

**AGENDA AND ADDITIONS TO THE AGENDA
REGULAR COUNCIL MEETING
CITY OF CROSSLAKE
MONDAY, JUNE 8, 2020
7:00 P.M. – CITY HALL**

A. CALL TO ORDER

1. Approval of Additions to the Agenda (**Council Action-Motion**)

B. CONSENT CALENDAR – NOTICE TO THE PUBLIC – All items here listed are considered to be routine by the City Council and will be acted on by one **motion**. There will be no separate discussion on these items unless a Citizen or Councilmember so requests:

1. Special Council Meeting Minutes of May 11, 2020
2. Regular Council Meeting Minutes of May 11, 2020
3. Special Council Meeting Minutes of May 21, 2020
4. City – Month End Revenue Report dated May 2020
5. City – Month End Expenditures Report dated May 2020
6. Police Report for Crosslake – May 2020
7. Police Report for Mission Township – May 2020
8. Fire Department Report – May 2020
9. Community Center Update – June 3, 2020
10. Planning and Zoning Monthly Statistics
11. Planning and Zoning Commission Meeting Minutes of April 24, 2020
12. Public Works Commission Meeting Minutes of February 3, 2020
13. Waste Partners Recycling Report for April 2020
14. Bills for Approval
15. **Additional Bills for Approval**

C. PUBLIC FORUM - No action will be taken on any of the issues raised. If appropriate, the issues will be placed on the agenda of a future council meeting. Speaker must state their name and address. Each speaker is given a three-minute time limit.

D. MAYOR’S AND COUNCIL MEMBERS’ REPORT

1. Updates on New City Hall Project
 - a. Pay Application #9 from Hy-Tec Construction for City Hall Project in the Amount of \$239,571.86 (**Council Action-Motion**)
 - b. Discuss Procedures for Opening City Hall to the Public (**Council Action-Motion**)
2. Proposal from Hytec for Fire Station Remodel (**Council Action-Motion**)
 - a. **Letter dated June 4, 2020 from Hytec Re: Fire Station Remodel**
 - b. **Gordian Group Work Order, Scope of Work and Price Proposal Details**
 - c. **Fire Station Plans**
3. Approve Resolution Accepting Donations (**Council Action-Motion**)

E. CITY ADMINISTRATOR’S REPORT

1. Eric Loge of Waste Partners – Discuss Recycling Options for the City of Crosslake
 - a. Correspondence from Eric Loge of Waste Partners
 - b. MN State Statute 115A.93 Regarding Licensing Solid Waste Collection

- c. City of Pequot Lakes Ordinance Regarding License and Business Regulations
 - d. City of Pequot Lakes Refuse Hauler's License Application
 - e. **Press Release from Crow Wing County Re: Recycling Program**
2. Memo dated June 2, 2020 from City Clerk Re: Application from The Wharf for Off-Sale Liquor License (**Council Action-Motion**)

F. COMMISSION REPORTS

1. PUBLIC WORKS/CEMETERY/SEWER

- a. Pay Request #2 from R.L. Larson Excavating for Daggett Bay Road Sanitary Sewer Extension in the Amount of \$59,508.01 (**Council Action-Motion**)
- b. Change Order No. 1 from R.L. Larson Excavating for Concrete Driveway Pavement (**Council Action-Motion**)
- c. Memo dated June 3, 2020 from Ted Strand Re: Request for Replace Cemetery Markers (**Council Action-Motion**)
- d. Memo dated June 2, 2020 from Public Works Commission and Park & Rec Commission Re: Request from Stuart Swenson for Sewer Connection Fee and Park Dedication Fee Relief (**Council Action-Motion**)

G. CITY ATTORNEY REPORT

- 1. Request for Council Action from Stephanie Heinen to Change Restrictive Use Agreement for Parcel ID# 14070576 (**Council Action-Motion**)
 - a. Restrictive Use Agreement dated February 2017
 - b. Current Photos Taken of Parcel

H. NEW BUSINESS

I. OLD BUSINESS

J. ADJOURN

D. R. A.

June 4, 2020

Mayor Nevin
City of Crosslake
37028 County Rd 66
Crosslake, MN 56442

RE: City of Crosslake Fire Station Remodel

Dear Mayor:

We hereby submit our proposal to furnish all labor and materials for the renovation of the Crosslake Fire Station per the plans dated 4/29/20. We will utilize the Sourcewell/Gordian process on this project.

Included in this proposal are the following clarifications:

Fire Station Renovation:

\$1,298,769.85

DIVISION 01 – GENERAL CONDITIONS:

- Includes supervision, temp utilities, dumpsters and general conditions.
- Building permit fees and builders risk insurance are included by the owner.
- Includes Sourcewell/Gordian Fees.

DIVISION 02 – EXISTING CONDITIONS, DEMO and SITE WORK:

- Selective demolition of the interior floors, walls, ceilings, mechanical and electrical system per demo plans.
- Removal of the existing 6" raised slab in the fire garage for the new 5th bay.
- Site excavation, removals and backfill for the new hose tower is included.
- Site removals and saw cutting are included for all new stoops and exterior concrete.
- Includes all exterior concrete walks, aprons and bollards for the new garage and at the training tower.
- No landscaping included.
- No additional well included. Based on info from the City, Appx. 400 gpm flow is sufficient for sprinkler system.
- Includes temp shoring of the existing structure to allow for new steel beam in added bay.
- Includes temporary shelters to isolate the operation of the fire department.
- Includes final cleaning of the facility prior to turnover.
- Includes all necessary tools and equipment to perform the project.

DIVISION 03 - CONCRETE:

- Includes new concrete footings at the hose tower.
- New concrete slab in the added 5th bay of the fire garage.

- Misc. floor patching for underground plumbing and electrical.

DIVISION 04 – MASONRY

- Includes all masonry foundation and stoops.
- Includes new burnished block (on the exterior) for the hose tower including all required scaffolding.
- The existing exterior brick walls will remain.

DIVISION 05 – STEEL

- Provide and install new steel beam and column structure for opening new stall in garage.
- Provide and install all required steel rebar for footings, masonry and slabs.
- Includes hose drying rack.

DIVISION 06 – CARPENTRY

- Framing new interior walls with wood 2x framing.
- Re-framing of the roof at the new training tower.
- Framing at the northwest man-door of the fire garage to re-direct snow/rain.
- Includes all blocking and backing as required.
- All cabinets and countertops to be provided by the owner.
- Re-configure existing cabinets for Training Room.

DIVISION 07 – THERMAL & MOSITURE

- Existing roof steel to remain.
- Provide and install new metal roof over training tower and tie-in the transition to the training tower.
- Provide and install new snow guards at roof as existing are damaged or missing.
- Includes labor to patch known roof leak at connection to the west covered overhang.
- Reinsulate attic space of the areas as they are disturbed from construction. Does not include reinsulating the entire attic.
- Includes interior sound insulation in the new walls.
- Provide and install new siding as shown, combination of LP Smart siding and metal wall panels.
- Provide flashing on the existing brick to eliminate water issues.
- Includes all required flashing and caulking.

DIVISION 08 – DOORS & WINDOWS

- Reuse existing steel door frames and slabs where able.
- Provide new aluminum exterior doors per plans.
- Includes all new door hardware, reuse existing door strikes as allows by code.
- Provide and install four new sliding windows.
- New overhead doors to be tempered glass panels on west doors and standard doors at east doors.

DIVISION 09 – FINISHES

- Install new drywall, hang, tape and texture.
- Includes painting of all rooms except for the existing FRP in the fire garage.
- Includes new 2x2 ACT ceilings as per the plans.
- Flooring to be LVT, Carpet, Ceramic and Epoxy as per the plans.

- Includes new epoxy in the Fire Garage.
- Full height ceramic tile showers.

DIVISION 10 – SPECIALTIES

- All lockers to be provided by the owner.
- Provide and install new locker room benches per the plans.
- New exterior channel letters and interior room signage.
- Provide and install new markerboards in the training room.
- Includes toilet and bath accessories per updated bathrooms and dirty bathroom.

DIVISION 11 – EQUIPMENT

- All appliances to be provided by the owner, including fire gear dryer.
- Appliance installation and connection included.

DIVISION 12 – FURNISHINGS

- Furniture to be provided by the owner.
- Reuse existing office furniture as able.
- Does not include any window shades.

DIVISION 15 – MECHANICAL

- Includes all new underground plumbing rough-ins.
- New plumbing fixtures and equipment per the plans.
- Plumbing tie-ins to the existing sanitary and domestic water systems.
- HVAC to have new furnaces for each designated area.
- All new HVAC ductwork and diffusers.
- New CO/NO2 control for the fire garage with make-up air unit.
- New gas unit heaters in the garage and hose tower.
- New sprinkler system throughout the building.
- Wet system in office space and dry system in attic and garage spaces.
- Includes stand-pipe and hose connections in the hose tower.

DIVISION 16 – ELECTRICAL

- Electrical to keep the existing ambulance garage in operation throughout the project.
- Maintain the essential operating system for the fire department to continue services.
- Provide new light fixtures, update/retrofit existing lights in the fire garage.
- Includes new ceiling fans in the fire garage and hose tower.
- Includes new receptacles and devices.
- Power to the mechanical equipment per the plans.
- Includes CAT5 wiring and coax to the training room and day room locations.
- Reuse existing door strikes for access control.
- Reuse existing security system for the building.
- TV's and AV appliances by owner. Includes install of power and data to each location.

Additional Options:

- Reuse the existing overhead door operators, replace only doors– Deduct \$ 8,000

Exclusions:

- Permit fees, SAC/WAC fees
- Re-Roofing of replacing the existing roof
- New electrical panel or new service
- Asbestos abatement
- Does include any existing wall repairs or unforeseen existing issues
- Does not include any work in the existing Ambulance side of the building.
- Removal / storage of existing furniture and equipment.

Please review the outlined scope above and let me know if you have any questions.

Thank you for the opportunity to work with you on this and have a great day!

Sincerely,



Andy Pickar
Project Manager
HY-TEC CONSTRUCTION
OF BRAINERD, INC.

D. 2. b.



Work Order Signature Document

Sourcewell EZIQC Contract No.: MN-NCM-GC05-120518-HTC

New Work Order

Modify an Existing Work Order

Work Order Number: 079439.00

Work Order Date: 06/04/2020

Owner PO No:

Work Order Title: City of Crosslake Fire Hall Remodel

Owner Name: City of Crosslake

Contractor Name: HY-Tec Construction of Brainerd, Inc.

Contact: David Nevin

Contact: Jack Steinke

Phone: (218) 820-3568

Phone:

Work to be Performed

Work to be performed as per the Final Detailed Scope of Work Attached and as per the terms and conditions of Sourcewell EZIQC Contract No MN-NCM-GC05-120518-HTC.

Brief Work Order Description:

Convert city hall into Fire Station

Time of Performance See Schedule Section of the Detailed Scope of Work

Duration

Liquidated Damages Will apply:

Will not apply:

Work Order Firm Fixed Price: \$1,298,769.85

Owner Purchase Order Number:

Approvals

Owner

Date

Contractor

Date

6/4/20

Detailed Scope of Work

To: Jack Steinke
HY-Tec Construction of Brainerd, Inc.
11360 Business 371
Brainerd, MN 56401
No Data Input

From: David Nevin
City of Crosslake
City Hall, 37028 County Rd 66
Crosslake, MN 56442
(218) 820-3568

Date Printed: June 04, 2020

Work Order Number: 079439.00

Owner PO No:

Work Order Title: City of Crosslake Fire Hall Remodel

Brief Scope: Convert city hall into Fire Station


Preliminary

Revised

Final

The following items detail the scope of work as discussed at the site. All requirements necessary to accomplish the items set forth below shall be considered part of this scope of work.

Convert Existing City Hall building into Fire Hall per attached plans.



Contractor



Date

Owner

Date

Contractor's Price Proposal - Summary

Date: June 04, 2020

Re: IQC Master Contract #: MN-NCM-GC05-120518-HTC
Work Order #: 079439.00
Owner PO #:
Title: City of Crosslake Fire Hall Remodel
Contractor: HY-Tec Construction of Brainerd, Inc.
Proposal Value: \$1,298,769.85

Framing	\$7,059.25
Casework	\$2,730.10
Concrete	\$26,608.11
Demolition	\$78,464.97
Dirt Work	\$15,429.41
Electrical	\$162,783.53
Equipment	\$18,561.62
Exterior Concrete	\$8,917.08
Finishes	\$192,222.99
Fire Protection	\$139,744.56
Framing	\$18,937.03
HVAC	\$206,457.38
Masonry	\$76,721.54
Openings	\$75,022.69
Plumbing	\$57,734.88
Specialties	\$14,058.39
Steel	\$108,462.16
Thermal and Moisture	\$84,730.02
Trim Work	\$4,124.14
Proposal Total	\$1,298,769.85

The Percentage of NPP on this Proposal: %

Contractor's Price Proposal - Detail

Date: June 04, 2020

Re: IQC Master Contract #: MN-NCM-GC05-120518-HTC
 Work Order #: 079439.00
 Owner PO #:
 Title: City of Crosslake Fire Hall Remodel
 Contractor: HY-Tec Construction of Brainerd, Inc.
 Proposal Value: \$1,298,769.85

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Framing					
1	06 17 53 00 0002		EA	10' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$631.09
				Installation	Quantity 4.00 x Unit Price 115.23 x Factor 1.3692 = Total 631.09
				Existing Roof Overlay	
2	06 17 53 00 0003		EA	12' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$1,584.71
				Installation	Quantity 9.00 x Unit Price 128.60 x Factor 1.3692 = Total 1,584.71
				Tower Roof	
3	06 17 53 00 0003 0044		MOD	For Up To 15, Add	\$35.49
				Installation	Quantity 9.00 x Unit Price 2.88 x Factor 1.3692 = Total 35.49
4	06 17 53 00 0003 0048		MOD	For 6 In 12 Slope, Add	\$70.98
				Installation	Quantity 9.00 x Unit Price 5.76 x Factor 1.3692 = Total 70.98
5	06 17 53 00 0003		EA	12' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$176.08
				Installation	Quantity 1.00 x Unit Price 128.60 x Factor 1.3692 = Total 176.08
				Existing Roof Overlay	
6	06 17 53 00 0003 0044		MOD	For Up To 15, Add	\$3.94
				Installation	Quantity 1.00 x Unit Price 2.88 x Factor 1.3692 = Total 3.94
7	06 17 53 00 0004		EA	14' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$197.51
				Installation	Quantity 1.00 x Unit Price 144.25 x Factor 1.3692 = Total 197.51
				Existing Roof Overlay	
8	06 17 53 00 0004 0044		MOD	For Up To 15, Add	\$4.75
				Installation	Quantity 1.00 x Unit Price 3.47 x Factor 1.3692 = Total 4.75
9	06 17 53 00 0005		EA	16' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$908.88
				Installation	Quantity 4.00 x Unit Price 165.95 x Factor 1.3692 = Total 908.87
				Existing Roof Overlay	
10	06 17 53 00 0005 0044		MOD	For Up To 15, Add	\$24.70
				Installation	Quantity 4.00 x Unit Price 4.51 x Factor 1.3692 = Total 24.70
11	06 17 53 00 0006		EA	18' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$252.15
				Installation	Quantity 1.00 x Unit Price 184.16 x Factor 1.3692 = Total 252.15
				Existing Roof Overlay	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Framing					
12	06 17 53 00 0006	0044	MOD	For Up To 15, Add	\$7.24
				Installation	
				Quantity	
				1.00 x	
				Unit Price	
				5.29 x	
				Factor	
				1.3692 =	
				Total	7.24
13	06 17 53 00 0008		EA	22' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$2,201.89
				Installation	
				Quantity	
				8.00 x	
				Unit Price	
				201.02 x	
				Factor	
				1.3692 =	
				Total	2,201.89
				Tower Roof	
14	06 17 53 00 0008	0044	MOD	For Up To 15, Add	\$55.64
				Installation	
				Quantity	
				8.00 x	
				Unit Price	
				5.08 x	
				Factor	
				1.3692 =	
				Total	55.64
15	06 17 53 00 0008	0048	MOD	For 6 In 12 Slope, Add	\$111.29
				Installation	
				Quantity	
				8.00 x	
				Unit Price	
				10.16 x	
				Factor	
				1.3692 =	
				Total	111.29
16	06 17 53 00 0013		EA	32' Pre-Assembled Wood Roof Truss, 4 In 12 Slope	\$732.06
				Installation	
				Quantity	
				2.00 x	
				Unit Price	
				267.33 x	
				Factor	
				1.3692 =	
				Total	732.06
				Tower Roof	
17	06 17 53 00 0013	0044	MOD	For Up To 15, Add	\$20.29
				Installation	
				Quantity	
				2.00 x	
				Unit Price	
				7.41 x	
				Factor	
				1.3692 =	
				Total	20.29
18	06 17 53 00 0013	0048	MOD	For 6 In 12 Slope, Add	\$40.56
				Installation	
				Quantity	
				2.00 x	
				Unit Price	
				14.81 x	
				Factor	
				1.3692 =	
				Total	40.56
Subtotal for Framing					\$7,059.25

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Casework					
19	12 35 70 13 0003		EA	36" High Base Sink Unit, 2 Doors; Midmark MC-SBS005-363624	\$102.18
				Installation	
				Quantity	
				1.00 x	
				Unit Price	
				74.63 x	
				Factor	
				1.3692 =	
				Total	102.18
				Day Room, Radio Room	
20	12 35 70 13 0006		EA	36" High Base Storage Unit, 1 Door; Midmark MC-SBP006-243624	\$163.48
				Installation	
				Quantity	
				2.00 x	
				Unit Price	
				59.70 x	
				Factor	
				1.3692 =	
				Total	163.48
				Day Room, Radio Room	
21	12 35 70 13 0008		EA	36" High Base Storage Unit, 1 4" Drawer, 1 Door; Midmark MC-SBP012-153624	\$163.48
				Installation	
				Quantity	
				2.00 x	
				Unit Price	
				59.70 x	
				Factor	
				1.3692 =	
				Total	163.48
				Day Room, Radio Room	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Casework						
22	12 35 70 13 0014		EA	36" High Base Storage Unit, 2 4" Drawer, 2 Doors; Midmark MC-SBP020-303624	\$102.18	
		X		Installation		
				Day Room, Radio Room		
				Quantity 1.00 x Unit Price 74.63 x Factor 1.3692 = Total 102.18		
23	12 35 70 13 0015		EA	36" High Base Storage Unit, 2 4" Drawer, 2 Doors; Midmark MC-SBP020-363624	\$919.65	
		X		Installation		
				Day Room, Radio Room		
				Quantity 9.00 x Unit Price 74.63 x Factor 1.3692 = Total 919.65		
24	12 36 23 13 0002		SF	Plastic Laminate Countertop Without Backsplash	\$824.15	
		X		Installation		
				Day Room, Radio Room		
				Quantity 114.00 x Unit Price 5.28 x Factor 1.3692 = Total 824.15		
25	12 36 23 13 0003		SF	Plastic Laminate Countertop With 4" Backsplash	\$368.70	
		X		Installation		
				Day Room, Restrooms		
				Quantity 34.00 x Unit Price 7.92 x Factor 1.3692 = Total 368.70		
26	12 36 23 13 0004		LF	Plastic Laminate End Splash For Plastic Laminate Countertops	\$26.04	
		X		Installation		
				Day Room, Restrooms		
				Quantity 6.00 x Unit Price 3.17 x Factor 1.3692 = Total 26.04		
27	12 36 23 13 0005		EA	Cutout For Sink And/Or Faucet In Plastic Laminate Countertop	\$60.24	
				Installation		
				Day room		
				Quantity 1.00 x Unit Price 44.00 x Factor 1.3692 = Total 60.24		
Subtotal for Casework					\$2,730.10	

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Concrete						
28	03 31 13 00 0003		SF	4" 3,000 PSI Slab On Grade Concrete Slabs Assembly	\$7,635.54	
				Installation		
				Replacement SOG for the demoed areas		
				Quantity 942.00 x Unit Price 5.92 x Factor 1.3692 = Total 7,635.54		
29	03 31 13 00 0003 0153		MOD	For 4,000 PSI Concrete, Add	\$270.86	
				Installation		
				Quantity 942.00 x Unit Price 0.21 x Factor 1.3692 = Total 270.86		
30	03 31 13 00 0003 0157		MOD	For >500 To 1,000, Add	\$1,986.27	
				Installation		
				Quantity 942.00 x Unit Price 1.54 x Factor 1.3692 = Total 1,986.27		
31	03 31 13 00 0005		SF	6" 3,000 PSI Slab On Grade Concrete Slabs Assembly	\$10,839.59	
				Installation		
				Replacement SOG for the demoed areas		
				Quantity 1,083.00 x Unit Price 7.31 x Factor 1.3692 = Total 10,839.59		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Concrete						
32	03 31 13 00 0005	0153	MOD	For 4,000 PSI Concrete, Add	\$415.20	
				Installation		
				Quantity	Total	
				1,083.00 x	415.20	
				Unit Price		
				0.28 x		
				Factor		
				1.3692 =		
33	03 31 13 00 0005	0158	MOD	For >1,000 To 2,000, Add	\$1,512.50	
				Installation		
				Quantity	Total	
				1,083.00 x	1,512.50	
				Unit Price		
				1.02 x		
				Factor		
				1.3692 =		
34	03 31 13 00 0018		CY	Direct Chute, Place 3,000 PSI Concrete Continuous Footings	\$2,559.65	
				Installation		
				Quantity	Total	
				11.00 x	2,559.65	
				Unit Price		
				169.95 x		
				Factor		
				1.3692 =		
				Continuous footings under stoops, Tower and connection.		
35	03 31 13 00 0018	0039	MOD	For Up To 20, Add	\$204.53	
				Installation		
				Quantity	Total	
				11.00 x	204.53	
				Unit Price		
				13.58 x		
				Factor		
				1.3692 =		
36	03 31 13 00 0022		CY	Direct Chute, Place 3,000 PSI Concrete Spread Footings	\$1,058.50	
				Installation		
				Quantity	Total	
				4.00 x	1,058.50	
				Unit Price		
				193.27 x		
				Factor		
				1.3692 =		
				For Pad Footings under the 2 new columns in Truck Garage		
37	03 31 13 00 0022	0039	MOD	For Up To 20, Add	\$125.47	
				Installation		
				Quantity	Total	
				4.00 x	125.47	
				Unit Price		
				22.91 x		
				Factor		
				1.3692 =		
Subtotal for Concrete					\$26,608.11	

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Demolition						
38	02 41 13 13 0020		SY	>3" To 6" By Machine, Break-up And Remove Bituminous Paving	\$1,726.56	
				Installation		
				Quantity	Total	
				100.00 x	1,726.56	
				Unit Price		
				12.61 x		
				Factor		
				1.3692 =		
				AT Tower Area		
39	02 41 13 13 0028		SY	>3" To 6" By Machine, Break-up And Remove Welded Wire Reinforced Concrete Paving	\$1,651.01	
				Installation		
				Quantity	Total	
				66.00 x	1,651.01	
				Unit Price		
				18.27 x		
				Factor		
				1.3692 =		
				At West Side & North end of East Side		
40	02 41 13 13 0041		SF	>3" To 6" By Hand, Break-up And Remove Concrete Paving	\$1,043.28	
				Installation		
				Quantity	Total	
				172.00 x	1,043.28	
				Unit Price		
				4.43 x		
				Factor		
				1.3692 =		
				SOG Demo For Plumbing		
41	02 41 13 13 0041		SF	>3" To 6" By Hand, Break-up And Remove Concrete Paving	\$10,918.00	
				Installation		
				Quantity	Total	
				1,800.00 x	10,918.00	
				Unit Price		
				4.43 x		
				Factor		
				1.3692 =		
				SOG Demo for Structural and Architectural. 1200 Sf Interior, 600 SF Exterior		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Demolition					
42	02 41 19 13 0002		LF	Saw Cut Bituminous Paving Up To 4" Depth	\$169.92
				Quantity	Unit Price
			Installation	85.00 x	1.46 x
					Factor =
					Total 169.92
				Cutting of asphalt at extents of Tower foundation excavation needs.	
43	02 41 19 13 0006		LF	Saw Cut Welded Wire Reinforced Concrete Slab Up To 4" Depth	\$534.97
				Quantity	Unit Price
			Installation	176.00 x	2.22 x
					Factor =
					Total 534.97
				SOG Demo for Plumbing	
44	02 41 19 13 0006 0030		MOD	For Each Additional Pass (Depth To 3"), Add	\$207.24
				Quantity	Unit Price
			Installation	176.00 x	0.86 x
					Factor =
					Total 207.24
45	02 41 19 13 0006		LF	Saw Cut Welded Wire Reinforced Concrete Slab Up To 4" Depth	\$975.72
				Quantity	Unit Price
			Installation	321.00 x	2.22 x
					Factor =
					Total 975.72
				SOG Demo for Structural and Architectural. 206 LF Interior, 115 LF Exterior	
46	02 41 19 13 0006 0030		MOD	For Each Additional Pass (Depth To 3"), Add	\$242.57
				Quantity	Unit Price
			Installation	206.00 x	0.86 x
					Factor =
					Total 242.57
47	08 12 13 13 0008		EA	3' x 6'-8" Through 7'-2" High, 4-3/4" Deep, 16 Gauge, Knock Down Hollow Metal Door Frame	\$1,663.70
				Quantity	Unit Price
			Installation	0.00 x	262.79 x
			Demolition	23.00 x	52.83 x
					Factor =
					Total 1,663.70
				Created for demo of the existing	
48	08 12 13 13 0074		EA	3' x 6'-8" Through 7'-2" High, 6-3/4" Deep, 16 Gauge, Knock Down Hollow Metal Door Frame	\$21,592.45
				Quantity	Unit Price
			Installation	41.00 x	382.06 x
			Demolition	2.00 x	52.83 x
					Factor =
					Total 21,447.78
				Created for demo of the existing and new	
49	08 13 13 13 0049		EA	3' x 7' x 1-3/4", 18 Gauge, Unrated, Hollow Metal Door	\$14,757.84
				Quantity	Unit Price
			Installation	21.00 x	510.24 x
			Demolition	2.00 x	31.70 x
					Factor =
					Total 14,671.03
				Created for demo of the existing and new	
50	08 14 16 00 0519		EA	3'-0" x 7' x 1-3/4" Thick, 5 Ply, Particleboard Core (PC), Maple Faced Wood Door	\$11,073.62
				Quantity	Unit Price
			Installation	22.00 x	334.48 x
			Demolition	23.00 x	31.70 x
					Factor =
					Total 10,075.34
				Created for demo of the existing and new	
51	09 65 19 19 0002		SF	1/8" Thick, Class 2 Through Pattern, Vinyl Composition Tile (VCT) (Armstrong® Standard Excelon Imperial Texture®)	\$1,760.65
				Quantity	Unit Price
			Installation	0.00 x	2.16 x
			Demolition	1,670.00 x	0.77 x
					Factor =
					Total 1,760.65
				This item created for demo of existing	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Demolition						
52	09 65 19 19 0002	0160	MOD	For >1,000 To 3,000, Deduct	-\$114.33	
				Installation		
				Quantity	Total	
				1,670.00 x	-114.33	
				Unit Price		
				-0.05 x		
				Factor	=	
				1.3692		
53	09 68 16 00 0023		SY	22 Ounce, Medium Traffic, Non Patterned, Nylon Broadloom Carpet	\$10,261.77	
				Installation		
				Quantity	Total	
				0.00 x	0.00	
				Unit Price		
				24.55 x		
				Factor	=	
				1.3692		
				Demolition		
				592.00 x	10,261.77	
				Unit Price		
				12.66 x		
				Factor	=	
				1.3692		
				This item created for demo of existing		
Subtotal for Demolition					\$78,464.97	

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Dirt Work						
54	31 05 13 00 0002		CY	Bank Run/Fill Sand	\$9,943.68	
				Installation		
				Quantity	Total	
				204.00 x	9,943.68	
				Unit Price		
				35.60 x		
				Factor	=	
				1.3692		
				Back fill and under slab		
55	31 23 16 36 0006		CY	Excavation For Building Foundations And Other Structures By Hydraulic Excavator, Backhoe, Loader in Soil	\$1,074.69	
				Installation		
				Quantity	Total	
				167.00 x	1,074.69	
				Unit Price		
				4.70 x		
				Factor	=	
				1.3692		
				New stoops, Tower and Connection		
56	31 23 16 36 0006	0016	MOD	For >50 To 250, Add	\$429.87	
				Installation		
				Quantity	Total	
				167.00 x	429.87	
				Unit Price		
				1.88 x		
				Factor	=	
				1.3692		
57	31 23 16 36 0017		CY	Backfilling Around Building Foundations And Other Structures By Skid-Steer Loader	\$595.77	
				Installation		
				Quantity	Total	
				147.00 x	595.77	
				Unit Price		
				2.96 x		
				Factor	=	
				1.3692		
				New stoops, Tower and Connection		
58	31 23 16 36 0017	0020	MOD	For >50 To 250, Add	\$237.50	
				Installation		
				Quantity	Total	
				147.00 x	237.50	
				Unit Price		
				1.18 x		
				Factor	=	
				1.3692		
59	31 23 16 36 0021		CY	Compaction Of Fill Or Subbase For Building Foundations and Other Structures by Vibratory Plate, Air Tamper, Etcetera	\$2,248.50	
				Installation		
				Quantity	Total	
				204.00 x	2,248.50	
				Unit Price		
				8.05 x		
				Factor	=	
				1.3692		
				New stoops, Tower and Connection		
60	31 23 16 36 0021	0024	MOD	For >50 To 250, Add	\$899.40	
				Installation		
				Quantity	Total	
				204.00 x	899.40	
				Unit Price		
				3.22 x		
				Factor	=	
				1.3692		
Subtotal for Dirt Work					\$15,429.41	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Electrical						
61	26 05 19 16 0004		LF	Pull String Installed To Remain In Place, In New Conduits	\$37.79	
				Installation		
				Quantity	Total	
				230.00 x 0.12 x 1.3692 =	37.79	
				Electrical Rough-in per Contractors Itemized list		
62	26 05 19 16 0213		MLF	#12 AWG Cable - Type MC, 2 Conductors, Solid Or Stranded, Aluminum Armor	\$9,292.88	
				Installation		
				Quantity	Total	
				2.69 x 2,523.08 x 1.3692 =	9,292.88	
				Electrical Rough-in per Contractors Itemized list		
63	26 05 19 16 0214		MLF	#10 AWG Cable - Type MC, 2 Conductors, Solid Or Stranded, Aluminum Armor	\$318.32	
				Installation		
				Quantity	Total	
				0.08 x 3,099.78 x 1.3692 =	318.32	
				Electrical Rough-in per Contractors Itemized list		
64	26 05 19 16 0216		MLF	#12 AWG Cable - Type MC, 3 Conductors, Solid Or Stranded, Aluminum Armor	\$3,277.05	
				Installation		
				Quantity	Total	
				0.80 x 2,991.76 x 1.3692 =	3,277.05	
				Electrical Rough-in per Contractors Itemized list		
65	26 05 19 16 0217		MLF	#10 AWG Cable - Type MC, 3 Conductors, Solid Or Stranded, Aluminum Armor	\$1,599.34	
				Installation		
				Quantity	Total	
				0.30 x 3,893.60 x 1.3692 =	1,599.34	
				Electrical Rough-in per Contractors Itemized list		
66	26 05 19 16 0246		EA	3/4" Armored Cable Connector	\$1,232.21	
				Installation		
				Quantity	Total	
				205.00 x 4.39 x 1.3692 =	1,232.21	
				Electrical Rough-in per Contractors Itemized list		
67	26 05 19 16 0279		MLF	#12 AWG Cable - Type THHN-THWN 600 Volt Copper, Single Stranded, Placed In Conduit	\$4,476.01	
				Installation		
				Quantity	Total	
				6.46 x 506.44 x 1.3692 =	4,476.01	
				Electrical Rough-in per Contractors Itemized list		
68	26 05 19 16 0280		MLF	#10 AWG Cable - Type THHN-THWN 600 Volt Copper, Single Stranded, Placed In Conduit	\$97.11	
				Installation		
				Quantity	Total	
				0.11 x 627.67 x 1.3692 =	97.11	
				Electrical Rough-in per Contractors Itemized list		
69	26 05 29 00 0167		EA	1/2", One Hole Steel Conduit Strap	\$3,626.52	
				Installation		
				Quantity	Total	
				992.00 x 2.67 x 1.3692 =	3,626.52	
				Electrical Rough-in per Contractors Itemized list		
70	26 05 29 00 0167 0097		MOD	For >500, Deduct	-\$991.52	
				Installation		
				Quantity	Total	
				992.00 x -0.73 x 1.3692 =	-991.52	
				Electrical Rough-in per Contractors Itemized list		
71	26 05 29 00 0168		EA	3/4", One Hole Steel Conduit Strap	\$463.82	
				Installation		
				Quantity	Total	
				125.00 x 2.71 x 1.3692 =	463.82	
				Electrical Rough-in per Contractors Itemized list		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Electrical					
72	26 05 29 00 0168	0095	MOD	For >100 To 250, Deduct	-42.79
			Installation	Quantity 125.00 x Unit Price -0.25 x Factor 1.3692 = Total -42.79	
73	26 05 29 00 0170		EA	1-1/4", One Hole Steel Conduit Strap	\$4.19
			Installation	Quantity 1.00 x Unit Price 3.06 x Factor 1.3692 = Total 4.19	
				Electrical Rough-in per Contractors Itemized list	
74	26 05 29 00 0240		EA	24" Long Snap On T-Bar Electrical Box Hanger (Caddy 512)	\$341.53
			Installation	Quantity 16.00 x Unit Price 15.59 x Factor 1.3692 = Total 341.53	
				Electrical Rough-in per Contractors Itemized list	
75	26 05 29 00 0304		C	6-1/2" Length, 18 LB Tensile Strength, Nylon Cable Ties	\$5,796.85
			Installation	Quantity 375.00 x Unit Price 11.29 x Factor 1.3692 = Total 5,796.85	
				Electrical Rough-in per Contractors Itemized list	
76	26 05 33 13 0593		LF	1/2" Electrical Metallic Tubing (EMT) Conduit	\$1,763.80
			Installation	Quantity 380.00 x Unit Price 3.39 x Factor 1.3692 = Total 1,763.80	
				Electrical Rough-in per Contractors Itemized list	
77	26 05 33 13 0593	0020	MOD	For >250 To 500, Deduct	-10.41
			Installation	Quantity 380.00 x Unit Price -0.02 x Factor 1.3692 = Total -10.41	
78	26 05 33 13 0594		LF	3/4" Electrical Metallic Tubing (EMT) Conduit	\$5,678.76
			Installation	Quantity 1,050.00 x Unit Price 3.95 x Factor 1.3692 = Total 5,678.76	
				Electrical Rough-in per Contractors Itemized list	
79	26 05 33 13 0594	0022	MOD	For >1,000, Deduct	-445.67
			Installation	Quantity 1,050.00 x Unit Price -0.31 x Factor 1.3692 = Total -445.67	
80	26 05 33 13 0596		LF	1-1/4" Electrical Metallic Tubing (EMT) Conduit	\$79.14
			Installation	Quantity 10.00 x Unit Price 5.78 x Factor 1.3692 = Total 79.14	
				Electrical Rough-in per Contractors Itemized list	
81	26 05 33 13 0615		EA	1/2" Electrical Metallic Tubing (EMT) Set Screw Coupling	\$84.78
			Installation	Quantity 18.00 x Unit Price 3.44 x Factor 1.3692 = Total 84.78	
				Electrical Rough-in per Contractors Itemized list	
82	26 05 33 13 0616		EA	3/4" Electrical Metallic Tubing (EMT) Set Screw Coupling	\$461.37
			Installation	Quantity 81.00 x Unit Price 4.16 x Factor 1.3692 = Total 461.37	
				Electrical Rough-in per Contractors Itemized list	
83	26 05 33 13 0626		EA	1/2 Electrical Metallic Tubing (EMT) Compression Coupling	\$117.75
			Installation	Quantity 20.00 x Unit Price 4.30 x Factor 1.3692 = Total 117.75	
				Electrical Rough-in per Contractors Itemized list	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Electrical						
84	26 05 33 13 0627		EA	3/4" Electrical Metallic Tubing (EMT) Compression Coupling	\$13.64	
				Quantity	Unit Price	Factor = Total
				Installation 2.00 x	4.98 x	1.3692 = 13.64
				Electrical Rough-in per Contractors Itemized list		
85	26 05 33 13 0637		EA	1/2" Electrical Metallic Tubing (EMT) Straight Box Connector With Set Screw	\$74.92	
				Quantity	Unit Price	Factor = Total
				Installation 16.00 x	3.42 x	1.3692 = 74.92
				Electrical Rough-in per Contractors Itemized list		
86	26 05 33 13 0638		EA	3/4" Electrical Metallic Tubing (EMT) Straight Box Connector With Set Screw	\$272.09	
				Quantity	Unit Price	Factor = Total
				Installation 48.00 x	4.14 x	1.3692 = 272.09
				Electrical Rough-in per Contractors Itemized list		
87	26 05 33 13 0659		EA	1/2" Electrical Metallic Tubing (EMT) Straight Box Compression Connector	\$272.09	
				Quantity	Unit Price	Factor = Total
				Installation 48.00 x	4.14 x	1.3692 = 272.09
				Electrical Rough-in per Contractors Itemized list		
88	26 05 33 13 0660		EA	3/4" Electrical Metallic Tubing (EMT) Straight Box Compression Connector	\$160.36	
				Quantity	Unit Price	Factor = Total
				Installation 24.00 x	4.88 x	1.3692 = 160.36
				Electrical Rough-in per Contractors Itemized list		
89	26 05 33 13 0662		EA	1-1/4" Electrical Metallic Tubing (EMT) Straight Box Compression Connector	\$11.82	
				Quantity	Unit Price	Factor = Total
				Installation 1.00 x	8.63 x	1.3692 = 11.82
				Electrical Rough-in per Contractors Itemized list		
90	26 05 33 13 2294		LF	1/2" Flexible Metallic Conduit	\$71.75	
				Quantity	Unit Price	Factor = Total
				Installation 20.00 x	2.62 x	1.3692 = 71.75
				Electrical Rough-in per Contractors Itemized list		
91	26 05 33 13 2295		LF	3/4" Flexible Metallic Conduit	\$20.33	
				Quantity	Unit Price	Factor = Total
				Installation 5.00 x	2.97 x	1.3692 = 20.33
				Electrical Rough-in per Contractors Itemized list		
92	26 05 33 13 2369		EA	3/4" Flexible Steel Screw-in Connector, Insulated	\$7.37	
				Quantity	Unit Price	Factor = Total
				Installation 1.00 x	5.38 x	1.3692 = 7.37
				Electrical Rough-in per Contractors Itemized list		
93	26 05 33 13 2383		EA	1/2" Flexible Straight Connector, Die Cast	\$46.55	
				Quantity	Unit Price	Factor = Total
				Installation 8.00 x	4.25 x	1.3692 = 46.55
				Electrical Rough-in per Contractors Itemized list		
94	26 05 33 13 2401		LF	3/4" Flexible Liquid Tight Non-Metallic Conduit	\$91.46	
				Quantity	Unit Price	Factor = Total
				Installation 20.00 x	3.34 x	1.3692 = 91.46
				Electrical Rough-in per Contractors Itemized list		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifer	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Electrical					
95	26 05 33 13 2409		EA	3/4" Liquid Tight Non-Metallic Straight Connector	\$46.39
				Quantity	Unit Price
				4.00	8.47
				x	x
				Factor	Total
				1.3692	46.39
				=	
				Electrical Rough-in per Contractors Itemized list	
96	26 05 33 13 2417		EA	3/4" Liquid Tight Non-Metallic 90 Degree Angle Connector	\$66.76
				Quantity	Unit Price
				4.00	12.19
				x	x
				Factor	Total
				1.3692	66.76
				=	
				Electrical Rough-in per Contractors Itemized list	
97	26 05 33 16 0003		EA	1-1/2" Depth, 4" Square Steel Box	\$6,535.22
				Quantity	Unit Price
				206.00	23.17
				x	x
				Factor	Total
				1.3692	6,535.22
				=	
				Electrical Rough-in per Contractors Itemized list	
98	26 05 33 16 0004		EA	2-1/8" Depth, 4" Square Steel Box	\$130.57
				Quantity	Unit Price
				4.00	23.84
				x	x
				Factor	Total
				1.3692	130.57
				=	
				Electrical Rough-in per Contractors Itemized list	
99	26 05 33 16 0009		EA	5/8" Depth, 1 Gang, 4" Square Steel Mud Ring	\$1,585.21
				Quantity	Unit Price
				144.00	8.04
				x	x
				Factor	Total
				1.3692	1,585.20
				=	
				Electrical Rough-in per Contractors Itemized list	
100	26 05 33 16 0014		EA	1/2" Depth, 2 Gang, 4" Square Steel Mud Ring	\$247.91
				Quantity	Unit Price
				22.00	8.23
				x	x
				Factor	Total
				1.3692	247.91
				=	
				Electrical Rough-in per Contractors Itemized list	
101	26 05 33 23 0094		EA	#5738AF Fan Box/Solid Base, 5-1/2" Diameter	\$95.90
				Quantity	Unit Price
				4.00	17.51
				x	x
				Factor	Total
				1.3692	95.90
				=	
				Electrical Rough-in per Contractors Itemized list	
102	26 09 23 00 0354		EA	Passive Infrared And Ultrasonic, Wall Switch Mounted Occupancy Sensor (Watt Stopper DW-100)	\$1,747.92
				Quantity	Unit Price
				10.00	127.66
				x	x
				Factor	Total
				1.3692	1,747.92
				=	
				Device & Trim	
103	26 09 23 00 0357		EA	Single Gang, Plastic Switch Plate Cover For Occupancy Sensors (Watt Stopper ASP)	\$62.98
				Quantity	Unit Price
				10.00	4.60
				x	x
				Factor	Total
				1.3692	62.98
				=	
				Device & Trim	
104	26 09 23 00 0401		EA	2,000 SF Coverage, Low Temperature, Passive Infrared, Ceiling/Wall Mounted Occupancy Sensor (Watt Stopper CB-100)	\$1,068.09
				Quantity	Unit Price
				4.00	195.02
				x	x
				Factor	Total
				1.3692	1,068.09
				=	
				Device & Trim	
105	26 09 23 00 0414		EA	277 Volt AC, Form C, Occupancy Sensor Power Pack (Watt Stopper A277C-P)	\$338.58
				Quantity	Unit Price
				4.00	61.82
				x	x
				Factor	Total
				1.3692	338.58
				=	
				Device & Trim	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Electrical					
106	26 09 23 00 0703		EA	Wired Photocell For Lighting Fixtures	\$175.11
				Quantity	Unit Price
				1.00 x	127.89 x
				Factor =	Total
				1.3692 =	175.11
				Device & Trim	
107	26 24 19 00 0438		EA	Bus Duct Transition Pull Box	\$714.57
				Quantity	Unit Price
				1.00 x	521.89 x
				Factor =	Total
				1.3692 =	714.57
				Electrical Rough-in per Contractors Itemized list	
108	26 24 19 00 0577		EA	2.4/4.8 KV Space Heaters	\$463.67
				Quantity	Unit Price
				2.00 x	169.32 x
				Factor =	Total
				1.3692 =	463.67
				Device & Trim	
109	26 27 26 00 0017		EA	20 Amp, NEMA 5-20, Single Receptacle, 125 Volt, 1 Phase	\$1,167.09
				Quantity	Unit Price
				41.00 x	20.79 x
				Factor =	Total
				1.3692 =	1,167.09
				Device & Trim	
110	26 27 26 00 0043		EA	30 Amp, Dryer Receptacle, 230 Volt	\$261.12
				Quantity	Unit Price
				3.00 x	63.57 x
				Factor =	Total
				1.3692 =	261.12
				Device & Trim	
111	26 27 26 00 0044		EA	60 Amp, Range Receptacle, 230 Volt	\$125.88
				Quantity	Unit Price
				1.00 x	91.94 x
				Factor =	Total
				1.3692 =	125.88
				Device & Trim	
112	26 27 26 00 0068		EA	20 Amp Ground Fault Circuit Interrupter (GFCI), Duplex Receptacle	\$1,132.22
				Quantity	Unit Price
				18.00 x	45.94 x
				Factor =	Total
				1.3692 =	1,132.22
				Device & Trim	
113	26 27 26 00 0151		EA	20 Amp, 120/277 Volt, SPST Switch	\$856.08
				Quantity	Unit Price
				22.00 x	28.42 x
				Factor =	Total
				1.3692 =	856.08
				Device & Trim	
114	26 27 26 00 0188		EA	Remote Speed Switch For Paddle Fan	\$516.68
				Quantity	Unit Price
				4.00 x	94.34 x
				Factor =	Total
				1.3692 =	516.68
				Device & Trim	
115	26 27 26 00 0191		EA	40 Amp, SPST, 125 Volt, Standard Time Switch	\$162.78
				Quantity	Unit Price
				1.00 x	118.89 x
				Factor =	Total
				1.3692 =	162.78
				Device & Trim	
116	26 27 26 00 0238		EA	1 Gang Plastic Switch Plate	\$31.63
				Quantity	Unit Price
				22.00 x	1.05 x
				Factor =	Total
				1.3692 =	31.63
				Device & Trim	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Electrical					
117	26 27 26 00 0242		EA	1 Gang Duplex Plastic Wall Plate	\$99.20
				Quantity	Unit Price
				69.00	1.05
				x	x
					Factor =
					1.3692
					Total
					99.20
				Device & Trim	
118	26 27 26 00 0255		EA	1 Gang, 302 Stainless Steel Switch Plate With Satin Finish	\$8.11
				Quantity	Unit Price
				1.00	5.92
				x	x
					Factor =
					1.3692
					Total
					8.11
				Device & Trim	
119	26 27 26 00 0278		EA	Blank Cover, Single Gang, Stamped Metallic Weatherproof Cover (Killark® 1FBC)	\$10.56
				Quantity	Unit Price
				1.00	7.71
				x	x
					Factor =
					1.3692
					Total
					10.56
				Device & Trim	
120	26 28 16 00 0006		EA	60 Amp, 240 Volt Class, 1 Phase, 2 Wire, 2 Blades And Fuseholders, Heavy Duty Fusible, NEMA 1 Enclosure, Neutral Kit, Safety Switch	\$3,126.43
				Quantity	Unit Price
				5.00	456.68
				x	x
					Factor =
					1.3692
					Total
					3,126.43
				Disconnects for HVAC Equipment	
121	26 51 13 00 0277		EA	4' Length, 4,600 Lumens, Lensed LED Striplight Fixture (Lithonia ZL2)	\$14,033.31
				Quantity	Unit Price
				32.00	320.29
				x	x
					Factor =
					1.3692
					Total
					14,033.31
				Lighting	
122	26 51 13 00 0326		EA	3,300 Lumens, 2' x 2', Shadow Box Style, Lay-In/Troffer LED Fixture (Lithonia 2SBSL2)	\$946.31
				Quantity	Unit Price
				2.00	345.57
				x	x
					Factor =
					1.3692
					Total
					946.31
				Lighting	
123	26 51 13 00 0327		EA	4,600 Lumens, 2' x 4', Shadow Box Style, Lay-In/Troffer LED Fixture (Lithonia 2SBSL4)	\$48,500.49
				Quantity	Unit Price
				75.00	472.30
				x	x
					Factor =
					1.3692
					Total
					48,500.49
				Lighting	
124	26 51 13 00 0350		EA	1,500 Lumens, 8" Diameter, Recessed LED Downlight With Open Trim (Lithonia DOM8 LED)	\$4,593.17
				Quantity	Unit Price
				8.00	419.33
				x	x
					Factor =
					1.3692
					Total
					4,593.17
				Lighting	
125	26 51 13 00 0488		EA	7,500 Lumens, 8' Length, LED Linear Low Bay Fixture (Cree® CS18™)	\$748.09
				Quantity	Unit Price
				1.00	546.37
				x	x
					Factor =
					1.3692
					Total
					748.09
				Lighting	
126	26 51 13 00 0506		EA	25 System Watts, 1,400 Lumens, Pendant Mount, Wet Location, NEMA 4X, Low Bay, LED Fixture (Cooper Vaporgard™ Pro P2LC)	\$7,589.69
				Quantity	Unit Price
				6.00	923.86
				x	x
					Factor =
					1.3692
					Total
					7,589.69
				Lighting	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Electrical								
127	26 51 13 00 0856		EA	18,000 Lumens, 45" Length, LED High Bay Fixture (Lithonia IBL 18L)	\$16,444.37			
				Quantity	Unit Price	Factor	=	Total
			Installation	15.00	x 800.68	x 1.3692	=	16,444.37
				Lighting				
128	26 51 13 00 0888		LF	For Each Additional LF Of Interior Lighting Wire Whip, AddWire whips are included with interior lighting fixtures, where necessary, up to six feet in length. Use this task for additional required whip length. For example, if the fixture requires a 15' wire whip then use 9 LF of this task to reach required length.	\$0.00			
				Quantity	Unit Price	Factor	=	Total
			Installation	0.00	x 1.01	x 1.3692	=	0.00
				Lighting				
129	26 52 00 00 0003		EA	3 Max Wattage At 90 Minutes, 3.6 Volt, Polycarbonate Housing, LED Lamps, Commercial Emergency Light (Lithonia ELM2 LED)	\$1,889.91			
				Quantity	Unit Price	Factor	=	Total
			Installation	10.00	x 138.03	x 1.3692	=	1,889.91
				Lighting				
130	26 53 00 00 0004		EA	Single Face, Thermoplastic Housing, LED Exit Sign With Battery Back-Up (Lithonia LQM ELN)	\$3,402.41			
				Quantity	Unit Price	Factor	=	Total
			Installation	16.00	x 155.31	x 1.3692	=	3,402.41
				Lighting				
131	26 56 23 00 0107		EA	20 LEDs, 26 System Watts, Wall Mount, Full Cutoff, LED Wall Pack (CREE® BetaLED® Edge® SEC-EDG)Includes 350mA or 525mA driver.	\$4,337.01			
				Quantity	Unit Price	Factor	=	Total
			Installation	5.00	x 633.51	x 1.3692	=	4,337.01
				Lighting				
132	27 14 13 16 0339		MLF	4-Pair Solid UTP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed	\$0.00			
				Quantity	Unit Price	Factor	=	Total
			Installation	0.00	x 1,199.29	x 1.3692	=	0.00
				Electrical Rough-in per Contractors Itemized list - Data & Communications				
133	27 14 33 16 0004		MLF	RG 59/U Coaxial, Indoor Telecommunications Cable, Installed In Conduit (Belden 9108)	\$1,220.90			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	x 891.69	x 1.3692	=	1,220.90
				Electrical Rough-in per Contractors Itemized list - Data & Communications				
Subtotal for Electrical					\$162,783.53			

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Equipment								
134	01 22 23 00 0027		MO	45' Engine Powered, Articulating (Up/Over) Boom Manlift	\$3,437.87			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	x 2,510.86	x 1.3692	=	3,437.87
				Tower Soffit, Fascia and Roof Finish				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Equipment					
135	01 22 23 00 0069		MO	40' Electric, Scissor Platform Lift	\$7,782.34
				Quantity	Unit Price
				Installation 2.00 x	2,841.93 x
					Factor = 1.3692 =
					Total 7,782.34
				Mechanical and Electrical work at Garage and Tower Ceiling	
136	01 22 23 00 0931		DAY	20 To 25 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator	\$1,736.87
				Quantity	Unit Price
				Installation 1.00 x	1,268.53 x
					Factor = 1.3692 =
					Total 1,736.87
				Building Tower Roof	
137	01 22 23 00 0983		MO	6,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator	\$37,176.19
				Quantity	Unit Price
				Installation 2.00 x	13,575.88 x
					Factor = 1.3692 =
					Total 37,176.19
				Material Handling, Truck Offloads, Masonry	
138	01 22 23 00 0983 0037		MOD	For Equipment Without Operator, Deduct	-\$32,171.65
				Quantity	Unit Price
				Installation 2.00 x	-11,748.34 x
					Factor = 1.3692 =
					Total -32,171.65
139	11 30 13 13 0009		EA	30" Gas Range With Oven	\$160.00
		X		Quantity	Unit Price
				Installation 1.00 x	116.86 x
					Factor = 1.3692 =
					Total 160.00
				Day room	
140	11 30 13 13 0037		EA	2.0 CF Over-The Range Microwave	\$119.98
		X		Quantity	Unit Price
				Installation 1.00 x	87.63 x
					Factor = 1.3692 =
					Total 119.98
				Day room	
141	11 30 13 13 0048		EA	>20 To 22 CF Top Freezer Refrigerator	\$80.00
		X		Quantity	Unit Price
				Installation 1.00 x	58.43 x
					Factor = 1.3692 =
					Total 80.00
				Day room	
142	11 30 13 23 0005		EA	>4 To 5 CF, Top Load Washing Machine	\$120.01
		X		Quantity	Unit Price
				Installation 1.00 x	87.65 x
					Factor = 1.3692 =
					Total 120.01
				Decon 124	
143	11 30 13 23 0010		EA	>6.5 To 7 CF, Electric Dryer	\$120.01
		X		Quantity	Unit Price
				Installation 1.00 x	87.65 x
					Factor = 1.3692 =
					Total 120.01
				Decon 124	
Subtotal for Equipment					\$18,561.62

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Exterior Concrete					
144	32 16 23 00 0002		SF	4" Cast In Place Concrete Sidewalk	\$4,004.91
				Quantity	Unit Price
				Installation 468.00 x	6.25 x
					Factor = 1.3692 =
					Total 4,004.91
				Infill with crete from Tower to cut line in asphalt	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Exterior Concrete					
145	32 16 23 00 0002	0096	MOD	For >100 To 500, Add	\$467.77
				Installation	
				Quantity	468.00 x
				Unit Price	0.73 x
				Factor	1.3692 =
				Total	467.77
146	32 16 23 00 0002	0099	MOD	For Welded Wire Reinforcement, Add	\$301.17
				Installation	
				Quantity	468.00 x
				Unit Price	0.47 x
				Factor	1.3692 =
				Total	301.17
147	32 16 23 00 0004		SF	6" Cast In Place Concrete Sidewalk	\$1,661.36
				Installation	
				Quantity	162.00 x
				Unit Price	7.49 x
				Factor	1.3692 =
				Total	1,661.36
				New stoops & Aprons	
148	32 16 23 00 0004	0096	MOD	For >100 To 500, Add	\$181.88
				Installation	
				Quantity	162.00 x
				Unit Price	0.82 x
				Factor	1.3692 =
				Total	181.88
149	32 16 23 00 0004	0099	MOD	For Welded Wire Reinforcement, Add	\$110.91
				Installation	
				Quantity	162.00 x
				Unit Price	0.50 x
				Factor	1.3692 =
				Total	110.91
150	32 39 13 00 0004		LF	6" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated	\$1,805.32
				Installation	
				Quantity	28.00 x
				Unit Price	47.09 x
				Factor	1.3692 =
				Total	1,805.32
				At new Garage Door at Rm 116.	
				4 Pipe, 7' Long	
151	32 39 13 00 0004	0267	MOD	For Concrete Fill, Add Per LF Of Pipe Bollard	\$383.76
				Installation	
				Quantity	28.00 x
				Unit Price	10.01 x
				Factor	1.3692 =
				Total	383.76

Subtotal for Exterior Concrete **\$8,917.08**

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Finishes					
152	09 01 60 91 0012		SY	Grinding Of Existing Concrete Floor Prior To Installation Of Carpet	\$12,394.77
				Installation	
				Quantity	891.00 x
				Unit Price	10.16 x
				Factor	1.3692 =
				Total	12,394.77
				Grinding floor in preparation for epoxy finish install	
153	09 29 00 00 0013		SF	5/8" Type X Fire Rated Gypsum Board	\$13,525.51
				Installation	
				Quantity	10,080.00 x
				Unit Price	0.98 x
				Factor	1.3692 =
				Total	13,525.51
				Drywall	
154	09 29 00 00 0013	0050	MOD	For Horizontal Installation Up To 10' High, Add	\$3,174.35
				Installation	
				Quantity	10,080.00 x
				Unit Price	0.23 x
				Factor	1.3692 =
				Total	3,174.35
155	09 29 00 00 0013	0055	MOD	For >1,536, Deduct	-\$1,104.12
				Installation	
				Quantity	10,080.00 x
				Unit Price	-0.08 x
				Factor	1.3692 =
				Total	-1,104.12

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Finishes						
156	09 29 00 00 0056		SF	Up To 10' High, Walls, Tape, Spackle And Finish Gypsum Board	\$4,015.59	
			Installation	Quantity 7,520.00 x Unit Price 0.39 x Factor 1.3692 = Total 4,015.59		
				Drywall		
157	09 29 00 00 0060		SF	>10' High, Ceilings, Tape, Spackle And Finish Gypsum BoardUse this task for the entire wall area when the wall is >10' high.	\$2,348.45	
			Installation	Quantity 2,560.00 x Unit Price 0.67 x Factor 1.3692 = Total 2,348.45		
				Drywall		
158	09 29 00 00 0062		LF	Up To 10' High, Vertical Corners, Tape, Spackle And Finish Gypsum Board	\$418.61	
			Installation	Quantity 387.00 x Unit Price 0.79 x Factor 1.3692 = Total 418.61		
				Drywall		
159	09 29 00 00 0063		LF	>10' High, Vertical Corners, Tape, Spackle And Finish Gypsum BoardUse this task for the entire wall area when the wall is >10' high.	\$208.83	
			Installation	Quantity 164.00 x Unit Price 0.93 x Factor 1.3692 = Total 208.83		
				Drywall		
160	09 29 00 00 0066		LF	>10' High, Horizontal Corners, Tape, Spackle And Finish Gypsum BoardUse this task for the entire wall area when the wall is >10' high.	\$618.11	
			Installation	Quantity 418.00 x Unit Price 1.08 x Factor 1.3692 = Total 618.11		
				Drywall		
161	09 30 13 00 0002		SF	Less Than 8" x 8" Mounted Floor TileIncludes glazed porcelain, unglazed porcelain and glazed ceramic tiles. Tiles mounted from back, side or front in 12" x 12", 12" x 24", or similar sized sheets.	\$1,484.79	
			Installation	Quantity 118.00 x Unit Price 9.19 x Factor 1.3692 = Total 1,484.79		
				Shower floors		
162	09 30 13 00 0002 0066		MOD	For >50 To 250, Add	\$103.40	
			Installation	Quantity 118.00 x Unit Price 0.64 x Factor 1.3692 = Total 103.40		
163	09 30 13 00 0003		SF	8" x 8" And Larger Unmounted Floor TileIncludes glazed porcelain, unglazed porcelain and glazed ceramic tiles.	\$10,412.44	
			Installation	Quantity 762.00 x Unit Price 9.98 x Factor 1.3692 = Total 10,412.44		
				Floor Tile at Rooms: 100, 105, 110,120,121 & 123		
164	09 30 13 00 0006		SF	8" x 8" And Larger Unmounted Wall TileIncludes glazed porcelain, unglazed porcelain and glazed ceramic tiles.	\$15,492.77	
			Installation	Quantity 1,040.00 x Unit Price 10.88 x Factor 1.3692 = Total 15,492.77		
				Rooms 120, 121 & 123		
165	09 30 13 00 0006 0072		MOD	For >1,000, Deduct	-\$697.74	
			Installation	Quantity 1,040.00 x Unit Price -0.49 x Factor 1.3692 = Total -697.74		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Finishes					
166	09 30 13 00 0010		LF	4-1/4" To 4-1/2" High Glazed Porcelain, Unglazed Porcelain And Glazed Ceramic Cove Base Or Trim	\$5,286.54
			Installation	Quantity 334.00 x Unit Price 11.56 x Factor 1.3692 = Total 5,286.54	
				At Ceramic Tile areas	
167	09 51 13 00 0017		SF	2' x 2' x 5/8" Mineral Fiber Acoustical Ceiling Panels	\$16,489.75
			Installation	Quantity 6,115.00 x Unit Price 1.57 x Factor 1.3692 = Total 13,145.07	
			Demolition	Quantity 7,880.00 x Unit Price 0.31 x Factor 1.3692 = Total 3,344.68	
				Demo of existing and Install of new	
168	09 51 13 00 0017 0102		MOD	For >5,000, Deduct	-\$837.27
			Installation	Quantity 6,115.00 x Unit Price -0.10 x Factor 1.3692 = Total -837.27	
169	09 51 13 00 0017 0111		MOD	For Single Angled Tegular Edge (Reveal), Add	\$4,186.33
			Installation	Quantity 6,115.00 x Unit Price 0.50 x Factor 1.3692 = Total 4,186.33	
170	09 53 23 00 0004		SF	2' x 2' Grid, 15/16" T Bar Ceiling Suspension System	\$19,383.08
			Installation	Quantity 6,115.00 x Unit Price 1.98 x Factor 1.3692 = Total 16,577.86	
			Demolition	Quantity 7,880.00 x Unit Price 0.26 x Factor 1.3692 = Total 2,805.22	
				Demo of existing and Install of new	
171	09 53 23 00 0004 0139		MOD	For >5,000, Deduct	-\$1,004.72
			Installation	Quantity 6,115.00 x Unit Price -0.12 x Factor 1.3692 = Total -1,004.72	
172	09 65 23 00 0004		SF	0.16" Overall Thickness, 0.020" Wear Layer, Vinyl Plank Flooring (Armstrong@Luxe Plank™)	\$8,534.39
			Installation	Quantity 956.00 x Unit Price 6.52 x Factor 1.3692 = Total 8,534.39	
				LVT at Dayroom	
173	09 65 66 00 0011		SF	3/8" Interlocking Rubber Athletic Flooring With Raised Square Pattern (Pawling HL-155)Black with hidden or exposed locks.	\$11,293.49
			Installation	Quantity 364.00 x Unit Price 22.66 x Factor 1.3692 = Total 11,293.49	
				Exercise Room 102	
174	09 68 13 00 0021		SY	22 Ounce, Patterned, Nylon Carpet Tile	\$12,820.09
			Installation	Quantity 266.00 x Unit Price 35.20 x Factor 1.3692 = Total 12,820.09	
				At carpeted areas per floor finishes sheet	
175	09 68 13 00 0021 0411		MOD	For >200 To 400, Deduct	-\$196.67
			Installation	Quantity 266.00 x Unit Price -0.54 x Factor 1.3692 = Total -196.67	
176	09 91 23 00 0065		SF	Paint Interior Plaster/Drywall Walls, 1 Coat Primer, Sprayed	\$9,075.00
			Installation	Quantity 17,442.00 x Unit Price 0.38 x Factor 1.3692 = Total 9,075.00	
				All walls in Office area to 9.5 Feet above FF, except CT Areas	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Finishes						
177	09 91 23 00 0065	0289	MOD	For >10,000 To 20,000, Deduct	-\$1,432.90	
			Installation	Quantity 17,442.00 x Unit Price -0.06 x Factor 1.3692 = Total -1,432.90		
178	09 91 23 00 0067		SF	Paint Interior Plaster/Drywall Walls, 2 Coats Paint, Sprayed	\$16,717.11	
			Installation	Quantity 17,442.00 x Unit Price 0.70 x Factor 1.3692 = Total 16,717.11		
				All walls in Office area to 9.5 Feet above FF, except CT Areas		
179	09 91 23 00 0067	0289	MOD	For >10,000 To 20,000, Deduct	-\$2,626.97	
			Installation	Quantity 17,442.00 x Unit Price -0.11 x Factor 1.3692 = Total -2,626.97		
180	09 91 23 00 0154		SF	Paint Interior Drywall/Plaster Ceiling, 1 Coat Primer, Sprayed	\$1,717.52	
			Installation	Quantity 2,560.00 x Unit Price 0.49 x Factor 1.3692 = Total 1,717.52		
				New and Patched hard ceilings		
181	09 91 23 00 0154	0287	MOD	For >2,500 To 5,000, Deduct	-\$70.10	
			Installation	Quantity 2,560.00 x Unit Price -0.02 x Factor 1.3692 = Total -70.10		
182	09 91 23 00 0156		SF	Paint Interior Drywall/Plaster Ceiling, 2 Coats Paint, Sprayed	\$2,663.92	
			Installation	Quantity 2,560.00 x Unit Price 0.76 x Factor 1.3692 = Total 2,663.92		
				New and Patched hard ceilings		
183	09 91 23 00 0156	0287	MOD	For >2,500 To 5,000, Deduct	-\$140.21	
			Installation	Quantity 2,560.00 x Unit Price -0.04 x Factor 1.3692 = Total -140.21		
184	09 91 23 00 0241		LF	Paint Interior Metal Door Frame And Trim, 2 Coats Paint, Brush/Roller Work	\$1,444.13	
			Installation	Quantity 717.50 x Unit Price 1.47 x Factor 1.3692 = Total 1,444.13		
				HM Frames		
185	09 91 23 00 0254		EA	Paint Interior Metal Door, Both Faces, 2 Coats Paint, Sprayed	\$2,146.71	
			Installation	Quantity 21.00 x Unit Price 74.66 x Factor 1.3692 = Total 2,146.71		
				HM Doors		
186	09 91 23 00 0254	0297	MOD	For >10 To 25, Deduct	-\$214.79	
			Installation	Quantity 21.00 x Unit Price -7.47 x Factor 1.3692 = Total -214.79		
187	09 93 23 53 0004		LF	Stain Wood Trim, Up To 6" Wide, 1 Coat Stain, With Brush And Wipe Off	\$98.25	
			Installation	Quantity 104.00 x Unit Price 0.69 x Factor 1.3692 = Total 98.25		
				Windows "A" Trim. Casing, Sill & Apron @ 4 windows		
188	09 93 23 53 0006		SF	Finish Wood Trim, 1 Coat Sealer And 1 Coat Varnish Or Polyurethane	\$116.77	
			Installation	Quantity 104.00 x Unit Price 0.82 x Factor 1.3692 = Total 116.77		
				Windows "A" Trim. Casing, Sill & Apron @ 4 windows		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Finishes								
189	09 96 56 00 0002		SF	High Build Epoxy - 50 Mil	\$24,377.78			
				Quantity	Unit Price	Factor	=	Total
			Installation	8,020.00	x 2.22	x 1.3692	=	24,377.78
				Epoxy Floor Finish as Scheduled				

Subtotal for Finishes \$192,222.99

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Fire Protection								
190	21 13 13 00 0003		EA	Exposed Piping, Light Hazard, Complete Wet-Pipe Sprinkler System, Per HeadIncludes branch pipe and fittings, supports and sprinkler heads.	\$36,705.87			
				Quantity	Unit Price	Factor	=	Total
			Installation	82.00	x 326.93	x 1.3692	=	36,705.87
				Garage, Tower, Water & Compressor Rooms				

191	21 13 13 00 0004		EA	Concealed Piping, Light Hazard, Complete Wet-Pipe Sprinkler System, Per HeadIncludes branch pipe and fittings, supports and sprinkler heads with flat or conical escutcheon.	\$32,788.99			
				Quantity	Unit Price	Factor	=	Total
			Installation	55.00	x 435.41	x 1.3692	=	32,788.99
				Complete Office Area				

192	21 13 16 00 0003		EA	Exposed Piping, Light Hazard, Dry-Pipe Sprinkler System, Per HeadIncludes branch pipe and fittings, supports and sprinkler heads.	\$8,743.77			
				Quantity	Unit Price	Factor	=	Total
			Installation	18.00	x 354.78	x 1.3692	=	8,743.77
				Exterior Porches				

193	21 13 16 00 0003 0012		MOD	For >10 To 20, Add	\$1,434.17			
				Quantity	Unit Price	Factor	=	Total
			Installation	15.00	x 69.83	x 1.3692	=	1,434.17

194	21 13 16 00 0004		EA	Concealed Piping, Light Hazard, Dry-Pipe Sprinkler System, Per HeadIncludes branch pipe and fittings, supports and sprinkler heads with flat or conical escutcheon.	\$60,071.76			
				Quantity	Unit Price	Factor	=	Total
			Installation	98.00	x 447.69	x 1.3692	=	60,071.76
				Entire Attic area of Office Area, Garage Area & Tower.				

Subtotal for Fire Protection \$139,744.56

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Framing								
195	06 11 16 00 0003		LF	2" x 6" Wood Rafter	\$764.01			
				Quantity	Unit Price	Factor	=	Total
			Installation	360.00	x 1.55	x 1.3692	=	764.01
				Created for structural detail 8/S3.2, Garage Truss Reinforcement for HVAC Units.				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total						
Labor	Equip.	Material	(Excluded if marked with an X)								
Framing											
196	06 11 16 00 0023		LF	2" x 4" Wood Purlin	\$207.02						
				Quantity	Unit Price	Factor	=	Total			
				Installation	144.00	x	1.05	x	1.3692	=	207.02
				Created for structural detail 8/S3.2, Garage Truss Reinforcement for HVAC Units.							
197	06 11 16 00 0061		SF	2" x 4" Wood Wall Framing At 16" On Center	\$7,863.92						
				Quantity	Unit Price	Factor	=	Total			
				Installation	3,576.00	x	1.11	x	1.3692	=	5,434.85
				Demolition	4,224.00	x	0.42	x	1.3692	=	2,429.07
				Demo of existing and building of new							
198	06 11 16 00 0062		SF	2" x 6" Wood Wall Framing At 16" On Center	\$3,621.26						
				Quantity	Unit Price	Factor	=	Total			
				Installation	1,140.00	x	1.55	x	1.3692	=	2,419.38
				Demolition	1,596.00	x	0.55	x	1.3692	=	1,201.88
				Demo of existing and building of new							
199	06 11 16 00 0066		SF	2" x 6" Wood Wall Framing At 24" On Center	\$2,338.59						
				Quantity	Unit Price	Factor	=	Total			
				Installation	1,400.00	x	1.22	x	1.3692	=	2,338.59
				Temp Wall							
200	06 11 16 00 0135		LF	2" x 6" Wood Blocking To Wood	\$720.88						
				Quantity	Unit Price	Factor	=	Total			
				Installation	150.00	x	3.51	x	1.3692	=	720.88
				As needed for cabinets and specialty installations							
201	06 16 33 00 0005		SF	5/8" Thick CDX Plywood Roof Decking Applied to wood rafters.	\$2,645.29						
				Quantity	Unit Price	Factor	=	Total			
				Installation	1,400.00	x	1.38	x	1.3692	=	2,645.29
				Temp Wall							
202	06 16 33 00 0047		SF	1/2" Thick Structural Oriented Strand Board On Floors	\$776.06						
				Quantity	Unit Price	Factor	=	Total			
				Installation	520.00	x	1.09	x	1.3692	=	776.06
				Temp Floor Protection							

Subtotal for Framing **\$18,937.03**

Sect.	Item	Modifier	UOM	Description	Line Total						
Labor	Equip.	Material	(Excluded if marked with an X)								
HVAC											
203	05 05 23 00 1194		LF	3/8" Diameter, Plain Finish Steel, Low Carbon Threaded Rod	\$1,154.92						
				Quantity	Unit Price	Factor	=	Total			
				Installation	350.00	x	2.41	x	1.3692	=	1,154.92
				Support hangers for equipment							
204	05 05 23 00 1288		EA	3/8" Diameter, Zinc Plated Steel, Low Carbon/Grade 2 Hex Nut	\$69.01						
				Quantity	Unit Price	Factor	=	Total			
				Installation	126.00	x	0.40	x	1.3692	=	69.01
				Support hangers for equipment							

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
HVAC					
205	05 05 23 00 1387		EA	3/8" Inside Diameter, Zinc Plated Steel, Low Carbon Flat Washer	\$41.40
				Quantity	Unit Price
			Installation	252.00 x	0.12 x
				Factor	=
				1.3692	Total
					41.40
				Support hangers for equipment	
206	05 43 00 00 0005		LF	1-5/8" Wide x 13/16" High, 12 Gauge, Steel Unistrut Channel	\$2,108.57
				Quantity	Unit Price
			Installation	200.00 x	7.70 x
				Factor	=
				1.3692	Total
					2,108.57
				Support hangers for equipment	
207	08 91 16 00 0034		EA	24" Wide x 24" High Adjustable Intake Louver, Galvanized Aluminum Includes bird screen. Excludes actuator.	\$3,522.68
				Quantity	Unit Price
			Installation	4.00 x	643.20 x
				Factor	=
				1.3692	Total
					3,522.68
				Exterior Wall Intake louvers	
208	08 91 16 00 0034	0619	MOD	For Anodized Finish, Add	\$1,270.29
				Quantity	Unit Price
			Installation	4.00 x	231.94 x
				Factor	=
				1.3692	Total
					1,270.29
209	22 13 16 00 0516		LF	2" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$1,360.98
				Quantity	Unit Price
			Installation	200.00 x	4.97 x
				Factor	=
				1.3692	Total
					1,360.98
				Furnace and Heaters Venting and fresh Air Draw	
210	22 13 16 00 0517		LF	3" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$2,067.49
				Quantity	Unit Price
			Installation	200.00 x	7.55 x
				Factor	=
				1.3692	Total
					2,067.49
				Furnace and Heaters Venting and fresh Air Draw	
211	22 13 16 00 0533		EA	2" Polyvinyl Chloride (PVC) DWV 1/4 Bends	\$1,130.00
				Quantity	Unit Price
			Installation	42.00 x	19.65 x
				Factor	=
				1.3692	Total
					1,130.00
				Furnace and Heaters Venting and fresh Air Draw	
212	22 13 16 00 0534		EA	3" Polyvinyl Chloride (PVC) DWV 1/4 Bends	\$1,670.56
				Quantity	Unit Price
			Installation	42.00 x	29.05 x
				Factor	=
				1.3692	Total
					1,670.56
				Furnace and Heaters Venting and fresh Air Draw	
213	22 13 16 00 0549		EA	2" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$322.53
				Quantity	Unit Price
			Installation	12.00 x	19.63 x
				Factor	=
				1.3692	Total
					322.53
				Furnace and Heaters Venting and fresh Air Draw	
214	22 13 16 00 0550		EA	3" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$470.57
				Quantity	Unit Price
			Installation	12.00 x	28.64 x
				Factor	=
				1.3692	Total
					470.57
				Furnace and Heaters Venting and fresh Air Draw	
215	22 13 16 00 0689		EA	2" Polyvinyl Chloride (PVC) Couplings	\$317.27
				Quantity	Unit Price
			Installation	12.00 x	19.31 x
				Factor	=
				1.3692	Total
					317.27
				Furnace and Heaters Venting and fresh Air Draw	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
HVAC					
216	22 13 16 00 0690	EA		3" Polyvinyl Chloride (PVC) Couplings	\$449.37
			Quantity	Unit Price	Factor = Total
		Installation	12.00 x	27.35 x	1.3692 = 449.37
			Furnace and Heaters Venting and fresh Air Draw		
217	23 07 13 00 0010	SF		1-1/2" Type 100 (1.0 LB/CF) FSK Fiber Glass Duct Wrap Insulation	\$16,598.65
			Quantity	Unit Price	Factor = Total
		Installation	3,936.00 x	3.08 x	1.3692 = 16,598.65
			Duct Insulation		
218	23 09 23 00 0402	EA		Electronic Programmable Heating/Cooling Heat Pump Or Conventional Unit Thermostat (Honeywell TH6110)	\$697.74
			Quantity	Unit Price	Factor = Total
		Installation	4.00 x	127.40 x	1.3692 = 697.74
			Per Subcontractors Material List		
219	23 09 23 00 0822	EA		6-1/4" x 6-1/8" CO2 Sensor, 0-2,000 ppm (Kele WCO-1B)	\$3,324.97
			Quantity	Unit Price	Factor = Total
		Installation	2.00 x	1,214.20 x	1.3692 = 3,324.97
			Carbon Dioxide detectors with controls.		
220	23 11 23 00 0109	EA		3/4" Port, 550 MBTU Pressure Regulator For Corrugated Stainless Steel Tubing (CSST), Flexible Gas Pipe	\$1,121.21
			Quantity	Unit Price	Factor = Total
		Installation	8.00 x	102.36 x	1.3692 = 1,121.21
			Gas Regulators		
221	23 21 13 23 0033	EA		1/2", 150 LB, Black Malleable Iron 90 Degree Elbow	\$910.90
			Quantity	Unit Price	Factor = Total
		Installation	36.00 x	18.48 x	1.3692 = 910.90
			Gas Lines Per Sub Material List		
222	23 21 13 23 0081	EA		1/2", 150 LB, Black Malleable Iron Tee	\$256.31
			Quantity	Unit Price	Factor = Total
		Installation	8.00 x	23.40 x	1.3692 = 256.31
			Gas Lines Per Sub Material List		
223	23 21 13 23 0130	EA		1/2", 150 LB, Black Malleable Iron Cap	\$129.14
			Quantity	Unit Price	Factor = Total
		Installation	9.00 x	10.48 x	1.3692 = 129.14
			Gas Lines Per Sub Material List		
224	23 21 13 23 0199	EA		1/2" x 3" Long, Schedule 40 Black Steel Nipple	\$247.28
			Quantity	Unit Price	Factor = Total
		Installation	20.00 x	9.03 x	1.3692 = 247.28
			Gas Lines Per Sub Material List		
225	23 23 16 00 0018	LF		3/4" Outside Diameter Type L Drawn, ACR Copper Tubing	\$6,615.97
			Quantity	Unit Price	Factor = Total
		Installation	800.00 x	6.04 x	1.3692 = 6,615.97
			Gas Line		
226	23 31 13 13 0004	LB		Sheet Metal Ductwork, Medium Pressure, Field Fabricated, Galvanized, Field Assemble And Install	\$45,810.63
			Quantity	Unit Price	Factor = Total
		Installation	4,491.00 x	7.45 x	1.3692 = 45,810.63
			Per Subcontractors Material List		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
HVAC					
227	23 31 13 13 0004	0144	MOD	For >2,000 To 5,000, Add	\$1,783.23
				Installation	
				Quantity	Unit Price
				4,491.00	0.29
				x	x
				Factor	Total
				1.3692	= 1,783.23
Per Subcontractors Material List					
228	23 31 13 16 0005		LF	6", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Duct	\$1,060.31
				Installation	
				Quantity	Unit Price
				160.00	4.84
				x	x
				Factor	Total
				1.3692	= 1,060.31
Per Subcontractors Material List					
229	23 31 13 16 0007		LF	8", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Duct	\$1,584.71
				Installation	
				Quantity	Unit Price
				180.00	6.43
				x	x
				Factor	Total
				1.3692	= 1,584.71
Per Subcontractors Material List					
230	23 31 13 16 0008		LF	10", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Duct	\$265.62
				Installation	
				Quantity	Unit Price
				25.00	7.76
				x	x
				Factor	Total
				1.3692	= 265.62
Per Subcontractors Material List					
231	23 31 13 16 0009		LF	12", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Duct	\$609.05
				Installation	
				Quantity	Unit Price
				46.00	9.67
				x	x
				Factor	Total
				1.3692	= 609.05
Per Subcontractors Material List					
232	23 31 13 16 0010		LF	14", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Duct	\$1,564.17
				Installation	
				Quantity	Unit Price
				96.00	11.90
				x	x
				Factor	Total
				1.3692	= 1,564.17
Per Subcontractors Material List					
233	23 31 13 16 0017		EA	6", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Adjustable Elbow	\$1,408.25
				Installation	
				Quantity	Unit Price
				36.00	28.57
				x	x
				Factor	Total
				1.3692	= 1,408.25
Per Subcontractors Material List					
234	23 31 13 16 0019		EA	8", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Adjustable Elbow	\$2,155.01
				Installation	
				Quantity	Unit Price
				36.00	43.72
				x	x
				Factor	Total
				1.3692	= 2,155.01
Per Subcontractors Material List					
235	23 31 13 16 0020		EA	10", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Adjustable Elbow	\$2,289.30
				Installation	
				Quantity	Unit Price
				25.00	66.88
				x	x
				Factor	Total
				1.3692	= 2,289.30
Per Subcontractors Material List					
236	23 31 13 16 0021		EA	12", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Adjustable Elbow	\$4,546.13
				Installation	
				Quantity	Unit Price
				36.00	92.23
				x	x
				Factor	Total
				1.3692	= 4,546.13
Per Subcontractors Material List					

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
HVAC					
237	23 31 13 16 0053	EA		6", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Tee	\$689.50
			Quantity	Unit Price	Factor = Total
	Installation		14.00 x	35.97 x	1.3692 = 689.50
	Per Subcontractors Material List				
238	23 31 13 16 0055	EA		8", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Tee	\$2,304.77
			Quantity	Unit Price	Factor = Total
	Installation		30.00 x	56.11 x	1.3692 = 2,304.77
	Per Subcontractors Material List				
239	23 31 13 16 0056	EA		10", 26 Gauge, Factory Fabricated, Field Installed, Low Pressure, Galvanized Sheet Metal Round Tee	\$609.24
			Quantity	Unit Price	Factor = Total
	Installation		6.00 x	74.16 x	1.3692 = 609.24
	Per Subcontractors Material List				
240	23 33 13 13 0002	EA		6" Diameter Radial Opposed Blade Damper Round, Steel Construction, Manual Operated	\$947.76
			Quantity	Unit Price	Factor = Total
	Installation		20.00 x	34.61 x	1.3692 = 947.76
	Per Duct work Layout Plans				
241	23 33 13 13 0004	EA		8" Diameter Radial Opposed Blade Damper Round, Steel Construction, Manual Operated	\$1,674.44
			Quantity	Unit Price	Factor = Total
	Installation		29.00 x	42.17 x	1.3692 = 1,674.44
	Per Duct work Layout Plans				
242	23 33 13 13 0005	EA		10" Diameter Radial Opposed Blade Damper Round, Steel Construction, Manual Operated	\$314.44
			Quantity	Unit Price	Factor = Total
	Installation		5.00 x	45.93 x	1.3692 = 314.44
	Per Duct work Layout Plans				
243	23 33 13 13 0006	EA		12" Diameter Radial Opposed Blade Damper Round, Steel Construction, Manual Operated	\$689.26
			Quantity	Unit Price	Factor = Total
	Installation		10.00 x	50.34 x	1.3692 = 689.26
	Per Duct work Layout Plans				
244	23 34 16 00 0143	EA		15" Diameter Wheel, 3 HP Belt Drive, Kitchen Make-Up Air Fan230/460/60/3. For roof installations. Includes downblast discharge, weatherhood, filter and disconnect switch.	\$2,158.01
			Quantity	Unit Price	Factor = Total
	Installation		1.00 x	1,576.11 x	1.3692 = 2,158.01
	Truck Garage, MAU-1				
245	23 34 16 00 0213	EA		1/4 HP, 2,908 CFM At 1/8" Static Pressure, 18" Diameter, Direct Drive, Sidewall Propeller Exhaust Fan	\$2,205.21
			Quantity	Unit Price	Factor = Total
	Installation		2.00 x	805.29 x	1.3692 = 2,205.21
	Truck Garage, EF-2 & EF-3				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
HVAC								
246	23 34 16 00 0258		EA	70 CFM, Ceiling Mounted, Polymeric Intake Grille, Light Duty Exhaust Fan With Heater Bulb (Broan® 162)	\$317.98			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	116.12	x	1.3692	317.98
				Turnout Gear, EF-4 & EF-5				
247	23 34 16 00 0289		EA	900 CFM Low Sound, Direct Drive Centrifugal Ceiling Exhaust Fan (Greenheck SP-A900)	\$985.14			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	719.50	x	1.3692	985.14
				Turnout Gear, EF-1				
248	23 37 13 00 0037		EA	24" x 24" Ceiling Diffuser, Louver Face, Adjustable Pattern, Surface Mounted, Aluminum Construction With Damper	\$8,443.09			
				Quantity	Unit Price	Factor	=	Total
			Installation	36.00	171.29	x	1.3692	8,443.09
				Diffuser A				
249	23 37 13 00 0037	0224	MOD	For Lay-In Mount, Add	\$992.72			
				Quantity	Unit Price	Factor	=	Total
			Installation	36.00	20.14	x	1.3692	992.72
250	23 37 13 00 0074		EA	10" x 6" Single Deflection Return/Exhaust Register, Aluminum, Opposed Blade Damper, Wall/Ceiling	\$115.51			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	84.36	x	1.3692	115.51
				Grille D				
251	23 37 13 00 0246		EA	18" x 18" Egg Crate Wall Return Air Or Exhaust Grille, Aluminum Construction	\$2,293.93			
				Quantity	Unit Price	Factor	=	Total
			Installation	21.00	79.78	x	1.3692	2,293.93
				Return/Exhaust Grille C				
252	23 37 13 00 0252		EA	14" x 6" 4-Way Adjustable Wall Supply Grille, Adjustable Deflection, Aluminum Construction	\$658.98			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	160.43	x	1.3692	658.98
				Grille B				
253	23 37 13 00 0255		EA	36" x 20" 4-Way Adjustable Wall Supply Grille, Adjustable Deflection, Aluminum Construction	\$804.87			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	293.92	x	1.3692	804.87
				Grille B				
254	23 51 13 16 0002		EA	3" Round Flue Shutter Draft Control Damper	\$1,139.74			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	277.47	x	1.3692	1,139.74
				Venting for Ceiling Hung Unit Heaters				
255	23 51 16 00 0005		LF	5" Round Flue/Vent Pipe, Galvanized Double Wall Breech/Smoke Pipe	\$320.89			
				Quantity	Unit Price	Factor	=	Total
			Installation	12.00	19.53	x	1.3692	320.89
				Venting for Ceiling Hung Unit Heaters				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
HVAC								
256	23 51 16 00 0101		EA	6" Round Flue/Vent Top Caps, Galvanized Double Wall Breech/Smoke Pipe	\$155.35			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	37.82	x	1.3692	155.35
				Venting for Ceiling Hung Unit Heaters				
257	23 51 16 00 0128		EA	6" Round Flue/Vent Adjustable Roof Flashing, Galvanized Double Wall Breech/Smoke Pipe	\$182.17			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	44.35	x	1.3692	182.17
				Venting for Ceiling Hung Unit Heaters				
258	23 51 16 00 0141		EA	5" Round Galvanized Storm Collar, Double Wall	\$79.77			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	19.42	x	1.3692	79.77
				Venting for Ceiling Hung Unit Heaters				
259	23 54 16 13 0011		EA	80 MBH, 1,200 CFM Up/Horizontal Flow Variable Speed, Two Stage 96% AFUE Gas FurnaceBlower cooling capacity up to 3 tons.	\$4,237.98			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	1,547.61	x	1.3692	4,237.98
				Furnaces F-2 & F-3				
260	23 54 16 13 0014		EA	120 MBH, 2,000 CFM Up/Horizontal Flow Variable Speed, Two Stage 96% AFUE Gas FurnaceBlower cooling capacity up to 5 tons.	\$5,259.04			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	1,920.48	x	1.3692	5,259.04
				Furnaces F-1 & F-4				
261	23 55 33 00 0004		EA	36.5 MBH Output, 45 MBH Input, 750 CFM Gas Fired Unit Heater Fan Propelled, Horizontal, 115 Volt	\$1,931.61			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	1,410.76	x	1.3692	1,931.61
				Tower, GUH-3				
262	23 55 33 00 0009		EA	101.3 MBH Output, 125 MBH Input, 2,200 CFM Gas Fired Unit Heater Fan Propelled, Horizontal, 115 Volt	\$5,196.80			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	1,897.75	x	1.3692	5,196.80
				Truck Garage, GUH 1 & 2				
263	23 63 13 00 0018		EA	2 Ton, 13 SEER, Air Cooled Condensing UnitPrecharged with refrigerant capable of charging the system with a 20' length of piping.	\$2,609.52			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	1,905.87	x	1.3692	2,609.52
				With Furnace F-3				
264	23 63 13 00 0020		EA	3 Ton, 13 SEER, Air Cooled Condensing UnitPrecharged with refrigerant capable of charging the system with a 20' length of piping.	\$3,186.07			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	2,326.96	x	1.3692	3,186.07
				With Furnace F-2				
265	23 63 13 00 0022		EA	4 Ton, 13 SEER, Air Cooled Condensing UnitPrecharged with refrigerant capable of charging the system with a 20' length of piping.	\$3,764.79			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	2,749.63	x	1.3692	3,764.79
				With Furnace F-4				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
HVAC					
266	23 63 13 00 0023		EA	5 Ton, 13 SEER, Air Cooled Condensing UnitPrecharged with refrigerant capable of charging the system with a 20' length of piping.	\$4,272.66
				Quantity	Unit Price
			Installation	1.00 x	3,120.55 x
				Factor	Total
				1.3692 =	4,272.66
				With Furnace F-1	
267	23 72 13 00 0002		EA	Up To 1,000 CFM Enthalpy Recovery Wheel	\$23,719.91
				Quantity	Unit Price
			Installation	3.00 x	5,774.64 x
				Factor	Total
				1.3692 =	23,719.91
				ERU's For Furnaces F-1, F-3 & F-4 Per Mech Schedule	
268	23 82 16 00 0061		EA	12" x 24" Direct Expansion Cooling Coil, 2 Rows Flanged Construction, 16 Gauge Galvanized Steel Casing	\$1,241.93
				Quantity	Unit Price
			Installation	1.00 x	907.05 x
				Factor	Total
				1.3692 =	1,241.93
				Per Subcontractors Material List	
269	23 82 16 00 0062		EA	24" x 30" Direct Expansion Cooling Coil, 2 Rows Flanged Construction, 16 Gauge Galvanized Steel Casing	\$1,726.10
				Quantity	Unit Price
			Installation	1.00 x	1,260.66 x
				Factor	Total
				1.3692 =	1,726.10
				Per Subcontractors Material List	
270	23 82 16 00 0063		EA	24" x 48" Direct Expansion Cooling Coil, 2 Rows Flanged Construction, 16 Gauge Galvanized Steel Casing	\$2,110.73
				Quantity	Unit Price
			Installation	1.00 x	1,541.58 x
				Factor	Total
				1.3692 =	2,110.73
				Per Subcontractors Material List	
271	23 82 16 00 0064		EA	30" x 48" Direct Expansion Cooling Coil, 2 Rows Flanged Construction, 16 Gauge Galvanized Steel Casing	\$2,464.79
				Quantity	Unit Price
			Installation	1.00 x	1,800.17 x
				Factor	Total
				1.3692 =	2,464.79
				Per Subcontractors Material List	
272	23 82 39 13 0003		EA	2 KW, 250 CFM, 35" Electric Cabinet Unit HeaterWall or floor mounted.	\$7,328.37
				Quantity	Unit Price
			Installation	3.00 x	1,784.10 x
				Factor	Total
				1.3692 =	7,328.37
				At the 3 Vestibules	
273	26 05 23 00 0024		MLF	#18/8 Conductor, Low Volt Thermostat Cable	\$390.09
				Quantity	Unit Price
			Installation	0.50 x	569.80 x
				Factor	Total
				1.3692 =	390.09
				Thermostat and Controls	

Subtotal for HVAC \$206,457.38

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Masonry					
274	03 61 16 00 0002		CY	Cementitious Flowable Grout	\$13,433.50
				Quantity	Unit Price
			Installation	28.00 x	350.40 x
				Factor	Total
				1.3692 =	13,433.50
				Core Pours and Bond Beams	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Masonry						
275	04 22 23 13 0019		SF	8" x 8" x 16", Cored, Normalweight, Concrete Block	\$5,001.82	
				Installation		
				Quantity		
				356.40 x		
				Unit Price		
				10.25 x		
				Factor		
				1.3692 =		
				Total	5,001.82	
				Foundation Block		
276	04 22 23 13 0021		SF	12" x 8" x 16", Cored, Normalweight, Concrete Block	\$825.30	
				Installation		
				Quantity		
				42.21 x		
				Unit Price		
				14.28 x		
				Factor		
				1.3692 =		
				Total	825.30	
				Foundation Block		
277	04 22 23 13 0035		LF	8" x 8" x 16", Normalweight, Bond Beam Or Lintel Concrete Block	\$1,262.98	
				Installation		
				Quantity		
				86.45 x		
				Unit Price		
				10.67 x		
				Factor		
				1.3692 =		
				Total	1,262.98	
				Foundation Block		
278	04 22 23 13 0036		LF	12" x 8" x 16", Normalweight, Bond Beam Or Lintel Concrete Block	\$290.20	
				Installation		
				Quantity		
				15.96 x		
				Unit Price		
				13.28 x		
				Factor		
				1.3692 =		
				Total	290.20	
				Foundation Block		
279	04 22 23 23 0004		SF	8" x 8" x 16", Ground Face, Concrete Block	\$46,260.67	
				Installation		
				Quantity		
				2,525.16 x		
				Unit Price		
				13.38 x		
				Factor		
				1.3692 =		
				Total	46,260.67	
				Exposed Block At Tower		
280	04 22 23 23 0006		SF	12" x 8" x 16", Ground Face, Concrete Block	\$9,515.86	
				Installation		
				Quantity		
				408.10 x		
				Unit Price		
				17.03 x		
				Factor		
				1.3692 =		
				Total	9,515.86	
				Exposed Block At Tower		
281	05 12 23 00 0100		SF	3/8" Masonry Plates, Filler Plates, Sole Plates And Anchor Straps	\$131.21	
				Installation		
				Quantity		
				3.54 x		
				Unit Price		
				27.07 x		
				Factor		
				1.3692 =		
				Total	131.21	
				Imbed plates for hose hanger tubes		
Subtotal for Masonry					\$76,721.54	

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Openings						
282	08 36 13 00 0068		EA	12' x 12', Insulated, 24 Gauge Galvanized Steel Sectional Door, Manual Lift	\$15,866.89	
				Installation		
				Quantity		
				4.00 x		
				Unit Price		
				2,051.87 x		
				Factor		
				1.3692 =		
				Total	11,237.68	
				Demolition		
				Quantity		
				8.00 x		
				Unit Price		
				422.62 x		
				Factor		
				1.3692 =		
				Total	4,629.21	
				Demo 8 Doors, Install 4 new.		
283	08 36 13 00 0068		EA	12' x 12', Insulated, 24 Gauge Galvanized Steel Sectional Door, Manual Lift	\$14,047.10	
				Installation		
				Quantity		
				5.00 x		
				Unit Price		
				2,051.87 x		
				Factor		
				1.3692 =		
				Total	14,047.10	
				For the % new front side doors with full vision. See 08361300-0169 for Vision Lites add		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Openings								
284	08 36 13 00 0071		EA	14' x 8', Insulated, 24 Gauge Galvanized Steel Sectional Door, Manual Lift	\$470.16			
				Quantity	Unit Price	Factor	=	Total
			Installation	0.00	x 1,606.99	x 1.3692	=	0.00
			Demolition	1.00	x 343.38	x 1.3692	=	470.16
				Created for Demo of existing				
285	08 36 13 00 0076		EA	16' x 8', Insulated, 24 Gauge Galvanized Steel Sectional Door, Manual Lift	\$2,638.78			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	x 1,927.24	x 1.3692	=	2,638.78
				Install 1 new door this size				
286	08 36 13 00 0158		LF	Flap Seal For Sectional Overhead Doors	\$1,111.35			
				Quantity	Unit Price	Factor	=	Total
			Installation	356.00	x 2.28	x 1.3692	=	1,111.35
				New for all OH Doors				
287	08 36 13 00 0164		EA	1/2 HP Trolley Operator For Sectional Overhead DoorsIncludes motor, supports, push button operator, stationary electronic eye, signal wiring from eye to motor and motor to operator.	\$911.04			
				Quantity	Unit Price	Factor	=	Total
			Installation	1.00	x 665.38	x 1.3692	=	911.04
				For the new 16 x 8 door				
288	08 36 13 00 0169		SF	Up To 2 SF Per Window 3/4" Insulated Glazing For Sectional Overhead DoorsAdditional cost for factory supplied.	\$288.68			
				Quantity	Unit Price	Factor	=	Total
			Installation	6.00	x 35.14	x 1.3692	=	288.68
				For the new 16 x 8 door				
289	08 36 13 00 0169		SF	Up To 2 SF Per Window 3/4" Insulated Glazing For Sectional Overhead DoorsAdditional cost for factory supplied.	\$5,773.64			
				Quantity	Unit Price	Factor	=	Total
			Installation	120.00	x 35.14	x 1.3692	=	5,773.64
				For the 5 Front Side full vision doors				
290	08 42 13 00 0002		EA	3' x 7' x 1-3/4" Medium Stile, Aluminum Framed Entrance Doors Including Glazing, Trim And Hardware (Special-Lite SL-14)	\$16,509.76			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	x 4,019.32	x 1.3692	=	16,509.76
				The aluminum entrance doors				
291	08 42 13 00 0002 0512		MOD	For 8' High Door, Add	\$1,524.78			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	x 371.21	x 1.3692	=	1,524.78
292	08 42 13 00 0002 0514		MOD	For 1" Insulated Glazing, Add	\$319.82			
				Quantity	Unit Price	Factor	=	Total
			Installation	3.00	x 77.86	x 1.3692	=	319.82
293	08 43 13 00 0006		SF	8' High, 1-3/4" x 4-1/2" Frame, Vertical Mullions 4' On Center, Aluminum Storefront Framing Assembly	\$3,961.94			
				Quantity	Unit Price	Factor	=	Total
			Installation	214.66	x 13.48	x 1.3692	=	3,961.94
				110A - 80SF 110B - 80SF 115C - 54.66SF				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Openings						
294	08 43 13 00 0006	0181	MOD	For Various Color Class I Anodized Finish, Add	\$117.57	
				Installation		
				Quantity	214.66 x	
				Unit Price	0.40 x	
				Factor	1.3692 =	
				Total	117.56	
295	08 51 13 00 0125		SF	>30 SF, 4" Frame Depth, HC 65, Fixed Aluminum Window (Traco TR-9500)	\$1,579.51	
				Installation		
				Quantity	80.00 x	
				Unit Price	14.42 x	
				Factor	1.3692 =	
				Total	1,579.51	
				Interior windows at Radio room		
296	08 52 13 00 0443		EA	59-1/2" x 47-1/2", One Operating Sash, Horizontal Sliding Metal Clad Wood Window (Jeld-Wen 'Builders-Clad')	\$2,696.72	
				Installation		
				Quantity	4.00 x	
				Unit Price	492.39 x	
				Factor	1.3692 =	
				Total	2,696.72	
				Windows 'A'. Only the 2 windows at the Radio Room need to have the tempered Glass.		
297	08 52 13 00 0443	0447	MOD	For Tempered Low-E Insulated Glass, Add	\$227.15	
				Installation		
				Quantity	2.00 x	
				Unit Price	82.95 x	
				Factor	1.3692 =	
				Total	227.15	
298	08 81 23 23 0015		SF	1/4" Thick, Tempered, Clear Float Field Installed Glass	\$1,764.72	
				Installation		
				Quantity	72.49 x	
				Unit Price	17.78 x	
				Factor	1.3692 =	
				Total	1,764.72	
				Interior windows at Radio room		
299	08 81 23 23 0015	0294	MOD	For >50 To 200, Deduct	-\$19.85	
				Installation		
				Quantity	72.49 x	
				Unit Price	-0.20 x	
				Factor	1.3692 =	
				Total	-19.85	
300	08 81 23 23 0015		SF	1/4" Thick, Tempered, Clear Float Field Installed Glass	\$1,461.39	
				Installation		
				Quantity	60.03 x	
				Unit Price	17.78 x	
				Factor	1.3692 =	
				Total	1,461.39	
				Storefront Elevation 110B		
301	08 81 23 23 0015	0294	MOD	For >50 To 200, Deduct	-\$16.44	
				Installation		
				Quantity	60.03 x	
				Unit Price	-0.20 x	
				Factor	1.3692 =	
				Total	-16.44	
302	08 81 23 23 0071		SF	1" Thick, Insulated Field Installed Glass Two 1/4" lites with 1/2" air space.	\$1,500.70	
				Installation		
				Quantity	38.20 x	
				Unit Price	28.69 x	
				Factor	1.3692 =	
				Total	1,500.70	
				Storefront Elevation 115C		
303	08 81 23 23 0071		SF	1" Thick, Insulated Field Installed Glass Two 1/4" lites with 1/2" air space.	\$2,319.62	
				Installation		
				Quantity	59.05 x	
				Unit Price	28.69 x	
				Factor	1.3692 =	
				Total	2,319.62	
				Storefront Elevation 110A		
304	08 81 23 23 0071	0294	MOD	For >50 To 200, Deduct	-\$32.34	
				Installation		
				Quantity	59.05 x	
				Unit Price	-0.40 x	
				Factor	1.3692 =	
				Total	-32.34	

Subtotal for Openings **\$75,022.69**

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Plumbing						

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
305	07 63 00 00 0041		EA	3" Vent Through Roof, Galvanized Metal Flashing With Neoprene Collar, Shingle Roofing	\$48.91
				Installation	
				Quantity	Unit Price
				1.00	35.72
				x	x
					Factor =
					Total
					48.91
				DWV Piping: Per Sub Contractor's Material List	
306	21 12 23 00 0010		EA	2-1/2" x 2-1/2" x 2-1/2" x 6" Fire Department Valve, Flush, Polished Brass	\$5,737.50
				Installation	
				Quantity	Unit Price
				3.00	1,396.80
				x	x
					Factor =
					Total
					5,737.50
				Training Tower Assembly	
307	22 07 19 00 0147		LF	1/2" Diameter Pipe, 1" Thick Foamglas Insulation	\$5,615.09
				Installation	
				Quantity	Unit Price
				300.00	13.67
				x	x
					Factor =
					Total
					5,615.09
				Pipe Insulation	
308	22 07 19 00 0148		LF	3/4" Diameter Pipe, 1" Thick Foamglas Insulation	\$1,963.43
				Installation	
				Quantity	Unit Price
				100.00	14.34
				x	x
					Factor =
					Total
					1,963.43
				Pipe Insulation	
309	22 07 19 00 0149		LF	1" Diameter Pipe, 1" Thick Foamglas Insulation	\$1,247.07
				Installation	
				Quantity	Unit Price
				60.00	15.18
				x	x
					Factor =
					Total
					1,247.07
				Pipe Insulation	
310	22 11 16 00 0118		EA	1/2", 150 LB, Galvanized Malleable Iron Cap	\$66.16
				Installation	
				Quantity	Unit Price
				4.00	12.08
				x	x
					Factor =
					Total
					66.16
				Water Piping: Per Sub Contractor's Material List	
311	22 11 16 00 0232		EA	1/2" x 6" Long, Schedule 40 Galvanized Steel Nipple	\$55.97
				Installation	
				Quantity	Unit Price
				4.00	10.22
				x	x
					Factor =
					Total
					55.97
				Water Piping: Per Sub Contractor's Material List	
312	22 11 16 00 0365		LF	1/2" Hard Drawn Type K Copper Tube/Pipe	\$1,425.34
				Installation	
				Quantity	Unit Price
				300.00	3.47
				x	x
					Factor =
					Total
					1,425.34
				Water Piping: Per Sub Contractor's Material List	
313	22 11 16 00 0365 0128		MOD	For >150, Deduct	-\$82.15
				Installation	
				Quantity	Unit Price
				300.00	-0.20
				x	x
					Factor =
					Total
					-82.15
314	22 11 16 00 0366		LF	3/4" Hard Drawn Type K Copper Tube/Pipe	\$638.05
				Installation	
				Quantity	Unit Price
				100.00	4.66
				x	x
					Factor =
					Total
					638.05
				Water Piping: Per Sub Contractor's Material List	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
315	22 11 16 00 0367		LF	1" Hard Drawn Type K Copper Tube/Pipe	\$446.09
				Quantity	Unit Price
				60.00	5.43
				x	x
					Factor =
					Total
					446.09
				Water Piping: Per Sub Contractor's Material List	
316	22 11 16 00 1264		EA	1/2" Forged Brass Tee For PEX Tubing	\$47.16
				Quantity	Unit Price
				2.00	17.22
				x	x
					Factor =
					Total
					47.16
				Water Piping: Per Sub Contractor's Material List	
317	22 11 16 00 1266		EA	1" Forged Brass Tee For PEX Tubing	\$74.68
				Quantity	Unit Price
				2.00	27.27
				x	x
					Factor =
					Total
					74.68
				Water Piping: Per Sub Contractor's Material List	
318	22 11 16 00 1268		EA	3/4" Forged Brass Reducing Tee For PEX Tubing	\$186.99
				Quantity	Unit Price
				7.00	19.51
				x	x
					Factor =
					Total
					186.99
				Water Piping: Per Sub Contractor's Material List	
319	22 11 16 00 1269		EA	1" Forged Brass Reducing Tee For PEX Tubing	\$373.07
				Quantity	Unit Price
				11.00	24.77
				x	x
					Factor =
					Total
					373.07
				Water Piping: Per Sub Contractor's Material List	
320	22 11 16 00 1272		EA	1/2" Forged Brass Coupling For PEX Tubing	\$30.64
				Quantity	Unit Price
				2.00	11.19
				x	x
					Factor =
					Total
					30.64
				Water Piping: Per Sub Contractor's Material List	
321	22 11 16 00 1276		EA	1" x 3/4" Forged Brass Reducing Coupling For PEX Tubing	\$168.58
				Quantity	Unit Price
				8.00	15.39
				x	x
					Factor =
					Total
					168.58
				Water Piping: Per Sub Contractor's Material List	
322	22 11 16 00 1284		EA	1/2" Forged Brass 90 Degree Elbow For PEX Tubing	\$974.32
				Quantity	Unit Price
				60.00	11.86
				x	x
					Factor =
					Total
					974.32
				Water Piping: Per Sub Contractor's Material List	
323	22 11 16 00 1285		EA	3/4" Forged Brass 90 Degree Elbow For PEX Tubing	\$412.90
				Quantity	Unit Price
				21.00	14.36
				x	x
					Factor =
					Total
					412.90
				Water Piping: Per Sub Contractor's Material List	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
324	22 11 16 00 1287		EA	1/2" Drop 90 Degree Elbow For PEX Tubing	\$93.49
				Quantity	Unit Price
				Installation	Factor
				4.00 x 17.07 x 1.3692 =	Total 93.49
				Water Piping: Per Sub Contractor's Material List	
325	22 11 19 00 0223		EA	1/2" Inlets, 1/2" Outlet Sink/Faucet Point-Of-Use Thermostatic Mixing Valve (Bradley S59-2007)	\$429.55
				Quantity	Unit Price
				Installation	Factor
				1.00 x 313.72 x 1.3692 =	Total 429.55
				Dirty Bath Rm 123	
326	22 13 16 00 0515		LF	1-1/2" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$616.00
				Quantity	Unit Price
				Installation	Factor
				110.00 x 4.09 x 1.3692 =	Total 616.00
				DWV Piping: Per Sub Contractors Material List	
327	22 13 16 00 0516		LF	2" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$1,769.28
				Quantity	Unit Price
				Installation	Factor
				260.00 x 4.97 x 1.3692 =	Total 1,769.28
				DWV Piping: Per Sub Contractors Material List	
328	22 13 16 00 0517		LF	3" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$1,033.75
				Quantity	Unit Price
				Installation	Factor
				100.00 x 7.55 x 1.3692 =	Total 1,033.75
				DWV Piping: Per Sub Contractors Material List	
329	22 13 16 00 0518		LF	4" Schedule 40 Polyvinyl Chloride (PVC) DWV Pipe	\$592.18
				Quantity	Unit Price
				Installation	Factor
				50.00 x 8.65 x 1.3692 =	Total 592.18
				DWV Piping: Per Sub Contractors Material List	
330	22 13 16 00 0532		EA	1-1/2" Polyvinyl Chloride (PVC) DWV 1/4 Bends	\$315.67
				Quantity	Unit Price
				Installation	Factor
				15.00 x 15.37 x 1.3692 =	Total 315.67
				DWV Piping: Per Sub Contractors Material List	
331	22 13 16 00 0533		EA	2" Polyvinyl Chloride (PVC) DWV 1/4 Bends	\$26.90
				Quantity	Unit Price
				Installation	Factor
				1.00 x 19.65 x 1.3692 =	Total 26.90
				DWV Piping: Per Sub Contractors Material List	
332	22 13 16 00 0541		EA	2" Polyvinyl Chloride (PVC) DWV Long Sweep 1/4 Bends	\$354.24
				Quantity	Unit Price
				Installation	Factor
				12.00 x 21.56 x 1.3692 =	Total 354.24
				DWV Piping: Per Sub Contractors Material List	
333	22 13 16 00 0542		EA	3" Polyvinyl Chloride (PVC) DWV Long Sweep 1/4 Bends	\$139.49
				Quantity	Unit Price
				Installation	Factor
				3.00 x 33.96 x 1.3692 =	Total 139.49
				DWV Piping: Per Sub Contractors Material List	
334	22 13 16 00 0543		EA	4" Polyvinyl Chloride (PVC) DWV Long Sweep 1/4 Bends	\$64.68
				Quantity	Unit Price
				Installation	Factor
				1.00 x 47.24 x 1.3692 =	Total 64.68
				DWV Piping: Per Sub Contractors Material List	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.		Item	Modifier	UOM	Description	Line Total							
Labor	Equip.	Material	(Excluded if marked with an X)										
Plumbing													
335	22	13	16	00	0548	EA	1-1/2" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$42.83					
							Quantity	Unit Price	Factor	=	Total		
						Installation	2.00	x	15.64	x	1.3692	=	42.83
DWV Piping: Per Sub Contractors Material List													
336	22	13	16	00	0549	EA	2" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$349.41					
							Quantity	Unit Price	Factor	=	Total		
						Installation	13.00	x	19.63	x	1.3692	=	349.41
DWV Piping: Per Sub Contractors Material List													
337	22	13	16	00	0550	EA	3" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$431.35					
							Quantity	Unit Price	Factor	=	Total		
						Installation	11.00	x	28.64	x	1.3692	=	431.35
DWV Piping: Per Sub Contractors Material List													
338	22	13	16	00	0551	EA	4" Polyvinyl Chloride (PVC) DWV 1/8 Bends	\$248.10					
							Quantity	Unit Price	Factor	=	Total		
						Installation	5.00	x	36.24	x	1.3692	=	248.10
DWV Piping: Per Sub Contractors Material List													
339	22	13	16	00	0556	EA	1-1/2" Polyvinyl Chloride (PVC) DWV Sanitary Tees	\$160.06					
							Quantity	Unit Price	Factor	=	Total		
						Installation	5.00	x	23.38	x	1.3692	=	160.06
DWV Piping: Per Sub Contractors Material List													
340	22	13	16	00	0557	EA	2" Polyvinyl Chloride (PVC) DWV Sanitary Tees	\$579.86					
							Quantity	Unit Price	Factor	=	Total		
						Installation	14.00	x	30.25	x	1.3692	=	579.86
DWV Piping: Per Sub Contractors Material List													
341	22	13	16	00	0558	EA	3" Polyvinyl Chloride (PVC) DWV Sanitary Tees	\$305.54					
							Quantity	Unit Price	Factor	=	Total		
						Installation	5.00	x	44.63	x	1.3692	=	305.54
DWV Piping: Per Sub Contractors Material List													
342	22	13	16	00	0565	EA	2" x 2" x 1-1/2" Polyvinyl Chloride (PVC) DWV Reducing Sanitary Tees	\$77.39					
							Quantity	Unit Price	Factor	=	Total		
						Installation	2.00	x	28.26	x	1.3692	=	77.39
DWV Piping: Per Sub Contractors Material List													
343	22	13	16	00	0567	EA	3" x 3" x 2" Polyvinyl Chloride (PVC) DWV Reducing Sanitary Tees	\$161.55					
							Quantity	Unit Price	Factor	=	Total		
						Installation	3.00	x	39.33	x	1.3692	=	161.55
DWV Piping: Per Sub Contractors Material List													
344	22	13	16	00	0598	EA	1-1/2" Polyvinyl Chloride (PVC) DWV P-Traps	\$69.58					
							Quantity	Unit Price	Factor	=	Total		
						Installation	2.00	x	25.41	x	1.3692	=	69.58
DWV Piping: Per Sub Contractors Material List													
345	22	13	16	00	0599	EA	2" Polyvinyl Chloride (PVC) DWV P-Traps	\$449.92					
							Quantity	Unit Price	Factor	=	Total		
						Installation	10.00	x	32.86	x	1.3692	=	449.92
DWV Piping: Per Sub Contractors Material List													

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
346	22 13 16 00 0600		EA	3" Polyvinyl Chloride (PVC) DWV P-Traps	\$177.04
				Installation	
				Quantity 2.00 x Unit Price 64.65 x Factor 1.3692 = Total 177.04	
				DWV Piping: Per Sub Contractors Material List	
347	22 13 16 00 0608		EA	2" Polyvinyl Chloride (PVC) DWV Wyes	\$129.31
				Installation	
				Quantity 3.00 x Unit Price 31.48 x Factor 1.3692 = Total 129.31	
				DWV Piping: Per Sub Contractors Material List	
348	22 13 16 00 0609		EA	3" Polyvinyl Chloride (PVC) DWV Wyes	\$253.03
				Installation	
				Quantity 4.00 x Unit Price 46.20 x Factor 1.3692 = Total 253.03	
				DWV Piping: Per Sub Contractors Material List	
349	22 13 16 00 0610		EA	4" Polyvinyl Chloride (PVC) DWV Wyes	\$248.30
				Installation	
				Quantity 3.00 x Unit Price 60.45 x Factor 1.3692 = Total 248.30	
				DWV Piping: Per Sub Contractors Material List	
350	22 13 16 00 0618		EA	3" x 3" x 2" Polyvinyl Chloride (PVC) DWV Reducing Wyes	\$56.00
				Installation	
				Quantity 1.00 x Unit Price 40.90 x Factor 1.3692 = Total 56.00	
				DWV Piping: Per Sub Contractors Material List	
351	22 13 16 00 0620		EA	4" x 4" x 2" Polyvinyl Chloride (PVC) DWV Reducing Wyes	\$70.95
				Installation	
				Quantity 1.00 x Unit Price 51.82 x Factor 1.3692 = Total 70.95	
				DWV Piping: Per Sub Contractors Material List	
352	22 13 16 00 0621		EA	4" x 4" x 3" Polyvinyl Chloride (PVC) DWV Reducing Wyes	\$471.14
				Installation	
				Quantity 6.00 x Unit Price 57.35 x Factor 1.3692 = Total 471.14	
				DWV Piping: Per Sub Contractors Material List	
353	22 13 16 00 0673		EA	2" Polyvinyl Chloride (PVC) DWV Cleanout Tees With Plug	\$259.27
				Installation	
				Quantity 4.00 x Unit Price 47.34 x Factor 1.3692 = Total 259.27	
				DWV Piping: Per Sub Contractors Material List	
354	22 13 16 00 0674		EA	3" Polyvinyl Chloride (PVC) DWV Cleanout Tees With Plug	\$308.11
				Installation	
				Quantity 3.00 x Unit Price 75.01 x Factor 1.3692 = Total 308.11	
				DWV Piping: Per Sub Contractors Material List	
355	22 13 16 00 0675		EA	4" Polyvinyl Chloride (PVC) DWV Cleanout Tees With Plug	\$299.53
				Installation	
				Quantity 2.00 x Unit Price 109.38 x Factor 1.3692 = Total 299.53	
				DWV Piping: Per Sub Contractors Material List	
356	22 13 16 00 0689		EA	2" Polyvinyl Chloride (PVC) Couplings	\$555.22
				Installation	
				Quantity 21.00 x Unit Price 19.31 x Factor 1.3692 = Total 555.22	
				DWV Piping: Per Sub Contractors Material List	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
357	22 13 16 00 0690	EA		3" Polyvinyl Chloride (PVC) Couplings	\$187.24
				Installation	
			Quantity	Unit Price	Factor = Total
			5.00	27.35	1.3692 = 187.24
				DWV Piping: Per Sub Contractors Material List	
358	22 13 16 00 0691	EA		4" Polyvinyl Chloride (PVC) Couplings	\$45.50
				Installation	
			Quantity	Unit Price	Factor = Total
			1.00	33.23	1.3692 = 45.50
				DWV Piping: Per Sub Contractors Material List	
359	22 13 16 00 0697	EA		2" Polyvinyl Chloride (PVC) Male Adapters	\$79.69
				Installation	
			Quantity	Unit Price	Factor = Total
			5.00	11.64	1.3692 = 79.69
				DWV Piping	
360	22 13 16 00 0698	EA		3" Polyvinyl Chloride (PVC) Male Adapters	\$237.95
				Installation	
			Quantity	Unit Price	Factor = Total
			9.00	19.31	1.3692 = 237.95
				DWV Piping	
361	22 13 16 00 0867	EA		4" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-44)	\$137.03
				Installation	
			Quantity	Unit Price	Factor = Total
			8.00	12.51	1.3692 = 137.03
				DWV Piping	
362	22 13 16 00 0895	EA		2" Elastomeric Flexible Pipe Cap (Fernco QC-102)	\$331.24
				Installation	
			Quantity	Unit Price	Factor = Total
			8.00	30.24	1.3692 = 331.24
				DWV Piping	
363	22 13 16 00 0896	EA		3" Elastomeric Flexible Pipe Cap (Fernco QC-103)	\$48.11
				Installation	
			Quantity	Unit Price	Factor = Total
			1.00	35.14	1.3692 = 48.11
				DWV Piping	
364	22 13 19 13 0003	EA		6" Round Top Floor Drain With 2" Outlet, Bronze Top	\$1,654.87
				Installation	
			Quantity	Unit Price	Factor = Total
			4.00	302.16	1.3692 = 1,654.87
				DWV Piping	
365	22 13 19 13 0004	EA		6" Round Top Floor Drain With 3" Outlet, Bronze Top	\$1,245.26
				Installation	
			Quantity	Unit Price	Factor = Total
			3.00	303.16	1.3692 = 1,245.26
				DWV Piping	
366	22 15 13 00 0003	EA		1/2" Combination Steel And Brass Disconnect Valve, Single Seated With Arm Ball And Bracket	\$158.06
				Installation	
			Quantity	Unit Price	Factor = Total
			4.00	28.86	1.3692 = 158.06
				Water Piping	
367	22 15 13 00 0004	EA		3/4" Combination Steel And Brass Disconnect Valve, Single Seated With Arm Ball And Bracket	\$263.71
				Installation	
			Quantity	Unit Price	Factor = Total
			6.00	32.10	1.3692 = 263.71
				Water Piping	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total	
Labor	Equip.	Material	(Excluded if marked with an X)			
Plumbing						
368	22 34 36 00 0003		EA	154 MBH Input, 81 Gallon, 80% Efficiency, Gas Fired Commercial Water Heater (A.O. Smith BTR-154)	\$885.69	
		X		Installation		
		X		Demolition		
				Created to remove the existing and later reinstall. Labor only, no materials.		
				Quantity	Unit Price	
				1.00 x	431.25 x	
				1.00 x	215.62 x	
					Factor = Total	
					590.47	
					295.23	
369	22 41 39 00 0040		EA	Washer Box With Supply Lines And Valve	\$360.35	
				Installation		
				Decon 124		
				Quantity	Unit Price	
				2.00 x	131.59 x	
					Factor = Total	
					360.35	
370	22 42 13 13 0003		EA	Flush Valve Type, Siphon Jet, Floor Mounted, Floor Outlet, Elongated Vitreous China Water Closet (American Standard Madera™)	\$403.85	
				Installation		
				Demolition		
				Line item created for demo of existing		
				Quantity	Unit Price	
				0.00 x	420.25 x	
				5.00 x	58.99 x	
					Factor = Total	
					0.00	
					403.85	
371	22 42 13 13 0007		EA	2 Piece Tank Type, Pressure Assisted, Siphon Jet, Floor Mounted, Floor Outlet, Elongated Vitreous China Water Closet (American Standard Cadet™)	\$2,674.50	
				Installation		
				2 Restrooms & Dirty Bath		
				Quantity	Unit Price	
				3.00 x	651.11 x	
					Factor = Total	
					2,674.50	
372	22 42 16 13 0003		EA	19" x 17" Porcelain Enameled Cast Iron Wall Hung Lavatory (American Standard Regalyn™)	\$52.03	
				Installation		
				Demolition		
				Line item created for demo of existing		
				Quantity	Unit Price	
				0.00 x	395.65 x	
				1.00 x	38.00 x	
					Factor = Total	
					0.00	
					52.03	
373	22 42 16 13 0010		EA	20" x 18" Vitreous China Wall Hung Lavatory (American Standard Lucerne™)	\$423.19	
				Installation		
				Dirty Bath Rm 123		
				Quantity	Unit Price	
				1.00 x	309.08 x	
					Factor = Total	
					423.19	
374	22 42 16 13 0066		EA	Wall Mounted Hanger Plate Type, Single Lavatory Carrier	\$184.86	
				Installation		
				Dirty Bath Rm 123		
				Quantity	Unit Price	
				1.00 x	135.01 x	
					Factor = Total	
					184.86	
375	22 42 16 16 0003		EA	25" x 22" x 8-3/4" Enameled Cast Iron Kitchen Sink, Single Bowl (Kohler® Mayfield®)	\$292.02	
				Installation		
				Demolition		
				Line item created for demo of existing		
				Quantity	Unit Price	
				0.00 x	508.26 x	
				4.00 x	53.32 x	
					Factor = Total	
					0.00	
					292.02	
376	22 42 16 16 0013		EA	22" x 22" x 10" Stainless Steel Kitchen Sink, Single Bowl, 18 Gauge (Elkay DLR222210)	\$1,943.18	
				Installation		
				Day Room		
				Quantity	Unit Price	
				1.00 x	1,419.21 x	
					Factor = Total	
					1,943.18	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Plumbing					
377	22 42 16 16 0025		EA	60" Wide, 3 Station Enameled Cast Iron Multi-Station Wash Sink (Kohler® Brockway™)Excludes faucets.	\$728.09
		X		Installation	582.47
		X		Demolition	145.61
Line item created for demo of existing and Labor to reinstall. No material.					
378	22 42 16 16 0044		EA	24" x 24" x 10" Plastic Composite Mop Service Sink With Combination Dome Strainer And Stainless Steel Lint Basket (Fiat Products MSB2424)	\$1,309.09
				Installation	1,309.09
Mech 114 & Decon 124					
379	22 42 39 00 0016		EA	Deck Mount Sink Faucet, 8" Center Set, 4" Wristblade Handles (Chicago Faucet 1100-GN2AE3-317CP)	\$335.08
				Installation	335.08
Day Room					
380	22 42 39 00 0025		EA	Single Handle Centerset Lavatory Faucet, Polished Chrome Finish (Delta Lahara 538-MPU-DST)	\$213.09
				Installation	213.09
Dirty Bath Rm 123					
381	22 42 39 00 0048		EA	Removable Hand Held Shower With Hose Wall Hook And Inline Vacuum Breaker (Powers 141-318 with 141-319)	\$929.06
				Installation	929.06
2 Restrooms & Dirty Bath					
382	22 42 39 00 0075		EA	7-1/4" Spout With Vacuum Break And Bottom Fork Brace, Wall Mount Service Sink Faucet, Stops In Integral Arm, Wrist Blade Handles (American Standard 8355.110)	\$973.09
				Installation	973.09
Mech 114 & Decon 124					
383	22 42 39 00 0161		EA	Soft Lavatory Drainline Guard And Shutoff Covers (IPS Truebro Soft-Guard Plus)	\$70.34
				Installation	70.34
Dirty Bath Rm 123					
384	23 21 13 23 0403		LF	6" Schedule 40, Welded Plain End Black Steel Pipe	\$2,000.73
				Installation	2,000.73
Training Tower Assembly					
385	23 21 13 23 0752		EA	6" Standard Weight, Flanged Steel, Tee	\$8,999.46
				Installation	8,999.46
Training Tower Assembly					
Subtotal for Plumbing					\$57,734.88

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Specialties					
386	10 14 19 00 0045		EA	24" High x 1-1/2" Deep, Molded Plastic Sign Letter/Character, Installed With Studs	\$5,831.52
				Installation	
				Quantity	Unit Price
				37.00 x	115.11 x
					Factor =
					Total
					5,831.52
				Exterior Dimensional Letters for Building Signage as shown on drawings	
387	10 14 23 00 0024		EA	>50 To 75 SI, Acrylic, Surface Mount, Indoor/Outdoor Signs With Braille	\$1,643.48
				Installation	
				Quantity	Unit Price
				32.00 x	37.51 x
					Factor =
					Total
					1,643.48
				Interior Room Signage	
388	10 14 23 00 0024 0214		MOD	For >25 To 50, Deduct	-\$100.34
				Installation	
				Quantity	Unit Price
				32.00 x	-2.29 x
					Factor =
					Total
					-100.33
389	10 28 13 13 0009		EA	Surface Mounted, Stainless Steel Folded Paper Towel Dispenser (Bobrick B-263)	\$454.63
				Installation	
				Quantity	Unit Price
				3.00 x	110.68 x
					Factor =
					Total
					454.63
				Rooms 120, 121 & 115	
390	10 28 13 13 0039		EA	Single Roll, Recessed Mounted, Stainless Steel Toilet Tissue Dispenser (Bobrick B-663)	\$159.05
				Installation	
				Quantity	Unit Price
				2.00 x	58.08 x
					Factor =
					Total
					159.05
				Rooms 120 & 121	
391	10 28 13 13 0060		EA	40 Fluid Ounce, Surface Mounted, Stainless Steel Soap Dispenser (Bobrick Contura B-4112)	\$312.10
				Installation	
				Quantity	Unit Price
				3.00 x	75.98 x
					Factor =
					Total
					312.10
				Rooms 120, 121 & 115	
392	10 28 13 13 0136		EA	18" Length, 1-1/2" Diameter, Stainless Steel Grab Bar (Bobrick B-6806x18)	\$175.29
				Installation	
				Quantity	Unit Price
				2.00 x	64.01 x
					Factor =
					Total
					175.28
				Rooms 120 & 121	
393	10 28 13 13 0139		EA	36" Length, 1-1/2" Diameter, Stainless Steel Grab Bar (Bobrick B-6806x36)	\$188.57
				Installation	
				Quantity	Unit Price
				2.00 x	68.86 x
					Factor =
					Total
					188.57
				Rooms 120 & 121	
394	10 28 13 13 0140		EA	42" Length, 1-1/2" Diameter, Stainless Steel Grab Bar (Bobrick B-6806x42)	\$193.17
				Installation	
				Quantity	Unit Price
				2.00 x	70.54 x
					Factor =
					Total
					193.17
				Rooms 120 & 121	
395	10 28 13 13 0185		EA	42" Width x 72" Height, Vinyl Shower Curtain (Bobrick B-204-2)Requires 7 curtain hooks.	\$80.54
				Installation	
				Quantity	Unit Price
				2.00 x	29.41 x
					Factor =
					Total
					80.54
				Rooms 120 & 121	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
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Sect.	Item	Modifier	UOM	Description	Line Total			
Labor	Equip.	Material	(Excluded if marked with an X)					
Specialties								
396	10 28 13 13 0188		EA	48" Length, 20-Gauge, 1" Diameter, Stainless Steel Shower Rod With Concealed Mounting (Bobrick B-207)	\$148.31			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	54.16	x	1.3692	148.31
				Rooms 120 & 121				
397	10 28 13 13 0333		EA	24" x 36", Surface Mounted, Stainless Steel Angle Frame Glass Mirror (Bobrick B-290 2436)	\$421.41			
				Quantity	Unit Price	Factor	=	Total
			Installation	2.00	153.89	x	1.3692	421.41
				Rooms 120 & 121				
398	10 51 13 00 0049		EA	12" x 15" x 60" Single Tier Athletic Locker	\$1,387.96			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	30.00	33.79	x	1.3692	1,387.96
				Locker Room 118				
399	10 51 13 00 0049	0001	MOD	For >25 To 50, Deduct	-\$342.16			
				Quantity	Unit Price	Factor	=	Total
			Installation	30.00	-8.33	x	1.3692	-342.16
400	10 51 13 00 0131		EA	24" x 21" x 76" Open Front, All-Welded Steel Stadium Locker (Penco 6WFD23)Includes shelf, foot locker, security box and 4" high integral base.	\$412.07			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	19.00	15.84	x	1.3692	412.07
				Created for personnel gear lockers, per quote from owners requested supplier. Turnout Gear Room 117				
401	10 51 13 00 0140		LF	15" Deep, 16 Gauge Continuous Slope Top	\$173.34			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	30.00	4.22	x	1.3692	173.34
				Locker Room 118				
402	10 51 13 00 0146		EA	15" Deep, 16 Gauge Slope Top Corner Fillers	\$11.56			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	2.00	4.22	x	1.3692	11.56
				Locker Room 118				
403	10 51 13 00 0168		EA	15" Deep, Individual Slope Top End Closures	\$11.56			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	2.00	4.22	x	1.3692	11.56
				Locker Room 118				
404	10 51 13 00 0175		EA	15" Wide, 6" High Closed Front Base	\$161.78			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	28.00	4.22	x	1.3692	161.78
				Locker Room 118				
405	10 51 13 00 0180		EA	15" Deep, 6" High Closed End Base	\$11.56			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	2.00	4.22	x	1.3692	11.56
				Locker Room 118				
406	10 51 13 00 0209		EA	15" Deep x 60" High, 16 Gauge End Panel	\$11.56			
		X		Quantity	Unit Price	Factor	=	Total
			Installation	2.00	4.22	x	1.3692	11.56
				Locker Room 118				

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Specialties					
407	10 51 53 00 0001		LF	Hardwood Bench With Aluminum Pedestals	\$2,169.14
				Installation	
			Quantity	Unit Price	Factor = Total
			28.00	56.58	1.3692 = 2,169.14
				Turnout Gear Room 117	
408	10 51 53 00 0001		LF	Hardwood Bench With Aluminum Pedestals	\$542.29
				Installation	
			Quantity	Unit Price	Factor = Total
			7.00	56.58	1.3692 = 542.29
				Locker Room 118	

Subtotal for Specialties **\$14,058.39**

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Steel					
409	03 62 13 00 0006		SF	2" Deep, Non-Metallic Non-Shrink Grout For Bases	\$134.59
				Installation	
			Quantity	Unit Price	Factor = Total
			2.00	49.15	1.3692 = 134.59
				Base Plate Grouting for the 2 Steel Columns	
410	05 12 23 00 0016		TON	>10-20 LB/LF Rolled C, MC Steel Channels	\$1,198.85
				Installation	
			Quantity	Unit Price	Factor = Total
			0.11	7,748.56	1.3692 = 1,198.85
				C Channel at Hose Hangers Assembly	
411	05 12 23 00 0032		TON	>65-100 LB/LF Combination Section - W Shapes And Angles	\$10,075.62
				Installation	
			Quantity	Unit Price	Factor = Total
			2.05	3,596.66	1.3692 = 10,075.62
				New support beam at demoed wall area in Truck Garage	
412	05 12 23 00 0050		LB	Column Base Plates, Up To 150 LB / Each, A36 Miscellaneous Steel Items	\$197.11
				Installation	
			Quantity	Unit Price	Factor = Total
			61.26	2.35	1.3692 = 197.11
				Base plates for the 2 Columns in the Truck Garage	
413	05 12 23 00 0059		TON	>5" To 12" Outside Diameter Structural Pipe, Extra Heavy A36 Miscellaneous Steel Items	\$366.14
				Installation	
			Quantity	Unit Price	Factor = Total
			0.06	4,178.29	1.3692 = 366.14
				Hose drying Tubes	
414	05 12 23 00 0059 0002		MOD	For Hot Dip Galvanizing, Add	\$81.26
				Installation	
			Quantity	Unit Price	Factor = Total
			0.06	927.31	1.3692 = 81.26
415	05 12 23 00 0081		TON	6" x 6" Weight Range 15-35 LB/LF Structural Tubing - Square	\$1,588.84
				Installation	
			Quantity	Unit Price	Factor = Total
			0.23	4,980.32	1.3692 = 1,588.84
				Support Columns for new beam in Truck Garage	
416	05 51 19 00 0003		RSR	4'-0" Wide Open Steel Grating Tread Metal Stair	\$21,707.15
				Installation	
			Quantity	Unit Price	Factor = Total
			53.00	299.13	1.3692 = 21,707.15
				Tower Stairs & Railings	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
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Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Steel					
417	05 51 19 00 0003	0148	MOD	For Galvanized Steel, Add	\$4,149.42
				Installation	
				Quantity	Total
				53.00 x	4,149.42
				Unit Price	
				57.18 x	
				Factor	
				1.3692 =	
418	05 51 19 00 0005		SF	Steel Grating Landing With Framing And 2 Pipe Handrail Conventional shape.	\$34,950.42
				Installation	
				Quantity	Total
				484.00 x	34,950.42
				Unit Price	
				52.74 x	
				Factor	
				1.3692 =	
				Tower Stairs & Railings	
419	05 51 19 00 0005	0184	MOD	For Galvanized Steel, Add	\$6,202.80
				Installation	
				Quantity	Total
				484.00 x	6,202.80
				Unit Price	
				9.36 x	
				Factor	
				1.3692 =	
420	05 52 13 00 0023		LF	1-1/2" Diameter, Schedule 40, Four Rail, Up To 42" High, Welded Steel Pipe Railing	\$14,292.53
				Installation	
				Quantity	Total
				134.00 x	14,292.53
				Unit Price	
				77.90 x	
				Factor	
				1.3692 =	
				Tower Stairs & Railings	
421	05 52 13 00 0023	0081	MOD	For Additional Off Set Handrail, ADA Attachment, Add	\$2,342.95
				Installation	
				Quantity	Total
				134.00 x	2,342.95
				Unit Price	
				12.77 x	
				Factor	
				1.3692 =	
422	05 52 13 00 0023	0085	MOD	For Galvanizing, Add	\$4,144.65
				Installation	
				Quantity	Total
				134.00 x	4,144.65
				Unit Price	
				22.59 x	
				Factor	
				1.3692 =	
423	05 52 13 00 0023	0095	MOD	For Mounting On Slopes, Add	\$392.63
				Installation	
				Quantity	Total
				134.00 x	392.63
				Unit Price	
				2.14 x	
				Factor	
				1.3692 =	
424	05 52 13 00 0045		LF	1-1/2" Diameter, Schedule 40, Wall Bracket Mounted, Up To 42" High, Welded Steel Pipe Railing	\$5,558.95
				Installation	
				Quantity	Total
				125.00 x	5,558.95
				Unit Price	
				32.48 x	
				Factor	
				1.3692 =	
				Tower Stairs & Railings	
425	05 52 13 00 0045	0105	MOD	For Galvanized Finish, Add	\$1,078.25
				Installation	
				Quantity	Total
				125.00 x	1,078.25
				Unit Price	
				6.30 x	
				Factor	
				1.3692 =	
Subtotal for Steel					\$108,462.16

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Thermal and Moisture					
426	07 21 13 13 0021		SF	2" Thick, R10.0, Extruded Polystyrene, Foam Board Insulation	\$1,633.39
				Installation	
				Quantity	Total
				495.00 x	1,633.39
				Unit Price	
				2.41 x	
				Factor	
				1.3692 =	
				At Tower, Connection & New Garage Opening, Foundation Insulation	
427	07 21 26 00 0003		SF	3-3/4" Thick, R-13 Attic, Fiberglass Blown In Insulation	\$1,859.37
				Installation	
				Quantity	Total
				1,400.00 x	1,859.37
				Unit Price	
				0.97 x	
				Factor	
				1.3692 =	
				Created to replenish attic insulation after attic area work is completed.	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total										
Labor	Equip.	Material	(Excluded if marked with an X)												
Thermal and Moisture															
428	07 41 13 00 0032		SF	Architectural 24 Gauge Galvanized Steel Standing Seam Concealed Fastener Roofing	\$8,915.68										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>730.00</td> <td>8.92</td> <td>x</td> <td>1.3692</td> <td>8,915.68</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	730.00	8.92	x	1.3692	8,915.68	
Quantity	Unit Price	Factor	=	Total											
730.00	8.92	x	1.3692	8,915.68											
				222 SF at Tie-In, 508 SF top of Tower											
429	07 41 13 00 0032 0010		MOD	For >1,500 To 5,000, Add	\$3,342.87										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>1,822.00</td> <td>1.34</td> <td>x</td> <td>1.3692</td> <td>3,342.87</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	1,822.00	1.34	x	1.3692	3,342.87	
Quantity	Unit Price	Factor	=	Total											
1,822.00	1.34	x	1.3692	3,342.87											
430	07 41 13 00 0040		LF	Eave Flashing For Galvanized Steel Standing Seam Concealed Fastener Roofing	\$2,351.52										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>96.00</td> <td>17.89</td> <td>x</td> <td>1.3692</td> <td>2,351.52</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	96.00	17.89	x	1.3692	2,351.52	
Quantity	Unit Price	Factor	=	Total											
96.00	17.89	x	1.3692	2,351.52											
				6' at Tie-In, 90' around Tower											
431	07 41 13 00 0041		LF	Valley Flashing For Galvanized Steel Standing Seam Concealed Fastener Roofing	\$1,500.01										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>38.00</td> <td>28.83</td> <td>x</td> <td>1.3692</td> <td>1,500.01</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	38.00	28.83	x	1.3692	1,500.01	
Quantity	Unit Price	Factor	=	Total											
38.00	28.83	x	1.3692	1,500.01											
				Valley at Tie-In											
432	07 41 13 00 0042		LF	Hip Flashing For Galvanized Steel Standing Seam Concealed Fastener Roofing	\$3,146.75										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>96.00</td> <td>23.94</td> <td>x</td> <td>1.3692</td> <td>3,146.75</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	96.00	23.94	x	1.3692	3,146.75	
Quantity	Unit Price	Factor	=	Total											
96.00	23.94	x	1.3692	3,146.75											
				Top of Tower											
433	07 46 16 00 0024		LF	2' Overhang, 0.019" Thick, Solid Or Vented Aluminum Soffit	\$960.85										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>136.00</td> <td>5.16</td> <td>x</td> <td>1.3692</td> <td>960.85</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	136.00	5.16	x	1.3692	960.85	
Quantity	Unit Price	Factor	=	Total											
136.00	5.16	x	1.3692	960.85											
				At Tower and Connection Assemblies											
434	07 46 16 00 0031		LF	10" Exposure, 0.024" Thick, Aluminum Fascia	\$810.02										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>136.00</td> <td>4.35</td> <td>x</td> <td>1.3692</td> <td>810.02</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	136.00	4.35	x	1.3692	810.02	
Quantity	Unit Price	Factor	=	Total											
136.00	4.35	x	1.3692	810.02											
				At Tower and Connection Assemblies											
435	07 46 19 00 0012		SF	24 Gauge, Painted Finish, Box Ribbed Steel Siding Panel	\$40,867.88										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>4,100.00</td> <td>5.69</td> <td>x</td> <td>1.3692</td> <td>31,942.07</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	4,100.00	5.69	x	1.3692	31,942.07	
Quantity	Unit Price	Factor	=	Total											
4,100.00	5.69	x	1.3692	31,942.07											
			Demolition	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>5,300.00</td> <td>1.23</td> <td>x</td> <td>1.3692</td> <td>8,925.81</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	5,300.00	1.23	x	1.3692	8,925.81	
Quantity	Unit Price	Factor	=	Total											
5,300.00	1.23	x	1.3692	8,925.81											
				Demo of Existing Metal Siding. Installation of new Metal Siding											
436	07 46 23 00 0002		LF	8" Wide Rough Sawn Cedar Lap Siding	\$8,045.10										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>2,683.00</td> <td>2.19</td> <td>x</td> <td>1.3692</td> <td>8,045.10</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	2,683.00	2.19	x	1.3692	8,045.10	
Quantity	Unit Price	Factor	=	Total											
2,683.00	2.19	x	1.3692	8,045.10											
				Created for LP Smart Siding											
437	07 46 63 00 0004		SF	22 Gauge, 1-3/8" Thick Galvanized Metal Liner Panel	\$2,379.78										
			Installation	<table> <tr> <td>Quantity</td> <td>Unit Price</td> <td>Factor</td> <td>=</td> <td>Total</td> </tr> <tr> <td>272.00</td> <td>6.39</td> <td>x</td> <td>1.3692</td> <td>2,379.78</td> </tr> </table>	Quantity	Unit Price	Factor	=	Total	272.00	6.39	x	1.3692	2,379.78	
Quantity	Unit Price	Factor	=	Total											
272.00	6.39	x	1.3692	2,379.78											
				Tower Ceiling											

Contractor's Price Proposal - Detail Continues..

Work Order Number: 079439.00
 Work Order Title: City of Crosslake Fire Hall Remodel

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Thermal and Moisture					
438	07 92 13 00 0032		CLF	1/4" x 1/4" Joint, Polyurethane Sealant And Caulking	\$1,753.35
			Installation	Quantity 6.50 x Unit Price 197.01 x Factor 1.3692 = Total 1,753.35	
				Siding and Trim caulking as needed	
439	09 91 13 00 0113		SF	Paint Exterior Rough Wood Siding (Shingles, Shakes Or Rough Sawn), 1 Coat Primer, Sprayed	\$2,387.82
			Installation	Quantity 2,683.00 x Unit Price 0.65 x Factor 1.3692 = Total 2,387.82	
				Created for LP Smart Siding	
440	09 91 13 00 0115		SF	Paint Exterior Rough Wood Siding (Shingles, Shakes Or Rough Sawn), 2 Coats Paint, Sprayed	\$5,032.78
			Installation	Quantity 2,683.00 x Unit Price 1.37 x Factor 1.3692 = Total 5,032.78	
				Created for LP Smart Siding	
441	09 91 13 00 0115 0215		MOD	For >2,500 To 5,000, Deduct	-\$257.15
			Installation	Quantity 2,683.00 x Unit Price -0.07 x Factor 1.3692 = Total -257.15	
Subtotal for Thermal and Moisture					\$84,730.02

Sect.	Item	Modifier	UOM	Description	Line Total
Labor	Equip.	Material	(Excluded if marked with an X)		
Trim Work					
442	06 46 36 00 0003		LF	3/4" x 2-1/2" Custom Shaped Ash	\$1,508.97
			Installation	Quantity 224.00 x Unit Price 4.92 x Factor 1.3692 = Total 1,508.97	
				4 windows: Ext Jams, Casing & Sills	
443	06 83 16 00 0002		SF	Fiberglass Reinforced Polyester (FRP) Paneling Including Adhesive And Trim	\$2,615.17
			Installation	Quantity 500.00 x Unit Price 3.82 x Factor 1.3692 = Total 2,615.17	
				As needed to complete wall finish at expanded garage	
Subtotal for Trim Work					\$4,124.14

Proposal Total **\$1,298,769.85**

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.

The Percentage of NPP on this Proposal: %

D.2.C.

CITY OF CROSSLAKE - FIRE STATION

CROSSLAKE, MN

WIDSETH
ARCHITECTS • ENGINEERS • SCIENTISTS • SURVEYORS

ABBREVIATIONS

ACT.	ACOUSTICAL CEILING TILE	INT.	INTERIOR	TYP.	TYPICAL
ALUM.	ALUMINUM	LAM.	LAMINATED	U.L.	UPPER LEVEL
BRG.	BEARING	L.H.	LEFT HAND	U.N.O.	UNLESS NOTED OTHERWISE
B.O.	BOTTOM OF	L.L.	LOWER LEVEL	V.B.	VINYL BASE
C.J.	CONTROL JOINT	MAX.	MAXIMUM	V.C.T.	VINYL COATED TILE
CLG.	CEILING	MIN.	MINIMUM	V.G.P.	VINYL COATED GYPSUM
C	CENTER LINE	MTL.	METAL	W	WITH
C.M.U.	CONCRETE MASONRY UNIT	M.L.P.	METAL LINER PANELS	WD.	WOOD
CONC.	CONCRETE	M.L.	MAIN LEVEL	WDW	WINDOW
CPT.	CARPET	N.I.C.	NOT IN CONTRACT		
C.T.	CERAMIC TILE	O.C.	ON CENTER		
C.S.	CULTURED STONE	O.H.	OVERHEAD		
DN.	DOWN	OPT.	OPTION		
D.W.	DISH WASHER	OP.HD.	OPPOSITE HAND		
DWG.	DRAWING	QTY.	QUANTITY		
ELEC.	ELECTRIC	RCP.	REFLECTED CEILING PLAN		
EXIST.	EXISTING	R.H.	RIGHT HAND		
EXT.	EXTERIOR	S.C.	SEALED CONCRETE		
F.D.	FLOOR DRAIN	SIM.	SIMILAR		
F.R.P.	SANITARY WALL PANELS	T&G	TONGUE AND GROOVE		
F.V.	FIELD VERIFY	T.O.	TOP OF		
GYP.BD.	GYPSUM BOARD	TSM.	TRANSOM		
H.M.	HOLLOW METAL	TV	TELEVISION		
INSUL.	INSULATION				

GENERAL NOTES

1. ALL WORK WILL BE IN COMPLIANCE WITH STATE & LOCAL CODES FOR RESPECTIVE TRADES.
2. DO NOT SCALE THE DRAWING.
3. CONTRACTOR TO VERIFY ALL DIMENSIONS.
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS.
5. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF EXISTING UTILITIES & EASEMENTS.
6. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING FINISH FLOOR HEIGHT ON THE SITE & INSURING DRAINAGE AWAY FROM THE BUILDING.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL BEARING CONDITIONS.
8. FIRE BLOCK ALL WALLS OVER 10'-0" IN HEIGHT @ MAX. 10'-0" ABOVE FINISH FLOOR.

CODE REVIEW

APPLICABLE CODES:
 2020 MINNESOTA BUILDING CODE
 2020 MINNESOTA ACCESSIBILITY CODE
 2020 MINNESOTA ENERGY CODE
 2020 MINNESOTA MECHANICAL AND FUEL GAS CODES
 MINNESOTA ELECTRICAL CODE
 MINNESOTA FIRE CODE

PROJECT DESCRIPTION:
 THE PROJECT CONSISTS OF THE REMODELING OF AN EXISTING GOVERNMENT CENTER FOR THE CITY OF CROSSLAKE, MN. THE GOVERNMENT CENTER WILL CONSIST OF EMERGENCY OPERATIONS CENTER THAT WILL SERVE THE CROSSLAKE COMMUNITY.

IBC SECTION 302 OCCUPANCY CLASSIFICATION
 A-3 = ASSEMBLY
 B = BUSINESS
 S-2 = LOW-HAZARD STORAGE

IBC TABLE 503 ALLOWABLE HEIGHT AND BUILDING AREAS:
 B OCCUPANCY ALLOWABLE AREA = 9,000 S.F.
 PROPOSED MAIN LEVEL = 15,947 S.F.
 B OCCUPANCY ALLOWABLE HEIGHT = 2 STORIES
 PROPOSED BUILDING HEIGHT = 1 STORY

IBC SECTIONS 506.2 FRONTAGE INCREASE & 506.3 AUTOMATIC SPRINKLER INCREASE
 INCREASE AREA BY 1.75 DUE TO FRONTAGE INCREASE
 INCREASE AREA BY 200% FOR AUTOMATIC SPRINKLER INCREASE
 TOTAL ALLOWABLE AREA INCREASE = 33,750 S.F.

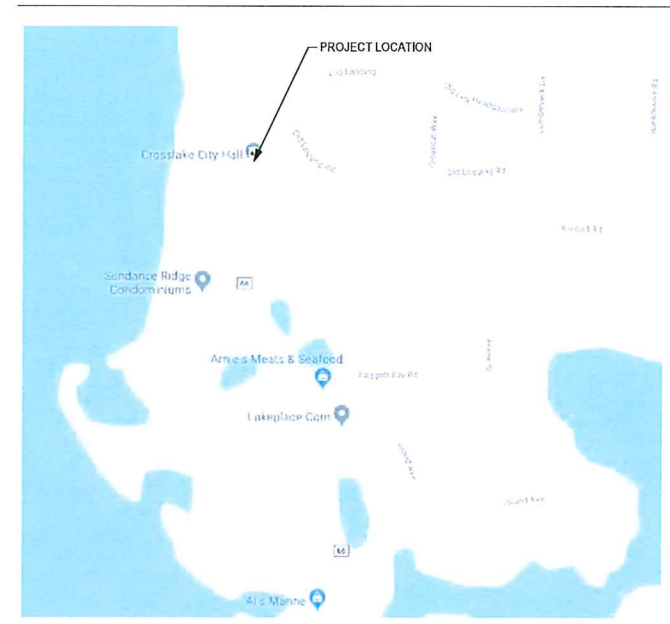
IBC SECTION 602.2
 BUILDING IS TYPE VB CONSTRUCTION

IBC SECTION 903.3.1.1 NFPA 13 SPRINKLER SYSTEMS
 WHERE PROVISIONS REQUIRE AN AUTOMATIC SPRINKLER SYSTEM, IT SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13.

IBC TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT
 A (ASSEMBLY) UNCONCENTRATED = 15 NET
 B (BUSINESS AREAS) = 100 GROSS
 S-2 (PARKING GARAGE) = 200 GROSS
 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM = 300 GROSS

MAIN LEVEL TOTAL = 139 OCCUPANTS

VICINITY MAP



PROJECT INFO

ADDRESS: 37028 COUNTY ROAD 66, CROSSLAKE, MN 56442

ARCHITECT / BUILDER:

DESIGN / GENERAL CONTRACTOR:
 HY-TEC CONSTRUCTION, INC
 11360 BUSINESS 371
 BRAINERD, MN 56401
 PH. 218-829-8529
 FAX. 218-829-5383

CONSTRUCTION CONTACT: ANDY PICKAR
 ARCHITECTURAL CONTACT: ANDY WALETZKO
 MIKE ANGLAND (WIDSETH)

ENGINEERING:
 CIVIL, MECHANICAL & STRUCTURAL

WIDSETH
 7804 INDUSTRIAL PARK ROAD
 BAXTER, MN 56425
 PH. 218-829-5117
 FAX. 218-829-2517

MECHANICAL CONTACT: ADAM SIEMERS
 STRUCTURAL CONTACT: DEREK NAVRATIL

ELECTRICAL:

JIMS ELECTRIC COMPANY
 8296 INDUSTRIAL PARK ROAD
 BAXTER, MN 56425
 PH. 218-828-0250
 FAX. 218-828-4531
 ELECTRICAL CONTACT: JASON STAWARSKI

FIRE PROTECTION:

BRETH-ZENZEN FIRE PROTECTION
 8053 STERLING DRIVE #101
 ST. JOSEPH, MN 56374
 PH. 320-363-0900
 CONTACT: ANDY BRETH

SHEET INDEX

SHEET #	SHEET NAME
T1.1	TITLE SHEET
D1.0	EXISTING CONDITIONS PLAN
D2.0	DEMO PLANS
A1.1	MAIN FLOOR PLAN
A1.2	ENLARGED OFFICE REMODEL PLAN
A1.3	ENLARGED GARAGE REMODEL PLAN
A1.4	REFLECTED CEILING PLANS
A2.1	EXTERIOR ELEVATIONS
A2.3	3D VIEWS
A3.1	SECTIONS
A3.2	SECTIONS
A3.3	DETAILS
A4.1	SCHEDULES
I3.0	FLOOR FINISH PLANS
I3.1	FLOOR FINISH PLANS
S1.1	OVERALL FOUNDATION/FRAMING PLAN
S2.1	TOWER FOUNDATION AND FRAMING PLAN
S3.1	FOUNDATION DETAILS & NOTES
S3.2	FRAMING DETAILS
M0.0	MECHANICAL LEGENDS AND ABBREVIATIONS
M0.1	SPECIFICATIONS
MD1.0	BELOW GRADE PLUMBING DEMOLITION PLAN
MD1.1	FIRST LEVEL PLUMBING DEMOLITION PLAN
MD1.2	FIRST LEVEL HVAC DEMOLITION PLAN
M1.0	BELOW GRADE PLUMBING PLAN
M1.1	FIRST LEVEL PLUMBING PLAN
M1.2	PLUMBING ISOMETRICS
M1.3	PLUMBING ISOMETRICS
M2.1	FIRST LEVEL HVAC PLAN
M2.2	FIRST LEVEL HVAC - ENLARGED
M3.1	MECHANICAL ROOF PLAN
ME1.1	MECHANICAL SCHEDULES

CODE SUMMARY

IBC TABLE 1016.2 EXIT ACCESS TRAVEL DISTANCE
 B OCCUPANCY WITH SPRINKLER SYSTEM = 300 FEET

IBC TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

MAIN LEVEL
 B BUSINESS CALCULATION
 - 4 WATER CLOSETS REQUIRED AND PROVIDED
 - 4 LAVATORIES REQUIRED AND PROVIDED
 - DRINKING FOUNTAIN REQUIRED, CULLIGAN WATER IN LIEU OF DRINKING FOUNTAINS

APPLICABLE CODES:
 IBC 2015, ZONE = 7

PROVIDE A 42" CLEAR FLOOR SPACE FROM CENTERLINE OF TOILET TO URINAL
 PROVIDE 48" CLEAR FLOOR SPACE IN FRONT OF TOILET
 TOILET MUST BE CENTERED 18" FROM SIDE WALL
 SEAT HEIGHT 17" -19" ABOVE FLOOR
 TOILET PAPER DISPENSER SHALL BE LOCATED MIN 1'-1/2" BELOW GRAB BAR & WITHIN AN AREA 12" MIN AND 40" MAX FROM REAR WALL
 RIM OF THE URINAL SHALL BE NO MORE THAN 17" ABOVE FLOOR
 RIM OF THE SINK SHALL BE NO MORE THAN 34" ABOVE FLOOR
 CLEAR FLOOR SPACE OF 30" X 48" SHALL BE IN FRONT OF SINK AND URINAL
 BOTTOM EDGE OF MIRROR SHALL BE NO MORE THAN 40 INCHES ABOVE FLOOR
 INSULATE PLUMBING BENEATH SINK
 TOWEL, SOAP AND PRODUCT DISPENSERS SHALL BE MOUNTED SO THAT THE HIGHEST OPERABLE PART OF THE DEVICE IS NO MORE THAN 48" ABOVE FLOOR FOR SIDE APPROACH AND 48" ABOVE FLOOR FOR FORWARD APPROACH.
 DOOR SIGNAGE SHALL BE LOCATED AT A HEIGHT OF 5' ABOVE FLOOR ON LATCH SIDE OF DOOR
 ALL DOOR HANDLES MUST BE A TYPE THAT DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TURNING OF THE WRIST. ALL HARDWARE WILL BE CODE COMPLIANT. MN 1341.

VERIFY THAT TACTILE SIGNAGE (RESTROOMS, COMMON STORAGE AREAS, ETC.) WILL BE DESIGNED & INSTALLED PER MSBC 1341.0405, ITEM P, & 1341.0418. ALL ISSUANCE OF THE CERTIFICATE OF OCCUPANCY. MSBC 1341.0405 & 1341.0476. REQUIRED TACTILE SIGNAGE MUST BE INSTALLED FOR FINAL INSPECTION & FOR PURPOSES OF THIS REMODEL PROJECT, NOTE THAT WITHIN ALL PUBLIC & COMMON USE AREAS OF THE BUILDING, EQUIPMENT CONTROLS (OR A PORTION THEREOF) SUCH AS ELECTRICAL OUTLETS, DOOR VISION PEEPS, ALARM PULLS, SWITCHES, SHELVING, ROBE AND/OR COAT HOOKS, FIXTURE CONTROLS, COAT RACKS & RODS, DISPENSERS, ETC., MUST ALL BE INSTALLED WITHIN THE REQUIRED REACH RANGE OF 48" MAX. A.F.F. (15" MIN. A.F.F. FOR ELECTRICAL OUTLETS).

VERIFY THAT SAID EQUIPMENT & DEVICES WILL BE INSTALLED WITHIN THE REACH RANGE REQUIREMENTS OF THE CODE. MSBC 1341 & ANSIA117.1, SECTION 308 & 309.



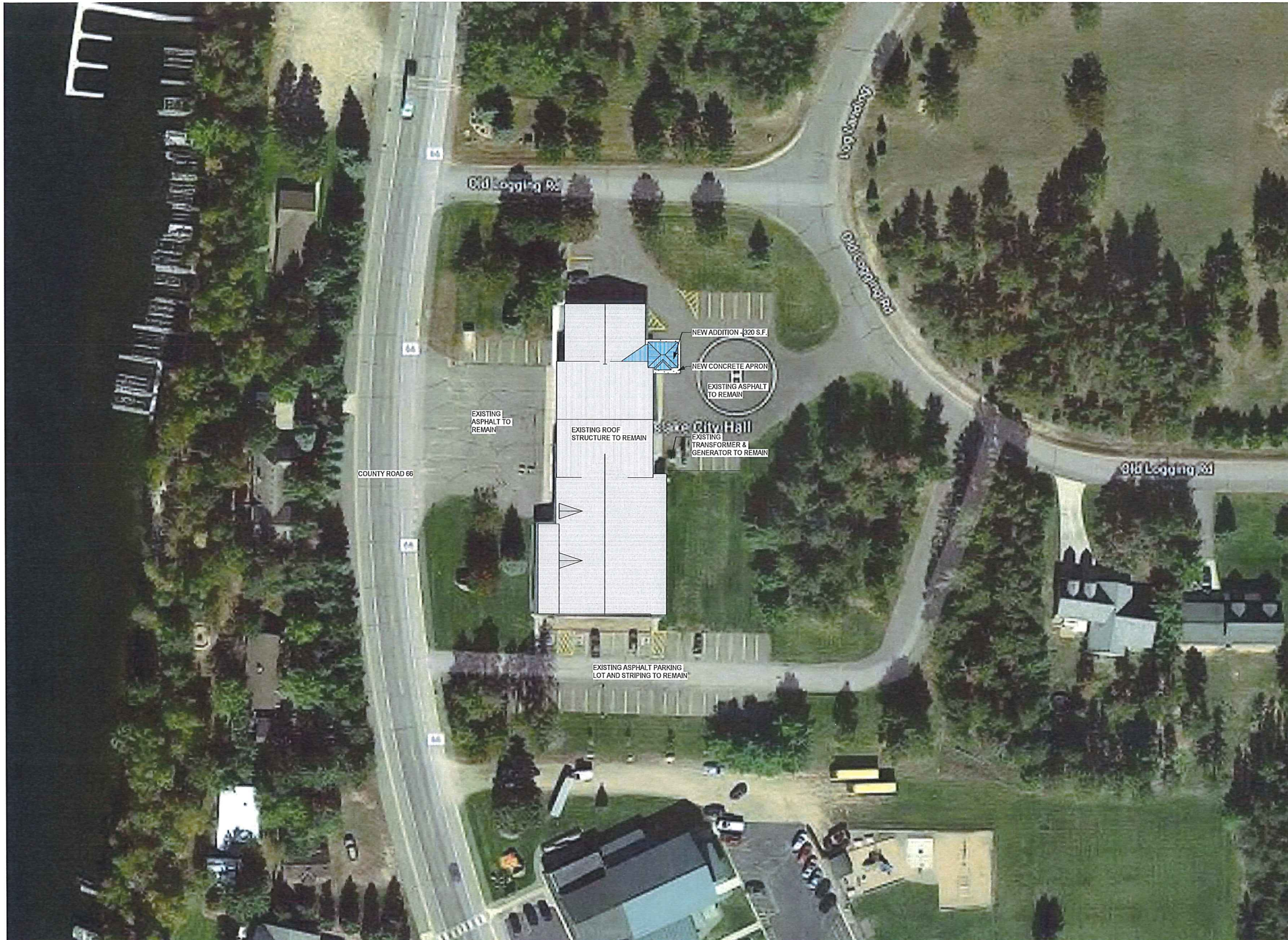
NO.	DATE	DESCRIPTION

CITY OF CROSSLAKE - FIRE
 STATION
 CROSSLAKE, MN
 TITLE SHEET

DATE: 5.22.20

SHEET: T1.1

PERMIT SET



1 ARCHITECTURAL SITE PLAN
A0.1 1" = 40'-0"



PERMIT SET

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
FIRE STATION
ARCHITECTURAL SITE PLAN

PROJECT #

DATE:

5.22.20

SHEET:

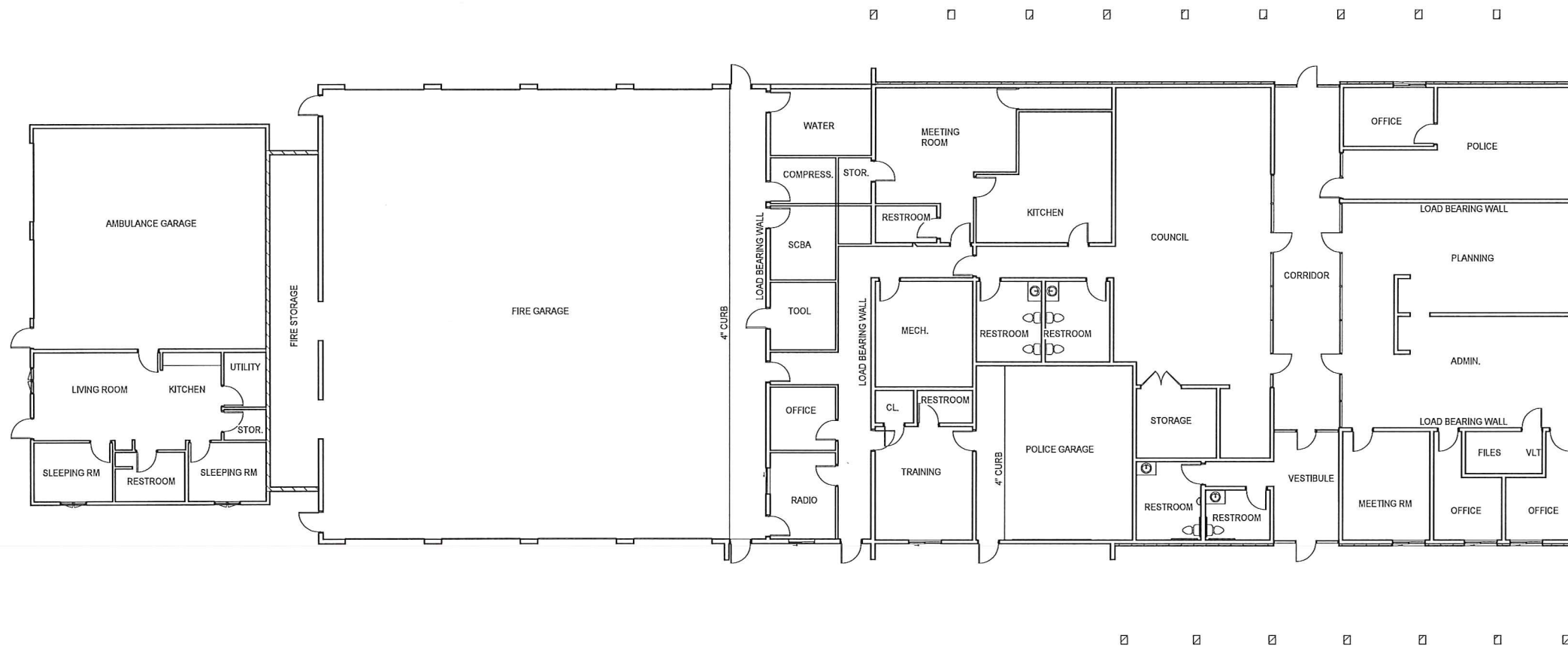
A0.1

HYTEC
CONSTRUCTION
ARCHITECTURAL DIVISION

1400 BUSINESS CT
BRANDERIDGE MN 56401
PHONE: 763-252-4229
HYTECCONSTRUCTION.COM
LIC: RB-C0059184

I HEREBY CERTIFY THAT THIS IS AN ORIGINAL COPY OF THIS REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
M. J. B. B.
ARCHITECT 06/22/2020 LIC# 45275

WIDSETH
ARCHITECTS • ENGINEERS • SCIENTISTS • SURVEYORS



1 EXISTING CONDITIONS PLAN
 D1.0 3/32" = 1'-0"

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
Michael Behl
 ARCHITECT 06/22/2020 LIC# 45375

1400 BUSINESS ST.
 BRANDES INN 6461
 PHOENIX 216-844-8229
 hyteconstruction.com
 IN #00000004

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
 FIRE STATION
 EXISTING CONDITIONS PLAN

PROJECT #

DATE:

5.22.20

SHEET:

D1.0

PERMIT SET

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF WYOMING.
M. J. Widseth
05/22/2020 LIC# 45375
ARCHITECT

1500 BUSINESS ST.
DANFORTH WY 83411
PHONE 307-245-5222
HYTEC.CONSTRUCTION.COM
HYTEC.CONSTRUCTION
HYTEC.CONSTRUCTION

HYTEC
CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

CITY OF CROSSLAKE -
FIRE STATION
DEMO PLANS

PROJECT #

DATE:

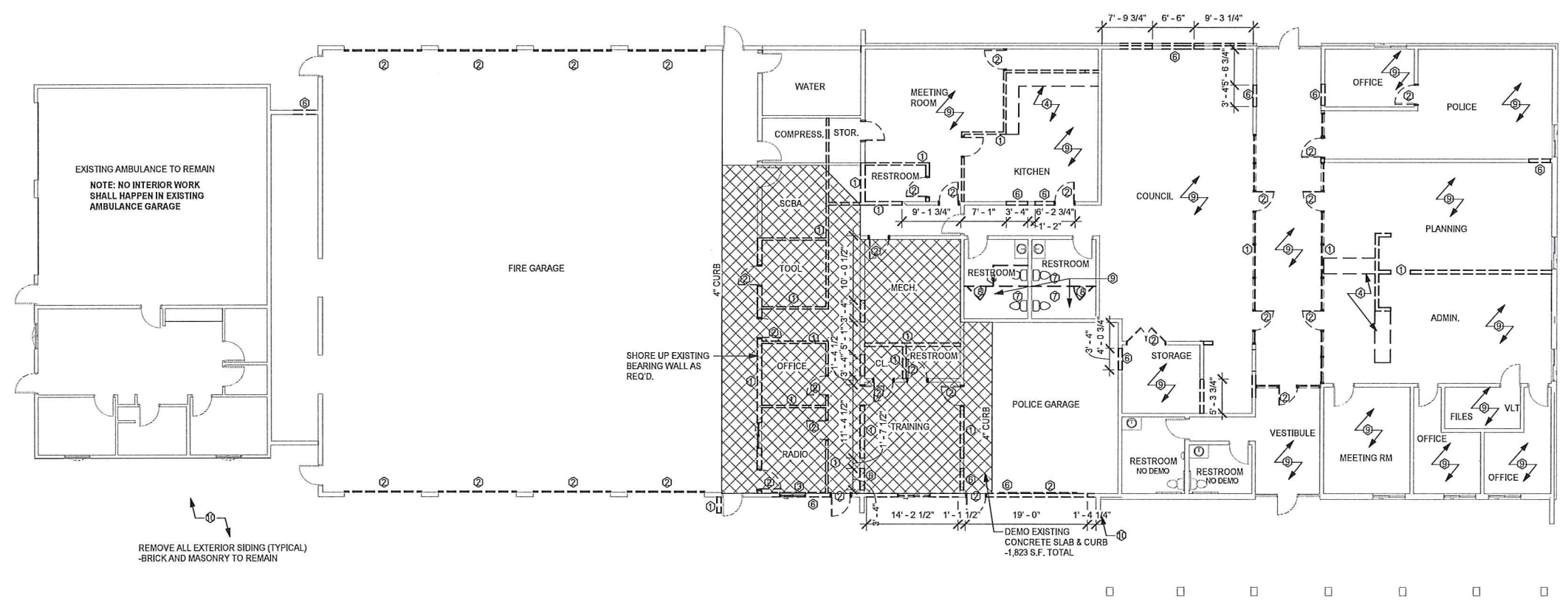
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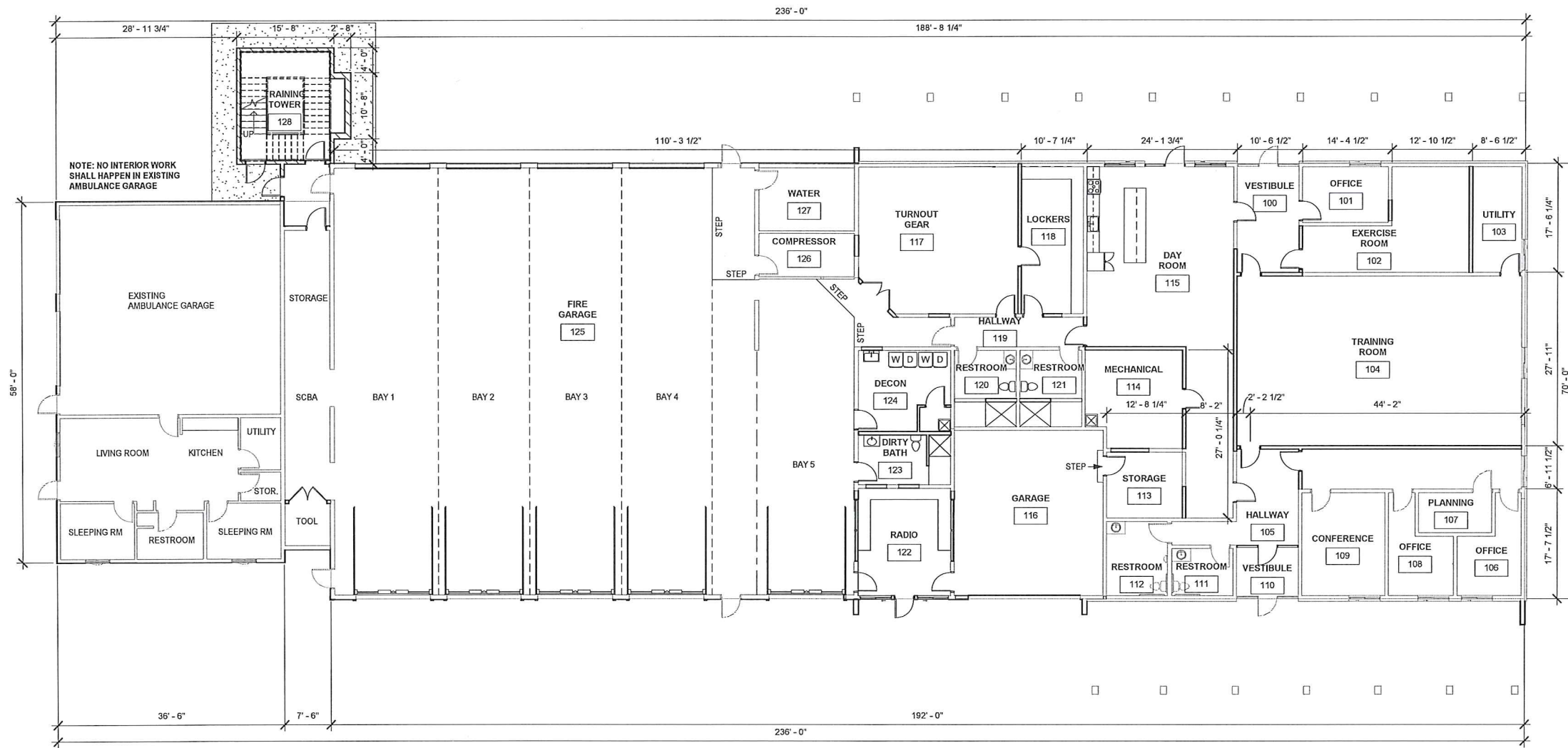
D2.0

DEMO SYMBOLS LEGEND	
①	REMOVE WALL
②	REMOVE DOOR
③	REMOVE WINDOW
④	REMOVE APPLIANCES, COUNTER TOPS, CABINETS
⑤	REMOVE PLUMBING FIXTURES
⑥	REMOVE PORTION OF WALL FOR NEW DOOR
⑦	REMOVE PLUMBING FIXTURE
⑧	REMOVE TOILET PARTITIONS
⑨	REMOVE FLOORING
⑩	REMOVE EXTERIOR CLADDING
⑪	
⑫	
⑬	
⑭	
⑮	
⑯	

NOTES:
- DASHED LINES INDICATE ITEMS TO BE REMOVED
- CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL DEMOLITION ITEMS
- CONTRACTOR IS RESPONSIBLE FOR FIXING/REPLACING LANDSCAPING OUTSIDE OF THE PROJECT AREA THAT IS DAMAGED DURING CONSTRUCTION
- FIELD VERIFY ALL WALLS FOR LOAD BEARING PRIOR TO DEMOLITION



1 MAIN LEVEL DEMOLITION PLAN
D2.0 3/32" = 1'-0"



1 MAIN LEVEL FLOOR PLAN
 A1.1 3/32" = 1'-0"

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
 FIRE STATION
 MAIN FLOOR PLAN

PROJECT #

DATE:

5.22.20

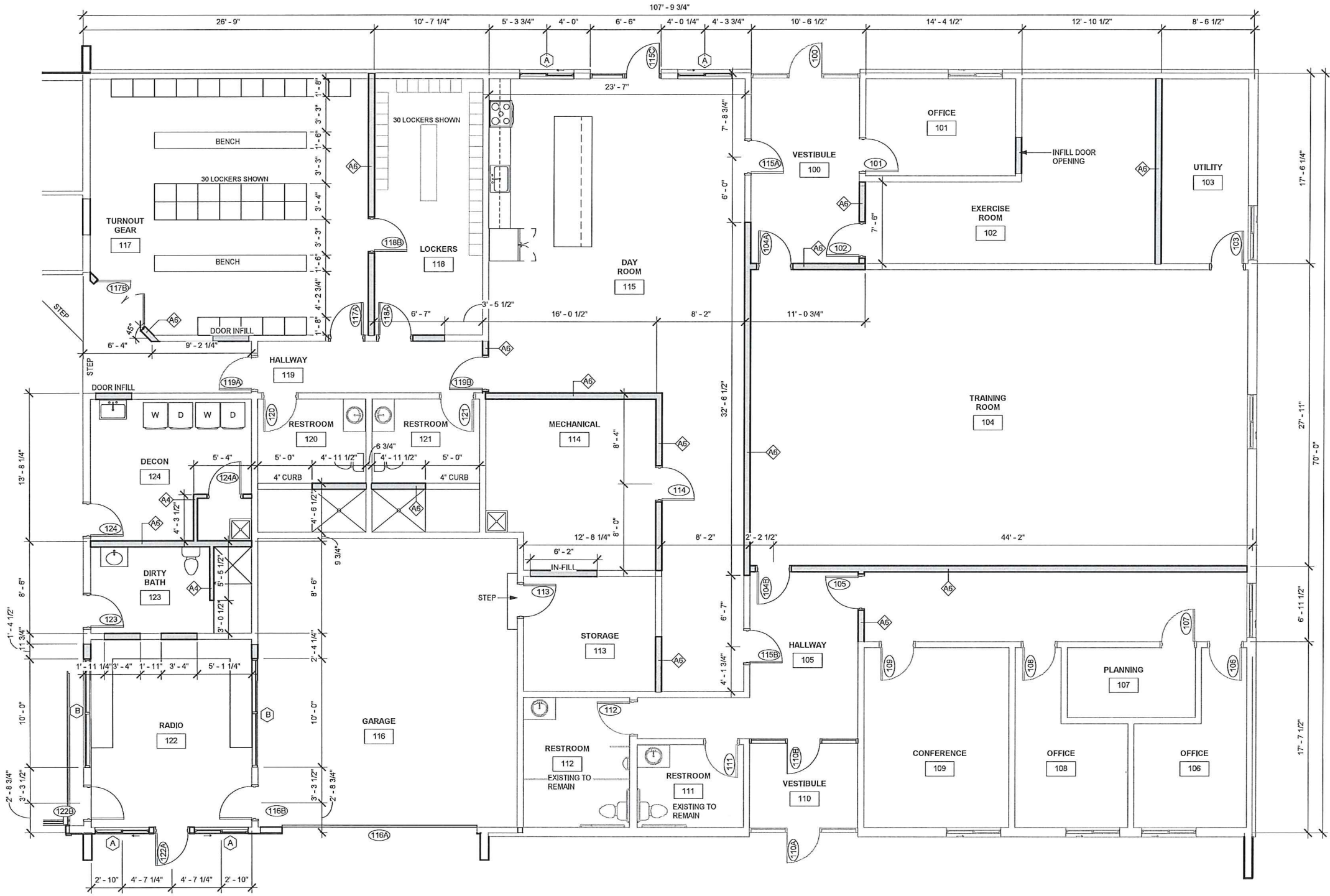
SHEET:

A1.1

PERMIT SET

GENERAL FLOOR PLAN NOTES:

1. PLANS ARE DIMENSIONED TO THE FACE OF STUD. (U.N.O.)
2. FIELD VERIFY ALL BEARING WALL LOCATIONS PRIOR TO DEMO OR INSTALLATION.
3. ALL SHOP DRAWINGS TO BE APPROVED BY HYTEC PRIOR TO INSTALLATION.



1 ENLARGED OFFICE REMODEL PLAN
A1.2 3/16" = 1'-0"

HYTEC CONSTRUCTION HAS BEEN AN INSPECTION AS REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN
M. J. Widseth
ARCHITECT 06/22/2020 LCW 45375

1430 BUSINESS ST.
WISCONSIN 53181
PHONE 262-242-2222
HYTEC CONSTRUCTION
HYTEC CONSTRUCTION.COM
HYTEC@HYTEC.COM

HYTEC
CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

NO.	DESCRIPTION

PROJECT #

DATE:

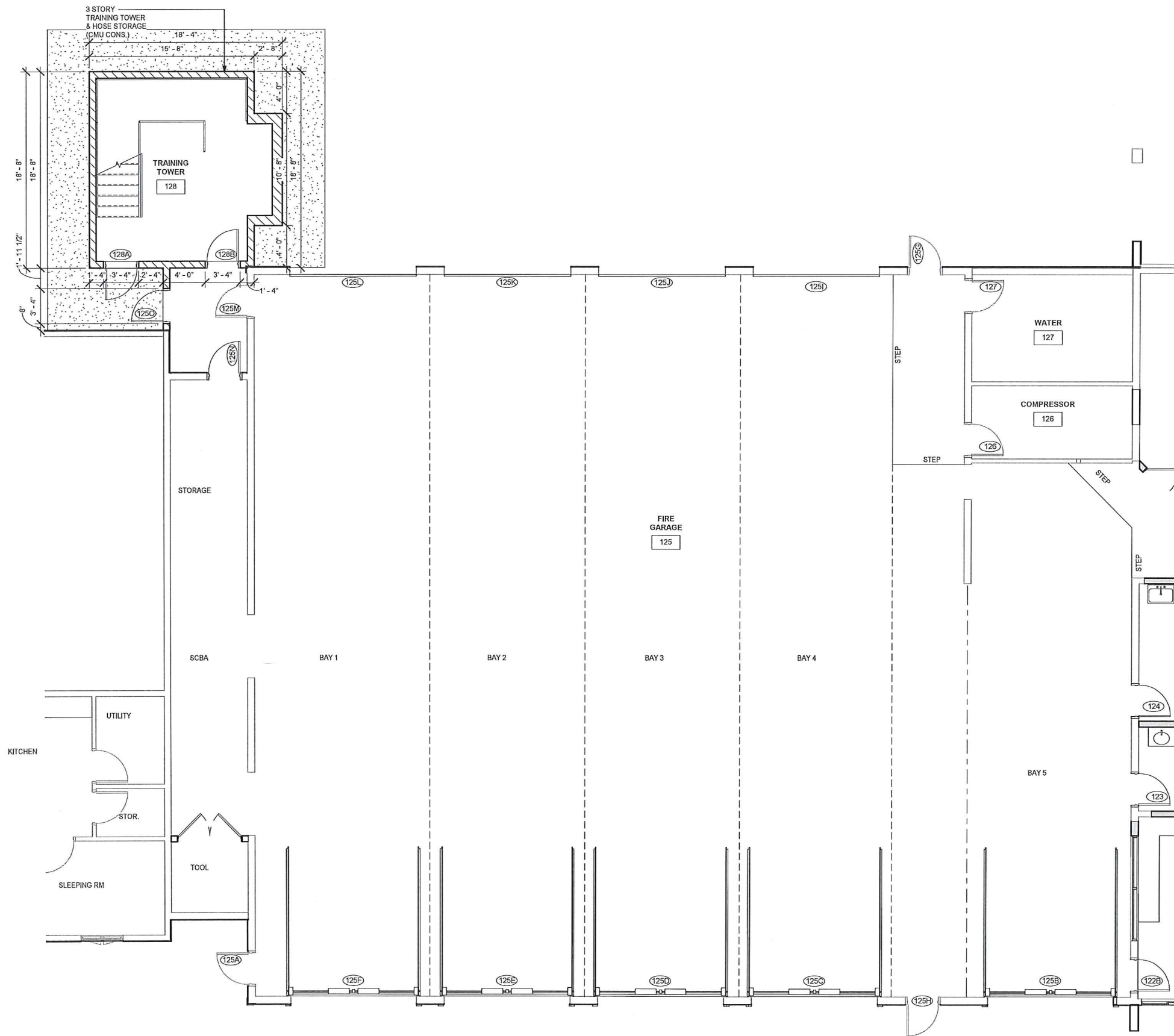
5.22.20

SHEET:

A1.2

**CITY OF CROSSLAKE -
FIRE STATION
ENLARGED OFFICE REMODEL PLAN**

PERMIT SET



1 ENLARGED GARAGE REMODEL PLAN
A1.3 3/16" = 1'-0"

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ARCHITECTS • ENGINEERS • SCIENTISTS • SURVEYORS

HYTEC CONSTRUCTION ARCHITECTURAL DIVISION
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PHONE 763-424-3233
HYTECCONSTRUCTION.COM
LIC: BDC18055848
ARCHITECT
M. J. Stahl
05/27/2020 LCK 45315

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CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

NO.	DATE	DESCRIPTION

CITY OF CROSSLAKE -
FIRE STATION
ENLARGED GARAGE REMODEL PLAN

PROJECT #

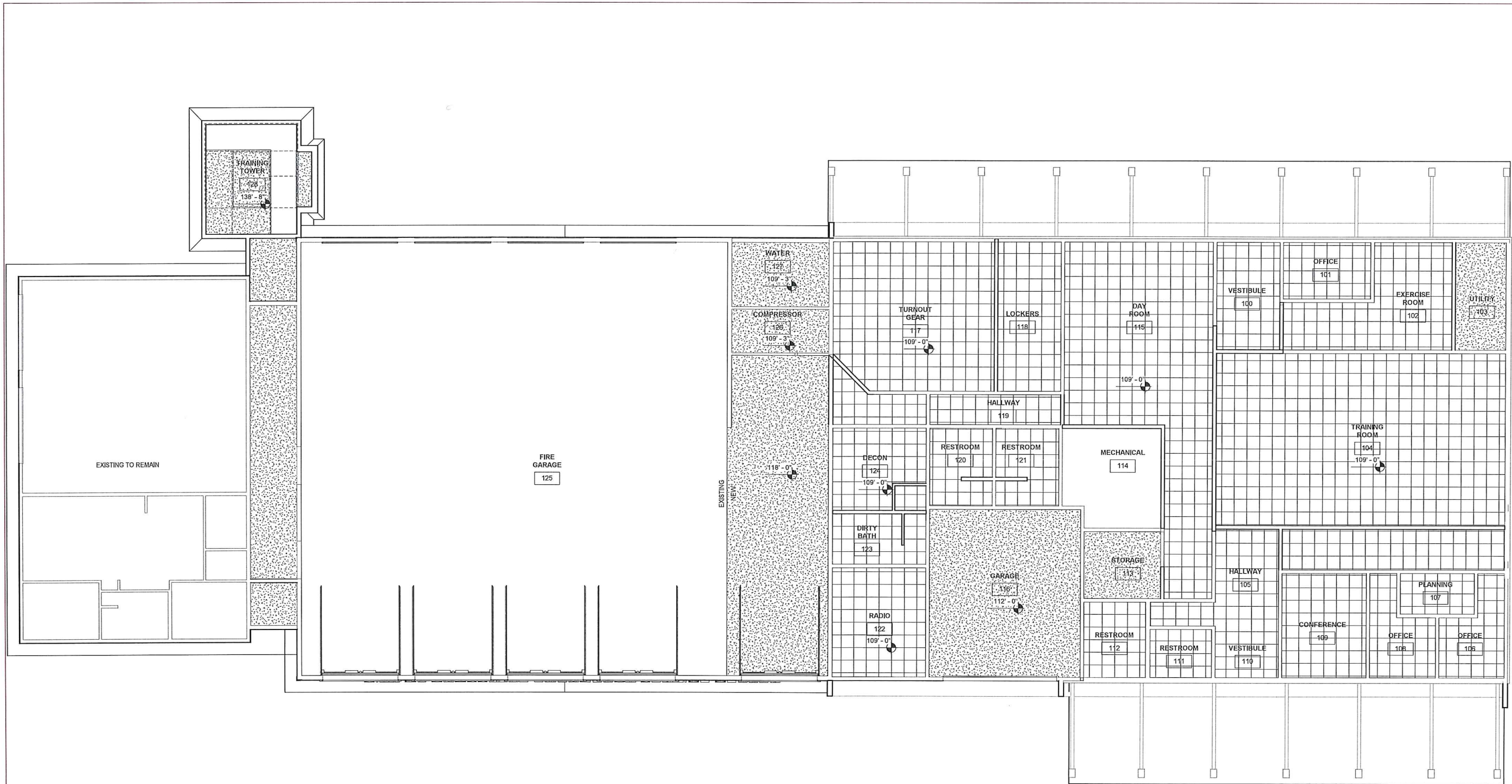
DATE:

5.22.20

SHEET:

A1.3

PERMIT SET



1 MAIN FLOOR REFLECTED CEILING PLAN
 A1.4 1/8" = 1'-0"

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 DUMFRIES, MN 55834
 PHONE 218-828-4537
 HYTEC.CONSTRUCTION.COM
 HYTEC@HYTEC.COM

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
 FIRE STATION
 REFLECTED CEILING PLANS

PROJECT #

DATE:

5.22.20

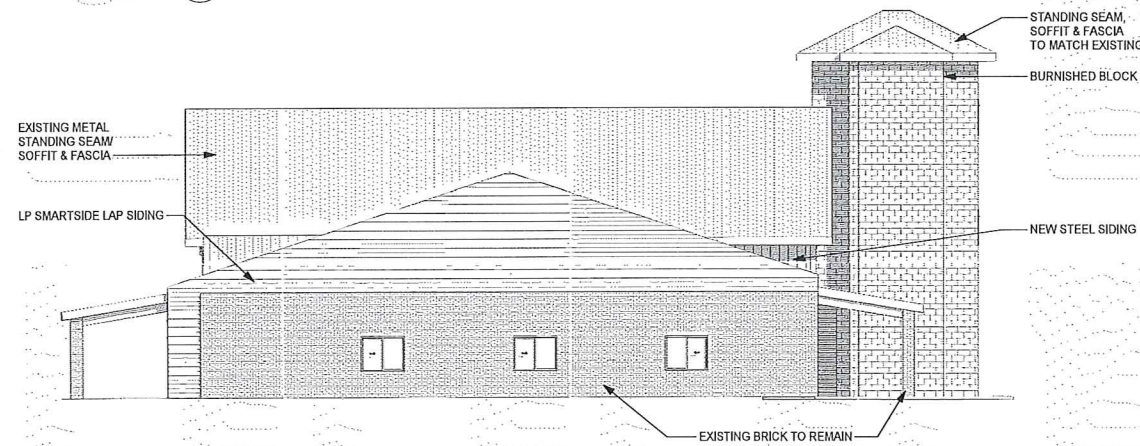
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A1.4

PERMIT SET



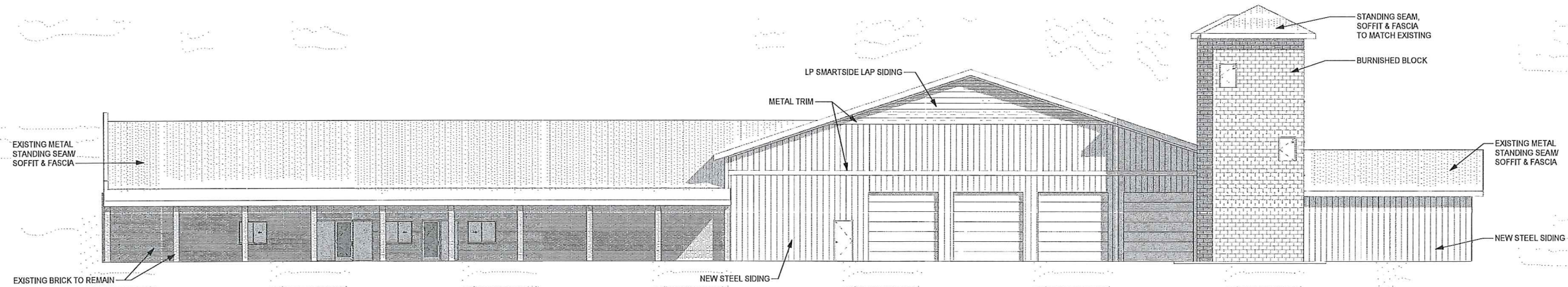
1 WEST ELEVATION
A2.1 3/32" = 1'-0"



2 SOUTH ELEVATION
A2.1 3/32" = 1'-0"



3 NORTH ELEVATION
A2.1 3/32" = 1'-0"



4 EAST ELEVATION
A2.1 3/32" = 1'-0"

EXTERIOR FINISHES					
PRODUCT	STYLE	TYPE	FINISH	MANUFACTURER	NOTES
BASE FLASHING	PRE-FINISHED METAL	PRE-FINISHED METAL	BRONZE		
CMU - TOWER	BURNISHED BLOCK	BURNISHED BLOCK	TBD		
CORNER TRIM @ METAL	4" TRIM	CUSTOM OUTSIDE TRIM	BURNISHED SLATE RAWHIDE	BRIDGER STEEL	
CORNER TRIM @ LAP	4" TRIM	LP SMARTSIDE CEDAR TEXTURE	DIAMOND KOTE - CANYON	LP CORP	
WINDOW / DOOR TRIM @ METAL	DOUBLE J	CUSTOM DOUBLE J TRIM	BURNISHED SLATE RAWHIDE	BRIDGER STEEL	
WINDOW / DOOR TRIM @ LAP	4" TRIM	LP SMARTSIDE CEDAR TEXTURE	DIAMOND KOTE - CANYON	LP CORP	
BAND BOARDS	9" BAND	CUSTOM BAND TRIM	BURNISHED SLATE RAWHIDE	BRIDGER STEEL	
SIDING 1	VERTICAL METAL	ULTRA BATTEN, STRIATED, 17 3/4"	BURNISHED SLATE RAWHIDE	BRIDGER STEEL	24 GA, CONCEALED FASTENER
SIDING 2	6" HORIZONTAL LAP	LP SMARTSIDE CEDAR TEXT. LAP	DIAMOND KOTE - CANYON	LP CORP	
SOFFIT	PRE-FINISHED METAL	MATCH TO EXISTING	MATCH TO EXISTING		
FASCIA	PRE-FINISHED METAL	MATCH TO EXISTING	MATCH TO EXISTING		
ROOF MATERIAL	METAL STANDING SEAM	MATCH TO EXISTING	MATCH TO EXISTING		

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HYTEC CONSTRUCTION ARCHITECT
REPORT PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND I AM A LICENSED ARCHITECT
UNDER THE LAWS OF THE STATE OF MINNESOTA
W. J. B. B. B.
ARCHITECT 05222020 LIC# 43375

1400 BURNING TREE
MINNEAPOLIS, MN 55411
PHONE 763-423-8233
HYTECCONSTRUCTION.COM
LIC# 0800866

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CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
FIRE STATION
EXTERIOR ELEVATIONS

PROJECT #

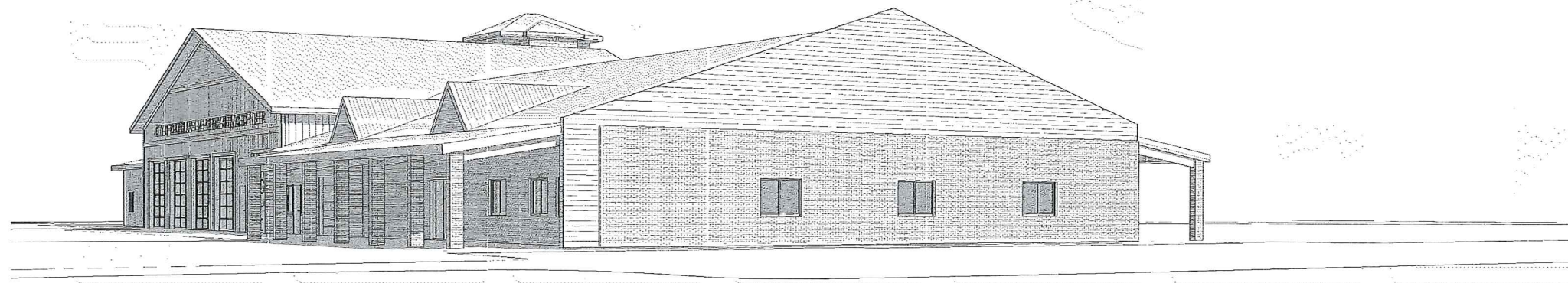
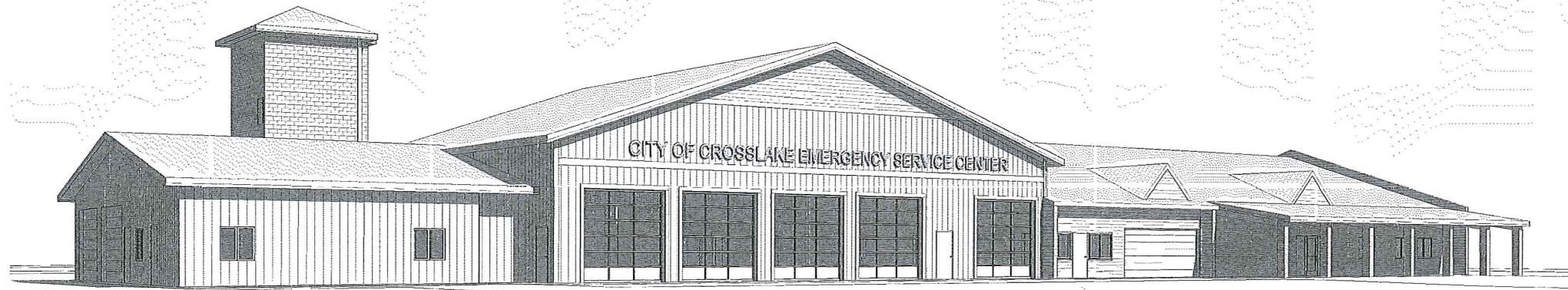
DATE:

5.22.20

SHEET:

A2.1

PERMIT SET



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LIC# 050005848

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CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

CITY OF CROSSLAKE -
FIRE STATION
3D VIEWS

PROJECT #

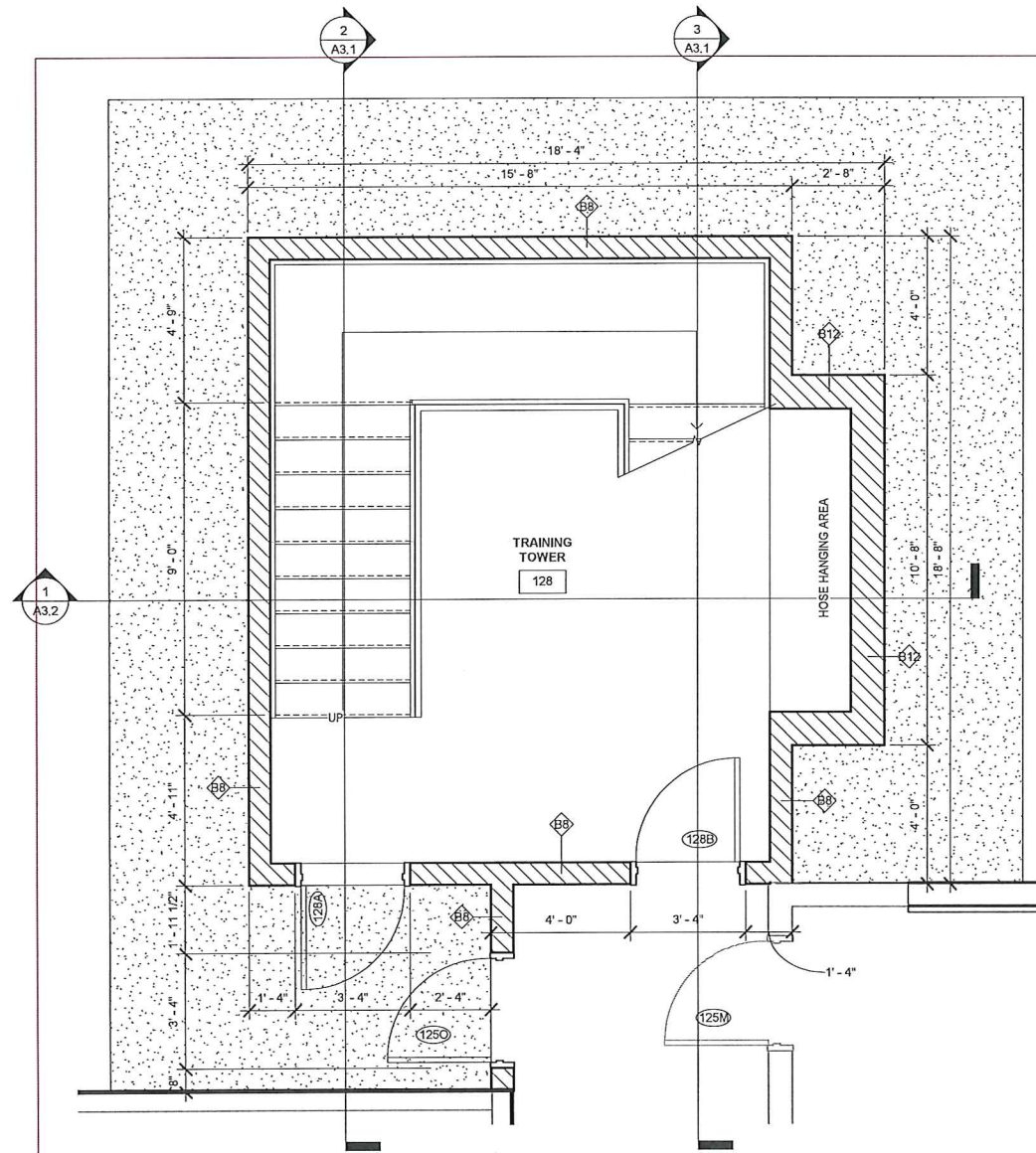
DATE:

5.22.20

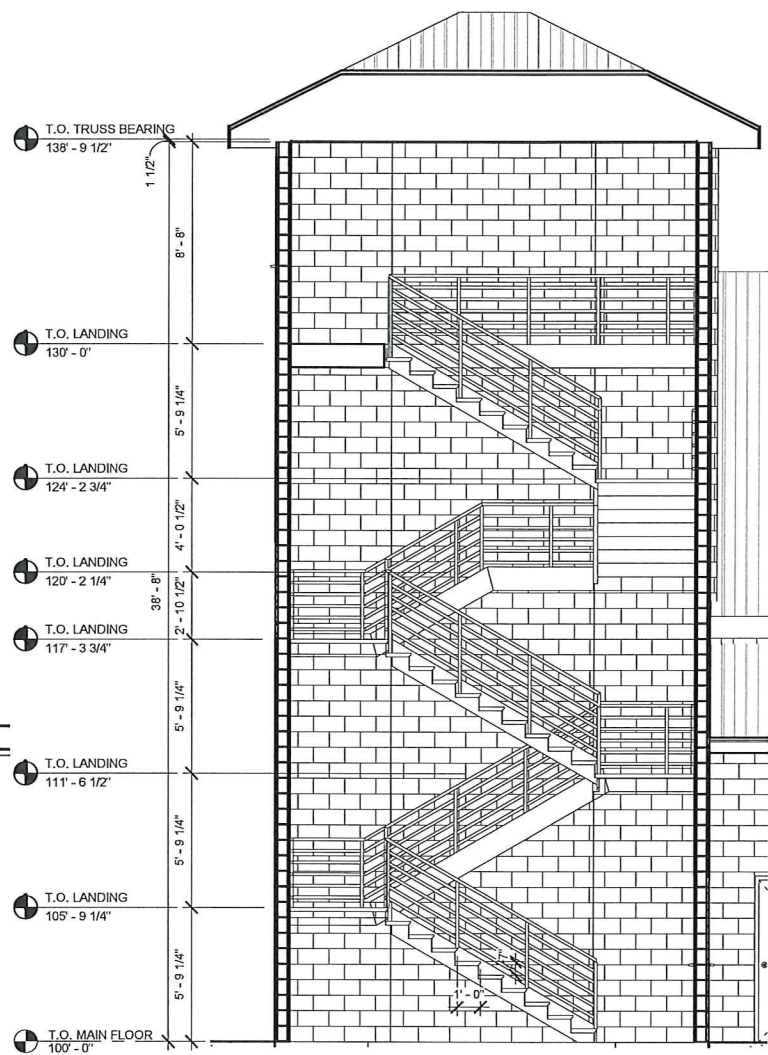
SHEET:

A2.3

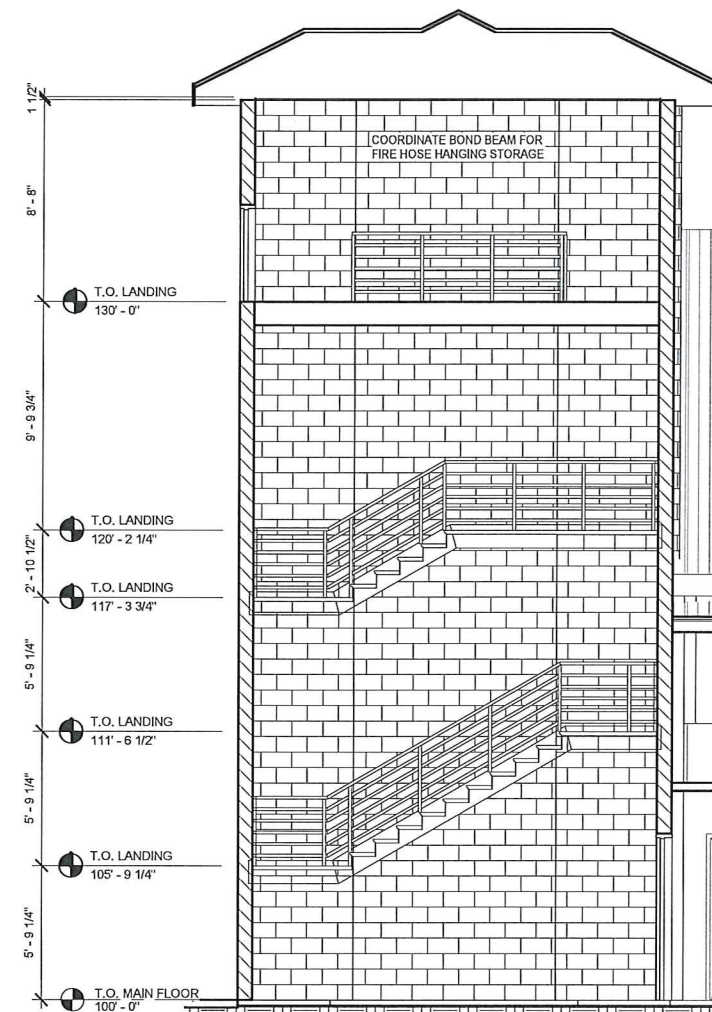
PERMIT SET



1 ENLARGED TRAINING TOWER PLAN
A3.1 3/8" = 1'-0"



2 TRAINING TOWER SECTION 01
A3.1 1/4" = 1'-0"



3 TRAINING TOWER SECTION 02
A3.1 1/4" = 1'-0"

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CONSTRUCTION
ARCHITECTURAL DIVISION

REVISIONS

NO.	DATE	DESCRIPTION

CITY OF CROSSLAKE -
FIRE STATION
SECTIONS

PROJECT #

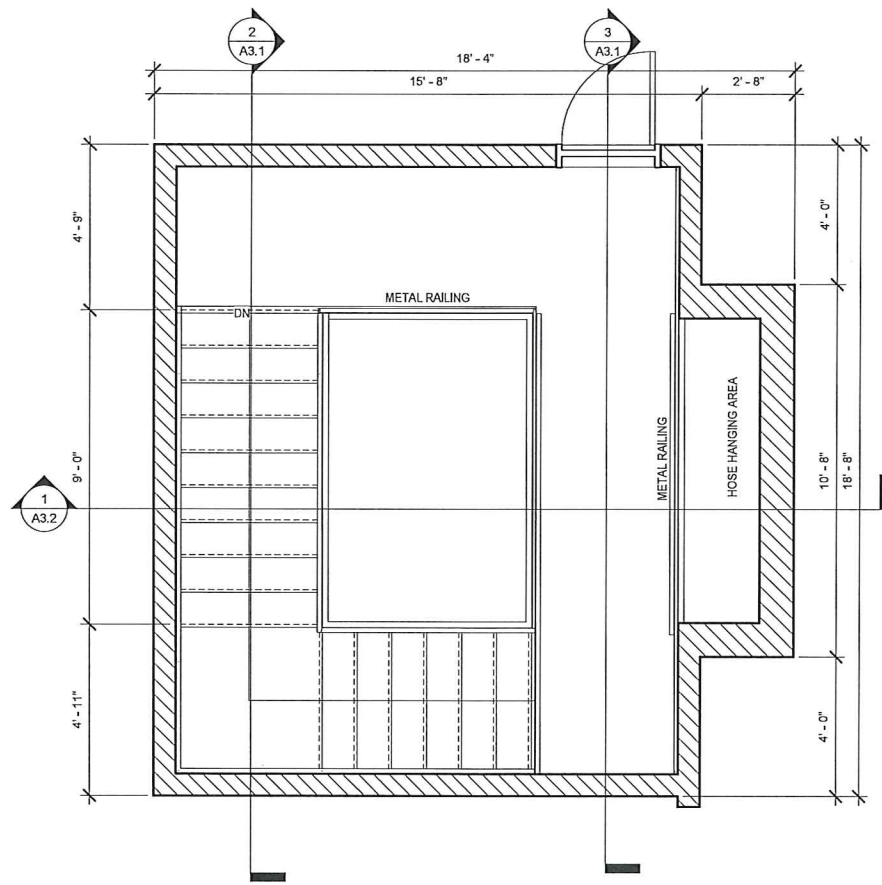
DATE:

5.22.20

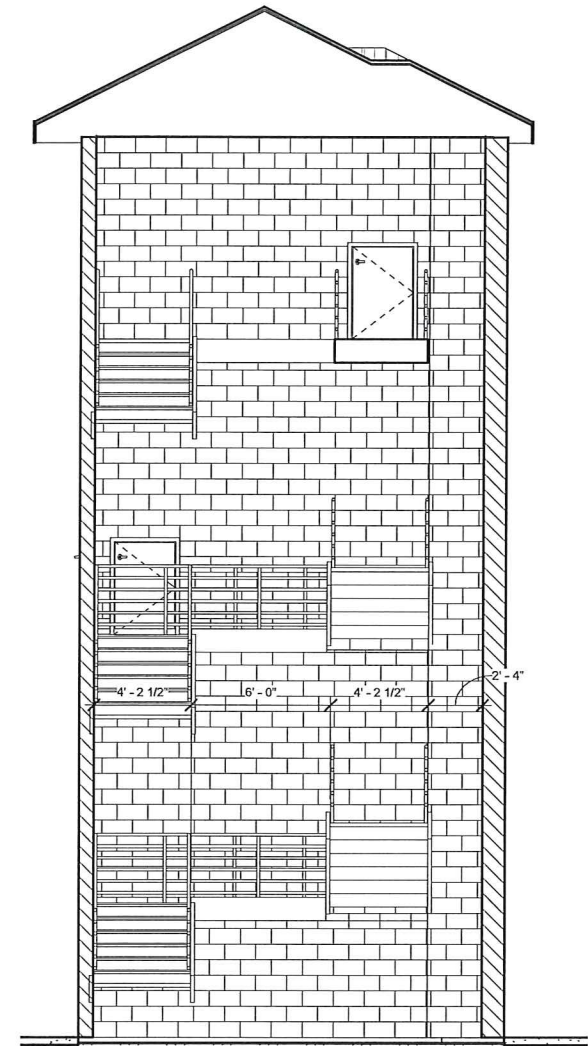
SHEET:

A3.1

PERMIT SET



2 ENLARGED TRAINING TOWER PLAN 3rd FLOOR
A3.2 3/8" = 1'-0"



1 TRAINING TOWER SECTION 03
A3.2 1/4" = 1'-0"

REVISIONS

NO.	DESCRIPTION

CITY OF CROSSLAKE -
FIRE STATION
SECTIONS

PROJECT #

DATE:

5.22.20

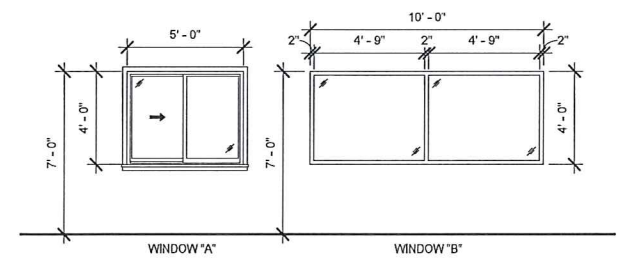
SHEET:

A3.2

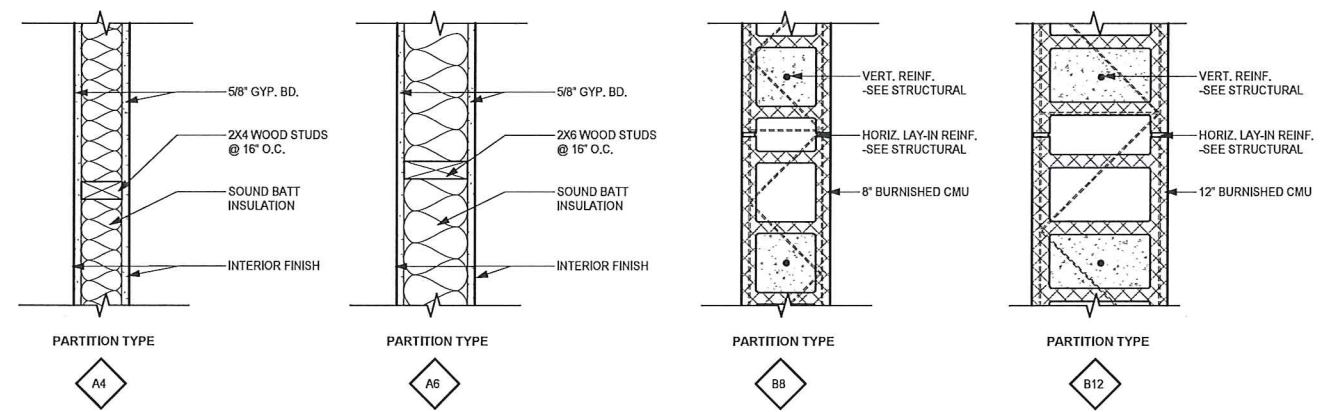
PERMIT SET

DOOR & FRAME SCHEDULE													
MARK	QTY.	DOOR			DOOR TYPE	PANEL TYPE	DOOR		FRAME		SWING	HARDWARE	NOTES
		WIDTH	HEIGHT	THICKNESS			DOOR MATERIAL	FRAME TYPE	FRAME MATERIAL				
100	1	3'-0"	7'-0"	0'-2"	SINGLE	FL - FULL LITE	ALUMINUM	F1	ALUMINUM	RH		PANIC HDWR REQ'D.	
101	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	RH			
102	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH			
103	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	RH			
104A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH		PANIC HDWR REQ'D.	
104B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH		PANIC HDWR REQ'D.	
105	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	RH			
106	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LH			
107	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LHR			
108	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	RH			
109	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	RH			
110A	1	3'-0"	7'-0"	0'-2"	SINGLE	FL - FULL LITE	ALUMINUM	F1	ALUMINUM	RH		PANIC HDWR REQ'D.	
110B	1	3'-0"	7'-0"	0'-2"	SINGLE	FL - FULL LITE	ALUMINUM	F1	ALUMINUM	RH		PANIC HDWR REQ'D.	
111	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LH			
112	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	RH			
113	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LH			
114	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LHR			
115A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	FL - FULL LITE	WOOD	F2	METAL	RH			
115B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH		PANIC HDWR REQ'D.	
115C	1	3'-0"	7'-0"	0'-2"	SINGLE	FL - FULL LITE	ALUMINUM	F4	ALUMINUM	RH		PANIC HDWR REQ'D.	
116A	1	18'-0"	8'-0"	0'-2"	OVERHEAD	OVERHEAD - F	METAL	F3	METAL	OH			
116B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	METAL	F2	METAL	LH			
117A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	RH			
117B	1	6'-0"	7'-0"	0'-1 3/4"	DOUBLE	F - FLUSH	METAL	F2	METAL	DBL			
118A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LH			
118B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	RH			
119A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH		PANIC HDWR REQ'D.	
119B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	WOOD	F2	METAL	LH		PANIC HDWR REQ'D.	
120	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	RH			
121	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	WOOD	F2	METAL	LH			
122A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	METAL	F2	METAL	RH		PANIC HDWR REQ'D.	
122B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	HL - HALF LITE	METAL	F2	METAL	RH		PANIC HDWR REQ'D.	
123	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH			
124	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH			
124A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LHR			
125A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH			
125B	1	12'-0"	12'-0"	0'-2 1/8"	OVERHEAD	OVERHEAD-FG	METAL	F3	METAL	OH			
125C	1	12'-0"	12'-0"	0'-2 1/8"	OVERHEAD	OVERHEAD-FG	METAL	F3	METAL	OH			
125D	1	12'-0"	12'-0"	0'-2 1/8"	OVERHEAD	OVERHEAD-FG	METAL	F3	METAL	OH			
125E	1	12'-0"	12'-0"	0'-2 1/8"	OVERHEAD	OVERHEAD-FG	METAL	F3	METAL	OH			
125F	1	12'-0"	12'-0"	0'-2 1/8"	OVERHEAD	OVERHEAD-FG	METAL	F3	METAL	OH			
125G	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LH			
125H	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH			
125I	1	12'-0"	12'-0"	0'-2"	OVERHEAD	OVERHEAD-P	METAL	F3	METAL	OH			
125J	1	12'-0"	12'-0"	0'-2"	OVERHEAD	OVERHEAD-P	METAL	F3	METAL	OH			
125K	1	12'-0"	12'-0"	0'-2"	OVERHEAD	OVERHEAD-P	METAL	F3	METAL	OH			
125L	1	12'-0"	12'-0"	0'-2"	OVERHEAD	OVERHEAD-P	METAL	F3	METAL	OH			
125M	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LH			
125N	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH		PANIC HDWR REQ'D.	
125O	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LH		PANIC HDWR REQ'D.	
125P	1	6'-0"	7'-0"	0'-1 3/4"	DOUBLE	F - FLUSH	METAL	F2	METAL	DBL			
126	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH			
127	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	LH			
128A	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH		PANIC HDWR REQ'D.	
128B	1	3'-0"	7'-0"	0'-1 3/4"	SINGLE	F - FLUSH	METAL	F2	METAL	RH		PANIC HDWR REQ'D.	

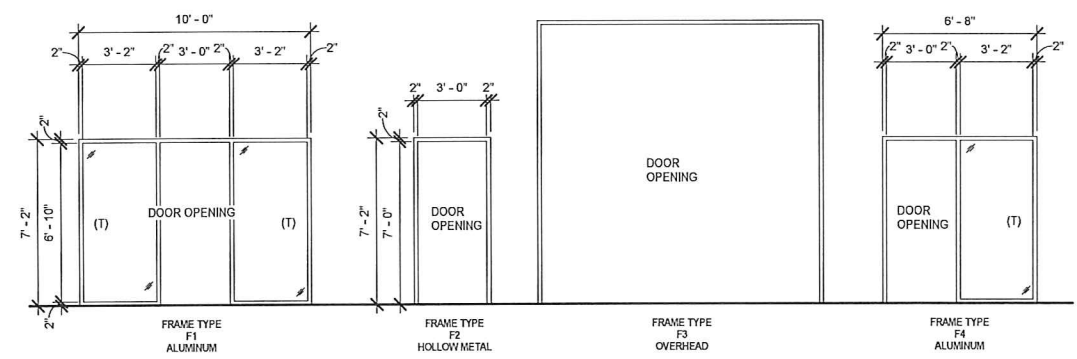
NOTES:
 - DOOR CLADDING TO BE VERIFIED
 - EXTERIOR DOOR THRESHOLD COLOR TO BE BRONZE
 - DOOR HARDWARE TO BE VERIFIED
 - SEE PLAN FOR DOOR SIZES, SWING, AND FUNCTION
 - ALL INTERIOR DOORS STYLE AND FINISH TO BE VERIFIED
 - INTERIOR DOOR HARDWARE TO BE VERIFIED
 - ENTRY DOOR HARDWARE TO BE VERIFIED
 - PROVIDE PRIVACY HARDWARE FOR ALL BATHROOM DOORS



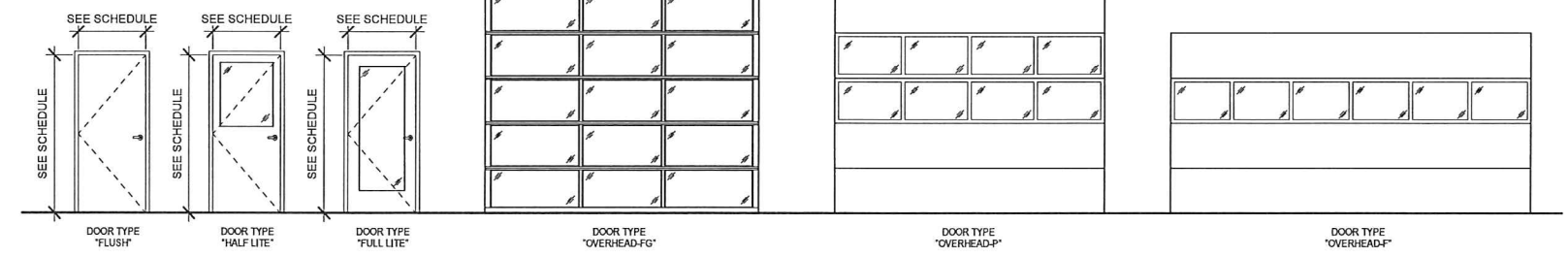
NOTES:
 - INSULATE WITH LOW EXPANSION FOAM AROUND ALL WINDOW OPENINGS
 - WINDOW CLADDING TO BE VERIFIED
 - WINDOW INTERIOR AND EXTENSION JAMBS TO BE PINE
 - WINDOW HARDWARE TO BE STANDARD
 - SCREEN AND SCREEN SURROUND TO BE STANDARD
 - SILL AND WEATHER STRIPPING COLORS TO BE STANDARD



Partition Types
 1/2" = 1'-0"



Frame Types
 1/4" = 1'-0"



Door Types
 1/4" = 1'-0"

HYTEC CONSTRUCTION ARCHITECTURAL DIVISION
 ARCHITECT
 05/22/2020 LCK 42375

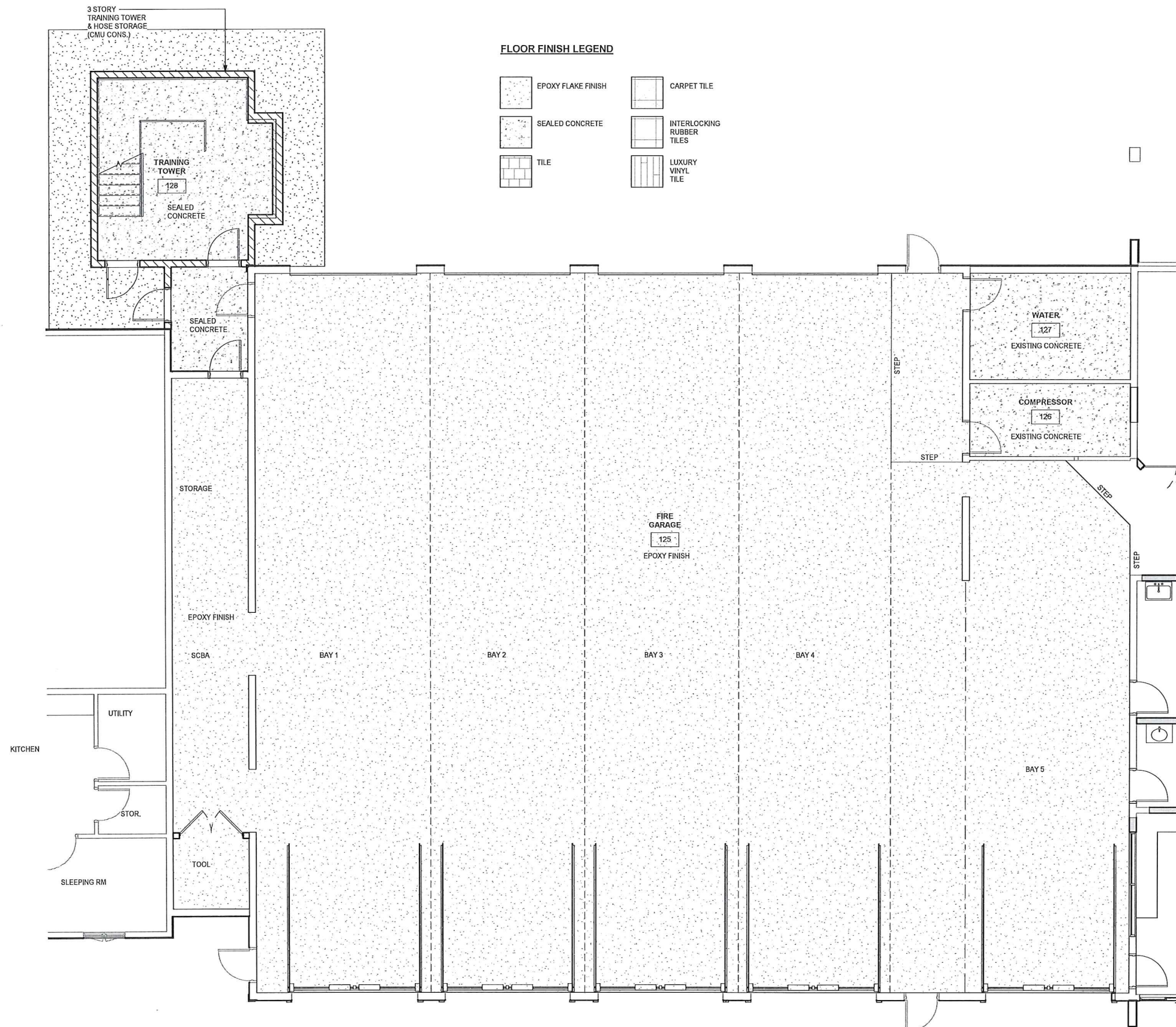
HYTEC CONSTRUCTION ARCHITECTURAL DIVISION
 ARCHITECT

REVISIONS

CITY OF CROSSLAKE - FIRE STATION SCHEDULES

PROJECT #
 DATE: 5.22.20
 SHEET: A4.1

PERMIT SET



1 ENLARGED GARAGE FINISH PLAN
13.0 3/16" = 1'-0"

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, REPORT OR REPORT AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAW OF THE STATE OF MICHIGAN.
Michael J. Bishel
 ARCHITECT
 04/22/2020 LICK 45375

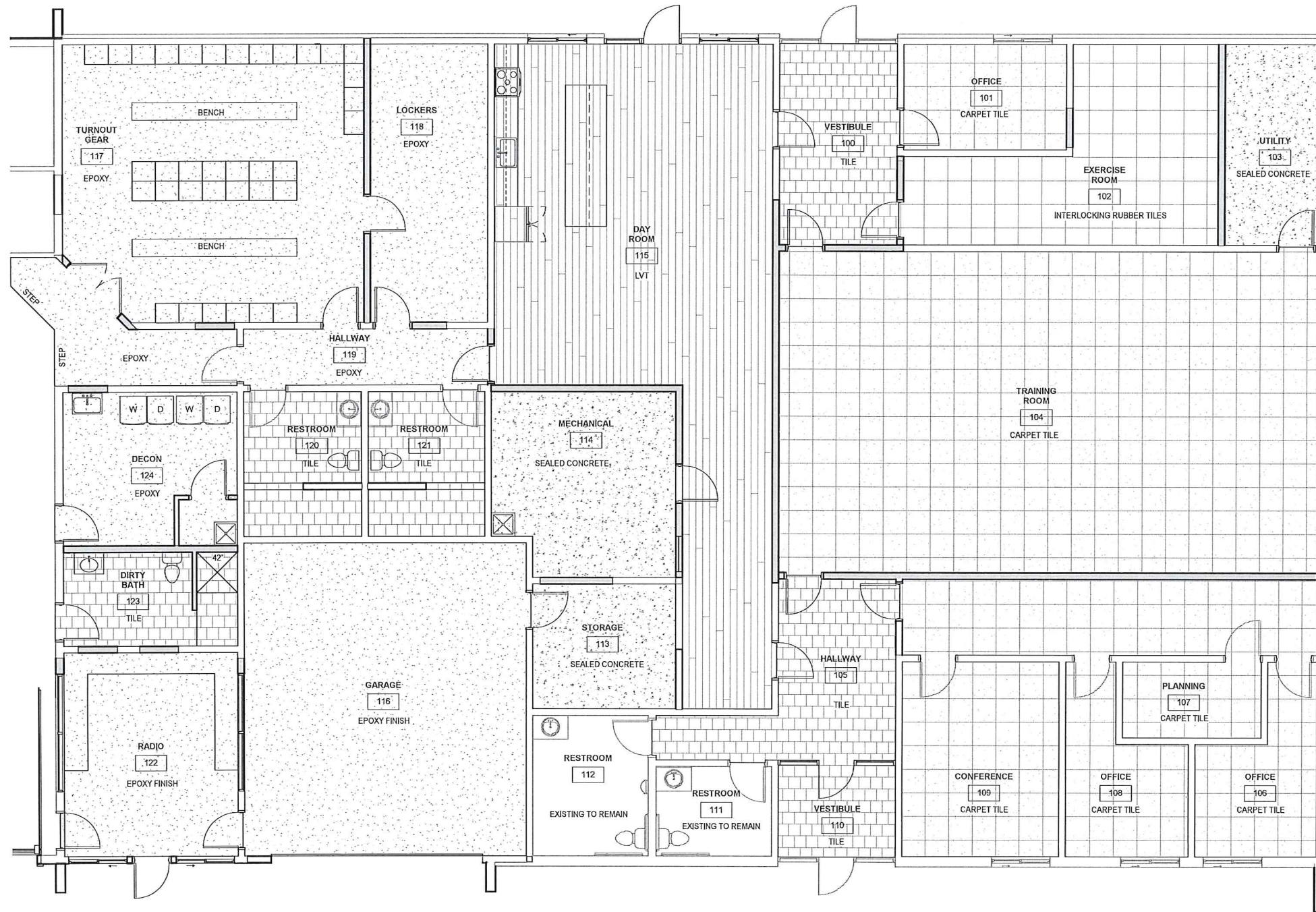
HYTEC CONSTRUCTION ARCHITECTURAL DIVISION
 1455 W. HUNTERS CREEK
 ANN ARBOR MI 48104
 PHONE 734-933-8333
 HYTECCONSTRUCTION.COM
 LIC. #PC-305544

REVISIONS

CITY OF CROSSLAKE -
 FIRE STATION
 FLOOR FINISH PLANS

PROJECT #	
DATE:	5.22.20
SHEET:	13.0

PERMIT SET



FLOOR FINISH LEGEND

- EPOXY FLAKE FINISH
- SEALED CONCRETE
- TILE
- CARPET TILE
- INTERLOCKING RUBBER TILES
- LUXURY VINYL TILE

1 ENLARGED OFFICE FINISH PLAN
13.1 3/16" = 1'-0"

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ARCHITECT: *M. J. Bahl*
DATE: 05/22/2020 LCH 45375

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PHONE 205-928-8222
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LIC #000000004



REVISIONS

NO.	DESCRIPTION	DATE

PROJECT #

DATE:

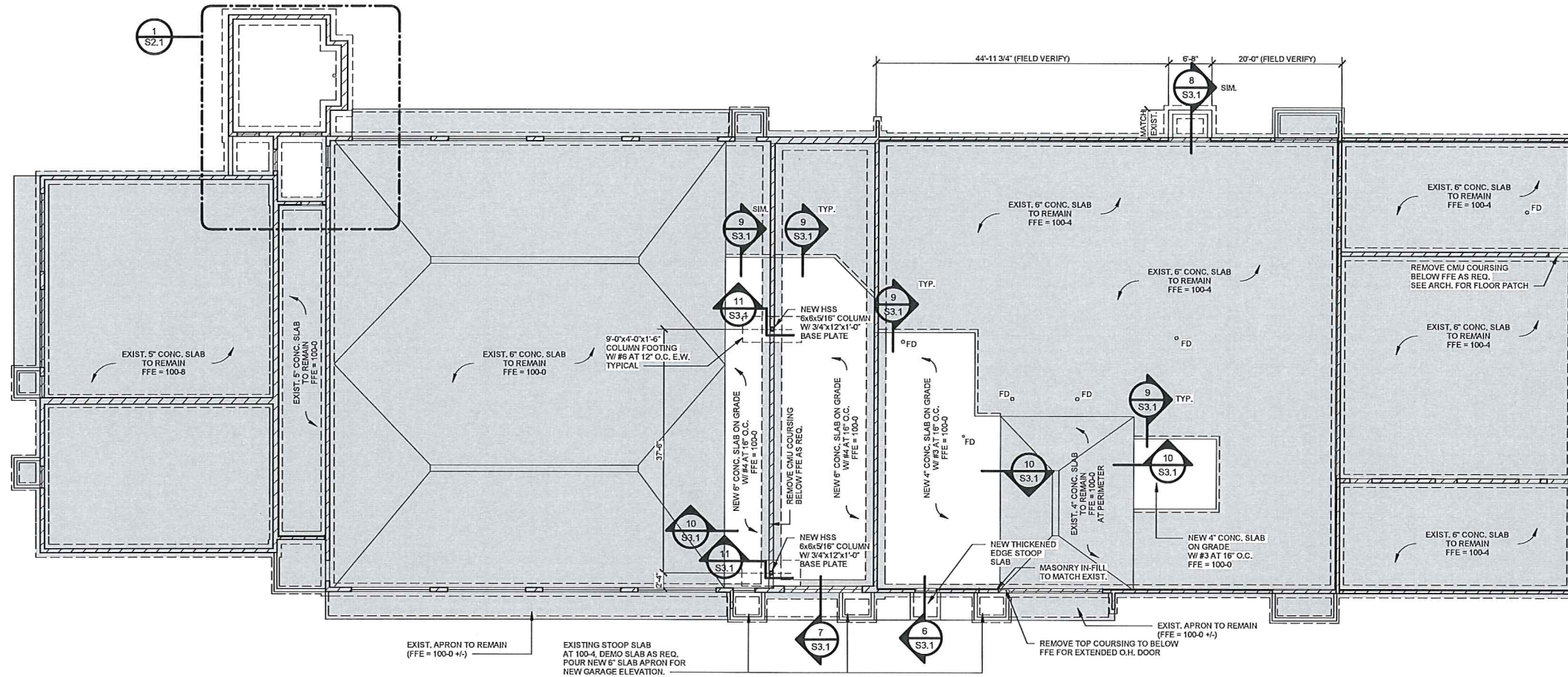
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SHEET:

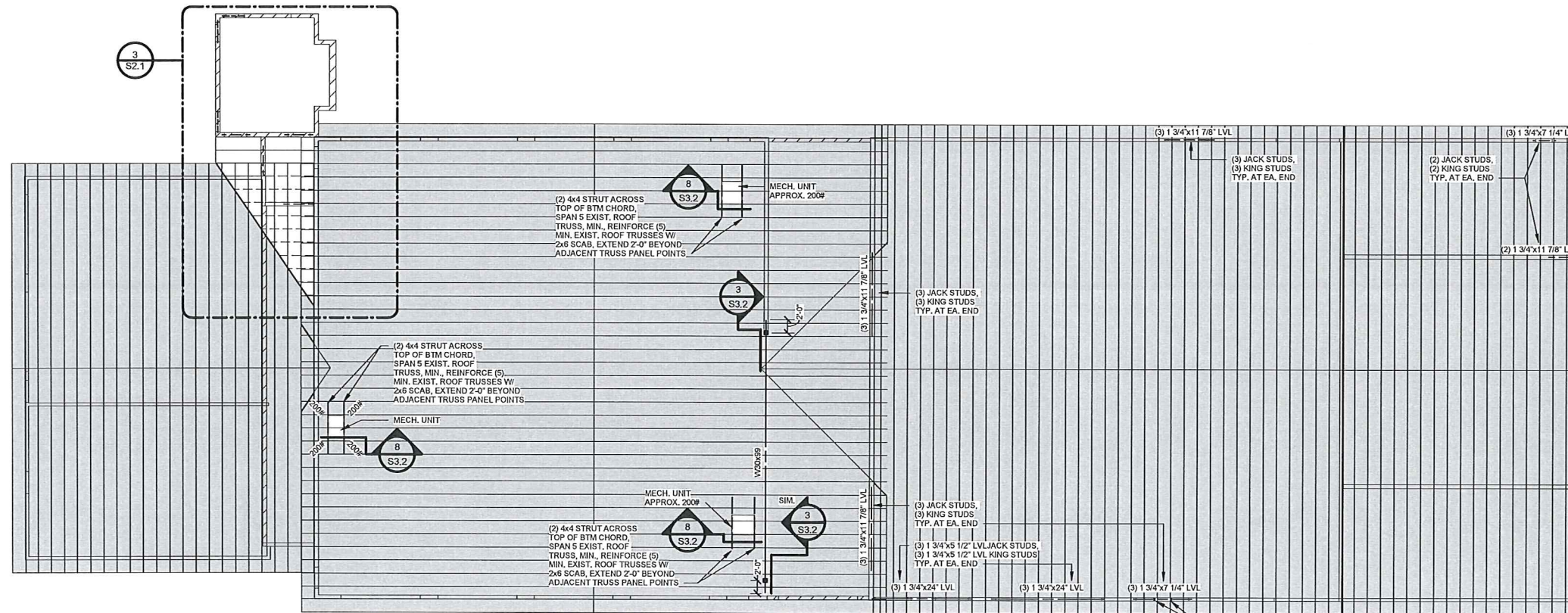
13.1

**CITY OF CROSSLAKE -
FIRE STATION
FLOOR FINISH PLANS**

PERMIT SET



1 OVERALL FOUNDATION PLAN
3/32" = 1'-0"



2 ROOF FRAMING PLAN
3/32" = 1'-0"



WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

DEREKA NAVRATI
5/15/2020 LCM-45022

DATE	REV#	REVISION DESCRIPTION

DATE: 5-15-2020
SCALE: AS NOTED
DRAWN BY: D.BERG
CHECKED BY: D.A.N.
JOB NUMBER: 2020-0130

PERMIT SET

FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

OVERALL FOUNDATION / FRAMING PLAN

SHEET NO.
S1.1
SHEET OF

STRUCTURAL NOTES

- I. DESIGN DATA:**
- A. BUILDING CODES**
- INTERNATIONAL BUILDING CODE - 2012
 - MINNESOTA BUILDING CODE - 2015
 - AMERICAN CONCRETE INSTITUTE 318-11
 - NCMA SPECIFICATION FOR THE DESIGN & CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION, 14th EDITION
 - CRSI MANUAL OF STANDARD PRACTICE
- B. DESIGN LOADS**
- | | | |
|--|---|---------|
| 1. WIND LOAD: | EXPOSURE C | 120 MPH |
| | DESIGN WIND SPEED, ULTIMATE | |
| | RISK CATEGORY IV | |
| 2. ROOF LOADS | | 60 PSF |
| a. GROUND SNOW LOAD | $I = 1.2$
$C_e = 1.0$ | |
| b. ROOF SNOW LOAD | 51 PSF FLAT ROOF
56 PSF SLOPED ROOF (+ UNBALANCED) | |
| c. DEAD LOAD | | 20 PSF |
| 3. FLOOR LIVE LOAD | | 100 PSF |
| FLOOR DEAD LOAD (SUPERIMPOSED) | | 20 PSF |
| 4. STAIRS, PUBLIC CORRIDORS, & LOBBIES LIVE LOAD | | 100 PSF |
| 5. SEISMIC ZONE 1 | | |
- C. SPECIAL INSPECTION**
- OWNER SHALL EMPLOY A SPECIAL INSPECTION AGENCY TO PROVIDE INSPECTION DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 1704 OF THE IBC. SPECIAL INSPECTOR TO PROVIDE FINAL SIGNED REPORT TO OWNER, BUILDING OFFICIAL, AND STRUCTURAL ENGINEER.
- THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION:
- SOILS: SOIL COMPACTION AND VERIFICATION OF BEARING CAPACITY.
 - STEEL: PERIODIC INSPECTION OF HIGH STRENGTH BOLTS AND WELDING.
 - MASONRY: PERIODIC INSPECTION PER LEVEL 1.
 - CONCRETE: CONCRETE AND REINFORCEMENT PLACEMENT, CONCRETE STRENGTH, SLUMP, AIR TEST.

II. SITE WORK:

A. SOILS

- DESIGN NET SOIL BEARING CAPACITY IS AS FOLLOWS:

a. SPREAD FOOTINGS	2,000 PSF
b. STRIP FOOTINGS	2,000 PSF
- CONTRACTOR TO HAVE BOTTOM OF EXCAVATION INSPECTED BY SOILS ENGINEER PRIOR TO CASTING FOOTINGS TO VERIFY SOIL BEARING CAPACITY.
- MINIMUM DEPTH FROM EXTERIOR GRADE TO BOTTOM OF BUILDING PERIMETER FOUNDATION SHALL BE 9'-0". ALL OPEN AIR FOUNDATIONS SHALL HAVE A MINIMUM OF 6'-0" OF FROST PROTECTION.
- BACKFILL EVENLY ON EACH SIDE OF WALLS IN 8' LIFTS TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY.
- FOOTINGS TO BEAR ON UNDISTURBED, UNFROZEN SOIL. FILL BELOW FOOTINGS SHALL BE PLACED IN 8' LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY.

III. CONCRETE:

A. CONCRETE MATERIAL PROPERTIES

CONCRETE PROPERTIES	FC PSI	SLUMP INCHES
a. FOOTINGS, WALLS	4,000 PSI	3" - 4"
b. INTERIOR SLAB ON GRADE	4,000 PSI	3" - 4"
c. EXTERIOR SLAB ON GRADE	4,000 PSI	3" - 4"

2. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED TO GIVE THE CONCRETE AN AIR CONTENT OF 5% - 6% BY VOLUME.

3. CONCRETE MIX DESIGNS AND SUPPORTIVE DATA MUST BE SUBMITTED FOR APPROVAL ACCORDING TO ACI 318-11, SECTION 5.3. SEE SPECIFICATIONS FOR MORE INFORMATION.

B. REINFORCING MATERIAL PROPERTIES

	FY KSI	ASTM
1. ALL BARS UNLESS NOTED	60	A615
2. WELDED WIRE FABRIC (SMOOTH)	65	A185

C. CAST IN PLACE CONCRETE

- ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED ACCORDING TO CRSI "MANUAL OF STANDARD PRACTICE". PROVIDE CORNER BARS AT ALL WALLS. MATCH SIZE AND SPACING OF HORIZONTAL BARS IN WALL.
- SLABS AND FOOTINGS TO BEAR ON COMPACTED, UNFROZEN SOIL.
- PROVIDE SAW CUT CONTROL JOINTS AT 10'-0" O.C. E.W. OR AS INDICATED ON PLAN SHEETS. CUT TO BE 3/16" WIDE AND 1/2" DEEP. CUT TO BE MADE WITHIN 24 HOURS AFTER POURING SLAB.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

	MINIMUM COVER IN.
a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	2
b. CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THROUGH #11 BARS	2
#5 BAR AND SMALLER	1 1/2
c. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS: PRIMARY REINFORCEMENT, TIES, STIRRUPS	3/4
BEAMS, COLUMNS:	1 1/2
- CONSTRUCTION JOINTS TO BE DOWELED OR KEVED. PROVIDE DETAIL TO ENGINEER FOR APPROVAL.

IV. MASONRY:

A. MATERIAL PROPERTIES

	STRENGTH (PSI)	ASTM
1. HOLLOW MASONRY UNITS	1900	C90-H1
2. HOLLOW UNIT MASONRY (ASSEMBLY)	1350	
3. GROUDED HOLLOW UNIT MASONRY (ASSEMBLY)	1500	
4. BRICK MASONRY (ASSEMBLY)	1400	C216-SW
5. MORTAR TYPE N (NON-LOAD BEARING BLOCK AND BRICK)	750	C270
6. MORTAR TYPE S (LOAD BEARING BLOCK)	1600	C270
7. GROUT	2000	C476
8. REINFORCING BARS	60,000	A615
9. COLD DRAWN STEEL WIRE	70,000	A82

- IV. MASONRY: (CONTINUED)**
- B. GENERAL MASONRY**
- DESIGN IS BASED ON INSPECTED VALUES AS PUBLISHED IN THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" (ACI 530-07/ASCE 5-07)
 - ALL HOLLOW UNIT BLOCK COMPRESSION TEST STRENGTHS REQUIRED TO ACHIEVE THE FM STATED ABOVE SHALL BE ACCORDING TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1-02/ASCE 6-02) BASED ON STRENGTHS BY THE UNIT STRENGTH METHOD SECTION 1.6.
 - MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'-0" UNLESS NOTED OTHERWISE.
 - PROVIDE STANDARD 90° HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SEE AND SPACING OF THE VERTICAL REINFORCING UNLESS NOTED OTHERWISE.
 - PROVIDE 9 GA. HORIZONTAL JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS.
 - REINFORCEMENT SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS FOR TENSION SPLICES AND 30 BAR DIAMETERS FOR COMPRESSION SPLICES. ALL SPLICES SHALL MEET TENSION REQUIREMENTS UNLESS NOTED OTHERWISE.
 - PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH TWO #5 BARS, OR AS NOTED. DISCONTINUE BARS AT CONTROL JOINTS, UNLESS NOTED OTHERWISE.
 - PROVIDE 8" CONCRETE LINTEL WITH TWO #4 BARS ABOVE DOORS AND WINDOWS UP TO 4'-0" WIDE; USE 16" BLOCK LINTEL WITH TWO #5 BARS TOP AND BOTTOM UP TO 8'-0" WIDE, OR PROVIDE LINTEL SIZE AND REINFORCEMENT AS NOTED ON THE DRAWINGS.
 - ALL NON-BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTION AT THE TOP OF WALL.
 - BRICK TIES SHALL BE A MINIMUM OF 3/16" DIAMETER, RECTANGULAR TYPE, ADJUSTABLE WALL TIES AS MANUFACTURED BY DUR-Q-WALL OR EQUAL. SPACE ONE TIE FOR EACH 2.00 SQUARE FEET OF WALL AREA. THE SPACING RECOMMENDATION IS 16" O.C. VERTICALLY AND 18" O.C. HORIZONTALLY.
 - STEEL LINTEL BEAMS TO HAVE 1/2"Ø x 6" HEADED STUDS WELDED TO TOP FLANGE OF BEAM. SPACING TO MATCH BLOCK REINFORCEMENT.

V. STEEL

A. MATERIAL STRENGTHS

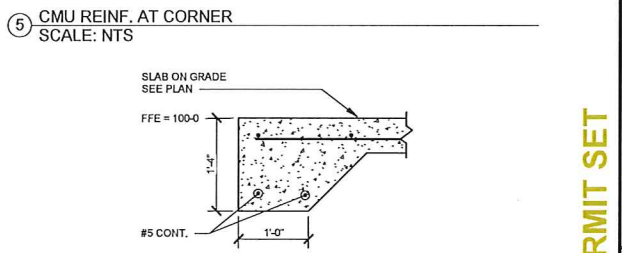
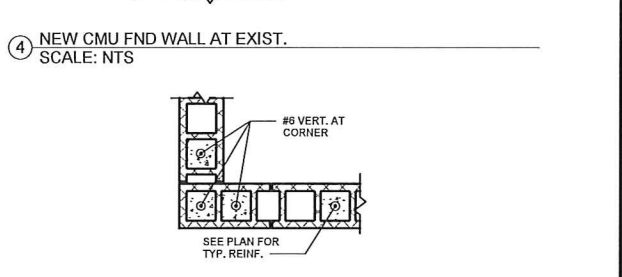
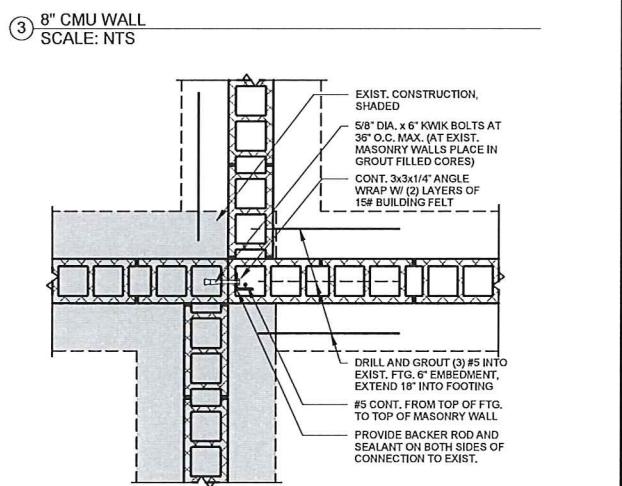
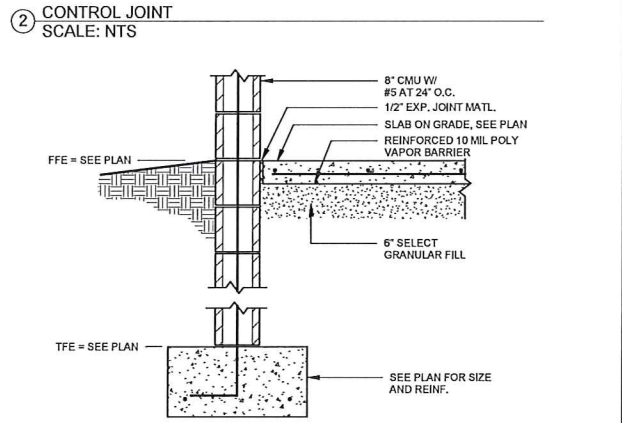
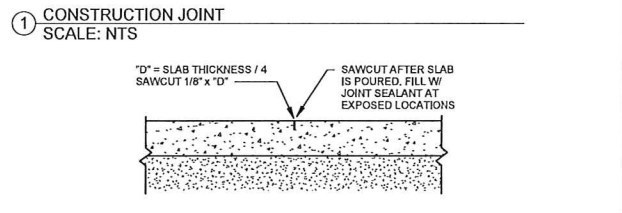
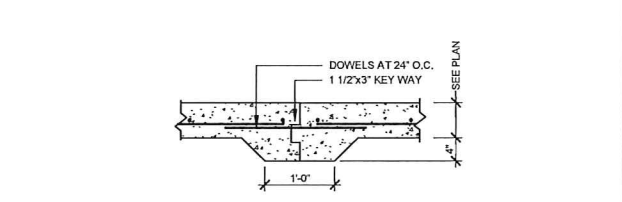
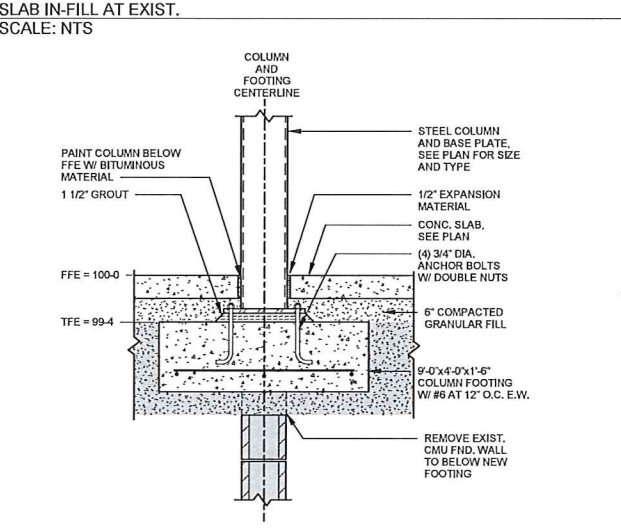
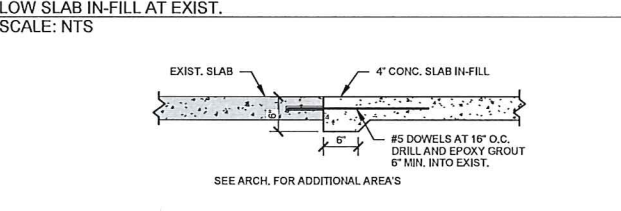
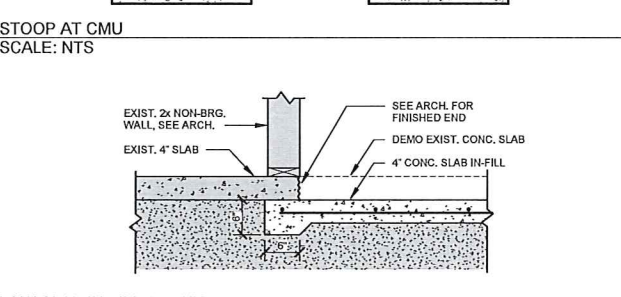
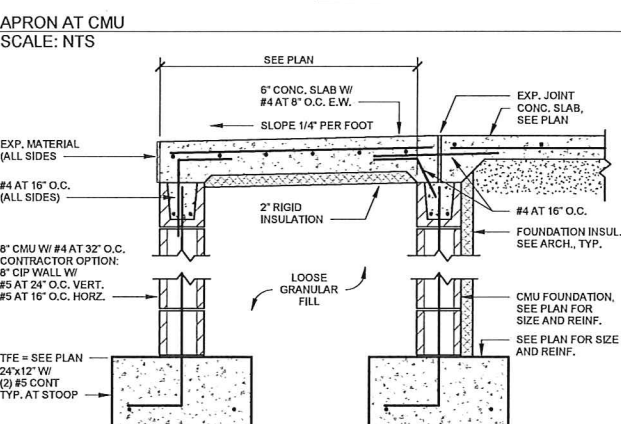
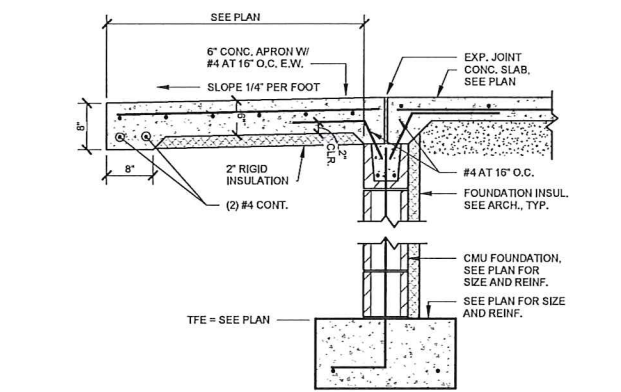
	FY, PSI	ASTM
1. STRUCTURAL SHAPES	50,000	A992
2. HIGH STRENGTH BOLTS, UNLESS NOTED	74,000	A325
3. ANCHOR BOLTS (TENSILE STRENGTH)	60,000	A307
4. WELDING ELECTRODES	E70XX	A233
5. DECK WELDING ELECTRODES	E60XX	A233
6. STRUCTURAL TUBES	46,000	A500, GRADE B
7. PLATES, ANGLES, ETC.	36,000	A36
8. HEADED STUDS	50,000	A108
9. EXPANSION BOLTS SHALL BE HILTI QUIK BOLT II OR EQUIVALENT.		

B. STRUCTURAL STEEL

- AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE" FOURTEENTH EDITION APPLY EXCEPT AS OTHERWISE NOTED.
- STRUCTURAL STEEL SUPPLIER IS RESPONSIBLE FOR AND SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT FOR THE DESIGN OF ALL CAP PLATES, BEARING PLATES, BASE PLATES, STIFFENERS, SPLICES, AND CONNECTIONS UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS.
- STRUCTURAL STEEL SUPPLIERS SHALL FURNISH BOLTS FOR O.S.H.A. CONNECTIONS.
- PROVIDE PROTECTIVE ASPHALTIC COATING OR EQUAL AROUND STRUCTURAL STEEL BELOW GRADE.
- CAMBERS SHOWN REFLECT THE IN-PLACE ERECTED, BEAM DEAD LOAD CONDITION. CAMBERS SHALL BE INCREASED ACCORDINGLY BY STRUCTURAL STEEL SUPPLIER TO ACCOUNT FOR LOSS OF CAMBER DUE TO CAMBERING PROCESS. SINGLE POINT CAMBERING WILL NOT BE ALLOWED.
- THIS STRUCTURE IS A NON-SELF SUPPORTING STEEL FRAME REQUIRING INTERACTION WITH OTHER ELEMENTS TO PROVIDE THE REQUIRED STABILITY. THE STEEL ERECTOR SHALL PROVIDE TEMPORARY SUPPORTS UNTIL FINAL STABILITY IS PROVIDED, AS A MINIMUM, TEMPORARY SUPPORTS SHALL BE PROVIDED AT EACH GRID IN BOTH DIRECTIONS.
- ALL BOLTED CONNECTIONS, UNLESS NOTED OTHERWISE, SHALL BE 3/4" A325 BEARING-TYPE WITH THREADS INCLUDED IN THE SHEAR PLANE AND AS SUCH NEED BE TIGHTENED IN PROPERLY ALIGNED HOLES TO A SNUG-TIGHT CONDITION AS DEFINED BY THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS.
- SHEAR CONNECTORS SHALL BE 3/4"Ø BY 3 1/2" LONG, HEADED STUDS OR EQUIVALENT PER AISC SPECIFICATION. STUDS SHALL BE FIELD WELDED TO THE TOP FLANGE OF THE BEAMS THROUGH THE STEEL DECK UNITS.
- ALL WELDING SHALL BE IN STRICT ACCORDANCE TO THE CURRENT SPECIFICATION OF THE A.W.S.

- VI. TIMBER:**
- A. STRUCTURAL LUMBER**
- DESIGN AND CONSTRUCTION SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
 - DIMENSION LUMBER SHALL FOLLOWING MIN. VALUES: $F_c = 900$ PSI, $F_v = 75$, $F_{c\perp} = 450$, $F_e = 1250$
 - CRITICAL DURATION OF LOAD FACTOR $\phi = 1.15$
 - ALL MEMBER SIZES GIVEN ON PLAN ARE NOMINAL DIMENSIONS. DRESSED SIZES ESTABLISHED IN AMERICAN SOFTWOOD LUMBERS STANDARDS PS 20-70 SHALL BE ACCEPTED AS MINIMUM NET SIZES CONFORMING TO SUCH NOMINAL SIZES.
 - WOOD LINTELS SHALL HAVE A FULL 3" LENGTH OF BEARING AT EACH END UNLESS NOTED OTHERWISE.
 - ALL BEAMS AND JOISTS NOT BEARING ON SUPPORTING MEMBERS SHALL BE FRAMED WITH PREFABRICATED METAL JOIST HANGERS OF REQUIRED CAPACITY.
 - WOOD JOISTS SHALL BEAR ON THE FULL WIDTH OF SUPPORTING MEMBERS UNLESS NOTED OTHERWISE.
 - NAILING SHALL BE IN ACCORDANCE WITH THE I.B.C. (AS A MINIMUM) OR AS REQUIRED BY THE DRAWINGS. SPACE NAILS TO AVOID SPLITTING. NAILS SHALL BE CLINCHED.
 - LAMINATED VENEER LUMBER (LVL) SHALL BE EQUIVALENT TO TRUSS JOIST CORPORATION $E = 2800$ PSI, $E = 2,000,000$ PSI.
 - ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EARTH SHALL BE PRESSURE TREATED.
 - PLYWOOD SHEATHING SHALL BE MINIMUM 5 PLYS AND RATED FOR LOADS AND SPANS AS INDICATED ON THE PLANS.

- VI. TIMBER: (CONTINUED)**
- B. TRUSSES**
- THE DESIGN AND FABRICATION OF ALL TRUSSES SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENERS BY NATIONAL FOREST PRODUCTS ASSOCIATION, AND DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES BY THE TRUSS PLATE INSTITUTE.
 - SEE PLAN FOR LOADS APPLIED TO TRUSSES. CRITICAL DURATION OF LOAD FACTOR $\phi = 1.15$. DEAD LOAD LISTED INCLUDES THE WEIGHT OF THE TRUSS.
 - TRUSS SUPPLIER TO FURNISH ALL BRIDGING, TRUSSES TO BEAM CONNECTIONS, HEADERS AND CHORD EXTENSIONS, ETC. AS NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
 - PLACEMENT OF MECHANICAL UNITS AND HANGERS SUPPORTED BY ROOF TRUSSES IS SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER.
 - THE TRUSS MANUFACTURER IS RESPONSIBLE FOR AND SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT FOR ALL ELEMENTS AND MEMBERS DESIGNED BY THE TRUSS MANUFACTURER.
 - THE DESIGN OF TRUSS MEMBERS AND ELEMENTS SHOWN ON THE DRAWINGS ARE FOR THE IN-PLACE COMPLETED BUILDING. ALL LOADING CRITERIA AND VERIFICATION OF DESIGN FOR LOADING SUCH AS HANDLING, TRANSPORTATION, AND ERECTION ARE THE SOLE RESPONSIBILITY OF THE TRUSS MANUFACTURER.
 - ALL TRUSSES SHALL BE FASTENED TO TOP OF WALL WITH SIMPSON HURRICANE TIES OR EQUAL.



WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

DATE: 5-15-2020
SCALE: AS NOTED
DRAWN BY: D.BERG
CHECKED BY: D.A.N.
JOB NUMBER: 2020-0130

DATE REV# REVISIONS DESCRIPTION BY

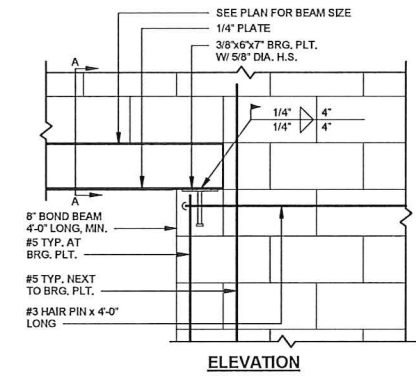
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FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

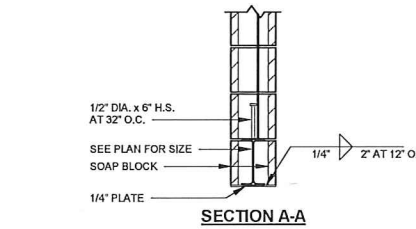
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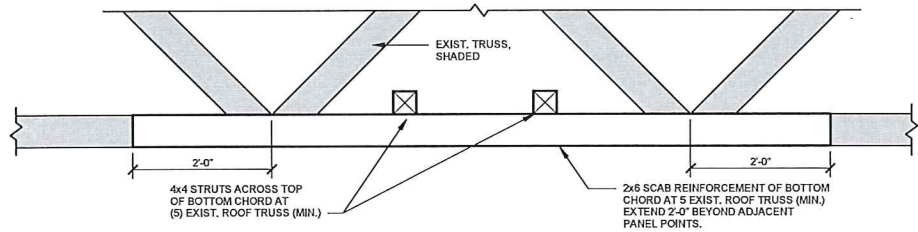


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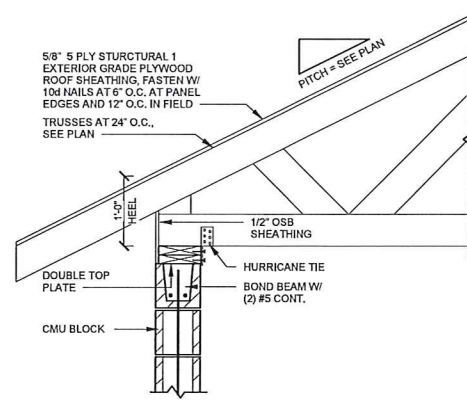


SECTION A-A

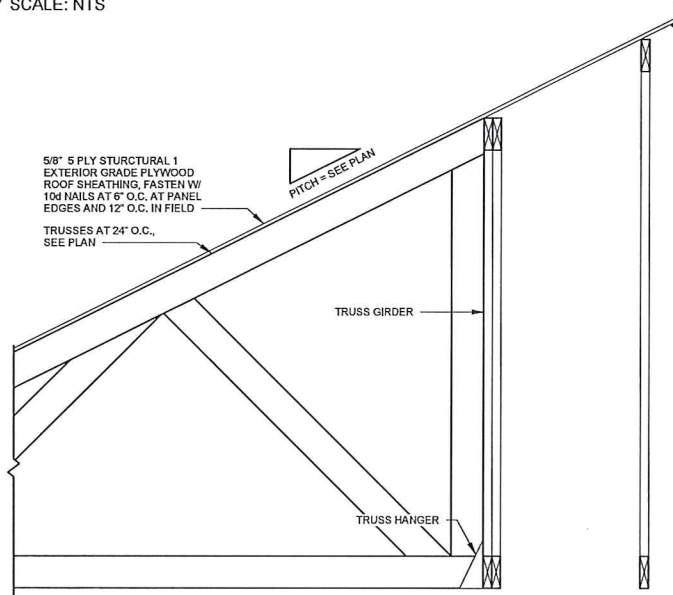
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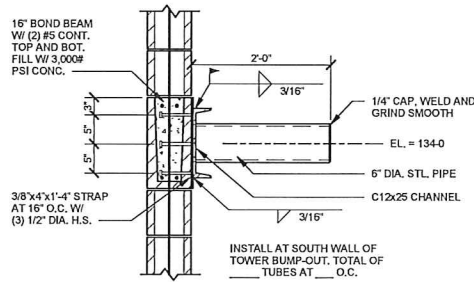
8 REINFORCEMENT AT EXIST. TRUSS
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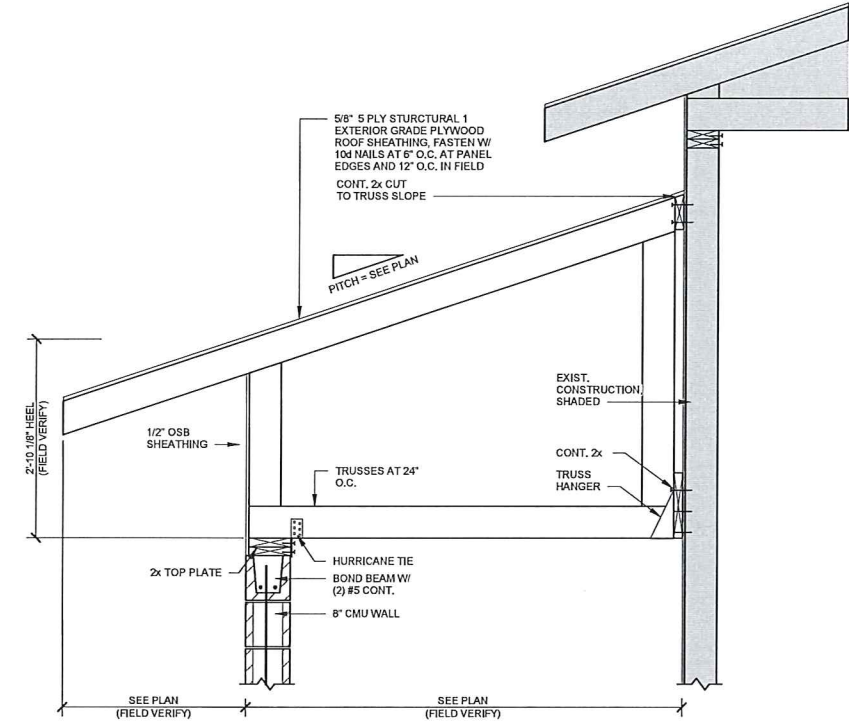
4 ROOF TRUSS TYPICAL FRAMING
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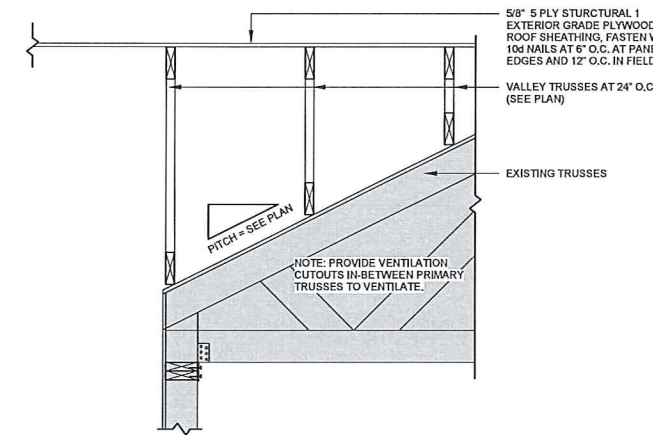
5 FRAMING AT TRUSS GIRDER
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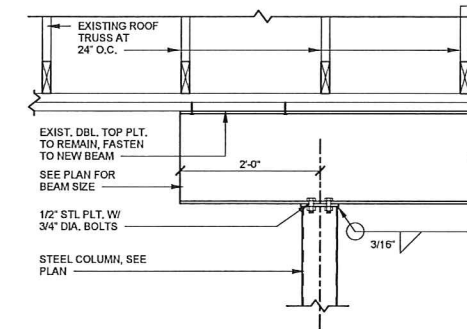
6 HOSE DRYING / TUBE ANCHORS
SCALE: NTS



1 ENTRY FRAMING AT TOWER
SCALE: NTS



2 FRAMING AT VALLEY TRUSS
SCALE: NTS



3 END COLUMN WOOD BEAM SUPPORT
SCALE: NTS

DATE	REV#	REVISIONS DESCRIPTION

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SCALE:	AS NOTED
DRAWN BY:	D.BERG
CHECKED BY:	D.A.N.
JOB NUMBER:	2020-10130

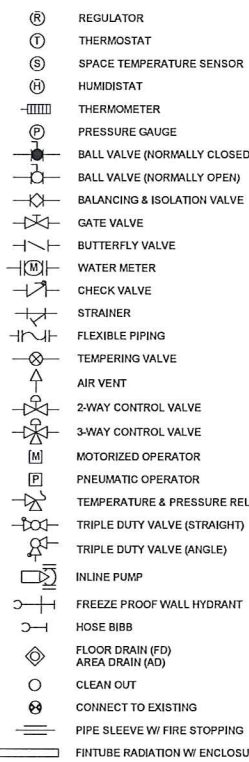
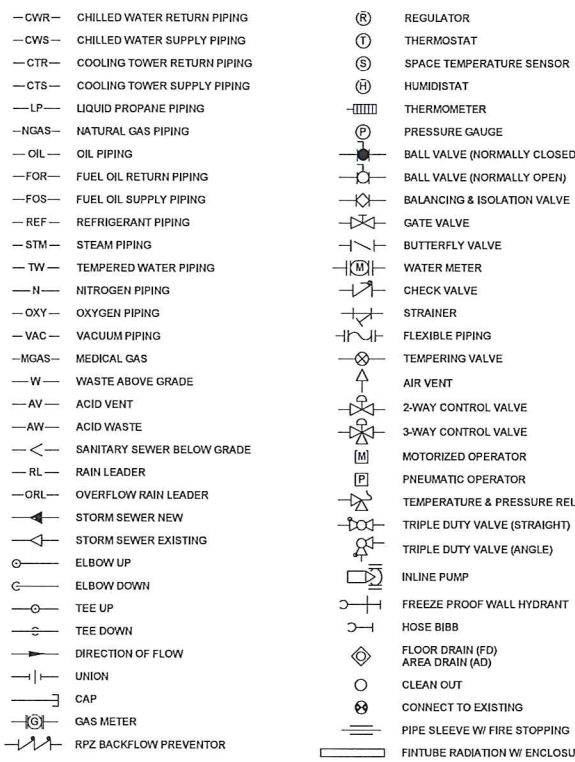
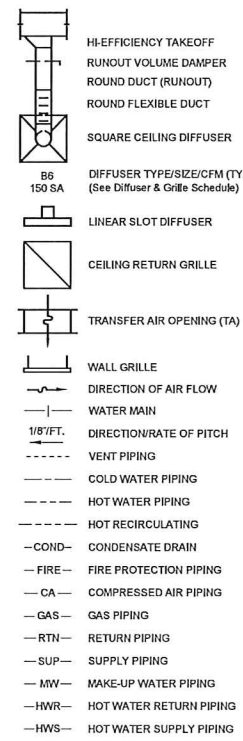
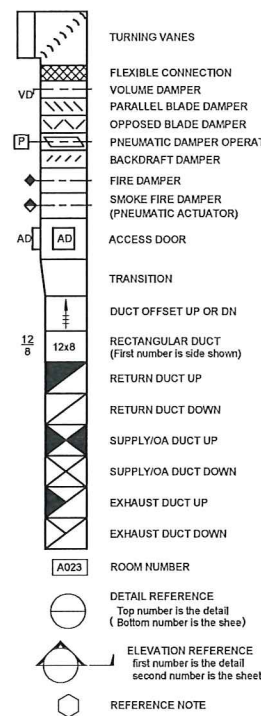
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FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

SHEET NO.
S3.2

SHEET OF

MECHANICAL LEGEND



ABBREVIATIONS

ABS	ABSORPTION CHILLER
AC	AIR COMPRESSOR (MECH.)
AC	ABOVE COUNTER (ELECT.)
A/C	AIR CONDITIONER
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GRADE
AGA	AMERICAN GAS ASSOCIATION
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
AS	AIR SEPARATOR
ATMOS.	ATMOSPHERIC
AWG	AMERICAN WIRE GAUGE
B	BOILER
BDD	BACKDRAFT DAMPER
BP	BOILER PUMP
BSP	BOILER SECONDARY PUMP
C	COLD WATER (MECH.)
C	CONDUIT (ELEC.)
CA	COMPRESSED AIR
C.A.	COMBUSTION AIR
CAP	CAPACITY
CB	CIRCUIT BREAKER
CC	COOLING COIL
CD	CONDENSATE DRAIN
CE	CEILING EXHAUST FAN
CF	CEILING FAN
CFM	CUBIC FEET PER MINUTE (AIR)
CH	CHILLER
CHW	CHILLED WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
CKT	CIRCUIT
CO	CLEANOUT
COMB	COMBINATION
COND	CONDENSATE (GRAVITY)
CONN	CONNECTION
CONV	PLATE HEAT EXCHANGER
CP	CIRCULATING PUMP
CP	CONDENSATE PUMP
CR	CONDENSATE RECEIVER
CT	CURRENT TRANSFORMER
CU	CONDENSING UNIT (MECH.)
CU	COPPER (ELEC.)
CUH	CABINET UNIT HEATER
CV	CONTROL VALVE
CW	COLD WATER
CW(CT)	CONDENSER WATER (COOLING TOWER)
CWP	CHILLED WATER PUMP

CYC	CYCLONE
D	DRYER (MECH.)
D	DELTA (ELECT.)
DB	DIRECT BURIED
DCH	DUST COLLECTION HOOD
DC	DRINKING FOUNTAIN
DF/C	DRINKING FOUNTAIN/CUSPIDOR
DH	DEHUMIDIFIER
DIA	DIAMETER
DN	DOWN
DT	DRY TYPE
DWV	DRAIN, WASTE, AND VENT
E	EMERGENCY
EA	EXHAUST AIR
EA*	SIZE AS PER MANUFACTURERS SPEC.
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EEW	EMERGENCY EYEWASH
EEWS	EMERGENCY EYEWASH SHOWER
EF	EXHAUST FAN
EHR	EXHAUST HOSE REEL
IN	INSULATED
ELECT.	ELECTRICAL
ELEV	ELEVATION
EMCS	ENERGY MANAGEMENT SYSTEM
ENCL	ENCLOSURE
EQUIP	EQUIPMENT
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
EWB	ENTERING WET BULB TEMPERATURE
EW	ELECTRIC WATER COOLER
EW	ENTERING WATER TEMPERATURE
EXH	EXHAUST HOOD
EXP	EXPANSION TANK
EXTG.	EXISTING
FA	FRESH AIR
FA	FIRE ALARM
FAN	FAN COIL
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FFM	FEET PER MINUTE
FRAC	FRACTIONAL
FS	FLOOR SINK
FT	FEET
FTR	FRITUBE RADIATION
FWH	FREEZE PROOF WALL HYDRANT
G	GAS (NATURAL)
GA	GAUGE
GAL	GALLON
GENL	GENERAL

GFI	GROUND FAULT INTERRUPTER
GHP	GROUND SOURCE HEAT PUMP
GIH	GRAVITY INTAKE HOOD
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
(H)	HANDICAPPED FIXTURE
HB	HOSE BIB
HC	HEATING COIL
H-O-A	HAND-OFF-AUTO
HP	HORSEPOWER
HR	HOT RECIRCULATING WATER
HS	HANDWASH SINK
HTG	HEATING
HU	HUMIDIFIER
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HYD	HYDRANT
I.A.Q.	INDOOR AIR QUALITY
IN	INCH
INSUL	INSULATED
INV	INVERT
IR	INFRARED HEATER
IRVP	INFRARED VACUUM PUMP
IRVP	INFRARED VACUUM PUMP
KS	KITCHEN SINK
KVA	KILOVOLT-AMPERE
KW	KILOWATT
L	LAVATORY
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LCP	LIGHTING CONTROL PANEL
LOC	LOCATION
LT	LAUNDRY TUB
LTG	LIGHTING
LWT	LEAVING WATER TEMPERATURE
MAN	MANIFOLD
MANUF	MANUFACTURER
MAX	MAXIMUM
MBH	THOUSAND BTU/HOUR
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MS	MOP SINK (MECH.)
MS	MOTION SENSOR (ELEC.)
MTD	MOUNTED
MV	MOTORIZED VALVE

MW	MAKEUP WATER
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELEC. MFR. ASSOC.
NEU	NEUTRAL
NIC	NOT IN CONTACT
NO	NORMALLY OPEN
NUM	NUMBER
OA	OUTSIDE AIR
OA*	SIZE AS PER MANUFACTURERS SPEC.
OB	OPPOSED BLADE DAMPER
OC	ON CENTER
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW RAIN LEADER
P	PUBLIC ADDRESS
PCP	PRIMARY CIRCULATION PUMP
PCR	PUMPED CONDENSATE RETURN
PCT	PERCENT
PH	PHASE
PLBG	PLUMBING
PNEU	PNEUMATIC
PNL	PANEL BOARD
PP	PRIMARY PUMP
PR	PAIR
PRV	POWER ROOF VENTILATOR
PS	PUMPED STORM DRAIN
PSI	POUNDS/SQUARE INCH
PSIG	POUNDS/SQUARE INCH (GAUGE)
PVC	POLYVINYL-CHLORIDE (CONDUIT OR PIPING)
PW	PRESSURE WASHER
RA	RETURN AIR
RA*	SIZE AS PER MANUFACTURERS SPEC.
RCGP	REMOTE CONTROL GRAPHICS PANEL
RCP	RECIRCULATING PUMP
RCP	REINFORCED CONCRETE PIPE (SITE PLAN)
RD	ROOF DRAIN
REF	REFRIGERANT
RF	RETURN FAN
RHC	REHEAT COIL
RHW	RETURN HOT WATER
RL	RAIN LEADER
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
S	SINK
SA	SUPPLY AIR
SA*	SIZE AS PER MANUFACTURERS SPEC.
SCFM	CFM, STANDARD CONDITIONS
SD	STORM DRAIN
SF	SUPPLY FAN

SF	SQUARE FOOT
SH	SHOWER
SHT	SHEET
SP	SUMP PUMP
SRC	SOURCE
SS	SCIENCE SINK
SS	SERVICE SINK
STM	STEAM
STOR	HOT WATER STORAGE TANK
STRUC	STRUCTURAL
SUP	SUPPLY PUMP
SURF	SURFACE
SWRB	SWITCHBOARD
TISH	TUB WITH SHOWER
TA	TRANSFER AIR
TCP	TEMPERATURE CONTROL PANEL
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
T & P	TEMPERATURE AND PRESSURE
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TV	TEMPERING VALVE
TWP	TEMPERED WATER
TRF	TRANSFORMER PANEL
TYP	TYPICAL
UF	UNDERGROUND FEEDER
UG	UNDERGROUND
UH	UNIT HEATER (HORIZONTAL)
UH-V	UNIT HEATER (VERTICAL)
UR	URINAL
USE	UNDERGROUND SERVICE ENTRANCE
V	VENT (MECH.)
V	VOLT (ELECT.)
VAV	VARIABLE AIR VOLUME
VCP	VENTILATION CONTROL PANEL
VF	VENTILATION FAN
VFD	VARIABLE FREQUENCY DRIVE
VT	VENT
VTR	VENT THROUGH ROOF
W	WASTE (MECH.)
W	WIRE OR WATTS (ELECT.)
WI	WITH
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WF	WASH FOUNTAIN
WH	WATER HEATER
WHD	WITHOUT
WPF	WEATHER PROOF
WPD	WATER PRESSURE DROP
WSH	WASHER
WTD	WATER TEMPERATURE DROP
XA	TRANSFORMER
XFMR	TRANSFORMER
YG	WYE GROUNDED

GENERAL NOTES:

- EXISTING AREAS ARE BASED ON CASUAL FIELD OBSERVATIONS AND EXISTING PLANS. CONTRACTOR SHALL BE PRESENT AT PRE-BID AND BRING UP ANY DISCREPANCIES PRIOR TO BIDDING.
- THIS CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS, AND APPURTENANCES, AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL AND PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY APPLICABLE CODES.
- THIS CONTRACTOR SHALL PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK, AND OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- INSTALL ALL MECHANICAL AND PLUMBING EQUIPMENT, MATERIALS, AND APPURTENANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, THE CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY AND THE AUTHORITY HAVING JURISDICTION.
- CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS, NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES NOTED BEFORE STARTING WORK.
- THE DRAWINGS ARE DIAGRAMMATIC IN NATURE, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, AND FIELD VERIFY DIMENSIONS NOT DETAILED. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS.
- COORDINATE THE WORK WITH THE WORK OF OTHER DIVISIONS. COORDINATE PIPING, DUCTWORK, DIFFUSERS, AND OTHER EQUIPMENT LAYOUTS WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE WITH THE LOCATIONS OF LIGHTS, CONDUITS, PIPING, ROOF DRAINS, STRUCTURAL COMPONENTS, ELECTRICAL EQUIPMENT, AND ANY OTHER ITEMS INSTALLED IN THE SPACES. RESOLVE ANY CONFLICTS BEFORE STARTING CONSTRUCTION.
- IN GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN AREAS WITH SUSPENDED CEILING, AND IN WALLS AND SHAFTS PROVIDED, UNLESS INDICATED OTHERWISE.
- PROVIDE DUCT AND PIPE RISES, DROPS, AND OFFSETS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. PROVIDE DUCTWORK, PIPING, FITTINGS, VALVES, OFFSETS, CONNECTIONS, AND ALL NECESSARY MATERIALS FOR A COMPLETE AND FUNCTIONING SYSTEM.
- HANG HORIZONTAL PIPING AND DUCTWORK FROM STRUCTURAL MEMBERS, CEILING JOISTS, AND THE UNDERSIDE OF THE ROOF STRUCTURE, UNLESS OTHERWISE INDICATED. INSTALL PIPING AND DUCTWORK AS HIGH AS POSSIBLE. RUN PIPING DOWN INSIDE WALLS, PARTITIONS, AND CHASES TO SERVE FIXTURES AND EQUIPMENT. INSTALL EXPOSED DUCTWORK AS HIGH AS POSSIBLE WHEN PASSING UNDER BEAMS AND ROOF JOISTS.
- CONTRACTORS SHALL BE RESPONSIBLE FOR PATCHING ANY FLOORS, WALLS, CEILING, OR ROOFING DAMAGED DURING THIS PROJECT. SEAL OPENINGS MADE THRU FLOORS, WALLS, CEILING, OR ROOF.
- ALL ROOF PATCHING SHALL BE BY THE APPROVED ROOFING CONTRACTOR. COORDINATE ALL ROOF CUTTING AND PATCHING WITH THE GENERAL CONTRACTOR.
- PRESSURE TEST NATURAL GAS PIPING SYSTEM BEFORE BURYING OR CONCEALING. TEST PIPING AT 1.5 TIMES THE MAXIMUM PROPOSED WORKING PRESSURE, BUT NOT LESS THAN 25-PSIG, FOR 30-MINUTES.

GENERAL MECHANICAL NOTES:

- PROVIDE ALL MECHANICAL SYSTEMS COMPLETE WITH ALL NECESSARY APPURTENANCES FOR COMPLETE AND OPERATING SYSTEMS.
- COORDINATE GRILLE, REGISTER, AND DIFFUSER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN. MAKE MINOR ADJUSTMENTS IN DIFFUSER AND DUCTWORK LOCATIONS AS REQUIRED.
- MECHANICAL CONTRACTOR SHALL FIELD COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL POWER REQUIREMENTS.
- MECHANICAL CONTRACTOR SHALL BALANCE AIR SYSTEMS TO THE AIR QUANTITIES INDICATED ON THE DRAWINGS. PROVIDE DUCT MOUNTED VOLUME DAMPERS FOR SUPPLY AIR SYSTEM BALANCING, USE OF TERMINAL DAMPERS IS NOT ACCEPTABLE EXCEPT WHERE REGISTERS ARE INDICATED.
- PROVIDE RETURN AIR DUCT SMOKE DETECTORS IN ACCORDANCE WITH LOCAL CODES. SMOKE DETECTORS SHALL BE PROVIDED BY MECHANICAL CONTRACTOR, AND WIRING BY ELECTRICAL CONTRACTOR. COORDINATE WITH FIRE PROTECTION CONTRACTOR.
- ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10' FROM ANY EXHAUST AIR OPENINGS OR PLUMBING VENT STACKS.
- CONTRACTOR MAY AT HIS OPTION INSTALL ROUND SPIRAL DUCTWORK OF EQUIVALENT CAPACITY IN LIEU OF RECTANGULAR DUCTWORK SHOWN, AS LONG AS THE CEILING HEIGHTS ARE NOT AFFECTED.
- INSTALL DUCTWORK AS HIGH AS POSSIBLE WHEN PASSING UNDER BEAMS AND JOISTS.
- PAINT ALL EXPOSED NATURAL GAS PIPING WITH TWO COATS OF OSHA YELLOW.
- HARD DUCTWORK SHALL BE UTILIZED FOR RUNOUTS TO DIFFUSERS IN OPEN CEILING AREAS.
- PROVIDE FACTORY STARTUP OF ALL ROOFTOP UNITS. ROOFTOP UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

WIDSETH

HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Adam Siemsen
 ADAM M. SIEMSEN
 5-15-2020 LIC# 52720

DATE	REV#	REVISION DESCRIPTION

DATE:	5-15-2020
SCALE:	AS NOTED
DRAWN BY:	JDO
CHECKED BY:	AMS
JOB NUMBER:	2020-1030

PERMIT SET
 FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN
 MECHANICAL LEGENDS AND ABBREVIATIONS

SHEET NO.
MO.0

PLUMBING SPECIFICATION:

- PLUMBING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT MINNESOTA STATE PLUMBING CODE AS AMENDED AND THESE PLANS. IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE LOCAL CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. THE CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST TO THE OWNER.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SUBMITTALS FOR EQUIPMENT.
- PLUMBING SYSTEM SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH MINNESOTA RULES OF THE CURRENT MINNESOTA STATE PLUMBING CODE.
- CONTRACTOR SHALL COORDINATE INSTALLATION WITH OTHER TRADES.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK.
- CONTRACTOR SHALL INCLUDE ALL COSTS FOR CUTTING AND PATCHING OF FLOORS, WALLS AND ROOFS REQUIRED FOR THE INSTALLATION OF THE PLUMBING SYSTEM.
- CONTRACTOR SHALL MAKE PROVISIONS FOR ENTRY OF EQUIPMENT INCLUDING BUILDING OPENINGS AND DO NECESSARY WORK TO RESTORE SITE AND BUILDING TO ORIGINAL CONDITION.
- APPROVED EQUALS: SPECIFIED EQUIPMENT CAN BE SUBSTITUTED IF THEY MEET BASIS OF DESIGN. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ADDED COSTS DUE TO SUBSTITUTION.

PIPE IDENTIFICATION

- PLASTIC TAPE PIPE MARKERS: FLEXIBLE VINYL FILM TAPE WITH PRESSURE SENSITIVE ADHESIVE BACKING AND PRINTED MARKINGS. MINIMUM INFORMATION SHALL INDICATED FLOW AND DIRECTION BY ARROWS AND IDENTIFICATION OF FLUID BEING CONVEYED.
- COLOR CODE AS FOLLOWS:
 - POTABLE WATER: GREEN WITH WHITE LETTERS
 - NON-POTABLE WATER: WHITE WITH GREEN LETTERS
 - FLAMMABLE FLUIDS: YELLOW WITH BLACK LETTERS
 - COMPRESSED AIR: BLUE WITH WHITE LETTERS

PIPING SAFETY COVERS

- PROVIDE PRODUCTS THAT COMPLY WITH AMERICANS WITH DISABILITIES ACT AND REQUIREMENTS OF APPLICABLE BUILDING CODES.
 - TRUEBRO LAV-GUARD 2 OR APPROVED EQUAL.

PIPING INSULATION

- GLASS FIBER
 - INSULATION: ASTM C547 AND ASTM C795; RIGID MOLDED, NONCOMBUSTIBLE.
 - K VALUE: ASTM C177, 0.24 AT 75°F.
 - MAXIMUM SERVICE TEMPERATURE: 850°F.
 - MAXIMUM MOISTURE ABSORPTION: 0.2 PERCENT BY VOLUME.
 - INSULATION: ASTM C547 AND ASTM C795; SEMI-RIGID, NONCOMBUSTIBLE, END GRAIN ADHERED TO JACKET.
 - K VALUE: ASTM C177, 0.24 AT 75°F.
 - MAXIMUM SERVICE TEMPERATURE: 650°F.
 - MAXIMUM MOISTURE ABSORPTION: 0.2 PERCENT BY VOLUME.
- VAPOR BARRIER JACKET: WHITE KRAFT PAPER WITH GLASS FIBER YARN, BONDED TO ALUMINIZED FILM, MOISTURE VAPOR TRANSMISSION WHEN TESTED IN ACCORDANCE WITH ASTM E969M OF 0.02 PERM-INCHES.
- VAPOR BARRIER LAP ADHESIVE: COMPATIBLE WITH INSULATION
- JACKETS FOR EXPOSED PIPING INSULATION 1/8 AFF AND BELOW
 - PVC PLASTIC: ONE PIECE MOLDED TYPE FITTING COVERS AND SHEET MATERIAL, OFF-WHITE COLOR.
 - MINIMUM SERVICE TEMPERATURE OF 0°F AND MAXIMUM OF 150°F.
 - MOISTURE VAPOR PERMEABILITY: 0.002 PERM INCH, MAXIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM E969M.
 - THICKNESS: 30 MIN.
 - CONNECTIONS: BRUSH ON WELDING ADHESIVE.
- INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND CURRENT MINNESOTA STATE PLUMBING CODE.
- PLUMBING SYSTEMS:
 - DOMESTIC HOT WATER SUPPLY:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL PIPE SIZES.
 - THICKNESS: 1 INCH.
 - DOMESTIC HOT WATER RECIRCULATION:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL SIZES.
 - THICKNESS: 1 INCH.
 - DOMESTIC COLD WATER SUPPLY:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL SIZES.
 - THICKNESS: 1 INCH
 - TEMPERED WATER:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL SIZES.
 - THICKNESS: 1 INCH
 - ROOF DRAINS AND RAIN LEADERS ABOVE GRADE:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL SIZES.
 - THICKNESS: 1 INCH
 - PLUMBING VENTS WITHIN 10 FEET OF THE EXTERIOR:
 - GLASS FIBER INSULATION:
 - PIPE SIZE RANGE: ALL SIZES.
 - THICKNESS: 1 INCH.

SANITARY SEWER PIPING, BELOW GRADE

- CAST IRON PIPE: CISPI 301, HUBLESS.
 - FITTINGS: CAST IRON
 - JOINTS: CISPI 310, NEOPRENE GASKET AND STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES.
- PVC PIPING: ASTM D 2665
 - FITTINGS: PVC
 - JOINTS: SOLVENT WELDED, WITH ASTM D2564 SOLVENT CEMENT.

SANITARY SEWER PIPING, ABOVE GRADE

- CAST IRON PIPE: CISPI 301, HUBLESS.
 - FITTINGS: CAST IRON
 - JOINTS: CISPI 310, NEOPRENE GASKET AND STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES.
- PVC PIPING: ASTM D 2665
 - FITTINGS: PVC
 - JOINTS: SOLVENT WELDED, WITH ASTM D2564 SOLVENT CEMENT.

WATER PIPING, BELOW GRADE

- POLYETHYLENE PIPE: ASTM D2239
 - FITTINGS: BRASS OR BRONZE
 - JOINTS: MECHANICAL WITH STAINLESS STEEL CLAMP.
- CROSS-LINKED POLYETHYLENE (PEX) PIPE: ASTM F876 OR ASTM F877.
 - PPI TR-4 PRESSURE DESIGN BASIS:
 - 100 PSIG AT MAXIMUM 180 DEGREES F.
 - JOINTS: MECHANICAL COMPRESSION FITTINGS.

WATER PIPING, ABOVE GRADE

- COPPER TUBING: ASTM B88 (ASTM B88M), TYPE K (A), DRAWN (H).
 - FITTINGS: ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT COPPER AND BRONZE.
 - JOINTS: ASTM B32, ALLOY 585 SOLDER.
 - MECHANICAL PRESS SEALED FITTINGS: DOUBLE PRESSED TYPE, NSF 61 AND NSF 372 APPROVED OR CERTIFIED, UTILIZING EPDM, NON TOXIC SYNTHETIC RUBBER SEALING ELEMENTS.
- CROSS-LINKED POLYETHYLENE (PEX) PIPE: ASTM F876 OR ASTM F877.
 - PPI TR-4 PRESSURE DESIGN BASIS:
 - 100 PSIG AT MAXIMUM 180 DEGREES F.
 - JOINTS: MECHANICAL COMPRESSION FITTINGS.

STORM WATER PIPING, BURIED BEYOND 5 FEET OF BUILDING

- CAST IRON PIPE: ASTM A74 EXTRA HEAVY WEIGHT.
 - FITTINGS: CAST IRON.
 - JOINT SEALS: ASTM C564 NEOPRENE GASKETS, OR LEAD AND OAKUM.

STORM WATER PIPING, BURIED WITHIN 5 FEET OF BUILDING

- CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT.
 - FITTINGS: CAST IRON.
 - JOINTS: NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES.
- PVC PIPE: ASTM D 2665.
 - FITTINGS: PVC.
 - JOINTS: SOLVENT WELDED, WITH ASTM D2564 SOLVENT CEMENT.

STORM WATER PIPING, ABOVE GRADE

- CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT.
 - FITTINGS: CAST IRON.
 - JOINTS: NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES.
- PVC PIPE: ASTM D 2665.
 - FITTINGS: PVC.
 - JOINTS: SOLVENT WELDED, WITH ASTM D2564 SOLVENT CEMENT

FLANGES, UNIONS, AND COUPLINGS

- UNIONS FOR PIPE SIZES 3 INCHES AND UNDER:
 - FERROUS PIPE: CLASS 150 MALLEABLE IRON THREADED UNIONS WITH GROUND FACES.
 - COPPER TUBE AND PIPE: CLASS 150 BRONZE UNIONS WITH SOLDERED JOINTS.
- FLANGES FOR PIPE SIZE OVER 1 INCH:
 - FERROUS PIPE: CLASS 150 MALLEABLE IRON THREADED OR FORGED STEEL SLIP-ON FLANGES; PREFORMED NEOPRENE GASKETS.
 - COPPER TUBE AND PIPE: CLASS 150 SLIP-ON BRONZE FLANGES; PREFORMED NEOPRENE GASKETS.
- MECHANICAL COUPLINGS FOR GROOVED AND SHOULDERED JOINTS: TWO OR MORE CURVED HOUSING SEGMENTS WITH CONTINUOUS KEY TO ENGAGE PIPE GROOVE, CIRCULAR C-PROFILE GASKET, AND BOLTS TO SECURE AND COMPRESS GASKET.
 - DIMENSIONS AND TESTING: IN ACCORDANCE WITH AWWA C606.
 - HOUSING MATERIAL: PROVIDE ASTM A47/A47M MALLEABLE IRON OR DUCTILE IRON, GALVANIZED.
 - BOLTS AND NUTS: HOT DIPPED GALVANIZED OR ZINC-ELECTROPLATED STEEL.
 - WHEN PIPE IS FIELD GROOVED, PROVIDE COUPLING MANUFACTURER'S GROOVING TOOLS.
- ELECTRIC CONNECTIONS: UNION WITH GALVANIZED OR PLATED STEEL THREADED END, COPPER SOLDER END, WATER IMPERVIOUS ISOLATION BARRIER

SLEEVES

- INSTALL APPLICABLE FIRE RATED SYSTEM PER UL LISTING AND ALL NFPA CODES AS REQUIRED.
- SLEEVES FOR PIPES THROUGH NON-FIRE RATED FLOORS: FORM WITH 18 GAUGE GALVANIZED STEEL.
- SLEEVES FOR PIPES THROUGH NON-FIRE RATED BEAMS, WALLS, FOOTINGS AND POTENTIALLY WET FLOORS: FORM WITH STEEL PIPE OR 18 GAUGE GALVANIZED STEEL.
- SET SLEEVES IN POSITION IN FORMWORK. PROVIDE REINFORCING AROUND SLEEVES.
- CAULK - SILICONE SEALANT.
- INSTALL CHROME PLATED STEEL ESCUTCHEONS AT FINISHED SURFACES.

PIPE HANGERS AND SUPPORTS

- PROVIDE HANGERS AND SUPPORTS THAT COMPLY WITH MSS SP-58.
 - IF TYPE OF HANGER OR SUPPORT FOR A PARTICULAR SITUATION IS NOT INDICATED, SELECT APPROPRIATE TYPE USING MSS SP-58 RECOMMENDATIONS.
 - OVERHEAD SUPPORTS: INDIVIDUAL STEEL ROD HANGERS ATTACHED TO STRUCTURE OR TO TRAPEZE HANGERS.
 - TRAPEZE HANGERS: WELDED STEEL CHANNEL FRAMES ATTACHED TO STRUCTURE.
 - VERTICAL PIPE SUPPORT: STEEL RISER CLAMP.
 - FLOOR SUPPORTS: CONCRETE PIER OR STEEL PEDESTAL WITH FLOOR FLANGE, FIXTURE ATTACHMENT.
- PIPE HANGER SPACING
 - COPPER PIPING:
 - PIPE SIZE: 1-1/2 INCHES AND SMALLER.
 - MAXIMUM HANGER SPACING: 6 FT.
 - HANGER ROD DIAMETER: 3/8 INCHES.
 - PIPE SIZE: 2 INCHES AND LARGER:
 - MAXIMUM HANGER SPACING: 10 FT.
 - HANGER ROD DIAMETER: 3/8 INCH.
- CAST IRON PIPING:
 - ALL SIZES:
 - MAXIMUM HANGER SPACING: 5 FT EXCEPT WHERE 10 FOOT LENGTHS ARE INSTALLED.
 - HANGER ROD DIAMETER: 3/8 INCH.
 - ABOVE GRADE HORIZONTAL CAST IRON PIPE MUST BE SUPPORTED AT EACH HORIZONTAL BRANCH CONNECTION AND AT EVERY OTHER JOINT UNLESS OVER 4 FEET, THEN AT EACH JOINT.
 - PLASTIC PIPING:
 - PIPE SIZE: 1 INCH AND SMALLER
 - MAXIMUM HANGER SPACING: 32 INCHES.
 - HANGER ROD DIAMETER: 3/8 INCH.
 - PIPE SIZE: 1-1/4 AND LARGER:
 - MAXIMUM HANGER SPACING: 48 INCHES.
 - HANGER ROD DIAMETER: 3/8 INCH.

BALL VALVES

- PLUMBING CONTRACTOR TO PROVIDE VALVES WHERE INDICATED ON PLANS AND AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. INSTALL VALVES FOR EACH FIXTURE AND ITEM OF EQUIPMENT. VALVES 2-1/2 INCHES AND SMALLER: MSS SP-110, CLASS 150, 400 PSI CWP, BRONZE, TWO PIECE BODY, CHROME PLATED BRASS BALL, FULL PORT, TEFLON SEATS AND STUFFING BOX RINGS, BLOW-OUT PROOF STEM, LEVER HANDLE, SOLDER ENDS.

PLUMBING FIXTURES & EQUIPMENT

- ROUGH-IN FIXTURE PIPING IN EXPOSED AREAS USING PIPE MARKERS MADE OF PERMANENT, DURABLE VINYL PLASTIC WITH PRESSURE SENSITIVE BACKING. BANDS SHALL BE APPLIED NEAR FIXTURES/EQUIPMENT, AND SPACED THAT THEY CAN EASILY BE SEEN. BANDS SHALL IDENTIFY BOTH SERVICE AND DIRECTION OF FLOW.

NATURAL GAS PIPING SPECIFICATION:

- THE FACILITY GAS PIPING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT INTERNATIONAL FUEL GAS CODE.
- THIS CONTRACTOR SHALL PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK, AND OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- COORDINATE ALL INSTALLATIONS WITH OTHER TRADES AND GAS UTILITIES COMPANY.
- SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT, PIPING, FITTINGS, AND REGULATORS AS REQUIRED.
- APPROVED EQUALS: SPECIFIED EQUIPMENT CAN BE SUBSTITUTED IF THEY MEET BASIS OF DESIGN. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ADDED COSTS DUE TO SUBSTITUTION.
- CONTRACTOR SHALL INCLUDE ANY ROOFING COSTS REQUIRED FOR THE INSTALLATION OF THE GAS PIPING SYSTEM.

SYSTEM DESCRIPTION

- PIPE, FITTINGS, AND VALVES MUST BE APPROVED FOR GAS PIPING APPLICATIONS.
- INSTALL FLANGES, UNIONS, OR COUPLINGS AT LOCATIONS REQUIRING SERVICE. USE UNIONS, FLANGES OR COUPLINGS DOWNSTREAM OF VALVES AND EQUIPMENT CONNECTIONS. DO NOT USE DIRECT WELDED OR THREADED CONNECTIONS TO VALVES OR EQUIPMENT.
- VALVES
 - USE BALL OR BUTTERFLY VALVES FOR SHUTOFF AND TO ISOLATE EQUIPMENT OR VERTICAL RISERS.
 - PROVIDE VALVES WHERE INDICATED ON PLANS AND AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION.
 - INSTALL VALVES FOR EACH ITEM OF EQUIPMENT.
 - VALVES: BALL TYPE, TWO PIECE BRONZE BODY, STAINLESS STEEL BALL, REINFORCED TEFLON SEATS AND SEALS, 600 LBS WOG, FULL PORT, SOLDER ENDS FOR WATER, SCREWED ENDS FOR GAS AND CONDENSATE.
- PIPING
 - STEEL PIPING - SCHEDULE 40, BLACK IRON OR GALVANIZED.
 - EXPOSED EXTERIOR PIPING - GALVANIZED OR PAINTED
 - COPPER PIPING ASTM B88, ACR ANNEALED
 - EQUIPMENT PIPING - CORRUGATED STAINLESS STEEL TUBING WITH POLYVINYL CHLORIDE (PVC) JACKET
- UNIONS AND FLANGES
 - CLASS 150 MALLEABLE IRON, THREADED.
 - COPPER: CLASS 150 BRONZE, THREADED OR BRAZED
- INSTALL GAS REGULATORS WHERE SHOWN ON PLANS AND DETAILS. REGULATORS TO HAVE AN ADJUSTABLE RANGE FROM 4" TO 5.5" W.C. WITH 2LB INLET PRESSURE, OR AS REQUIRED BY EQUIPMENT.
- EMERGENCY GAS SHUTOFF VALVE
 - VALVE FURNISHED AND INSTALLED BY PIPING CONTRACTOR
 - LOW VOLTAGE CONNECTION AND SWITCH BY ELECTRICAL CONTRACTOR.
 - SHALL HAVE MANUAL RESET
- ROOF PIPE STANDS - ONLY MANUFACTURED PIPE STANDS WILL BE ALLOWED.

NEW SERVICE CONNECTION

- INSTALL NEW GAS SERVICE COMPLETE WITH GAS METER AND REGULATORS. DISTRIBUTION PIPING SHALL HAVE INITIAL MINIMUM PRESSURE OF 2 PSI. FURNISH AND INSTALL REGULATORS ON EACH LINE SERVING GRAVITY TYPE APPLIANCES, SIZED IN ACCORDANCE WITH EQUIPMENT. COST ASSOCIATED WITH THE GAS SERVICE FROM GAS MAIN TO THE BUILDING SHALL BE INCLUDED IN THE PIPING BID.

EXISTING SERVICE CONNECTION

- CONNECT TO EXISTING GAS PIPING SYSTEM. VERIFY EXISTING SERVICE IS COMPLETE WITH GAS METER AND REGULATORS. DISTRIBUTION PIPING SHALL HAVE INITIAL MINIMUM PRESSURE OF 2 PSI. FURNISH AND INSTALL REGULATORS ON EACH LINE SERVING GRAVITY TYPE APPLIANCES, SIZED IN ACCORDANCE WITH EQUIPMENT. COST ASSOCIATED WITH THE GAS SERVICE FROM GAS MAIN TO THE BUILDING SHALL BE INCLUDED IN THE PIPING BID.

INSTALLATION

- INSTALL PIPING IN AN ORDERLY MANNER, PLUMB AND LEVEL.
- PIPING SHALL BE INSTALLED TO ALLOW FOR EXPANSION AND CONTRACTOR WITHOUT STRESSING PIPE, JOINTS, OR CONNECTING EQUIPMENT.
- INSTALL IDENTIFICATION ON PIPING WITH SELF ADHESIVE LABELS IN A NEAT AND ORDERLY FASHION.
- INSTALL SHUT-OFF VALVE, PRESSURE REGULATOR, DIRT LEG AND UNION AT EACH EQUIPMENT CONNECTION.
- INSTALL FLEXIBLE CONNECTIONS AS REQUIRED.

TESTING

- CONTRACTOR TO PROVIDE DOCUMENTATION OF PRESSURE TESTING AND ALL REQUIRED INSPECTIONS.
- PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54 AND IFGC.

PIPE IDENTIFICATION

- IDENTIFY ALL PIPING IN EXPOSED AREAS USING PIPE MARKERS MADE OF PERMANENT, DURABLE VINYL PLASTIC WITH PRESSURE SENSITIVE BACKING. BANDS SHALL BE APPLIED NEAR FIXTURES/EQUIPMENT, AND SPACED THAT THEY CAN EASILY BE SEEN. BANDS SHALL IDENTIFY BOTH SERVICE AND DIRECTION OF FLOW.

WARRANTY

- CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PRIOR OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. CONTRACTOR WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

HVAC SPECIFICATION:

- THIS CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS, AND APPURTENANCES, AND PERFORM ALL LABOR REQUIRED TO INSTALL A COMPLETE AND OPERABLE MECHANICAL SYSTEM AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY APPLICABLE CODES.
- THIS CONTRACTOR SHALL PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK, AND OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- INSTALL MECHANICAL EQUIPMENT, MATERIALS, AND APPURTENANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, THE CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY AND THE AUTHORITY HAVING JURISDICTION.
- MECHANICAL CONTRACTOR SHALL BALANCE AIR SYSTEMS TO THE AIR QUANTITIES INDICATED ON THE DRAWINGS. PROVIDE DUCT MOUNTED VOLUME DAMPERS FOR SUPPLY AIR SYSTEM BALANCING, USE OF TERMINAL DAMPERS IS NOT ACCEPTABLE EXCEPT WHERE REGISTERS ARE INDICATED.
- INSTALL SMOKE, FIRE, OR COMBINATION FIRE/SMOKE DAMPERS, IF REQUIRED, PER CURRENT CODES.
- COORDINATE THE LINE VOLTAGE WIRING REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR AND INSTALL PER IN ACCORDANCE WITH NEC CODE.
- APPROVED EQUALS: SPECIFIED EQUIPMENT CAN BE SUBSTITUTED IF THEY MEET BASIS OF DESIGN. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ADDED COSTS DUE TO SUBSTITUTION.

HVAC EQUIPMENT

- SEE SCHEDULES FOR SELECTIONS.
- INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.

HVAC DUCTS

- REGULATORY REQUIREMENTS: CONSTRUCT DUCTWORK TO COMPLY WITH SMACNA AND NFPA 90A STANDARDS.
- DUCT MATERIALS: HOT-DIPPED GALVANIZED STEEL SHEET, ASTM A653/A653M FS TYPE B, WITH G60Z/180 COATING.
- SUPPLY, EXHAUST, RETURN AND TRANSFER AIR DUCTS: 2 INCH W.G. PRESSURE CLASS.
- FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA (DCS) AND AS INDICATED.
- PROVIDE DUCT MATERIAL, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED.

VOLUME CONTROL DAMPERS

- FABRICATE IN ACCORDANCE WITH SMACNA (DCS) AND AS INDICATED.
- SINGLE BLADE DAMPERS:
 - FABRICATE FOR DUCT SIZES UP TO 6 BY 30 INCH.
 - BLADE: 24 GAUGE, 0.0239 INCH, MINIMUM.

SUPPLY, EXHAUST, RETURN AND TRANSFER GRILLES

- MANUFACTURERS:
 - CARNES, A DIVISION OF CARNES COMPANY INC.
 - HART & COOLEY, INC.
 - KRUEGER-HVAC.
 - METALAIR, A BRAND OF METAL INDUSTRIES INC.
 - PRICE INDUSTRIES.
 - TITUS, A BRAND OF AIR DISTRIBUTION TECHNOLOGIES.
 - TUTTLE AND BAILEY.
- SEE SCHEDULES FOR SELECTIONS.

- DUCT INSULATION: DUCTWORK INSULATION SHALL COMPLY WITH MN ENERGY CODE REQUIREMENTS FOR R-VALUE, THICKNESS AND A K-VALUE OF 0.36 OR HIGHER @ 75 DEGREES. ALL INSULATION SHALL HAVE VAPOR BARRIER, AND VAPOR BARRIER TAPED JOINTS.
 - SUPPLY AIR DUCTWORK IN CONCEALED SPACES TO BE INSULATED WITH FIBERGLASS WRAP, R-3.3 WITH VAPOR BARRIER.
 - OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED WITH FIBERGLASS WRAP, R-3.3 WITH VAPOR BARRIER.
 - EXHAUST DUCT TO HAVE FIBERGLASS WRAP, R-3.3 WITH VAPOR BARRIER.
 - DUCTWORK IN ATTIC SPACE TO HAVE R-8 RATED DUCT WRAP.
 - DUCTS WITHIN THE SPACE THEY SERVE - NO INSULATION REQUIRED.

EXAMINATION

- VERIFY THAT SUBSTRATES ARE READY FOR INSTALLATION OF UNITS AND OPENINGS ARE AS INDICATED ON SHOP DRAWINGS.
- VERIFY THAT PROPER POWER SUPPLY IS AVAILABLE AND IN CORRECT LOCATION.

INSTALLATION

- INSTALL SUPPORT, AND SEAL DUCTS AND EQUIPMENT IN ACCORDANCE WITH NFPA 90A, NFPA 90B, AND SMACNA (DCS).
- LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES.
- INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION.
- INSTALL GRILLES, REGISTERS, AND DIFFUSERS TO DUCTWORK WITH AIR TIGHT CONNECTIONS.
- PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFF TO EXHAUST GRILLES. INSTALL MINIMUM 2 DUCT WIDTHS FROM DUCT TAKE-OFF.

WIDSETH

I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Adam Senets
ADAM SENETS 5-15-2020 LIC# 57270

DATE	REV#	REVISIONS DESCRIPTION

DATE: 5-15-2020
SCALE: AS NOTED
DRAWN BY: JDO
CHECKED BY: AMS
JOB NUMBER: 2020-10130

PERMIT SET

FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

SHEET NO.
MO.1

SPECIFICATIONS

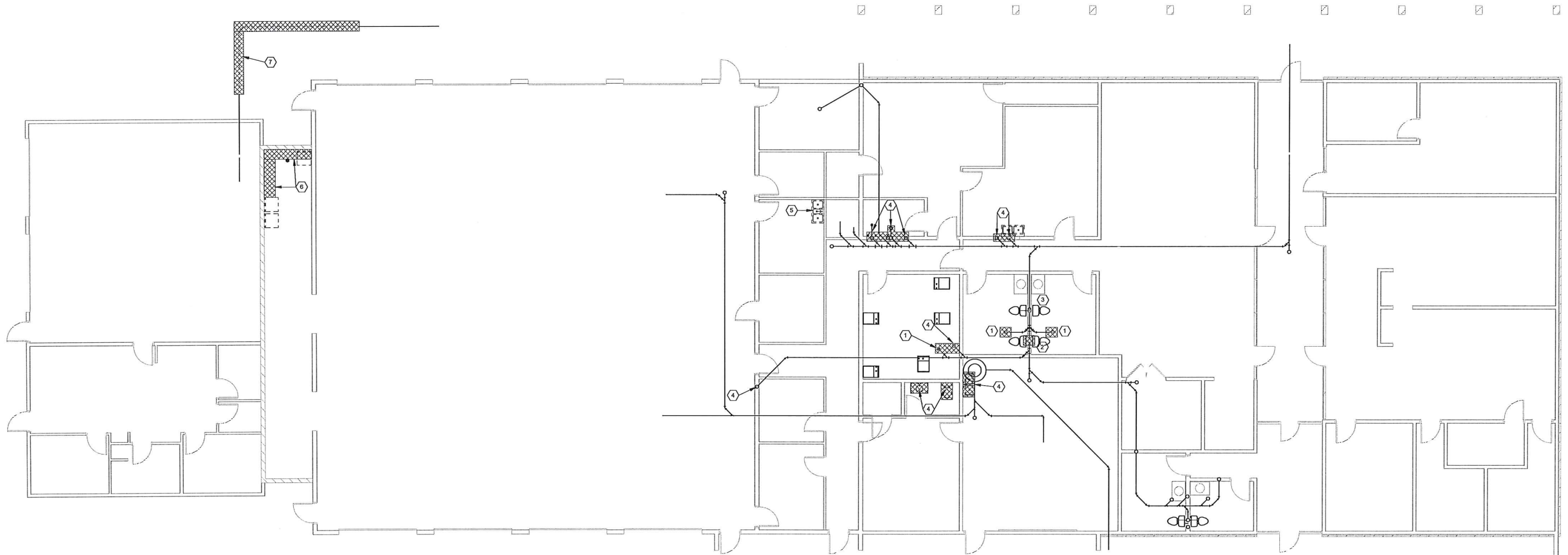
PIPING LEGEND

-----	EXISTING PIPING TO BE REMOVED
-----	EXISTING PIPING TO REMAIN
-----	NEW PIPING

(LINE TYPE TO VARY DEPENDING ON PIPE TYPE)

- DEMOLITION NOTES:**
1. DEMO FLOOR DRAIN, CAP BELOW GRADE
 2. DEMO WATER CLOSETS, PIPING TO BE REUSED
 3. DEMO URINAL, WATER PIPING AND MINIMUM 2" VENT TO BE REUSED FOR NEW WATER CLOSET
 4. DEMO PLUMBING FIXTURE, CAP WASTE BELOW GRADE OR IN WALL
 5. THREE COMPARTMENT SINK TO BE RELOCATED, CAP WASTE BELOW GRADE OR IN WALL
 6. DEMO STANDPIPE, VENT AND WATER LINES, CAP AT MAINS.
 7. DEMO WASTE PIPE, CONTRACTOR TO VERIFY EXISTING INVERT

- REFERENCE NOTES:**
- A. COORDINATE FLOOR CUTTING WITH ARCHITECT



1 BELOW GRADE PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

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Adam Siemers
ADAM M SIEMERS
5-15-2020 LIC# 52730

DATE	REV#	REVISIONS DESCRIPTION

DATE: 5-15-2020
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JOB NUMBER: 2020-1030

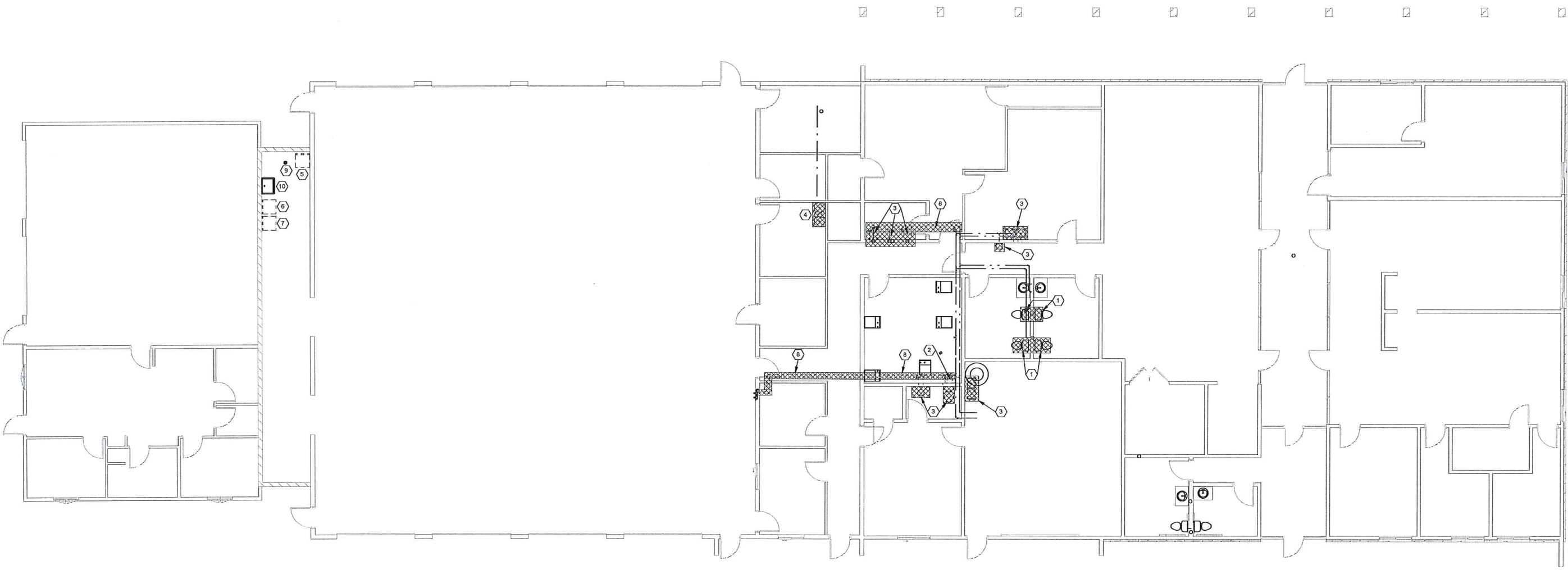
PERMIT SET
FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN
BELOW GRADE PLUMBING DEMOLITION PLAN

SHEET NO.
MD1.0

PIPING LEGEND	
	EXISTING PIPING TO BE REMOVED
	EXISTING PIPING TO REMAIN
	NEW PIPING
(LINE TYPE TO VARY DEPENDING ON PIPE TYPE)	

DEMOLITION NOTES:

1. DEMO HVAC SYSTEM, FIVE FURNACES, CONDENSING UNITS, DUCTWORK, GRDS, AND APPURTENANCES. CAP AND MODIFY GAS PIPING AS NEEDED FOR NEW FURNACE LOCATIONS.
2. DEMO HANGING UNIT HEATERS IN FIRE HALL GARAGE.
3. DEMO PROP EXHAUST FANS AND DUCTWORK IN FIRE HALL GARAGE
4. DEMO RESTROOM EXHAUST FANS AND DUCTWORK



1 FIRST LEVEL PLUMBING DEMOLITION PLAN
1/8" = 1'-0"



BY: I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Adam Semers
ADAM M SEMERS 5-15-2020 LIC# 52730

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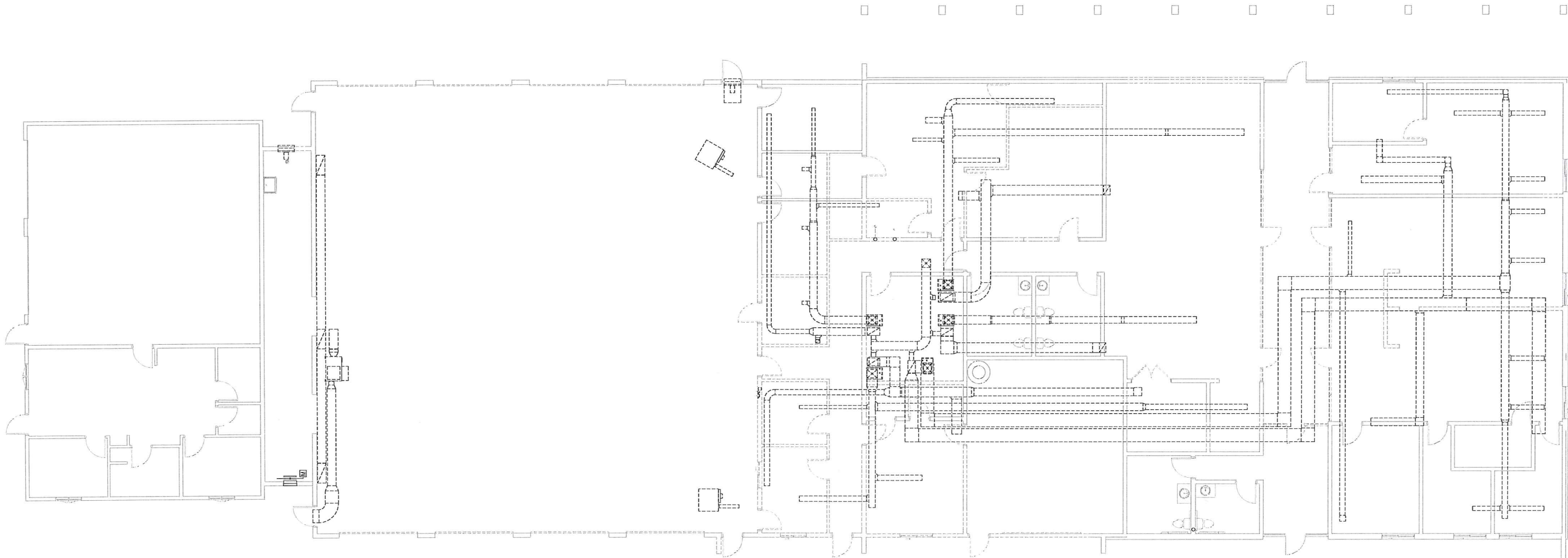
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FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

SHEET NO.
MD1.1

FIRST LEVEL PLUMBING DEMOLITION PLAN



DEMOLITION NOTES:

1. DEMO HVAC SYSTEM, FIVE FURNACES, CONDENSING UNITS, DUCTWORK, GRD'S, AND APPURTENANCES. CAP AND MODIFY GAS PIPING AS NEEDED FOR NEW FURNACE LOCATIONS.
2. DEMO HANGING UNIT HEATERS IN FIRE HALL GARAGE.
3. DEMO PROP EXHAUST FANS AND DUCTWORK IN FIRE HALL GARAGE
4. DEMO RESTROOM EXHAUST FANS AND DUCTWORK

1 FIRST LEVEL HVAC DEMOLITION PLAN
1/8" = 1'-0"

WIDSETH

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Adam Semers
ADAM M. SEMERS 5-15-2020 LIC# 57750

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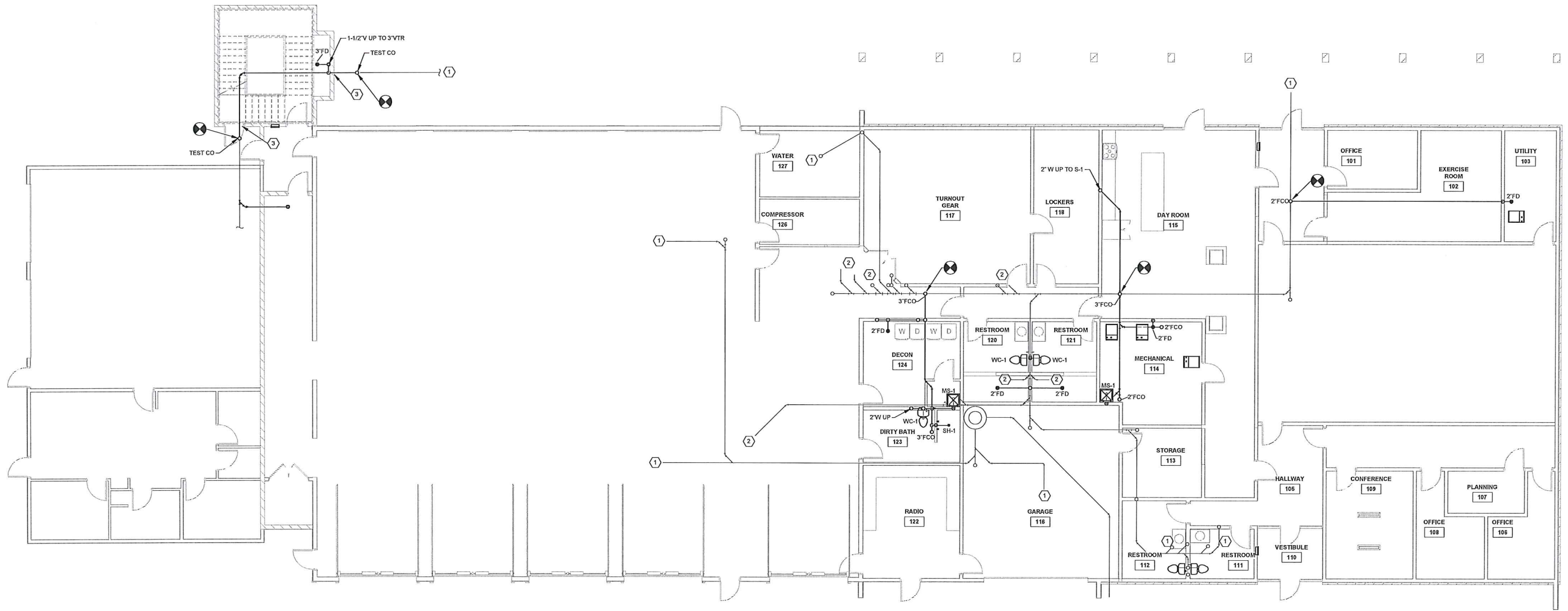
DATE: 5-15-2020
SCALE: AS NOTED
DRAWN BY: AMS
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JOB NUMBER: 2020-10130

PERMIT SET
FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN
FIRST LEVEL HVAC DEMOLITION PLAN

SHEET NO.
MD1.2

REFERENCE NOTES:

1. EXISTING TO REMAIN
2. CAPPED WASTE BELOW GRADE
3. VERIFY LOCATION, SLEEVE FOOTING AT PENETRATION



1 BELOW GRADE PLUMBING PLAN
1/8" = 1'-0"



EVERY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Adam Jensen
 ADAM M. JENSEN LICH: 57730 5-15-2020

DATE	REV#	REVISIONS DESCRIPTION

DATE: 5-15-2020
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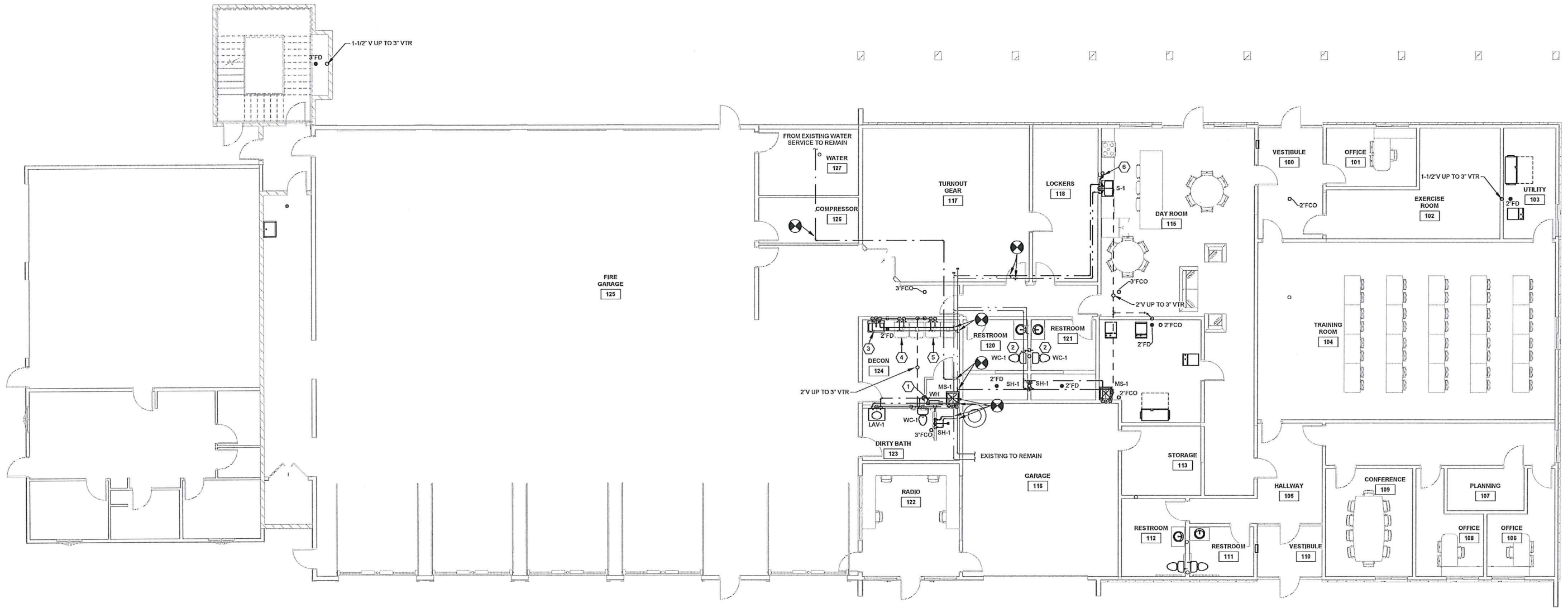
PERMIT SET

FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN
 BELOW GRADE PLUMBING PLAN

SHEET NO.
 M1.0

REFERENCE NOTES:

1. RELOCATED WATER HEATER, MODIFY/EXTEND PIPING AS REQUIRED
2. MODIFY/EXTEND PIPING AS REQUIRED FOR NEW PLUMBING FIXTURE
3. RELOCATED THREE COMPARTMENT SINK
4. RELOCATED WASHER
5. RELOCATED UNIMAC (WASHER)
6. COFFEE MAKER CONNECTION WITH CODE APPROVED BACKFLOW PREVENTER



1 FIRST LEVEL PLUMBING PLAN
1/8" = 1'-0"



BY: I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Adam Siemers
ADAM M SIEMERS LIC# 52790

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DATE: 5-15-2020
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JOB NUMBER: 2020-10130

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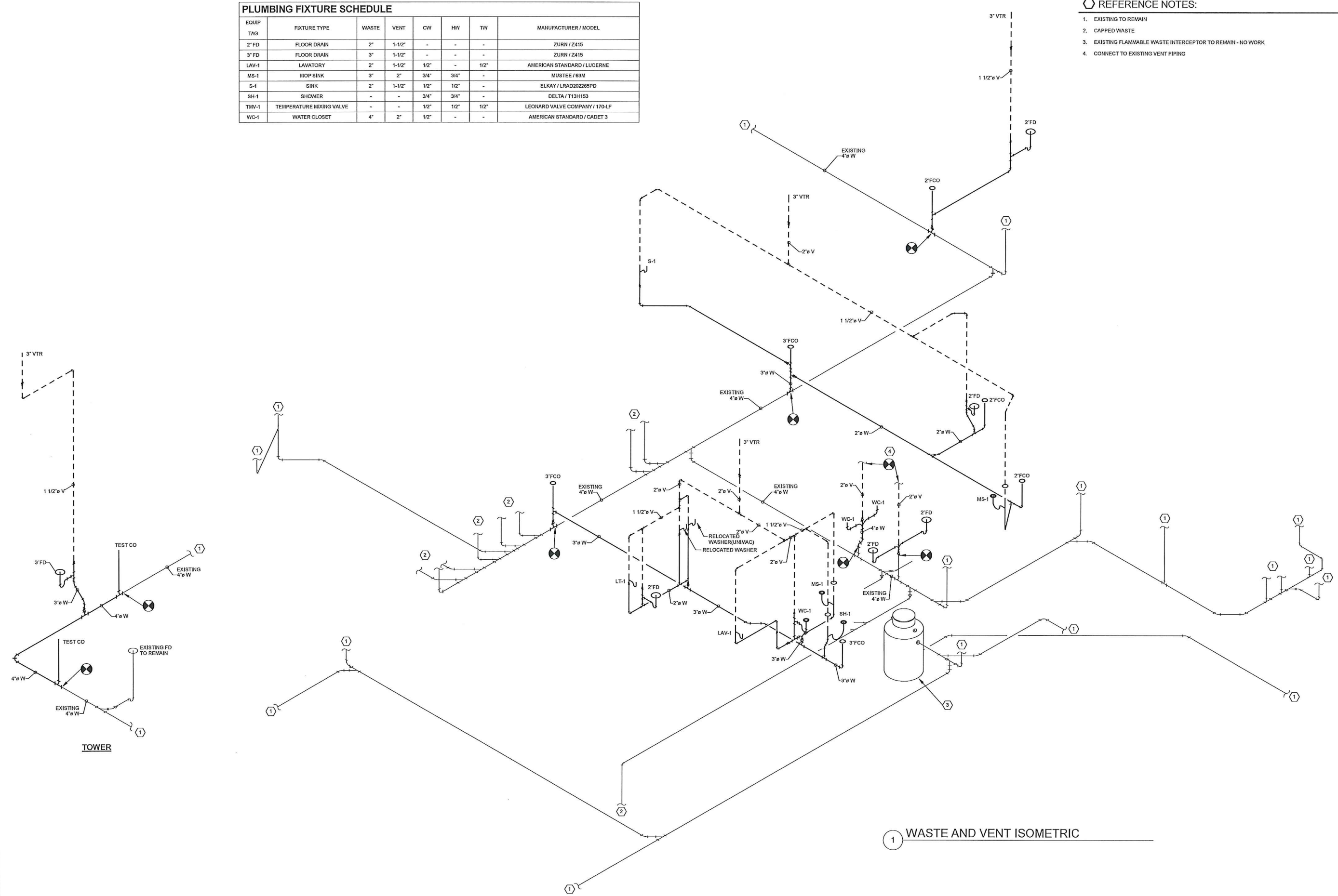
FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN
FIRST LEVEL PLUMBING PLAN

SHEET NO.
M1.1

PLUMBING FIXTURE SCHEDULE							
EQUIP TAG	FIXTURE TYPE	WASTE	VENT	CW	HW	TW	MANUFACTURER / MODEL
2" FD	FLOOR DRAIN	2"	1-1/2"	-	-	-	ZURN / Z415
3" FD	FLOOR DRAIN	3"	1-1/2"	-	-	-	ZURN / Z415
LAV-1	LAVATORY	2"	1-1/2"	1/2"	-	1/2"	AMERICAN STANDARD / LUCERNE
MS-1	MOP SINK	3"	2"	3/4"	3/4"	-	MUSTEE / 63M
S-1	SINK	2"	1-1/2"	1/2"	1/2"	-	ELKAY / LRAD202265PD
SH-1	SHOWER	-	-	3/4"	3/4"	-	DELTA / T13H153
TMV-1	TEMPERATURE MIXING VALVE	-	-	1/2"	1/2"	1/2"	LEONARD VALVE COMPANY / 170-LF
WC-1	WATER CLOSET	4"	2"	1/2"	-	-	AMERICAN STANDARD / CADET 3

REFERENCE NOTES:

- EXISTING TO REMAIN
- CAPPED WASTE
- EXISTING FLAMMABLE WASTE INTERCEPTOR TO REMAIN - NO WORK
- CONNECT TO EXISTING VENT PIPING



1 WASTE AND VENT ISOMETRIC

WIDSETH

PLUMBING ISOMETRICS
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Adam Siemers
 ADAM M SIEMERS 5-15-2020 LIC# 57290

DATE	REV#	REVISIONS DESCRIPTION

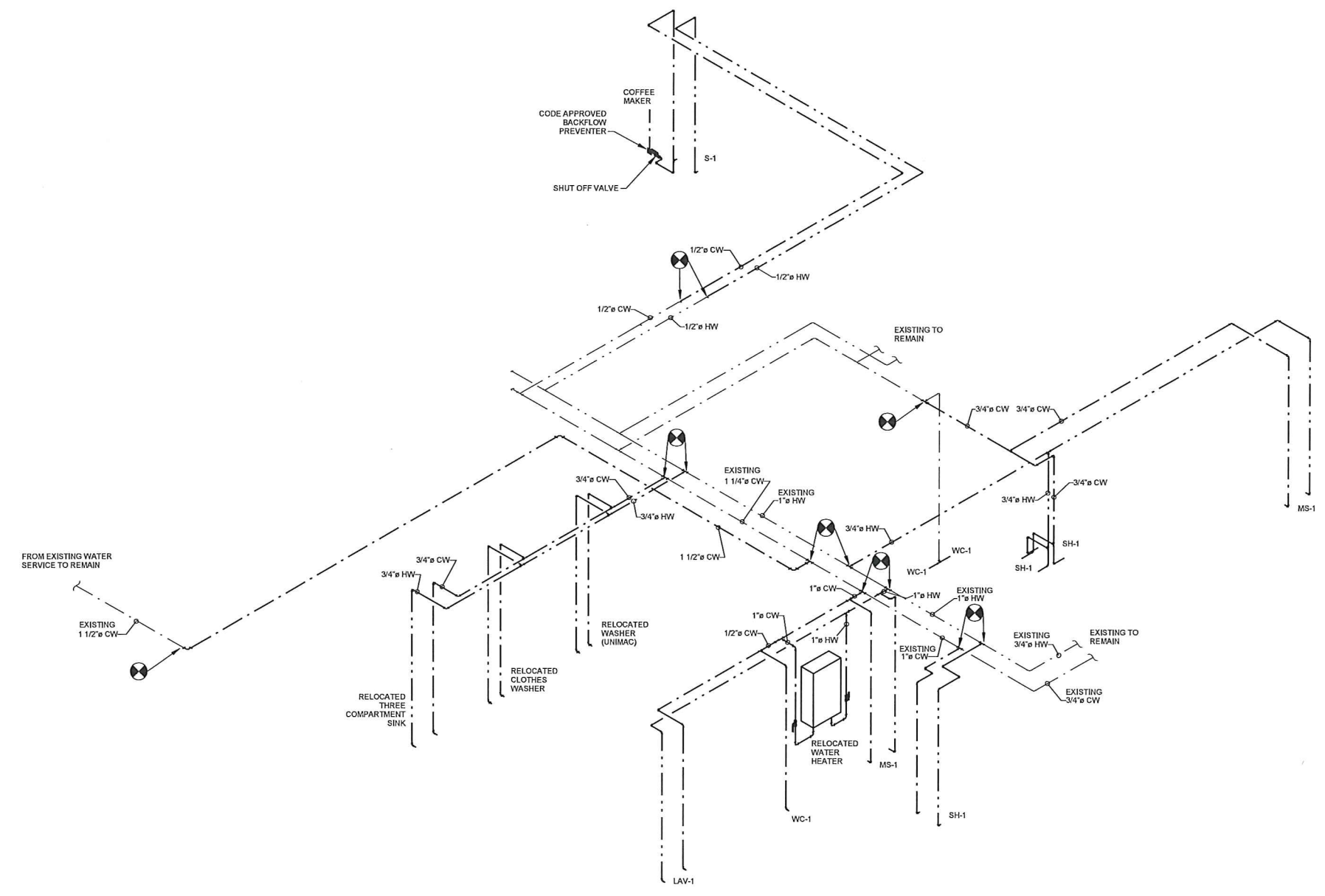
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 JOB NUMBER: 2020-0130

PERMIT SET

FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN

SHEET NO.
M1.2

PLUMBING FIXTURE SCHEDULE							
EQUIP TAG	FIXTURE TYPE	WASTE	VENT	CW	HW	TW	MANUFACTURER / MODEL
2" FD	FLOOR DRAIN	2"	1-1/2"	-	-	-	ZURN / Z415
3" FD	FLOOR DRAIN	3"	1-1/2"	-	-	-	ZURN / Z415
LAV-1	LAVATORY	2"	1-1/2"	1/2"	-	1/2"	AMERICAN STANDARD / LUCERNE
MS-1	MOP SINK	3"	2"	3/4"	3/4"	-	MUSTEE / 63M
S-1	SINK	2"	1-1/2"	1/2"	1/2"	-	ELKAY / LRAD20226SPD
SH-1	SHOWER	-	-	3/4"	3/4"	-	DELTA / T13H153
TMV-1	TEMPERATURE MIXING VALVE	-	-	1/2"	1/2"	1/2"	LEONARD VALVE COMPANY / 170-LF
WC-1	WATER CLOSET	4"	2"	1/2"	-	-	AMERICAN STANDARD / CADET 3



1 DOMESTIC WATER ISOMETRIC

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Adam Siemers
 ADAM H. SIEMERS LIC# 52790

DATE	REV#	REVISIONS DESCRIPTION

DATE: 5-15-2020
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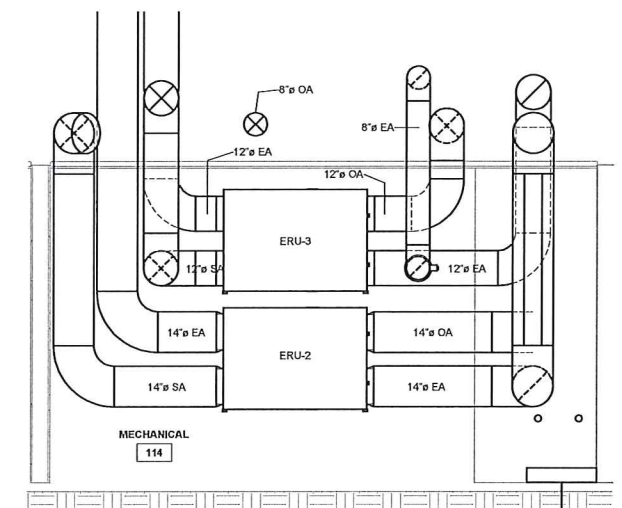
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FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN
 PLUMBING ISOMETRICS

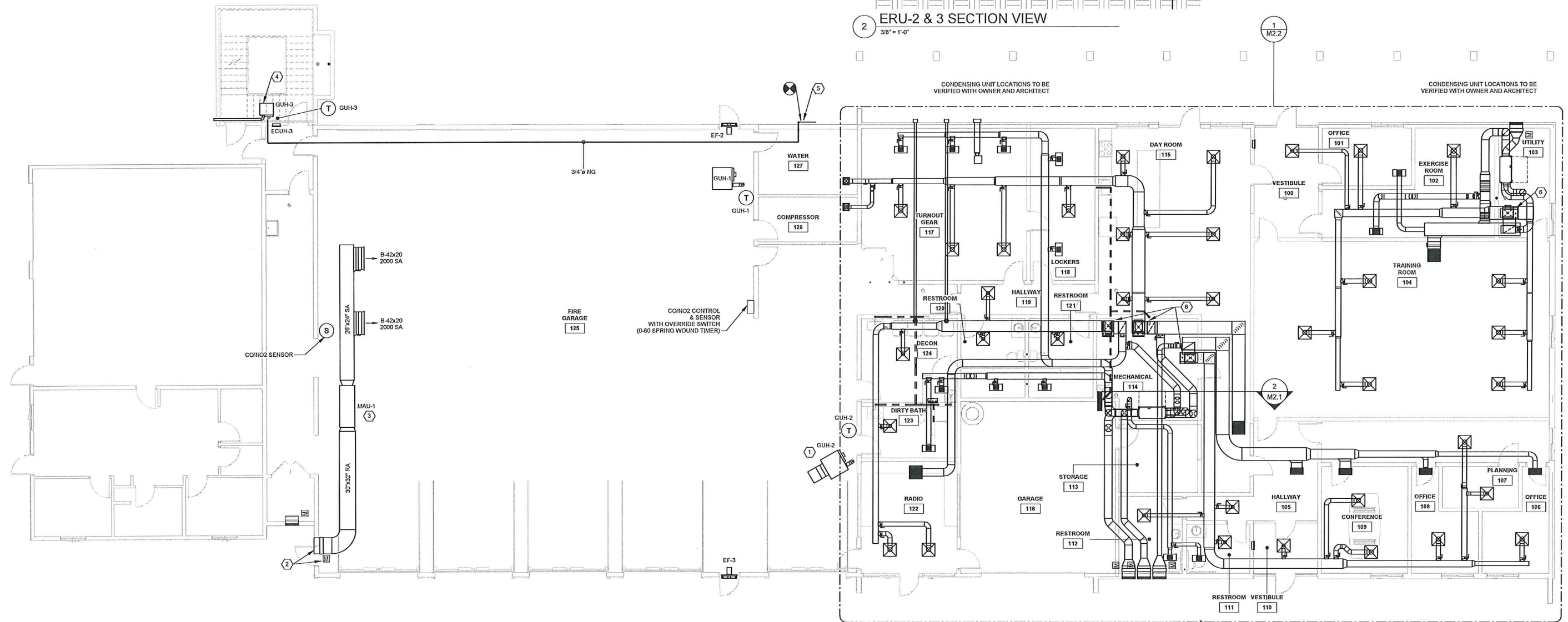
SHEET NO.
M1.3

REFERENCE NOTES:

- COORDINATE UNIT HEATER LOCATION AND HEIGHT WITH OVERHEAD DOOR AND FIRE TRUCK HEIGHT. MODIFY/EXTEND GAS PIPING AS REQUIRED.
- CONNECT TO EXISTING INTAKE LOUVER, INTERLOCK MOTORIZED DAMPER WITH MAU-1.
- MOUNT MAU AS HIGH AS POSSIBLE, COORDINATE WITH FIRE TRUCK HEIGHT.
- SUSPEND FROM STAIR AT APPROX. 16'-0" AFF.
- CONNECT NEW GAS PIPE AT METER.
- GAS PIPING TO FURNACES SHALL BE DESIGN-BUILD BASED ON ACTUAL GAS PIPING LAYOUT WHEN DEMOED.



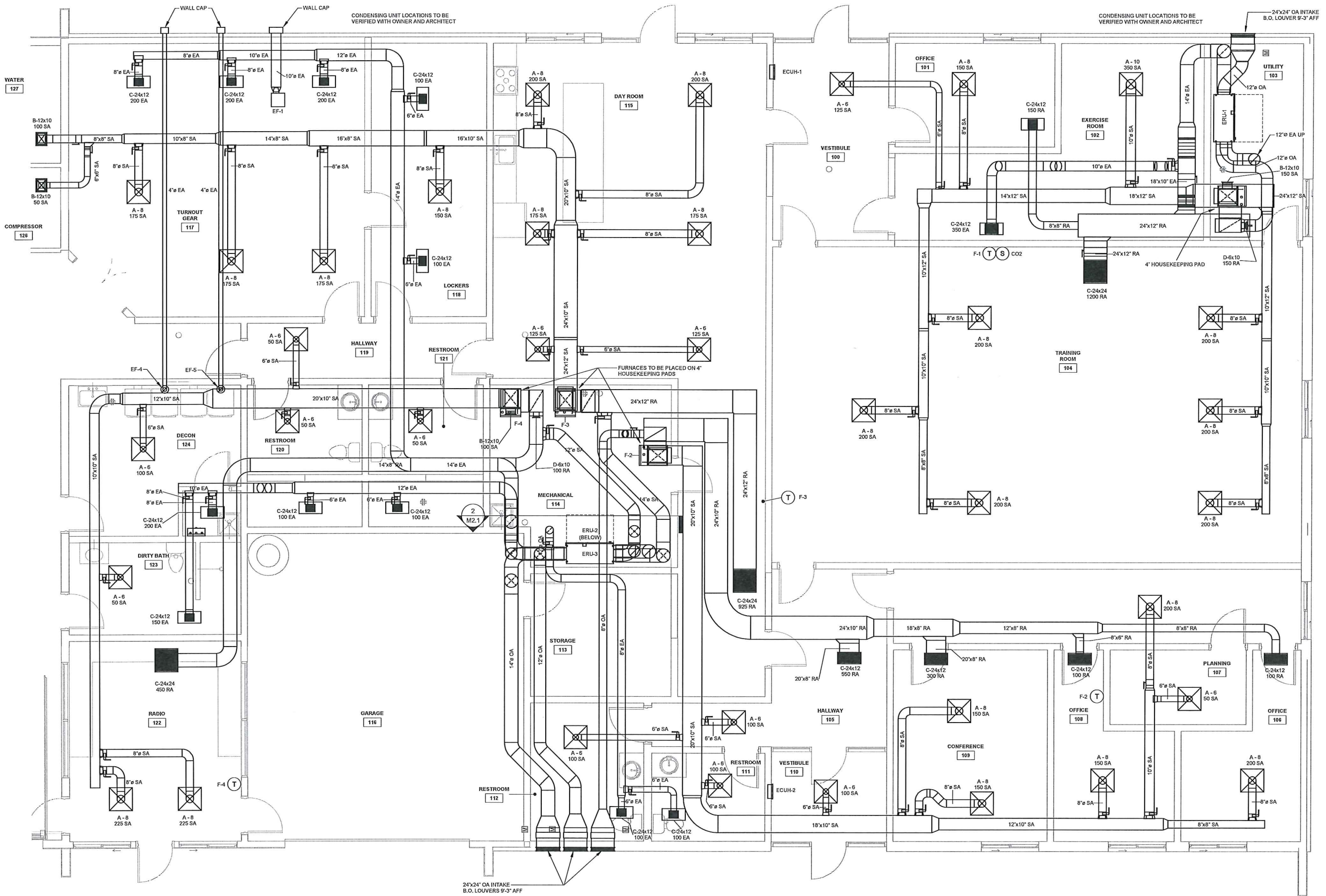
2 ERU-2 & 3 SECTION VIEW
3/8" = 1'-0"



1 FIRST LEVEL HVAC PLAN
1/8" = 1'-0"

PERMIT SET

FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN
 FIRST LEVEL HVAC PLAN
 SHEET NO. M2.1



1 ENLARGED HVAC PLAN
1/4" = 1'-0"

WIDSETH

PERMIT SET

FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN

SHEET NO. M2.2

DATE: 5-15-2020
SCALE: AS NOTED
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Adam Sevens
ADAM SIEMENS 5-15-2020 LIC# 52720

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1 MECHANICAL ROOF PLAN
1/8" = 1'-0"



PERMIT SET

FIRE STATION REMODEL
CITY OF CROSSLAKE
CROSSLAKE, MN
MECHANICAL ROOF PLAN

SHEET NO.
M3.1

DATE: 5-15-2020
SCALE: AS NOTED
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JOB NUMBER: 2020-10130

DATE REV# REVISIONS DESCRIPTION

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Adam Siemens
ADAM M SIEMENS LIC# 57726

WIDSETH

MAKE-UP AIR UNIT SCHEDULE																
GENERAL			MECHANICAL										ELECTRICAL			
EQUIP TAG	LOCATION	APPLICATION	CFM	EXT SP (IN)	FAN DRIVE	FAN HP	FAN RPM	EAT (F)	LAT (F)	GAS INPUT (MBH)	GAS OUTPUT (MBH)	MANUFACTURER	MODEL NO.	NOTES	VOLTAGE/ PHASE	NOTES
MAU-1	FIRE GARAGE 125	DIRECT FIRED - INDOOR	4000	0.5	BELT	3	1120	-20	65	400	368	GREENHECK	DG-112-H10	1	208/3	

DIVISION 22, 23 NOTES
1. PROVIDE FACTORY STARTERS AND DISCONNECTS

DIVISION 26 NOTES
1.

EXHAUST FAN SCHEDULE												
GENERAL			MECHANICAL							ELECTRICAL		
EQUIP TAG	LOCATION	FAN TYPE	CFM	EXT SP (IN)	FAN DRIVE	FAN RPM	FAN HP	MANUFACTURER	MODEL NO.	NOTES	VOLTAGE/ PHASE	NOTES
EF-1	TURNOUT GEAR 117	CEILING	400	0.25	DIRECT	1042	FRACT.	GREENHECK	SP-A510-VG	1	120/ 1	
EF-2	FIRE GARAGE 125	PROP	2200	0.25	DIRECT	1641	1/4	GREENHECK	SE1-14-436-VG	1	120/ 1	
EF-3	FIRE GARAGE 125	PROP	2200	0.25	DIRECT	1641	1/4	GREENHECK	SE1-14-436-VG	1	120/ 1	
EF-4	TURNOUT GEAR 117	BOOSTER	75	1.25	DIRECT	2175	65 (W)	FANTECH	DBF-XL4	1, 2	120/ 1	
EF-5	TURNOUT GEAR 117	BOOSTER	75	1.25	DIRECT	2175	65 (W)	FANTECH	DBF-XL4	1, 2	120/ 1	

DIVISION 22, 23 NOTES
1. PROVIDE FACTORY STARTERS AND DISCONNECTS
2. INTERLOCK WITH DRYER OPERATION

DIVISION 26 NOTES
1.

FURNACE SCHEDULE														
GENERAL			MECHANICAL										ELECTRICAL	
EQUIP TAG	LOCATION	CFM	OA CFM	FAN DRIVE	ESP	FAN HP	GAS INPUT (MBH) HIGH - LOW	GAS OUTPUT (MBH) HIGH - LOW	CONFIGURATION	MANUFACTURER	MODEL NO.	NOTES	VOLTAGE/ PHASE	NOTES
F-1	UTILITY 103	1975	850	DIRECT	0.7	1	117 - 76	113 - 73	UPFLOW	CARRIER	59TP6B 120V24-22	1,2,3,4,5	120/ 1	
F-2	MECH 114	1200	200	DIRECT	0.7	3/4	78 - 51	75 - 49	UPFLOW	CARRIER	59TP6B 080V17-16	1,2,3,4,5	120/ 1	
F-3	MECH 114	900	550	DIRECT	0.7	1/2	58 - 38	56 - 36	UPFLOW	CARRIER	59TP6B 060V17-14	1,2,3,4,5	120/ 1	
F-4	MECH 114	1725	800	DIRECT	0.7	1	117 - 76	113 - 73	UPFLOW	CARRIER	59TP6B 120V24-22	1,2,3,4,5	120/ 1	

DIVISION 22, 23 NOTES
1. PROVIDE COMPATIBLE CASED COIL
2. PROVIDE TOGGLE DISCONNECTS
3. VENTING THROUGH ROOF
4. TWO-STAGE GAS TRAIN
5. PROVIDE 7-DAY, PROGRAMMABLE T-STAT THAT IS COMPATIBLE WITH 2-STAGE FURNACE AND CONDENSING UNITS

DIVISION 26 NOTES
1.

CONDENSING UNIT SCHEDULE (AIR COOLED)									
GENERAL			MECHANICAL					ELECTRICAL	
EQUIP TAG	APPLICATION	CAPACITY (TONS)	AMBIENT TEMP (F)	COMPRESSOR TYPE	MANUFACTURER	MODEL NO.	NOTES	VOLTAGE/ PHASE	NOTES
CU-1	F-1	5	86	2-STAGE SCROLL	CARRIER	INFINITY - 24ANB760	1, 2	208-230/1	
CU-2	F-2	3	86	2-STAGE SCROLL	CARRIER	INFINITY - 24ANB736	1, 2	208-230/1	
CU-3	F-3	2	86	2-STAGE SCROLL	CARRIER	INFINITY - 24ANB724	1, 2	208-230/1	
CU-4	F-4	4	86	2-STAGE SCROLL	CARRIER	INFINITY - 24ANB748	1, 2	208-230/1	

DIVISION 22, 23 NOTES
1. PROVIDE FACTORY STARTERS AND DISCONNECTS
2. LONG LINE SET CAPABILITY
3. PROVIDE COMPATIBLE CASED COIL

DIVISION 26 NOTES
1.

ENERGY RECOVERY UNIT SCHEDULE																		
GENERAL			MECHANICAL										ELECTRICAL					
EQUIP TAG	LOCATION	SERVES	OUTSIDE AIR CFM	EXHAUST AIR CFM	SUMMER DESIGN				WINTER DESIGN				AIR PRESSURE DROP (IN. W.C.)	MANUFACTURER	MODEL NO.	NOTES	VOLTAGE/ PHASE	NOTES
					OA EAT DBWB	EA EAT DBWB	EA EAT DBWB	EA LAT DBWB	OA EAT DBWB	EA EAT DBWB	EA EAT DBWB	EA LAT DBWB						
ERU-1	UTILITY 103	F-1	850	800	86/68	78/65	75/62	-	-20/-20	40/33	70/53	-	0.5	RENEWAIRE	HE1XRH	1	120/ 1	
ERU-2	MECH 114	F-3	550	500	86/68	78/65	75/62	-	-20/-20	40/33	70/53	-	0.5	RENEWAIRE	HE1XRH	1	120/ 1	
ERU-3	MECH 114	F-4	850	800	86/68	78/65	78/65	-	-20/-20	40/33	44/36	-	0.5	RENEWAIRE	HE1XRH	1	120/ 1	

DIVISION 22, 23 NOTES
1. PROVIDE AND INSTALL BYPASS ECONOMIZER DAMPER AND DUCTING

DIVISION 26 NOTES
1.

UNIT HEATER / CABINET UNIT HEATER SCHEDULE																	
GENERAL			MECHANICAL										ELECTRICAL				
EQUIP TAG	LOCATION	TYPE	CFM	FAN DRIVE	FAN RPM	FAN HP	EAT (F)	LAT (F)	GAS-FIRED UNIT		ELECTRIC COIL	MANUFACTURER	MODEL NO.	THERMOSTAT	NOTES	VOLTAGE/ PHASE	NOTES
									GAS INPUT (MBH)	GAS OUTPUT (MBH)	INPUT (KW)						
GUH-1	FIRE GARAGE 125	GAS	1921	DIRECT	1050	1/4	0	60	150	124.5	-	REZNOR	UDAP 150	REMOTE	1	120/ 1	
GUH-2	FIRE GARAGE 125	GAS	1921	DIRECT	1050	1/4	0	60	150	124.5	-	REZNOR	UDAP 150	REMOTE	1	120/ 1	
GUH-3	TOWER	GAS	769	DIRECT	1550	FRACT.	0	60	60	49.8	-	REZNOR	UDAP 60	REMOTE	1	120/ 1	
ECUH-1	VESTIBULE 100	ELEC - RECESSED	100	DIRECT	-	-	-	-	-	-	2	QMARK	AWH4406F	INTEGRAL	1	208/ 1	
ECUH-2	VESTIBULE 110	ELEC - RECESSED	100	DIRECT	-	-	-	-	-	-	2	QMARK	AWH4406F	INTEGRAL	1	208/ 1	
ECUH-3	VESTIBULE - TOWER	ELEC - RECESSED	100	DIRECT	-	-	-	-	-	-	2	QMARK	AWH4406F	INTEGRAL	1	208/ 1	

DIVISION 22, 23 NOTES
1. PROVIDE FACTORY STARTERS AND DISCONNECTS

DIVISION 26 NOTES
1.

GRILLE, REGISTER AND DIFFUSER SCHEDULE										
GRD TAG	FIXTURE TYPE	MATERIAL	SYSTEM	BLADE / SLOT SPACING	NUMBER OF SLOTS	DIFFUSER THROW PATTERN	VOLUME DAMPER	MANUFACTURER	MODEL NUMBER	NOTES
A	SQUARE CONE	ALUMINUM	SUPPLY	-	-	ADJUSTABLE	AS SHOWN OR NOTED	TITUS	TMSA-AA	1, 2, 3
B	SIDEWALL GRILLE	ALUMINUM	SUPPLY	3/4"	-	ADJUSTABLE	AS SHOWN OR NOTED	TITUS	300FS	1, 2, 3
C	EGGCRATE	ALUMINUM	RETURN/EXHAUST	1/2 x 1/2 x 1/2	-	FIXED	AS SHOWN OR NOTED	TITUS	50F	1, 2, 3
D	SIDEWALL GRILLE	ALUMINUM	RETURN	3/4"	-	FIXED	AS SHOWN OR NOTED	TITUS	350FS	1, 2, 3

DIVISION 23 NOTES
1. COORDINATE MOUNTING FRAME TYPE WITH ARCHITECTURAL PLANS
2. COLOR TO BE SELECTED BY THE ARCHITECT
3. CONTRACTOR SHALL PROVIDE MEANS FOR BALANCING DIFFUSERS.

WIDSETH

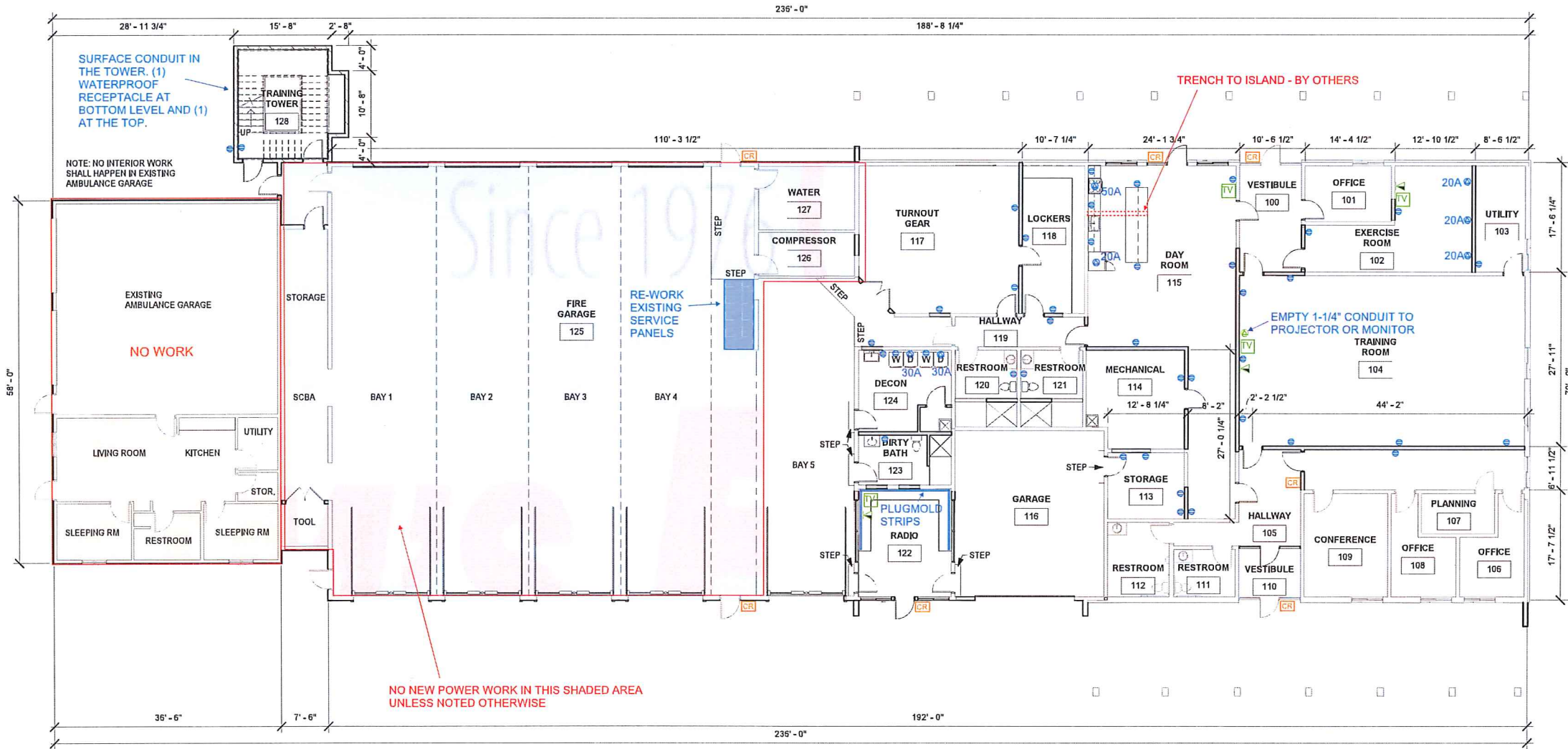
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Adam Stevens
 ADAM H. STEVENS
 5-15-2020 LIC# 52760

DATE	REV#	REVISIONS DESCRIPTION	BY

DATE: 5-15-2020
 SCALE: AS NOTED
 DRAWN BY: AMS
 CHECKED BY: AMS
 JOB NUMBER: 2020-10130

PERMIT SET
 FIRE STATION REMODEL
 CITY OF CROSSLAKE
 CROSSLAKE, MN
 MECHANICAL SCHEDULES
 SHEET NO.
ME1.1

POWER AND DATA



1 MAIN LEVEL FLOOR PLAN
A1.1 3/32" = 1'-0"

GENERAL NOTES:
 1) GENERAL INTENT FOR RECEPTACLES, PHONE/INTERNET JACKS IN EXISTING WALLS, OTHER THAN FIRE GARAGE, IS TO LEAVE IN CURRENT LOCATION, CONFIRM THEY ARE OPERATIONAL AND REPLACE WITH A NEW DEVICE.
 2) REFER TO MECHANICAL DRAWINGS FOR EQUIPMENT REQUIRING ELECTRICAL POWER.
 3) GENERAL INTENT FOR CARD READER ACCESS IS TO RE-USE EXISTING AND RELOCATE AS NEEDED. NO NEW EQUIPMENT IS INCLUDED.

- RECEPTACLE
- SPECIALTY RECEPTACLE/POWER CONNECTION
- TV TV JACK - COAX CABLE RAN BACK TO HEAD END - FINAL CONNECTIONS BY OTHERS
- DATA DATA JACK - (2) CAT 5E CABLES RAN BACK TO HEAD END - FINAL TERMINATIONS BY OTHERS
- CR CARD READER - CARD ACCESS - UTILIZE EXSITING AS MUCH AS POSSIBLE


JIM'S ELECTRIC
 COMPANY INC.
 PRELIMINARY DRAWING
 NOT FOR CONSTRUCTION USE

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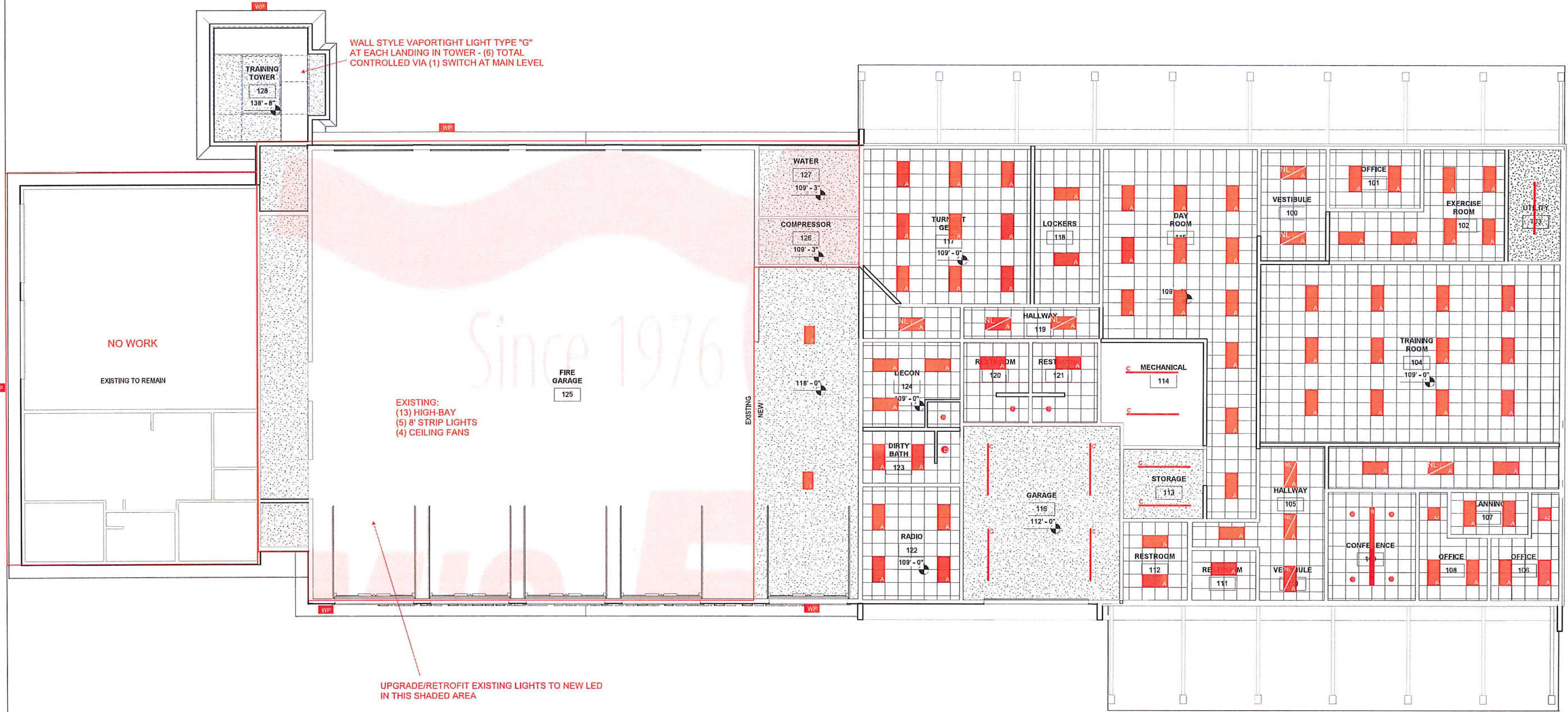
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CITY OF CROSSLAKE -
 FIRE STATION
 MAIN FLOOR PLAN

PROJECT #	
DATE:	4/23/20
SHEET:	E1.0

REFLECTED CEILING W/LIGHTING



1 MAIN FLOOR REFLECTED CEILING PLAN
A1.4 1/8" = 1'-0"

- GENERAL NOTES:**
- 1) ALL EXTERIOR LIGHTING TO REMAIN IN CURRENT LOCATIONS BUT UPGRADED/RETROFIT TO NEW LED FIXTURES UNLESS NOTED OTHERWISE.
 - 2) EXTERIOR LIGHTING TO BE AUTOMATIC DUSK TO DAWN CONTROL
 - 3) EGRESS EXIT/EMERGENCY LIGHTING TO CODE
 - 4) "NL" DENOTES "NIGHT LIGHT" - ON ALL THE TIME

FIXTURE SCHEDULE:

TYPE	DESCRIPTION
A	2'x4' LAY-IN
A2	2'x2' LAY-IN
B	SUSPENDED LINEAR - UP/DOWN
C	STRIP LIGHT
D	DISC LIGHT
F	HIGH BAY
G	VAPORTIGHT FIXTURE
WP	WALL PACK



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REVISIONS

NO.	DESCRIPTION

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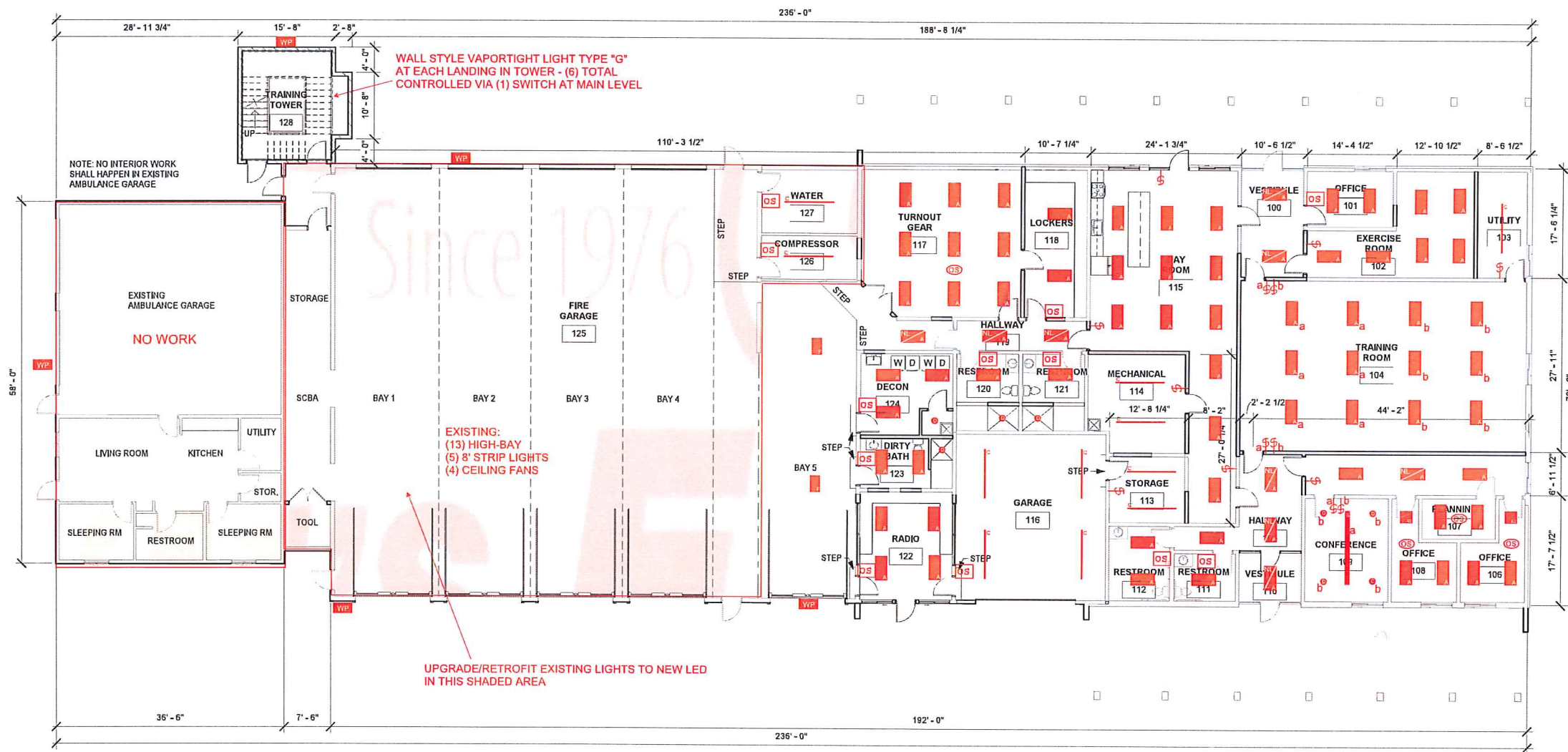
CITY OF CROSSLAKE -
FIRE STATION
REFLECTED CEILING PLANS

PROJECT #

DATE: 4/23/20

SHEET: E2.0

LIGHTING AND CONTROL



1 MAIN LEVEL FLOOR PLAN
A1.1 3/32" = 1'-0"

- GENERAL NOTES:**
- 1) ALL EXTERIOR LIGHTING TO REMAIN IN CURRENT LOCATIONS BUT UPGRADED/RETROFIT TO NEW LED FIXTURES UNLESS NOTED OTHERWISE.
 - 2) EXTERIOR LIGHTING TO BE AUTOMATIC DUSK TO DAWN CONTROL
 - 3) EGRESS EXIT/EMERGENCY LIGHTING TO CODE
 - 4) "NL" DENOTES "NIGHT LIGHT" - ON ALL THE TIME

FIXTURE SCHEDULE:

TYPE	DESCRIPTION
A	2'x4' LAY-IN
A2	2'x2' LAY-IN
B	SUSPENDED LINEAR - UP/DOWN
C	STRIP LIGHT
D	DISC LIGHT
F	HIGH BAY
G	VAPORTIGHT FIXTURE

- ⌘ LIGHT SWITCH
- OS OCCUPANCY SENSOR - WALL MOUNT
- ⊙ OCCUPANCY SENSOR - CEILING MOUNT



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CITY OF CROSSLAKE -
FIRE STATION
MAIN FLOOR PLAN

PROJECT #	
DATE:	4/23/20
SHEET:	E2.1



PRESS RELEASE

E. I. e.

FOR IMMEDIATE RELEASE

Date: June 4, 2020

Contact: Ryan Simonson

Phone: (218) 824-1355

RECYCLING PROGRAM CONTINUES TO BE STRONG IN 2020

Crow Wing County has 4 recycling drop sites that are available for use to all County residents.

- ❖ Crow Wing County Landfill – 15728 State Highway 210, Brainerd
- ❖ Ideal Township Transfer Station – 33503 West Island Lake Drive, Pequot Lakes
- ❖ City of Nisswa – 25636 Main Street, Nisswa
- ❖ Crow Wing Township – 6930 Cuyuna Ave, Brainerd

Historically there were 12 drop sites located throughout the County, however increasing costs have led to a reduction in the number of sites. Two sites that have recently closed their recycling operations include the City of Crosby and Crosslake Roll-Off. The City of Crosby had challenges with contamination, overfilled dumpsters, and overall monitoring of the site, so the City requested the County provide extra funding to help with monitoring, or remove the dumpsters altogether. Contamination fees have amounted to 20+% of Crosby's overall recycling bill. Crosslake Roll-Off was challenged with increasing costs.

Looking forward into 2021, the County is considering moving forward with 2 drop-off sites located at the County Landfill and the Ideal Transfer Station. The County is also considering offering a 50% cost sharing program for Cities and Townships that prefer to have a recycling drop site in their jurisdiction. "An option where local governments can partner with the county is one of the best ways to share costs and continue to provide additional recycling opportunities", stated Ryan Simonson, Environmental Services Supervisor.

In addition to the drop-off sites, an even better recycling method is curbside service. Four cities have ordinances in place requiring haulers to provide curbside recycling in their cities. These cities include Brainerd, Baxter, Pequot Lakes, and Ironton. "The county encourages these types of curbside recycling ordinances because the volume speaks for itself", added Simonson. The Cities of Brainerd and Baxter recycle more volume through curbside service than is recycled at all of the drop-off locations combined.

The Landfill site and Ideal Transfer Station are located in the southcentral and northwestern portions of the County, respectively, and serve a large number of residents. The distance from downtown Nisswa to the Ideal Transfer Station is 10.9 miles. Downtown Crosslake is 12 miles from the transfer station. Further south, the distance from downtown Deerwood to the Landfill is 9.6 miles, while downtown Crosby is only 6.8 miles from the Landfill.

Our Vision: Being Minnesota's favorite place.

Our Mission: Serve well. Deliver value. Drive results.

Our Values: Be responsible. Treat people right. Build a better future.

The Land Services Department is committed to providing excellent customer service while helping our residents make wise choices that protect Crow Wing County's extraordinary natural resources. Citizens are encouraged to contact the Environmental Services Solid Waste Office at (218) 824-1290 or for more information regarding mattress disposal options. Please visit the county website at www.crowwing.us and search for "Solid Waste".

Gary Griffin, Director
Land Services Department
322 Laurel Street, Suite 15
Brainerd, MN 56401

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