



# APPLICATION FOR DOWNTOWN HISTORIC DISTRICT DESIGN REVIEW

See reverse side for more information regarding the review process and the materials required.

**NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.**

## HISTORICAL STATUS OF STRUCTURE

- ☒ CONTRIBUTING PROPERTY WITHIN THE HISTORIC DISTRICT
 ☐ NON-CONTRIBUTING PROPERTY WITHIN THE HISTORIC DISTRICT  
☐ LANDMARK PROPERTY OUTSIDE THE HISTORIC DISTRICT

DOES THIS PROJECT REQUIRE A BUILDING PERMIT? ☒ YES ☐ NO

Development/ Building Permit application has already been submitted.

## WHAT BEST DESCRIBES THIS PROJECT?

- ☒ **TYPE A** - MINOR ALTERATION NOT ALTERING BUILDING STRUCTURE OR FOOTPRINT (Ex: window replacement; canopy replacement)  
☐ **TYPE B** - ALTERATION THAT WILL ALTER THE BUILDING STRUCTURE OR FOOTPRINT (Ex: removing recessed entryway; adding addition to existing building)  
☐ **TYPE C** – NEW CONSTRUCTION

HAVE YOU SUBMITTED A NARRATIVE THAT EXPLAINS THE PROJECT? ☒ YES ☐ NO

### TYPE A

The narrative should include the following information:

- applicable design standards and guidelines. How the project will meet the
- the design standards and guidelines, please explain why. If the project is unable to meet
- any significant exterior features of the structure? If yes, please describe which features will be impacted or altered. Will the project impact or alter
- or replacement? Will the project be a restoration
- placement of outdoor mechanical equipment? Will the project effect the

### TYPE B & C

The narrative should include the following information:

- applicable design standards and guidelines. How the project will meet the
- the design standards and guidelines, please explain why. If the project is unable to meet
- any significant exterior features of the structure? If yes, please describe which features will be impacted or altered. Will the project impact or alter
- placement of outdoor mechanical equipment? Will the project effect the

## ADDITIONAL MATERIALS REQUIRED

### TYPE A

- A list of materials that will be used
- Manufacturer's data on all visible fixtures that are part of the project showing size, form, color and method of installation.
- An elevation drawing drawn to scale showing architectural details such as doorways, windows, canopy, etc.

This form and all documents associated with it are public record once submitted.

**TYPE B & C**

- A list of materials that will be used
- Manufacturer's data on all visible fixtures that are part of the project showing size, form, color and method of installation.
- An elevation drawing drawn to scale showing architectural details such as doorways, windows, canopy, etc. The elevation drawing must be stamped by a licensed engineer or architect.
- A site plan of the property drawn to scale, clearly showing streets, existing structures and all proposed changes. The site plan must be stamped by a licensed engineer or architect.



April 30, 2024

CBJ – Community Development Department  
Attn: Forrest Courtney, Planner II  
230 S. Franklin Street – 4<sup>th</sup> Floor

Project Narrative for Historic Downtown District Review:

Project Description: The AT&T communications facility is proposed on the rooftop/penthouse of the 230 S. Franklin Street building. The project consists of attachment of seven (7) panel antennas to the outside of the penthouse structure, extending less than 10-feet above the top of the penthouse structure. Additionally, a steel platform is to be placed adjacent to the penthouse to support the prefabricated electronics shelter and battery cabinet. The facility is to connect to the power/fiber utilities by running conduit through the inside shafts down to the demarcation points in the building. No exterior alterations to the outside of the building/façade are proposed. See drawings/structural details for more information.

**How the project will meet the applicable design standards and guidelines.**

*Response: The proposed WCF is proposed on the penthouse and rooftop of the subject building. Only the façade of the building is located in the DT Historic District, which is not being affected by the proposed installation. The existing penthouse has existing communications equipment already attached to the penthouse structure, being used by others. The subject building is not a historical structure, built in the 1970's. The proposed antenna mounting design is the least obstructive and functional design needed to broadcast the licensed frequencies to provide voice/internet services in DT Juneau. The proposed electronic equipment is located on the rooftop in close proximity to the penthouse to minimize views from surrounding properties. Photo-simulations of the proposed installation were provided with the WCF application.*

**If the project is unable to meet the design standards and guidelines, please explain why.**

*Response: The WCF project is designed with the least obtrusive antenna mounting system on the existing penthouse of the subject building, which is technically outside of the mapped historical district. No alterations to the façade of the building are proposed. See drawings for details on the design.*

**Will the project impact or alter any significant exterior features of the structure? If yes, please describe which features will be impacted or altered.**

*Response: No significant alterations to the façade of the building are proposed. All proposed work is located on the penthouse/rooftop portion of the subject building. No architectural features are being impacted.*

**Will the project be a restoration or replacement?**

*Response: The proposed project is neither a restoration or a replacement. See responses above and the details in the WCF application for more information.*

**Will the project effect the placement of outdoor mechanical equipment?**

*Response: The proposed project has been approved by the building owners and will not affect the placement of outdoor mechanical equipment, associated with the building.*



**A list of materials that will be used.**

*Response: All proposed equipment/materials are contained in the architectural / structural drawings that were submitted with the WCF application. None of these materials will affect the outside of the building/façade. All work is proposed on the rooftop/penthouse of the subject building, which is located outside of the mapped historical district. Views from inside the historical district will not be adversely affected by this proposed installation, as the building currently has other communications equipment on the penthouse.*

**Manufacturer's data on all visible fixtures that are part of the project showing size, form, color and method of installation.**

*Response: All proposed fixtures are drawn and described within the architectural / structural drawings contained in the WCF application. These details show the size, dimensions and method of installation of each of the proposed pieces of equipment, along with manufacturer part numbers. The panel antennas have a white fiberglass exterior. The steel parts are galvanized for weather.*

**An elevation drawing drawn to scale showing architectural details such as doorways, windows, canopy, etc.**

*Response: The architectural drawings show the project from all four (4) elevations of the building. No alterations to the outside of the building is proposed other than the rooftop/penthouse. Only the façade of the building is located in the historical district per the CBJ mapping. The rooftop/penthouse are located outside the mapped DT district.*



**VISUAL IMPACT ANALYSIS – PHOTO SIMULATIONS**  
**AT&T CELL SITE IN JUNEAU ALASKA**  
**MARINE VIEW APARTMENTS AND MIXED COMMERCIAL**  
**230 SOUTH FRANKLIN STREET**  
**JUNEAU, AK 99801**  
**Date: March 20, 2024**

**Scope of Work:** New Wireless Communications Facility consisting of proposed roof top installation of radio and antennas located on the roof top elevator penthouse.

**Existing Environment:** Central Business and Commercial District of Juneau Alaska.

**Conclusion:** Based on a review of the photographs, Zoning Drawings, and other information contained in the application, the placement of proposed antennas has a minimal visual impact at this location, as viewed from the most adjacent properties.







- **Photo #1: Looking North Along Franklin Ave. "BEFORE"**



### PHOTO SIM

- **Photo #1: Looking North Along Franklin Ave. "AFTER"**







- **Photo #2: Looking East Along Marine Way “BEFORE”**



**PHOTO SIM**

- **Photo #2: Looking East Along Marine Way “AFTER”**





- **Photo #3: Looking South Along Seward Street “BEFORE”**

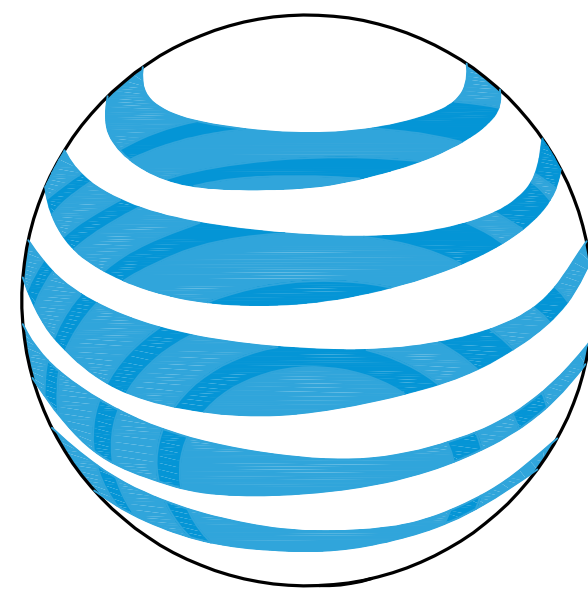


#### PHOTO SIM

- **Photo #3: Looking South Along Seward Street “AFTER”**







at&t

Your world. Delivered.

# JN3073 JUNEAU HARBOR MARINE VIEW NSB

FA LOCATION CODE: 14738339  
230 S. FRANKLIN STREET, JUNEAU, AK 99801

ORACLE PTN # 1: 3775A0L15F PACE JOB # 1: MRWOR037729  
ORACLE PTN # 2: 3775A0QD6T PACE JOB # 2: MRWOR043399  
ORACLE PTN # 3: 3775A0QDBL PACE JOB # 3: MRWOR043385  
ORACLE PTN # 4: 3775A0QDBM PACE JOB # 4: MRWOR043449  
ORACLE PTN # 5: 3775A0QD86 PACE JOB # 5: MRWOR043488  
ORACLE PTN # 6: 3775A0QDAR PACE JOB # 6: MRWOR043484

## PROJECT INFORMATION

**PROJECT DESCRIPTION:**  
AT&T PROPOSES TO INSTALL PROPOSED ROOF TOP EQUIPMENT AND BATTERY CABINETS MOUNTED ON A STEEL PLATFORM. AT&T PANEL ANTENNAS TO BE MOUNTED TO THE EXISTING PENTHOUSE EXTERIOR WALLS AS INDICATED ON THE ATTACHED DRAWINGS.

**APPLICANT:**  
MASTEC NETWORK SOLUTIONS - ALASKA  
2240 E. DOWLING ROAD  
ANCHORAGE, AK 99507  
253-709-0317

**CODE INFORMATION:**  
ZONING CLASSIFICATION: MIXED USE (MU)  
BUILDING CODE: INTERNATIONAL BUILDING CODE  
CURRENT CODE 2021  
PARCEL NUMBER: 1C070K820010  
CONSTRUCTION TYPE: II-B  
JURISDICTION: BOROUGH OF JUNEAU  
LOT SIZE: TBD  
CURRENT USE: COMMERCIAL RETAIL  
OFFICE SPACE &  
RESIDENTIAL APARTMENTS  
PROPOSED USE: TELECOM FACILITY  
POWER SERVICE: ALASKA ELECTRIC LIGHT & POWER  
TELCO SERVICE: ACS  
SITE LOCATION:  
LATITUDE: 58° 17' 57.8112" N  
58.299392  
LONGITUDE: 134° 24' 17.262" W  
-134.404795  
EXISTING ROOF DECK: 125.8'  
OVERALL HEIGHT AGL: 134'-0"  
BASE OF STRUCTURE AMSL: 27'

**PROPERTY OWNER:**  
ROBBINS-HATRUP PARTNERSHIP  
9105 MENDENHALL MALL ROAD  
#170A  
JUNEAU, AK 98225  
CONTACT: ANITA BAUER  
PROPERTY MANAGER  
PHONE: 907-586-4990

**TOWER OWNER:**  
ROBBINS-HATRUP PARTNERSHIP  
9105 MENDENHALL MALL ROAD  
#170A  
JUNEAU, AK 98225  
CONTACT: ANITA BAUER  
PROPERTY MANAGER  
PHONE: 907-586-4990

**PERMITTING:**  
CONTACT: JUSTIN ABBOTT  
SELECT SITE ACQUISITION LLC  
206-790-4655

**SITE ACQUISITION:**  
CONTACT: PAT HINMAN  
SELECT SITE ACQUISITION LLC  
425-306-2733

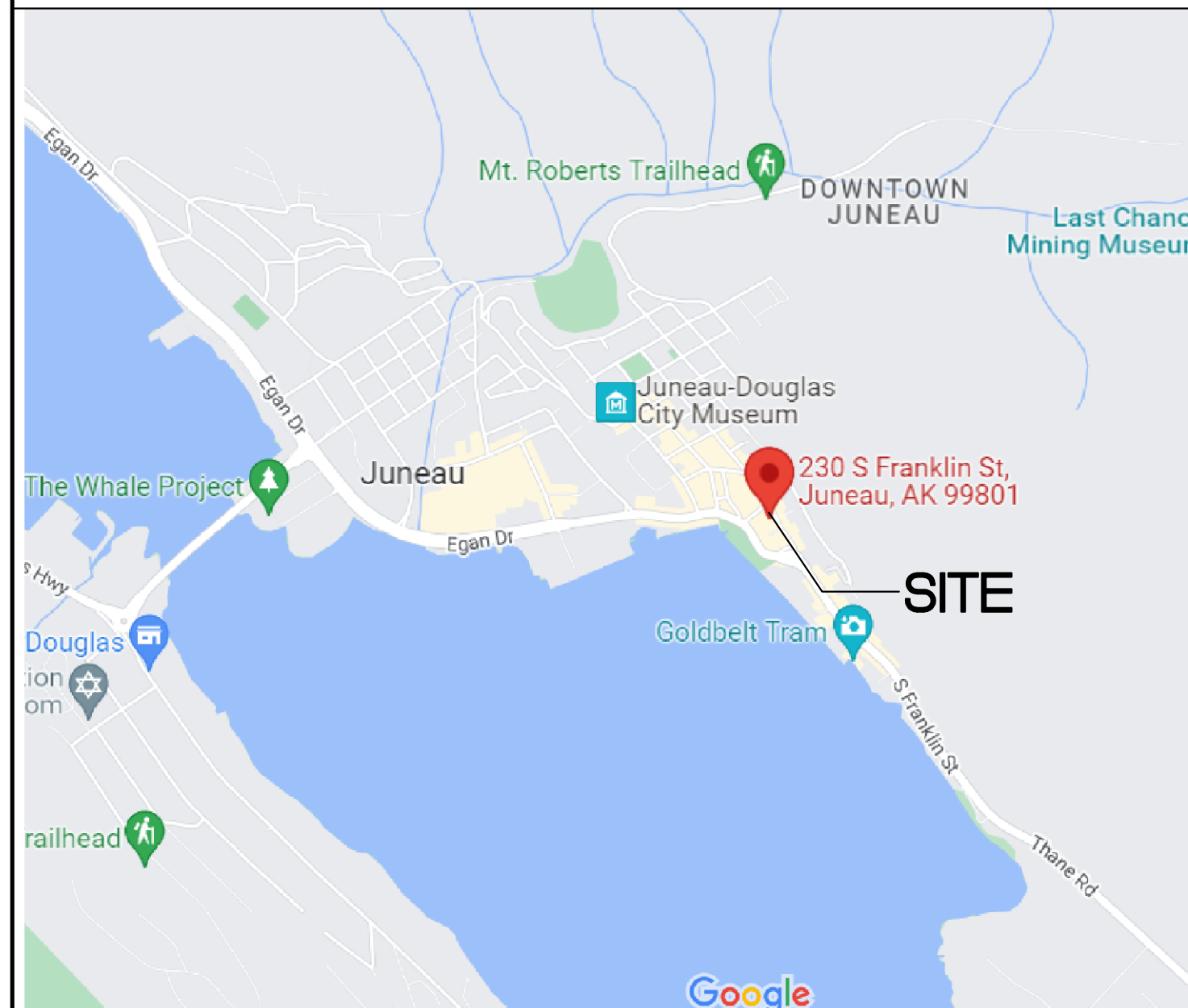
**CONSTRUCTION:**  
CONTACT: TODD RICHARDSON  
MASTEC NETWORK SOLUTIONS - ALASKA  
2240 E. DOWLING ROAD  
ANCHORAGE, AK 99507  
OFFICE: 907-336-1300  
MOBILE: 907-351-3886

## PROJECT TEAM

**PROJECT ARCHITECT:** DHD ARCHITECTURE PLLC:  
DAVID H. DEAN, ARCHITECT  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
425.503.0637 P  
DAVIDHDEAN@MSN.COM

**PROJECT CONSULTANT:** MASTEC NETWORK SOLUTIONS - ALASKA  
2240 E. DOWLING ROAD  
ANCHORAGE, AK 99507  
253-709-0317

## VICINITY MAP



## DRIVING DIRECTIONS

JUNEAU INTERNATIONAL AIRPORT  
1873 SHELL SIMMONS DR, JUNEAU, AK 99801  
HEAD SOUTH ON SHELL SIMMONS DR TOWARD YANDUKIN DR 0.2 MI  
TURN RIGHT ONTO YANDUKIN DR 0.9 MI  
SLIGHT RIGHT ONTO EGAN DR 1.1 MI  
KEEP LEFT TO STAY ON EGAN DR 6.2 MI  
CONTINUE ONTO MARINE WAY 0.2 MI  
SHARP LEFT ONTO S FRANKLIN ST 72 FT  
SLIGHT RIGHT TO STAY ON S FRANKLIN ST  
DESTINATION WILL BE ON THE LEFT  
407 FT  
230 S FRANKLIN ST  
JUNEAU, AK 99801

## DRAWING INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
N-1	GENERAL NOTES
A-1	SITE PLAN
A-2	ENLARGED PLANS
A-2.2	BUILDING EXTERIOR ELEVATIONS
A-2.3	ENLARGED EXTERIOR ELEVATIONS
A-3	DETAILS
A-4	DETAILS
A-5	DETAILS
A-6	DETAILS
A-7	DETAILS
RF-1	ANTENNA CONFIGURATION & SCHEDULE
RF-2	SIGNAGE - RADIO FREQUENCY INFORMATION
STRUCTURAL	
T-1	TITLE SHEET
N-1	MODIFICATION INSPECTION CHECKLIST
N-2	NOTES
S-1	MODIFICATION SCHEDULE
S-2	PLATFORM ROOFTOP PLACEMENT
S-3	PLATFORM FRAMING PLAN
S-4	PLATFORM INSTALLATION DETAIL
S-5	PLATFORM LADDER DETAILS
CUT SHEETS	PRODUCT INFORMATION
ELECTRICAL	
E0.1	LEGEND
E1.1	ELECTRICAL PLANS
E2.1	ONE-LINE DIAGRAMS, DETAILS & SCHEDULES

## APPROVALS LIST

APPROVAL	DATE	SIGNATURE
MNS ENGINEERING - SSA	3-13-24	Patrick Hinman
MNS SCOPING MANAGER		Reviewed By Scoping
MNS SAQ PROJECT MANAGER	3-14-24	Alexys Gutteridge
MNS CONSTRUCTION MANAGER	3-13-24	Jason Eslinger
AT&T SAQ PROJECT MANAGER	3/18/24	Cathy Waghdhare
AT&T CONSTRUCTION MANAGER		Reviewed By T. Logan

CONSTRUCTION DOCUMENTS REVIEW ROUTING ORDER. REVIEWERS MUST STAMP THEIR NAME ON THE APPROPRIATE TITLE BLOCK ABOVE.

## LEGAL DESCRIPTION

PROPERTY ID: 14257  
LEGAL DESCRIPTION: LOT 3 BLOCK 4, AIRPARK SUBDIVISION, KODIAK, AK.99615

## SITE ACCESS REQUIREMENTS

GATE CODES: TBD  
DOOR CODES: TBD  
POINT OF CONTACT FOR FACILITIES:  
SITE TECH CONTACT - NUMBER: TBD  
SITE ACCESS TIME FRAME: TBD

CALL FOR UNDERGROUND  
UTILITIES PRIOR TO DIGGING

811  
OR  
(800) 478-3121 (ALASKA)  
EMERGENCY:  
CALL 911



Nicholas Spiropolos



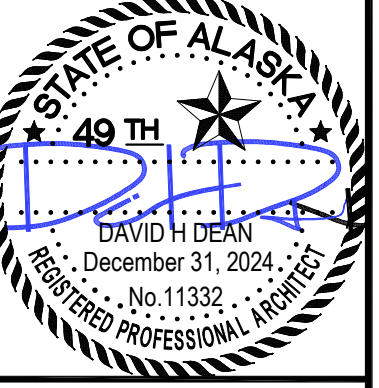
Select Site Acquisition,  
LLC  
24009 E ALKILANE  
LIBERTY LAKE, WA 99019

DHD  
ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
EMAIL: davidhdean@outlook.com  
HTTP://WWW.DHDARCHITECTURE.BIZ

JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE:  
03-21-2024

NO.	DATE	ISSUE BLOCK
1	05-26-22	TURF4-NSB 1C RFDS DATED 04-08-22
2	02-16-23	REV TO PENTHOUSE EQUIPMENT
3	02-23-23	ADD SCHEMATIC CONDUIT RUN INFO
4	04-19-23	ANTENNA MOUNT REV
5	05-24-23	EQUIPMENT REVISIONS
6	01-05-24	TURF4-REV TO EQUIPMENT PLATFORM
7	03-06-24	ADD FIRE RATED SHAFT ACCESS DOORS



SHEET TITLE:  
TITLE SHEET

SHEET NUMBER:  
T-1



GENERAL NOTES:

1. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
2. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
3. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
6. ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
7. GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.
8. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
9. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
10. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
11. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
14. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
15. THE CONTRACTOR SHALL PROVIDE AT&T WIRELESS, LLC. PROPER INSURANCE CERTIFICATES NAMING AT&T WIRELESS, LLC. AS ADDITIONAL INSURED, AND AT&T WIRELESS, LLC. PROOF OF LICENSE(S) AND PE & PD INSURANCE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL INSPECTIONS.
17. CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. DIAL 811
18. CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO AT&T WIRELESS, LLC. ALONG WITH REDLINED CONSTRUCTION SET.
19. CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO AT&T WIRELESS, LLC. UPON COMPLETION.
20. FOR COLLOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
21. GENERAL CONTRACTOR IS TO COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO NETWORK CARRIER REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.
22. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY AT&T CONSTRUCTION MANAGER.
23. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCUR, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.
24. IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS WITHIN CONCEALED (SHROUDED) SUPPORT FRAMES OR TRIPODS, THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHROUD IS SIMULATING (IN APPEARANCE) DESIGNATED EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK FASTENERS IN ALL FRP CONSTRUCTION. WHEN PHOTO SIMULATIONS ARE PROVIDED, THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTO SIMULATIONS. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

GENERAL NOTES (CONT'D):

25. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO A CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS WITHIN THE ROOF SLAB - RESULTING FROM AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" - HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.
26. GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TIES FOR ALL CABLE TRAY TIE DOWNS AND ALL OTHER GENERAL TIE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON AT&T PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANDUIT CORP. METAL LOCKING TIES MODEL NO. MLT4S-CP UNDER SERIES-304 (OR EQUAL). PANDUIT PRODUCT DISTRIBUTED BY TRIARC OF TACOMA, WA.

DESIGN CRITERIA:

1. THE STRUCTURAL DESIGN OF THIS PROJECT IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2018

DESIGN LOADS:

-ROOF SNOW LOAD		PER STRUCTURAL
-BASIC WIND SPEED		PER STRUCTURAL
-WIND EXPOSURE		PER STRUCTURAL

CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318.
2. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH CHAPTER 19 OF THE IBC 2021. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS.

TYPE OF CONSTRUCTION	28 DAY STRENGTHS (f'c)	W/C RATIO	MINIMUM CEMENT CONTENT PER CUBIC YARD
A. SLABS ON GRADE TOPPING SLABS CONCRETE PIERS	3,000 PSI	≤ .45	5 1/2 SACKS
B. ALL STRUCTURAL CONCRETE EXCEPT WALLS	4,000 PSI	≤ .45	6 1/2 SACKS
C. CONCRETE WALLS	4,000 PSI	≤ .45	6 1/2 SACKS

CEMENT SHALL BE ASTM C150, PORTLAND CEMENT TYPE II U.N.O.

3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND BE RESPONSIBLE FOR THE METHODS AND PROCEDURES OF CONCRETE PLACEMENT.
4. ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, C618, C989 AND C1017. TOTAL AIR CONTENT SHALL BE IN ACCORDANCE WITH TABLE 1904.2.1 OF THE IBC 2021.
5. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy=60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy=40,000 PSI. GRADE 60 REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D14 ARE SUBMITTED.
6. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
8. SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy=60,000 PSI.
9. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE CONSULTANT.
10. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

- FOOTINGS AND OTHER UNFORMED SURFACES, EARTH FACE

3"

- FORMED SURFACES EXPOSED TO EARTH OR WEATHER

(#6 BARS OR LARGER) 2"

(#5 BARS OR SMALLER) 1 1/2"

- SLABS AND WALLS (INTERIOR FACE)

3/4"
11. BARS SHALL BE SUPPORTED ON CHAIRS OR DOBIE BRICKS.
12. ANCHOR BOLTS TO CONFORM TO ASTM A307.
13. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).
14. ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER.

STRUCTURAL STEEL NOTES:

1. SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW PRIOR TO FABRICATION.
2. STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) SHALL BE BASED ON THE A.I.S.I. "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION. SUPERVISION SHALL BE IN ACCORDANCE WITH IBC 2021 CHAPTER 22, BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE CONSULTANT. THE CONSULTANT SHALL BE FURNISHED WITH A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS.
3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER

A. WIDE FLANGE SHAPE  
B. OTHER SHAPE, PLATES AND ROD  
C. PIPE COLUMNS  
D. STRUCTURAL TUBING  
E. ANCHOR BOLTS  
F. CONNECTION BOLTS

ASTM A992, Fy 50 KSI  
ASTM A36, Fy 36 KSI  
ASTM A53, Fy 35 KSI  
ASTM A500, Fy 46 KSI  
ASTM A307  
ASTM A325
4. ALL MATERIAL TO BE HOT DIPPED GALVANIZED AFTER FABRICATION PER A123/A123M-00.
5. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.I. AND AWS STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70 XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.
6. COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE, AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."
7. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
8. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
9. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION SPECIFICATION AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
10. ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
11. TOUCH UP ALL FIELD DRILLING AND WELDING WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

TOWER/POLE NOTES:

1. VERIFICATION THAT THE PROPOSED TOWER/POLE CAN SUPPORT THE PROPOSED ANTENNA LOADING IS TO BE DONE BY OTHERS.
2. PROVIDE SUPPORTS FOR THE ANTENNA COAX CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA COAX CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.

ABBREVIATED ROOF TOP SAFETY PROCEDURES (WHEN APPLICABLE):

FALL PROTECTION METHODS AND EQUIPMENT  
ROOF TOP INSTALLATIONS

1. FOR WORK IS BEING PERFORMED WITHIN 25' OF AN UNPROTECTED ROOF EDGE, THE CONSTRUCTION SUPERVISOR SHALL DESIGNATE A TRAINED SAFETY MONITOR TO OBSERVE THE MOVEMENTS AND ACTIVITIES OF THE CONSTRUCTION WORKERS.
2. SAFETY MONITOR SHALL WARN CONSTRUCTION WORKERS OF HAZARDS (I.E., BACKING UP TOWARD A ROOF EDGE, ETC.) OR UNSAFE ACTIVITIES. THE SAFETY MONITOR MUST BE ON THE SAME ROOF AND WITHIN VISUAL AND VERBAL DISTANCE OF THE CONSTRUCTION WORKERS.
3. CONSTRUCTION INVOLVING WORKERS TO APPROACH WITHIN 6' OR LESS OF AN UNPROTECTED ROOF EDGE, REQUIRES WORKERS TO USE SAFETY LINE.
4. SAFETY LINE SHALL BE MINIMUM 1/4" DIAMETER NYLON, WITH A NOMINAL TENSILE STRENGTH OF 5400 LBS.
5. SAFETY LINE SHALL BE ATTACHED TO A SUBSTANTIAL MEMBER OF THE STRUCTURE.
6. SAFETY LINE LENGTH SHALL BE SET ALLOWING CONSTRUCTION WORKER TO REACH EDGE OF ROOF, BUT NOT BEYOND.
7. SAFETY BELTS SHALL BE WORN BY ALL CONSTRUCTION WORKERS.
8. MONTHLY SAFETY INSPECTION AND MAINTENANCE OF THE FALL PROTECTION EQUIPMENT SHALL OCCUR BY THE SAFETY COMMITTEE REPRESENTATIVES, INCLUDING:

INSPECTION OF CONSTRUCTION AREA FOR HAZARDS  
USE OF AN INSPECTION CHECKLIST  
INTERVIEWING COWORKERS REGARDING SAFETY CONCERNS  
REPORTING AND DOCUMENTING ANY HAZARDS  
REPORTING HAZARDS TO THE SAFETY COMMITTEE FOR CONSIDERATION  
POSTING RESULTS OF INSPECTION AND ANY ACTION TAKEN  
RECEIVING AN UNBIASED REVIEW OF ONE'S OWN WORK AREA BY ANOTHER COWORKER SAFETY REPRESENTATIVE

REFER TO ROOFTOP WORK AREA SAFETY PROTOCOL  
NATIONAL ASSOCIATION OF TOWER ERECTORS 2000 PUBLICATION

REFERENCED OSHA REGULATION/STANDARDS SHALL BE REVIEWED BY TOWER ERECTORS.  
EQUIPMENT INSTALLERS, AND TOWER/ROOF TOP CONTRACTORS/SUBCONTRACTORS  
29 CFR 1926.500 - SCOPE, APPLICATION AND DEFINITIONS  
29 CFR 1926.501 - DUTY TO HAVE FALL PROTECTION  
19 CFR 1926.502 - FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES

SYMBOLS AND ABBREVIATIONS

A/C	AIR CONDITIONING	LBS	POUNDS
AGL	ABOVE GRADE LEVEL	MAX	MAXIMUM
APPROX	APPROXIMATELY	MECH	MECHANICAL
		MTL	METAL
BLDG	BUILDING	MFR	MANUFACTURE
BLK	BLOCKING	MGR	MANAGER
		MIN	MINIMUM
CLG	CEILING	MISC	MISCELLANEOUS
CLR	CLEAR		
CONC.	CONCRETE	NA	NOT APPLICABLE
CONST	CONSTRUCTION	NIC	NOT IN CONTRACT
CONT	CONTINUOUS	NS	NEAR SIDE
		NTS	NOT TO SCALE
DBL	DOUBLE	OC	ON CENTER
DIA	DIAMETER	OD	OUTSIDE DIAMETER
DIAG	DIAGONAL		
DN	DOWN		
DET	DETAIL	PLYWD	PLYWOOD
DWG	DRAWING	PROJ	PROJECT
		PROP	PROPERTY
EA	EACH	PT	PRESSURE TREATED
EL	ELEVATION	REQ	REQUIRED
ELEC	ELECTRICAL	RM	ROOM
EQ	EQUAL	RO	ROUGH OPENING
EQUIP	EQUIPMENT		
EXT	EXTERIOR	SHT	SHEET
		SIM	SIMILAR
FIN	FINISH	SPEC	SPECIFICATION
FLUOR	FLUORESCENT	SF	SQUARE FOOT
FLR	FLOOR	SS	STAINLESS STEEL
FS	FAR SIDE	STL	STEEL
FT	FOOT	STRUCT	STRUCTURAL
		STD	STUD
		SUSP	SUSPENDED
GA	GAUGE		
GALV	GALVANIZED	THRU	THROUGH
GC	GENERAL CONTRACTOR	TNNG	TINNED
GRND	GROUND	TYP	TYPICAL
GYP BD	GYP SUM WALL BOARD		
		UNO	UNLESS NOTED OTHERWISE
HORZ	HORIZONTAL		
HR	HOUR	VERT	VERTICAL
HT	HEIGHT	VIF	VERIFY IN FIELD
HVAC	HEATING VENTILATION AIR CONDITIONING		
		W/	WITH
ID	INSIDE DIAMETER	W/O	WITHOUT
INCH	INCH	WP	WATER PROOF
INFO	INFORMATION		
INSUL	INSULATION		
INT	INTERIOR		
IBC	INTERNATIONAL BUILDING CODE		
		TELEPHONE	
----- T ----- T -----		POWER	
----- P ----- P -----		GROUND WIRE	
----- COAX ----- COAX -----		COAXIAL CABLE	
		ANTENNA	
		CENTERLINE	
		EXISTING	
		DETAIL NUMBER	
		SHEET NUMBER	

TRANSMITTING NOTES:

APPLICABLE BUILDING CODES AND STANDARDS:

- ALL TRANSMITTING ANTENNAS WILL BE INSTALLED IN A MANNER AS SET FORTH BY THE MANUFACTURER AND BY THE FEDERAL COMMUNICATIONS COMMISSION AS MEETING THE CURRENT AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) STANDARD FOR NONIONIZING ELECTROMAGNETIC RADIATION (NIER).

- TELECOMMUNICATIONS INDUSTRY ASSOCIATION, (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES.

- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1000 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT.

- IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE").

- TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS.



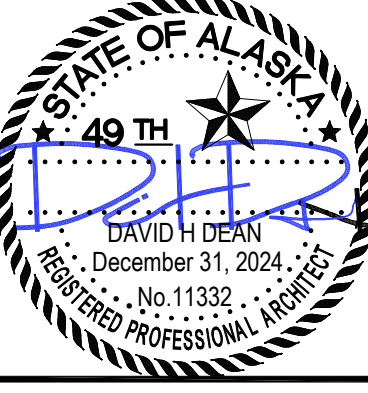
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ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
EMAIL: david@dhdaoutlook.com  
HTTP://WWW.DHDARCHITECTURE.BIZ

JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE:  
03-21-2024

NO.	DATE	ISSUE BLOCK
1	05-26-22	TURF4NSB 1C RFDS DATED 04-08-22
2	02-16-23	REV TO PENTHOUSE EQUIPMENT
3	02-23-23	ADD SCHEMATIC CONDUIT RUN INFO
4	04-19-23	ANTENNA MOUNT REVS
5	05-24-23	EQUIPMENT REVISIONS
6	01-05-24	TURF4REV TO EQUIPMENT PLATFORM
7	03-06-24	ADD FIRE RATED SHAFT ACCESS DOORS



SHEET TITLE:

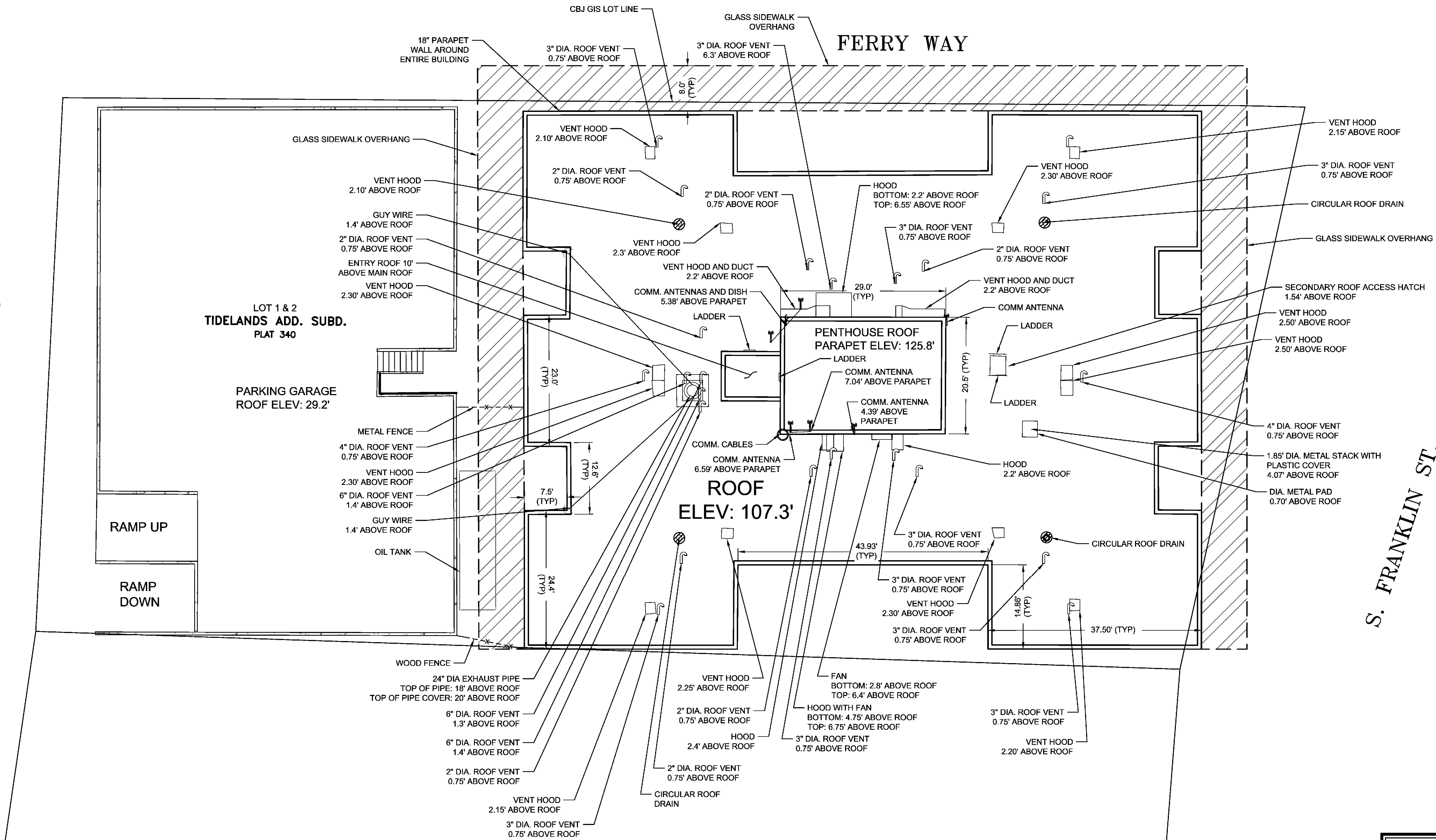
GENERAL NOTES

SHEET NUMBER:

N-1



MARINE WAY



#### NOTES:

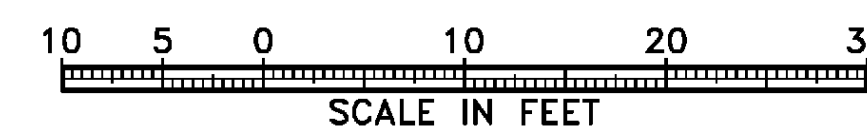
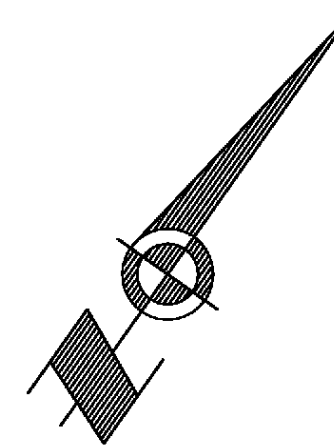
1. THE PURPOSE OF THIS SURVEY IS TO PROVIDE AS-BUILT LOCATIONS OF THE ROOF/PENTHOUSE AND ALL PROTRUDING EQUIPMENT ON THE ROOF OF THE MARINEVIEW APARTMENTS.
2. THE FIELD WORK FOR THIS SURVEY WAS CONDUCTED IN SEPTEMBER, 2022.
3. THE HORIZONTAL POSITIONS OF SURVEY CONTROL POINTS WERE ESTABLISHED WITH A COMBINATION OF HIGH PRECISION STATIC GPS AND CONVENTIONAL TOTAL STATION METHODS.
4. PROPERTY LINES DERIVED FROM CITY AND BOROUGH OF JUNEAU PUBLISHED GIS DATA. PROPERTY LINES SHOWN ARE GRAPHICAL REPRESENTATIONS AND ARE NOT INTENDED TO REPRESENT ACTUALLY PROPERTY LOCATIONS.
5. MARINE VIEW ROOF ELEVATION DERIVED FROM AVERAGED SHOT POINTS. ROOF ELEVATION = 107.3'
6. ELEVATOR SHAFT BUILDING (PENTHOUSE ROOF) DERIVED FROM AVERAGE SHOT ELEVATIONS. PENTHOUSE ROOF ELEVATION = 124.3'

#### HORIZONTAL CONTROL STATEMENT

**BASIS OF COORDINATES:**  
THE BASIS OF COORDINATES IS THE NAD83 ALASKA STATE PLANE ZONE 1 COORDINATES FOR THE CP-1, SET SPIKE. THESE NAD83 ALASKA STATE PLANE ZONE 1 COORDINATES ARE 2,362,083.82 NORTH, 2,541,967.25 EAST, U.S. SURVEY FEET (68°17'55.3695" NORTH, 134°24'53.8941" WEST). CP-1 IS LOCATED ON THE NW CORNER OF "TRACY'S CRAB SHACK" PARKING LOT.

#### VERTICAL CONTROL STATEMENT

VERTICAL DATUM BASED ON NAVD88 ELEVATIONS EXPRESSED IN US FEET. THE BASE OF ELEVATION IS CONTROL POINT CP-1, A SET SPIKE, HAVING AN ELEVATION OF 22.25'. THE ELEVATIONS FOR ALL OTHER POINTS WERE DETERMINED USING REAL TIME KINEMATIC SURVEYING TECHNIQUES AND DERIVED USING GEOID12B.



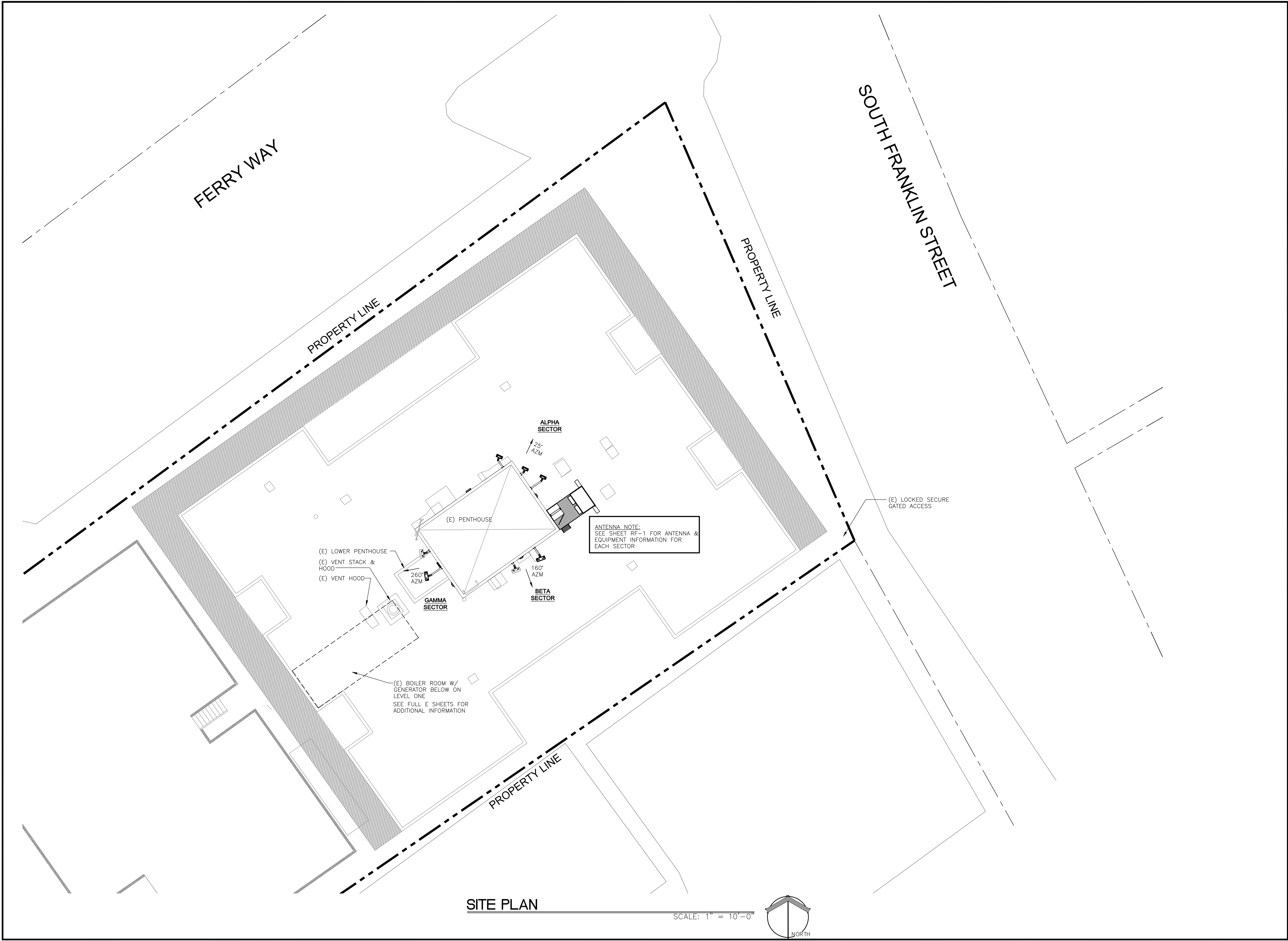
NAME OF SURVEYOR:  
**RESPEC**  
1028 AURORA DR.  
FAIRBANKS, AK 99709  
**PHONE:** 907.452.1414  
**FAX:** 907.4562707  
AECC163270

### ROOF SURVEY MARINE VIEW APARTMENTS

LOCATED WITHIN  
LOTS 1 & 2, BLOCK 82  
TIDELANDS ADDITION  
RECORDED PLAT 340  
JUNEAU RECORDING DISTRICT, JUNEAU, AK  
CITY AND BOROUGH OF JUNEAU, JUNEAU, AK

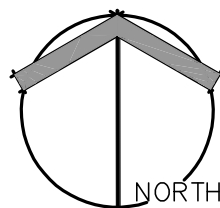
OWNER:	SCALE 1" = 10'
MasTec Network Solutions	SURVEYOR EV
2240 E. DOWLING RD.	DRAWN GES
ANCHORAGE, AK 99515	CHECKED KHE
907.336.1300	DATE 9/30/2022
	PROJECT NO. 10944.22001
	SHEET NUMBER 1 OF 1







SITE PLAN

SCALE: 1" = 10'-0"





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Network Solutions

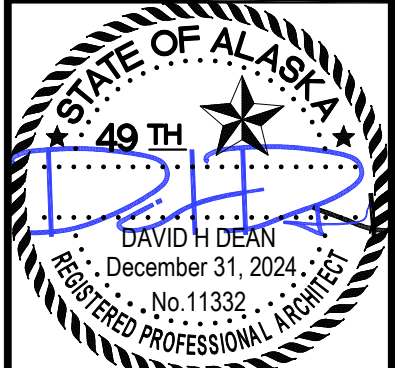
Select Site Acquisition,  
LLC  
24009 E ALKI LANE  
LIBERTY LAKE, WA 99019

**DHD**  
ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
EMAIL: daviddean@outlook.com  
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**JN3073**  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE:  
03-21-2024

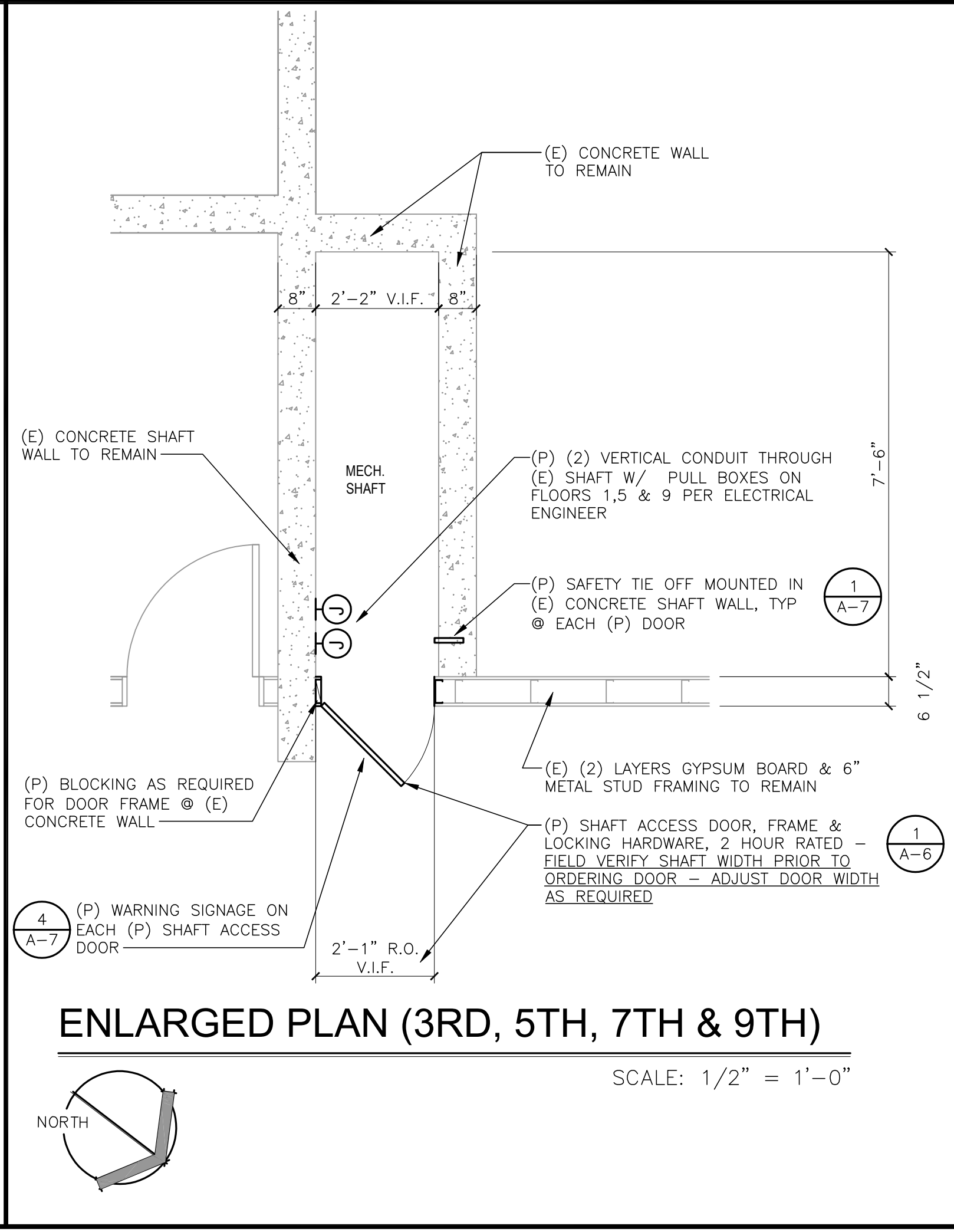
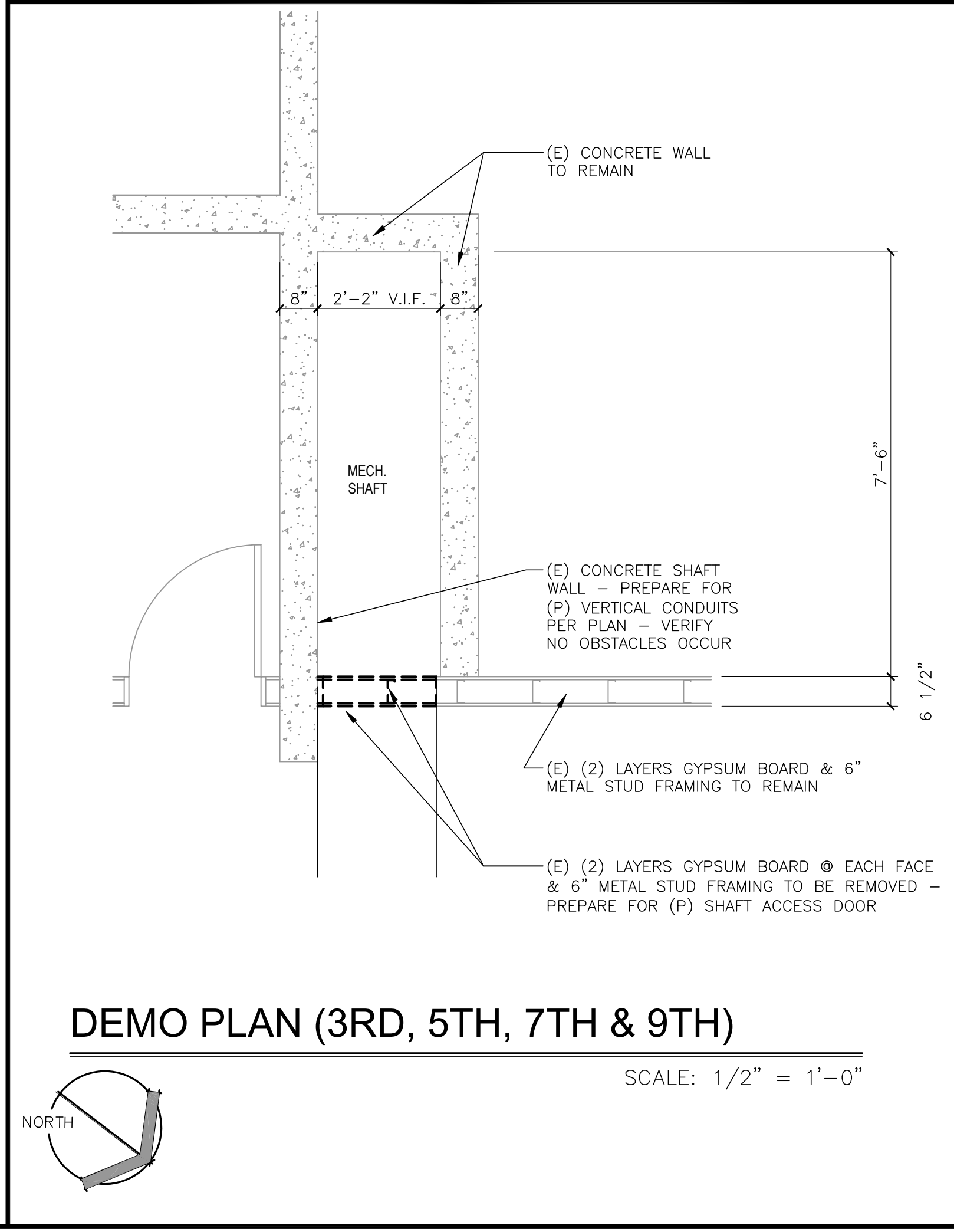
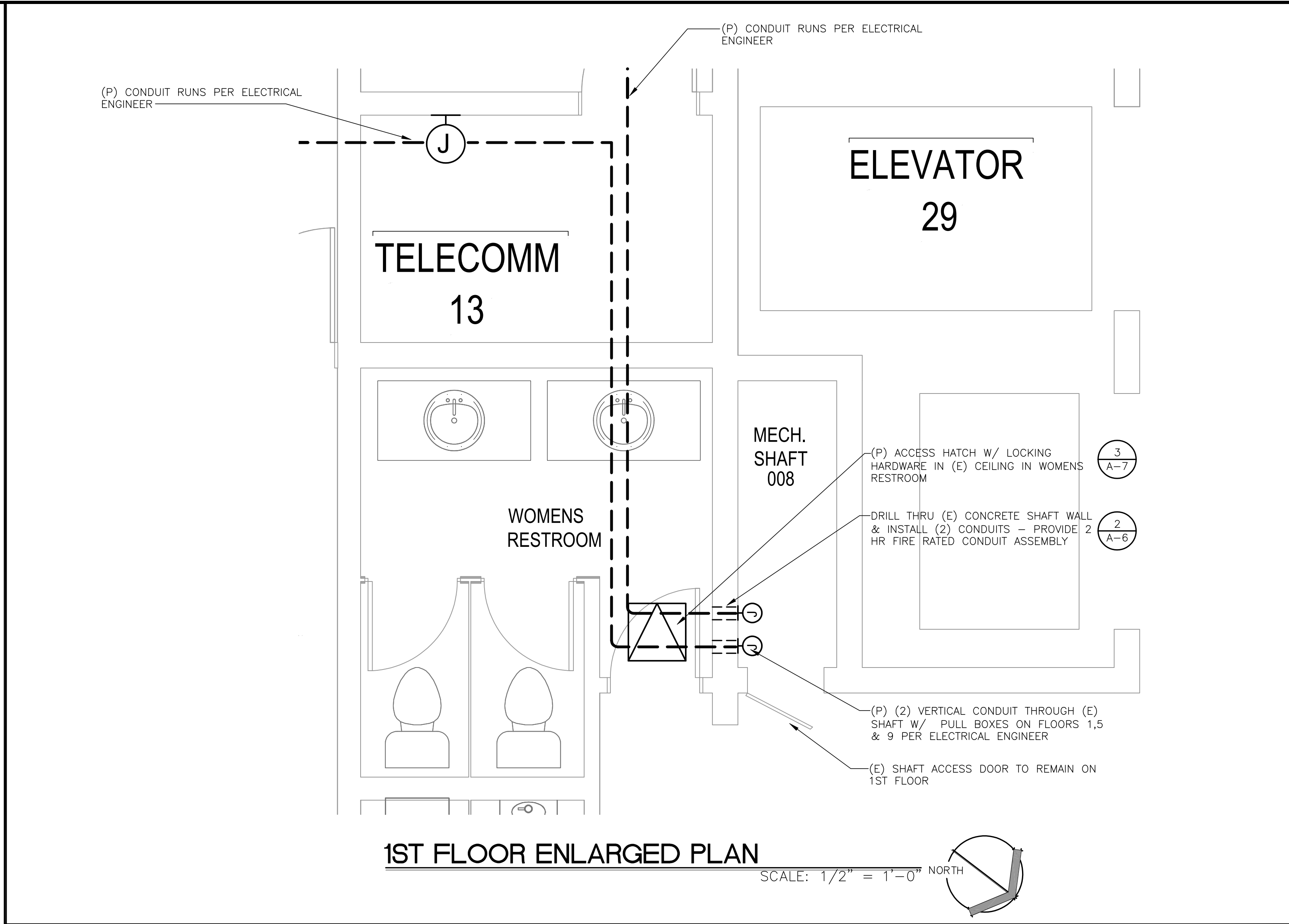
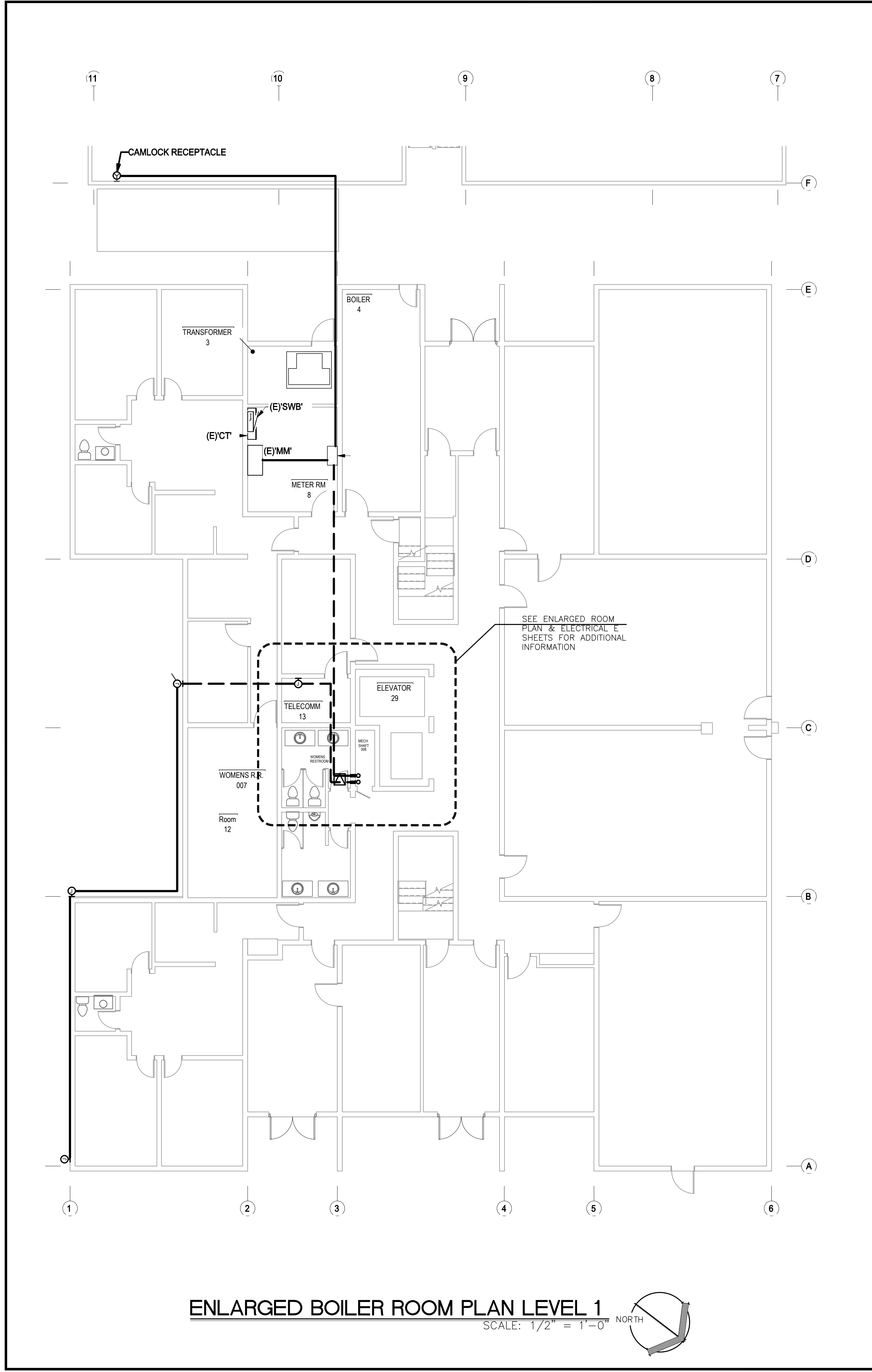
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3	02-23-23	ADD SCHEMATIC CONDUIT RUN INFO
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5	05-24-23	EQUIPMENT REVISIONS
6	01-05-24	TURF4-REV TO EQUIPMENT PLATFORM
7	03-06-24	ADD FIRE RATED SHAFT ACCESS DOORS




SHEET TITLE:  
SITE PLAN

SHEET NUMBER:  
**A-1**







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PHONE: 425.657.0552  
EMAIL: david@hdean.com  
HTTP://WWW.DHDARCHITECTURE.BIZ

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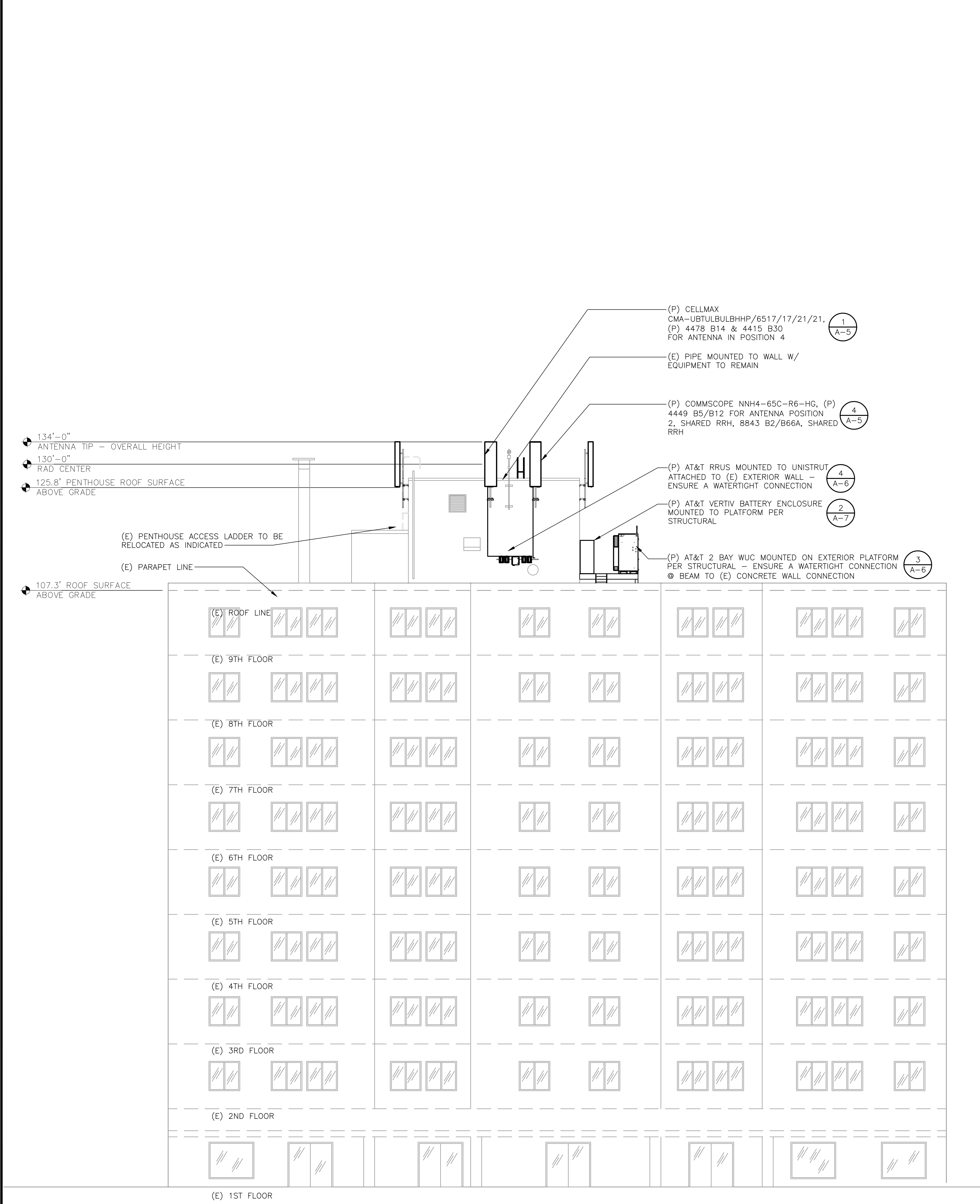
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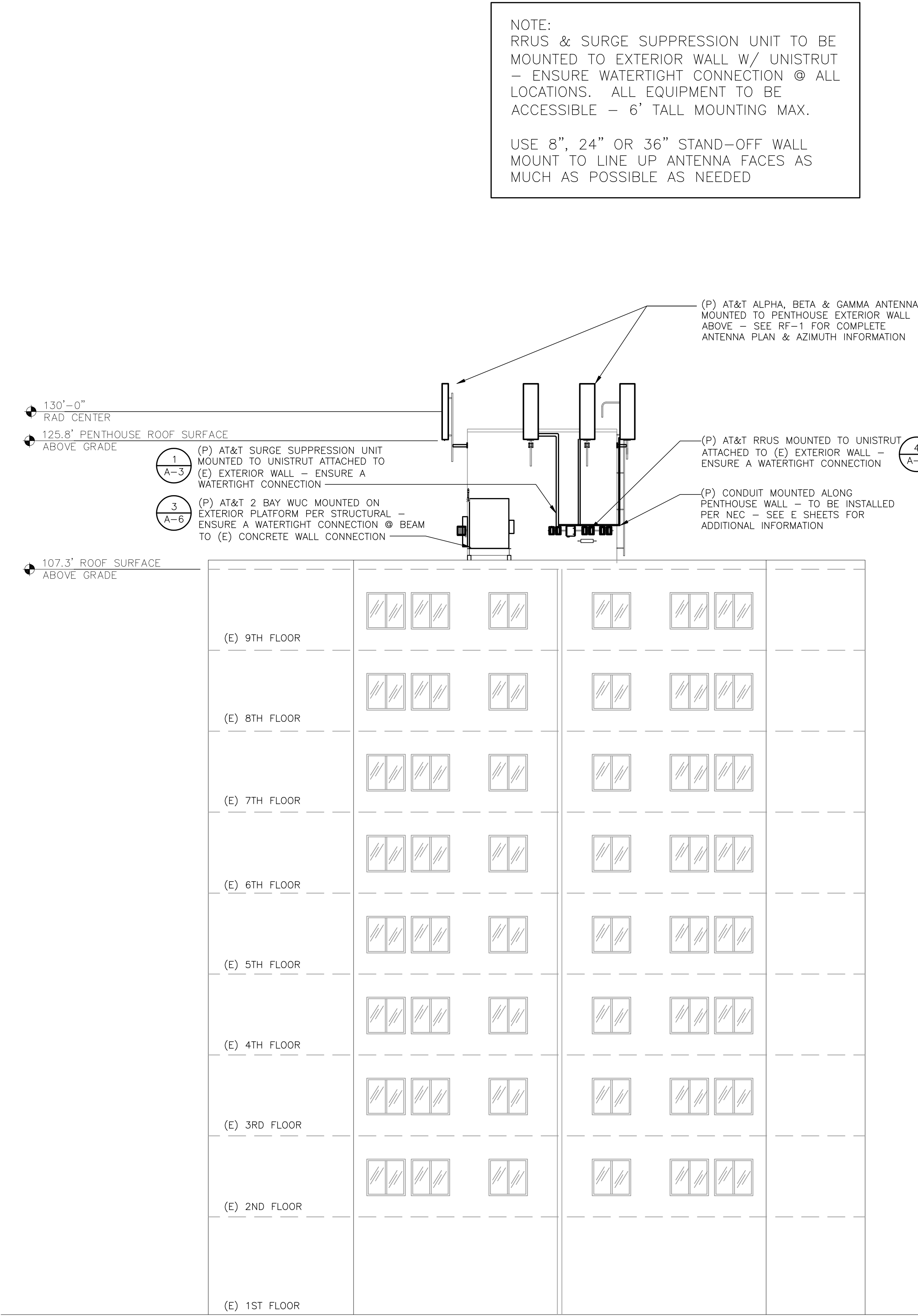
SHEET TITLE:  
EXTERIOR  
ELEVATIONS

SHEET NUMBER:  
A-2



EAST EXTERIOR ELEVATION

SCALE: 1" = 20'-0"



NORTH EXTERIOR ELEVATION (ALPHA)

SCALE: 1" = 20'-0"

NOTE:  
RRUS & SURGE SUPPRESSION UNIT TO BE MOUNTED TO EXTERIOR WALL W/ UNISTRUT - ENSURE WATERTIGHT CONNECTION @ ALL LOCATIONS. ALL EQUIPMENT TO BE ACCESSIBLE - 6' TALL MOUNTING MAX.  
  
USE 8", 24" OR 36" STAND-OFF WALL MOUNT TO LINE UP ANTENNA FACES AS MUCH AS POSSIBLE AS NEEDED



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LIBERTY LAKE, WA 99019

DHD ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
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JUNEAU, AK 99801

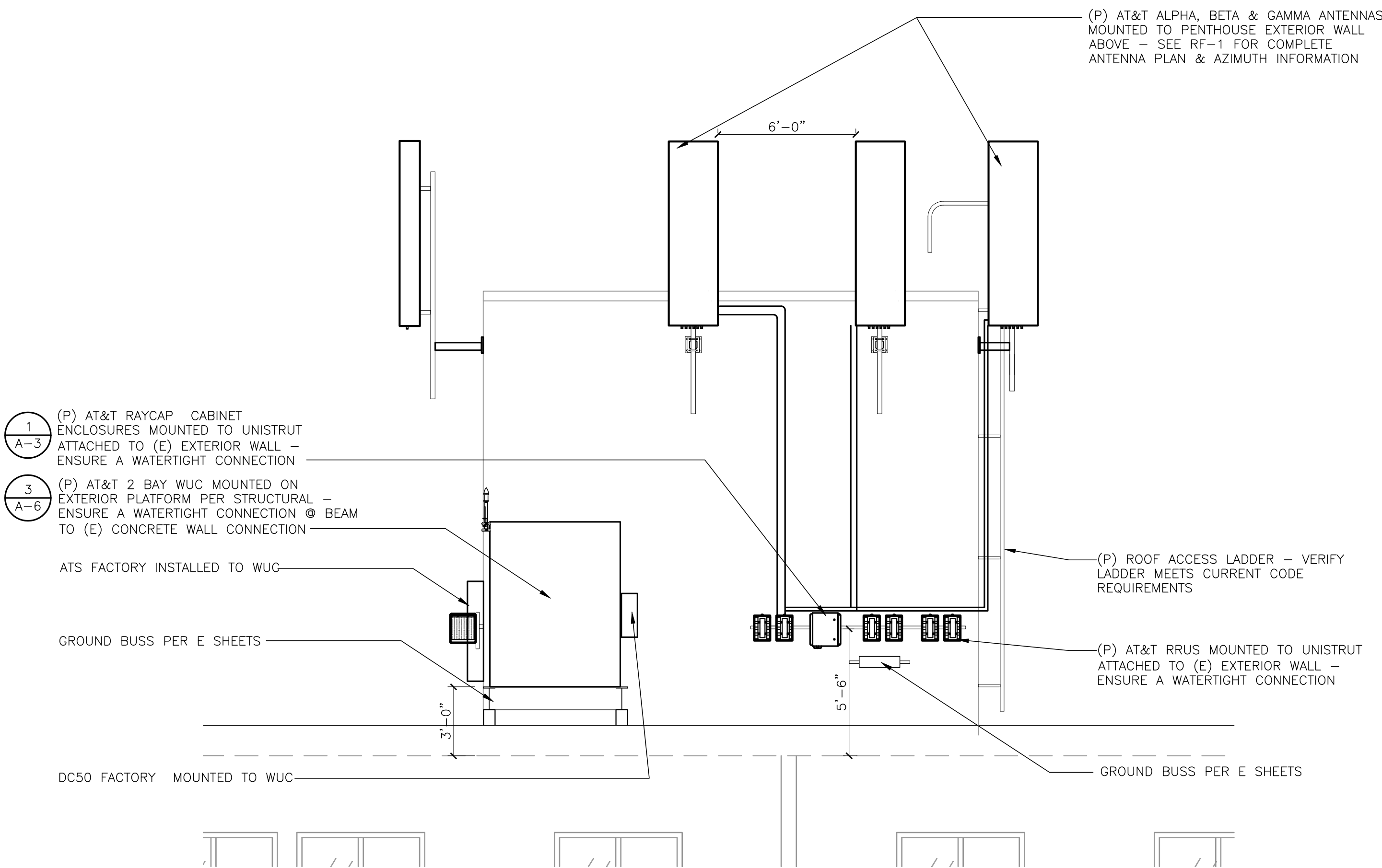
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ISSUE BLOCK	
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SHEET TITLE:  
EXTERIOR ELEVATIONS

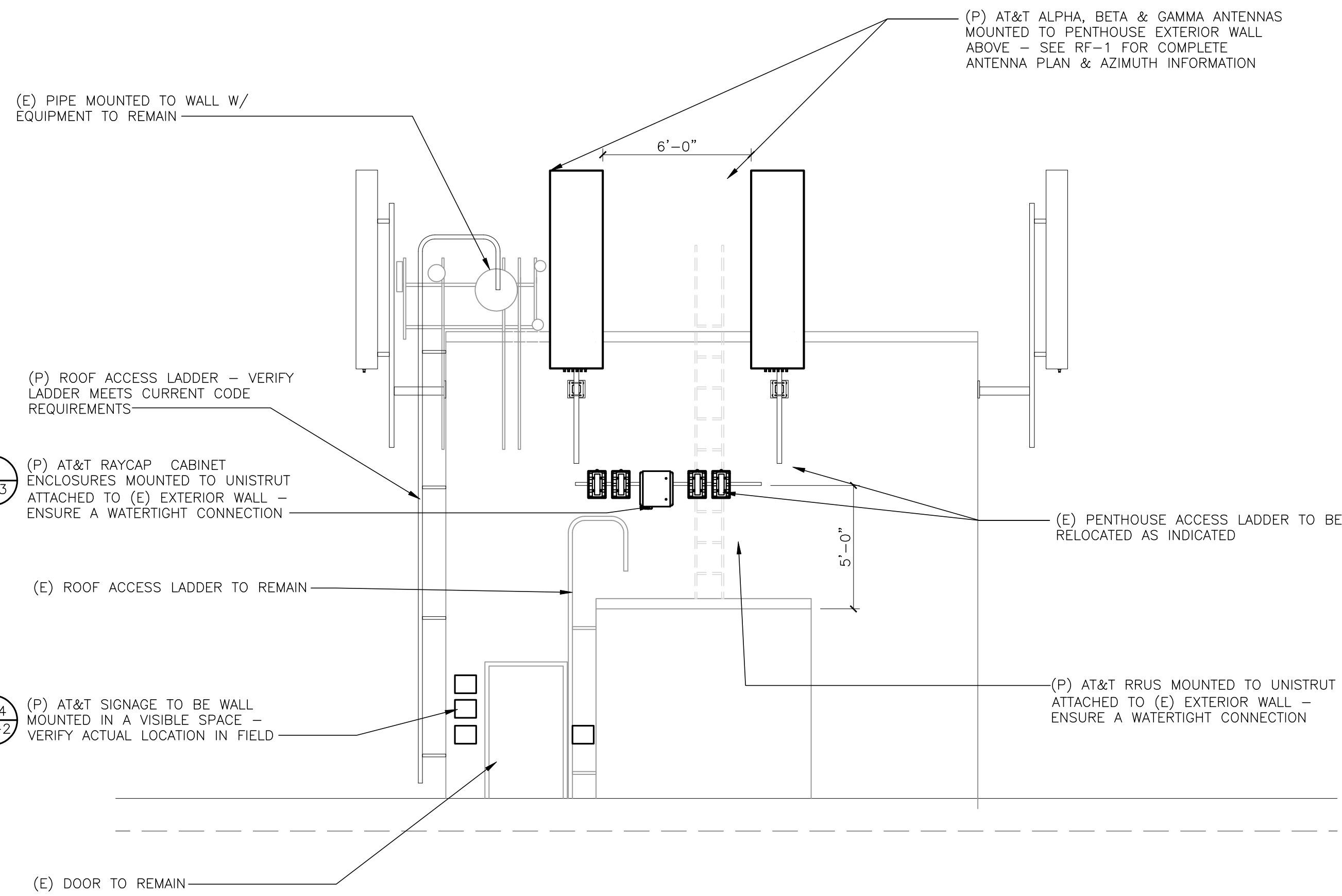
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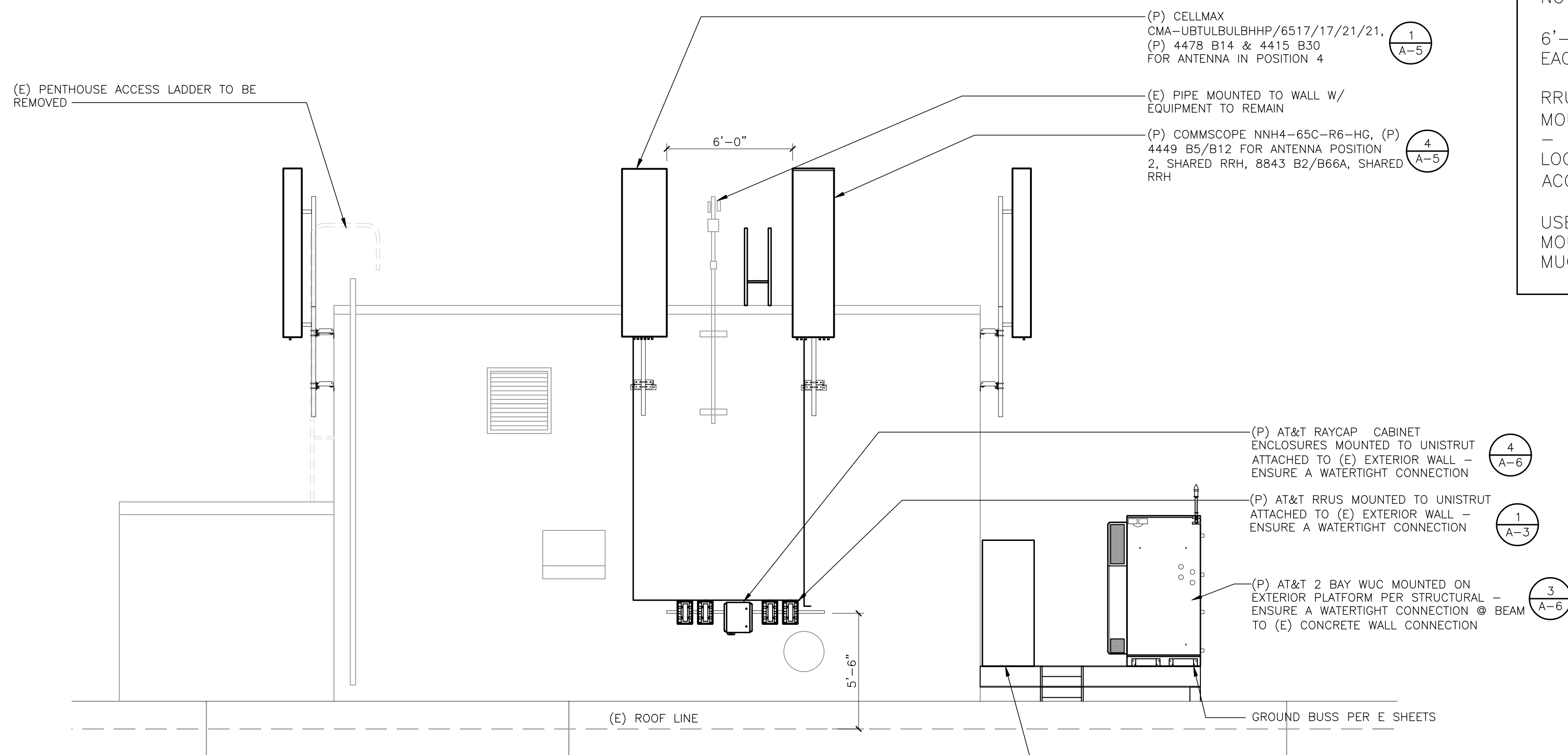
**NORTH EXTERIOR ELEVATION (ALPHA)**

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



**SOUTH EXTERIOR ELEVATION (GAMMA)**

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



**EAST EXTERIOR ELEVATION (BETA)**

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

**NOTE:**

6'-0" TYPICAL ANTENNA SEPARATION @ EACH SECTOR

RRUS & SURGE SUPPRESSION UNIT TO BE MOUNTED TO EXTERIOR WALL W/ UNISTRUT - ENSURE WATERTIGHT CONNECTION @ ALL LOCATIONS. ALL EQUIPMENT TO BE ACCESSIBLE - 6' TALL MOUNTING MAX.

USE 8", 24" OR 36" STAND-OFF WALL MOUNT TO LINE UP ANTENNA FACES AS MUCH AS POSSIBLE AS NEEDED



**EXISTING ELEVATION (GAMMA)**

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

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RRUS 4449 B5, B12

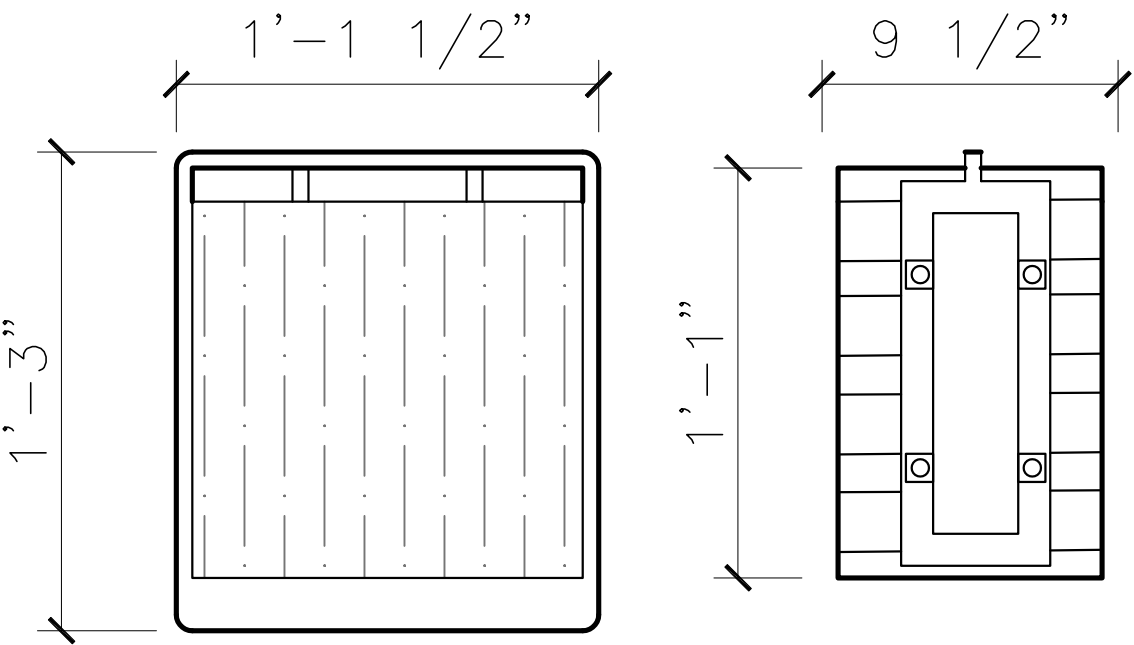
DIMENSIONS (WITH SUNSHIELD)

WIDTH: 14.96 in  
HEIGHT: 13.19 in  
DEPTH: 9.25 in  
WEIGHT: 70 lbs

4TX/4RX PER BAND  
320W OF TOTAL POWER  
4x40 W PER BAND OR 2x60 W & 2x80 W  
FOR B66A  
LTE: MAX OF 3 CARRIERS PER PORT (DL), MAX 3  
CARRIERS PER PORT (UL)

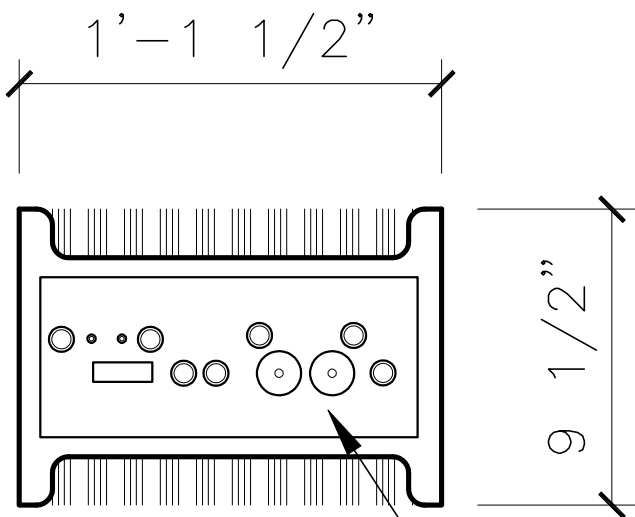
-48 VDC 3-WIRE (2-WIRE W/ ADAPTER)

- ADAPTER IS REQUIRED FOR 2-WIRE CONNECTION
- SHIELDED DC CABLE IS REQUIRED
- › GROUND CABLE SIZE = 2AWG



FRONT

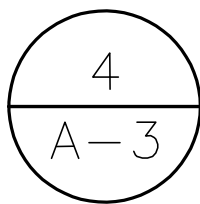
SIDE



BOTTOM

SEE PRODUCT  
BROCHURE FOR  
CONNECTION  
INTERFACES

RRUS B5/B12 4449

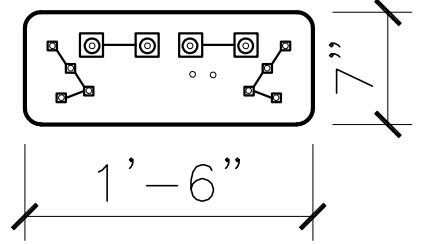


1/2" = 1'-0"

COMMSCOPE SBNHH-1D45C

6-PORT SECTOR ANTENNA

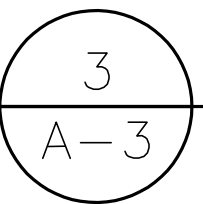
WEIGHT; 79.6 lbs (36.1 kg)  
WIND LOAD; 1460 N @ 150 km/h  
328.2 lbf @ 150 km/h



INCLUDED PRODUCTS

BSAMNT-1 WIDE PROFILE ANTENNA  
DOWNTILT MOUNTING KIT FOR 2.5-4.5" OD  
ROUND MEMBERS

ANTENNA SPEC



NTS

RRUS 8843 B2, B66A

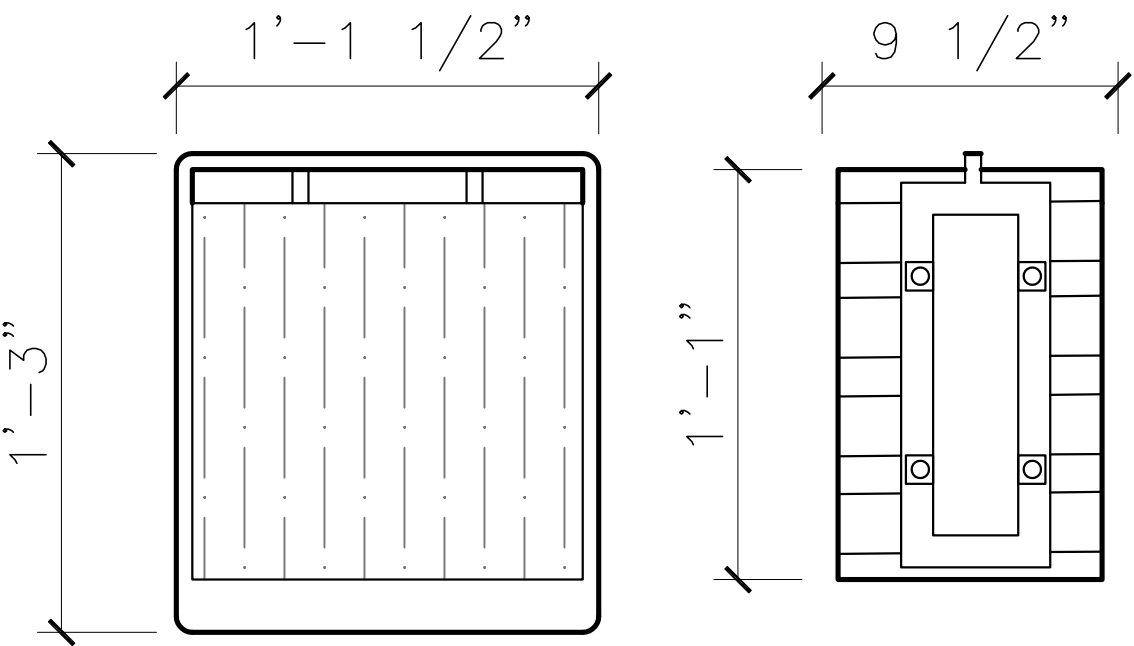
DIMENSIONS (WITH SUNSHIELD)

WIDTH: 14.96 in  
HEIGHT: 13.19 in  
DEPTH: 9.25 in  
WEIGHT: 70 lbs

4TX/4RX PER BAND  
320W OF TOTAL POWER  
4x40 W PER BAND OR 2x60 W & 2x80 W  
FOR B66A  
LTE: MAX OF 3 CARRIERS PER PORT (DL), MAX 3  
CARRIERS PER PORT (UL)

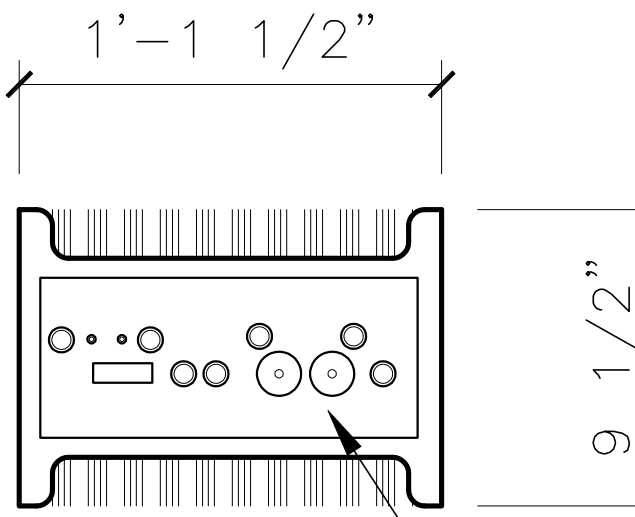
-48 VDC 3-WIRE (2-WIRE W/ ADAPTER)

- ADAPTER IS REQUIRED FOR 2-WIRE CONNECTION
- SHIELDED DC CABLE IS REQUIRED
- › GROUND CABLE SIZE = 2AWG



FRONT

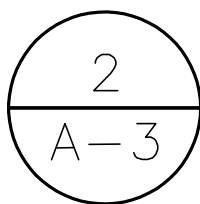
SIDE



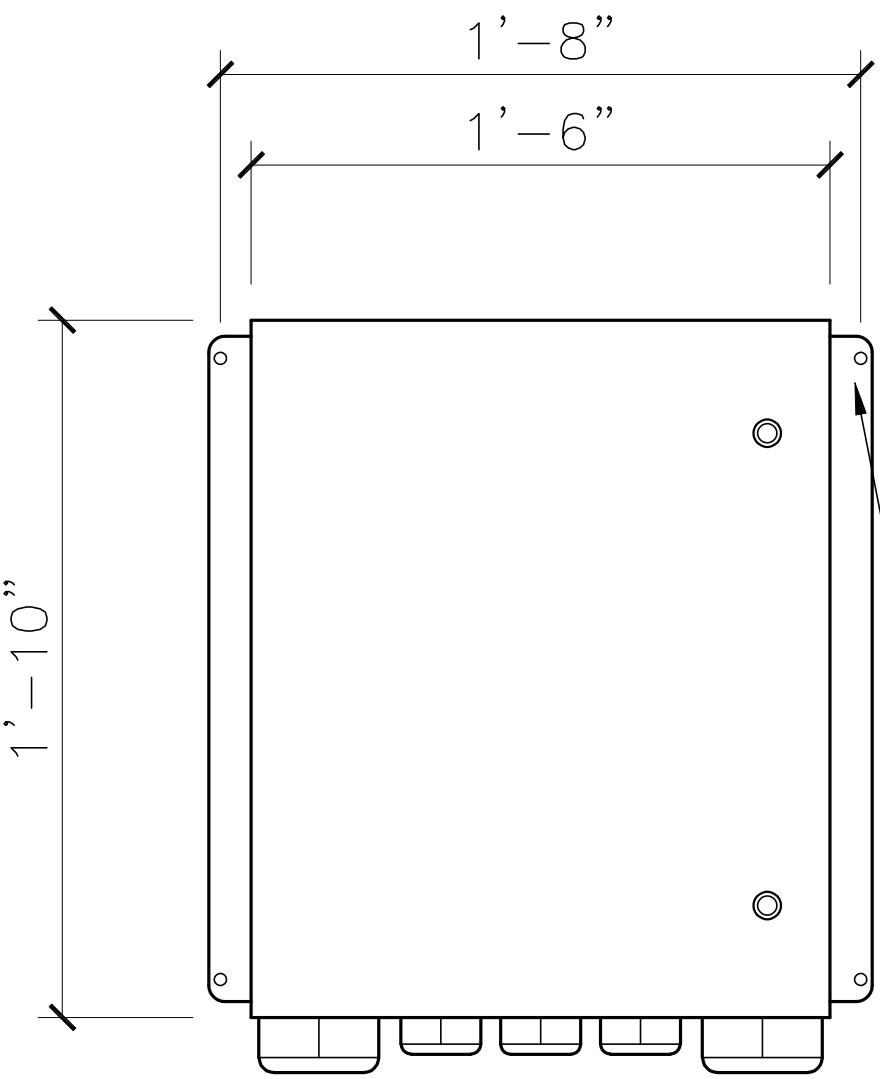
BOTTOM

SEE PRODUCT  
BROCHURE FOR  
CONNECTION  
INTERFACES

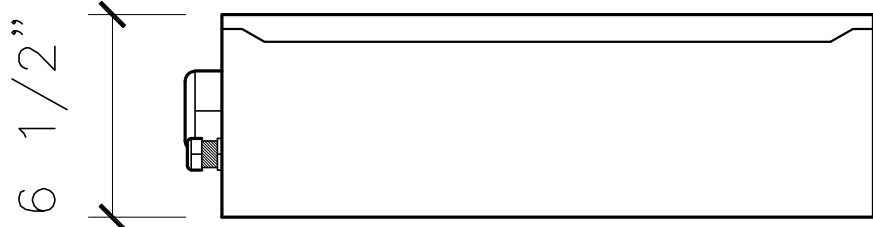
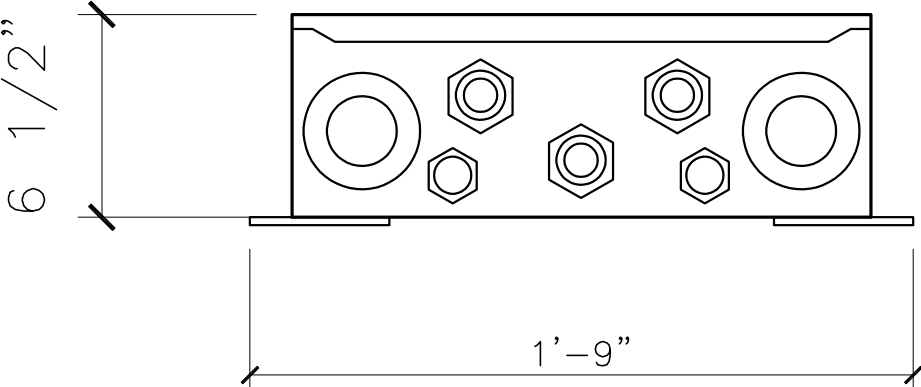
RRUS 8843 B2/B66A



NOT TO SCALE



MOUNT TO (E)  
BUILDING PER  
MANUFACTURERS  
RECOMMENDATIONS



MANUFACTURER: RAYCAP

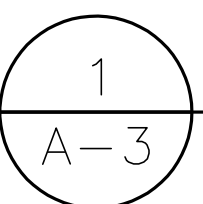
MODEL: DC6-48-60-18 (STAINLESS  
STEEL ENCLOSURE FOR COASTAL  
REGIONS WHERE APPLIES)

PROVIDES PROTECTION FOR 6 INDIVIDUAL  
-48V DC RRH

MAX IMPULSE CURRENT 5kA 10/350 US

FIBER CONNECTIONS FOR UP TO 18  
PAIR OF FIBER

RAYCAP CABINET ENCLOSURE



NTS



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EMAIL: daviddean@outlook.com  
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JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUE BLOCK	
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5	05-24-23 EQUIPMENT REVISIONS
6	01-05-24 TURF4REV TO EQUIPMENT PLATFORM
7	03-06-24 ADD FIRE RATED SHAFT ACCESS DOORS



SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
A-3

RRUS 4415 B30

DIMENSIONS (WITH SUNSHIELD)

WIDTH: 13.4 in  
HEIGHT: 16.5 in  
DEPTH: 5.9 in  
WEIGHT: 46 lbs

CPRI 2 PORTS X 2.5/4.9/9.8/10.1 GBPS. INSTALL 2 SFP AND CONNECT 2 FIBER PAIR TO THE RRUS 4415 DURING INITIAL INSTALL.

ONLY USE ERICSSON SUPPLIED AND APPROVED SFPS RDH10265/25

2 EXTERNAL ALARM INPUTS

MAX WIND LOAD @ 50M/SEC = 260N

BREAKER SIZE = 25A, DC POWER CONSUMPTION = 670 W (FOR DIMENSIONING)

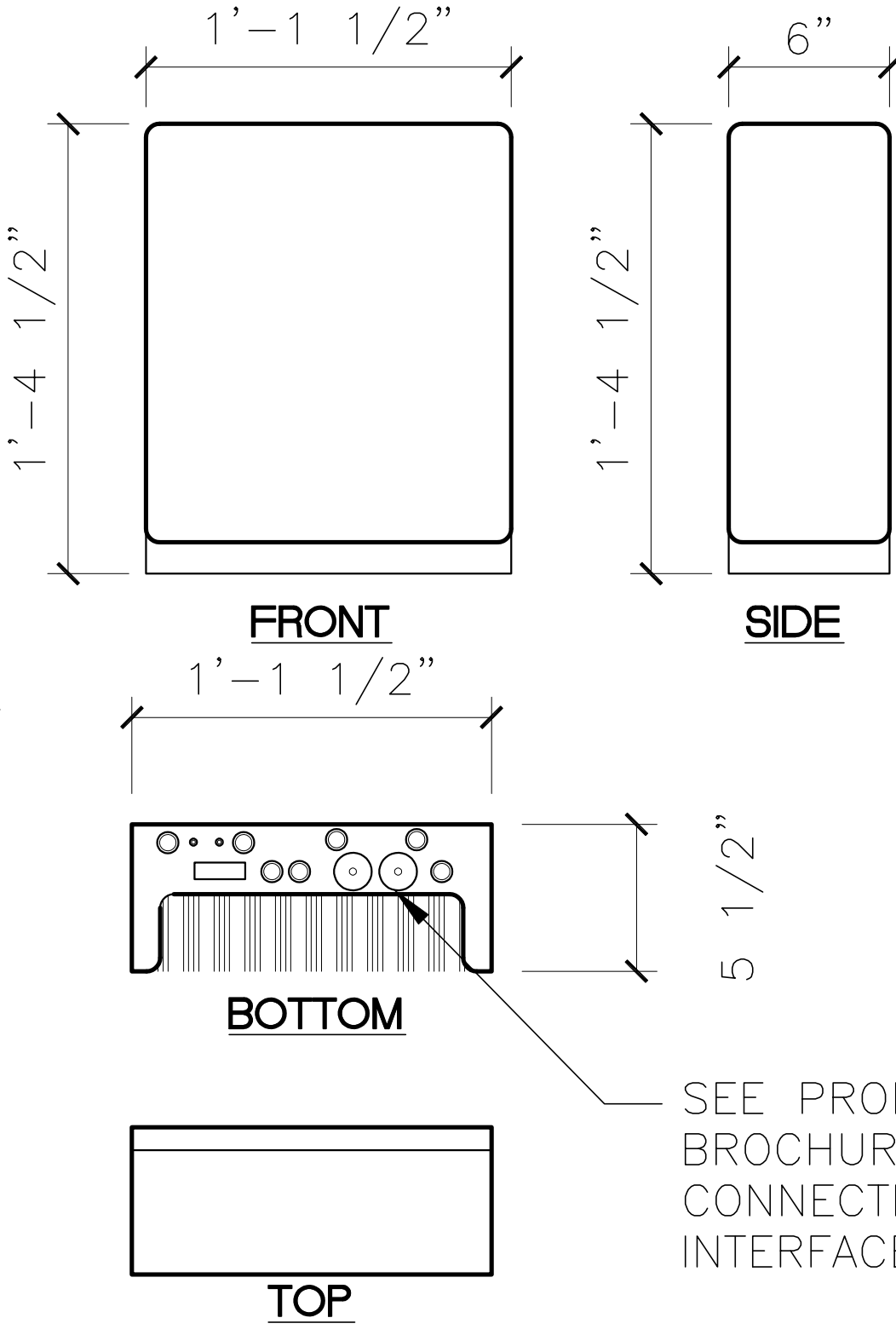
200MM HORIZONTAL SEPARATION REQUIRED FOR SIDE BY SIDE MOUNTING

200MM SEPARATION REQUIRED FROM ANTENNA BACKPLANE TO RADIO

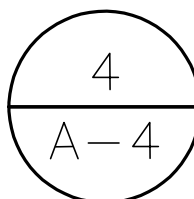
400MM VERTICAL OUTDOOR/INDOOR SEPARATION REQUIRED BETWEEN 2 RADIOS

500MM VERTICAL SEPARATION BELOW ANTENNA

MIN, MAX DC CABLE SIZE FROM SQUID TO RADIO = 10,8 AWG



RRUS 4415 B30



1 1/2" = 1'-0"

RRUS 4478 B14

DIMENSIONS (WITH HANDLES & FAN UNIT)

WIDTH: 13.40 in  
HEIGHT: 18.1 in  
DEPTH: 8.26 in  
WEIGHT: 59.4 lbs

CPRI 2 PORTS X 2.5/4.9/9.8/10.1 GBPS. INSTALL 1 SFP AND CONNECT 1 FIBER PAIR TO THE RRUS 4415 DURING INITIAL INSTALL.

ONLY USE ERICSSON SUPPLIED AND APPROVED SFPS RDH10265/25

2 EXTERNAL ALARM INPUTS

MAX WIND LOAD @ 50M/SEC = 260N

BREAKER SIZE = 25A, DC POWER CONSUMPTION = 650 W (FOR DIMENSIONING)

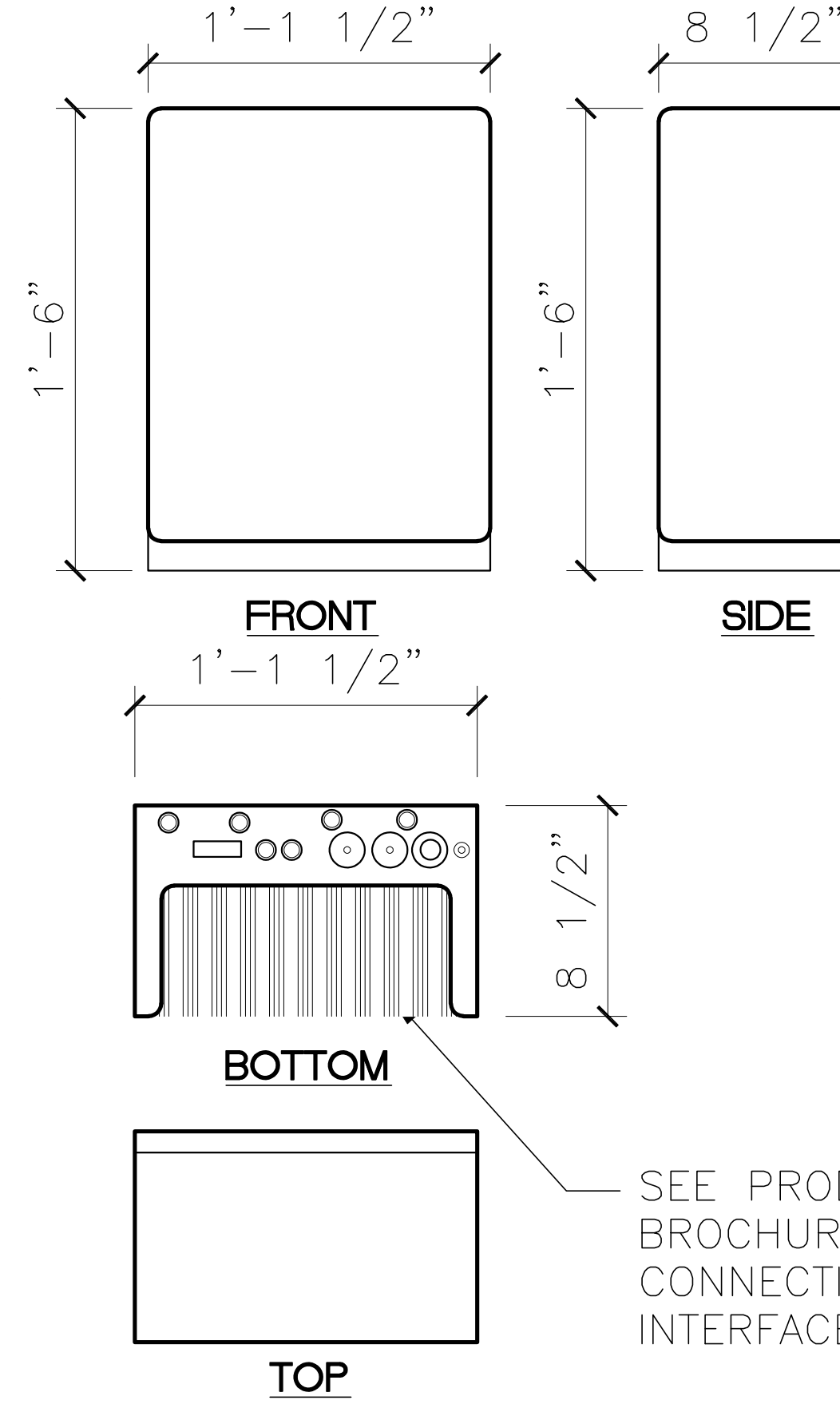
200MM HORIZONTAL SEPARATION REQUIRED FOR SIDE BY SIDE MOUNTING

200MM SEPARATION REQUIRED FROM ANTENNA BACKPLANE TO RADIO

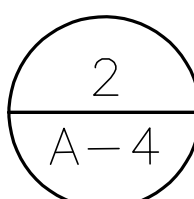
400MM VERTICAL OUTDOOR/INDOOR SEPARATION REQUIRED BETWEEN 2 RADIOS

500MM VERTICAL SEPARATION BELOW ANTENNA

MIN, MAX DC CABLE SIZE FROM SQUID TO RADIO = 10,8 AWG



RRUS 4478 B14

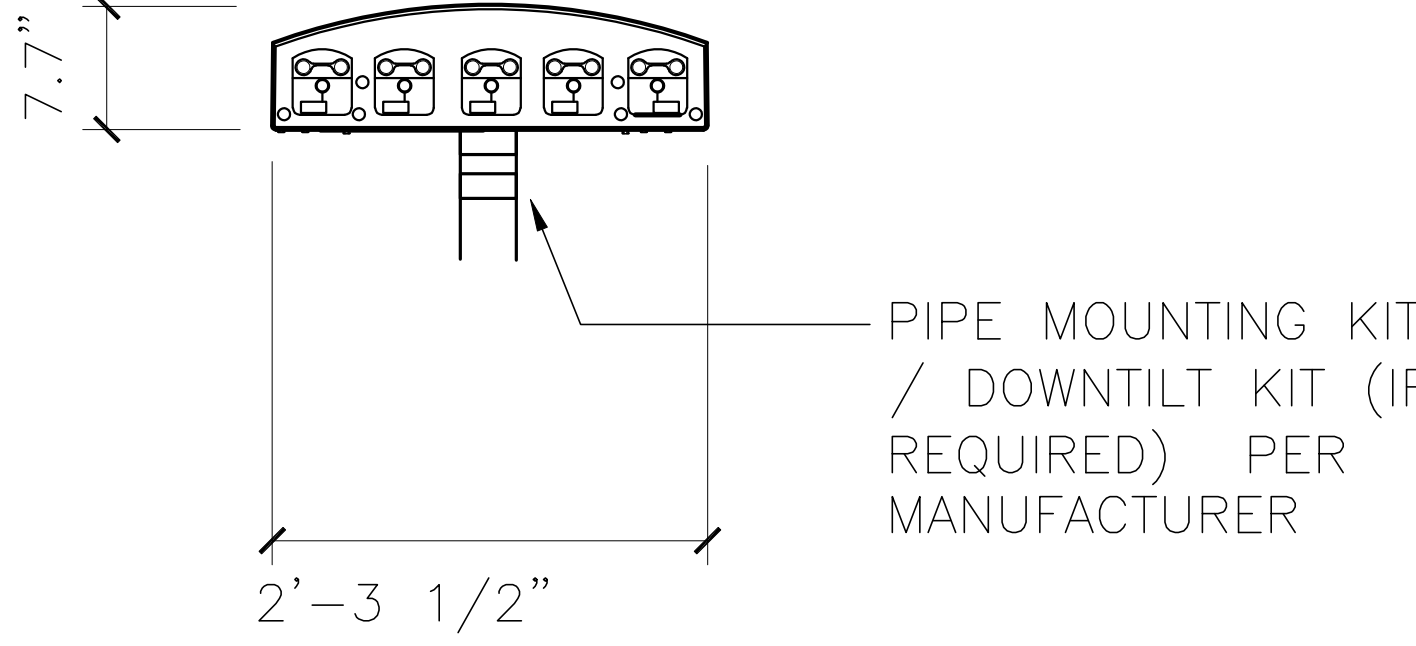


1 1/2" = 1'-0"

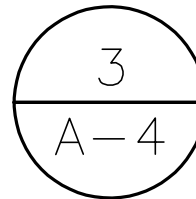
CELLMAX CMA-UBTULBULBHH-6517-17-21-21

WEIGHT; 112 lbs  
WIND LOAD @ 94 MPH

FRONTAL: 928 N (224.1 LBF)  
LATERAL: 322 N (72.4 LBF)  
REAR: 67 m/s (150 MPH)



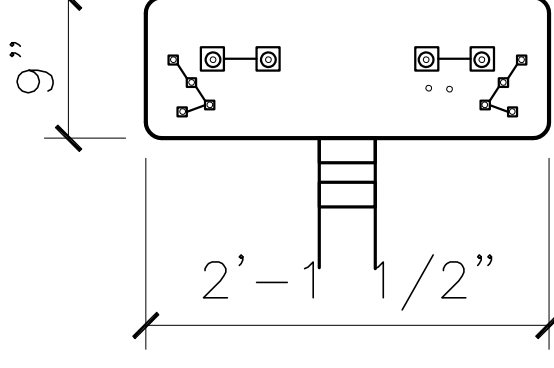
CELLMAX ANTENNA SPEC



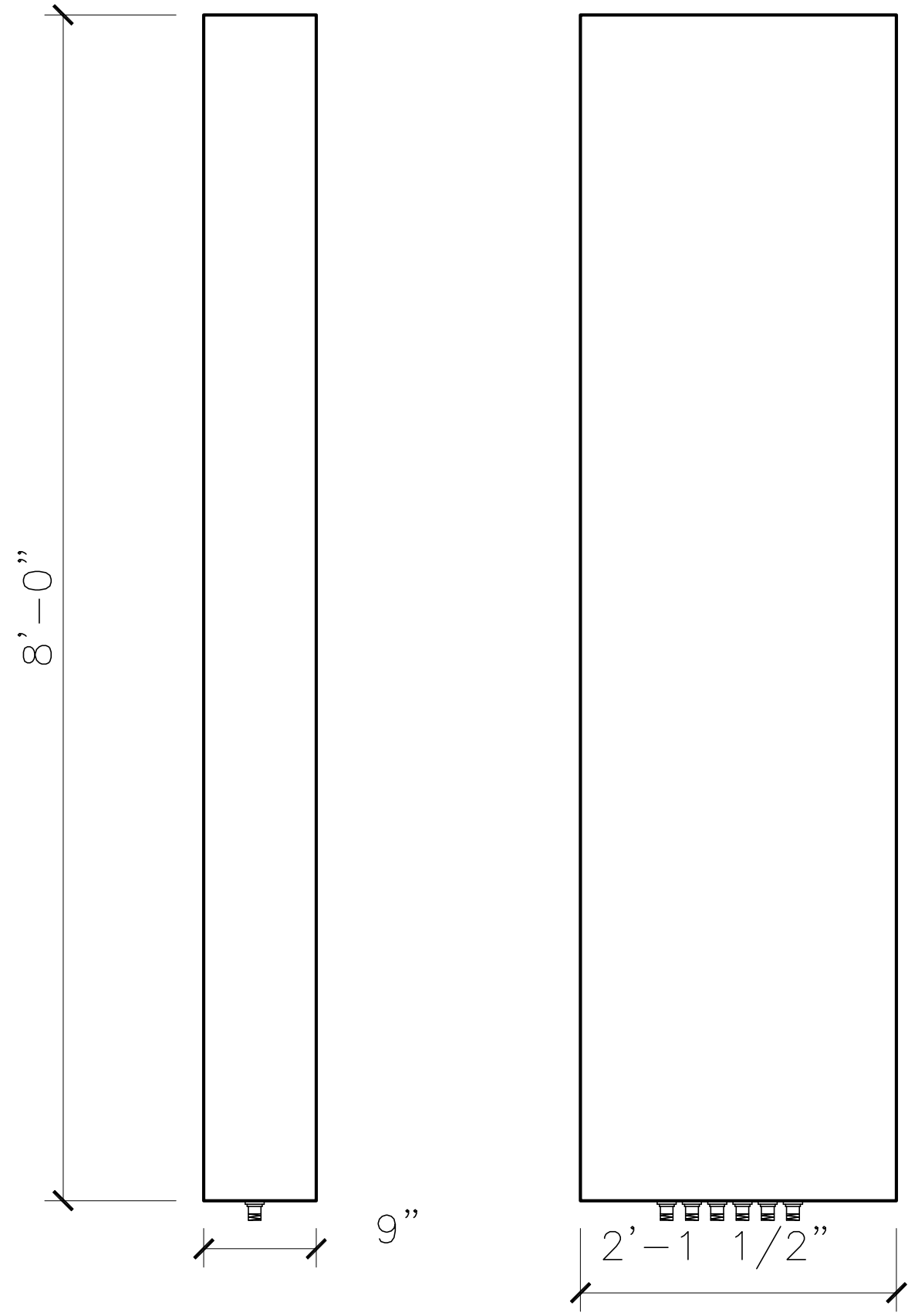
NOT TO SCALE

COMMSCOPE COMM-NNHH-45C-R4  
8 PORT SECTOR ANTENNA

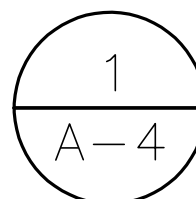
WIDTH: 25.2"  
DEPTH: 9.3"  
LENGTH: 95.9"  
WEIGHT; 99.2 lbs (45.0 kg)  
WIND LOAD; 954 N @ 150 km/h  
214.5 lbf @ 150 km/h



**INCLUDED PRODUCTS**  
BSAMNT-1 WIDE PROFILE ANTENNA  
DOWNTILT MOUNTING KIT FOR 2.5-4.5" OD ROUND MEMBERS



ANTENNA SPEC



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Your world. Delivered.

Network Solutions

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JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE:  
03-21-2024

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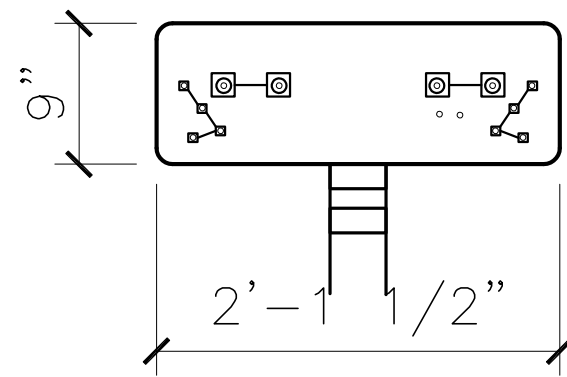
SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
**A-4**

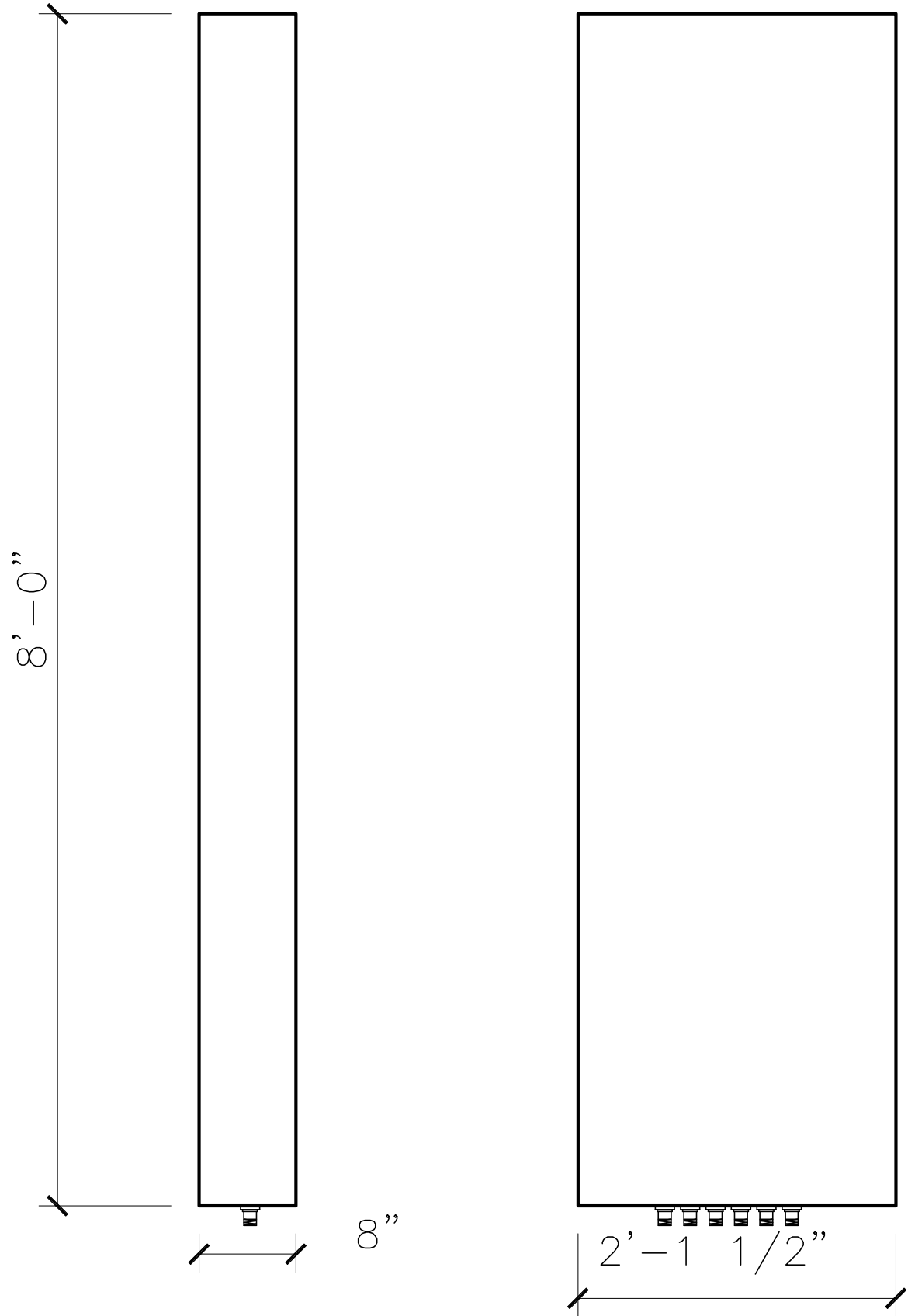


COMMSCOPE COMM-NNH4-65C-R6-HG  
12 PORT SECTOR ANTENNA

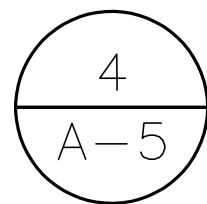
WIDTH: 25.197"  
DEPTH: 9.252"  
LENGTH: 95.984"  
WEIGHT; 99.2 lbs (45.0 kg)  
WIND LOAD; 954 N @ 150 km/h  
214.5 lbf @ 150 km/h



INCLUDED PRODUCTS  
BSAMNT-1 WIDE PROFILE ANTENNA  
DOWNTILT MOUNTING KIT FOR 2.5-4.5" OD  
ROUND MEMBERS



ANTENNA SPEC



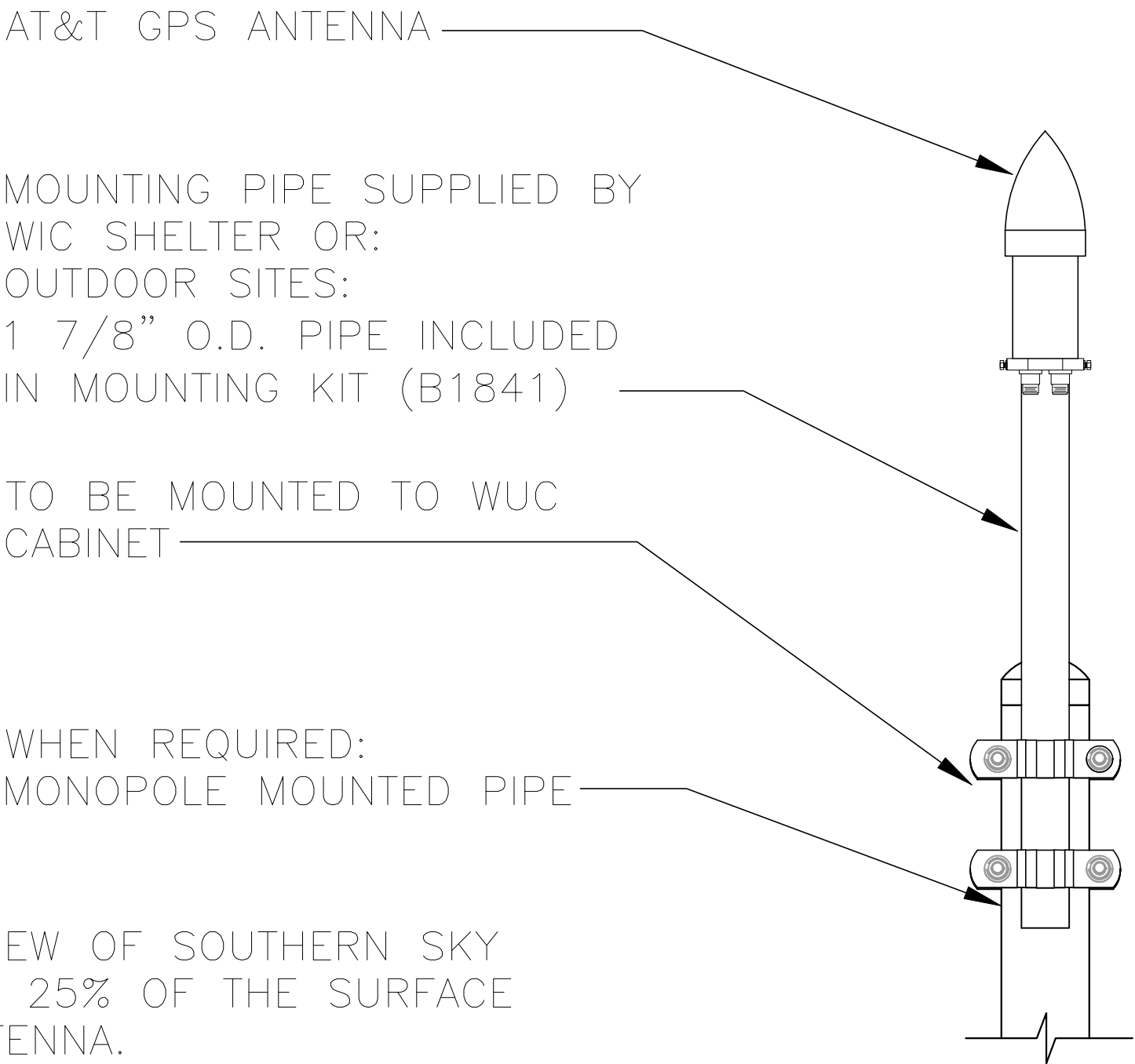
NTS

HIGH REJECTION 40 dB GPS  
GPS-TMG-HR-40N  
WEIGHT; 0.6 lbs  
DIMENSIONS: 5.0" x 3.2"ø

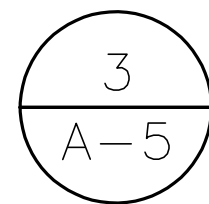
FREQUENCY RANGE: 1575.42+/-10 MHz  
ANTENNA GAIN: 3.5 dBic  
AMPLIFIER GAIN: 40 dB+/-4 dB

DC VOLTAGE: 3.0-12.0 V (OPERATING)  
28 V (SURVIVABILITY)

- NOTES:
1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
  2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.



GPS ANTENNA



NOT TO SCALE

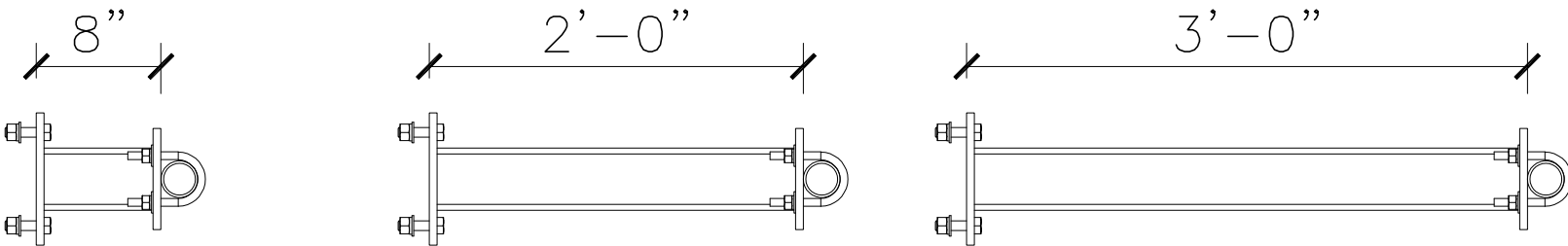
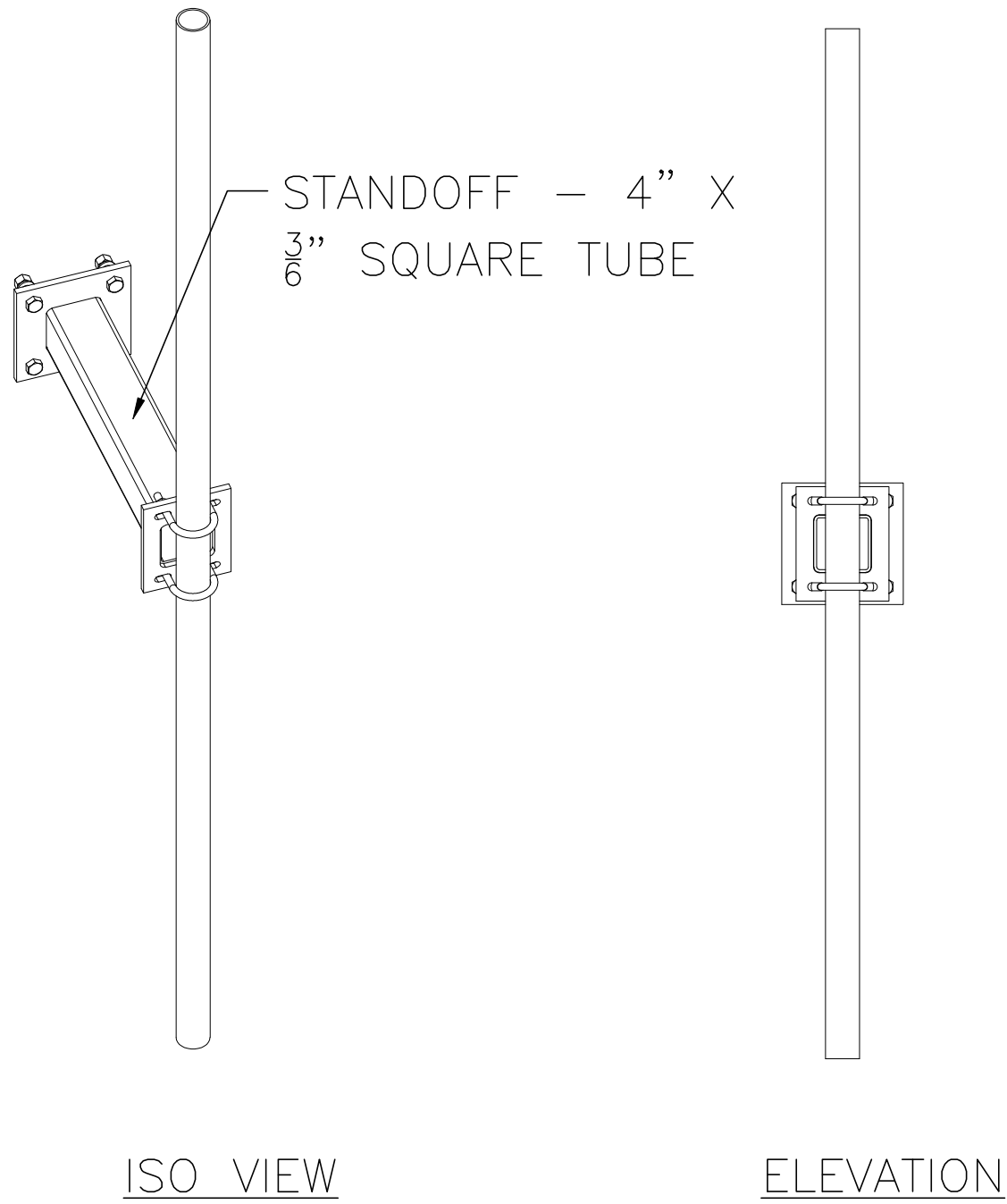
SITE PRO1 STANDOFF MOUNTS

CEQ#	OEM P/N	DESCRIPTION
ANT.55231	MM01	8" SUPPORT ARM
ANT.55230	MM02	23" SUPPORT ARM
ANT.55232	MM03	36" SUPPORT ARM

ACCEPT 2-3/8", 2-7/8", OR 3-1/2" PIPES  
VERTICALLY OR HORIZONTALLY

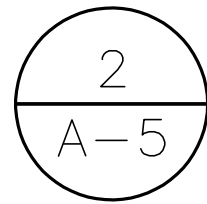
FITS STANDARD OR LIGHTWEIGHT RING MOUNTS

STANDOFF IS 4" X 3/8" SQUARE TUBE



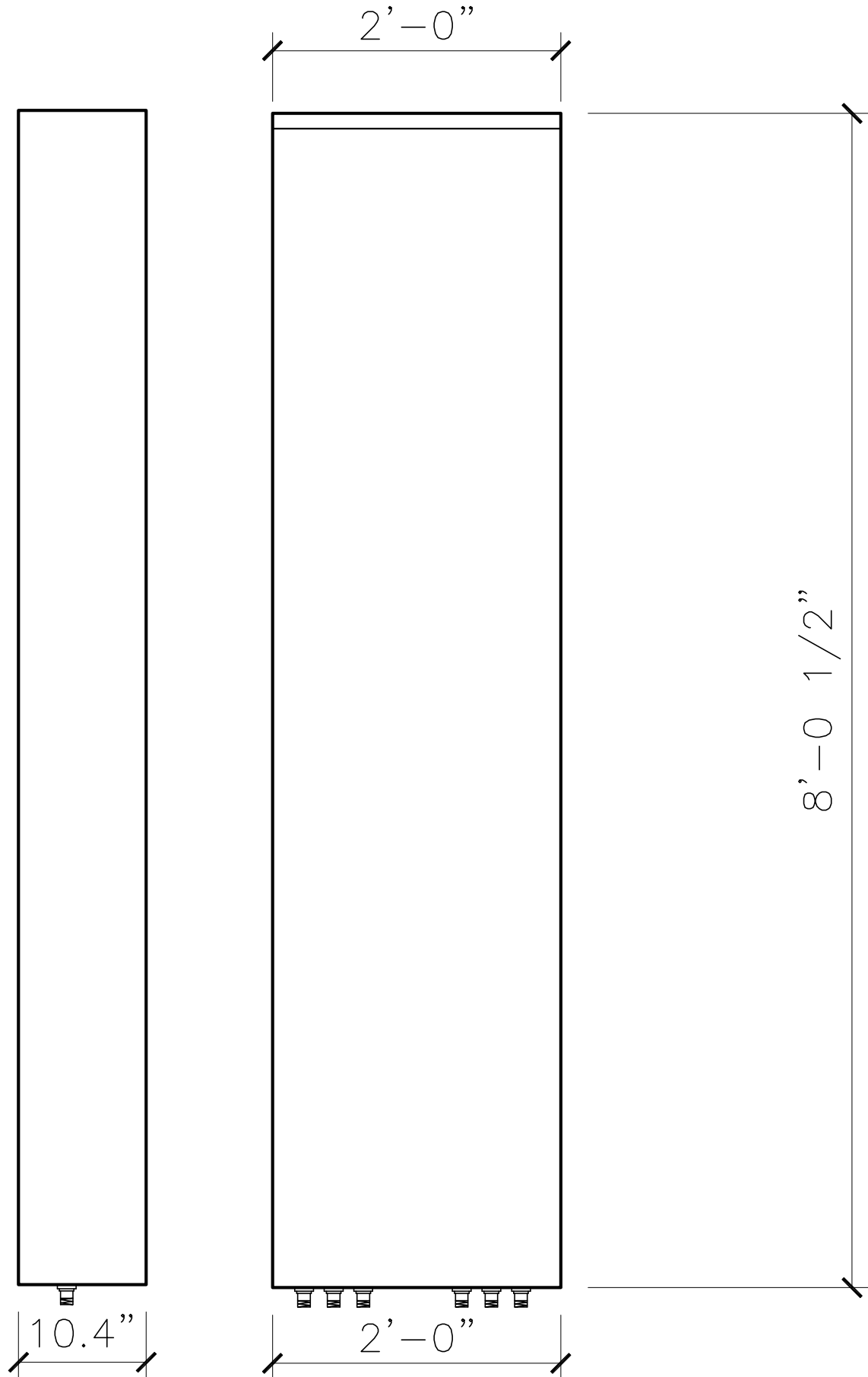
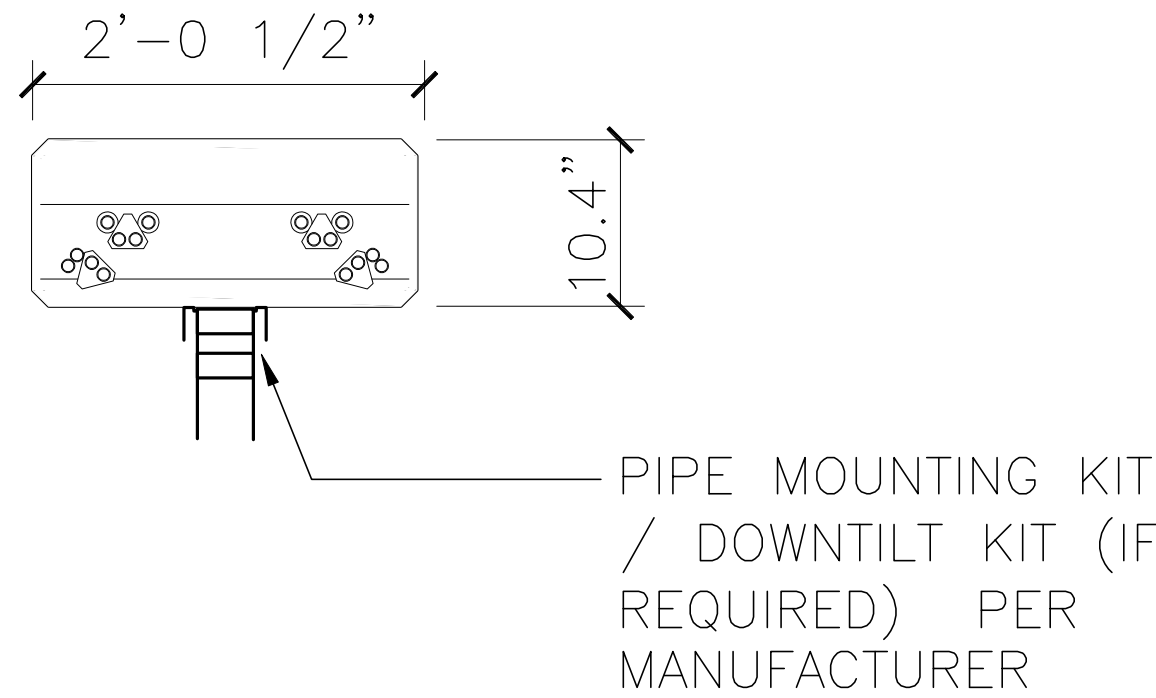
MM01 PLAN MM02 PLAN MM03 PLAN

WALL MOUNT DETAIL

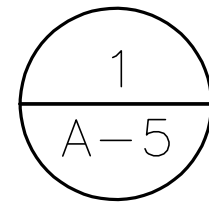


1 1/2" = 1'-0"

CELLMAX CMA-UBTULBULBHHP-6517-17-21-21  
WEIGHT; 157 lbs  
WIND LOAD @ 94 MPH  
FRONTAL: 1,530 N (344 LBF)  
LATERAL: 254 N (57 LBF)  
SURVIVAL WIND SPEED: 67 m/s (151 MPH)



ANTENNA SPEC



NOT TO SCALE

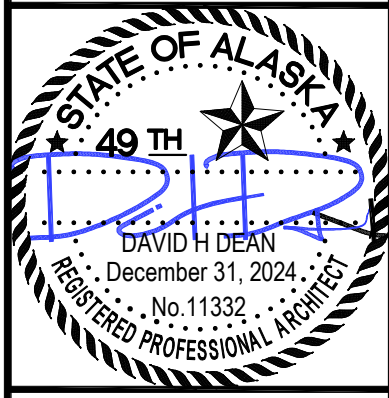


Select Site Acquisition,  
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HTTP://WWW.DHDARCHITECTURE.BIZ

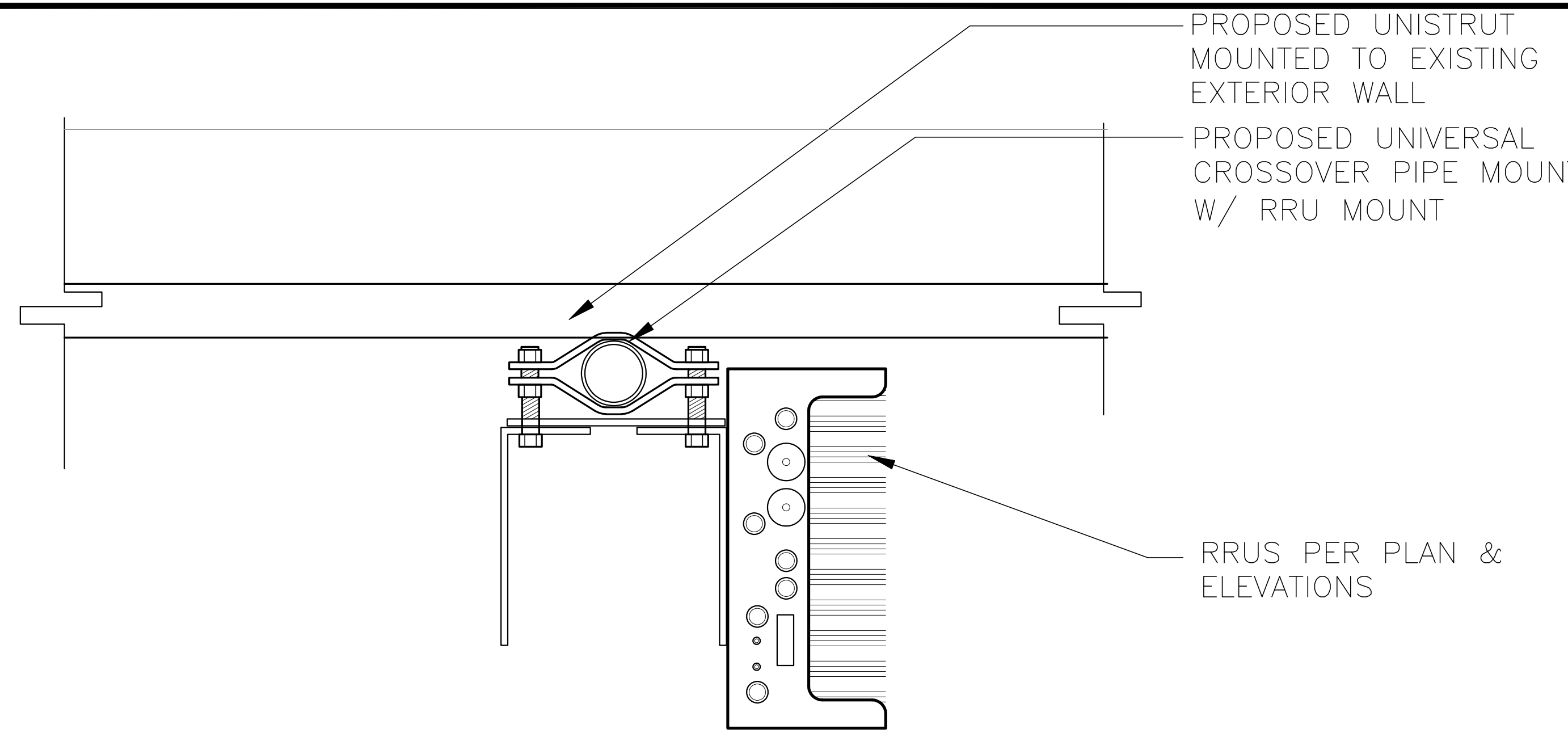
JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

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SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
A-5



U-BRACKET SIDE BY SIDE RRUS MOUNT

4  
A-6

## RRU EXTERIOR WALL MOUNT

NTS

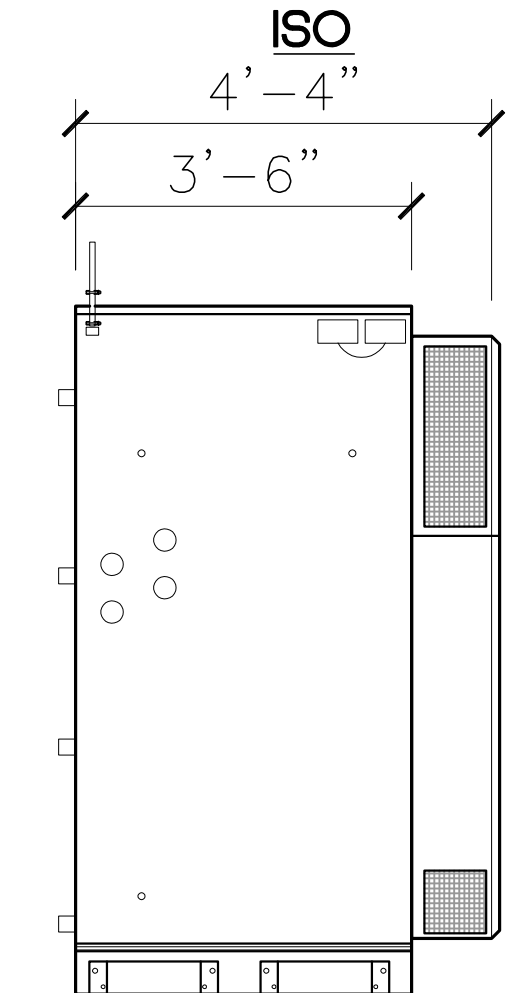
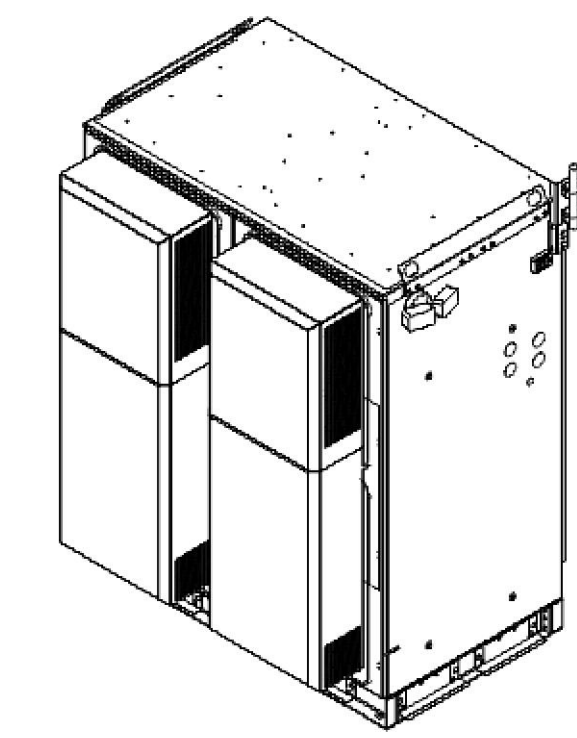
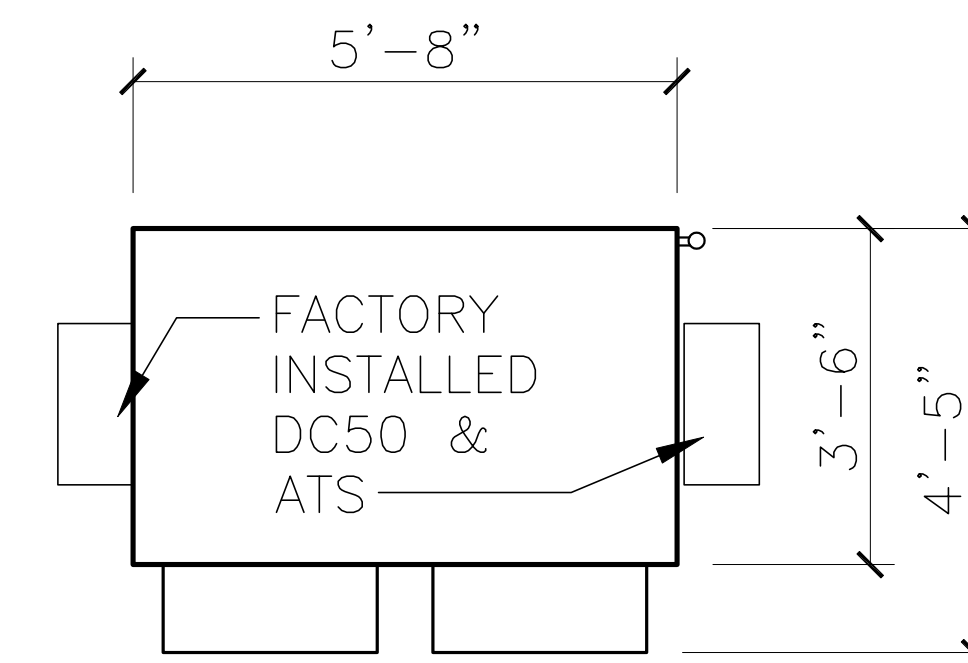
## VERTIV NETSURE X701 WALKUP CABINET (WUC)

TWO-BAY  
DIMENSIONS (HxWxD): 86" x 68" x 54"  
WEIGHT: 1,300 LBS

MOUNTING OPTIONS:  
PAD, PLATFORM

RACKS:  
ADJUSTABLE 19" TO 23" RACKS IN EACH EQUIPMENT CHAMBER

ELECTRICAL:  
INPUT/OUTPUT: 208/240 VAC  
SINGLE PHASE INPUT  
-48VDC PRIMARY/-58 VDC SECONDARY



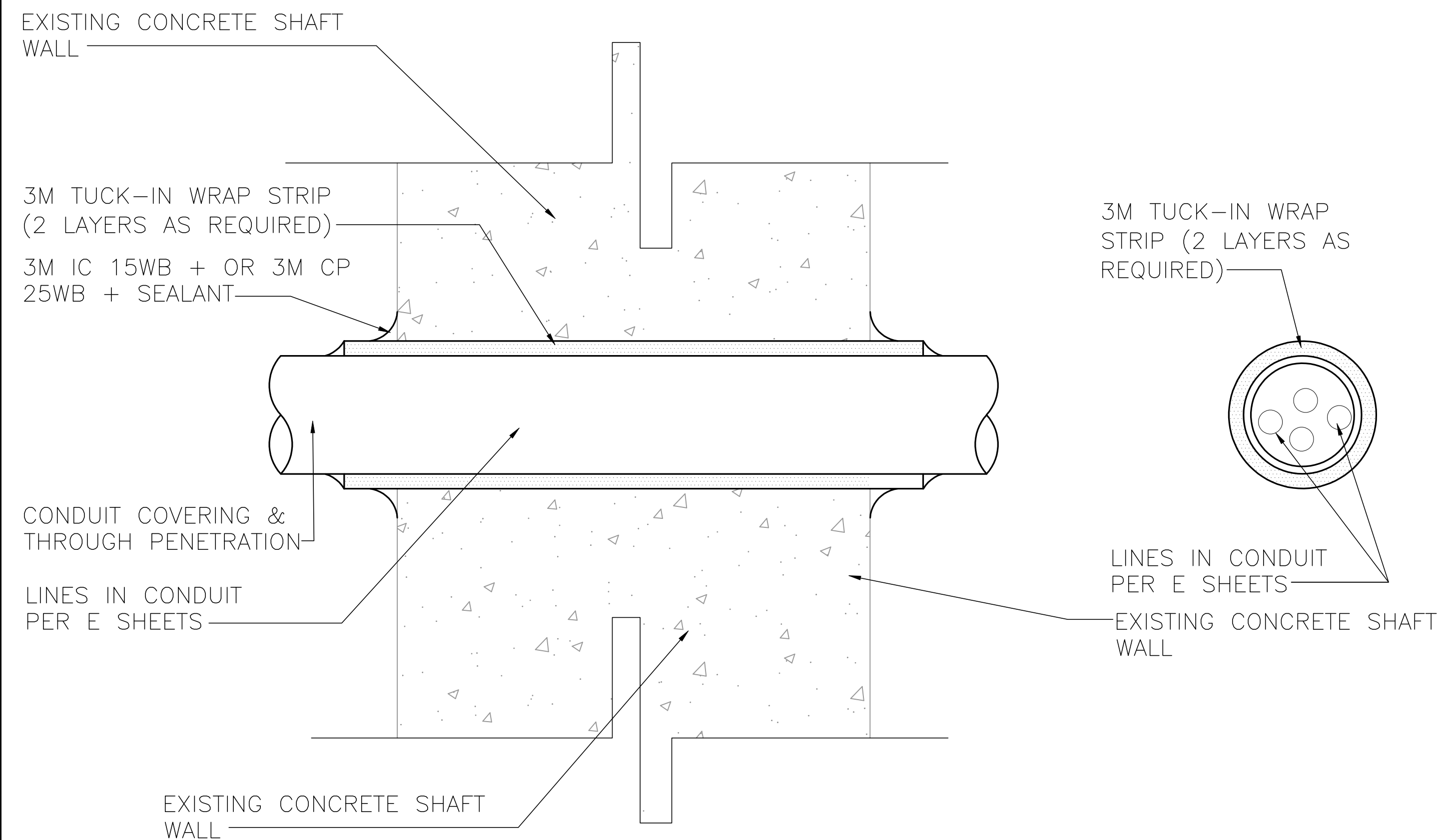
FRONT ELEVATION

SIDE ELEVATION

3  
A-6

## VERTIV WALK UP CABINET

NOT TO SCALE

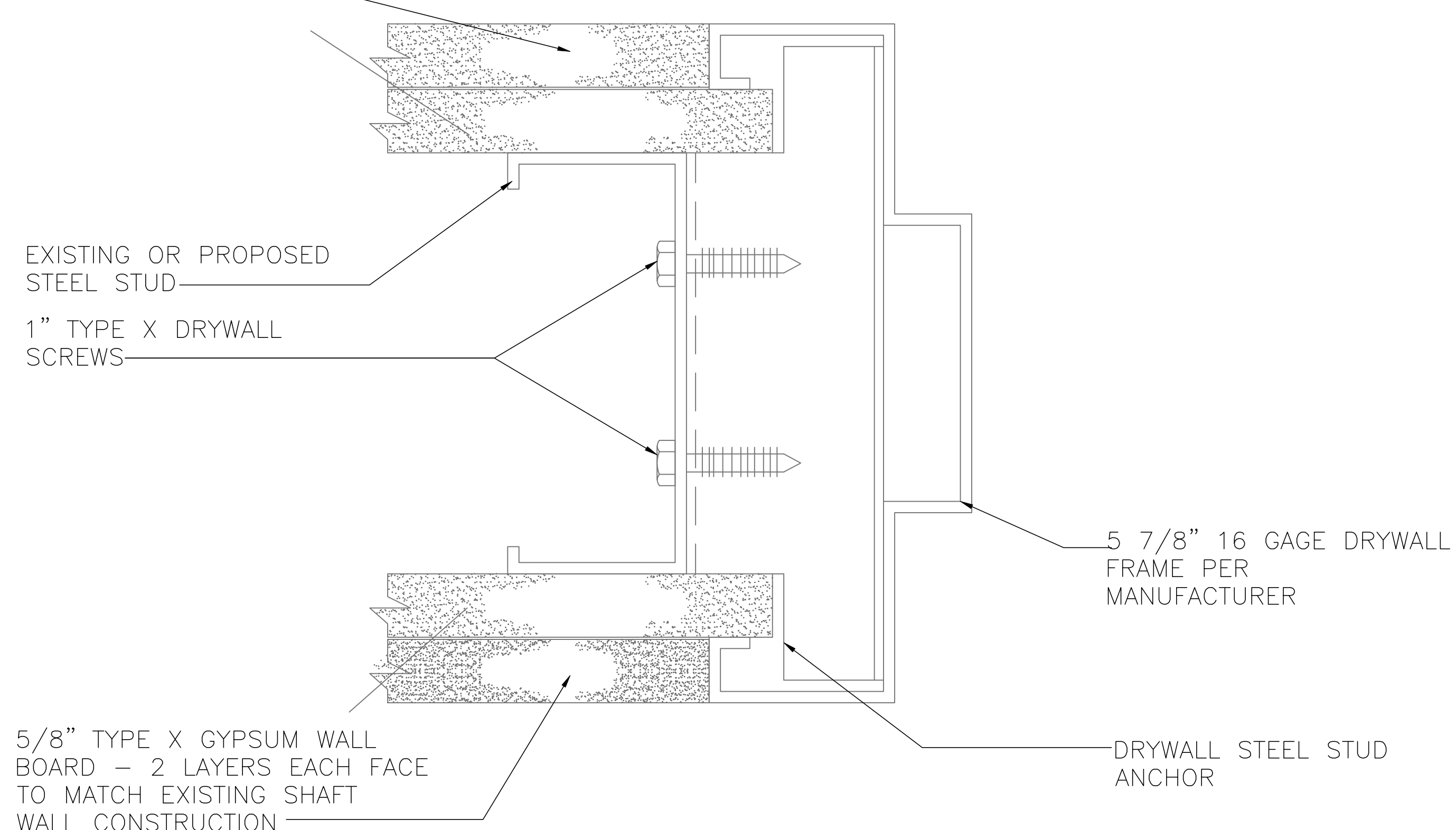


2  
A-6

## SHAFT WALL PENETRATION

NOT TO SCALE

5/8" TYPE X GYPSUM WALL BOARD - 2 LAYERS EACH FACE TO MATCH EXISTING SHAFT WALL CONSTRUCTION



1  
A-6

## 2 HR RATED DOOR

NOT TO SCALE



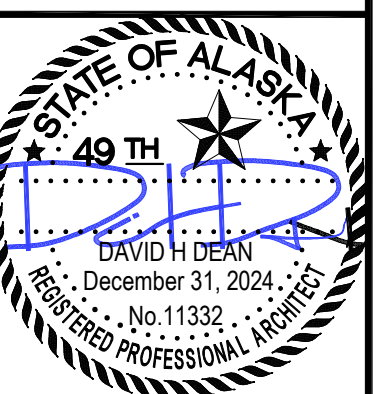
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SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
**A-6**





NOTE:  
PROPOSED SHAFT ACCESS  
DOORS TO BE LOCKED TO  
PUBLIC @ ALL TIMES

SHAFT ACCESS DOOR SIGNAGE

4  
A-7

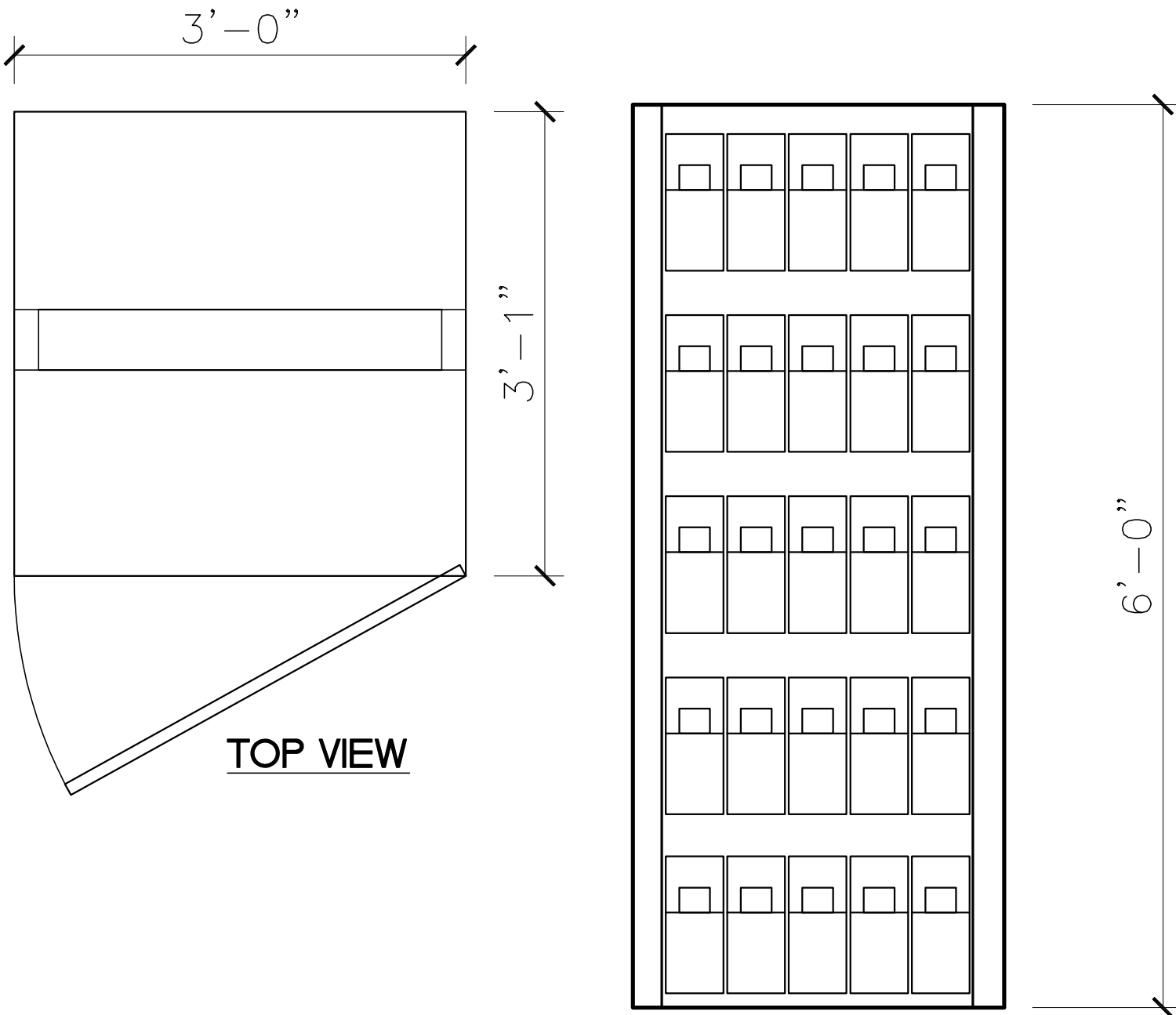
NOT TO SCALE

VERTIV BATTERY ENCLOSURE 601B  
NEQ. 15918 POWER SYSTEM:

CABINETS ARE EQUIPPED W/ (5) BATTERY  
SHELVES THAT CAN HOUSE UP TO (12)+24  
V OR (6) -48V BATTERY STRINGS.

WEIGHT: 980 LBS  
DIMENSIONS: 72"Hx36"Wx35"D

TOTAL OF ENERSYS (16) 190 BATTERIES



BATTERY NOTE:  
ALL BATTERY SYSTEMS SHALL COMPLY W/  
2012 INTERNATIONAL FIRE CODE -  
SECTION 608.1 THROUGH 608.9 & TABLE  
608.1 - VERIFY W/ MANUFACTURER &  
THEIR CURRENT SPECIFICATIONS

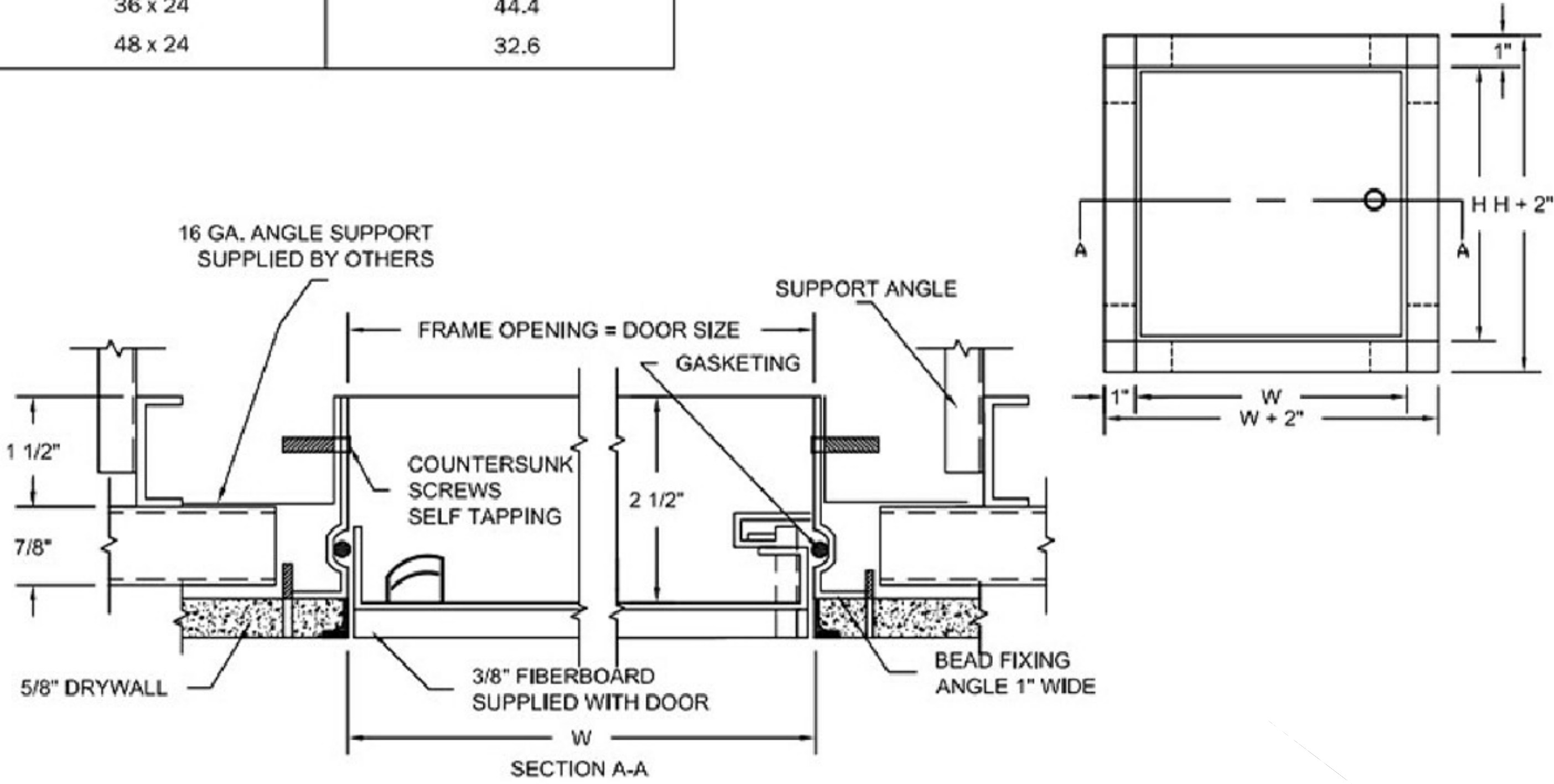
VERTIV BATTERY ENCLOSURE

2  
A-7

NOT TO SCALE

STANDARD SIZES

DOOR SIZE H x W (INCHES)	SHIPPING WT. (LBS.)
12 x 12	8.2
18 x 18	16.7
24 x 24	17.6
36 x 24	44.4
48 x 24	32.6



CEILING ACCESS HATCH

3  
A-7

NOT TO SCALE

ROTATING MULTI-USE ANCHOR W/  
EXPANSION BOLT

ANCHOR BRACKET WITH INTEGRAL D-RING  
INCLUDES HILTI HEAVY DUTY EXPANSION BOLT  
UNIVERSAL BRUSHING PROVIDES BRACKET ROTATION

ATTACH USING FALLTECH FT-R CLASS 2 LEADING  
EDGE SLR W/ 30' GALVANIZED STEEL CABLE (OR  
APPROVED EQUAL)

NSI COMFORTECH ACT ADVANCED GEL BACK & FRONT  
D-RINGS, TONGUE BUCKLE LEGS FALL PROTECTION  
HARNESS, #315519 (OR APPROVED EQUAL)



FALL SAFETY SYSTEM

1  
A-7

NOT TO SCALE

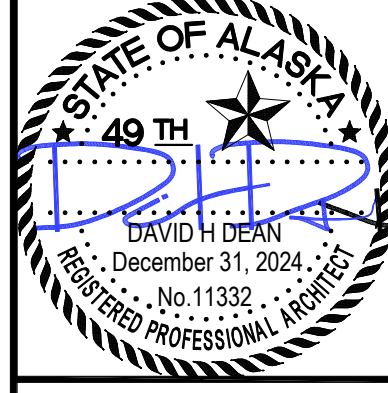


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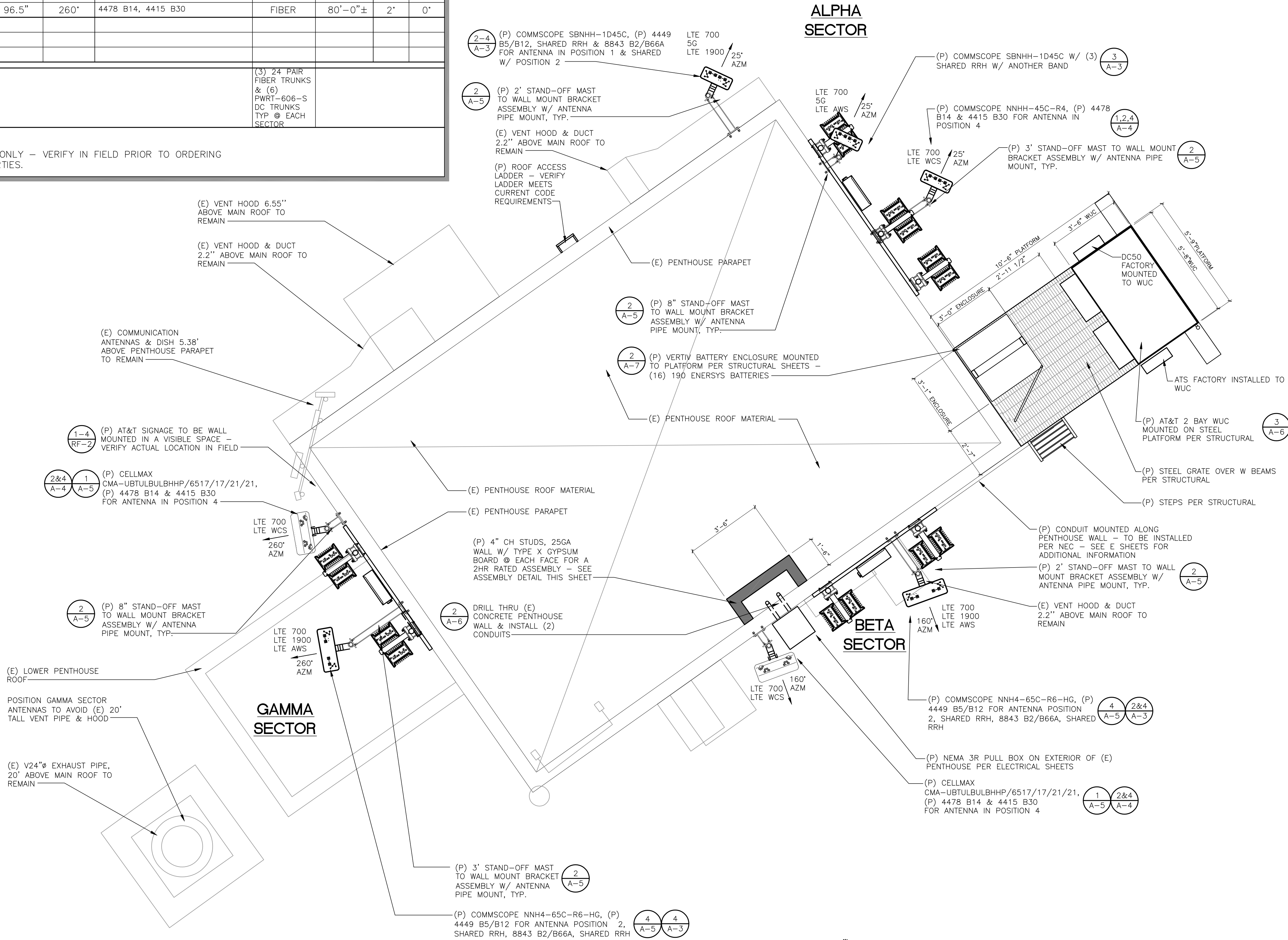
SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
A-7



PROPOSED ANTENNA PLAN & SCHEDULE											
SECTOR	POSITION NUMBER	BAND TECH.	ANTENNA MODEL	RAD	ANT. SIZE	AZIMUTH	RRH QUANTITY & MODEL #	LINES TO EQUIPMENT	TRUNK LENGTH	ELEC. TILT	MECH. TILT
ALPHA	1	LTE 700 5G LTE 1900	COMMSCOPE SBNHH-1D45C	130'	98.9"	25°	4449 B5/B12, SHARED, 8843 B2/B66A	FIBER	40'-0"±	2°	0°
	2	LTE 700 5G LTE AWS	COMMSCOPE SBNHH-1D45C	130'	98.9"	25°	(3) SHARED RRH	FIBER	40'-0"±	2°	0°
	3	---	----	--	--	--	--	--	--	--	--
	4	LTE 700, LTE WCS	COMMSCOPE NNHH-45C-R4	130'	95.9"	25°	4478 B14, 4415 B30	FIBER	80'-0"±	2°	0°
BETA	1	---	----	--	--	--	--	--	--	--	--
	2	LTE 700, 5G LTE 1900, LTE AWS	COMMSCOPE NNH4-65C-R6-HG	130'	96"	160°	4449 B5/B12, SHARED, 8843 B2/B66A, SHARED	FIBER	80'-0"±	2°	0°
	3	---	----	--	--	--	--	--	--	--	--
	4	LTE 700, LTE WCS	CELLMAX CMA-UBTULBULBHHP/6517/17/21/21	130'	96.5"	160°	4478 B14, 4415 B30	FIBER	80'-0"±	2°	0°
GAMMA	1	---	----	--	--	--	--	--	--	--	--
	2	LTE 700, 5G LTE 1900, LTE AWS	COMMSCOPE NNH4-65C-R6-HG	130'	96"	260°	4449 B5/B12, SHARED, 8843 B2/B66A, SHARED	FIBER	80'-0"±	2°	0°
	3	---	----	--	--	--	--	--	--	--	--
	4	LTE 700, LTE WCS	CELLMAX CMA-UBTULBULBHHP/6517/17/21/21	130'	96.5"	260°	4478 B14, 4415 B30	FIBER	80'-0"±	2°	0°
MW DISH	---										
	---										
SURGE SUPPRESSION QUANTITY & MODEL #								(3) 24 PAIR FIBER TRUNKS & (6) PWRT-606-S DC TRUNKS TYP @ EACH SECTOR			
3	DC6-48-60-18-SS										
ANTENNA NOTE: 1. DO NOT USE COAX – TRUNK LENGTHS FOR CUT LENGTHS – ESTIMATES ONLY – VERIFY IN FIELD PRIOR TO ORDERING 2. CONFIRM THE LATEST VERSION OF THE RFDS IS BEING USED BY ALL PARTIES.											

NOTE:  
6'-0 TYPICAL ANTENNA SEPARATION @ EACH SECTOR  
  
RRUS & SURGE SUPPRESSION UNIT TO BE MOUNTED TO EXTERIOR WALL W/ UNISTRUT - ENSURE WATERTIGHT CONNECTION @ ALL LOCATIONS. ALL EQUIPMENT TO BE ACCESSIBLE - 6' TALL MOUNTING MAX.  
  
USE 8", 24" OR 36" STAND-OFF WALL MOUNT TO LINE UP ANTENNA FACES AS MUCH AS POSSIBLE AS NEEDED

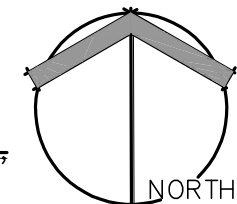


## WALL ASSEMBLY

UL U415 UL SYSTEM C  
SHAFT WALL - STEEL STUD (NON-LOAD-BEARING)  
  
FIRE RATING  
2 HOURS  
  
SYSTEM THICKNESS  
4.75 IN.  
  
STC  
51  
  
ASSEMBLY DETAILS  
GYPSUM PANEL: 1 LAYER 1" [25.4 MM] SHEETROCK® GYPSUM LINER PANELS (UL TYPE SLX)  
  
STEEL STUDS: 1 LAYER 4" [102 MM] CH STUDS, 25 GA. (0.018"), 24" [610 MM] O.C.  
  
INSULATION: 1 LAYER 3" [76 MM] MINERAL WOOL INSULATION  
  
GYPSUM PANEL: 1 LAYER 3/4" [19 MM] SHEETROCK® ULTRACODE® GYPSUM PANEL (UL TYPE ULTRACODE)

## ANTENNA PLAN

3/8" = 1'-0"



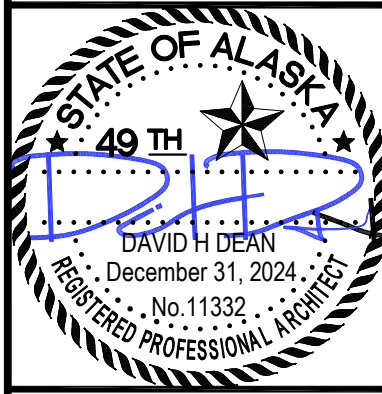
Select Site Acquisition,  
LLC  
24009 E ALKILANE  
LIBERTY LAKE, WA 99019

DHD  
ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
EMAIL: daviddean@outlook.com  
HTTP://WWW.DHDARCHITECTURE.BIZ

JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE:  
03-21-2024

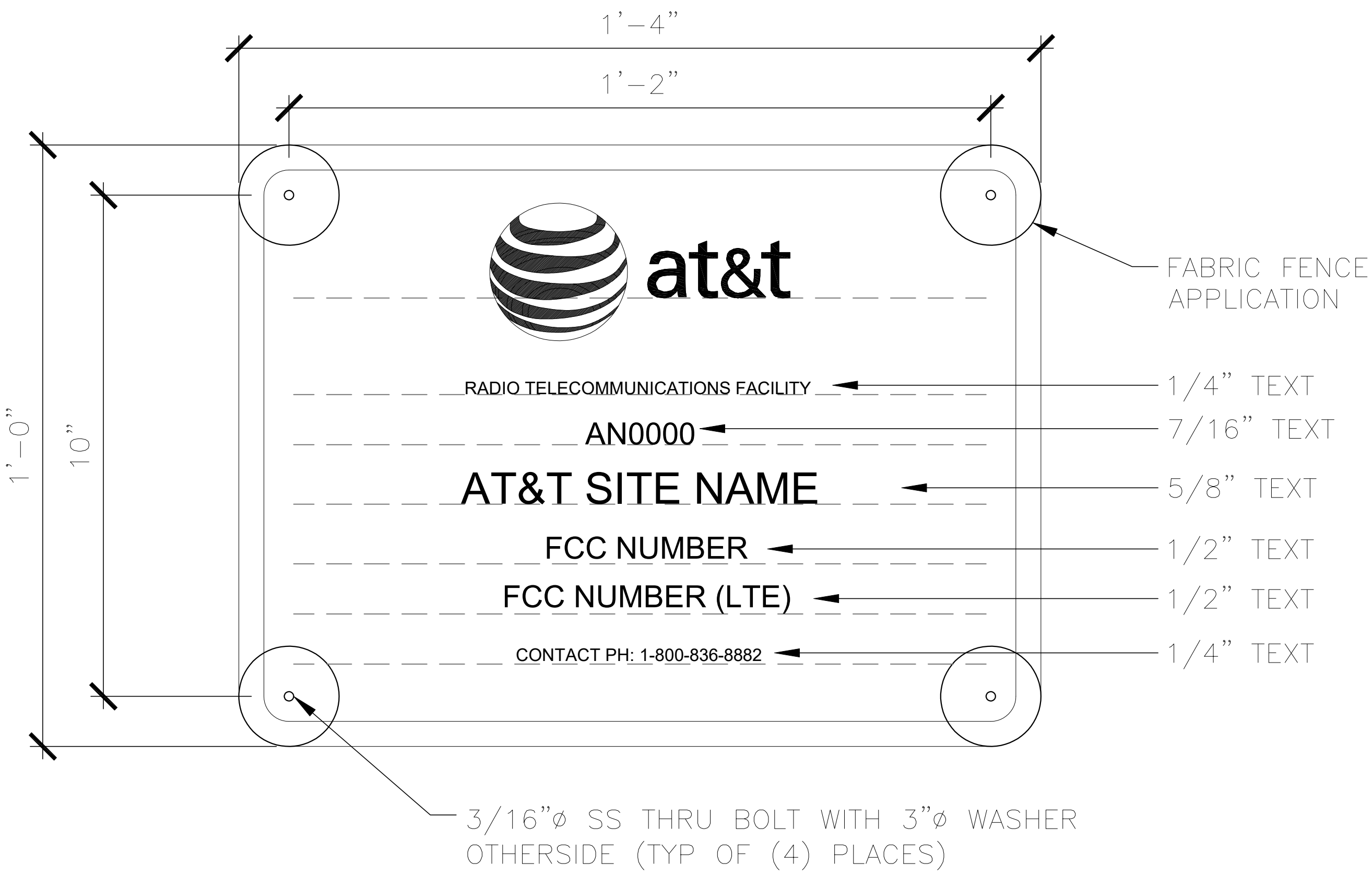
NO.	DATE	ISSUE BLOCK
1	05-26-22	TURF4-NSB 1C RFDS DATED 04-08-22
2	02-16-23	REV TO PENTHOUSE EQUIPMENT
3	02-23-23	ADD SCHEMATIC CONDUIT RUN INFO
4	04-19-23	ANTENNA MOUNT REVS
5	05-24-23	EQUIPMENT REVISIONS
6	01-05-24	TURF4-REV TO EQUIPMENT PLATFORM
7	03-06-24	ADD FIRE RATED SHAFT ACCESS DOORS



SHEET TITLE:  
ANTENNA  
CONFIGURATION

SHEET NUMBER:  
RF-1

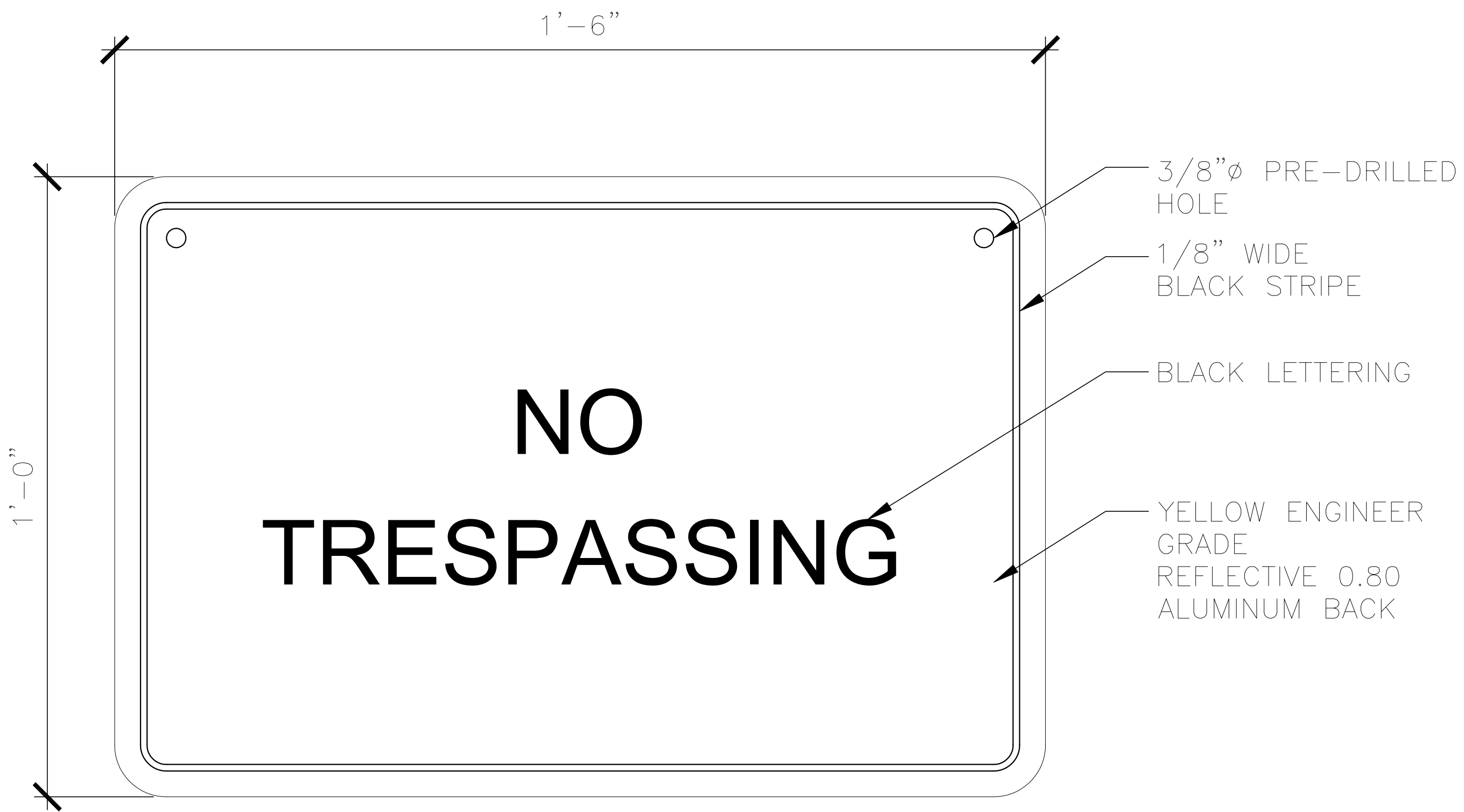




4  
RF-2

SIGNAGE

NO SCALE



3  
RF-2

SIGNAGE

NO SCALE

SIGNS AND PLACEMENT:  
1. LOW LEVEL BLUE NOTICE SIGNS – PLACE AT SITE ENTRY / ACCESS POINTS ONLY.  
– ROOFTOPS: PLACE SIGNS ON THE INSIDE OF ROOF HATCH; PLACE ON ACCESS DOOR UNLESS DOOR IS USED BY GENERAL PUBLIC OR BUILDING TENANTS ON A REGULAR BASIS FOR ACCESS – IN THESE CASES CONSULT CONSTRUCTION MANAGER.  
– WATER TANKS: PLACE SIGNS ON COMPOUND GATE.  
– NETWORK CARRIER OWNED SITES: PLACE ONE SIGN ON COMPOUND GATE; ALL SIGNS SHALL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS TECH SCREWS.

2. CONSTRUCTION COORDINATOR PARTICIPATION IN SIGN LOCATION: NETWORK CARRIER CONSTRUCTION MANAGER SHALL MEET WITH ALL CONSTRUCTION COORDINATOR’S TO OUTLINE CRITERIA FOR SIGN PLACEMENT. EMPHASIS SHALL BE PLACED ON ”CHALLENGING” SITES, WHERE THE NETWORK CARRIER CONSTRUCTION MANAGERS SHALL GIVE CONSTRUCTION COORDINATOR’S AS MUCH GUIDANCE ON EACH SPECIFIC SITUATION AS POSSIBLE, HOWEVER, CONSTRUCTION COORDINATOR’S SHALL BE ENCOURAGED TO PARTNER WITH NETWORK CARRIER CONSTRUCTION MANAGER IN DECIDING PLACEMENT PERTAINING TO CHALLENGING SITES. A SITE VISIT MAY BE REQUIRED TO FULFILL REQUIREMENTS. CONSTRUCTION COORDINATOR SHALL IDENTIFY ALL SIGN LOCATIONS AT THE A&E WALK. PLEASE SEE SIGN DETAIL AND SIZE.

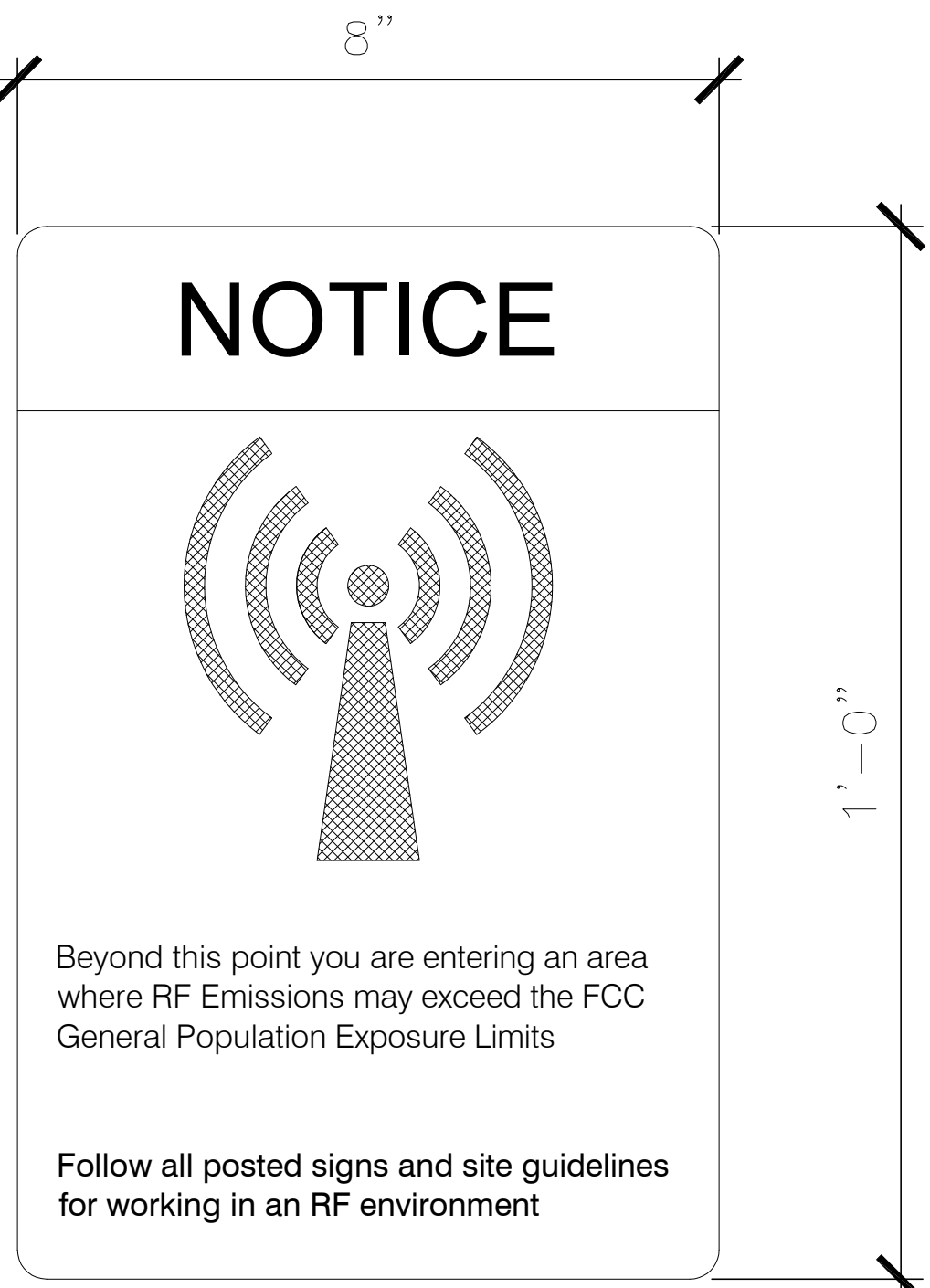
3. SIGN DISBURSEMENT FROM WAREHOUSE: SIGN INVENTORY SHALL BE ACCESSIBLE AT NETWORK CARRIER WAREHOUSE TO BE DISBURSED AS PART OF THE GENERAL CONTRACTOR BOM AS CALLED OUT IN A&E DRAWINGS FOR EACH SITE.

2  
RF-2

GENERAL SIGNAGE NOTES

NO SCALE

NOTES:  
1. FOR AT&T LOGO SEE AT&T LOGO DESIGN SPECIFICATIONS  
2. ALL TEXT FONT IS ARIAL U.N.O.  
3. CONTRACTOR TO PROCURE FCC NO. FROM AT&T COMPLIANCE MANAGER  
PH: 425-580-8860  
4. TEXT FOR SIGNAGE SHALL INDICATE CORRECT SITE NAME AND NUMBER AS PER AT&T CONSTRUCTION MANAGER RECOMMENDATIONS  
5. CABINET MOUNTING APPLICATION REQUIRES ADHERING PLATE TO FACE OF CABINET WITH WATERPROOFING POLYURETHANE ADHESIVE  
6. AT&T MOBILITY COMPLIANCE STATEMENT: BASED ON THE INFORMATION COLLECTED, AT&T MOBILITY WILL BE COMPLIANT WITH FCC RULES AND REGULATIONS AT THE NEAREST WALKING SURFACE IF RECOMMENDATIONS IN THE COMPLIANCE SUMMARY ARE IMPLEMENTED. REFER TO RFSSRP REPORT AND TO REFERENCE IT FOR SPECIFIC SIGNAGE REQUIREMENTS.



1  
RF-1

SIGNAGE

NO SCALE

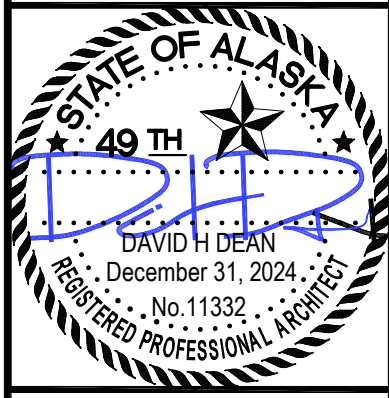


Select Site Acquisition, LLC  
24809 E. ALKI LANE  
LIBERTY LAKE, WA 99019

DHD  
ARCHITECTURE PLLC  
13424 246TH AVE SE  
ISSAQUAH, WA 98027  
PHONE: 425.657.0552  
EMAIL: david@den@outlook.com  
HTTP://WWW.DHDARCHITECTURE.BIZ

JN3073  
JUNEAU HARBOR  
MARINE VIEW NSB  
230 S FRANKLIN STREET  
JUNEAU, AK 99801

ISSUED DATE: 03-21-2024	
NO.	DATE
1	05-26-22
2	05-26-22
3	02-16-23
4	02-23-23
5	04-19-23
6	05-24-23
7	01-05-24
8	03-06-24



SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER:  
RF-2

# PLATFORM INSTALLATION DRAWINGS

## PREPARED FOR AT&T

SITE NAME: JUNEAU HARBOR  
NUMBER: JN3073  
FA NUMBER: 14738339

SITE ADDRESS:  
230 S. FRANKLIN STREET, JUNEAU,  
JUNEAU BOROUGH, AK 99801

- PROJECT CONTACTS:
- 1. PROJECT MANAGER  
TODD RICHARDSON  
907-336-3886  
TODD.RIHARDSON@MASTEC.COM
  - 2. DESIGN ENGINEER - MAIN RFI CONTACT  
RAHUL MANGARI, EI  
RAHUL.MANGARI@MASTEC.COM
  - 3. ENGINEER OF RECORD  
RAPHAEL I. MOHAMED, PE, PEng  
919-674-5895  
1151 SE CARY PKWY, SUITE 101  
CARY, NC 27518  
RAPHAEL.MOHAMED@MASTEC.COM
  - 4. FOR FABRICATION AND CONSTRUCTION  
RELATED INQUIRIES: CONTACT MASTEC  
DESIGN ENGINEER AND ENGINEER OF RECORD.

DRAWINGS INCLUDED			
SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION
T-1	TITLE SHEET		
N-1	MODIFICATION INSPECTION CHECKLIST		
N-2	GENERAL NOTES		
S-1	MODIFICATION SCHEDULE		
S-2	PLATFORM ROOFTOP PLACEMENT		
S-3	PLATFORM FRAMING PLAN		
S-4	PLATFORM INSTALLATION DETAIL		
S-5	PLATFORM LADDER INSTALLATION DETAIL		


QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM MASTEC NETWORK SOLUTIONS TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, PLEASE CONTACT RAPHAEL MOHAMED AT (919) 244-5207.

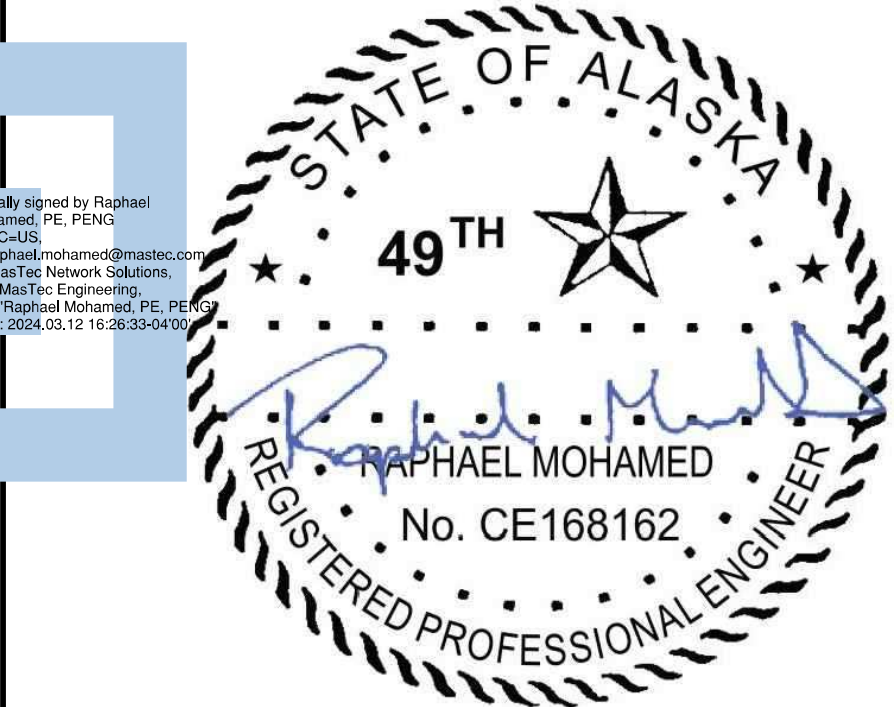
### BUILDING INFORMATION

BUILDING HEIGHT / TYPE:	107.3 FT BUILDING ROOFTOP W/ 18.5 PENTHOUSE
MOUNT HEIGHT/TYPE:	107 FT (PLATFORM )
BUILDING LOCATION:	LAT: 58.2993° LONG: -134.4047°
PASSING ANALYSIS FIRM NAME:	MASTEC NETWORK SOLUTIONS
PROJECT NUMBER:	45903-MOD3

### CODE COMPLIANCE

ANSI/TIA-222-H  
2021 INTERNATIONAL BUILDING CODE

 1151 SE CARY PKWY, SUITE 101 CARY, NC 27518			
THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.			
SITE NAME: JUNEAU HARBOR SITE NUMBER: JN3073 FA NUMBER: 14738339 MNS ENG. NUMBER: 45903 - MOD3			
SITE ADDRESS: 230 S FRANKLIN STREET, JUNEAU, AK 99801			
DRAWN BY: RM			
CHECKED BY: BDM			
APPROVED BY: RIM			
SCALE: N.T.S			
TITLE SHEET			
T-1			REV 0



RAPHAEL I. MOHAMED, PE,PEng  
SENIOR DIRECTOR OF ENGINEERING  
AK PE LICENSE NO. CE168162

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALASKA.



MI CHECKLIST	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
PRE-CONSTRUCTION	
X	MI CHECKLIST DRAWING
N/A	EOR APPROVAL
N/A	FABRICATION INSPECTION
N/A	FABRICATOR CERTIFIED WELD INSPECTION
N/A	MATERIAL TEST REPORT (MTR)
N/A	FABRICATOR NDE INSPECTION
N/A	NDE REPORT OF BASE PLATE
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
N/A	CONTINUOUS FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH AND SLUMP TESTS
N/A	GROUT COMP. STRENGTH (ASTM C109)
N/A	POST INSTALLED ANCHOR ROD VERIFICATION
N/A	BASE PLATE GROUT VERIFICATION
N/A	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
N/A	EARTHWORK: LIFT AND DENSITY
X	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
N/A	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT NEEDED FOR THE PMI REPORT  
N/A DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE PMI REPORT

MODIFICATION INSPECTION NOTES:

GENERAL:

1. THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF THE TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR)
2. THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.
3. TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR POINT OF CONTACT (POC).

MI INSPECTOR:

1. THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM  

REVIEW THE REQUIREMENTS OF THE MI CHECKLIST WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
2. THE MI IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTORS (GC) INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS. AND SUBMITTING THE MI REPORT.

GENERAL CONTRACTOR:

1. THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:
  - REVIEW THE REQUIREMENTS OF THE MI CHECKLIST.
  - WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT
  - ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
  - BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS.
2. THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

MI VERIFICATION INSPECTIONS:

VERIFICATION INSPECTION MAY BE CONDUCTED BY AN INDEPENDENT FIRM AFTER A MODIFICATION PROJECT IS COMPLETED, AS MARKED BY THE OF AN ACCEPTED "PASSING MI" OR "PASS AS NOTED MI" REPORT FOR THE ORIGINAL PROJECT.

REQUIRED PHOTOS:

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTIONS AND INSPECTION:
- RAW MATERIALS
- PHOTOS OF ALL CRITICAL DETAILS
- FOUNDATION MODIFICATIONS
- WELD PREPARATION
- BOLT INSTALLATION AND TORQUE
- FINAL INSTALLED CONDITION
- SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
- FINAL IN FIELD CONDITIONS

PHOTOS OF ELEVATED MODIFICATION TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

CORRECTION OF FAILING MI'S:

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE TOWER OWNER TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.
- OR, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/ENFORCEMENT USING THE AS-BUILT CONDITION.



RECOMMENDATIONS:

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING A MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI, THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACULTIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CANCELLATION OR DELAYS IN SCHEDULED MI:

IF THE GC AND MI INSPECTOR AGREE TO A DATE ON WHICH THE MI WILL BE CONDUCTED, AND EITHER PARTY CANCELS OR DELAYS, TOWER OWNER SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OF DEPOSITS AND/OR OTHER PENALTIES RELATED TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY FOR ANY TIME (E.G. TRAVEL AND LODGING, COSTS OF KEEPING EQUIPMENT ON-SITE, ETC.). IF TOWER OWNER CONTRACTS DIRECTLY FOR A THIRD PARTY MI, EXCEPTIONS MAY BE MADE IN THE EVENT THAT THE DELAY/CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

				 1151 SE CARY PKWY, SUITE 101 CARY, NC 27518
				THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.
0	03/12/24	FIRST ISSUE	RM	
NO.	DATE	DESCRIPTION	BY	
REVISIONS				
				SITE NAME: JUNEAU HARBOR SITE NUMBER: JN3073 FA NUMBER: 14738339 MNS ENG. NUMBER: 45903 - MOD3  SITE ADDRESS: 230 S FRANKLIN STREET, JUNEAU, AK 99801
RAPHAEL I. MOHAMED, PE,PEng SENIOR DIRECTOR OF ENGINEERING AK PE LICENSE NO. CE168162				DRAWN BY: RM
				CHECKED BY: BDM
				APPROVED BY: RIM
				SCALE: N.T.S
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALASKA.				MODIFICATION INSPECTION CHECKLIST
				N-1



1. ALL WORK PRESENTED IN THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
2. THE CONTRACTOR MUST HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN TOWER ERECTION AND RETROFIT SIMILAR TO THAT DESCRIBED HEREIN.
3. ALL CONSTRUCTION IS TO BE COMPLETE IN ACCORDANCE WITH THE ANSI/ASSE A10.48 AND ANSI/TIA-322 STANDARDS. THE CONTRACTOR MUST HAVE CONSIDERABLE WORKING KNOWLEDGE IN THESE STANDARDS TO ACCEPT THIS WORK. BY ACCEPTING THIS PROJECT, THE CONTRACTOR IS ATTESTING THAT HE HAS SUFFICIENT EXPERIENCE, ABILITY, AND KNOWLEDGE OF THE WORK TO BE PERFORMED AND IS PROPERLY LICENSED AND REGISTERED TO COMPLETE THIS WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS PRIOR TO BEGINNING ANY MATERIAL ORDERS, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE EOR. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR MAY PROCEED WITH THE PROJECT.
5. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE CONTRACTOR AND/OR FABRICATOR.
6. ALL MANUFACTURERS' INSTRUCTIONS FOR INSTALLATION MUST BE FOLLOWED EXACTLY AS SPECIFIED. WHEN CONFLICTING WITH THESE DRAWINGS, THE MANUFACTURER SPECIFICATIONS SHALL GOVERN.
7. ALL MATERIALS AND EQUIPMENT USED IN THE INSTALLATION OF THESE DRAWINGS SHALL BE IN NEW OR GOOD WORKING QUALITY, FREE FROM DEFECTS AND FAULTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL SUBSTITUTIONS MUST BE GIVEN WRITTEN APPROVAL FROM THE EOR PRIOR TO INSTALLATION. ALL MATERIALS SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INTENDED CONSTRUCTION ACTIVITY INCLUDING MATERIALS, ACCESS AND WORK SCHEDULE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND WILL BE RESPONSIBLE FOR ABIDING BY ALL REQUIREMENTS AND CONDITIONS OF THE PERMITS. WHEN APPLICABLE, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTION PRIOR TO BEGINNING OF ANY CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS. INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS. CONSTRUCTION OF THE PROPOSED WORK SHALL MEET ANSI/ASSE A10.48, OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.

- STEEL:**



1. THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST AISC CODE AND ASTM SPECIFICATIONS.
2. HOLES SHALL NOT BE TORCH CUT THROUGH STRUCTURAL STEEL FOR FABRICATION. ALL STEEL FABRICATION MUST FOLLOW AISC SPECIFICATIONS.
3. HOT-DIP GALVANIZE ALL ITEMS AFTER FABRICATION IN COMPLIANCE WITH ASTM A-123 UNLESS OTHERWISE SPECIFIED. ALL NEW STEEL IS TO BE PAINTED TO MATCH THE EXISTING STEEL.
4. NEW STEEL MEMBERS MUST HAVE SINGLE DRILLED HOLES. SLOTTED AND DOUBLY DRILLED HOLES ARE NOT ACCEPTABLE MEANS OF FABRICATION UNLESS OTHERWISE SPECIFIED.
5. ALL CONNECTIONS NOT DETAILED IN THESE DRAWINGS MUST BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS.
6. ALL BOLTED CONNECTIONS MUST BE INSTALLED TO A SNUG-TIGHTENED CONDITION PER AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM 325 OR A490 BOLTS" SECTION 8.1 UNLESS OTHERWISE SPECIFIED.
7. CONTRACTOR MUST BE REQUIRED TO STACK WASHERS FOR BOLTS WHERE THREADS ARE EXCLUDED FROM SHEAR PLANE TO OBTAIN SNUG TIGHT INSTALLATION. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS. GALVANIZED ASTM 325 OR A490 BOLTS SHALL NOT BE REUSED.

1. ALL DAMAGED SURFACES SHALL BE REPAIRED WITH A COLD-GALVANIZING COATING CONFORMING TO ASTM 780. THIS COATING SHALL BE APPLIED BY BRUSH. THE GALVANIZING COMPOUND SHALL CONTAIN A MINIMUM OF 95% ± PURE ZINC. THE FINISHED COATING SHALL BE A MINIMUM THICKNESS OF 4 MILS.
2. CONTRACTOR TO USE ZINGA OR ZRC COLD GALVANIZATION COMPOUNDS OR APPROVED EQUIVALENTS.
3. CLEAN AREAS TO BE PREPARED AND REMOVE SLAG FROM WELDS FOR TREATMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. IF THE TOWER IS PAINTED, ALL TREATED AREAS ARE TO BE BRUSH PAINTED TO MATCH THE TOWER AFTER COLD GALVANIZING COMPOUND IS ALLOWED TO CURE.

1. ALL U-BOLTS ARE TO BE ASTM A36/A307, SAE 429 GR. 2 UNLESS OTHERWISE SPECIFIED.
2. U-BOLTS SHALL MEET REQUIREMENTS OF ASME B18.31.5-2011 BENT BOLTS.
3. U-BOLT ASSEMBLY SHALL COME COMPLETE WITH NUTS (ASTM A563), WASHERS (ASTM F436), AND LOCK WASHERS.
4. FULL U-BOLT ASSEMBLY TO BE HOT-DIP GALVANIZED PER ASTM A153/A153M OR A123, AS APPLICABLE.

1. APPURTENANCES MAY INTERFERE WITH PROPOSED MODIFICATIONS.
2. ALL MODIFICATIONS TO BE INSTALLED CONTINUOUSLY THROUGH EXISTING EQUIPMENT. ALL EXISTING EQUIPMENT MUST NOT BE DAMAGED OR TAKEN OFF AIR DURING INSTALLATION OF PROPOSED MODIFICATIONS.
3. ANTENNA AND COAX NOT SHOWN FOR CLARITY. SEE STRUCTURAL ANALYSIS REPORT FOR EXISTING ANTENNA LOADING AND COAX CONFIGURATION.
4. PRIOR TO FABRICATION AND INSTALLATION , CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. INFORMATION PROVIDED IS FOR QUOTING PURPOSES ONLY, AND SHALL NOT BE USED FOR FABRICATION.
5. EXISTING RRU'S AND ANCILLARY EQUIPMENT MAY NEED TO BE TEMPORARILY RELOCATED AS NECESSARY TO COMPLETE THIS MODIFICATION. EQUIPMENT IS NOT TO BE TAKEN OFF AIR AT ANY TIME DURING INSTALLATION. PLEASE CONTACT EOR IF THIS CANNOT BE MET.
6. CONTACT EOR IF PROPOSED MOUNT REINFORCEMENT DIMENSIONS CANNOT BE MET.

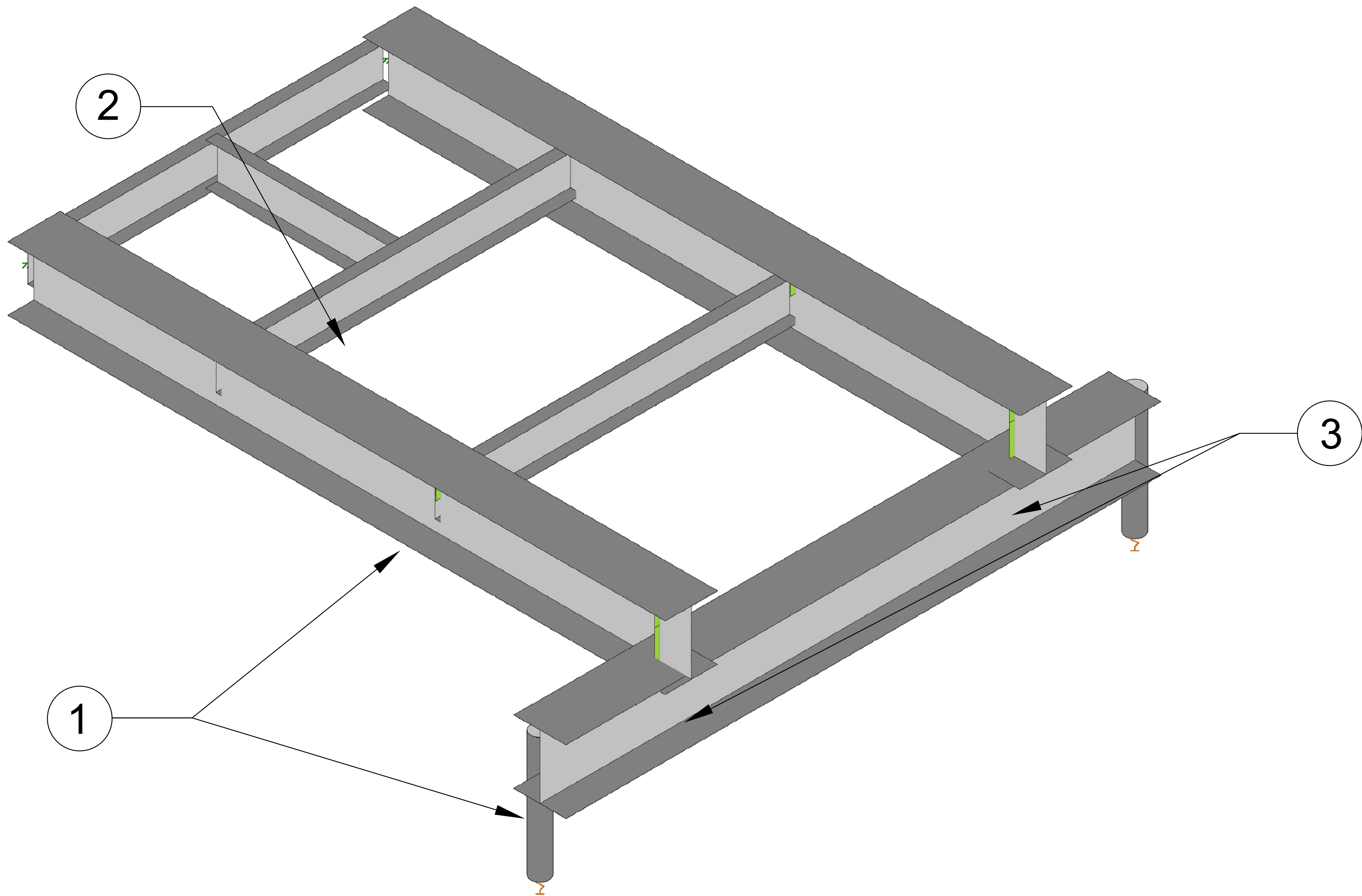
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NO.	DATE	DESCRIPTION		BY	
REVISIONS					
					
RAPHAEL I. MOHAMED, PE, PEng SENIOR DIRECTOR OF ENGINEERING AK PE LICENSE NO. CE168162					
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALASKA.					
<div> <div>  <p> <b>MasTec</b>            Network Solutions            1151 SE CARY PKWY, SUITE 101            CARY, NC 27518         </p> </div> <div> <p>THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.</p> </div> </div>					
SITE NAME: JUNEAU HARBOR SITE NUMBER: JN3073 FA NUMBER: 14738339 MNS ENG. NUMBER: 45903 - MOD3					
SITE ADDRESS: 230 S FRANKLIN STREET, JUNEAU, AK 99801					
DRAWN BY: RM					
CHECKED BY: BDM					
APPROVED BY: RIM					
SCALE: N.T.S					
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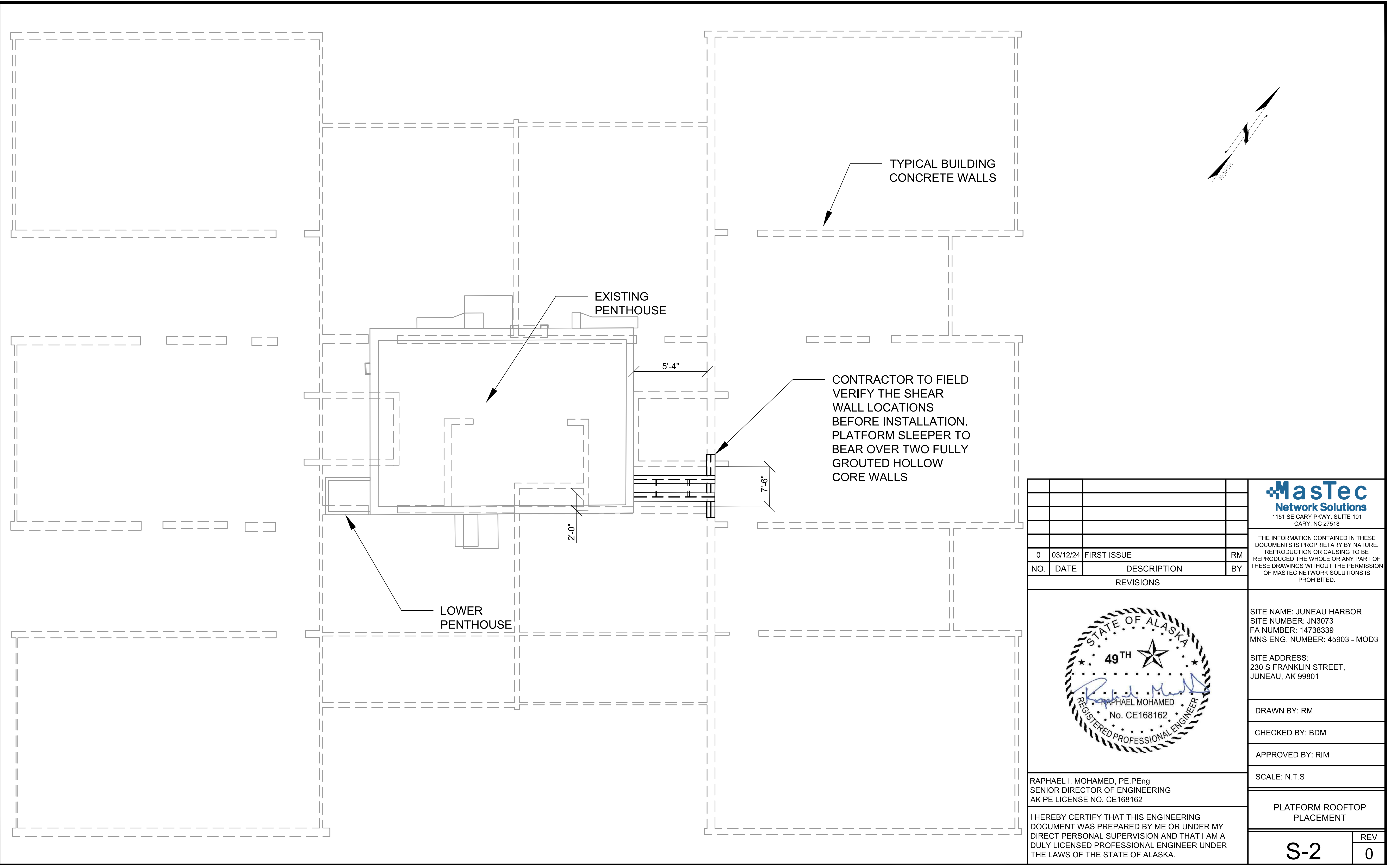




MODIFICATION SCHEDULE

SCOPE NO.	MODIFICATION DESCRIPTION	BOTTOM ELEVATION	TOP ELEVATION	SHEET NO.
1	INSTALLATION OF NEW PLATFORM BEAMS	-	117'-0" ±	S-2 TO S-4
2	INSTALLATION OF NEW PLATFORM BRACINGS	-	117'-0" ±	S-2 TO S-4
3	INSTALLATION OF NEW PLATFORM SUPPORTS	-	117'-0" ±	S-2 TO S-4



				 1151 SE CARY PKWY, SUITE 101 CARY, NC 27518	
				THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.	
0	03/12/24	FIRST ISSUE		RM	
NO.	DATE	DESCRIPTION	BY		
REVISIONS					
				SITE NAME: JUNEAU HARBOR SITE NUMBER: JN3073 FA NUMBER: 14738339 MNS ENG. NUMBER: 45903 - MOD3	
				SITE ADDRESS: 230 S FRANKLIN STREET, JUNEAU, AK 99801	
RAPHAEL I. MOHAMED, PE,PEng SENIOR DIRECTOR OF ENGINEERING AK PE LICENSE NO. CE168162				DRAWN BY: RM	
				CHECKED BY: BDM	
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALASKA.				APPROVED BY: RIM	
				SCALE: N.T.S	
				MODIFICATION SCHEDULE (ALPHA/BETA SECTORS)	
				S-1	
				REV	0



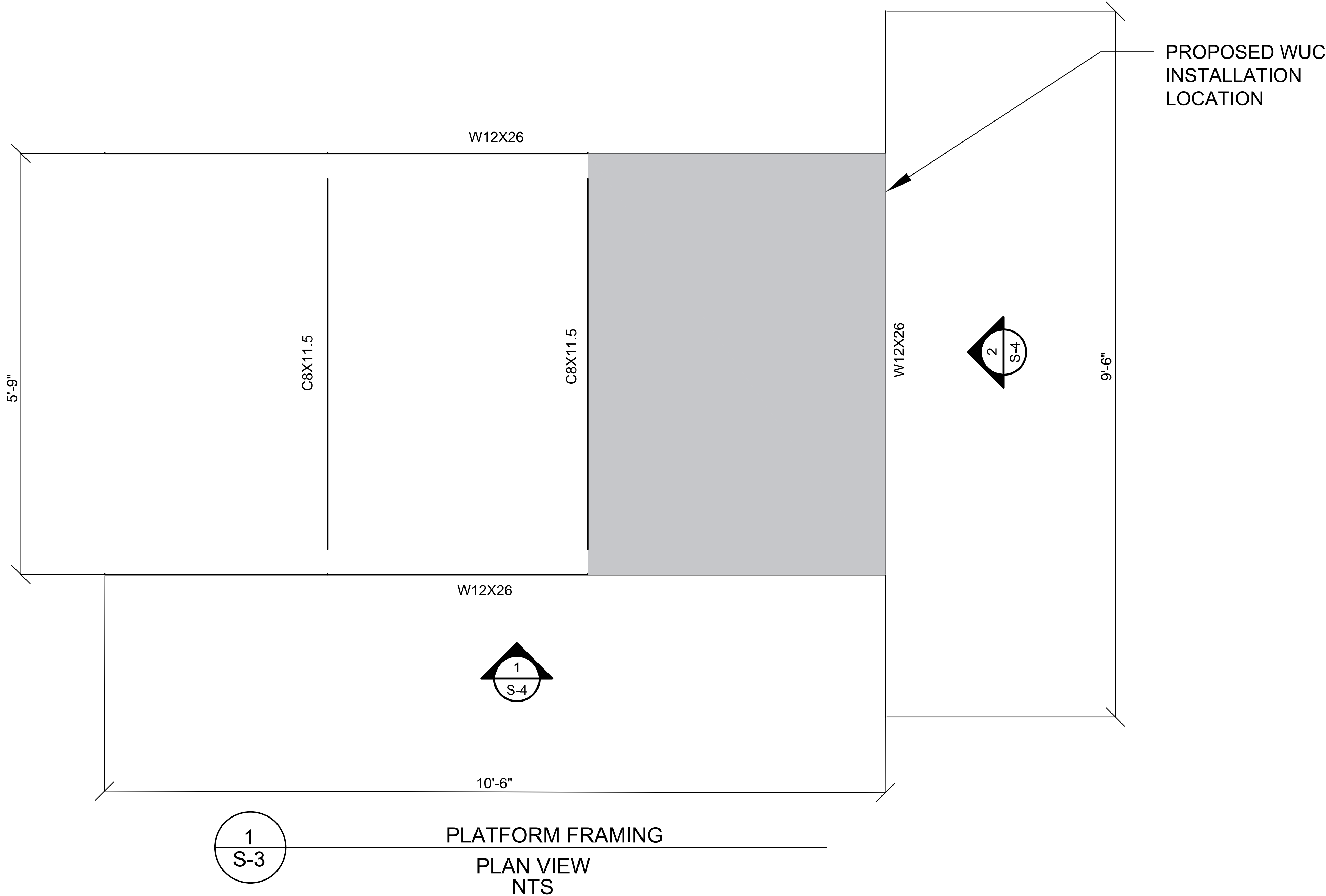
 1151 SE CARY PKWY, SUITE 101 CARY, NC 27518			
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REVISIONS			
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		SITE ADDRESS: 230 S FRANKLIN STREET, JUNEAU, AK 99801	
		DRAWN BY: RM	
		CHECKED BY: BDM	
		APPROVED BY: RIM	
SCALE: N.T.S			
RAPHAEEL I. MOHAMED, PE,PEng SENIOR DIRECTOR OF ENGINEERING AK PE LICENSE NO. CE168162		PLATFORM ROOFTOP PLACEMENT	
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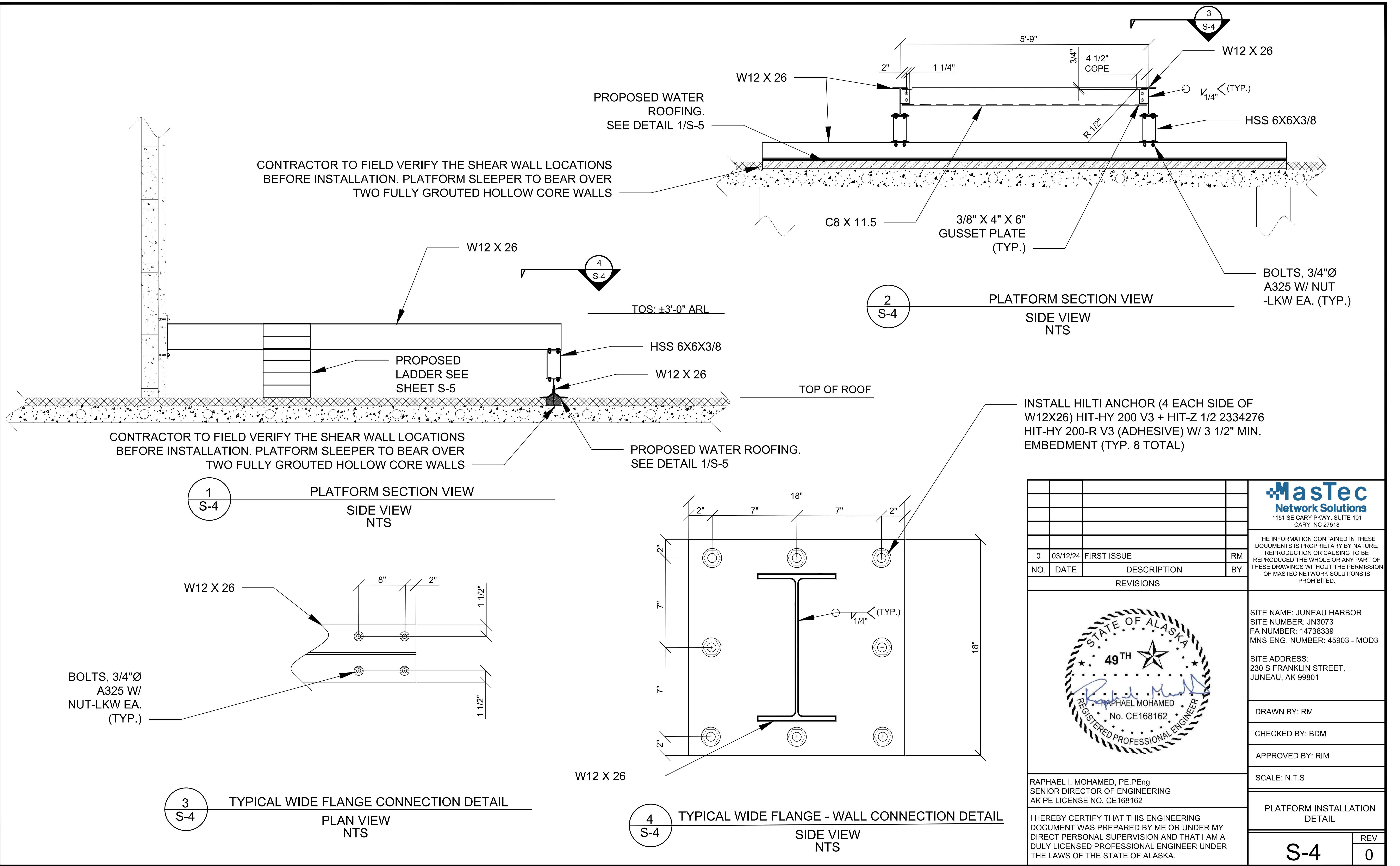
NOTES:

1. CONTRACTOR TO FIELD VERIFY THE REQUIRED LENGTH OF THE NEW PIPES MAY CUT ENDS AS REQUIRED TO AVOID UNNECESSARY OVERHANG AND OVERLAP.
2. TWO COATS OF COLD GALVANIZING COATING MUST BE APPLIED TO ALL CUT ENDS IN ACCORDANCE TO ASTM A780 PRIOR TO INSTALLATION.

PLATFORM BILL OF MATERIAL		
MARK	QUANTITY	DESCRIPTION
(WF)	3	PLATFORM WIDE FLANGE, W12X26
(CS)	2	PLATFORM BRACING, C8 X 11.5
(HSS)	2	PLATFORM VERTICAL SUPPORT, HSS6X6X3/8
(CP)	2	CAP PLATE, 14" X 10" X 1/2"
(AP)	2	ANCHOR PLATE, 14" X 10" X 1/2"
(GP)	4	GUSSET PLATE, 4" X 6" X 3/8"
--	24	CONNECTION BOLTS, 3/4"Ø A325 W/ NUT-LKW EA.
2018444	8	HILTI HIT-Z 1/2 (ELEMENT)
2334276	8	HILTI HIT-HY200 V3 (ADHESIVE)




				 1151 SE CARY PKWY, SUITE 101 CARY, NC 27518
				THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.
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RAPHAEL I. MOHAMED, PE,PEng SENIOR DIRECTOR OF ENGINEERING AK PE LICENSE NO. CE168162  I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ALASKA.				DRAWN BY: RM
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				APPROVED BY: RIM
SCALE: N.T.S				
PLATFORM FRAMING PLAN				
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				<div>S-5</div>	<div>REV</div> <div>0</div>



THIS SHEET IS FULL SIZE AT 34"x22"  
1" ACTUAL

## ELECTRICAL SPECIFICATIONS

"X" = PROVIDE SUBMITTAL

26 00 00 - GENERAL REQUIREMENTS: ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC), STATE, MUNICIPAL, FEDERAL LAWS, AND AMENDMENTS GOVERNING THE PROJECT. ALL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A CERTIFIED ADMINISTRATOR JOURNEYMAN ELECTRICIAN.

ALL ELECTRICAL EQUIPMENT SHALL BE NEW COMMERCIAL GRADE AND INCLUDE THE SEAL OF A NATIONALLY RECOGNIZED TESTING LABORATORY FOR THE PURPOSE IT IS INSTALLED AS A COMPLETE ASSEMBLY. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR ANY SUBSTITUTION OR DEVIATION FROM THE DESIGN IN WRITING TO THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, SCHEDULE INSPECTIONS, AND PAY ALL ASSOCIATED FEES UNLESS DIRECTED OTHERWISE.

WORKING CLEARANCES: THE CONTRACTOR IS REQUIRED TO COORDINATE THE MINIMUM WORKING CLEARANCES AND DEDICATED EQUIPMENT REQUIRED BY THE NEC. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH ALL SUBCONTRACTORS SO THAT ENCROACHMENTS INTO THE RESTRICTED SPACE ARE PREVENTED.

PROVIDE ALL CUTTING, CORING, AND PATCHING REQUIRED FOR ELECTRICAL INSTALLATION. REGISTERED STRUCTURAL ENGINEER APPROVAL IS REQUIRED WHEN CORING OR CUTTING OF STRUCTURAL MEMBERS IS REQUIRED.

PLENUM RATING: ALL CABLING, RACEWAYS, CABLE TIES AND COMPONENTS LOCATED IN CEILING SPACES THAT ARE PLENUMS SHALL BE PLENUM RATED.

COORDINATE WITH ARCHITECTURAL PLANS, SHOP DRAWINGS, AND OTHER TRADES PRIOR ROUGH-IN FOR FOR DEVICE AND EQUIPMENT LOCATIONS AND REQUIREMENTS.

BARRIER RATINGS: ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE SEALED IN ACCORDANCE WITH NEC ARTICLE 300.21. PROVIDE FIRE PUTTY OR SHEET ROCK CONFIGURED FOR UL FIRE RATING WRAPPING ALL BOXES AND PANELS MATCHING WALL AND CEILING FIRE RATING. CONTRACTOR TO PROVIDE SUBMITTAL OF ALL FIRE RATING SYSTEMS TO BE USED. VAPOR BARRIERS: SEAL ALL VAPOR BARRIER PENETRATIONS TO MAINTAIN SYSTEM INTEGRITY. RACEWAYS EXPOSED TO DIFFERENT TEMPERATURES SHALL BE FILLED WITH AN APPROVED MATERIAL IN ACCORDANCE WITH NEC TO STOP AIR FLOW..

ACCESS PANELS: PROVIDE ACCESS PANELS FOR ALL LOCATIONS NECESSARY TO ACCESS ELECTRICAL EQUIPMENT AND JUNCTION BOXES. ACCESS PANELS SHALL BE FIRE RATED EQUAL TO OR EXCEEDING THE ADJACENT WALL OR CEILING CONSTRUCTION AND PAINTED TO MATCH.

REMODEL: TRACE OUT EXISTING CIRCUIT CONFIGURATIONS IMPACTED BY REMODEL REQUIREMENTS. PROVIDE CIRCUIT CONTINUITY FOR ALL CIRCUITS THAT ARE MODIFIED DURING CONSTRUCTION AND PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL AREAS OF THE BUILDING DURING THE RENOVATION WHERE REQUIRED. DEMOLISH ALL ABANDONED CONTROL, SIGNAL AND POWER WIRING BACK TO SOURCE. UPDATE ALL PANEL SCHEDULES TO REFLECT CURRENT CIRCUIT DESCRIPTIONS. REMOVE, RE-INSTALL, CLEAN AND TEST EXISTING EQUIPMENT, DEVICES, FIXTURES ETC WHERE WALLS OR CEILINGS ARE MODIFIED REQUIRING SYSTEM MODIFICATION. EXISTING/REMODEL WIRING THAT CANNOT BE CONCEALED DUE TO EXISTING SOLID CORE OR CONCRETE CONSTRUCTION SHALL BE INSTALLED USING WIREMOLD SURFACE MOUNTED RACEWAY AND BOXES IN FINISHED AREAS AND EXPOSED CONDUIT IN NON-FINISHED AREAS. CIRCUITS POWERING EMERGENCY LIGHTING MUST BE RECONFIGURED TO NOT BE PART OF A MULTI-WIRE (SHARED NEUTRAL) CIRCUIT.

26 01 10 - SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTAL FOR EACH SPECIFICATION SECTION DENOTED AS REQUIRED AT MINIMUM. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT (UNLESS HARD COPY IS REQUIRED BY OTHER CONTRACT APPLYING TO THE ENTIRE PROJECT). SUBMIT ALL REQUIRED SECTIONS IN A SINGLE SUBMITTAL OR BROKEN INTO NO MORE THAN THE FOLLOWING SEPARATE SECTIONS: "LIGHTING", "EQUIPMENT", "WIRING/DEVICES", AND "SPECIAL SYSTEMS". ORGANIZE SUBMITTAL AND/OR EACH SECTION BY SPECIFICATION NUMBER FOLLOWED BY ANY MAJOR EQUIPMENT REFERENCE ON THE DRAWINGS WITH ALL OPTIONS AND SELECTIONS HIGHLIGHTED TO DENOTE THE SPECIFIC EQUIPMENT PROPOSED. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND CONFIGURATION AND DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING A COMPLETE OPERATIONAL SYSTEM COMPLIANT WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

26 01 21 - RECORD DRAWINGS: MARK UP A SET OF DRAWINGS (REDLINES) SHOWING ALL ELECTRICAL WORK. SHOW DIAGRAMMATIC ROUTING MODIFICATIONS, SIZING, AND CIRCUIT REVISIONS TO THE CONTRACT PLANS. RECORD DRAWINGS SHALL BE KEPT ON SITE AVAILABLE FOR REVIEW DURING THE ENTIRE CONSTRUCTION PERIOD. SUBMIT FINAL REDLINE SET FOR APPROVAL PRIOR TO FINAL INSPECTION.

26 01 22 - WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM SUBSTANTIAL COMPLETION. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED DURING THE GUARANTEE PERIOD AT NO ADDITIONAL COST TO THE OWNER.

26 05 15 - POWER AND LIGHTING CONDUCTORS: STRANDED COPPER ROUTED IN CONDUIT UNLESS NOTED OTHERWISE. INSULATION TO BE THHN-2 90 DEGREE C FOR INDOOR APPLICATIONS AND XHHW-2 90 DEGREE C FOR OUTDOOR LOCATIONS, IN UNHEATED SPACES, OR INSTALLED WHILE THE AMBIENT TEMPERATURE IS LESS THAN -7C (20F). ALL CONDUCTORS SHALL BE INSTALLED IN ACCORDANCE WITH NEC REQUIREMENTS FOR AMBIENT TEMPERATURE DERATING, CONDUIT FILL DERATING, AND BOX FILL. PROVIDE UNSHARED DEDICATED NEUTRAL FOR EACH CIRCUIT. BRANCH CIRCUIT WIRING MAY BE INSTALLED IN CABLES WHERE ROUTED CONCEALED AND SUPPORTED BY NEC REQUIREMENTS AND TYPE TYPE W OR EQUAL CORDS WHERE INSTALLED IN ACCORDANCE WITH THE NEC REQUIREMENTS SIZED AS DENOTED IN THE NEC TABLES 400.5(A)(2) AND 400.5(A)(3).

OVERSIZED CONDUCTORS THAT EXCEED THE TERMINATION LUG SIZE RATING SHALL BE SPLICED USING AN INSULATED POLARIS OR CRIMP STYLE DEVICE THAT IS RATED FOR CONNECTION OF EACH CONDUCTOR SIZE. THE LOCATION CAN BE INSIDE THE ENCLOSURE HOUSING THE TERMINATION LUG WHERE THE MAXIMUM FILL IS NOT EXCEEDED. PROVIDE AN AUXILIARY ENCLOSURE SIZED FOR THE CONDUCTORS/RACEWAY WHEN SPACE IS NOT ADEQUATE IN THE EQUIPMENT.

208V/120V CONDUCTORS: COLOR CODE CONDUCTORS BLACK, RED, BLUE, WHITE, AND GREEN. MINIMUM SIZE CONDUCTORS FOR 15 AND 20 AMP BRANCH CIRCUITS MEASURED FROM THE PANELBOARD TO THE FURTHEST DEVICE ON THE CIRCUIT UNLESS OTHERWISE NOTED ON THE DRAWINGS: 12 AWG UP TO 75 FT, 10 AWG 75 FT TO 140 FT, GREATER THAN 140 FT SIZE CONDUCTORS TO LIMIT VOLTAGE DROP TO 5% OR LESS.

26 05 19 - MC CABLES: METALCLAD (MC) CABLE WITH STEEL OUTER SHEATH. ALLOWED USES DRY WHERE ROUTED CONCEALED AND PROTECTED.

26 05 26 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS: PROVIDE EQUI-POTENTIAL GROUNDING SYSTEM, IN ACCORDANCE WITH NEC ARTICLE 250. PROVIDE GROUNDING CONDUCTOR IN ALL RACEWAYS BONDED TO EQUIPMENT AND TO RACEWAY SYSTEM.

## ELECTRICAL SPECIFICATIONS

"X" = PROVIDE SUBMITTAL

26 05 29 - HANGARS AND SUPPORTS FOR ELECTRICAL SYSTEMS: SUPPORT ALL ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO, LIGHT FIXTURES, PANELBOARDS, BOXES, CONDUIT, ETC. PER NEC AND IBC SEISMIC REQUIREMENTS. PROVIDE SEISMIC SUPPORT AND DESIGN SEALED BY A LICENSED STRUCTURAL ENGINEER AS A DEFERRED SUBMITTAL TO THE AHJ FOR ALL EQUIPMENT OVER 400 LBS AND, EQUIPMENT OVER 20 LBS MOUNTED GREATER THAN 4FT AFF, CONDUIT 2.5" OR GREATER AND ALL TRAPEZE OR WALL SUPPORTED RACEWAY 10 LBS/LF OR GREATER. SUPPORT STRUT AND MOUNTING HARDWARE TO BE GALVANIZED

INTERIOR FLOOR MOUNTED MOUNTED EQUIPMENT: PROVIDE 4" THICK MINIMUM STEEL RE-INFORCED CONCRETE HOUSEKEEPING PAD MONOLITHICALLY POURED WITH ADJACENT CONCRETE FLOOR OR SLAB FOR INTERIOR FLOOR INSTALLATIONS. EXTERIOR GROUND MOUNTED EQUIPMENT: PROVIDE A FOUNDATION MATCHING THE ADJACENT BUILDING FOUNDATION DEPTH AND CONFIGURATION FOR EXTERIOR GROUND MOUNTED EQUIPMENT.

26 05 30 - RACEWAY: ALL POWER, LIGHTING, CLASS 1, CLASS 2/3 CIRCUITS INSTALLED IN CONDUIT SHALL BE CONCEALED RACEWAY EXCEPT WHERE SPECIFICALLY INDICATED ELSEWHERE IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS. ELECTRICAL EQUIPMENT AND WIRING CAN BE EXPOSED IN MECHANICAL/ELECTRICAL ROOMS, COOLER/FREEZERS, TELECOMMUNICATION ROOMS, OPEN CEILING SPACES, OR WHERE SPECIFICALLY NOTED. DO NOT ROUTE RACEWAYS ON THE EXTERIOR SURFACE OF THE BUILDING OR THE ROOF UNLESS SPECIFICALLY NOTED OTHERWISE. RACEWAYS CROSSING BUILDING SEISMIC JOINTS OR CONNECTING TO EQUIPMENT WHICH MOVES OR VIBRATES REQUIRE TRANSITION TO FLEXIBLE RACEWAY ACROSS JOINT WITH ENOUGH SLACK TO ALLOW BUILDING MOVEMENT IN ALL DIRECTIONS WITHOUT DAMAGE.

26 05 31 - POLYVINYL CHLORIDE CONDUIT (PVC): UL 651, SCHEDULE 40 AND SCHEDULE 80. FITTINGS: UL 514C AND UL 514D. USES: SCHEDULE 40 - BELOW GRADE OR SLAB ON GRADE. SCHEDULE 80 - BELOW GRADE, SLAB ON GRADE, CORROSIVE ENVIRONMENT, OR EXPOSED. DO NOT INSTALL WHEN AMBIENT TEMPERATURES ARE LESS THAN -7C (20F).

26 05 33 - RIGID METAL CONDUIT (RMC): ANSI C80.1, UL 6. WITH BUSHINGS AT ALL TERMINATIONS. FITTINGS: GALVANIZED MALLEABLE IRON WITH THREADED HUBS FOR ALL CONDUIT ENTRIES AND COUPLINGS. SET SCREW OR RUNNING THREAD FITTINGS ARE NOT PERMITTED. USES: WET OR DRY WHERE INSTALLED BELOW GRADE, IN CONCRETE, STUB UPS, CONCEALED, WHERE EXPOSED TO PHYSICAL DAMAGE, ROUTED ON BUILDING ROOF, SERVICE RISERS, OR WITHIN 10FT OF RACEWAY ROUTED INTO FIXED FOUNDATIONS SUCH AS LIGHT POLE BASE OR STRUCTURE. MUST USE THREADED FITTINGS. MYERS HUBS WITH GROUNDING LOCKNUTS ARE REQUIRED FOR SERVICE RACEWAYS TO CT'S, METERS AND MAIN DISCONNECTS.

26 05 34 - ELECTRICAL METALLIC TUBING (EMT): ANSI C80.3, UL 797; GALVANIZED STEEL TUBING. FITTINGS: NEMA FB 1; GALVANIZED STEEL OR MALLEABLE IRON SET SCREW OR COMPRESSION. DIE CAST OR PRESSURE CAST FITTINGS OR LOCKNUTS ARE NOT PERMITTED. USES: WET OR DRY, CONCEALED OR EXPOSED WHERE NOT SUBJECT TO PHYSICAL DAMAGE. WET OR DAMP LOCATIONS REQUIRE RAINTIGHT WET RATED GLAND COMPRESSION COUPLINGS AND CONNECTORS. NOT PERMITTED FOR SERVICE ENTRANCE RACEWAY, IN CONTACT WITH EARTH, OR IN CONTACT WITH CONCRETE.

26 05 35 - FLEXIBLE METAL CONDUIT (FMC): GALVANIZED OR ZINC COATED FLEXIBLE STEEL CONSTRUCTION. FMC FITTINGS: GALVANIZED MALLEABLE IRON OR STEEL WITH INSULATED THROATS. USES: DRY SPACES LENGTHS LESS THAN 6FT FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND OTHER MOVABLE OR VIBRATING EQUIPMENT.

LIGHTDIGHT FLEXIBLE CONDUIT (LTMC): GALVANIZED OR ZINC COATED FLEXIBLE STEEL CONSTRUCTION WITH PVC OUTER JACKET. USES: DRY, DAMP, OR WET LOCATIONS LENGTHS LESS THAN 6FT FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND OTHER MOVABLE OR VIBRATING EQUIPMENT.

26 05 36 - WET OR DAMP LOCATIONS: USE DEVICES, FIXTURES, RACEWAYS, CONNECTORS, COUPLINGS, CABLES, ENCLOSURES, SUPPORTS, DEVICES, COVER PLATES, AND CONDUCTORS RATED FOR LOCATION INSTALLED.

26 05 40 - BOXES: PROVIDE PULL AND JUNCTION BOXES AS REQUIRED SIZED PER NEC REQUIREMENTS. BOX TO BE NEMA RATED FOR THE THE ENVIRONMENT INSTALLED. BRANCH CIRCUIT JUNCTION BOXES TO BE ELECTRO-GALVANIZED, 4" SQUARE BY 1 1/2" DEEP MINIMUM FOR USE IN DRY INTERIOR AREAS. PROVIDE 4 11/16" SQUARE BY 2 1/8" DEEP OUTLET BOXES FOR ALL VOICE AND DATA OUTLETS. DO NOT INSTALL BOXES BACK-TO-BACK IN WALLS. PROVIDE SEPARATION TO MINIMIZE SOUND TRANSFER. PROVIDE FIRE RATED PADS TO COVER EACH BOX IN FIRE RATED WALLS WHERE NECESSARY TO MAINTAIN FIRE WALL RATING.

26 05 40.1 - WET OR DAMP LOCATION BOXES AND FITTINGS: BOXES: WET RATED. FITTINGS: THREADED HUBS OR RAINTIGHT CONNECTORS FOR EMT. OUTLET BOXES SHALL BE CAST FERROUS WITH THREADED HUBS, NEMA 3R FOR EXTERIOR LOCATIONS, NEMA 4 FOR INTERIOR WET LOCATIONS. NEMA 4X FOR OUTDOOR WITHIN 1 MILE OF THE COASTLINE. CONTROL EQUIPMENT, AND INTERIOR/EXTERIOR WET LOCATIONS EXPOSED TO CORROSIVE ENVIRONMENT.

26 05 56 - CONDUCTOR IDENTIFICATION: LABEL EACH BRANCH CIRCUIT CONDUCTOR AT EACH TERMINATION OR INTERCONNECTION OF WIRING IN PANELBOARDS, GUTTERS, PULL BOXES, OUTLETS AND LOAD CONNECTIONS. LABEL SHALL DENOTE PANEL NAME AND CIRCUIT NUMBER. COLOR CODE PHASE CONDUCTORS PER CONDUCTOR SPECIFICATION.

X 26 05 73 - OVERCURRENT PROTECTIVE DEVICE COORDINATION AND ARC FLASH STUDY: PERFORM USING COMPUTER SOFTWARE DESIGNED FOR THIS PURPOSE. PERTINENT DATA AND THE RATIONALE EMPLOYED IN DEVELOPING THE CALCULATIONS SHALL BE DESCRIBED IN THE INTRODUCTORY REMARKS OF THE STUDY. CALCULATE THE FAULT IMPEDANCE TO DETERMINE THE AVAILABLE SHORT-CIRCUIT AND GROUND FAULT CURRENTS AT EACH BUS. INCORPORATE APPLICABLE MOTOR AND/OR GENERATOR CONTRIBUTION IN DETERMINING THE MOMENTARY AND INTERRUPTING RATINGS OF THE OVERCURRENT PROTECTIVE DEVICES. PRESENT THE RESULTS OF THE SHORT-CIRCUIT STUDY IN A TABLE. INCLUDE THE FOLLOWING: DEVICE IDENTIFICATION, OPERATING VOLTAGE, OVERCURRENT PROTECTIVE DEVICE TYPE/RATING, AND CALCULATED SHORT - CIRCUIT CURRENT. PREPARE THE COORDINATION CURVES TO DETERMINE THE REQUIRED SETTINGS OF OVERCURRENT PROTECTIVE DEVICES TO DEMONSTRATE SELECTIVE COORDINATION. GRAPHICALLY ILLUSTRATE ON LOG - LOG PAPER THAT ADEQUATE TIME SEPARATION EXISTS BETWEEN DEVICES, INCLUDING THE UTILITY COMPANY UPSTREAM DEVICE IF APPLICABLE. PLOT THE SPECIFIC TIME - CURRENT CHARACTERISTICS OF EACH OVERCURRENT PROTECTIVE DEVICE IN SUCH A MANNER THAT ALL DEVICES ARE CLEARLY DEPICTED. PROVIDE FIELD ADJUSTMENT OF DEVICES TO THE OPTIMUM SETTINGS CALCULATED FOR EACH DEVICE.

X 26 24 15 - OVERCURRENT PROTECTION: FOR ALL CIRCUIT BREAKERS RATED AT OR WHICH CAN BE ADJUSTED TO 1200 AMPS OR HIGHER, PROVIDE ARC ENERGY REDUCTION (AER), DOCUMENTATION, AND INITIAL TESTING PER NEC REQUIREMENTS.

X 26 24 16 - PANELBOARDS: PROVIDE AND INSTALL NEMA PB1: BOLT-ON CIRCUIT BREAKER TYPE. FS W-P-115; TYPE I, CLASS 1 PANELBOARD OF THE RATING AND CONFIGURATION AS SHOWN ON THE SINGLE LINE DIAGRAM, PANEL SCHEDULES, AND SCCR TABLE. PROVIDE TYPED CIRCUIT DIRECTORY SHOWING CIRCUITING ARRANGEMENT. PROVIDE BREAKER HANDLE TIES ON ALL EXISTING AND NEW MULTIWIRE BRANCH CIRCUITS SHOWN ON DRAWINGS. PROVIDE BREAKER LOCK-ON HANDLES FOR ALL FIRE ALARM AND EMERGENCY LIGHTING CIRCUITS AND PROVIDE LOCK-OFF DEVICES ON ALL BREAKERS USED FOR DISCONNECTS.

## ELECTRICAL SPECIFICATIONS

"X" = PROVIDE SUBMITTAL

X 26 24 50 - SURGE PROTECTION DEVICE (SPD): UL1449 WITH INTEGRAL FUSE MOV TECHNOLOGY. DISTRIBUTION PANELS - 240KA, 5000 IMPULSES, 200,000 AMP. BRANCH CIRCUIT PANELS - 120KA, 5000 IMPULSES, 200,000 AMP UL LISTED SCCR. INSTALL ON ALL PANELS NOTED ON THE ONE-LINE DIAGRAM, ANY PANEL DOWNSTREAM OF GENERATOR TRANSFER SWITCH OR ANY PANEL LOCATED IN A DWELLING UNIT.

X 26 27 13 - ELECTRICAL SERVICES: THE ELECTRICAL CONTRACTOR SHALL CONTACT EACH SERVING UTILITY CO. AND VERIFY EXACT SERVICE REQUIREMENTS/LOCATION FOR POWER, TELEPHONE AND CABLE TV. SUBMIT EQUIPMENT SUBMITTALS/SHOP DRAWINGS TO SERVING POWER UTILITY FOR COORDINATION OF FAULT CURRENT RATINGS AND CONFIGURATION APPROVAL PRIOR TO EQUIPMENT PROCUREMENT. THE CONTRACTOR SHALL COORDINATE AND PROVIDE ALL REQUIREMENTS OF EACH SERVING UTILITY AND ALL EQUIPMENT SHALL CONFORM TO THE SERVING UTILITY STANDARDS AND REQUIREMENTS.

26 27 28 - GFCI RECEPTACLES: DUPLEX WITH CLASS 3 INTEGRAL GROUND FAULT CURRENT INTERRUPTER (GFCI). THE GFCI SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION OR PROVIDE GFCI BREAKER IN PANEL. EXTERIOR, WET OR DAMP LOCATIONS SHALL BE WEATHER RESISTANT MARKED "WR" ON THE FACE.

26 27 29 - SPECIAL RECEPTACLES: AMPERAGE/VOLTAGE/POLES AS DENOTED ON PLANS. COORDINATE RECEPTACLE CONFIGURATION WITH EQUIPMENT PROVIDED. RECEPTACLES DENOTED AS GFCI PROTECTED MAY BE PROTECTED BY GFCI CIRCUIT BREAKER OR REMOTE GFCI PROTECTION MODULE WITH TEST/RESET IN ACCESSIBLE LOCATION.

X 26 36 00 - TRANSFER SWITCH: OPEN TRANSITION (PROGRAMMED) SIZE AND RATING AS DENOTED ON THE ONE-LINE DIAGRAM. SWITCH SHALL BE INTERLOCKED ELECTRICALLY AND MECHANICALLY TO PREVENT SIMULTANEOUS CLOSING OF BOTH SOURCES UNDER EITHER AUTOMATIC OR MANUAL OPERATIONS. ENGINE PACKAGE FEATURES: ADJUSTABLE TIME DELAY ENGINE START, ADJUSTABLE TIME DELAY ENGINE COOL OFF, ENGINE START CONTACT, ADJUSTABLE TIME DELAY SWITCH TRANSITION. [[DIGITAL CONTROL DISPLAY, RELAY SIGNAL MODULE, LOADSHED, NETWORK INTERFACE, LOAD POWER AND CURRENT MONITORING, AND LEVEL 2 CONTROL PACKAGE]]

X 26 51 00 - LUMINAIRES: PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE LUMINAIRE SCHEDULE CONFIGURED WITH OPTIONS AND MOUNTING HARDWARE FOR CEILING TYPE DENOTED ON THE ARCHITECTURAL PLANS. PROVIDE SUBMITTAL WITH FINISH COLOR AND MATERIAL OPTIONS FOR FINAL SELECTION BY THE ARCHITECT WHERE APPLICABLE. LED'S TO BE LONG-LIFE COUPLED WITH HIGH-EFFICIENCY DRIVERS RATED GREATER THAN 100 LPW WITH AN 80% LED LUMEN MAINTENANCE AT 60,000 HOURS MINIMUM. DIMMING TO BE FLICKER-FREE (0-10V) DOWN TO 1% UNLESS OTHERWISE NOTED. DRIVERS TO BE 120-277 MULTI-VOLT INPUT UNLESS OTHERWISE NOTED. EXTERIOR FIXTURES AND DRIVERS TO BE COLD AND WET RATED FOR THE LOCAL ENVIRONMENT.

## ELECTRICAL LEGEND

 LUMINAIRE - WALL MOUNTED: TYPE AS NOTED ON PLAN

 METERING DEVICE

 POWER PANELBOARD

 JUNCTION BOX OR EQUIPMENT CONNECTION (CEILING; WALL; FLOOR)

 DUPLEX RECEPTACLE - GFCI PROTECTED, WEATHERPROOF, +24" UON

 SPECIAL RECEPTACLE (VERIFY NEMA CONFIGURATION)

 DENOTES AVAILABLE FAULT CURRENT

----- LINETYPE/LINEWEIGHT DENOTING FUTURE WORK

\_\_\_\_\_ LINETYPE/LINEWEIGHT DENOTING EXISTING WORK TO REMAIN

\_\_\_\_\_ LINETYPE/LINEWEIGHT DENOTING NEW WORK


===== LINETYPE/LINEWEIGHT DENOTING NEW ONE-LINE CONNECTIONS

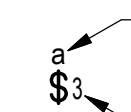
----- LINETYPE/LINEWEIGHT DENOTING DEMO WORK

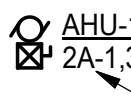
----- LINETYPE/LINEWEIGHT DENOTING BELOW GRADE CONDUIT

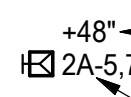
--- --- --- LINETYPE/LINEWEIGHT DENOTING CONTROL WIRING


## EQUIPMENT TAG LEGEND

LUMINAIRES  RT13 ← LUMINAIRE TYPE (UNDERLINED)  
2A-15a ← CIRCUIT AND SWITCH/LEG  
PANEL

CONTROL SWITCHES  a ← LOWER CASE LETTER DENOTES SWITCH LEG FOR CORRESPONDING LUMINAIRE CONTROL  
\$3 ← UPPERCASE LETTER OR NUMBER DENOTES SWITCH CONFIGURATION

EQUIPMENT CONNECTIONS  AHU-1 ← EQUIPMENT ID (UNDERLINED)  
2A-1,3,5 ← CIRCUIT NUMBER(S)  
PANEL

RECEPTACLES  +48" ← MOUNTING HEIGHT (SEE NOTE 1)  
2A-5,7 ← CIRCUIT NUMBER(S)  
PANEL

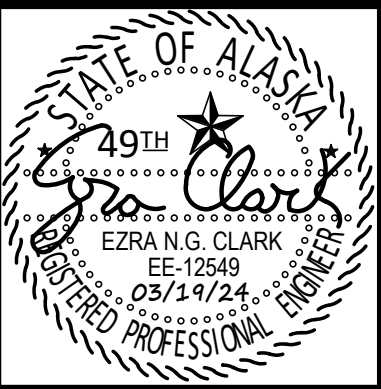
 TRIANGLE. SEE NOTE 1.

NOTE 1: DIMENSIONS (WHEN GIVEN ARE AFF). TRIANGLE DENOTES 46" AFF IN OPEN AREAS OR AT CASEWORK LOCATIONS TO BE 4" ABOVE COUNTERTOP (BACKSPASH WHEN PRESENT). COORDINATE WITH ARCHITECTURE. THIS APPLIES TO ALL ELECTRICAL DEVICES.

ABBREVIATIONS	
INDUSTRY STANDARD ABBREVIATIONS SHALL ALSO BE APPLICABLE.	
Key Name	FullWord
(#)	DENOTES TYPICAL IN LIGHT FIXTURE TYPES
(D)	DEMOLISH
(E)	EXISTING
(R)	RELOCATED
AER	ARC ENERGY REDUCTION
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFI	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
BJ	BONDING JUMPER
CB	CIRCUIT BREAKER
CO, C.O.	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
EECP	ELEVATOR EMERGENCY COMMUNICATION PANEL
EECS	ELEVATOR EMERGENCY COMMUNICATION STATION
EGC	EQUIPMENT GROUNDING CONDUCTOR
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FC	FOOTCANDLE ILLUMINATION
FHP	FRACTIONAL HORSEPOWER
FLA	FULL LOAD AMPS
FSD	FIRE SMOKE DAMPER
G, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GEC	GROUNDING ELECTRODE CONDUCTOR
GES	GROUNDING ELECTRODE SYSTEM
GFPE	GROUND FAULT PROTECTION OF EQUIPMENT
MCA	MINIMUM CIRCUIT AMPACITY
MFS	MAXIMUM FUSE SIZE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT (NOT IN SCOPE)
NO	NORMALLY OPEN
P	POLES
PC	PHOTO CELL
PH, Ø	PHASE
PNL	PANEL
RIB	RELAY IN A BOX (MOTOR RATED)
SCA	SHORT CIRCUIT AMPS
SCCR	SHORT CIRCUIT CURRENT RATING
SE	SERVICE ENTRANCE RATED
SSBJ	SUPPLY SIDE BONDING JUMPER
SSEBJ	SUPPLY SIDE EQUIPMENT BONDING JUMPER
TGB	TELECOMMUNICATION GROUNDING BUSBAR
TMGB	TELECOMMUNICATION MAIN GROUNDING BUSBAR
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS OR WIRE
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER

MOUNTING HEIGHT SCHEDULE	
EQUIPMENT (TO CENTER UON)	HEIGHT (UON)
CONTACTORS, MOTOR STARTERS, DISCONNECT (TOP)	66"
ELECTRIC RANGE RECEPTACLES (TOP)	7" MAX
INDICATING DEVICES (BOTTOM)	80"
PANELBOARDS - POWER; SPECIAL SYSTEMS (TOP)	72"
POWER METER BASE (CENTER LINE OF SOCKET)	PER UTILITY
PULL STATIONS, PUSH BUTTONS	46"
REC FULL HEIGHT REFRIGERATOR OR REACH-IN UNITS	46"
REC IN FINISHED AREAS	18"
REC IN NON-FINISHED, WAREHOUSE, MECH AND SHOPS	46"
REC LOCATED IN HAZARDOUS OR S-2 OCCUPANCIES	24" MINIMUM
TELECOMMUNICATION OUTLETS	18"
WALL MOUNTED SWITCHES	46"
WASHING MACHINES AND DRYER RECEPTACLE	43"

ELECTRICAL SHEET LIST	
NUM	SHEET TITLE
E0.1	LEGEND
E1.1	ELECTRICAL PLANS
E2.1	ONE-LINE DIAGRAMS, DETAILS, AND SCHEDULES
TOTAL SHEETS: 3	



EIC ENGINEERS, INC.  
ELECTRICAL ENGINEERS

CORPORATION LICENSE: AEC01105  
6927 OLD SEWARD HWY, STE 200  
ANCHORAGE, AK 99518  
907-349-9712  
WWW.EICENG.COM



EIC JOB NO. E24-4350

JN3073  
JUNEAU HARBOR  
230 S. FRANKLIN STREET  
JUNEAU, AK 99801

REVISIONS	
NUM	DESCRIPTION

JOB NO.	E24-4350
DATE	03/19/2024
DRAWN	KRR
REVIEWED	ENGC

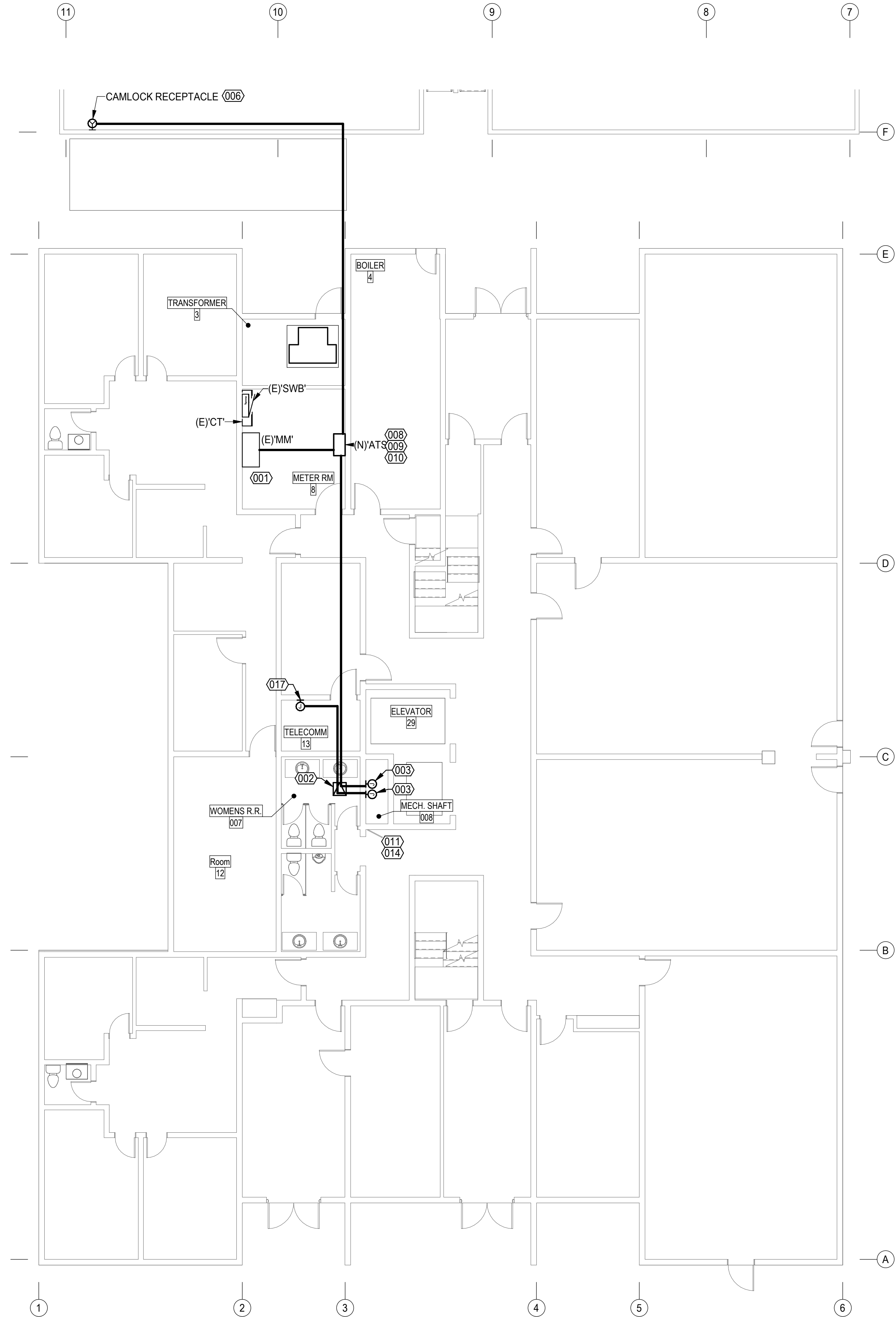
### LEGEND

SHEET NO.

E0.1

1" ACTUAL

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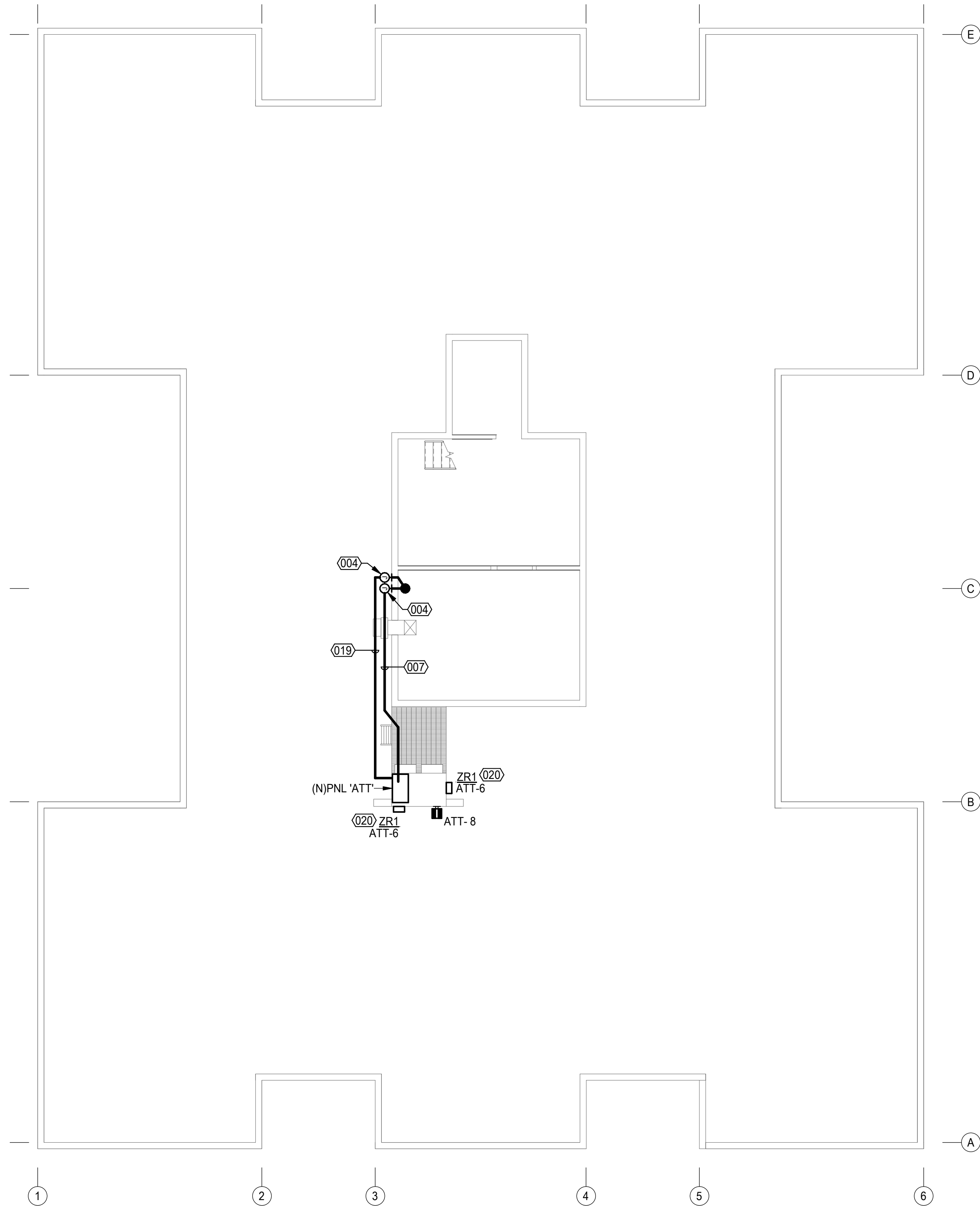


1 POWER AND SIGNAL PLAN - FIRST FLOOR  
E.1.1 SCALE: 1/8" = 1'-0"

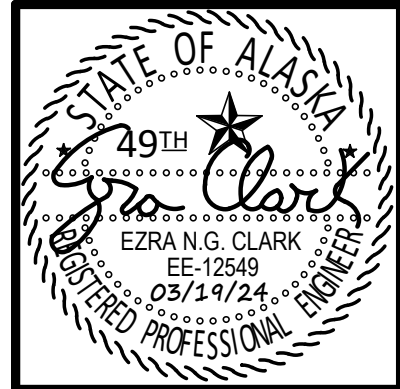
#### REFERENCED SHEET NOTES

REF	NOTE
001	CIRCUIT NEW PANEL 'ATT' TO EXISTING 150 AMP 3 POLE CIRCUIT BREAKER IN MULTIMETER SECTION OF SERVICE.
002	PROVIDE ACCESS HATCH IN WOMENS RESTROOM CEILING FOR CONDUIT. FIELD COORDINATE EXACT LOCATION WITH EXISTING CEILING DEVICES.
003	PROVIDE VERTICAL CONDUIT THROUGH SHAFT WITH A 18"x18"x8" PULL BOX ON FLOORS 1, 5, AND 9. PROVIDE STRAIN RELIEF AS REQUIRED TO MEET NEC 300.19(C) REQUIREMENTS.
004	PROVIDE 18"x18"x8" NEMA 3P PULL BOX ON EXTERIOR OF PENTHOUSE. PROVIDE STRAIN RELIEF AS REQUIRED TO MEET NEC 300.19(C) REQUIREMENTS.
006	PROVIDE INTERSECT #ICGG-1P CLOACK RECEPTACLE WITH INTERSECT #ICGG-MB MOUNTING BOX FOR PORTABLE GENERATOR CONNECTION PER ATT STANDARDS.
007	ROUTE CONDUIT ALONG PENTHOUSE WALL AND BELOW PLATFORM AND STAIRS. IT WILL GO UP INTO THE BOTTOM OF PANEL 'ATT' WHICH IS INTEGRAL TO 'WUC' WALK UP CABINET.
008	PROVIDE 2" CONDUIT FOR A 200 AMP FEEDER TO NEW CLOACK RECEPTACLE.
009	PROVIDE (2) 3/4" CONDUITS FOR FUTURE CONTROLS AND FUTURE SHORE POWER TO THE GENERATOR LOCATION.

REF	NOTE
010	PROVIDE NEW 200 AMP 2 POLE ASCO 300 NEMA 1 AUTOMATIC TRANSFER SWITCH WITH A SOLID NEUTRAL.
011	ACCESS DOOR ON GROUND LEVEL IS EXISTING. PROVIDE NEW MECHANICAL SHAFT ACCESS DOORS ON THE 3RD, 5TH, 7TH, AND 9TH FLOOR. SEE ARCHITECTURAL DRAWINGS FOR INSTALLATION SPECIFICATIONS AND REQUIREMENTS FOR ACCESS DOORS.
014	PROVIDE NEW PULLBOXES ON THE 1ST, 5TH, AND 9TH FLOOR.
017	PROVIDE 2" CONDUIT WITH FIBER OPTIC CABLE FROM EXISTING TELECOM ROOM TO ATT WUC ON ROOF. FOLLOW SAME PATH AS 2" CONDUIT FOR ATT POWER.
019	CONTRACTOR TO FIELD COORDINATE ROUTING OF FIBER TELECOMM CONDUIT TO 'WUC' WALK UP CABINET.
020	PROVIDE NEW RAB BRISK17FA LIGHT FIXTURE ON EXTERIOR OF WUC. CIRCUITED TO PANEL 'ATT'.



2 POWER AND SIGNAL PLAN - ROOF PLAN  
E1.1 SCALE: 1/8" = 1'-0"



**EIC ENGINEERS, INC.**  
**ELECTRICAL ENGINEERS**

 CORPORATION LICENSE: AECC1105

6927 OLD SEWARD HWY. STE 200  
ANCHORAGE, AK 99518  
907 349 9712  
WWW.EICENG.COM

EIC JOB NO. E24-4350

**JN3073**  
**JUNEAU HARBOR**  
**230 S. FRANKLIN STREET**  
**JUNEAU, AK 99801**

REVISIONS	
NUM	DESCRIPTION



JOB NO.	E24-4350
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DRAWN	KRR
REVIEWED	ENG

## ELECTRICAL PLANS

SHEET NO.

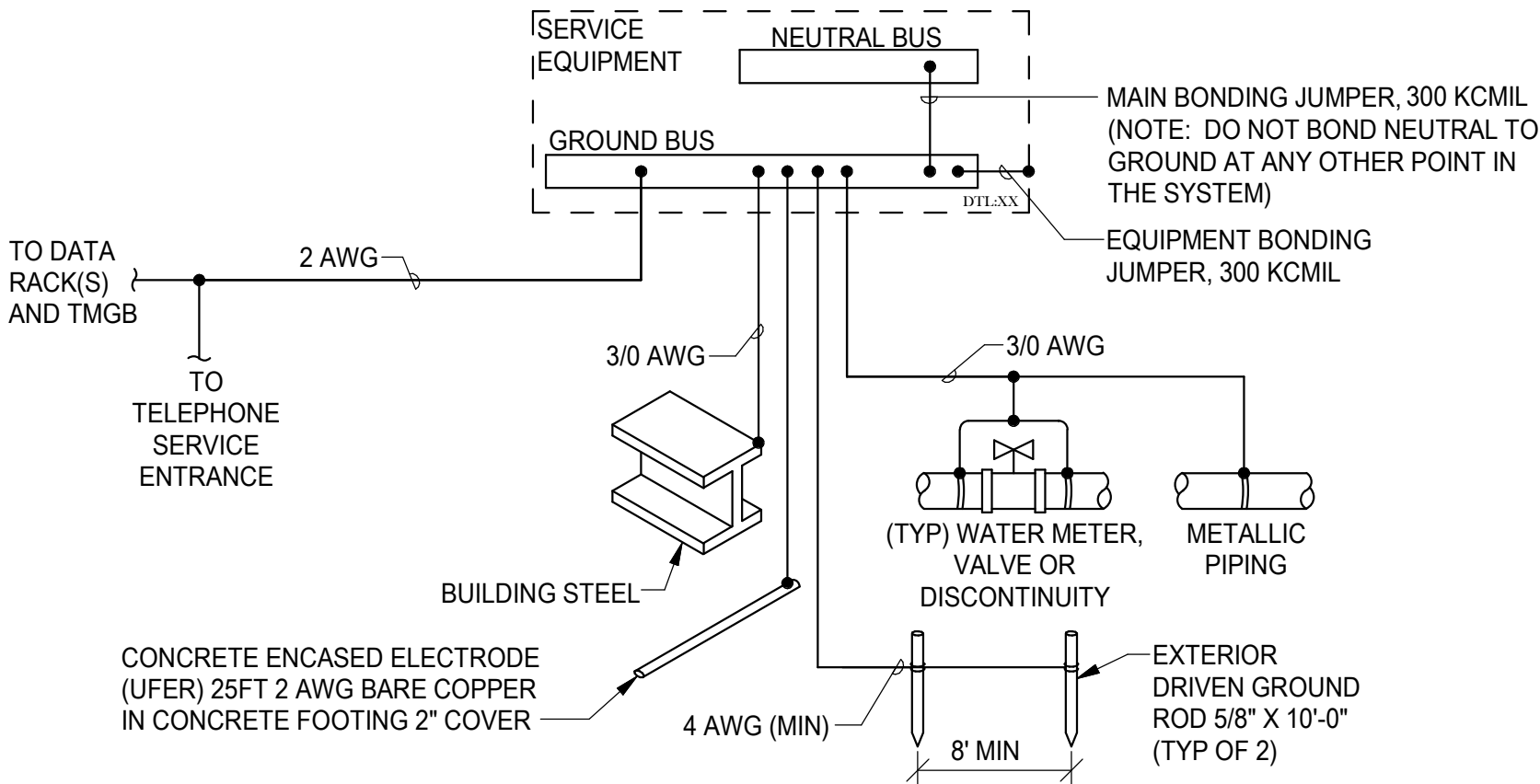
## E1.1

DISTRIBUTION SCCR SCHEDULE					
EQUIPMENT SHALL HAVE AN SCCR EXCEEDING THE SHORT CIRCUIT AMPS "SCA" OR MINIMUM SCCR, WHICH EVER IS GREATER. EQUIPMENT SHALL BE FULLY RATED. BRANCH CIRCUIT PANELS RATED 225 AMPS OR LESS MAY USE MANUFACTURER TESTED COMBINATIONS PER NEC 240.86(B) WHERE THE MOTOR LOAD DO NOT EXCEED 1% OF THE LOWEST AIC RATED DEVICE IN THE PANEL PER NEC 240.86(C).					
CONTRACTOR TO VERIFY EQUIPMENT TO BE PROVIDED WITH SERVING UTILITY PRIOR TO PROCUREMENT. ANY DECREASE OF TRANSFORMER %Z, CONDUCTOR LENGTHS, OR INCREASE IN TRANSFORMER KVA OR CABLE SIZES TO BE REPORTED TO CONTRACT OFFICER FOR RECALCULATION OF SCA PRIOR TO PROCUREMENT. DENOTED "MIN FT" ARE MINIMUM CIRCUIT LENGTH FOR VALID CALCULATED SCA VALUES AND DO NOT REPRESENT ACTUAL FEEDER LENGTH.					
ASSUMED UTILITY SYSTEM CONFIGURATION (BASIS FOR CALCULATION)					
SERVICE TRANSFORMER					
		SCA SECONDARY			
KVA	%Z	LINE-LINE	LINE-NEUTRAL		
300	1.40	59,422	59,422		
- FOR CALCULATION ONLY -					
AMPS		SERVICE LATERAL		MIN FT	
1200		3EA: (4)600 KCMIL		10	
EQUIP ID	OPD	SCA	MIN SCCR	XR	MIN FT
CT	1200 A	56,091		3.00	10
SWB	1200 A	54,370		2.93	6
MM	400 A	46,849		2.67	16
ATS	200 A	35,525	40,000	1.57	12
ATT	200 A	7,283	10,000	0.64	163

SERVICE LOAD SUMMARY	
----- EXISTING LOAD -----	
RECORDED LOAD:	92.0 KW
POWER FACTOR:	@ 80%
MAX DEMAND:	115.0 KVA
NEC 220.87 (125%):	143.8 KVA
----- NEW LOADS -----	
NEW PNL 'ATT':	35.0 KVA
NOT USED:	0.0 KVA
NOT USED:	0.0 KVA
NOT USED:	0.0 KVA
TOTAL LOAD: 178.8 KVA	
TOTAL CURRENT: 496 AMPS	
EXISTING 1200A, 208V, 3PH, 4 WIRE	
SERVICE CAPACITY IS ADEQUATE	

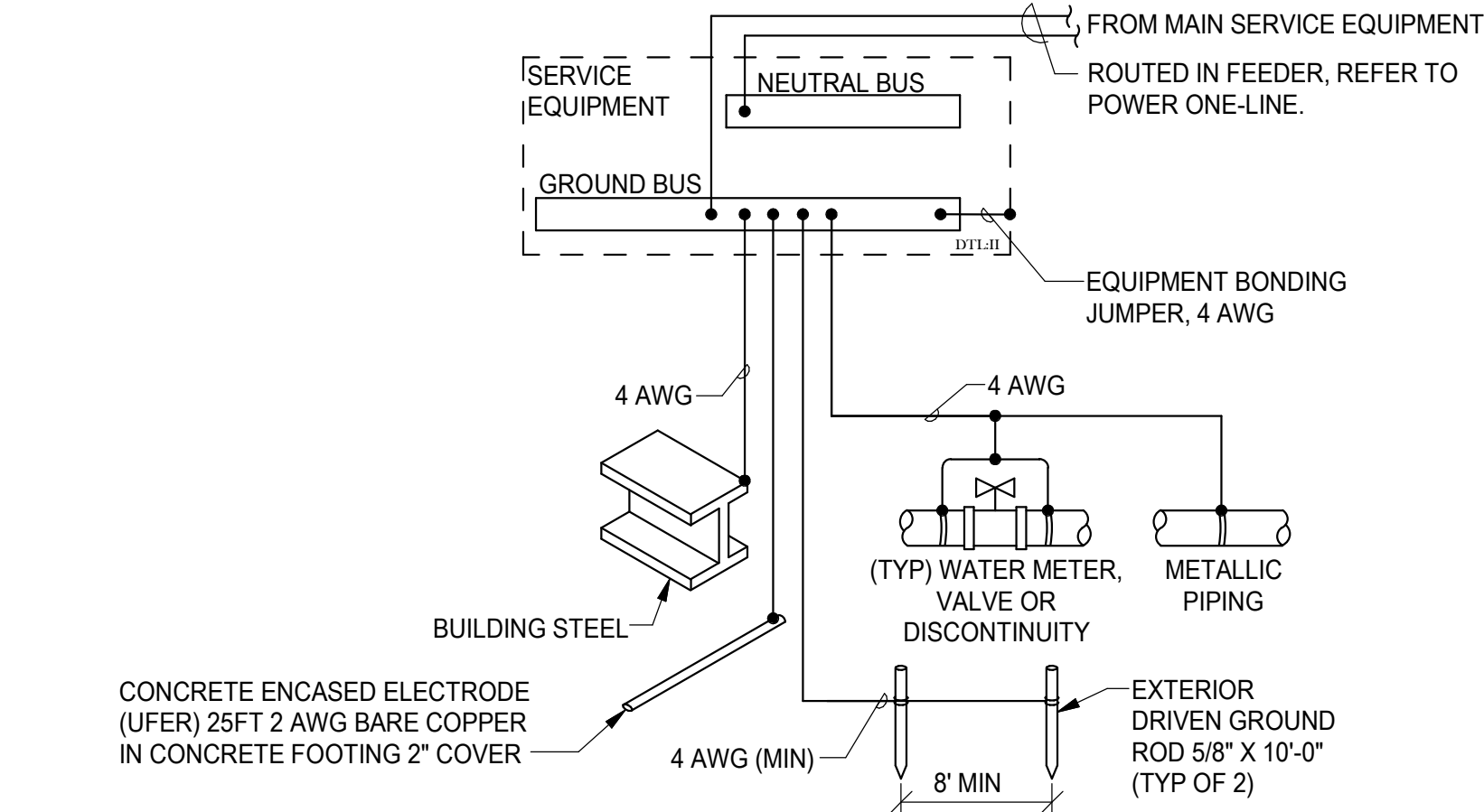
FEEDER SCHEDULE				
ID	AMPERAGE	FEEDER (MINIMUM) CU UON		
ATS	200	2°C, (3)3/0 AWG, (1)6 AWG EGC		
ATT	200	2°C, (3)3/0 AWG, (1)6 AWG EGC		

- NOTES:
1. BOND ALL BUILDING STEEL AND METALLIC PIPING TO PROVIDE ELECTRICALLY CONTINUOUS SYSTEMS. BOND HOT AND COLD METALLIC WATER PIPES TOGETHER AT EACH WATER HEATER WITH 8 AWG MINIMUM.
  2. PROVIDE RACEWAY FOR ALL ELECTRODE AND BOND CONDUCTORS. RACEWAY TO BE METALLIC IN PLENUM AIR SPACES. BOND METALLIC RACEWAY TO EACH END OF CONDUCTOR.
  3. COMBINE GROUNDING ELECTRODE CONDUCTORS PER NEC.



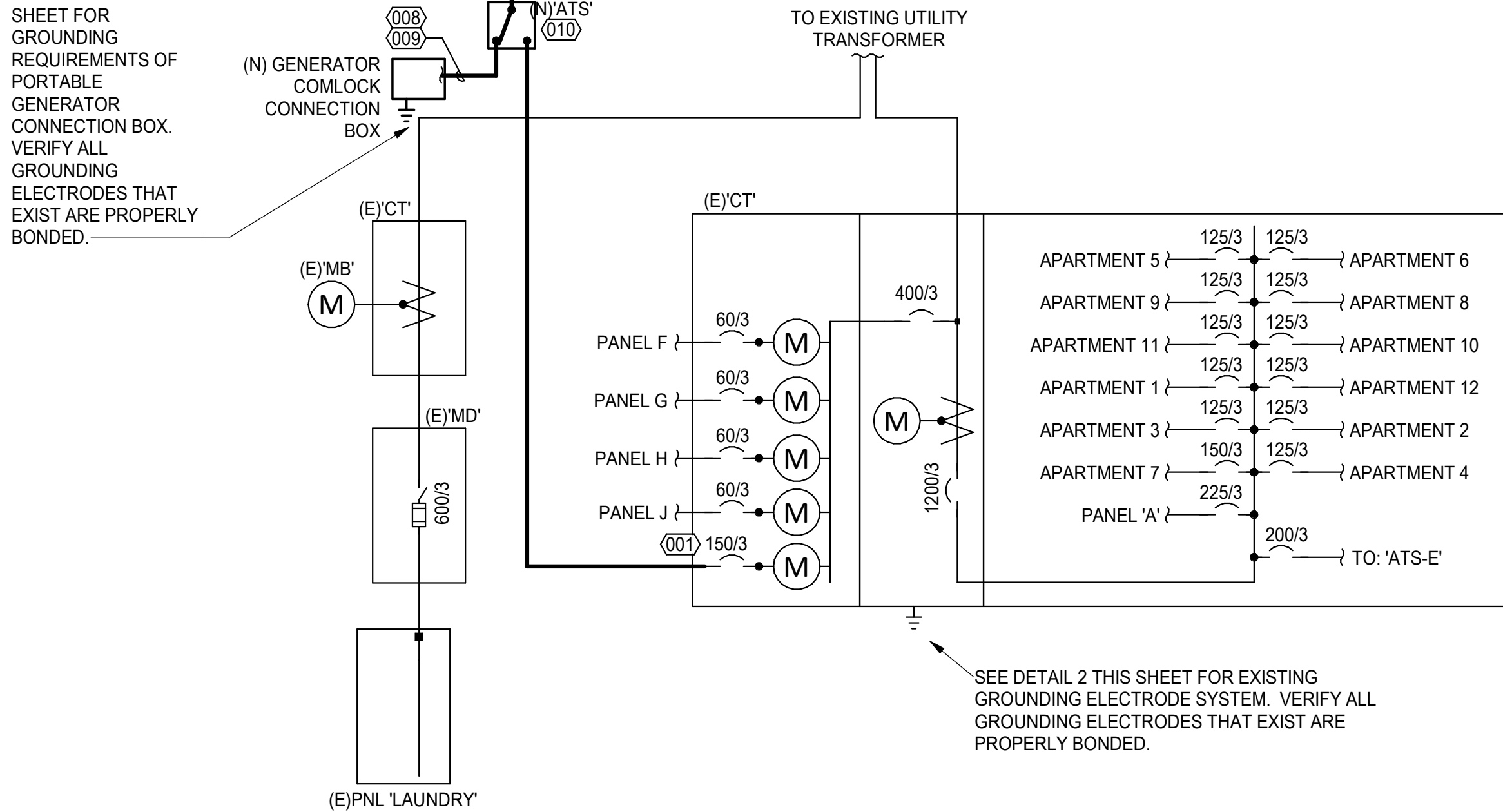
2 GROUNDING SYSTEM ONE-LINE DIAGRAM - EXISTING SERVICE  
E2.1 SCALE: NOT TO SCALE

- NOTES:
1. BOND ALL BUILDING STEEL AND METALLIC PIPING TO PROVIDE ELECTRICALLY CONTINUOUS SYSTEMS.
  2. PROVIDE RACEWAY FOR ALL ELECTRODE AND BOND CONDUCTORS. RACEWAY TO BE METALLIC IN PLENUM AIR SPACES. BOND METALLIC RACEWAY TO EACH END OF CONDUCTOR.
  3. COMBINE GROUNDING ELECTRODE CONDUCTORS PER NEC.



3 GROUNDING SYSTEM ONE-LINE DIAGRAM - NEW CONNECTION BOX FOR PORTABLE GENERATOR  
E2.1 SCALE: NOT TO SCALE

SEE DETAIL 3 THIS SHEET FOR GROUNDING REQUIREMENTS OF PORTABLE GENERATOR CONNECTION BOX. VERIFY ALL GROUNDING ELECTRODES THAT EXIST ARE PROPERLY BONDED.

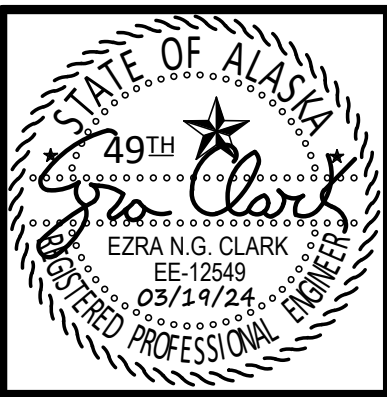


SEE DETAIL 2 THIS SHEET FOR EXISTING GROUNDING ELECTRODE SYSTEM. VERIFY ALL GROUNDING ELECTRODES THAT EXIST ARE PROPERLY BONDED.

1 POWER ONE-LINE DIAGRAM  
E2.1 SCALE: NOT TO SCALE

## # REFERENCED SHEET NOTES

- | REF | NOTE  |
|-----|---|
| 001 | CIRCUIT NEW PANEL 'ATT' TO EXISTING 150 AMP 3 POLE CIRCUIT BREAKER IN MULTIMETER SECTION OF SERVICE.  |
| 003 | PROVIDE VERTICAL CONDUIT THROUGH SHAFT WITH A 18"x18"x8" PULL BOX ON FLOORS 1, 5, AND 9. PROVIDE STRAIN RELIEF AS REQUIRED TO MEET NEC 300.19(C) REQUIREMENTS.  |
| 004 | PROVIDE 18"x18"x8" NEMA 3R PULL BOX ON EXTERIOR OF PENTHOUSE. PROVIDE STRAIN RELIEF AS REQUIRED TO MEET NEC 300.19(C) REQUIREMENTS.   |
| 007 | ROUTE CONDUIT ALONG PENTHOUSE WALL AND BELOW PLATFORM AND STAIRS. IT WILL GO UP INTO THE BOTTOM OF PANEL 'ATT' WHICH IS INTEGRAL TO 'WUC' WALK UP CABINET.  |
| 008 | PROVIDE 2" CONDUIT FOR A 200 AMP FEEDER TO NEW CAMLOCK RECEPTACLE.  |
| 009 | PROVIDE (2) 3/4" CONDUITS FOR FUTURE CONTROLS AND FUTURE SHORE POWER TO THE GENERATOR LOCATION.   |
| 010 | PROVIDE NEW 200 AMP 2 POLE ASCO 300 NEMA 1 AUTOMATIC TRANSFER SWITCH WITH A SOLID NEUTRAL.  |
| 012 | EXISTING ACCESS DOOR. FIELD COORDINATE INSTALLATION OF CONDUIT WITH THE EXISTING ACCESS DOOR ON THE 1ST FLOOR, NEW ACCESS DOORS ON THE 3RD, 5TH, 7TH, AND 9TH FLOORS, AND PULLBOXES ON THE 1ST, 5TH, AND 9TH FLOOR. |
| 013 | NEW ACCESS DOOR. FIELD COORDINATE INSTALLATION OF CONDUIT WITH THE EXISTING ACCESS DOOR ON THE 1ST FLOOR, NEW ACCESS DOORS ON THE 3RD, 5TH, 7TH, AND 9TH FLOORS, AND PULLBOXES ON THE 1ST, 5TH, AND 9TH FLOOR.      |



**EIC ENGINEERS, INC.**  
ELECTRICAL ENGINEERS  
CORPORATION LICENSE: AEC01105  
6827 OLD SEWARD HWY., STE 200  
ANCHORAGE, AK 99518  
907.349.9712  
WWW.EICENG.COM  
EIC JOB NO. E24-4350

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**JUNEAU HARBOR**  
**230 S. FRANKLIN STREET**  
**JUNEAU, AK 99801**

REVISIONS	
NUM	DESCRIPTION
1	Coordination Items

JOB NO. E24-4350  
DATE 03/19/2024  
DRAWN KRR  
REVIEWED ENGC

ONE-LINE  
DIAGRAMS, DETAILS,  
AND SCHEDULES

SHEET NO.

E2.1