# ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

# **RFB NO. 316014 - ADDENDUM NO. 1**

#### COUNTY HIGHWAY FACILITY SATELLITE BUILDING

# <u>BIDS DUE</u>: TUESDAY, JUNE 28, 2016, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

#### PLEASE MAKE THE FOLLOWING CHANGES:

#### 1. Section 22 05 14

Delete current specification section; replace with new specification section, issued with this Addendum.

# 2. Drawing P-204

Replace existing Plumbing Plans and Schedules Sheet (P-204) with Revised Plumbing Plans and Schedules Sheet (P-204) included with this addendum.

# **3. Drawing A-202**

Replace existing Exterior Elevations Sheet (A-301) with Revised Exterior Elevations Sheet (A-301) included with this addendum.

# 4. Drawing A-301

Replace existing Building Sections Sheet (A-301) with Revised Building Sections Sheet (A-301) included with this addendum.

### **5.** Drawing A-401

Replace existing Wall Sections Sheet (A-401) with Revised Wall Sections Sheet (A-401) included with this addendum.

# **6.** Drawing A-601

Replace existing Room and Door Schedules Sheet (A-601) with Revised Room and Door Schedules Sheet (A-601) included with this addendum.

7. **ADD:** Sheet AX.X Cold Storage Building Site Plan – Sheet AX.X is for contours and site layout reference. The "Office" and "Cold Storage Building" shown on Sheet AX.X do not pertain to this project. Refer to sheet A-101 issued with the bid set

If any additional information about this Addendum is needed, please call Ryan Shore at 608/266-4475, shore@countyofdane.com.

Sincerely,

Ryan Shore

Project Manager

# Enclosures:

Section 22 05 14

P-204 Plumbing Plans and Schedules

A-202 Exterior Elevations

A-301 Building Sections

A-401 Wall Sections

A-601 Room and Door Schedules

AX.X Cold Storage Building Site Plan

Response to Questions

RFB No. 316014 - 2 - rev. 02/16

# **SECTION 22 05 14**

### PLUMBING SPECIALTIES

#### PART 1-GENERAL

#### SCOPE

This section includes specifications for floor drains, roof drains, cleanouts, backflow preventers, water hammer arrestors and other miscellaneous plumbing specialties.

#### PART 1 - GENERAL

Scope

Related Documents

Reference

Reference Standards

**Quality Assurance** 

**Shop Drawings** 

Operation and Maintenance Data

### PART 2 - PRODUCTS

Floor Drains

**Roof Drains** 

Trench Drains

Cleanouts

Water Hammer Arrestors

**Backflow Preventers** 

Wall Hydrants

Hose Bibbs

Catch Basins

Safings

Vent Flashings

Washing Machine Wall Boxes

Air Reels

Water Reels

Water Make-up for Fire Protection Tank

High Water alarm for Process sewer tank

HW Alarm/solenoid

2000 Gallon pump tank for process sewer

Building Water Meter

# PART 3 - EXECUTION

Installation

### RELATED DOCUMENTS

Section 22 11 00 - Facility Water Distribution
Section 22 13 00 - Facility Sanitary Sewerage
Section 22 14 00 - Facility Storm Drainage
Section 22 15 13 - General Service Compressed-Air Piping

Section 22 05 23 - General-Duty Valves for Plumbing Piping

# REFERENCE

Applicable provisions of Division 1 shall govern work under this section.

# REFERENCE STANDARDS

ANSI A112.21.1 - Floor Drains.

ANSI A112.21.2 - Roof Drains.

ANSI A112.26.1/PDI WH-201 - Water Hammer Arrestors.

ASSE 1001 - Pipe Applied Atmospheric Type Vacuum Breakers.

ASSE 1010 - Water Hammer Arrestors.

ASSE 1011 - Hose Connection Vacuum Breakers.

ASSE 1012 - Backflow Preventers with Intermediate Atmospheric Vent.

ASSE 1013 - Reduced Pressure Principle Backflow Preventers.

ASSE 1019 - Wall Hydrants, Frost Proof Automatic Draining, Anti-Backflow Type.

### **QUALITY ASSURANCE**

Substitution of Materials: Refer to Section GC - General Conditions of the Contract, Equals and Substitutions.

Plumbing products requiring approval by the State of Wisconsin Dept. of Commerce must be approved or have pending approval at the time of shop drawing submission.

#### **SHOP DRAWINGS**

Include data concerning dimensions, capacities, materials of construction, ratings, certifications, weights, manufacturer's installation requirements, manufacturer's performance limitations, and appropriate identification.

### OPERATION AND MAINTENANCE DATA

All operations and maintenance data shall comply with the submission and content requirements specified under section GENERAL REQUIREMENTS.

#### PART 2-PRODUCTS

#### FLOOR DRAINS

Manufacturer: Smith, Wade, Watts, Zurn.

<u>FD-1</u>: Enameled cast iron two piece body with double drainage flange, weep holes, reversible clamping adjustable collar, adjustable 6" round polished nickel-bronze strainer with threaded collar, bottom outlet. JR Smith 2005Y-B-M

<u>FD-2</u>: Enameled heavy duty cast iron two piece body with double drainage flange, weep holes, heavy duty adjustable 8 ½" round coated cast iron tractor grate strainer, with sediment bucket, bottom outlet. JR Smith 2320Y-B-M

#### ROOF DRAINS

Manufacturer: Smith, Wade, Watts, Zurn.

<u>RD-1</u>: Bottom outlet roof drain, enameled cast iron body with flashing collar and gravel stop, cast iron dome strainer, adjustable extension, underdeck clamp, 15" diameter.

JR Smith 1015-C-CID

# TRENCH DRAINS

Manufacturer: JR Smith or Equal

<u>TD-1</u>: Modular precast polyester trench drain, interlocking sections with presloped 4" wide interior radiused waterways, knockouts, endcaps, ductile iron rail and extra heavy duty (Class F rated) slotted ductile iron grate, grate locking devices.

JR Smith Powerdrain 9877 sloped trench drainW/integral ductile iron frame and Class F ductile iron grates with powerlocking grate locking system, include all end caps, outlets, #9879 channel support/clamping device and accessories.

ABT #2010 Channel with #2513 Ductile Iron Grate and frame with all accessories as needed to meet specifications.

SEE PART 3 for installation items

# **CLEANOUTS**

Manufacturer: Smith, Wade, Watts, Zurn.

### UNFINISHED INTERIOR CONCRETE FLOOR AREAS:

Heavy Duty, Enameled cast iron body with round adjustable scoriated cast iron cover, tapered threaded ABS closure plug.

JR Smith 4224S

FINISHED INTERIOR CONCRETE FLOOR AREAS: Enameled cast iron body with round adjustable scoriated polished nickel bronze cover, tapered threaded ABS closure plug. JR Smith 4024S

INTERIOR FINISHED WALL AREAS: Line type cleanout tee with tapered threaded ABS cleanout plug, round polished stainless steel access cover secured with machine screw. JR Smith 4530 wall access cover

INTERIOR EXPOSED VERTICAL STACKS: Line type cleanout tee with tapered threaded ABS closure plug.

INTERIOR HORIZONTAL LINES: Cast iron hub with tapped ferrule and tapered threaded ABS or PVC closure plug, or no-hub coupling and blind plug.

EXTERIOR PAVED AREAS: Cast iron hub or plug with tapered threaded ABS or PVC closure plug, cast iron frost sleeve and cover set in 24" square by 4" min. thick reinforced concrete pad top or surrounding pavement, crowned for drainage. SR Smith 4253S or Neenah R-1976 with non-ferrous securing screw.

EXTERIOR UNPAVED AREAS: Cast iron hub or plug with tapered threaded ABS or PVC closure plug, cast iron or PVC frost sleeve and cover set in 24" square by 4" min. thick reinforced concrete pad top. JR Smith 4253S or Neenah R-1976 with non-ferrous securing screw.

#### WATER HAMMER ARRESTORS

Manufacturer: JR Smith, PPP Industries, Sioux Chief, Wade, Watts.

ANSI A112.26.1, ASSE 1010; sized in accordance with PDI WH-201, precharged piston type constructed of hard drawn Type K copper, threaded brass adapter, brass piston with o-ring seals, FDA approved silicone lubricant, suitable for operation in temperature range 35 to 150 degrees F, maximum 250 psig working pressure, 1500 psig surge pressure. JR Smith 5200 Series or Watts series 15.

#### **BACKFLOW PREVENTERS**

Manufacturers: Beeco, Cla-Val, Conbraco, Febco, Watts, Wilkins.

HOSE CONNECTION VACUUM BREAKERS: ASSE 1011, brass or bronze construction, EPDM diaphragm and seat, rated for 125 psig and 180°F. Watts 8 (interior application).

PIPE APPLIED ATMOSPHERIC TYPE VACUUM BREAKERS: ASSE 1001, same size as pipe, brass or bronze construction, silicone disc, rated for 125 psig and 160°F. Watts 288A.

HIGH HAZARD ANTI-SIPHON, ANTI-SPILL VACUUM BREAKERS: ASSE 1056, same size as pipe, brass or bronze construction, silicone rubber discs, stainless steel springs, inlet and outlet ball shutoff valves, with test cocks, anti-spill design, rated for 150 psig and 180 deg. F max.. Watts 008QT.

DUAL CHECK WITH ATMOSPHERIC VENT: 3/8°, stainless steel body and parts, dual check with third ball check outlet, rated for 150 psig and 140°F. Watts SD3.

INTERMEDIATE ATMOSPHERIC VENTED BACKFLOW PREVENTERS: ASSE 1012, same size as pipe, with intermediate atmospheric vent between independent check valves, bronze body with union ends, stainless steel springs, rated for 175 psig and 210°F. Watts 9DM.

REDUCED PRESSURE ZONE BACKFLOW PREVENTERS: ASSE 1013 reduced pressure zone backflow assembly complete with inlet strainer, inlet and outlet ball or non-rising stem gate isolation valves.. Constructed of bronze or epoxy coated cast iron body with bronze and plastic internal parts, stainless steel springs, non-threaded vent outlet, 4 test cocks, rated for 175 psig and 210°F, with air gap apparatus on drain. Watts series 009 or 909 series products.

### WALL HYDRANTS

Manufacturer: Woodford.

 $\underline{\text{WH-1}}$ : Freezeproof automatic draining wall hydrant with exposed chrome plated bronze wall plate, 3/4" inlet, 3/4" hose thread ASSE 1019-93 backflow preventer outlet, copper or bronze casing, loose key operator. Woodford model 67 series

#### HOSE BIBBS

<u>HB-</u>1: Bronze or brass construction hose faucet/valve, cast iron handwheel, replaceable disc, hose thread spout, with ASSE 1011 backflow preventer outlet, 3/4" size. Woodford #24.

#### **CATCH BASINS**

#### **Garage Catch Basin**

Shall be 36" diameter inside diameter by 6'deep reinforced precast concrete (or Fiberglass) with proper inlet/outlet openings.

6" thick concrete base, if applicable.

Backfill shall be gravel or sand compacted.

Frame and grate shall be heavy duty.

#### **SAFINGS**

Manufacturers: Noble, Oatey.

Chlorinated polyethylene sheeting, 40 mils thick, ASTM D4068, joined with CPE solvent;

### **VENT FLASHINGS**

Manufacturers: Semco, Oatey.

Single Ply Membrane Roofs: Flashing boot of material compatible with roofing membrane with base flange for adhering to membrane and stainless steel drawband for securing to vent pipe.

#### WASHING MACHINE WALL BOXES

<u>AWC-1</u>: recessed wall box with face flange, overflow lip, fastening tabs, 1/2" hot and cold bronze washing machine ½ turn shutoff valves rated for 125 psi and 180 degrees F, long shank valve fittings for replacement of valves within box, 2" drain outlet fitting.

Symmons W-602

Screw on shock stops with hose thread connections

#### AIR REELS, AR1 & AR2

Description: Low Pressure air reel, heavy duty, all steel construction, spring driven,

2 sealed bearings at main shaft, dual pedestal base and guide arms,

75' of ½" hose, baked-on powder coat finish

Fixture: Reelcraft 82075 OLP

Flex hose: SS braided shell, synthetic rubber inner hose, brass connectors

# WATER REELS, WR1

Description: Low Pressure water reel, heavy duty, all steel construction, spring driven, 2 Sealed

bearings at main shaft, dual pedestal base and guide arms, 50' of 1" hose,

baked-on powder coat finish.

Fixture: Reelcraft D84050 OLP

Flex hose: SS braided shell, synthetic rubber inner hose, brass connectors Backflow preventer: Watts 1" 008PCQT (ASSE 1056) vacuum breaker.

1" aluminum Nozzle, Kochek # NZ030 (FireHose Direct)

Thread Adaptor, Grainger 6ANXO, 1"NTP male to 1"NPSH male adaptor.

1"NTP brass coupler.

#### WATER MAKE-UP FOR FIRE PROTECTION TANK

Level sensor – SJE Rhombus Float switch SPDT, 30' normally closed (closes when level drops) Slow closing solenoid valve – ASCO 2", normally closed, Model 8221, 120V 2" water meter – Badger Recordall 2" disc meter

### HW ALARM/SOLENOID (near HW storage tank on mezzanine)

Symmons HTA-100 with SV-1000 2" solenoid valve. Set at alarm at 130F

# 2000 GALLON PUMP TANK FOR PROCESS SEWER

Exterior Buried Reinforced precast concrete assembly.

Manhole covers & tank top shall be capable of withstanding Semi truck loading.

2000 gallon 5000 psi precast concrete unit with manholes as needed to inspect & clean tank compartments, manhole risers, riser rings, CI heavy duty frame/solid lid, joints sealed with Mastic sealant, 4"pipe size.

SJE-Rhombus, SJE Level Monitor CL100 with Alarm for remote installation (200')

#### **BUILDING WATER METER**

2" water meter - Badger Recordall 2" disc meter.

#### PART 3-EXECUTION

### INSTALLATION

Coordinate location and setting of plumbing specialties with adjacent construction. Install in accordance with manufacturers recommendations.

Set floor drains, roof drains, trench drains and cleanouts level and plumb adjusted to finished floor elevation, roof elevation or finished wall location. Locate where serviceable. Allow minimum of 18" clearance around cleanouts for rodding. Lubricate threaded cleanout plugs with graphite and oil, teflon tape or waterproof grease. Provide deep seal traps on floor drains.

Installation of Holding Tank Level Controls/Alarm for 3 holding tanks shall conform to MFG installation guide.

Include all miscellaneous items for installation. Set and adjust Equipment per Mfg installation guide. Provide signage indicating tank served.

Install water hammer arrestors where indicated and at quick closing valve installations.

Install backflow preventers in accordance with Wisconsin Code requirements maintaining minimum clearance distances for servicing and testing. Provide indirect waste piping with air gap installation from relief opening to above hub drain or floor drain.

Where backflow preventers requiring Code registration are installed, provide initial registration, testing and report filing required by the WI-DSPS. Follow all Code Requirements. Include app paperwork in Owners manuals.

Mount wall hydrants recessed in exterior wall construction with valve plug extended beyond interior side of building insulation. Slope to drain to exterior. Install so discharge is 18" min. above finished grade. Set in grout or caulk and fill exterior wall penetration with insulation.

Mount hose bibbs securely fastened to wall where indicated. Provide water hammer arrestor in line to hose bibb.

Excavate for catch basins setting precast bases on granular backfill and pouring cast in place bases on undisturbed soil. Seal joints between base, sections, collars and castings with gasketing material for tightly packed waterproof seals. Adjust casting to match finished grade. Form interior shelves with concrete grout for smooth flowlines conforming to the shape and slope of the sewer. Place piping into manholes providing full support of piping on exterior bedding and insuring pipe seals are properly installed and waterproof. Structures intended to remain dry must be made waterproof and are subject to infiltration testing. Backfill and compact soil around manhole or catch basin.

Excavate for Large oil/grit separator, pump tank, Holding tanks (3) and wash bay water reclaim separator tanks (5) setting precast base on granular backfill bases with undisturbed soil below. Seal joints between base, sections, collars and castings with gasketing material for tightly packed waterproof seals. Adjust casting to match finished grade. Place piping into manholes providing full support of piping on exterior bedding and insuring pipe seals are properly installed and waterproof. Structures intended to remain dry must be made waterproof and are subject to infiltration testing, Backfill and compact soil around underground structure.

Install safing at floor drains above grade. Extend 12" beyond drains in all directions Install on concrete floor that is smooth and free of debris. Seal all joints and connect to drain body clamp. Safing is subject to standing water leak test. Install safing at all built-up shower installations. (Note: spray-on and brush applied liquid safing is not acceptable).

Flash vent penetrations through roof. Co-ordinate installation of pipe and roof boot with roof installer, Tighten drawband of membrane boot to vent pipe. Adhere base flashing to deck or membrane.

Install washing machine boxes in wall construction, secured to structure, directly behind proposed washing machine location. Provide water hammer arrestors in supply piping. Mount box a min. of 36" above floor.

# TRENCH DRAIN INSTALLATION

See Mfg instructions for installation, include all required concrete bedding materials, supports, staking to secure trench drain during concrete installation, co-ordination with other trades as needed.

# WATER MAKE-UP FOR FIRE PROTECTION TANK

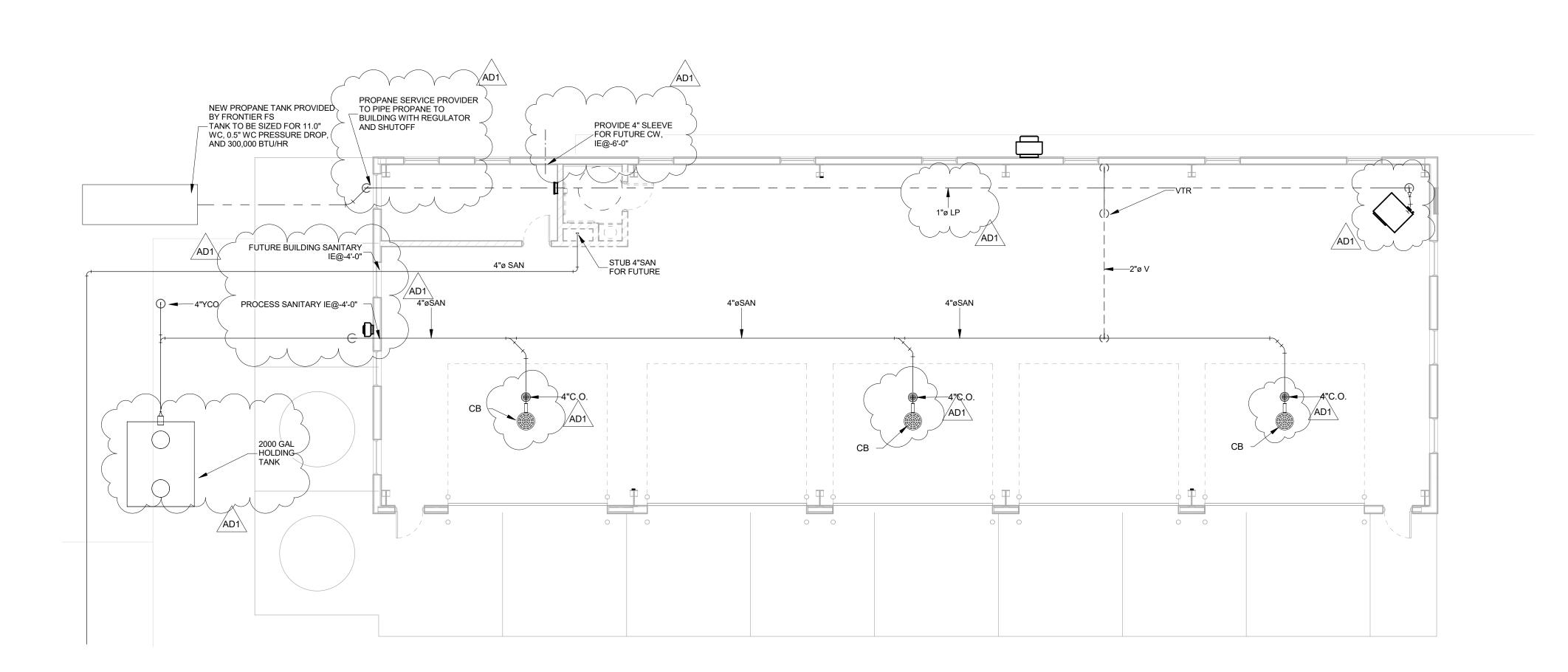
Level sensor – SJE Rhombus Float switch SPDT, 30' normally closed (closes when level drops) Slow closing solenoid valve – ASCO 2", normally closed, Model 8221, 120V 2" water meter – Badger Recordall 2" disc meter

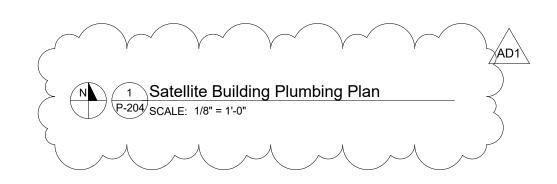
# **BACKFLOW PREVENTERS**

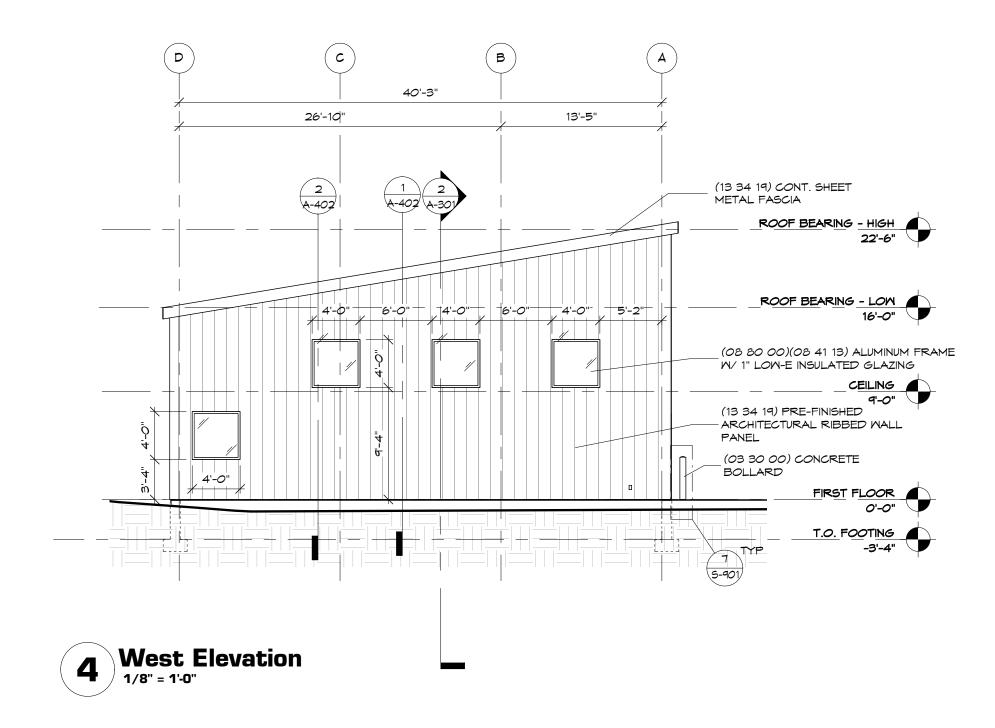
Install units, test and register with WI-DSPS

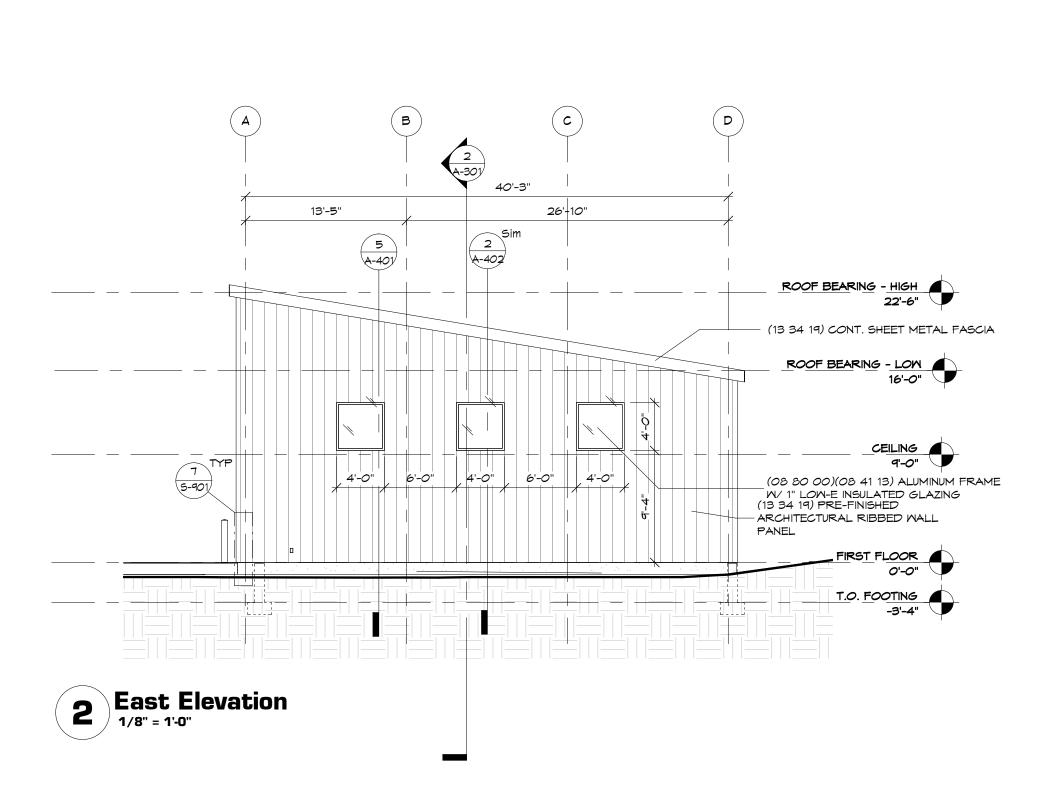
**END OF SECTION** 

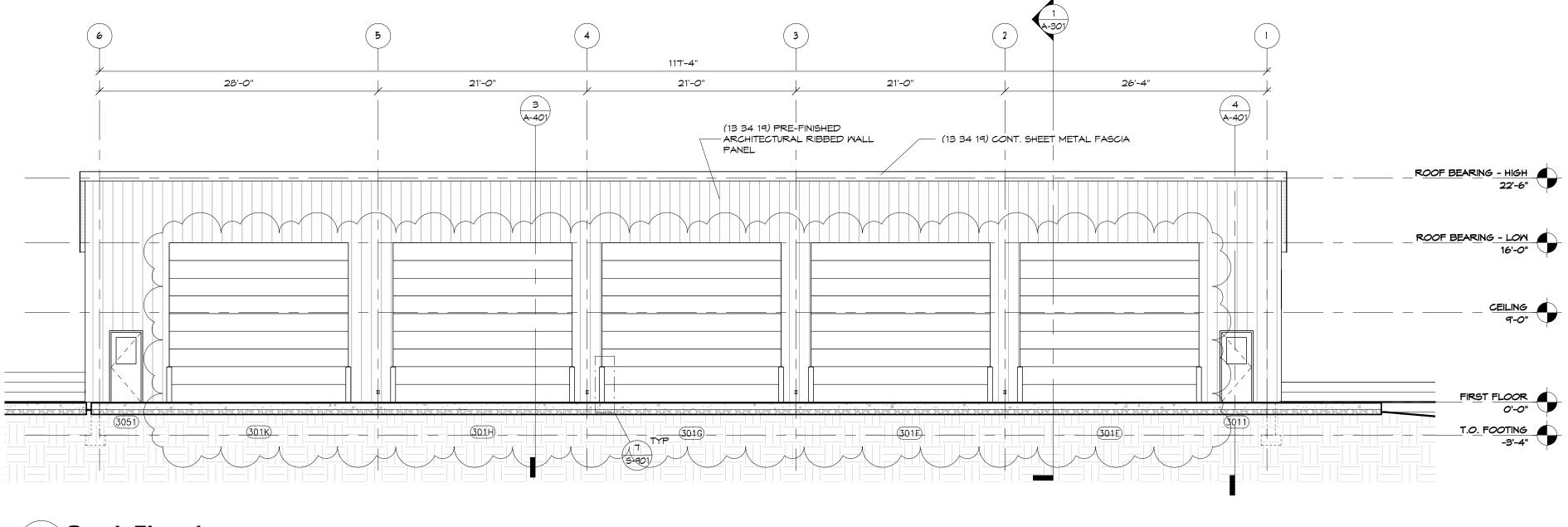
Bid No. 316014 22 05 14-6



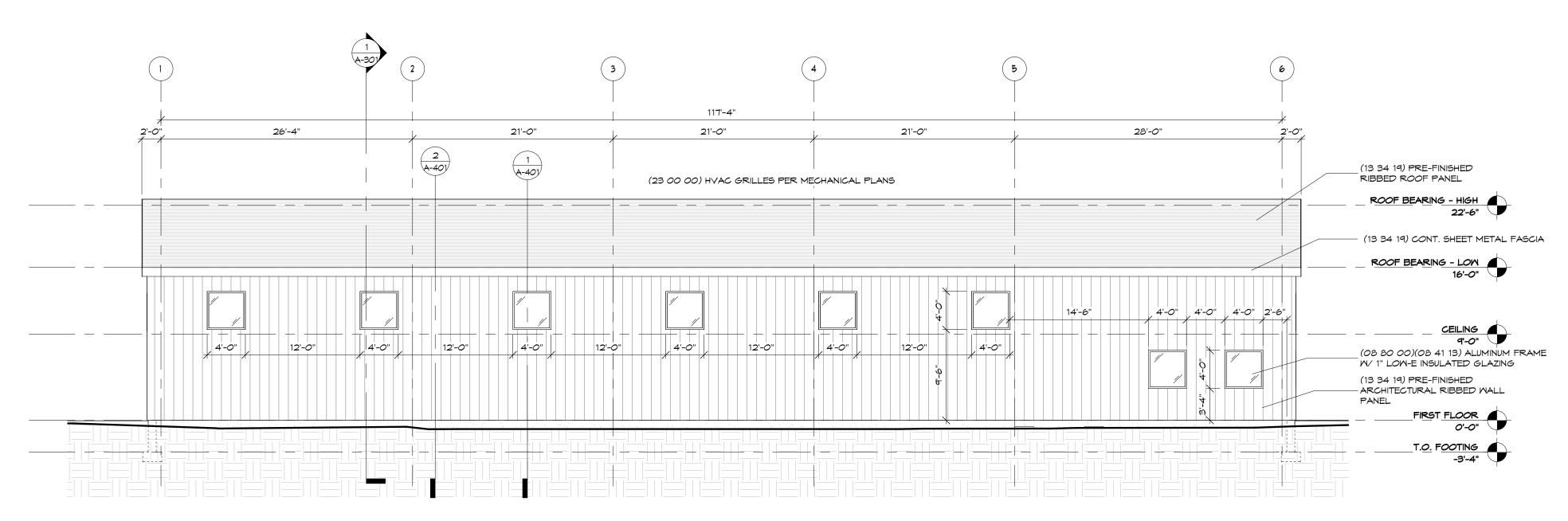




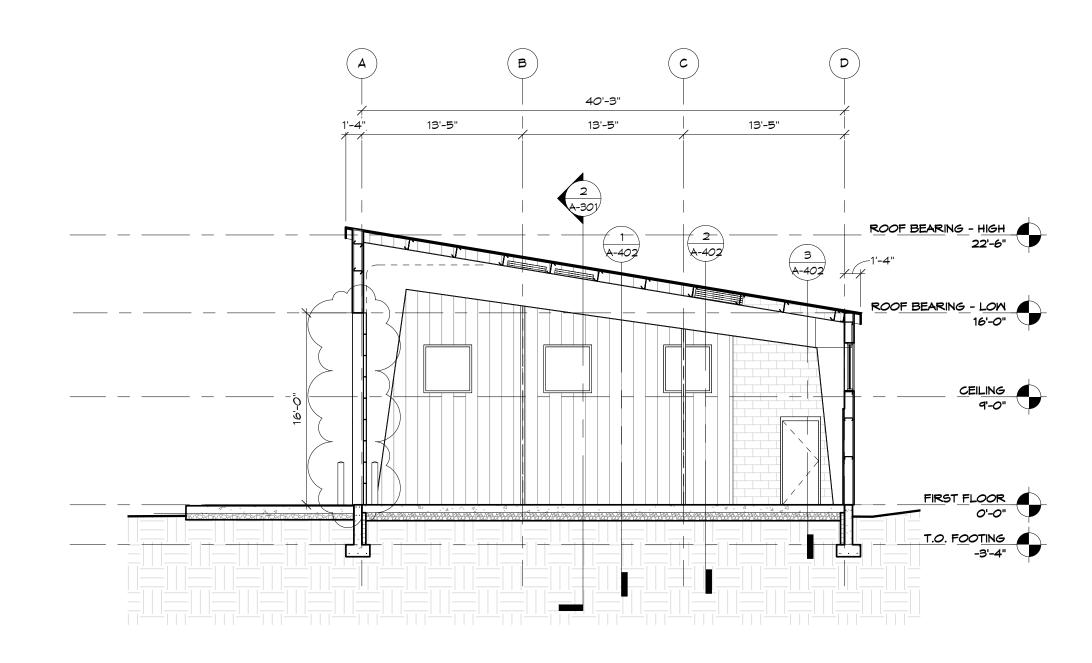




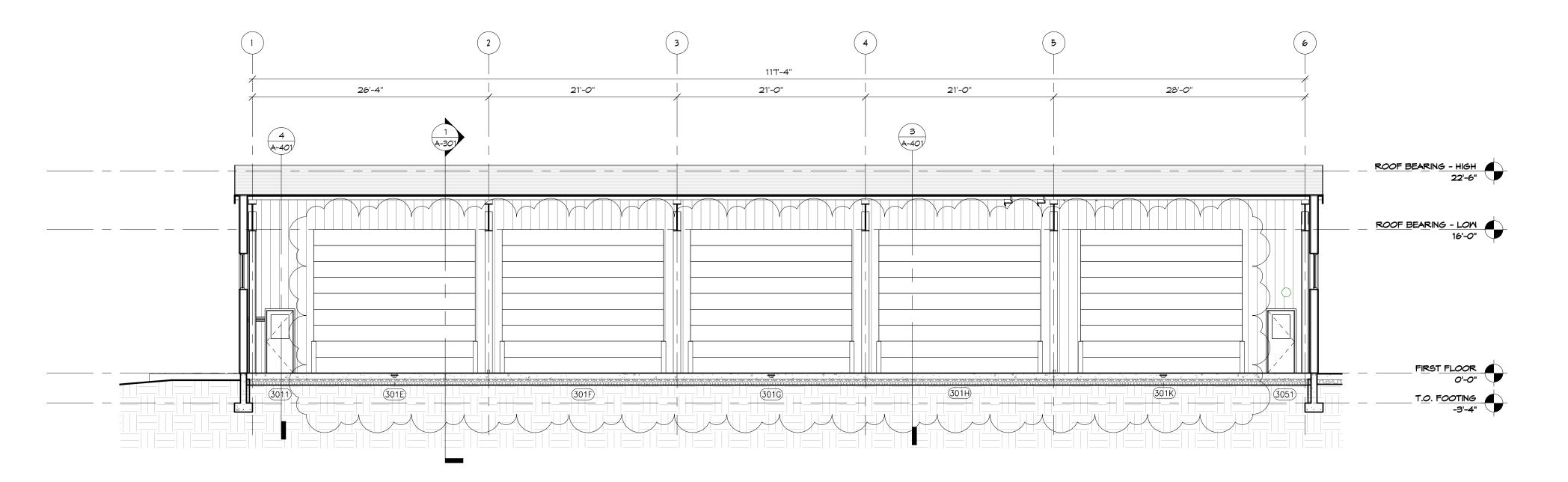
South Elevation
1/8" = 1'-0"



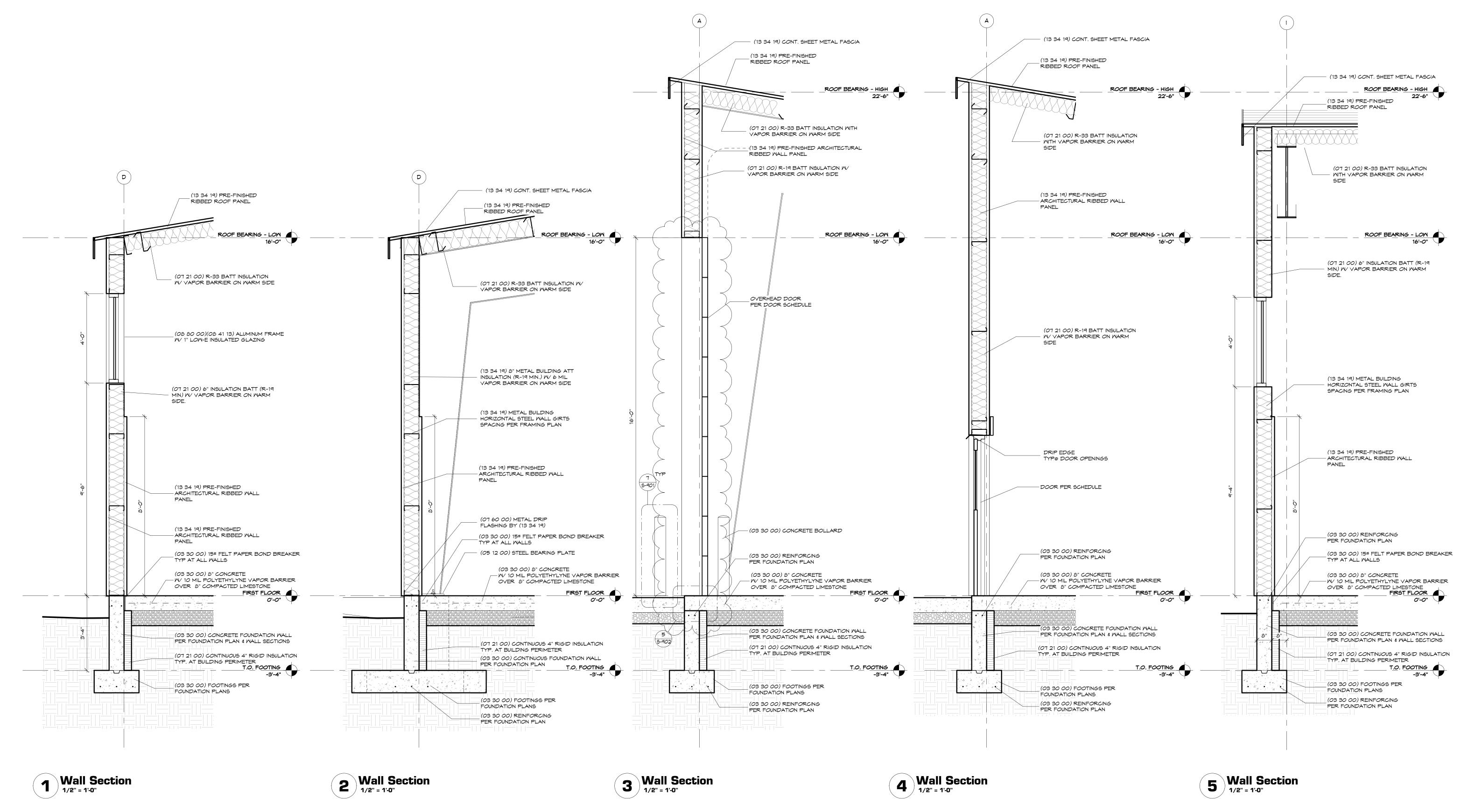
North Elevation
1/8" = 1'-0"



# 1 North-South Building Section 1/8" = 1'-0"



**2** East-West Building Section 1/8" = 1'-0"



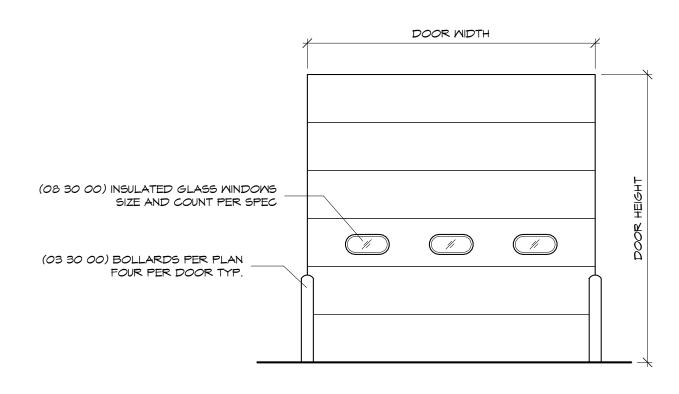
ROOM SCHEDULE											
					WALL	FINISH	CEIL	LING			
NUMBER	NAME	FLOOR TYPE	BASE	NORTH	SOUTH	EAST	WEST	TYPE	HEIGHT	REMARKS	
301	vehicle storage	CONC	VB	MTL / GL-2	MTL	MTL / GL-2	MTL / GL-2	DRYFALL	VARIES		
302	support	CONC	VB	MTL / GL-2	CMU	CMU	MTL / GL-2	ACT-1	9'-0"		
303	toilet	CONC	VB	MTL	CMU	CMU	CMU	ACT-2	8'-0"	Future	

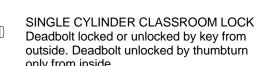
PAINT SCHEDULE												
RC	OM			WA	LLS							
NUM	NAME	FLOOR	NORTH	SOUTH	EAST	WEST	CEILING	METAL	WOOD	REMARKS		
301	vehicle storage	Ashford	Latex-S	Latex-S	Latex-S	Latex-S	Dryfall	Enamel	Varnish			
302	support	Ashford	Latex-S	Latex-S	Latex-S	Latex-S	ACT-1	Enamel	Varnish			
303	toilet	Ashford	Latex-S	Latex-S	Latex-S	Latex-S	ACT-2	Enamel	Varnish	Future		

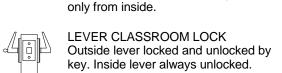
DOOR SCHEDULE																		
FROM ROOM TO ROOM			DOOR								FRAME							
MARK	NUM	NAME	NUM	NAME	TYPE	MATERIAL	SWING	LABEL	WIDTH	HEIGHT	THICKNESS	LOUVER	GLASS	TYPE	MATERIAL	LABEL	GLASS	REMARKS
3011	-	exterior	301	vehicle storage	HG	METAL	RHRB	-	3' - 0"	7' - 0"	1 3/4"	-	GL-2	Α	METAL	-	-	-
3021	301	vehicle storage	302	support	HG	METAL	RH	-	3' - 0"	7' - 0"	1 3/4"	-	GL-1	А	METAL	-	-	-
3031	301	vehicle storage	303	toilet	F	METAL	RHRB	-	3' - 0"	7' - 0"	1 3/4"	-	-	В	METAL	-	-	FUTURE DOOR
3051	-	exterior	301	vehicle storage	HG	METAL	LHRB	-	3' - 0"	7' - 0"	1 3/4"	-	GL-2	Α	METAL	-	-	-

HARDWARE SCHEDULE												
								WEATHERSTRI				
MARK	LOCKSET	PUSH-PULL	HOLD OPEN	CLOSER	HINGE	DOOR STOP	THRESHOLD	P	KICKPLATE	SOUNDSTOP	NAMEPLATE	NOTES
3011	Entrance	-	-	Х	B.B.	-	Х	X	Х	X	-	OUTBUILDING
3021	Entrance	-	X	-	Х	-	-	-	X	X	-	OUTBUILDING
3031	Privacy	-	-	X	B.B.	X	-	-	Х	X	-	OUTBUILDING
3051	Entrance	-	-	Х	B.B.	-	X	X	Х	X	-	OUTBUILDING

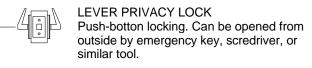
OH DOOR SCHEDULE												
FROM ROOM		TO ROOM					DOOR					
MARK	NUM	NAME	NUM	NAME	TYPE	R-Value	LABEL	WIDTH	HEIGHT	THICKNESS	GLASS	REMARKS
301E	-	exterior	301	vehicle storage	ОН	R-17		18' - 0"	7 16' - 0"	3"	GL-2	Hardware by (08 30 00)
301F	-	exterior	301	vehicle storage	ОН	R-17		18' - 0"	16' - 0"	3"	GL-2	Hardware by (08 30 00)
301G	-	exterior	301	vehicle storage	ОН	R-17		18' - 0" /	16' - 0"	3"	GL-2	Hardware by (08 30 00)
301H	-	exterior	301	vehicle storage	ОН	R-17		18' - 0"	16' - 0"	3"	GL-2	Hardware by (08 30 00)
301K	-	exterior	301	vehicle storage	ОН	R-17		18' - 0"	) 16' - 0"	3"	GL-2	Hardware by (08 30 00)
		•	•									





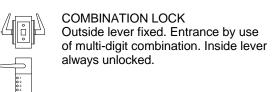






LEVER OFFICE LOCK Push-button locking. Pushing button locks outside lever until unlocked by key outside or by turning inside lever.

LEVER ENTRANCE LOCK
Turn/Push-button locking. Pushing and turning button locks outside lever requiring use of key until button in manually unlocked. Push-button locking. Push button locks outside lever until locked by outside key or by turning inside lever.

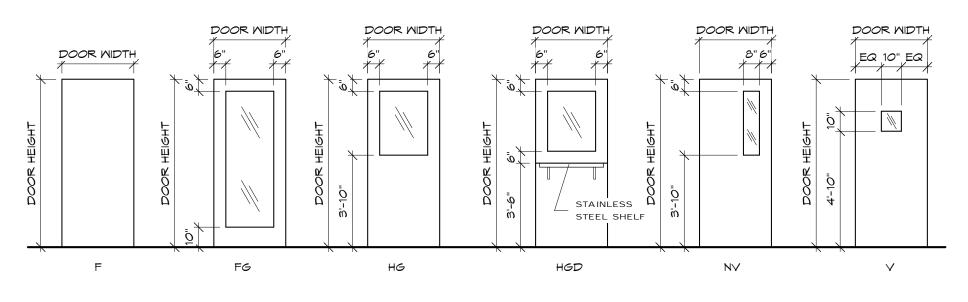


_	_	
set	<b>Types</b>	

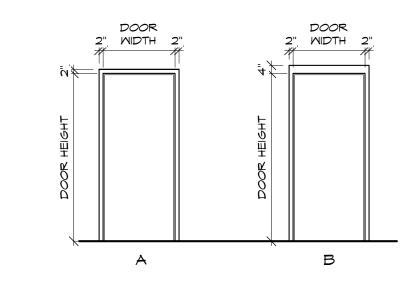
Locks

**MATERIAL KEY** CODE DESCRIPTION CEILING TYPE ACT-1 Acoustical Ceiling Tile 2x2 Acoustical Ceiling Panels (or 2x4 panels with 2x2 appearance) ACT-2 Acoustical Ceiling Tile 2x2 Vinyl Faced Gypsum Panels FLOOR TYPE CONC Sealed Concrete Concrete Carpet Tile Carpet ECB 6" Epoxy Cove Base Ероху EPOXY Epoxy Resin Flooring Ероху Vinyl Base 4" Vinyl Base PAINT SCHEDULE KEY EPOXY PAINT Epoxy Paint LATEX-E PAINT Latex Wall Paint - Enamel LATEX-S PAINT Latex Wall Paint - Satin Finish WALL TYPE CMU Concrete Masonry Painted Concrete Masonry Unit 3/8" Glass Glass 1" Insulated Glass GWB1 5/8" G.W.B. Taped and Finished on Stud Framing per Wall Type Gypsum Wallboard 5/8" Moisture & Mold Resistant Gypsum Wallboard Taped & Finished on Stud Framing per Wall Type GWB2 Gypsum Wallboard Metal Panel Pre-finished Architectural Ribbed Wall Panel 6x6 Ceramic Wall Tile Ceramic Tile

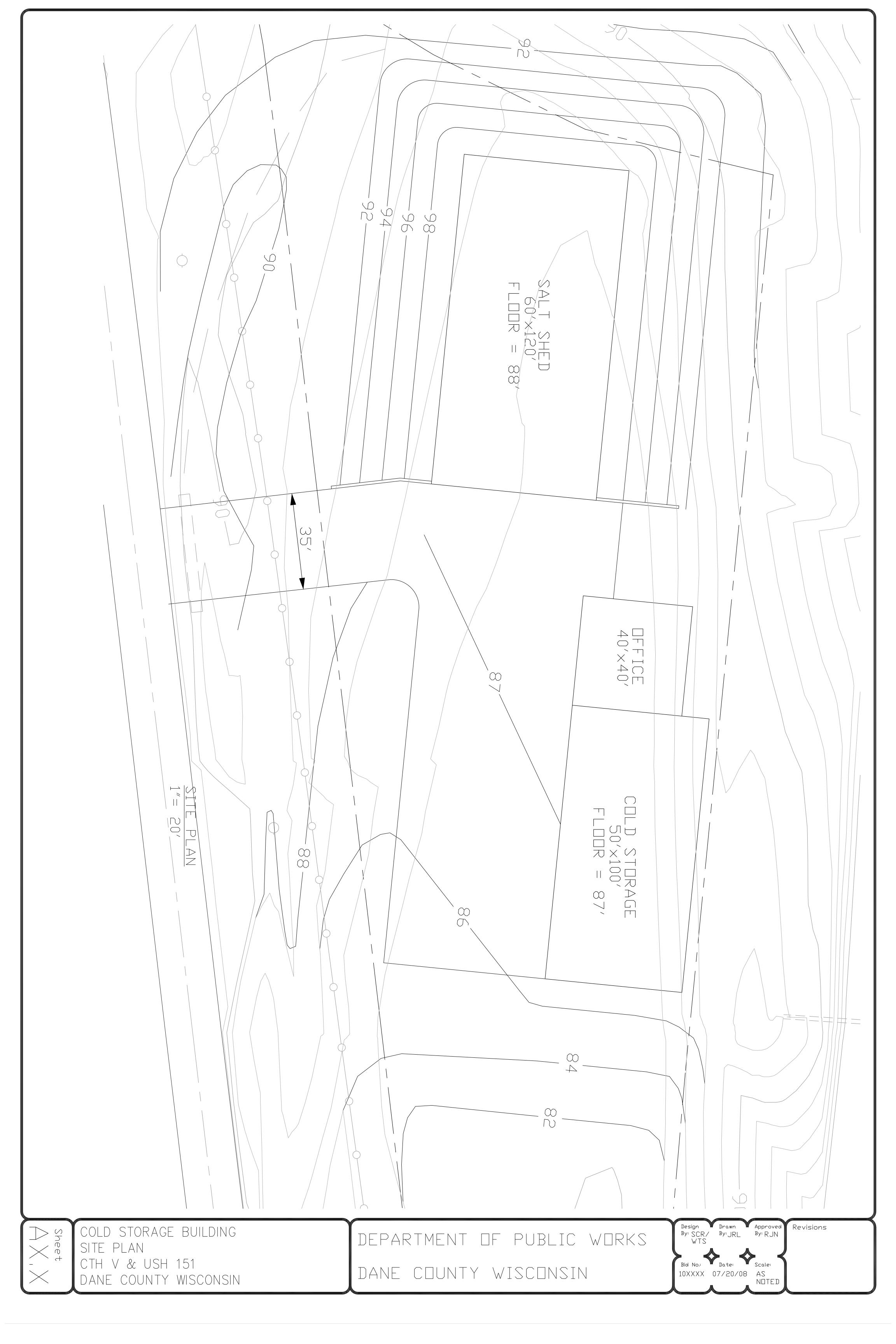
Typ OH Door



**DOOR PANEL TYPES** 



**Door Frame Types** 



# Dane County Highway Facility Satellite Building

# Response to Questions

1) The current Div 22 specification does not seem to match the work shown on drawing P204, Please Advise.

**Answer**: See addended specification section 22 05 14

2) Can you provide specification and/or detail for the 6,000 gal holding tank?

**Answer**: See addended specification section 22 05 14

3) Can you provide specification for the underground & above floor LP piping?

**Answer:** Liquid Propane (Systems) 2" and Smaller: ASTM A53, type E or S, standard weight (schedule 40) black steel pipe with ASTM A197/ANSI B16.3 class 150 black malleable iron threaded fittings or ASTM A234 grade WPB/ANSI B16.9 standard weight, seamless, carbon steel weld fittings.

4) Who makes the final connection to the new propane tank?

**Answer:** Propane supplier will connect to the propane tank and provide piping to the building along with a regulator.

5) Can you provide detail for LP piping end connection or are these lines to be valved & capped for future?

**Answer:** No future piping is anticipated. There is only 1 connection to a new unit heater.

6) The plan tag on Drawing P-204 is named "Satellite Building Plumbing Plan – Alt #1". Per item #15 in the instruction to bidders, there are no alternate bids. Please advise.

**Answer:** There is no alternate, see addended revised plan sheet P-204.

7) Can you provide invert elevations for the two 4" sanitary lines that exist the building and the 4" sleeve for future water? Is there a civil utility plan to reference?

**Answer:** See addended revised plan sheet P-204.

8) Does the CMU block wall need to go up to the deck?

**Answer**: Yes, the block wall should extend up to the deck.

9). There is a possibility for one day having CNG vehicles in the building. Should the proper light fixtures be included now?

**Answer:** Special fixtures are needed only when installed within 18" of the ceiling. Light fixture to be installed below this threshold, therefore are compatible with CNG vehicles.

10) A site plan was issued showing a 40'x40' office attached.

**Answer:** There is no 40'x40' office. See site plan issued in the bid set, sheet A-101.

11) The site plan shows a sanitary line coming out of the building for a future holding tank. Right now it just kind of ends with not dimension and it appears to end under the pavement.

Answer: Sanitary line for future holding tank should exit the building as shown plans on the west side of the building, and extend 30' to the west.