

OCEANSIDE ARENA AHU REPLACEMENT



CONSULTANTS:

MECHANICAL:

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HEROLD ENGINEERING LTD.
3701 SHENTON ROAD
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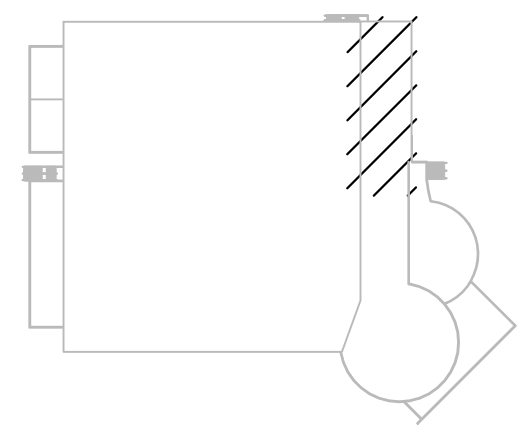
DRAWING INDEX:

MECHANICAL:

M-0: COVER SHEET
M-1: PARTIAL ROOF PLAN - MECHANICAL WORK
M-2: MECHANICAL SCHEDULES, PHOTOS AND DETAILS

REVISION - RECORD:		
No.	DATE	DESCRIPTION
1.	JUL. 4/17	REVIEW
2.	JUL. 10/17	ISSUED FOR TENDER
3.		
4.		
5.		
6.		
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10.		

KEYPLAN:



CLIENT:

ROCKY POINT
ENGINEERING LTD.
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SEAL:

PROJECT STATUS:

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PROJECT TITLE:

**OCEANSIDE ARENA
AHU REPLACEMENT**

830 Island Hwy W
Parkville, BC
V9P 2X4

CLIENT:

**REGIONAL DISTRICT
OF NANAIMO**

DRAWING TITLE:

COVER SHEET

PROJECT NUMBER:

17177-N

DRAWN:

ANG

DESIGNED:

MW

CHECKED:

AM

DATE:

JULY 2017

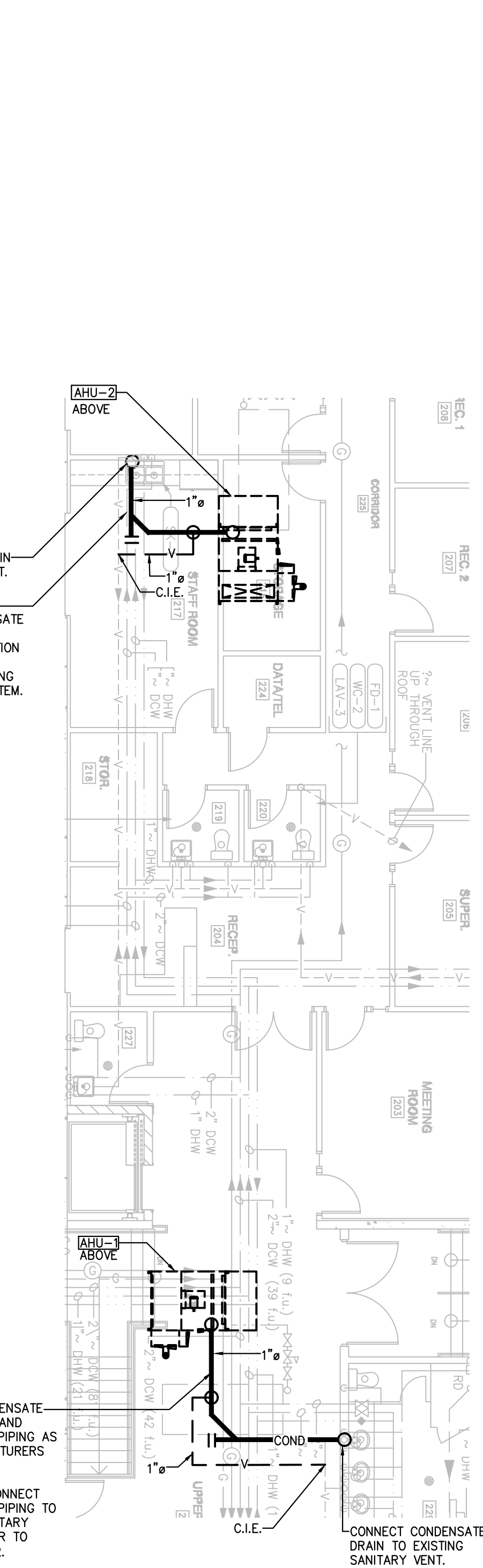
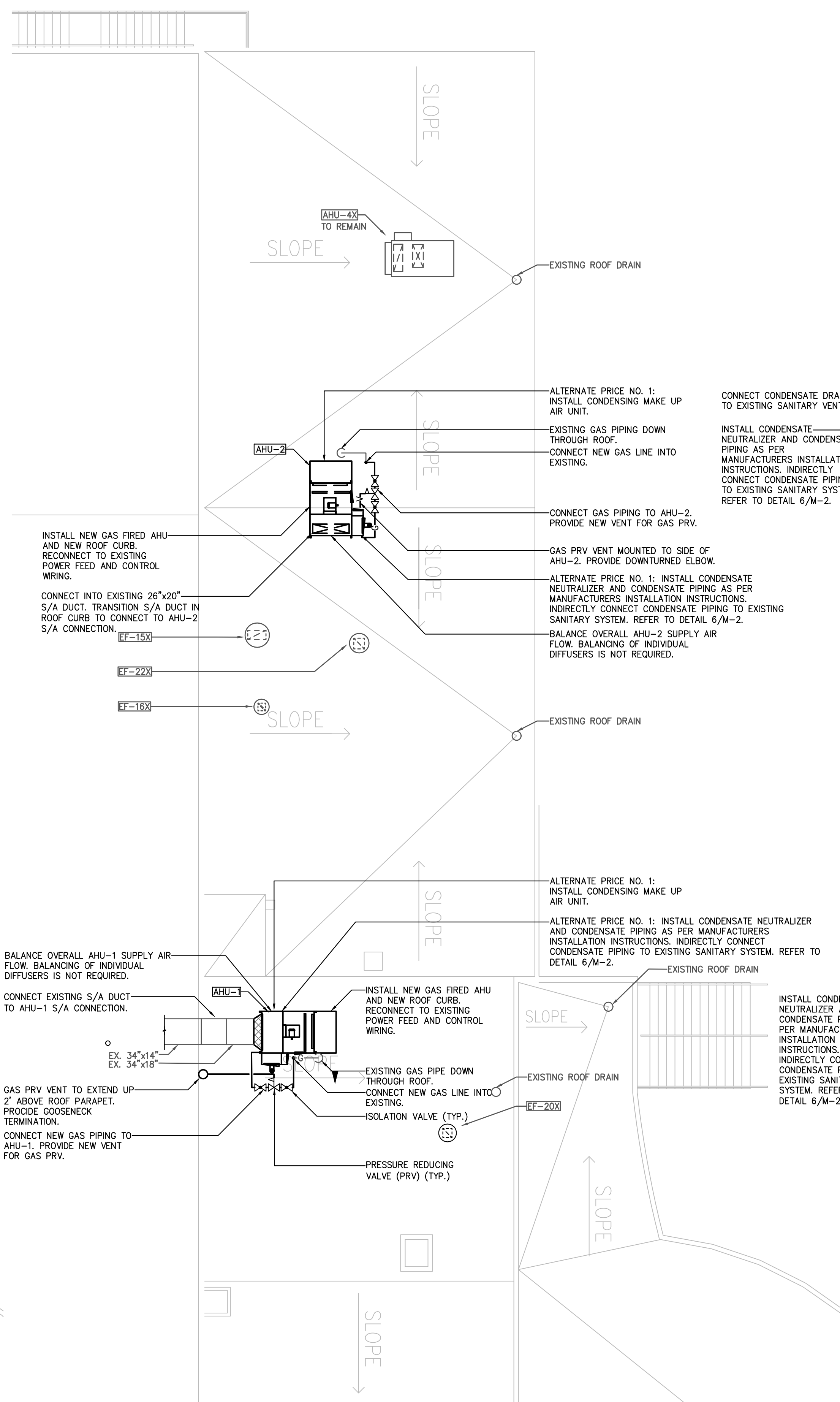
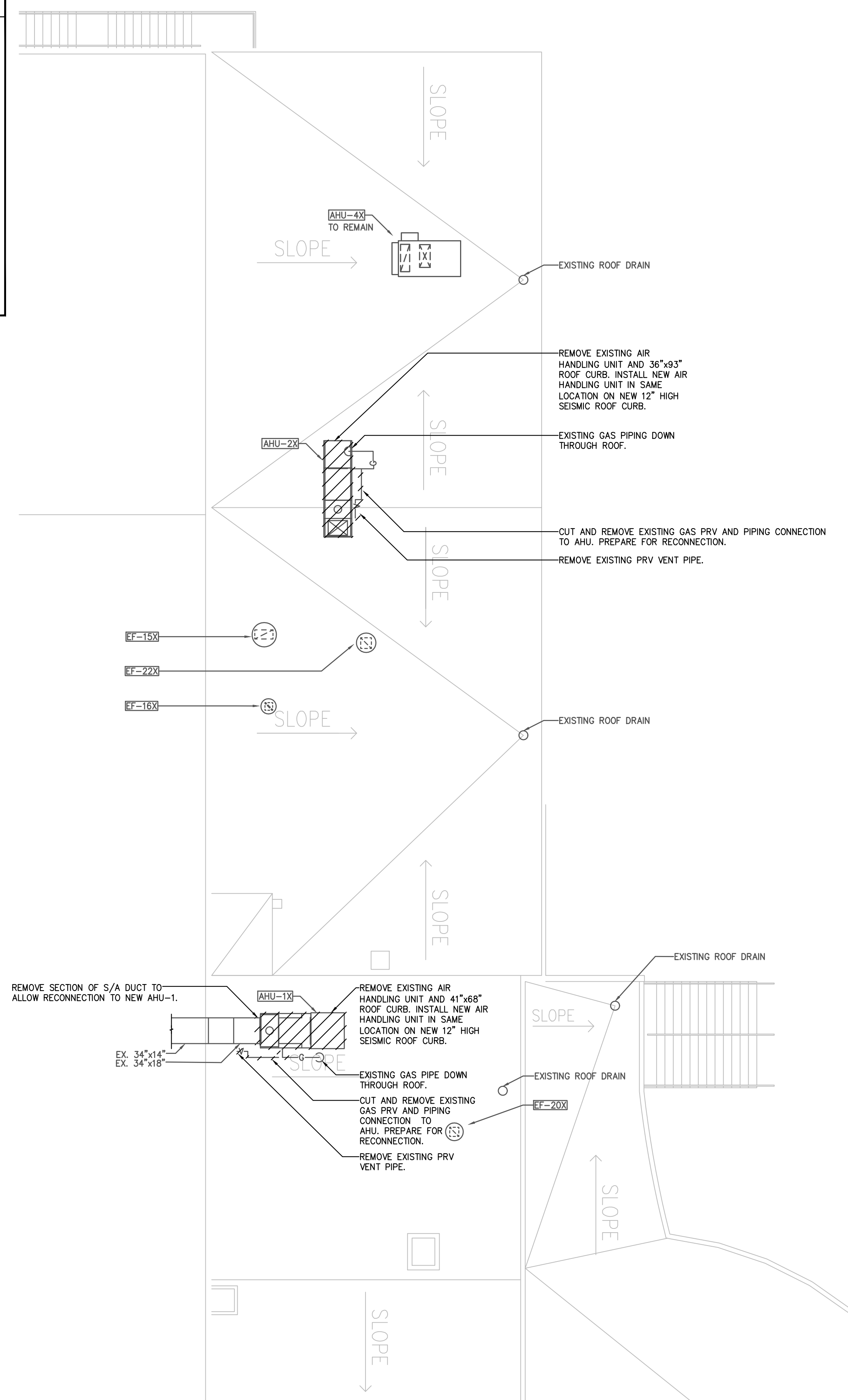
SCALE:

1/8" = 1'-0"

DRAWING NUMBER:

M-0

SYMBOL SCHEDULE	
	SUPPLY AIR DUCT
	DIRECTION OF FLOW
	PIPING DROP / RISE
	EXISTING NATURAL GAS PIPE
	NATURAL GAS PIPE
	EXISTING VENT
	VENT
	CONDENSATE DRAIN
	CHECK VALVE
	BALL VALVE
	PRESSURE REDUCING VALVE
	CLEAN OUT
	EQUIPMENT TAG
	THERMOSTAT
	S/A
	O/A
	COMPLETE WITH
	CONNECT INTO EXISTING



1
M-1
PARTIAL ROOF PLAN - MECHANICAL DEMOLITION
1/8" = 1'-0"

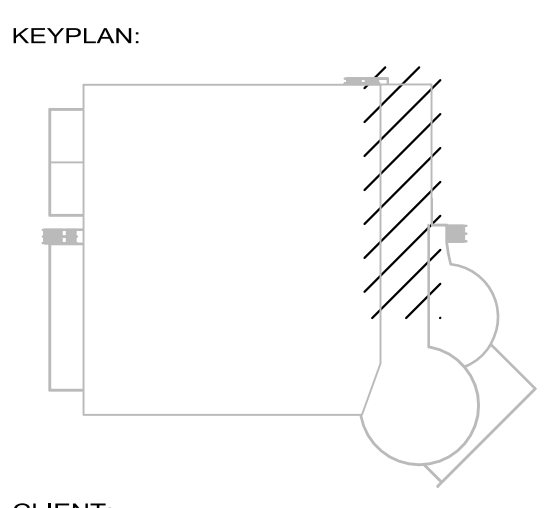


2
M-1
PARTIAL ROOF PLAN - MECHANICAL NEW WORK
1/8" = 1'-0"



3
M-1
(ALTERNATE PRICE NO.1)
PARTIAL UPPER FLOOR PLAN
MECHANICAL NEW WORK
1/8" = 1'-0"

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PROJECT TITLE:
**OCEANSIDE ARENA
 AHU REPLACEMENT**

830 Island Hwy W
 Parksville, BC
 V9P 2X4

CLIENT:
**REGIONAL DISTRICT
 OF NANAIMO**

DRAWING TITLE:
**PARTIAL ROOF PLAN
 MECHANICAL WORK**

PROJECT NUMBER:
17177-N

DRAWN: ANG
 DESIGNED: MW
 CHECKED: AM
 DATE: JULY 2017
 SCALE: 1/8" = 1'-0"
 DRAWING NUMBER:

M-1



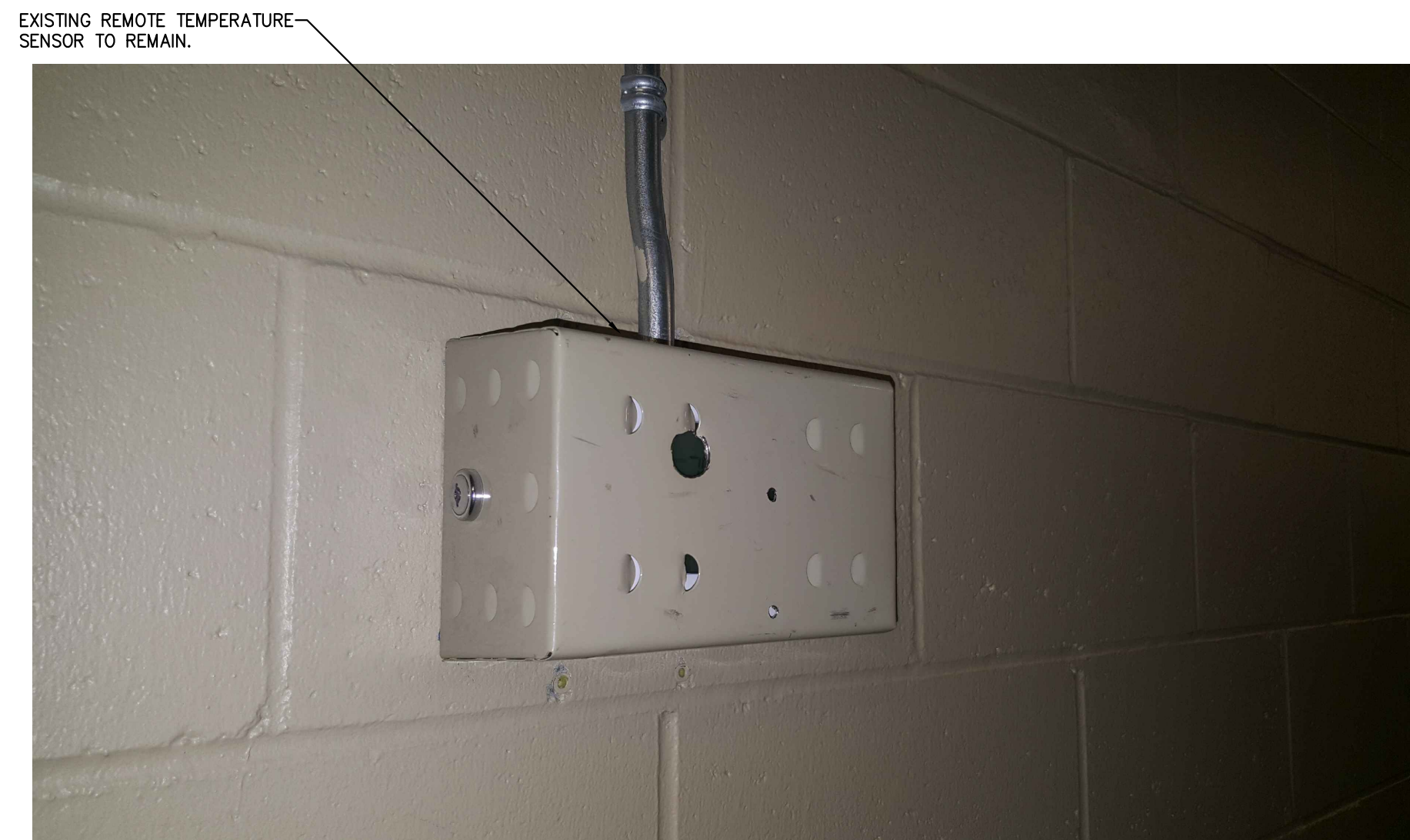
1 EAST ROOF PLAN - EXISTING AHU-1
M-2 N.T.S.



2 EAST ROOF PLAN - EXISTING AHU-2
M-2 N.T.S.



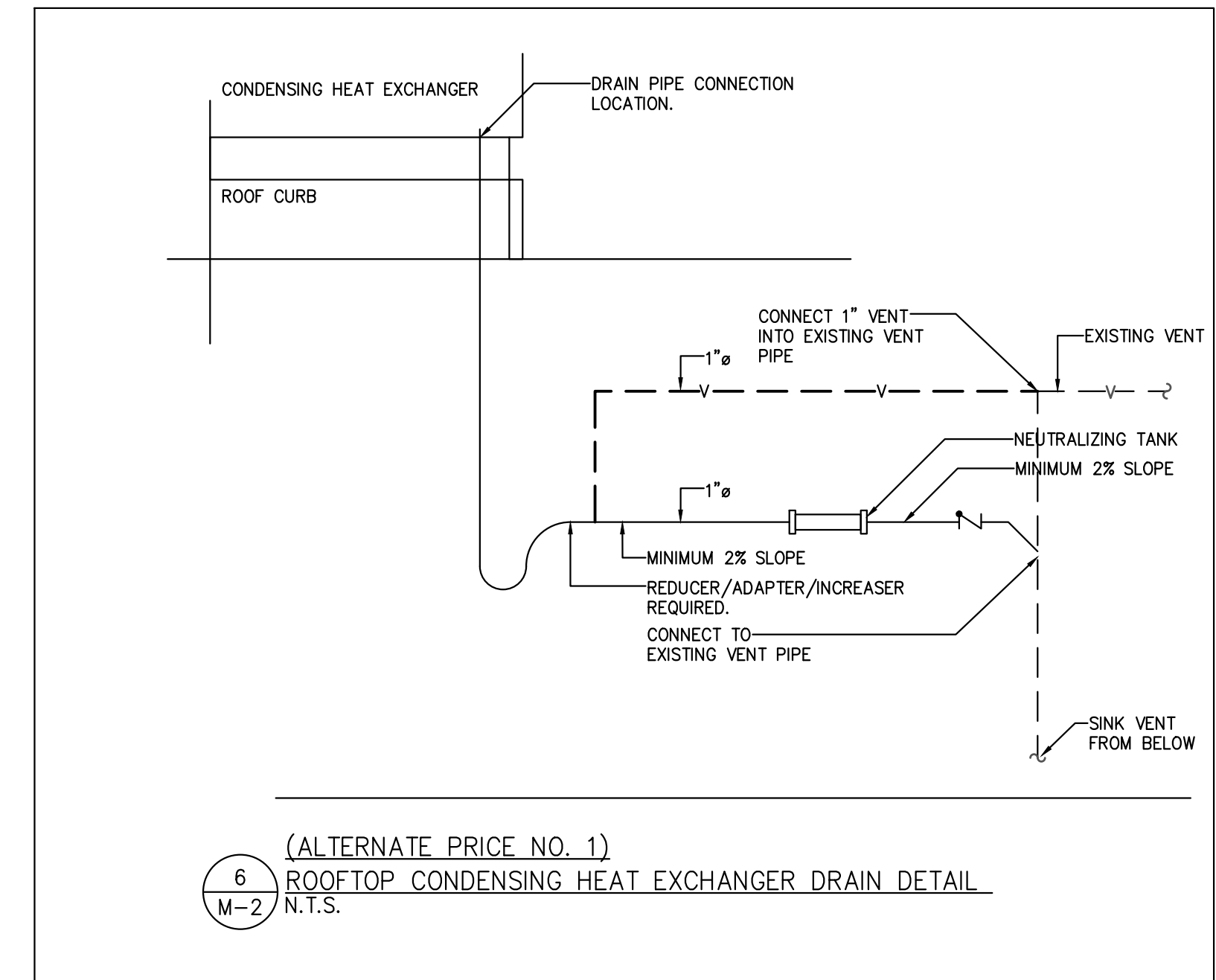
3 TEMPERATURE SENSOR
M-2 N.T.S.



4 TEMPERATURE SENSOR
M-2 N.T.S.



5 EXISTING CONTROLS
M-2 N.T.S.



(ALTERNATE PRICE NO. 1)
6 ROOFTOP CONDENSING HEAT EXCHANGER DRAIN DETAIL
M-2 N.T.S.

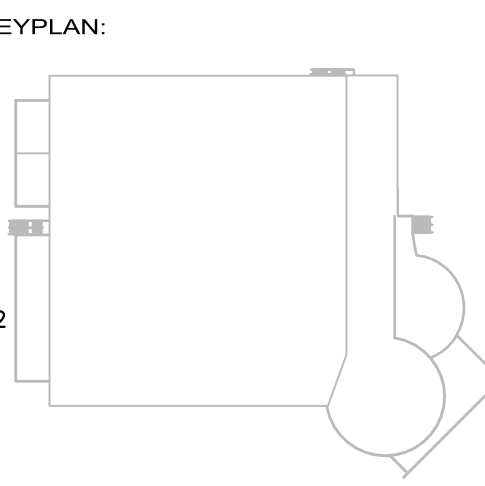
GAS FIRED ROOF MOUNTED AIR HANDLING UNITS																				
DESIGNATION	STANDARD OF ACCEPTANCE	MODEL	LOCATION	SERVICE	AIRFLOW (cfm)	EXTERNAL STATIC PR (in-wg)	SUPPLY FAN TYPE	SUPPLY FAN SIZE	DRIVE TYPE	MOTOR HP	FAN RPM	HEATING INPUT (BTUH)	HEATING OUTPUT (BTUH)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	ELECTRICAL V/PH/Hz	UNIT WEIGHT (lbs)	ROOF CURB WEIGHT (lbs)	CONTROL	COMMENTS
AHU-1	ENGINEERED AIR	DJS-40	ROOF	CHANGE ROOMS	2500	1.25	FORWARD	12/12 MPFC	BELT	2 HP		250,000	203,000	17.6	92.6	575/3/60	1,449	300	EXISTING TIMECLOCK	NOTE 1, END S/A CONNECTION
AHU-2	ENGINEERED AIR	DJS-40	ROOF	CHANGE ROOMS	2000	1.25	FORWARD	12/12 MPFC	BELT	2 HP		250,000	203,000	17.6	111.1	575/3/60	1,449	300	EXISTING TIMECLOCK	NOTE 1, DISCHARGE AIR PLENUM WITH BOTTOM S/A CONNECTION

NOTE 1: C/W OUTDOOR AIR INTAKE HOOD AND BIRDSCREEN, 12" HIGH SEISMIC ROOF CURB, INTERNAL ISOLATION WITH SEISMIC RESTRAINT, MOTORIZED INLET DAMPER, FREEZESTAT, 15:1 TURNDOWN D/A CONTROL, LEVERLOCK ACCESS DOORS, MERV 13 FILTERS, PROVIDE DUCT MOUNTED SMOKE SENSOR IN SUPPLY AIR DUCT HARDWIRED TO SHUTDOWN UNIT

GAS FIRED ROOF MOUNTED AIR HANDLING UNITS (ALTERNATE PRICE NO. 3)																				
DESIGNATION	STANDARD OF ACCEPTANCE	MODEL	LOCATION	SERVICE	AIRFLOW (cfm)	EXTERNAL STATIC PR (in-wg)	SUPPLY FAN TYPE	SUPPLY FAN SIZE	DRIVE TYPE	MOTOR HP	FAN RPM	HEATING INPUT (BTUH)	HEATING OUTPUT (BTUH)	ENTERING AIR TEMP. (°F)	LEAVING AIR TEMP. (°F)	ELECTRICAL V/PH/Hz	UNIT WEIGHT (lbs)	ROOF CURB WEIGHT (lbs)	CONTROL	COMMENTS
AHU-1	ENGINEERED AIR	DJX-40	ROOF	CHANGE ROOMS	2500	1.25	FORWARD	12/12 MPFC	BELT	2 HP		250,000	225,000	17.6	100.9	575/3/60	1,449	300	EXISTING TIMECLOCK	NOTE 1, END S/A CONNECTION
AHU-2	ENGINEERED AIR	DJX-40	ROOF	CHANGE ROOMS	2000	1.25	FORWARD	12/12 MPFC	BELT	2 HP		250,000	225,000	17.6	121.8	575/3/60	1,449	300	EXISTING TIMECLOCK	NOTE 1, DISCHARGE AIR PLENUM WITH BOTTOM S/A CONNECTION

NOTE 1: C/W OUTDOOR AIR INTAKE HOOD AND BIRDSCREEN, 12" HIGH SEISMIC ROOF CURB, INTERNAL ISOLATION WITH SEISMIC RESTRAINT, MOTORIZED INLET DAMPER, FREEZESTAT, 15:1 TURNDOWN D/A CONTROL, LEVERLOCK ACCESS DOORS, MERV 13 FILTERS, CONDENSATE NEUTRALIZER, PROVIDE DUCT MOUNTED SMOKE SENSOR IN SUPPLY AIR DUCT HARDWIRED TO SHUTDOWN UNIT

REVISION - RECORD:		
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OCEANSIDE ARENA AHU REPLACEMENT

830 Island Hwy W
 Parksville, BC
 V9P 2X4

CLIENT:

REGIONAL DISTRICT OF NANAIMO

DRAWING TITLE:

MECHANICAL PHOTOS, SCHEDULES AND DETAILS

PROJECT NUMBER:

17177-N

DRAWN: ANG

DESIGNED: MW

CHECKED: AM

DATE: JULY 2017

SCALE: AS SHOWN

DRAWING NUMBER:

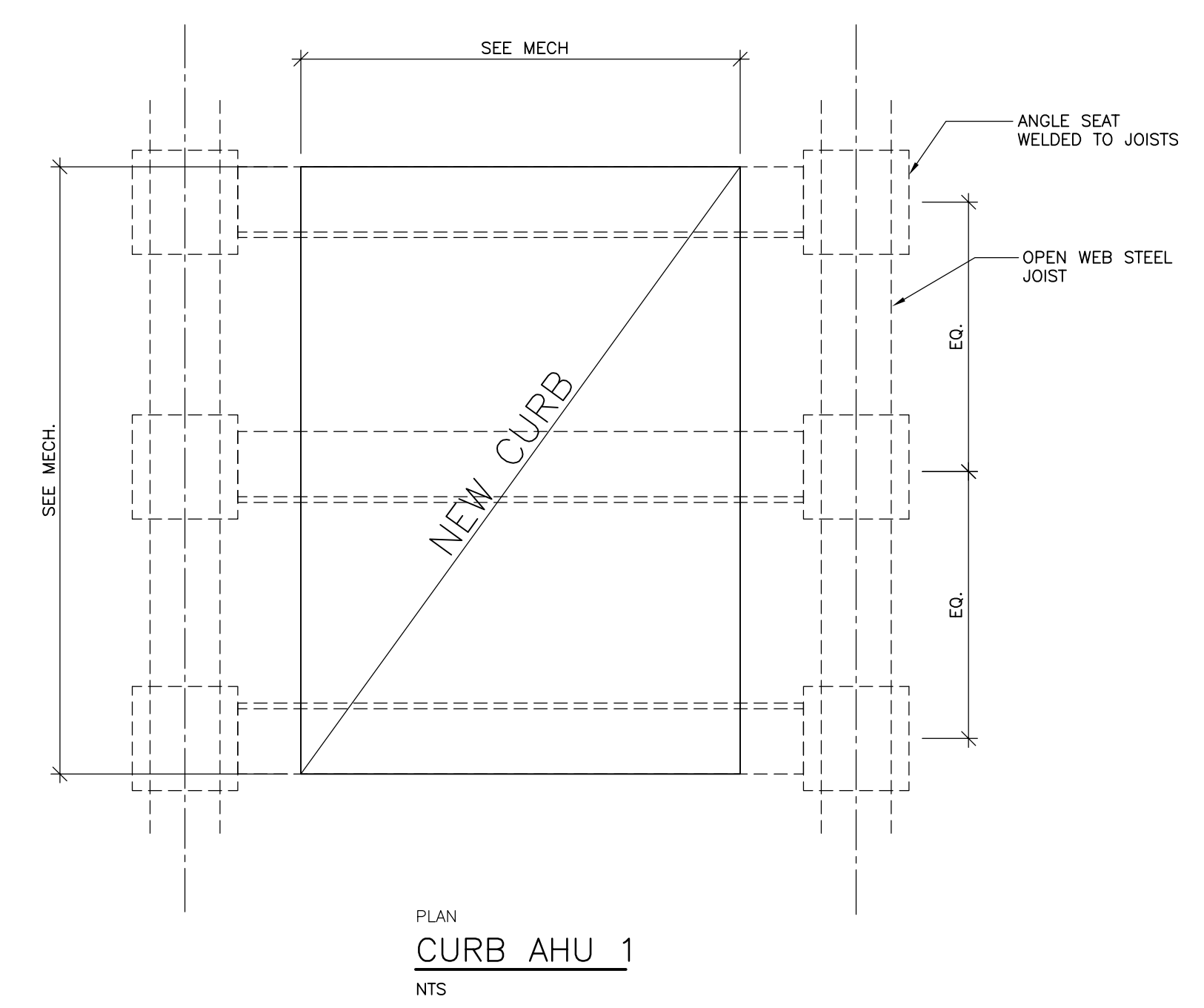
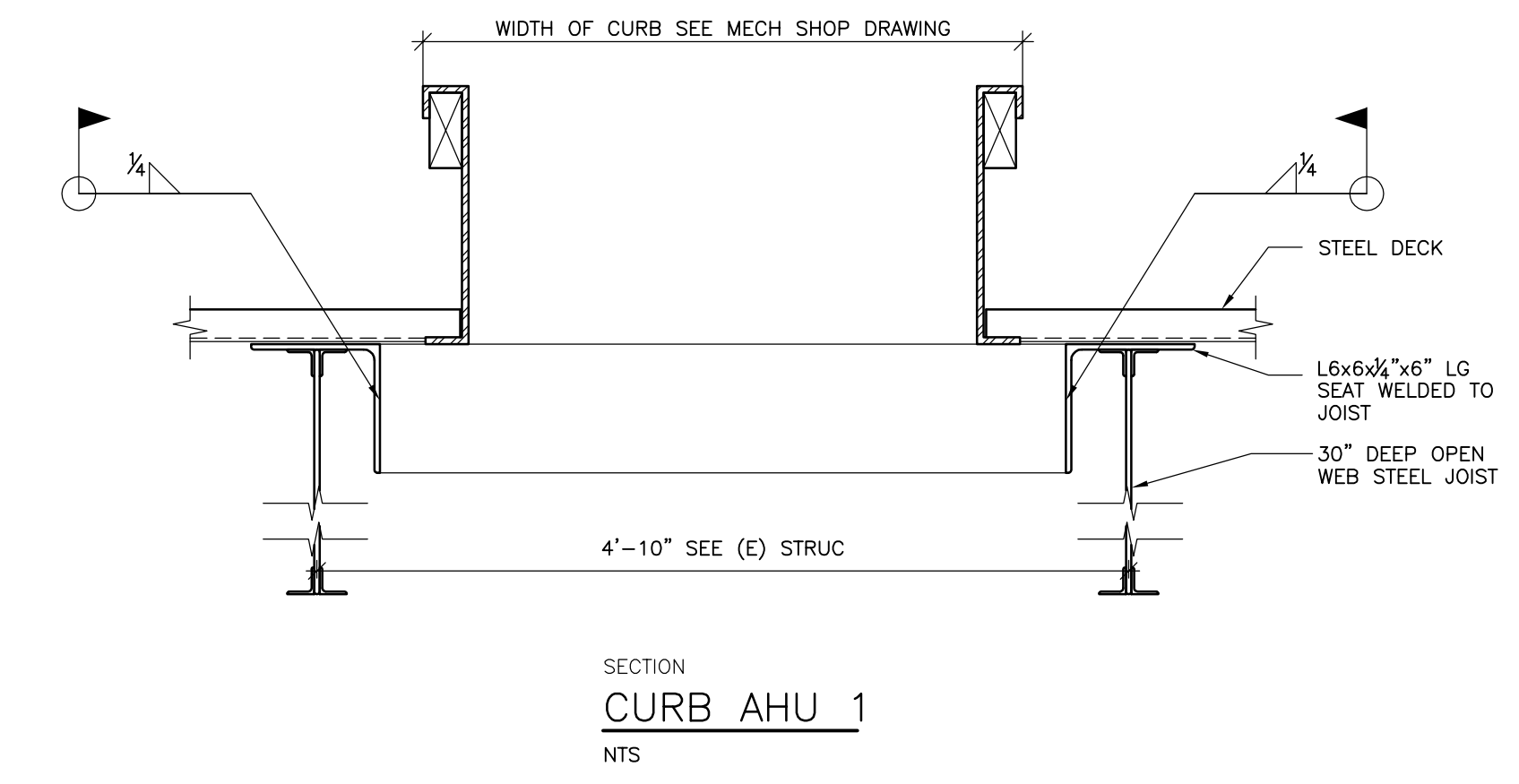
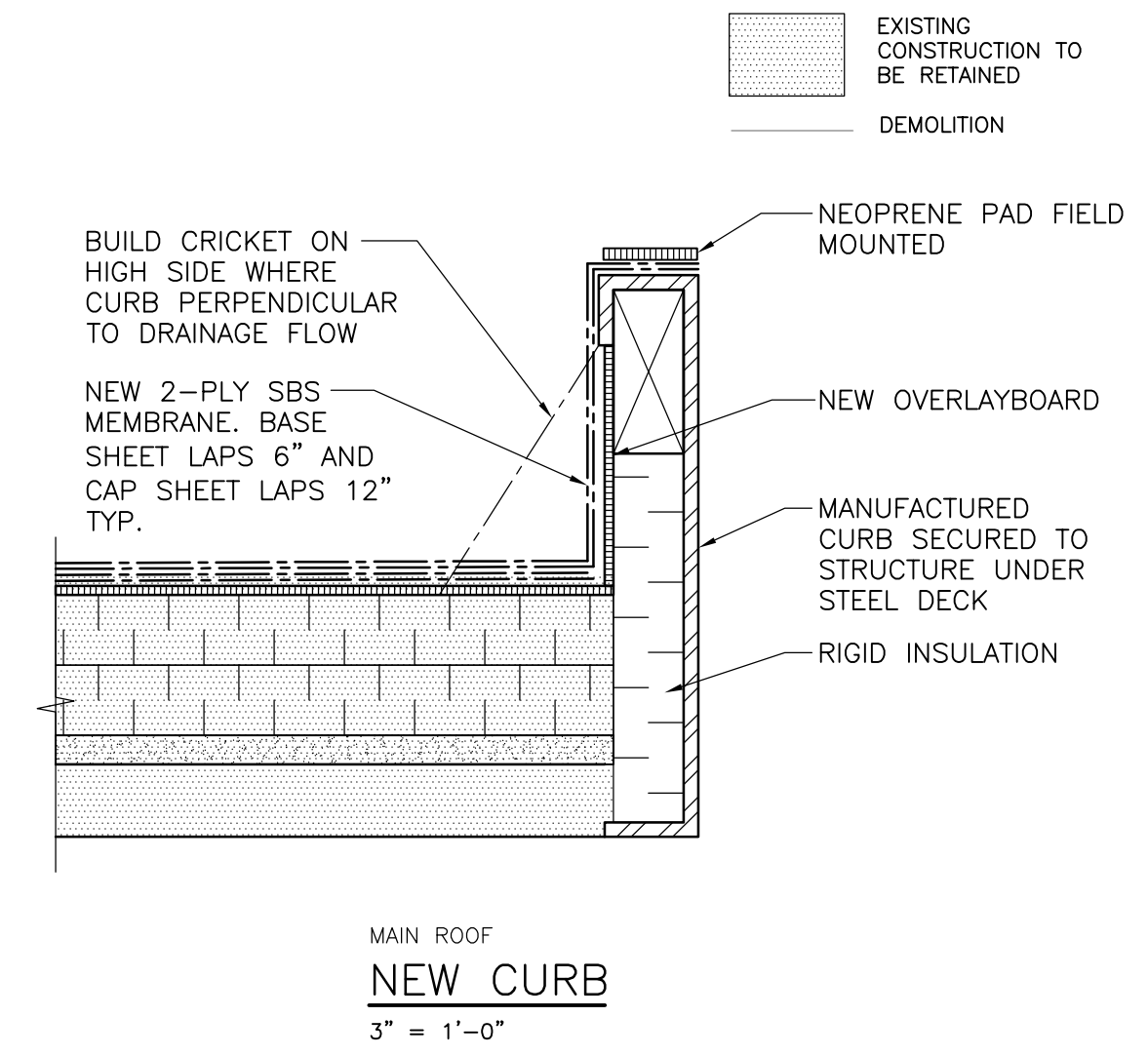
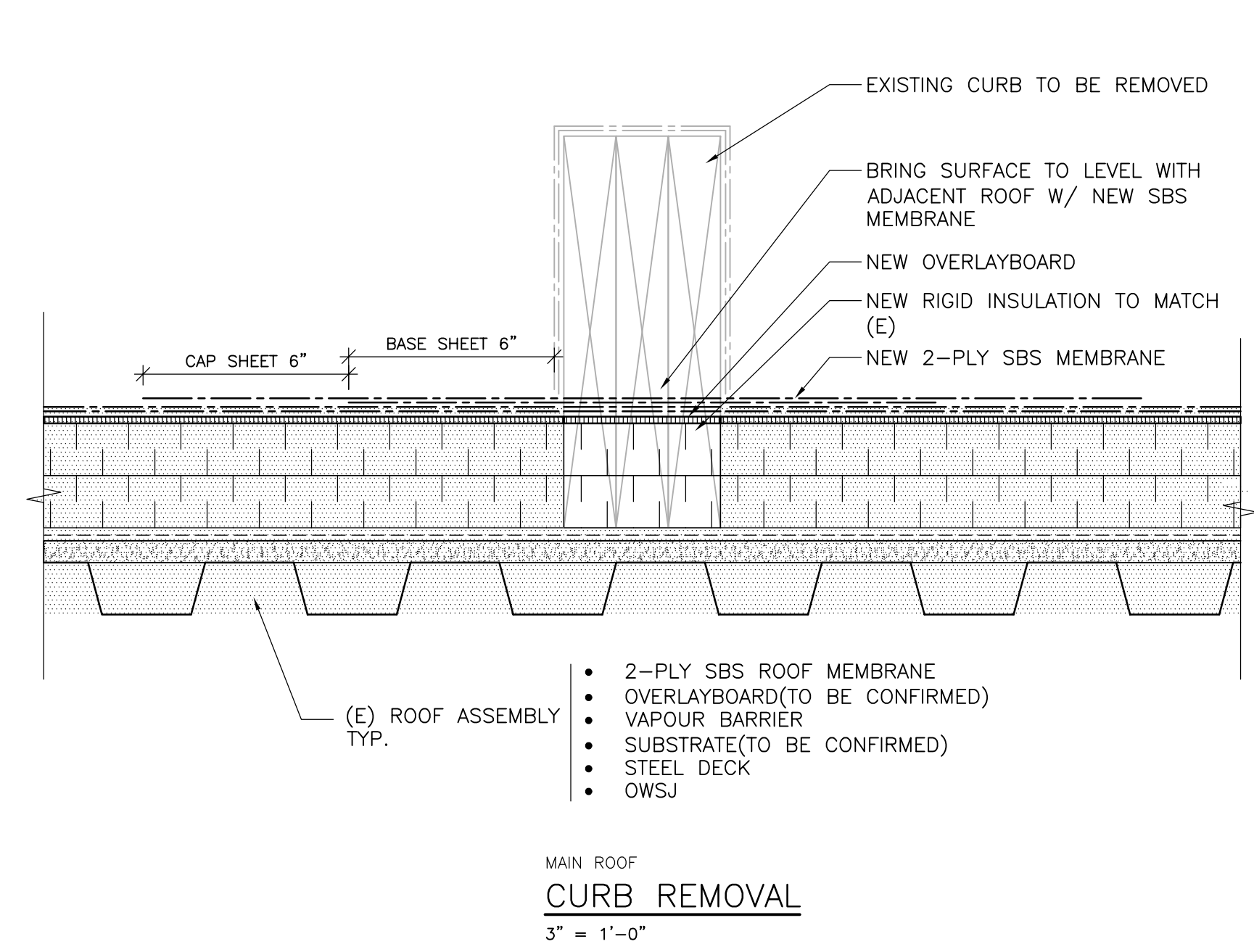
M-2

STRUCTURAL STEEL

HEL-022

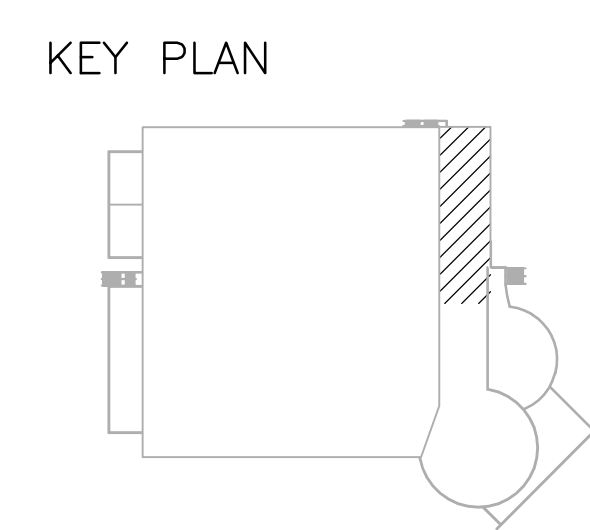
- ALL STEEL WORK SHALL BE IN ACCORDANCE WITH CSA-S16-09 AND THE REVIEWED SHOP DRAWINGS.
- THE STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS AS SPECIFIED UNDER 'SUBMITTALS' TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE ALL DETAILS, FASTENERS, MATERIAL SPECIFICATIONS, FINISHES AND DESIGN LOADS.
- A COPY OF THE FABRICATOR'S CANADIAN WELDING BUREAU CERTIFICATES SHALL BE INCLUDED WITH THE SHOP DRAWING SUBMISSION.
- ALL WELDING SHALL BE IN ACCORDANCE WITH CSA W59-03 (R2008) AND SHALL BE PERFORMED BY FABRICATORS "FULLY APPROVED" BY THE CANADIAN WELDING BUREAU UNDER CSA W55.3-08. FABRICATING SHOP TO HAVE A MINIMUM DIVISION 2.1 CERTIFICATION BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA W47.1-09 AND CSA W55.3-08 FOR RESISTANCE WELDING OF STRUCTURAL COMPONENTS. THE FABRICATOR SHALL SUBMIT PROOF OF CERTIFICATION PRIOR TO START OF WORK.
- ALL WELDING ELECTRODES SHALL CONFORM TO CSA W48-06 (R2011).
- CONNECTIONS DETAILED ON THESE STRUCTURAL DRAWINGS SHALL BE FABRICATED AND ERECTED AS SHOWN. ALTERNATIVES MAY BE CONSIDERED AT THE SOLE DISCRETION OF THE STRUCTURAL ENGINEER OF RECORD BUT MUST BE PRE-APPROVED BY SAME. WHERE AN ALTERNATIVE IS APPROVED IT SHALL BE AT NO ADDITIONAL COST TO THE OWNER AND SHALL NOT NEGATIVELY IMPACT THE CONSTRUCTION SCHEDULE.
- FABRICATOR SHALL INCREASE WELD SIZES TO ACCOMMODATE SLOT WIDTHS SO THAT LEG SIZE AS SPECIFIED IS FULLY ON STEEL CONNECTION ELEMENT. FINAL WELD SIZE TO BE SHOWN ON THE SHOP DRAWINGS.
- EXCEPT PARTS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR GALVANIZED OR UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL STEEL WORK SHALL BE SHOP PRIMED. PRIMING SHALL BE IN ACCORDANCE WITH CISC/CPMA-1-73g "QUICK DRYING PRIMER" WHEN NO TOP COAT IS REQUIRED AND IN ACCORDANCE WITH CISC/CPMA-2-75 WHEN A TOP COAT IS SPECIFIED. IF A TOP COAT IS SPECIFIED THE PRIMER SHALL BE SELECTED ENSURING COMPATIBILITY WITH THE SPECIFIED SYSTEM. ITEMS SPECIFIED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED TO ASTM A123/A123M, MINIMUM ZINC COATING OF 600g/sq.m. FIELD TOUCH-UP ALL ABRASIONS, SCRATCHES, WELDS OR BOLTS WITH GALVAON OR EQUIVALENT.
- ALL EXTERIOR STEEL WORK AND STEEL PROTRUDING THROUGH THE BUILDING ENVELOPE SHALL BE HOT DIP GALVANIZED.
- PROVIDE STRUCTURAL STEEL TO CSA C40.20-04/G40.21-04 (R2009) OR ASTM A992 WITH THE FOLLOWING GRADES:

CHANNELS AND ANGLES	300W (44W)
MISCELLANEOUS STEEL PLATES	300W (44W)
- THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING DURING CONSTRUCTION. THE BRACING SHALL BE DESIGNED, INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE BRACING SHALL BE REMOVED ONLY AFTER PERMANENT ROOF AND FLOOR DIAPHRAGMS, SHEAR WALLS AND BRACING ARE COMPLETE.
- THE CONTRACTOR SHALL PROVIDE SEAL WELDED CLOSURE PLATES AT ALL OPEN ENDS OF EXTERIOR HSS COLUMNS. PLATE THICKNESS SHALL BE A MINIMUM OF 6 mm (1/4") UNLESS NOTED OTHERWISE.



ISSUES		
No.	DATE	ISSUED FOR
1	2017.06.27	REVIEW
2	2017.07.06	CLIENT REVIEW

SUB CONSULTANT



OCEANSIDE ARENA AHU UPGRADE

830 ISLAND HWY W PARKSVILLE, BC

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 Tel: 250-751-8558 Fax: 250-751-8559
 Email: mail@heroldengineering.com

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DETAILS NOTES

DESIGNED JK	ENGINEER'S SEAL
DESIGN REVIEW VW	
DRAFTED VW	CLIENT DRAWING No. n/a
DRAFTING REVIEW GB	
PROJECT No. 0417-059	PERMIT No. n/a
SCALE AS SHOWN	
HEL DRAWING No. S101	REVISION