

BIRD DETERRENT LEGEND

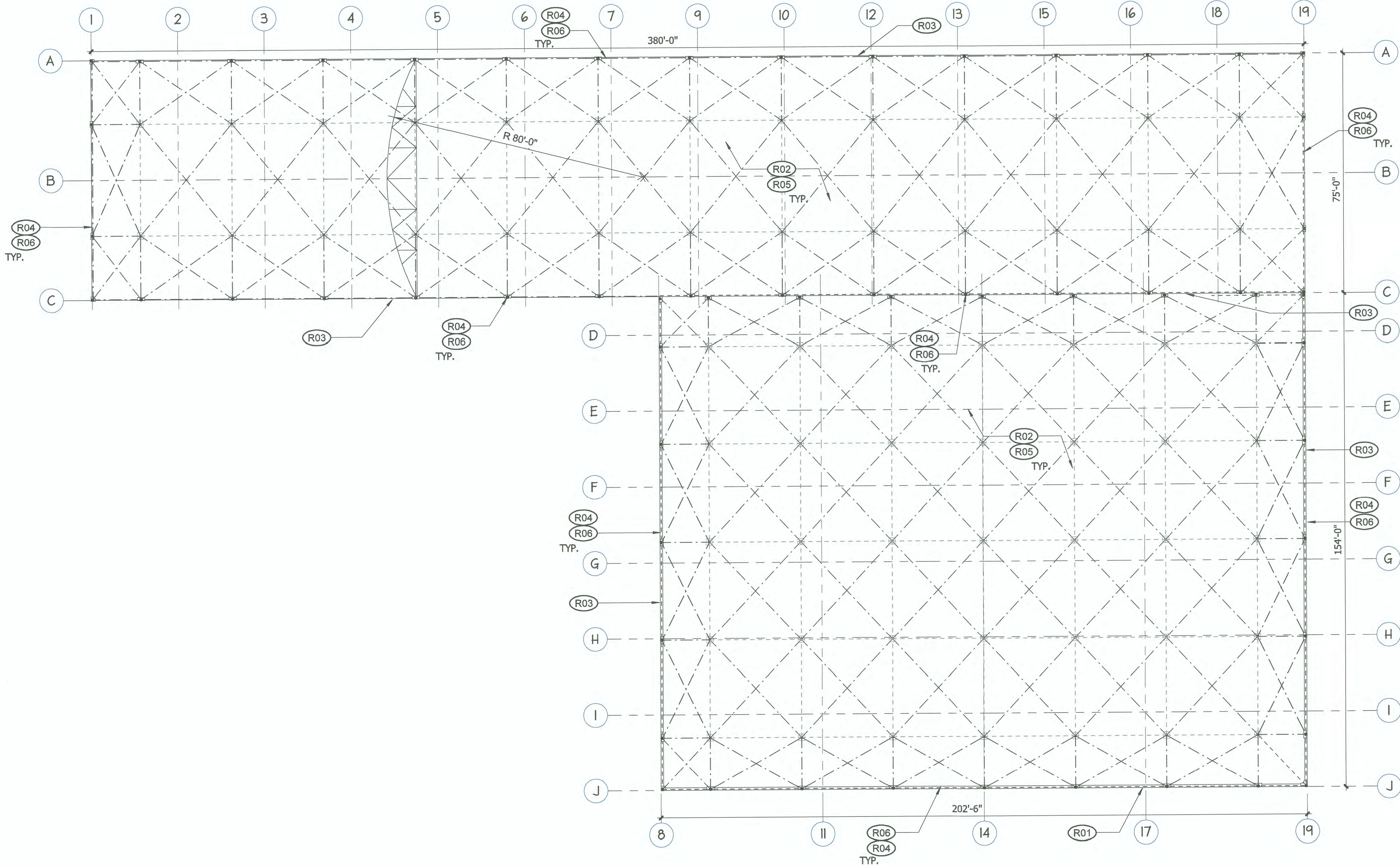
DESCRIPTION	SYMBOL AND TEXT
BIRD DETERRENT SYSTEM	
(E) ROOF POST*	
ROOF POST*	
PARAPET MOUNTED POST*	
PARAPET BIRD SPIKES	
(E) WIRES	
WIRES	
* SEE GENERAL NOTE C POLE MOUNTING REQUIREMENTS	

GENERAL NOTES

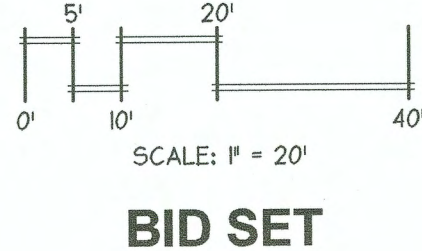
NOTE
1. ABBREVIATIONS:
(D) - DEMOLITION
(R) - RELOCATE
(E) - EXISTING TO REMAIN
(S) - SALVAGE
REFER TO SHEET G2.10 FOR STANDARD ABBREVIATIONS LIST.

ROOF PLAN NOTES

SYMBOL	NOTE
(R01)	PROVIDE BIRD DETERRENT SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 10 81 13, AS FOLLOWS:
(R02)	PROVIDE BIRD SPIKES ON PERIMETER PARAPET WALLS.
(R03)	EXISTING POLES AND WIRE GRID BETWEEN POLES TO REMAIN.
(R04)	PROVIDE BIRD DETERRENT WIRE APPROXIMATELY 8 INCHES ABOVE EXISTING GUTTERS.
(R05)	PROVIDE HORIZONTAL WIRES AT APPROXIMATELY 18" O.C. VERTICALLY BETWEEN POLES, ALONG PERIMETER ROOF, TYPICAL. BOTTOM WIRE SHALL BE LOCATED 8" ABOVE ROOF.
(R06)	PROVIDE CROSS WIRES DIAGONALLY BETWEEN POLES, TYPICAL IN FIELD OF ROOF.
(R07)	PROVIDE POLES AND WIRE GRID ALONG ROOF PERIMETER, TYPICAL, AND CONNECT TO EXISTING SYSTEM. FASTEN BASE PLATE TO OUTSIDE FACE PARAPET WALL OR FASCIA.



ROOF PLAN - BLDG 523
1" = 20'-0"



BID SET

A1.30
7 OF 18

EBC BLDG 326 HVAC & ROOF REPLACEMENT
& BLDGS 407 & 532 BIRD WIRE

ROOF PLAN - B532

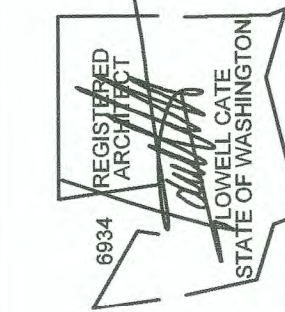
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PROJ. ENGR. DATE

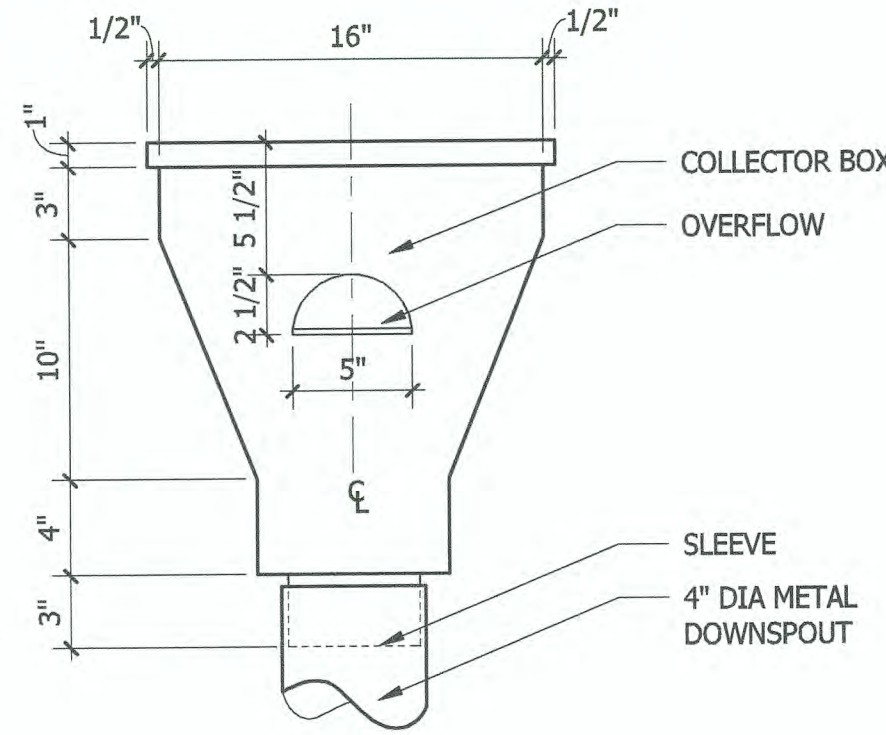
PORT ADDRESS: 401 ALEXANDER AVENUE,
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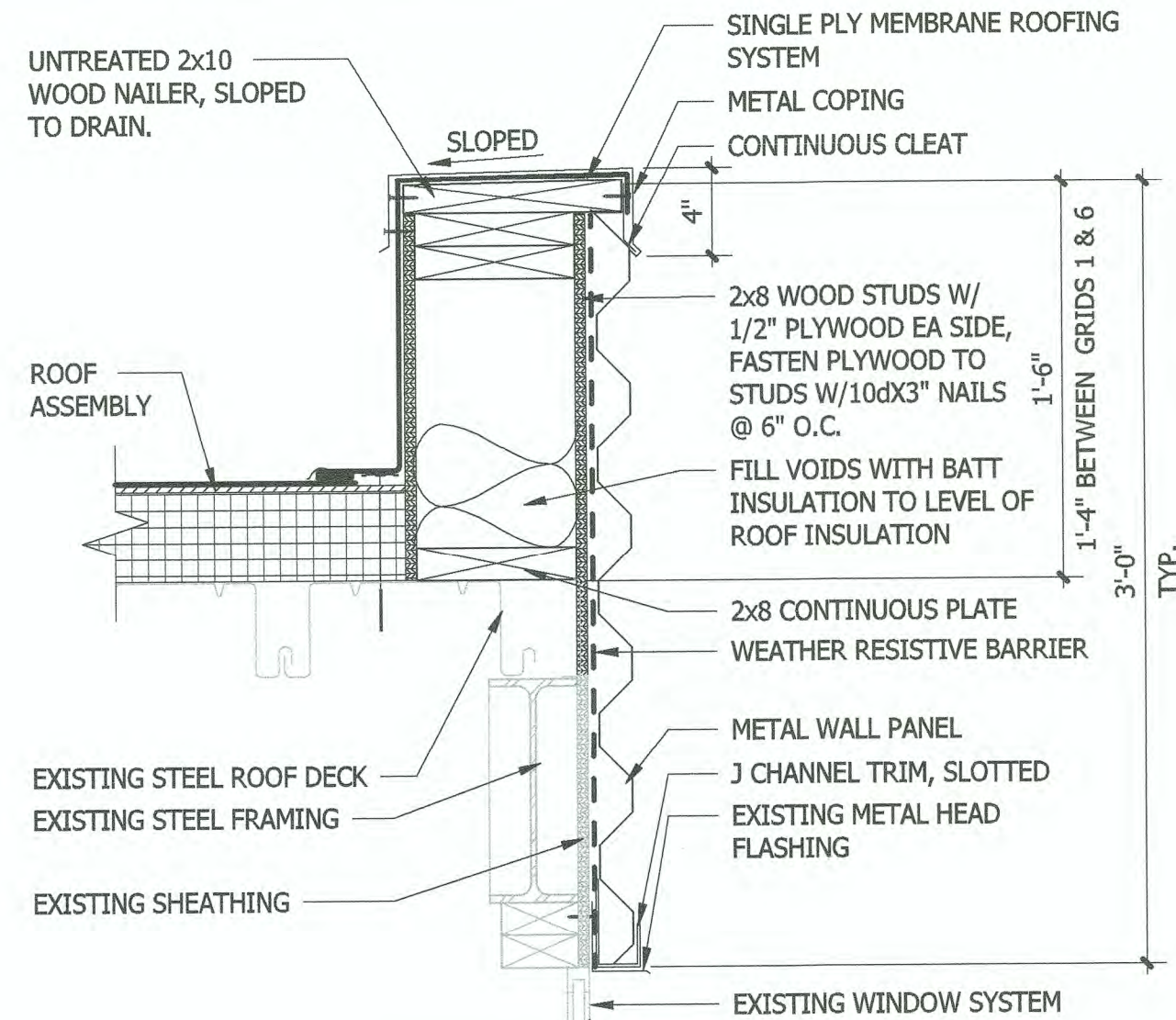
Port of
Tacoma
P.O. BOX 1807 TACOMA, WA 98401 (253)895-5841

MARK: REVISION: BY: DATE:



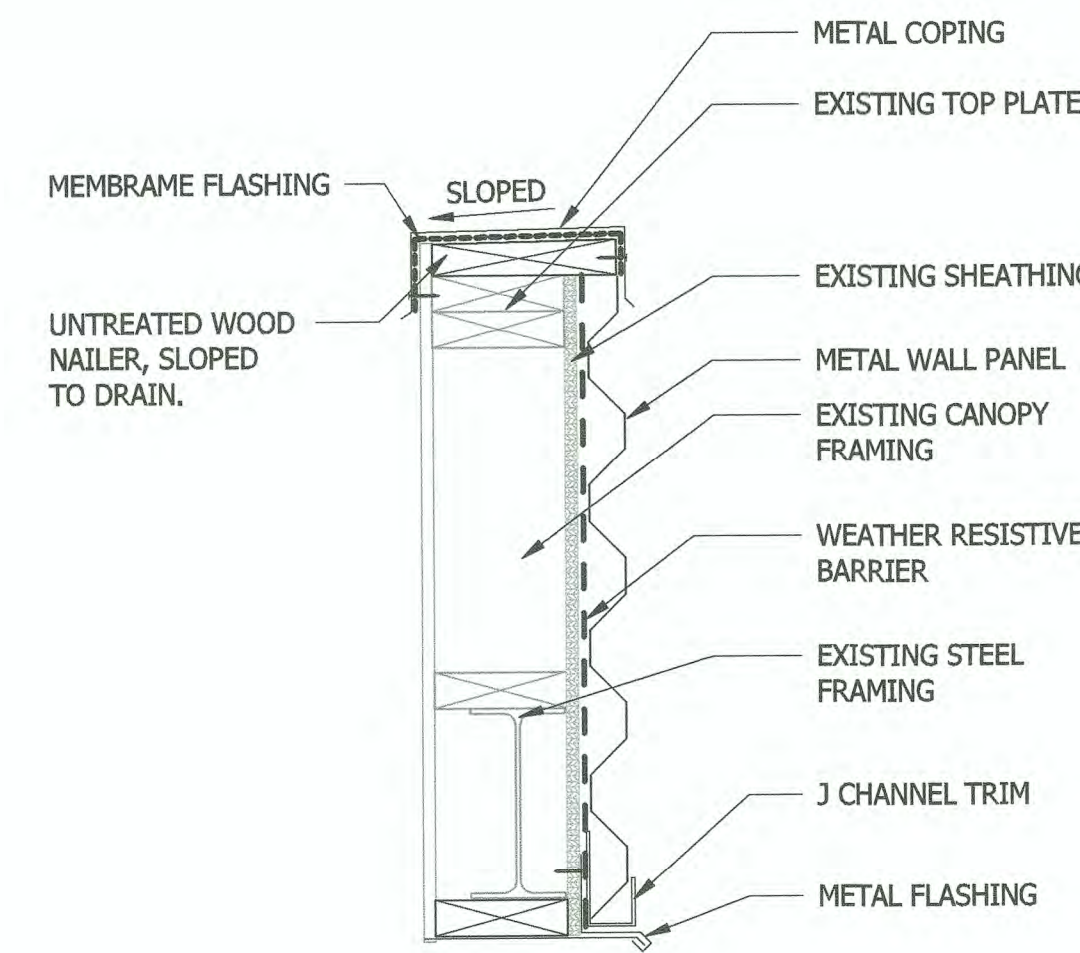
CONDUCTOR HEAD DETAIL

1 1/2" = 1'-0"



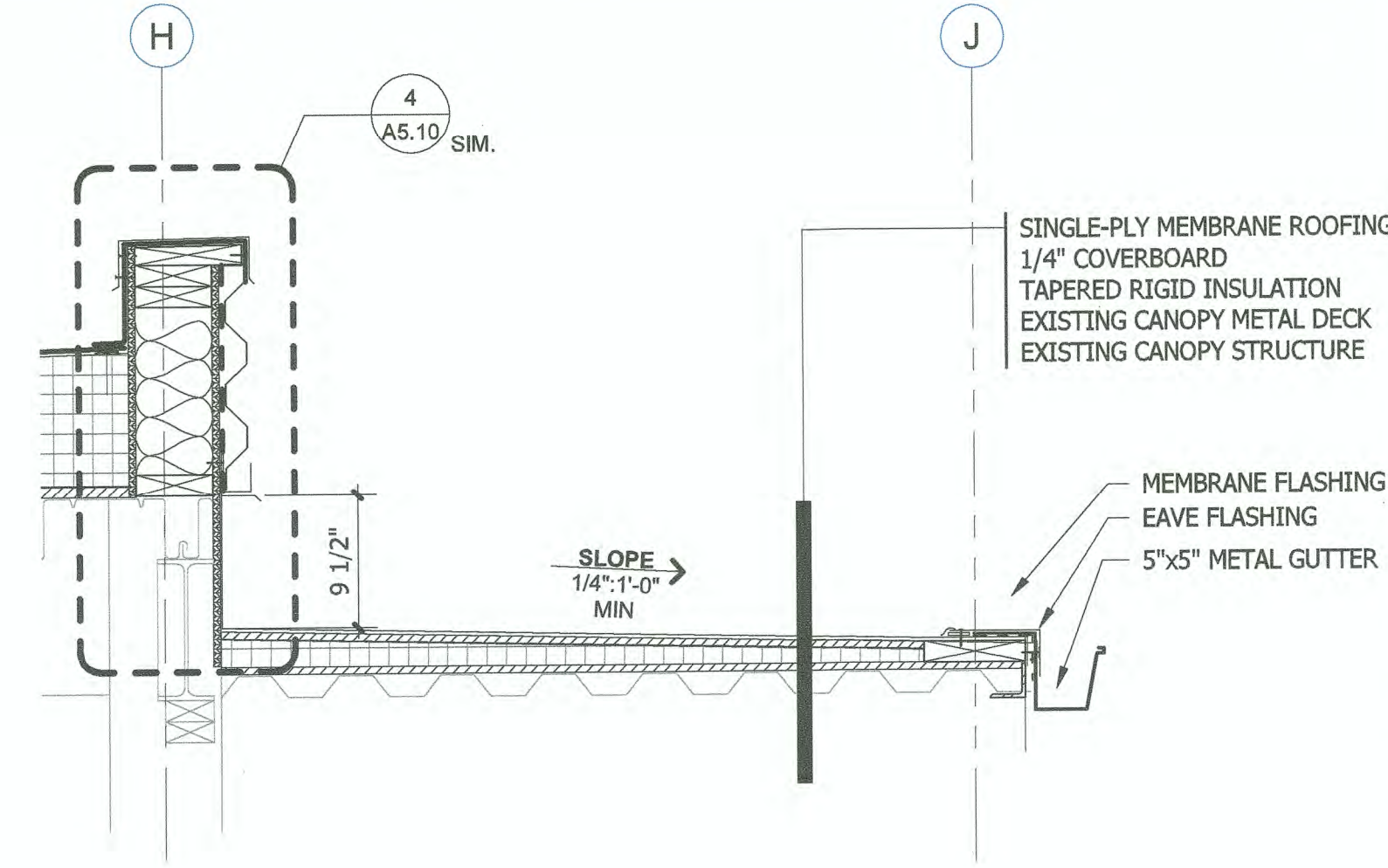
PARAPET DETAIL

1 1/2" = 1'-0"



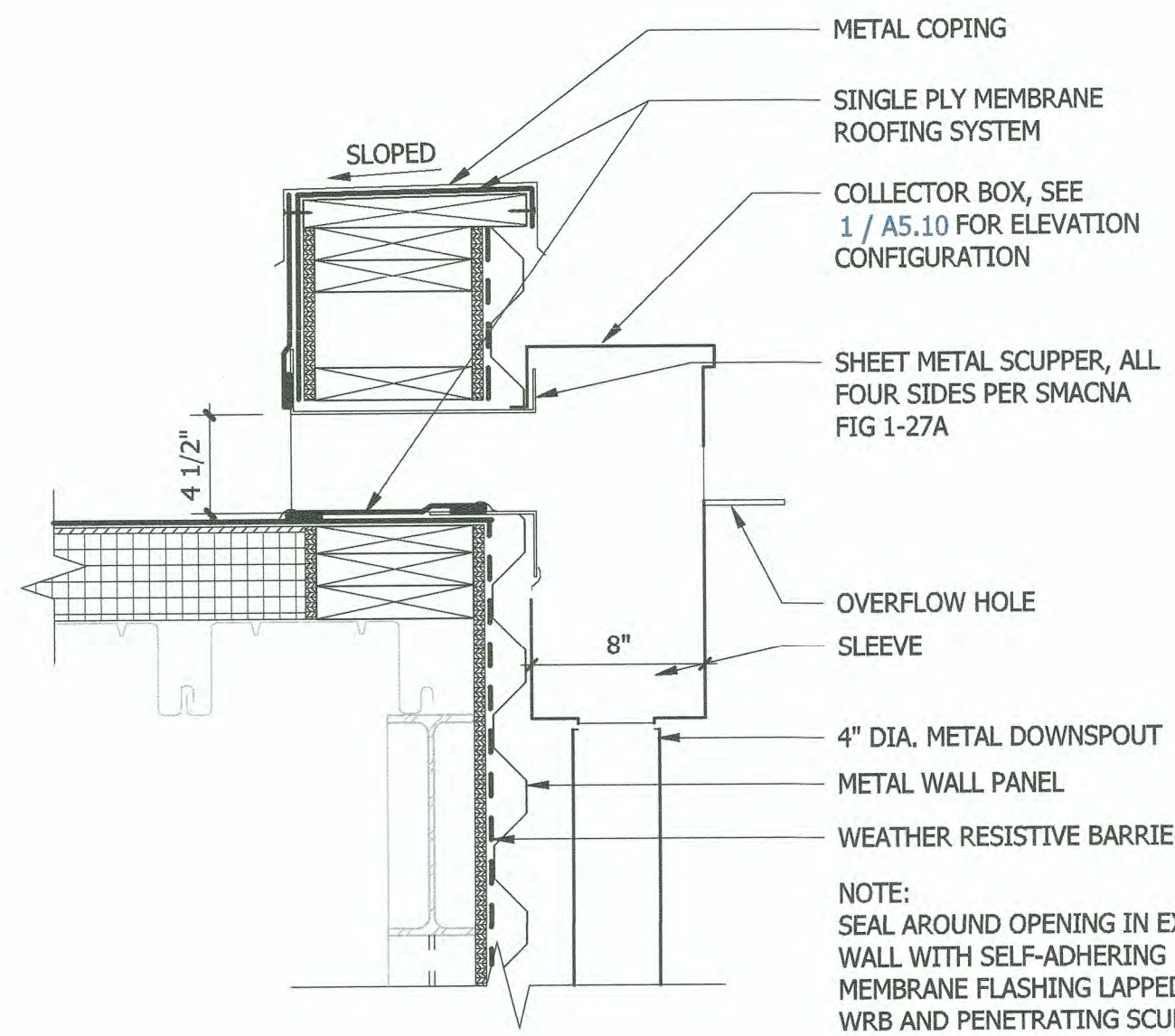
CANOPY DETAIL

1 1/2" = 1'-0"



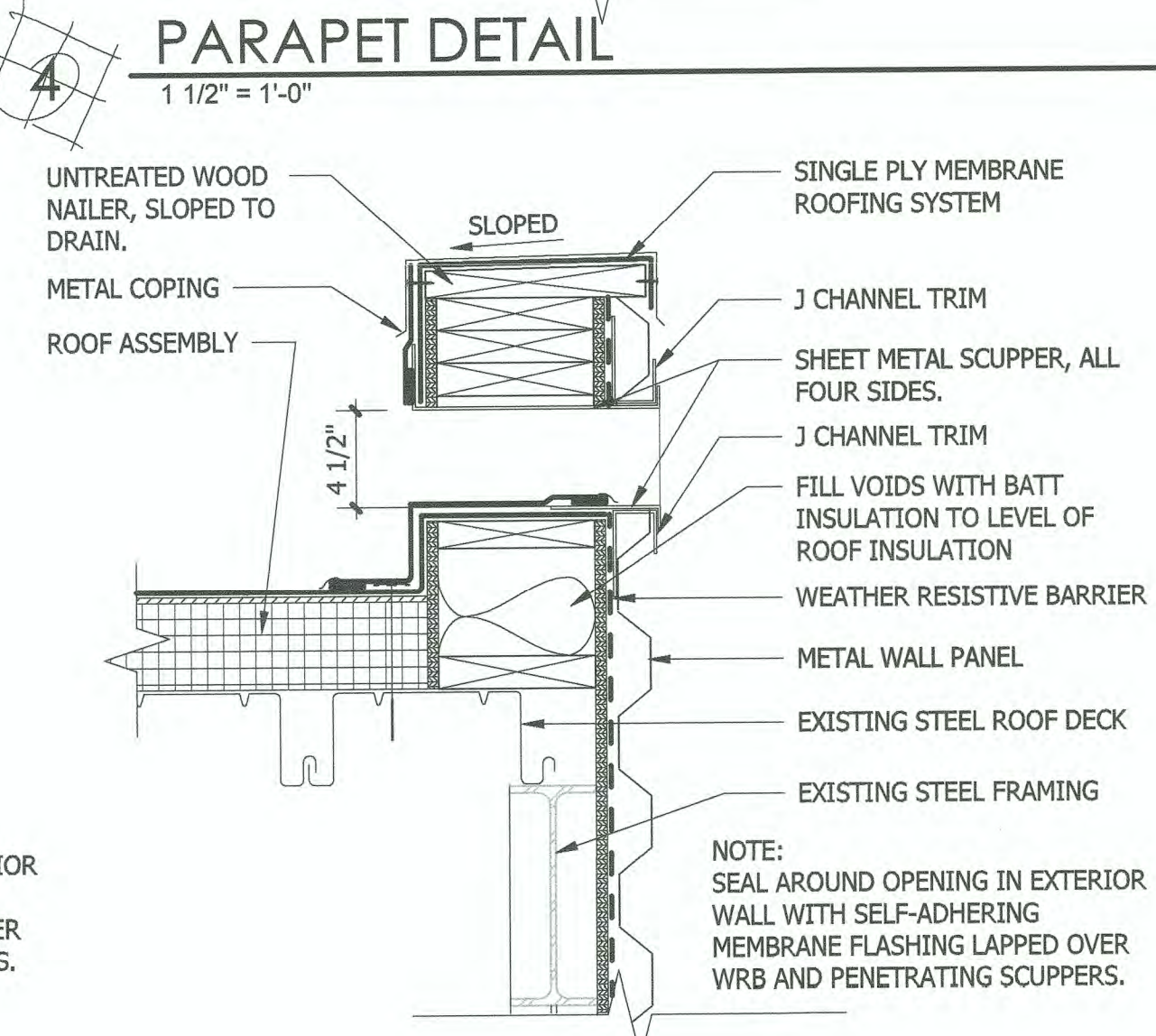
CANOPY DETAIL

1" = 1'-0"



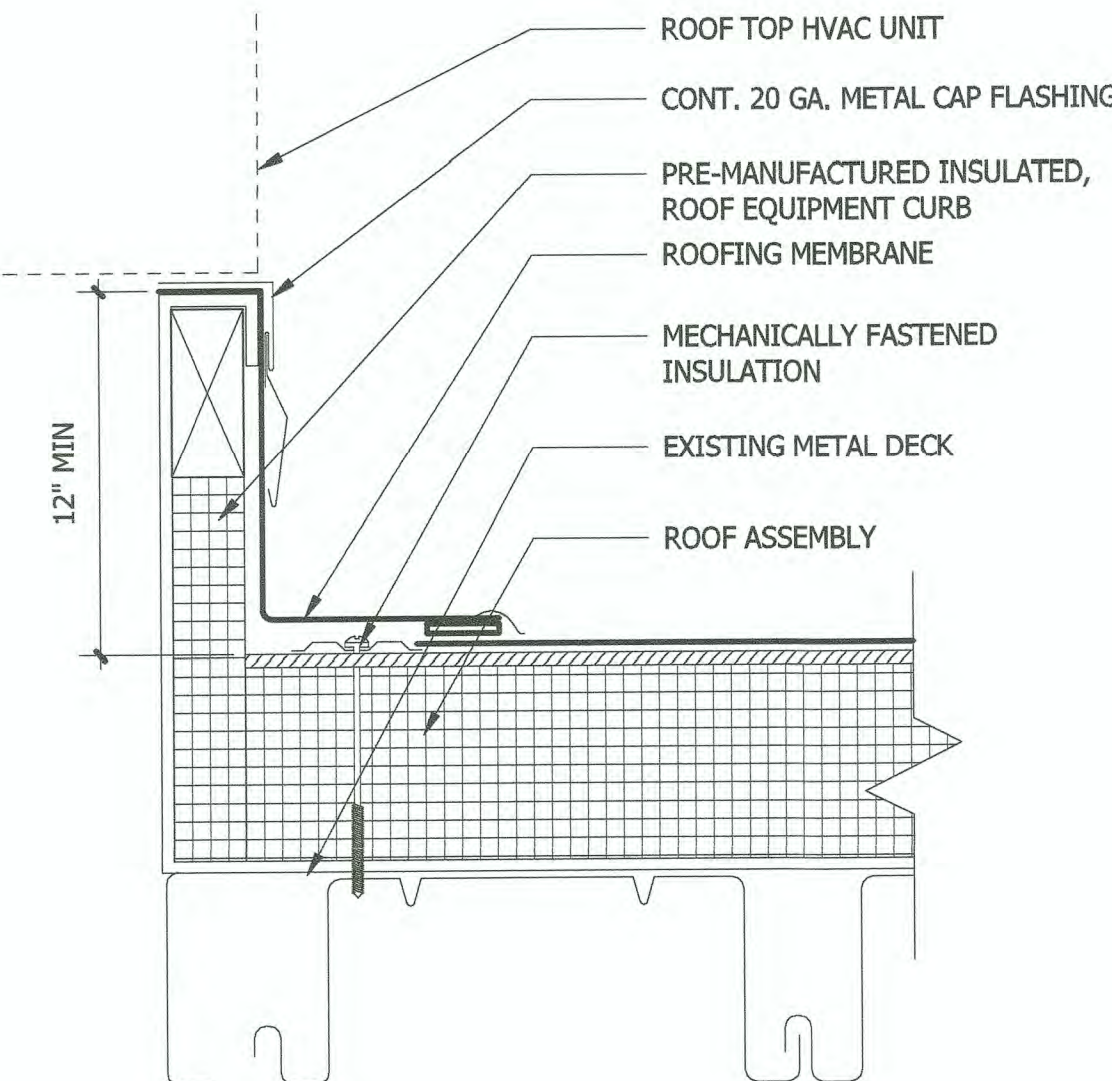
SCUPPER DETAIL

1 1/2" = 1'-0"



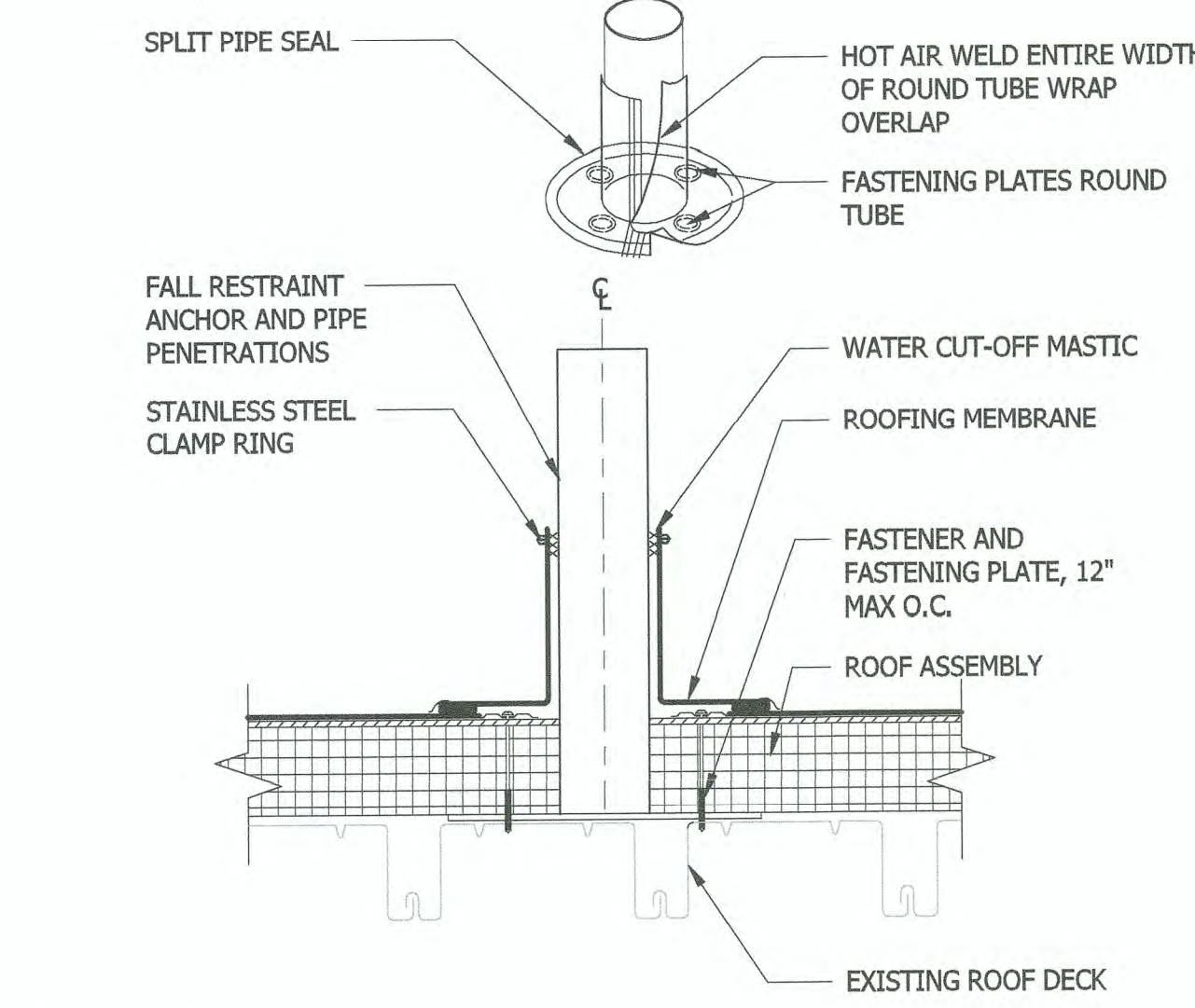
OVERFLOW SCUPPER DETAIL

1 1/2" = 1'-0"



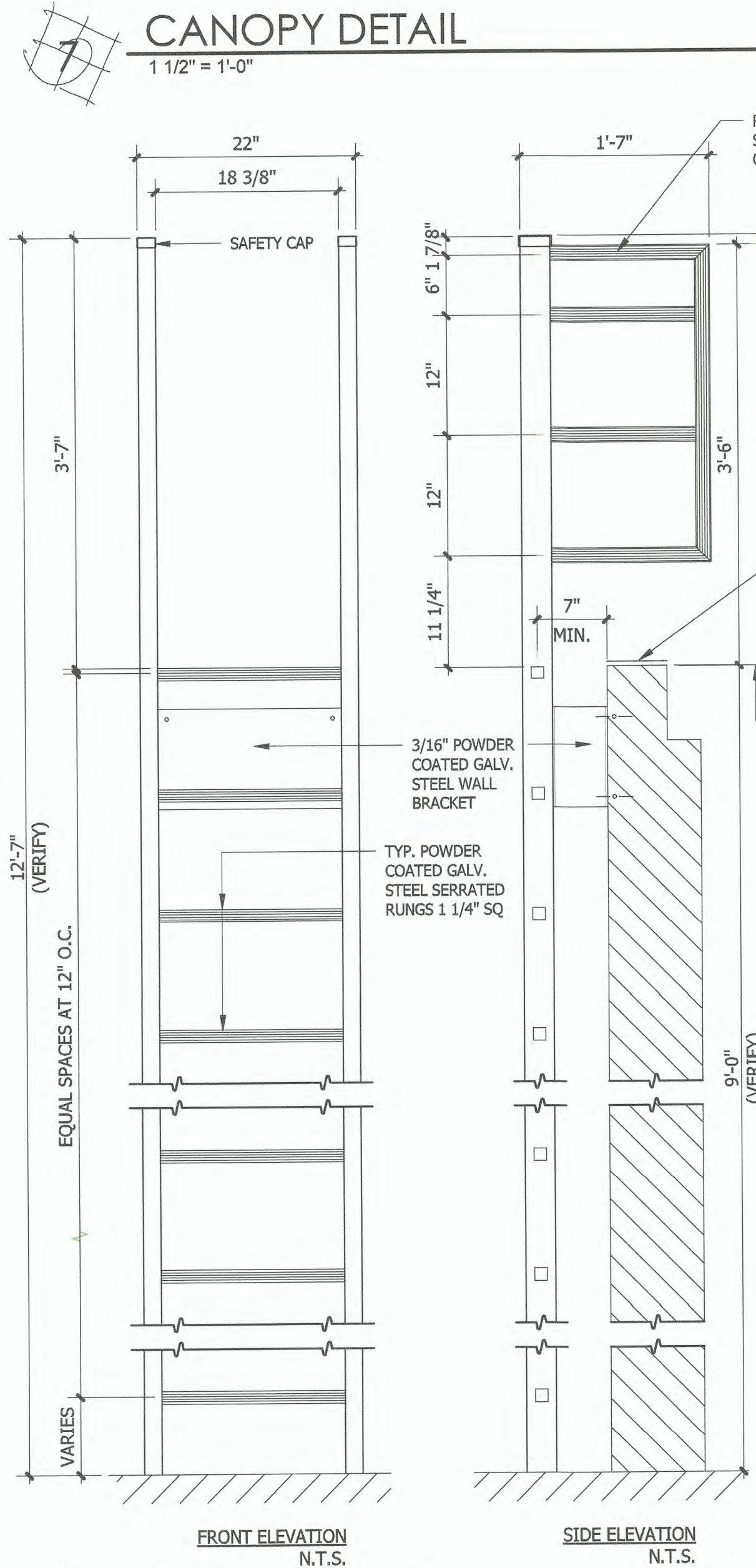
HVAC CURB DETAIL

3" = 1'-0"



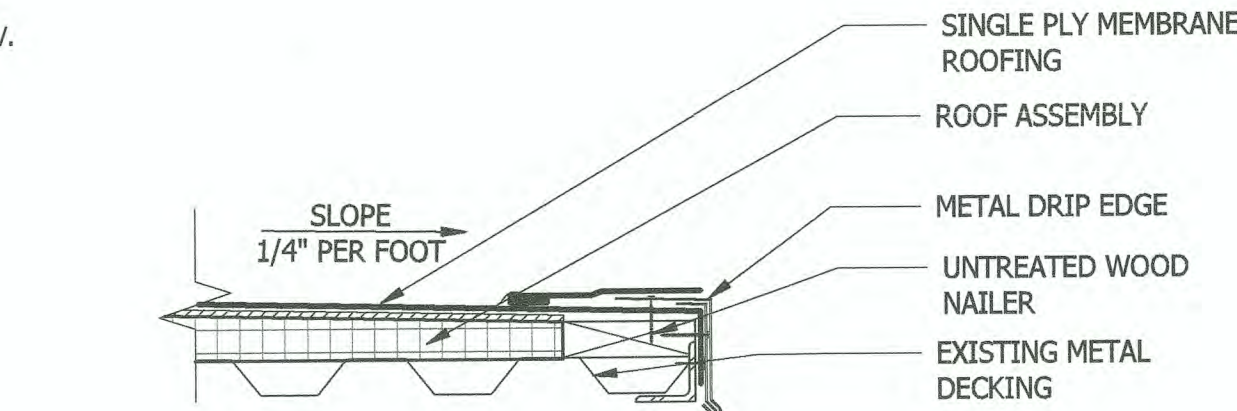
PIPE PENETRATION DETAIL

1 1/2" = 1'-0"



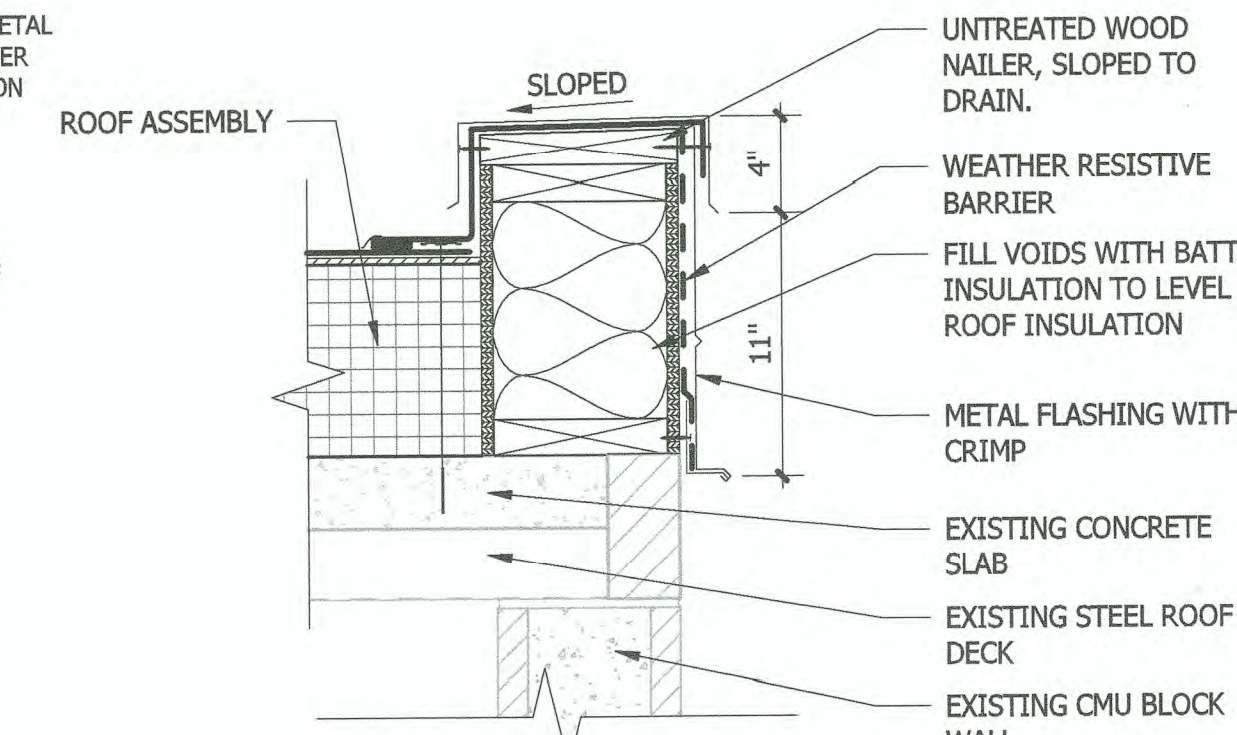
LADDER DETAIL

1" = 1'-0"



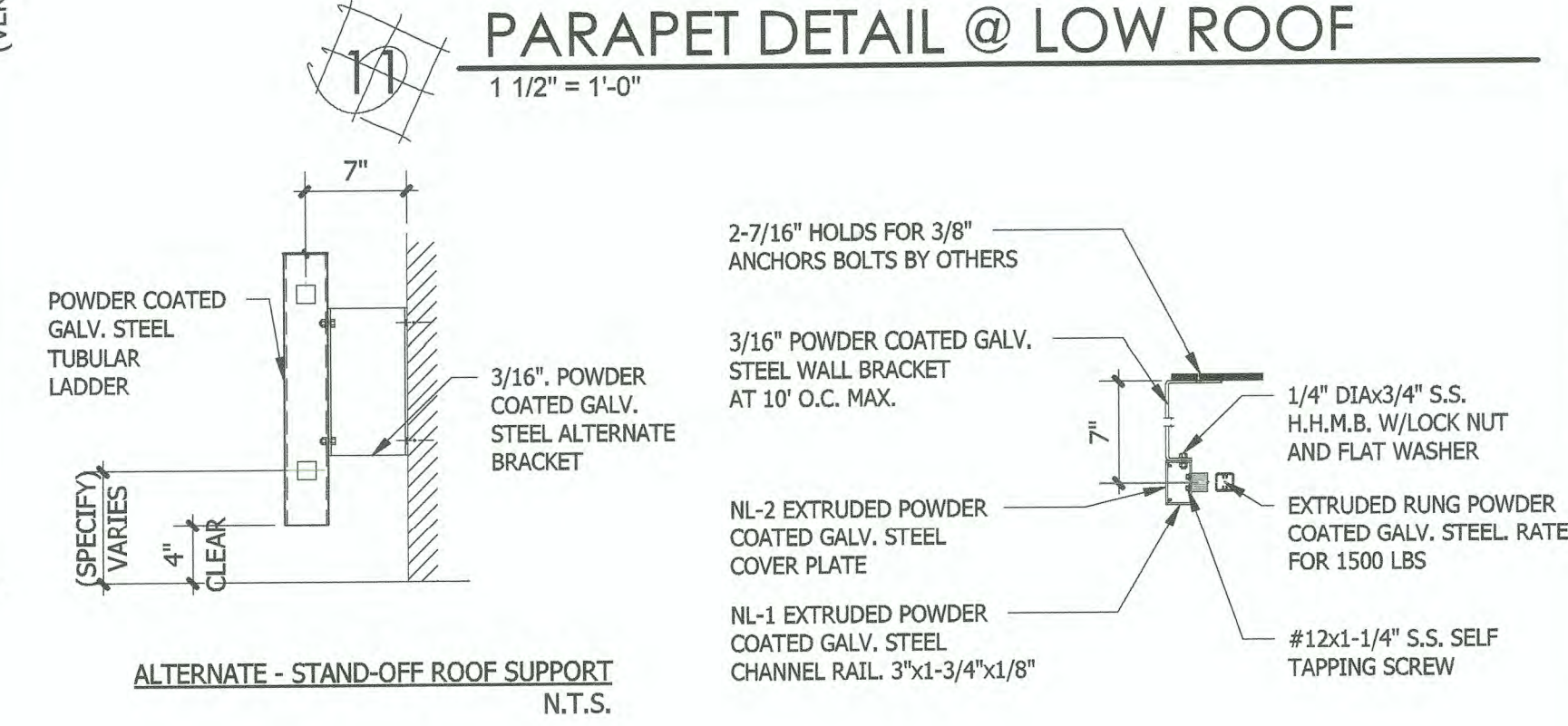
ENTRY CANOPY DETAIL

1 1/2" = 1'-0"



PARAPET DETAIL @ LOW ROOF

1 1/2" = 1'-0"



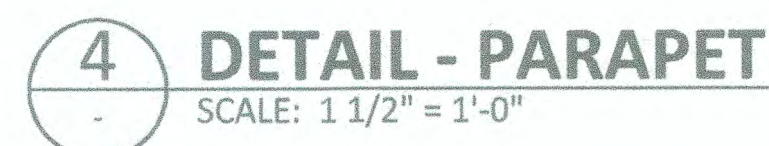
ALTERNATE - STAND-OFF ROOF SUPPORT

N.T.S.

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		12.10.18 CHECKED BY: DATE:	
REGISTERED PROFESSIONAL ENGINEER 6894 STATE OF WASHINGTON		DATE:	
APPROVED:		DATE:	
EBC BLDG 326 HVAC & ROOF REPLACEMENT & BLDGS 407 & 532 BIRD WIRE EXTERIOR DETAILS		PRINTED BY: Author DIRECTOR ENG. DATE: 12/13/18	
TOWNSHIP: 21 RANGE: 03 SECTION: 35 DAT-HRZ: WA83-SF PARCEL: 5000350013		PORT ADDRESS: 401 ALEXANDER AVENUE, TACOMA WA 98421	
CONT/CONS: 8 OF 18 M. ID:		PHASE: PERMIT SUBMITTAL	



1. PROVIDE (60) FASTENERS AT EACH FALL RESTRAINT ANCHOR.
2. PRIOR TO INSTALLATION OF BASEPLATE, FALL RESTRAINT ANCHORS, AND PARAPET, REMOVE ROOFING AND INSULATION.
3. USE LANYARDS PER MANUFACTURERS RECOMMENDATIONS OR AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS.
4. FALL RESTRAINT ANCHORS SHALL NOT BE USED TO SUPPORT FREE-FALL LOADS OR IN CONJUNCTION WITH FALL ARREST DEVICES.
5. IF METAL DECK DOES NOT MATCH CONDITION AS SHOWN IN DETAILS, CONTACT THE ENGINEER.
6. REFER TO IBC FOR FRAMING DETAILS NOT SHOWN.
7. FOR LOCATION OF FALL RESTRAINT ANCHORS, SEE ARCHITECTURAL DRAWING A1.10.



1. ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC) 2015 EDITION AS AMENDED AND ADOPTED BY THE CITY OF TACOMA.
2. STRUCTURAL AND MISCELLANEOUS STEEL FABRICATIONS AND ERECTION THEREOF SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC 360) 2010 EDITION, AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC 303) 2010 EDITION.
3. TIMBER CONSTRUCTION SHALL CONFORM TO THE AMERICAN WOOD COUNCIL, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2018 EDITION.
4. WELDING OF STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO "STRUCTURAL WELDING CODE - STEEL" (AWS D1.1) 2015 EDITION.

1. REMOVE EXISTING ROOFING AND INSULATION PER ARCHITECTURAL DRAWINGS. ALL DEMOLITION MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE COMPLETELY REMOVED AND DISPOSED OF. THE REMOVAL, HANDLING, HAULING, AND DISPOSAL OF ALL DEMOLITION MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH THE MATERIALS TO BE DISPOSED OF AND ALL GOVERNING AGENCIES AND PERMIT REQUIREMENTS.

1. DEAD LOADS: ACTUAL WEIGHT OF CONSTRUCTION AND MATERIALS OF PERMANENT EQUIPMENT.

WIND	
BASIC WIND SPEED (ULTIMATE)	100 MPH
EXPOSURE	D

1. STEEL PLATES ASTM A36

1. MEET THE REQUIREMENTS OF PERFORMANCE STANDARD PS 20-15 AND THE NATIONAL GRADING RULES FOR SOFTWOOD DIMENSIONAL LUMBER AND BEAR THE WWPA STAMP. NOMINAL MEMBER SIZES ARE GIVEN ON PLAN.

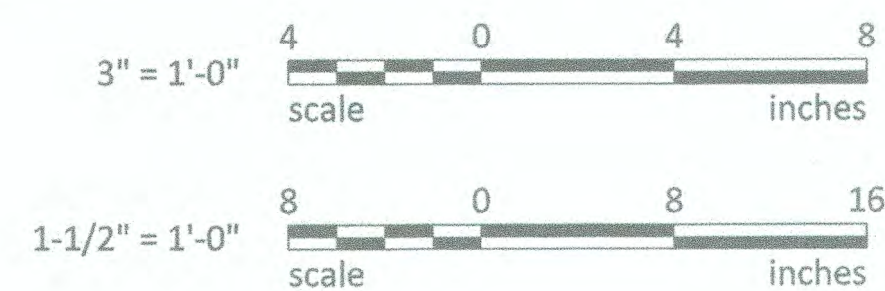
3. LUMBER SHALL BE STAMPED "SURFACE-DRY" AND SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% WHEN SURFACED AND INSTALLED.

4. NOTCHING AND BORING OF WOOD MEMBERS IS NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE PORT.

5. USE COMMON NAILS. NAILING SHALL CONFORM TO THE MINIMUM REQUIREMENTS CONTAINED IN TABLE 2304.9.1 OF THE IBC UNLESS OTHER REQUIREMENTS ARE SHOWN. WHERE POWER DRIVEN NAILS ARE USED, THEY SHALL BE OF EQUIVALENT DIAMETER TO THE COMMON NAILS SPECIFIED.

1. SHEATHING SHALL BE 1/2" NOMINAL WITH A MINIMUM SPAN RATING OF 24" AND CONFORM TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) VOLUNTARY PRODUCT STANDARD PS 1-07.

1. ALL CLIPS, STRAPS, ETC. SHALL BE FROM SIMPSON STRONG-TIE OR APPROVED EQUAL. SUBSTITUTIONS SHALL BE SUBMITTED TO THE PORT FOR APPROVAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



BID SET

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ENERGY CODE NOTES

1. HVAC EQUIPMENT PERFORMANCE, C403.2.3/C403.2.13.1: EQUIPMENT SCHEDULES ARE INCLUDED WITH THESE PLANS.
2. RETURN AIR DAMPERS, C403.2.4.3: PROVIDE RETURN AIR OPENINGS WITH CLASS 1 MOTORIZED DAMPER WHERE USED FOR AIRSIDE ECONOMIZER. WHERE INSTALLED IN UNITARY PACKAGED EQUIPMENT DAMPER, PROVIDE DAMPERS WITH LOWEST LEAKAGE RATE AVAILABLE FROM THE EQUIPMENT MANUFACTURER.
3. VENTILATION, C403.2.6/C403.2.11.4: MECHANICAL VENTILATION AIR SYSTEMS SHALL BE CONFIGURED TO PROVIDE NOT MORE THAN 150%, BUT AT LEAST THE MINIMUM REQUIRED VOLUME OF OUTDOOR AIR TO EACH ZONE PER IMC. SEE MECHANICAL EQUIPMENT SCHEDULES FOR MINIMUM OUTSIDE AIR VALUES.
4. DUCT CONSTRUCTION, C403.2.8.1: DUCTWORK SHALL BE CONSTRUCTED AND SEALED PER IMC.
5. DUCT PRESSURE CLASS, C403.2.8.3: ALL DUCTWORK SHOWN IS LOW PRESSURE DUCT, OPERATING AT STATIC PRESSURE LESS THAN OR EQUAL TO 3 INCHES WATER GAUGE (W.G.).
6. DUCT INSULATION, C403.2.8.1: MINIMUM DUCT INSULATION PER WSEC IS AS FOLLOWS:

SERVICEINSULATION LEVEL

SUPPLY DUCTS WITHIN CONDITIONED SPACE WHERE SUPPLY AIR IS < 55 DEG F, OR > 105 DEG F.

R-3.3
7. AIR ECONOMIZER REQUIRED, C403.3: SEE EQUIPMENT SCHEDULES FOR EQUIPMENT PROVIDED WITH ECONOMIZER COOLING.
8. INTEGRATED ECONOMIZER OPERATION, C403.3 .1: ECONOMIZERS SHALL BE CONFIGURED FOR PARTIAL COOLING OPERATION EVEN WHERE ADDITIONAL MECHANICAL COOLING IS REQUIRED TO MEET THE LOAD.
9. ECONOMIZER HEATING IMPACT, C403.3.2: ECONOMIZER CONTROLS SHALL BE SUCH THAT ECONOMIZER OPERATION DOES NOT INCREASE BUILDING HEATING ENERGY DURING NORMAL OPERATIONS.
10. AIR ECONOMIZER CAPACITY, C403.3.3.1: ECONOMIZER OUTSIDE AIR AND RETURN AIR DAMPERS SHALL MODULATE TO PROVIDE UP TO 100% OUTSIDE AIR FOR COOLING.
11. INTEGRATED AIR ECONOMIZER, C403.3.3.1: MECHANICAL COOLING CONTROLS SHALL BE INTERLOCKED WITH AIR ECONOMIZER CONTROLS SO THE OUTSIDE AIR DAMPER REMAINS IN 100% OPEN POSITION WHEN MECHANICAL EQUIPMENT IS IN COOLING TO MEET THE COOLING LOAD, UNTIL THE LEAVING AIR TEMPERATURE IS < 45°F. FOR SYSTEMS WITH COOLING CAPACITY GREATER THAN 65 MBH, CONTROL OF ECONOMIZER DAMPERS SHALL NOT BE CONTROLLED BASED ONLY ON MIXED AIR TEMPERATURE.
12. ECONOMIZER HIGH LIMIT CONTROLS, C403.3.3.3: PROVIDE HIGH-LIMIT ECONOMIZER SHUT-OFF CONTROL UTILIZING FIXED DRY BULB METHOD. ECONOMIZER SHALL BE OFF WHEN OUTDOOR AIR TEMPERATURE EXCEEDS 75°F.
13. FUNCTIONAL PERFORMANCE TESTING CRITERIA, C408.2.3: FUNCTIONAL PERFORMANCE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH WSEC C408.2.3.
14. DOCUMENTATION SUBMITTAL REQUIREMENTS, C103.6: SUBMIT ALL CLOSEOUT DOCUMENTATION INCLUDING AS-BUILTS AND O&M'S TO OWNER WITHIN 180 DAYS OF RECEIPT OF CERTIFICATE OF OCCUPANCY.
15. THESE "ENERGY CODE NOTES" ARE LISTED TO SATISFY THE BUILDING DEPARTMENT'S REQUIREMENT THAT CERTAIN INFORMATION BE PLACED ON THE PLANS, BUT DO NOT DIMINISH THE FULL PROJECT REQUIREMENTS. PROVIDE ITEMS IN EXCESS OF CODE WHERE NOTED ON DRAWINGS AND IN SPECIFICATIONS. FOR OTHER ADDED REQUIREMENTS, SEE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

ITEM	SECTION#
AS-BUILT DOCUMENTS	20 05 00
O&M MANUALS	20 05 00
PIPING & DUCT INSULATION	20 07 00
DUCTWORK SEALING & TESTING	23 31 00
CONTROLS	23 09 33 & 23 09 93

MECHANICAL GENERAL NOTES

1. MECHANICAL WORK IS NOT LIMITED TO MECHANICAL DRAWINGS AND DIVISION 22, 23, AND 25 SPECIFICATIONS. THERE IS ADDITIONAL MECHANICAL WORK TO BE INCLUDED IN THE BID INDICATED ON OTHER DRAWINGS AND IN OTHER SPECIFICATION DIVISIONS. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL MECHANICAL WORK.
2. ALL ITEMS ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING.
3. DRAWINGS SCALES APPLY TO FULL SIZE SHEET ONLY; FULL SIZE SHEETS ARE 36"X24"AND 42"X30". USE CAUTION IN OBTAINING DIMENSIONS AND QUANTITIES FROM DRAWINGS THAT ARE NOT THIS FULL SIZE; USE DIMENSIONS CALCULATED FROM DIMENSIONS ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS OVER OTHER METHODS OF OBTAINING DIMENSIONS.
4. SEISMICALLY ANCHOR ALL UNITS & EQUIPMENT TO BUILDING. (UNO). CONTRACTOR IS RESPONSIBLE TO SELECT AND PROVIDE ALL SEISMIC ANCHORING DEVICES FOR ALL MECHANICAL EQUIPMENT, ALL PIPING AND ALL DUCTWORK. CONTRACTOR SHALL SUBMIT DETAILS AND PLANS TO BUILDING INSPECTOR FOR REVIEW AND COMMENT PRIOR TO INSTALLATION.
5. PIPE ROUTING: ALL PIPING SHOWN IS SCHEMATIC. CONTRACTOR SHALL PROVIDE ALL OFFSETS/ELBOWS AS REQ'D TO ALLOW ROUTING AROUND STRUCTURE, ELECTRICAL, & OTHER INTERFERENCES. ALL PIPING SHALL BE RUN CONCEALED, UNO.
6. PIPE SIZES: UNSIZED PLUMBING PIPING SHALL MATCH THE SIZE OF THE LARGEST ADJACENT CONNECTING PIPE SIZE SHOWN.
7. BALANCING NOTES: PROVIDE AIR BALANCING OF HVAC SYSTEM. SEE SECTION 20 05 93 FOR COMPLETE REQUIREMENTS.
8. PROVIDE FLEX CONNECTORS IN DUCT CONNECTIONS TO ALL EQUIPMENT.
9. CFM'S SHOWN REPRESENT AIRFLOWS WITH SYSTEM IN "OCCUPIED" MODE.
10. PROVIDE TRANSITIONS FROM DUCT SIZES INDICATED TO CONNECTION SIZES AT EQUIPMENT TO MATCH UNIT CONNECTIONS. WHERE THE CONNECTING DUCT IS LINED, THE TRANSITION SHALL BE LINED.
11. FIELD VERIFY SIZE OF ALL EXISTING DUCTS SHOWN BEING CONNECTED TO PRIOR TO FABRICATION OF CONNECTING DUCTWORK. PROVIDE TRANSITIONS AS NECESSARY TO MAKE CONNECTIONS.
12. BUILDING FEATURES AND PIPING AND DUCT LOCATIONS & SIZES SHOWN ON PLANS ARE APPROXIMATE & ARE BASED ON AS-BUILT DATA PROVIDED BY THE OWNER, A COMPLETE REVIEW IS REQUIRED TO BE MADE BY THE CONTRACTOR. VERIFY SIZES PRIOR TO BIDDING AND BEGINNING WORK.
13. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING EQUIPMENT, PIPING, WALLS, SUPPORTS, DUCTWORK, ELECTRICAL AND RELATED BUILDING FEATURES AND RELOCATE/REVISE SUCH EXISTING ITEMS AS NECESSARY TO ALLOW FOR THE WORK INDICATED.
14. CONTRACTOR SHALL FIELD VERIFY THE SIZES AND LOCATIONS OF ALL EXISTING ITEMS SHOWN BEING CONNECTED TO. VERIFICATION SHALL OCCUR PRIOR TO MATERIALS BEING ORDERED OR FABRICATED.
15. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO REVIEW AND VERIFY EXISTING CONDITIONS AND CONSTRUCTION MATERIALS, INCLUDING, BUT NOT LIMITED TO, ALL WALLS, FLOORS, CEILINGS, AND OTHER AREAS THAT MAY BE DISTURBED DURING CONSTRUCTION IN ORDER TO ACCOMPLISH THE WORK IN THESE DOCUMENTS. THE CONTRACTOR SHALL ALSO VISIT THE SITE AGAIN PRIOR TO BEGINNING ANY WORK.
16. PROVIDE DUCT AND TRANSITIONS AS NECESSARY TO CONNECT TO EXISTING SYSTEMS. SUCH SYSTEMS SHALL BE FIELD REVIEWED FOR SIZE, DIRECTION OF FLOW, LOCATION AND TYPE PRIOR TO ORDERING/FABRICATING SUCH TRANSITIONS BECAUSE OWNER PROVIDED AS-BUILT DRAWINGS THAT SHOW SUCH INFORMATION ARE CONSIDERED APPROXIMATE. CONTRACTOR SHALL ASSUME IN HIS BID ONE TRANSITION FOR EACH CONNECTION TO EXISTING SYSTEMS. PIPING CONNECTIONS ON EXISTING ITEMS MAY BE ONE PIPE SIZE SMALLER OR LARGER THAN SHOWN.
17. PROVIDE PIPING TRANSITIONS AS NECESSARY TO CONNECT TO EXISTING SYSTEMS. SUCH SYSTEMS SHALL BE FIELD REVIEWED FOR SIZE, DIRECTION OF FLOW, LOCATION AND TYPE PRIOR TO ORDERING/FABRICATING SUCH TRANSITIONS BECAUSE OWNER PROVIDED AS-BUILT DRAWINGS THAT SHOW SUCH INFORMATION ARE CONSIDERED APPROXIMATE. CONTRACTOR SHALL ASSUME IN HIS BID ONE TRANSITION FOR EACH CONNECTION TO EXISTING SYSTEMS. PIPING CONNECTIONS ON EXISTING ITEMS MAY BE ONE PIPE SIZE SMALLER OR LARGER THAN SHOWN.
18. WHERE ITEMS ARE DISCONNECTED FROM EXISTING DUCTWORK, CAREFULLY COVER EXPOSED DUCTWORK OPENINGS UNTIL THE TIME FOR RE-INSTALLATION OF THOSE ITEMS.
19. AS-BUILT DRAWINGS ARE AVAILABLE FOR REVIEW AT OWNERS FACILITY.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	ABBREV.	DESCRIPTION
	DUCT SECTION (SUPPLY)	AHJ	AUTHORITY HAVING JURISDICTION
	DUCT SECTION (EXHAUST OR RETURN)	ALUM	ALUMINUM
	DUCT (FIRST FIGURE, SIDE SHOWN)	APPROX	APPROXIMATELY
	LINED DUCT (DIM. FOR NET FREE AREA) 2" LINING (UNO) EOL= END OF LINING	ARCH	ARCHITECTURAL
	RISE (R) OR DROP (D) ARROW IN DIRECTION OF FLOW	AUTO	AUTOMATIC
	DUCT SECTION (SUPPLY)	BLDG	BUILDING
	DUCT SECTION (EXHAUST OR RETURN)	CAP	CAPACITY
	ROUND DUCT	CONN	CONNECTION
	ELBOW WITH TURNING VANES	CONT	CONTINUE, CONTINUATION
	DUCT UP (RECTANGULAR)	CFM	CUBIC FEET PER MINUTE
	DUCT UP (RECTANGULAR)	DEF, F	DEGREE FAHRENHEIT
	DUCT DOWN (RECTANGULAR)	DIA Ø	DIAMETER
	DUCT DOWN (RECTANGULAR)	DN	DOWN
	DUCT UP (ROUND)	DWG	DRAWING
	DUCT DOWN (ROUND)	EA	EACH
	PIPE UP	EFF	EFFICIENCY
	PIPE DOWN	ELEC	ELECTRICAL, ELECTRIC
	NATURAL GAS (G)	EOL	END OF LINING
	ISOLATION VALVE	EXH	EXHAUST
	UNION	EXIST, (E)	EXISTING
		ESP	EXTERNAL STATIC PRESSURE
		FPM	FEET PER MINUTE
		FPS	FEET PER SECOND
		FLEX	FLEXIBLE
		FL	FLOOR
		FLA	FULL LOAD AMPS
		GALV.	GALVANIZED
		HP	HORSE POWER
		INTEGR.	INTEGRAL
		IN	INCH
		KW	KILOWATT
		MAX	MAXIMUM
		MFR	MANUFACTURER
		MCA	MINIMUM CIRCUIT AMPS
		MECH	MECHANICAL
		MIN	MINIMUM
		NO	NUMBER
		NTS	NOT TO SCALE
		OBD	OPPOSED BLADE DAMPER
		OA	OUTSIDE AIR
		ORL	OVERFLOW RAIN LEADER
		PH	PHASE
		PD	PRESSURE DROP
		RG	REFRIGERANT GAS
		RL	RAIN LEADER
		RLA	RATED LOAD AMPS
		REF	REFERENCE
		REQ'D	REQUIRED
		RA	RETURN AIR
		RPM	REVOLUTIONS PER MINUTE
		RM	ROOM
		RVI	ROOF VENT INTAKE
		RVR	ROOF VENT RELIEF
		SA	SUPPLY AIR
		S.O.	SCREENED OPENING
		TEMP	TEMPERATURE
		TYP	TYPICAL
		UNO	UNLESS NOTED OTHERWISE
		VFD	VARIABLE FREQUENCY DRIVE
		VTR	VENT THROUGH ROOF
		VERT	VERTICAL
		V	VOLTS, VOLTAGE
		WA	WATT
		W	WITH
	DETAIL IDENTIFICATION NUMBER SHEET ON WHICH DETAIL IS SHOWN		

MECHANICAL GENERAL DEMOLITION NOTES

1. DEMOLITION DRAWINGS ARE INTENDED TO ONLY GIVE A GENERAL REPRESENTATION OF THE DEMOLITION INVOLVED, AND DO NOT CONSTITUTE A FULL LISTING OF ALL ITEMS REQUIRING REMOVAL. NOT ALL ITEMS TO BE DEMO'D ARE SHOWN. CONTRACTOR IS RESPONSIBLE TO REVIEW EXISTING CONDITIONS, EXISTING DRAWINGS, AND MECHANICAL GENERAL DEMOLITION NOTES.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW SITE CONDITIONS AND TO IDENTIFY ALL DEMOLITION WORK, AND INCLUDE IN HIS BID ALL COSTS FOR DEMOLITION & DISPOSAL.
3. EXISTING DUCTS AND PIPING AND EQUIPMENT SHOWN DASHED REPRESENT MAJOR MECHANICAL ITEMS TO BE REMOVED. SEE GENERAL NOTES, DRAWING NOTES & KEYED NOTES WHICH COVER ALL OTHER MISCELLANEOUS. MECHANICAL ITEMS TO BE REMOVED.
4. ALL EXISTING ITEMS NOT BEING REUSED SHALL BE REMOVED. THIS INCLUDES SUCH ITEMS AS PIPING, VALVES, DUCTS, FANS, SUPPORTS, CURBS, CONTROLS, AND RELATED ACCESSORIES.
5. ABANDONED ITEMS, ANCHORS, INSERTS, AND OTHER PROJECTIONS NOT BEING CONCEALED BY NEW CONSTRUCTION SHALL BE REMOVED TO 1" BELOW THE ADJACENT FINISHED SURFACE, AND THE DISTURBED AREA PATCHED.
6. REFERENCE ARCHITECTURAL DRAWINGS FOR WHERE ROOF AND OTHER GENERAL DEMOLITION WORK IS BEING DONE.
7. ALL EXISTING ITEMS ASSOCIATED WITH DEMO'D ITEMS SHALL BE REMOVED. THIS INCLUDES SUCH ITEMS AS HANGERS, DAMPERS, CURBS, SUPPORTS, DUCTS, AND SIMILAR ACCESSORIES.
8. ROUTING SHOWN OF EXISTING ITEMS IS APPROXIMATE, CONTRACTOR SHALL FIELD VERIFY LOCATIONS, CONTENTS, AND FLOW DIRECTION OF ALL PIPING & DUCTS. LABELING SHOWN ON PLANS HAS NOT BEEN VERIFIED.

BID SET

M0.01

10 OF 18

CONT/CONS:

M. ID:

PHASE: BID SET

EBC BLDG326 HVAC & ROOF REPLACEMENT

& BLDGS 407 & 532 BIRD WIRE

LEGEND & NOTES

TOWNSHIP: 21

DAT-HRZ: WA83-SF

PARCEL: 6000350013

RANGE: 03

VERT: MLW 19.39' @ Tide 22 1933

DRAWING SCALE: AS NOTED

SECTION: 35

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HULTZ & BHU
engineering inc

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general@hultzbhu.com Job Number: 18-099

MARK: REVISION:

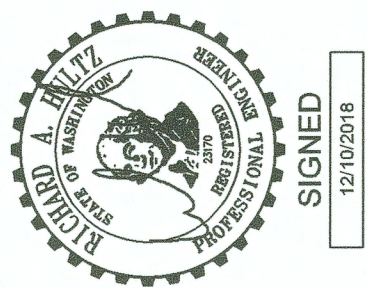
BY: APPR: DATE:

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e n g i n e e r s i n c

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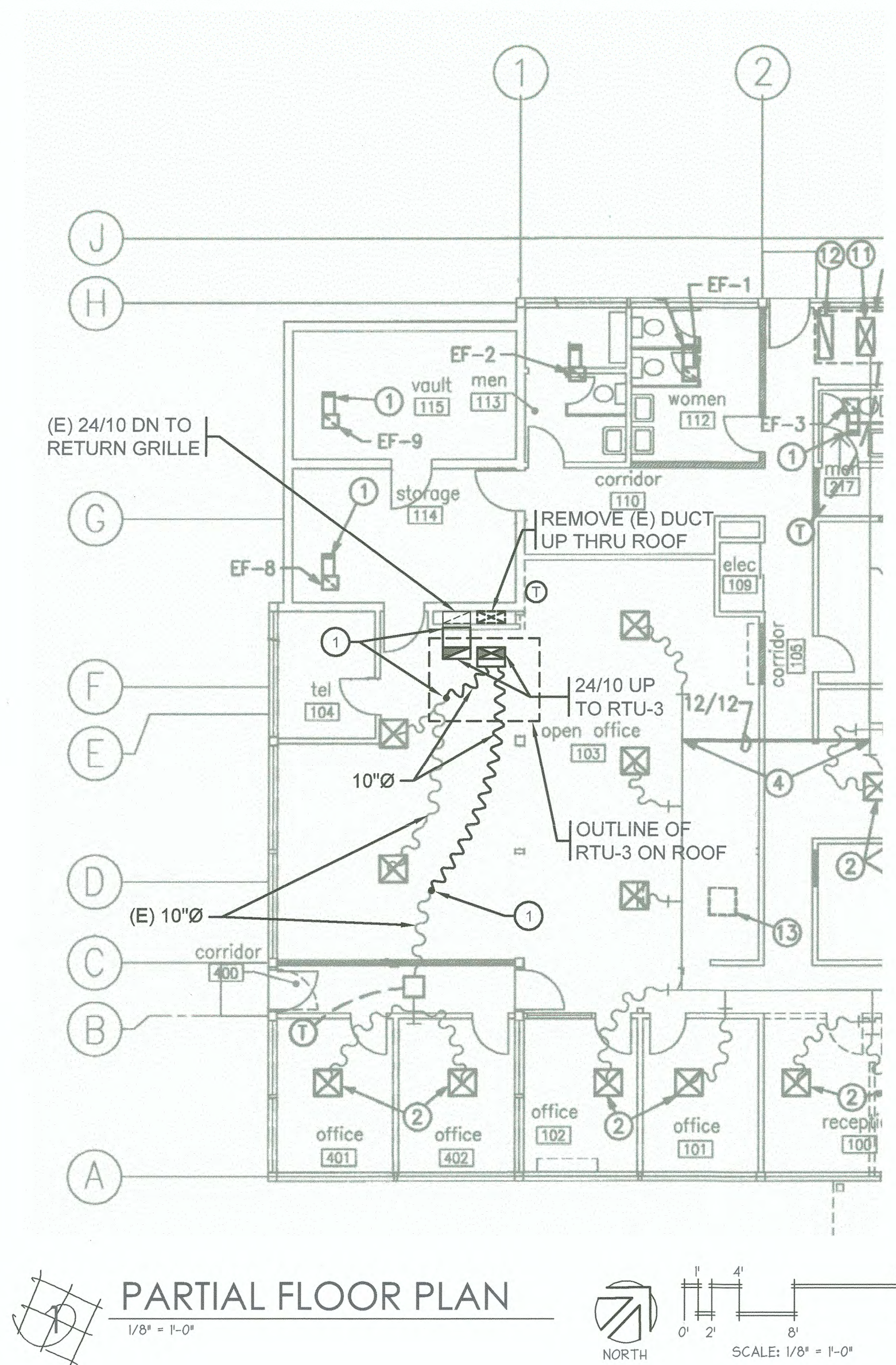
APPROVED:	RH	12.10.18
	CHECKED BY	DATE
	BW	12.10.18
	PROJ. ENGR	DATE
	PRINTED BY: MattB Dec 07, 2018	
PORT ADDRESS: 401 ALEXANDER AVENUE		
TACOMA, WA 98421		

**EBC BLDG326 HVAC & ROOF REPLACEMENT
& BLDGS 407 & 532 BIRD WIRE
SCHEDULES**

M0.02
11 OF 18

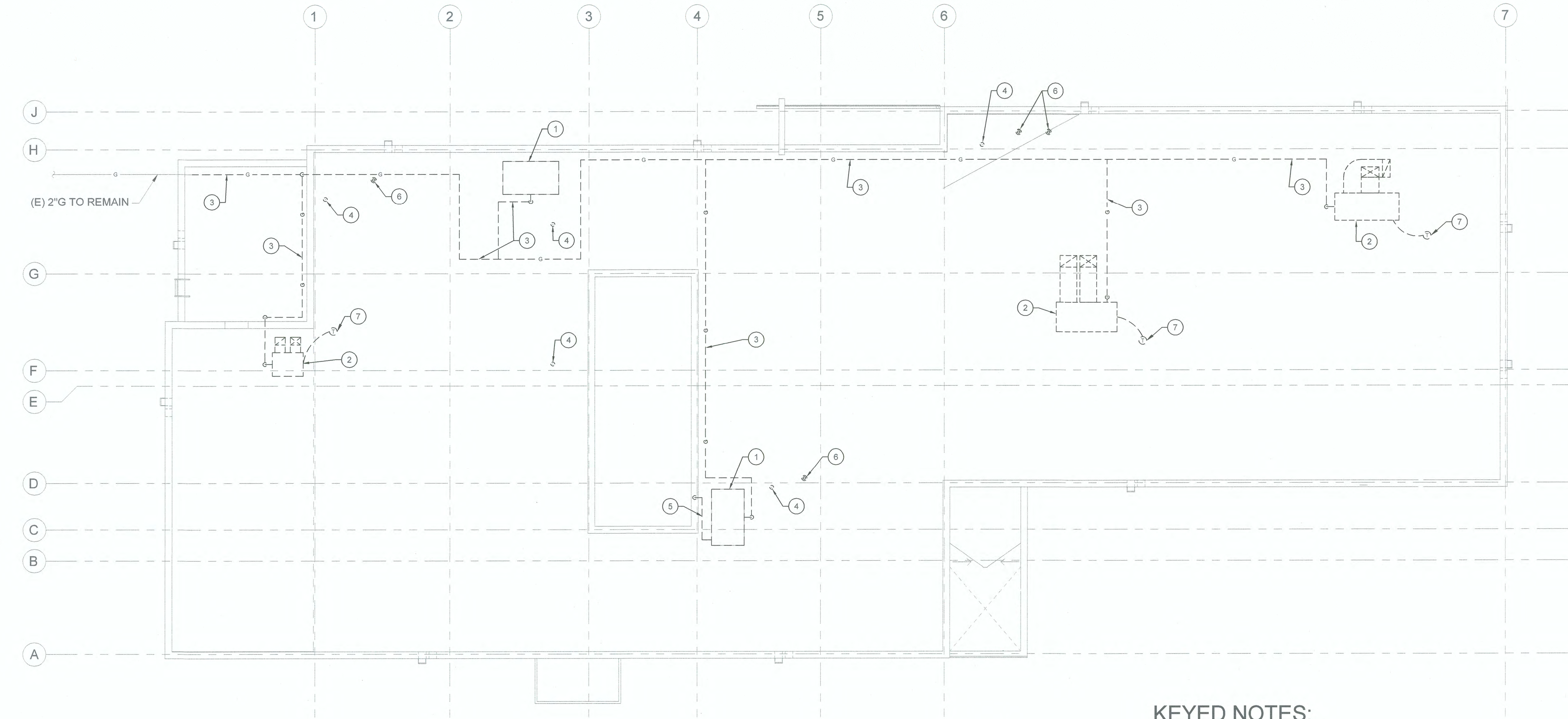
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M. ID:	DAT=HRZ: WA83-SF	VERT: MLLW 1939 @ Tide 22 1933		PORT ADDRESS: 401 ALEXANDER AVENUE
PHASE: BID SET	PARCEL: 5000350013	DRAWING SCALE: AS NOTED		TACOMA WA 98421

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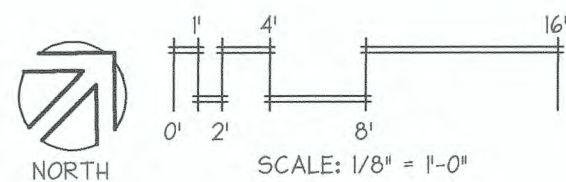


① CONNECT NEW DUCT TO EXISTING. VERIFY EXISTING DUCT SIZES & LOCATION PRIOR TO ORDERING MATERIALS. PROVIDE TRANSITION AS NECESSARY TO MAKE CONNECTION.

BID SET



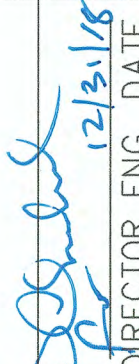
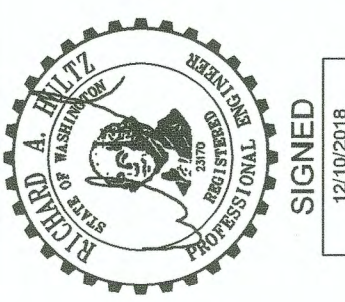
DEMO PLAN
1/8" = 1'-0"

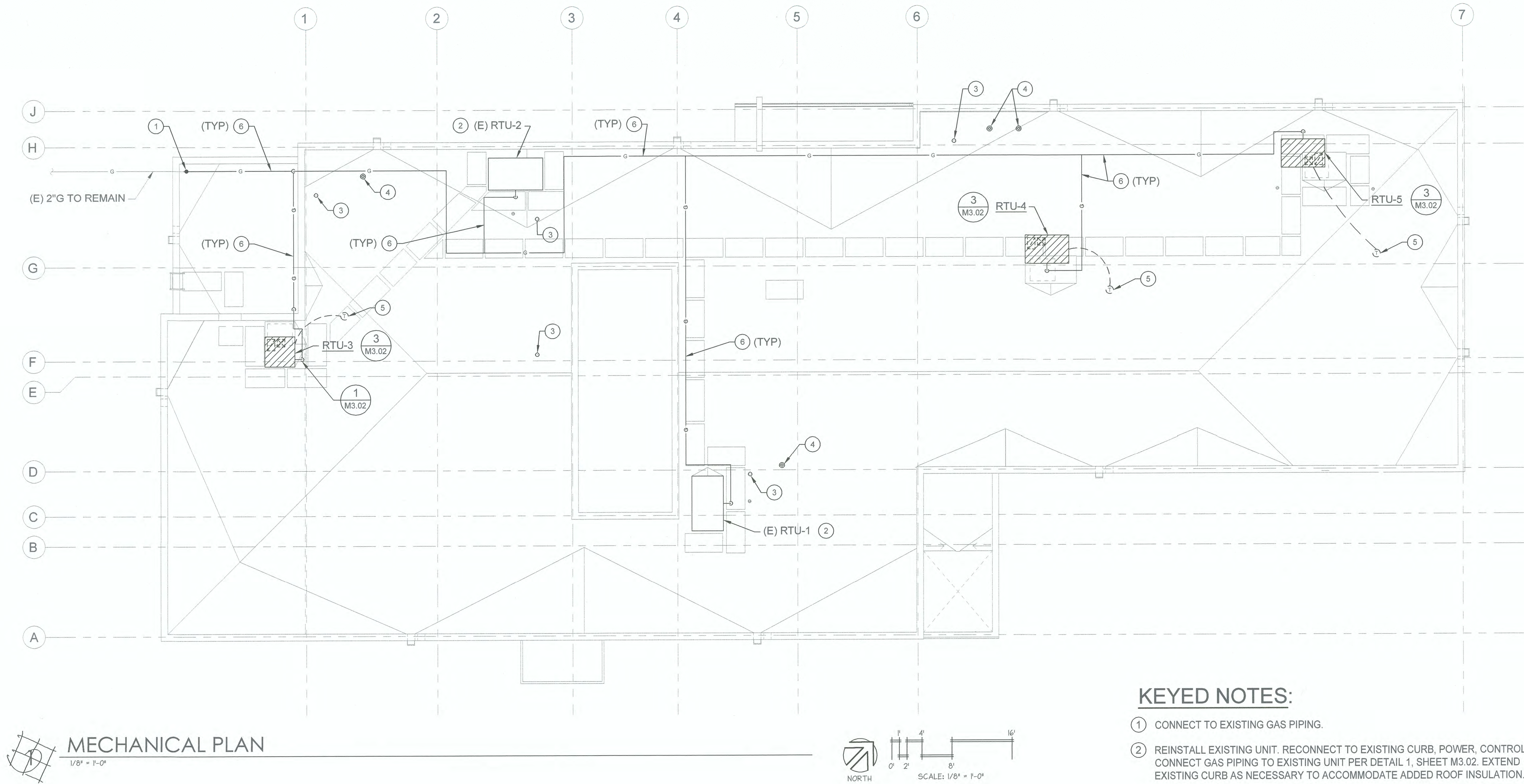


KEYED NOTES:

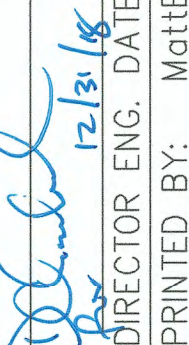
- 1 SALVAGE & REINSTALL EXISTING PACKAGED HVAC UNIT & ASSOCIATED CURB AS NECESSARY TO ALLOW ROOFING WORK. DISCONNECT UNIT FROM EXISTING POWER, GAS & CONTROLS.
- 2 REMOVE EXISTING PACKAGED ROOFTOP HVAC UNIT COMPLETE INCLUDING CURB, GAS PIPING, DUCTWORK, POWER, & CONTROLS. DUCTWORK SHALL BE REMOVED TO UP TO ROOF PENETRATION. EXISTING DUCTWORK BELOW ROOF PENETRATION TO REMAIN FOR CONNECTION TO NEW UNIT.
- 3 REMOVE EXISTING ROOFTOP GAS PIPING COMPLETE INCLUDING VALVES, UNIONS, SUPPORTS & ACCESSORIES.
- 4 EXTEND EXISTING VENT THRU ROOF PIPING AS NECESSARY TO ACCOMMODATE NEW ROOFING & TO MAINTAIN MINIMUM 12" ABOVE ROOF DECK. VERIFY PIPING SIZE PRIOR TO ORDERING MATERIALS. FOR BIDDING PURPOSES ASSUME PIPING IS 4".
- 5 REMOVE (E) 3/4" CONDENSATE DRAIN COMPLETE.
- 6 SALVAGE & REINSTALL EXISTING VENT CAP. EXTEND EXISTING EXHAUST DUCT UP AS NECESSARY TO ACCOMMODATE NEW ROOFING & TO MAINTAIN MINIMUM 12" ABOVE ROOF DECK.
- 7 REMOVE EXISTING THERMOSTAT IN SPACE BELOW THAT SERVES DEMO'D UNIT EXISTING CONTROL WIRING SHALL REMAIN FOR CONNECTION TO NEW THERMOSTAT. VERIFY LOCATION OF THERMOSTAT PRIOR TO BIDDING. LOCATION SHOWN IS APPROXIMATE.

BID SET

M1.01 12 OF 18	EBC BLDG326 HVAC & ROOF REPLACEMENT & BLDGS 407 & 532 BIRD WIRE DEMO PLAN				APPROVED:  DIRECTOR ENC. DATE: 12/31/18 PRINTED BY: Matt B Dec 07, 2018 PORT ADDRESS: 401 ALEXANDER AVENUE TACOMA, WA 98421	RH 12.10.18 CHECKED BY BW DATE 12.10.18 PROJ. ENGR Dec 07, 2018		HULTZ BHU engineers inc Tacoma, WA 98402 Phone: (253) 383-3257 Fax: (253) 383-3283 general@hultzbhu.com Job Number: 18-099	 P.O. BOX 1807 TACOMA, WA 98401 (253)885-5841
	CONTR/CONS: M. ID: PHASE: BID SET	TOWNSHIP: 21 DAT-HRZ: WA83-SF PARCEL: 5000350013	RANGE: 03 SECTION: 35 VERT: MILLW 19.39' @ Tide 22 1933	MARK: REVISION: BY: DATE:					



BID SET

M3.01 13 OF 18	EBC BLDG326 HVAC & ROOF REPLACEMENT & BLDGS 407 & 532 BIRD WIRE MECHANICAL PLAN				APPROVED:  DIRECTOR 12/13/18	RH CHECKED BY BW	12.10.18 DATE 12.10.18	 SIGNED 12/10/2018	 Hulttz BHU Engineering Tacoma, WA 98402 Phone: (253) 383-0257 general@hulttz.com Job Number: 18-099	 Port of Tacoma P.O. BOX 1837 TACOMA, WA 98401 (253)883-1841	
	TOWNSHIP: 21 RANGE: 03 SECTION: 35				PRINTED BY: MatTB Dec. 07, 2018	BY:					REVISION:
	DATE-HRZ: WAB3-SF VERT: MLLW 19.39' @ Tide 22 1933				PORT ADDRESS: 401 ALEXANDER AVENUE TACOMA, WA 98421	APPR:					DATE:
	PARCEL: 5000350013 DRAWING SCALE: AS NOTED				MARK:						