



# Building Permit

Permit No. 01-24 Date: March 22, 2024 Expires: April 30, 2025

Permitee's Name: Craig Tribal Association

Building Address: 1705 Windy Loop Craig AK, 99921  
(Lot 18E-1, Tract 18, USS 2611)

QUESTIONS OR COMMENTS?  
CONTACT THE CRAIG BUILDING OFFICIAL  
(CRAIG CITY PLANNER) AT 907-826-3275.

*Samantha A. Wilson, Craig Building Official*  
Building Official  
POST ON BUILDING SITE

## CITY OF CRAIG, ALASKA BUILDING PERMIT APPLICATION

Applicant Information	Owner Information (if not also applicant)
Name <u>Lorraine De Asis (THRA)</u>	Name <u>Craig Tribal Association</u>
Mailing Address <u>5446 Jenkins Dr</u>	Mailing Address <u>PO Box 828</u>
Street Address <u>5446 Jenkins Dr</u>	Street Address <u>505 Front St.</u>
City, State, Zip <u>Seward, AK 99801</u>	City, State, Zip <u>Craig, AK 99921</u>
Telephone <u>(907) 780-3188</u>	Telephone <u>907-826-3996</u>

**Property Description**

Subdivision Name \_\_\_\_\_

Survey Number: 2611 Tract Number: 1B Lot Number: 18E-1 Block Number: \_\_\_\_\_

Army Corps of Engineers Permit Name and/or Number: \_\_\_\_\_

**Building Activity Information (please check one)**

<input type="checkbox"/> Single Family Home	<input type="checkbox"/> Duplex	<input type="checkbox"/> Triplex	<input checked="" type="checkbox"/> Fourplex or greater
<input type="checkbox"/> Deck	<input type="checkbox"/> Porch	<input type="checkbox"/> Retaining Wall	<input type="checkbox"/> Addition
<input checked="" type="checkbox"/> Commercial Building	<input type="checkbox"/> Wannigan	<input type="checkbox"/> Garage	<input type="checkbox"/> Shed
<input type="checkbox"/> Mobile Home (Year and Make) _____			
<input type="checkbox"/> Travel Trailer (Year and Make) _____			
<input type="checkbox"/> Other (Please describe): _____			

Height of Building at Roof Eve: 12'-1" Closest setback to property line: 10'-0"

Building Dimensions: See Plans Area of building footprint: 9613 SF

What use(s) do you propose for the building? Independent Senior Living Center

**Site Plan**

Please complete on reverse side or attached sheet a site plan showing all proposed construction.

**Owner's/Applicant's Statement**

I acknowledge that I have read this application and state that the above information is correct. I agree to comply with all codes and ordinances of the City of Craig applicable to building and construction, and all land use regulations as pertaining to this permit. Any violation of land management regulations are the responsibility of the property owner. This permit becomes void upon completion of the approved work, or one year, whichever comes first. Work not documented in this application is not authorized by this building permit. I understand that this permit is revocable if work is not completed consistent with this applicant or if work does not comply with the requirements of the City of Craig Municipal Code. I agree to provide the City of Craig with an as-built survey of the lot in the event one is completed for this project.

Lorraine De Asis 3-15-24 Christy Cook 3-21-24

Signature of Applicant Date Signature of Property Owner (if other than applicant) Date

**Special Conditions of Approval.**

The following conditions of approval are made a part of this permit as provided by section 18.06.001B.6 of the Craig Land Development Code:

1. No construction may occupy any portion of the 10' property setback.
2. No commercial activity may take place on the property beyond typical uses permitted by medium-density residentially zoned property as outlined in section 18.05.002 of the Craig Municipal Code.
3. All property corners associated with intersections or sharp turns must maintain 20' of visibility as outlined section 18.05.002 G.2 of the Craig Municipal Code.

Permission is hereby granted to perform the above work in compliance with any and all conditions listed above and in compliance with the Craig Land Development Code and all other ordinances of the City of Craig and the State of Alaska pertaining to the construction of buildings.

Signature of City Building Official Samantha Wilson Date 3/22/2024 3/22/2024

Plan Review Approval Letter & Certificate  
Grantor: State of Alaska, Department of Public Safety, Division of Fire & Life Safety  
Grantee: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY  
Recording District:  
Legal Description:

State of Alaska  
Office of the State Fire Marshal  
Plan Review

This is to certify that the plans for this building were reviewed by the *State Fire Marshal* on 3/15/2024 for conformance with AS 18.70.010 -- 100; 13 AAC 50.027.

This certificate shall be posted in a conspicuous place on the premises named THRHA Craig Senior Center and shall remain posted until construction is completed.

**NOTICE:** Any changes or modifications to the approved plans **must** be resubmitted for review by the *State Fire Marshal*.

Plan Review #: 2024ANCH0121

By: 

Authority: AS 18.70.080  
Form: 12-741  
(6/01) **Full Plan Review**

Steve Crouch  
Building Plans Examiner I



THE STATE  
of ALASKA  
GOVERNOR MIKE DUNLEAVY

## Department of Public Safety

DIVISION OF FIRE AND LIFE SAFETY

Plan Review Bureau – Anchorage

5700 East Tudor Road

Anchorage, Alaska 99705-1225

Main: 907.269.2004

Fax: 907.269.0098

03/15/2024

Return to Applicant: Nycole Gizinski  
7180 Revilla Rd, Suite 300  
Ketchikan, AK 99901

SUBJECT: THRHA Craig Senior Center - Full Plan Review  
ADDRESS: Corner of Windy Loop & Windy Way  
CITY: Craig  
PLAN REVIEW: 2024ANCH0121  
TYPE OF CONSTRUCTION: V-B  
OCCUPANCY: R-2 Residential Long Term  
2021 INTERNATIONAL BUILDING AND FIRE CODE

Dear Nycole Gizinski:

Plans for the Full Plan Review have been reviewed by this office for conformity with the State Fire Safety Regulations and are hereby approved. Enclosed is a certificate of approval that must be posted on the premises until completion of the above project.

Other requirements have been identified for your project. An application with shop drawings for the Automatic Fire System must be submitted for review and approval within ninety (90) days and prior to the installation on the system.

**It is prohibited to occupy this building until construction is completed, and if applicable, the Automatic Fire System(s) is installed, tested, and certified as operable.** Any changes to the approved plans must be submitted to this office for review and approval.

Approval of submitted plans is not approval of omissions or oversights by this office or noncompliance with any applicable regulations of the Municipal Government. The plans have not been reviewed for compliance with the federal Americans with Disabilities Act or structural requirements.

It must be understood that the inclusion of and compliance with State Fire Safety Regulations does not preclude the necessity of compliance with the requirements of local codes and ordinances.

If we can be of further assistance in this matter, please feel free to contact us at the address above.

Approved By:  
Steve Crouch  
Building Plans Examiner I  
steve.crouch@alaska.gov

Enclosure: Approval Certificate

# THRHA Craig Senior Center Phase I

Craig, AK

## PARTICIPANTS

**CLIENT:**  
Tlingit-Haida Regional Housing Authority  
5446 Jenkins Drive  
Juneau, AK 99801  
907.780.6868

**ELECTRICAL ENGINEER:**  
EIC Engineering  
6927 Old Seward HWY, Suite 200  
Anchorage, AK 99518  
907.349.9712

**ARCHITECT / CIVIL ENGINEER:**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
907.225.7917

**MECHANICAL ENGINEER:**  
SPURLOCK & ASSOCIATES  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
907.344.8222

## CODE REVIEW

**PROJECT LOCATION:**  
1701 Hamilton Dr., Lot 18E-1, Tract 18, USS 2611

**IBC 2021 REVIEW**

**I. TYPE OF CONSTRUCTION (Chapter 6)**

V-B  
SPRINKLED - YES

**II. USE & OCCUPANCY CLASSIFICATION (Chapter 3)**

R-2

**III. OCCUPANCY SEPARATIONS (Table 508.4)**

1/2-Hr Separation Between Dwelling Units  
1/2 Hr Separation Between Dwelling Units & Corridors  
1 Hr Separation Residential and Assembly

**IV. BUILDING AREA (Table 503)**

ALLOWED:  
RESIDENTIAL: UL SQ, 4 Stories

PROPOSED: 1 STORY, 9613 SF

**V. BUILDING HEIGHT (Table 503)**

ALLOWED: 60'  
PROPOSED: 19' - 3"

**VI. OCCUPANT LOAD (Table 1004.1.2)**

Residential	2272 GROSS SF / 200	12
Unoccupied	7092 GROSS SF / 300	24
	TOTAL OCCUPANT LOAD	36

## ZONING REVIEW

CITY OF CRAIG TITLE 18 REVIEW

ZONING: RM - MEDIUM DENSITY RESIDENTIAL

**LOT SIZE:**

COVERAGE:

MAXIMUM: 50%

PROPOSED: 26.5%

BUILDING GROSS AREA: 9613 SF

BUILDING HEIGHT:

MAXIMUM: 30'

PROPOSED: 11' - 0"

**SETBACKS:**

MINIMUM: 10' FROM ALL LOT LINES

PROPOSED: SEE SITE PLAN

**PARKING:**

MINIMUM: 1 SPACE FOR EVERY 1-1/2 BEDROOMS  
4 BEDROOMS / 1.5 = 3 SPACES MIN

PROPOSED: 3+

## SHEET INDEX

### GENERAL

G100 Cover Sheet  
G101 Abbreviations & Symbols

### CIVIL

C002 Legend  
C100 Existing Conditions  
C200 Civil Site Plan  
C201 Utility Plan  
C202 Parking Plan  
D100 Details  
D101 Details  
D102 Details

### ARCHITECTURAL

A001 Egress Plan  
A002 Notes & Wall Types  
A003 Schedules  
A100 Site Plan  
A200 Main Floor Plan  
A201 Reflected Ceiling Plan  
A202 Roof Plan  
A203 Partial Floor Plans  
A204 Enlarged Plans & Interior Elevations  
A300 Sections  
A301 Sections  
A400 Elevations  
A401 Elevations  
A500 Wall Sections  
A501 Wall Sections  
A502 Wall Sections  
A700 Details  
A701 Details  
A702 Interior Details  
A703 Interior Details

### STRUCTURAL

S100 Structural Notes  
S200 Foundation Plan  
S201 Main Floor Framing Plan  
S202 Header & Shearwall Plan  
S203 Roof Framing Plan  
S300 Structural Details  
S301 Structural Details

### MECHANICAL

M101 Legends, Abbreviations & Schedules  
M102 Mechanical Schedules  
M200 Underfloor Plumbing Reference Plan  
M201 Underfloor Plumbing Plan - Phase 1  
M202 Plumbing Partial Plan - Phase 1  
M301 HVAC Partial Plan Phase 1  
M302 Overall HVAC Plan  
M801 Mechanical Details

### ELECTRICAL

E0.1 Legend and Specifications  
E1.1 Electrical Site Plan  
E2.1 Lighting Plan  
E3.1 Power and Signal Plan  
E4.1 Unit Electrical Plans & Schedules  
E5.1 One-Line Diagrams, Details, & Schedules  
E6.1 Panel Schedules



REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:

CONSTRUCTION  
DRAWINGS

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:

Cover Sheet

**G100**

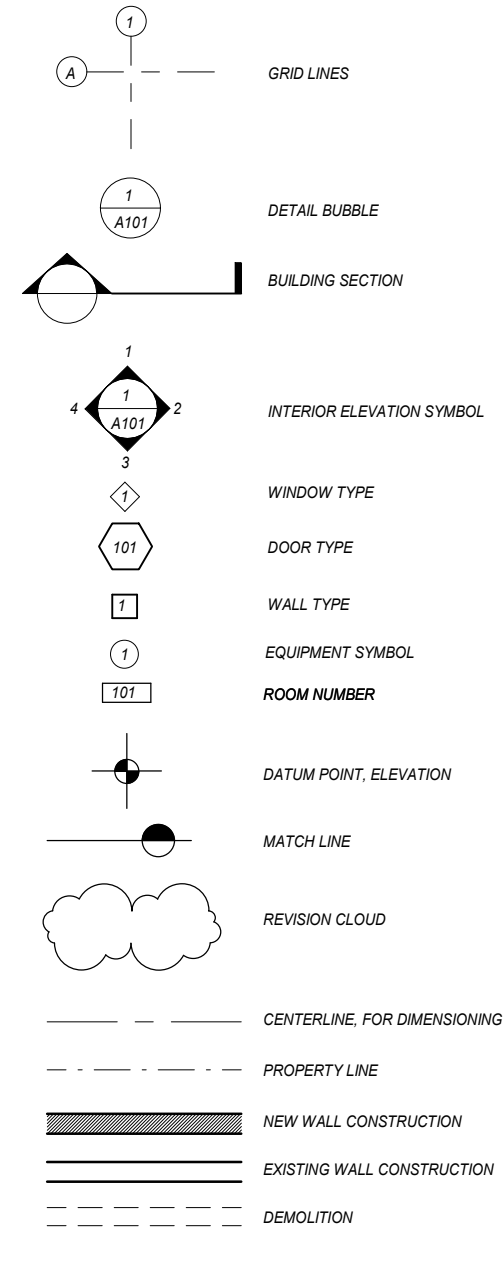
SHEET:

01 of xx

## ARCHITECTURAL ABBREVIATIONS

AB	ANCHOR BOLT	F/F	FACE TO FACE	MACH	MACHINE
ABV	ABOVE	F.F	FINISH FLOOR	MAN	MANUAL
ACOUS	ACOUSTICAL	FA	FIRE ALARM	MATL	MATERIAL
ACT	ACOUSTICAL CEILING TILE	FBD	FIBERBOARD	MAX	MAXIMUM
AD	AREA DRAIN	FD	FLOOR DRAIN	MC	MEDICINE CABINET
ADDL	ADDITIONAL	FDC	FIRE DEPARTMENT CONNECTION	MECH	MECHANICAL
ADJ	ADJUSTABLE	FND	FOUNDATION	MEMB	MEMBRANE
AFF	ABOVE FINISHED FLOOR	FDV	FIRE DEPARTMENT VALVE	MET	METAL
AFG	ABOVE FINISHED GRADE	FE	FIRE EXTINGUISHER	MFR	MANUFACTURER
AFS	ABOVE FINISHED SLAB	FEB	FIRE EXTINGUISHER BRACKET	MH	MANHOLE
AL	ALUMINUM	FEC	FIRE EXTINGUISHER CABINET	MIN	MINIMUM
ALT	ALTERNATE	FHY	FIRE HYDRANT	MIR	MIRROR
AP	ACCESS PANEL	FIN	FINISH	MISC	MISCELLANEOUS
APPROX	APPROXIMATE(LY)	FIN GR	FINISH GRADE	MOD	MODULAR
ARCH	ARCHITECT(URAL)	FL	FLOOR(ING)	MTD	MOUNTED
ASPH	ASPHALT	FLASH	FLASHING	MTG	MOUNTING
AUTO	AUTOMATIC	FLEX	FLEXIBLE	MULL	MULLION
		FLR SK	FLOOR SINK		
BD	BOARD	FLUOR	FLUORESCENT	(N)	NEW
BKG	BACKING	FNR	FEMININE NAPKIN RECEPTACLE	N	NORTH
BLDG	BUILDING	FNTD	FEMININE NAPKIN-TAMPON DISPENSER	NA	NOT APPLICABLE
BLKG	BLOCKING	FOC	FACE OF CONCRETE	NAT	NATURAL
BLW	BELOW	FOF	FACE OF FINISH	NIC	NOT IN CONTRACT
BOT	BOTTOM	FOM	FACE OF MASONARY	NO	NUMBER
BRKT	BRACKET	FOS	FACE OF STUD	NOM	NOMINAL
BSMT	BASEMENT	FRPF	FIREPROOFING	NRC	NOISE REDUCTION COEFFICIENT
BTW	BETWEEN	FRZ	FREEZER	NTS	NOT TO SCALE
BURS	BUILT UP ROOFING SYSTEM	FSB	FOLDING SHOWER BENCH		
		FSTNR	FASTENER	OA	OVERALL
CAB	CABINET	FT	FOOT, FEET	OC	ON CENTER
CB	CATCH BASIN	FTG	FOOTING	OD	OUTSIDE DIAMETER
CCTV	CLOSED CIRCUIT TELEVISION	FURN	FURNITURE	OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
CG	CORNER GUARD	FURR	FURRING	OFOI	OWNER FURNISHED-OWNER INSTALLED
CEM	CEMENT	FUS	FOLDING UTILITY SEAT	OH	OPPOSITE HAND
CER	CERAMIC	FUT	FUTURE	OPNG	OPENING
CER TILE	CERAMIC TILE	FXTR	FIXTURE	OPP	OPPOSITE
CL	CENTERLINE			OVHD	OVERHEAD
CLG	CEILING	GA	GAUGE	PBD	PARTICLE BOARD
CLJ	CONTROL JOINT	GALV	GALVANIZED	PCF	POUNDS PER CUBIC FOOT
CLR	CLEAR	GB	GRAB BAR	PERF	PERFORATED
CMU	CONCRETE MASONRY UNIT	GC	GENERAL CONTRACTOR	PERIM	PERIMETER
CNTR	COUNTER	GL	GLASS	PERM	PERMANENT
CO	CASED OPENING	GL BLK	GLASS BLOCK	PERP	PERPENDICULAR
CONC	CONCRETE	GLULAM	GLUE LAMINATED	PH	PANIC HARDWARE
CONF	CONFERENCE	GLZ	GLAZING	PL	PROPERTY LINE
CONN	CONNECTION	GND	GROUND	PLAM	PLASTIC LAMINATE
CONSTR	CONSTRUCTION	GR	GRADE, GRADING	PLAT	PLATFORM
CONT	CONTINUOUS	GRV	GRAVEL	PLBG	PLUMBING
CORR	CORRIDOR	GYP BD	GYPSPUM BOARD	PLF	POUNDS PER LINEAL FOOT
CRPT	CARPET			PLYWD	PLYWOOD
CSWK	CASEWORK	H	HIGH	PNL	PANEL
CT	CARPET TILE	HB	HOSE BIB	PREFAB	PREFABRICATED
CUST	CUSTOM	HC	HOLLOW CORE	PRKG	PARKING
CW	COLD WATER	HCP	HANDICAPPED	PROJ	PROJECT
		HD	HEAD	PROP	PROPERTY
DBL	DOUBLE	HDBD	HARDBOARD	PSF	POUNDS PER SQUARE FOOT
DEMO	DEMOLISH	HDWE	HARDWARE	PSI	POUNDS PER SQUARE INCH
DET	DETAIL	HM	HOLLOW METAL	PT	POINT
DF	DRINKING FOUNTAIN	HNDRL	HANDRAIL	PTD	PAPER TOWEL DISPENSER
DIA	DIAMETER	HR	HOOR	PTD/R	PAPER TOWEL DISPENSER W/ RECEPTACLE
DIAG	DIAGONAL	HT	HEIGHT	PTR	PAPER TOWEL RECEPTACLE
DIFF	DIFFUSER	HVAC	HEATING, VENTILATION, AIR CONDITIONING, & COOLING	PVMT	PAVEMENT
DIM	DIMENSION			PWR	POWER
DIM PT	DIMENSION POINT	HW	HOT WATER		
DISP	DISPENSER	ID	INSIDE DIAMETER	QT	QUARRY TILE
DIST	DISTANCE	INCAND	INCANDESCENT	QTR	QUARTER
DLV	DOOR LOUVER	INCL	INCLUDING	QTY	QUANTITY
DMPF	DAMP PROOFING	INFO	INFORMATION		
DN	DOWN	INSUL	INSULATION	R	RISER
DR	DRAIN	INT	INTERIOR	RA	RETURN AIR
DS	DOWNSPOUT			RAD	RADIUS
DT	DRAIN TILE	JAN	JANITOR	RCP	REFLECTED CEILING PLAN
DWG	DRAWING	JB	JUNCTION BOX	RD	ROOF DRAIN
DWGS	DRAWINGS	JT	JOINT	REF	REFRIGERATOR
DWR	DRAWER			REINF	REINFORCED
		KIT	KITCHEN	REQD	REQUIRED
(E)	EXISTING	KPL	KICK PLATE	RESIL	RESILIENT
E	EAST	KS	KNEE SPACE	RET	RETURN
EA	EACH			REV	REVISION
ECAB	ELECTRICAL CABINET	LAB	LABORATORY	RH	RIGHT HAND
EG	EDGE GUARD	LAM	LAMINATE	RM	ROOM
EIFS	EXTERIOR INSULATION FINISH SYSTEM	LAV	LAVATORY	RO	ROUGH OPENING
EL	ELEVATION	LB	POUND	ROW	RIGHT OF WAY
ELEC	ELECTRICAL	LF	LINEAR FOOT		
ELEV	ELEVATION	LG	LENGTH	S	SOUTH
EMER	EMERGENCY	LH	LEFT HAND	SA	SUPPLY AIR
ENCL	ENCLOSURE	LIN	LINEAR	SASU	SELF-ADHERING SHEET UNDERLAYMENT
ENGR	ENGINEER	LKR	LOCKER	SB	SPLASH BLOCK
EO	ELECTRICAL OUTLET	LT	LIGHT	SC	SOLID CORE
EQL SP	EQUALLY SPACED	LT WT	LIGHT WEIGHT	SCD	SEAT COVER DISPENSER
EQUIP	EQUIPMENT	LTG	LIGHTING	SCHED	SCHEDULED
EQUIV	EQUIVALENT			SCR	SHOWER CURTAIN ROD
EXP	EXPANSION			SD	SOAP DISPENSER
EXPO	EXPOSED			SECT	SECTION
EXIST	EXISTING			SEP	SEPARATION
EXT	EXTERIOR			SF	SQUARE FOOT

## DRAWING SYMBOLS



REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:

**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:

Abbreviations & Symbols

**G101**

SHEET:

02 of xx

**GENERAL NOTES**

HORIZONTAL DATA:

1) THE HORIZONTAL CONTROL IN THIS DRAWING ARE LOCAL GRID COORDINATES AT GROUND. THE BASIS OF BEARING IS GPS DELIVERED.

VERTICAL DATA:

1) ELEVATIONS DETERMINED ON THIS PROJECT HAVE BEEN ADJUSTED TO MEAN LOWER LOW WATER FOR CRAIG.

GENERAL NOTES:

- 1) ALL UTILITIES SHOWN WERE LOCATED FROM SURFACE EVIDENCE AND ASBUILT RECORDS BY THE CITY OF CRAIG.
- 2) THE PROPERTY LINES SHOWN ON THIS SURVEY CONSTITUTE A COMPLETE BOUNDARY RESOLUTION.
- 3) WATER DISTRIBUTION SYSTEM CONSTRUCTION SHALL BE ACCORDANCE WITH THESE PLANS, THE CITY OF CRAIG STANDARD SPECIFICATIONS, AND ADEC REGULATIONS AS CONTAINED IN 18-AAC-80, DRINKING WATER.
- 4) ALL TRENCHING, COMPACTION, AND AGGREGATES SHALL BE COMPLETED IN ACCORDANCE WITH THE CITY OF CRAIG STANDARD SPECIFICATIONS (DIVISION 20) UNLESS OTHERWISE NOTED.
- 5) WASTEWATER SYSTEM CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS, THE CITY OF CRAIG STANDARD SPECIFICATIONS AND ADEC REGULATIONS AS CONTAINED IN 18-AAC-72, WASTEWATER DISPOSAL.
- 6) MAINTAIN MINIMUM 10 FOOT HORIZONTAL, AND 18 INCH VERTICAL SEPARATION BETWEEN SEWER AND WATER MAIN LINES AT ANY POINT UNLESS OTHERWISE NOTED IN PLANS.
- 7) WATER MAINS SHALL CROSS OVER THE TOP OF SEWER MAINS WITH 18 INCHES OF SEPARATION BETWEEN OUTSIDE EDGES OF THE PIPES. THE WATER LINE JOINTS SHALL BE AT LEAST 9 FEET FROM THE SEWER JOINTS. SEE DETAILS.
- 8) WATER PIPE SHALL BE 4710 RESIN SDR11 HDPE PIPE.
- 9) GRAVITY SEWER MAINS AND SERVICES SHALL BE C900 PVC PIPE.
- 10) ALL PRESSURE SEWER MAINS AND LATERALS SHALL BE 4710 RESIN SDR11 HDPE PIPE.
- 11) DO NOT CHANGE UTILITY DESIGN, LINE, GRADE, SIZE, MATERIALS, ETC. WITHOUT APPROVAL FROM THE DESIGN ENGINEER OR THE CITY OF CRAIG.
- 12) THE WATER LINE DESIGN IS BASED ON HDPE PIPE WITH AN ALLOWABLE BENDING RADIUS = 10-D. THE CONTRACTOR SHALL SUBMIT ALIGNMENT SHOP DRAWINGS IF SELECTED HDPE PIPE MANUFACTURER'S ALLOWABLE BENDING RADIUS IS GREATER.
- 13) MAINTAIN 5' MINIMUM COVER ON WATER MAINS AND 5' MINIMUM COVER OVER SANITARY SEWER FORCE MAINS AND PRESSURE LATERALS.
- 14) SEWER PIPE ELEVATIONS ARE TO INVERT OF PIPE
- 15) SEWER PIPE SLOPES ARE CALCULATED FROM FACE OF MANHOLE
- 16) SUBMITTALS - THE CONTRACTOR SHALL SUBMIT DATA SHEETS FOR ALL CONSTRUCTION MATERIALS TO THE CRAIG PUBLIC WORKS DEPARTMENT AND OBTAIN WRITTEN APPROVAL FOR THE CONSTRUCTION MATERIALS PRIOR TO PURCHASING AND INSTALLING THEM. THE CONSTRUCTION MATERIALS INCLUDE BUT ARE NOT LIMITED TO ALL PIPE, FITTINGS, VALVES, CURB STOPS, CORPORATION STOPS, TAPPING SADDLES, MANHOLES, FRAMES & LIDS, CLEANOUTS, AND HYDRANTS.

**LEGEND**

FEATURE DESCRIPTION	EXISTING	PROPOSED	FEATURE DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	----	N/A	UTILITY POLE		
PROPERTY LINE (INFORMATIONAL)	----	N/A	GUY ANCHOR		N/A
CENTERLINE	----	----	CONTROL POINT (AS NOTED)		N/A
CONCRETE			FOUND MONUMENT (AS NOTED)		N/A
ASPHALT			STORM DRAIN MANHOLE		
BUILDING LINE			STORM CATCH BASIN		
BUILDING OVERHANG	----	AS NOTED	STORM CLEANOUT		
EDGE OF ASPHALT/CONCRETE	----	(PATCH)	SANITARY SEWER MANHOLE		
EDGE OF GRAVEL	----	N/A	SANITARY SEWER CLEANOUT		
TOP/TOE/DITCH (GENERAL)	----	----	BOLLARD/POST (TYPE AS NOTED)		
OVERHEAD UTILITY LINE	—XOH—XOH—XOH—XOH—	N/A	WATER VALVE		
UNDERGROUDN UTILITY LINE	—UGP—UGP—UGP—UGP—	N/A	FIRE HYDRANT		
STORM DRAIN	—XSD—XSD—XSD—XSD—	—SD—SD—SD—SD—	LIGHT POLE		N/A
SEWER LINE	—XSS—XSS—XSS—XSS—	—SS—SS—SS—SS—	ELECTRICAL METER		N/A
SEWER LINE (RECORD)	—SS(R)—SS(R)—	N/A	SIGN		N/A
SANITARY SEWER PRESSURE LINE	—XFM—XFM—XFM—	—FM—FM—FM—FM—	TEST PIT		N/A
SEWER SERVICE	N/A	—S SERV—S SERV—S SERV—	ROCK WALL		
WATER LINE	—XW—XW—XW—XW—	—W—W—W—W—W—			
WATER SERVICE	N/A	—W SERV—W SERV—W SERV—			
WATER LINE (RECORD)	—W(R)—W(R)—W(R)—	N/A			
RAW SALTWATER LINE	—SRAW—SRAW—	N/A			
FUEL/GAS LINE	—G—G—G—G—G—	N/A			
FENCE	—X—X—X—X—X—	—O—O—O—O—			
GUARD RAIL		N/A			
MAJOR CONTOUR	----	----			
MINOR CONTOUR	----	----			
POSSIBLE UNKNOWN LINE DETECTED BY GPR	— ? — ? — ? —	N/A			

NOTE: LINE WEIGHTS VARY BETWEEN SHEETS

Date	No.	Description	By

Designed: TSS	Approved:	Scale: AS_NOTED
Drawn: TSS	Date: 2/8/2024	Project: 222321.02
Checked: TSS	DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS ONLY	



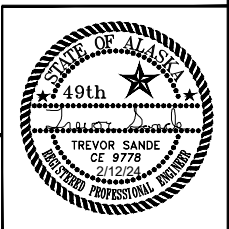
R&M ENGINEERING - KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901 AELC 576

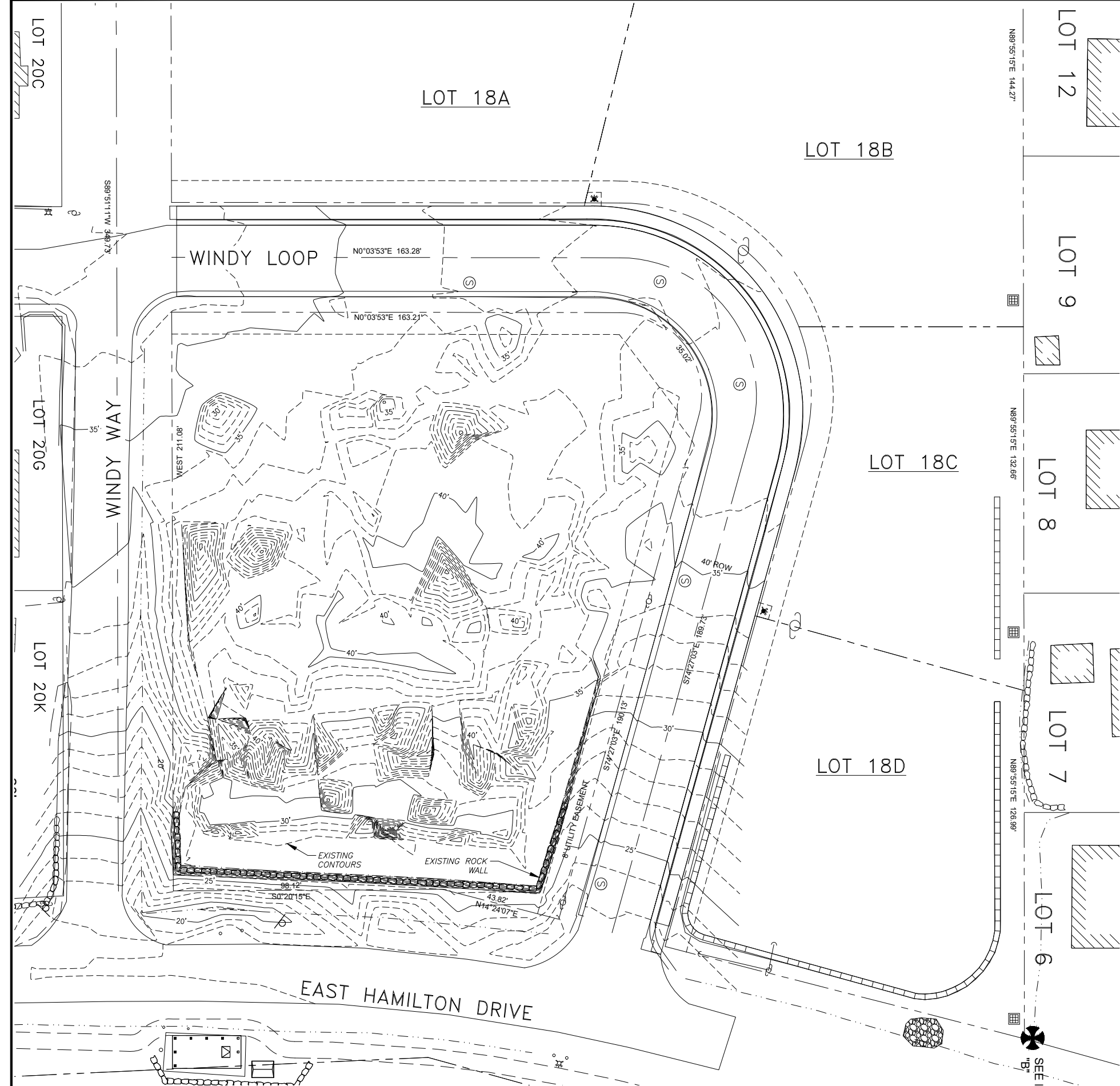
Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY  
5446 JENKINS DRIVE  
JUNEAU, AK 99801

Project: CRAIG TRACT 18 SENIOR CENTER

Sheet Description: LEGEND

Sheet No. C002

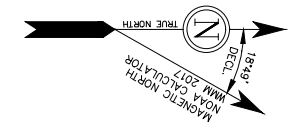




SCALE 1"=20'  
 THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING

0 10 20 40 60 80 FEET  
 0 5 10 15 20 25 METERS

1 METER = 3.2808333 U.S. SURVEY FEET  
 1 U.S. ACRE = 0.4047 HECTARES



Date	No.	Description	By
		Revision	

Designed: TSS  
 Drawn: TSS  
 Checked: TSS

Approved: TSS  
 Date: 2/8/2024

Scale: AS NOTED  
 Project: 222321.02

DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS ONLY



Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY  
 5446 JENKINS DRIVE  
 JUNEAU, AK 99801

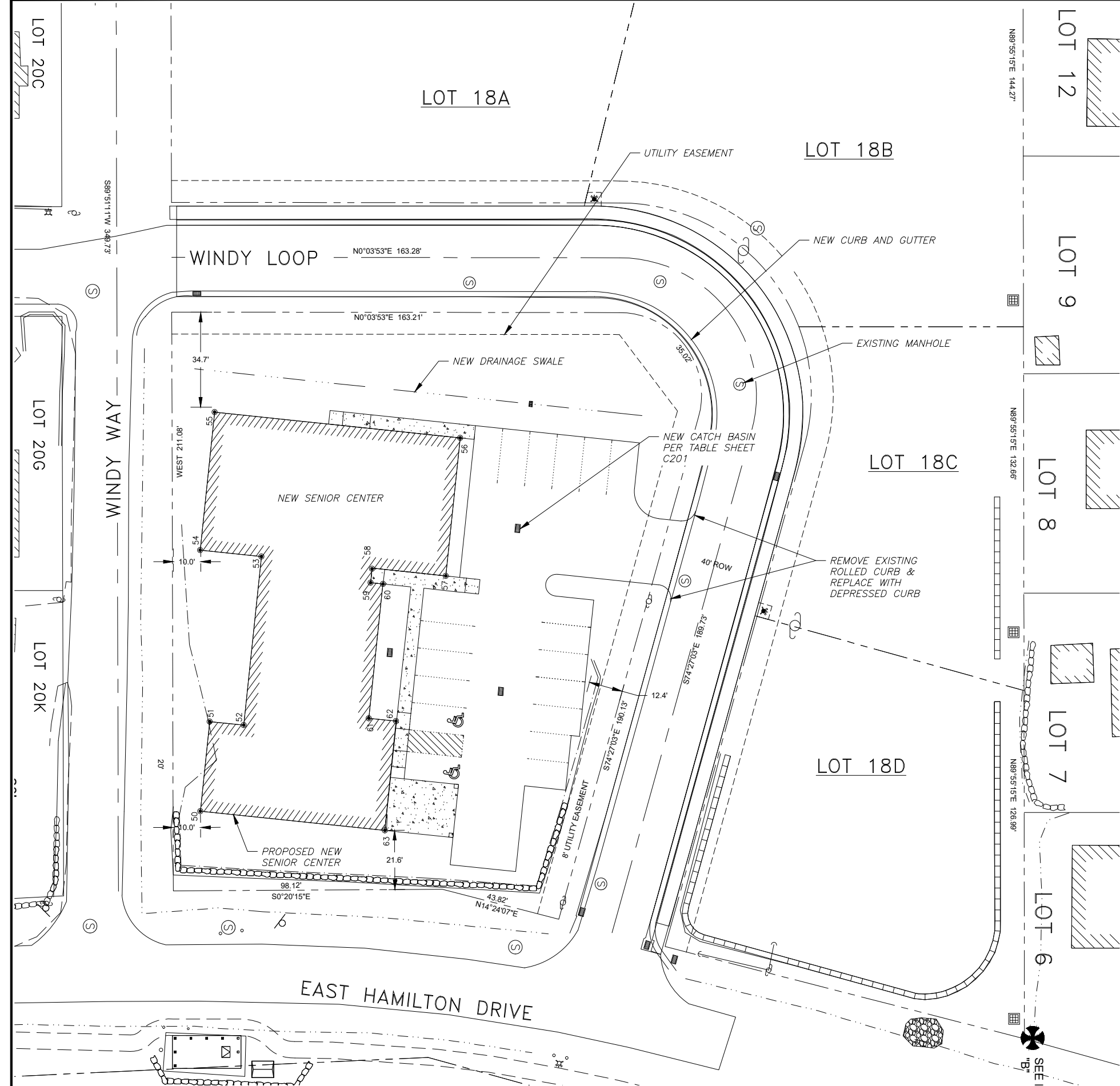
Project: CRAIG TRACT 18 SENIOR CENTER

Sheet Description: EXISTING CONDITIONS

Sheet No. C100



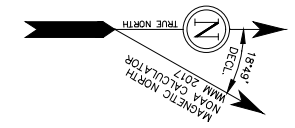




SCALE 1"=20'  
 THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING

0 10 20 40 60 80 FEET  
 0 5 10 15 20 25 METERS

1 METER = 3.2808333 U.S. SURVEY FEET  
 1 U.S. ACRE = 0.4047 HECTARES



BUILDING LAYOUT TABLE				
Point #	Northing	Easting	Elevation	Description
50	49382.17	11902.29	35.93	BUILDING CORNER
51	49385.59	11869.63	35.93	BUILDING LAYOUT
52	49398.02	11870.93	35.93	BUILDING LAYOUT
53	49404.46	11809.44	35.93	BUILDING LAYOUT
54	49382.10	11807.10	35.93	BUILDING LAYOUT
55	49387.36	11756.79	35.93	BUILDING LAYOUT
56	49476.94	11766.17	35.93	BUILDING LAYOUT
57	49471.67	11816.47	35.93	BUILDING LAYOUT
58	49444.79	11813.93	35.93	BUILDING LAYOUT
59	49444.26	11818.94	35.93	BUILDING LAYOUT
60	49448.82	11819.45	35.93	BUILDING LAYOUT
61	49443.61	11868.42	35.93	BUILDING LAYOUT
62	49453.56	11869.46	35.93	BUILDING LAYOUT
63	49449.47	11909.29	35.93	BUILDING LAYOUT

Designed: TSS	Approved: TSS	Scale: AS NOTED	
Drawn: TSS	Date: 2/8/2024	Project: 222321.02	
Date	No.	Description	Revision

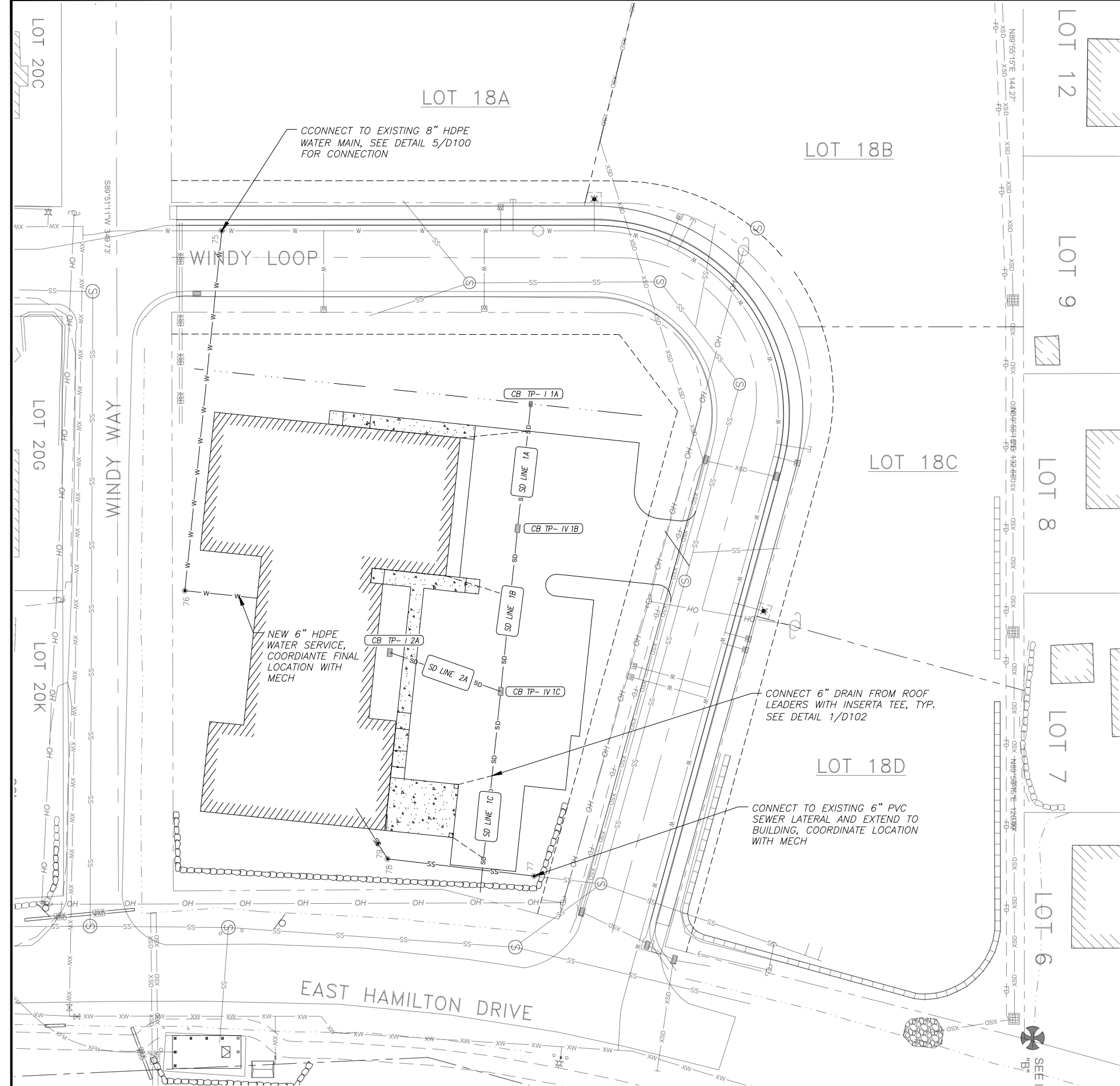
Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY  
 5446 JENKINS DRIVE  
 JUNEAU, AK 99801

Project: CRAIG TRACT 18 SENIOR CENTER

Sheet Description: SITE PLAN

Sheet No. C200

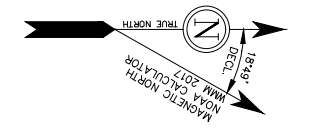




**SCALE 1"=20'**  
 THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING

0 10 20 40 60 80 FEET  
 0 5 10 15 20 25 METERS

1 METER = 3.2808333 U.S. SURVEY FEET  
 1 U.S. ACRE = 0.4047 HECTARES



**STORM DRAIN TABLE**

	CONNECT TO EXISTING CB IE = MATCH EXISTING
SD LINE 1A  INSTALL: 44 LF 8" CPP S=0.01±	CB TP- 1 1A INSTALL TYPE IV CB RIM=34.5 IE =33.5
SD LINE 1B  INSTALL: 57 LF 12" CPP S=0.01±	CB TP- IV 1B INSTALL TYPE IV CB RIM=34.5 IE =32.9
SD LINE 2A  INSTALL: 43 LF 12" CPP S=0.01±	CB TP- IV 1C INSTALL TYPE IV CB RIM=34.5 IE =32
SD LINE 1C  INSTALL: 73 LF 8" CPP S=0.08±	CB TP- 1 2A INSTALL TYPE IV CB RIM=35.0 IE =33.9

**UTILITY LAYOUT TABLE**

Point #	Northing	Easting	Elevation	Description
75	49390.00	11690.64	29.50	CONNECT TO EXISTING
76	49376.54	11821.88	0.00	6" DIA. 90° BEND
77	49503.89	11925.97	0.00	CONNECT TO EXISTING
78	49450.48	11919.68	0.00	45° BEND
79	49446.93	11914.05	0.00	CLEANOUT 5' FROM BUILDING WALL

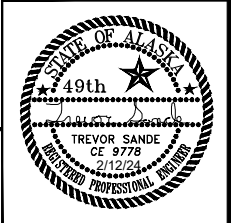
Designed: TSS	Approved:	Scale: AS NOTED	
Drawn: TSS	Date: 2/8/2024	Project: 222321.02	
Date	No.	Description	Revision

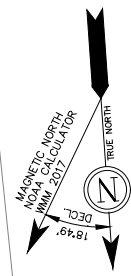
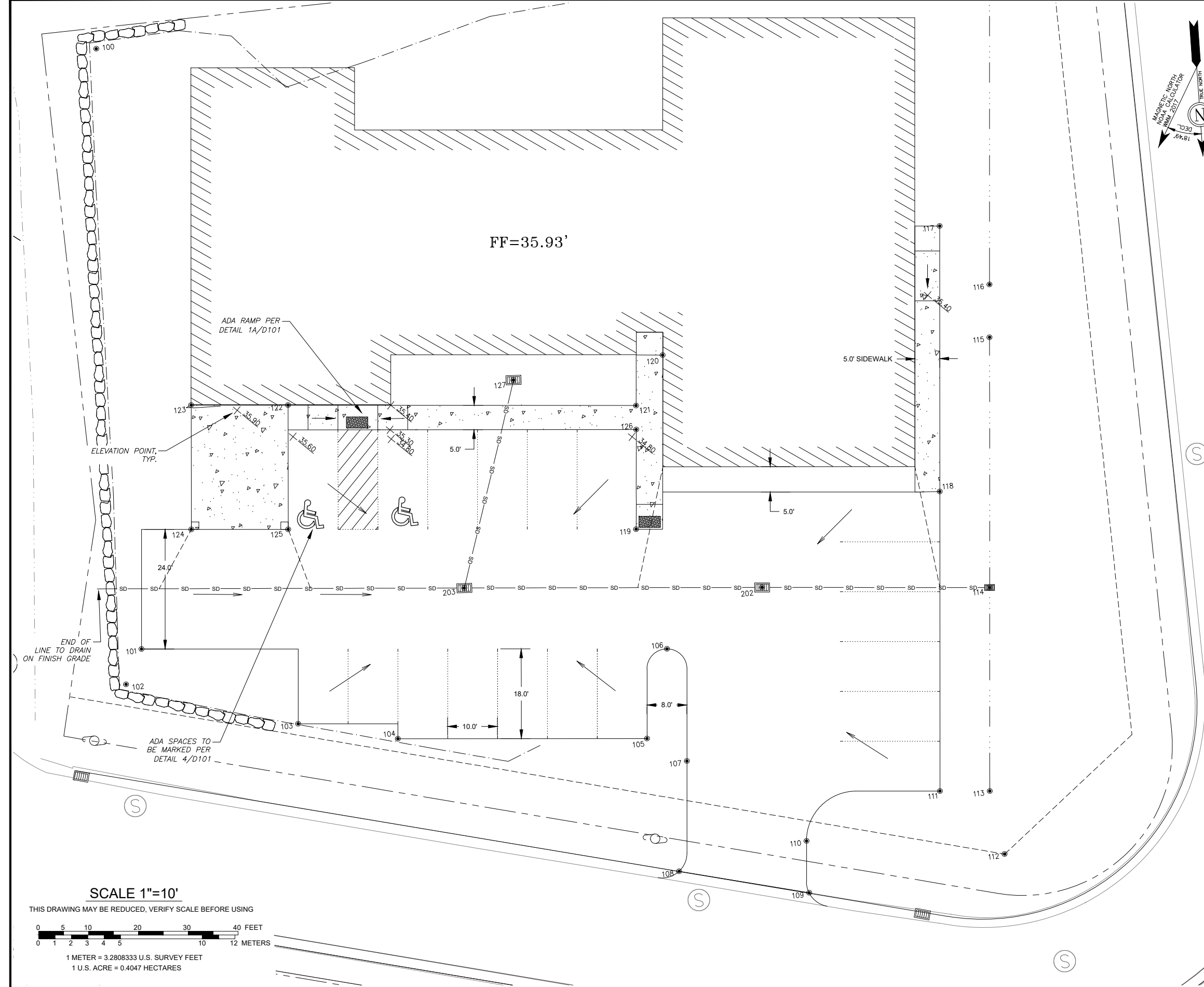
Client: **TLINGIT HAIDA REGIONAL HOUSING AUTHORITY**  
 5446 JENKINS DRIVE  
 JUNEAU, AK 99801

Project: **CRAIG TRACT 18 SENIOR CENTER**

Sheet Description: **UTILITY PLAN**

Sheet No. **C201**





POINT GRADING TABLE				
Point #	Northing	Easting	Elevation	Description
100	49376.40	11920.78	35.00	GRADE
101	49497.11	11924.33	35.50	PARKING
102	49503.83	11928.16	35.00	GRADE
103	49515.30	11894.63	35.50	PARKING
104	49520.37	11875.05	35.50	PARKING
105	49525.57	11825.32	35.50	PARKING
106	49508.09	11819.47	35.00	PARKING
107	49530.89	11817.83	35.50	PARKING
108	49552.74	11821.69	34.55	DRIVEWAY
109	49559.75	11796.20	36.08	DRIVEWAY
110	49549.35	11795.63	36.00	DRIVEWAY
111	49542.19	11767.97	36.20	PARKING
112	49556.12	11756.37	MATCH	GRADE
113	49543.23	11758.02	35.50	GRADE
114	49502.63	11753.79	34.50	CATCH BASIN
115	49452.69	11748.55	35.00	DRAINAGE
116	49442.16	11747.45	35.00	DRAINAGE
117	49429.44	11756.17	35.90	TOP OF CURB
118	49482.43	11761.72	35.40	TOP OF CURB
119	49483.58	11823.10	34.70	TOP OF CURB
120	49449.39	11814.16	35.90	TOP OF CURB
121	49458.90	11820.53	35.40	TOP OF CURB
122	49451.53	11889.96	35.70	TOP OF CURB
123	49449.47	11909.29	0.00	TOP OF CURB
124	49474.28	11911.89	0.00	TOP OF CURB
125	49476.31	11892.56	35.20	TOP OF CURB
126	49463.69	11821.00	35.30	TOP OF CURB

FF=35.93'

ADA RAMP PER  
DETAIL 1A/D101

5.0' SIDEWALK

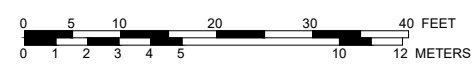
ELEVATION POINT,  
TYP.

(S)

ADA SPACES TO  
BE MARKED PER  
DETAIL 4/D101

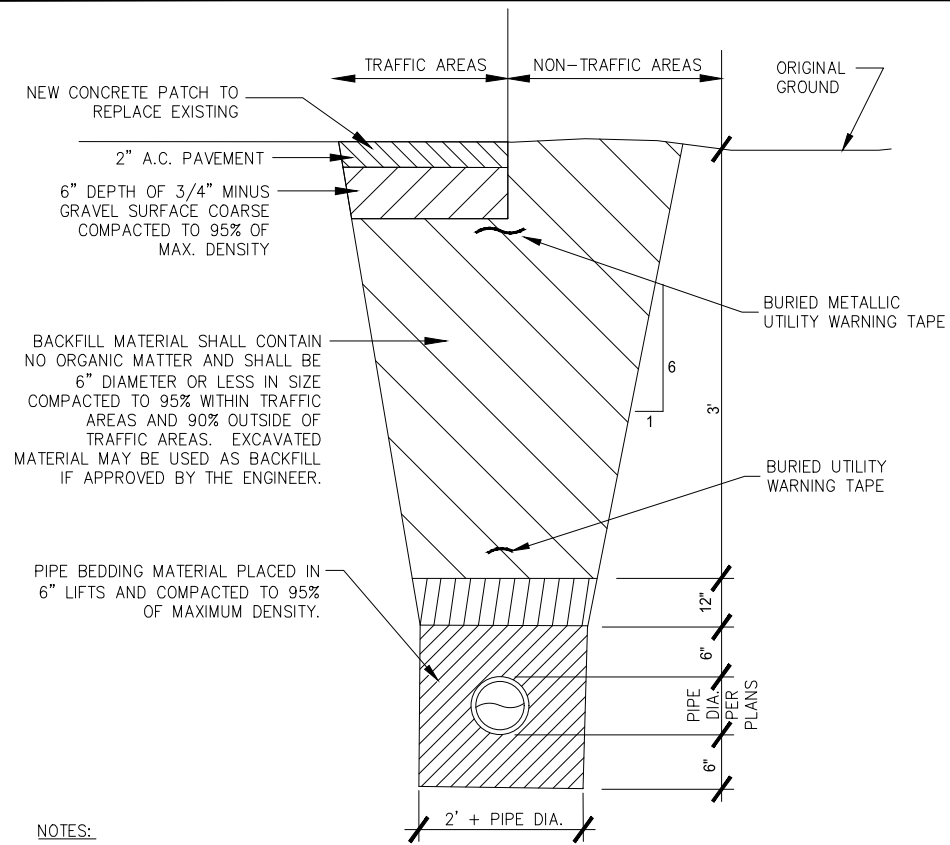
SCALE 1"=10'

THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING



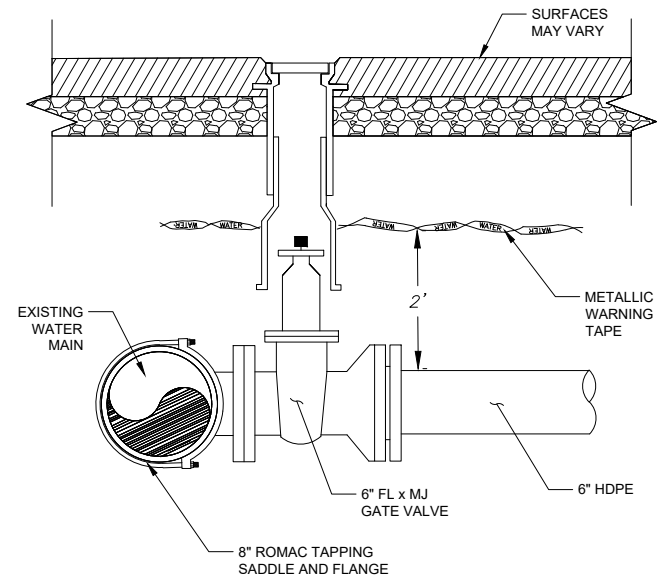
1 METER = 3.2808333 U.S. SURVEY FEET  
1 U.S. ACRE = 0.4047 HECTARES

Designed: TSS		Approved: TSS		Scale: AS NOTED			Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY 5446 JENKINS DRIVE JUNEAU, AK 99801	Project: CRAIG TRACT 18 SENIOR CENTER	Sheet Description: LAYOUT	Sheet No. C202	
Date: TSS	No.:	Description: TSS	By: TSS	Date: 2/8/2024	Project: 222321.02						
R&M ENGINEERING-KETCHIKAN, INC. 7180 REVILLA ROAD, SUITE 300 KETCHIKAN, ALASKA 99901 AELC 576											
DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS ONLY											

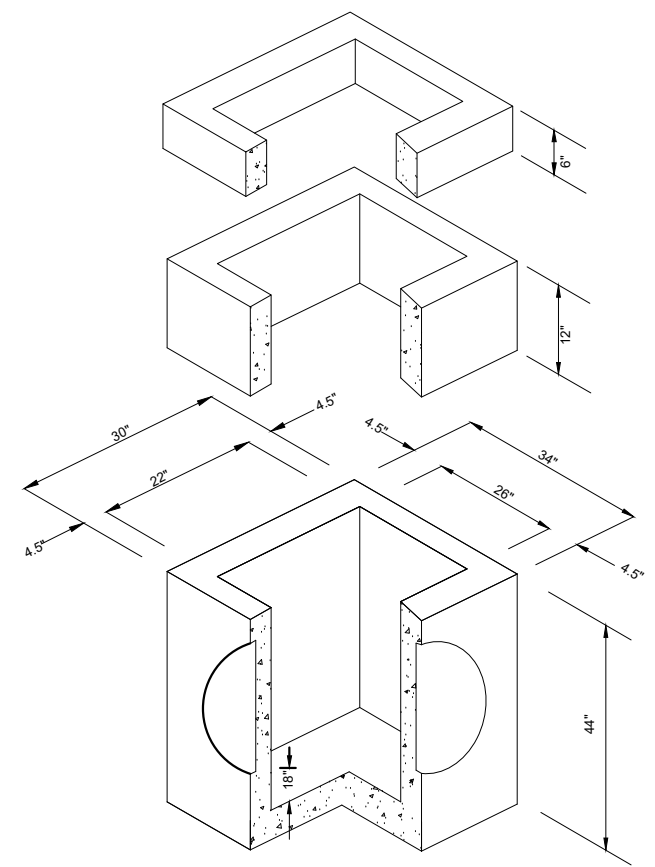


- NOTES:
1. BACKFILL MATERIAL SHALL BE PLACED IN 8" MAXIMUM LIFTS.
  2. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS.
  3. INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATION ONLY FOR IMPORTED BACKFILL GRAVEL AND RESURFACING REQUIREMENTS.
  4. IF UNSUITABLE PIPE FOUNDATION MATERIAL IS ENCOUNTERED DURING EXCAVATION, ENGINEER MAY DIRECT THE CONTRACTOR TO OVER-EXCAVATE AND BACKFILL WITH SUITABLE MATERIAL.
  5. THE DITCH LINE, IF ONE EXISTS, SHALL BE RESHAPED IN SUCH A MANNER TO ALLOW POSITIVE DRAINAGE TO MATCH PRE-CONSTRUCTION CONDITIONS.

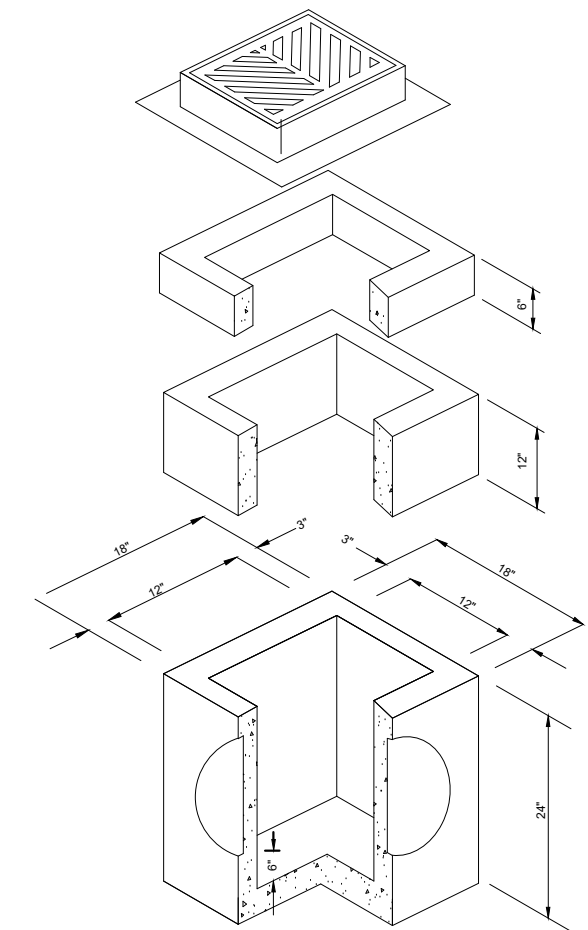
1 TYPICAL TRENCH DETAIL  
D100 NOT TO SCALE



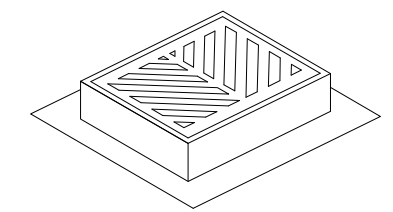
5 WATER MAIN CONNECTION  
D100 NOT TO SCALE



2 TYPE II CATCH BASIN DETAIL  
D100 NOT TO SCALE



3 TYPE I AREA DRAIN DETAIL  
D100 NOT TO SCALE



- NOTES:
- 1) CATCH BASINS SCHEDULED TO HAVE FIELD INLETS SHALL HAVE OLYMPIC FOUNDRY 18"x22"x4" REVERSIBLE, PART NO. SM60 OR EQUAL.
  - 2) CATCH BASINS SCHEDULED TO HAVE CURB INLETS SHALL HAVE NEENAH FOUNDRY TYPE R-3501-N INLET FOR ROLL TYPE CURB OR EQUAL.

4 FIELD INLET DETAIL  
D100 NOT TO SCALE

Designed: TSS	Approved:	Scale: AS NOTED	
Drawn: TSS	Date: 2/8/2024	Project: 222321.02	
Date	No.	Description	By
		Revision	

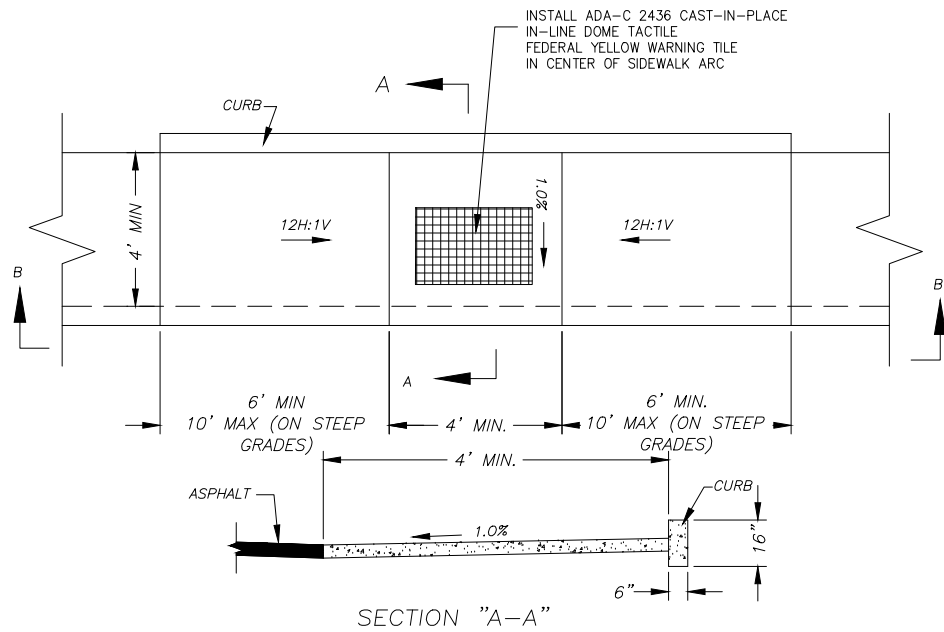
Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY  
5446 JENKINS DRIVE  
JUNEAU, AK 99801

Project: CRAIG TRACT 18 SENIOR CENTER

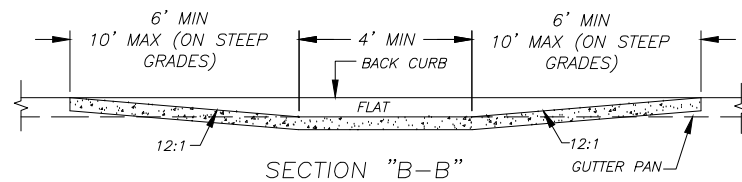
Sheet Description: DETAILS

Sheet No. D100



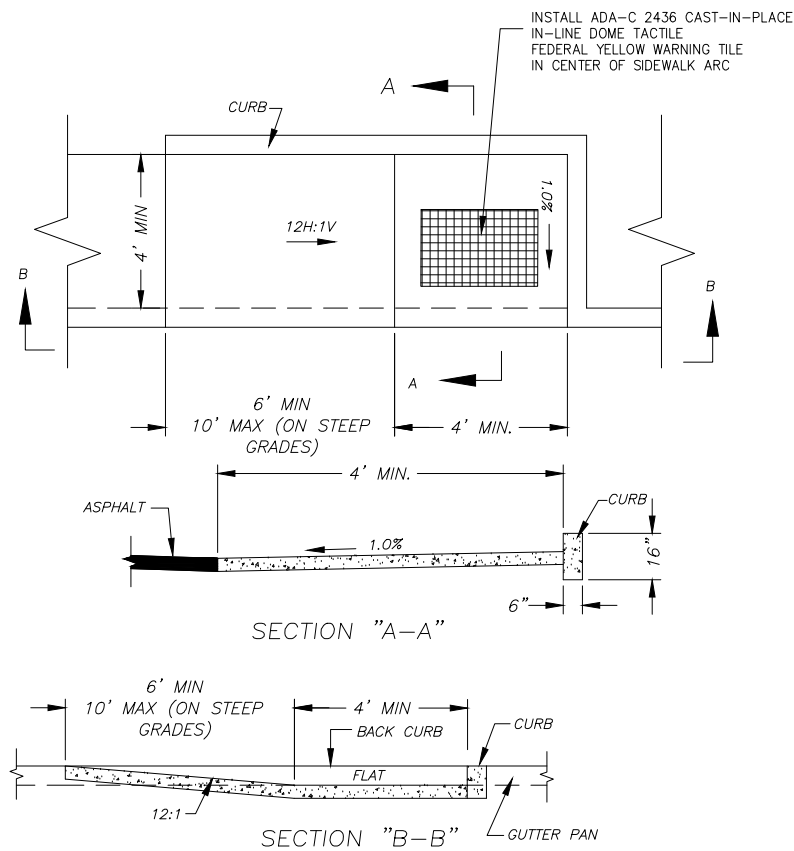


SECTION "A-A"

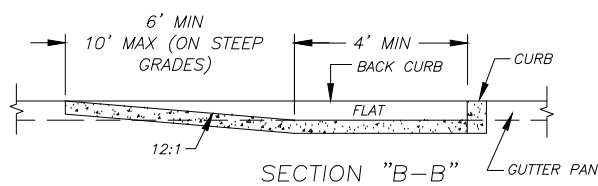


SECTION "B-B"

1A STANDARD ADA RAMP DETAIL  
D101 NOT TO SCALE

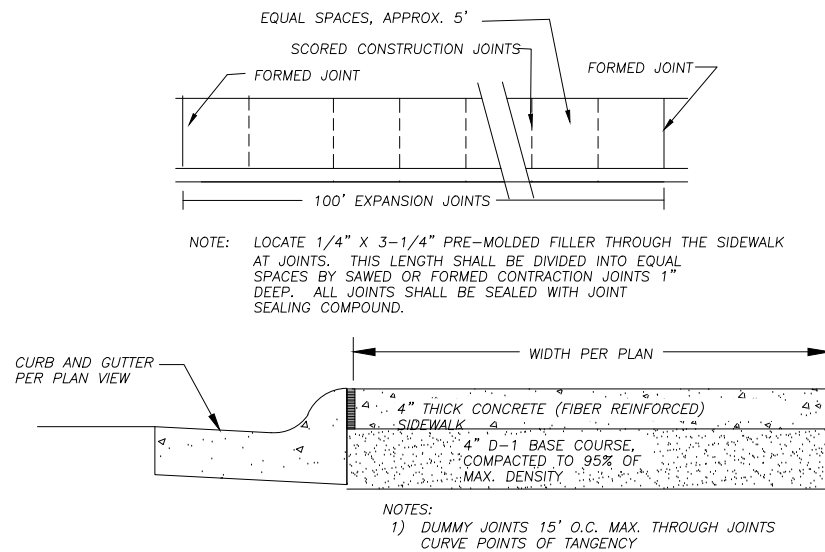


SECTION "A-A"

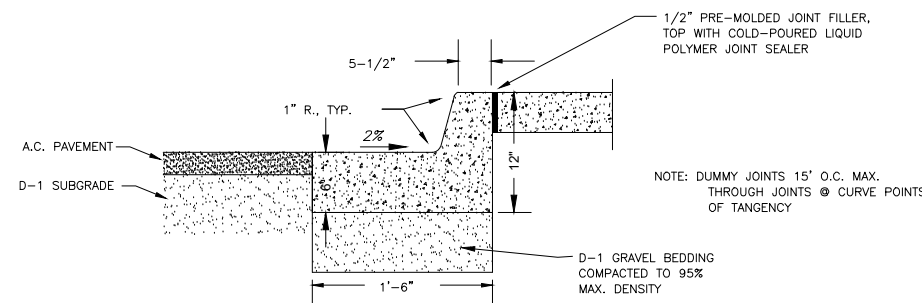


SECTION "B-B"

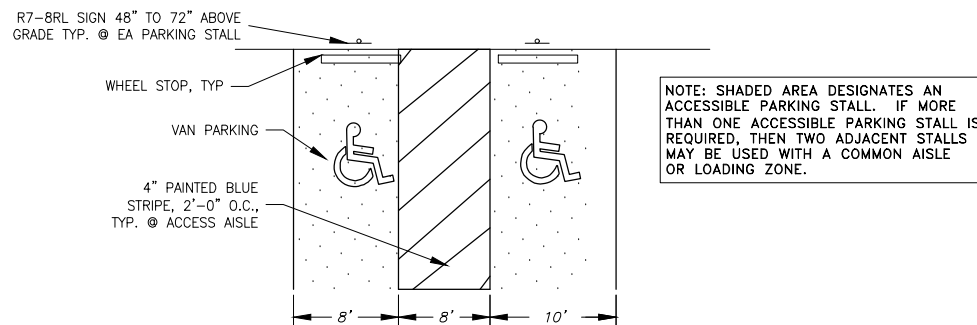
1B HALF ADA RAMP DETAIL  
D101 NOT TO SCALE



2 SIDEWALK SECTION & DETAIL  
D101 NOT TO SCALE

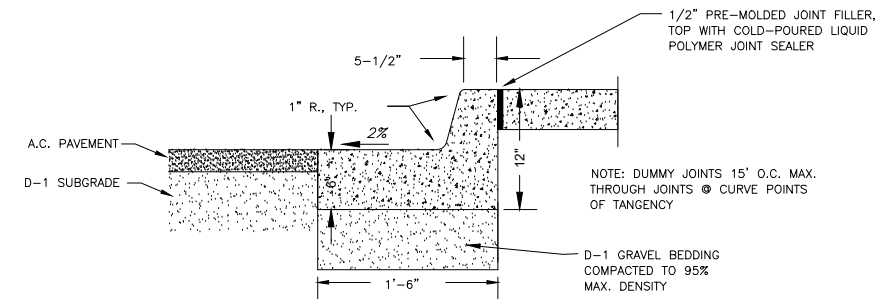


3 STANDARD CURB AND GUTTER  
D101 NOT TO SCALE

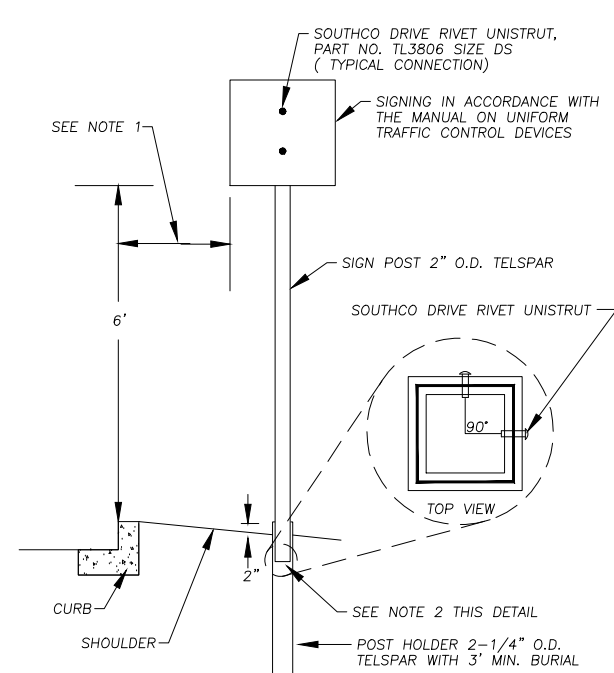


- ONE STALL TO BE VAN ACCESSIBLE PER ANSI 117.1, 2009 EDITION, SECTION 502. SPACES THAT ARE VAN ACCESSIBLE SHALL HAVE AN ADDITIONAL SIGN "VAN ACCESSIBLE" MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY. STALL WIDTH SHALL HAVE A MINIMUM WIDTH 132 INCHES AND SHALL BE ADJACENT A 60 INCH WIDE ACCESS AISLE.

4 HANDICAP PARKING  
D101 NOT TO SCALE



4 SHED CURB AND GUTTER  
D101 NOT TO SCALE

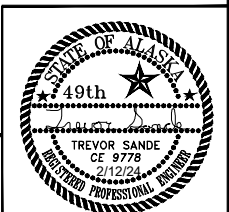


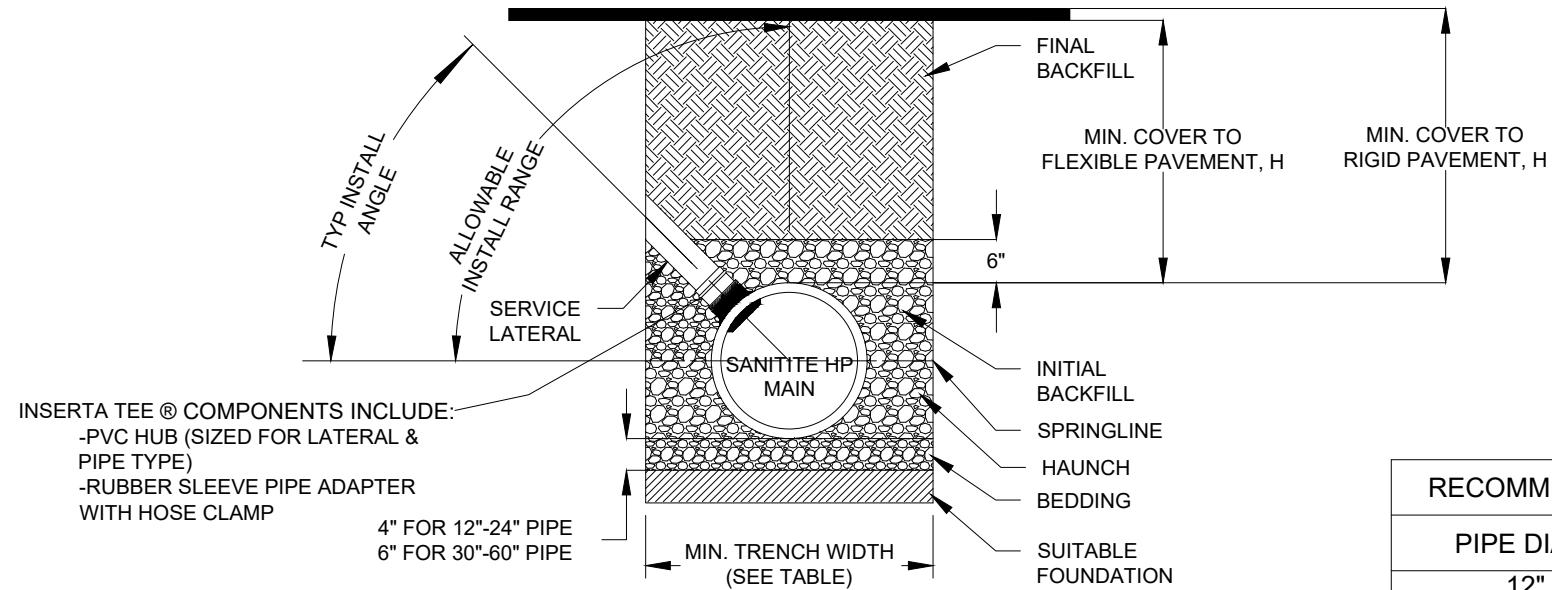
- MAXIMUM & MINIMUM DIMENSIONS PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE, PER PART II SIGNS.
- SIGN POST MUST BE INSERTED INTO HOLDER A MAXIMUM OF 12" AND A MINIMUM OF 6".
- NUMBERS IN SCHEDULE REFER TO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

SIGN SCHEDULE		
SIGN	No.	DESCRIPTION
S1	R7-8RL	RESERVED PARKING
S2	R7-8	RESERVED PARKING "VAN ACCESSIBLE"
S3	R1-1	STOP
S4		AUTHORIZED PERSONNEL PARKING ONLY
S5	R7-9	NO PARKING LOADING ZONE
S6		

5 SIGN DETAIL  
D101 NOT TO SCALE

Designed: TSS	Approved: TSS	Scale: AS NOTED		Client: TLINGIT HAIDA REGIONAL HOUSING AUTHORITY	Project: CRAIG TRACT 18 SENIOR CENTER	Sheet Description: DETAILS	Sheet No. D101
Drawn: TSS	Date: 2/8/2024	Project: 222321.02		R&M ENGINEERING-KETCHIKAN, INC. 7180 REVILLA ROAD, SUITE 300 KETCHIKAN, ALASKA 99901 AELC 576	5446 JENKINS DRIVE JUNEAU, AK 99801		
Date	No.	Description	By	DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS ONLY			
		Revision	TSS				





INSERTA TEE @ COMPONENTS INCLUDE:  
 -PVC HUB (SIZED FOR LATERAL & PIPE TYPE)  
 -RUBBER SLEEVE PIPE ADAPTER WITH HOSE CLAMP

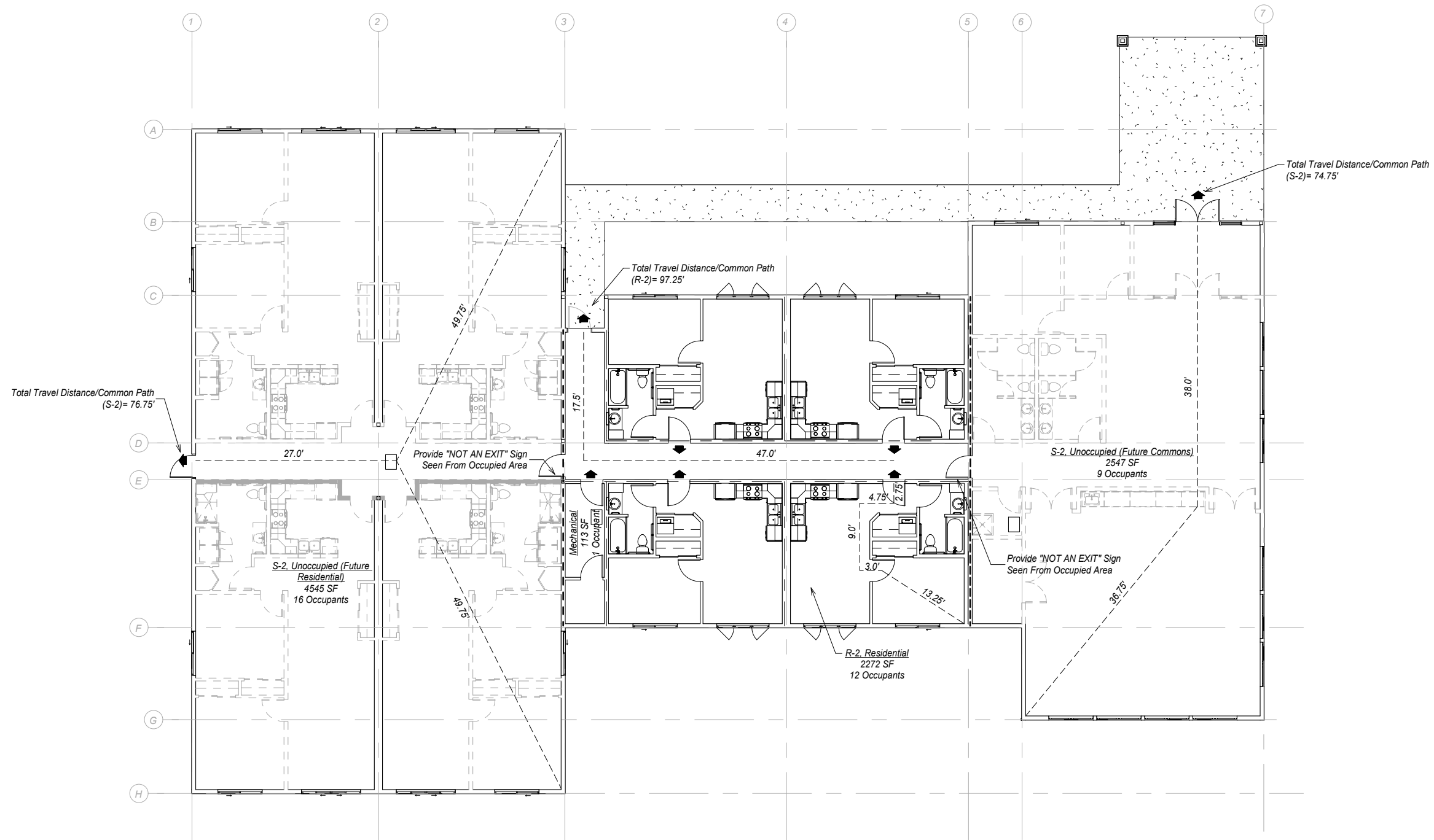
4" FOR 12"-24" PIPE  
 6" FOR 30"-60" PIPE

RECOMMENDED MINIMUM TRENCH WIDTHS	
PIPE DIAM.	MIN. TRENCH WIDTH
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

**NOTES:**

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- THE INSERTA TEE CONNECTION CAN BE INSTALLED UP TO A VERTICAL ORIENTATION, BUT A 45° INSTALL ANGLE IS MOST COMMON. GREATER ANGLES ARE SUBJECT TO DESIGN ENGINEER APPROVAL AND MAY REQUIRE PREMIUM BACKFILL.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

1 INSERTA TEE CONNECTION DETAIL  
 D102 NOT TO SCALE



**1 Egress Plan**  
1/16" = 1'-0"

**FIRE RATING LEGEND**

- 1-Hr Rated Wall Construction
- 1/2 Hr Rated Wall Construction

REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Egress Plan

**A001**

SHEET:  
11 of xx

**GENERAL NOTES**

COMPLY WITH ALL PROVISIONS OF THE INTERNATIONAL CODES AS ADOPTED BY THE CITY OF CRAIG AND THE STATE OF ALASKA.

- ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, INCLUDING THE LATEST ADOPTED EDITIONS OF THE IBC, IRC, IMC, IPC, IRC, UFC, UMC, UPC, NEC, AND ADA ACCESSIBILITY GUIDELINES.
- THE ARCHITECTURAL DRAWINGS ARE A PART OF LARGER SET OF DRAWINGS WHICH, WHEN COMPLETE, CONSISTS OF ALL DRAWINGS LISTED BY THE INDEX OF DRAWINGS. THE WORD DESCRIBED BY THE DRAWINGS OF ANY ONE DISCIPLINE MAY BE AFFECTED BY THE WORK DESCRIBED ON DRAWINGS OF ANOTHER DISCIPLINE AND MAY REQUIRE REFERENCE TO THE DRAWINGS OF ANOTHER DISCIPLINE. PARTIAL SETS OF DRAWINGS ARE INCOMPLETE AND SHOULD NOT BE DISTRIBUTED OR UTILIZED BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUBCONTRACTORS, TRADES, AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY.
- CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND BUILDING DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK. ANY VARIATION FROM THE CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE OWNER OR ARCHITECT FOR RESOLUTION PRIOR TO CONSTRUCTION.
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DIMENSIONS ARE TO CENTERLINE OF COLUMNS OR TO FACE OF FRAMING, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLEAR" ARE TO FACE OF FINISH MATERIALS.
- REFER TO THE STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL, LANDSCAPE AND PLUMBING DRAWINGS FOR THE DETAILED DESIGN OF STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL, LANDSCAPE AND PLUMBING SYSTEMS, OF WHICH PORTIONS MAY BE SHOWN ON THE ARCHITECTURAL DRAWINGS.
- FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE FLOOR SLAB OR WOOD SUB-FLOOR, UNLESS OTHERWISE NOTED.
- CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS OTHERWISE NOTED.
- PROVIDE FIRE BLOCKING, DRAFT STOPS, AND FIRE STOPS PER IBC SECTION 717.
- PROVIDE AN 2A 10BC FIRE EXTINGUISHER PER PLANS.
- WINDOWS IN OCCUPIED, HEATED AREAS OF BUILDING TO BE DOUBLE PANE, INSULATED GLAZING.
- SAFETY GLAZING: WIRED, TEMPERED, AND LAMINATED SAFETY GLASS MUST MEET UBC STANDARDS. GLAZING IN OR ADJACENT TO DOORS (12") AND GLAZING LESS THAN 18" ABOVE FLOOR, AND OTHER HAZARDOUS LOCATIONS PER UBC SEC. 2406.
- MINIMUM INSULATION REQUIREMENTS IN OCCUPIED, HEATED AREAS OF BUILDING, UON:

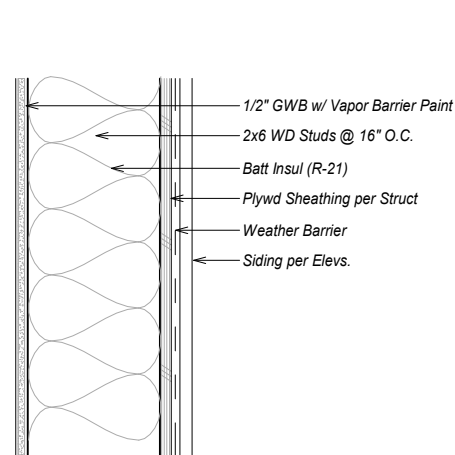
ROOF/CEILING	R49
EXT. WALLS	R21
FLOORS & SOFFITS	R30
HOT WATER PIPES	1/2"

ALLOW 2" MIN. AIR SPACE OVER INSULATION WHEN BATTS ARE USED BETWEEN RAFTERS & TRUSSES. SEAL ALL TEARS AND JOINTS WITH TAPE. ALL ROOF INSULATION APPLIED DIRECTLY TO EXTERIOR FRAMING MEMBERS SHALL BE PROVIDED WITH VAPOR BARRIER ON HEATED SIDE. ALL OPENINGS (DOORS, WINDOWS, ETC.) SHALL BE CAULKED, SEALED, OR WEATHERSTRIPPED.

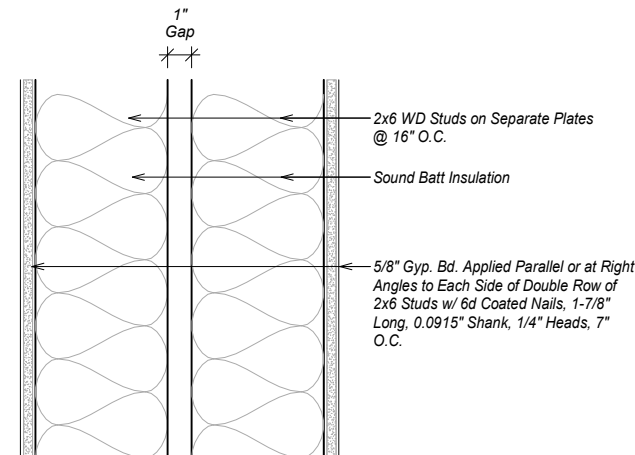
**SCOPE OF WORK**

CONSTRUCTION OF 9613 SF, SINGLE STORY FULLY SPRINKLED INDEPENDANT SENIOR LIVING FACILITY. THE BUILDING'S SHELL AND (4) 1 BEDROOM UNITS WILL BE BUILT AS PHASE 1. UNOCCUPIED SPACES ARE TO BE SPRINKLED AND ARE TREATED AS S-2 STORAGE. THERE IS A 1-HR SEPARATION BETWEEN THE OCCUPIED PHASE 1 AND FUTURE PHASES OF CONSTRUCTION.

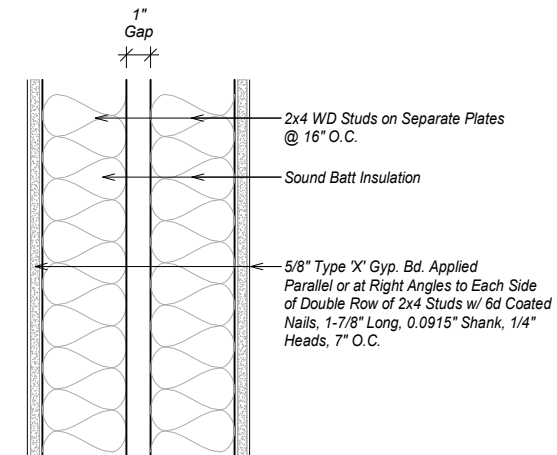
**WALL TYPES**



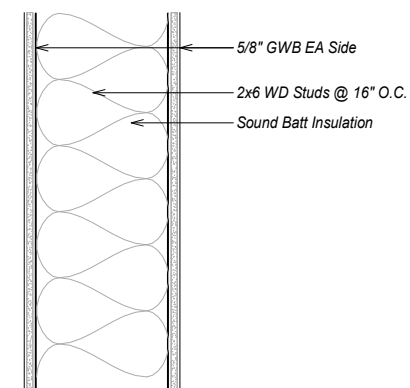
**1 Exterior Wall**



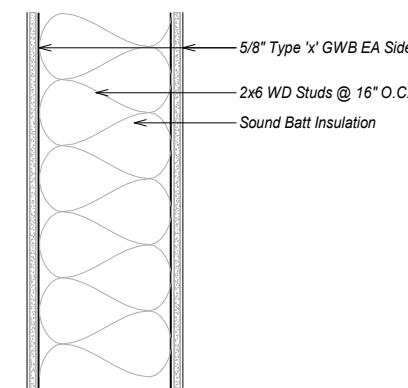
**2 Typ. Interior Unit Separation Wall (2x6)**  
30 Min Rated, STC 50+



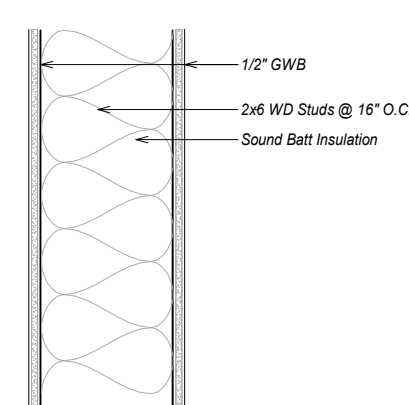
**3 Interior Rated Double Wall (2x6)**  
1-hr Rated, STC 50+  
Ga File No. WP 3370



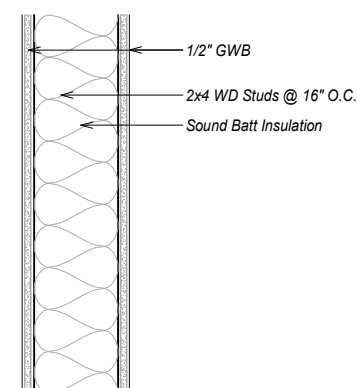
**4 Typ. Corridor Wall (2x6) 30 Min-Rated**



**5 Typ. Interior Rated Wall (2x6) 1hr-Rated**



**6 Typ. Interior Sound Wall (2x6)**



**7 Typ. Interior Sound Wall (2x4)**

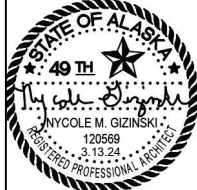
REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Notes & Wall Types

**A002**

SHEET:  
12 of xx

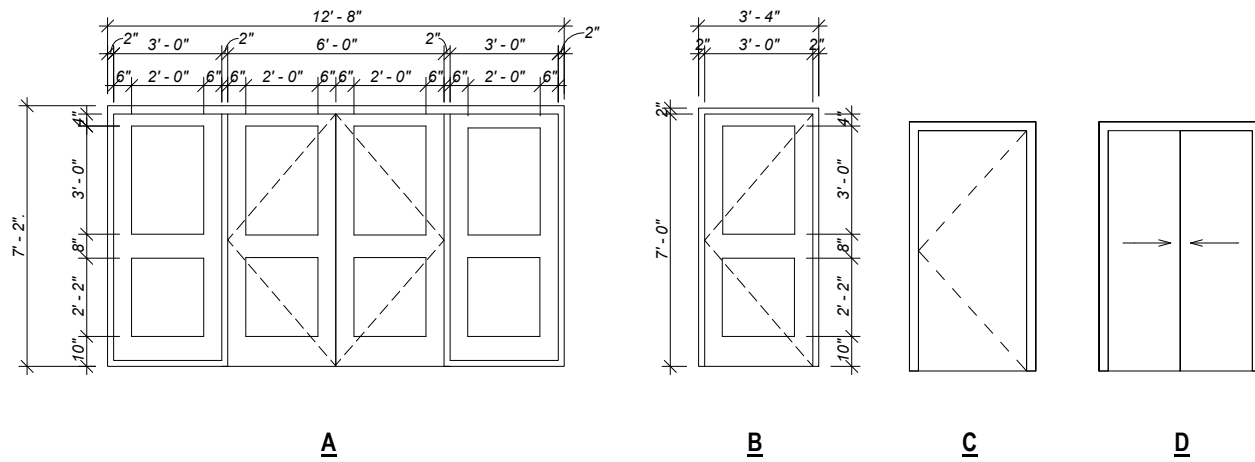


### Door Schedule

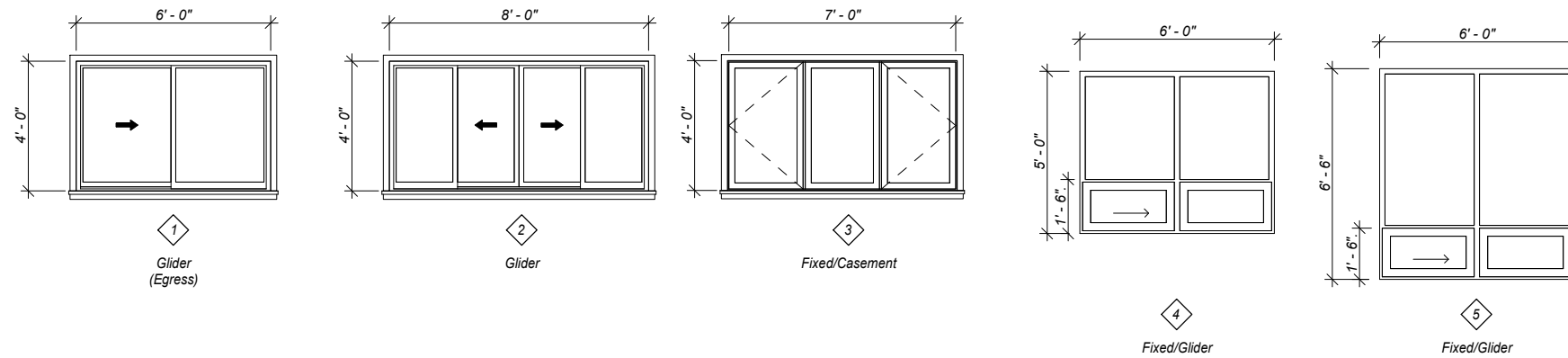
Type Mark	Width	Height	Door Type	Operation	Thickness	Door Material	Frame Material	Fire Rating	Hardware	Description
1	6' - 0"	7' - 0"	A	Swing	1 3/4"	Steel	Steel			Exterior Insulated Door Pair w/ Sidelites
2	3' - 0"	7' - 0"	B	Swing	1 3/4"	Steel	Steel			Exterior Insulated Door w/ Relite
3	3' - 0"	6' - 8"	C	Swing	1 3/8"	HM	HM	60 Min.		Insulated Rated Door
4	3' - 0"	6' - 8"	C	Swing	1 3/8"	HM	HM	30 Min		Rated Door
5	3' - 0"	6' - 8"	C	Swing	1 3/8"	WD/SC				
6	5' - 0"	6' - 8"	D	Bi Pass	1 1/2"	WD/SC	Wood			Bi-Pass Door Pair
7	3' - 0"	6' - 8"	C	Swing	1 3/8"	HM	HM			

NOTE: ALL HARDWARE TO BE ADA COMPLIANT.

### DOOR TYPES



### WINDOW TYPES



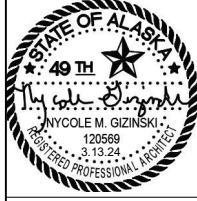
REVISIONS:

**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



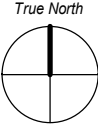
SHEET DESCRIPTION:  
Schedules

**A003**

SHEET:  
13 of xx



**1 Site Plan**  
1" = 30'-0"



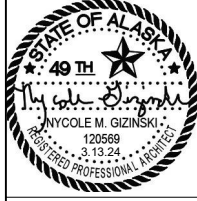
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

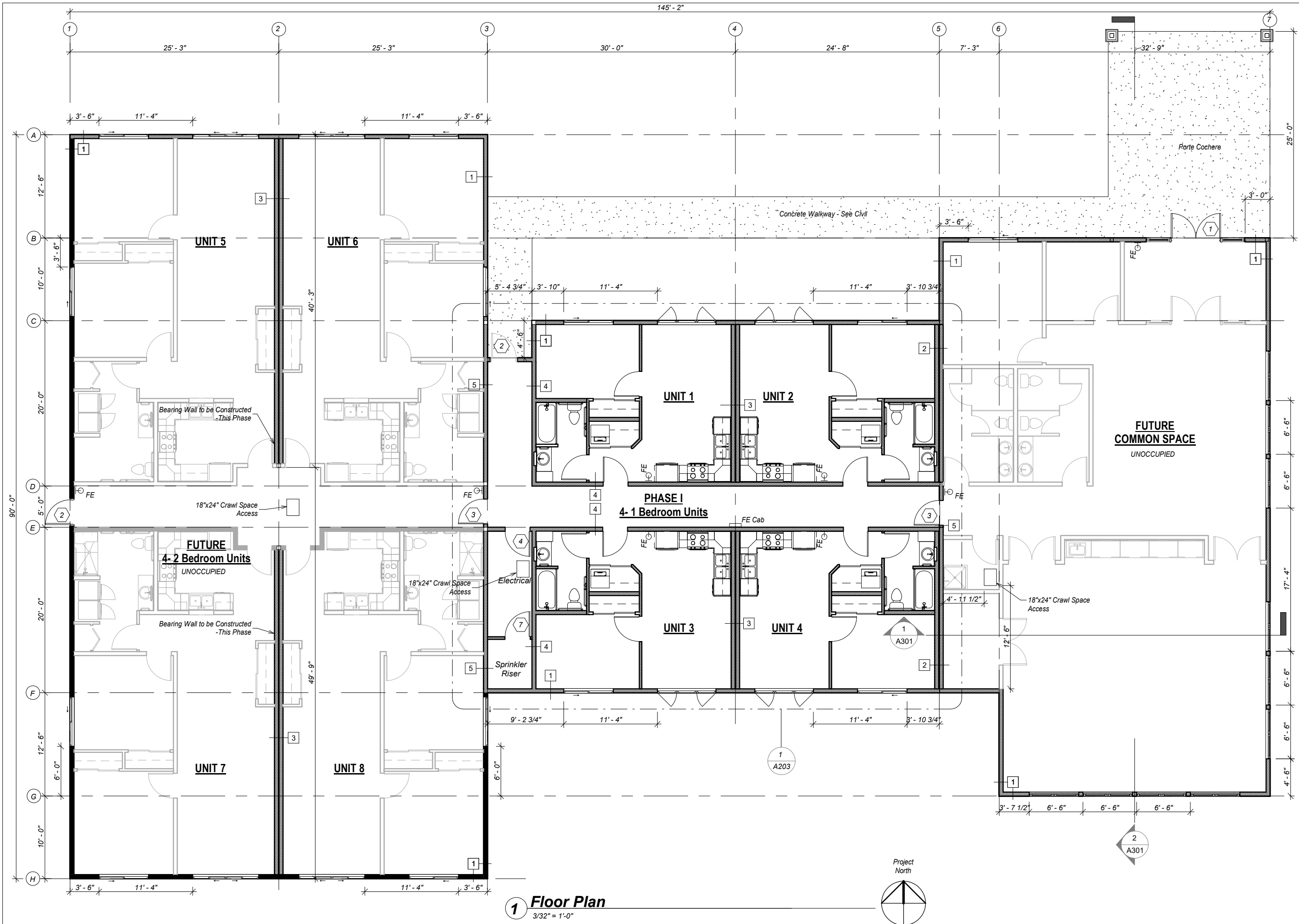
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



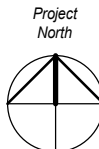
SHEET DESCRIPTION:  
Site Plan

**A100**

SHEET:  
14 of xx



**1 Floor Plan**  
3/32" = 1'-0"



REVISIONS:

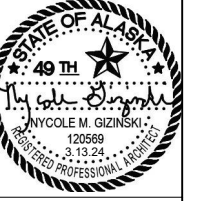
REV #1: FE, Crawl Space 3.11.24

**THRHA - Craig Senior Center  
PHASE I**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

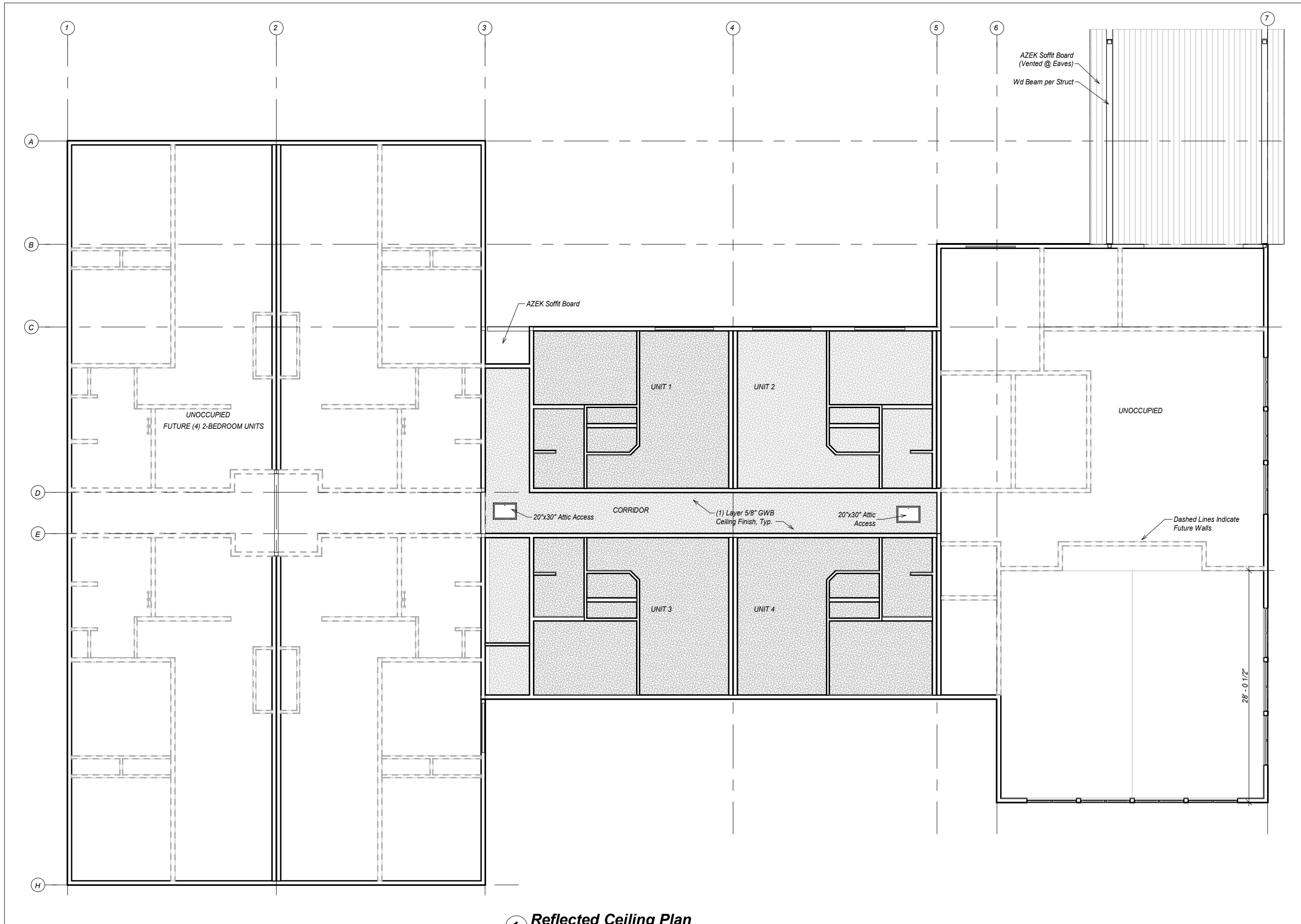
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Main Floor Plan

**A200**

SHEET:  
15 of xx



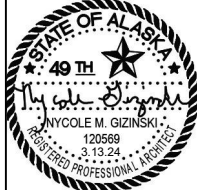
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com

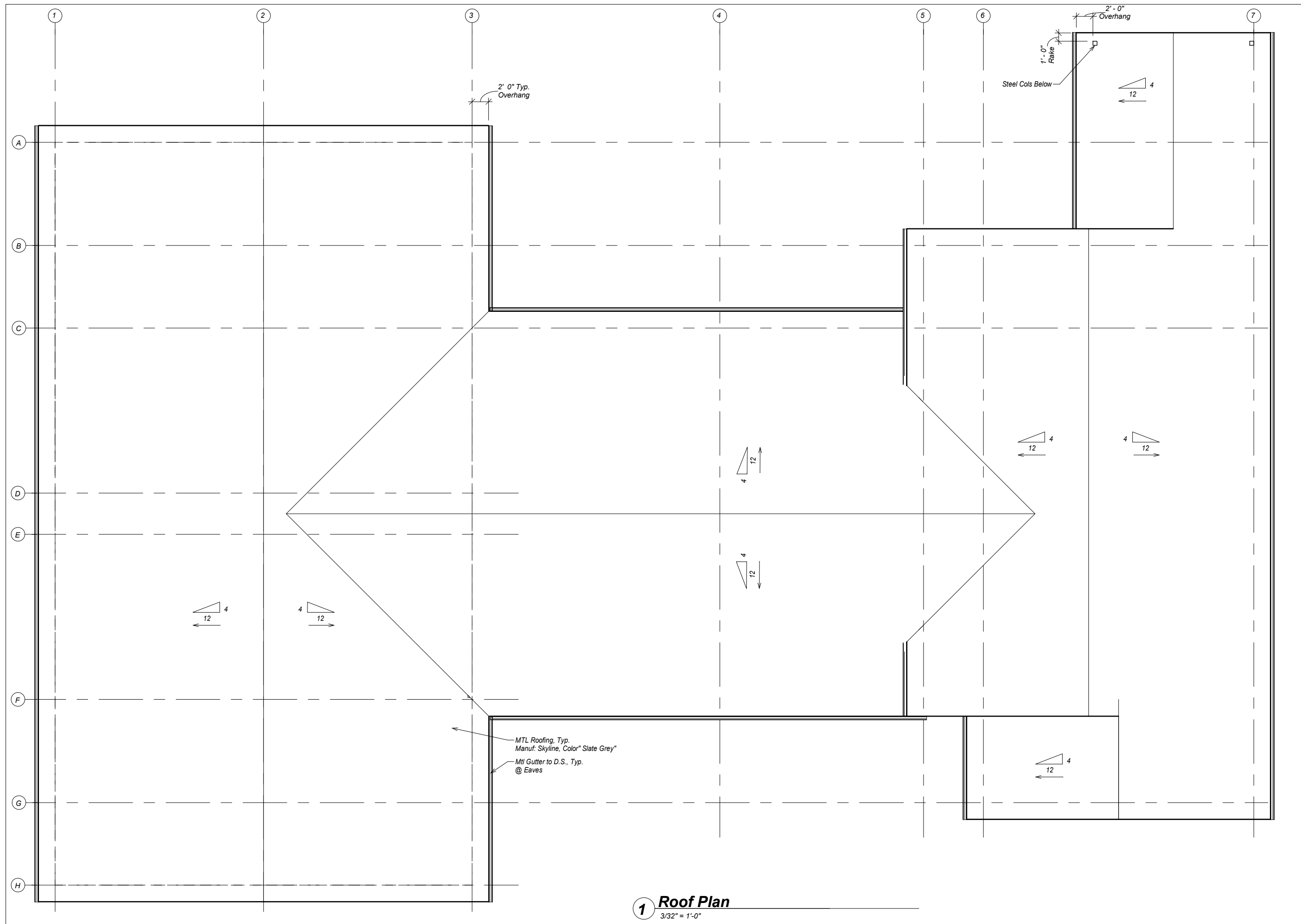


SHEET DESCRIPTION:  
Reflected Ceiling Plan

**A201**

SHEET:  
16 of xx

**1 Reflected Ceiling Plan**  
3/32" = 1'-0"



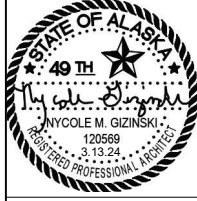
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

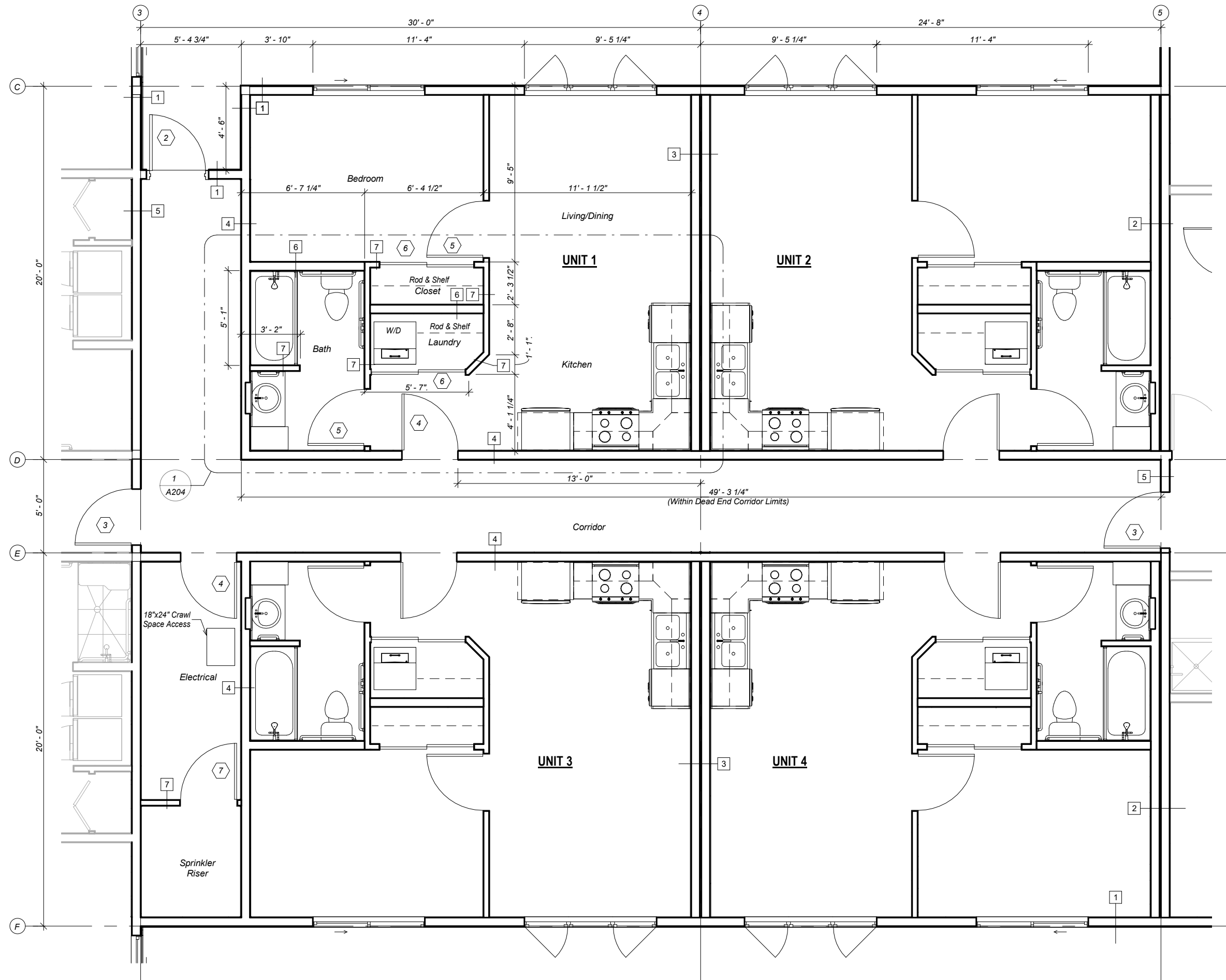
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Roof Plan

**A202**

SHEET:  
17 of xx



**1 Partial Floor Plan - Phase 1**  
 3/16" = 1'-0"

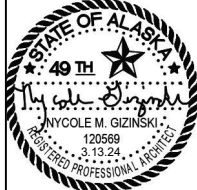
REVISIONS:


**THRHA - Craig Senior Center  
 PHASE 1**

STATUS:  
**CONSTRUCTION  
 DRAWINGS**

DRAWN BY: NMG  
 CHECKED BY: NMG  
 DATE: 3.13.24  
 PROJECT #: 222321.02

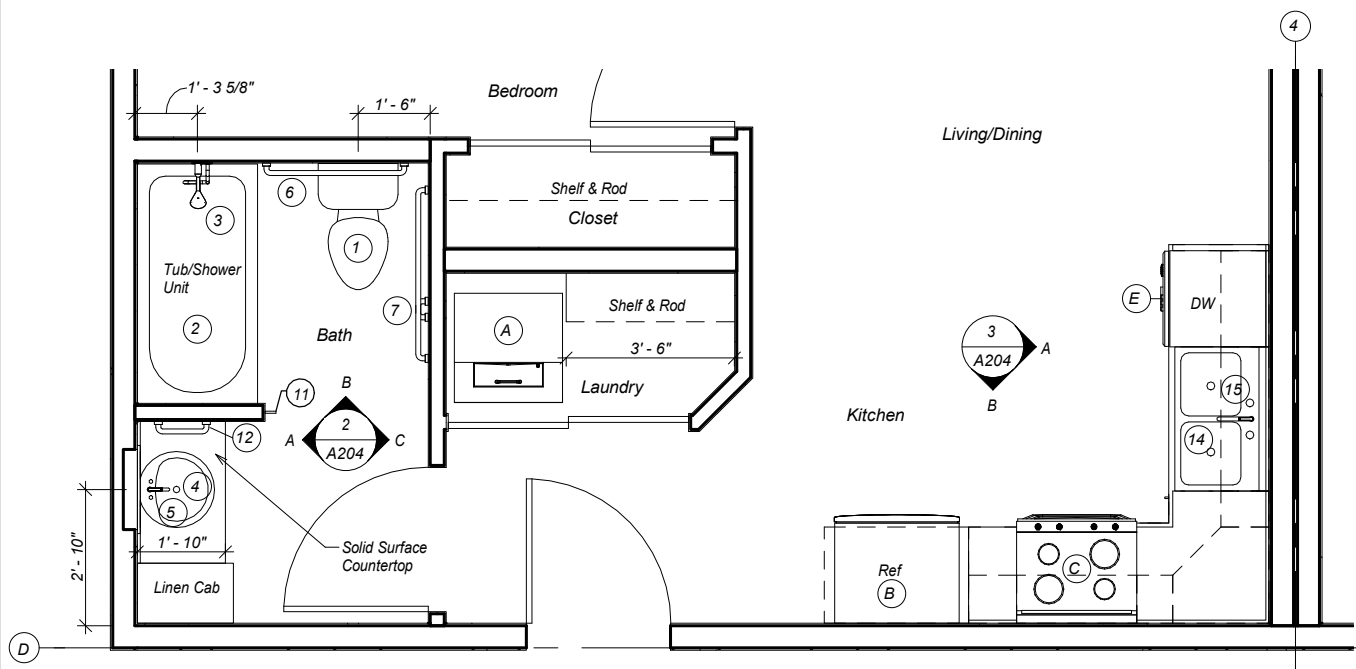
**R&M**  
 R&M ENGINEERING-KETCHIKAN, INC.  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



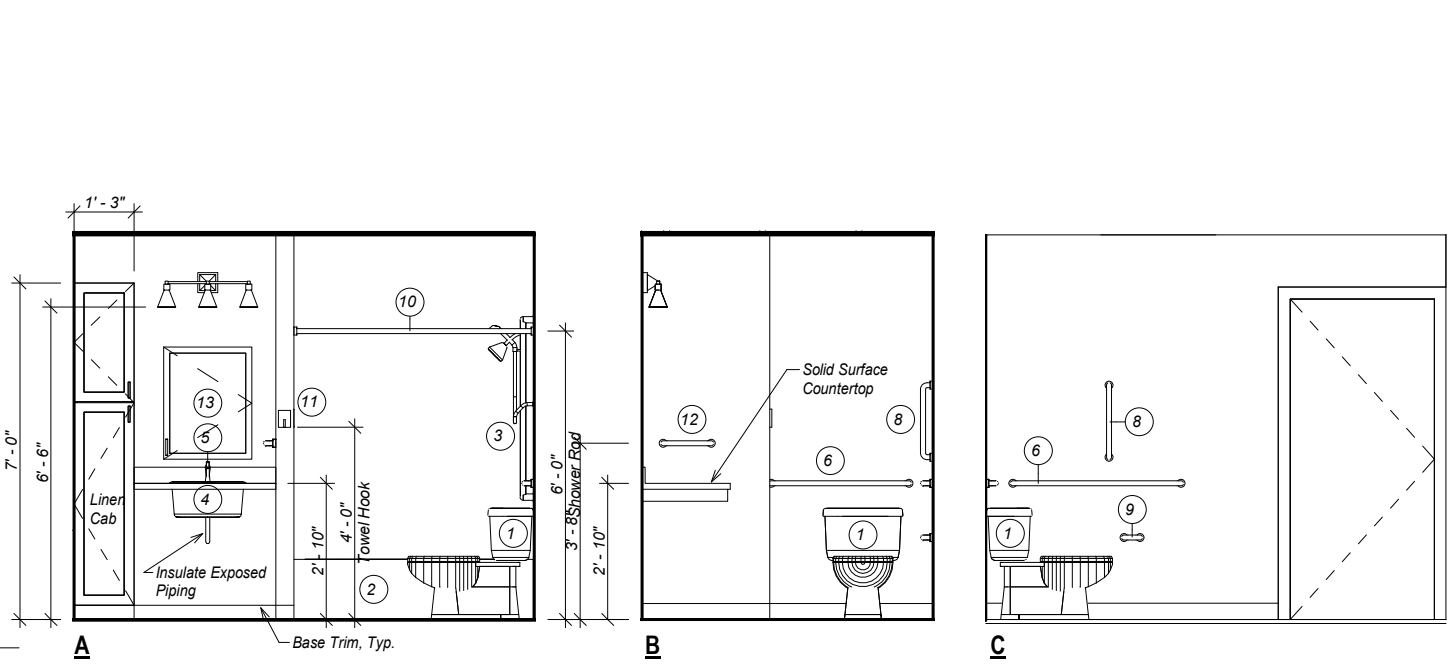
SHEET DESCRIPTION:  
 Partial Floor Plans

**A203**

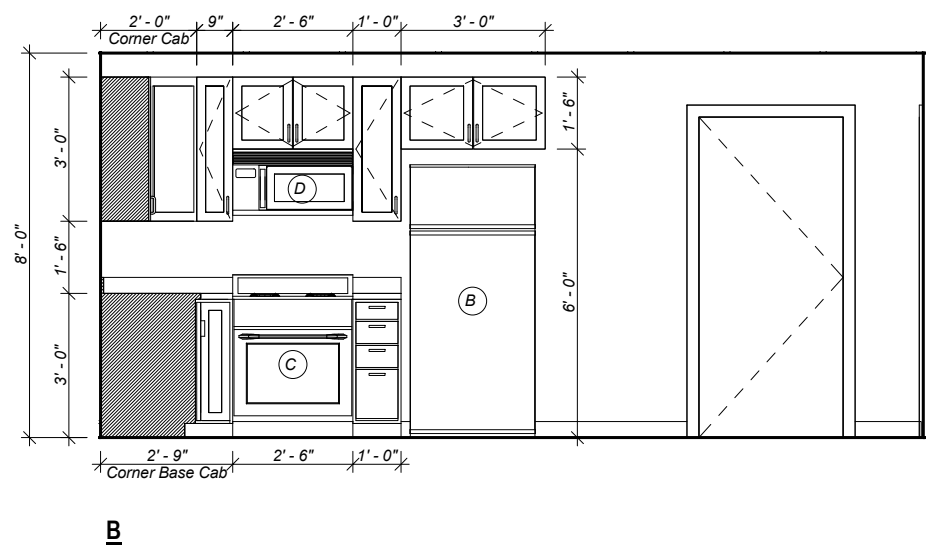
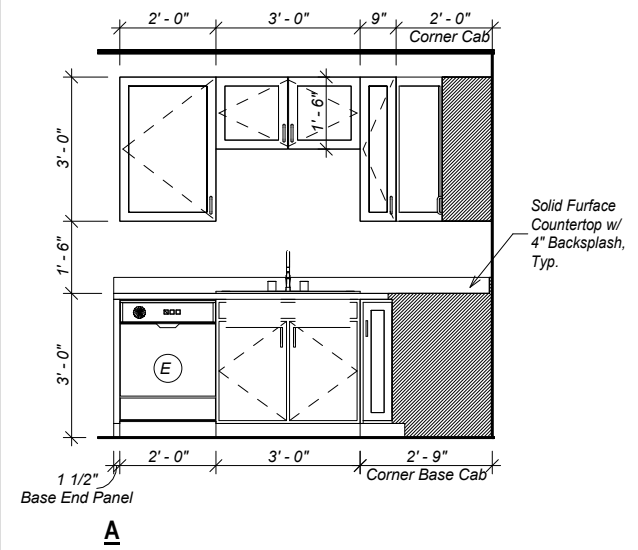
SHEET:  
 18 of xx



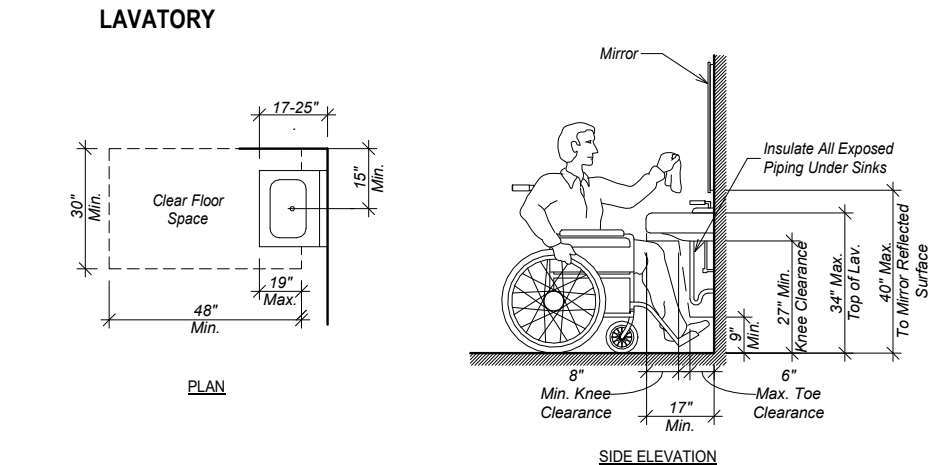
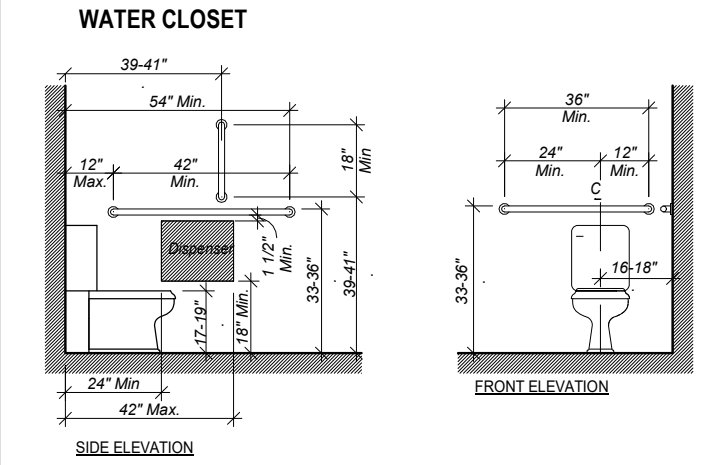
**1 Kitchen & Bath - Plan**  
1/4" = 1'-0"



**2 Interior Elevations-Bath**  
1/4" = 1'-0"



**3 Interior Elevations-Kitchen**  
1/4" = 1'-0"



**4 ADA Mounting Details.**  
1/4" = 1'-0"

Plumbing Fixture & Accessory Schedule					
Type Mark	Description	Dimensions (WxDxH)	Manufacturer	Model	Remarks
1	Toilet, Insulated		Kohler	K-3999-U	
2	Tub	60"x30"x17-3/4"	American Standard	2973102.020	Include 5-Piece Bath Wall Set 2968BWT60
3	ADA Shower/Bath Faucet		American Standard	TU105508	
4	Lavatory		American Standard	0614.300	
5	Vanity Faucet		American Standard	7105857	
6	36" Grab Bar		Bobrick	5806x36	
7	42" Grab Bar		Bobrick	5806x42	
8	18" Grab Bar		Bobrick	5806x18	
9	Toilet Paper Holder		American Standard	7105230.002	
10	60" Shower Rod		Bobrick	B-6107x60	
11	Robe/Towel Hook		American Standard	7105210.002	
12	Towel Ring		American Standard	7105190	
13	Medicine Cabinet, Recessed	20"x26"x3-5/8"	Kohler	K-CB-CLW2026SS	
14	Kitchen Sink		Kohler	K-3145-4	
15	Kitchen Faucet		American Standard	4803300.002	

Appliance Schedule					
Type Mark	Description	Dimensions (WxDxH)	Manufacturer	Model	Remarks
A	Stacked Washer/Dryer	23-7/8"x26-5/8"x74-1/4"	Whirlpool	WET4024HW	
B	Refrigerator	31-1/10"x27"x67-9/10"	GE	GBE17HYR	
C	30" Range, Electric	29 3/4"x36"x26 7/16"	GE	JS645LSS	
D	Combo Microwave/Exhaust Hood	29 7/8"x15 1/4"x15 3/4"	GE	JVM3160RFSS	
E	Dishwasher	23 3/4"x23 1/2"x32 1/4"	GE	GDF460PTSS	

REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 22321.02

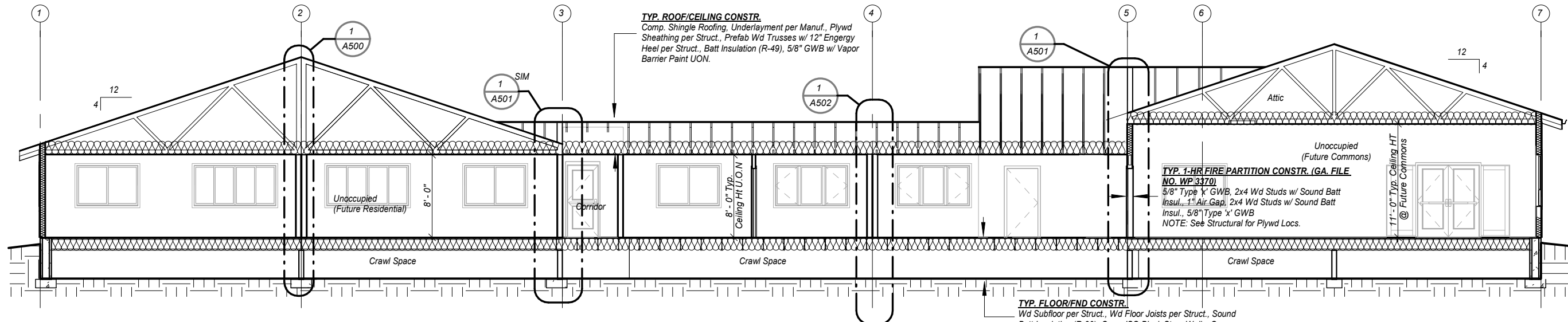
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Enlarged Plans & Interior Elevations

**A204**

SHEET:  
19 of xx

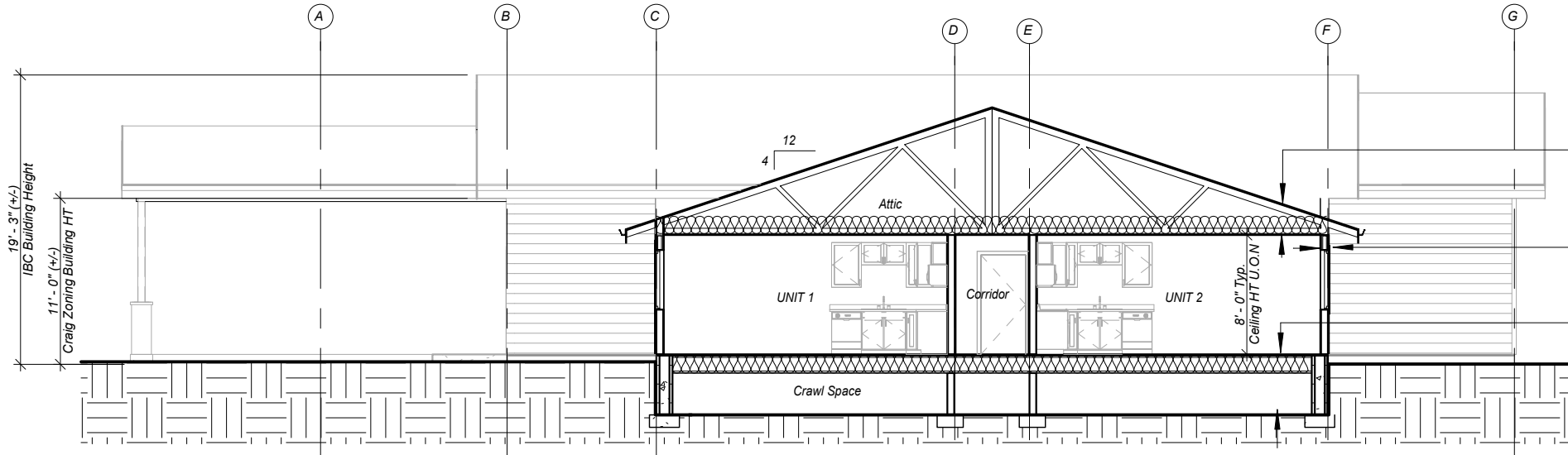


**1 Section 1**  
3/32" = 1'-0"

**TYP. ROOF/CEILING CONSTR.**  
Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Prefab Wd Trusses w/ 12" Engergy Heel per Struct., Batt Insulation (R-49), 5/8" GWB w/ Vapor Barrier Paint UON.

**TYP. 1-HR FIRE PARTITION CONSTR. (GA. FILE NO. WP 3370)**  
5/8" Type 'Y' GWB, 2x4 Wd Studs w/ Sound Batt Insul., 1" Air Gap, 2x4 Wd Studs w/ Sound Batt Insul., 5/8" Type 'X' GWB  
NOTE: See Structural for Plywd Locs.

**TYP. FLOOR/FND CONSTR.**  
Wd Subfloor per Struct., Wd Floor Joists per Struct., Sound Batt Insulation (R-30), Conc. ISO Block Stem Walls, Conc. FTG's per Struct., 10 Mil Vapor Barrier



**2 Section 2**  
3/32" = 1'-0"

**TYP. ROOF/CEILING CONSTR. U.O.N.**  
Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Prefab Wd Trusses w/ 12" Engergy Heel per Struct., Batt Insulation (R-49), 5/8" GWB w/ Vapor Barrier Paint UON.

**TYP. EXTERIOR WALL CONSTR.**  
Vinyl Siding, Breathable Weather Barrier, Plywd Sheathing per Struct., WD Studs per Struct., Batt Insulation (R-19), 1.2" GWB w/ Vapor Barrier Paint

**FLOOR/FND CONSTR.**  
Wd Subfloor per Struct., Wd Floor Joists per Struct., Sound Batt Insulation (R-30), Conc. ISO Block Stem Walls, Conc. FTG's per Struct., 10 Mil Vapor Barrier

19'-3" (+/-) IBC Building Height  
11'-0" (+/-) Craig Zoning Building HT

REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

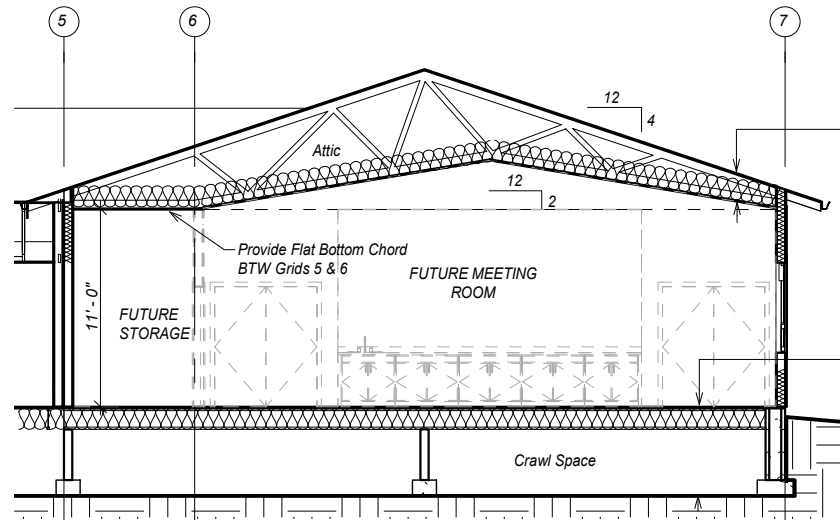
DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Sections  
**A300**  
SHEET:  
20 of xx

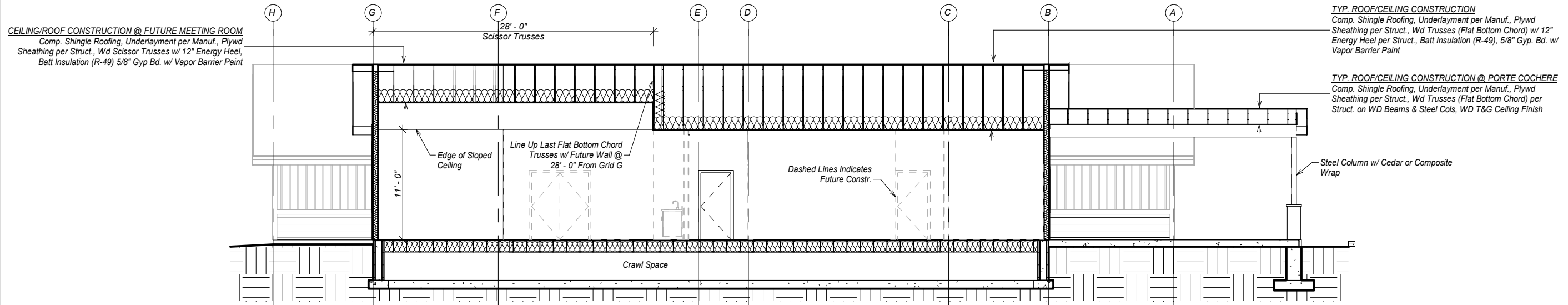




**TYP. CEILING/ROOF CONSTR. @ FUTURE MEETING ROOM**  
 Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Wd Scissor Trusses w/ 12" Energy Heel, Batt Insulation (R-49) 5/8" Gyp. Bd w/ Vapor Barrier Paint

**TYP. FLOOR/FND CONSTR.**  
 Wd Subfloor per Struct., Wd Floor Joists per Struct., Sound Batt Insulation (R-30), Conc. ISO Block Stem Walls, Conc. FTG's per Struct., 10 Mil Vapor Barrier

**1 Section 3**  
 3/32" = 1'-0"



**CEILING/ROOF CONSTRUCTION @ FUTURE MEETING ROOM**  
 Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Wd Scissor Trusses w/ 12" Energy Heel, Batt Insulation (R-49) 5/8" Gyp Bd. w/ Vapor Barrier Paint

**TYP. ROOF/CEILING CONSTRUCTION**  
 Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Wd Trusses (Flat Bottom Chord) w/ 12" Energy Heel per Struct., Batt Insulation (R-49), 5/8" Gyp. Bd. w/ Vapor Barrier Paint

**TYP. ROOF/CEILING CONSTRUCTION @ PORTE COCHERE**  
 Comp. Shingle Roofing, Underlayment per Manuf., Plywd Sheathing per Struct., Wd Trusses (Flat Bottom Chord) per Struct. on WD Beams & Steel Cols, WD T&G Ceiling Finish

**2 Section 4**  
 3/32" = 1'-0"

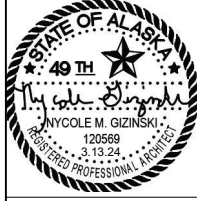
REVISIONS:


**THRHA - Craig Senior Center  
 PHASE 1**

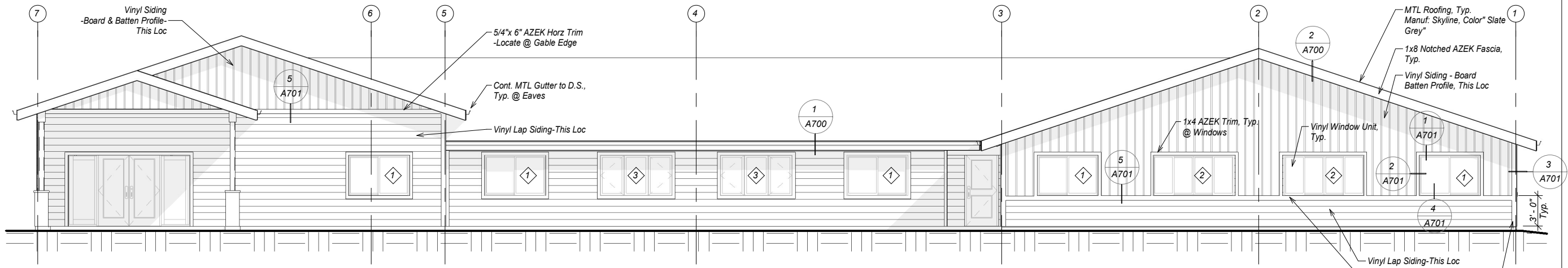
STATUS:  
**CONSTRUCTION  
 DRAWINGS**

DRAWN BY: NMG  
 CHECKED BY: NMG  
 DATE: 3.13.24  
 PROJECT #: 222321.02

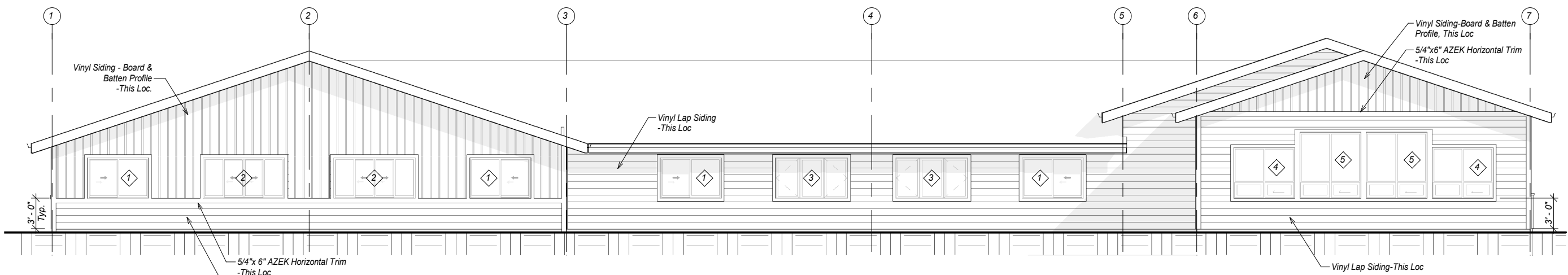
**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



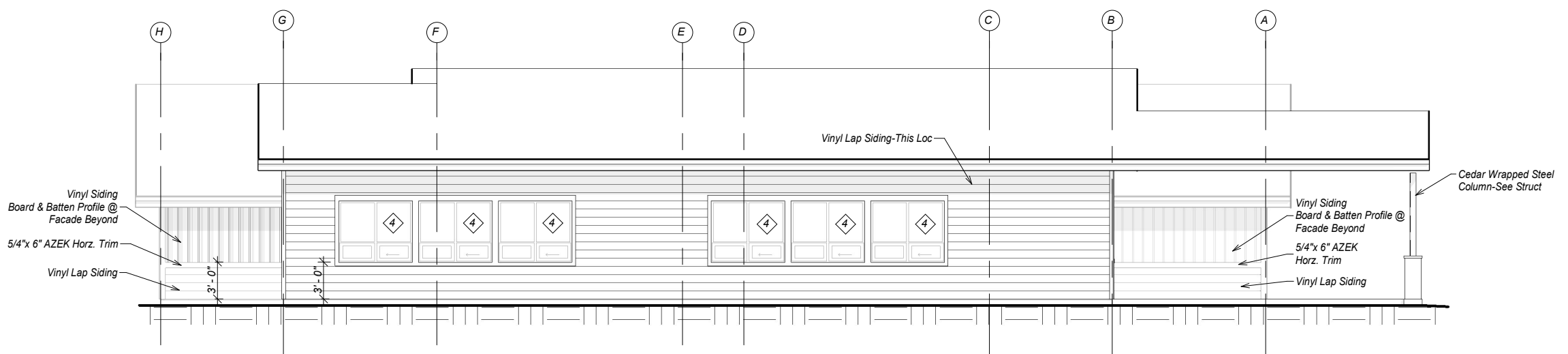
SHEET DESCRIPTION:  
 Sections  
**A301**  
 SHEET:  
 21 of xx



**1 North Elevation**  
3/32" = 1'-0"



**2 South Elevation**  
3/32" = 1'-0"



**3 East Elevation**  
3/32" = 1'-0"

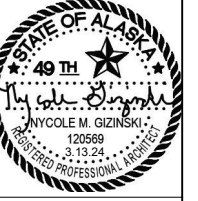
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

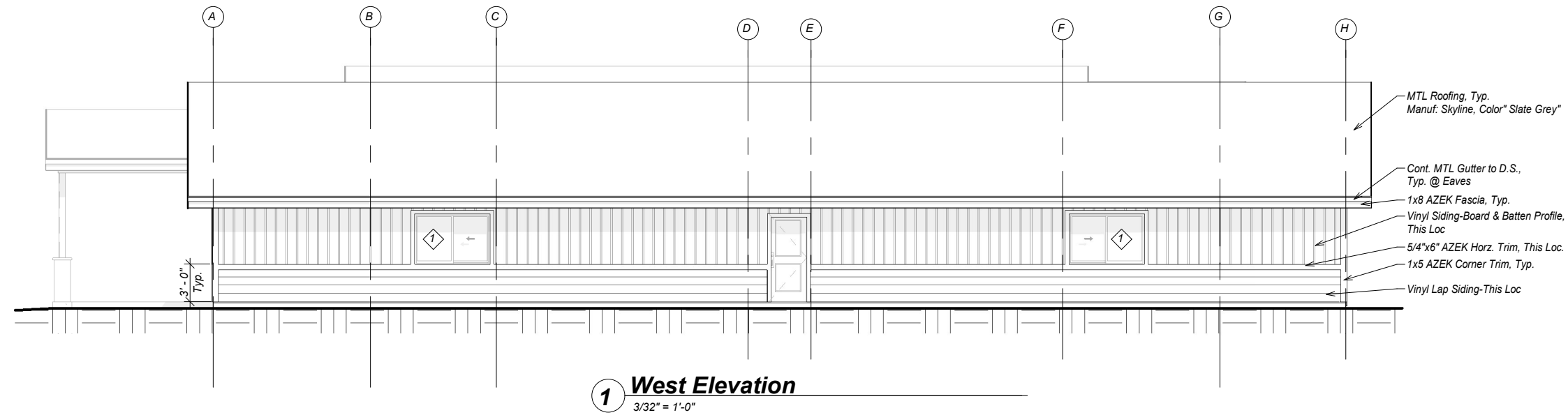
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Elevations

**A400**

SHEET:  
22 of xx



**1 West Elevation**  
3/32" = 1'-0"

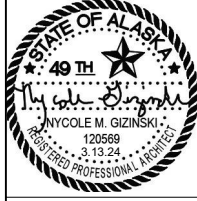
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

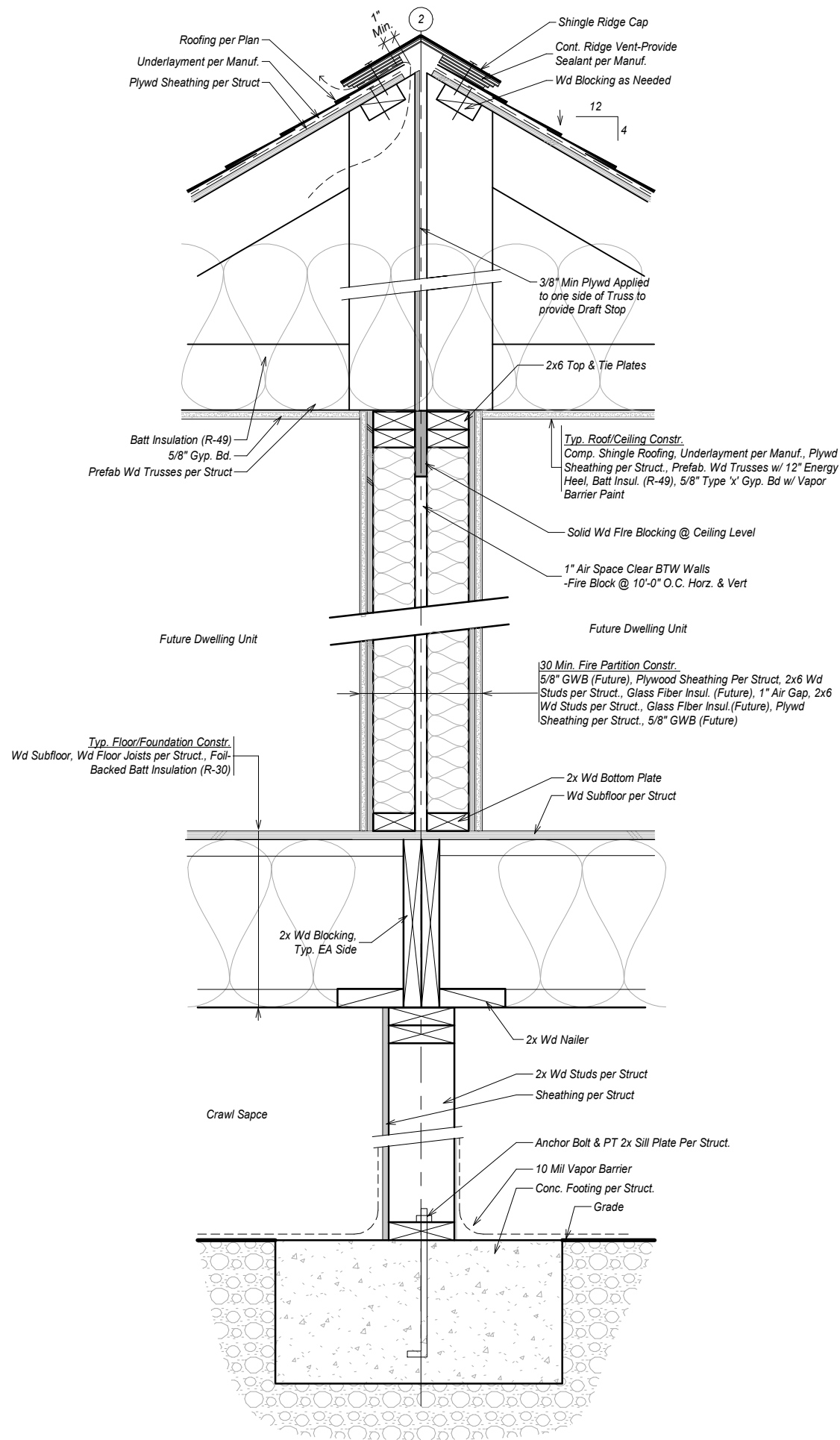
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



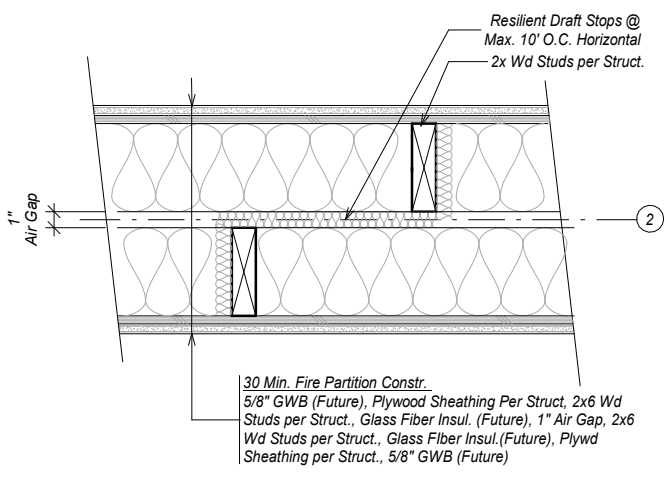
SHEET DESCRIPTION:  
Elevations

**A401**

SHEET:  
23 of xx



**1 Fire Partition @ Grid 2**  
1" = 1'-0"



**Draft Stop Detail**

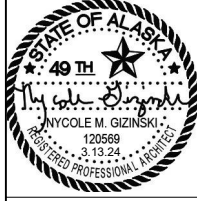
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

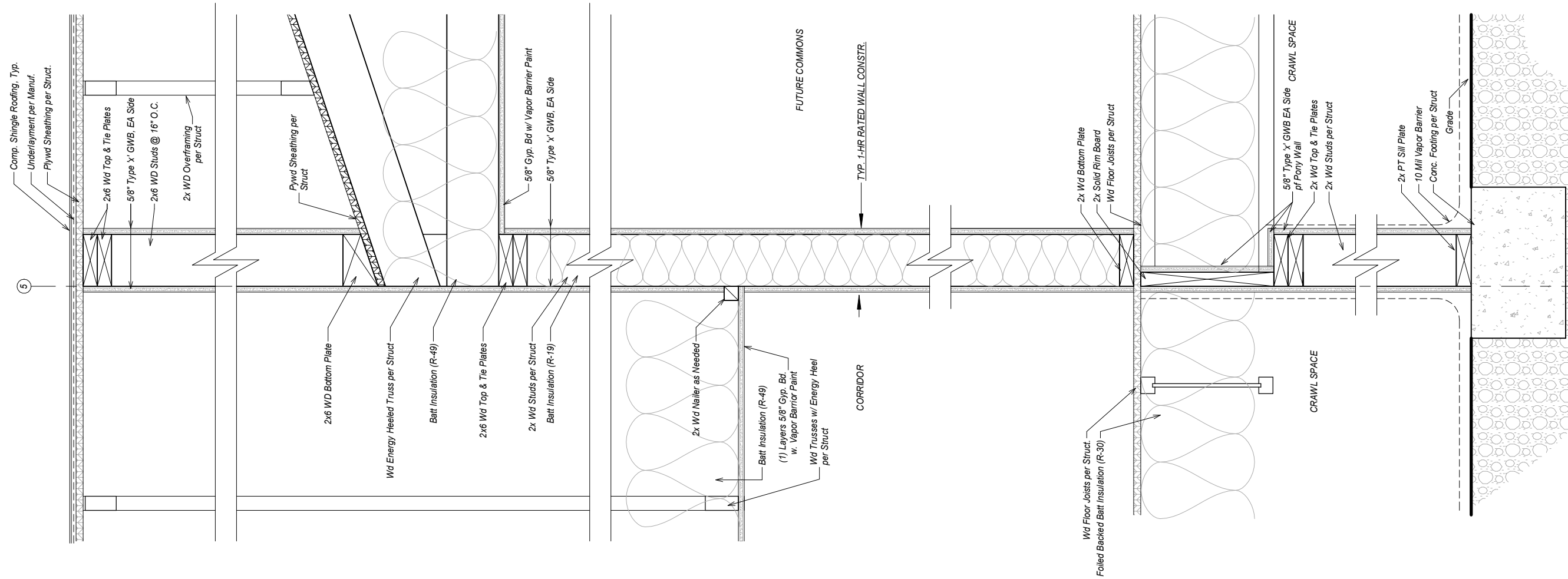
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Wall Sections

**A500**

SHEET:  
24 of xx



**1** Wall Section @ Grid 5 (Grid 3 SIM)  
1" = 1'-0"

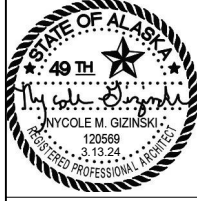
REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

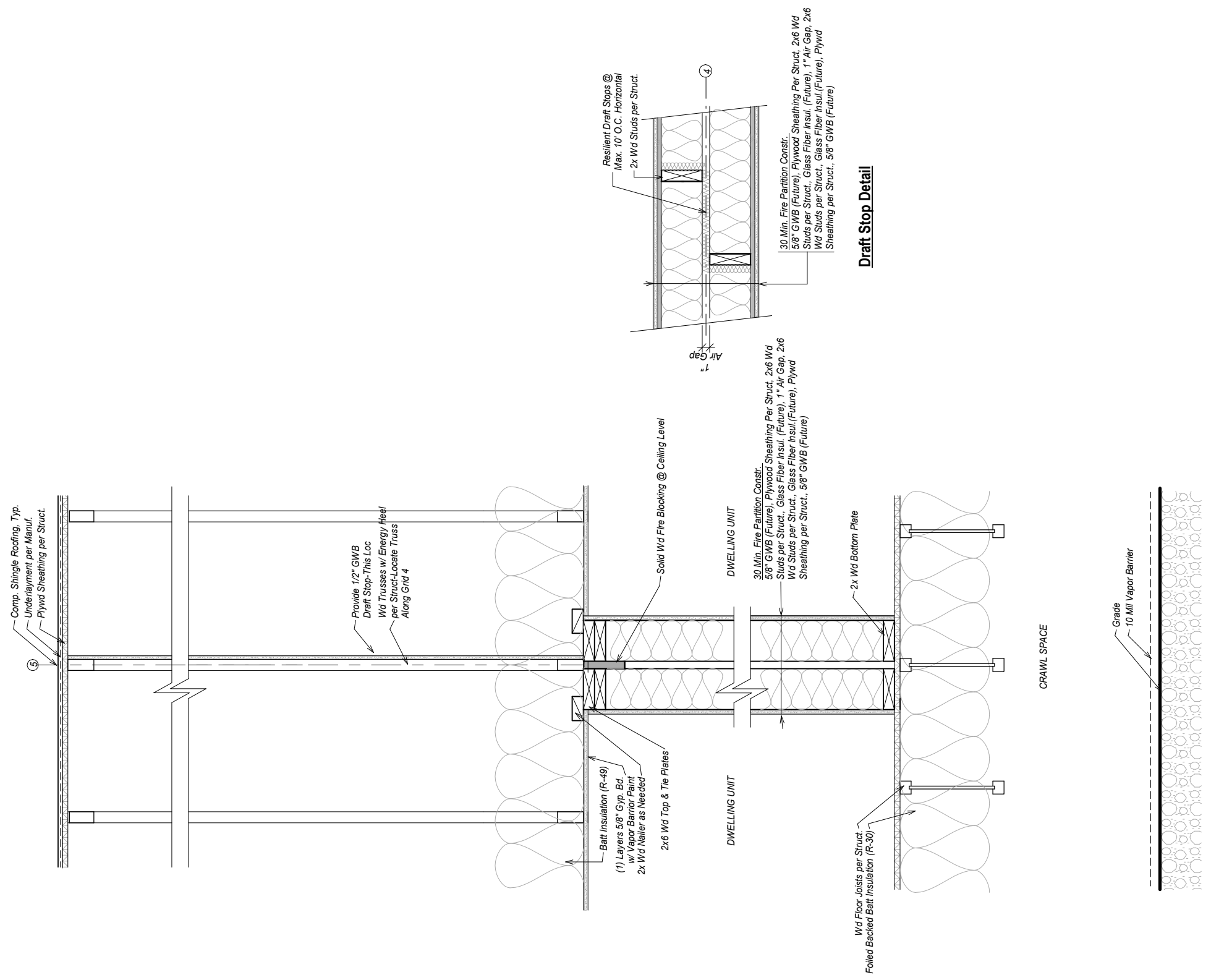
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Wall Sections

**A501**

SHEET:  
25 of xx



**Draft Stop Detail**

**1** Wall Section @ Grid 4  
3/4" = 1'-0"

REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

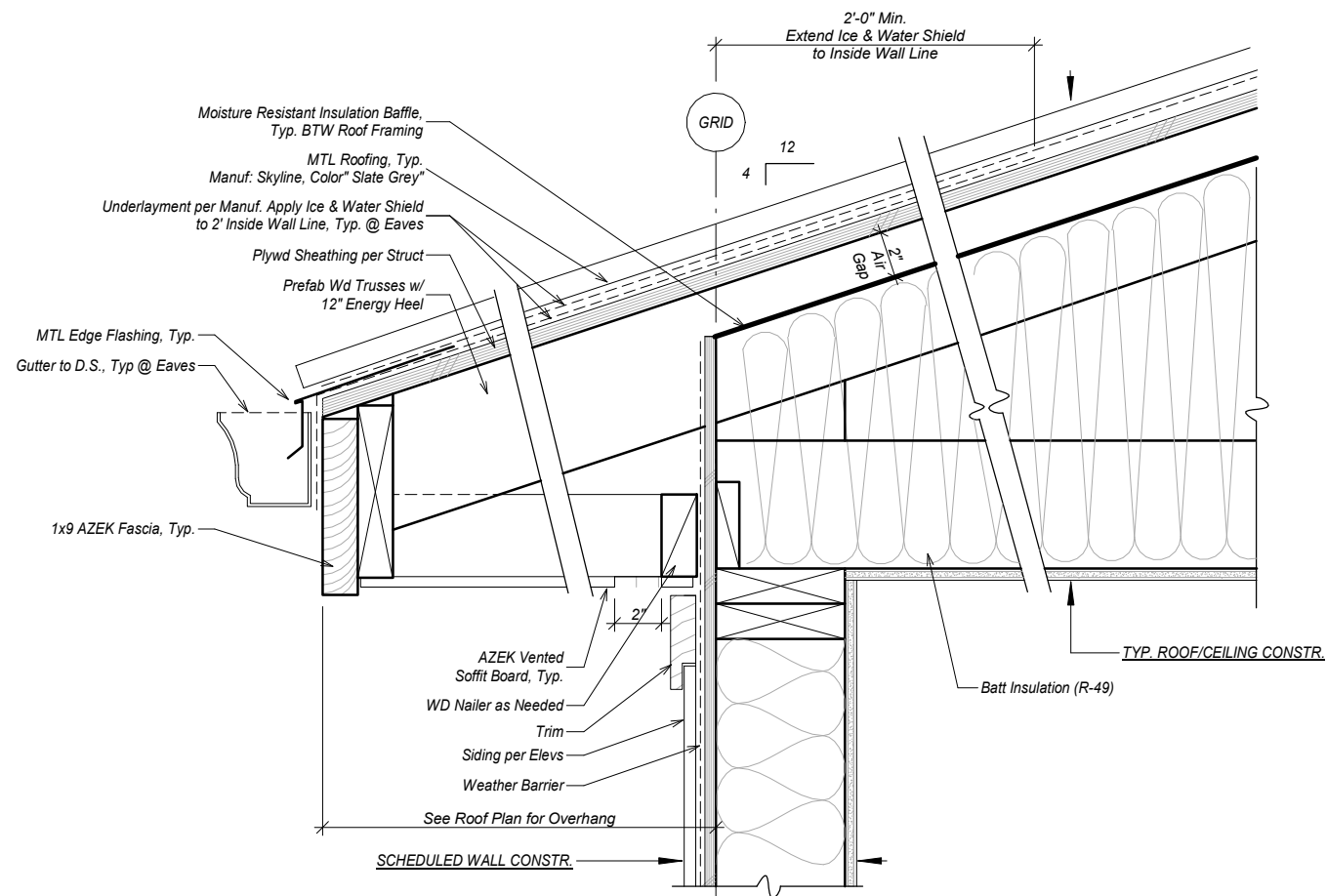
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



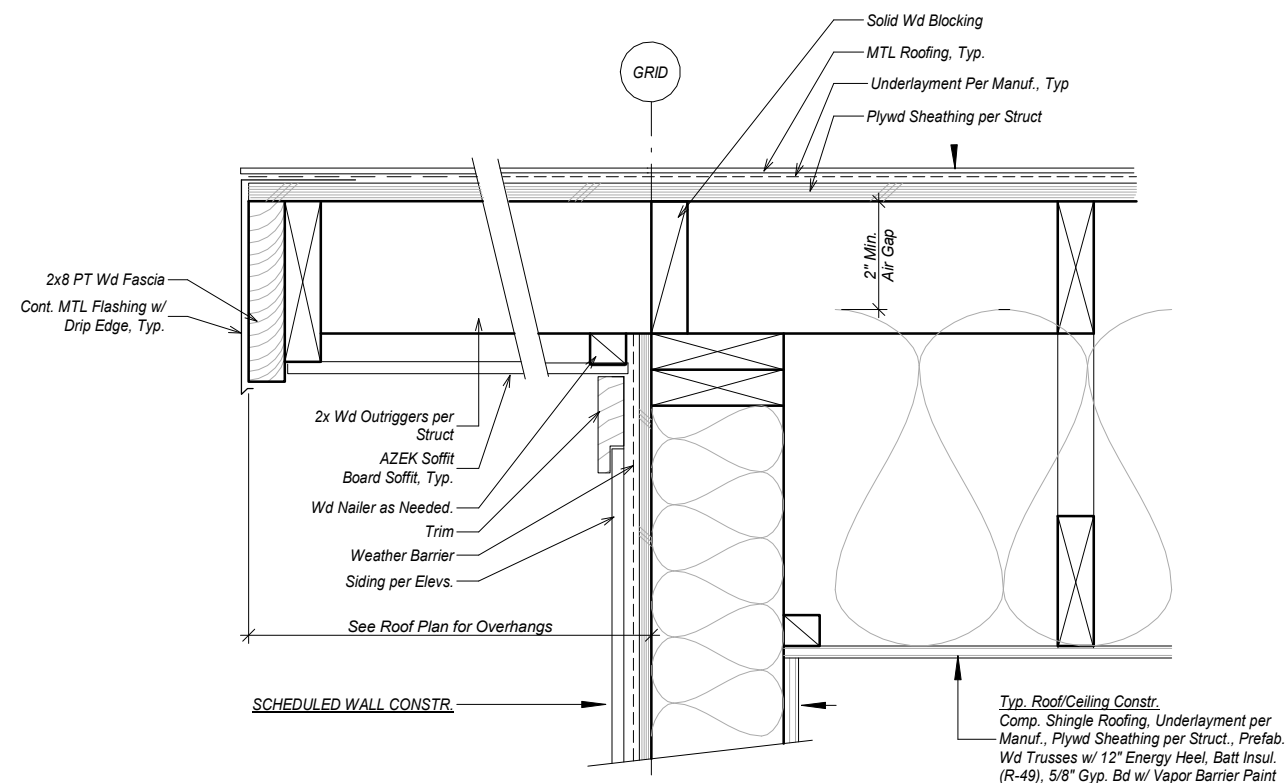
SHEET DESCRIPTION:  
Wall Sections

**A502**

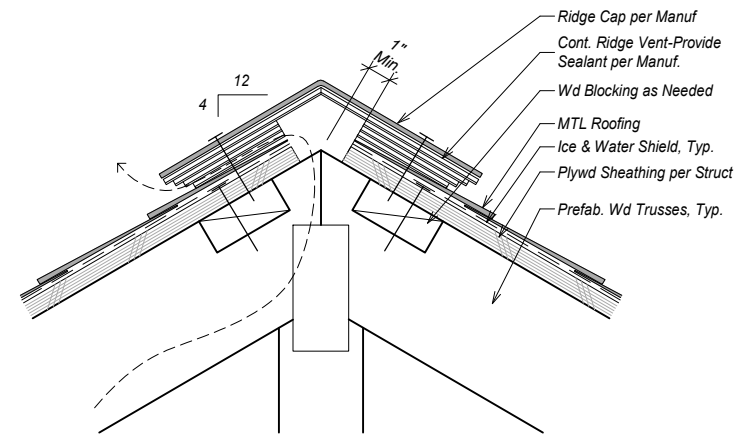
SHEET:  
26 of xx



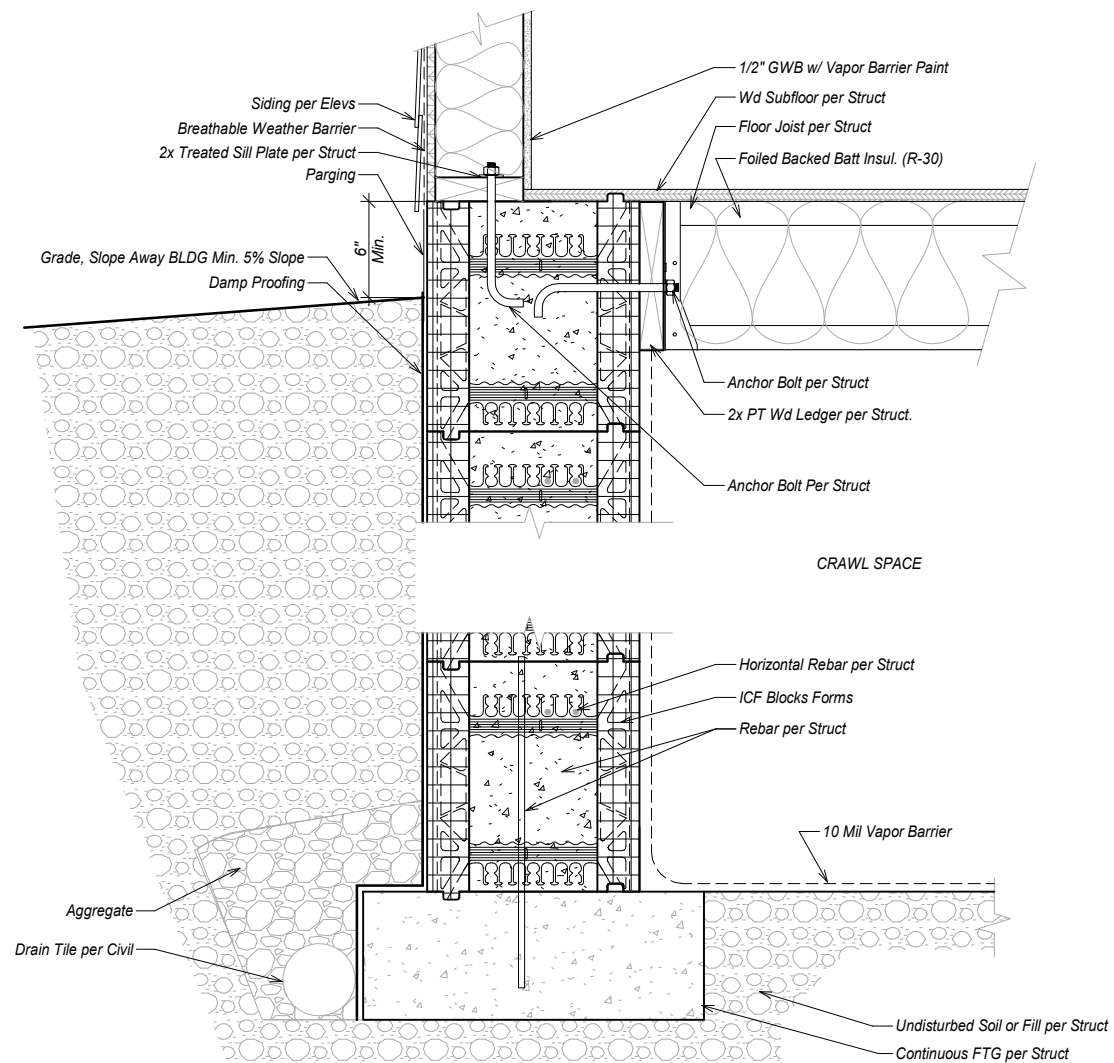
**1** **Typ. Eave Detail**  
1 1/2" = 1'-0"



**2** **Typ. Rake Detail**  
1 1/2" = 1'-0"



**3** **Typ. Ridge Detail**  
1 1/2" = 1'-0"



**4** **Typ. Foundation Detail**  
1" = 1'-0"

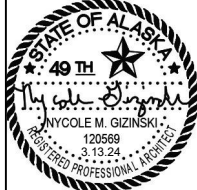
REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

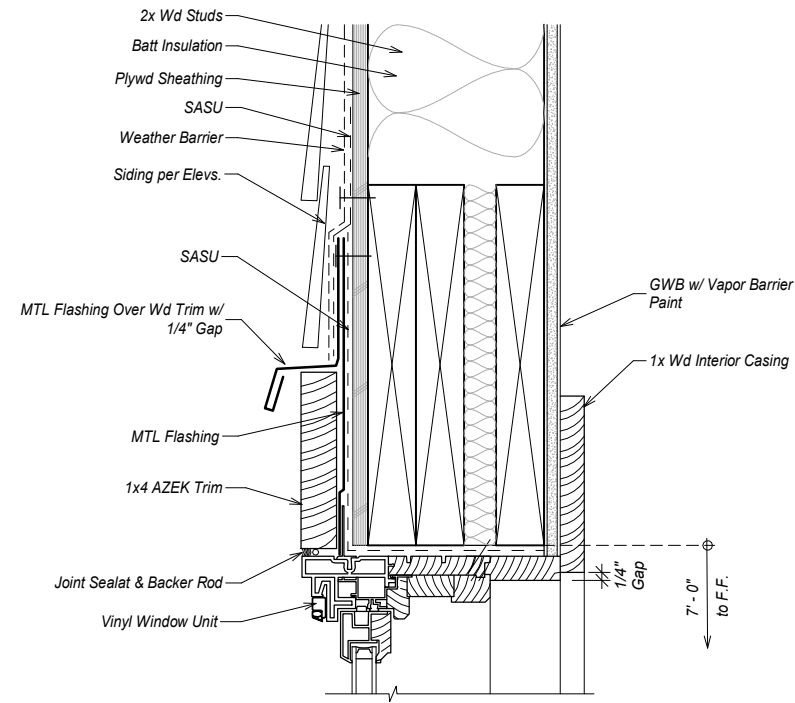
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



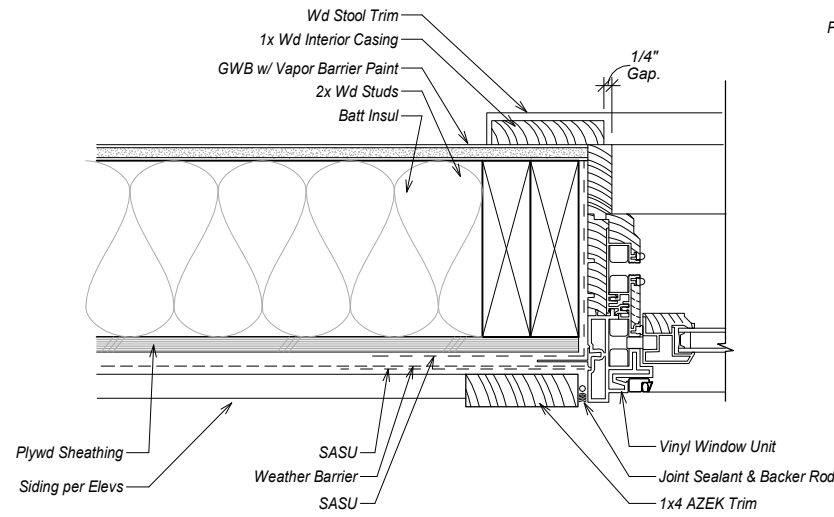
SHEET DESCRIPTION:  
Details

**A700**

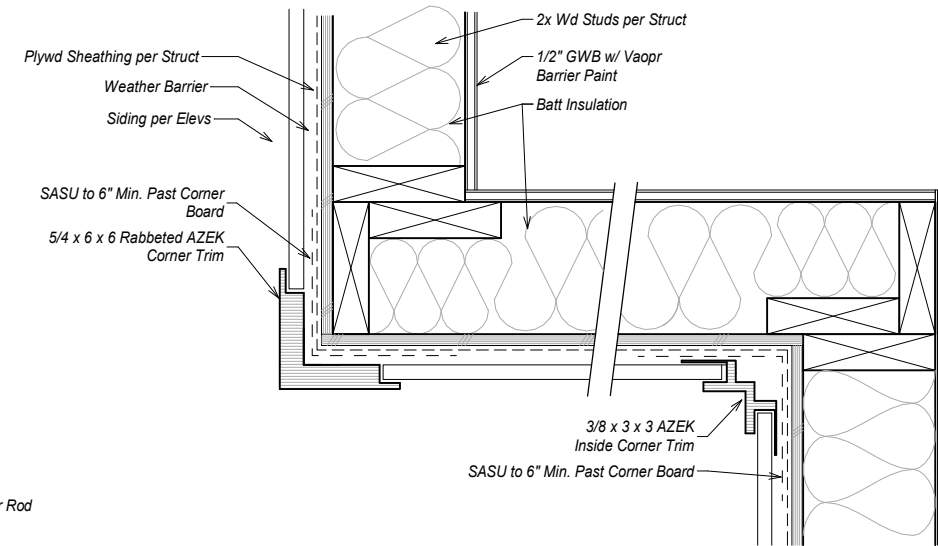
SHEET:  
27 of xx



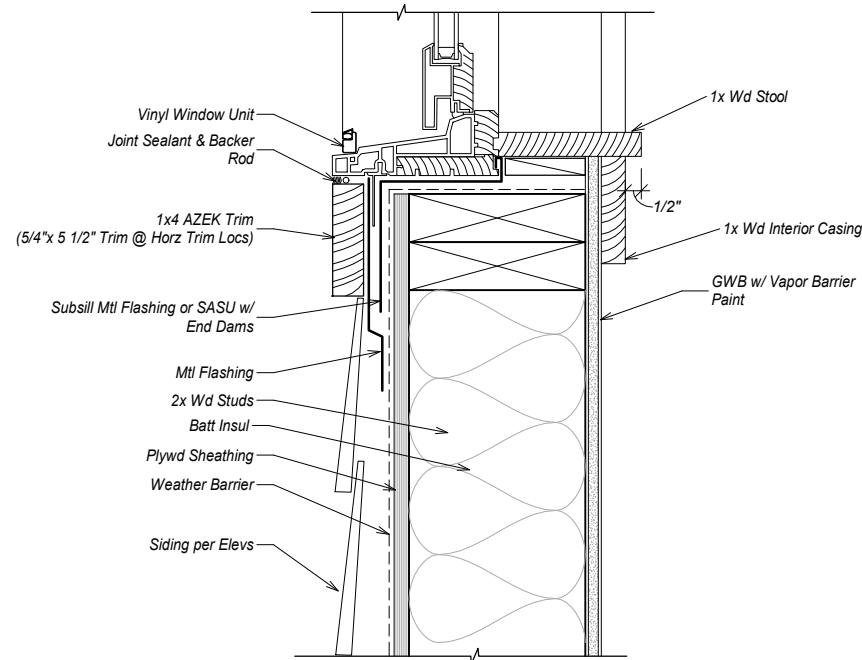
**1 Typ. Window Head**  
1:6



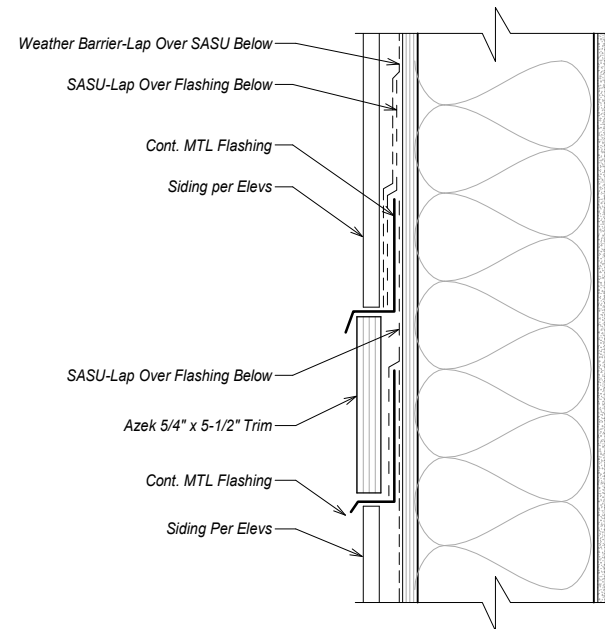
**2 Typ. Window Jamb**  
1:6



**3 Typ. Corner Detail**  
1 1/2" = 1'-0"



**4 Typ. Window Sill**  
1:6



**5 Typ. Siding Transition Detail**  
1:6

REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com

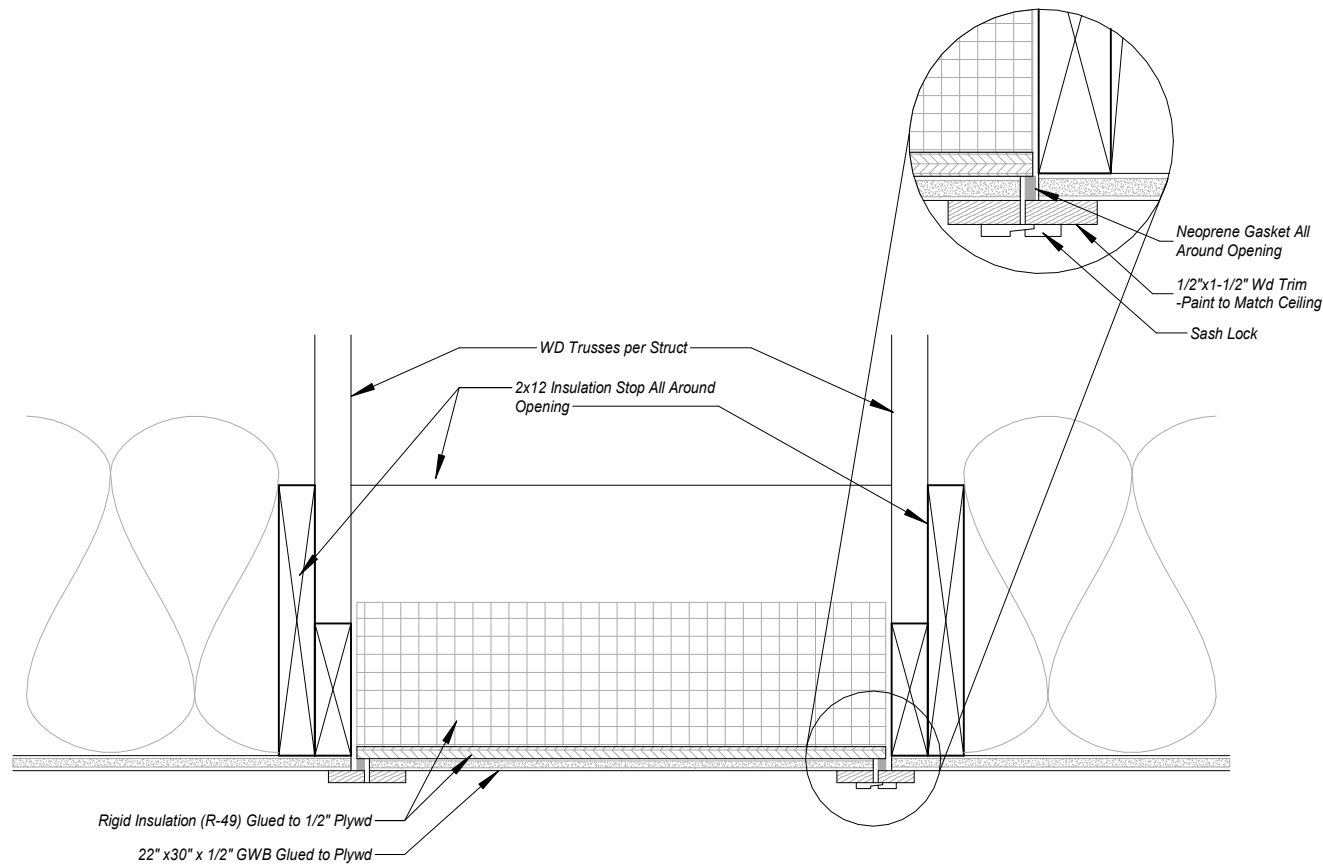


SHEET DESCRIPTION:  
Details

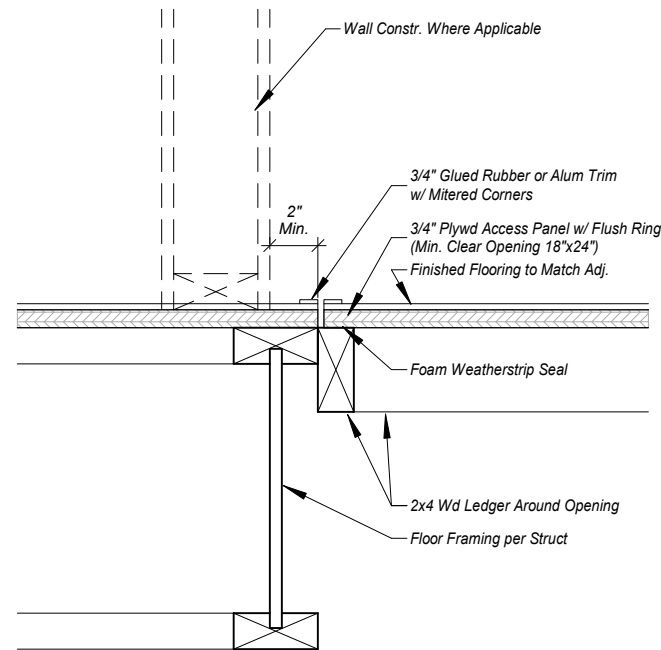
**A701**

SHEET:  
28 of xx

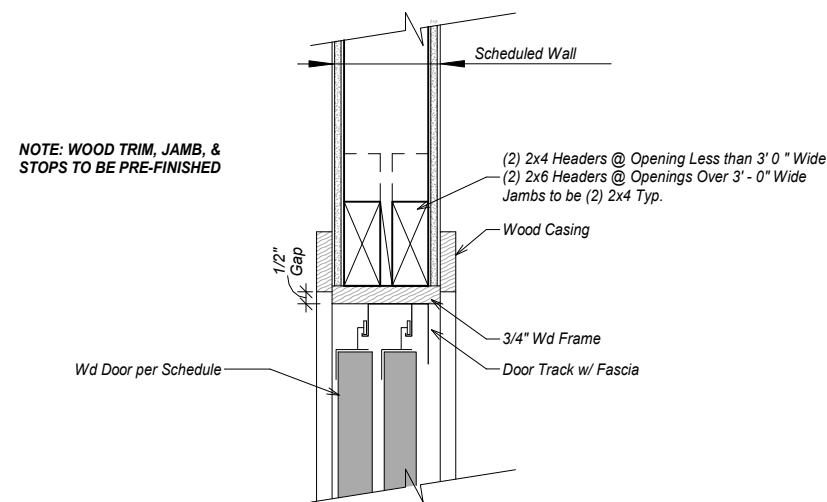




**1 Attic Access Hatch**  
1 1/2" = 1'-0"



**2 Crawl Space Access**  
1 1/2" = 1'-0"



**3 By-Pass Door Head**  
1 1/2" = 1'-0"

REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:

**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



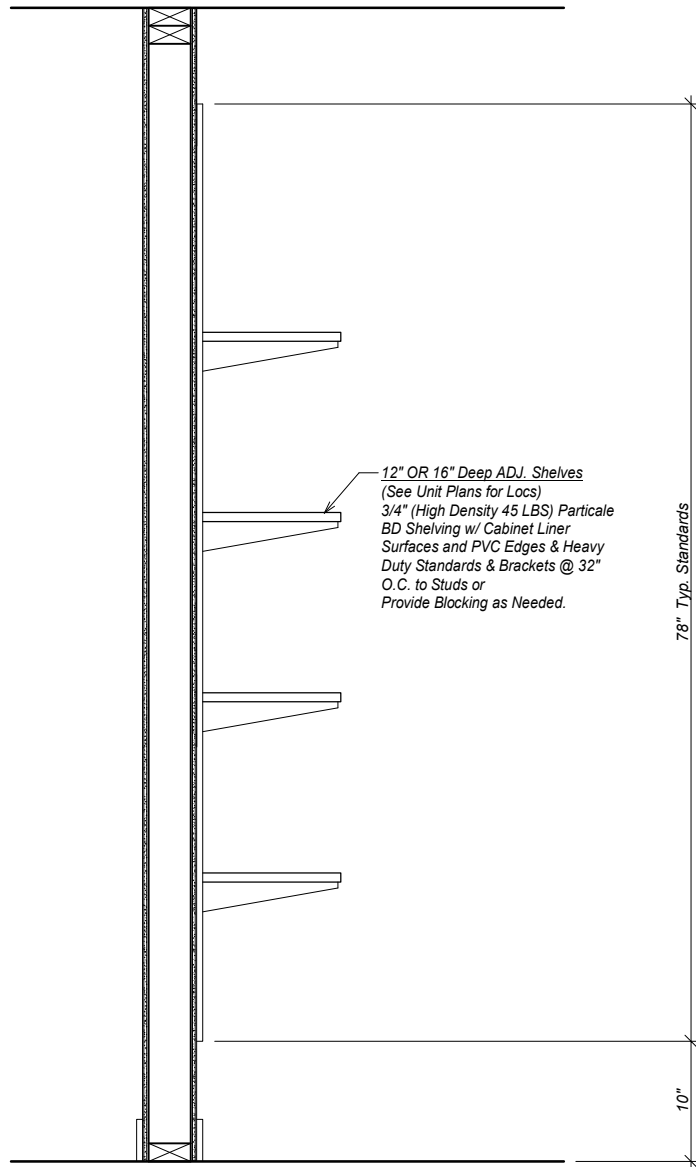
SHEET DESCRIPTION:

Interior Details

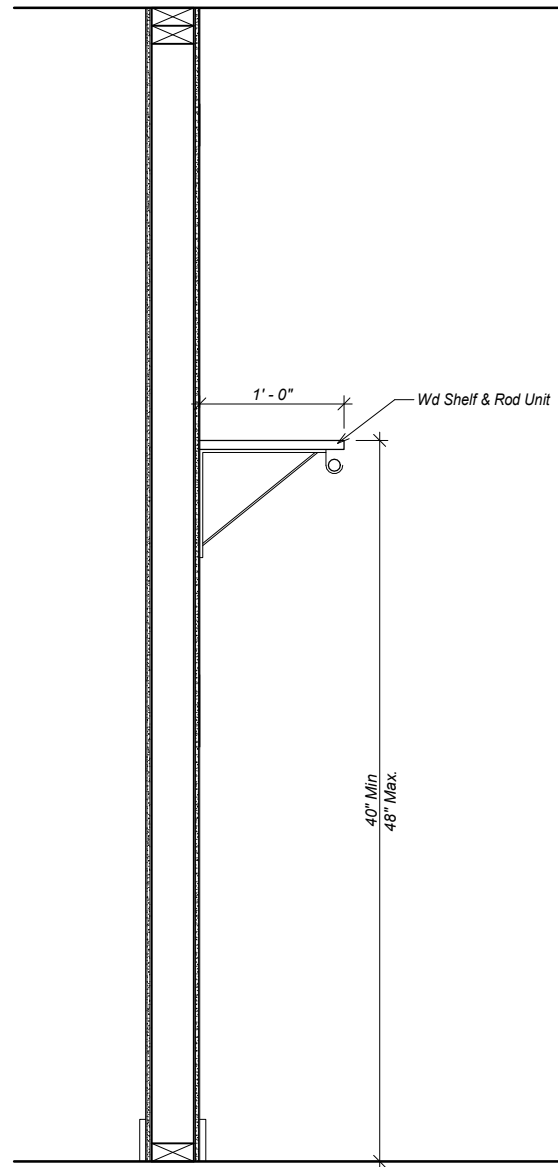
**A702**

SHEET:

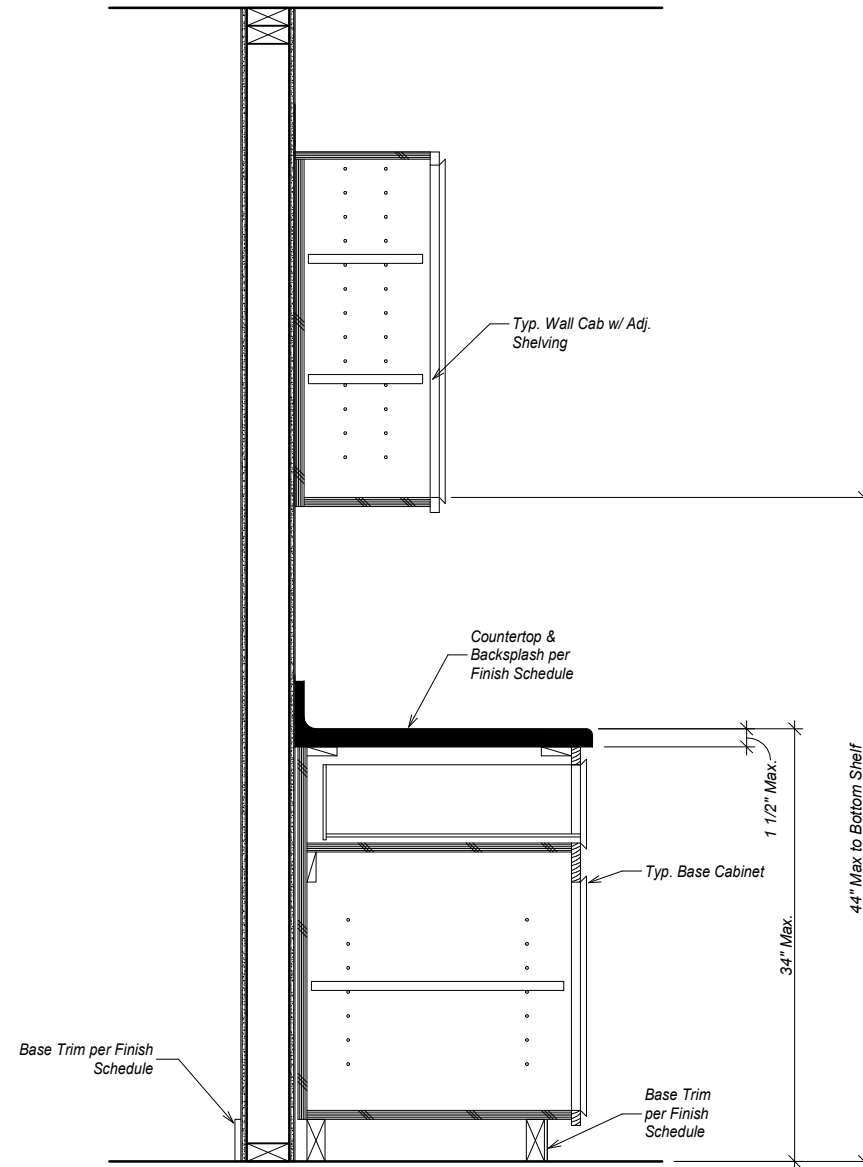
29 of xx



**1** **Typ. Adj. Wood Shelving**  
3/4" = 1'-0"



**2** **Typ. Closet Shelf & Rod**  
3/4" = 1'-0"



**3** **Typ. Casework**  
3/4" = 1'-0"

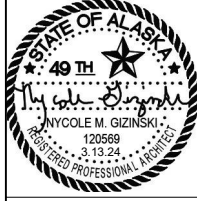
REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Interior Details

**A703**

SHEET:  
30 of xx

## GENERAL STRUCTURAL NOTES

### GENERAL

**BUILDING CODE:** ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION.

**STANDARDS:** REFERENCE TO ASTM AND OTHER STANDARDS SHALL MEAN THE LATEST EDITION IN EFFECT ON THE BID DATE, UNLESS NOTED IN THESE DOCUMENTS OR DESIGNATED BY THE GOVERNING CODE.

### LOADS AND CRITERIA

GRAVITY: IN ADDITION TO THE SELF WEIGHT, THE FOLLOWING WERE USED FOR DESIGN:

AREA	UNIFORM LIVE LOAD (PSF)
RESIDENTIAL AREAS	40
COMMON AREAS	100

### SNOW DESIGN DATA:

GROUND SNOW LOAD	P <sub>g</sub> = 55 PSF
FLAT-ROOF SNOW LOAD	P <sub>f</sub> = 40 psf
SNOW EXPOSURE FACTOR	C <sub>e</sub> = 0.9
SNOW LOAD IMPORTANCE FACTOR	I <sub>s</sub> = 1.0
THERMAL FACTOR	C <sub>t</sub> = 1.0
RAIN-ON-SNOW SURCHARGE	= 0 PSF
SLOPED ROOF SNOW LOAD	P <sub>s</sub> = 40 PSF

### WIND DESIGN DATA (GOVERNS DESIGN OF LATERAL FORCE RESISTING SYSTEM):

BASIC WIND SPEED (3-SECOND GUST)	V = 149 MPH
WIND RISK CATEGORY	I <sub>w</sub> = II
SURFACE ROUGHNESS	= B
EXPOSURE CATEGORY	= D
INTERNAL PRESSURE COEFFICIENT	GC = 0.18 : ENCLOSED
COMPONENT AND CLADDING PRESSURE	P <sub>ri</sub> = +/- 41 PSF

### SEISMIC DESIGN DATA

MAPPED SPECTRAL RESPONSE	S <sub>s</sub> = 0.475 %g
SPECTRAL RESPONSE COEFFICIENTS	S <sub>1</sub> = 0.32 %g
	S <sub>ds</sub> = 0.34 %g
	S <sub>d1</sub> = 0.29 %g
SEISMIC DESIGN CATEGORY	D

SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION OF THESE ITEMS:

CONCRETE MIX DESIGN	ROOF TRUSSES
CONCRETE REINFORCING	JOIST FRAMING

CONTRACTOR SHALL REVIEW AND STAMP SUBMITTALS PRIOR TO SUBMISSION. IF SHOP DRAWINGS DIFFER FROM DESIGN SHOWN ON STRUCTURAL DRAWINGS, THEY SHALL BE SEALED BY THE ALASKA STATE REGISTERED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN. DIMENSIONS AND QUANTITIES ARE CONTRACTOR'S RESPONSIBILITY AND WILL NOT BE REVIEWED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS PLACED PRIOR TO RECEIPT OF REVIEWED SUBMITTALS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR REVIEW.

NOTE:  
SUBMIT TRUSS CALCULATIONS AND LAYOUT PLAN TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO SUBMITTAL TO CITY. PLANS AND CALCULATIONS TO BE APPROVED BY CITY PRIOR TO REQUESTING FRAME INSPECTION.

SOIL BEARING PRESSURE: 3000 PSF (IBC TABLE 1804.2)  
SOIL BEARING IS BASED ON THREE TEST PITS EXCAVATED TO THE NATIVE BEACH GRAVEL WHICH CONFIRMED THE SITE WAS FILLED WITH SHOT ROCK FILL.

SPECIAL INSPECTION  
CONTRACTOR SHALL PROVIDE SPECIAL INSPECTION FOR THE FOLLOWING:  
SOIL SUBGRADE  
GENERAL FRAMING  
REBAR PLACEMENT  
CONCRETE PLACEMENT  
STRUCTURAL HOLD DOWNS  
ROCK BOLTS (SEE NOTE BELOW)  
SUMMARY OF BUILDING INSPECTION (PUR-102)

### CONCRETE

**REFERENCE STANDARDS:** CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE FOLLOWING DOCUMENTS, EXCEPT AS MODIFIED BELOW:

ACI 301	"STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE"
ACI 318	"BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
ACI 304	"GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE"
ACI 311	"GUIDE FOR CONCRETE INSPECTION"

### MATERIALS:

CEMENT	ASTM C150, C595
AGGREGATE	ASTM C33
ADMIXTURES	ASTM C260, C494, & C1017
FLY ASH	ASTM C618, CLASS "F" OR "C"

AGGREGATES THAT EXHIBIT DELETERIOUS ACTIVITY WHEN EVALUATED IN ACCORDANCE WITH ASTM C33 APPENDIX XI SHALL NOT BE USED. SAND EQUIVALENT FOR FINE AGGREGATE SHALL NOT EXCEED 75.

MAXIMUM LOSS ON IGNITION SHALL BE 1%.

CONCRETE SHALL BE PROPORTIONED TO ACHIEVE A WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. MIX DESIGNS SHALL BE SUBMITTED FOR REVIEW PRIOR TO USE. COMPLY WITH IBC SECTION 1905. MIXES SHALL MEET OR EXCEED THE FOLLOWING CRITERIA:

TYPE OF CONSTRUCTION	COMPRESSIVE STRENGTH (f <sub>c</sub> )	TEST AGE	MAXIMUM WATER/CEMENT RATIO
FOOTINGS, TOPPING SLABS, RETAINING AND FOUNDATION WALLS, CONCRETE ON METAL DECK, WALLS	4,000 PSI	28 DAYS	0.50

ADMIXTURES: ALL CONCRETE, INCLUDING SLAB ON GRADE, SHALL HAVE A WATER-REDUCING ADMIXTURE COMPLYING WITH ASTM C-494 ADDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CALCIUM CHLORIDE OR OTHER CHLORIDE ADMIXTURES SHALL NOT BE USED.

ALL HORIZONTAL SURFACE EXPOSED TO WEATHER SHALL CONTAIN AN AIR-ENTRAINING AGENT COMPLYING WITH ASTM C260. THE AMOUNT OF ENTRAINED AIR SHALL BE 5% +/- 1 1/2% BY VOLUME. TESTS FOR AIR CONTENT SHALL BE MADE AT THE DISCHARGE END OF THE PLACING HOSE IN ACCORDANCE WITH ASTM C173.

WATER/CEMENT RATIO SHALL BE MEASURED BY WEIGHT AND BE BASED ON TOTAL CEMENTITIOUS MATERIAL, INCLUDING CEMENT AND POZZOLANS SUCH AS FLY ASH AND SILICA FUME.

MAXIMUM AGGREGATE SIZE SHALL BE 1 1/2". BUT NOT MORE THAN 3/4 TIMES THE CLEAR DISTANCE BETWEEN REINFORCING BARS NOR 1/5 TIMES THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS. MAXIMUM AGGREGATE SIZE FOR SLABS ON GRADE SHALL BE 1/3 TIMES THE SLAB THICKNESS.

SLUMP REQUIRED FOR PROPER PLACEMENT SHALL BE DETERMINED BY CONTRACTOR AND SUPPLIER, AND INCLUDED IN MIX DESIGN SUBMITTALS. FIELD MEASURED SLUMP SHALL CONFORM TO SUBMITTED CONCRETE MIX DESIGN. SLUMP SHALL CONFORM TO ASTM C94.

EMBEDDED ITEMS: CONDUIT AND SLEEVES SHALL NOT BE EMBEDDED IN OR PASS THROUGH CONCRETE WITHOUT APPROVAL. ALUMINUM ITEMS SHALL NOT BE EMBEDDED IN CONCRETE. SUBMIT CONDUIT LAYOUTS AND EMBEDDED ITEM PLANS FOR REVIEW PRIOR TO PLACING CONCRETE.

CONSTRUCTION JOINTS IN WALLS SHALL BE KEYED IN ACCORDANCE WITH TYPICAL CONSTRUCTION JOINT DETAILS SHOWN ON DRAWINGS OR, AT CONTRACTOR'S OPTION, SHALL BE AN INTENTIONALLY ROUGHENED CONSTRUCTION JOINT DEFINED BY THE FOLLOWING:

1. SURFACE OF JOINT SHALL BE SAND BLASTED OR ROUGHENED WITH A CHIPPING HAMMER TO EXPOSE AGGREGATE EMBEDDED IN PREVIOUS POUR.
2. EXPOSED AGGREGATE SHALL BE CLEANED AND LAITANCE REMOVED.
3. JOINT SURFACE SHALL BE CLEANED AND LAITANCE REMOVED.
4. JOINT SHALL BE WETTED AND STANDING WATER REMOVED IMMEDIATELY BEFORE NEW CONCRETE IS PLACED.

CONSTRUCTION JOINTS WHEN REQUIRED SHALL BE IN ACCORDANCE WITH ACI 6.4. SUBMIT JOINT LAYOUT PLAN FOR REVIEW PRIOR TO PLACING CONCRETE.

### CONCRETE REINFORCEMENT

**REFERENCE STANDARDS:** CONCRETE REINFORCEMENT SHALL CONFORM TO ALL REQUIREMENTS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS, EXCEPT AS MODIFIED BELOW:

ACI 301
ACI SP-66
ACI 318
CRSI
CRSI
WRI

### MATERIALS:

DEFORMED BARS	ASTM A615, GRADE 60
SMOOTH WELDED WIRE	ASTM A185, 65 KSI YIELD
BAR SUPPORTS	CONFORM TO CHAPTER 3, CRSI MSP-1

REINFORCING STEEL SHALL BE PLACED AND SUPPORTED IN ACCORDANCE WITH CRSI MSP-1. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI SP-66. NO BENDING OR STRAIGHTENING OF REINFORCEMENT WILL BE PERMITTED AFTER PARTIAL EMBEDMENT IN CONCRETE.

LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH THE SECTIONS AND DETAILS. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 1 CROSS WIRE SPACING + 2" OR 8" WHICHEVER IS GREATER.

BAR SIZE	#4	#5
L	30"	37.5"
L <sub>p</sub> 18"	22.5"	

WELDING OR TACK WELDING OF REINFORCING BARS TO OTHER BARS OR TO PLATES, ANGLES, ETC IS PROHIBITED, EXCEPT WHERE SPECIFICALLY APPROVED. WHERE WELDING IS APPROVED, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E9018 ELECTRODES. WELDING PROCEDURES SHALL COMPLY WITH AWS-D1.4.

CONCRETE COVER: UNLESS NOTED OTHERWISE, MINIMUM COVER FOR REINFORCING SHALL BE:

ELEVATED SLABS	3/4" (1" AT FIRE-RESISTIVE RATING ≥ 2 HOURS)
SLABS ON GRADE	2" BOTTOM
INTERIOR WALL FACES	3/4"
EXPOSED FORMED WALL FACES	1 1/2" (#5 AND SMALLER), 2" (#6 & LARGER)
FOOTINGS	3" (2" TOP AND FORMED SIDES)
BEAMS, COLUMNS	1 1/2" (TO TIES, SPIRALS, STIRRUPS)

FIBROUS REINFORCEMENT: POLYPROPYLENE FIBROUS REINFORCEMENT ("FIBERMESH", "GRACE FIBERS", OR APPROVED EQUAL) SHALL BE USED WHERE NOTED ON THE DRAWINGS. SUBMIT PROPOSED PRODUCT DATA AND SPECIFICATIONS FOR REVIEW. ADD FIBERS TO CONCRETE MIX AND FINISH IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. COMPLY WITH ASTM C116, TYPE III, PERFORMANCE LEVEL 1. MINIMUM APPLICATION RATE SHALL BE 1.5 LB/CY.

### ANCHORAGE

POST-INSTALLED ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND NOTED ICC-ES REPORTS. SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC-ES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. ALLOWABLE EPOXY PRODUCTS INCLUDE HILTI HY-150 OR APPROVED EQUAL.

NO REINFORCING BARS SHALL BE CUT TO INSTALL ANCHORS. ALL DEFECTIVE ANCHOR HOLES SHALL BE GROUTED WITH EPOXY ADHESIVE AND A NEW HOLE DRILLED A MINIMUM OF 3 BOLT DIAMETERS AWAY.

### WOOD

**REFERENCE STANDARDS:** WOOD FRAMING SHALL CONFORM TO ALL REQUIREMENTS OF THE FOLLOWING DOCUMENTS, EXCEPT AS MODIFIED BELOW:

AITC
AF & PA

PLYWOOD: WOOD STRUCTURAL PANELS SHALL CONFORM TO REQUIREMENTS OF U.S. DEPARTMENT OF COMMERCE PS-1 OR PS-2. EACH PANEL SHALL BEAR THE AMERICAN PLYWOOD ASSOCIATION (APS) GRADE MARK. SEE DRAWINGS FOR GRADE AND THICKNESS.

SHEATHING: UNLESS NOTED OTHERWISE, ROOF AND FLOOR PANELS SHALL BE INSTALLED WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS AND CONTINUOUS OVER 2 OR MORE SPANS. PLACE NAILS 3/8" FROM PANEL ENDS AND EDGES. DRIVE ALL NAILS FLUSH WITH SHEATHING SURFACE.

USE	SIZE	SPECIES	GRADE
WALL STUDS	2x 3x	HEM-FIR	#2
SILL PLATES	2x 3x	HEM-FIR	#2
JOISTS	2x	HEM-FIR	#2
JOISTS	3x 4x	HEM-FIR	#2
BEAMS/POSTS	4x	HEM-FIR	#2
BEAMS/POSTS	6x	HEM-FIR	#1
T&G DECKING	2x	HEM-FIR	#2

GLUE LAMINATED MEMBERS (GLULAMS) SHALL BE FABRICATED IN CONFORMANCE WITH U.S. PRODUCT STANDARD PS 58-73 AND AITC STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER OF SOFTWOOD SPECIES, MANUFACTURING REQUIREMENTS AITC 117-93. EACH MEMBER SHALL BEAR AN AITC OF CONFORMANCE. GLULAMS SHALL BE ARCHITECTURAL GRADE WITH STRENGTH GRADES AS NOTED BELOW:

BEAMS: 24F-E11 (F<sub>b</sub>=2400 PSI, F<sub>v</sub>=195 PSI, E=1800 KSI)

ENGINEERED WOOD JOISTS: DESIGN SHOWN ON DRAWINGS IS BASED ON JOISTS MANUFACTURED BY BOISE CASCADE. SUBSTITUTES SHALL BE SUBMITTED WITH A CURRENT ICC-ES EVALUATION REPORT AND AN ITEMIZED SUBSTITUTION LIST FOR APPROVAL. JOIST SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL NECESSARY ACCESSORIES, SUCH AS BRIDGING, BLOCKING AND STIFFENERS, SHALL BE FURNISHED BY THE MANUFACTURER.

ENGINEERED LUMBER: DESIGN SHOWN ON DRAWINGS IS BASED ON LUMBER MANUFACTURED BY BOISE CASCADE. SUBSTITUTES SHALL BE SUBMITTED WITH A CURRENT ICC-ES EVALUATION REPORT AND AN ITEMIZED SUBSTITUTION LIST FOR APPROVAL.

CONNECTORS: DESIGN SHOWN ON DRAWINGS IS BASED ON CONNETEERS MANUFACTURED BY SIMPSON STRONG-TIE IN ACCORDANCE WITH CATALOG C-2004. SUBSTITUTES SHALL BE SUBMITTED WITH A CURRENT ICC-ES EVALUATION REPORT AND AN ITEMIZED SUBSTITUTION LIST FOR APPROVAL. CONNECTORS SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS.

NAILING NOT SHOWN SHALL BE AS SHOWN IN IBC TABLE 2304.9.1 OR CURRENT ICC-ES REPORT NER-272. MINIMUM NAIL DIMENSIONS SHALL BE AS FOLLOWS:

SIZE	DIAMETER	LENGTH
6d	0.113"	2"
8d	0.131"	2 1/2"
10d	0.148" 3"	
12d	0.148" 3 1/4"	
16d	0.162" 3 1/2"	
20d	0.192" 4"	

BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307.

WOOD PROTECTION: ALL WOOD MEMBERS EXPOSED TO WEATHER AND SPECIFIED AS "PT" ON THE DRAWINGS SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE. FASTENERS IN TREATED WOOD SHALL BE HOT DIPPED ZINC COATED GALVANIZED PER ASTM A153, STAINLESS STEEL, SILICON BRONZE OR COPPER.

FLOOR FRAMING: ALL FLOOR FRAMING TO HAVE A MINIMUM LIVE LOAD DEFLECTION LIMIT OF L/480.

REVISIONS:

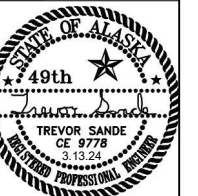
THRHA - Craig Senior Center  
PHASE 1

STATUS:

**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: ISS  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



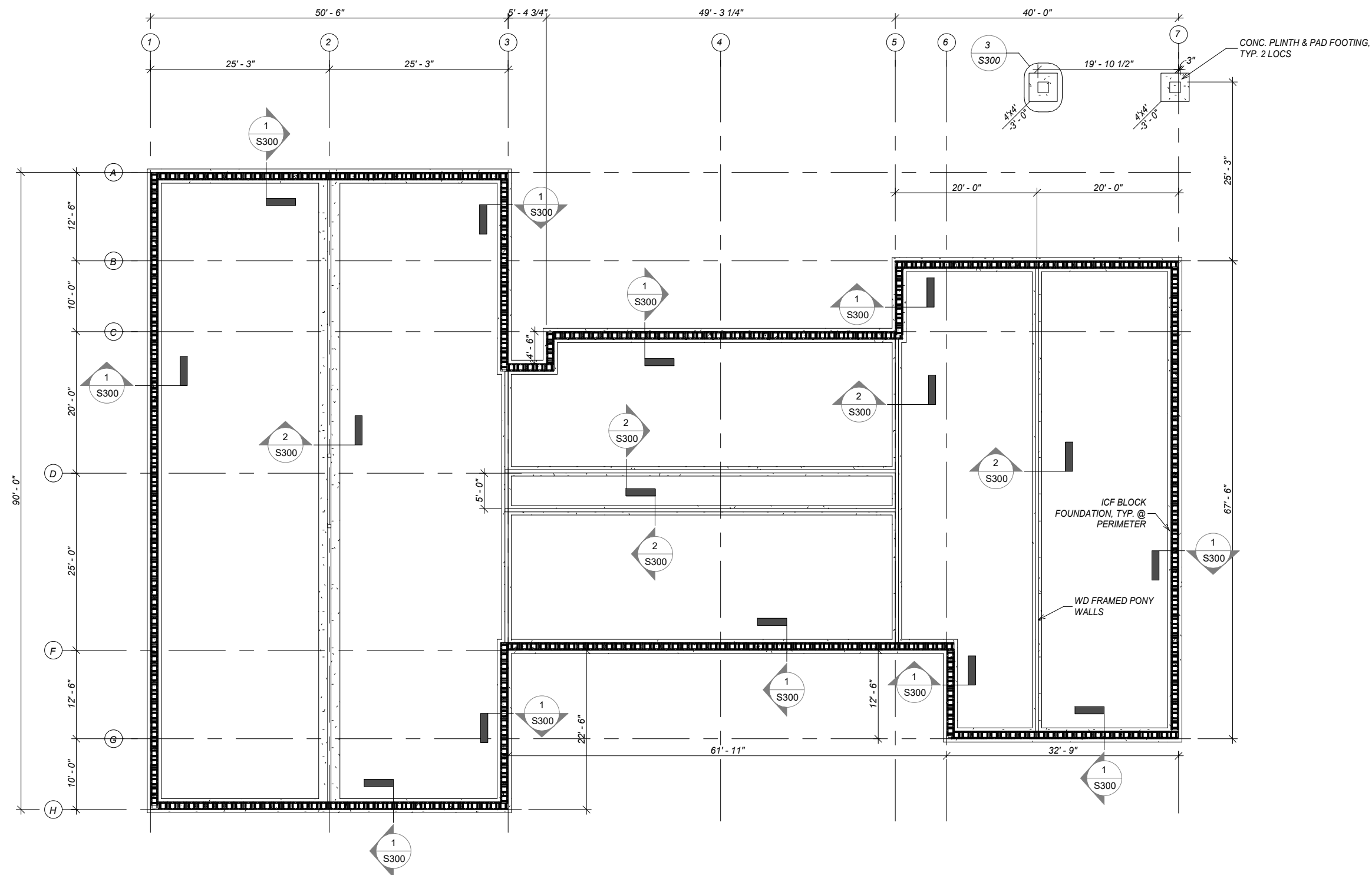
SHEET DESCRIPTION:

Structural Notes

**S100**

SHEET:

31 of xx



**1 Foundation Plan**  
 1/16" = 1'-0"

REVISIONS:


**THRHA - Craig Senior Center  
 PHASE 1**

STATUS:  
**CONSTRUCTION  
 DRAWINGS**

DRAWN BY: NMG  
 CHECKED BY: TSS  
 DATE: 3.13.24  
 PROJECT #: 222321.02

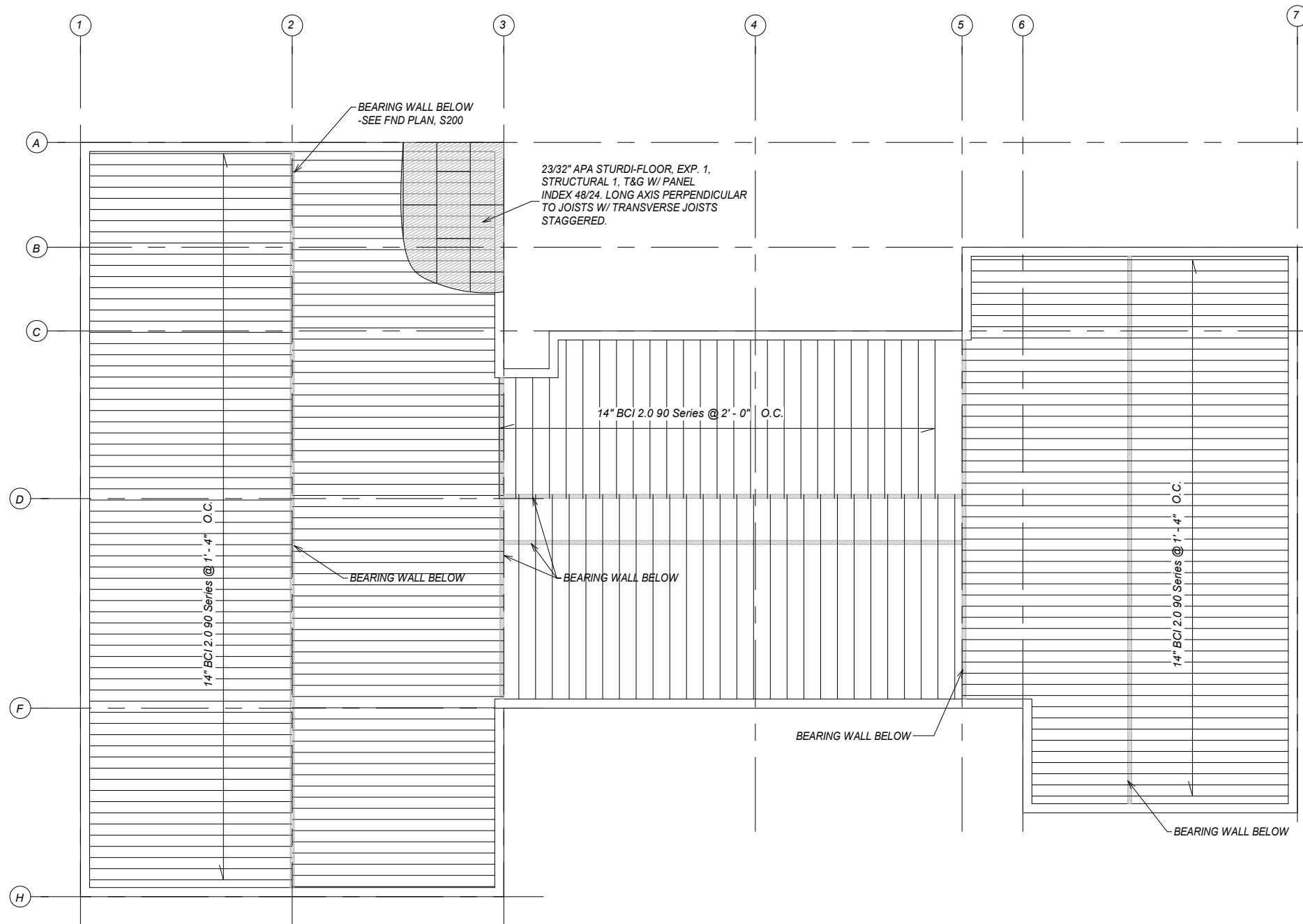
**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



SHEET DESCRIPTION:  
 Foundation Plan

**S200**

SHEET:  
 32 of xx



**1 Main Level Floor Framing Plan**  
 1/16" = 1'-0"

REVISIONS:


**THRHA - Craig Senior Center  
 PHASE 1**

STATUS:  
**CONSTRUCTION  
 DRAWINGS**

DRAWN BY: NMG  
 CHECKED BY: TSS  
 DATE: 3.13.24  
 PROJECT #: 222321.02

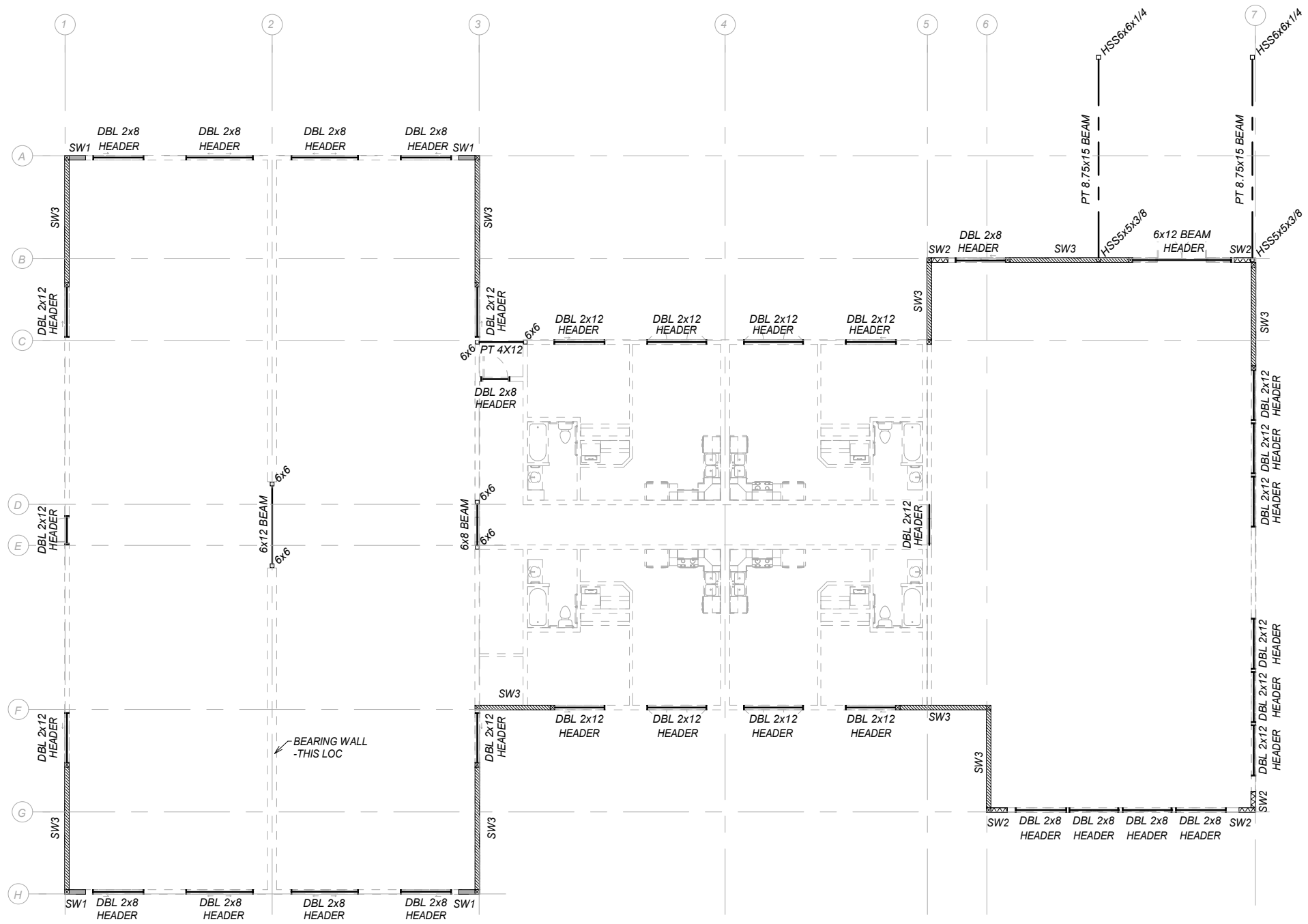
**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



SHEET DESCRIPTION:  
 Main Floor Framing Plan

**S201**

SHEET:  
 33 of xx



**SHEARWALL SCHEDULE**

**SW1** SIMPSON STRONG WALL - SSW24X8

**SW2** SIMPSON STRONG WALL - SSW24X11

**SW3** 15/32" CDX STRUCTURAL SHEATHING ONE SIDE. FASTENERS TO BE 10d WITH 1-1/2" PENETRATION INTO FRAMING. OUTSIDE PANEL NAILING TO BE 4". INTERIOR SPACING TO BE 12". MIN 4x6 AT EACH END OR AS NOTED WITH SIMPSON HDU5-SDS2.5. SILL PLATE BOLTS TO BE 5/8" @ 24" O.C., SILL PLATE BOLTS AT NON SHEARWALLS LOCATIONS TO BE 5/8" @ 48" O.C.

**NOTES:**

- FLOOR SHEATHING SHALL BE 23/32" APA STURDI-FLOOR, EXP. 1, STRUCTURAL 1, T&G W/ PANEL INDEX 48/24. LONG AXIS PERPENDICULAR TO JOISTS W/ TRANSVERSE JOISTS STAGGERED.
- BEARING WALLS SHALL BE 2"x6" LUMBER BEAMS, SET @ 16" O.C., UNLESS OTHERWISE NOTED.
- INTERIOR WALL SHALL BE 2"x4" LUMBER BEAMS, SET AT 16" O.C., UNLESS OTHERWISE NOTED.
- FLOOR TO FLOOR STRAPPING TO BE SIMPSON CMST12, CLEAR SPAN +90°, ON 8" CENTERS ALONG THE EXTERIOR WALLS.
- ALL BEAMS MUST HAVE MINIMUM BEARING LENGTH OF 3"
- INTERIOR HEADERS LOCATED W/IN A NON-BEARING WALL SHALL CONSIST OF A (2) 2x8 HEADER SUPPORTED BY A (1) 2x (MIN.) JACK STUD @ BOTH ENDS.
- CONTRACTOR TO VERIFY HANGER DIMENSION AND CONFIGURATIONS WITH SIMPSON PRIOR TO CONSTRUCTION. ADDITIONALLY, ALL JOIST HANGERS AND BEAM SUPPORTS SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

**1 Header & Shearwall Plan**  
1/16" = 1'-0"

REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: TSS  
DATE: 3.13.24  
PROJECT #: 222321.02

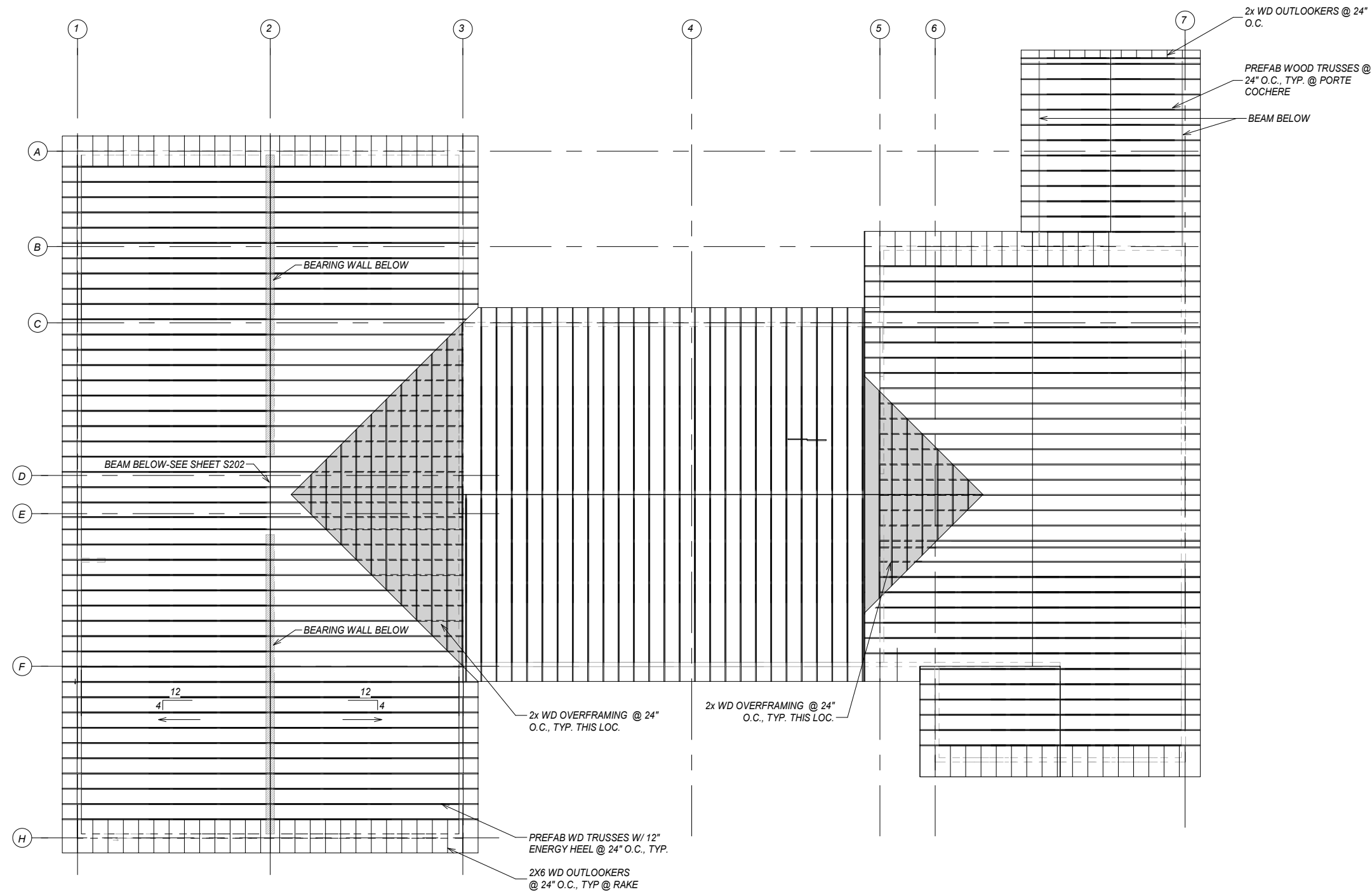
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Header & Shearwall Plan

**S202**

SHEET:  
34 of xx



**1 Roof Framing Plan**  
1/16" = 1'-0"

**ROOF SHEATHING**  
19/32" APA CDX RATED SHEATHING w/ PANEL INDEX 40/20, EXTERIOR GLUE. LONG AXIS PERPENDICULAR TO TRUSSES w/ TRANSVERSE JOINTS STAGGERED. BLOCK DIAPHRAGM AT PANEL EDGES WITHIN 8' OF ENDWALLS AND SHEARWALLS. BLOCK WITH FLAT 2x6 AT EVERY PANEL EDGE, 6" EXTERIOR NAIL SPACING.

REVISIONS:


**THRHA - Craig Senior Center  
PHASE 1**

STATUS:  
**CONSTRUCTION  
DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: TSS  
DATE: 3.13.24  
PROJECT #: 222321.02

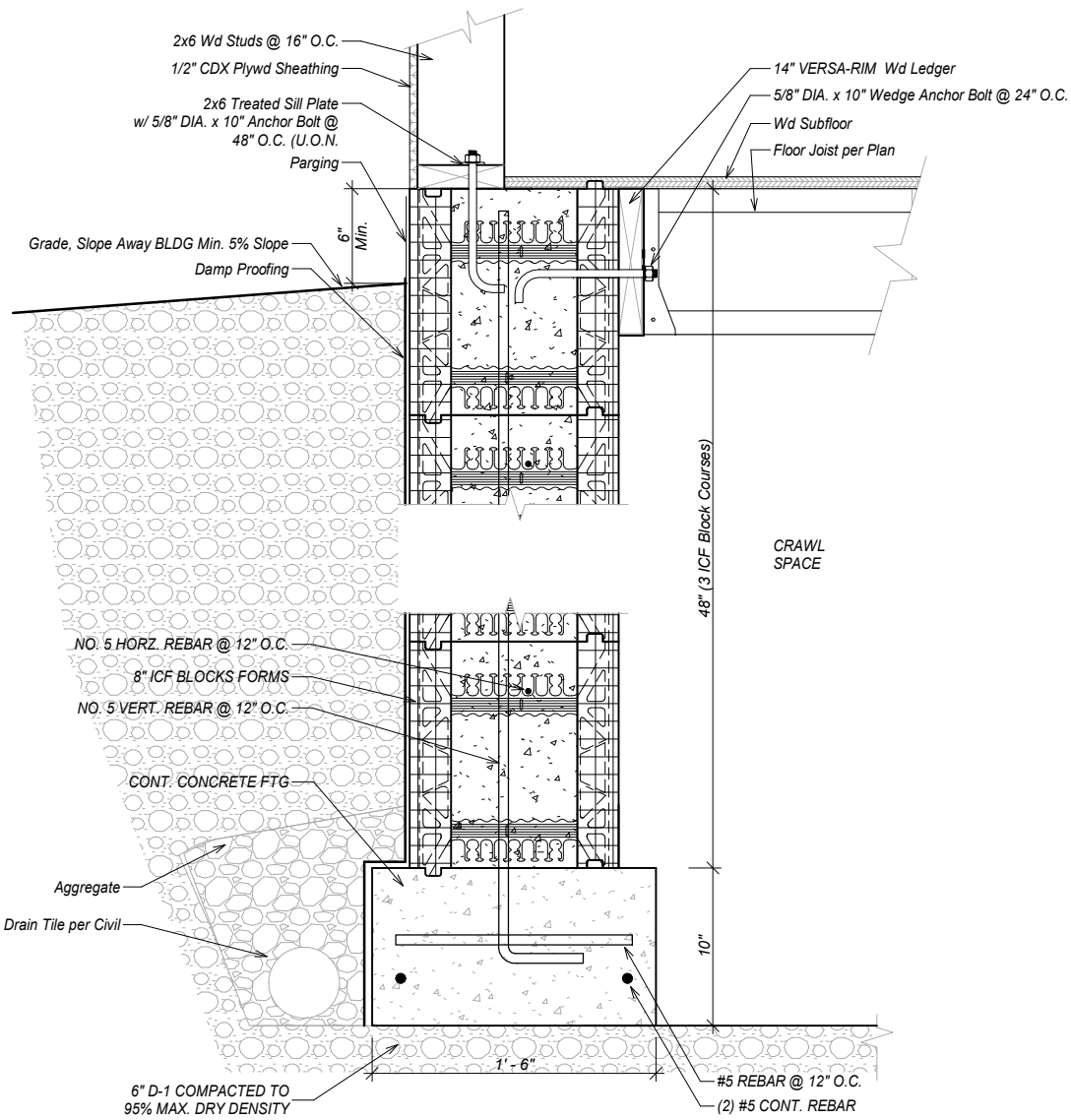
**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



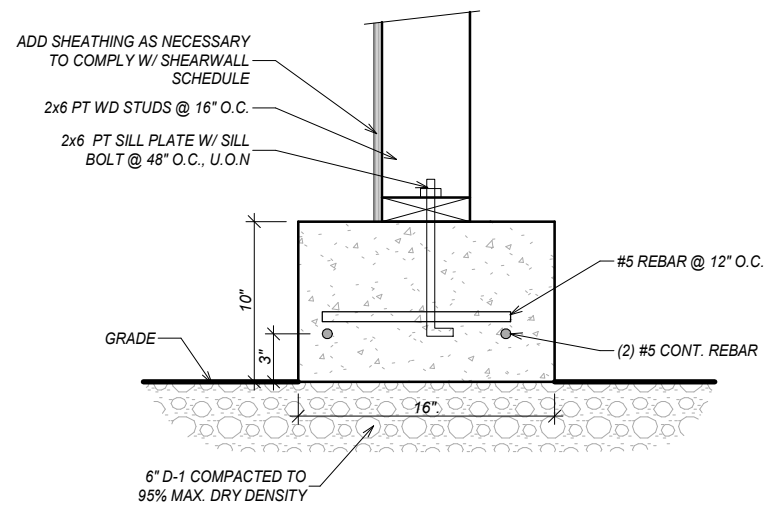
SHEET DESCRIPTION:  
Roof Framing Plan

**S203**

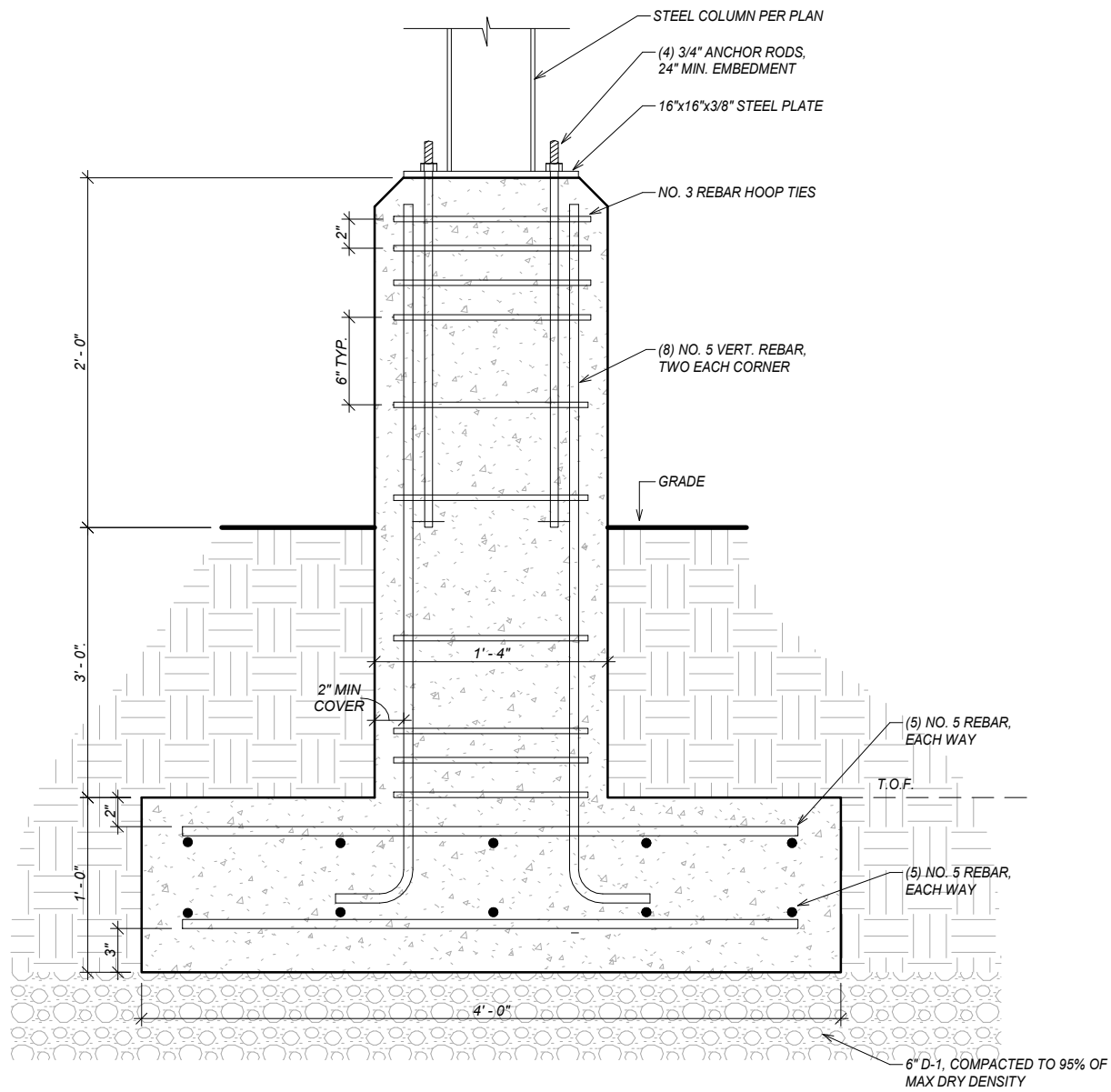
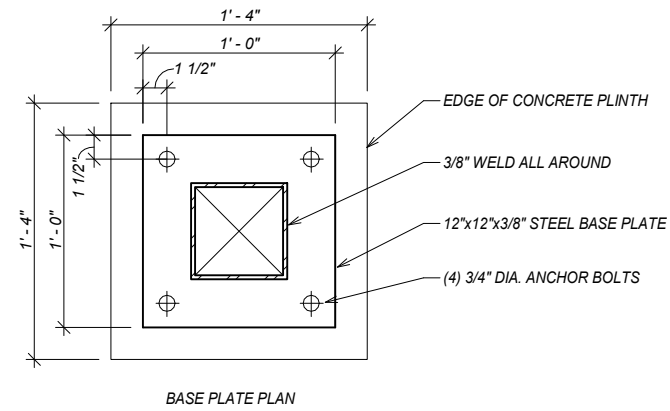
SHEET:  
35 of xx



**1** *Typ. FND Detail*  
1" = 1'-0"



**2** *Typ. Pony Wall Detail*  
1" = 1'-0"



**3** *Typ. Column Base Detail*  
1" = 1'-0"

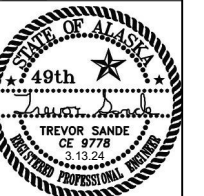
REVISIONS:

THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: TSS  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com

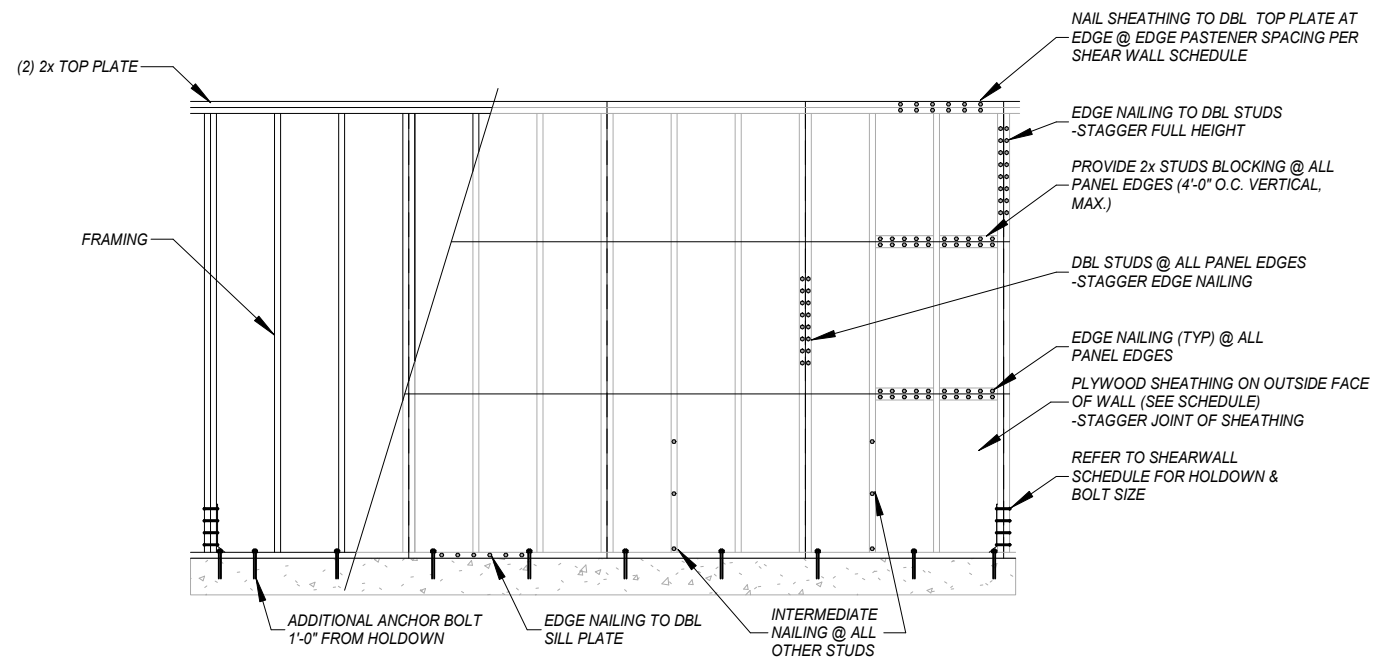


SHEET DESCRIPTION:  
Structural Details

**S300**

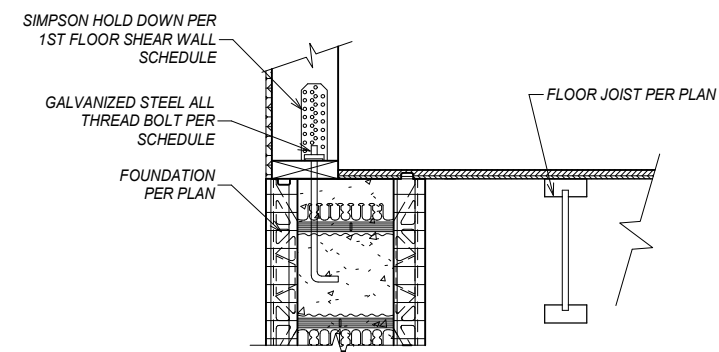
SHEET:  
36 of xx



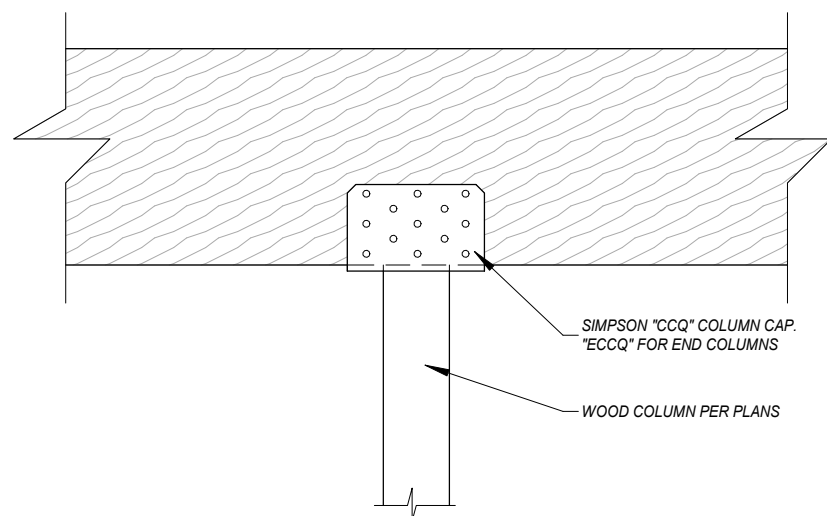


1. EXTERIOR PLYWOOD SHEATHING SHALL BE APA RATED, STRUCTURAL 1.
2. SEE SHEARWALL SCHEDULE FOR FASTENER SPACING REQUIREMENTS.
3. STRUCTURAL PLYWOOD APA RATED SHEATHING PERMITTED TO BE APPLIED EITHER PARALLEL OR PERPENDICULAR TO FRAMING, STAGGER JOINT OF SHEATHING.
4. FACE NAIL DOUBLE STUDS 16d AT 6" O.C. FOR SHEAR TRANSFER BETWEEN PANELS.
5. ANCHOR BOLT FOR SILL PLATE TO BE 5/8" SIMPSON AT MIN. EMBEDMENT 7" AT 2 FOOT CENTERS, ANCHOR BOLTS TO BE SPACED AT 4 FOOT CENTERS AT NON-SHEARWALL LOCATIONS.

**1 Shearwall Detail**  
1/4" = 1'-0"



**2 Typ. Shearwall Holddown Detail**  
3/4" = 1'-0"



**3 Typ. Column to Beam Detail**  
3/4" = 1'-0"

REVISIONS:


THRHA - Craig Senior Center  
PHASE 1

STATUS:  
**CONSTRUCTION DRAWINGS**

DRAWN BY: NMG  
CHECKED BY: NMG  
DATE: 3.13.24  
PROJECT #: 222321.02

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com



SHEET DESCRIPTION:  
Structural Details

**S301**

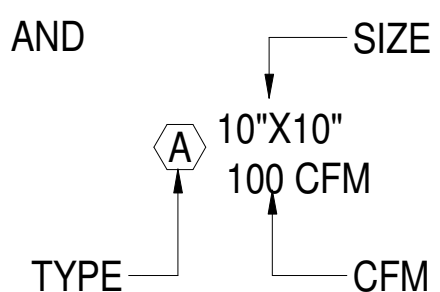
SHEET:  
37 of xx

# MECHANICAL SYMBOL LEGEND

PIPING SYMBOLS			HVAC SYMBOLS		
SYMBOL	ABBR.	DESCRIPTION	SYMBOL	ABBR.	DESCRIPTION
	W	WASTE			NEW DUCTWORK
	V	VENT		S.L.	ACOUSTICALLY LINED DUCT
	CW	COLD WATER			THERMALLY INSULATED DUCT
	HW	HOT WATER			DUCTWORK UP
	HWC	HOT WATER RECIRCULATION			DUCTWORK DOWN
	GHR	GLYCOL HEATING RETURN			TURNING VANES
	GHS	GLYCOL HEATING SUPPLY			AIR EXTRACTOR
	SMR	SNOW MELT RETURN		S/A	SUPPLY REG., GRILLE OR DIFFUSER
	SMS	SNOW MELT SUPPLY		R/A	RETURN/EXHAUST REG. OR GRILLE
	G	LOW PRESSURE GAS			SUPPLY
					RETURN OR EXHAUST
		DEEP SEAL TRAP			SUPPLY AIR SLOT WITH FLEX DUCT
		PIPE ELBOW DOWN			RETURN AIR SLOT
		PIPE ELBOW UP			FLEXIBLE DUCT
		UNION			FLEXIBLE CONNECTION
	GV/SOV	GATE VALVE/SHUT-OFF VALVE		VD,BD	VOLUME DAMPER
		PLUG VALVE		FD	FIRE DAMPER
		GAS COCK		FSD	FIRE/SMOKE DAMPER
		GLOBE VALVE		MOD	MOTOR OPERATED DAMPER
	MOV	MOTOR OPERATED VALVE 2-WAY			DUCT SIZE
	MOV	MOTOR OPERATED VALVE 3-WAY		HC	HEATING COIL
	PRV	PRESSURE REDUCING VALVE		S/A	SUPPLY AIR
	RV	RELIEF VALVE		R/A	RETURN/RELIEF AIR
	CV	CHECK VALVE		E/A	EXHAUST AIR
		BALL VALVE (FULL PORT)		O/A	OUTSIDE AIR
		STRAINER		DD	DUCT DETECTOR
		THERMOMETER			ACCESS PANEL
		PRESSURE GAUGE W/ISO. VALVE		T'STAT	THERMOSTAT, & W/INS. BASE
		SOLENOID VALVE		SP	STATIC PRESSURE SENSOR
	BV	BALANCING VALVE		S	SWITCH
		BUTTERFLY VALVE	<b>ABBREVIATIONS</b>		
		FLEX CONNECTION	ABBR.	DESCRIPTION	
	WHA	WATER HAMMER ARRESTER (Y=SIZE)	EAT	ENTERING AIR TEMPERATURE	
		AUTOMATIC FLOW CONTROL	LAT	LEAVING AIR TEMPERATURE	
	CO	CLEAN-OUT	EWT	ENTERING WATER (GLYCOL) TEMP.	
	WCO	WALL CLEAN-OUT	LWT	LEAVING WATER (GLYCOL) TEMP.	
	FCO	FLOOR CLEAN-OUT	AFF	ABOVE FINISHED FLOOR	
	FD	FLOOR DRAIN	AFG	ABOVE FINISHED GRADE	
		PIPE ANCHOR	BDD	BACK DRAFT DAMPER	
		PIPE GUIDE	BG	BELOW GRADE	
			SS	STAINLESS STEEL	
			TP	TRAP PRIMER	
			VTR	VENT THRU ROOF	
			OADB	OUTSIDE AIR DRY BULB	
			AAV	AUTOMATIC AIR VENT	

## DIFFUSER KEY

DIFFUSERS, GRILLES, AND REGISTERS SYMBOL:



SYMBOLS DO NOT NECESSARILY APPEAR ON PLANS IN SAME SIZE AND PROPORTION AS SHOWN HERE.

PLANS DO NOT NECESSARILY USE ALL OF THE SYMBOLS SHOWN HERE.

# MECHANICAL SPECIFICATIONS

## GENERAL:

- THESE DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND DO NOT SHOW ALL FITTINGS AND/OR ACCESSORIES NECESSARY FOR A COMPLETE, FUNCTIONAL AND COORDINATED INSTALLATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THEIR WORK WITH OTHER TRADES AND WITH FIELD CONDITIONS.
- ALL PLUMBING PIPING SHALL BE PER THE UNIFORM PLUMBING CODE, 2021 EDITION AND ALL LOCAL AMENDMENTS.
- ALL MECHANICAL WORK SHALL BE PER THE INTERNATIONAL MECHANICAL CODE, 2021 EDITION AND ALL LOCAL AMENDMENTS.
- ALL PENETRATIONS THROUGH FIRE RATED CONSTRUCTION (FIRE BARRIERS, SHAFTS AND HORIZONTAL ASSEMBLIES) MUST COMPLY WITH INTERNATIONAL BUILDING CODE, 2021 EDITION.
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND FEES.
- THE CONTRACTOR SHALL PROVIDE SUBMITTAL DATA ON ALL MECHANICAL SYSTEMS. THIS INFORMATION SHALL BE BOUND IN A THREE RING BINDER, PROPERLY MARKED AND TAGGED. DATA SUBMITTED SHALL BE COMPLETE AND SUBMITTED AT ONE TIME AS PARTIAL SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. SUBMITTALS SHALL BE CLEARLY MARKED TO INDICATE EXACT ITEM TO BE SUPPLIED.
- NO SUBSTITUTION OF MATERIALS WILL BE ALLOWED WITHOUT OWNERS APPROVAL.
- AT THE END OF THE PROJECT PROVIDE THE OWNER WITH THREE COPIES OF AN OPERATION AND MAINTENANCE MANUAL ASSEMBLED SPECIFICALLY FOR THIS PROJECT FOR ALL MECHANICAL EQUIPMENT FURNISHED UNDER THIS CONTRACT. INFORMATION SHALL BE COMPLETE AND SHALL PROVIDE SPECIFICATION, OPERATION AND MAINTENANCE INFORMATION, WARRANTY INFORMATION, AS WELL AS SOURCES OF REPLACEMENT PARTS.
- PROVIDE A COMPLETE SET OF AS-BUILT DRAWING AT THE END OF THE PROJECT. DRAWINGS SHALL SHOW ALL CHANGES MADE TO THE PROJECT DURING CONSTRUCTION. AS-BUILT OF CONTROL DRAWINGS SHALL ALSO BE INCLUDED.
- ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS FOR A PERIOD ON ONE YEAR AFTER ACCEPTANCE OF THE PROJECT BY THE OWNER. THIS SHALL INCLUDE MATERIALS, EQUIPMENT AND WORKMANSHIP. ALL DEFECTS SHALL BE REPLACED OR REPAIRED TO THE OWNERS SATISFACTION.
- PROVIDE MANUFACTURERS RECOMMENDED CLEARANCE AND ACCESS TO ALL EQUIPMENT.
- ALL PIPING, DUCT WORK, AND EQUIPMENT SHALL BE SEISMICALLY RESTRAINED IN ACCORDANCE WITH THE SMACNA SEISMIC RESTRAINT MANUAL FOR MECHANICAL SYSTEMS.

## SHEET METAL:

- DUCTWORK SHALL BE FABRICATED SHEET METAL AND INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- DIMENSIONS SHOWN FOR DUCTWORK ARE THE INSIDE CLEAR DIMENSIONS. CONTRACTOR SHALL ADD TO THE DUCT ALLOWANCES FOR SOUND LINING.
- PAINT INTERIOR OF ALL DUCTWORK VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS FLAT BLACK. FLEX DUCT SHALL ONLY BE USED AT DIFFUSER CONNECTIONS AND SHALL BE THE SAME DIAMETER AS THE DIFFUSER NECK.
- FLEX DUCT LENGTH SHALL NOT EXCEED 5 FEET, AND SHALL NOT BE INSTALLED WITH MORE THAN ONE (1) 90° FULL RADIUS BEND.

## PIPING:

- DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE "L" HARD DRAWN COPPER TUBING, WROUGHT SOLDER TYPE FITTINGS, 95/5 TIN-ANTIMONY OR LEAD FREE SILVER BEARING SOLDER. PROVIDE WATER HAMMER ARRESTORS FOR ALL BATTERIES OF FIXTURES. PEX TUBING MAY BE USED WHERE ALLOWED BY CODE.
- WASTE, AND VENT PIPE SHALL BE "ABS" PIPING WITH DRAIN, WASTE & VENT FITTINGS AND SHALL BE INSTALLED AND TESTED PER THE REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE UNIFORM PLUMBING CODE. REUSE EXISTING ROOF OPENINGS WHERE EVER POSSIBLE.
- PROVIDE BACKFLOW PREVENTERS WHERE REQUIRED BY THE UPC AND OR THE LOCAL AUTHORITIES.
- VALVES FOR PLUMBING SYSTEMS SHALL BE BALL VALVES. PROVIDE ISOLATION VALVES FOR EACH FIXTURE BATTERY AND WHERE INDICATED ON DRAWINGS.

## PLUMBING:

- PLUMBING FIXTURES SHALL BE COMMERCIAL GRADE COMPLETE WITH ALL TRIM. FOR FIXTURE MANUFACTURER, MODEL ETC, SEE THE PLUMBING FIXTURE SCHEDULE.
- PLUMBING EQUIPMENT SHALL BE COMMERCIAL GRADE COMPLETE WITH ALL SAFETIES AND TRIM. FOR INFORMATION ON MODEL ETC., SEE EQUIPMENT SCHEDULES.

## HEATING:

- HEATING EQUIPMENT SHALL BE COMMERCIAL GRADE COMPLETE WITH ALL SAFETIES AND TRIM. FOR INFORMATION ON MODEL ETC., SEE EQUIPMENT SCHEDULES.

## INSULATION:

- INSULATE ALL COLD PIPES WITH 1" FIBERGLASS INSULATION, WITH VAPOR BARRIER JACKET. (FIBERGLASS 25ASJ/SSL-II).
- INSULATE ALL HOT PIPES, UP TO 2", WITH 1" FIBERGLASS INSULATION, PIPES 2-1/2" OR LARGER, INSULATE WITH 1-1/2" FIBERGLASS INSULATION. (FIBERGLASS 25ASJ/SSL-II).
- INSULATE EXHAUST DUCT WORK FROM FAN TO THE EXTERIOR.
- 2" INSULATION ON ALL OSA, AND RELIEF AIR DUCTWORK.
- INSULATE ALL ABS & PVC PIPING IN CEILING PLENUM WITH 1" FIBERGLASS INSULATION (FIBERGLASS 25ASJ/SSL-II).

## CONTROLS:

- THE CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERATIONAL CONTROL SYSTEM AS REQUIRED.

## BALANCING:

- BALANCE HVAC & PLUMBING SYSTEMS USING NATIONAL ENVIROMENTAL BALANCING BUREAU (NEBB) RECOMMENDED PROCEDURES.

REVISIONS:

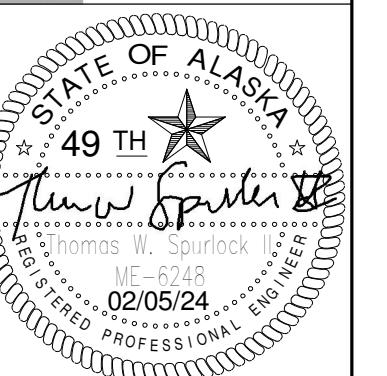
THRHA - Craig Senior Center

STATUS:

**CONSTRUCTION DOCUMENTS**

DRAWN BY: BKS  
CHECKED BY: TWS  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com



**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
LEGENDS,  
ABBREVIATIONS &  
SCHEDULES

**M101**

SHEET:

of xxx

## FIXTURE CONECTION SCHEDULE

TAG	FIXTURE	WASTE SIZE	VENT SIZE	HW SIZE	CW SIZE	REMARKS ①
P1-1	WATER CLOSET "ADA"	3"	2"	----	1/2"	FLOOR MOUNTED TANK TYPE WATER CLOSET WITH TRIM
P3-1	LAVATORY "ADA"	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER SET LAVATORY WITH FAUCET AND TRIM. "ADA" APPROVED ②
P4-1	KITCHEN SINK "ADA"	2"	1-1/2"	1/2"	1/2"	COUNTER SET TWO COMPARTMENT SINK WITH FAUCET AND TRIM "ADA" APPROVED
P5-1	SHOWER & TUB "ADA"	2"	1-1/2"	1/2"	1/2"	COMBINATION TUB & SHOWER, HEAD, VALVE DRAIN & ALL REQUIRED TRIM. "ADA"
P5-2	WASHER BOX	2"	2"	1/2"	1/2"	GUY GRAY WASHER BOX WITH ALL REQUIRED TRIM
FD-1	FLOOR DRAIN	2"	1-1/2"	----	---	J.R. SMITH FLOOR DRAIN WITH TRAP PRIMER.

① PLUMBING FIXTURES TO BE SELECTED BY ARCHITECT AND OWNER.

② PROVIDE WITH ASSE 1070 POINT OF USE VALVE.

## FAN SCHEDULE

TAG	LOCATION	SCFM	RPM	E.S.P.	TYPE	NOM. SIZE	USE	DISC.	MOTOR HP /VOLTS/ PH	REMARKS
EF-1	BATH ROOM	50	----	0.125"	CENTR.	----	E/A	HORIZ.	FR/120/1	PANASONIC "FV0511Vk2" WITH TRIM ①

① FURNISH WITH SPEED CONTROLLER, BACKRAFT DAMPER, TIME DELAY WALL SWITCH AND WALL OR ROOF CAP.

## EQUIPMENT SCHEDULE

### HP-1A & 1B

HEAT PUMP INDOOR UNIT (HP-1A): MITSUBISHI FLOOR MOUNTED HEATING & COOLING UNIT MODEL "MFZ-KJ09NA". 9,000 BTU/H COOLING, 11,000BTU/H HEATING. FURNISH COMPLETE WITH ALL REQUIRED TRIM TO INCLUDE BUT NOT LIMITED TO REQUIRED CONTROLS AND SAFETIES. 208/60/1. INDOOR UNIT POWERED BY THE OUTDOOR UNIT.

HEAT PUMP OUTDOOR UNIT (HP-1B): MITSUBISHI OUTDOOR UNIT MODEL "MUFZ-KJ09NAHZ". FURNISH COMPLETE WITH ALL REQUIRED TRIM TO INCLUDE BUT NOT LIMITED TO REQUIRED CONTROLS AND SAFETIES. 208/60/1, MCA 11.0A, MOCP 15A. INDOOR UNIT POWERED BY THE OUTDOOR UNIT.

### WH-1

WATER HEATER: RHEEM ELECTRIC TANK TYPE WATER HEATER MODEL "PROE50 T2 RH95". FIRST HOUR RATING 63 GPH, RECOVERY 21 GPH. 50 GALLON STORAGE. 4.5KW, 208/60/1

## ELECTRIC HEATING SCHEDULE

TAG	DISCRIPTION	SCFM	KW	NOM. SIZE	MOTOR HP /VOLTS/ PH	REMARKS ①
EBB-1	ELECTRIC BASEBOARD	----	0.5	----	----	KING ELECTRIC BASEBOARD HEATER MODEL "2K2005BW" . 0.5KW, 208/60/1. WITH ALL REQUIRED TRIM
EBB-2	ELECTRIC BASEBOARD	----	0.75	----	----	KING ELECTRIC BASEBOARD HEATER MODEL "3K2007BW" . 0.75KW, 208/60/1. WITH ALL REQUIRED TRIM
EBB-3	ELECTRIC BASEBOARD	----	1.0	----	----	KING ELECTRIC BASEBOARD HEATER MODEL "4K2010BW" . 1.0KW, 208/60/1. WITH ALL REQUIRED TRIM

① FURNISH COMPLETE WITH ALL REQUIRED TRIM.

REVISIONS:	
------------	--

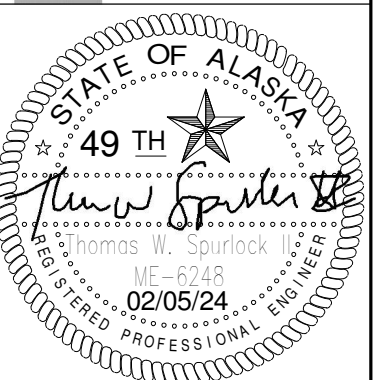
THRHA - Craig Senior Center

STATUS:

**CONSTRUCTION DOCUMENTS**

DRAWN BY: BKS  
 CHECKED BY: TWS  
 DATE: 02/05/24  
 PROJECT #: 23912

**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7187  
 www.ketchikanengineer.com



**SAI** CONSULTING ENGINEERS

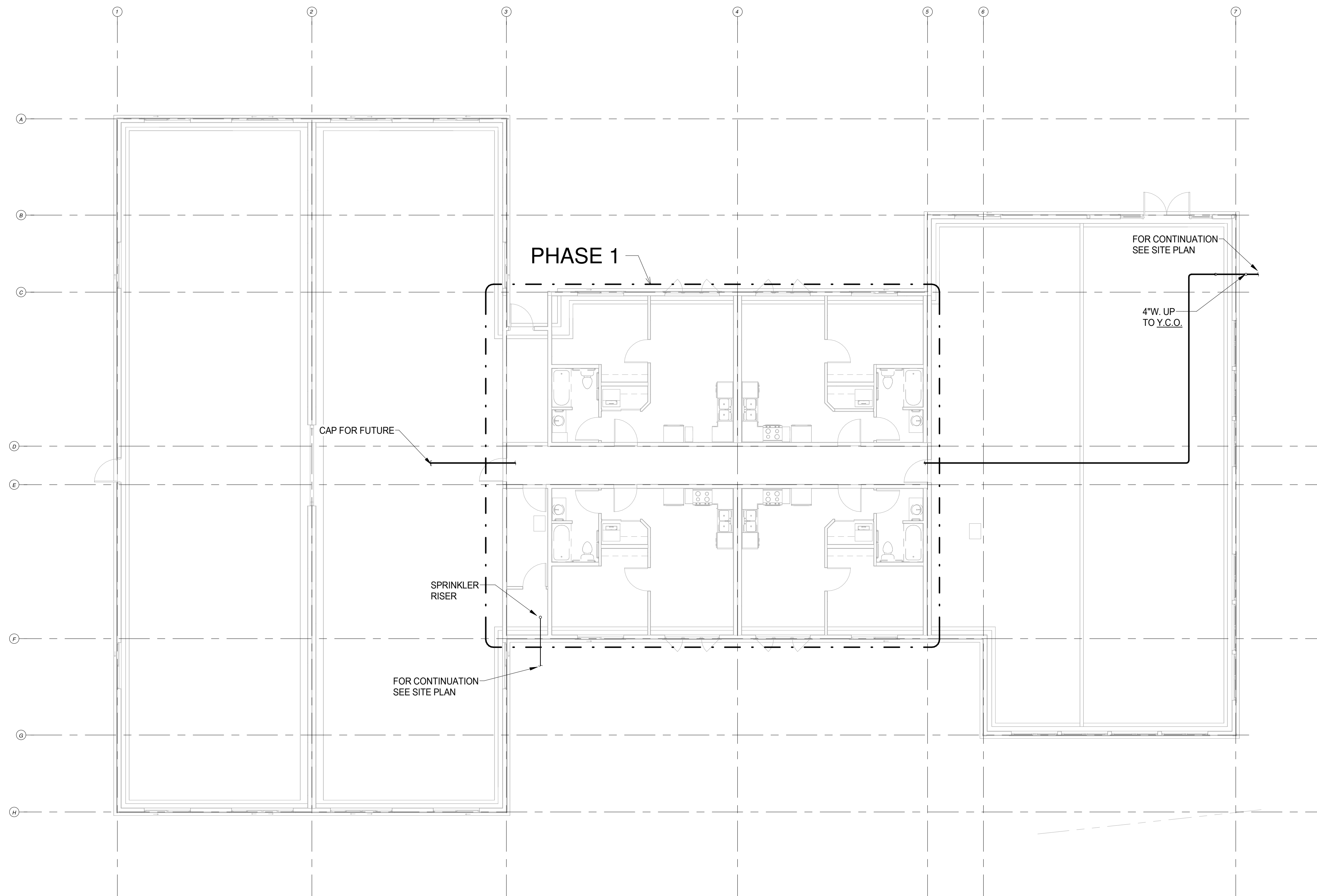
**SPURLOCK & ASSOCIATES, INC.**  
 3705 ARCTIC BLVD #1567  
 ANCHORAGE, AK 99503  
 1150 S. COLONY WAY ST. 3  
 PMB 370  
 PALMER, AK 99645  
 AECC 734

SHEET DESCRIPTION:  
 MECHANICAL SCHEDULES

**M102**

SHEET:

of **XXX**



**1** Underfloor Plumbing Reference Plan  
1/8" = 1'-0"

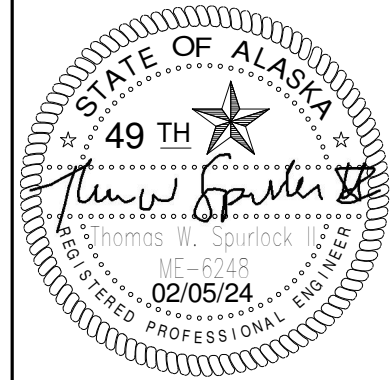
REVISIONS:


**THRHA - Craig Senior Center**

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: Author  
CHECKED BY: Checker  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com

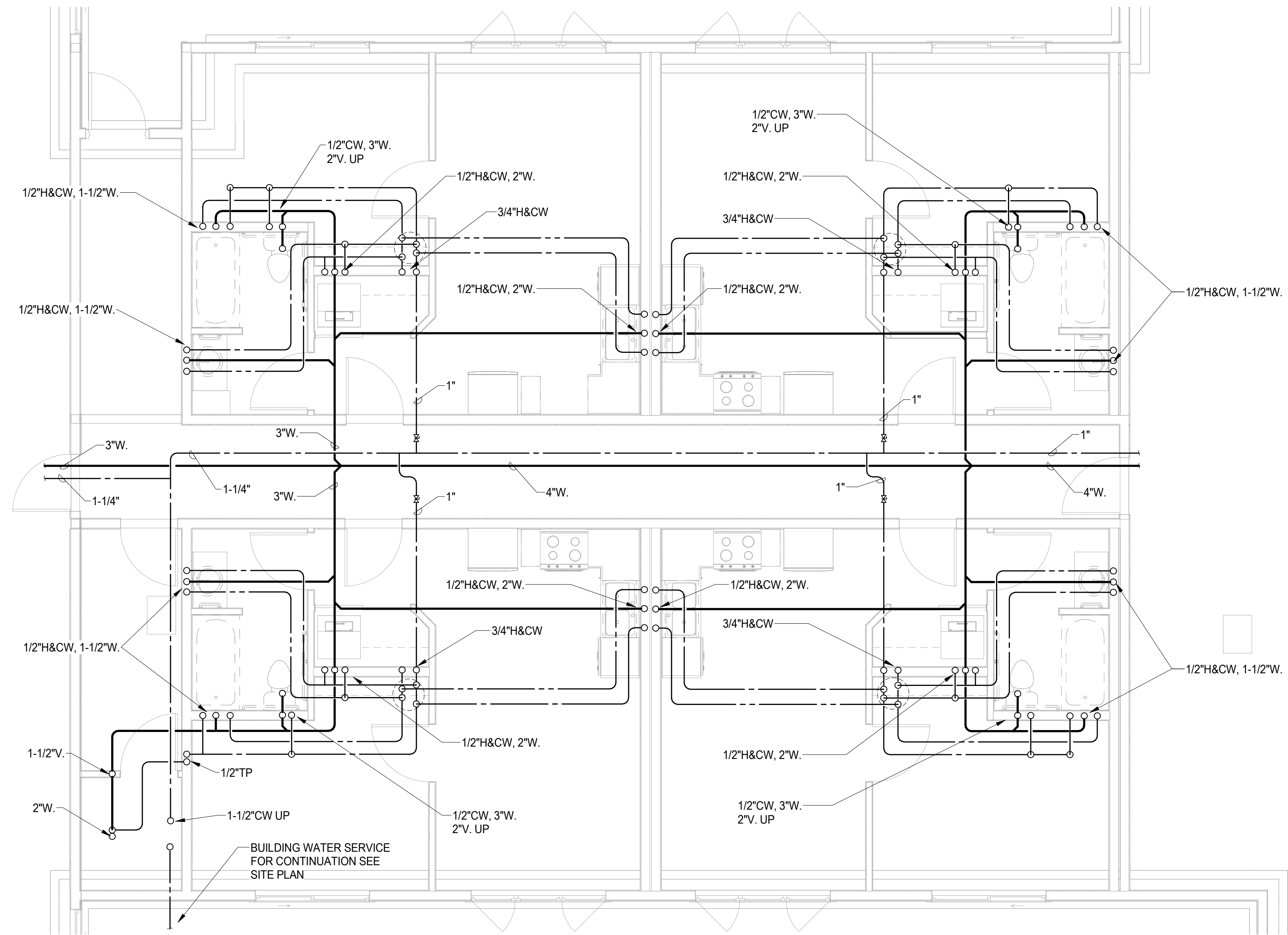


**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
Underfloor Plumbing Reference Plan

**M200**

SHEET:  
of **XXX**



**1** Underfloor Plumbing Partial Plan - Phase 1  
 1/4" = 1'-0"

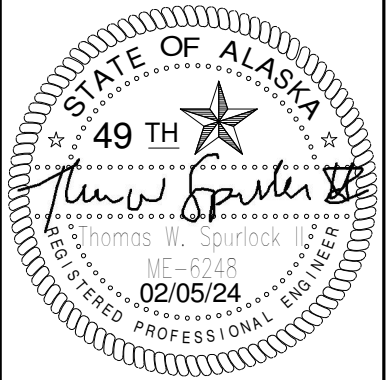
REVISIONS:


THRHA - Craig Senior Center

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: BKS  
 CHECKED BY: TWS  
 DATE: 02/05/24  
 PROJECT #: 23912

**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7187  
 www.ketchikanengineer.com

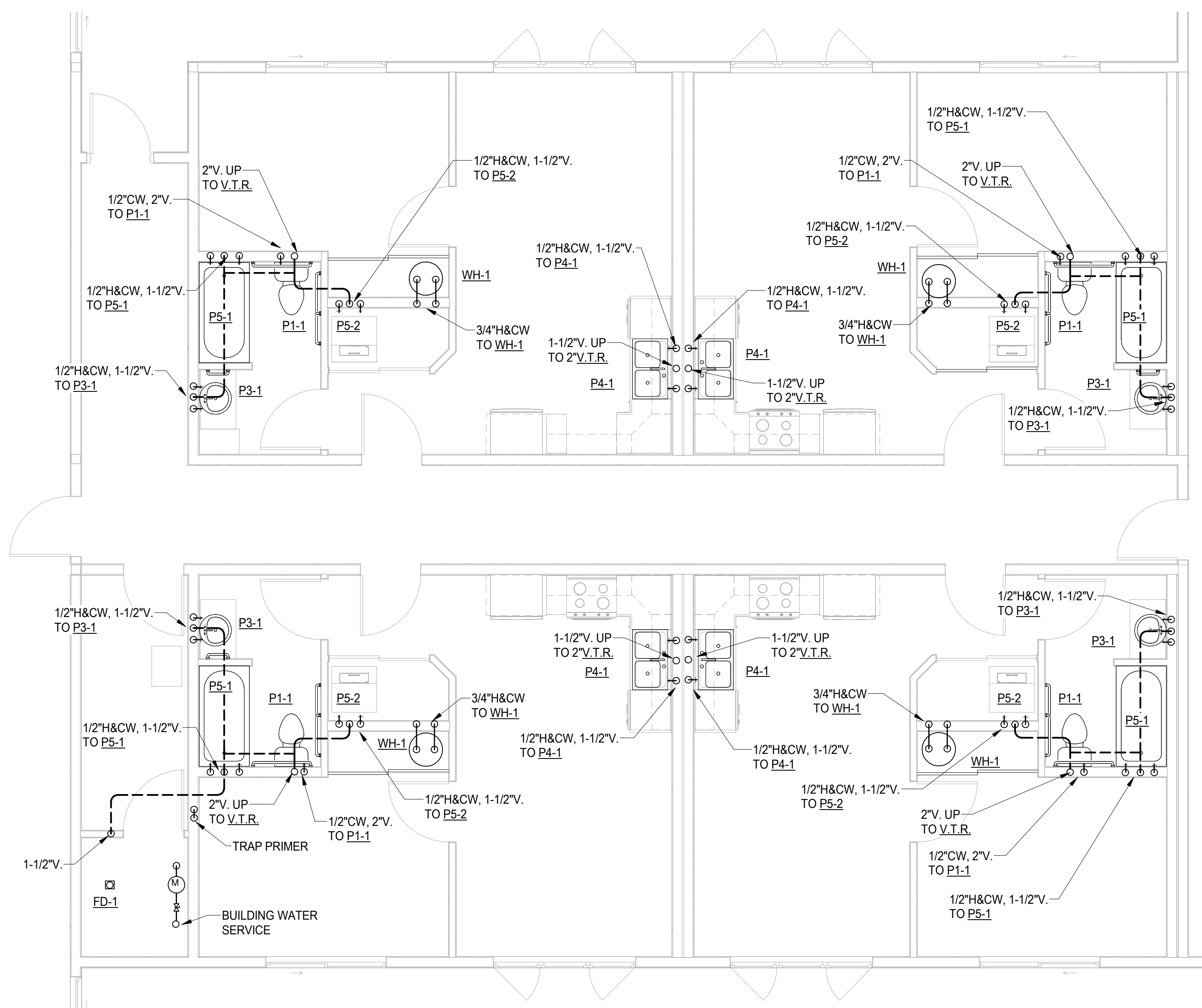


**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
 3705 ARCTIC BLVD #1567  
 ANCHORAGE, AK 99503  
 1150 S. COLONY WAY ST. 3  
 PMB 370  
 PALMER, AK 99645  
 AECC 734

SHEET DESCRIPTION:  
 Underfloor Plumbing Plan - Phase 1

**M201**

SHEET:  
 of XXX



**1** Plumbing Partial Plan - Phase 1  
1/4" = 1'-0"

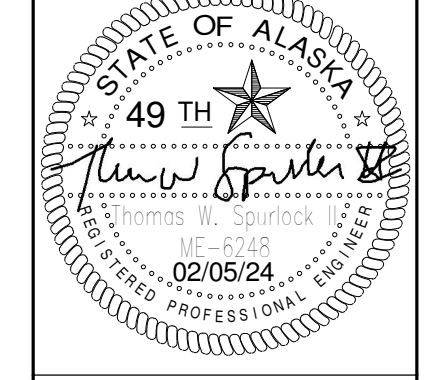
REVISIONS:


**THRHA - Craig Senior Center**

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: Author  
CHECKED BY: Checker  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com

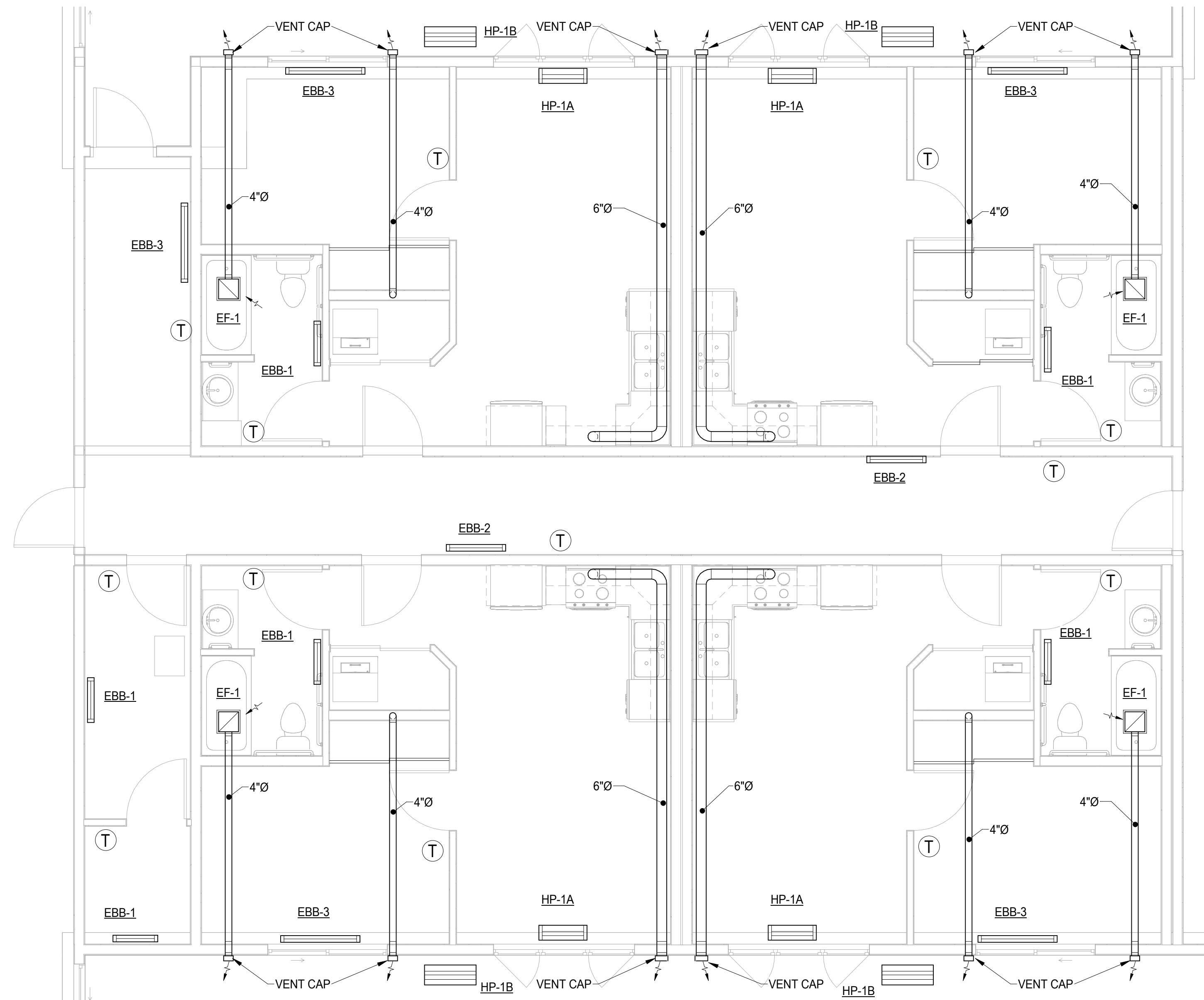


**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
Plumbing Partial Plan - Phase 1

**M202**

SHEET:  
of **XXX**



**1** HVAC Partial Plan - Phase 1  
1/4" = 1'-0"

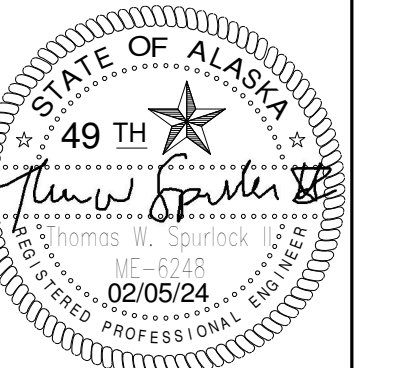
REVISIONS:

THRHA - Craig Senior Center

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: Author  
CHECKED BY: Checker  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com

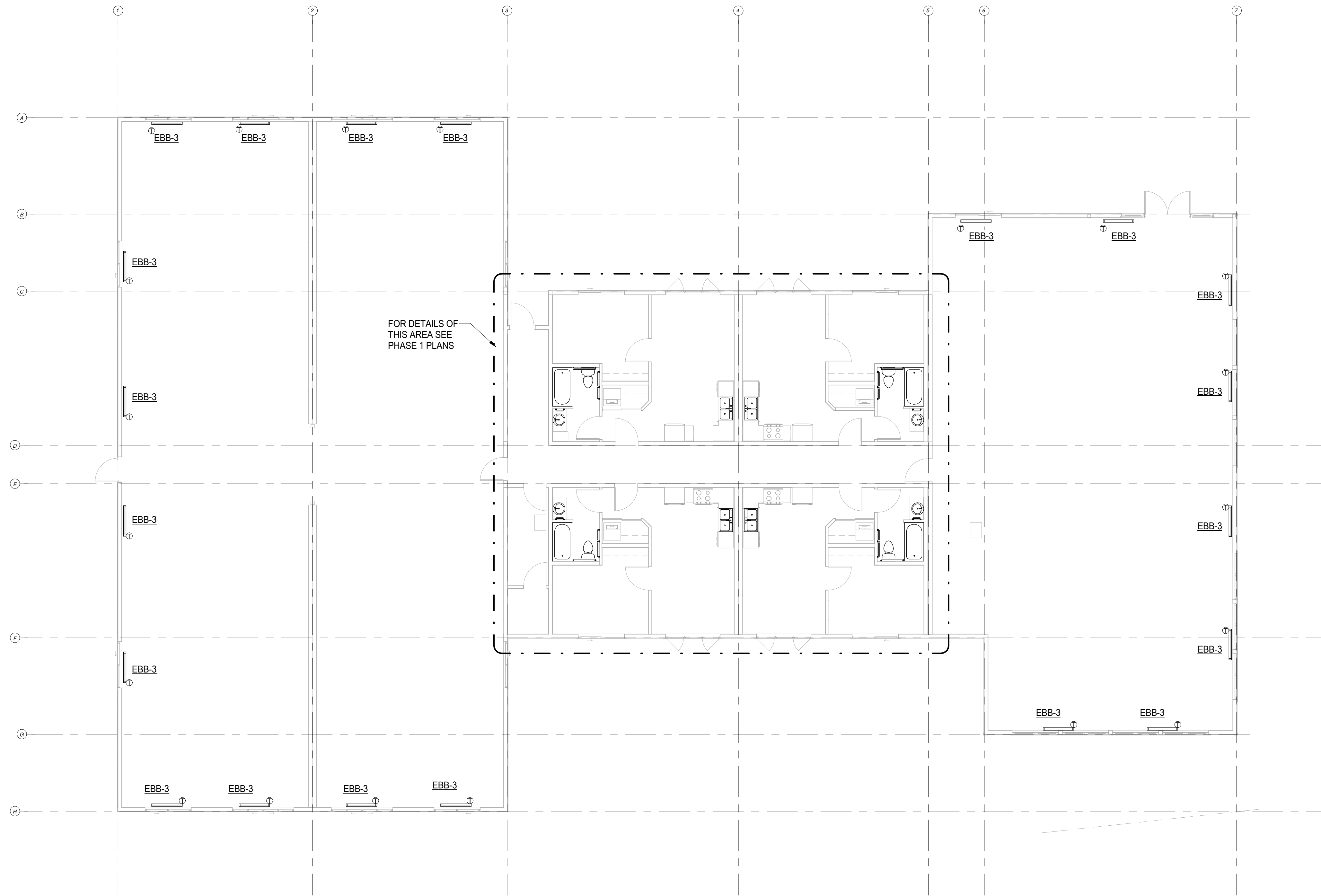


**SAI** CONSULTING ENGINEERS  
SPURLOCK & ASSOCIATES, INC.  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
HVAC Partial Plan Phase 1

**M301**

SHEET:  
of **XXX**



1 Main Level Overall Mechanical Plan  
1/8" = 1'-0"

REVISIONS:


THRHA - Craig Senior Center

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: Author  
CHECKED BY: Checker  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com



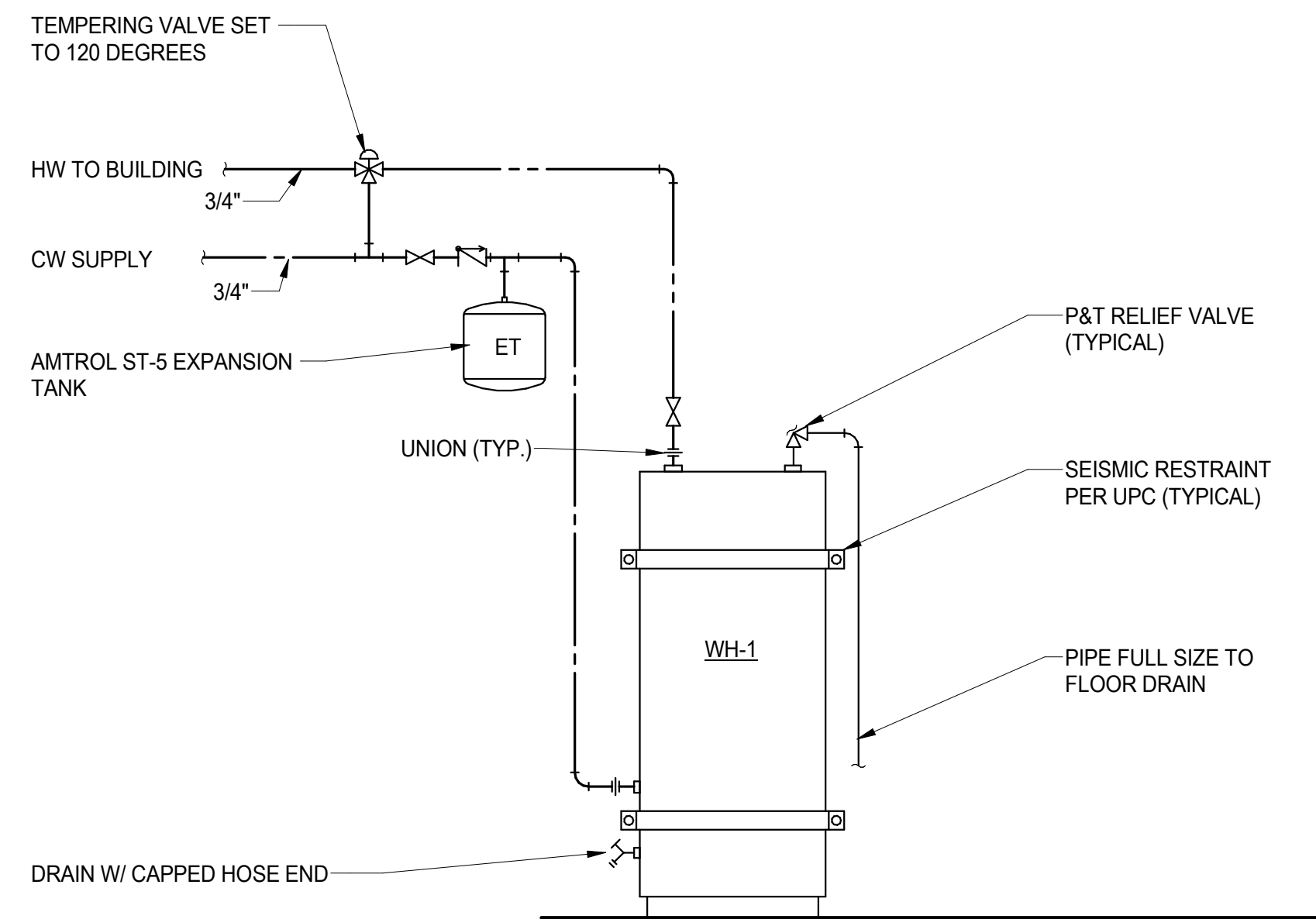
**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
Overall HVAC Plan

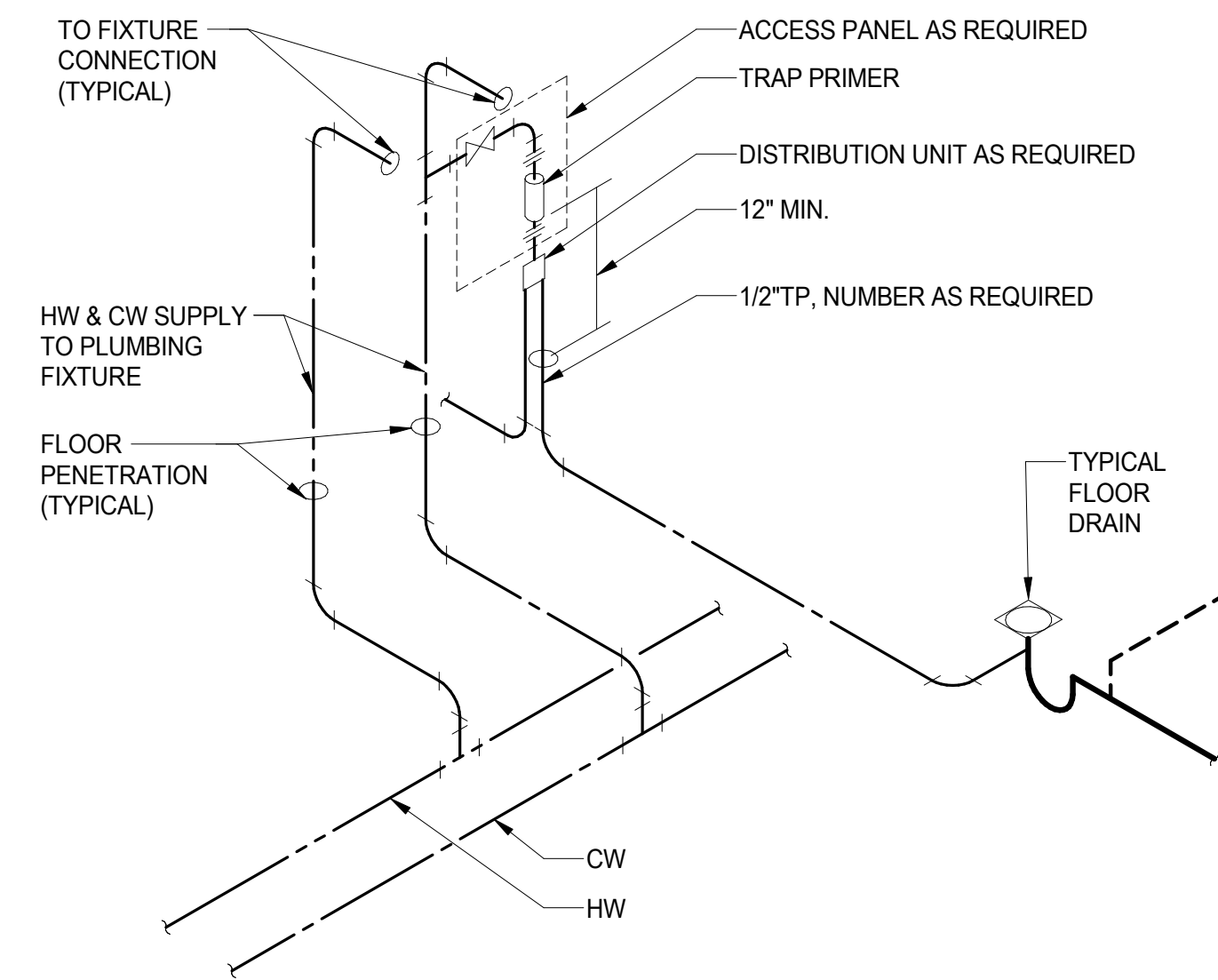
**M302**

SHEET:  
of XXX

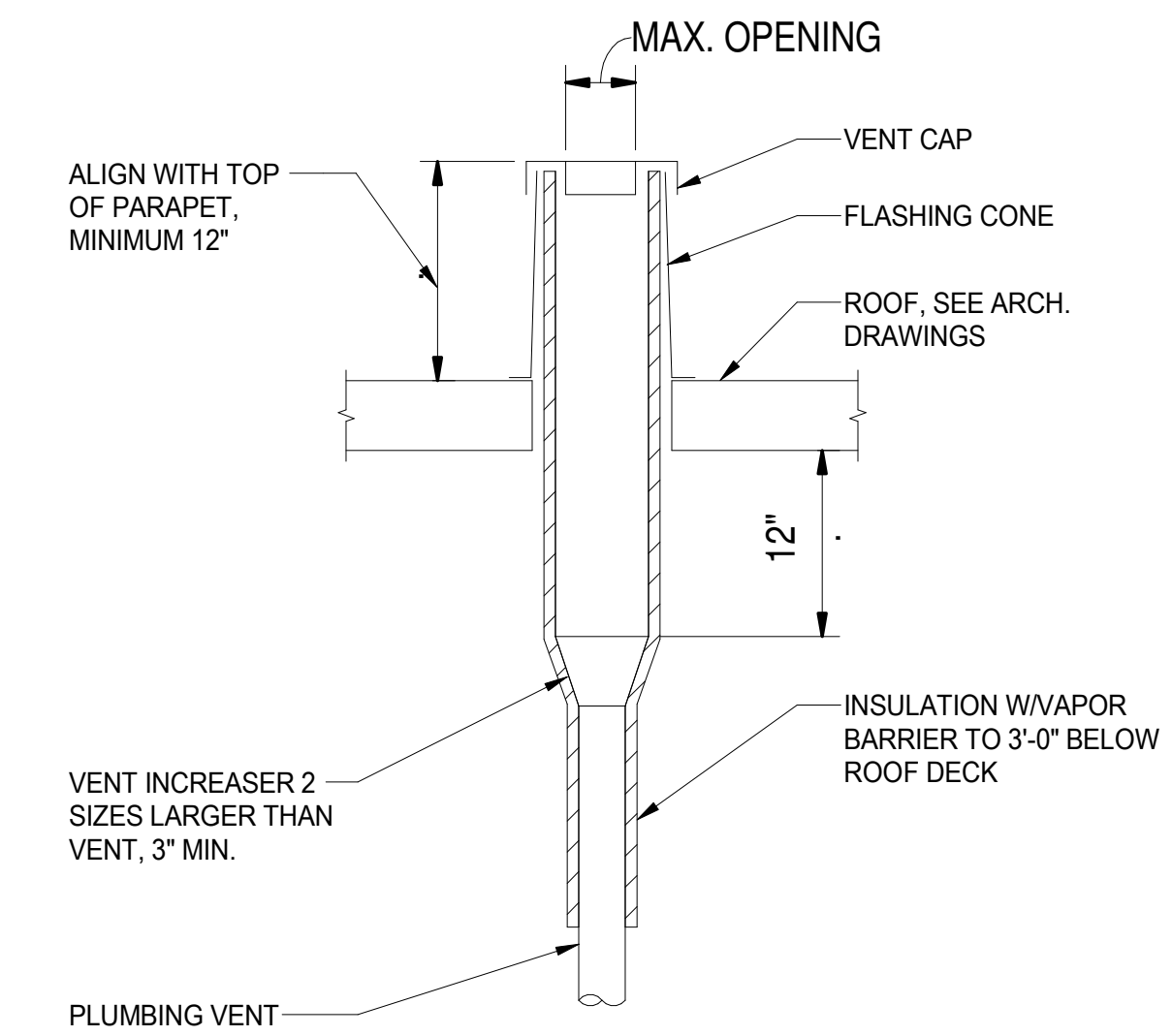




**1 WATER HEATER DETAIL**  
12" = 1'-0"



**2 AUTOMATIC TRAP PRIMER DETAIL**  
12" = 1'-0"



**3 VENT THRU ROOF DETAIL**  
12" = 1'-0"

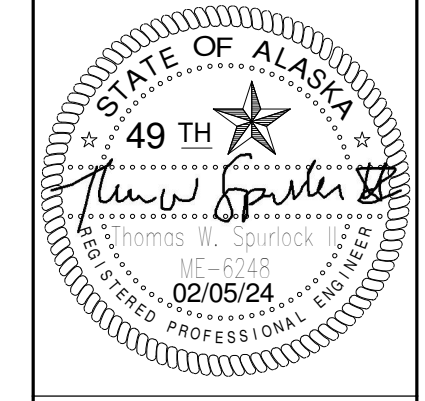
REVISIONS:


**THRHA - Craig Senior Center**

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: Author  
CHECKED BY: Checker  
DATE: 02/05/24  
PROJECT #: 23912

**R&M**  
R&M ENGINEERING-KETCHIKAN, INC.  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7187  
www.ketchikanengineer.com



**SAI** CONSULTING ENGINEERS  
**SPURLOCK & ASSOCIATES, INC.**  
3705 ARCTIC BLVD #1567  
ANCHORAGE, AK 99503  
1150 S. COLONY WAY ST. 3  
PMB 370  
PALMER, AK 99645  
AECC 734

SHEET DESCRIPTION:  
MECHANICAL DETAILS

**M801**

SHEET:  
of **XXX**

THIS SHEET IS FULL SIZE AT 34"x22"

2/11/2024 11:08:03 AM C:\Users\EricCowling\EIC Engineers\Design - Files\Projects\E23\E23-4133\_THRHA Craig Senior Center - Phase 1\DES\E23-4133\_Esh24\_THRHAraigSeniorCtr-Phase1.rvt qt:c02/11/2024 11:07:54 : fc:1 : lvsOnSht : abudDb1 : \*nbsa : 1.1.15.0.6.17/670

### 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.

ELECTRICAL DEVICES SHOWN ON THE PLANS AS EXISTING ARE TO BE REPLACED WITH NEW DEVICES AND DEVICE PLATES TO MATCH THE NEW WORK.

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 THIN-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).

### ELECTRICAL SPECIFICATIONS

"X" = PROVIDE SUBMITTAL  
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 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°C OR GREATER AND ALL TRAPEZE OR WALL SUPPORTED RACEWAY 10 LBS/LF OR GREATER. SUPPORT STRUT AND MOUNTING HARDWARE TO BE GALVANIZED

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 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 CTS, 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 RAINIGHT 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.

LIQUIDTIGHT 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 40.1 - WET OR DAMP LOCATION BOXES AND FITTINGS: BOXES: WET RATED. FITTINGS: THREADED HUBS OR RAINIGHT 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.

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.

### ELECTRICAL LEGEND

- EXTERIOR LIGHT FIXTURE, POLE MOUNTED, HEADS AS SHOWN
- PHOTOCELL CONTROL
- LUMINAIRE - TYPE AS NOTED ON PLAN - LINEWORK MAY VARY
- LUMINAIRE - WALL MOUNTED: TYPE AS NOTED ON PLAN
- EMERGENCY LIGHTING UNIT (WALL; CEILING; REMOTE HEAD)
- COMBINATION EMERGENCY LIGHTING UNIT/EXIT SIGN, SHADE DENOTES FACE
- OCCUPANCY SENSOR LIGHTING CONTROL
- SWITCH - SINGLE POLE, SINGLE THROW, UON
- SWITCH - SEE SWITCH LEGEND FOR TYPE
- METERING DEVICE
- POWER PANELBOARD
- MOTOR CONNECTION
- NON-FUSED SAFETY SWITCH / DISCONNECT
- FUSED SAFETY SWITCH / DISCONNECT
- ELECTRIC BASEBOARD HEATER
- JUNCTION BOX OR EQUIPMENT CONNECTION (CEILING; WALL; FLOOR)
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE - GFCI PROTECTED
- DUPLEX RECEPTACLE - GFCI PROTECTED, WEATHERPROOF, +24" UON
- DUPLEX RECEPTACLE - REMOTE GFCI PROTECTED
- SPECIAL RECEPTACLE - GFCI PROTECTED (VERIFY NEMA CONFIGURATION)
- SMOKE ALARM - MULTIPLE STATION 120VAC/9VDC

#### SWITCH LEGEND

3 (THREE WAY); 4 (FOUR WAY); B (THREE WAY DIMMER); C (TIMER); D (DIMMER); K (KEYED); L (LOW VOLTAGE); P (PILOT LIGHT); S (VARIABLE SPEED CONTROL); T (INTEGRAL MOTOR OVERLOAD)  
-WALL SENSOR: 2 (DUAL CIRCUIT OCCUPANCY); D (DIMMING VACANCY SENSOR); O (OCCUPANCY SENSOR); V (VACANCY SENSOR)

- 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
  - LUMINAIRE TYPE (UNDERLINED)
  - CIRCUIT AND SWITCHLEG
  - PANEL
- CONTROL SWITCHES
  - LOWER CASE LETTER DENOTES SWITCH LEG FOR CORRESPONDING LUMINAIRE CONTROL
  - UPPERCASE LETTER OR NUMBER DENOTES SWITCH CONFIGURATION
- EQUIPMENT CONNECTIONS
  - EQUIPMENT ID (UNDERLINED)
  - CIRCUIT NUMBER(S)
  - PANEL
- RECEPTACLES
  - MOUNTING HEIGHT (SEE NOTE 1)
  - 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
AFB	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
EESCS	ELEVATOR EMERGENCY COMMUNICATION STATION
EGC	EQUIPMENT GROUNDING CONDUCTOR
FAA	FIRE ALARM ANNUCIATOR
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
SPD	SURGE PROTECTION DEVICE
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 AND SPECIFICATIONS
E1.1	ELECTRICAL SITE PLAN
E2.1	LIGHTING PLAN
E3.1	POWER AND SIGNAL PLAN
E4.1	UNIT ELECTRICAL PLANS & SCHEDULES
E5.1	ONE-LINE DIAGRAMS, DETAILS, AND SCHEDULES
E6.1	PANEL SCHEDULES
TOTAL SHEETS: 7	

REVISIONS:									
------------	--	--	--	--	--	--	--	--	--

**THRHA - Craig Senior Center**

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: LDW  
CHECKED BY: EDC  
DATE: 02/11/2024  
PROJECT #: E23-4133

**R&M ENGINEERING-KETCHIKAN, INC.**  
7180 REVILLA ROAD, SUITE 300  
KETCHIKAN, ALASKA 99901  
PH: 907.225.7917  
www.ketchikanengineer.com

**EIC ENGINEERS, INC**  
ELECTRICAL ENGINEERS

EIC NO: E23-4133  
CORP. #AECC1105  
6927 OLD SEWARD HWY  
SUITE 200  
ANCHORAGE, AK 99518  
T 907.349.9712  
F 907.349.9713  
www.eiceng.com

SHEET DESCRIPTION:  
LEGEND AND SPECIFICATIONS

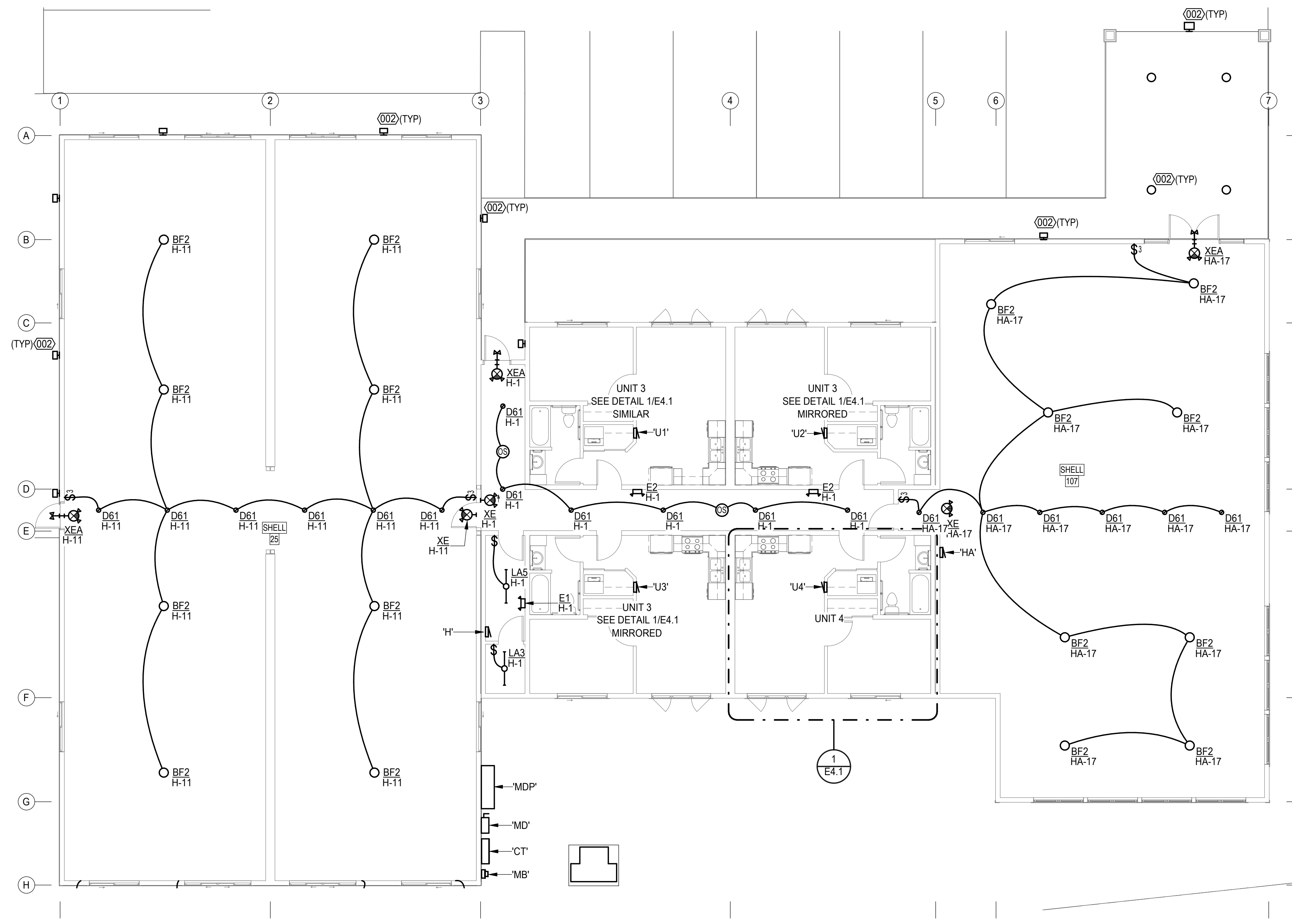
**E0.1**

SHEET:  
  
of



THIS SHEET IS FULL SIZE AT 34"x22"

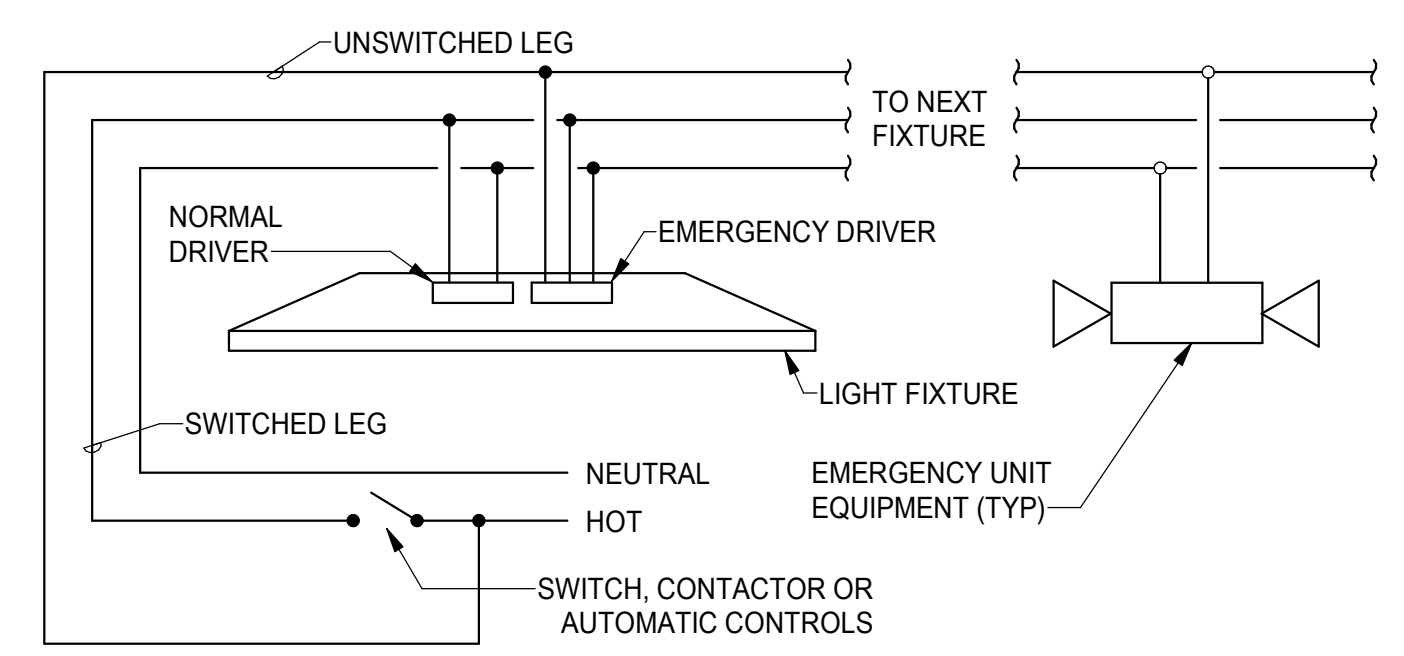
2/11/2024 11:08:04 AM C:\Users\ericowling\EIC Engineers\Design - Files\Projects\E23\E23-4133\_THRHA Craig Senior Center - Phase I\DES\E23-4133\_EShd24\_THRHA Craig Senior Center-Phase1.rvt  
 qc:02/11/2024 11:07:54 : fc:1 : lvs:onsht : abudbl : \*na5a : 1.1.5.0.6.17/7670



**1 LIGHTING PLAN**  
 E2.1 SCALE: 1/8" = 1'-0"

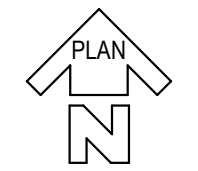
**# REFERENCED SHEET NOTES**

REF	NOTE
002	REFER TO SITE PLAN FOR CIRCUIT AND TYPE DETAILS FOR THE EXTERIOR LIGHTING.



**DETAIL NOTES:**  
 1. EMERGENCY FIXTURES TO BE CONNECTED TO LOCAL LIGHTING CIRCUIT TO ILLUMINATE WHEN UNSWITCHED LEG CIRCUIT FAILS NO MATTER WHAT STATE LIGHTING IS OPERATING.

**2 EMERGENCY LIGHTING CONNECTION DIAGRAM**  
 E2.1 SCALE: NONE



SCALES ARE DENOTED AT 34"x22" SHEET SIZE. ADJUST ACCORDINGLY FOR OTHER PRINTED SHEET SIZES.

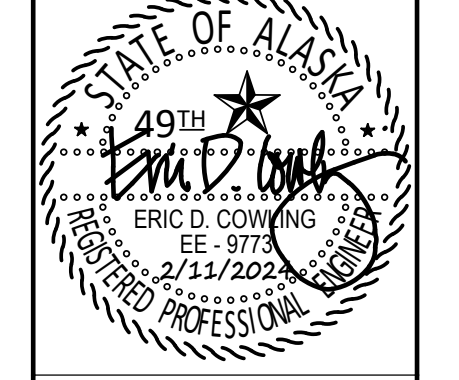
NO.	DESCRIPTION

**THRHA - Craig Senior Center**

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: LDW  
 CHECKED BY: EDC  
 DATE: 02/11/2024  
 PROJECT #: E23-4133

**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



**EIC ENGINEERS, INC**  
 ELECTRICAL ENGINEERS  
 EIC NO: E23-4133  
 CORP. #AECC1105  
 6927 OLD SEWARD HWY  
 SUITE 200  
 ANCHORAGE, AK 99518  
 T 907.349.9712  
 F 907.349.9713  
 www.eiceng.com

**SHEET DESCRIPTION:**  
 LIGHTING PLAN

**E2.1**

SHEET:  
 of

THIS SHEET IS FULL SIZE AT 34"x22"

2/11/2024 11:08:04 AM C:\Users\EricCowling\OneDrive\Projects\Phase 1\THRHA Senior Center - Phase 1\DES\23-4133\_THRHA Senior Center - Phase 1\THRHA Senior Center - Phase 1.rvt  
qc02/11/2024 11:07:54 : fc.1 : vsOnSht : abuDbl : \*naSa : 1.15.0.6.17/670

EQUIPMENT CONNECTION SCHEDULE													
NOTES													
(KEY)	'(x)' DENOTES A GENERAL, NON-REFERENCED, NOTE. NUMBERED NOTES ARE REFERENCED IN THE SCHEDULE.												
(A)	REFER TO FLOOR PLAN DRAWINGS FOR EQUIPMENT TYPE REQUIREMENTS, LOCATIONS AND QUANTITIES.												
(B)	COORDINATE ALL CONNECTION REQUIREMENTS WITH ACTUAL EQUIPMENT SUPPLIED PRIOR TO ROUGH-IN.												
(C)	COORDINATE AND PROVIDE SPECIFIC SIZING OF OVERLOADS AND FUSES WITH EQUIPMENT NAMEPLATES.												
(D)	FRACTIONAL HP TYPE MOTOR SWITCH WHERE AUTO CONTROL IS REQUIRED PROVIDE 'RELAY IN BOX'.												
(E)	DISCONNECT HP RATING TO BE SIZED FOR FUSE TYPE AT THE SYSTEM VOLTAGE. (FAST ACTING FUSES REDUCE HP RATING, REFER TO MANUFACTURER'S DATA SHEET FOR REDUCTION).												
SCHEDULE													
EQUIP ID	LOCATION OR FUNCTION	KVA	HP	FLA	MCA	MFS	TYPE	CONFIG	V	PH	OPD	FEEDER (MINIMUM) CU UON	NOTES
DISP	GARBAGE DISPOSAL	0.840					DUPLEX GFCI	NEMA 1	120	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
DW	DISHWASHER	1.200					DUPLEX GFCI	NEMA 1	120	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
EBB-1	ELECTRIC BASEBOARD - 4 LINEAR FEET	0.376					HARDWIRED		208	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
EBB-2	ELECTRIC BASEBOARD - 4 LINEAR FEET	0.564					HARDWIRED		208	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
EBB-3	ELECTRIC BASEBOARD - 4 LINEAR FEET	0.752					HARDWIRED		208	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
EF-1	EXHAUST FAN	0.120	FHP				DIRECT WIRED	NEMA 1	120	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
HP-1B	HEAT PUMP OUTDOOR UNIT	2.496			12		FUSED DISC	NEMA 3R	208	1	15 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
MW	MICROWAVE	1.550					DUPLEX GFCI	NEMA 1	120	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
RANGE	ELECTRIC RANGE, 50A/2P CB	8.000					GFCI PROTECTED	NEMA 1	208	1	50 A	1°C, (3)6 AWG, (1)10 AWG EGC	
REF	REFRIGERATOR	1.200					DUPLEX GFCI	NEMA 1	120	1	20 A	0.5°C, (2)12 AWG, (1)12 AWG EGC	
WD-1	WASHER DRYER COMBO UNIT, 30A/2P CB	5.500					GFCI PROTECTED	NEMA 1	208	1	30 A	0.75°C, (3)10 AWG, (1)10 AWG EGC	
WH-1	ELECTRIC WATER HEATER	4.500					NON-FUSED DISC	NEMA 1	208	1	30 A	0.75°C, (2)10 AWG, (1)10 AWG EGC	

# REFERENCED SHEET NOTES

- REF NOTE
- 004 PROVIDE BRANCH CIRCUIT PANEL IN SHELL AREA LOCATED IN FUTURE UTILITY ROOM TO FEED ALL CIRCUITS IN PHASE 2 TI.
  - 104 COORDINATE WITH UTILITY FOR LOCATION OF BUILDING ELECTRICAL SERVICE AND APPROVAL OF CONFIGURATION AND EQUIPMENT TO BE PROVIDED PRIOR TO PROCUREMENT.

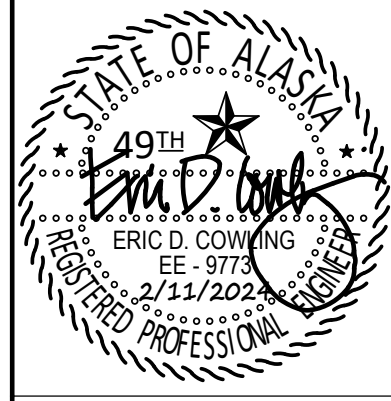
REVISIONS:									
------------	--	--	--	--	--	--	--	--	--

THRHA - Craig Senior Center

STATUS: CONSTRUCTION DOCUMENTS

DRAWN BY: LDW  
 CHECKED BY: EDC  
 DATE: 02/11/2024  
 PROJECT #: E23-4133

**R&M**  
 R&M ENGINEERING-KETCHIKAN, INC.  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com

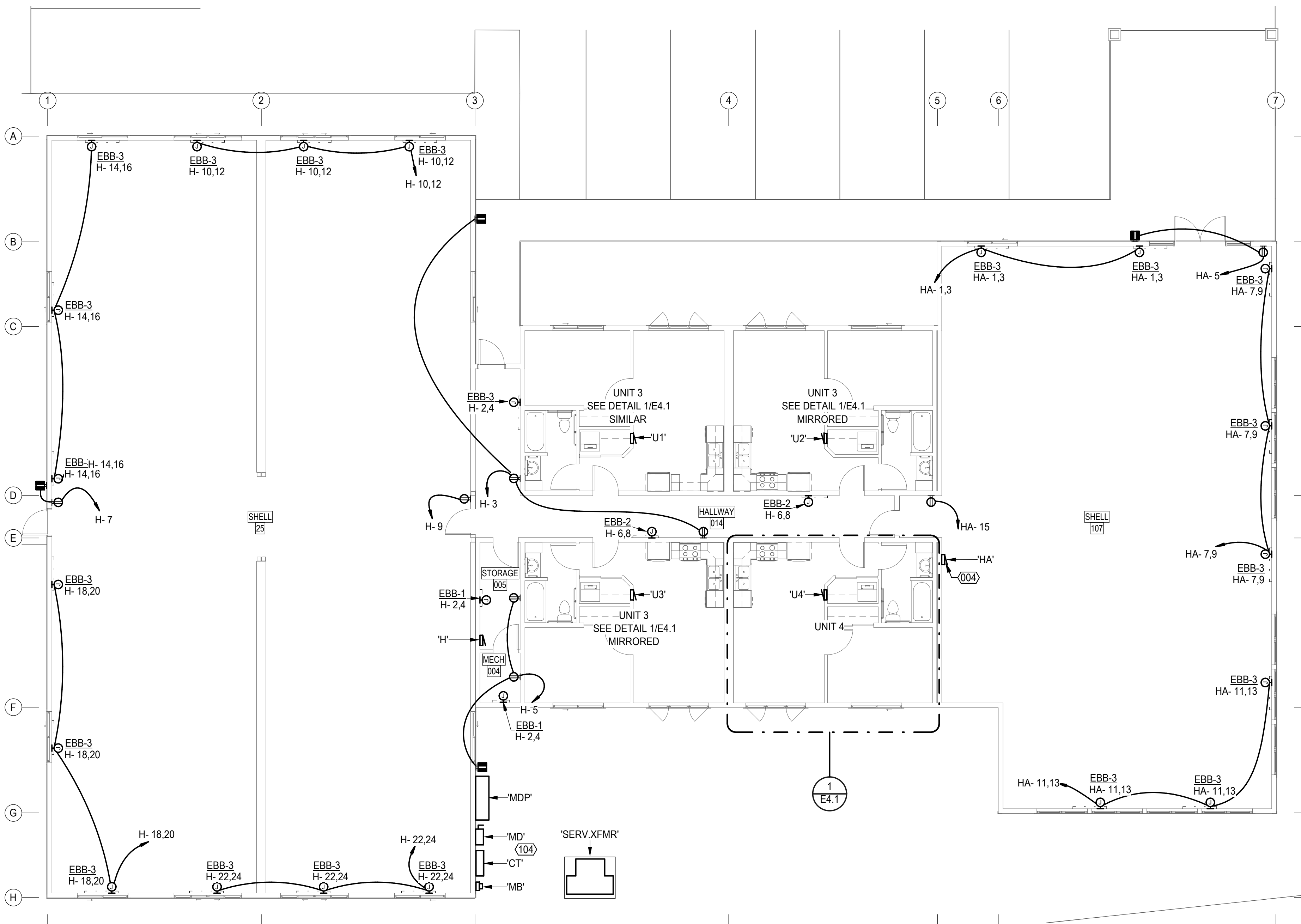


**EIC ENGINEERS, INC.**  
 ELECTRICAL ENGINEERS  
 EIC NO: E23-4133  
 CORP. #AECC1105  
 6927 OLD SEWARD HWY  
 SUITE 200  
 ANCHORAGE, AK 99518  
 T 907.349.9712  
 F 907.349.9713  
 www.eiceng.com

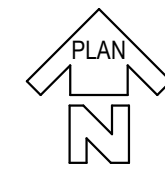
SHEET DESCRIPTION: POWER AND SIGNAL PLAN

E3.1

SHEET: of



1 POWER AND SIGNAL PLAN  
E3.1 SCALE: 1/8" = 1'-0"



SCALES ARE DENOTED AT 34"x22" SHEET SIZE. ADJUST ACCORDINGLY FOR OTHER PRINTED SHEET SIZES.

THIS SHEET IS FULL SIZE AT 34"x22"

2/11/2024 11:08:04 AM C:\Users\EricCowling\EIC Engineers\Design - Files\Projects\E23\E23-4133 THRHA Craig Senior Center - Phase 1\DES\E23-4133\_EShit24\_THRHA Craig Senior Cntr-Phase1.rvt  
qt:c02/11/2024 11:07:54 : fc:1 : lvs:OnSht : abudDbi : \*na5a : 1.1.5.0.6.17/670

# REFERENCED SHEET NOTES

REF	NOTE
001	HEAT PUMP INDOOR UNIT. POWERED BY EXTERNAL UNIT HP-1B.

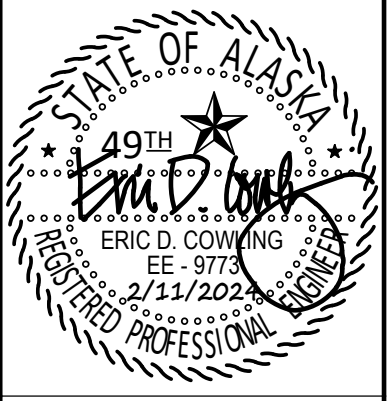
REVISIONS:


THRHA - Craig Senior Center

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: LDW  
CHECKED BY: EDC  
DATE: 02/11/2024  
PROJECT #: E23-4133

**R&M**  
**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com

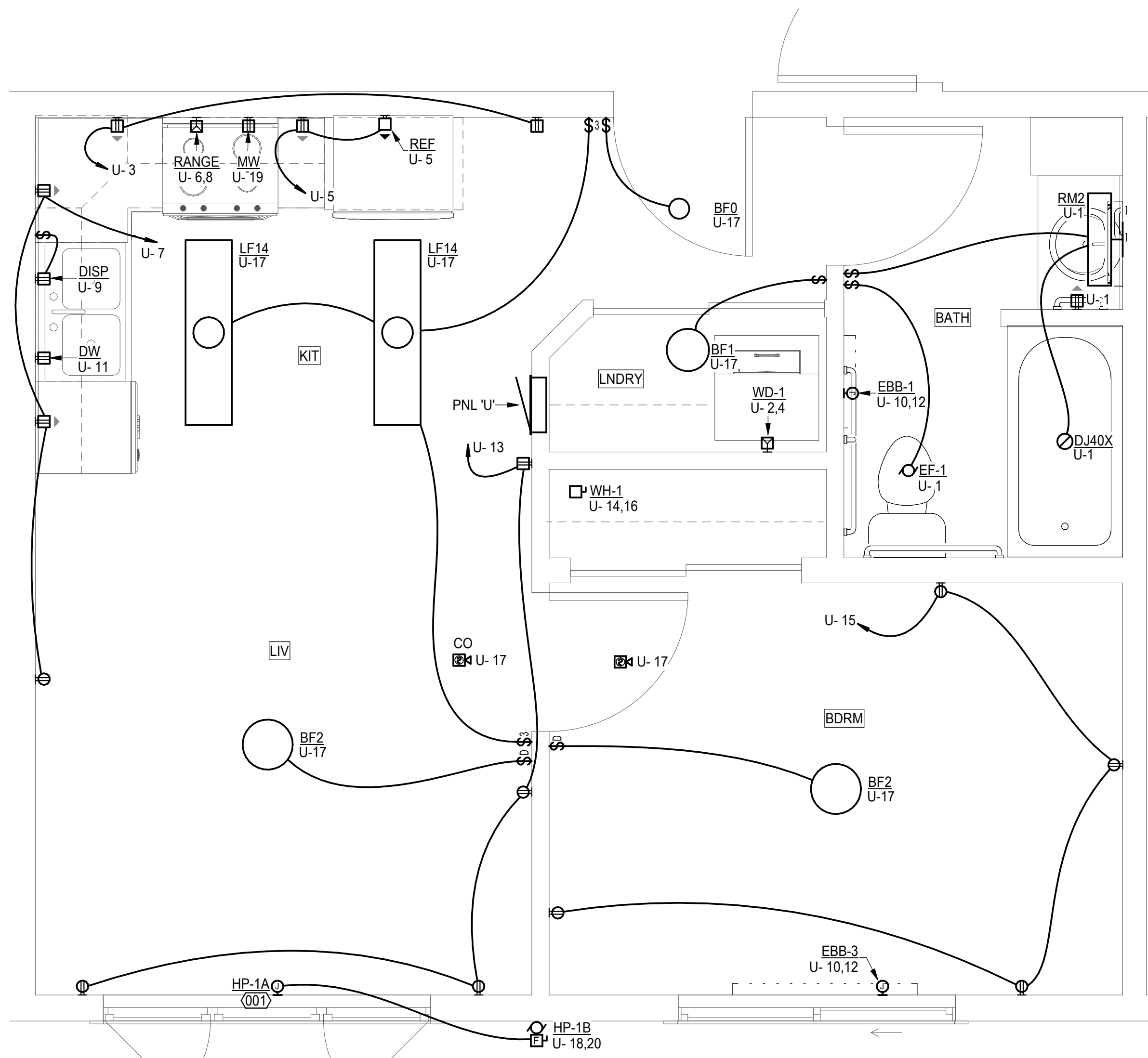


**EIC ENGINEERS, INC**  
 ELECTRICAL ENGINEERS  
 EIC NO: E23-4133  
 CORP. #AECC1105  
 6927 OLD SEWARD HWY  
 SUITE 200  
 ANCHORAGE, AK 99518  
 T 907.349.9712  
 F 907.349.9713  
 www.eiceng.com

SHEET DESCRIPTION:  
UNIT ELECTRICAL PLANS  
& SCHEDULES

**E4.1**

SHEET: \_\_\_\_\_ of \_\_\_\_\_



1 UNIT ELECTRICAL PLAN  
E4.1 SCALE: 1/2" = 1'-0"

SCALES ARE DENOTED AT 34"x22" SHEET SIZE. ADJUST ACCORDINGLY FOR OTHER PRINTED SHEET SIZES.

THIS SHEET IS FULL SIZE AT 34"x22"

2/11/2024 11:08:05 AM C:\Users\ericowling\EIC Engineers\Design - Files\Projects\E23\E23-4133\_THRHA\_Craig Senior Center - Phase 1\Drawings\E23-4133\_Esh24\_Thrha\CraigSeniorCenter-Phase1.rvt  
qc02/11/2024 11:07:54 : fc-1 : lvsOnSht : abuDbl : \*na5a : 1.1.5.0.6.17/670

LUMINAIRE SCHEDULE						
NOTES						
(KEY)	(x) DENOTES A GENERAL, NON-REFERENCED, NOTE. NUMBERED NOTES ARE REFERENCED IN THE SCHEDULE.					
(A)	CATALOG NUMBERS ARE FOR GENERAL REFERENCE AND ARE NOT INCLUSIVE OF ALL OPTIONS/REQUIREMENTS DENOTED ON PLANS AND SPECIFICATIONS. ASTERISK (*) DENOTES COORDINATION ITEMS.					
(B)	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND PROVIDE MOUNTING HARDWARE/FLANGES ETC FOR ALL LUMINAIRES FOR CEILING TYPES SHOWN.					
(C)	PROVIDE UNIVERSAL OR MULTI-VOLTAGE VOLTAGE DRIVERS WHEN AVAILABLE. COORDINATE EXACT VOLTAGE/PHASE WITH CONNECTED CIRCUITS IN ALL OTHER SITUATIONS.					
(D)	LIGHT SOURCE COLOR TEMPERATURE, UNLESS OTHERWISE NOTED: 3500K (SELECT NEAREST AVAILABLE COLOR TEMP FOR EACH LUMINAIRE TYPE). LIGHT SOURCE CRI TO BE 80 MIN. UON.					
(E)	COLOR FINISH FOR ALL EXTERIOR LUMINAIRES TO BE DARK BRONZE UON.					
(F)	ALL POLES TO BE SQUARE STEEL WITH VIBRATION DAMPER RATED FOR 100MPH WIND & 1.3 GUST FACTOR FOR OVERALL EPA. NUMBER OF HEADS AND ORIENTATION TO BE AS DONOTED ON THE PLANS.					
(G)	PROVIDE DRIVEN STEEL PILE LIGHT POLE FOUNDATION PER M.A.S.S. DETAIL 80-13. EXTEND PILE 3'-0" ABOVE GRADE AND PROVIDE 3'-0" CONCRETE PROTECTION BASE UON FOR AN OVERALL MOUNTING HEIGHT AS DENOTED IN MOUNTING COLUMN. NOMINAL POLE SHAFT LENGTH IS EQUAL TO MOUNTING HEIGHT MINUS 3'-0" CONCRETE BASE. ALL POLES TO INCLUDE ANCHOR BOLT TRIM COVERS.					
SCHEDULE						
TYPE	DESCRIPTION	WATTS	LUMENS	MOUNTING	MANUFACTURER	MODEL
BF0	5" SURFACE LED DOWNLIGHT	10 W	754 LM LED	CEILING SURFACE	JUNO	JSF 5IN 07LM *** MVOLT ZT [DWELLINGS USE 120FRPC] WH
BF1	11" SURFACE LED DOWNLIGHT	15 W	1352 LM LED	CEILING SURFACE	JUNO	JSF 11IN 13LM *** MVOLT ZT [DWELLINGS USE 120FRPC] WH
BF2	13" SURFACE LED DOWNLIGHT	20 W	1843 LM LED	CEILING SURFACE	JUNO	JSF 13IN 18LM *** MVOLT ZT [DWELLINGS USE 120FRPC] WH
D61	6" OPEN LED DOWNLIGHT, ADJUSTABLE (FIELD SET TO 750 LUMENS)	13 W	750 LM LED	CEILING RECESSED	LITHONIA	LDN6 AL01 SWW1* L06AR LD MVOLT UGZ
DJ40X	4" LENSED LED DOWNLIGHT WET LOCATION	9 W	534 LM LED	CEILING RECESSED	JUNO	IC1LED G4 06LM *K *CRI * 12 WWH
E1	EMERGENCY LIGHTING UNIT W/ TWO ADJUSTABLE HEADS	0 W	(2) 0.75W LED	WALL +7'-0"	LITHONIA	EU2L
E2	EMERGENCY LIGHTING UNIT W/ TWO ADJUSTABLE HEADS	1 W	(2) 1.2W LED	WALL +7'-0" OR CEILING	LITHONIA	ELM2L M12
LA3	4FT LED STRIP W/ ADJUSTABLE OUTPUT (FIELD SET SWITCH TO 3000 LUMENS)	28 W	3190 LM LED	CEILING SURFACE	LITHONIA	CSS L48 AL03 MVOLT SWW3 80CRI (FIELD SET CCT *)
LA5	4FT LED STRIP W/ ADJUSTABLE OUTPUT (FIELD SET SWITCH TO 5000 LUMENS)	44 W	5058 LM LED	CEILING SURFACE	LITHONIA	CSS L48 AL03 MVOLT SWW3 80CRI (FIELD SET CCT *)
LF14	1' X 4' LED FLAT PANEL W/ ADJUSTABLE OUTPUT (FIELD SET SWITCH TO 4400 LUMENS)	39 W	4356 LM LED	CEILING SURFACE	LITHONIA	CPANL 1X4 24/33/44LM *K M4 DCMK 14
RM2	2FT LED CYLINDER VANITY	18 W	1737 LM LED	WALL OVER MIRROR	LITHONIA	FMVCLS 24IN MVOLT * 90CRI BN
XE	LED COMBO EXIT SIGN & EMERGENCY LIGHTING UNIT W/ BATTERY BACKUP	4 W	GREEN LED	WALL OR CEILING	LITHONIA	LHQM LED G
XEA	LED COMBO EXIT SIGN & EMERGENCY LIGHTING UNIT W/ EXTERIOR REMOTE EM LIGHT	4 W	GREEN LED	WALL OR CEILING	LITHONIA	LHQM LED G HO; AFB OELR DDBTXD WT
ZB3	8" ROUND LED BOLLARD W/ ALUMINUM MOUNTING RING	39 W	3009 LM LED	CONCRETE BASE	LITHONIA	KBD8 LED 16C 700 *K SYM **
ZC1	12" ROUND CANOPY AREA LIGHT	17 W	1077 LM LED	CEILING/SURFACE	LITHONIA	OLCFM 15 *
ZPD18	POLE MOUNTED AREA LIGHT	140 W	17791 LM LED	POLE +20'-0"	LITHONIA	DSX1 LED P2 40K TFTM MVOLT
ZWA1	OUTDOOR LED WALL LUMINAIRE, DIE-CAST ALUMINUM	11 W	1454 LM LED	WALL 7'-2"	LITHONIA	ARC1 LED P1 * MVOLT *
ZWA6	OUTDOOR LED WALL LUMINAIRE, DIE-CAST ALUMINUM	51 W	6615 LM LED	WALL 13' 6"	LITHONIA	ARC2 LED P5 * MVOLT *

DISTRIBUTION SCCR SCHEDULE			
EQUIPMENT SHALL HAVE A 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) AND THE MOTOR LOADS 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. LENGTHS PROVIDED ARE MINIMUM FOR VALID CALCULATED VALUE AND DO NOT REPRESENT ACTUAL FEEDER LENGTH.			
ASSUMED UTILITY SYSTEM CONFIGURATION (BASIS FOR CALCULATION)			
SERVICE TRANSFORMER			
KVA	%Z	LINE-LINE	LINE-NEUTRAL
300	2.50	33,291	33,291
- FOR CALCULATION ONLY - SERVICE LATERAL			
AMPS	SCA	MIN SCCR	XR
1000	3EA: (4)400 KCMIL	14	
EQUIPMENT ID	SCA	MIN SCCR	XR
CT	31,910	36,000	2.94
H	23,248	26,000	1.60
HA	9,049	10,000	0.53
MD	31,280	35,000	2.86
MDP	30,738	34,000	2.79
U1	16,216	18,000	1.11
U2	14,369	16,000	1.01
U3	19,439	22,000	1.30
U4	16,175	18,000	1.10

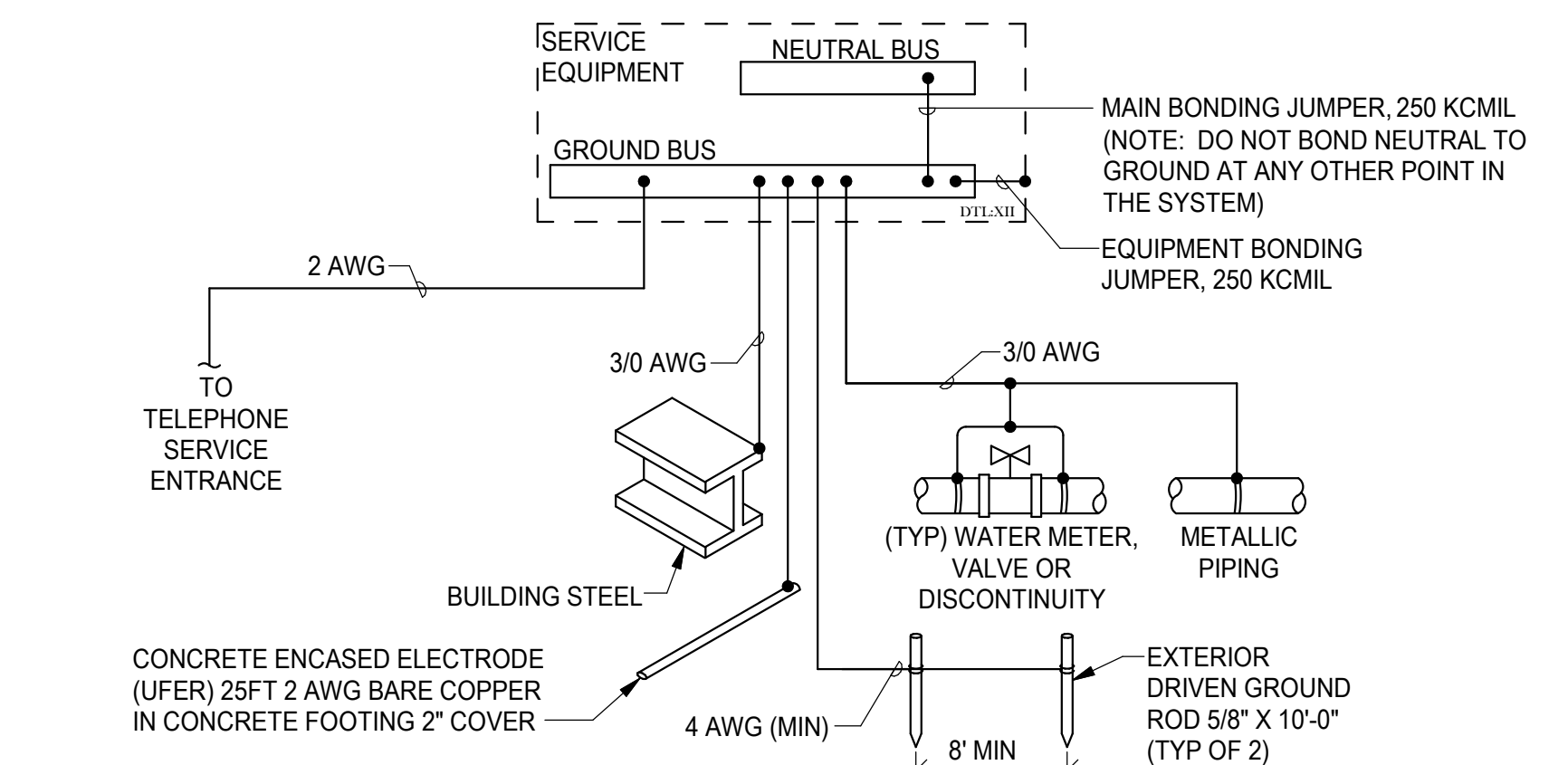
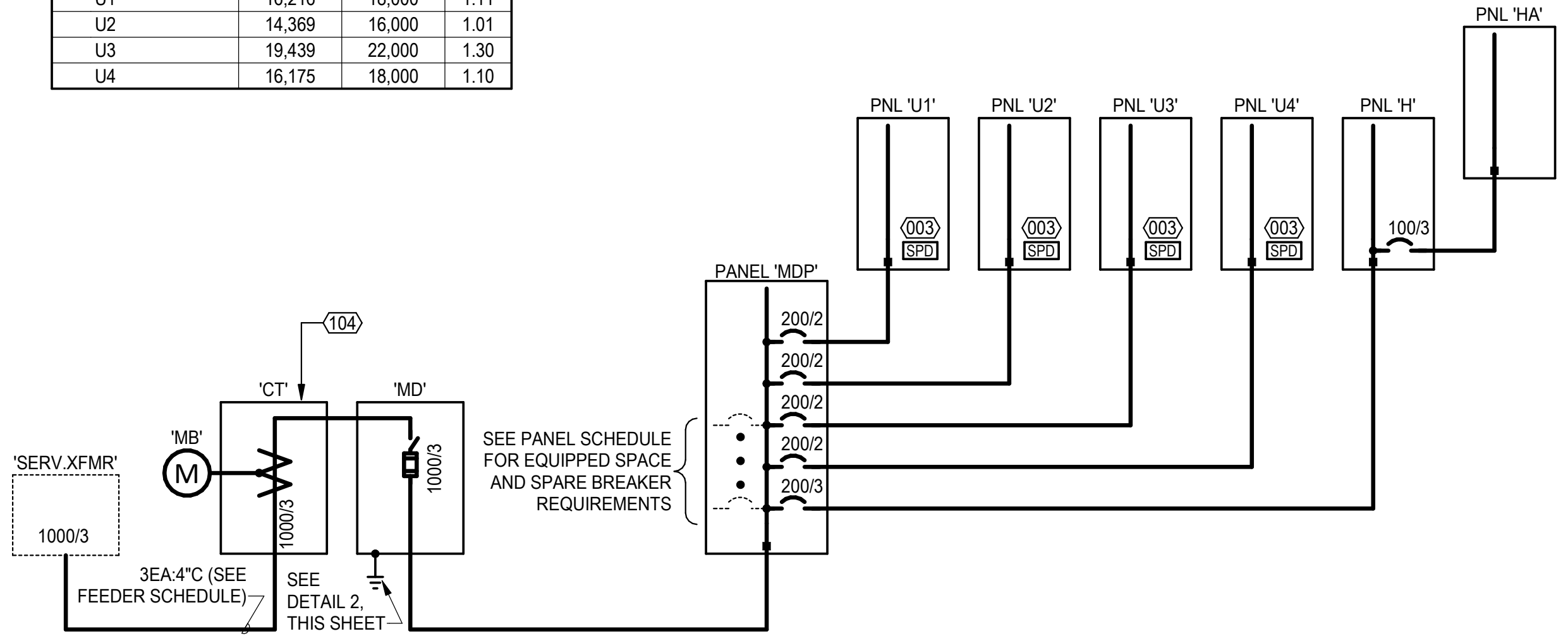
SERVICE EQUIPMENT SCHEDULE					
NOTES					
(KEY)	(x) DENOTES A GENERAL, NON-REFERENCED, NOTE.				
(A)	*MB* DENOTES ELECTRICAL SERVICE METERBASE PER UTILITY STANDARDS.				
1	NOT USED.				
SCHEDULE					
ID	FUNCTION	OPD	VOLTAGE CONFIG	ENCLOSURE	NOTES
CT	CT ENCLOSURE	1000 A	208Y/120V, 3PH, 4W	NEMA 3R	
MD	SERVICE MAIN	1000 A	208Y/120V, 3PH, 4W	NEMA 3R	

FEEDER SCHEDULE		
ID	AMPERAGE	FEEDER (MINIMUM) CU UON
CT	1000	3EA: (4)400 KCMIL
MD	1000	3EA: 3"C, (4)400 KCMIL, (1)3/0 AWG BJ
MDP	1000	3EA: 3"C, (4)400 KCMIL, (1)2/0 AWG EGC
H	200	2"C, (4)3/0 AWG, (1)6 AWG EGC
U1	200	2"C, (3)3/0 AWG, (1)6 AWG EGC
U2	200	2"C, (3)3/0 AWG, (1)6 AWG EGC
U3	200	2"C, (3)3/0 AWG, (1)6 AWG EGC
U4	200	2"C, (3)3/0 AWG, (1)6 AWG EGC
HA	100	1.25"C, (4)2 AWG, (1)6 AWG EGC

SER CABLES ARE ACCEPTABLE WHERE PROTECTED FOR 200 AMP AND BELOW FEEDERS

EQUIPMENT SCCR SCHEDULE				
NOTES				
(A)	THE SHORT CIRCUIT AMPS (SCA) COLUMN DENOTES THE CALCULATED MAXIMUM AVAILABLE FAULT CURRENT AT THE EQUIPMENT'S POINT OF CONNECTION.			
(B)	THE SHORT CIRCUIT CURRENT RATING (SCCR) COLUMN DENOTES THE EQUIPMENT SCCR RATING EXPECTED. THE CONTRACTOR SHALL VERIFY THE INSTALLED EQUIPMENT MEETS OR EXCEEDS THE EXPECTED SCCR VALUE. WHERE THE SCCR VALUE IS LESS THAN THE SCA VALUE, THE CONTRACTOR SHALL PROVIDE A DISCONNECT WITH CURRENT LIMITING FUSES CAPABLE TO REDUCE THE PEAK LET-THROUGH CURRENT TO LESS THAN THE EQUIPMENT'S SCCR RATING. TYPICALLY THIS WILL REQUIRE CLASS RK1 FAST ACTING OR T FAST-ACTING FUSES. THE CONTRACTOR SHALL PROVIDE THE FUSE DOCUMENTATION OF THE LIMITED PEAK LET-THROUGH VALUE TO THE ENGINEER, INSPECTOR, AND POST INSIDE THE EQUIPMENT.			
(C)	THE OPD COLUMN DENOTES THE UPSTREAM CIRCUIT BREAKER RATING. THE FUSE AMPERAGE IS TO BE SELECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS FOR THE SPECIFIC EQUIPMENT PROVIDED.			
(D)	PROVIDE SIGNAGE AT THE DISCONNECT DENOTING THE EQUIPMENT ID, FED FROM PANEL 'ID', SCA, AND THE DATE OF THE PLANS. WHERE CURRENT LIMITING FUSES ARE REQUIRED ALSO PROVIDE WARNING SIGNAGE DENOTING THE PEAK LET-THROUGH AMPERAGE OF THE FUSES, TEXT DENOTING "IDENTIFIED REPLACEMENT COMPONENTS REQUIRED", FOLLOWED BY AMPERAGE AND MANUFACTURER/MODEL TYPE OF FUSE REQUIRED.			
SCHEDULE				
ID	TYPE	OPD	SCA	SCCR
HP-1B	FUSED DISC	15 A	3,465	5,000

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.



1 POWER ONE-LINE DIAGRAM  
 E5.1 SCALE: NONE

2 GROUNDING SYSTEM ONE-LINE DIAGRAM  
 E5.1 SCALE: NONE

SCALES ARE DENOTED AT 34"x22" SHEET SIZE. ADJUST ACCORDINGLY FOR OTHER PRINTED SHEET SIZES.

# REFERENCED SHEET NOTES

REF	NOTE
003	PROVIDE SURGE PROTECTION DEVICE IN EACH DWELLING UNIT PANEL.
104	COORDINATE WITH UTILITY FOR LOCATION OF BUILDING ELECTRICAL SERVICE AND APPROVAL OF CONFIGURATION AND EQUIPMENT TO BE PROVIDED PRIOR TO PROCUREMENT.

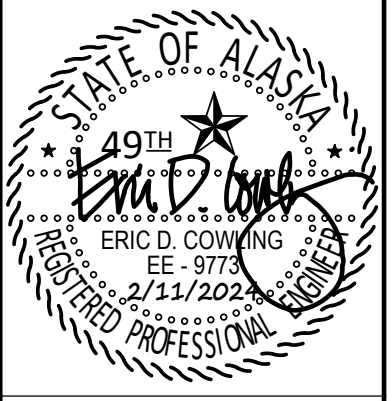
REVISIONS:

THRHA - Craig Senior Center

STATUS:  
**CONSTRUCTION DOCUMENTS**

DRAWN BY: LDW  
 CHECKED BY: EDC  
 DATE: 02/11/2024  
 PROJECT #: E23-4133

**R&M ENGINEERING-KETCHIKAN, INC.**  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901  
 PH: 907.225.7917  
 www.ketchikanengineer.com



**EIC ENGINEERS, INC.**  
 ELECTRICAL ENGINEERS  
 EIC NO: E23-4133  
 CORP. #AECC1105  
 6927 OLD SEWARD HWY  
 SUITE 200  
 ANCHORAGE, AK 99518  
 T 907.349.9712  
 F 907.349.9713  
 www.eiceng.com

SHEET DESCRIPTION:  
 ONE-LINE DIAGRAMS,  
 DETAILS, AND SCHEDULES

**E5.1**

SHEET:  
 of

