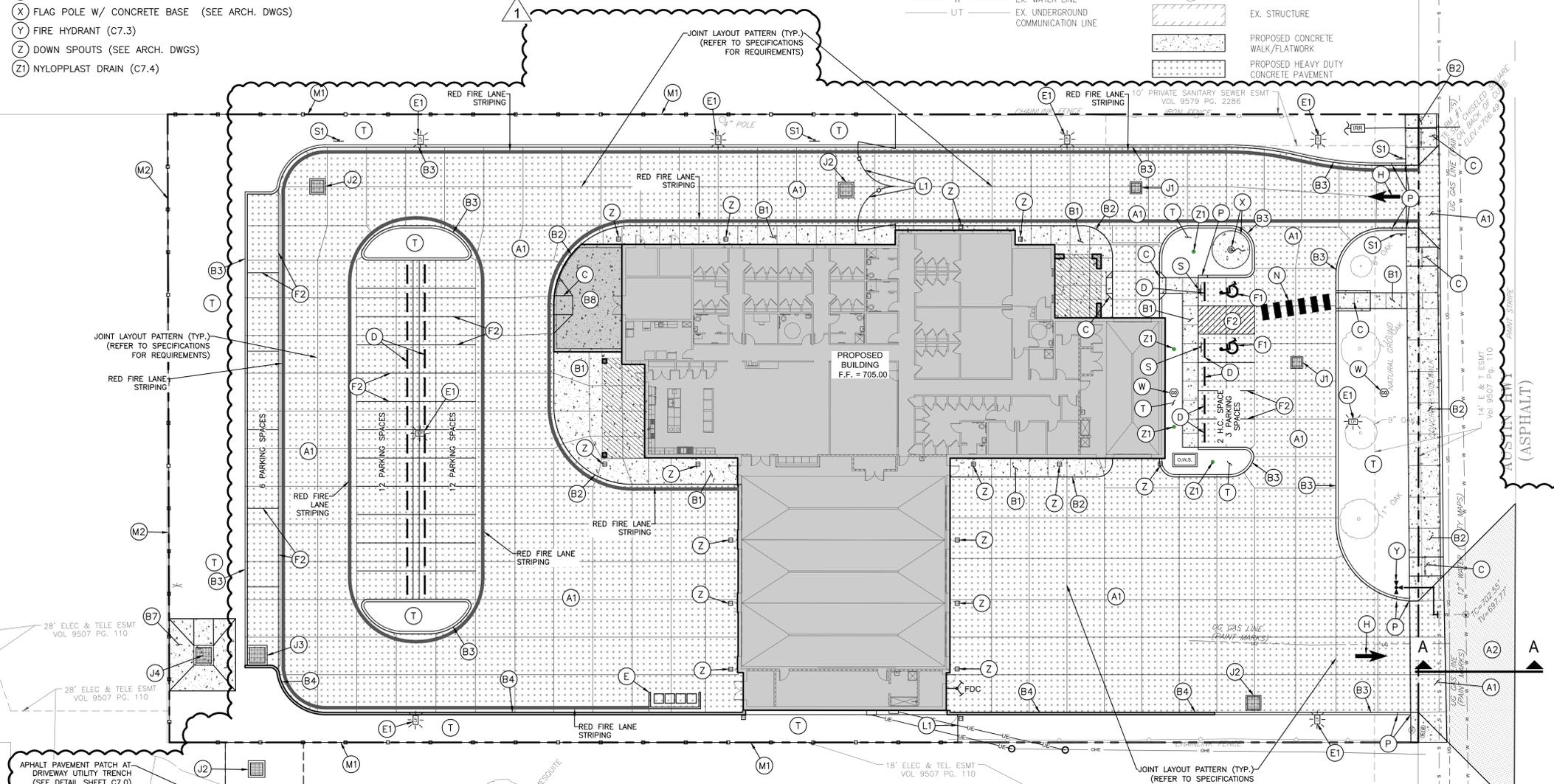
- (A1) CONCRETE PAVEMENT (HEAVY DUTY) (C7.0)
- (A2) PAVEMENT REPAIR (AUSTIN HWY) SEE THIS SHEET
- (B) CONCRETE SIDEWALK (C7.3)
- (B2) COMBINATION CURB AND SIDEWALK (C7.3)
- (B3) STANDARD CONCRETE CURB (STD.) (C7.0)
- (B4) CONCRETE RETAINING WALL W/ GUARD RAIL (C4.1)
- (B5) FLUSH CURB (C7.0)
- (B6) COMBINATION FLUSH CURB AND SIDEWALK (C7.3)
- (B7) CONCRETE RIP-RAP (C7.4)
- (B8) STRUCTURAL CONCRETE MECHANICAL YARD (SEE ARCH DWGS.)
- (C) ADA SIDEWALK RAMP (C7.0)
- (D) PRECAST CONCRETE WHEELSTOP (C7.0)
- (E) DUMPSTER ENCLOSURE (SEE ARCH. DWGS)
- (E1) PROPOSED LAMP POST (SEE ARCH. DWGS)
- (F) PVMT MRKG: INTERNATIONAL HANDICAP SYMBOL (C7.1)
- (F2) PVMT MRKG: 4" WIDE PAINTED WHITE STRIPE (C7.1)
- (G) OUTFALL STRUCTURE (C7.2)
- (H) DIRECTIONAL ARROWS (C7.1)
- (J1) 3x3 GRATE INLET (C4.5, C7.4, C7.5)
- (J2) 4x4 GRATE INLET (C4.5, C7.4, C7.5)
- (J3) 5x5 GRATE INLET (C4.5, C7.4, C7.5)
- (J4) 6x6 GRATE INLET (C4.5, C7.4, C7.5)
- (L1) DECORATIVE FENCE GATES (SEE ARCH. DWG.)
- (M1) 6' HIGH CHAIN LINK FENCE (C7.3)
- (M2) 8' HIGH CHAIN LINK FENCE (W/ SLATS) (C7.3)
- (N) CROSS WALK STRIPES (C7.0)
- (P) CURB TRANSITION (C7.0)
- (S) SIGN, (HANDICAP PARKING - VAN ACCESSIBLE) (C7.1)
- (S1) SIGN, (FIRE LANE) (C7.1, FPSP)
- (T) LANDSCAPE AREA, SEE LANDSCAPE PLANS
- (W) SEWER CLEAN OUT (C7.4)
- (X) FLAG POLE W/ CONCRETE BASE (SEE ARCH. DWGS)
- (Y) FIRE HYDRANT (C7.3)
- (Z) DOWN SPOUTS (SEE ARCH. DWGS)
- (Z1) NYLOPLAST DRAIN (C7.4)

NOTE: ALL CURB CONTROL JOINTS TO BE ALIGNED WITH CONCRETE PAVEMENT JOINTS



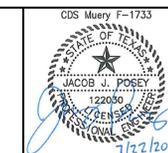
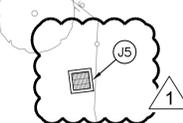
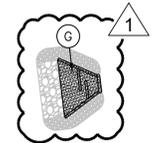
**LEGEND**

- EX. SITE PROPERTY
- - - EX. EDGE OF PAVEMENT
- - - EX. CONTOUR
- - - EX. PROPOSED CONTOUR
- EX. POWER POLE
- EX. TELEPHONE POLE
- EX. LIGHT POLE
- EX. GUY WIRE
- EX. OVERHEAD ELEC. LINE
- EX. UNDERGROUND FIBER OPTIC LINE
- EX. WATER LINE
- EX. UNDERGROUND COMMUNICATION LINE
- EX. TELEPHONE PEDESTAL
- EX. WATER VALVE
- EX. FIRE HYDRANT
- EX. CHAINLINK FENCE
- EX. WIRE FENCE
- EX. CABLE FENCE
- EX. IRON FENCE
- EX. GUARD RAIL
- EX. SIGN WITH CONC. PAD
- EX. SIGN
- EX. MAILBOX
- EX. TREE
- EX. TREE TO BE REMOVED
- EX. STRUCTURE
- PROPOSED CONCRETE WALK/FLATWORK
- PROPOSED HEAVY DUTY CONCRETE PAVEMENT



APRIL 2020

NOTE: REFER TO ARCHEOLOGICAL PLAN AND EPIC SHEET FOR ADDITIONAL ARCHEOLOGICAL AND ENVIRONMENTAL REQUIREMENTS IN DRAINAGE EASEMENT AREA.

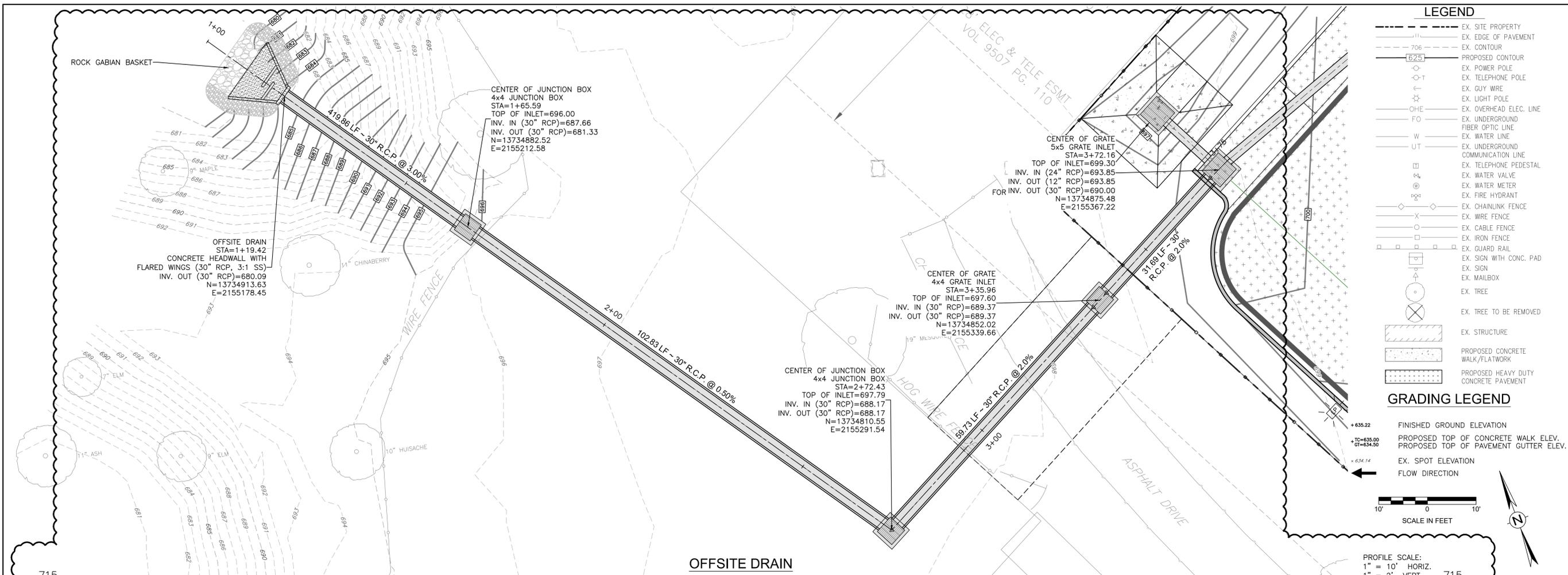


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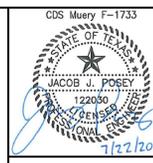
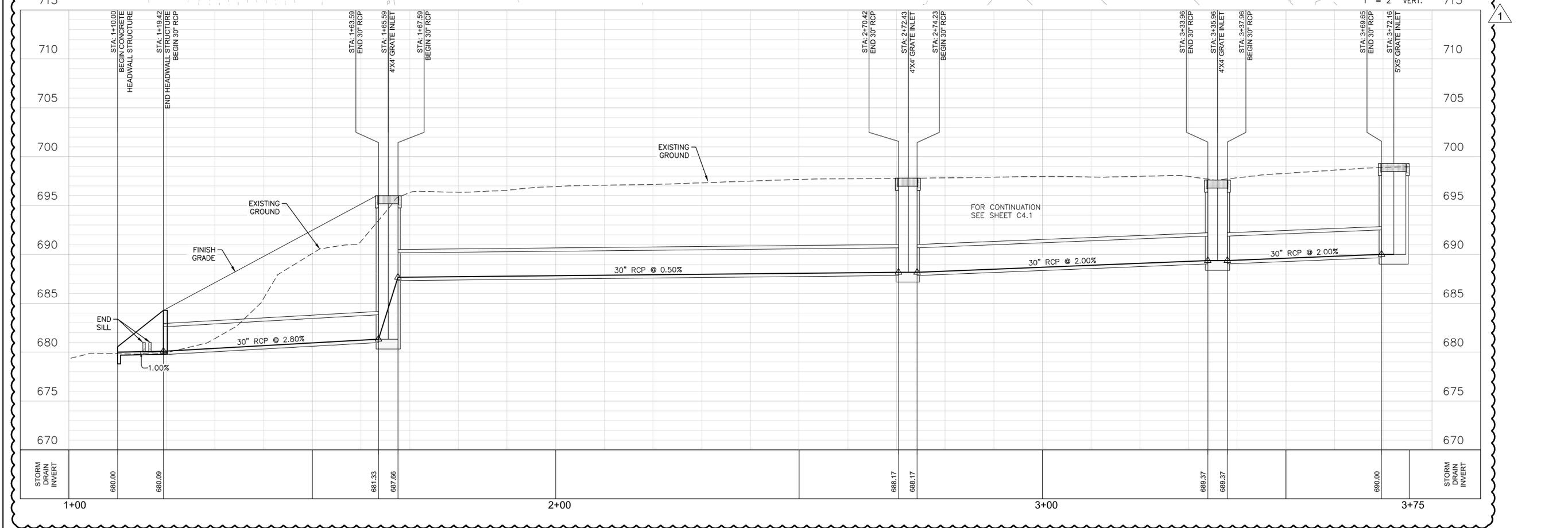
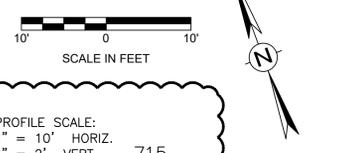
CITY OF SAN ANTONIO  
 FIRE STATION #24  
 SAN ANTONIO, TEXAS 78236-1244

REVISIONS
7/22/20 ADDENDUM 1
SHIFTED SITE PLAN 3' SOUTH & ADDED PVMT. REPAIR AREA
PROJECT NO. 118037
PHASE 100% CONSTRUCTION DOCUMENTS
DATE APRIL 2020
DESCRIPTION KEY NOTE PLAN

**C3.1**



- LEGEND**
- EX. SITE PROPERTY
  - - - EX. EDGE OF PAVEMENT
  - - - 7.06 EX. CONTOUR
  - - - PROPOSED CONTOUR
  - EX. POWER POLE
  - EX. TELEPHONE POLE
  - EX. GUY WIRE
  - EX. LIGHT POLE
  - OHE EX. OVERHEAD ELEC. LINE
  - FO EX. UNDERGROUND FIBER OPTIC LINE
  - W EX. WATER LINE
  - UT EX. UNDERGROUND COMMUNICATION LINE
  - EX. TELEPHONE PEDESTAL
  - EX. WATER VALVE
  - EX. WATER METER
  - EX. FIRE HYDRANT
  - EX. CHAINLINK FENCE
  - EX. WIRE FENCE
  - EX. CABLE FENCE
  - EX. IRON FENCE
  - EX. GUARD RAIL
  - EX. SIGN WITH CONC. PAD
  - EX. MAILBOX
  - EX. TREE
  - ⊗ EX. TREE TO BE REMOVED
  - ▭ EX. STRUCTURE
  - ▨ PROPOSED CONCRETE WALK/FLATWORK
  - ▩ PROPOSED HEAVY DUTY CONCRETE PAVEMENT
- GRADING LEGEND**
- FINISHED GROUND ELEVATION
  - PROPOSED TOP OF CONCRETE WALK ELEV.
  - PROPOSED TOP OF PAVEMENT GUTTER ELEV.
  - EX. SPOT ELEVATION
  - FLOW DIRECTION



**CDS muery**  
ENGINEERS • SURVEYORS

**DEBRA J. DOCKERY, ARCHITECT, P.C.**  
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**CITY OF SAN ANTONIO**  
**FIRE STATION #24**  
SAN ANTONIO, TEXAS 78236-1244

**REVISIONS**

7/22/20	ADDENDUM 1
REVISED STORM DRAIN LAYOUT AND VERTICAL DESIGN	

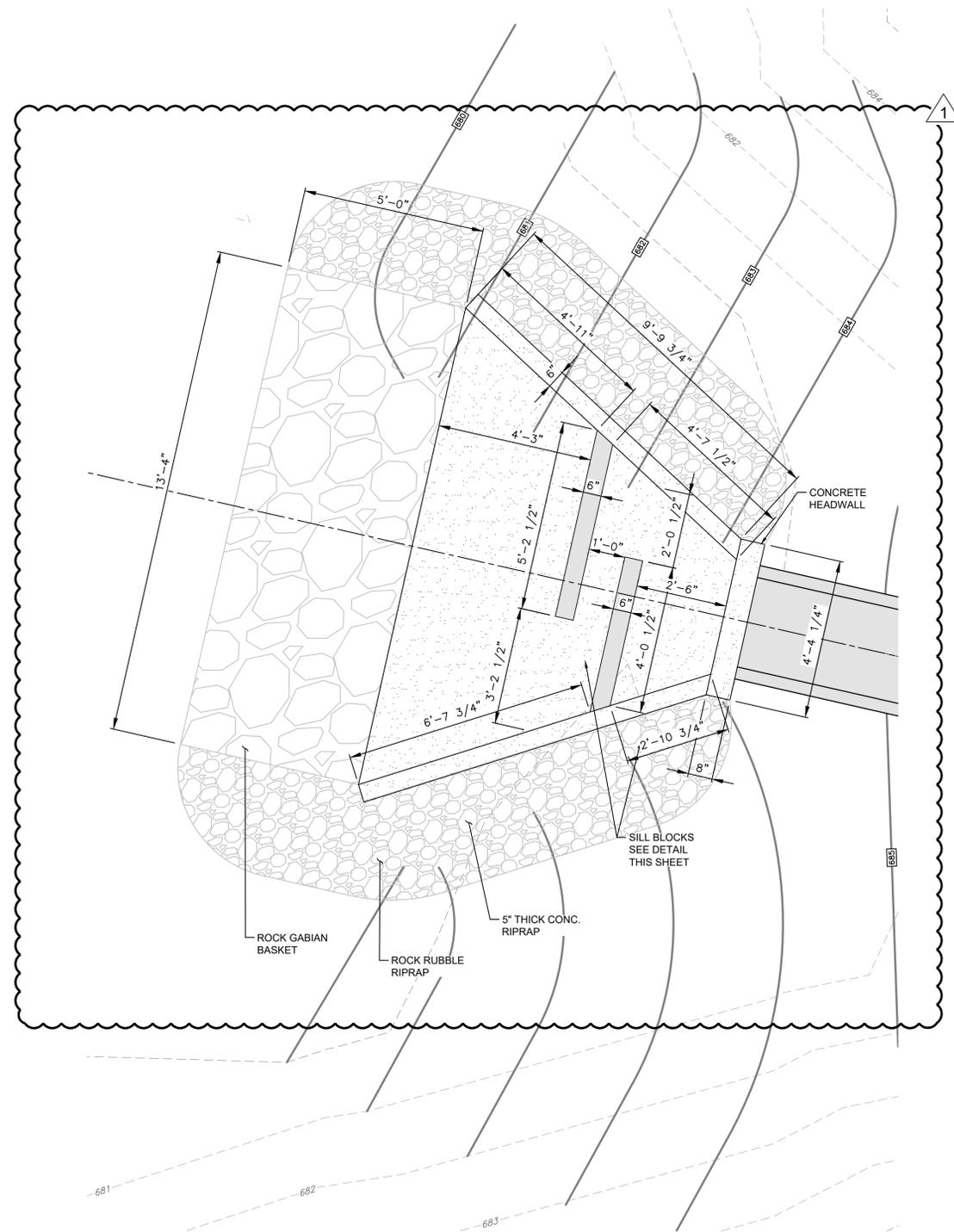
**PROJECT NO.**  
118037

**PHASE**  
100% CONSTRUCTION DOCUMENTS

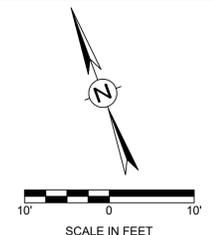
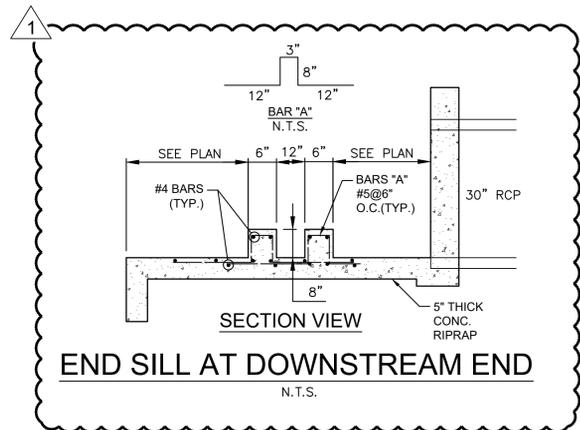
**DATE**  
APRIL 2020

**DESCRIPTION**  
OFFSITE DRAIN PLAN & PROFILE

**C4.3**



**DOWNSTREAM DRAIN  
STRUCTURE DETAIL**

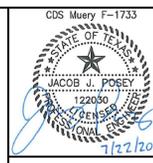


**LEGEND**

---	EX. SITE PROPERTY
---	EX. EDGE OF PAVEMENT
---	EX. CONTOUR
---	PROPOSED CONTOUR
○	EX. POWER POLE
○	EX. TELEPHONE POLE
○	EX. GUY WIRE
○	EX. LIGHT POLE
---	EX. OVERHEAD ELEC. LINE
---	EX. UNDERGROUND FIBER OPTIC LINE
---	EX. UNDERGROUND COMMUNICATION LINE
---	EX. TELEPHONE PEDESTAL
---	EX. WATER VALVE
---	EX. WATER METER
---	EX. FIRE HYDRANT
---	EX. CHAINLINK FENCE
---	EX. WIRE FENCE
---	EX. CABLE FENCE
---	EX. IRON FENCE
---	EX. GUARD RAIL
---	EX. SIGN WITH CONC. PAD
---	EX. SIGN
---	EX. MAILBOX
---	EX. TREE
---	EX. TREE TO BE REMOVED
---	EX. STRUCTURE
---	PROPOSED CONCRETE WALK/FLATWORK

**GRADING LEGEND**

+ 635.22	FINISHED GROUND ELEVATION
+ TC=635.00 GT=634.50	PROPOSED TOP OF CONCRETE WALK ELEV. PROPOSED TOP OF PAVEMENT GUTTER ELEV.
+ 634.14	EX. SPOT ELEVATION
←	FLOW DIRECTION



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**CITY OF SAN ANTONIO  
FIRE STATION #24**  
SAN ANTONIO, TEXAS 78236-1244

**REVISIONS**

△ 7/22/20	ADDENDUM 1
	REVISED STRUCTURE DETAILS

**PROJECT NO.**  
118037

**PHASE**  
100% CONSTRUCTION DOCUMENTS

**DATE**  
APRIL 2020

**DESCRIPTION**  
OFFSITE DRAIN PLAN & PROFILE DETAILS

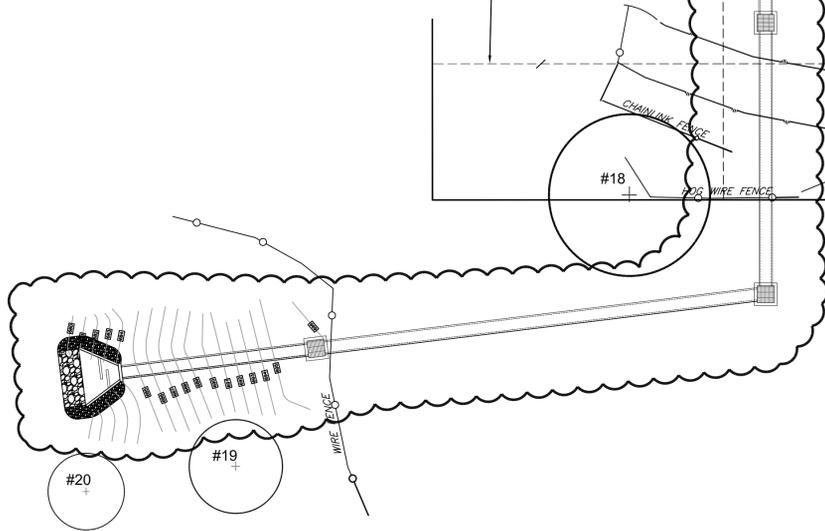
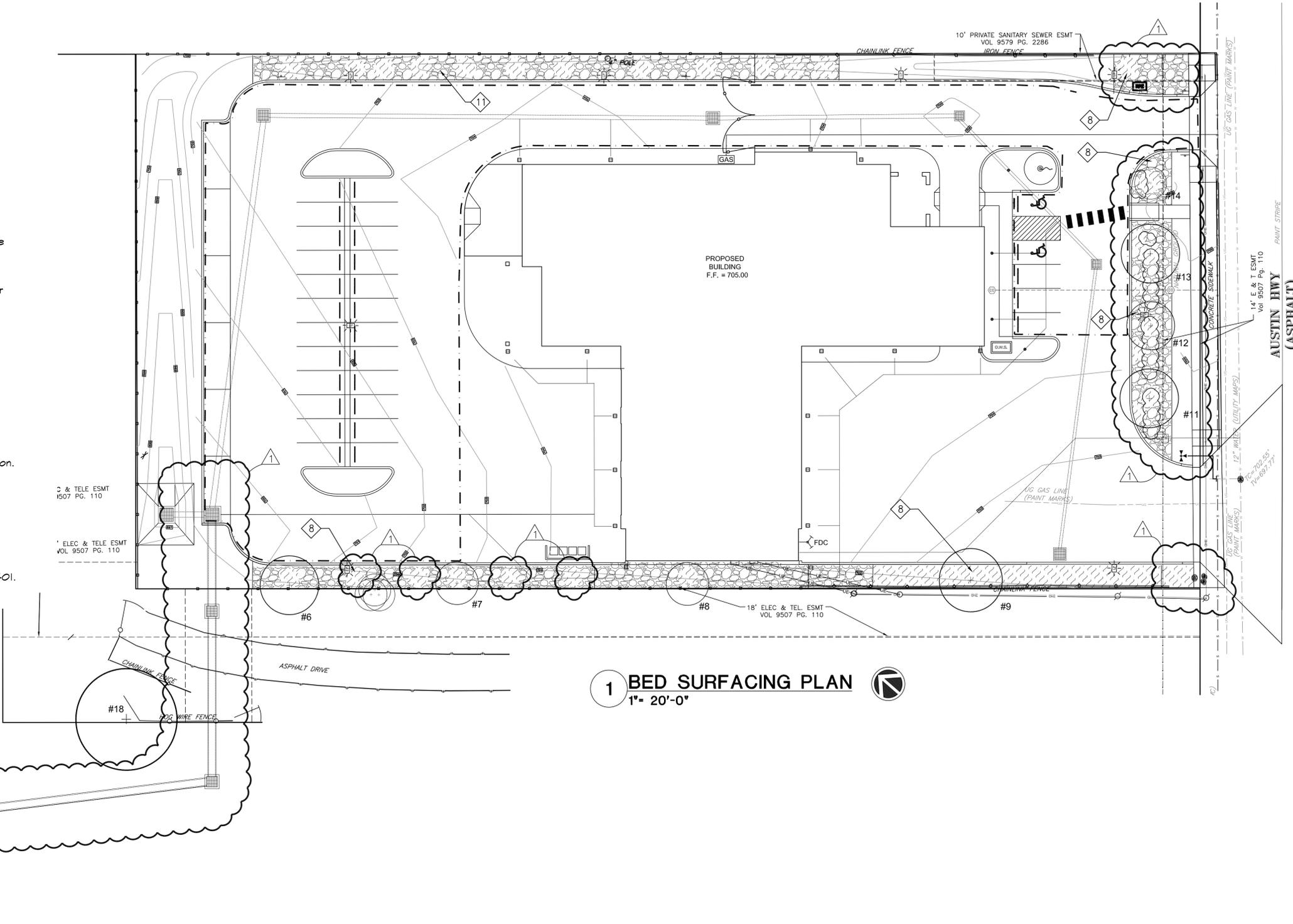
**C4.4**

**LEGEND**

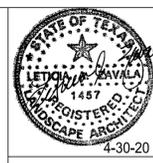
-  EXISTING TREES TO REMAIN
-  EXISTING SHRUBS TO REMAIN
-  TEXAS BLEND GRAVEL 2"-3" DIAMETER
-  SHREDDED BARK MULCH 3" DEEP

**PLANTING NOTES: ( # Keyed Notes)**

1. Landscape contractor shall be responsible for making himself familiar with the specifications and all submittal requirements. It is the responsibility of the Landscape contractor to notify the Landscape Architect for site inspections as specified in the specifications. Failure to notify the Landscape Architect does not relieve the contractor from inspection approval and will require the contractor to install/repair work as required for approval at the cost of the contractor. Landscape contractor is to inform Landscape Architect of the start date of work.
2. The landscape contractor is to notify Texas One Call (800-245-4545) and 800 DIG TESS (800-344-8311) 12 hours prior to any excavation. Landscape contractor shall be responsible for making himself familiar with all underground utilities, pipes and structures. Landscape contractor shall take sole responsibility for any cost incurred due to damage of said utilities whether or not Texas One Call is notified.
3. Do not willingly proceed with construction as designed when it is obvious that unknown obstruction and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the Landscape Architect. The Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
4. The Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.
5. If conflicts arise between size of areas and plans, Contractor is to contact Landscape Architect for resolution. Failure to make such conflicts known will result in Contractor's liability to relocate the materials.
6. See specifications for planting requirements, materials and execution.
7. Steel Edger. See Dtl. 1/L401.
8. Install 3" shredded bark mulch in bed areas.
9. Sod to limits of grading and to repair construction damage.
10. Sod to limits of grading and to repair construction damage.
11. Install 2"-3" diameter Texas Blend gravel, 4" deep. See Dtl. 6/L-401.



**1 BED SURFACING PLAN**  
1" = 20'-0"



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**CITY OF SAN ANTONIO**  
**FIRE STATION #24**  
SAN ANTONIO, TEXAS 78236-1244

REVISIONS	ADDENDA 1
7-20-20	
PROJECT NO.	18-14
PHASE	Construction Docs.
DATE	4-30-20
DESCRIPTION	BED SURFACING PLAN

**cfz** C•F•Z Group LLC  
Landscape Architecture & Planning  
7410 John Smith Drive, Suite 208  
San Antonio, Texas 78229  
210-366-1911/210-366-0044 fax  
PATH: S:\18-1148\DWGS\81148\_L3.DWG

**L-302**



7.22.2020

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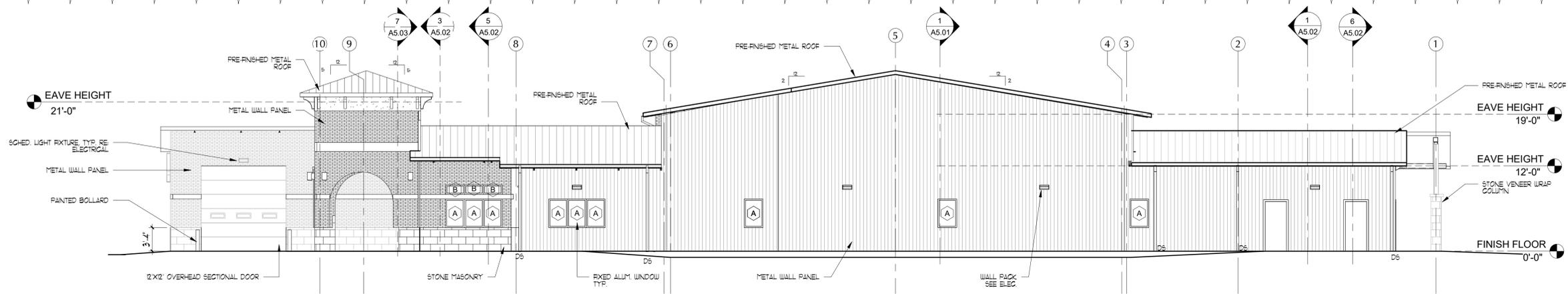
CITY OF SAN ANTONIO  
FIRE STATION #24  
2265 AUSTIN HWY.  
SAN ANTONIO, TEXAS 78218

REVISIONS  
ADDENDUM 1 -  
07/22/2020

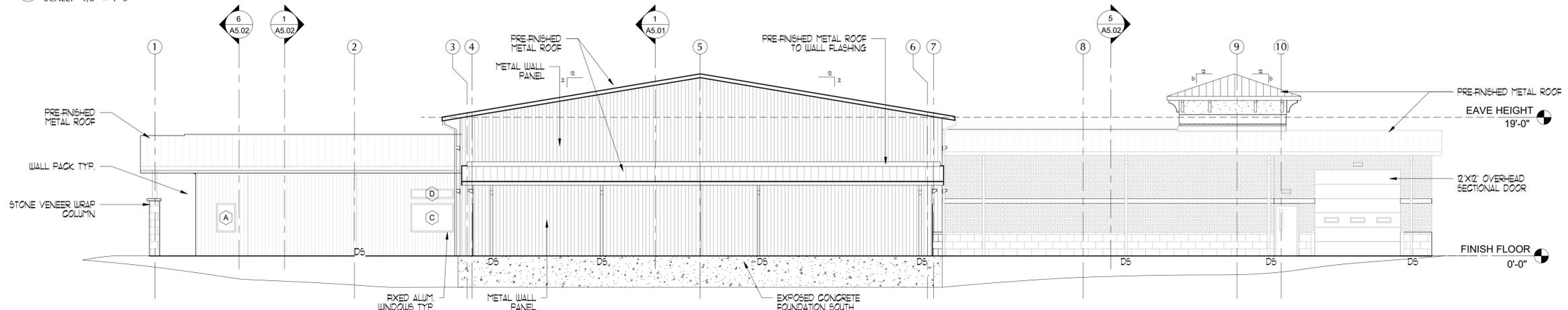
PROJECT NO.  
18-14  
PHASE  
CONSTRUCTION DOCUMENTS  
DATE

DESCRIPTION  
EXTERIOR ELEVATIONS

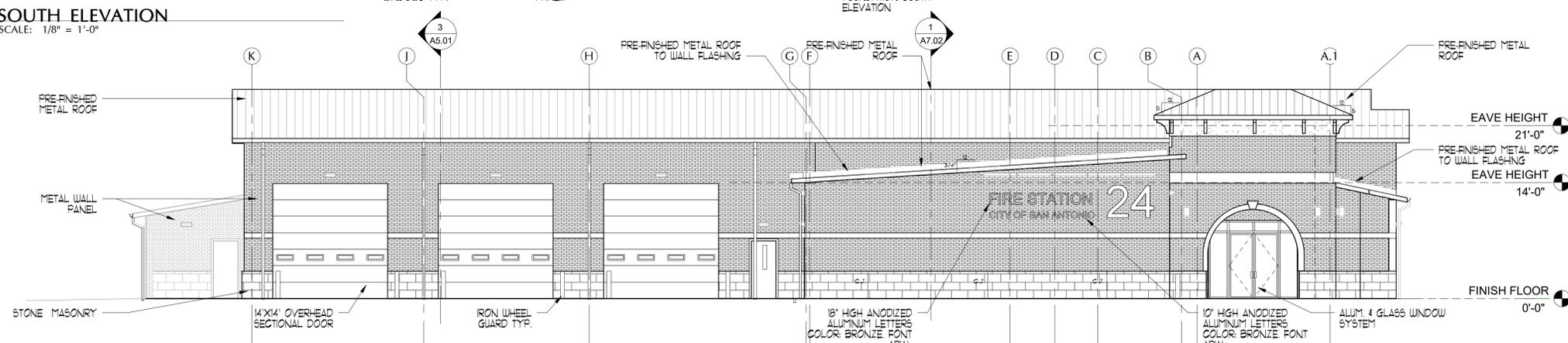
A4.01



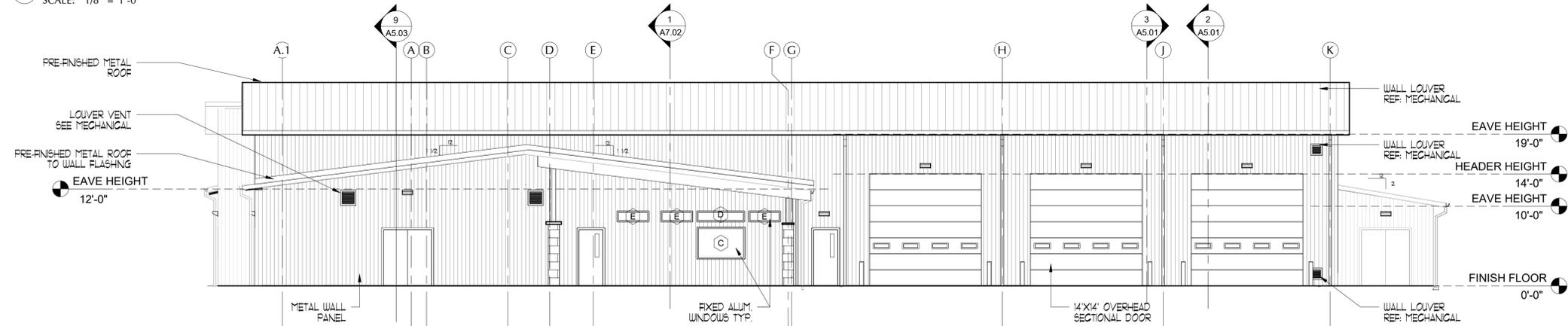
1 NORTH ELEVATION  
SCALE: 1/8" = 1'-0"



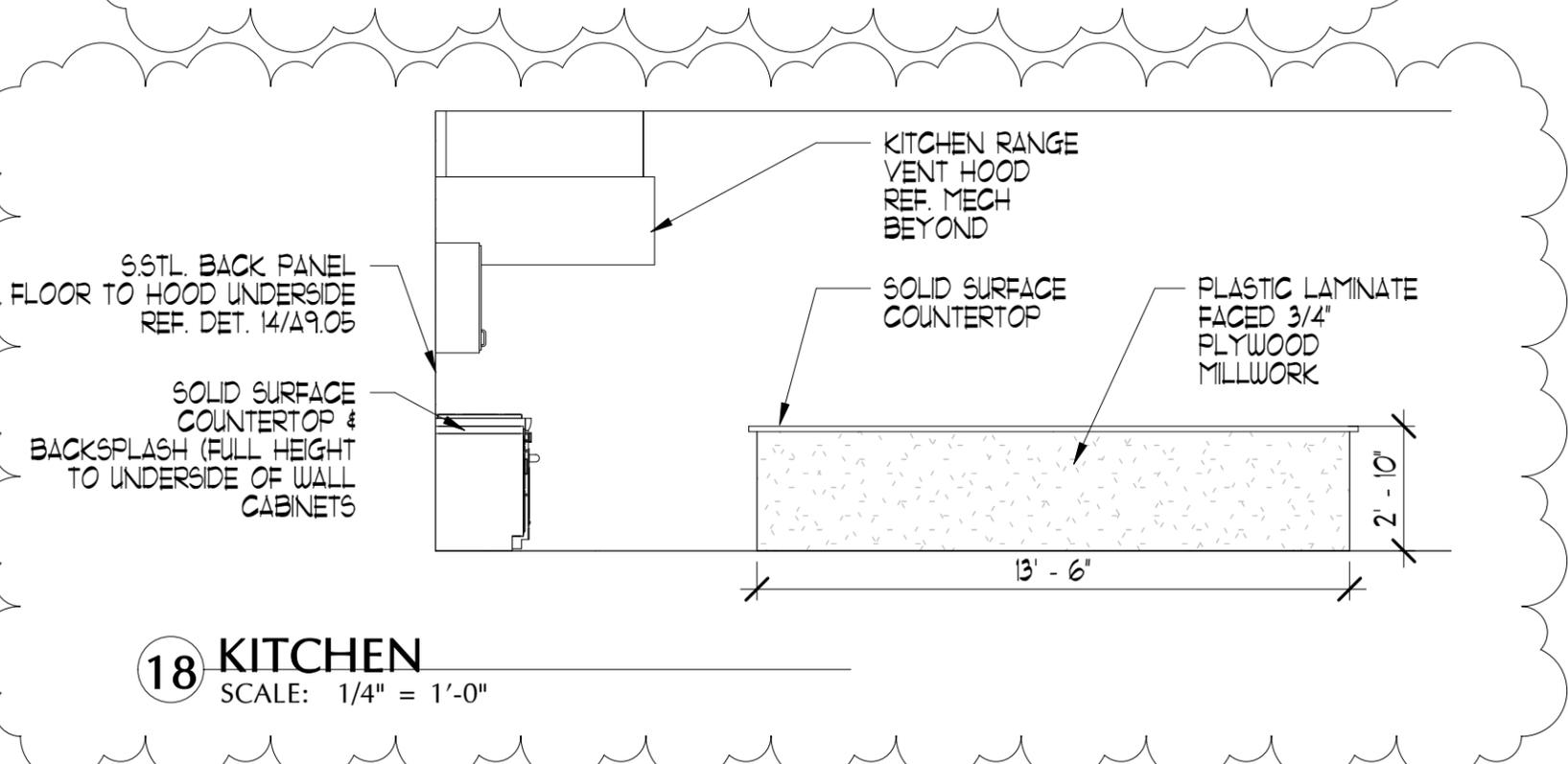
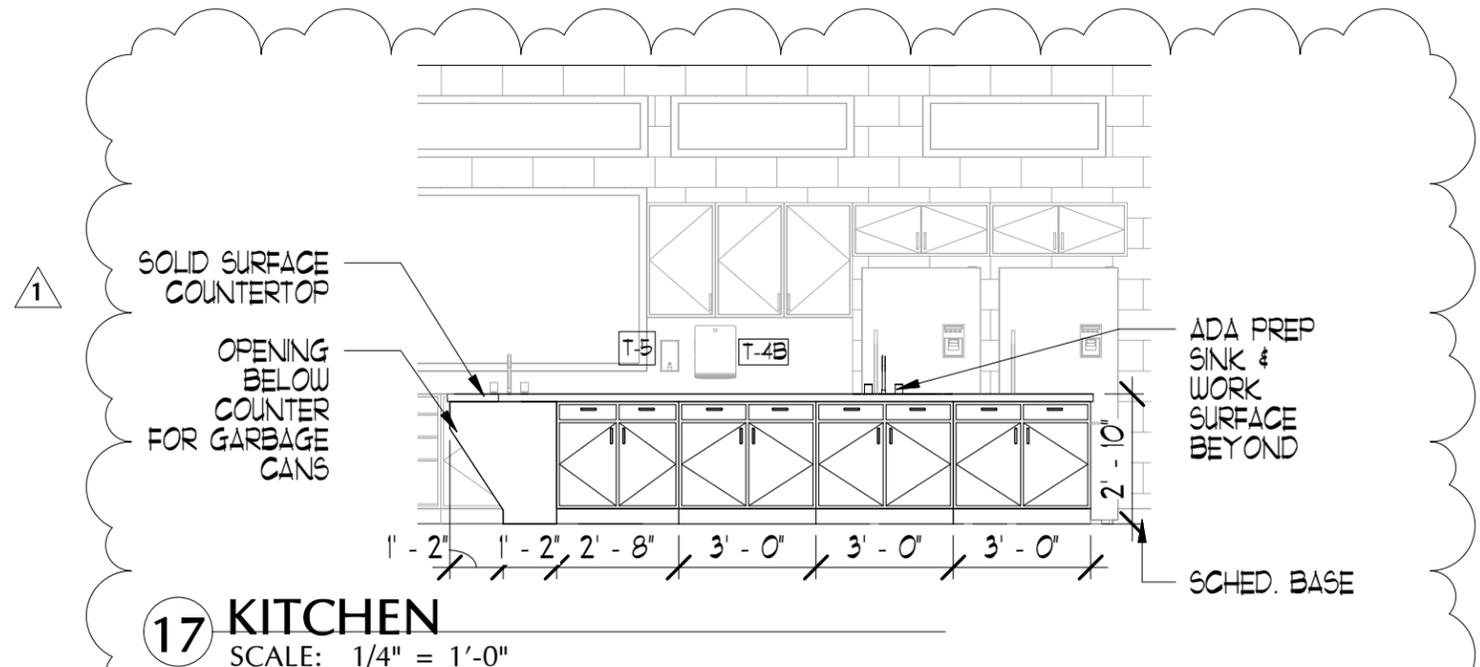
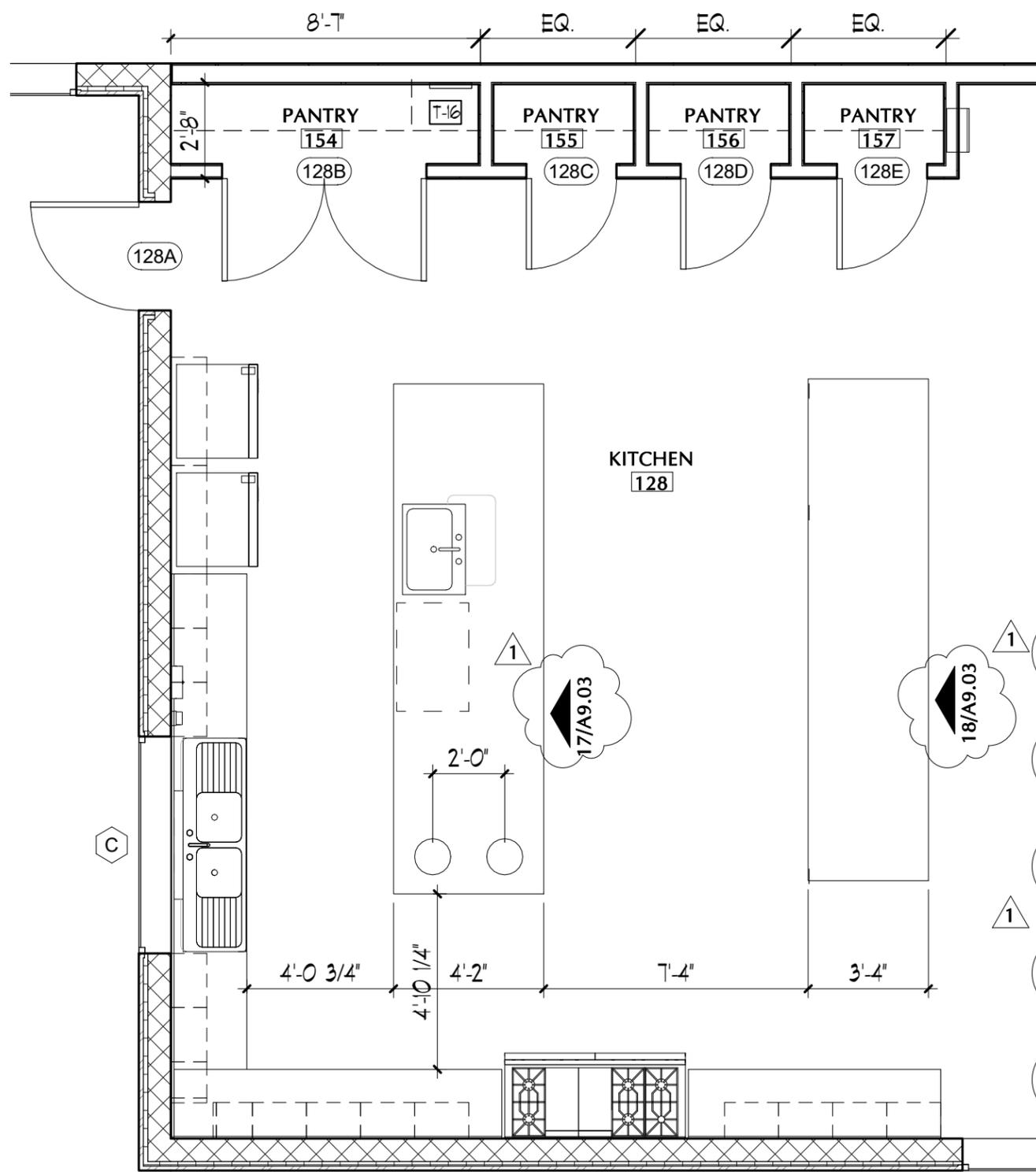
2 SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"



3 EAST ELEVATION  
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION  
SCALE: 1/8" = 1'-0"



**5 ENLARGED KITCHEN PLAN**  
SCALE: 1/4" = 1'-0"



# ADDENDUM

REFERENCE SHEET: A9.01

Project Name FIRE STATION # 24

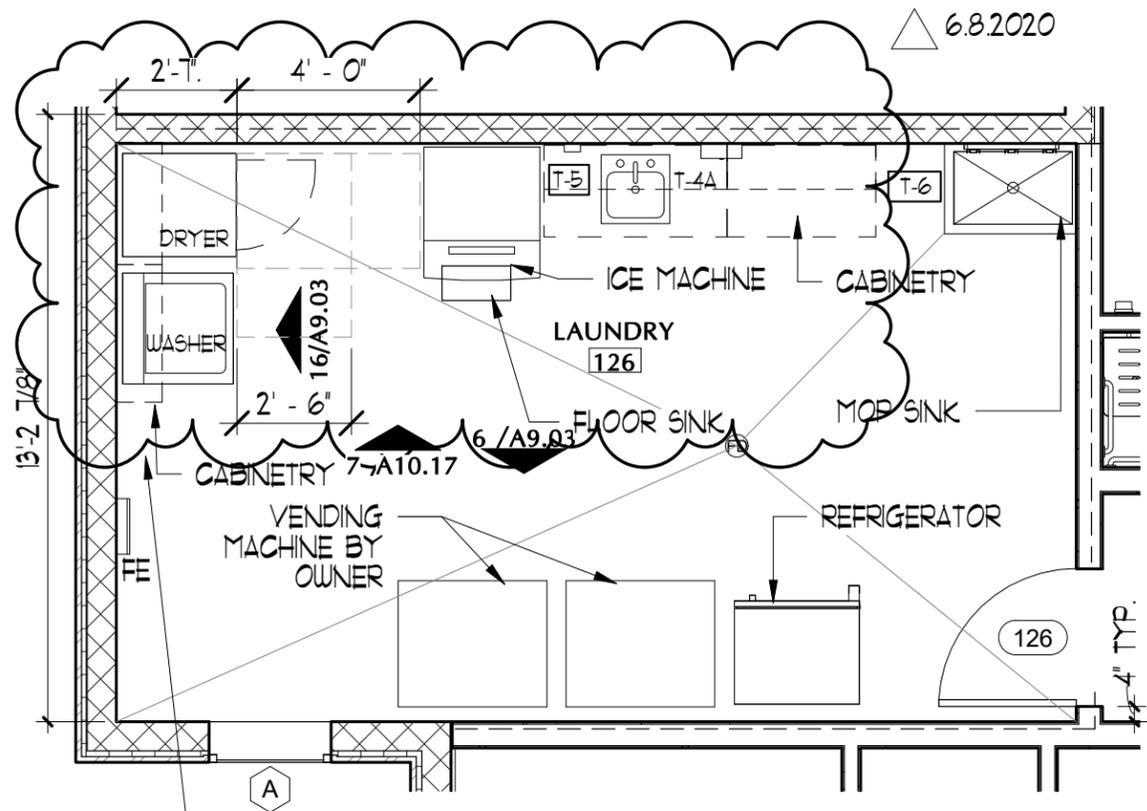
PROJECT NO. 18-14

DATE: JULY 21, 2020

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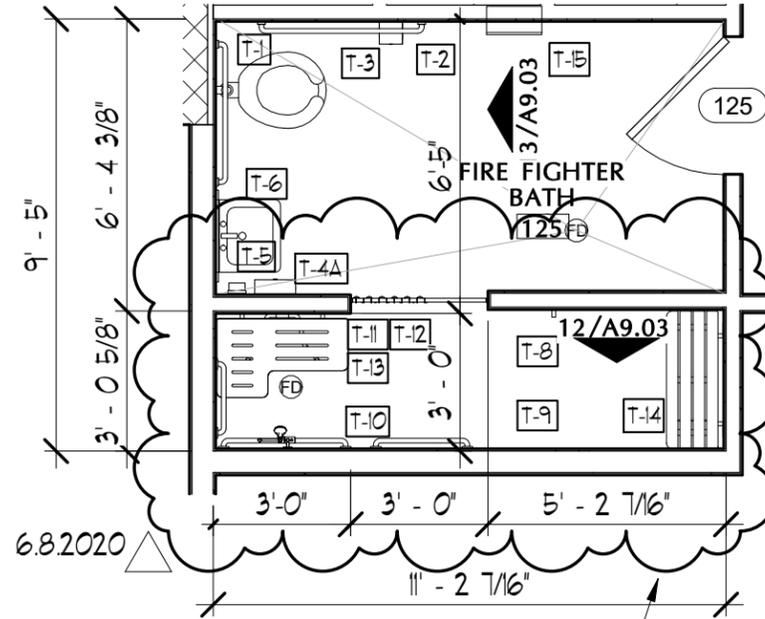
118 BROADWAY, SUITE 516 SAN ANTONIO, TX 78205  
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ADDENDUM # 1



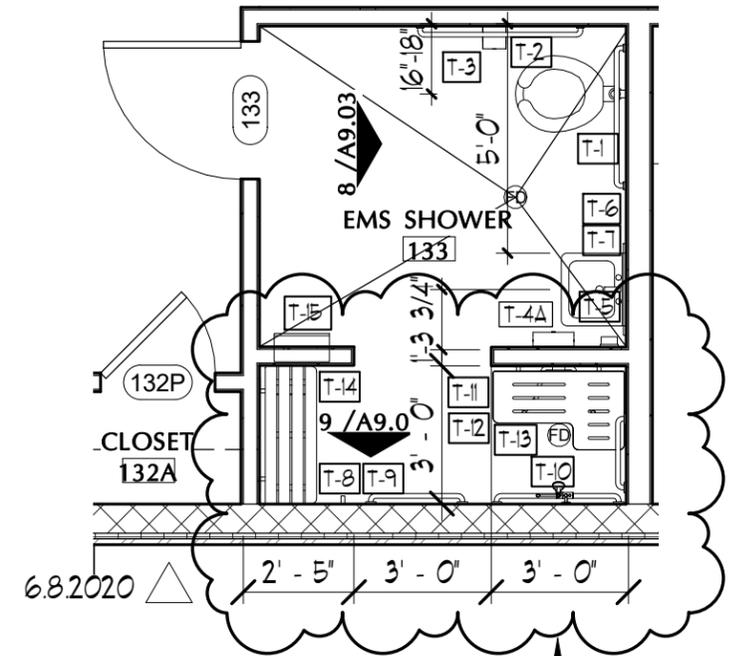
AMENDMENT # 6.8.2020 - ICE MACHINE AND WALL MOUNTED PAPER TOWEL DISPENSER RELOCATED ALONG CABINET/COUNTER PROVIDING 30"X48" CLEAR FLOOR SPACE FOR WASHER AND DRYER

**1 ENLARGED LAUNDRY PLAN**  
SCALE: 1/4" = 1'-0"



AMENDMENT # 6.8.2020 - SHOWER CONTROL RELOCATED TO OPPOSITE SIDE OF SEAT ENTRY WIDTH 36" WIDE ADJACENT TO A CLEAR INSIDE DIMENSIONS 36"X36" SHOWER REVISED LOCATION OF ACCESSIBLE BENCH

**2 ENLARGED BATH PLAN**  
SCALE: 1/4" = 1'-0"



AMENDMENT # 6.8.2020 - SHOWER CONTROL RELOCATED TO OPPOSITE SIDE OF SEAT ENTRY WIDTH 36" WIDE ADJACENT TO A CLEAR INSIDE DIMENSIONS 36"X36" SHOWER

**6 ENLARGED EMS DORM ROOM PLAN**  
SCALE: 1/4" = 1'-0"



## TAS REVISIONS

REFERENCE SHEET: A9.01

Project Name FIRE STATION #24

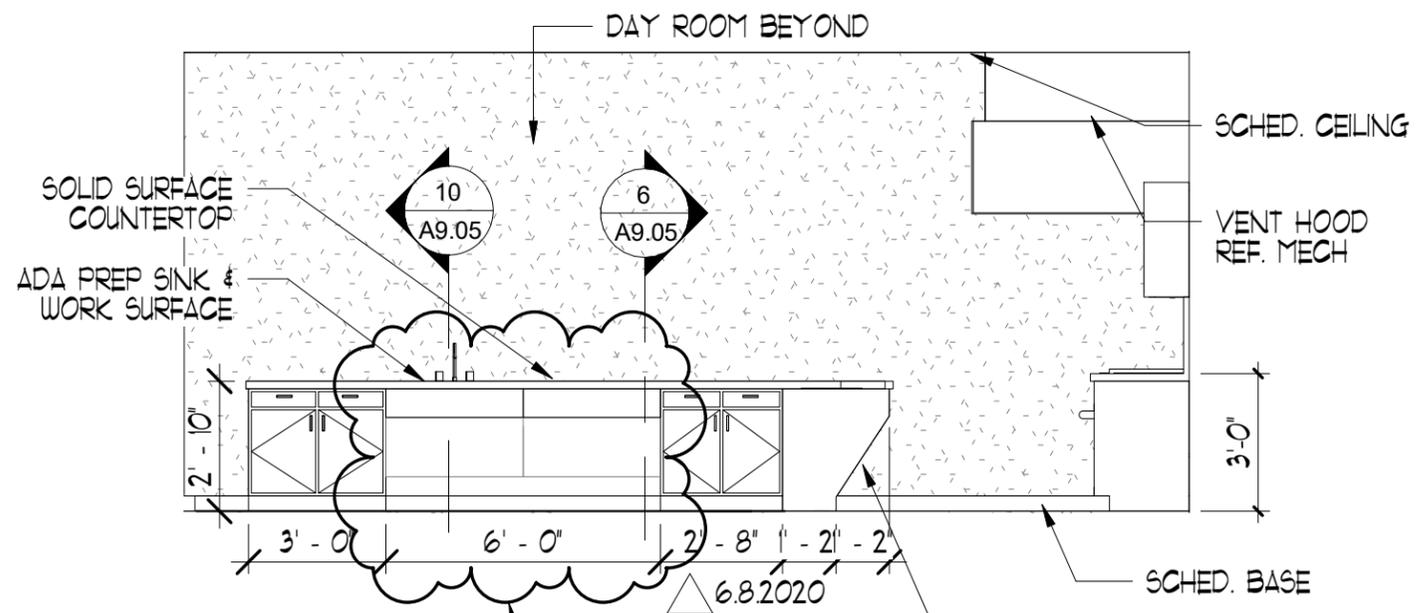
PROJECT NO. 18-14

DATE: MAY 29, 2020

**DEBRA J. DOCKERY, ARCHITECT, P.C.**

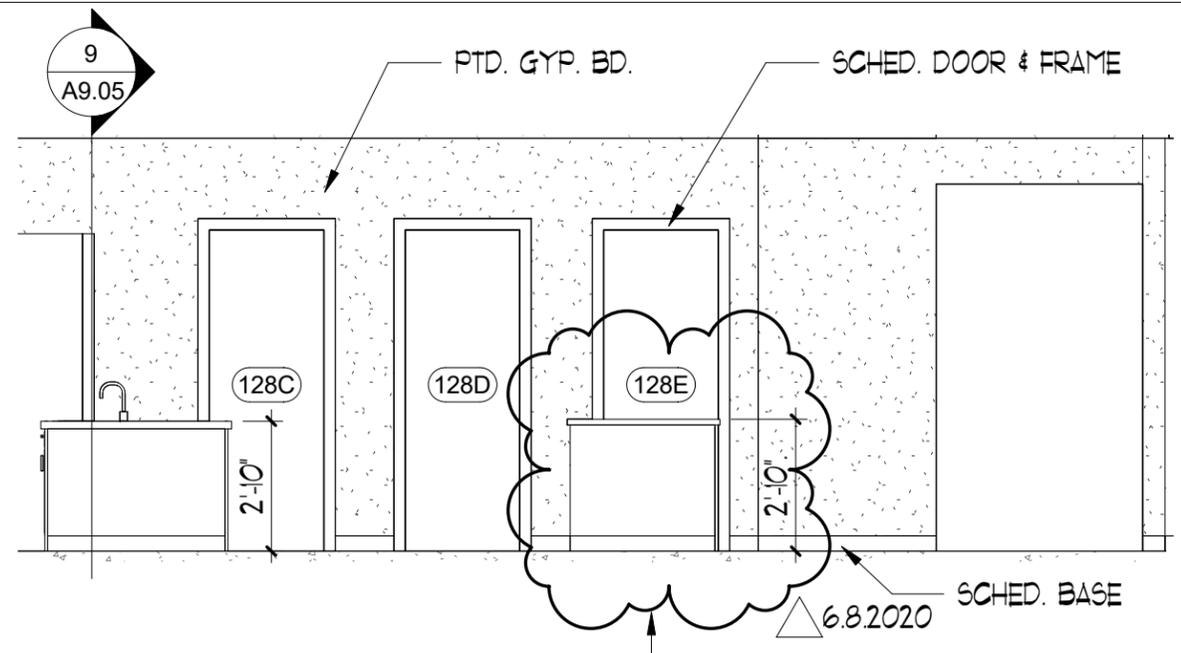
118 BROADWAY, SUITE 516 SAN ANTONIO, TX 78205  
PHONE (210) 225-6130 FAX (210) 225-7588

AMENDMENT # 6.8.2020



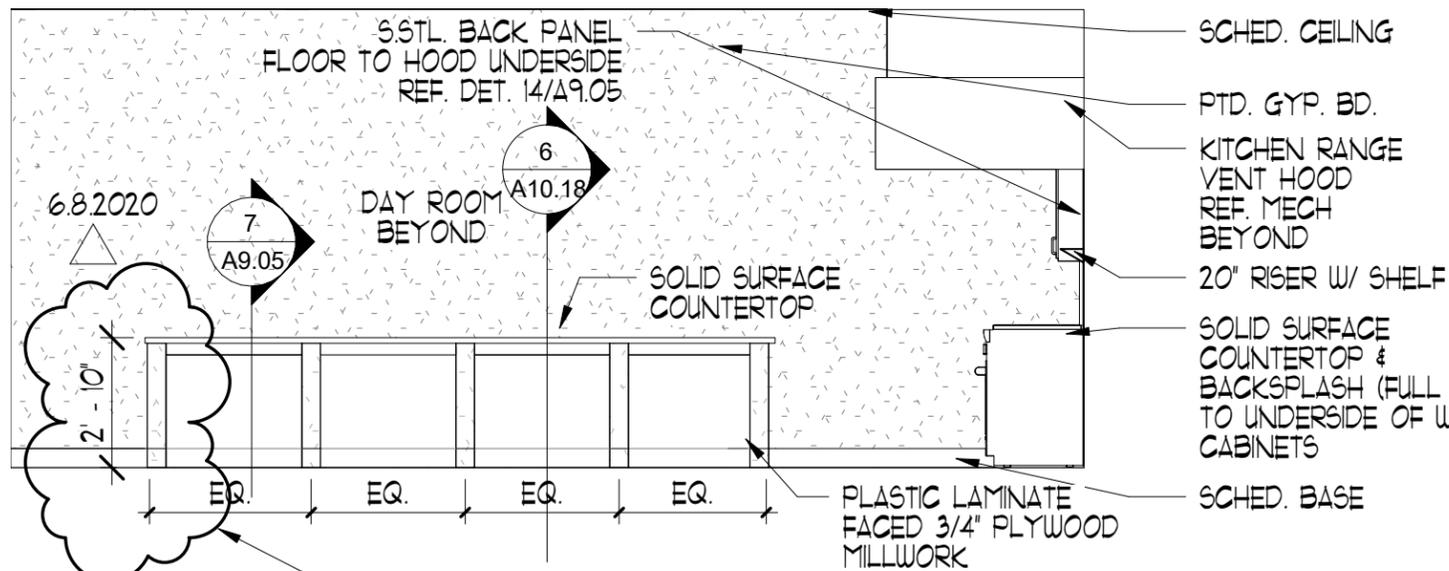
**3 KITCHEN**  
SCALE: 1/4" = 1'-0"

AMENDMENT # 6.8.2020 - OMIT CABINETRY AND PROVIDE KNEE SPACE 27" MIN. CLEARANCE  
OPENING BELOW COUNTER FOR GARBAGE CANS



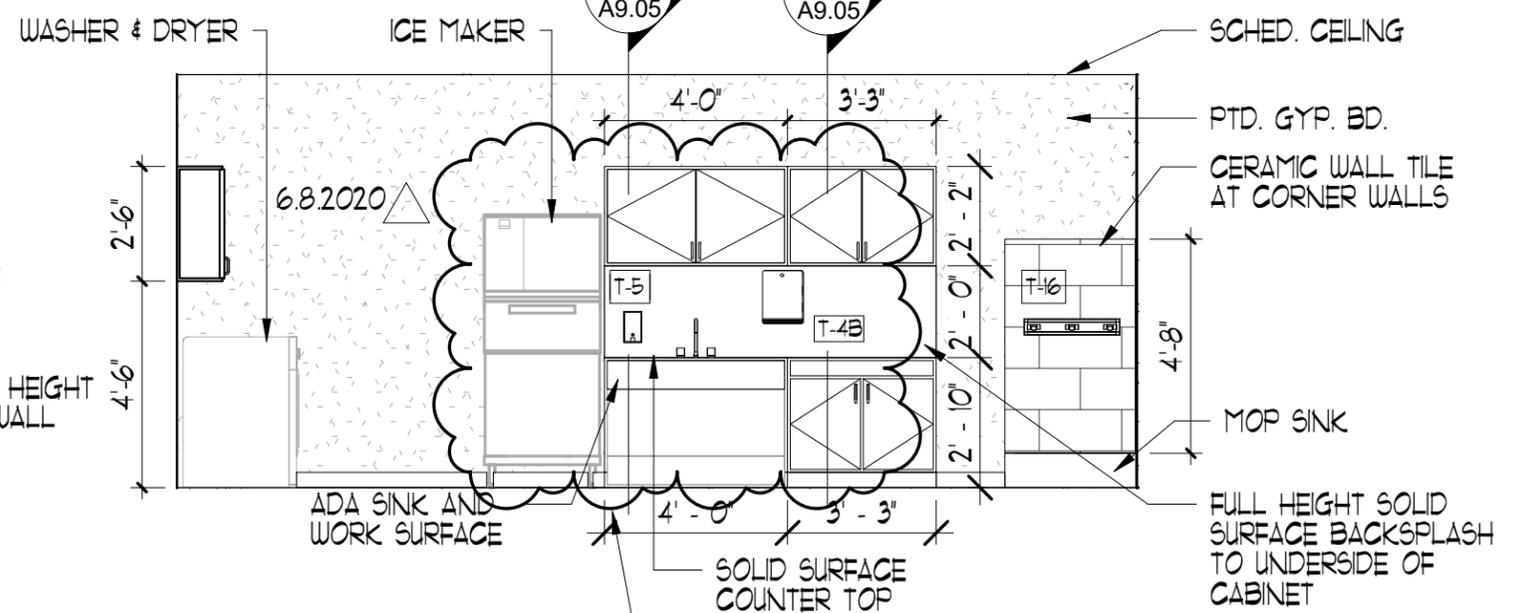
**4 KITCHEN**  
SCALE: 1/4" = 1'-0"

AMENDMENT # 6.8.2020 - REVISE COUNTER HEIGHT FROM 3'-0" TO 2'-10"



**5 KITCHEN**  
SCALE: 1/4" = 1'-0"

AMENDMENT # 6.8.2020 - REVISE COUNTER HEIGHT FROM 3'-0" TO 2'-10"



**7 LAUNDRY**  
SCALE: 1/4" = 1'-0"

AMENDMENT # 6.8.2020 - ICE MACHINE AND WALL MOUNTED PAPER TOWEL DISPENSER RELOCATED ALONG CABINET/COUNTER PROVIDING 30" X 48" CLEAR FLOOR SPACE FOR WASHER AND DRYER



# TAS REVISIONS

REFERENCE SHEET: A9.03

Project Name FIRE STATION #24

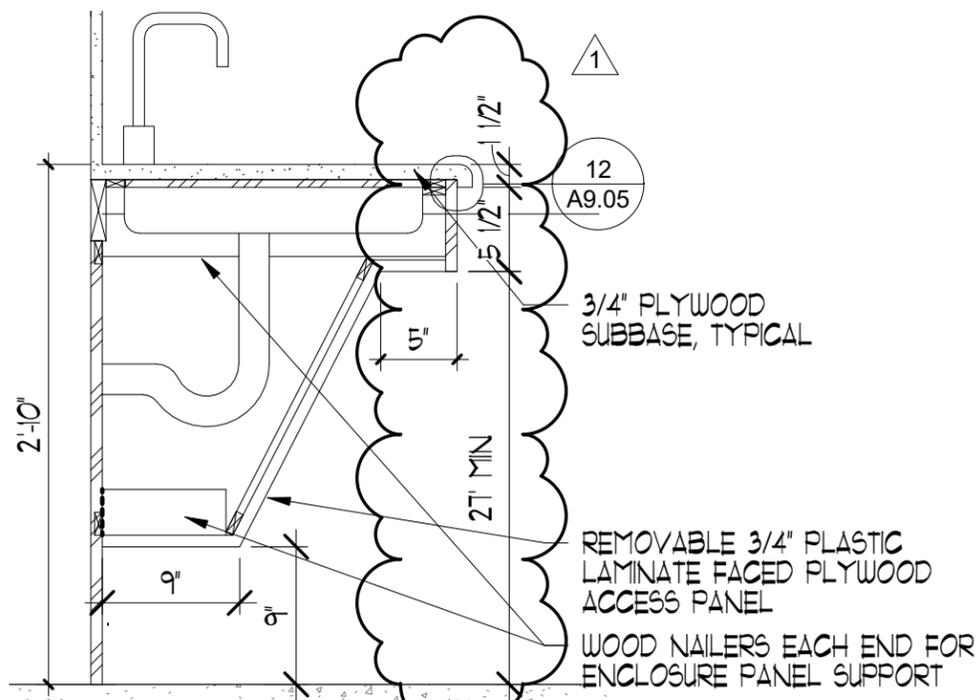
PROJECT NO. 18-14

DATE: MAY 29, 2020

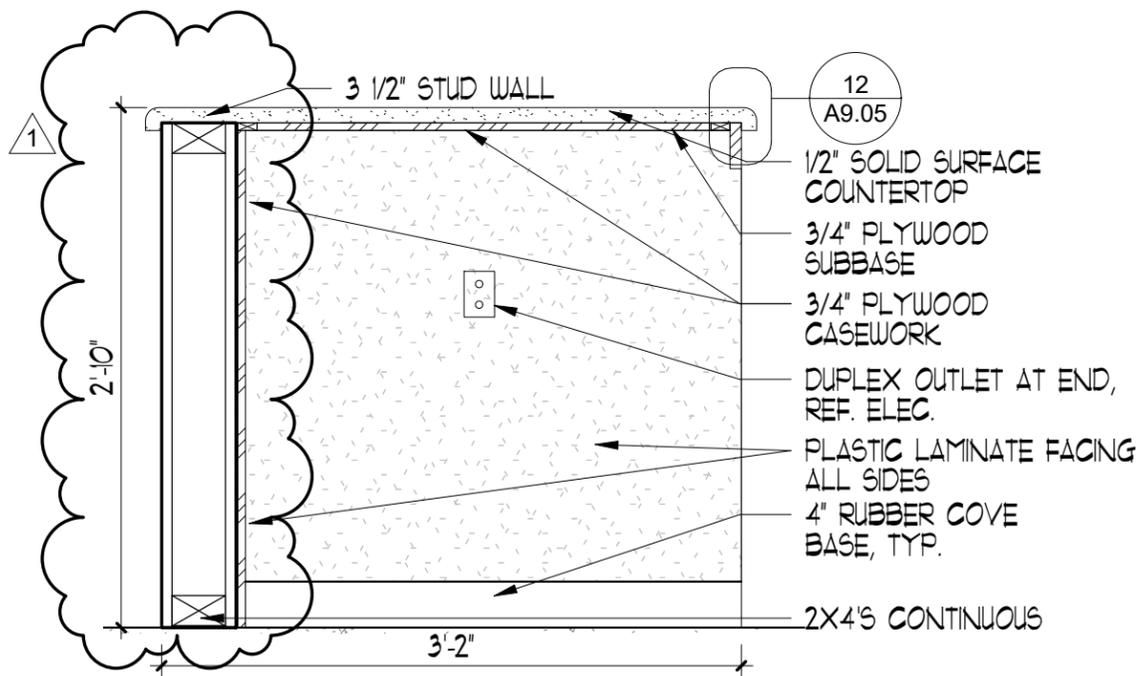
**DEBRA J. DOCKERY, ARCHITECT, P.C.**

118 BROADWAY, SUITE 516 SAN ANTONIO, TX 78205  
PHONE (210) 225-6130 FAX (210) 225-7588

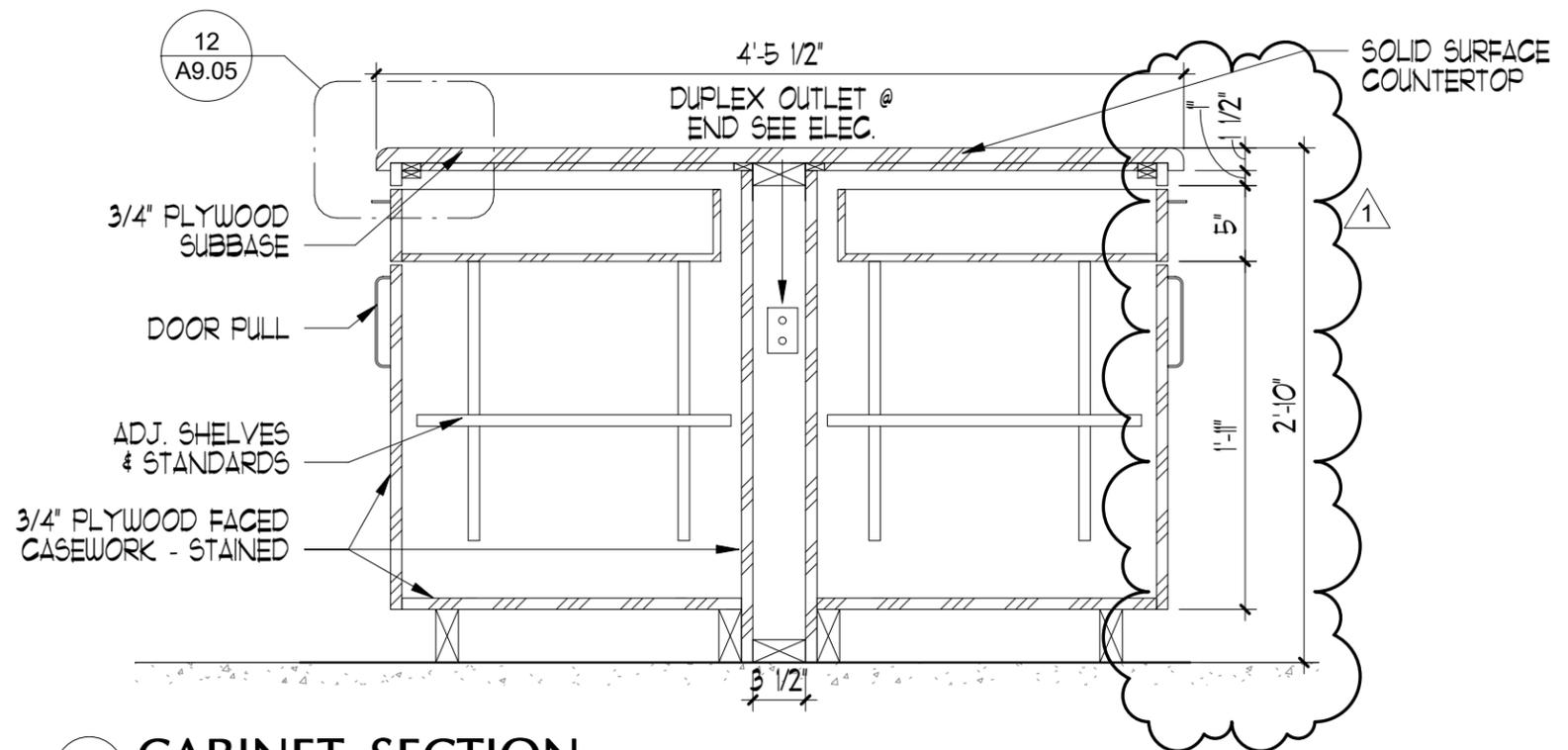
AMENDMENT # 6.8.2020



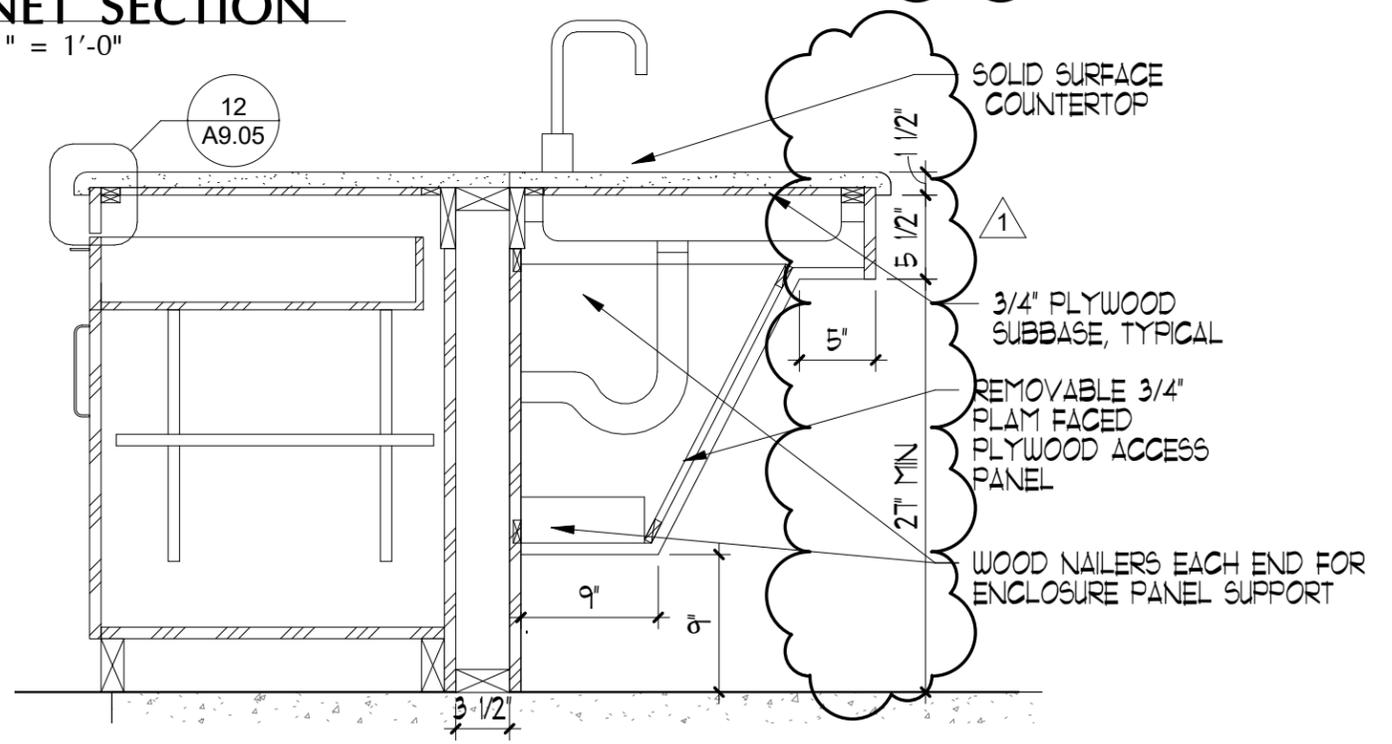
**4 SECTION @ SINK**  
SCALE: 1" = 1'-0"



**7 ISLAND SECTION**  
SCALE: 1" = 1'-0"



**6 CABINET SECTION**  
SCALE: 1" = 1'-0"



**10 ISLAND CABINET SECTION**  
SCALE: 1" = 1'-0"



**ADD #1**

REFERENCE SHEET: A9.05

Project Name FIRE STATION #24

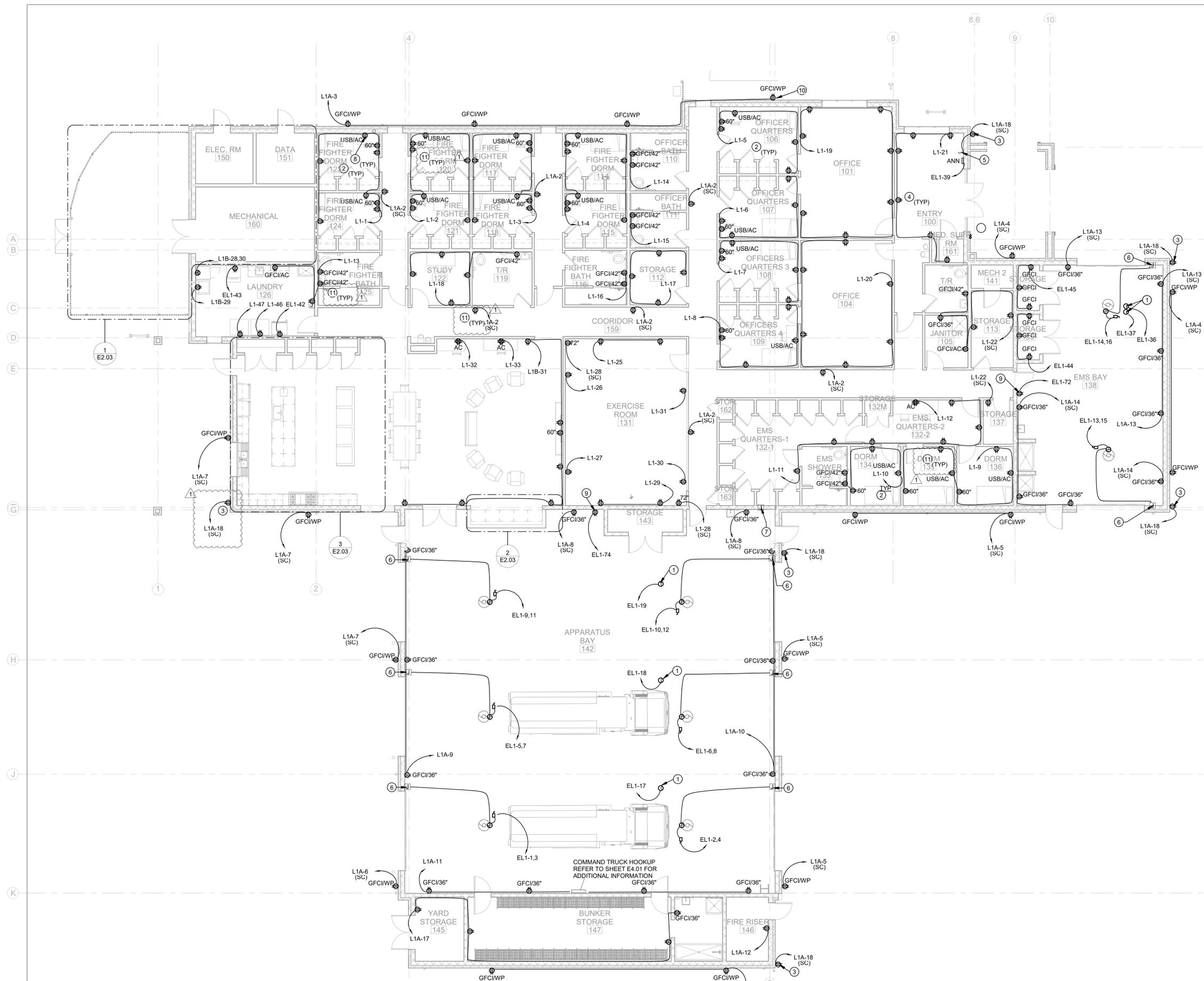
PROJECT NO. 18-14

DATE: MAY 29, 2020

**DEBRA J. DOCKERY, ARCHITECT, P.C.**

118 BROADWAY, SUITE 516 SAN ANTONIO, TX 78205  
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ADDENDUM # **1**

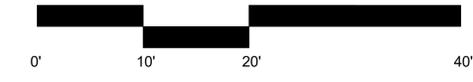


**GENERAL POWER NOTES (THIS SHEET ONLY)**

- COMPLETE WORK IN ACCORDANCE WITH APPLICABLE CODES, ORDINANCES, AND INTERPRETATIONS OF AHJ.
- COORDINATE WORK WITH OTHER TRADES AS REQUIRED TO PROVIDE COMPLETE SYSTEMS AND AVOID CONFLICTS.
- MOUNT RECEPTACLES AND DATA OUTLETS AT 18" AFF, AS MEASURED FROM BOTTOM OF BOX, EXCEPT WHERE ALTERNATIVE HEIGHT IS INDICATED.
- MOUNT RECEPTACLES AND DATA OUTLETS DESIGNATED "AC" (ABOVE COUNTER) 3" ABOVE BACK SPLASH, AS MEASURED FROM BOTTOM OF BOX.
- COORDINATE INSTALLATION OF ELECTRICAL WORK ABOVE THE CEILING TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR PLUMBING AND MECHANICAL EQUIPMENT BOTH CURRENT AND FUTURE. CONDUITS SHALL BE KEPT TIGHT TO STRUCTURE OR ROUTED THROUGH STRUCTURAL TRUSSES WHEREVER POSSIBLE.
- COORDINATE LOCATIONS OF SWITCHES, RECEPTACLES, AND DATA OUTLETS WITH FURNITURE AND CASEWORK PRIOR TO COMMENCING DEVICE ROUGH-IN TO AVOID CONFLICTS.
- COORDINATE LOCATION OF ALL DISCONNECT SWITCHES TO ENSURE THAT ALL NEC MINIMUM WORKING CLEARANCES ARE MAINTAINED.
- SINGLE HOMERUNS ARE SHOWN FOR CIRCUIT IDENTIFICATION ONLY. CIRCUITS MAY BE GROUPED UP TO THREE (3) PHASE CONDUCTORS PER RACEWAY, UNLESS NOTED OTHERWISE.
- MULTIWIRED (SHARED NEUTRAL) BRANCH CIRCUITS SHALL NOT BE INSTALLED. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR ALL SINGLE-PHASE BRANCH CIRCUITS.
- HOMERUNS AND RUNS BETWEEN JUNCTION BOXES SHALL BE MINIMUM OF 3/4" CONDUIT AND SHALL INCLUDE #10 (MINIMUM) CONDUCTORS AND INSULATED GROUNDING CONDUCTOR. CIRCUIT SHALL EXTEND FROM OCPD TO A JUNCTION BOX IN THE AREA OF THE RECEPTACLES OR UTILIZATION EQUIPMENT. DROPS TO INDIVIDUAL 20-AMP WIRING DEVICES SHALL INCLUDE #12 (MINIMUM) CONDUCTORS.
- HOMERUNS TO ISOLATED GROUND RECEPTACLES SHALL INCLUDE INSULATED, ISOLATED GROUND CONDUCTOR, IN ADDITION TO THE INSULATED GROUNDING CONDUCTOR.
- VOLTAGE DROP TO LAST DEVICE ON BRANCH CIRCUIT SHALL NOT EXCEED 3 PERCENT FROM PANEL. INCREASE BRANCH CIRCUIT CONDUCTOR SIZES AS REQUIRED TO ALLOW FOR CIRCUIT LENGTH.
- FMC SHALL BE USED FOR FINAL CONNECTIONS TO LIGHT FIXTURES, IN RUNS UP TO 6 FEET LONG.
- FMC OR LFMC SHALL BE USED FOR CONNECTIONS TO VIBRATION PRODUCING EQUIPMENT, SUCH AS MOTORS, TRANSFORMERS, AND HVAC EQUIPMENT. LFMC SHALL BE USED IN DAMP AND WET LOCATIONS.
- ALL DATA CONDUITS, SLEEVES AND STUBS SHALL BE TERMINATED WITH PLASTIC BUSHINGS.
- PROVIDE UL LISTED FIRE STOP SYSTEMS AT ALL PENETRATIONS THROUGH RATED PARTITIONS.
- WIRING DEVICES SHALL BE [SPECIFICATION-GRADE] DEVICES, LISTED AND LABELED BY A NRTL.
- ALL FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER.
- MARK JUNCTION BOX COVERS USING PERMANENT MARKER INDICATING THE PANEL AND CIRCUIT NUMBERS SERVING THE JUNCTION BOX.
- MARK SWITCH AND RECEPTACLE COVERPLATES USING APPROVED LABEL MAKER, INDICATING THE PANEL AND CIRCUIT NUMBERS SERVING THE DEVICE(S).
- PROVIDE CEILING ACCESS DOORS TO GAIN ACCESS TO EQUIPMENT ABOVE HARD CEILINGS.

**KEYED NOTES (APPLIES TO THIS SHEET ONLY)**

- PROVIDE A DEDICATED, NEMA 5-20R SIMPLEX RECEPTACLE. PROVIDE A CORD STRAIN RELIEF DEVICE (KELLEMS #073041279 OR EQUAL). PROVIDE CORD ASSEMBLY WITH YELLOW OUTER JACKET, 12/3 COPPER SOW CORD, NEMA 5-20 AND NEMA 5-20P DEVICES ON OPPOSITE ENDS. CORD SHALL END 36" ABOVE FINISHED FLOOR. PROVIDE A SECOND CORD AND RECEPTACLE ASSEMBLY WITH YELLOW OUTER JACKET, 12/3 COPPER SOW CORD, NEMA 5-20 AND NEMA 5-20P DEVICES ON OPPOSITE ENDS 18" IN LENGTH FOR FINAL CONNECTION TO VEHICLE.
- IN ALL DORM ROOMS FIELD VERIFY ALL RECEPTACLE LOCATIONS AND HEIGHTS WITH OWNER FURNISHED FURNITURE AND EQUIPMENT.
- RECEPTACLE MOUNTED IN SOFFIT FOR SEASONAL DECORATIONS. RECEPTACLE SHALL BE GFCI/WEATHERPROOF. COORDINATE EXACT HEIGHT AND LOCATION WITH ARCHITECTURAL PLANS BEFORE ROUGH-IN.
- ALL RECEPTACLES LOCATED IN ENTRY 100 SHALL BE TAMPER RESISTANT PER NEC.
- LABELED SWITCH SEASONAL LIGHTING.
- PROVIDE A SURFACE MOUNTED J-BOX FOR CONTROL WIRING ONLY TO OVERHEAD DOOR MOTOR. COORDINATE HEIGHT PRIOR TO ROUGH-IN.
- PROVIDE A JUNCTION BOX, FLUSH WITH WALL FOR PUSH BUTTON INSTALLATION. PUSH BUTTON SHALL CONTROL PEDESTRIAN WARNING SIGNS, TRAFFIC WARNING SIGNS AND FLASHER BEACON LIGHT. SEE SHEET E1.01 FOR LOCATIONS OF WARNING SIGNS. COORDINATE EXACT LOCATION AND HEIGHT OF PUSH BUTTON PRIOR TO ROUGH-IN.
- DEVICE SHALL BE A POWER/USB CHARGING TYPE DEVICE. PROVIDE TAMPER PROOF, DUPLEX RECEPTACLE WITH INTEGRAL USB 2.0 TYPE A CHARGING SOCKET. COORDINATE HEIGHT AND LOCATION WITH OWNER FURNISHED FURNITURE PRIOR TO ROUGH-IN.
- AT STRUCTURE FOR GPS ANTENNA.
- MOUNT RECEPTACLE FLUSH WITH WALL. REFER TO ARCHITECTURAL DRAWINGS FOR WALL DETAILS.
- PROVIDE AFCI BREAKER TO ALL CIRCUITS IN DORM ROOMS, HALLWAYS & BATHROOMS PER NEC.



**1 POWER FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"

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**CITY OF SAN ANTONIO**  
**FIRE STATION #24**  
 2265 AUSTIN HWY  
 SAN ANTONIO, TEXAS 78218

REVISIONS	
1-2020-06-23 - DSD CITY REVIEW COMMENTS	
PROJECT NO.	
18-14	
PHASE	
100% CD	
DATE	
04/30/2020	
DESCRIPTION	
POWER FLOOR PLAN	

**E2.01**





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F-1008

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**CITY OF SAN ANTONIO**  
**FIRE STATION #24**  
 2265 AUSTIN HWY  
 SAN ANTONIO, TEXAS 78218

REVISIONS  
1 - 2/20/2020 - DSD CITY REVIEW COMMENTS

PROJECT NO.  
18-14

PHASE  
100% CD

DATE  
04/30/2020

DESCRIPTION  
ELECTRICAL SCHEDULES

**E5.02**

### Branch Panel: L1

Location: ELEC. RM 150  
Supply From: MDP  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 120/208 Wye  
Phases: 3  
Wires: 4

A.I.C. Rating: 22000 A  
Mains Type: MLO  
Mains Rating: 225 A

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT		
1	RECEP. FF DORM 123/124 (NOTE 4)	Recep...	20 A	1	1440	1440		1	20 A	Recep...	RECEP. FF DORM 123/124 (NOTE 4)	2		
3	RECEP. FF DORM 117/118 (NOTE 4)	Recep...	20 A	1		1440	1440	1	20 A	Recep...	RECEP. FF DORM 117/118 (NOTE 4)	4		
5	RECEP. OFFICER QUARTERS 106 (NOTE 4)	Recep...	20 A	1			900	900	1	20 A	Recep...	RECEP. OFFICER QUARTERS 107 (NOTE 4)	6	
7	RECEP. OFFICER QUARTERS 108 (NOTE 4)	Recep...	20 A	1	900	900			1	20 A	Recep...	RECEP. OFFICER QUARTERS 109 (NOTE 4)	8	
9	RECEP. EMS DORM 135/136 (NOTE 4)	Recep...	20 A	1		1080	900		1	20 A	Recep...	RECEP. DORM 134/EMS SHOWER 133 (NOTE 4)	10	
11	RECEP. EMS QUARTERS 132 (NOTE 4)	Recep...	20 A	1			1080	360	1	20 A	Recep...	RECEP. DESK EMS QUARTERS 132 (NOTE 4)	12	
13	RECEP. LAUNTRY 126/FF 125	Recep...	20 A	1	720	360			1	20 A	Recep...	RECEP. OFF BATH 110 (NOTE 4)	14	
15	RECEP. OFF BATH 111 (NOTE 4)	Recep...	20 A	1		360	360		1	20 A	Recep...	RECEP. FF BATH 116 (NOTE 4)	16	
17	RECEP. STORAGE 112	Recep...	20 A	1				720	900	1	20 A	Recep...	RECEP. STUDY 122/TR 119 (NOTE 4)	18
19	RECEP. OFFICE 101	Recep...	20 A	1	1260	1080			1	20 A	Recep...	RECEP. OFFICE 104 (NOTE 4)	20	
21	RECEP. ENTRY 100/MED SUPPLY 161	Recep...	20 A	1		1080	1080		1	20 A	Recep...	RECEP. TR 103/JANITOR 105/STORAGE 113	22	
23	WATER FOUNTAIN ENTRY 100 (NOTE 1)	Other	20 A	1			600	600	1	20 A	Other	WATER FOUNTAIN COORIDOR 159 (NOTE 1)	24	
25	RECEP. EXERCISE ROOM 131	Recep...	20 A	1	360	180			1	20 A	Recep...	RECEP. EXERCISE ROOM 131	26	
27	RECEP. EXERCISE ROOM 131	Recep...	20 A	1		180	360		1	20 A	Recep...	RECEP. EXERCISE ROOM 131	28	
29	RECEP. EXERCISE ROOM 131	Recep...	20 A	1			360	180	1	20 A	Recep...	RECEP. EXERCISE ROOM 131	30	
31	RECEP. EXERCISE ROOM 131	Recep...	20 A	1	180	360			1	20 A	Recep...	RECEP. DESK DAY ROOM	32	
33	RECEP. DESK DAY ROOM	Recep...	20 A	1		360	1200		1	20 A	Recep...	GARBAGE DISPOSAL KITCHEN (NOTE 1)	34	
35	RECEP. COUNTER KITCHEN	Recep...	20 A	1			180	180	1	20 A	Recep...	RECEP. COUNTER KITCHEN	36	
37	RECEP. COUNTER KITCHEN	Recep...	20 A	1	180	180			1	20 A	Recep...	RECEP. COUNTER KITCHEN	38	
39	RECEP. COUNTER KITCHEN	Recep...	20 A	1		180	180		1	20 A	Recep...	RECEP. COUNTER KITCHEN	40	
41	RECEP. COUNTER KITCHEN	Recep...	20 A	1			180	180	1	20 A	Recep...	RECEP. COUNTER KITCHEN	42	
43	OVEN KITCHEN (NOTE 1&2)	Recep...	20 A	1	180	720			1	20 A	Recep...	RECEP. ISLANDS KITCHEN	44	
45	Spare	--	20 A	1			0	1200		1	20 A	Recep...	VENDING MACHINE LAUNDRY 126 (NOTE 1)	46
47	VENDING MACHINE LAUNDRY 126 (NOTE 1)	Recep...	20 A	1				1200	180	1	20 A	Recep...	IRRIGATION CONTROL MECH RM 160	48
49	RECEP. ELEC RM 150	Recep...	20 A	1	180	0			1	20 A	--	Spare	50	
51	Spare	--	20 A	1		0	0		1	20 A	--	Spare	52	
53	Spare	--	20 A	1			0	0	1	20 A	--	Spare	54	
55	Spare	--	20 A	1		0	0		1	20 A	--	Spare	56	
57	Spare	--	20 A	1			0	0	1	20 A	--	Spare	58	
59	Spare	--	20 A	1				0	0	1	20 A	--	Spare	60
<b>Total Load:</b>					10520 VA	11400 VA		8700 VA						
<b>Total Amps:</b>					91 A	97 A		73 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Other	1200 VA	100.00%	1200 VA	<b>Total Conn. Load(KVA):</b> 30720 VA <b>Total Demand(KVA):</b> 20960 VA <b>Total Demand(Amps):</b> 58 A
Receptacle	29520 VA	66.94%	19760 VA	

**Notes:**  
1. PROVIDE GFCI BREAKER.  
2. PROVIDE SHUNT TRIP BREAKER.  
3. PROVIDE S/C STUDY PER SPECIFICATIONS. PROVIDE PANELBOARD WITH AIC RATING SUFFICIENT FOR AVAILABLE FAULT CURRENT.  
4. PROVIDE AFCI BREAKER.

### Branch Panel: L1A

Location: ELEC. RM 150  
Supply From: MDP  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 120/208 Wye  
Phases: 3  
Wires: 4

A.I.C. Rating: 22000 A  
Mains Type: MLO  
Mains Rating: 225 A

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT		
1	RECEP. SERVICE YARD	Recep...	20 A	1	180	1260			1	20 A	Recep...	RECEP. COORIDORS (NOTE 2)	2	
3	RECEP. OUTSIDE PERIMETER	Recep...	20 A	1		720	540		1	20 A	Recep...	RECEP. OUTSIDE PERIMETER	4	
5	RECEP. OUTSIDE PERIMETER	Recep...	20 A	1			720	540	1	20 A	Recep...	RECEP. OUTSIDE PERIMETER	6	
7	RECEP. OUTSIDE PERIMETER	Recep...	20 A	1	540	360			1	20 A	Recep...	RECEP. APPARATUS BAY	8	
9	RECEP. APPARATUS BAY	Recep...	20 A	1		540	540		1	20 A	Recep...	RECEP. APPARATUS BAY	10	
11	RECEP. APPARATUS BAY	Recep...	20 A	1			720	180	1	20 A	Recep...	RECEP. FIRE RISER 146	12	
13	RECEP. EMS BAY 138	Recep...	20 A	1	720	720			1	20 A	Recep...	RECEP. EMS BAY 138	14	
15	Lighting - Rooms 119, 122, 126, 131	Lightin...	20 A	1		714	264		1	20 A	Other	Lighting - Corridor Steplights	16	
17	RECEP. YARD/BUNKER STORAGE	Recep...	20 A	1				720	1080	1	20 A	Recep...	RECEP. SOFFET SEASONAL DECO. (NOTE 1)	18
19	RECEP. KITCHEN ISLAND (NOTE 1)	Recep...	20 A	1			720	374		1	20 A	Lighting	Lighting - Exterior Apparatus Bay	22
23	Lighting	Lightin...	20 A	1			810	282		1	20 A	Lightin...	Lighting - Exterior Patio	24
25	Lighting - Exterior Parking	Lighting	20 A	1	452	452			1	20 A	Lighting	Lighting - Exterior Lighting	26	
27	Lighting - Flagpole	Other	20 A	1		201	600		1	20 A	Water...	WH-2 MECHANICAL 2 141	28	
29	WH-1 MECHANICAL 160	Water...	20 A	1			600	4000	2	50 A	Water...	WH-4 EMS BAY 138	30	
31	TRAP PRIMER MECHANICAL 160	Other	20 A	1	180	4000			--	--	--	--	32	
33	TRAP PRIMER MECH 2 141	Other	20 A	1		180	180		1	20 A	Other	TRAP PRIMER FIRE RISER 146	34	
35	Spare	--	20 A	1			0	0	1	20 A	--	Spare	36	
37	Spare	--	20 A	1		0	0		1	20 A	--	Spare	38	
39	Spare	--	20 A	1		0	0		1	20 A	--	Spare	40	
41	Spare	--	20 A	1			0	0	1	20 A	--	Spare	42	
<b>Total Load:</b>					8782 VA	5569 VA		9451 VA						
<b>Total Amps:</b>					77 A	46 A		83 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Water Heater	9200 VA	125.00%	11500 VA	<b>Total Conn. Load(KVA):</b> 23798 VA <b>Total Demand(KVA):</b> 26347 VA <b>Total Demand(Amps):</b> 73 A
Lighting	2638 VA	100.00%	2397 VA	
Other	1205 VA	100.00%	1205 VA	
Receptacle	10800 VA	96.30%	10400 VA	

**Notes:**  
1. PROVIDE GFCI BREAKER.  
2. PROVIDE AFCI BREAKER.

### Branch Panel: L1B

Location: ELEC. RM 150  
Supply From: MDP  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 120/208 Wye  
Phases: 3  
Wires: 4

A.I.C. Rating: 22000 A  
Mains Type: MLO  
Mains Rating: 225 A

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT		
1	FCU-1	Cooling	15 A	1	1176	1176			1	15 A	Cooling	FCU-2	2	
3	FCU-3	Cooling	15 A	1		1176	1176		1	15 A	Cooling	FCU-4	4	
5	FCU-5	Cooling	15 A	1			1656	1156	2	20 A	Fan	ERV-1	6	
7	EF-2	Fan	20 A	1	528	1156			--	--	--	--	8	
9	MUA-1	Fan	20 A	1		1656	5301		3	60 A	Heating	DH-1	10	
11	OAF-1	Fan	20 A	1			864	5301	--	--	--	--	12	
13	DH-2	Heating	50 A	3	4263	5301			--	--	--	--	14	
15	--	--	--	--	--	4263	864		1	20 A	Fan	EF-1	16	
17	--	--	--	--	--	--	--	4263	1649	2	20 A	Heating	UH-1	18
19	RH-1	Heating	20 A	1	120	1649			--	--	--	--	20	
21	RH-2	Heating	20 A	1		120	216		1	20 A	Heating	RH-3	22	
23	HOOD LIGHTS KITCHEN	Other	20 A	1			180	1000	1	20 A	Recep...	RECEP. PUMP MECH RM	24	
25	RECIRC. PUMP MECH 2 141	Recep...	20 A	1	1000	180			1	20 A	Other	GAS SHUTOFF KITCHEN	26	
27	--	--	--	--	--	--	2500		2	30 A	Other	DRYER	28	
29	WASHER	Recep...	20 A	1			1200	2500	--	--	--	--	30	
31	RECEPTACLES DAY ROOM	Recep...	20 A	1	1260	4000			2	50 A	Cooling	WH-3 BUNKER STORAGE 147	32	
33	Spare	--	20 A	1		0	4000		--	--	--	--	34	
35	Spare	--	20 A	1			0	0	1	20 A	--	Spare	36	
37	Spare	--	20 A	1		0	0		1	20 A	--	Spare	38	
39	Spare	--	20 A	1		0	0		1	20 A	--	Spare	40	
41	Spare	--	20 A	1			0	0	1	20 A	--	Spare	42	
<b>Total Load:</b>					21809 VA	21271 VA		19770 VA						
<b>Total Amps:</b>					184 A	179 A		165 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Cooling	14360 VA	100.00%	14360 VA	<b>Total Conn. Load(KVA):</b> 62850 VA <b>Total Demand(KVA):</b> 50047 VA <b>Total Demand(Amps):</b> 139 A
Heating	32446 VA	100.00%	32446 VA	
Other	5360 VA	100.00%	5360 VA	
Receptacle	4460 VA	100.00%	4460 VA	

**Notes:**  
1. PROVIDE S/C STUDY PER SPECIFICATIONS. PROVIDE PANELBOARD WITH AIC RATING SUFFICIENT FOR AVAILABLE FAULT CURRENT.

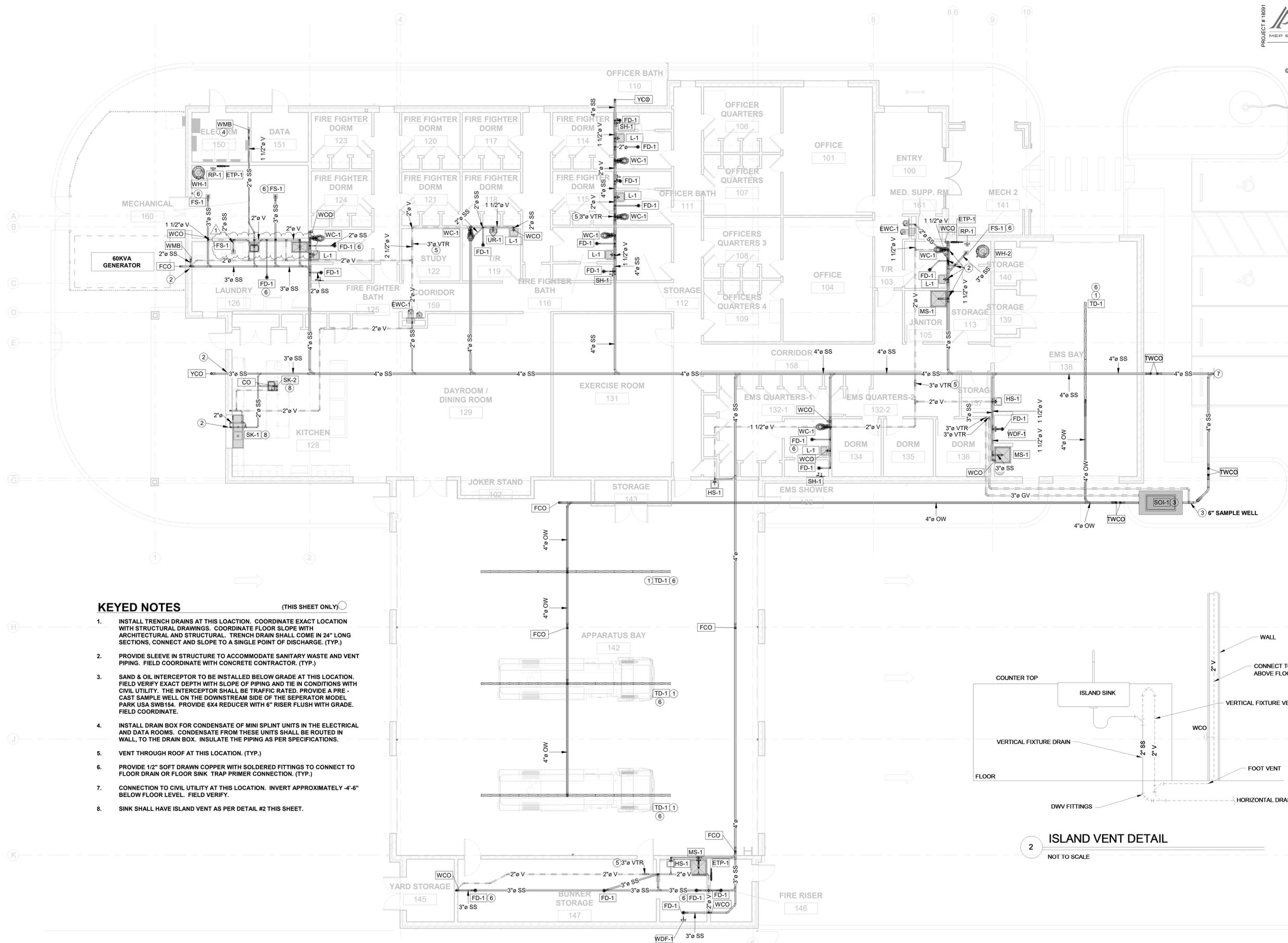
### Branch Panel: EL1

Location: ELEC. RM 150  
Supply From: ATS  
Mounting: SURFACE  
Enclosure: NEMA1

Volts: 120/208 Wye  
Phases: 3  
Wires: 4

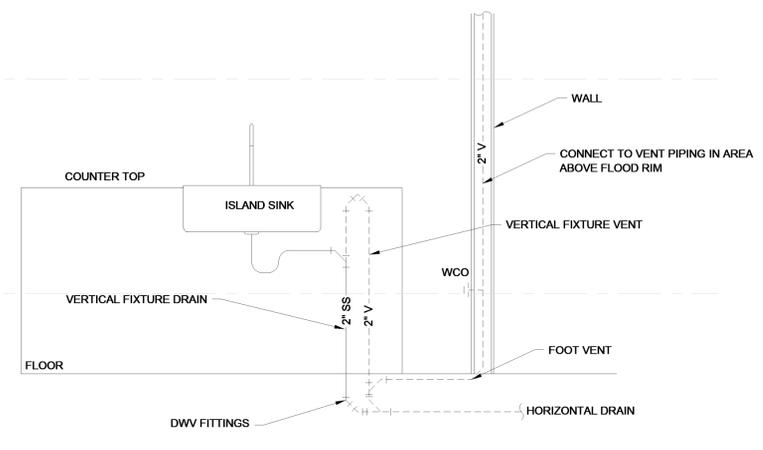
A.I.C. Rating: 22000 A  
Mains Type: MCB  
Mains Rating: 225 A  
MCB Rating: 225 A

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT	
1	APPARATUS BAY DOOR BOTTOM LEFT	Motor	30 A	2	790	790			2	30 A	APPARATUS BAY DOOR BOTTOM RIGHT	2	
3	--	--	--	--	--	790	790		--	--	--	--	4
5	APPARATUS BAY DOOR MIDDLE LEFT	Motor	30 A	2			790	790	2	30 A	APPARATUS BAY DOOR MIDDLE RIGHT	6	
7	--	--	--	--	790	790			--	--	--	--	8
9	APPARATUS BAY DOOR TOP LEFT	Motor	30 A	2		790	790		2	30 A	APPARATUS BAY DOOR TOP RIGHT	10	
11	--	--	--	--	--	--	790	790	--	--	--	--	12
13	EMS BAY DOOR BOTTOM	Motor	30 A	2	790	790			2	30 A	EMS BAY DOOR TOP	14	
15	--	--	--	--	--	790	790		--	--	--	--	16
17	APPARATUS BAY DROP CORD BOTTOM	Recep...	20 A	1			180	180	1	20 A	APPARATUS BAY DROP CORD MIDDLE	18	
19	APPARATUS BAY DROP CORD TOP	Recep...	20 A	1	180	360			1	20 A	RECEPTACLES JOKER STAND	20	
21	RECEPTACLES JOKER STAND	Recep...	20 A	1		180	180		1	20 A	RECEPTACLES JOKER STAND	22	
23	RECEPTACLES JOKER STAND	Recep...	20 A	1			360	667	1	20 A	Lighting	COORIDOR LIGHTING	24
25	SERVER RACK DATA 151	Power	20 A	2	1250	1000			1	20 A	Recep...	SERVER RACK DATA 151</	



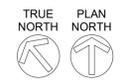
**KEYED NOTES** (THIS SHEET ONLY)

1. INSTALL TRENCH DRAINS AT THIS LOCATION. COORDINATE EXACT LOCATION WITH STRUCTURAL DRAWINGS. COORDINATE FLOOR SLOPE WITH ARCHITECTURAL AND STRUCTURAL. TRENCH DRAIN SHALL COME IN 24" LONG SECTIONS, CONNECT AND SLOPE TO A SINGLE POINT OF DISCHARGE. (TYP.)
2. PROVIDE SLEEVE IN STRUCTURE TO ACCOMMODATE SANITARY WASTE AND VENT PIPING. FIELD COORDINATE WITH CONCRETE CONTRACTOR. (TYP.)
3. SAND & OIL INTERCEPTOR TO BE INSTALLED BELOW GRADE AT THIS LOCATION. FIELD VERIFY EXACT DEPTH WITH SLOPE OF PIPING AND TIE IN CONDITIONS WITH CIVIL UTILITY. THE INTERCEPTOR SHALL BE TRAFFIC RATED. PROVIDE A PRE-CAST SAMPLE WELL ON THE DOWNSTREAM SIDE OF THE SEPARATOR MODEL PARK USA SWB154. PROVIDE 6X4 REDUCER WITH 6" RISER FLUSH WITH GRADE. FIELD COORDINATE.
4. INSTALL DRAIN BOX FOR CONDENSATE OF MINI SPLIT UNITS IN THE ELECTRICAL AND DATA ROOMS. CONDENSATE FROM THESE UNITS SHALL BE ROUTED IN WALL, TO THE DRAIN BOX. INSULATE THE PIPING AS PER SPECIFICATIONS.
5. VENT THROUGH ROOF AT THIS LOCATION. (TYP.)
6. PROVIDE 1/2" SOFT DRAWN COPPER WITH SOLDERED FITTINGS TO CONNECT TO FLOOR DRAIN OR FLOOR SINK TRAP PRIMER CONNECTION. (TYP.)
7. CONNECTION TO CIVIL UTILITY AT THIS LOCATION. INVERT APPROXIMATELY -4'-6" BELOW FLOOR LEVEL. FIELD VERIFY.
8. SINK SHALL HAVE ISLAND VENT AS PER DETAIL #2 THIS SHEET.



**2 ISLAND VENT DETAIL**

NOT TO SCALE



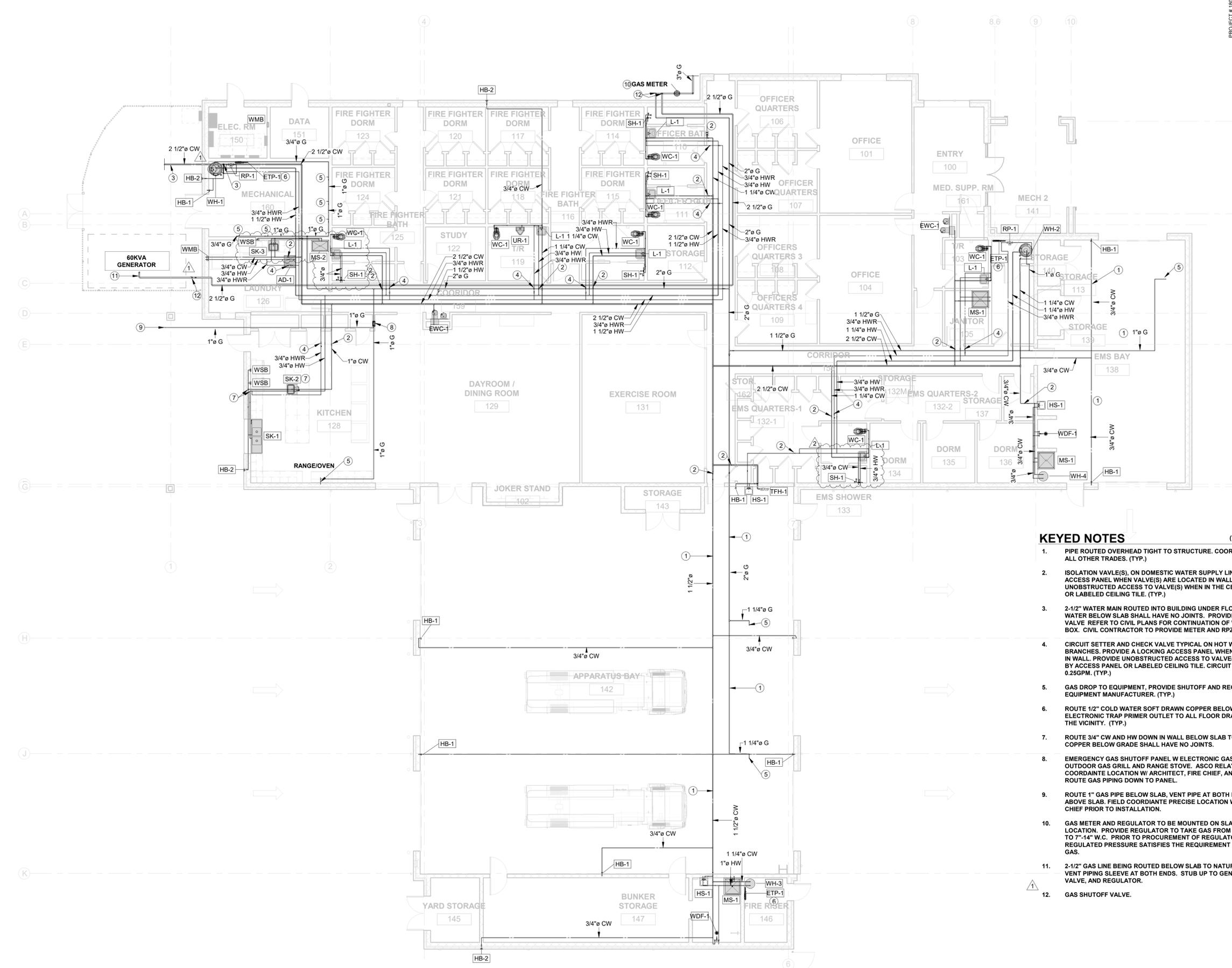
**1 PLUMBING FLOOR PLAN - SANITARY AND VENT**  
 P1.01 1/8" = 1'-0"

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**CITY OF SAN ANTONIO  
 FIRE STATION #24**  
 2265 AUSTIN HWY  
 SAN ANTONIO, TEXAS 78218

REVISIONS	
1 - 2020-07-23 - ADDENDUM #1	
PROJECT NO.	18-14
PHASE	100% CD REVIEW
DATE	04-30-2020
DESCRIPTION	SANITARY NEW WORK PLAN - OVERALL

**P1.01**



- KEYED NOTES** (THIS SHEET ONLY)
- PIPE ROUTED OVERHEAD TIGHT TO STRUCTURE. COORDINATE ROUTING WITH ALL OTHER TRADES. (TYP.)
  - ISOLATION VALVE(S), ON DOMESTIC WATER SUPPLY LINE(S). PROVIDE A LOCKING ACCESS PANEL WHEN VALVE(S) ARE LOCATED IN WALL. PROVIDE UNOBSTRUCTED ACCESS TO VALVE(S) WHEN IN THE CEILING BY ACCESS PANEL OR LABELED CEILING TILE. (TYP.)
  - 2-1/2" WATER MAIN ROUTED INTO BUILDING UNDER FLOOR TO SUPPLY BUILDING. WATER BELOW SLAB SHALL HAVE NO JOINTS. PROVIDE BUTTERFLY ISOLATION VALVE REFER TO CIVIL PLANS FOR CONTINUATION OF WATER MAIN, AND VALVE BOX. CIVIL CONTRACTOR TO PROVIDE METER AND RPZ.
  - CIRCUIT SETTER AND CHECK VALVE TYPICAL ON HOT WATER RECIRCULATION BRANCHES. PROVIDE A LOCKING ACCESS PANEL WHEN VALVE(S) ARE LOCATED IN WALL. PROVIDE UNOBSTRUCTED ACCESS TO VALVE(S) WHEN IN THE CEILING BY ACCESS PANEL OR LABELED CEILING TILE. CIRCUIT SETTER SHALL BE SET TO 0.25GPM. (TYP.)
  - GAS DROP TO EQUIPMENT. PROVIDE SHUTOFF AND REGULATOR AS REQUIRED BY EQUIPMENT MANUFACTURER. (TYP.)
  - ROUTE 1/2" COLD WATER SOFT DRAWN COPPER BELOW SLAB FROM ELECTRONIC TRAP PRIMER OUTLET TO ALL FLOOR DRAINS AND FLOOR SINKS IN THE VICINITY. (TYP.)
  - ROUTE 3/4" CW AND HW DOWN IN WALL BELOW SLAB TO SERVE THE ISLAND SINK. COPPER BELOW GRADE SHALL HAVE NO JOINTS.
  - EMERGENCY GAS SHUTOFF PANEL W ELECTRONIC GAS VALVES FOR THE OUTDOOR GAS GRILL AND RANGE STOVE. ASCO RELAY PANEL MODEL #108D90C. COORDINATE LOCATION W/ ARCHITECT, FIRE CHIEF, AND DIV 26 CONTRACTOR. ROUTE GAS PIPING DOWN TO PANEL.
  - ROUTE 1" GAS PIPE BELOW SLAB, VENT PIPE AT BOTH ENDS. PROVIDE SHUTOFF ABOVE SLAB. FIELD COORDINATE PRECISE LOCATION WITH ARCHITECT & FIRE CHIEF PRIOR TO INSTALLATION.
  - GAS METER AND REGULATOR TO BE MOUNTED ON SLAB AS PER DETAILS AT THIS LOCATION. PROVIDE REGULATOR TO TAKE GAS FROM INCOMING CPS SERVICE TO 7"-14" W.C. PRIOR TO PROCUREMENT OF REGULATOR, FIELD VERIFY THE REGULATED PRESSURE SATISFIES THE REQUIREMENT ON ALL EQUIPMENT USING GAS.
  - 2-1/2" GAS LINE BEING ROUTED BELOW SLAB TO NATURAL GAS GENERATOR. VENT PIPING SLEEVE AT BOTH ENDS. STUB UP TO GENERATOR WITH CUTOFF VALVE, AND REGULATOR.
  - GAS SHUTOFF VALVE.



**PLUMBING FLOOR PLAN - WATER AND GAS**  
 1 P1.02 1/8" = 1'-0"

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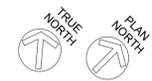
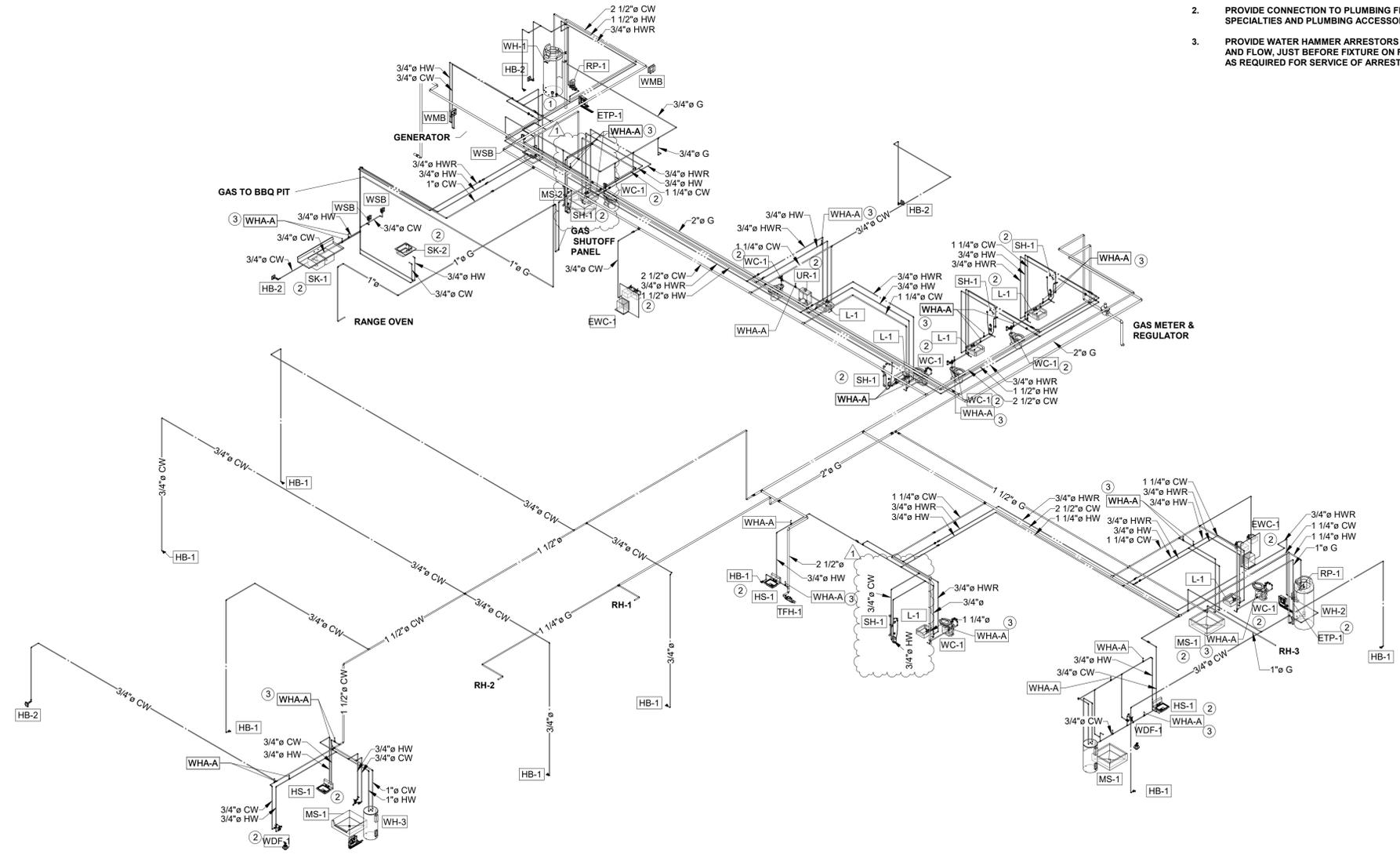
REVISIONS
1 - 2020-07-23 - ADDENDUM #1
PROJECT NO.
18-14
PHASE
100% CD REVIEW
DATE
04-30-2020
DESCRIPTION
PRESSURE NEW WORK PLAN - OVERALL

**P1.02**



**KEYED NOTES**

- (THIS SHEET)
- 2-1/2" DOMESTIC COLD WATER SERVICE. CONNECT TO CIVIL UTILITY OUTSIDE OF BUILDING. ENTRANCE RISER SHALL HAVE A MASTER SHUTOFF PIPE LOCATED UNDER CONCRETE SHALL BE JOINT FREE.
  - PROVIDE CONNECTION TO PLUMBING FIXTURE WITH REQUIRED PIPING Alderson & Associates, Inc. SPECIALTIES AND PLUMBING ACCESSORIES. RE: SPECIFICATIONS, (1...),
  - PROVIDE WATER HAMMER ARRESTORS SIZED ACCORDINGLY FOR PIPE SIZE AND FLOW, JUST BEFORE FIXTURE ON FINAL RUN. PROVIDE ACCESS PANEL AS REQUIRED FOR SERVICE OF ARRESTORS. (TYP.)



1  
 P2.02  
**RISER DIAGRAM - PRESSURE PLAN**

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REVISIONS
1 - 2020-07-23 - ADDENDUM #1
PROJECT NO.
18-14
PHASE
100% CD REVIEW
DATE
04-30-2020
DESCRIPTION
PLUMBING RISER DIAGRAMS

SHOCK ARRESTOR SCHEDULE				
MARK	THREADED	F.U. RATING	P.D.I. CROSS REFERENCE	MANUFACTURER
WHA	1/2"	1-11	A	WATTS LF15M2S-A
WHA	3/4"	12-32	B	WATTS LF15M2S-B
WHA	1"	33-60	C	WATTS LF15M2S-C
WHA	1"	61-113	D	WATTS LF15M2S-D

NOTES:  
1. SOLDER CONNECTION

HW MIXING VALVE SCHEDULE	
MARK	TMV-1
SERVICE	FIXTURES
VALVE OPERATION	THERMOSTATIC
OUTLET TEMPERATURE	110 DEG F
MIN. GPM	0.25
MAX. GPM	12.0
GPM @ 10 PSI PRESSURE DROP	5.5
GPM @ 20 PSI PRESSURE DROP	7.5
INLET SIZES	1/2"
OUTLET SIZE	1/2"
RE-CIRCULATION SIZE	---
REFERENCE	
MANUFACTURER	SEE SPECIFICATIONS
MODEL NO.	SEE SPECIFICATIONS
NOTES	2
NOTES:	1. COMPLY WITH ASSE 1070. 2. LEAD FREE

RECIRCULATING PUMP SCHEDULE								
MARK	SERVICE	GPM	TOTAL HEAD FT	SPEED / WATTS	ELECTRICAL			REMARKS
					VOLTS	PHASE	HERTZ	
RP-1	HOT WATER RECIRCULATION PUMP	1.5	3	3 / 5-28	115	1	60	BELL & GOSSETT 43-4V/BUPYZ ADJUSTABLE SPEED, PLUG IN.

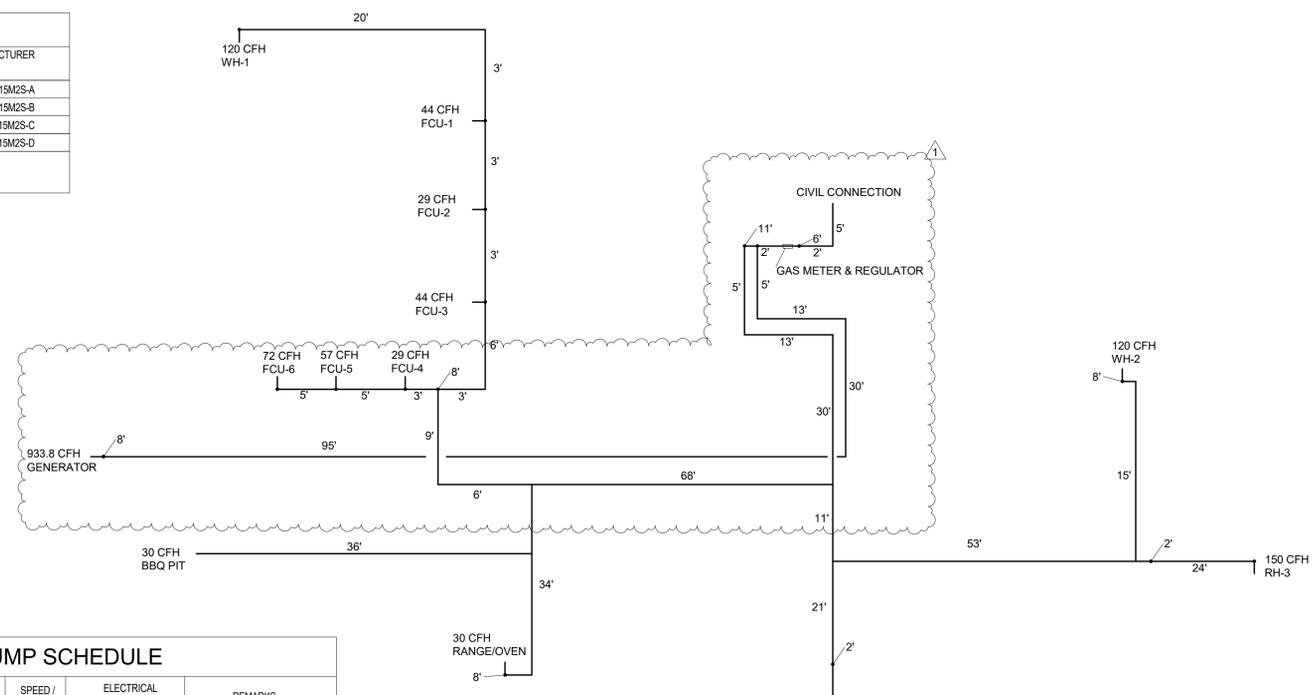
FURNISH WITH THE FOLLOWING OPTIONS AND/OR ACCESSORIES:  
1. LEAD FREE BRASS CONSTRUCTION  
2. AUTOMATIC TIMER AND AQUASTAT  
3. 3-YEAR WARRANTY  
4. NYLON IMPELLER  
5. CERAMIC CARBON BEARINGS

GAS WATER HEATER SCHEDULE								
MARK	STORAGE GALLONS	GPM @ 80°F TEMP. RECOVERY	TOTAL BTU/HR	ELECTRICAL				REMARKS
				VOLT	PHASE	HERTZ	AMP	
WH-1,2	120	138	120,000	120	1	60	5	A.O. SMITH BTH-120-300 COMMERCIAL GAS WATER HEATER. ASME CERTIFIED INCLUDE MANUFACTURE CONCENTRIC VENT KIT. NOTES: 1

FURNISH WITH THE FOLLOWING OPTIONS AND/OR ACCESSORIES:  
1. REFER TO MECHANICAL PLANS FOR CONCENTRIC VENTING.

ELECTRIC WATER HEATER SCHEDULE									
MARK	STORAGE GALLONS	RECOVERY GALLONS PER HOUR	TEMP. RISE	SET TEMP.	ELECTRICAL				REMARKS
					VOLT	PHASE	HERTZ	KW	
WH-3,4	40	41	80°	120°	208	1	60	8	A.O. SMITH DEN-40 DOUBLE 4000 WATT ELEMENTS SIMULTANEOUS OPERATION

SAND-OIL INTERCEPTOR SCHEDULE					
MARK	DESCRIPTION	GPM	MAX CAPACITY	MAX OIL CAPACITY	NOTES
SOI-1	BURIED CONCRETE INTERCEPTOR WITH ACCESS AND SAMPLE WELL PORTS.	100	750 GAL	375 GAL	PARK USA SOCOMP-TG-750-100; REINFORCED CONCRETE, ALL MATERIALS CORROSION RESISTANT, WITH 4" INLET AND OUTLET, 24" ACCESS WAY, SAMPLE WELL PORTS, AND 30 YEAR WARRANTY. FURNISHED BY DIVISION 22 CONTRACTOR.



### GAS LOAD (14"W.C.) TABULATION SCHEDULE

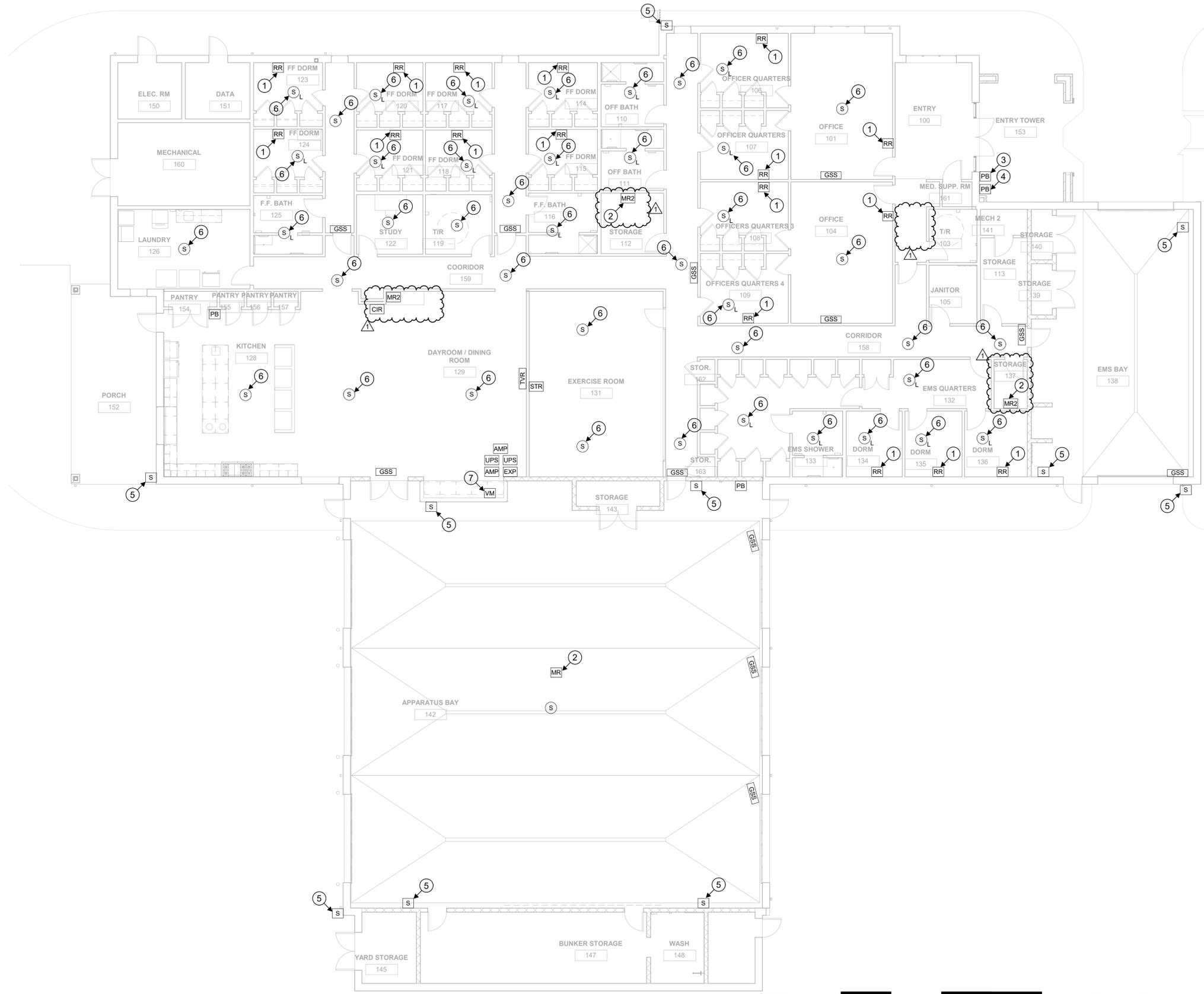
EQUIPMENT	LOAD IN CFH
RH-1	200
RH-2	200
RH-3	150
FCU-1	44.0
FCU-2	29.0
FCU-3	44.0
FCU-4	29.0
FCU-5	57.0
FCU-6	72.0
WH-1	120
WH-2	120
GENERATOR	933.8
RANGE/OVEN/BBQ PIT	60.0
ACTUAL DEVELOPED LENGTH= 210 FT. (SIZING BASED ON 250 FT x 14" @ 3.0 IN. W.C. PRESSURE DROP.)	
TOTAL	2058.8 CFH

- NOTES:
- ALL GAS PIPE ROUTED IN RETURN PLENUM. BELOW GRADE AND BELOW CONCRETE SLAB ABUTTING THE BUILDING BASE SLAB SHALL BE RUN IN A CONTINUOUS SLEEVE. SLEEVES SHALL BE OPEN AT EACH END. BURIED END; A MINIMUM OF 5'-0" BEYOND THE EDGE OF THE CONCRETE SLAB, AND ABOVE GRADE END; BELOW THE POINT OF ENTRY TO THE BUILDING ADJACENT TO REGULATORS OR ISOLATION VALVES WITH A GOOSENECK VENT.
  - GAS SLEEVES SHALL BE SCH 40 PVC BELOW GRADE AND WELDED SCH 40 STEEL ABOVE GRADE.
  - SLEEVES VENTED ABOVE GRADE SHALL BE GOOSENECK ASSEMBLIES WITH SCREENED INLETS AND SHALL BE SECURED IN A VANDAL PROOF MANNER.

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**CITY OF SAN ANTONIO  
FIRE STATION #24**  
2265 AUSTIN HWY  
SAN ANTONIO, TEXAS 78218

REVISIONS	
1-	2020-06-16 - OSD CITY REVIEW COMMENTS
PROJECT NO.	
18-14	
PHASE	
100% CD REVIEW	
DATE	
04-30-2020	
DESCRIPTION	
PLUMBING SCHEDULES	



1 SPECIAL SYSTEMS FLOOR PLAN  
T3.02 1/8" = 1'-0"



- US DIGITAL DESIGNS DRAWING GENERAL NOTES (THIS SHEET ONLY)**
- FIRE STATION ALERTING SYSTEM (PHOENIX SYSTEM) IS DESIGNED BY US DIGITAL DESIGN (USDD). COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED. VENDOR OF PHOENIX ALERTING SYSTEM EQUIPMENT SHALL BE US DIGITAL DESIGN. INSTALLATION OF SYSTEM SHALL BE PERFORMED BY US DIGITAL DESIGN (USDD) APPROVED INSTALLER ONLY. CONTACT USDD REPRESENTATIVE PETER DONKIN AT 602-687-1759 FOR COORDINATION.
  - USDD PHOENIX FIRE ALERTING SYSTEM IS SHOWN FOR DESIGN INTENT. ALERTING SYSTEM SHALL BE DESIGNED, AND FULLY COMMISSIONED BY USDD TO BE INCLUDED UNDER THIS CONTRACT.
  - COMPLETE INSTALLATION OF FIRE ALERTING SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, CONDUIT, BOXES, SUPPORT, PHOENIX EQUIPMENT DEVICES, AND PROGRAMMING SHALL BE INCLUDED IN THIS CONTRACT. COORDINATE SYSTEM INSTALLATION WITH USDD APPROVED INSTALLER PRIOR TO ROUGH-IN.
  - USDD DRAWING IS INCLUDED FOR REFERENCE PURPOSES ONLY. OBTAIN FINAL INSTALLATION DRAWING FROM US DIGITAL DESIGN.
  - LOCATIONS OF DEVICES ARE DIAGRAMMATICAL EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
  - COORDINATE ADDITIONAL CONDUIT AND JUNCTION BOX REQUIREMENTS WITH US DIGITAL DESIGN INSTALLATION DRAWINGS PRIOR TO ROUGH-IN.
  - REFER TO FINAL USDD SYSTEM INSTALLATION DRAWINGS FOR FINAL CONDUIT AND CABLING REQUIREMENTS.
  - CONTRACTOR TO SUBMIT USDD INSTALLATION SHOP DRAWINGS BASED ON FINAL CONTRACT DOCUMENTS FOR REVIEW PRIOR TO ROUGH-IN.
  - CONTRACTOR TO INCLUDE ONE YEAR SUPPORT ON SYSTEM.
  - CONTRACTOR TO INCLUDE ONE YEAR PARTS AND LABOR ON SYSTEM INSTALLATION.
  - CONDUIT, RACEWAYS, SUPPORT, JUNCTION BOXES AND BACKBOXES ARE TO BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR AND ARE NOT INCLUDED IN THE USDD ALLOWANCE AMOUNT.

- TECHNOLOGY FLOOR PLANS KEYED NOTES (THIS SHEET ONLY)**
- PROVIDE 1-INCH CONDUIT FROM ROUGH-IN TO 6-INCH ABOVE NEAREST ACCESSIBLE CEILING. REFER TO US DIGITAL DESIGN INSTALLATION DRAWINGS FOR JUNCTION BOX ROUGH-IN OPENING HEIGHT INSTALLATION REQUIREMENTS
  - PROVIDE 1-INCH CONDUIT FROM MESSAGE REMOTE TO NEAREST ACCESSIBLE CEILING.
  - US DIGITAL DESIGN EMERGENCY CALL PUSH BUTTON PROVIDE 1-INCH CONDUIT TO MESSAGE REMOTE. OWNER TO PROVIDE PUSH BUTTON LABELS FOR CONTRACTOR INSTALLATION. PROVIDE JUNCTION BOXES AS REQUIRED.
  - US DIGITAL DESIGN NON-EMERGENCY CALL PUSH BUTTON PROVIDE 1-INCH CONDUIT TO MESSAGE REMOTE. OWNER TO PROVIDE PUSH BUTTON LABELS FOR CONTRACTOR INSTALLATION. PROVIDE JUNCTION BOXES AS REQUIRED.
  - PROVIDE SURFACE MOUNTED 4-INCH SQUARE JUNCTION BOX WITH 2-INCH MUD RING AND COVER. PROVIDE 1-INCH CONDUIT TO MESSAGE REMOTE OR OTHER LOCATION AS INDICATED ON US DIGITAL DESIGN INSTALLATION DRAWINGS PROVIDE A 3/4-INCH DIAMETER HOLE CENTERED IN THE JUNCTION BOX COVER WITH A HEYCO # 2840 BUSHING. MOUNT APPARATUS BAY JUNCTION BOX SPEAKERS AT 13' A.F.F. AND OUTSIDE SPEAKER JUNCTION BOXES AT 11' A.F.F. EXTERIOR SPEAKER JUNCTION BOXES SHALL BE RECESSED.
  - CEILING SPEAKERS (HARD CEILING) - PROVIDE BOGEN RE84 CEILING SPEAKER ENCLOSURE IN ALL HARD CEILING APPLICATIONS. PROVIDE 1-INCH EMPTY CONDUIT TO ENCLOSURE AND RUN TO NEAREST ACCESSIBLE CEILING LOCATION EQUIPMENT OR AS NOTED ON US DIGITAL DESIGN INSTALLATION DRAWING. CEILING SPEAKERS (SUSPENDED CEILING) - PROVIDE BOGEN TB8 AS APPROPRIATE FOR SPECIFIED SPEAKERS. PROVIDE RE84 CEILING SPEAKER ENCLOSURES OR AS NOTED BY US DIGITAL DESIGN INSTALLATION DRAWING.
  - FURNISH AND INSTALL AN APHONE MASTER INTERCOM STATION WITH DOOR RELEASE BUTTON. WIRE INTERCOM STATION AT ENTRY GATE (SEE SITE PLAN) AND PROVIDE CONTROL WIRING TO GATE CONTROLLER TO OPEN AND CLOSE GATES. PROVIDE POWER TRANSFORMER MOUNTED CONCEALED BELOW JOKER STAND. INSTALL STATION ON FLUSH WALL BOX DIRECTED AT SITE. PROVIDE COMPLETE SUBMITTAL INCLUDING COMPLETE WIRING, ROUTING AND CONNECTIONS. INSTALL ALL WIRING IN CONDUIT. PROVIDE CONTROL RELAY AT GATE OPERATOR AS REQUIRED. EXTEND 1-INCH CONDUIT TO 6-INCH ABOVE NEAREST ACCESSIBLE CEILING. ROUTE GATE INTERCOM COMMUNICATIONS CABLING TO MDF AND TERMINATE AT SPD DEVICES. INTERCONNECT AS DIRECTED BY ITS. EXTEND COMMUNICATION CABLING FROM MDF TO JOKER STAND INTERCOM BOX. COORDINATED INSTALLATION OF GATE INTERCOM SYSTEM WITH COSA ITS.

SR	PHOENIX G2 SIGN REMOTE (USDD)
RR	PHOENIX G2 ROOM REMOTE (USDD)
BB	BETA BRITE (USDD)
MS	PHOENIX G2 MESSAGE SIGN (USDD)
MR2	PHOENIX G2 MESSAGE REMOTE (USDD)
PB	PUSH BUTTON
ATX	PHOENIX G2 ATX STATION CONTROLLER (USDD)
EXP	G2 EXPANSION MODULE (USDD)
AMP	OEM AMPLIFIER
UPS	G2 UNINTERRUPTIBLE (USDD)
STR	G2 STROBE LIGHT (USDD)
CIR	G2 COLOR INDICATOR REMOTE (USDD)
GSS	G2 MESSAGE SIGN (STANDARD 24") (USDD)
S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) RECESSED MOUNT
S-L	PHOENIX ALERTING SYSTEM SPEAKER (USDD) WITH LED LIGHT - SURFACE MOUNT
S+L	PHOENIX ALERTING SYSTEM SPEAKER (USDD) SURFACE MOUNT
TVR	G2 HDTV REMOTE



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FIRE STATION #24  
2265 AUSTIN HWY.  
SAN ANTONIO, TEXAS 78218

**REVISIONS**  
1 Add #1 07/21/20

**PROJECT NO.**  
18-14

**PHASE**  
CONSTRUCTION DOCUMENTS

**DATE**  
05/01/2020

**DESCRIPTION**  
SPECIAL SYSTEMS FLOOR PLAN

**T3.02**

COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED



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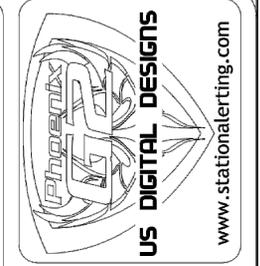
REVISIONS  
 1 ADD #1 07/21/20

PROJECT NO.  
 18-14

PHASE  
 CONSTRUCTION DOCUMENTS

DATE  
 05/01/2020  
 DESCRIPTION  
 1ST FLOOR SPECIAL SYSTEMS PLAN DETAIL

**T5.02**



US DIGITAL DESIGNS	
Count	Name
1	EXTERNAL AMPLIFIER (60-100W)
1	G2 ATX STATION CONTROLLER
3	G2 ATX-EXP RACK EARS (ATX-E)
1	G2 COLOR INDICATOR REMOTE
2	G2 EXPANSION UNIT (G2-EXP-12)
1	G2 HDTV REMOTE
22	G2 LED SPEAKER (G2-LVL-HC-70)
4	G2 MESSAGE REMOTE 2
16	G2 MESSAGE SIGN STANDARD (MS-G2-S)
4	G2 MS ADAPTOR PLATE DOUBLE (AP-D)
1	G2 OMNISTROBE SPEAKER
1	G2 STROBE LIGHT
3	G2 UPS - RACK MOUNT (UPS-RM)
3	MS-G HANGER KIT (MS-HK)
4	MS-MNT-ART-L
2	PUSH BUTTON (BLACK)
1	PUSH BUTTON (RED)
15	ROOM REMOTE 2 (RR-2)
20	SPEAKER FLUSH MOUNT
9	SPEAKER WEATHER-PROOF

SYMBOL	DESCRIPTION
	G2 I/O REMOTE
	G2 MESSAGE REMOTE 2
	G2 ROOM REMOTE 2
	G2 HDTV REMOTE
	G2 COLOR INDICATOR REMOTE
	PUSH BUTTON - RED
	PUSH BUTTON - BLACK
	G2 LOCAL AREA REMOTE
	G2 STROBE LIGHT
	OEM TRANSFORMER
	G2 OMNIALERT STROBE SPEAKER
	G2 LED SPEAKER, FLUSH MOUNT
	G2 LED SPEAKER, METAL BOX
	SPEAKER, WEATHER-PROOF
	SPEAKER, FLUSH MOUNT
	SPEAKER, METAL BOX
	G2 MESSAGE SIGN (MINI 12")
	G2 MESSAGE SIGN (STANDARD 24")
	G2 MESSAGE SIGN (EXTENDED 36")
	OEM FLAT PANEL MONITOR, XX", WITH MOUNT
	VOLUME CONTROL (CUSTOMER SUPPLIED)
	ADAPTER PLATE SINGLE
	ADAPTER PLATE DOUBLE
	ARTICULATING ARM MOUNT - LONG

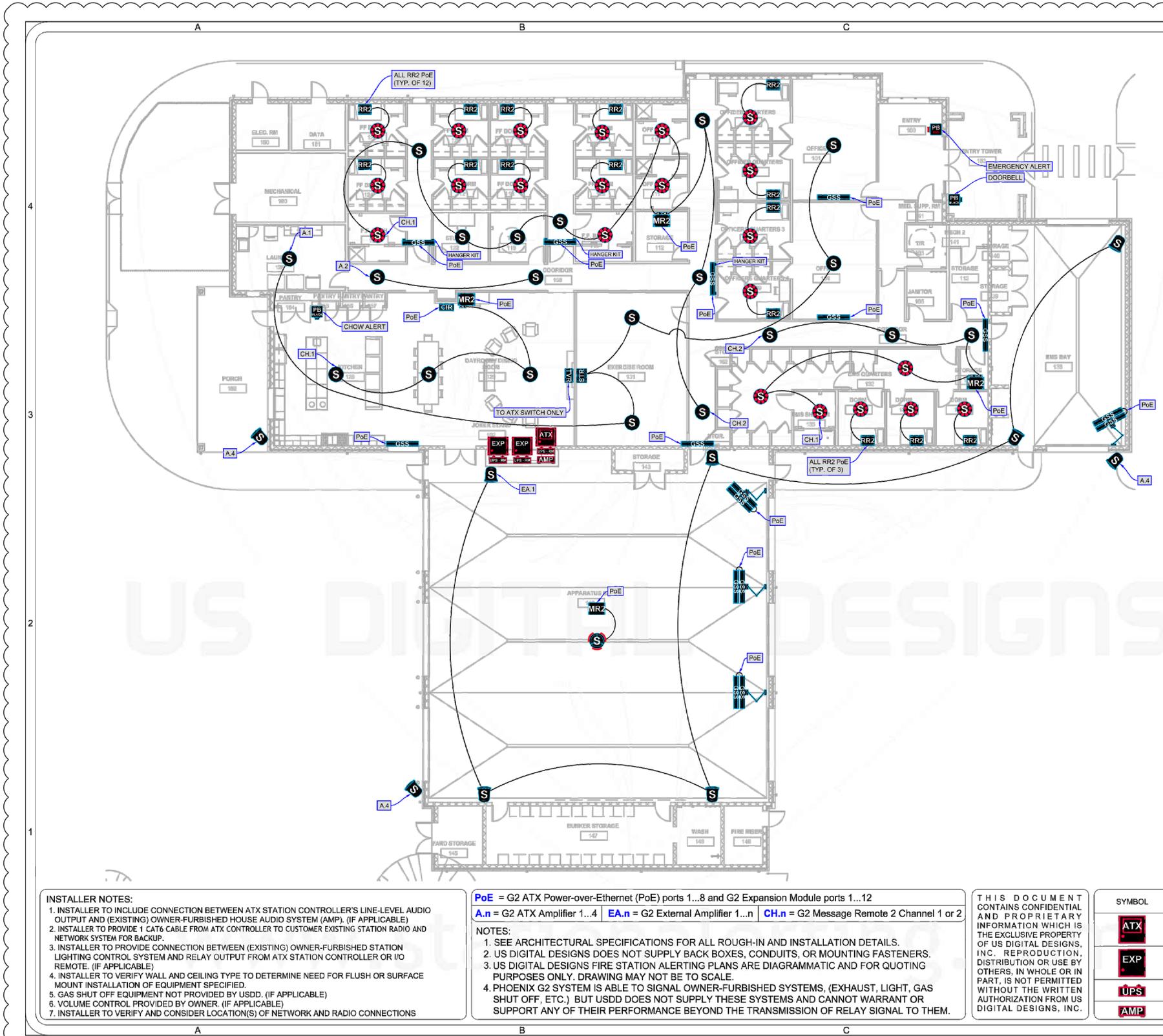
SYMBOL	DESCRIPTION
	G2 ATX STATION CONTROLLER
	G2 EXPANSION MODULE
	G2-UNINTERRUPTIBLE POWER SUPPLY
	OEM AMPLIFIER

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**PoE** = G2 ATX Power-over-Ethernet (PoE) ports 1...8 and G2 Expansion Module ports 1...12  
**A.n** = G2 ATX Amplifier 1...4 **EA.n** = G2 External Amplifier 1...n **CH.n** = G2 Message Remote 2 Channel 1 or 2

**NOTES:**  
 1. SEE ARCHITECTURAL SPECIFICATIONS FOR ALL ROUGH-IN AND INSTALLATION DETAILS.  
 2. US DIGITAL DESIGNS DOES NOT SUPPLY BACK BOXES, CONDUITS, OR MOUNTING FASTENERS.  
 3. US DIGITAL DESIGNS FIRE STATION ALERTING PLANS ARE DIAGRAMMATIC AND FOR QUOTING PURPOSES ONLY. DRAWING MAY NOT BE TO SCALE.  
 4. PHOENIX G2 SYSTEM IS ABLE TO SIGNAL OWNER-FURNISHED SYSTEMS, (EXHAUST, LIGHT, GAS SHUT OFF, ETC.) BUT USDD DOES NOT SUPPLY THESE SYSTEMS AND CANNOT WARRANT OR SUPPORT ANY OF THEIR PERFORMANCE BEYOND THE TRANSMISSION OF RELAY SIGNAL TO THEM.

**INSTALLER NOTES:**  
 1. INSTALLER TO INCLUDE CONNECTION BETWEEN ATX STATION CONTROLLER'S LINE-LEVEL AUDIO OUTPUT AND (EXISTING) OWNER-FURNISHED HOUSE AUDIO SYSTEM (AMP), (IF APPLICABLE)  
 2. INSTALLER TO PROVIDE 1 CAT6 CABLE FROM ATX CONTROLLER TO CUSTOMER EXISTING STATION RADIO AND NETWORK SYSTEM FOR BACKUP.  
 3. INSTALLER TO PROVIDE CONNECTION BETWEEN (EXISTING) OWNER-FURNISHED STATION LIGHTING CONTROL SYSTEM AND RELAY OUTPUT FROM ATX STATION CONTROLLER OR I/O REMOTE. (IF APPLICABLE)  
 4. INSTALLER TO VERIFY WALL AND CEILING TYPE TO DETERMINE NEED FOR FLUSH OR SURFACE MOUNT INSTALLATION OF EQUIPMENT SPECIFIED.  
 5. GAS SHUT OFF EQUIPMENT NOT PROVIDED BY USDD. (IF APPLICABLE)  
 6. VOLUME CONTROL PROVIDED BY OWNER. (IF APPLICABLE)  
 7. INSTALLER TO VERIFY AND CONSIDER LOCATION(S) OF NETWORK AND RADIO CONNECTIONS



1 US DIGITAL DESIGNS REFERENCE  
 T5.02 SCALE: NOT TO SCALE

True North Plan North

project **SAN ANTONIO FIRE DEPARTMENT, TX**  
 building **FIRE STATION 24**  
 filename **USDD.TX\_SANT.FS24.FSA.DWG**  
 date **4/30/2020 - 5:00PM**  
 design by **PD**