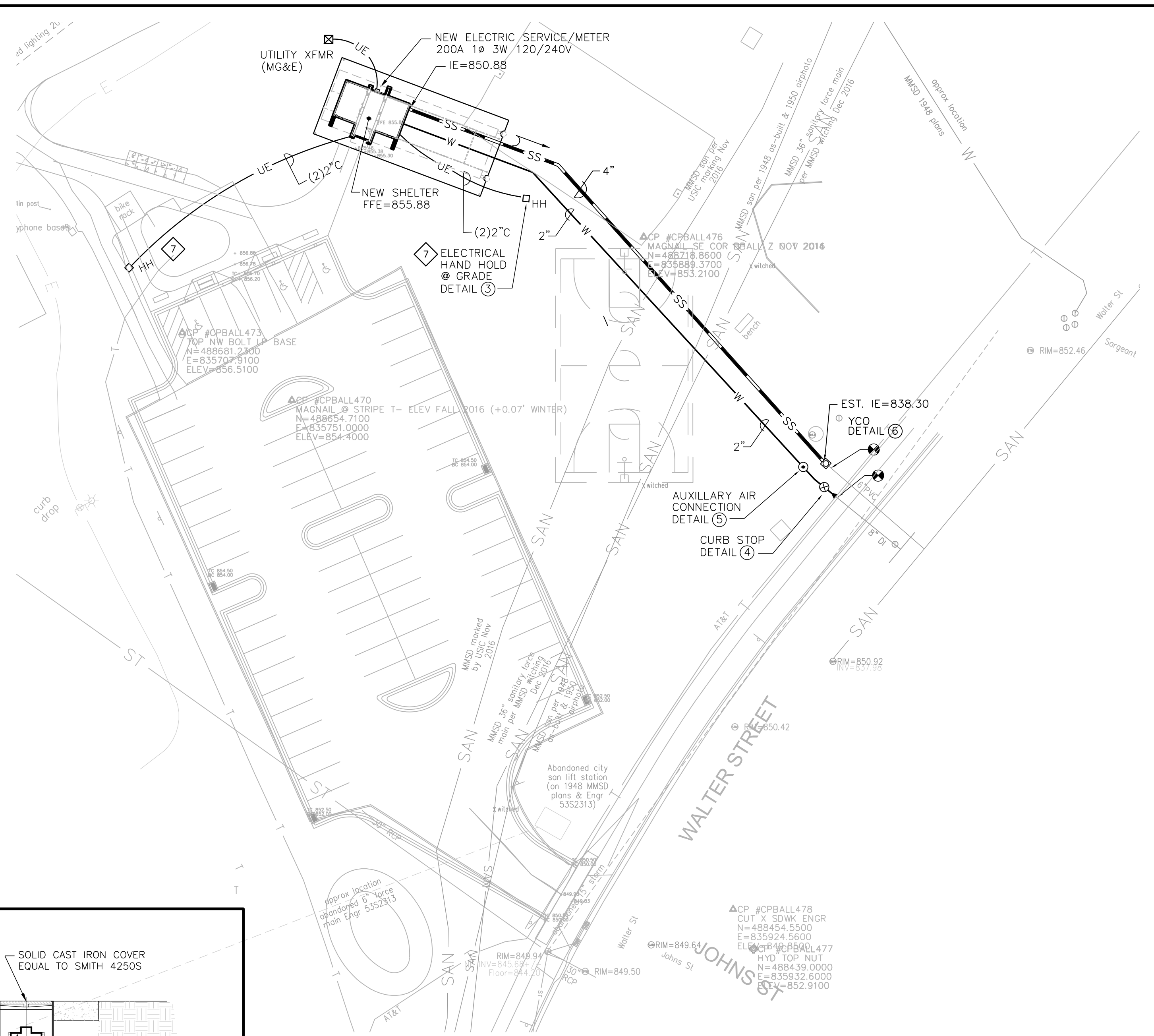
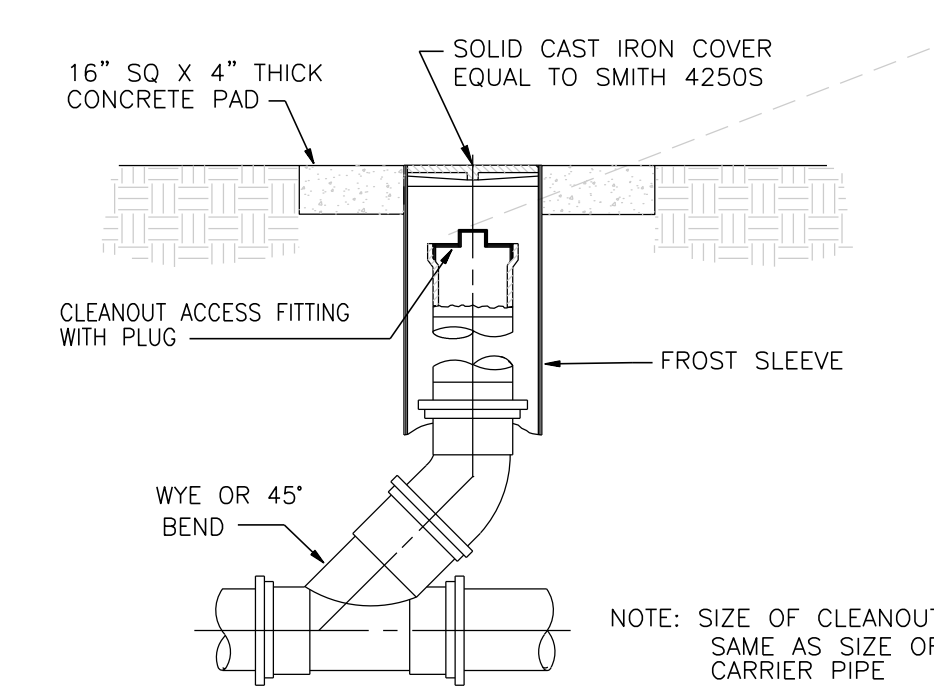


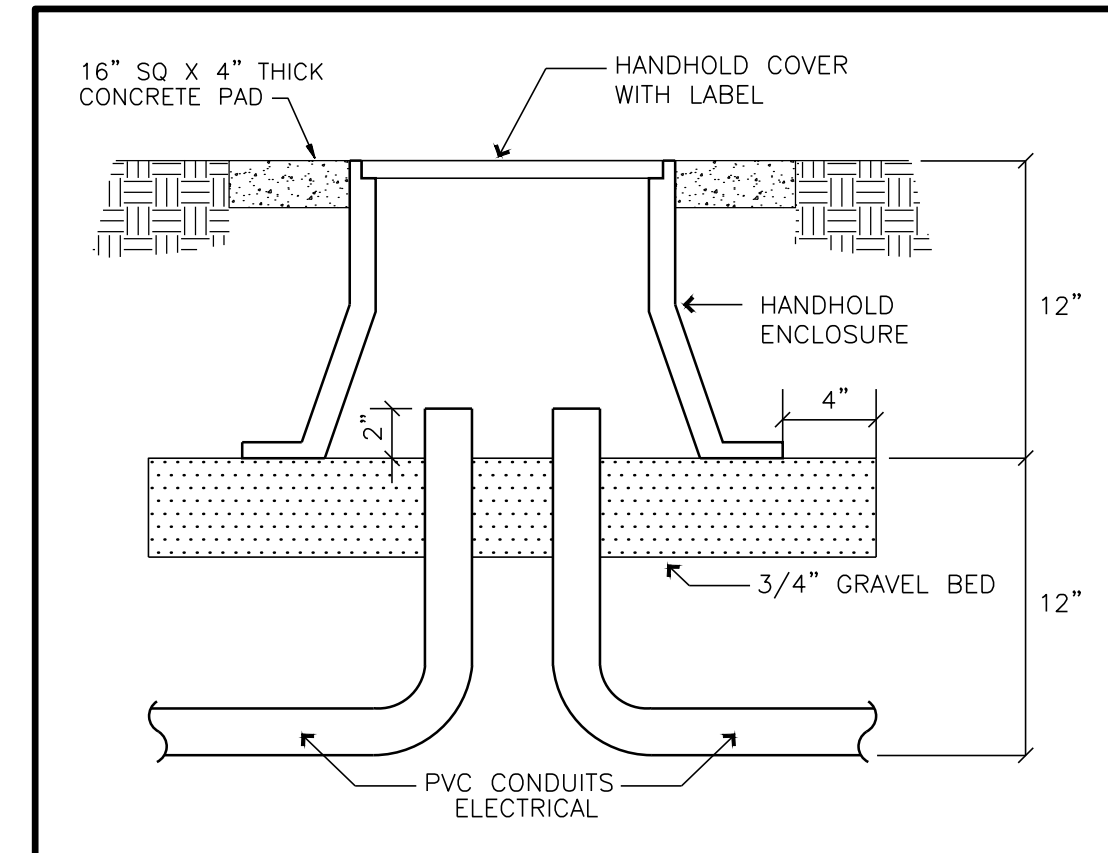
1 DEMO SITE UTILITY PLAN
1" = 30'-0"



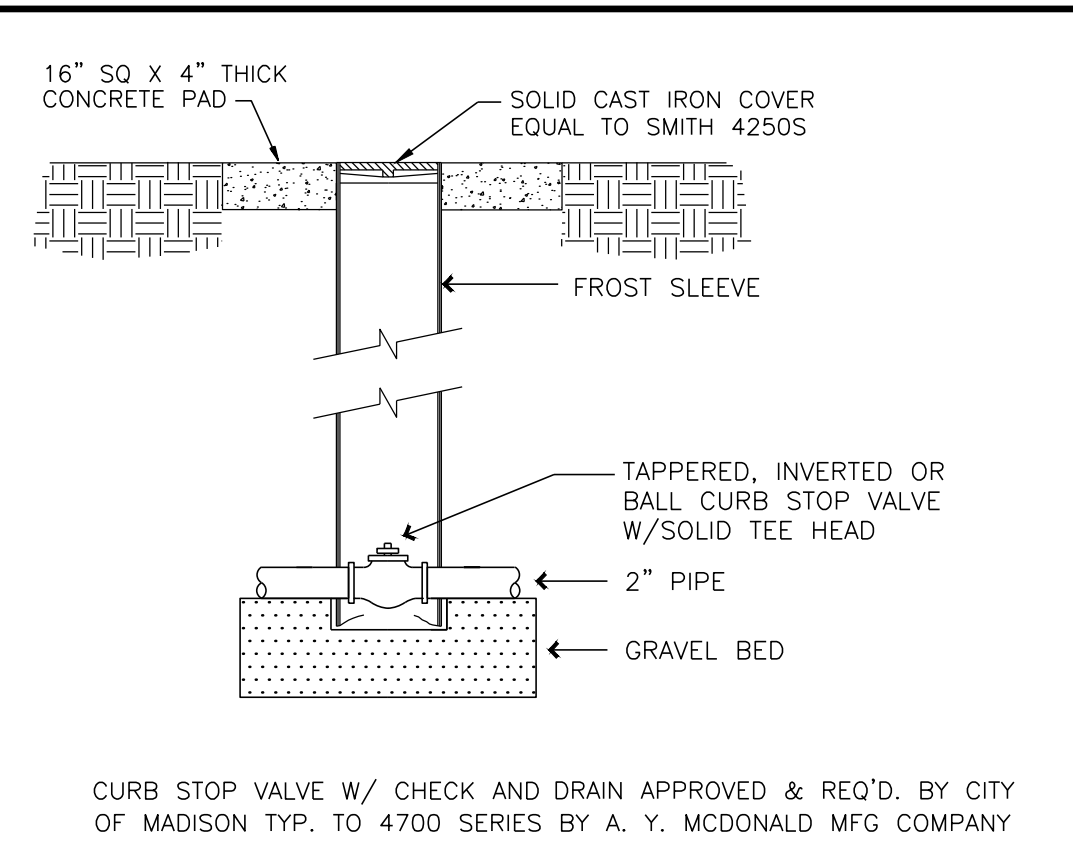
2 SITE UTILITY PLAN
1" = 30'-0"



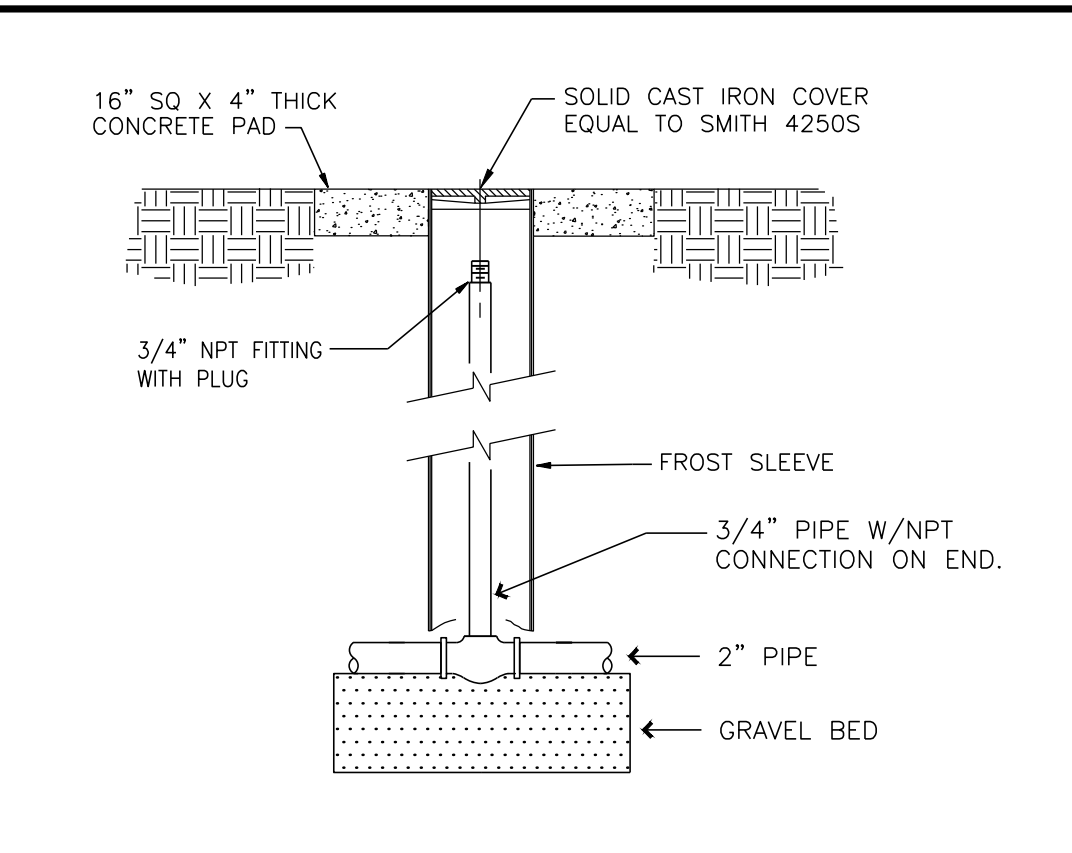
6 YARD CLEANOUT DETAIL
N.T.S.



3 ELECTRICAL HAND HOLD
N.T.S.



4 WATER CURB STOP VALVE & BOX
N.T.S.



5 AUXILIARY AIR CONNECTION DETAIL
N.T.S.

SYMBOL SCHEDULE	
— SAN —	EXISTING SANITARY SEWER
— W —	EXISTING WATER SERVICE
— UE —	EXISTING UNDERGROUND ELECTRICAL SERVICE
— T —	EXISTING TELEPHONE
- - - SAN - - -	EXISTING SANITARY SEWER - REMOVED
- - - W - - -	EXISTING WATER SERVICE - REMOVED
- - - T - - -	EXISTING UNDERGROUND TELEPHONE - REMOVED
- - - E - - -	EXISTING UNDERGROUND ELECTRICAL SERVICE - REMOVED
— W —	WATER SERVICE
- - - SS - - -	UNDERGROUND SANITARY
— UE —	UNDERGROUND ELECTRICAL SERVICE
⊙	CONNECT TO EXISTING
⊗	ELECTRICAL TRANSFORMER
⊕	TELEPHONE PEDESTAL
⊖	ELECTRIC METER
o/c	POLE-TOE LIGHT FIXTURE
pc/tc	PHOTOCELL ON / TIMELOCK OFF
□ HH	AT GRADE HAND HOLD

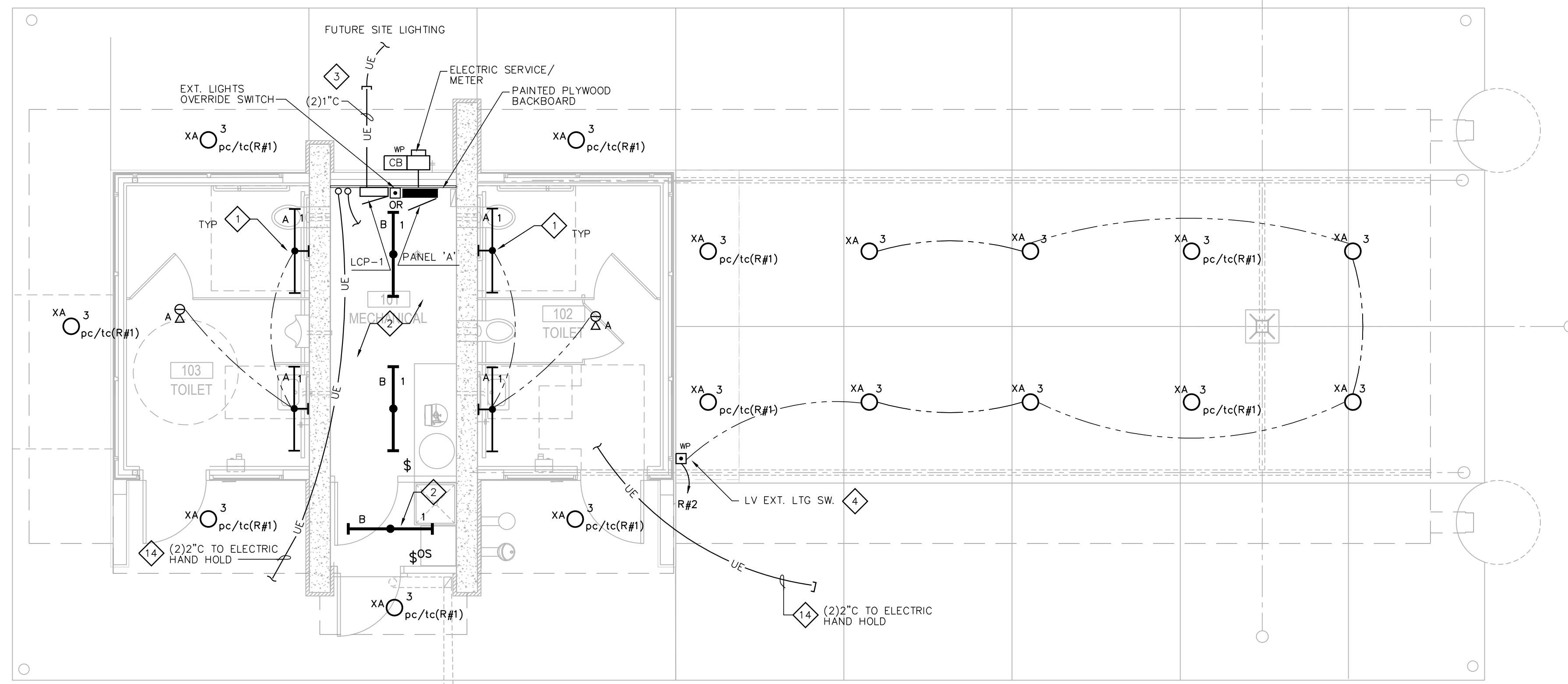
- SITE UTILITY PLAN NOTES:**
- ALL SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF MADISON AND WISCONSIN DSPS STANDARDS.
 - WATER SERVICE SHALL BE BURIED TO A DEPTH OF 6 FEET. THE DEPTH IS DEFINED AS THE DISTANCE BETWEEN THE FINISHED GRADE ELEVATION AND THE TOP OF WATER MAIN OR SERVICE.
 - MAINTAIN AN 8 FOOT MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN PUBLIC SANITARY SEWER, WATER MAIN AND STORM SEWER. PROVIDE 18" MINIMUM VERTICAL SEPARATION WHERE SEWER CROSSES OVER WATER MAIN AND PROVIDE 12" MINIMUM VERTICAL SEPARATION WHERE WATER MAIN CROSSES OVER SEWER.
 - ANY UTILITIES WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
 - ALL UNDERGROUND EXTERIOR NON-METALLIC SEWERS/MAINS AND WATER SERVICES/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORDANCE WITH 182.0715(2r) OF STATE STATUTES.
 - CONTRACTOR SHALL VERIFY MATERIAL, SIZE, AND INVERT OF SANITARY SEWER, WATER MAIN, AND STORM SEWER PRIOR TO CONSTRUCTION.
 - COORDINATE NEW ELECTRIC SERVICE INSTALLATION WITH MG&E. OWNER TO PAY ALL NEW SERVICE FEES.
- SITE UTILITY PLAN NOTES:**
- DISCONNECT, CAP AND REMOVE EXIST WATER SERVICE TO MANHOLE AND FROM MANHOLE TO CURB STOP PER CITY OF MADISON WATER UTILITY REQUIREMENTS.
 - DISCONNECT AND REMOVE SANITARY LINE FROM EXISTING TOILET FACILITY TO EXISTING SANITARY MAIN AND CAP.
 - DISCONNECT EXISTING ELECTRIC SERVICE AT EXISTING TOILET BUILDING PER MG&E REQUIREMENTS, DISCONNECT AND REMOVE UNDERGROUND FEEDERS AS SHOWN. COORDINATE ELECTRIC SERVICE RELOCATION WITH MG&E.
 - DISCONNECT POWER, WATER AND WASTE PIPING TO EXISTING BUILDING TO PREPARE FOR DEMOLITION.
 - DISCONNECT POWER TO EXISTING SHELTER AND PREPARE FOR DEMOLITION.
 - DISCONNECT POWER TO EXISTING LIGHT POLE AND REMOVE FEEDER BACK TO FIRST JCT. BOX. REMOVE LIGHT POLE & BASE.
 - CONFIRM FINAL ELECTRICAL HAND HOLD LOCATIONS WITH OWNER.

ISSUANCES:

5.17.18 CD SET

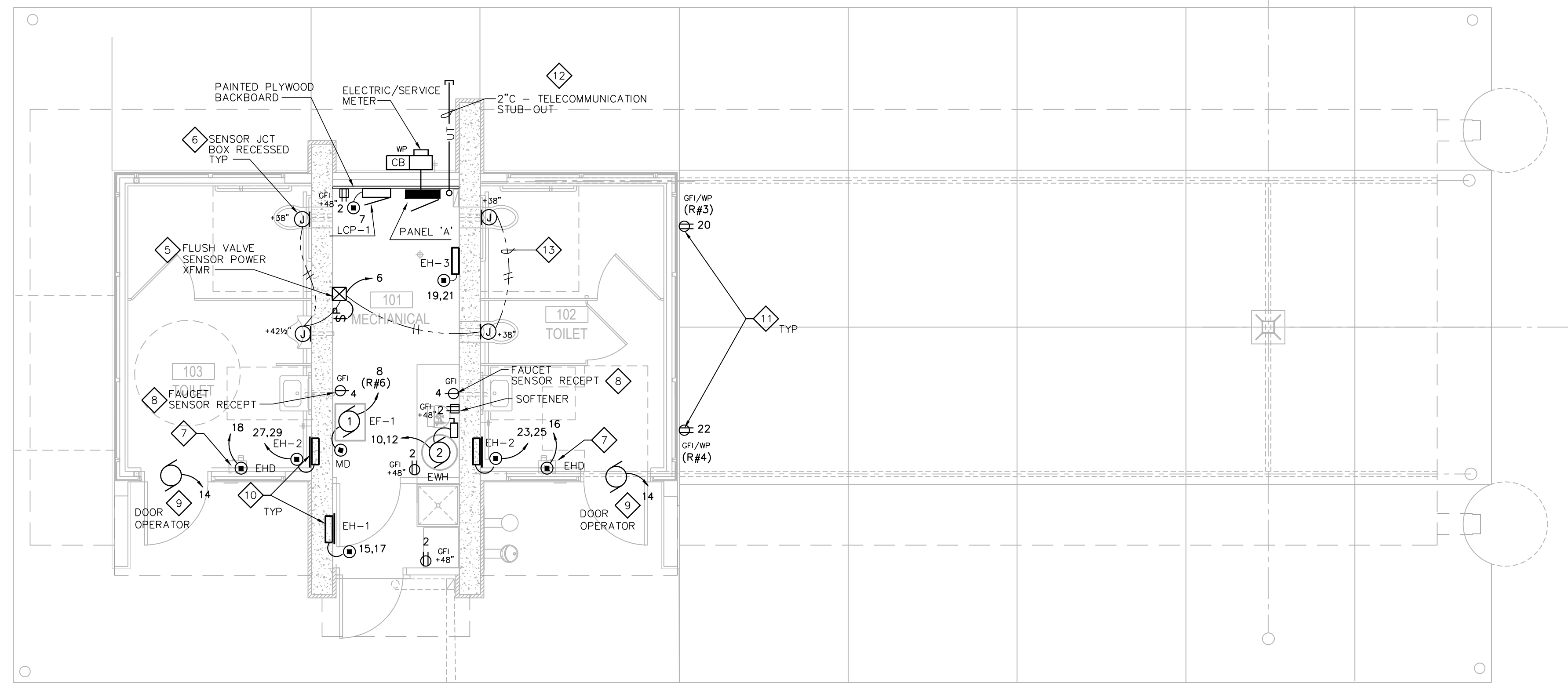
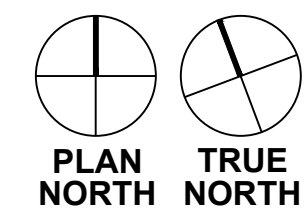
Construction Documents:

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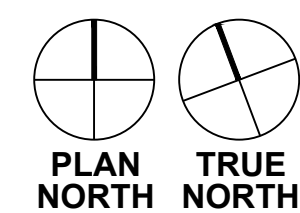
ELECTRIAL LIGHTING PLAN

1/4" = 1'-0"



ELECTRIAL POWER/LV PLAN

1/4" = 1'-0"



ELECTRICAL GENERAL NOTES:

1. COORDINATE LIGHTING & DEVICE LAYOUT WITH GENERAL CONTRACTOR.
2. COORDINATE ELECTRICAL RACEWAYS ROUTING WITH GENERAL CONTRACTOR AND OTHER TRADES FOR PROPER EQUIPMENT ACCESS.
3. ALL RACEWAYS ARE TO BE CONCEALED IN FINISHED AREAS. MECHANICAL & UTILITY AREAS MAY USE SURFACE CONDUIT SYSTEMS.
4. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL CONSTRUCTION CONDITIONS.
5. COORDINATE AND SCHEDULE ALL WORK WITH THE GENERAL CONTRACTOR AND LOW-VOLTAGE CABLING PRIOR TO STARTING.
6. ALL LIGHTS CIRCUITED TO PANEL 'A' UNLESS INDICATED OTHERWISE.

ELECTRICAL POWER/LV PLAN NOTES:

- 1 CORNER-MTD LIGHT FIXTURE @ CEILING.
- 2 COORDINATE LIGHT FIXTURE MOUNTING LOCATION WITH DUCTWORK, PIPING & OTHER TRADES.
- 3 STUB OUT 1" (PVC) RACEWAYS 24" BELOW GRADE FOR FUTURE PER SITE PLAN LIGHTING.
- 4 LV LIGHTING CONTROL STA. (WP). REFER TO LCP-1 RISER.
- 5 COORDINATE POWER TO LOW-VOLTAGE TRANSFORMER FOR FLUSH VALVES BY PLUMBING TRADE. PROVIDE MASTER PILOT LIGHT SWITCH FOR POWER TO FLUSH VALVES AND LABEL. ROUTE ALL LV CABLING IN RACEWAY.
- 6 PROVIDE 4"x4"x2 1/8" RECESSED BOX WITH PLASTER RING FOR SENSOR MOUNTING HEIGHT TO CENTER OF BOX. COORDINATE INSTALLATION WITH PLUMBING TRADE. COORDINATE FINAL MOUNTING HEIGHT LOCATION WITH GENERAL CONTRACTOR.
- 7 PROVIDE 4"x4"x2 1/8" RECESSED BOX WITH PLASTER RING FOR ELECTRIC HAND DRYER CONNECTION. PROVIDE POWER CONNECTION TO HAND DRYERS. COORDINATE FINAL MOUNTING HEIGHT LOCATION WITH GENERAL CONTRACTOR.
- 8 COORDINATE FINAL RECEPTACLE LOCATION WITH PLUMBING TRADE FOR FAUCET SENSOR POWER.
- 9 COORDINATE POWER AND CONTROL WIRING AND RACEWAY REQUIREMENTS FOR DOOR OPERATORS WITH GENERAL CONTRACTOR.
- 10 COORDINATE POWER WIRING AND RACEWAY REQUIREMENTS FOR ELECTRIC HEATERS WITH HVAC CONTRACTOR.
- 11 EXTERIOR RECEPTACLES POWER CONTROLLED BY LCP TIMELOCK. REFER TO LCP RISER.
- 12 STUB OUT 2" (PVC) RACEWAY 24" BELOW GRADE AND CAPPED FOR FUTURE COMMUNICATIONS CABLING.
- 13 EXTEND LOW-VOLTAGE CABLING FROM TRANSFORMER (BY P.C.) TO FLUSH VALVE SENSORS. ROUTE CABLING IN CONDUIT OR RACEWAYS.
- 14 REFER TO SITE UTILITY PLAN C100 FOR CONTINUATION.

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500 & 502 WALTER ST, MADISON WI
CITY OF MADISON PARKS DIVISION
CONTRACT #8177 / MUNIS #11330

ISSUANCES:

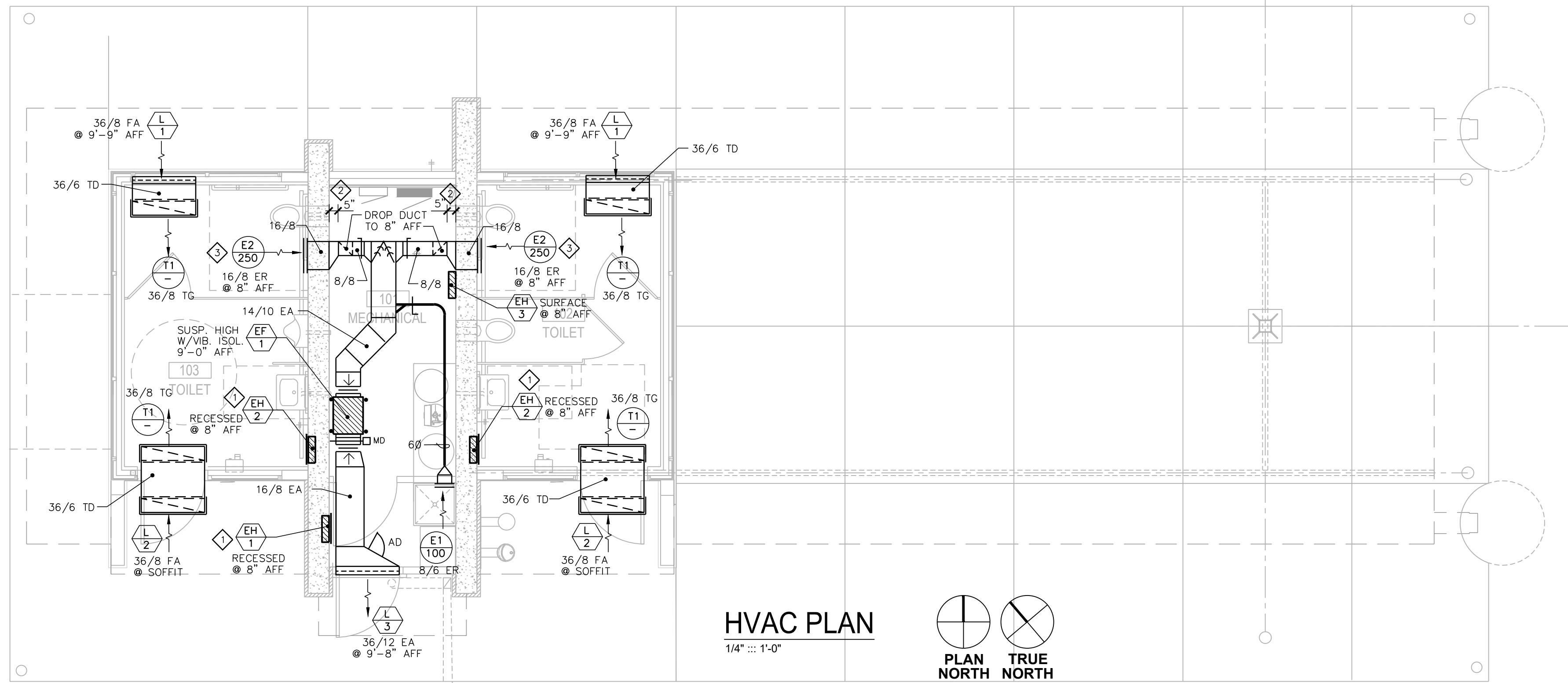
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Construction Documents:

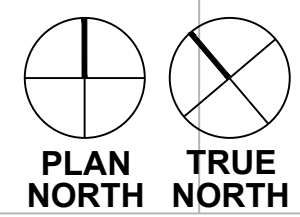
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PROJECT #: 170515
SHEET NUMBER

E101



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



HVAC GENERAL NOTES:

1. HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF HVAC WORK WITH OTHER TRADES.
2. COORDINATE PROVISIONS FOR OPENINGS IN NEW CONSTRUCTION WITH THE GENERAL CONTRACTOR FOR APPROVAL PRIOR TO STARTING WORK.
3. HVAC CONTRACTOR IS RESPONSIBLE FOR CUTTING AND PATCHING WALLS, FLOORS & CEILING FOR NEW HVAC WORK, IF REQUIRED.
4. COORDINATE FINAL CEILING REGISTER AND GRILLE LOCATIONS WITH OTHER TRADES.
5. COORDINATE PIPING AND DUCTWORK ROUTING WITH OTHER TRADES TO MAINTAIN SCHEDULED CEILING HEIGHTS.
6. PROVIDE PROPER SERVICE CLEARANCES AND ACCESS SPACE FOR ALL NEW EQUIPMENT.
7. PROVIDE ACCESS PANELS TO SERVICE EQUIPMENT, WHERE REQUIRED.

HVAC PLAN NOTES:

- 1 COORDINATE RECESS OPENINGS IN BLOCK WALLS FOR ELECTRIC WALL HEATERS WITH GENERAL CONTRACTOR & MASONRY CONTRACTOR.
- 2 DROP DUCT 5" AWAY FROM WALL TO ALLOW CLEARANCE FOR PLUMBING PIPING.
- 3 COORDINATE DUCT OPENING IN BLOCK WALLS WITH GENERAL CONTRACTOR & MASONRY CONTRACTOR.

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ISSUANCES:

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PROJECT #: 170515
SHEET NUMBER

H101

EXHAUST FANS SCHEDULE

TAG	EF-1
MANUFACTURER	GREENHECK
MODEL NO.	50-100-VG
AREA SERVED	TOILETS & MECH
CFM	600
ESP *WG	1/2"
RPM	1241
MOUNTING	SPRING VIB. HANGERS
DRIVE	DIRECT
SONES (INLET/RADIATED)	6.3/3.0
ELECTRICAL:	
MOTOR HP (BHP)	1/4
FAN F.L.A.	3.7
VOLTAGE/PHASE	115/1
CONTROL	OCCUPIED BLDG. MODE
REMARKS:	1) INTERLOCK EF-1 WITH LCP BUILDING OCCUPIED MODE SCHEDULE. 2) ECM MOTOR WITH UNIT-MOUNTED POTENTIOMETER FOR BALANCING. 3) SPRING/NEOPRENE VIBRATION ISOLATION HANGERS. 4) MOTORIZED (115V) OPPOSED BLADE, LOW-LEAKAGE DAMPER. 5) DIRECT-COUPLED EXTERNAL ACTUATOR (BELIMO). 6) NEMA 1 DISCONNECT SWITCH UNIT-MOUNTED. 7) INSULATED HOUSING.

DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

TAG	MFR	MODEL	SIZE	FACE (L)	MOUNTING	SERVICE	CFM	REMARKS
E1	KEES	GHD40	8"x6"	-	SURFACE/WALL	EXHAUST	100	1) 2) 3) HD ER 40 deg BL
E2	KEES	GHD40	16"x8"	-	SURFACE/WALL	EXHAUST	250	1) 2) 3) HD ER 40 deg BL
T1	KEES	GHD40	36"x8"	-	SURFACE/CLG	TRANSFER	-	1) 3) HD TG 40 deg BL

REMARKS:
1) WHITE FINISH.
2) OPPOSED BLADE DAMPER.
3) SUB-FRAME 24 GA.
ER = EXHAUST REGISTER
HD = HEAVY DUTY
TG = TRANSFER GRILLE

ELECTRIC HEAT SCHEDULE

TAG	MFR	MODEL	TYPE	SIZE	WATTS	CAP. BTU/HR	ELECTRICAL	AMPS	REMARKS
EH-1	Q-MARK	AWH-4404	RECESSED WALL HTR	18 1/4" x 15 3/4" x 3 3/4"	2000	6,825	240/1	8.3	1) 2)
EH-2	Q-MARK	AWH-4404	RECESSED WALL HTR	18 1/4" x 15 3/4" x 3 3/4"	4000	13,650	240/1	16.7	1) 2) 3)
EH-3	Q-MARK	AWH-4404	SURFACE WALL HTR	18 1/4" x 15 3/4" x 3 3/4"	2000	6,825	240/1	8.3	1) 2) 4)

1) INTEGRAL TAMPER PROOF THERMOSTAT.
2) BUILT-IN DISCONNECT SWITCH.
3) LFKSF: 14 GA SECURITY FRONT COVER.
4) AWHSM: SURFACE MOUNTING FRAME.

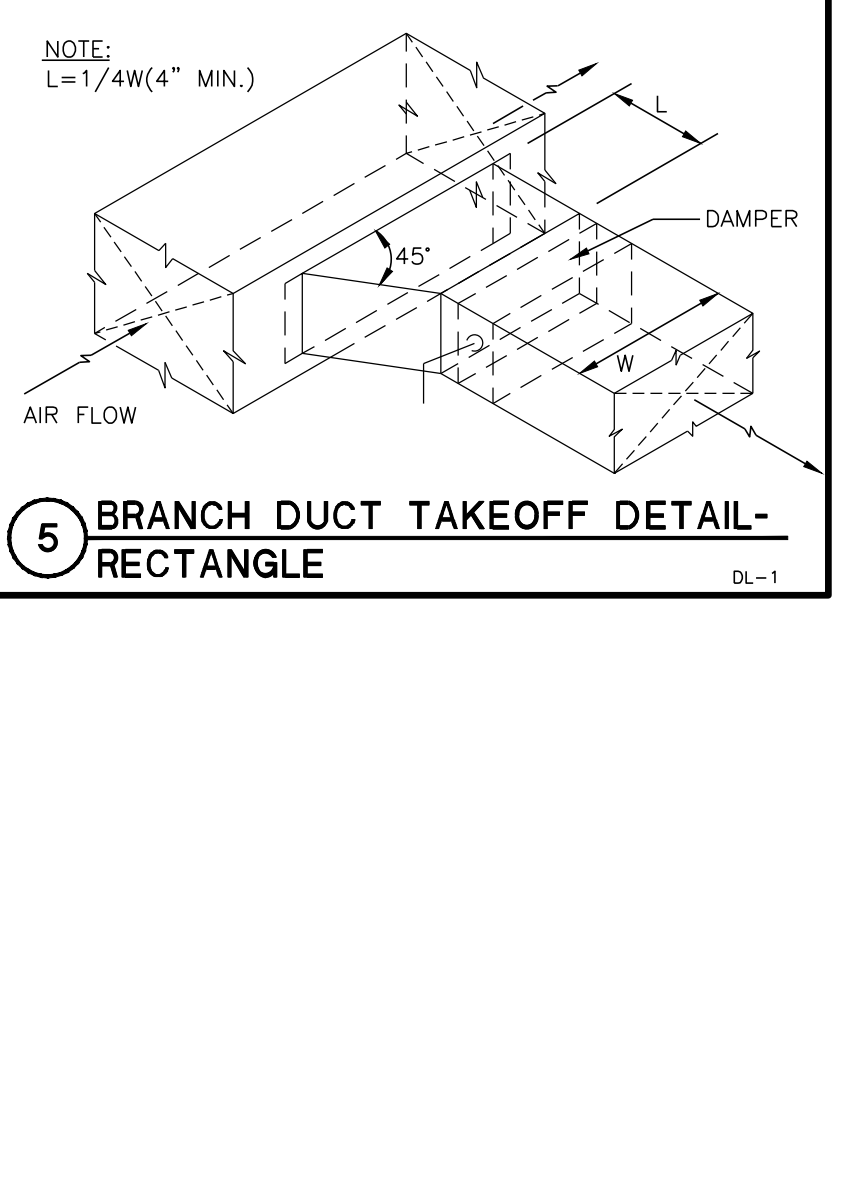
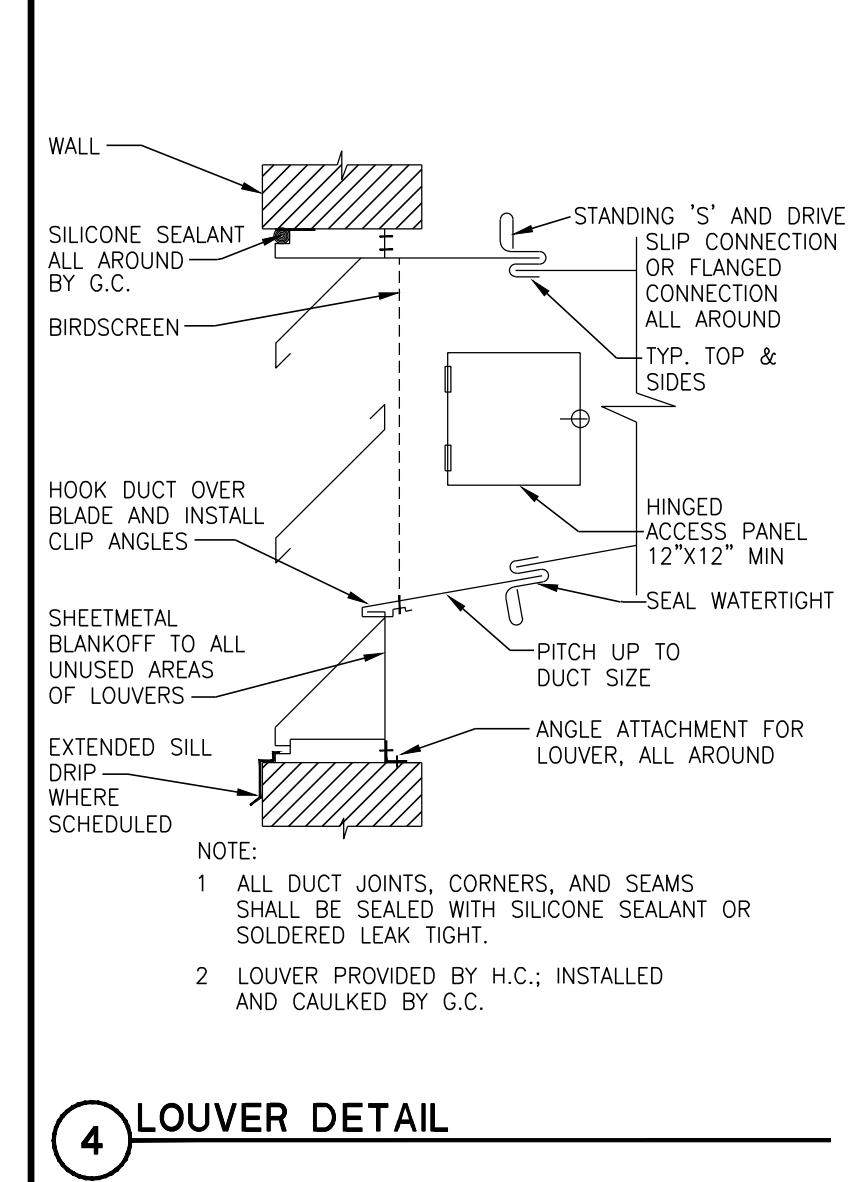
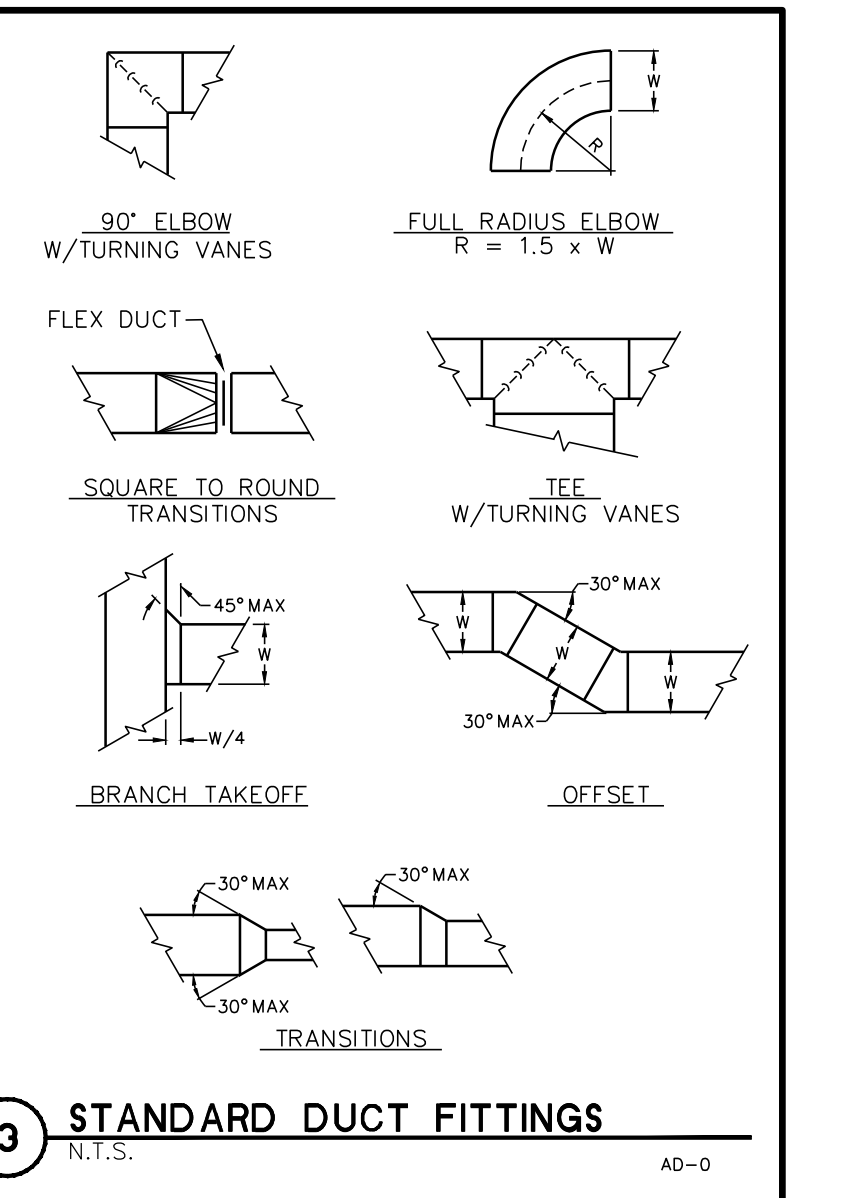
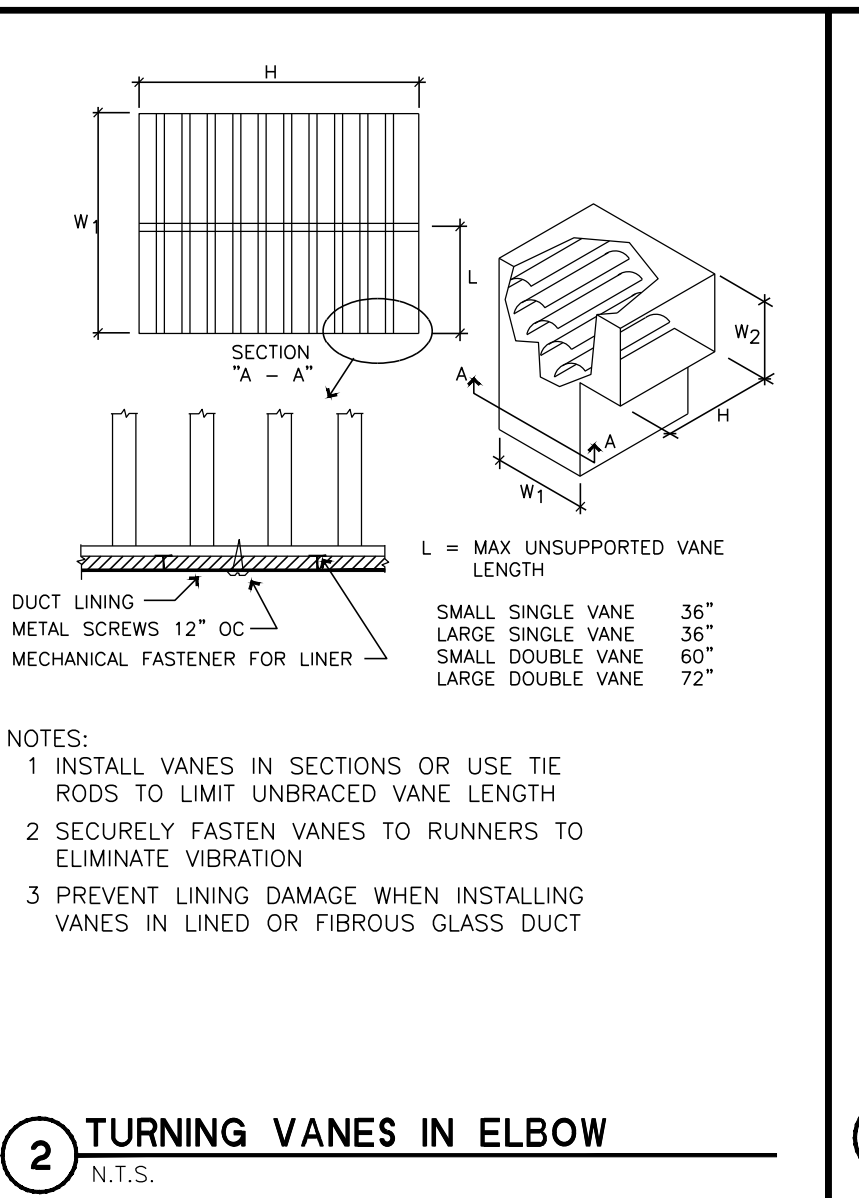
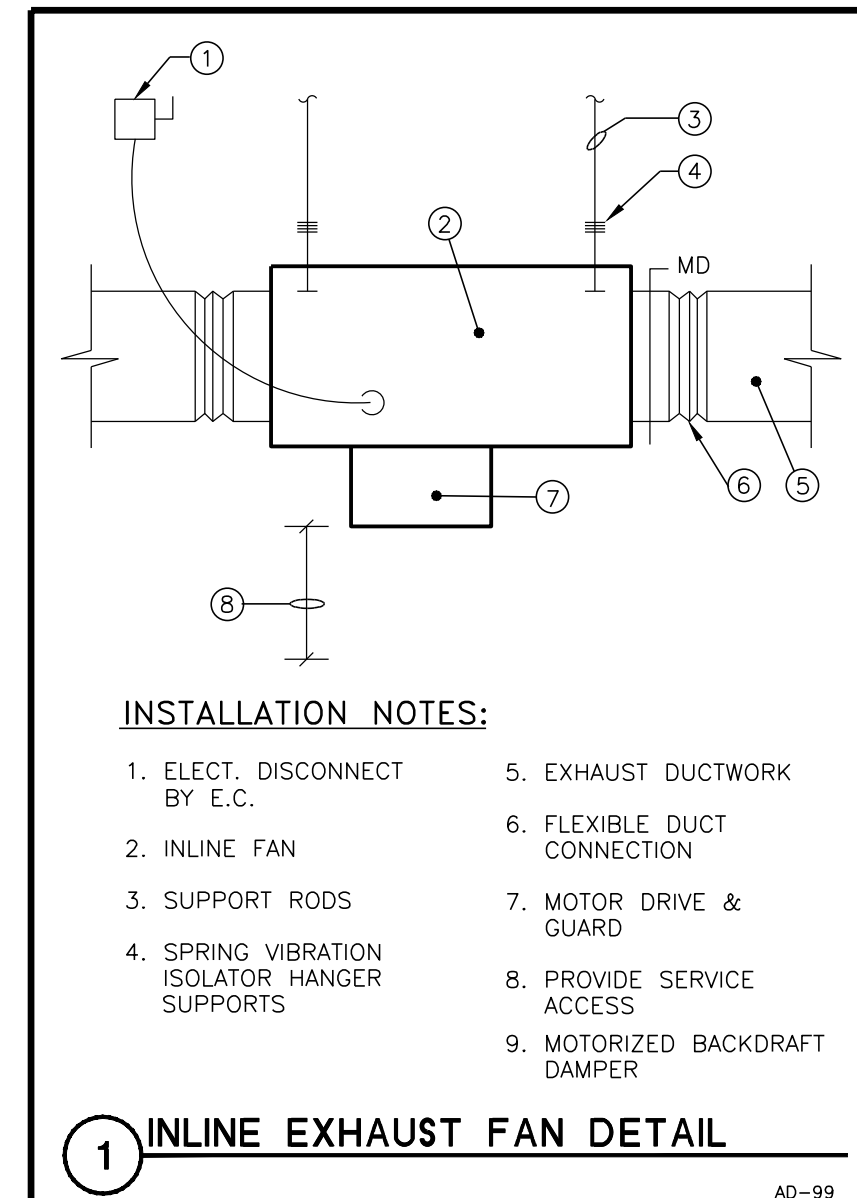
LOUVER SCHEDULE

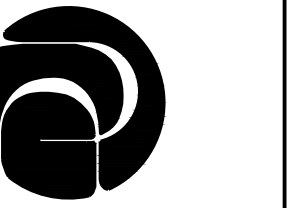
TAG	MANUFACTURER	MODEL	TYPE	METAL	LOUVER	FREE	SERVICE	REMARKS
L-1	VENT PRODUCTS	2600	STAT.	EXT. ALUM.	2" x 36" x 8"	0.61	TRANSFER AIR	2) BUCK FRAME
L-2	VENT PRODUCTS	2600-31-34	STAT.	EXT. ALUM.	2" x 36" x 8"	0.61	TRANSFER AIR	2) 3) FLANGED FRAME W/SUB-FRAME
L-3	VENT PRODUCTS	2600	STAT.	EXT. ALUM.	2" x 36" x 12"	1.02	EXHAUST AIR	1) BUCK FRAME

1) BIRD SCREEN - ALUM.
2) 18x16 MESH ALUM INSECT SCREEN.
3) ALUM SUB-FRAME (BUCK FRAME).
4) POWDER COAT BAKED ENAMEL FINISH-BLACK; FINAL COLOR SELECTION BY ARCHITECT.

HVAC SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
	SQUARE/RECTANGULAR SUPPLY DIFFUSER, GRILLE OR REGISTER-HORIZONTAL MOUNT
	SQUARE/RECTANGULAR RETURN/EXHAUST REGISTER OR GRILLE-HORIZONTAL MOUNT
	SUPPLY REGISTER OR GRILLE VERT. MOUNT
	RETURN/EXHAUST REGISTER OR GRILLE VERT. MOUNT
	VERTICAL SUPPLY DUCT DOWN
	VERTICAL RETURN/EXHAUST DUCT DOWN
	VOLUME DAMPER
	MOTORIZED DAMPER
	FLEXIBLE CONNECTION
	DIFFUSER/REGISTER/GRILLE TYPE
	EXHAUST CFM
	EQUIPMENT SYMBOL NO.
	EXHAUST FAN
	ELECTRIC HEATER
	ELECTRIC WATER HEATER
	LOUVER
	ABOVE FINISHED FLOOR
	EXHAUST AIR
	FRESH AIR
	MOTORIZED DAMPER





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SHEET NUMBER

P101

PLUMBING FIXTURE SCHEDULE							
P#	FIXTURE	WASTE	VENT	CW.	HW.	DESCRIPTION	
WC-1	WATER CLOSET	4"	1-1/2"	1"	--	VITREOUS CHINA, WHITE, WALL-MTD, ELONGATED BOWL, REAR SPUD, RIM @ 16" AFF. FIXTURE EQUAL TO KOHLER KINGSTON K-4323, SLOAN OPTIMA 152-1.6 ES-S SENSOR OPERATED FLUSH VALVE (1.6 GPF) & BEMIS 1955-SSC OPEN FRONT SEAT. PROVIDE EL-154 (120V) TRANSFORMER & VERTICAL ADJ. WALL CARRIERS EQUAL TO SMITH 0230 SERIES.	
WC-2	WATER CLOSET	4"	1-1/2"	1"	--	SAME AS WC EXCEPT RIM MTD @ 17" ADA COMPLIANT.	
UR-1	URINAL	2"	1-1/2"	3/4"	--	VITREOUS CHINA, WHITE, WALL HUNG, REAR SPUD, RIM MTD. @ 17" AFF. KOHLER BARODEN MODEL K-4991-ER WITH SLOAN 195-1.0 ES-S SENSOR-CONTROLLED FLUSH VALVE (1.0 GPF), S.S. BEEHIVE STRAINER, PROVIDE EL-154 (102V) TRANSFORMER & VERTICAL ADJ. WALL CARRIER EQUAL TO SMITH 0630 SERIES.	
LAV-1	LAVATORY	1-1/4"	1-1/2"	1/2"	1/2"	VITREOUS CHINA, WHITE, WALL HUNG EQUAL TO KOHLER KINGSTON LAV K-1729, (2-HOLE 4" O.C.) W/SLOAN ETF-600-P-BDM ELECTRIC FAUCET, MECH MIXING VALVE, ETF-233 (120V) PLUG-IN TRANSFORMER, MOUNT CONTROL MODULE & TRANSFORMER IN MECH 101 W/GROMMET OPENING IN WALL, PROWRAP 2000 INSULATION GUARDS, CONCEALED ARM CARRIER EQUAL TO SMITH 0700 SERIES & KOHLER 8998 P-TRAP WITH CLEANOUT, ADA COMPLIANT.	
MS-1	MOP SINK	3"	1-1/2"	1/2"	1/2"	FLOOR-MOUNTED MOLDED STONE EQUAL TO MUSTEE MODEL #63M WITH #63.700 HOSE & HOSE HOLDER, #65.600 MOP HANGER & #67.2424 WALLGUARDS, CHICAGO 897 FAUCET WITH HOSE CONN. VB (WATTS BA-ASSE 1011).	
HB-1	HOSE BIBB	--	--	3/4"	--	KEY-OPERATED, AUTOMATIC DRAINING WITH ANTI-SIPHON VB & FLUSH TAMPERS-PROOF BOX W/HINGED COVER. EQUAL TO WOODFORD MODEL B67 (ASSE 1052).	
WH-1	WALL HYDRANT	--	--	3/4"	--	KEY-OPERATED, FREEZELESS, AUTOMATIC DRAINING WITH ANTI-SIPHON VB & FLUSH TAMPERS-PROOF BOX W/HINGED COVER. EQUAL TO WOODFORD MODEL B67-PB. (ASSE 1052).	
DF-1	EXTERIOR DRINKING FOUNTAIN, ADA	1-1/4"	1-1/2"	1/2"	--	EXTERIOR, WALL-MOUNTED, DRINKING FOUNTAIN WITH BOTTLE FILLER STATION & SUPPORT BACK PLATE. COLOR FINISH SELECTED BY ARCHITECT. STERN-WILLIAMS MODEL 7315 & FLUWM-2 CARRIER/MTC PLATE. PROVIDE MOUNTING BRACKET FOR FILTER.	
FD-1	FLOOR DRAIN	3"	1-1/2"	--	--	POLISHED BRONZE ADJ. ROUNDTOP W/PROSET TRAP GUARD EQUAL TO SMITH MODEL 2005Y-A-PB (NO HUB), 2010C-A-PB (CAULKED OUTLET).	
TD-1	TRENCH DRAIN	2"	1-1/2"	--	--	HDPE 2-1/2" WIDE x 96" LONG LINEAR TRENCH DRAIN WITH BOTTOM OUTLET & STAINLESS STEEL BAR GRATE, ZURN Z880-U1.5-E1-SWG.	
EW-1	ELECTRIC WATER HEATER	--	--	3/4"	3/4"	FLOOR MOUNTED ELECTRIC WATER HEATER 30 GALLON CAPACITY, 23 GPH @ 80° F RISE, EQUAL TO SMITH DEN-30, 4500 WATT, 240V SINGLE PHASE, 18.8 FLA, T&P RELIEF VALVE.	
WS-1	WATER SOFTENER	OPEN SITE DRAIN	--	1-1/2"	--	HELLENBRAND MODEL H151-90-BD OR APPROVED EQUAL. CAPACITY = 96,000 GRAIN, 3.0 CF RESIN, 35 GPM @ 15 PSIG MAX WPD. SOFTENER SIZE: 14" Ø x 65" H. BRINE TANK: 18" Ø x 40" H (300 LB. SALT CAP.). 1/2" VALVE/MANIFOLD, METERED DEMAND-CONTROLLED REGENERATION. PROVIDE BOTTOM DRAIN FOR WINTERIZING.	

PLUMBING GENERAL NOTES:

- PLUMBING CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS.
- COORDINATE PHASING OF WORK WITH GENERAL CONTRACTOR.
- ALL PLUMBING SHALL BE CONCEALED IN MECHANICAL ROOM.

PLUMBING PLAN NOTES:

- COORDINATE ROUTING OF PIPING IN MECH ROOM WITH OTHER TRADES FOR PROPER SERVICE CLEARANCES.
- COORDINATE INSTALLATION OF LAV WALL CARRIER SUPPORTS WITH GENERAL CONTRACTOR & MASONRY TRADE.
- COORDINATE INSTALLATION OF DF WALL CARRIER SUPPORTS WITH GENERAL CONTRACTOR & MASONRY TRADE.
- COORDINATE FINAL LOCATIONS OF TRENCH DRAINS WITH FLOOR SLOPE BY GENERAL CONTRACTOR.
- COORDINATE PLACEMENT OF RECESSED/FLUSH SENSOR BOX (4x4) AT EACH FIXTURE WITH GENERAL CONTRACTOR & MASONRY TRADE.
- COORDINATE SENSOR TRANSFORMER PLACEMENT WITH ELECTRICAL TRADE FOR LINE VOLTAGE POWER. LOW-VOLTAGE POWER BY PLUMBING TRADE IN CONDUIT (EXPOSED) PER DIVISION 16.
- MOUNT CONTROL MODULE & TRANSFORMER IN MECHANICAL 101. CABLE CONTROLS THROUGH WALL GROMMET. PROVIDE ADDITIONAL CABLE LENGTHS AS REQUIRED. COORDINATE WORK WITH E.C.
- SLOPE ALL WATER PIPING TO LOW POINTS WITH DRAIN VALVE FOR WINTERIZING.
- EXTEND BACKWASH LINE TO MOP SINK WITH AIR GAP.

WATER SERVICE SIZING (POTABLE):

- .46 DEMAND OF BUILDING IN G.P.M.
- .70 PSI LOW PRESSURE AT MAIN IN STREET
- .6 FT DIFFERENCE IN ELEVATION, MAIN TO METER.
- .1 IN SIZE OF WATER METER.
- .350 FT DEVELOPED LENGTH FROM MAIN TO METER.

AVAILABLE PRESSURE AFTER THE WATER METER:

- .9 PSI PRESSURE LOSS DUE TO FRICTION LOSS IN 2" WATER SERVICE.
- 1.0 PSI PRESSURE LOSS DUE TO ELEVATION, MAIN TO METER.
- 7.5 PSI PRESSURE LOSS DUE TO METER.
- 59.4 PSI AVAILABLE PRESSURE AFTER THE WATER METER.

HOT WATER DISTRIBUTION SIZING:

PERMISSIBLE UNIFORM PRESSURE LOSS FOR FRICTION (A): (P.S.I./100' OF PIPE)

WHERE: $A = \frac{B - (C + D + E)}{F} \times 100$

- A. 118.3 PERMISSIBLE PRESSURE LOSS FOR FRICTION. (PSI/100' OF PIPE).
- B. 59.4 PSI AVAILABLE PRESSURE AFTER WATER METER
- C. 8 PSI PRESSURE NEEDED AT CONTROLLING FIXTURE.
- D. 0.9 PSI DIFFERENCE IN ELEVATION BETWEEN WATER METER AND CONTROLLING FIXTURE IN FEET 2 FT x .434 PSI/FT.
- E. 15 PSI PRESSURE LOSS DUE TO WATER HEATER, WATER TREATMENT DEVICES AND BACKFLOW PREVENTERS.
- F. 30 FT DEVELOPED LENGTH FROM WATER METER TO CONTROLLING FIXTURE IN FEET 20 x 1.5.

COLD WATER DISTRIBUTION SIZING:

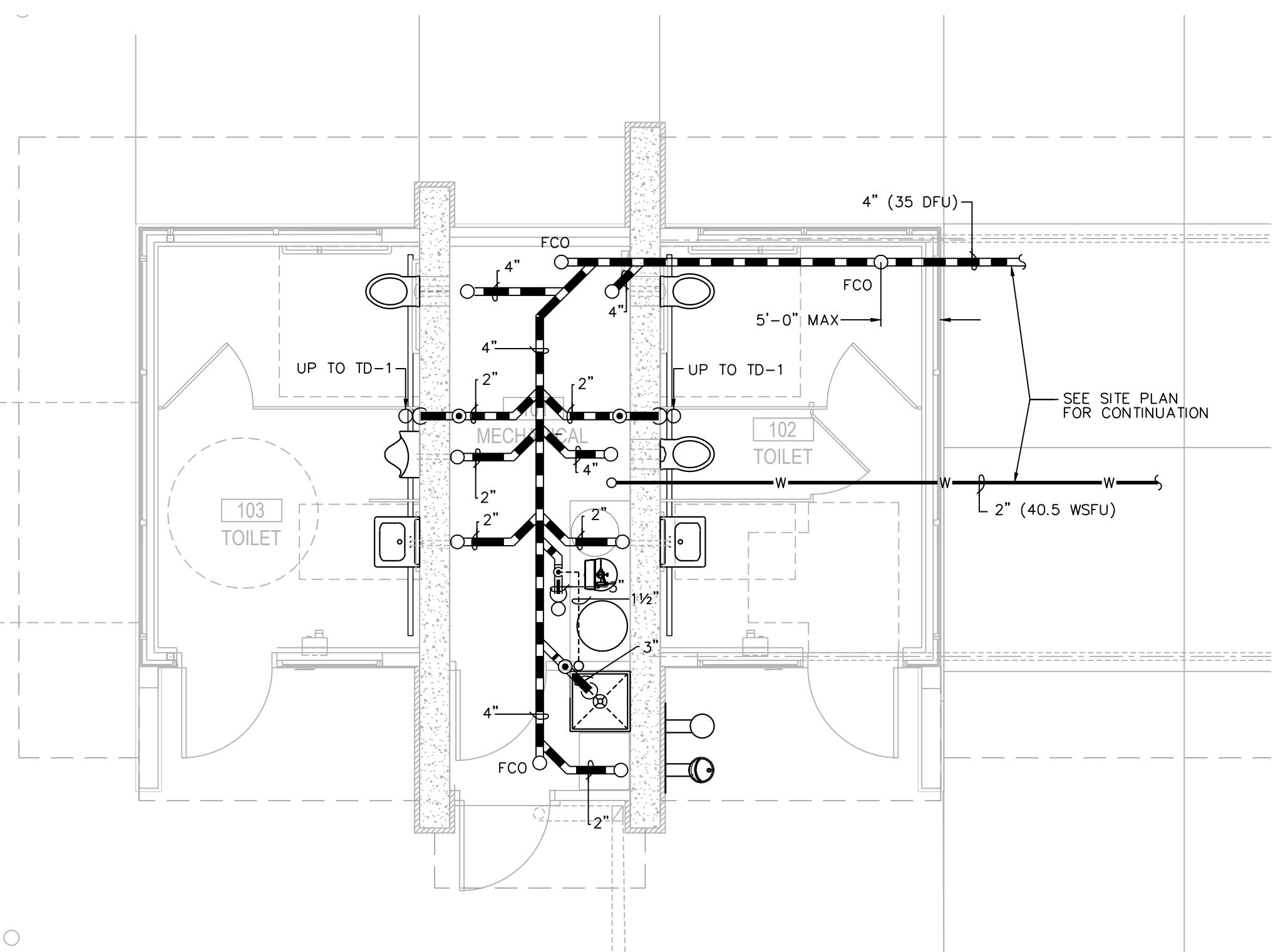
PERMISSIBLE UNIFORM PRESSURE LOSS FOR FRICTION (A): (P.S.I./100' OF PIPE)

WHERE: $A = \frac{B - (C + D + E)}{F} \times 100$

- A. 146.6 PERMISSIBLE PRESSURE LOSS FOR FRICTION. (PSI/100' OF PIPE).
- B. 59.4 PSI AVAILABLE PRESSURE AFTER WATER METER
- C. 15 PSI PRESSURE NEEDED AT CONTROLLING FIXTURE.
- D. 0.9 PSI DIFFERENCE IN ELEVATION BETWEEN WATER METER AND CONTROLLING FIXTURE IN FEET 2 FT x .434 PSI/FT.
- E. 0 PSI PRESSURE LOSS DUE TO WATER HEATER, WATER TREATMENT DEVICES AND BACKFLOW PREVENTERS.
- F. 30 FT DEVELOPED LENGTH FROM WATER METER TO CONTROLLING FIXTURE IN FEET 20 x 1.5.

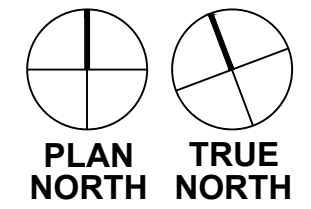
PLUMBING SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
---	WASTE BELOW SLAB
- - - - -	COLD WATER
- · - · - ·	HOT WATER
- - - - -	VENT
- - - - -	PIPE UP
- - - - -	PIPE DOWN
- - - - -	CLEAN OUT

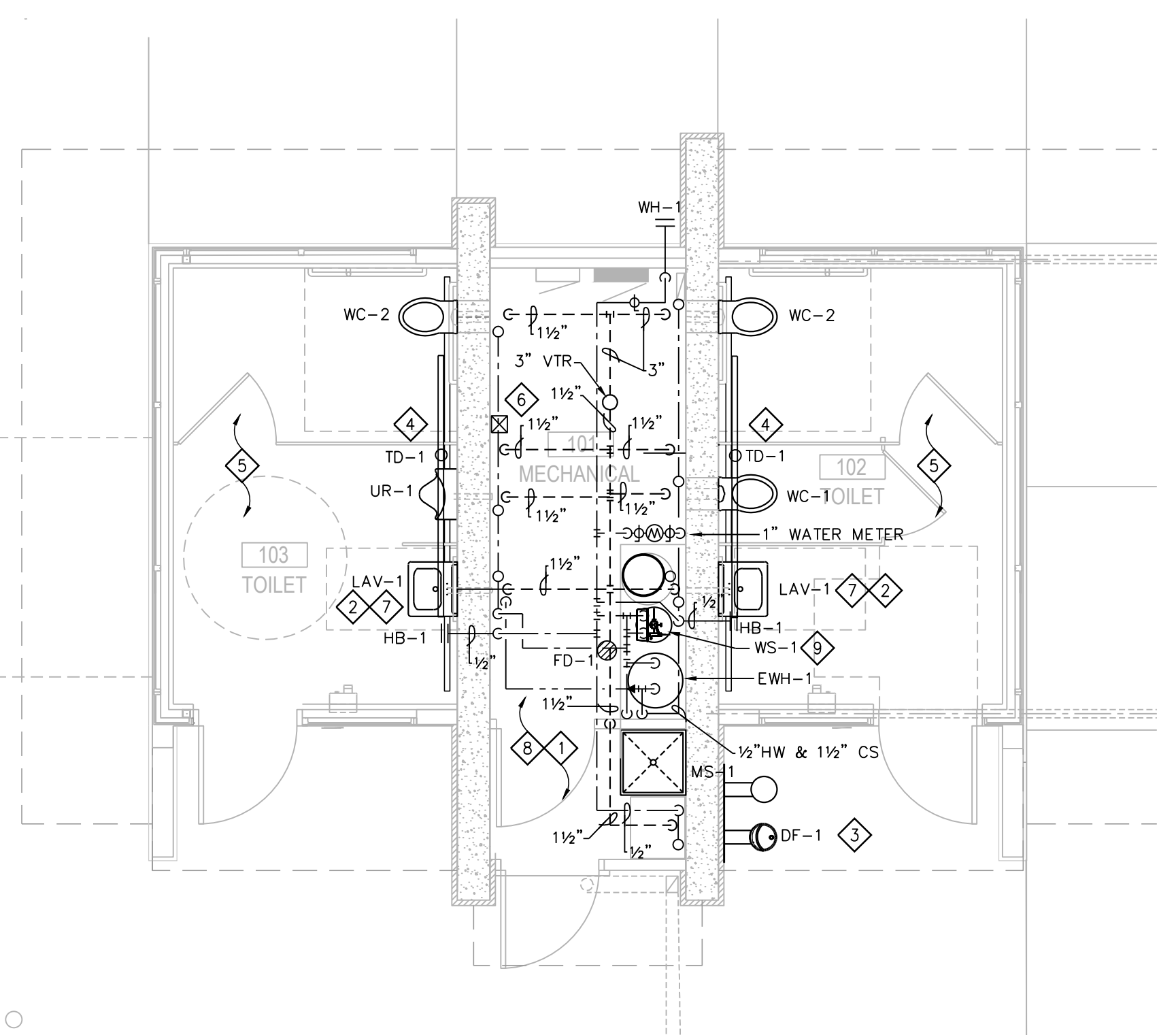


UNDERGROUND PLUMBING PLAN

1/4" = 1'-0"

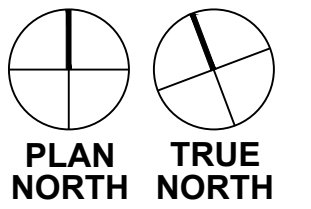


PLAN NORTH TRUE NORTH



PLUMBING PLAN

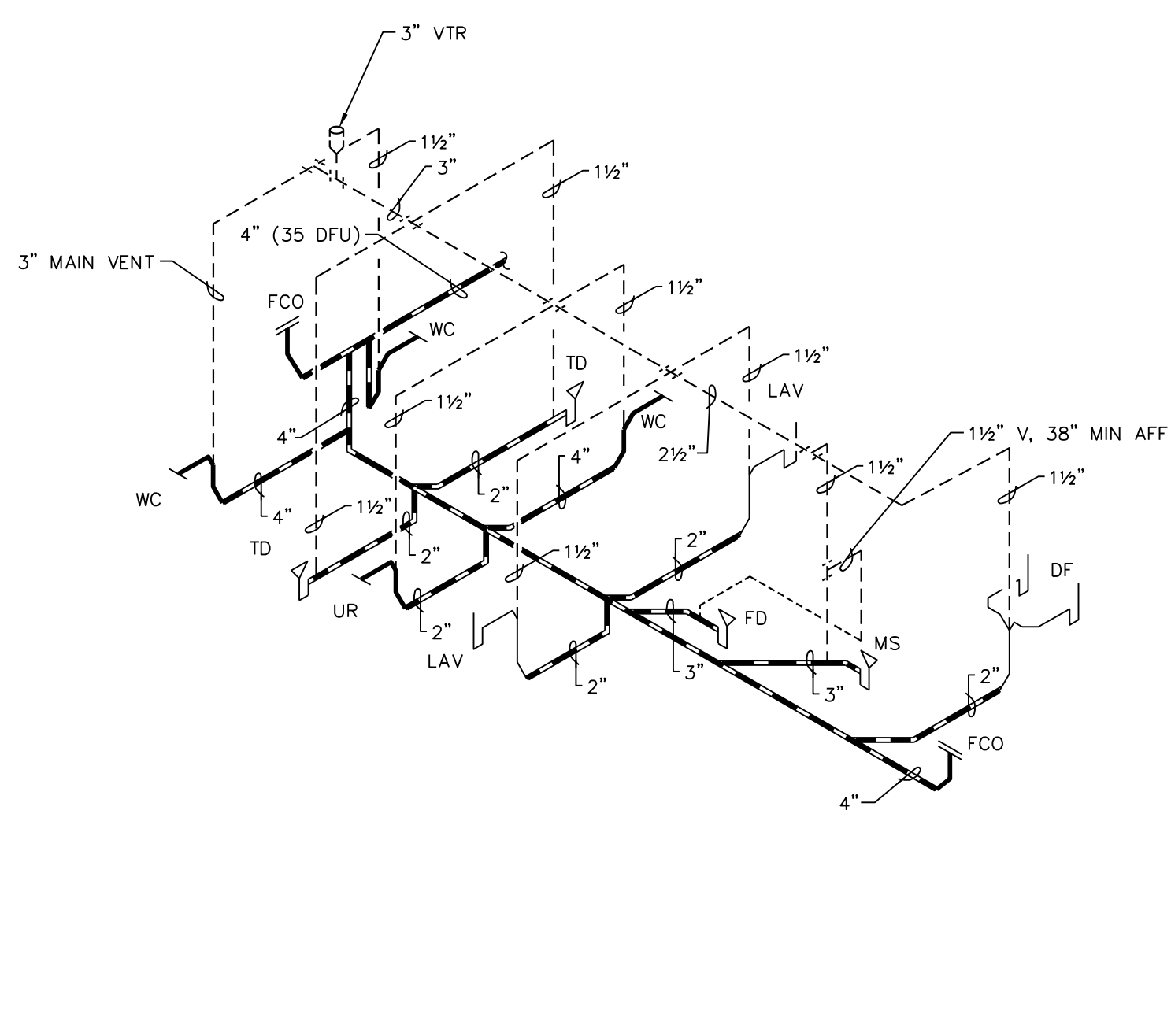
1/4" = 1'-0"



PLAN NORTH TRUE NORTH

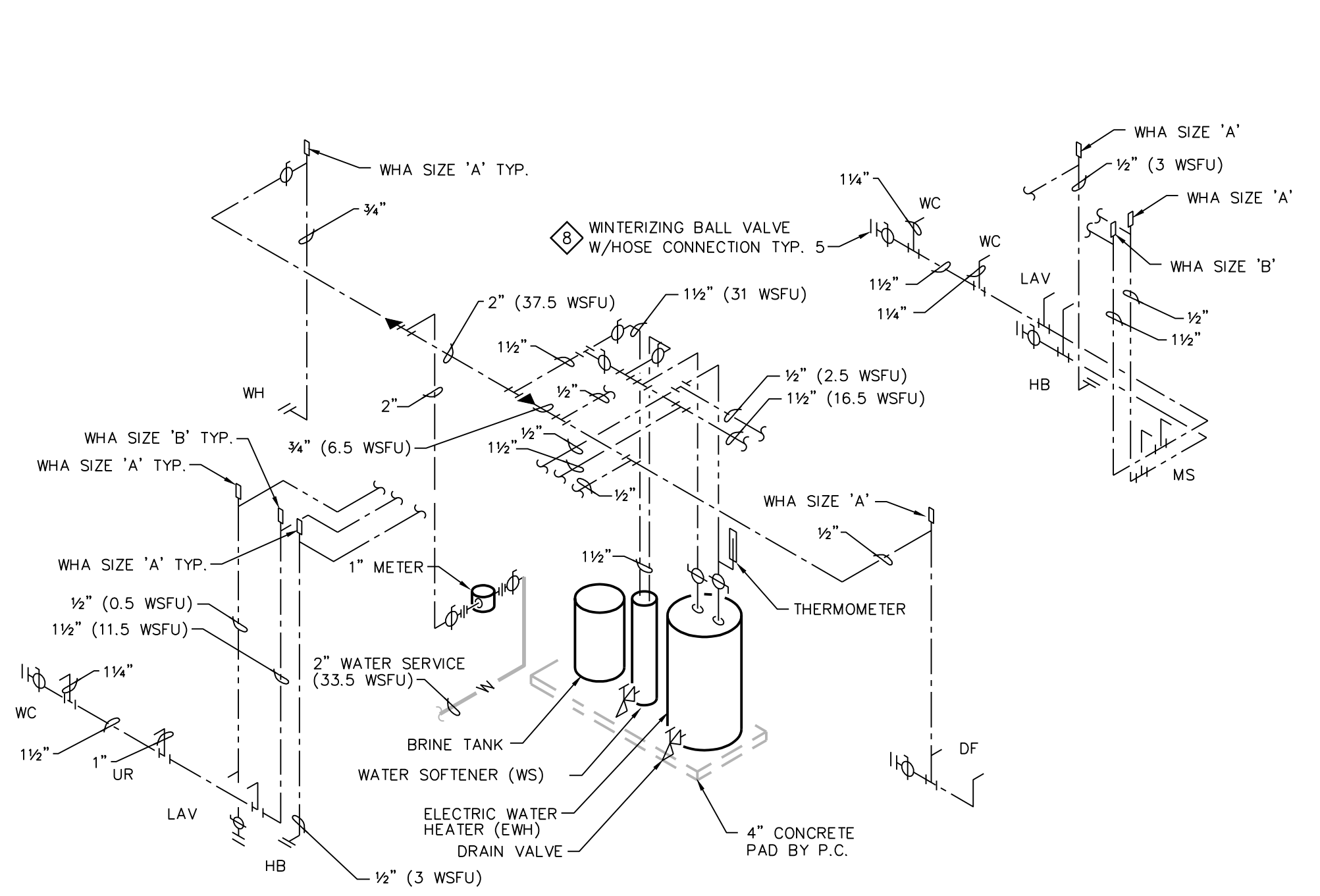
PIPE SIZE	COLD WATER @ 19.0 PSI/100'						HOT WATER @ 19.0 PSI/100'					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
WSFU (FT)	6.0	14.5	28.5	55.0	103	250	6.0	14.5	28.5	55.0	103	250
WSFU (FM)	-	4.0	6.0	13.5	34.0	128	-	-	-	-	-	-

FT = FLUSH TANK
FM = FLUSHOMETER



WASTE & VENT RISER

N.T.S.



WATER PIPING RISER

N.T.S.