

# MISSOURI DEPARTMENT OF TRANSPORTATION

Vienna Maintenance Building  
Central District  
702 North Highway 63, Vienna, MO 65582  
Maries County

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## CODE REQUIREMENTS

- BUILDING CODE - CURRENT IBC
- PLUMBING CODE - CURRENT IBC
- MECHANICAL CODE - CURRENT IBC
- ELECTRICAL CODE - CURRENT N.E.C.



# COVER SHEET

MISSOURI DEPARTMENT  
OF TRANSPORTATION

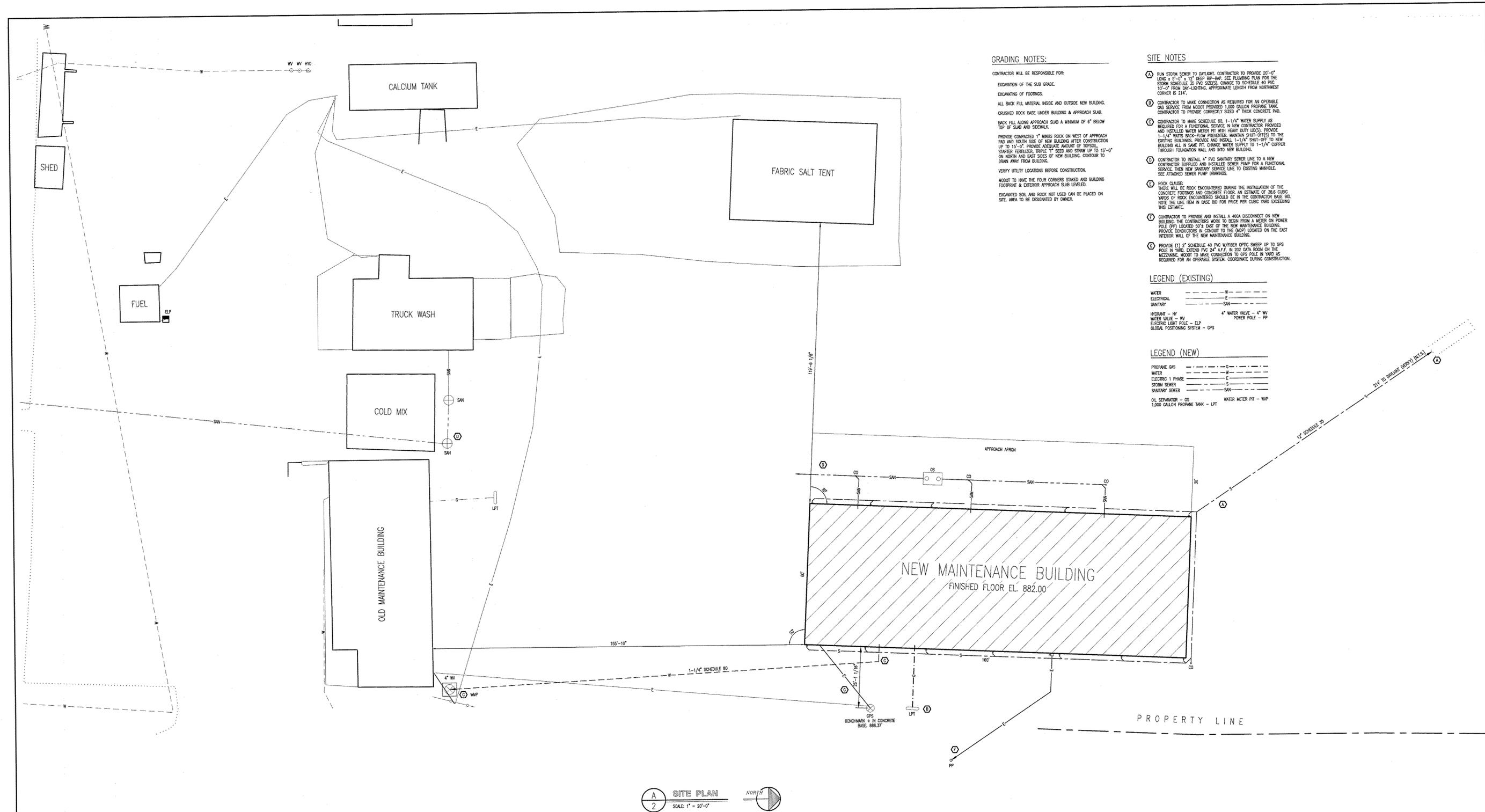
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Vienna Maintenance Building  
Central District - Maries County  
702 North Highway 63, Vienna, MO

DESIGN BY: LARRY CARVER

DATE: 9-11-15

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**GRADING NOTES:**

CONTRACTOR WILL BE RESPONSIBLE FOR:  
 EXCAVATION OF THE SUB GRADE.  
 EXCAVATING OF FOOTINGS.  
 ALL BACK FILL MATERIAL INSIDE AND OUTSIDE NEW BUILDING.  
 CRUSHED ROCK BASE UNDER BUILDING & APPROACH SLAB.  
 BACK FILL ALONG APPROACH SLAB A MINIMUM OF 6" BELOW TOP OF SLAB AND SIDEWALK.  
 PROVIDE COMPACTED 1" MINUS ROCK ON WEST OF APPROACH PAD AND SOUTH SIDE OF NEW BUILDING AFTER CONSTRUCTION UP TO 15'-0". PROVIDE ADEQUATE AMOUNT OF TOPSOIL, STARTER FERTILIZER, TRIPLE T SEED AND STRAW UP TO 15'-0" ON NORTH AND EAST SIDES OF NEW BUILDING. CONTOUR TO DRAIN AWAY FROM BUILDING.  
 VERIFY UTILITY LOCATIONS BEFORE CONSTRUCTION.  
 MODOT TO HAVE THE FOUR CORNERS STAKED AND BUILDING FOOTPRINT & EXTERIOR APPROACH SLAB LEVELED.  
 EXCAVATED SOIL AND ROCK NOT USED CAN BE PLACED ON SITE. AREA TO BE DESIGNATED BY OWNER.

**SITE NOTES:**

- 1. RUN STORM SEWER TO DRYLIGHT. CONTRACTOR TO PROVIDE 20'-0" LONG x 3'-0" x 12" DEEP RIM-RUN. SEE PLUMBING PLAN FOR THE STORM SCHEDULE 30 PVC SIZES. CHANGE TO SCHEDULE 40 PVC 12'-0" FROM DRY-LIGHTING. APPROXIMATE LENGTH FROM NORTHWEST CORNER IS 214'.
- 2. CONTRACTOR TO MAKE CONNECTION AS REQUIRED FOR AN OPERABLE GAS SERVICE FROM MODOT PROVIDED 1,000 GALLON PROPANE TANK. CONTRACTOR TO PROVIDE CORRECTLY SIZED 4" THICK CONCRETE PAD.
- 3. CONTRACTOR TO MAKE SCHEDULE 40, 1-1/4" WATER SUPPLY AS REQUIRED FOR A FUNCTIONAL SERVICE IN NEW CONSTRUCTION PROVIDED AND INSTALLED WATER METER FIT WITH HEAVY DUTY GUY(S). PROVIDE 1-1/4" WATTS BACK-FLOW PREVENTER, MAINFAN SHUT-OFF(S) TO THE EXISTING BUILDINGS. PROVIDE AND INSTALL 1-1/4" SHUT-OFF TO NEW BUILDING ALL IN SAME P.E. CHANGE. WATER SUPPLY TO 1-1/4" COPPER THROUGH FOUNDATION WALL AND INTO NEW BUILDING.
- 4. CONTRACTOR TO INSTALL 4" PVC SANITARY SEWER LINE TO A NEW CONTRACTOR SUPPLIED AND INSTALLED SEWER PUMP FOR A FUNCTIONAL SERVICE. THEN NEW SANITARY SERVICE LINE TO EXISTING MANHOLE. SEE ATTACHED SEWER PUMP DRAWINGS.
- 5. ROCK CLASSES: THERE WILL BE ROCK ENCOUNTERED DURING THE INSTALLATION OF THE CONCRETE FOOTINGS AND CONCRETE FLOOR. AN ESTIMATE OF 36.8 CUBIC YARDS OF ROCK ENCOUNTERED SHOULD BE IN THE CONTRACTOR'S BID. NOTE THE LINE ITEM IN BASE BID FOR PRICE PER CUBIC YARD EXCEEDING THIS ESTIMATE.
- 6. CONTRACTOR TO PROVIDE AND INSTALL A 400A DISCONNECT ON NEW BUILDING. THE CONTRACTOR'S WORK TO BEGIN FROM A METER ON POWER POLE (PP) LOCATED 50' EAST OF THE NEW MAINTENANCE BUILDING. PROVIDE CONDUITS IN CONDUIT TO THE (MDP) LOCATED ON THE EAST INTERIOR WALL OF THE NEW MAINTENANCE BUILDING.
- 7. PROVIDE (1) 2" SCHEDULE 40 PVC W/BBEC OPTIC SNEEP UP TO GPS POLE IN YARD. EXTERIOR PVC 4" A.P.F. IN 202 DATA ROOM ON THE MEZZANINE. MODOT TO MAKE CONNECTION TO GPS POLE IN YARD AS REQUIRED FOR AN OPERABLE SYSTEM. COORDINATE DURING CONSTRUCTION.

**LEGEND (EXISTING)**

WATER ——— W ———  
 ELECTRICAL ——— E ———  
 SANITARY ——— SAN ———  
 HYDRANT — HY ——— 4" WATER VALVE — 4" WV  
 WATER VALVE — WV ——— POWER POLE — PP  
 ELECTRIC LIGHT POLE — ELP ———  
 GLOBAL POSITIONING SYSTEM — GPS

**LEGEND (NEW)**

PROPANE GAS ——— G ———  
 WATER ——— W ———  
 ELECTRIC 1 PHASE ——— P ———  
 STORM SEWER ——— S ———  
 SANITARY SEWER ——— SAN ———  
 OIL SEPARATOR — OS ——— WATER METER PIT — WMP

**A** SITE PLAN  
**2** SCALE: 1" = 20'-0"  
 NORTH

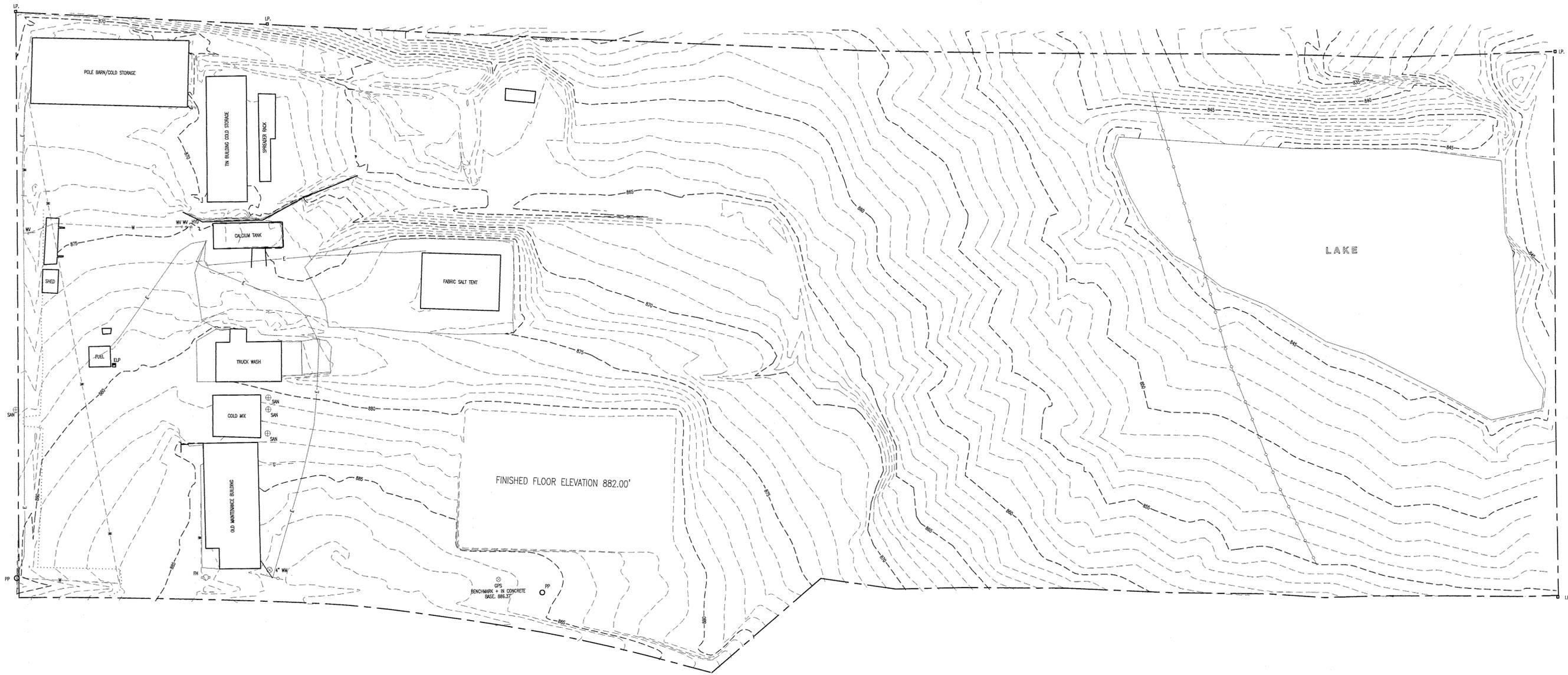


**SITE PLAN**

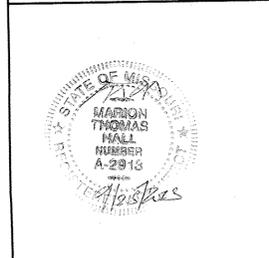
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 DIVISION OF GENERAL SERVICES  
 FACILITIES MANAGEMENT

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 Sheet 2 of 20




**EXISTING CONTOUR PLAN**  
 SCALE: 1" = 40'-0"

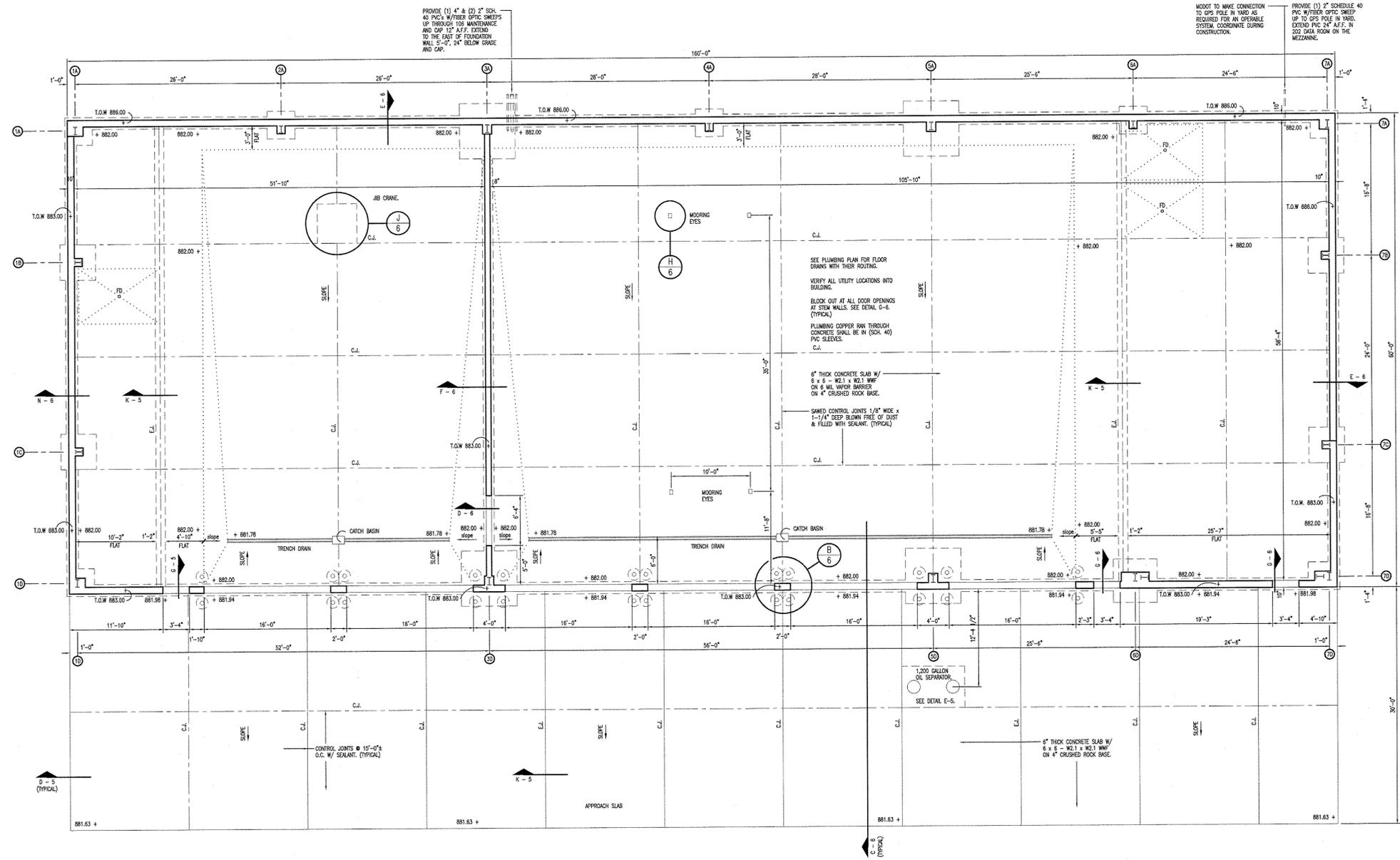


# EXISTING CONTOUR PLAN

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PROVIDE (1) 4" & (2) 2" SCH. 40 TUBULAR W/ FIBER OPTIC SHEETS UP THROUGH 106 MAINTENANCE AND CAP 12" A.F.F. EXTEND TO THE EAST OF FOUNDATION WALL 5'-0", 24" BELOW GRADE AND CAP.

MOOR TO MAKE CONNECTION TO GPS POLE IN YARD AS REQUIRED FOR AN OPENABLE SYSTEM. COORDINATE DURING CONSTRUCTION.

PROVIDE (1) 2" SCHEDULE 40 PVC W/ FIBER OPTIC SHEET UP TO GPS POLE IN YARD. EXTEND PVC 24" A.F.F. IN 202 DATA ROOM ON THE MEZZANINE.

SEE PLUMBING PLAN FOR FLOOR DRAINS WITH THEIR ROUTING. VERIFY ALL UTILITY LOCATIONS INTO BUILDING. BLOCK OUT AT ALL DOOR OPENINGS AT STEM WALLS. SEE DETAIL G-6. (TYPICAL). PLUMBING COPPER RAN THROUGH CONCRETE SHALL BE IN (SCH. 40) PVC SLEEVES. C.A.

6" THICK CONCRETE SLAB W/ 6 x 6 - #2.1 x #2.1 W/P ON 6 MIL VAPOR BARRIER ON 4" CRUSHED ROCK BASE.

SAWED CONTROL JOINTS 1/4" WIDE x 1'-1/4" DEEP BLOW FREE OF DUST & FILLED WITH SEALANT. (TYPICAL).

**A**  
**4** FOUNDATION PLAN  
SCALE: 1/8" = 1'-0"  
NORTH

SEE SHEET 5 & 6 FOR COLUMN LINE FOOTING PLAN DETAILS.



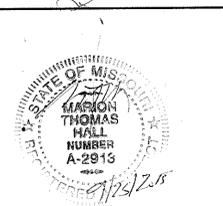
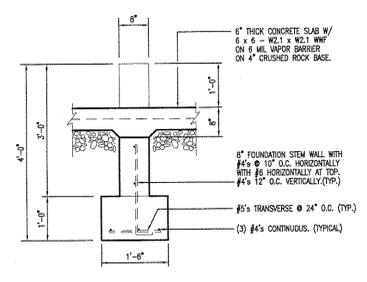
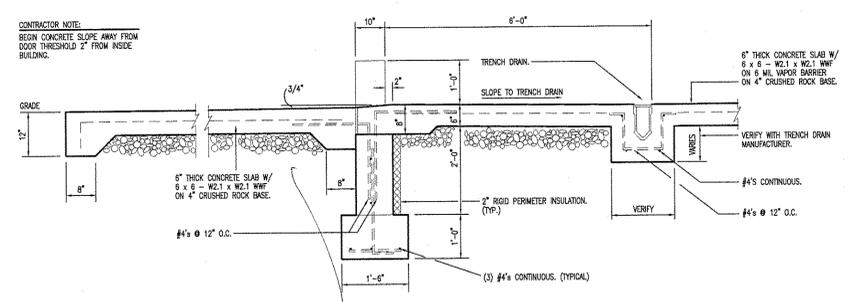
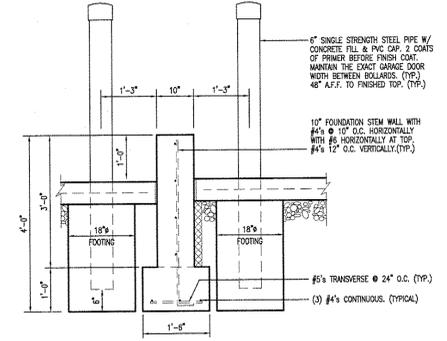
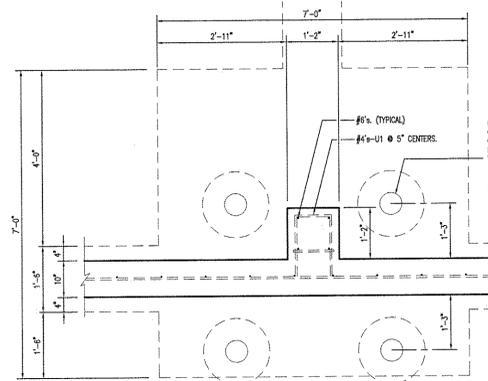
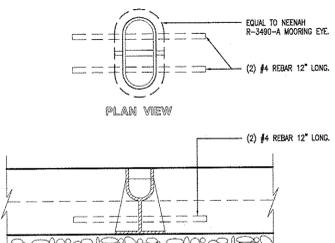
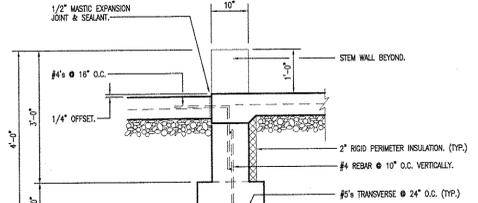
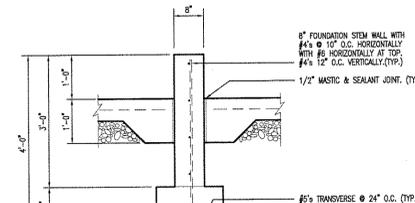
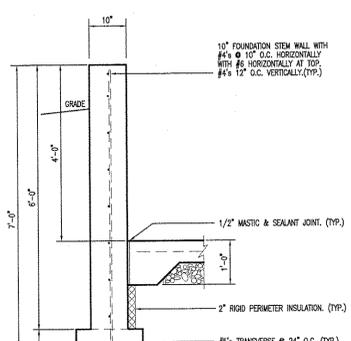
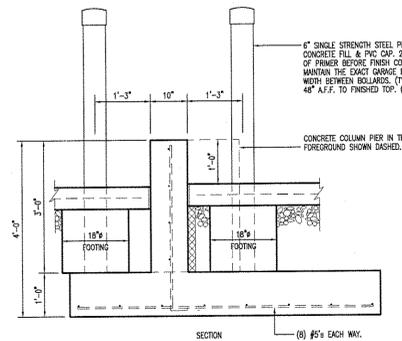
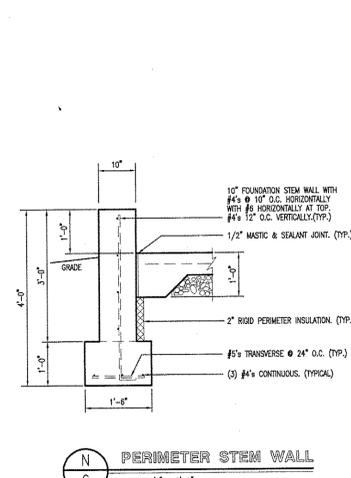
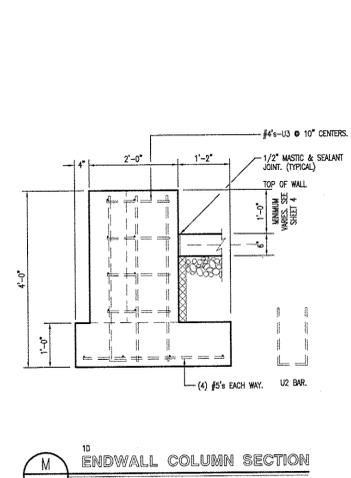
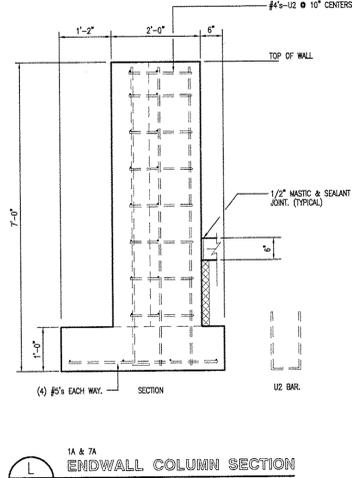
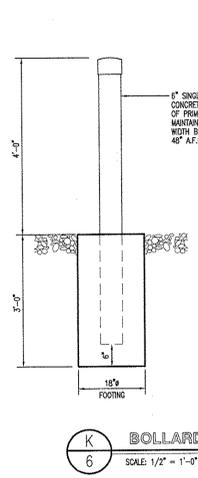
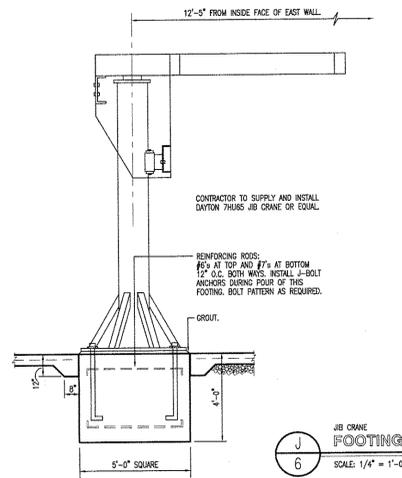
# FOUNDATION PLAN

MISSOURI DEPARTMENT OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Vienna Maintenance Building  
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DESIGN BY: LARRY CARVER  
DATE: 9-11-15  
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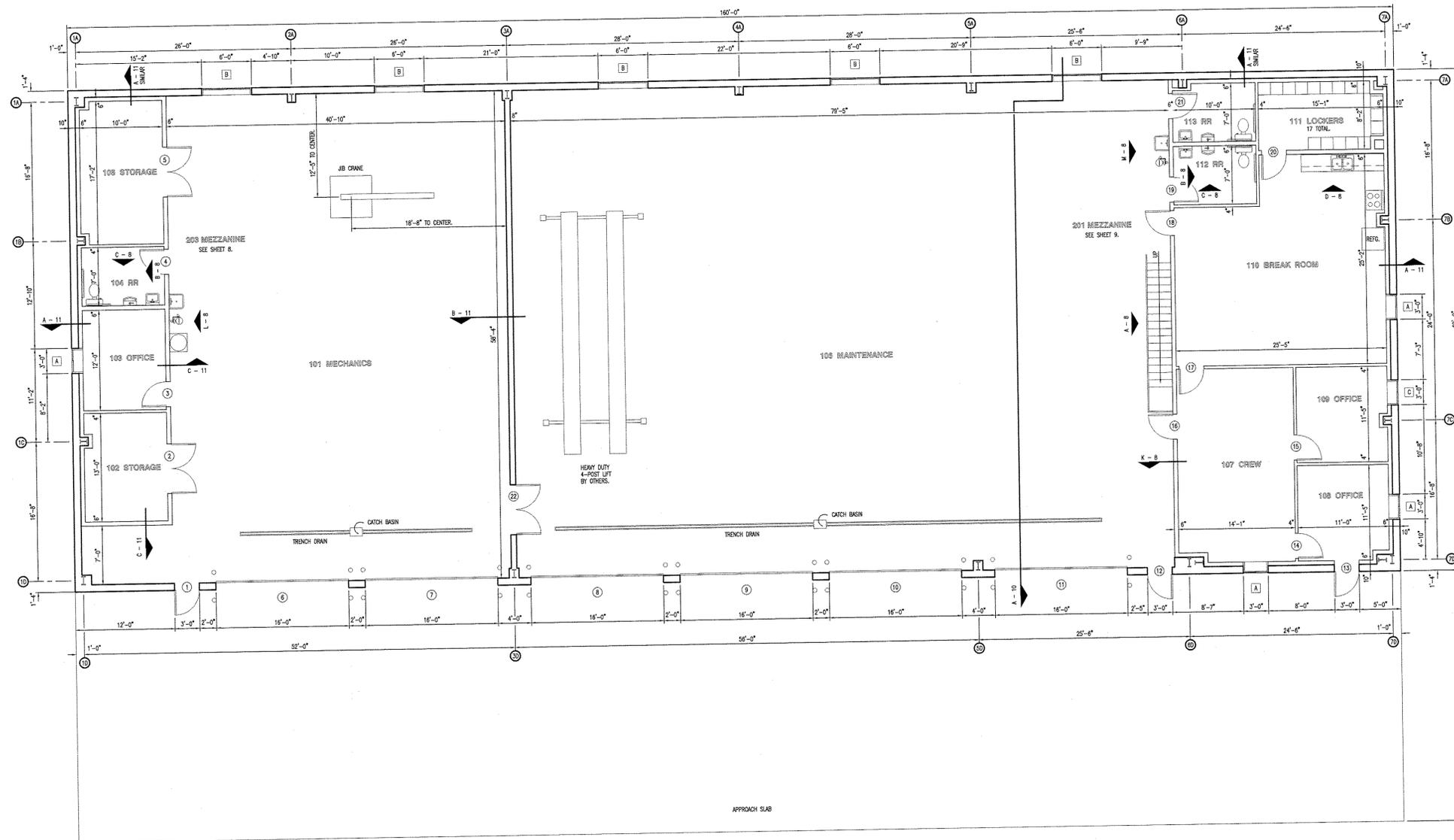


# FOUNDATION DETAILS

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A  
7
FLOOR PLAN
SCALE: 1/8" = 1'-0"

  
NORTH

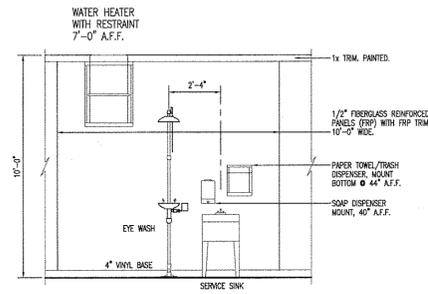


# FLOOR PLAN

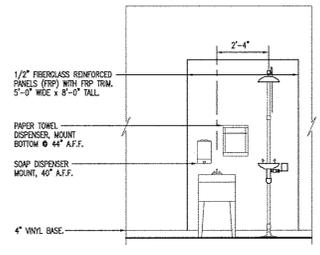
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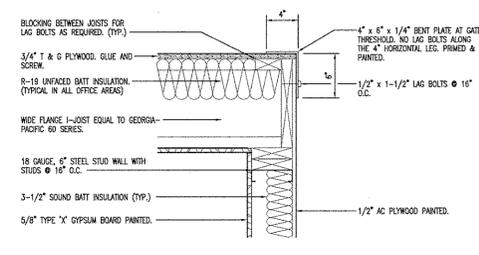
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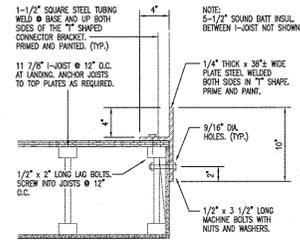
**L** FIXTURE ELEVATION  
SCALE: 1/4" = 1'-0"



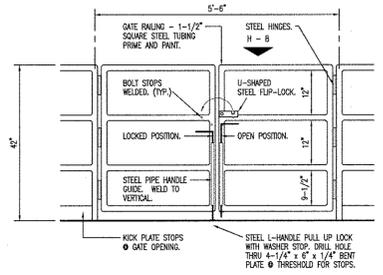
**M** FIXTURE ELEVATION  
SCALE: 1/4" = 1'-0"



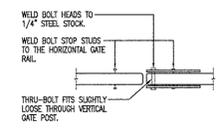
**N** SECTION AT KICKPLATE  
SCALE: 1" = 1'-0"



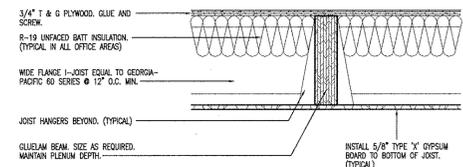
**F** KICK PLATE DETAIL  
SCALE: 1" = 1'-0"



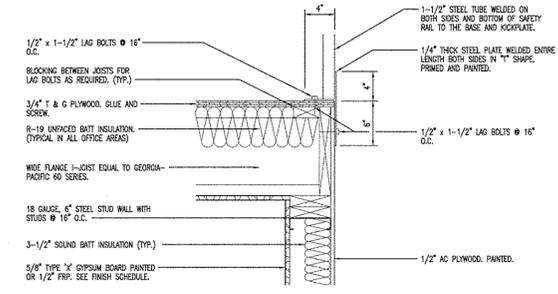
**G** VIEW FROM MEZZANINE SWING GATE DETAIL  
SCALE: 1/2" = 1'-0"



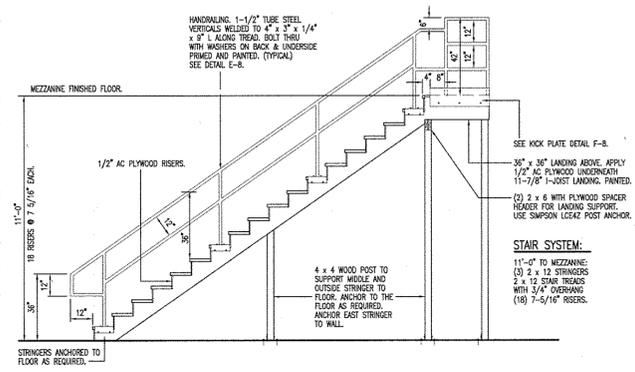
**H** FLIP LOCK  
SCALE: 1" = 1'-0"



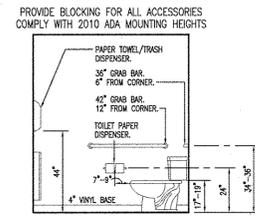
**J** BEAM DETAIL  
SCALE: 1" = 1'-0"



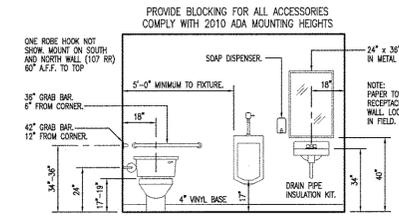
**K** SECTION @ KICKPLATE  
SCALE: 1" = 1'-0"



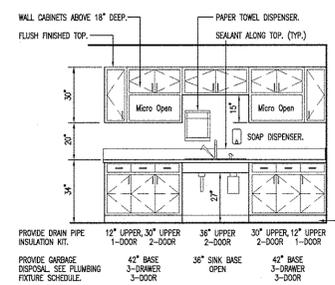
**A** MEZZANINE STAIR SYSTEM  
SCALE: 1/4" = 1'-0"



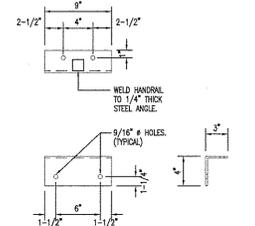
**B** 112 RR (REVERSED), 104 MIRROR REST ROOM ELEVATION  
SCALE: 1/4" = 1'-0"



**C** 112 RR (REVERSED), 104 MIRROR REST ROOM ELEVATION  
SCALE: 1/4" = 1'-0"



**D** CASEWORK ELEVATION  
SCALE: 1/4" = 1'-0"



**E** STAIR RAIL CONNECTION  
SCALE: 1" = 1'-0"

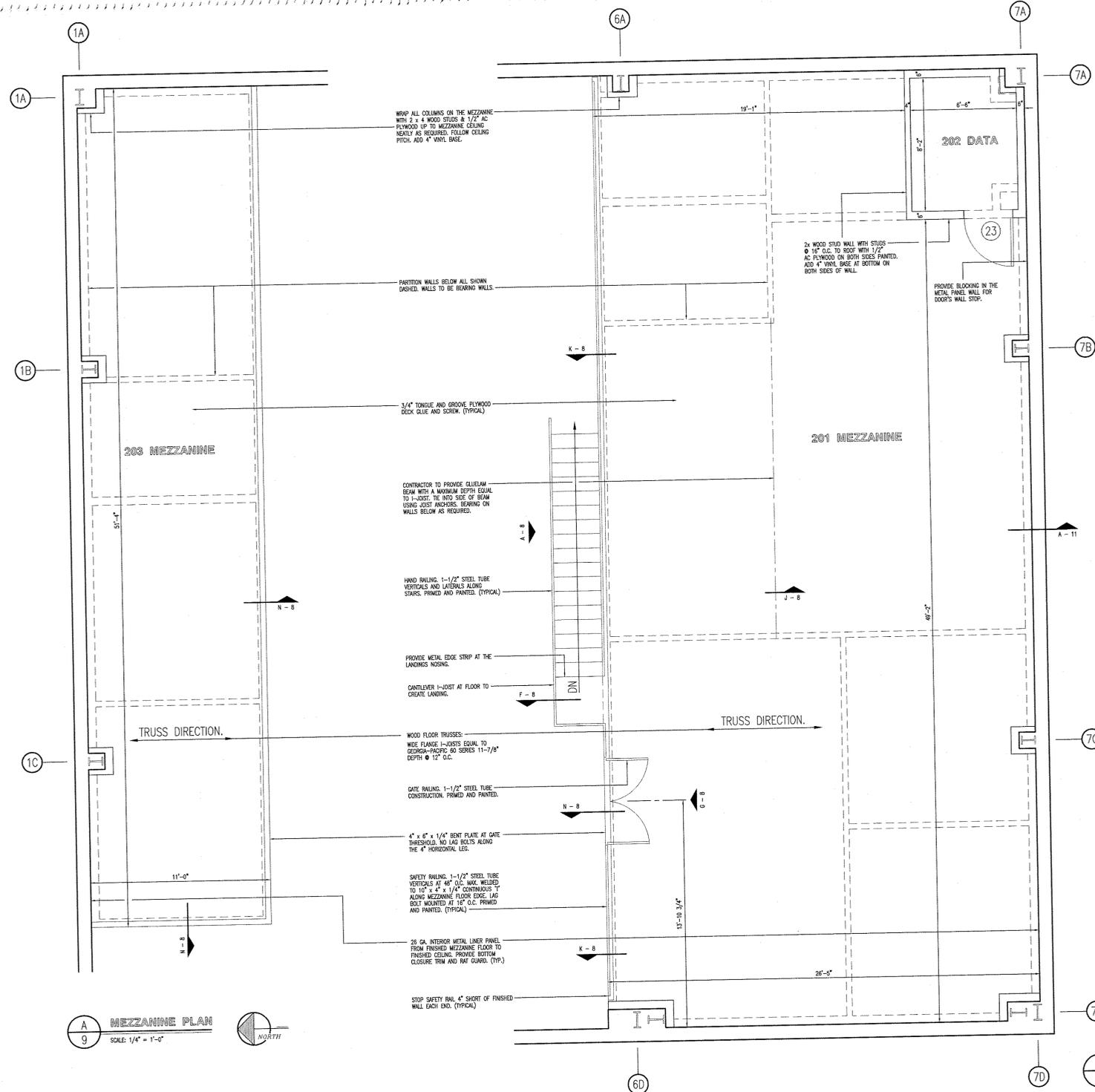


# INTERIOR ELEVATIONS

MISSOURI DEPARTMENT OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

Vienna Maintenance Building  
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**A** MEZZANINE PLAN  
SCALE: 1/4" = 1'-0"



**B** MEZZANINE PLAN  
SCALE: 1/4" = 1'-0"

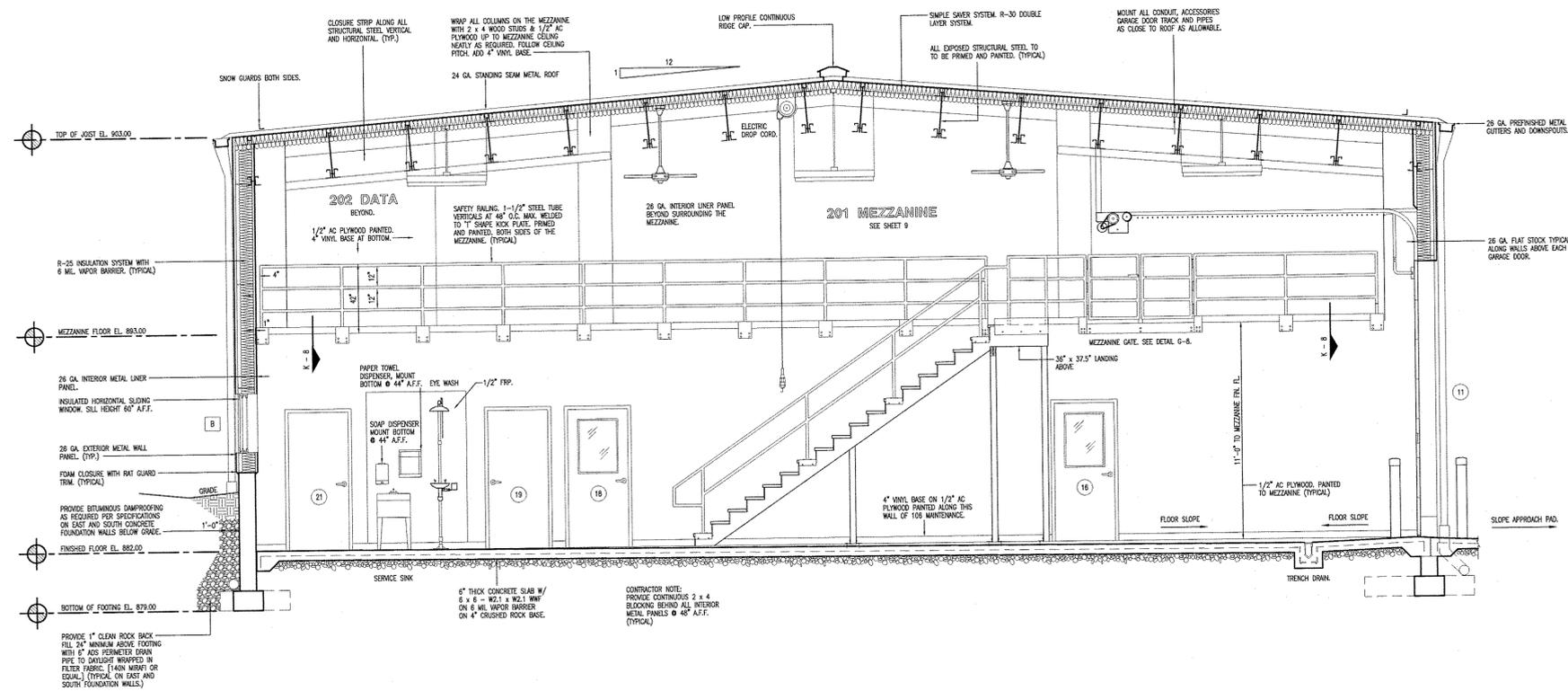


# MEZZANINE PLAN

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FACILITIES MANAGEMENT

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**A**  
**10** BUILDING SECTION - 106 MAINTENANCE  
 SCALE 1/4" = 1'-0"

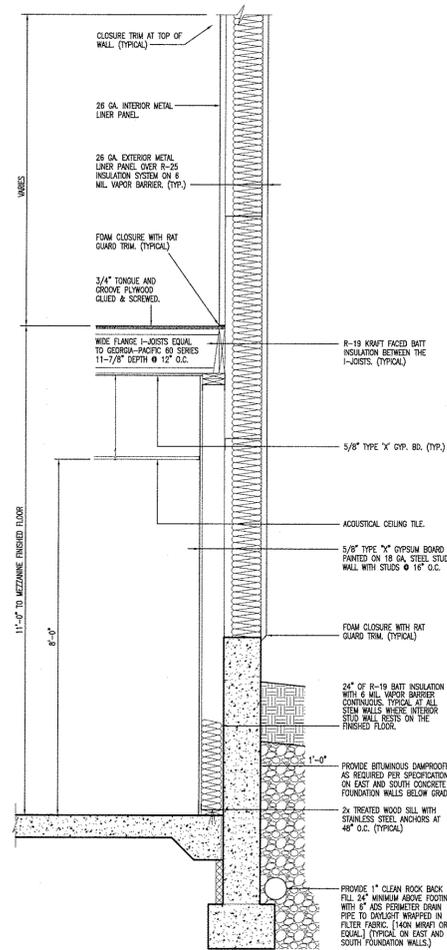


# BUILDING SECTION

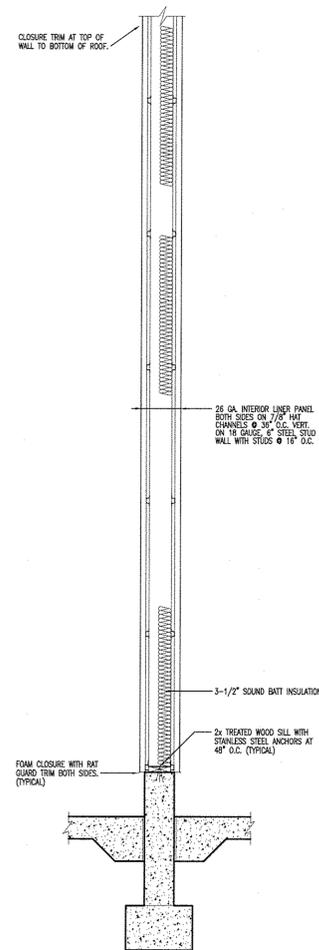
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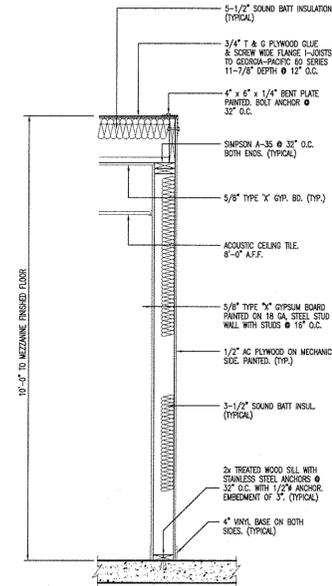
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**A** EXTERIOR WALL SECTION  
SCALE: 1/2" = 1'-0"



**B** WALL SECTION  
SCALE: 1/2" = 1'-0"



**C** WALL SECTION  
SCALE: 1/2" = 1'-0"

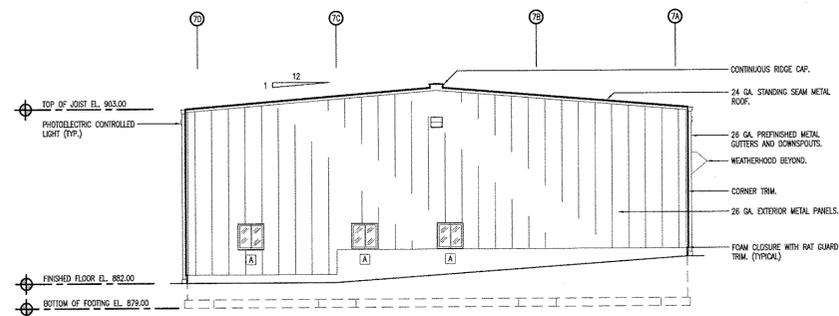


# WALL SECTIONS

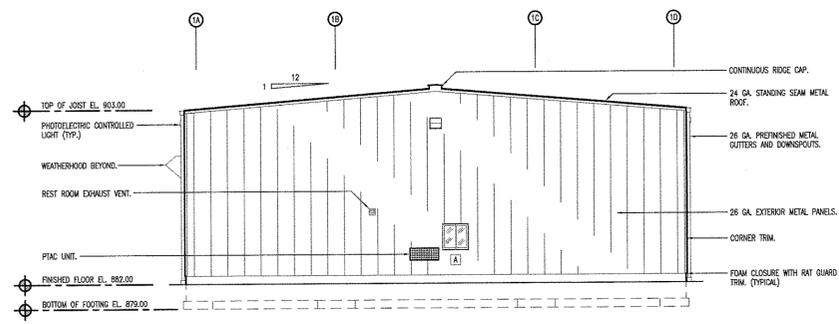
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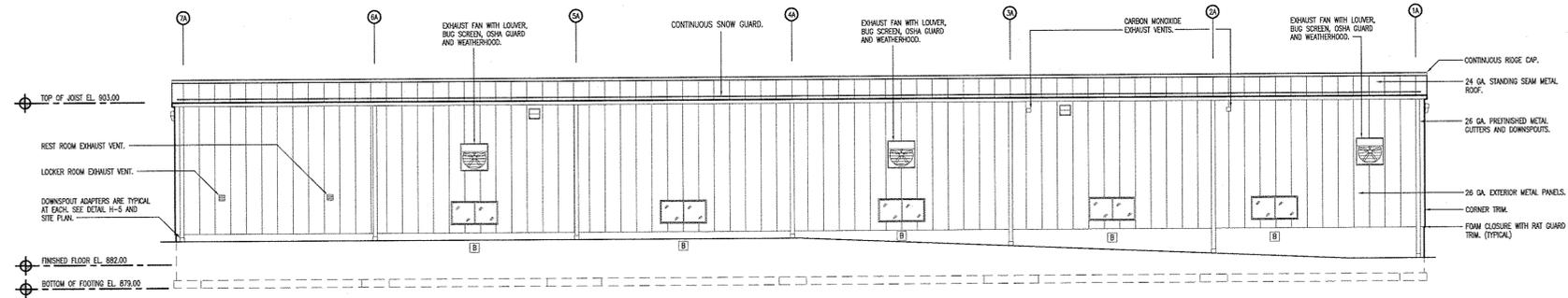
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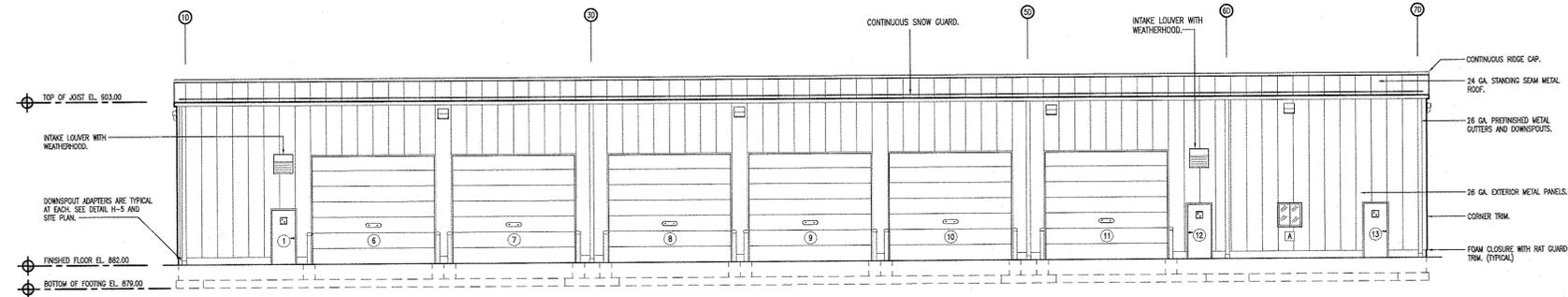
**C SOUTH ELEVATION**  
SCALE: 3/32" = 1'-0"



**D NORTH ELEVATION**  
SCALE: 3/32" = 1'-0"



**B EAST ELEVATION**  
SCALE: 3/32" = 1'-0"



**A WEST ELEVATION**  
SCALE: 3/32" = 1'-0"

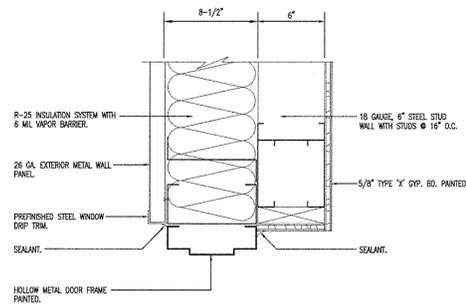


# ELEVATIONS

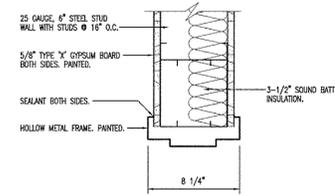
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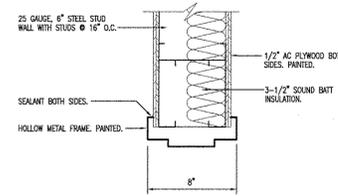
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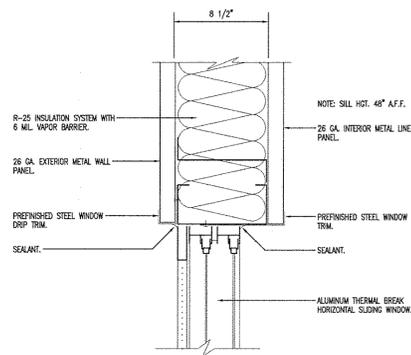
**L**  
13  
JAMB SIMILAR  
DOOR HEAD  
SCALE: 1-1/2" = 1'-0"



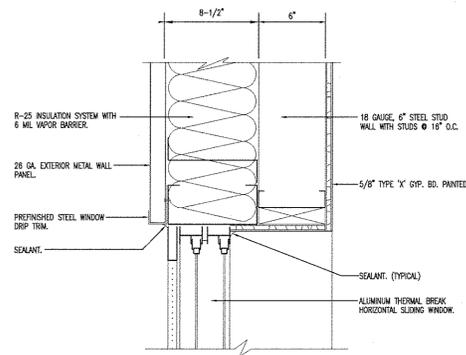
**M**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



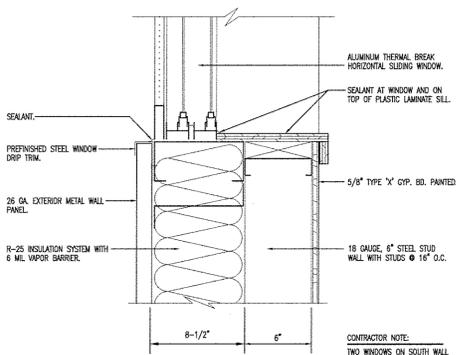
**N**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



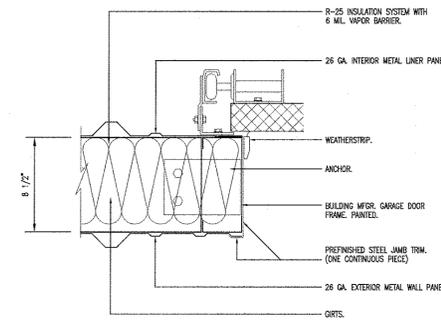
**F**  
13  
JAMB & SILL SIMILAR  
WINDOW HEAD  
SCALE: 1-1/2" = 1'-0"



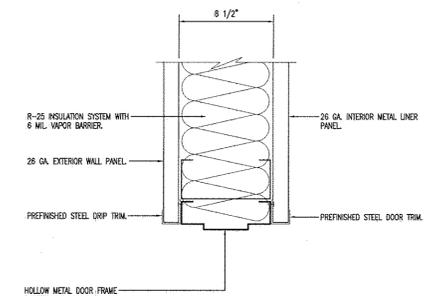
**G**  
13  
JAMB SIMILAR  
WINDOW HEAD  
SCALE: 1-1/2" = 1'-0"



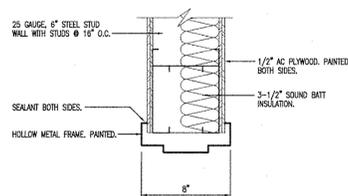
**H**  
13  
WINDOW SILL  
SCALE: 1-1/2" = 1'-0"



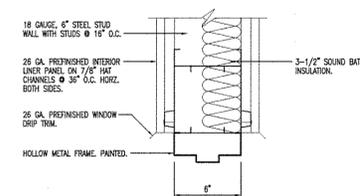
**J**  
13  
GARAGE DOOR JAMB  
SCALE: 1-1/2" = 1'-0"



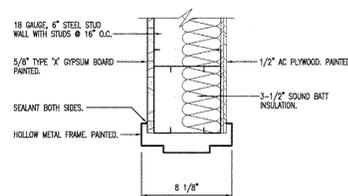
**K**  
13  
JAMB SIMILAR  
DOOR HEAD  
SCALE: 1-1/2" = 1'-0"



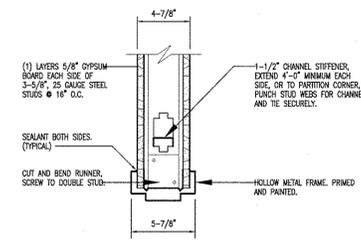
**A**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



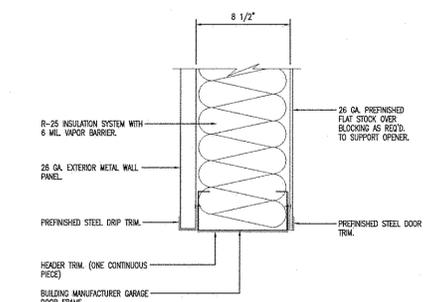
**B**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



**C**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



**D**  
13  
DOOR HEAD/JAMB  
SCALE: 1-1/2" = 1'-0"



**E**  
13  
GARAGE DOOR HEAD  
SCALE: 1-1/2" = 1'-0"

CONTRACTOR NOTE:  
TWO WINDOWS ON SOUTH WALL  
ATTACHED TO TOP OF CONCRETE  
STEM WALL. LAMINATE SILL INSTEAD  
TYPICAL FLASHING AS REQUIRED.

SOUND BATT INSULATION NOT SHOWN.



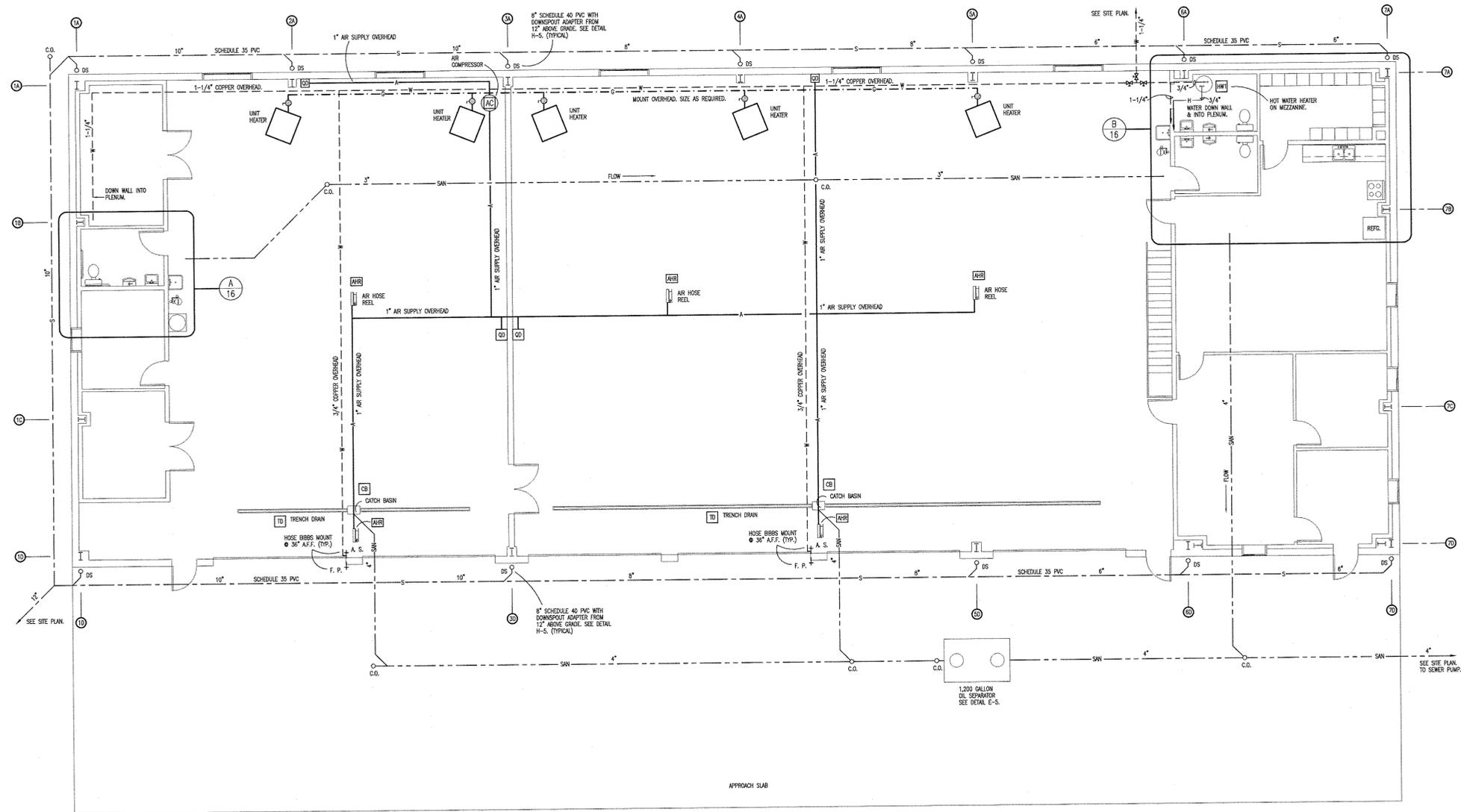
# HEAD & JAMB DETAILS

MISSOURI DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Vienna Maintenance Building  
Central District - Maries County  
702 North Highway 63, Vienna, MO

DESIGN BY: LARRY CARVER  
DATE: 9-11-15  
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**LEGEND**

HOT WATER	— H —
WATER	— W —
SANITARY SEWER	— SAN —
STORM	— S —
COMPRESSED AIR	— A —
GAS	— G —
CLEANOUT	— C.O. —
GAS VALVE	— G.V. —

**A**  
15  
**PLUMBING PLAN**  
SCALE: 1/8" = 1'-0"  
NORTH



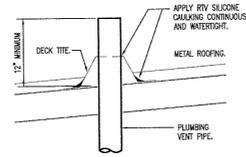
# PLUMBING PLAN

**MISSOURI DEPARTMENT OF TRANSPORTATION**  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Vienna Maintenance Building  
Central District - Maries County  
702 North Highway 63, Vienna, MO

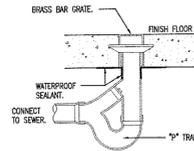
DESIGN BY: LARRY CARVER  
DATE: 9-11-15  
Sheet  
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PLUMBING SCHEDULE						
SYM.	FIXTURE	PIPE CONNECTION	PIPE CONNECTION	VENT	REMARKS	
WC	WATER CLOSET	1/2"	1/2"	3"	2"	EQUAL TO AMERICAN STANDARD #277-100 FLOOR MOUNT, PRESSURE ASSISTED, ELONGATED WATER-SAVER "CASCET" WATER CLOSET; 16-1/2" HIGH 310.076 SINK, 400-100 TANK. INCLUDE OPEN FRONT SEAT WITH LID. (WHITE)
UR	URINAL	3/4"	1/2"	1-1/2"	1-1/2"	EQUAL TO AMERICAN STANDARD #8601-021 "LYMBROOK" 1.0 GALLON URINAL WITH SLEEN ROYAL 100-1 FLUSH VALVE.
LV	LAVATORY	1/2"	1/2"	2"	2"	EQUAL TO AMERICAN STANDARD #487-024, 20" x 16" ENAMELED, CAST IRON REFRIGERANT WALL MOUNT LAVATORY WITH 1/2" CENTERSET SHAMPOO DISPENSER 5-2-81 SINGLE LEVER LAVATORY FAUCET. INCLUDE AN ADA APPROVED INSULATION KIT.
SS	SERVICE SINK	1/2"	1/2"	1-1/2"	1-1/2"	EQUAL TO MASTEC #187, 20" x 14" FIBERGLASS, DRUGGED STONE AND RESIN BLEND SERVICE SINK WITH FAUCET ELKAY LK408208L2, 4" CENTER, SWING SPOUT AND Aerator END.
EM	EMERGENCY EYE WASH	1-1/4"	3/4"			EQUAL TO BRADLEY MODEL 519-310" TRENCH SHOWER/EYE WASH UNIT SPECS YELLOW, 519-2102 THERMOSTATIC MIXING VALVE.
WH	WATER HEATER	3/4"	3/4"			A.O. SMITH MODEL NUMBER EES-30 (2) 4500 WATT, 240 VOLT ELEMENTS, 30 GALLON ELECTRIC WITH PRESSURE RELIEF VALVE OR EQUAL MOUNT ON MEZZANINE WITH DRAIN PAN.
HB-1	HOSE BIBB	3/4"				EXTERIOR - EQUAL TO WOODFORD MODEL 677-12 FREEZELESS WALL MOUNT WITH 3/4" N.P.T. OUTLET, INTERNAL VACUUM BREAKER-BACK FLOW PREVENTER.
HB-2	HOSE BIBB	3/4"				INTERIOR - EQUAL TO WOODFORD MODEL 26 WALL FAUCET WITH 3/4" N.P.T. OUTLET, INTERNAL VACUUM BREAKER-BACKFLOW PREVENTER.
FD	FLOOR DRAIN			2"		PVC FLOOR DRAIN WITH P-TRAP, 6-1/2" DIA. NICKEL-BRONZE STRAINER, 2" FP THREADED TRAP-SHAFT BREAKER DEVICE, 1-1/2" PRE-INSTALLED FP CLEAN-OUT THREADS.
CO	CLEAN OUT					INTERIOR APPLICATIONS: BRASS WITH ADAPTER AND CAP EQUAL TO PIPE SIZE SHOWN. EXTERIOR APPLICATIONS USE PVC.
AC	AIR COMPRESSOR					EQUAL TO INGERSOLL-RAND MODEL #2340, 28A, 5 HP, 60 GALLON VERTICAL, 2-STAGE. PROVIDE RUBBERIZED WROUGHT AT EACH FLOOR MOUNT TO ACT AS A SHOCK ABSORBER. SIZE MOUNT AS REQUIRED. PROVIDE LINE FILTERS AS REQUIRED. SEE BREAKER.
HR	AIR HOSE REEL					EQUAL TO REELCRAFT 7850 OLP 57 300 LOW PRESSURE HEAVY DUTY ALL STEEL CONSTRUCTION WITH ONE PRESS. TRAP AROUND GUIDE ARM.
QC	QUICK DISCONNECT					VERY SIZE WITH MOORE MECHANIC. MOUNT AT 48" A.F.F. ATTACH PROXIMITY TO USES.
SK	SINK	1/2"	1/2"	2"	2"	EQUAL TO ELKAY MODEL P8R-3321 DOUBLE BOWL SINK WITH STANDARD 4 HOSE PATTERNS AND ELKAY MODEL 18-4311-F CHROME FAUCET, SPOUT, SWIVEL AERATOR AND SPRAY. PROVIDE NONSKIDPROOF EVOLUTION 3/4" HP, 8.1 HP, GARAGE DISPOSAL.
TD	TRENCH DRAIN			4"		EQUAL TO ACO K100 CHANNEL SLOPE TRENCH DRAIN SYSTEM WITH TYPE 4810 DUCTILE QUICKLOC CAST IRON GRATE.
CB	CATCH BASIN			4"		EQUAL TO ACO W800 CATCH BASIN WITH PLASTIC TRASH BUCKET WITH TYPE 4810 DUCTILE QUICKLOC CAST IRON GRATE FOR LID.
WH	WATER HEATER	3/4"	3/4"			A.O. SMITH MODEL NUMBER EES-30 4500 WATT, 240 VOLT ELEMENTS, 30 GALLON ELECTRIC WITH PRESSURE RELIEF VALVE OR EQUAL ON INSULATED WALL MOUNT RESTROOM SYSTEM MODEL 50-SHOP-M-C. INCLUDE MOLDSITE RESTRAINT STRIP HR-80-350.
OS	OIL SEPARATOR			4"		EQUAL TO CHAMPION PRECAST INC. 1,000 GALLON OIL & GREASE INTERCEPTION STOCK STANDARD NO. 140-002180, HEAVY DUTY PRECAST CONCRETE, STANDARD 8" CAST IRON FRAME, LID AND COLLAR. P/N: (573)394-5855.



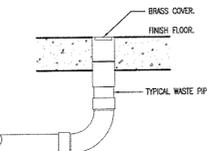
VENT THROUGH ROOF DETAIL

SCALE: NONE



FLOOR DRAIN DETAIL

SCALE: NONE

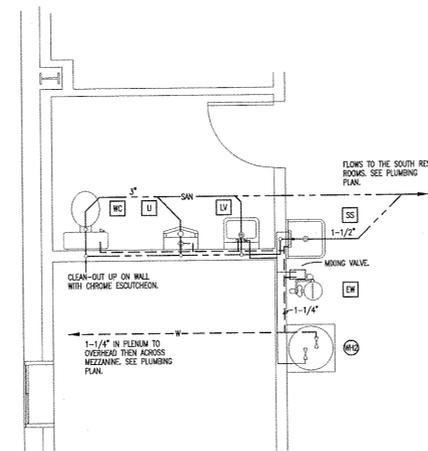


FLOOR CLEANOUT DETAIL

SCALE: NONE

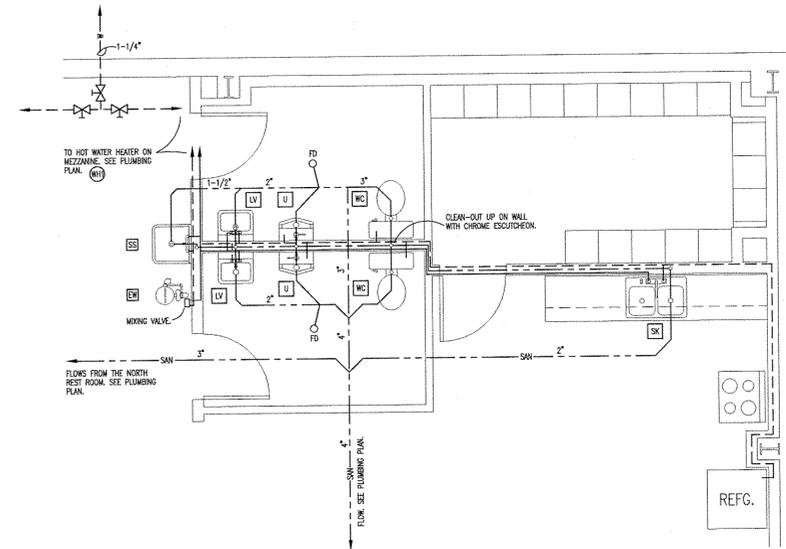
PLUMBING NOTES

- DRAWINGS AND DIAGRAMS ARE DIAGNOSTIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- PLUMBING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
- PLUMBING SHALL BE LOCATED AND PLACED UNDER THE SLAB PRIOR TO POURING OF CONCRETE. PIPING SHALL BE RUN IN SAND FILLED TRENCH UNDER THE BASE ROCK AND SLEEVED WITH PVC W/STENDER REIN THROUGH CONCRETE.
- PROVIDE PLUMBING EQUIPMENT AND ACCESSORIES REQUIRED FOR COMPLETE AND OPERATIONAL PLUMBING SYSTEMS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
- PLUMBING VENTS ARE NOT SHOWN ON THE PLANS. ALL FIXTURES SHALL BE PROPERLY VENTED AS PER IRC PLUMBING CODE. VENT AS CLOSE AS POSSIBLE TO EXTERIOR WALLS.
- ROOF VENTS SHALL BE COMBINED WHEREVER IN COMPLIANCE WITH THE NATIONAL PLUMBING CODE TO MINIMIZE ROOF PENETRATIONS.
- PROVIDE SHUT OFF VALVES AT EACH FIXTURE.
- PROVIDE SHOCK ABSORBERS AS REQUIRED AT EACH FAUCET.
- SEE MECHANICAL PLAN FOR GAS PIPING AND MECHANICAL REQUIREMENTS.
- CONTRACTOR TO PROVIDE CAST IRON VENT PIPING IN FLEMEN AS REQUIRED BY CODE. SECURE AS REQUIRED.
- EXTERIOR BELOW GROUND WATER DISTRIBUTION PIPING SHALL RUN A MINIMUM OF 36" BELOW FINISH GRADE.
- CONTRACTOR TO PROVIDE 2" BACK FLOW PREVENTER & PRESSURE REDUCING VALVE IN 10' MAINTENANCE AS REQUIRED.
- PROVIDE BLOCING TO ALL FIXTURES AS REQUIRED FOR A SECURE APPLICATION.
- PROVIDE 3/8" COPPER WATER LINE TO REFRIGERATOR WITH SHUT-OFF AS REQUIRED (ON THE REFRIGERATOR'S ICE MAKER. SHUT-OFF TO BE INSIDE WALL COVERED BY KAMP BRAND 8" x 8" HAND-ACCESS PLASTIC ACCESS PANEL. WATER LINE TO BE THROUGH FINISHED WALL WITH CHROME ESCUTCHEON.



A REST ROOM PLUMBING PLAN

SCALE: 1/4" = 1'-0"



B REST ROOM PLUMBING PLAN

SCALE: 1/4" = 1'-0"



LEGEND

HOT WATER	---	H
WATER	---	W
SANITARY SEWER	---	SAN
STORM	---	S
COMPRESSED AIR	---	A
GAS	---	G
CLEANOUT	---	C.O.
GAS VALVE	○	○



REST ROOM PLUMBING PLAN

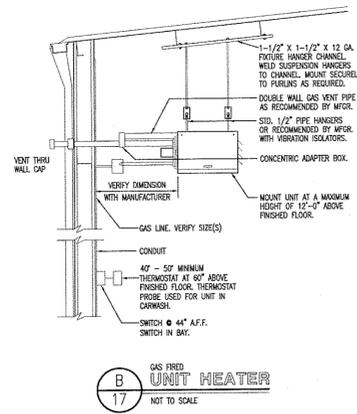
MISSOURI DEPARTMENT OF TRANSPORTATION  
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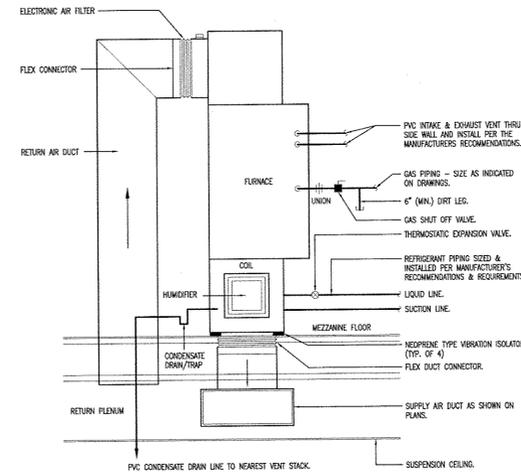
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DATE: 9-11-15  
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**MECHANICAL NOTES**

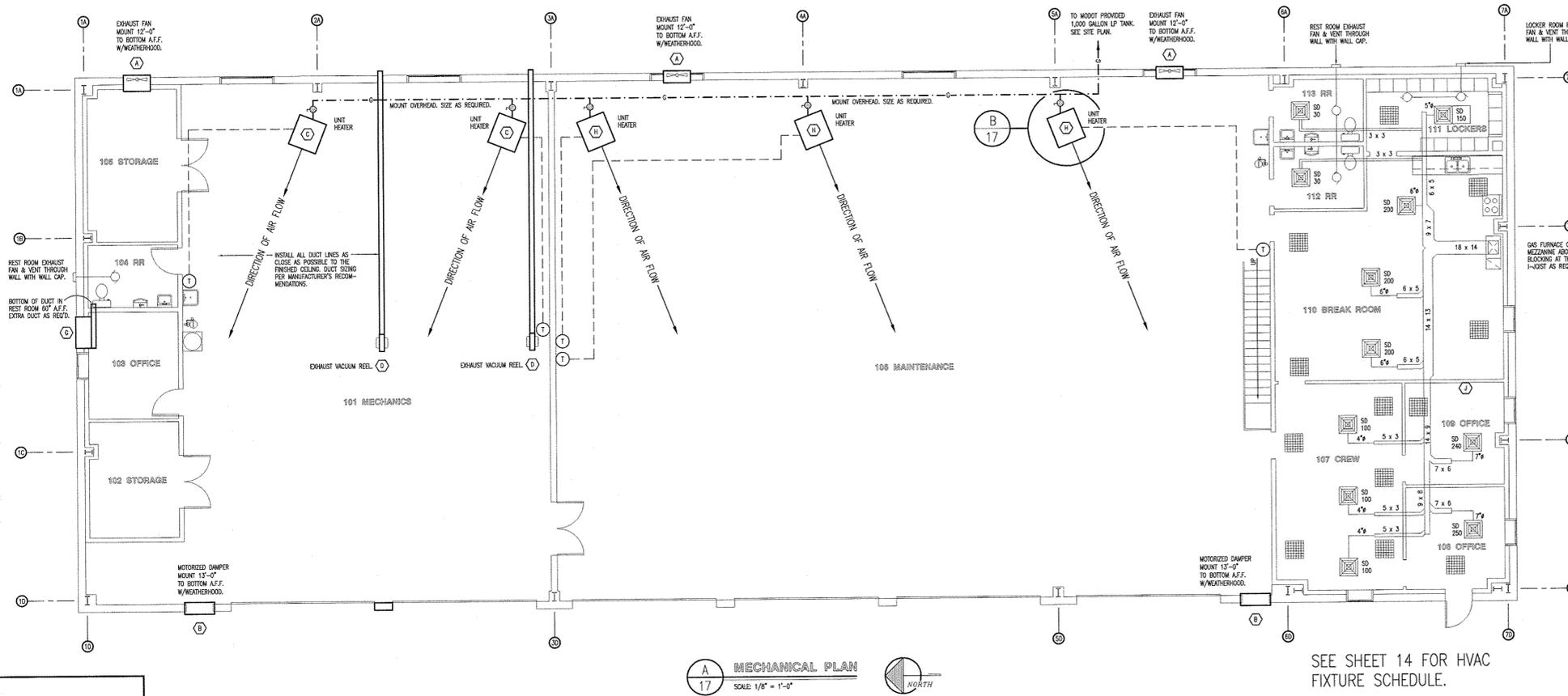
- DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- MECHANICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE IBC MECHANICAL CODE.
- PROVIDE EQUIPMENT AND APPURTENANCES NOT NECESSARILY SHOWN OR SPECIFIED BUT NEEDED FOR COMPLETE AND PROPER INSTALLATION.
- ALL EQUIPMENT AND MATERIALS, IN PARTICULAR VALVES, FILTERS, MOTORS, AND CONTROLS SHALL BE ARRANGED TO PROVIDE PROPER CLEARANCE FOR SERVICE, MAINTENANCE AND INSPECTION.
- MECHANICAL SUBCONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH PLUMBING AND ELECTRICAL WORKERS PRIOR TO COMMENCING OF THE MECHANICAL INSTALLATION.
- PROVIDE BLOCKING TO HVAC DEVICES AS REQUIRED FOR A SECURE APPLICATION.
- MECHANICAL CONTRACTOR TO PROVIDE ALL DEVICES REQUIRED FOR A FUNCTIONAL SYSTEM.



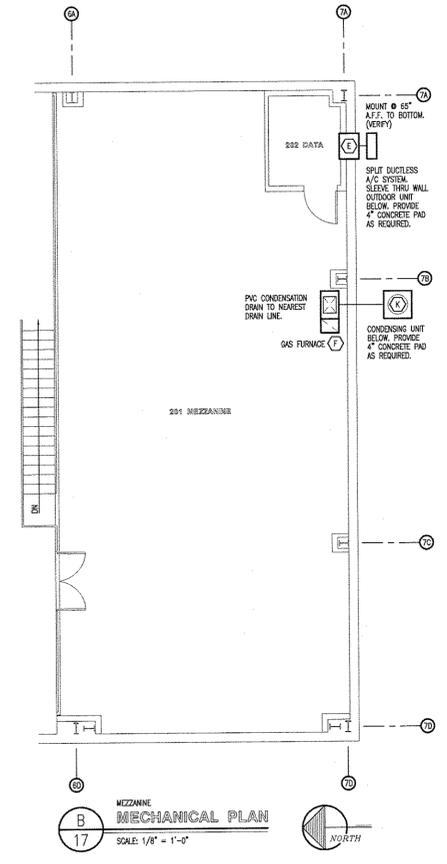
**B**  
17  
GAS FRED UNIT HEATER  
NOT TO SCALE



**C**  
17  
GAS FURNACE INSTALLATION  
NOT TO SCALE



**A**  
17  
MECHANICAL PLAN  
SCALE: 1/8" = 1'-0"



**B**  
17  
MEZZANINE MECHANICAL PLAN  
SCALE: 1/8" = 1'-0"

SEE SHEET 14 FOR HVAC FIXTURE SCHEDULE.



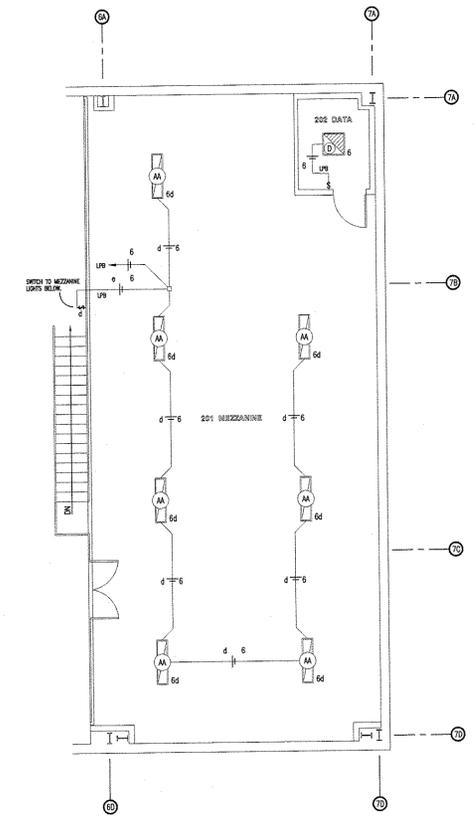
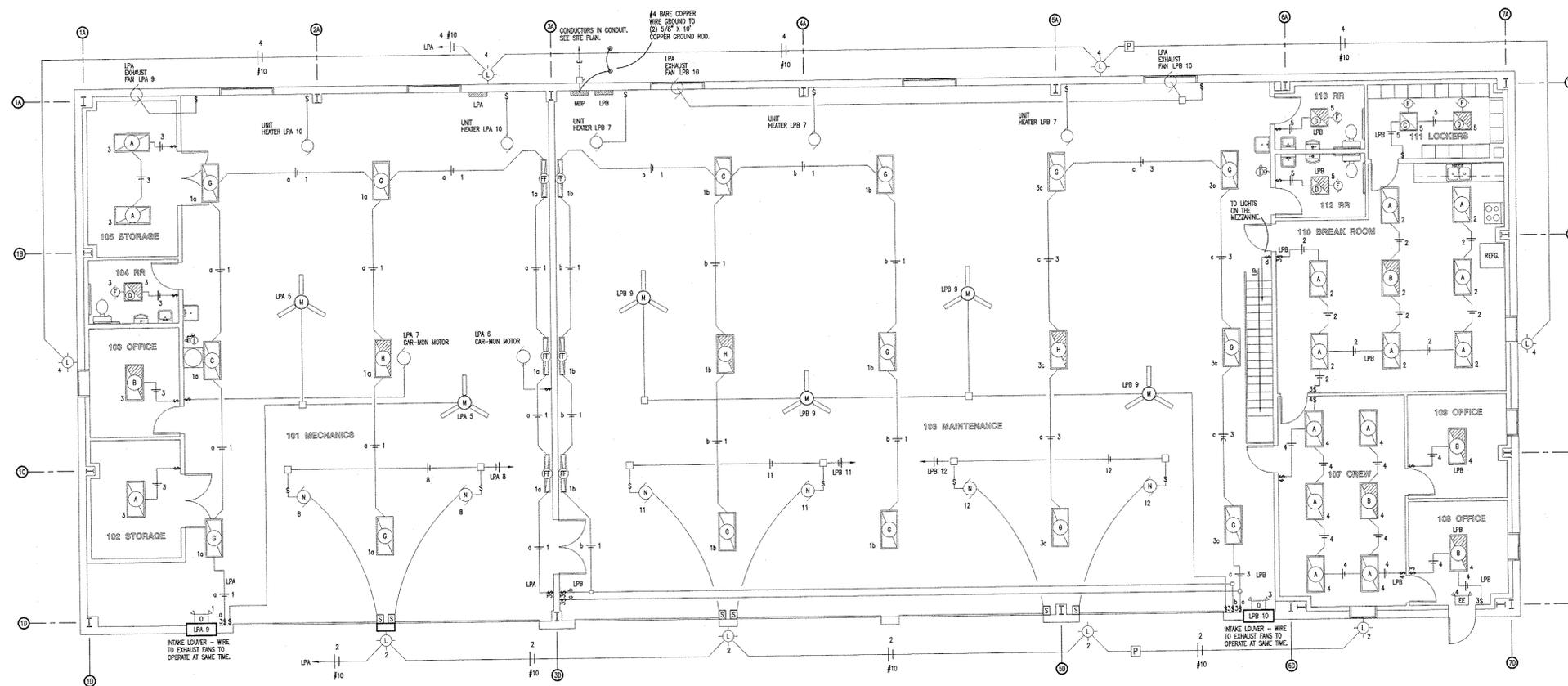
**MECHANICAL PLAN**

**MISSOURI DEPARTMENT OF TRANSPORTATION**  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

Vienna Maintenance Building  
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SEE ELECTRICAL SCHEDULE  
& NOTES SHEET 20.



**A** LIGHTING PLAN  
SCALE: 1/8" = 1'-0"  
NORTH

**B** MEZZANINE LIGHTING PLAN  
SCALE: 1/8" = 1'-0"  
NORTH



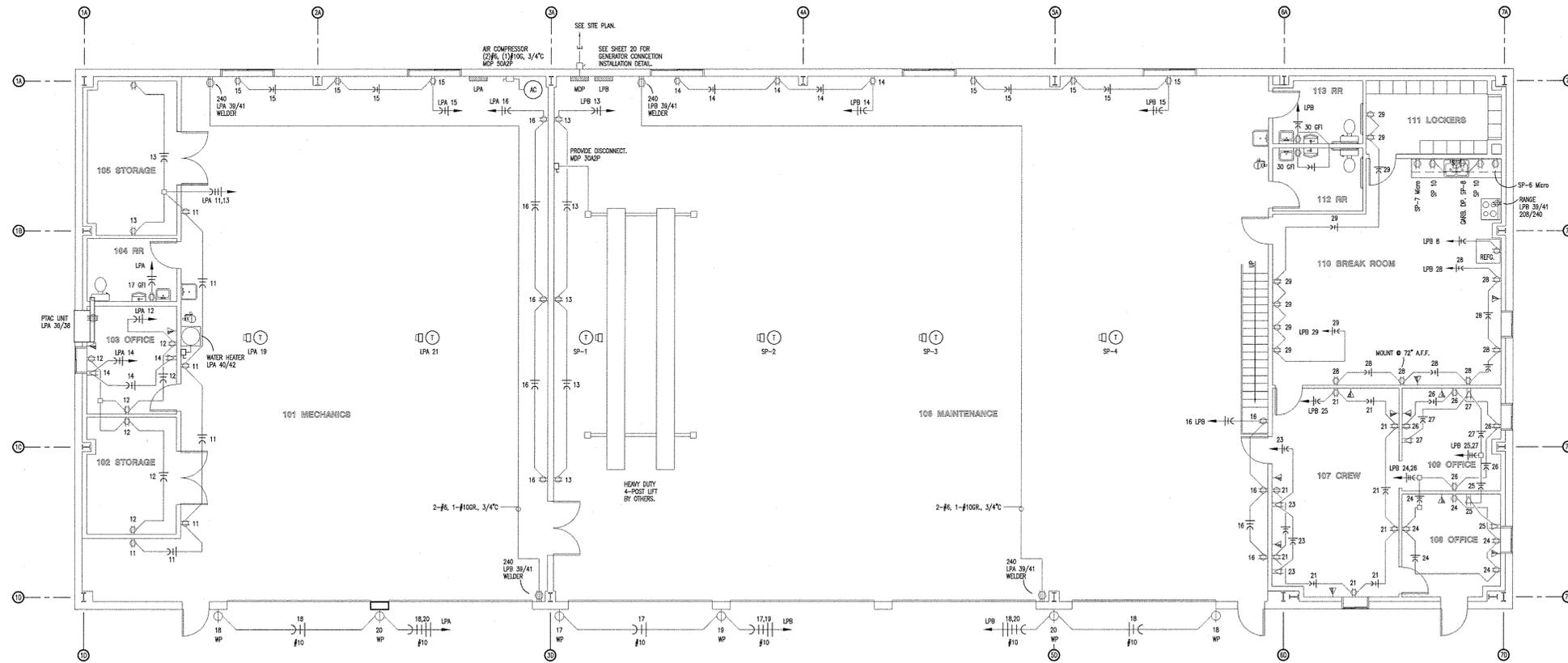
# LIGHTING PLAN

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OF TRANSPORTATION  
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FACILITIES MANAGEMENT

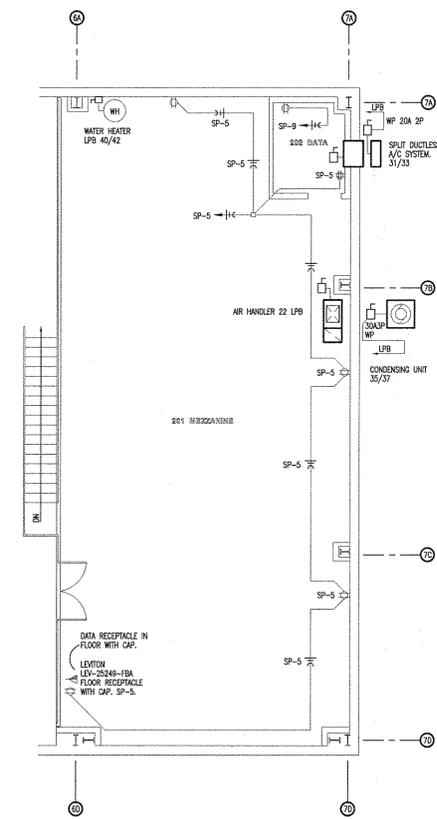
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DATE: 9-11-15  
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SEE ELECTRICAL SCHEDULE  
& NOTES SHEET 20.



**A** POWER PLAN  
19 SCALE: 1/8" = 1'-0"



**B** MEZZANINE POWER PLAN  
19 SCALE: 1/8" = 1'-0"



# POWER PLAN

MISSOURI DEPARTMENT  
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DATE: 9-11-15  
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ELECTRIC SCHEDULE					
MANUF.	MODEL	#	LAMPS	W	REMARKS
WILLIAMS	500-524-LEDMP-50/835-RPC12125-EDMP-UNV	51	CLG		24" x 48" STATIC TROOPER FUTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12 & EMERGENCY DRIVER.
WILLIAMS	500-524-LEDMP-50/835-RPC12125-EM/BSL310-EDMP-UNV	51	CLG		24" x 48" STATIC TROOPER FUTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12 & EMERGENCY DRIVER.
WILLIAMS	500-522-LEDMP30/85-RPC12125-EDMP-UNV	23	CLG		24" x 24" STATIC TROOPER FUTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12.
WILLIAMS	500-522-LEDMP30/85-RPC12125-EM/BSL310-EDMP-UNV	23	CLG		24" x 24" STATIC TROOPER FUTURE, HOUSING: 22 GAUGE DIE FORMED C.R.S. SHIELDING: FROSTED PATTERN #12 & EMERGENCY DRIVER.
BROWN	GRONNER #4C772		CLG		80 CPW CEILING MOUNT BATHROOM VENTILATOR.
WILLIAMS	CL-4-1200/840-WG11-DRY-UNV	174	CLG		14-3/16" x 48" DIE-FORMED ALUMINUM HOUSING WITH WIRE GUARD.
WILLIAMS	CL-4-1200/840-EM/BSL310-WG11-DRY-UNV	174	CLG		14-3/16" x 48" DIE-FORMED ALUMINUM HOUSING WITH WIRE GUARD, BACK MOUNTED EMERGENCY LED DRIVER.
	OVERHEAD DOOR OPERATOR		WALL		115V, 1-PH, 1000 MOUNT TYPE COMMERCIAL IN CARWASH & TROLLEY TYPE IN MAINTENANCE. SEE SPECIFICATION SECTION 08720.
COOPER	XFORMER-N	82	WALL		EXTERIOR, SURFACE MOUNT LIGHT FIXTURE, WITH ALUMINUM HOUSING, PRISMATIC GLASS LENS.
DAYTON	GRANGER #8PZ3		CLG		SINGLE-SPEED, 48" THREE-BLADE, HEAVY DUTY COMMERCIAL CEILING FAN.
	OVERHEAD DOOR OPERATOR		WALL		115V, 1-PH, TROLLEY TYPE. SEE SPECIFICATION SECTION 08720.
LITHONIA	LHQM P W3 R N		WALL		QUANTUM THERMOPLASTIC EXIT/UNIT COMBO (2) LED 5.4 KILOWATT LAMPS.
TORK	2001		WALL		120V PHOTO ELECTRIC CONTROL OF EXTERIOR LIGHTS.
	OVERHEAD DOOR CONTROL		WALL		THREE BUTTON OVERHEAD DOOR CONTROL, AS SUPPLIED BY OVERHEAD DOOR MANUF. SEE SPECIFICATION SECTION 08720.
REELCRAFT	L 4050 163 1		CLG		CEILING MOUNTED SPRING RETRACTABLE, ELECT. CORD REEL WITH INCANDESCENT LAMP & THREE FRONT OUTLET PLUGS.
WILLIAMS	75L-4-LEDPM50/835-A12125-EDMP-UNV	51	CLG		2-3/4" x 48" 22 GAUGE DIE-FORMED C.R.S. SHIELDING: ACRYLIC PATTERN #12, 1/2" THICK.
WILLIAMS	EEL2-4-1145/830-HA1R-WET/2-SM85-DRY-UNV	142	CLG		15" x 48" DAMP LOCATION, FIBERGLASS HOUSING, FROSTED IMPACT-RESISTANT, SECURE LOCKING PLASTIC LATCHES.
PATHWAY	FLEXLEDOR		WALL		SOLID STATE 2-RATE CHARGER, NI-CAD BATTERY (2) LED LAMPS, 3.7 WATTS, 0.040 A.
OSCE	LSA-40L-40K-10V-120	40	WALL		2-5/8" x 48" SURFACE AMBIENT, 22 GAUGE, LOW-GLARE ACRYLIC LENS, WHITE.

ELECTRICAL FIXTURES AND EQUIPMENT ARE SCHEDULED BY MANUFACTURER AND MODEL NUMBER FOR DESIGN INTENT ONLY. APPROVED EQUALS MAY BE SUBSTITUTED.

SERVICE PANEL LPA						
CR	SERVICE	VA	BKR	BKR	VA	CR
1	LIGHTS - 101 MECHANICS	1164	20A1P	A	20A1P	2
3	LIGHTS - 109 MAINTENANCE	1050	20A1P	B	20A1P	4
5	101 - CEILING FANS	156	20A1P	A	20A1P	6
7	CARBON MONOXIDE	1533	20A1P	B	30A1P	8
9	EXHAUST FAN & DAMPER	813	20A1P	A	20A1P	10
11	101 - RECEPTACLES	720	20A1P	B	20A1P	12
13	103 - RECEPTACLES	360	20A1P	A	20A1P	14
15	101 - RECEPTACLES	540	20A1P	B	20A1P	16
17	104 - OT RECEPTACLE	180	20A1P	A	20A1P	18
18	102 CORD REEL	540	20A1P	B	20A1P	20
21	102 CORD REEL	540	20A1P	A	20A1P	22
23						24
25						26
27						28
29						30
31						32
33						34
35						36
37						38
39	101 - WELDER MECHANICS	4500	50A2P	B	30A2P	40
41						42

MAIN BUS: 225A MID VOLTS: 240/120, 1PH, 4-WIRE BUS MATERIAL: COPPER MOUNTING SURFACE: SQUARE "T" 1000 OR EQUAL W/ NEUTRAL BUS & GROUNDING BUS CIRCUIT BREAKERS BOLT-IN 10000 AC

CONNECTED LOAD: A PHASE 16330 VA B PHASE 17463 VA TOTAL 33793 VA 141 A

● CIRCUIT BREAKER SHALL BE GFI RATED

SERVICE PANEL LPB						
CR	SERVICE	VA	BKR	BKR	VA	CR
1	LIGHTS - 106 MAINTENANCE	1164	20A1P	A	20A1P	2
3	LIGHTS - 109 MAINTENANCE	1050	20A1P	B	20A1P	4
5	LIGHTS/EX FAN 111, 112, 113	124	20A1P	A	20A1P	6
7	106 - UNIT HEATERS	1836	20A1P	B	20A1P	8
9	106 - CEILING FANS	312	20A1P	A	20A1P	10
11	106 - GARAGE DOOR OPENERS	2163	20A1P	B	20A1P	12
13	106 - RECEPTACLES	540	20A1P	A	20A1P	14
15	106 - RECEPTACLES	540	20A1P	B	20A1P	16
17	EXTERIOR RECEPTACLE	3000	20A1P	A	20A1P	18
19	EXTERIOR RECEPTACLE	3000	20A1P	B	20A1P	20
21	107 - CDM RECEPTACLES	3000	20A1P	A	20A1P	22
23	107 DEDICATED RECEPTACLES	300	20A1P	B	20A1P	24
26	108 DEDICATED RECEPTACLES	360	20A1P	A	20A1P	26
27	109 DEDICATED RECEPTACLES	360	20A1P	B	20A1P	28
29	110.111 RECEPTACLES	720	20A1P	A	20A1P	30
31	SPLIT CONDENSEL A/C	1468	20A2P	B	20A2P	32
33		1468	A	3178		34
35	AIR CONDENSER	1468	20A2P	B	20A2P	36
37		1468	A	2040		38
39	106 - WELDER MAINTENANCE	4500	50A2P	B	30A2P	40
41		4500	A	2800		42

MAIN BUS: 225A MID VOLTS: 240/120, 1PH, 4-WIRE BUS MATERIAL: COPPER MOUNTING SURFACE: SQUARE "T" 1000 OR EQUAL W/ NEUTRAL BUS & GROUNDING BUS CIRCUIT BREAKERS BOLT-IN 10000 AC

CONNECTED LOAD: A PHASE 26253 VA B PHASE 28808 VA TOTAL 55061 VA 230 A

● CIRCUIT BREAKER SHALL BE GFI RATED

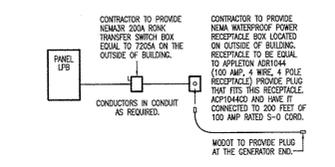
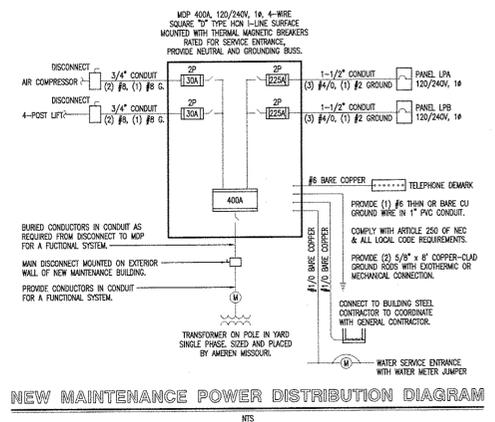
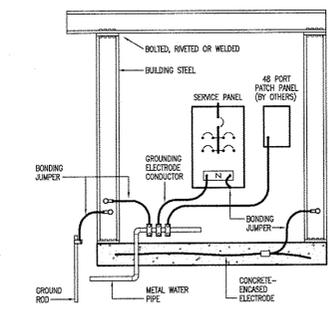
SUB-PANEL: SP						
CR	SERVICE	VA	BKR	BKR	VA	CR
1	106 CORD REEL	540	20A1P	A	20A1P	2
3	106 CORD REEL	540	20A1P	B	20A1P	4
5	MEZZANINE RECEPTACLES	1080	20A1P	A	20A1P	6
7	MICROWAVE - SOUTH	800	20A1P	B	20A1P	8
9	GPS	180	20A1P	A	20A1P	10
11	SPACE					12

MAIN BUS: 100A MID VOLTS: 240/120, 1PH, 4-WIRE BUS MATERIAL: COPPER MOUNTING SURFACE: SQUARE "T" 1000 OR EQUAL

CONNECTED LOAD: A PHASE 3200 VA B PHASE 2602 VA TOTAL 5802 VA 26 A

- LEGEND**
- SP SINGLE POLE OR 3-WAY SWITCH, MOUNT IN FS BOX WITH HUBBELL HBL7420 COVER.
  - DP DUPLEX RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL5221 COVER.
  - SP SINGLE RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL7420 COVER.
  - S SINGLE POLE SWITCH, FLUSH MOUNTED IN FINISHED AREAS @ 48" A.F.F.
  - S<sup>3</sup> 3-WAY SWITCH, SURFACE MOUNTED IN UNFINISHED AREAS @ 48" A.F.F.
  - S<sup>4</sup> 4-WAY SWITCH, SURFACE MOUNTED IN FINISHED AREAS @ 48" A.F.F.
  - DP DUPLEX RECEPTACLE FLUSH MOUNTED IN FINISHED OFFICE, REST ROOMS AND BREAK ROOM @ 18" A.F.F. TO BOTTOM OF OUTLET.
  - DP DUPLEX RECEPTACLES IN WORK BAYS STORAGE, MEZZANINE AND EXTERIOR @ 48" A.F.F.
  - W WELDER RECEPTACLE SURFACE MOUNTED 48" A.F.F., MOUNT IN 4" SQUARE BOX WITH WIRE COVER.
  - GFI DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER. PROVIDE SEPARATE GROUND FOR CIRCUIT. TYPICAL.
  - J JUNCTION BOX, SIZE FOR WIRE, FILL ACCORDING TO ARTICLE 314-16 OF THE N.E.C.
  - F NON FUSED DISCONNECT SWITCH.
  - D DEDICATED RECEPTACLE FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.
  - V VOICE AND DATA OUTLET FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.
- #12 COPPER NEUTRAL CONDUCTOR UNLESS NOTED.  
 — #12 COPPER PHASE CONDUCTORS UNLESS NOTED.  
 — 1/2" EMT UNLESS NOTED.  
 — #12 COPPER GROUNDING CONDUCTOR UNLESS NOTED.

- ELECTRICAL NOTES**
- DRAWINGS AND DIAGRAMS ARE DIAGNOSTIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
  - ELECTRICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.).
  - PROVIDE ELECTRICAL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEM SPECIFIED.
  - SWITCHES AND RECEPTACLES SHALL BE EQUAL TO THE AMPERE RATING SHOWN IN THE PANEL SCHEDULE. RECEPTACLES SHALL BE GROUND-FAULT INTERRUPTION TYPE WHERE SHOWN OR AS REQUIRED BY CODE.
  - BATHROOM EXHAUST FAN IS TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
  - SEE HVAC SCHEDULE FOR EQUIPMENT TO BE HARD WIRED, PROVIDE SERVICE DISCONNECT AT EACH.
  - ALL RECEPTACLES IN GARAGE AREA TO BE MOUNTED AT 48" A.F.F.
  - COORDINATE WORK WITH OTHER TRADES PRIOR TO COMMENCING WITH ELECTRICAL WORK.
  - CONDUCTOR AND BREAKER SIZE MAY VARY PER MANUFACTURER ON THE EQUIPMENT SPECIFIED. ELECTRIC CONTRACTOR TO VERIFY SIZES WITH EXACT EQUIPMENT ORDERED PRIOR TO PURCHASING ELECTRICAL SUPPLIES. USE ONLY COPPER WIRE BUILDING.
  - FIXTURE LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED AFTER COLLABORATION WITH THE OWNER AND OTHER TRADES.
  - CONTRACTOR SHALL PROVIDE SERVICE DISCONNECTS AS REQUIRED AT EXTERIOR OF BUILDING.
  - PROVIDE BLOCKING FOR ELECTRICAL DEVICES AS REQUIRED FOR A SECURE APPLICATION.
  - PROVIDE CONDUCTORS AND CONDUIT TO POWER POLE IN YARD AS REQUIRED FOR A FUNCTIONAL SERVICE. SEE SITE PLAN.



# Electrical Panels & Schedules

MISSOURI DEPARTMENT OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

Vienna Maintenance Building  
Central District - Maries County  
702 North Highway 63, Vienna, MO

DESIGN BY: LARRY CARVER  
DATE: 9-11-15  
Sheet 20 of 20