

BULL RUN BATH HOUSE #2

* ADA RENOVATIONS *

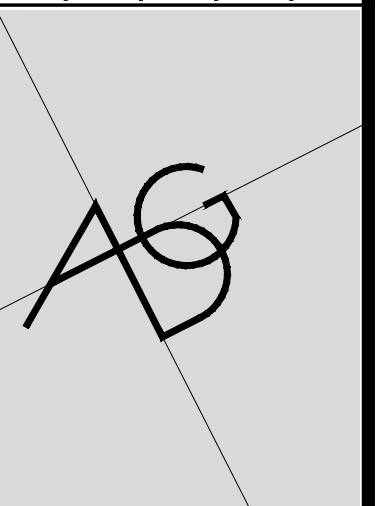
7700 BULL RUN DRIVE

BULL RUN REGIONAL PARK

CENTREVILLE, VA 20121

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BULL RUN BATH HOUSE #2
 ADA RENOVATIONS
 BULL RUN REGIONAL PARK
 CENTREVILLE, VA 20121

PROJECT PHASE:
 PERMIT SET

DATE:
 09/16/2019

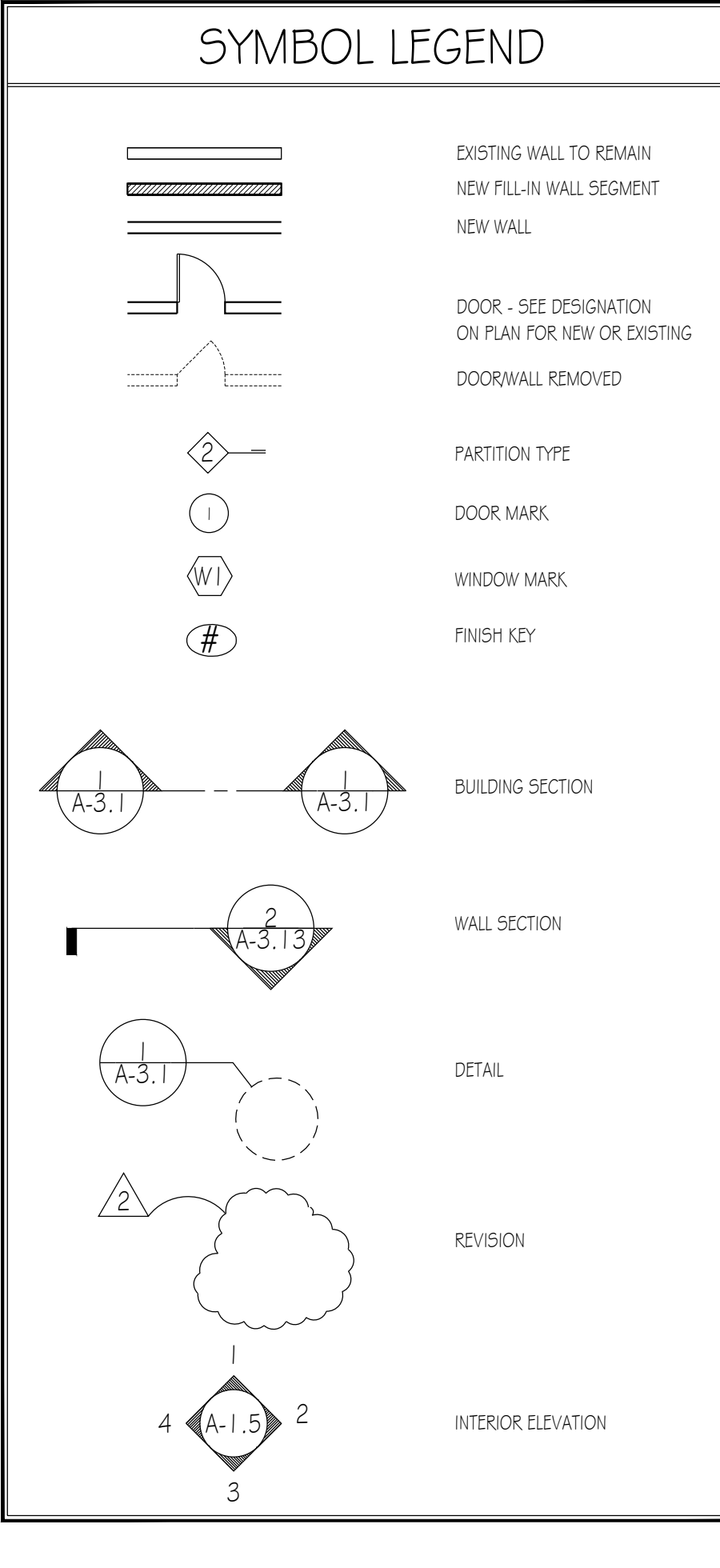
SHEET No.
 A-0

GENERAL CONSTRUCTION NOTES

- THE VIRGINIA STATEWIDE UNIFORM BUILDING CODE (IBC 2015) SHALL APPLY TO THIS PROJECT.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SAFETY MEASURES ON THE JOB SITE.
- ELECTRICAL AND PLUMBING SUBCONTRACTORS SHALL PROVIDE ADDITIONAL DESIGN DATA, DRAWINGS, AND INFORMATION TO CODE AUTHORITIES, BEYOND THOSE HEREIN, REQUIRED TO PROPERLY EXECUTE WORK AND SECURE TRADE PERMITS.
- WHEN CONFLICTS EXIST BETWEEN FLOOR PLANS AND DETAILS, THE LARGER SCALE DRAWINGS (DETAIL) SHALL TAKE PRECEDENCE. THE CONTRACTOR SHALL CONTACT THE ARCHITECT REGARDING ANY DISCREPANCIES.
- ALL WOOD BLOCKING IN CONTACT WITH MASONRY, CONCRETE, OR MOISTURE SHALL BE PRESSURE-TREATED FOR RESISTANCE TO ROT AND DECAY.
- WRITTEN DIMENSIONS ON THE DRAWINGS SHALL DICATE OVER HAND SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
- WHEN REFERENCED STANDARDS OR DESIGN NUMBERS (FOR EXAMPLE, UNDERWRITER LABORATORY FIRE RESISTANCE NOS., ASTM STANDARDS, ANSI STANDARDS, ETC.) ARE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN THE STANDARD OR DETAIL AND PROVIDE THE ASSEMBLY IN COMPLIANCE WITH THE STANDARD SPECIFIED.
- CERTAIN INFORMATION CONTAINED IN THESE DRAWINGS IS BASED ON SPECIFIC PRODUCTS. THE INFORMATION CONTAINED HEREIN MAY REQUIRE ADJUSTMENTS OR MODIFICATIONS TO CONFORM TO SUCH ITEMS. IN CASES WHERE CHANGES ARE NECESSARY, THESE DRAWINGS SHALL BE USED TO SHOW THE DESIGN INTENT ONLY.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CONCERNING EXISTING AND NEW WORK. INFORMATION CONTAINED ON THE DRAWINGS, AND NOTIFY THE ARCHITECT OF ANY CONFLICTS BEFORE PROCEEDING WITH EITHER FABRICATION OR INSTALLATION OF THE WORK. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY SHOULD EXISTING CONDITIONS PROHIBIT EXECUTION OF THE DESIGN INTENT OF THE DRAWINGS. ANY ADDITIONAL WORK, DEMOLITION, AND/OR REMOVAL AS A RESULT OF FAILURE TO NOTIFY THE ARCHITECT WILL BE AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL FURNISH ALL ITEMS SHOWN ON THE DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE EITHER ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- ALL STUDS, CEILING FURRING, AND FRAMING MEMBERS SHALL BE PLACED SO AS TO AVOID INTERFERENCE WITH LOCATIONS OF CASEWORK, RECESSED LIGHTING FIXTURES, PIPING, DUCT WORK AND SIMILAR ITEMS. GENERAL CONTRACTOR SHALL PROVIDE BLOCKING FOR WALL MOUNTED ITEMS AND GRAB BARS AS REQUIRED.
- THE CONTRACTOR SHALL BROOM CLEAN ALL INTERIOR FLOOR SURFACES PRIOR TO THE END OF EACH DAY. ALL TRASH, CONSTRUCTION DEBRIS, TOOLS, ETC., SHALL BE REMOVED FROM THE PARK BY THE CONTRACTOR ON A WEEKLY BASIS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTRICTING AND CONTAINING DUST AND DEBRIS GENERATED FROM CONSTRUCTION WORK PARTITIONS OR BARRIERS AS REQUIRED.
- THE SCOPE OF WORK DESCRIBED IN THESE DOCUMENTS REQUIRES THAT THE CONTRACTOR ERECT AND MAINTAIN SAFETY MEASURES (BARRIERS, FENCING, SIGNS, AND SIGNALING DEVICES). THE CONTRACTOR IS REQUIRED TO USE CAUTION AND EXTREME SAFETY PRECAUTIONS IN SAFEGUARDING BOTH PEOPLE AND PROPERTY. STANDARDS ESTABLISHED BY THE OCCUPATIONAL SAFETY AND HEALTH AGENCY (OSHA) SHALL APPLY. THE CONTRACTOR IS RESPONSIBLE FOR MEETING AND MAINTAINING ALL OSHA STANDARDS AND SAFETY PROGRAMS.
- "NOTES" ON TYPICAL SECTION OR DETAIL SHEETS SHALL PERTAIN TO ALL SIMILAR CONDITIONS.
- WHEN COMPONENTS OR EQUIPMENT ARE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL SUPPLY ALL ELEMETS FOR THE PROPER OPERATION OF THE SAME, INCLUDING BUT NOT LIMITED TO: SUPPORTS, UTILITY CONNECTIONS, ETC.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL GUARANTEE THEIR WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- THE TERM "PROVIDE" INDICATES FURNISH AND INSTALL.
- IT IS INTENDED THAT THE CONTRACTOR SHALL PROVIDE ALL DEMOLITION WORK TO PREPARE FOR NEW WORK WHETHER INDICATED OR NOT.

ABBREVIATION LIST

@	AT	F.D.	FLOOR DRAIN	Q.T.	QUARRY TILE
A.B.	ANCHOR BOLT	F.E.C.	FIRE EXTINGUISHER CABINET	R.	RISER
AC	AIR CONDITIONING	FIN.	FINISHED	R.A.	RETURN AIR
A.C.T.	ACOUSTICAL TILE	FL.	FLOOR OR FLUSH	RAD.	RADIUS
A.D.	AREA DRAIN	FIG.	FOOTING	R.D.	ROOF DRAIN
ADJ.	ADJACENT	FUR.	FURRING	R.F.	REINFORCING
A.F.F.	ABOVE FINISHED FLOOR	FURN.	FURNISHED	REQD.	REQUIRED
AGGR.	AGGREGATE	FURFL.	FLOURESCENT	RES.	RESILIENT
ALT.	ALTERNATE	F.F.T.	FIRE RETARDANT	RM.	ROOM
ALUM.	ALUMINUM	GAL.	GALVE	R.O.	ROUGH OPENING
ANOD.	ANODIZED	G.B.	GRAB BAR	R.X.	REMOVE EXISTING
A.P.	ACCESS PANEL	GR.	GRADE	S.	SHELF(S)
APPROX.	APPROXIMATE	GL.	GLASS	S.A.T.	SUSPENDED ACOUSTICAL TILE
ARCH.	ARCHITECT (URAL)	G.B.	GYPSON BOARD	S.C.	SCHEDULE
ASPH.	ASPHALT	H.B.	HOSE BIB	SCH.	SCHEDULE
AVC.	ANGLE	H.C.	HOLLOW CORE	S.B.	SECTION
B.	BOARD	H.W.	HARDWARE	SH.	SHEET
BD.	BETWEEN	H.F.	HOLD FACE	SIM.	SIMILAR
BTWN.	BETWEEN	H.M.	HOLLOW METAL	SPEC(S)	SPECIFICATION(S)
BIT.	BITUMINOUS	HOR.	HORIZONTAL	SQ.	SQUARE
BLDG.	BUILDING	H.P.	HIGH POINT	S.S.	STAINLESS STEEL
BKG.	BLOCKING	HT.	HEIGHT	SF OR	SQUARE FOOT
BM.	BEAM	I.D.	INSIDE DIAMETER	STD.	STANDARD
BOT.	BOTTOM	INS.	INSULATED(ING)	STL.	STEEL
BR.	BEARING	INT.	INTERIOR	STO.	STORAGE
BRG.	BRESSUMING	JAN.	JANITOR	STR.	STRUCTURAL
B.S.M.T.	BUILT-UP ROOFING	JST.	JOIST	SUR.	SURFACE
B.U.R.	BUILT-UP ROOFING	J.T.	JOINT	SUSP.	SUSPENDED
CAB.	CABINET	J.T.	JOINT	S 4 R	SHELF # ROD
CEM.	CEMENT	J.T.	JOINT	T.	TREAD
C.I.	CAST IRON	J.T.	JOINT	T 4 B	TOP & BOTTOM
C.J.	CONTROL JOINT	J.T.	JOINT	T 4 G	TONGUE & GROVE
CLR.	CLEAR	J.T.	JOINT	TH.	THRESHOLD
CLG.	CEILING	KIT.	KITCHEN	THK.	THICK
C.M.U.	CONCRETE MASONRY UNIT	K.O.	KNOCK OUT	T.O.	TOP OF
CONC.	CONCRETE	L.	LENGTH	TYP.	TYPICAL
COND.	CONDENSER	LAM.	LAMINATE	UC.	UNDERCUT
CONT.	CONTINUOUS	LAV.	LAVATORY	UL.	UNDERWRITERS LABORATORY
CONSTR.	CONSTRUCTION	L.P.	LOW POINT	UR.	UNLESS NOTED OTHERWISE
CORR.	CORRIDOR	LT.	LIGHT	UNO.	UNLESS NOTED OTHERWISE
C.T.	CERAMIC TILE	MAS.	MASONRY	US	UNDERSIDE OF STRUCTURE
CTR.	CENTERLINE	MATL.	MATERIAL	V.B.	VAPOR BARRIER
DBL.	DOUBLE	M.C.	MEDICINE CABINET	V.T.	VINYL TILE
DEMO.	DEMOLITION	MECH.	MECHANICAL	VERT.	VERTICAL
DTL.	DETAIL	M.E.M.	MEMBRANE	VEST.	VESTIBULE
D.F.	DRINKING FOUNTAIN	MFR.	MANUFACTURER	V.T.R.	VENT THROUGH ROOF
DIAM OR	DIAMETER	MIN.	MINIMUM	V.W.C.	VINYL WALL COVERING
DN.	DOWN	MISC.	MISCELLANEOUS	W.	WITH
DO.	DITTO	M.O.	MASONRY OPENING	W.C.	WATER CLOSET
D.P.	DAMP PROOFING	MTD.	MOUNTED	WD.	WOOD
DR.	DOOR	MTL.	METAL	W.D.W.	WINDOW
D.S.	DRAIN TILE	N.A.	NOT APPLICABLE	W.H.	WALL HUNG
D.T.	DRAWING	N.C.	NOT IN CONTRACT	WD	WATER HEATER
DWG.	DRAWING	N.O.	NUMBER	WI	WROUGHT IRON
E.A.	EACH	N.T.S.	NOT TO SCALE	WO	WITHOUT
EL.	ELEVATION	OA.	OVERALL	W.P.	WATER-PROOFING
ELEC.	ELECTRICAL	O.C.	ON CENTER	W.F.	WELDED WIRE FABRIC
ENCL.	ENCLOSURE	O.D.	OUTSIDE DIAMETER	WT.	WEIGHT
EQ.	EQUAL	OFF.	OFFICE		
EQUIP.	EQUIPMENT	O.H.	OVERHEAD		
EXST.	EXISTING	OHG.	OVERHANG		
EXT.	EXTERIOR	OPG.	OPENING		
EXP.	EXPOSED/EXPANSION	OPF.	OPPOSITE		
E.W.	EACH WAY	PLAS.	PLASTIC		
E.W.C.	ELECTRIC WATER COOLER	P.M.J.F.	PRE-MOLDED JOINT FILLER		
		PAN.	PANEL		
		POLY.	POLYETHYLENE		
		PREFAB.	PREFABRICATED		
		P.T.D.	PAINTED		



SHEET INDEX

A-0 - COVER SHEET

ARCHITECTURAL DRAWINGS

A-1 ACCESSIBILITY (ADA) SHEET
 A-2 DEMOLITION PLAN
 A-3 NEW PLAN
 A-4 INTERIOR ELEVATIONS
 A-5 DOOR SCHEDULE/DETAILS
 ALT-1 ADD ALTERNATE

MECHANICAL DRAWINGS

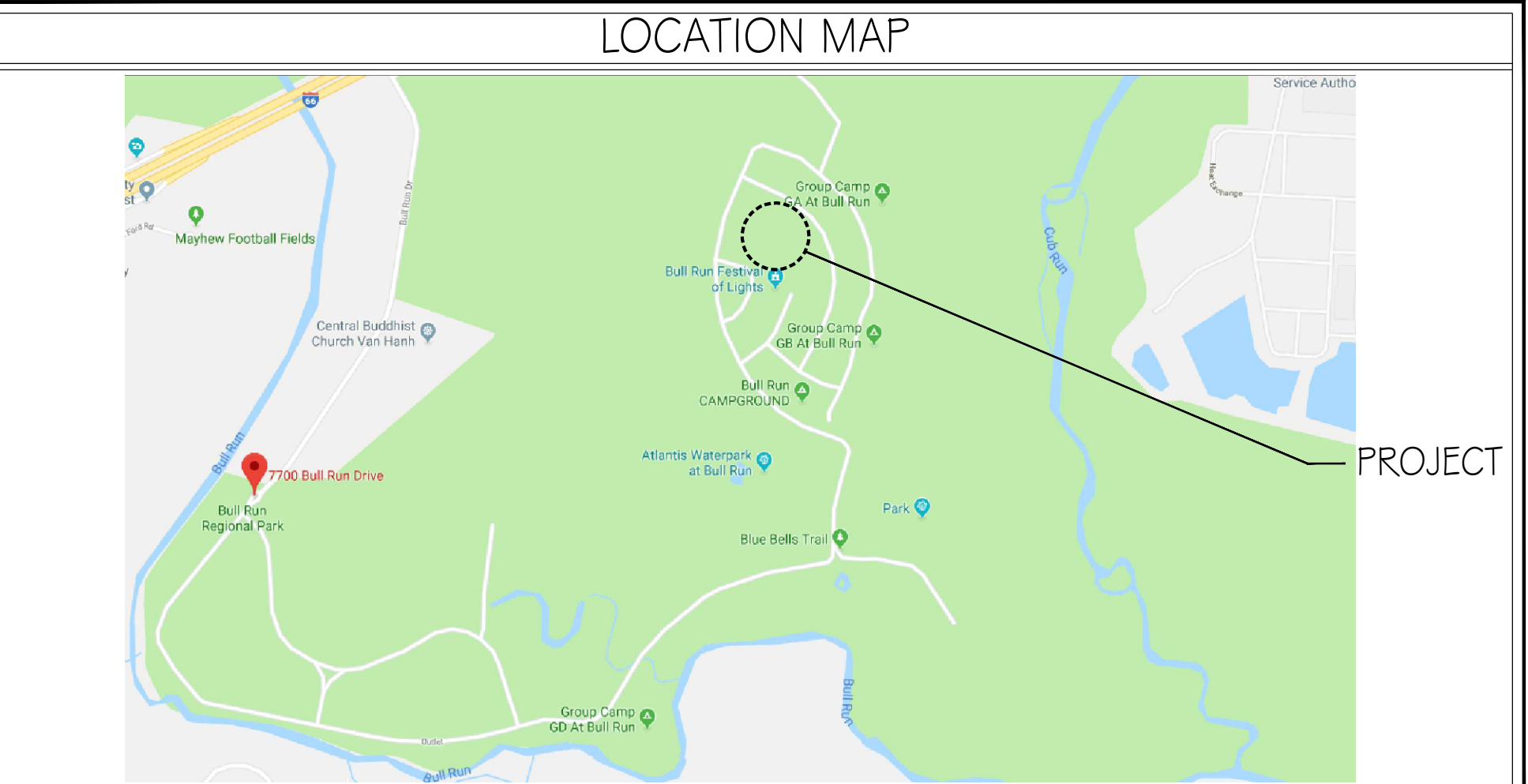
M-1 MECHANICAL COVER SHEET
 M-2 DEMOLITION AND NEW WORK FLOOR PLANS
 M-3 NEW WORK FLOOR PLAN (ALT. #1), SCHEDULES AND DETAILS

ELECTRICAL DRAWINGS

E-1 ELECTRICAL COVER SHEET
 E-2 ELECTRICAL DEMOLITION PLANS
 E-3 LIGHTING AND POWER PLAN
 E-4 LIGHTING AND POWER PLAN - ALT #1

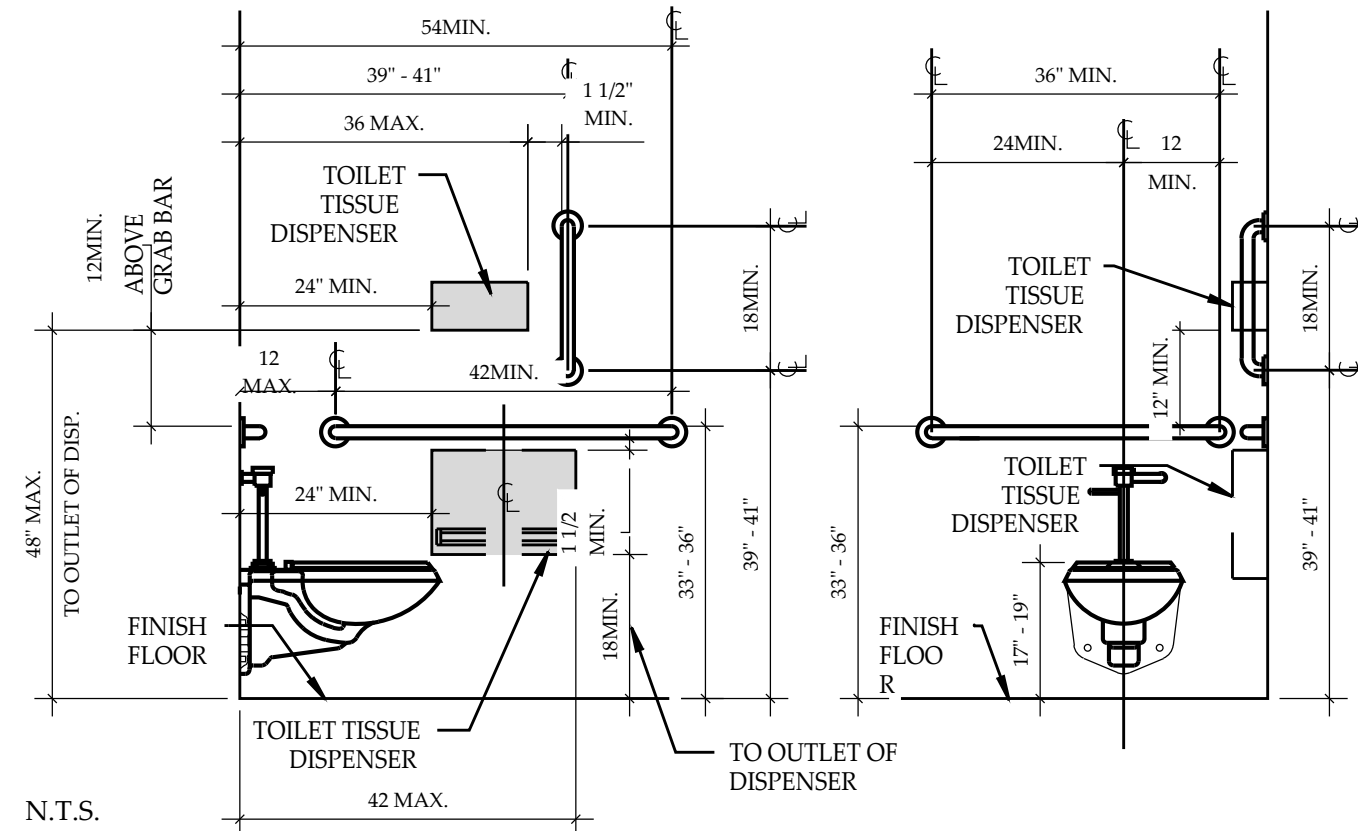
PLUMBING DRAWINGS

P-1 PLUMBING COVER SHEET
 P-2 DEMOLITION AND NEW WORK PLANS, AND RISER DIAGRAMS
 P-3 NEW WORK PLAN AND RISER DIAGRAM - ALT #1

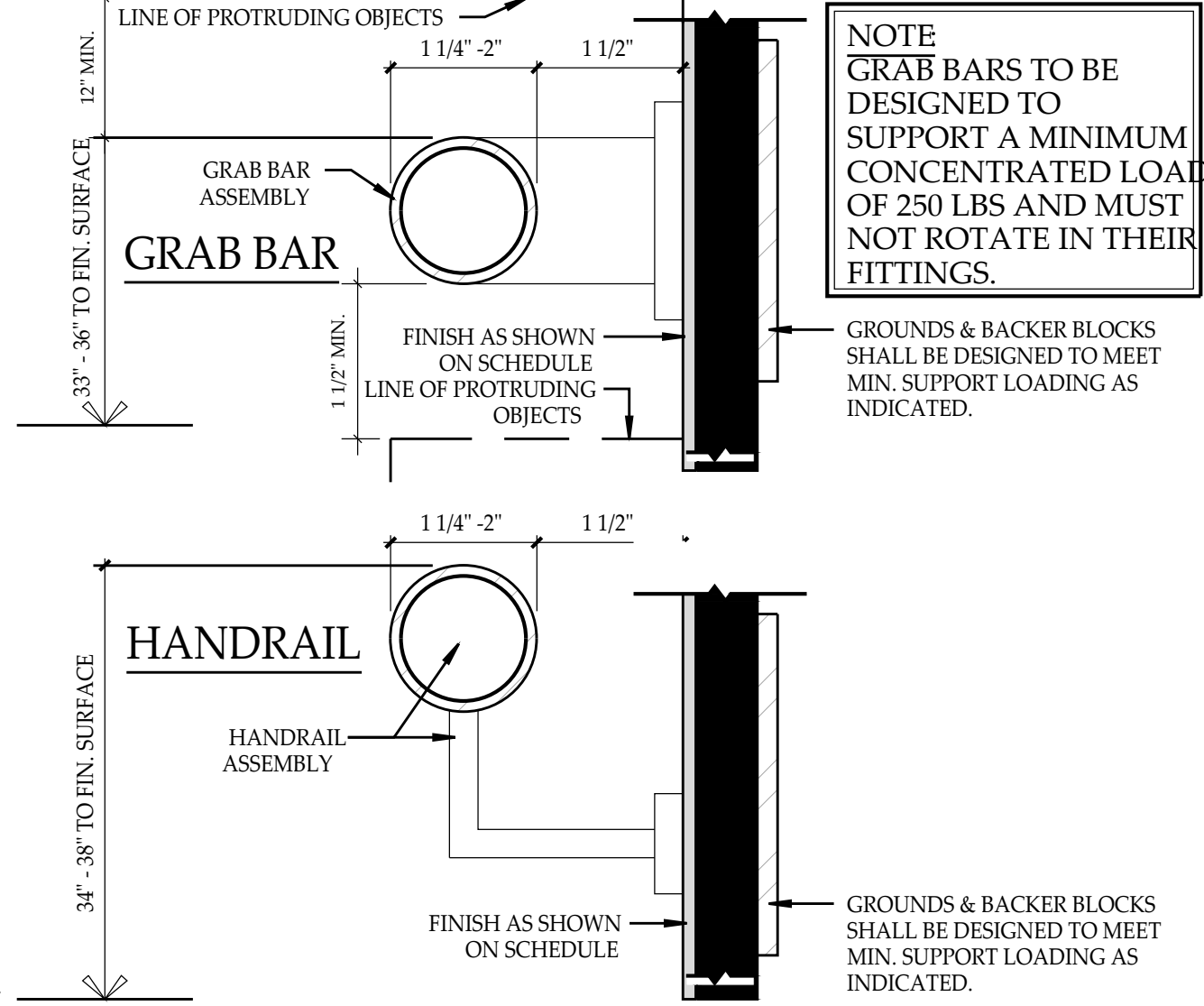


PROJECT INFORMATION

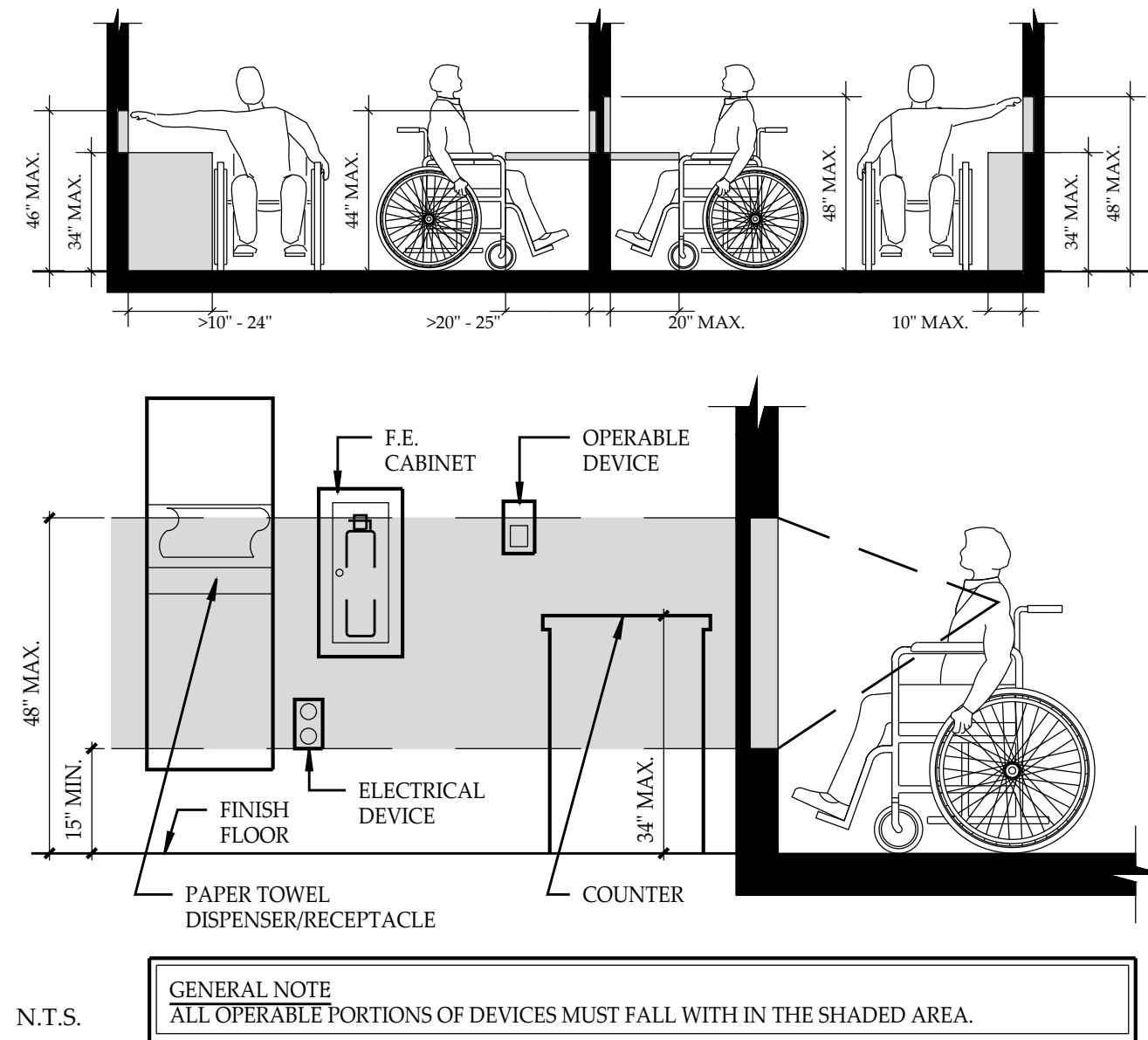
DESCRIPTION OF WORK:	ADA RENOVATION OF 2-BATHROOMS, NEW ADA ENTRANCE, PLUMBING & SHOWER UPGRADES, LAUNDRY UPGRADES & ELECTRICAL & EXHAUST IMPROVEMENTS, AND SIDEWALK
CODE:	IBC 2015, VIRGINIA UNIFORM STATEWIDE BUILDING CODE 2015, 2003 ANS, IMC 2015, IFC 2015, AND IFC 2015, ADA-ICC A117.1 2009
USE GROUP:	GROUP U
BUILDING SIZE:	1,566.5 SQ. FT.
OCCUPANT:	LAUNDRY - 229 SQ. FT./300 = 2 OCCUPANTS
TABULATION:	BATHROOM WOMEN - 424 SQ. FT./300 = 2 OCCUPANTS BATHROOM MEN - 424 SQ. FT./300 = 2 OCCUPANTS NET TOTAL - 1121 SQ. FT./300 = 6 TOTAL OCCUPANTS
SPRINKLER SYSTEM:	NONE
CONSTRUCTION TYPE:	EXISTING BUILDING (BUILT PRIOR TO JULY 1973) (BOCA 1969) CONSTRUCTION TYPE - IIB
BUILDING HEIGHT:	FROM MID (FRONT LEVEL) - 17'-0"± RIDGE OF ROOF - 22'±



1 WATER CLOSET ELEVATIONS



2 GRAB BARS & HANDRAILS

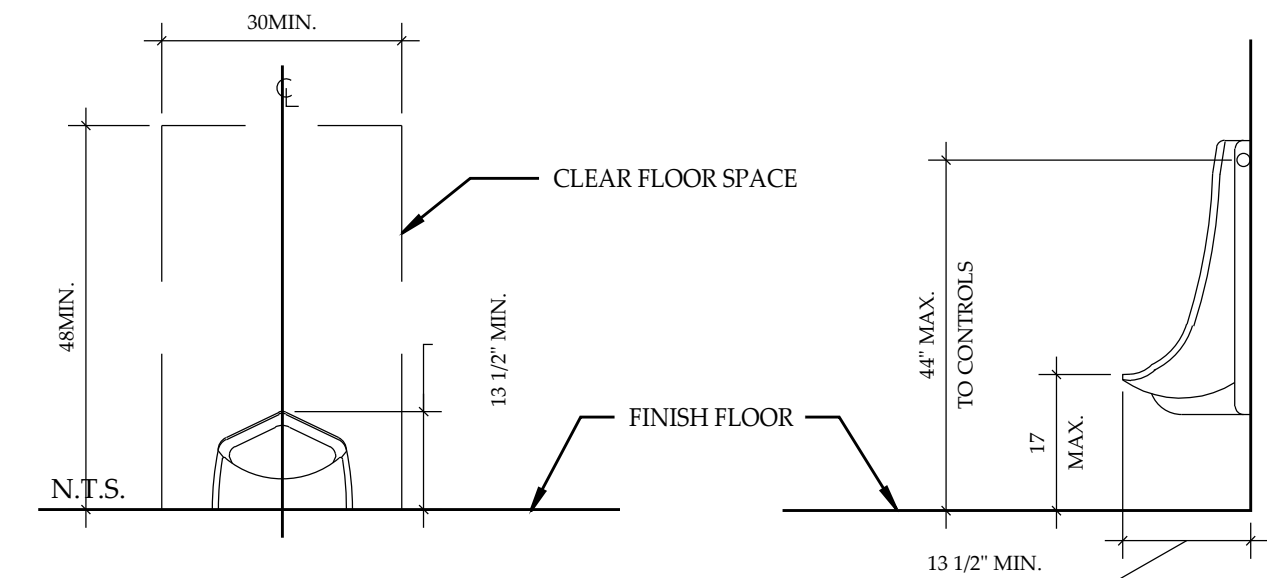


3 REACH / MOUNTING HEIGHTS

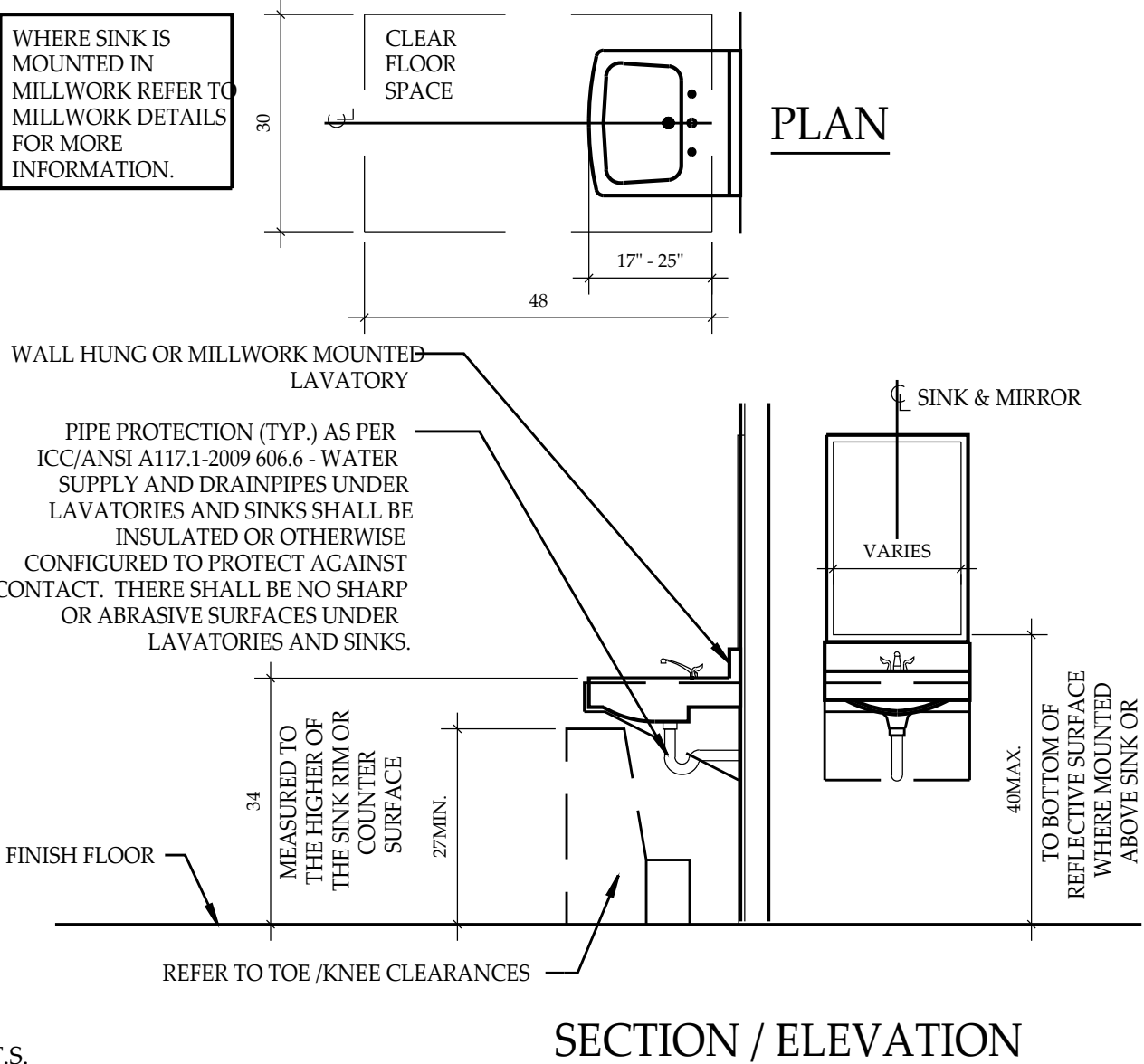
BARRIER-FREE STANDARDS INDICATED HEREIN ARE TYPICAL. DIMENSIONS SHOWN ARE TYPICAL UNLESS INDICATED OTHERWISE ELSEWHERE IN THE DRAWINGS.

- REFER TO SHEET A0.00 FOR APPLICABLE CODES, STANDARDS, AND GUIDELINES.
- THE CLEAR WIDTH OF A PASSAGEWAY FOR A SINGLE WHEELCHAIR SHALL BE 32 INCHES FOR A PASSAGEWAY OF 24 INCHES OR LESS AND 36 INCHES FOR A PASSAGEWAY LONGER THAN 24 INCHES.
- THE CLEAR FLOOR SPACE REQUIRED FOR A SINGLE WHEELCHAIR SHALL BE 30 INCHES BY 48 INCHES.
- THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL BE 36 INCHES. EXCEPTION: THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES MINIMUM FOR A LENGTH OF 24 INCHES MAXIMUM, PROVIDED THE REDUCED-WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES MINIMUM IN LENGTH AND 36 INCHES MINIMUM IN WIDTH.
- WALKING SURFACES ALONG ACCESSIBLE ROUTES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE NOT STEEPER THAN 1:48. IF SLOPE IS GREATER THAN 1:20, SEE NOTE #11.
- HANDRAILS: THE TOP OF GRIPPING SURFACE OF HANDRAILS SHALL BE 34 INCHES MINIMUM AND 38 INCHES MAXIMUM VERTICALLY ABOVE THE STAIR NOSING OR RAMP SURFACE. GRIPPING SURFACE SHALL BE CONTINUOUS, WITHOUT INTERRUPTION BY NEWEL POST. OTHER CONSTRUCTION ELEMENTS OR OBSTRUCTIONS. CLEAR SPACE BETWEEN HANDRAILS AND WALL SURFACE SHALL BE 1 1/2" MINIMUM. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSING, RAMP SURFACES AND WALKING SURFACES.
- PROTRUDING OBJECTS: OBJECTS WITH LEADING EDGES LOCATED MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FLOOR SHALL PROTRUDE NOT MORE THAN 4 INCHES FROM THE WALL.
- GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHEN VERTICAL CLEARANCE OF AN AREA ADJOINING AN ACCESSIBLE ROUTE IS LESS THAN 80 INCHES HIGH. LEADING EDGES SHALL BE NO HIGHER THAN 27" ABOVE THE FLOOR.
- CHANGES IN LEVEL: A CHANGE IN LEVEL OF 1/4 INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL AND WITHOUT EDGE TREATMENT. A CHANGE IN LEVEL OF BETWEEN 1/4 INCH AND 1/2 INCH HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.
- ACCESSIBLE CAR PARKING SPACES SHALL BE 96 INCHES WIDE AND HAVE AN ADJACENT ACCESS AISLE OF NOT LESS THAN 60 INCHES MINIMUM. ACCESSIBLE VAN PARKING SHALL BE 132 INCHES MINIMUM IN WIDTH, EXCEPT THEY MAY BE 96 INCHES WIDE WHERE THE ADJACENT ACCESS AISLE IS 96 INCHES MINIMUM IN WIDTH. A CLEAR HEIGHT OF 98 INCHES IS TO BE PROVIDED AT ALL VAN PARKING SPACES. PASSENGER LOADING ZONES SHALL PROVIDE AN ACCESS AISLE 60 INCHES WIDE AND 20 FEET LONG MINIMUM ADJACENT TO THE VEHICLE PULL-UP SPACE AND AT THE SAME LEVEL AS THE ROADWAY.
- RAMPS SHALL HAVE A SLOPE NOT STEEPER THAN 1:12 AND A CROSS SLOPE OF NO STEEPER THAN 1:48. THE MAXIMUM RISE FOR ANY RAMP WITHOUT A LANDING IS 30 INCHES. THE RAMP SHALL HAVE A CLEAR WIDTH BETWEEN HANDRAILS OF 36 INCHES. LANDING LENGTH SHALL BE A MINIMUM OF 60 INCHES. RAMPS SHALL BE PROVIDED WITH EDGE PROTECTION UNLESS OTHERWISE NOTED.
- DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.
- INTERIOR HINGED, SLIDING OR FOLDING DOOR OPENING FORCE, WHERE CLOSERS ARE USED SHALL BE 5 POUNDS MAXIMUM.
- THE BOTTOM 10 INCHES OF ALL DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
- POWER ASSISTED DOORS: THE TIME REQUIRED FOR SUCH DOORS TO OPEN TO A BACK CHECK POSITION SHALL BE 3 SECONDS MINIMUM. THE FORCE REQUIRED TO STOP DOOR MOVEMENT SHALL BE 15 POUNDS MAXIMUM.
- GRAB BARS SHALL HAVE A DIAMETER OR WIDTH OF GRIPPING SURFACE FROM 1 1/4 TO 2 INCHES. THE CLEAR SPACE BETWEEN THE GRAB BAR SURFACE AND THE WALL SURFACE SHALL BE 1-1/2 INCHES.
- STRUCTURAL STRENGTH: ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR OR SEAT, FASTENER MOUNTING DEVICE OR SUPPORTING STRUCTURE.
- DIMENSIONS THAT ARE NOT STATED AS "MAXIMUM" OR "MINIMUM" ARE ABSOLUTE. ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES.
- OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM.

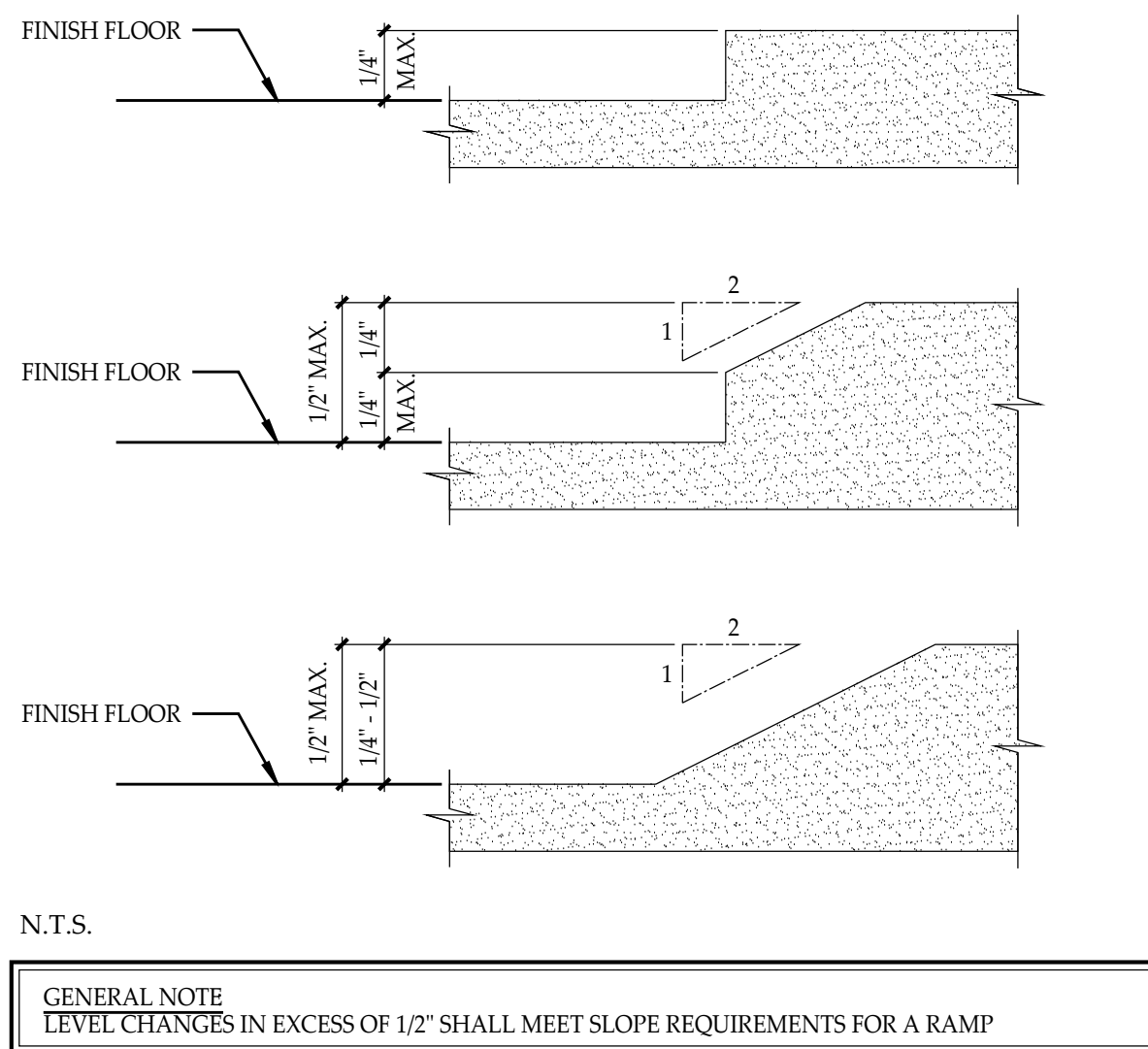
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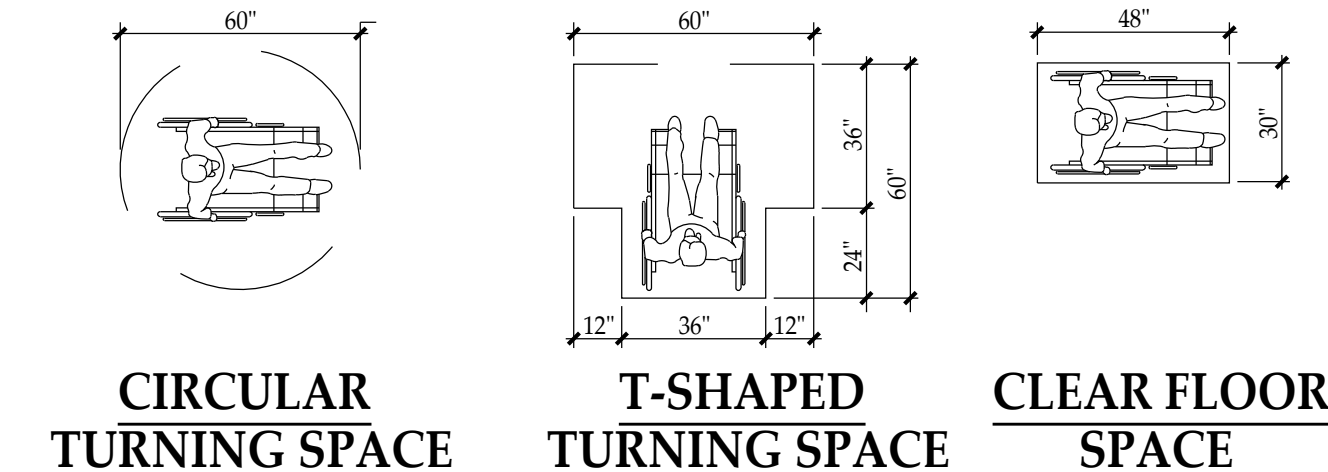
4 WALL HUNG URINAL



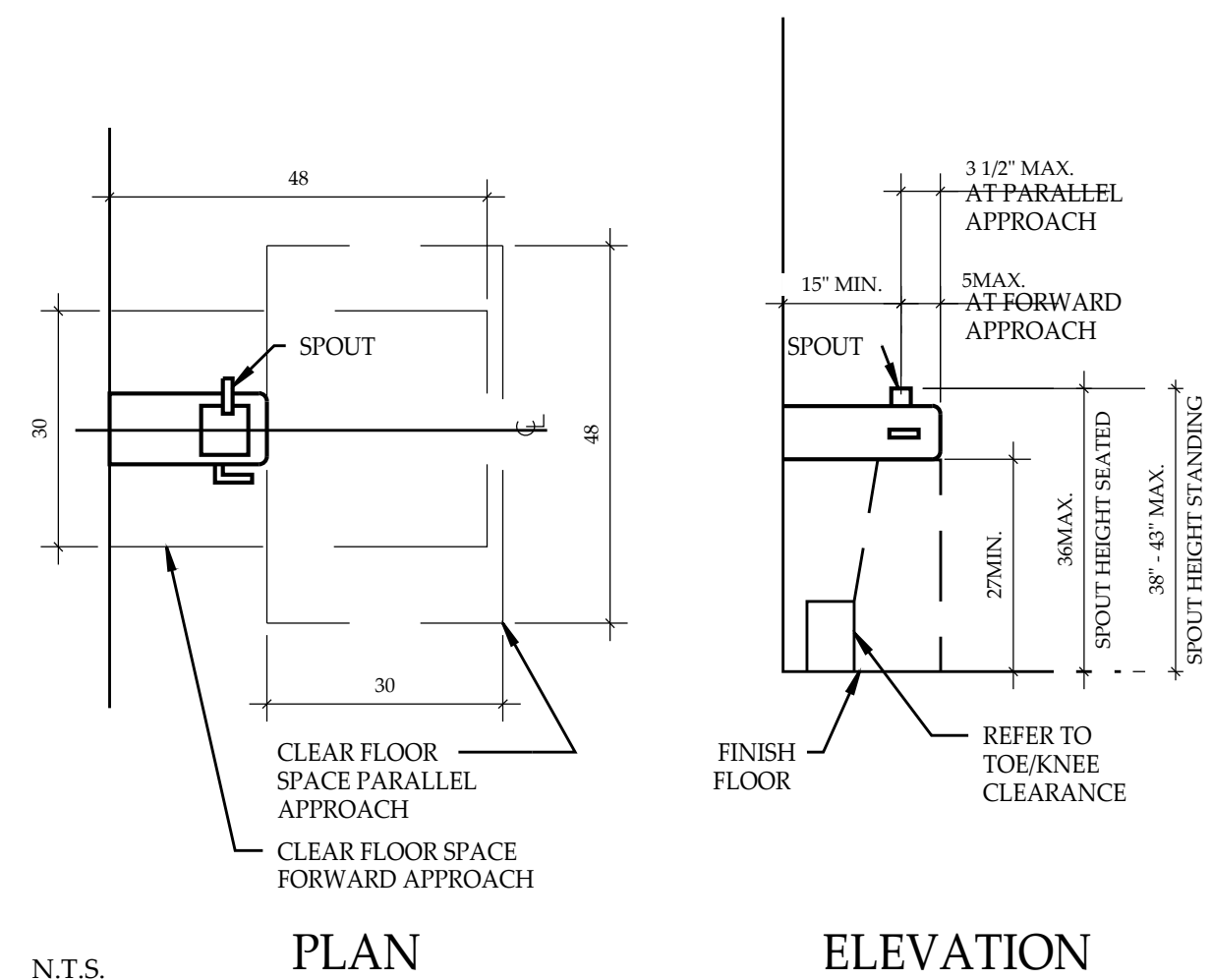
5 LAVATORIES AND SINKS



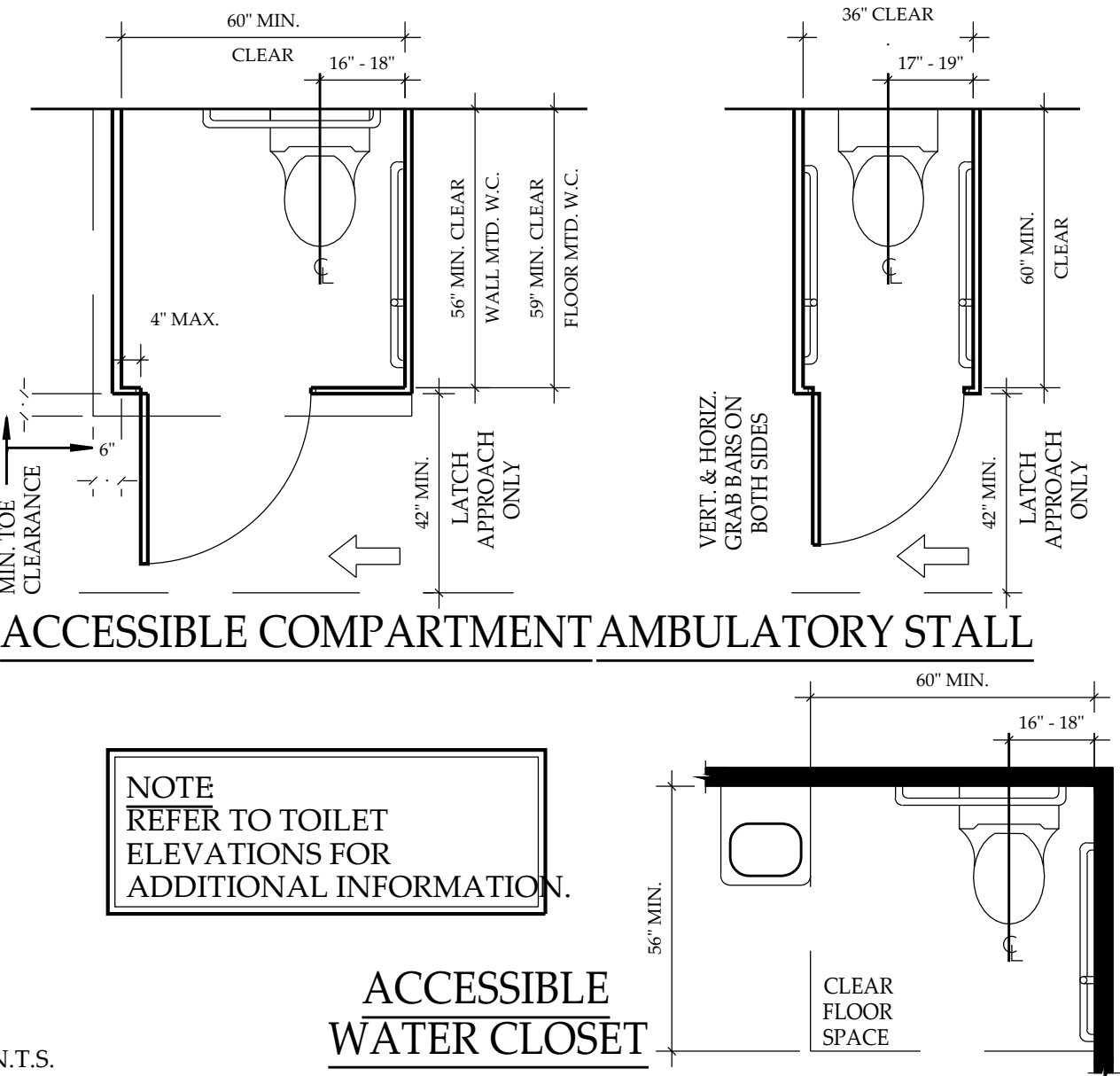
6 LEVEL CHANGES - (UP TO 1/2")



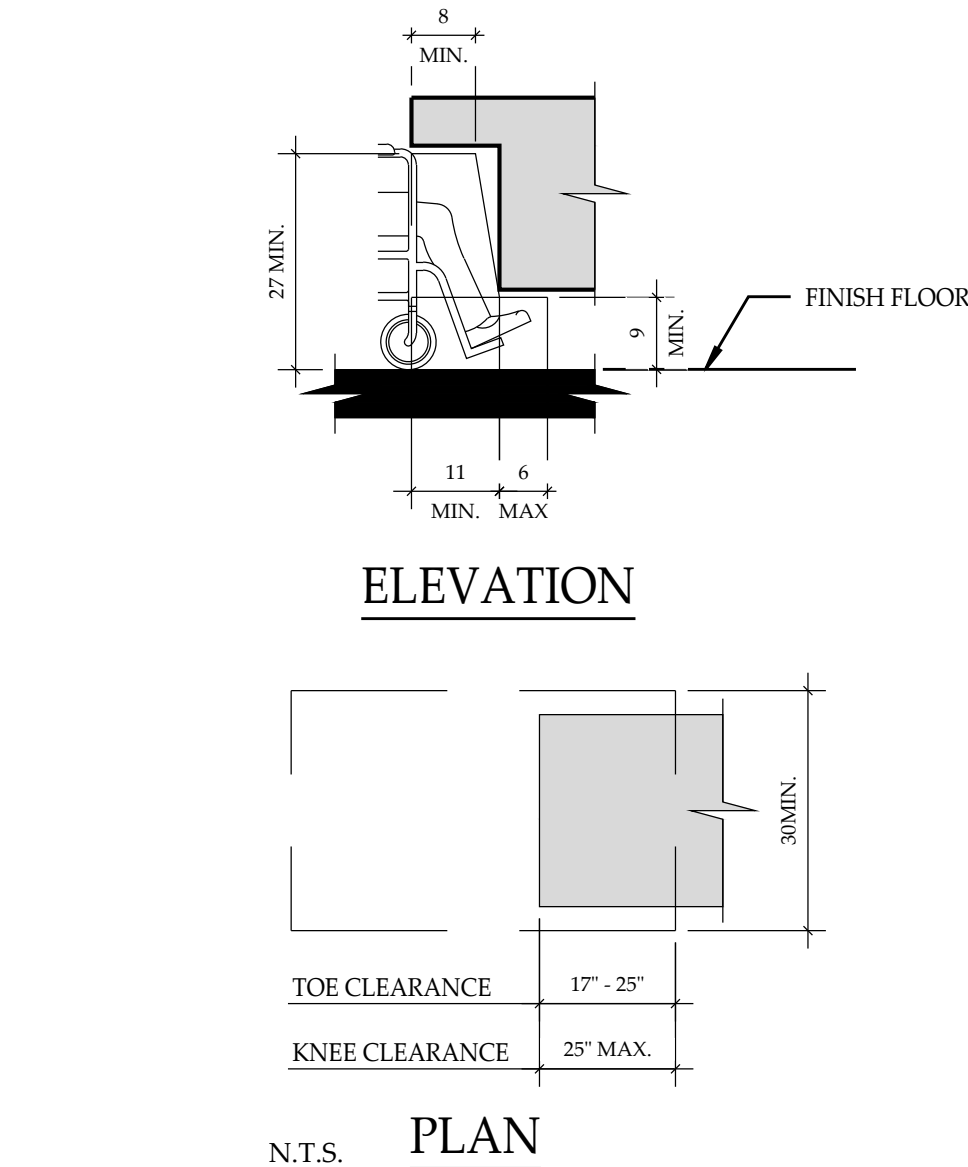
7 ACCESSIBILITY NOTES & INFO.



8 DRINKING FOUNTAIN



9 DRINKING FOUNTAIN



10 TOE / KNEE CLEARANCES

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PROJECT PHASE:
 PERMIT SET

DATE:
 AUG 12, 2019

SHEET No.

A-1

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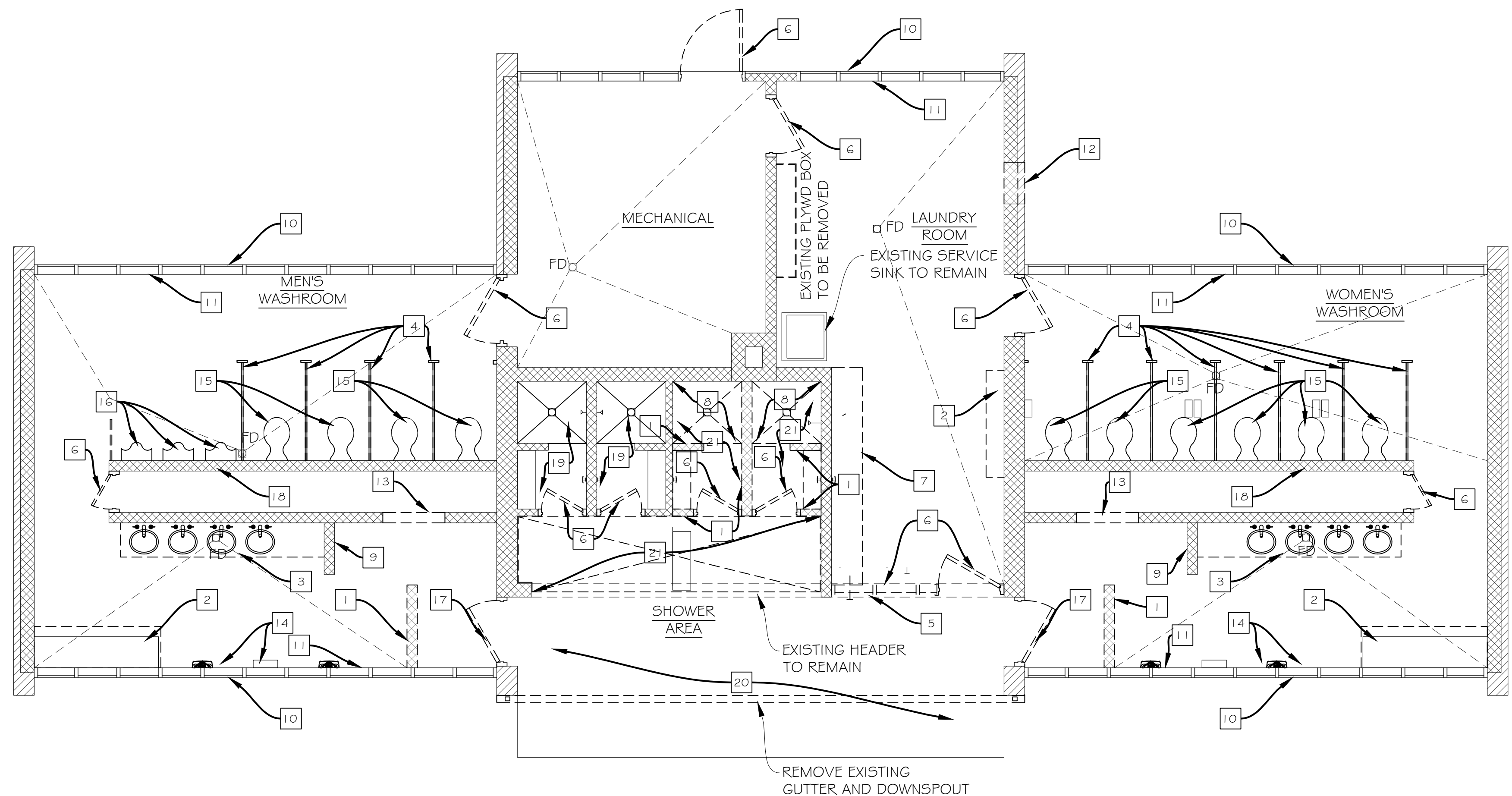
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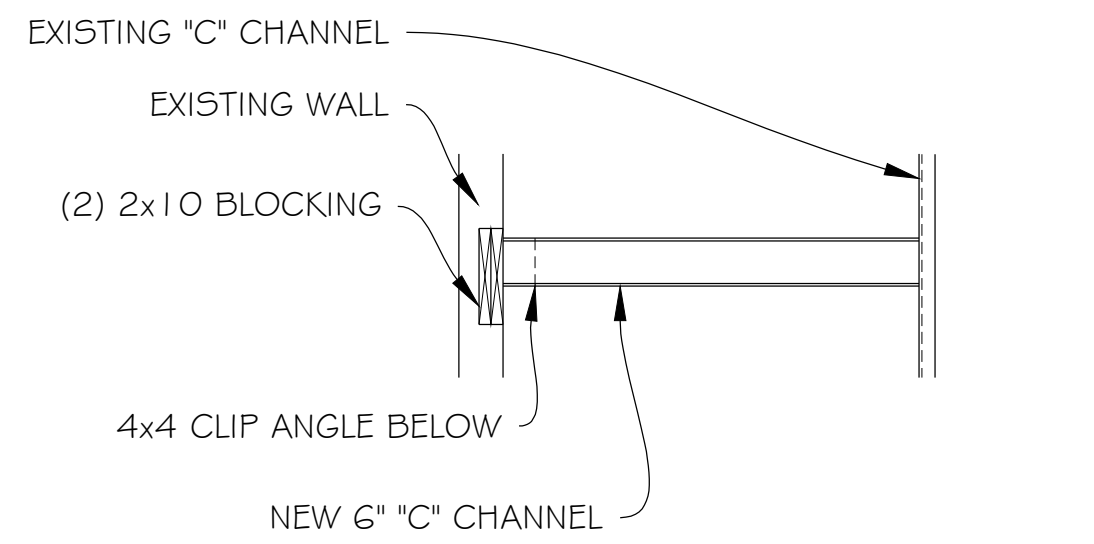
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SHEET No.
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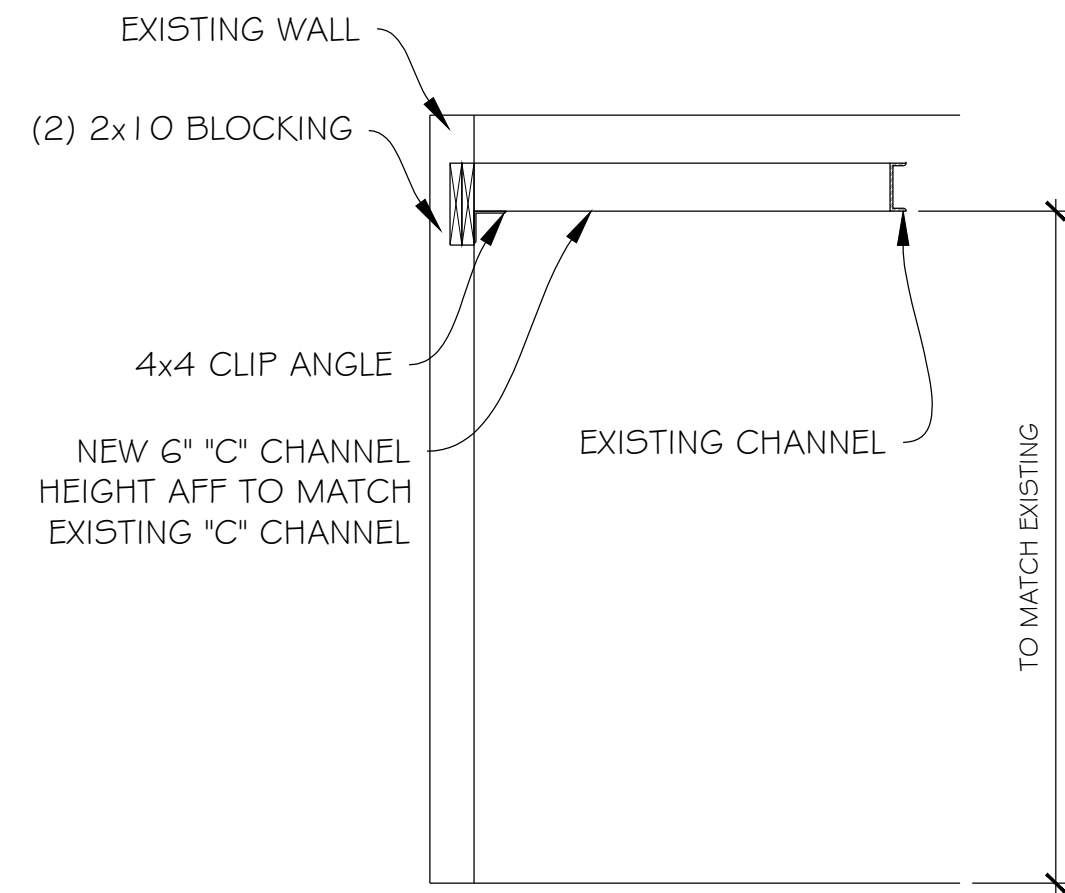


1 DEMOLITION PLAN
 A-2 SCALE: 1/4" = 1'-0"

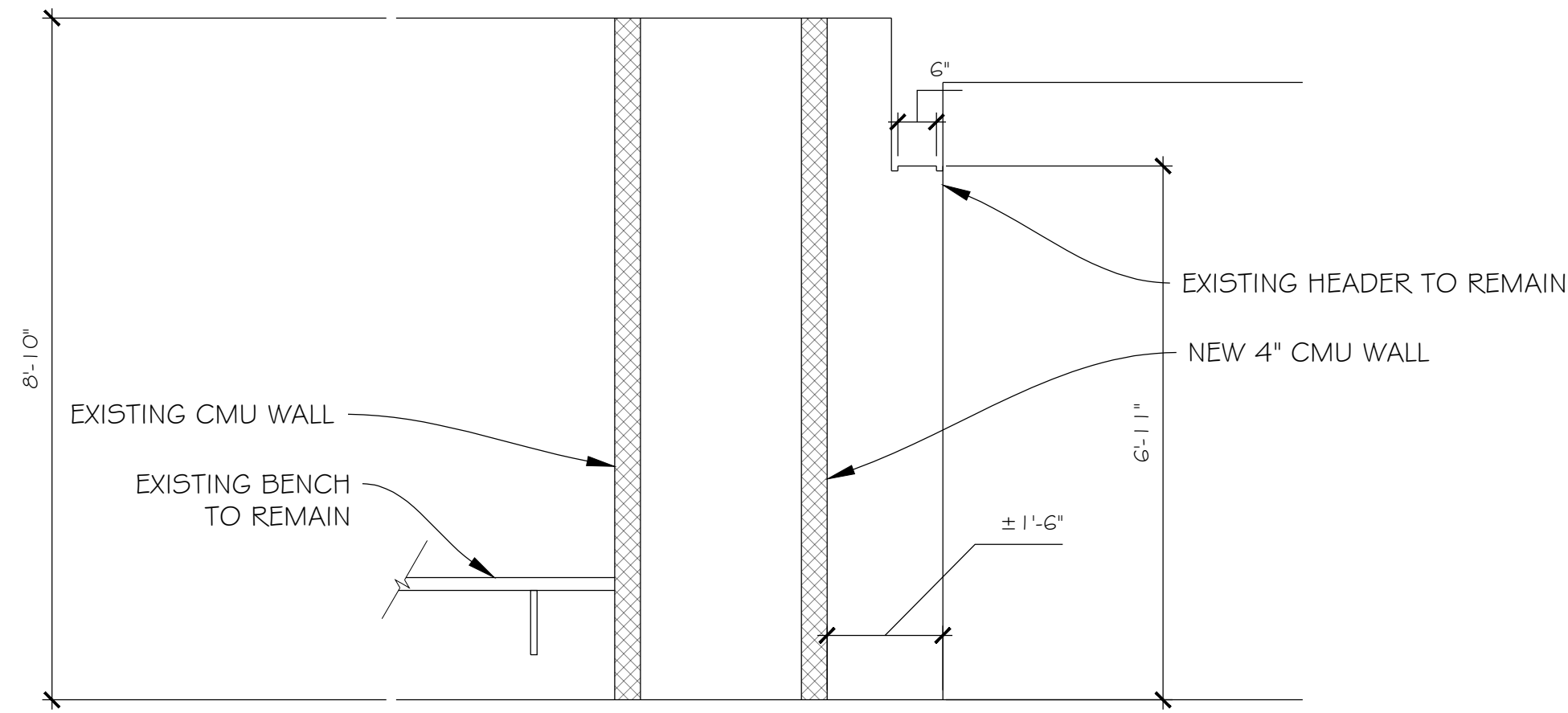
DEMOLITION NOTES:	
1	REMOVE EXISTING CMU PARTITION, PATCH, & REPAIR FLOOR & WALL.
2	REMOVE EXISTING TABLE, SAVE FOR REUSE
3	REMOVE EXISTING SINKS, MIRRORS, AND SOAP DISPENSERS. REMOVE COUNTER.
4	REMOVE EXISTING CEILING HUNG TOILET PARTITIONS
5	REMOVE EXISTING PARTITION, HOSE BIB, AND VENT. CAP AS REQUIRED
6	REMOVE EXISTING DOOR, FRAME, AND PARTITION. PREPARE OPENING TO BE IN-FILLED WITH NEW MATERIAL
7	REMOVE EXISTING WOODEN BOX AROUND DRYER EXHAUST DUCTS. REMOVE DUCTS AND HOSE BIB
8	REMOVE EXISTING SHOWER & CONCRETE FLOOR
9	EXISTING WALL TO REMAIN
10	REMOVE EXISTING TRIM AND PLASTIC IN-FILL. SEE DETAIL A-5/A-4 FOR MORE INFORMATION. TYPICAL AT ALL PLASTIC WINDOWS. (TYPICAL FOR ALL SMALL WINDOWS)
11	REMOVE EXISTING WOOD BATTENS FROM INTERIOR WALL
12	DEMO PORTION OF WALL FOR INSTALLATION OF NEW LOUVER. PATCH AND REPAIR WALL AS REQUIRED.
13	DEMO PORTION OF CMU WALL FOR NEW 36"x22" ACCESS DOOR
14	REMOVE EXISTING ELECTRIC HAND DRYERS
15	REMOVE EXISTING WALL HUNG TOILETS
16	REMOVE EXISTING URINALS
17	REMOVE EXISTING DOOR. METAL DOOR FRAME TO REMAIN
18	DEMO AS REQUIRED CMU WALL TO REMOVE AND REINSTALL WATER CLOSET CARRIERS.
19	REMOVE EXISTING TILE FLOOR - PREPARE CONCRETE FOR NEW TILE
20	EXISTING CONCRETE IN CONCRETE ENTRANCE TO REMAIN
21	SAW CUT AND REMOVE EXISTING CONCRETE FLOOR. PREPARE SUBSTRATE FOR NEW CONCRETE FLOOR.



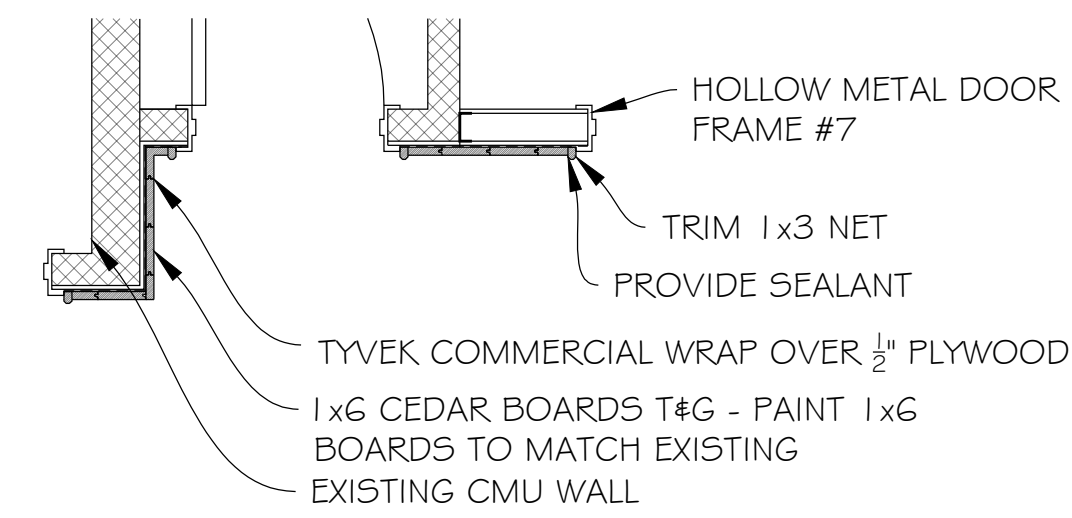
PLAN VIEW
SCALE: 1/2" = 1'-0"



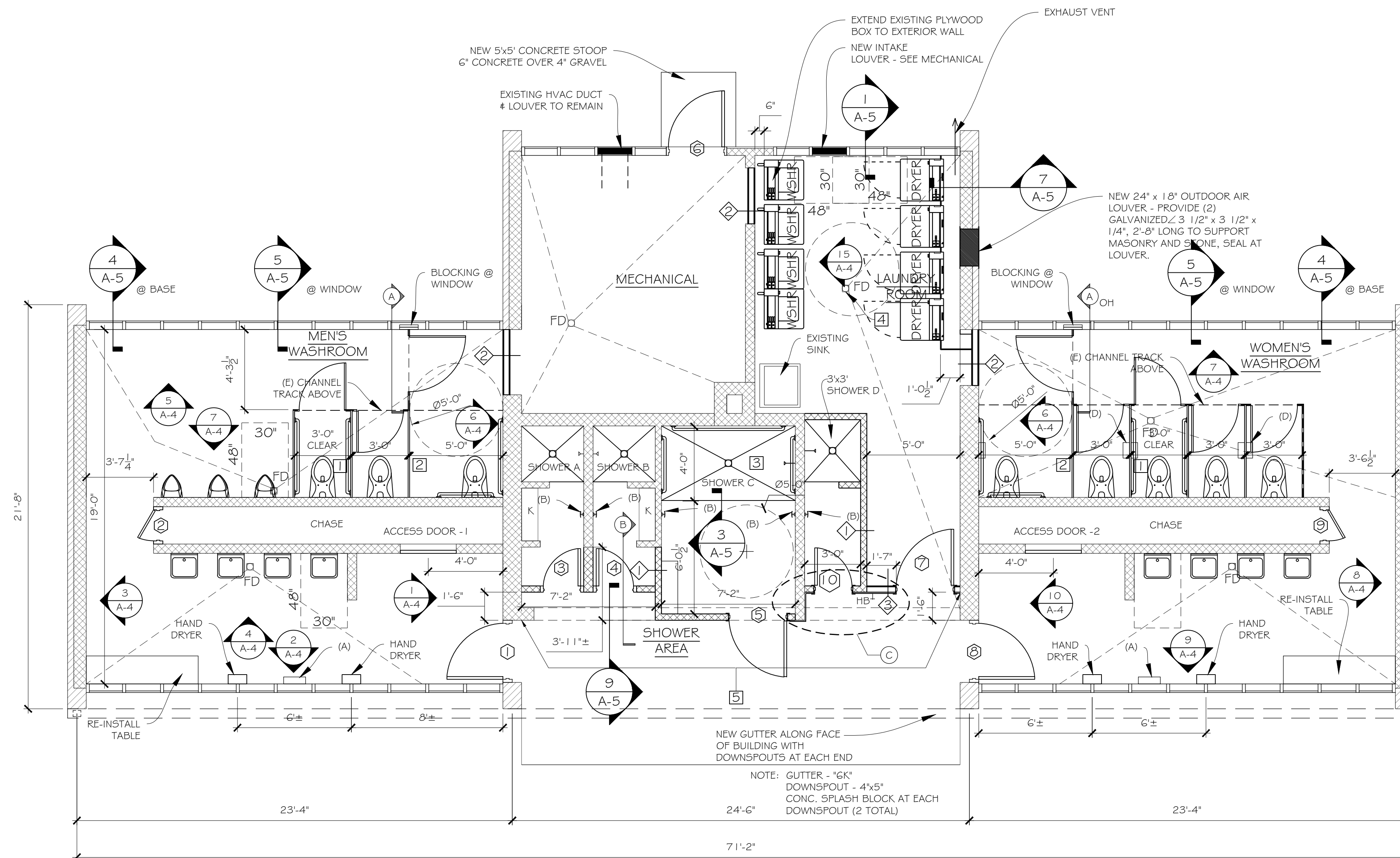
A SECTION
SCALE: 1/2" = 1'-0"



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



C DETAIL - PLAN DETAIL
SCALE: 1/2" = 1'-0"



1 NEW FLOOR PLAN
A-3 SCALE: 1/4" = 1'-0"

TOILET AND SANITARY ACCESSORIES KEY NOTE

TAG	TYPE	REMARKS
A	SURFACE MOUNTED WASTE RECEPTACLE WITH DISPOSAL DOOR	BOBRICK - TRIMLINE SERIES, #B-35639
B	SURFACE MOUNTED DOUBLE ROBE HOOK	BOBRICK CLASSIC SERIES #B-672, B-6727 (EACH SHOWER)
C	MIRROR WITH STAINLESS STEEL ANGLE FRAME AND SHELF	BOBRICK - #B-292
D	SURFACE MOUNTED SANITARY-NAPKIN DISPOSAL	BOBRICK MATRIX SERIES, #B-5270 (EACH WOMEN TOILET COMPARTMENT)
E	SEAT-COVER DISPENSER	BOBRICK RECESSED SEAT COVER DISPENSER 'B - 221' (EACH TOILET COMPARTMENT)

LEGEND AND NOTES

"K" - EXISTING BENCH TO REMAIN
"OH" OPPOSITE HAND
NOTE: EACH SHOWER AREA AS FOLLOWS:
WALLS - 12"x12" TILE
FLOOR - 2'x2' TILE
CEILING - 1/2" CEMENT BOARD, PAINTED
ROBING AREA:
FLOORS - CONCRETE
WALLS - PAINTED CMU

NOTES:

1	AMBULATORY ACCESSIBLE COMPARTMENT
2	WHEELCHAIR ACCESSIBLE COMPARTMENT
3	WHEELCHAIR ACCESSIBLE SHOWER COMPARTMENT ROLL-ON TYPE SHOWER
4	CONTRACTOR TO "SNAKE-OUT" DRAIN LINE AND CHECK FOR PROPER DRAINAGE
5	REPAINT THIS PORTION OF THE EXTERIOR TO MATCH EXISTING

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AGS

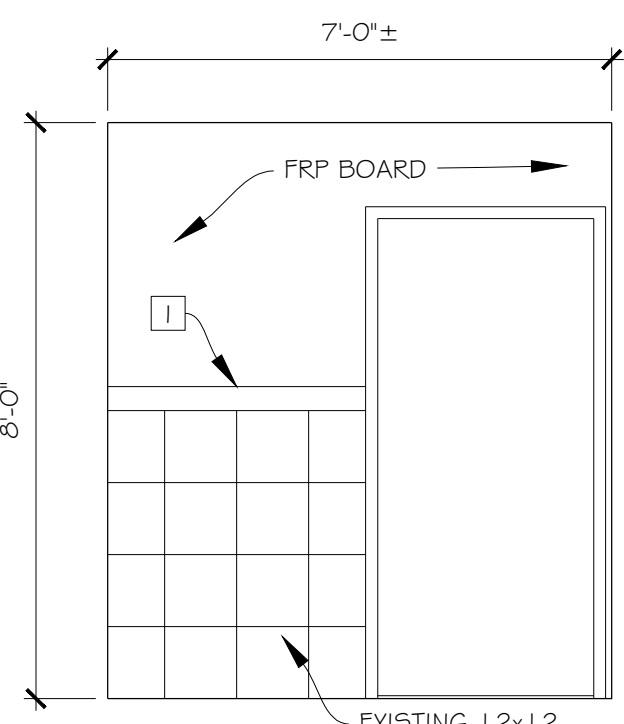
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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA 20121

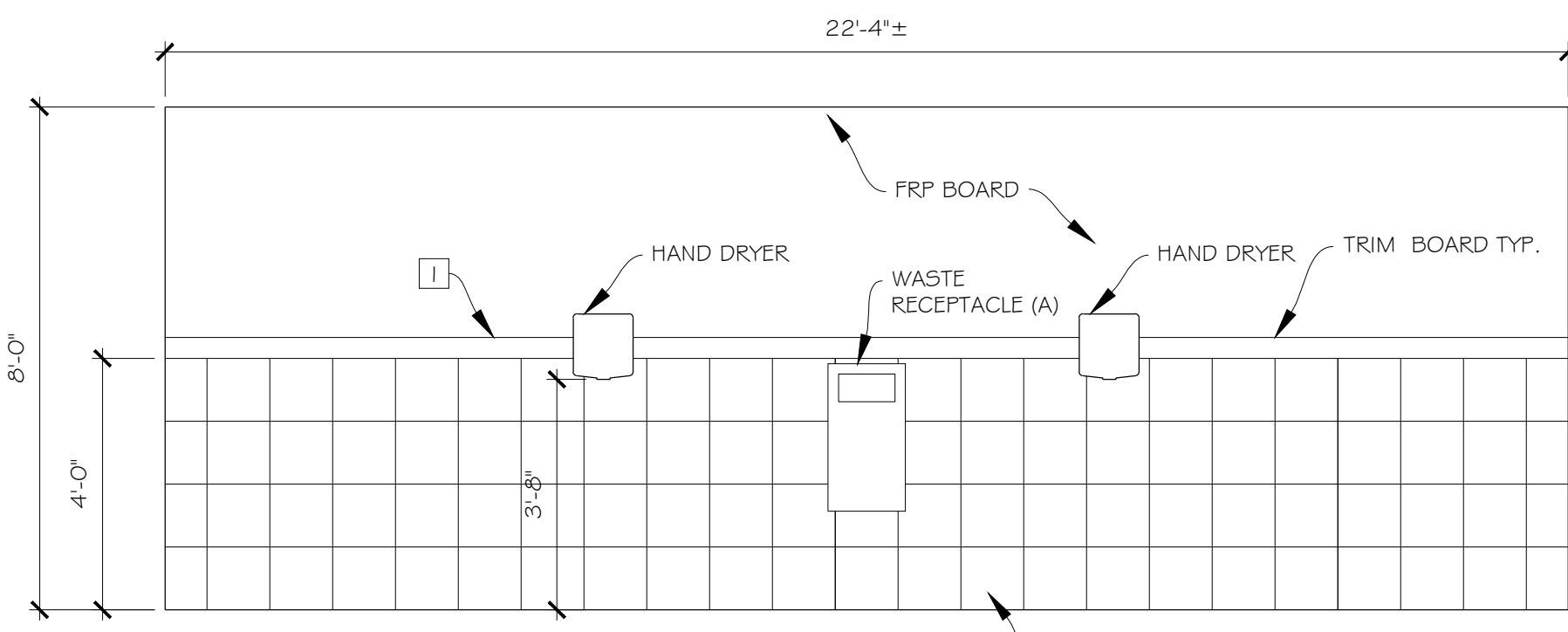
PROJECT PHASE:
PERMIT SET

DATE:
09/16/2019

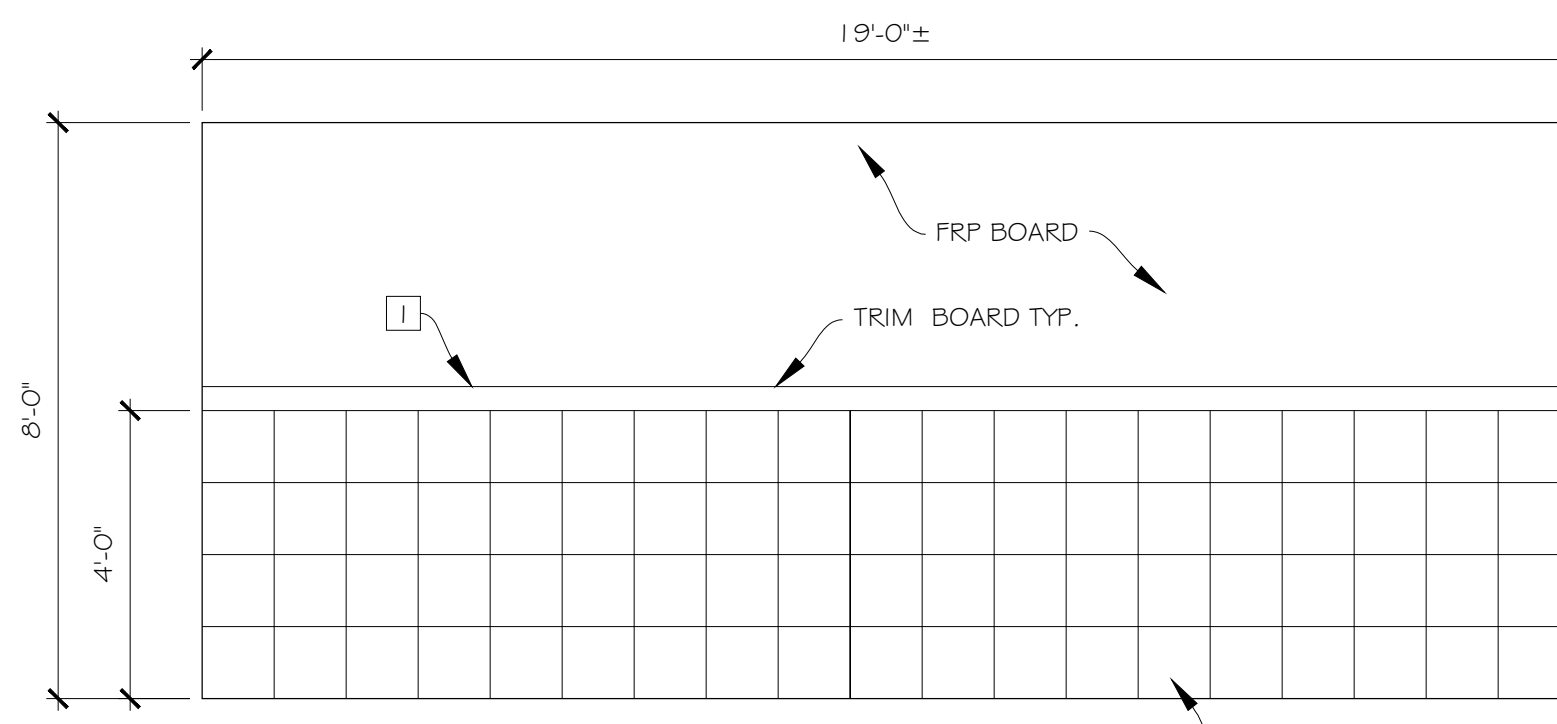
SHEET No.
A-3



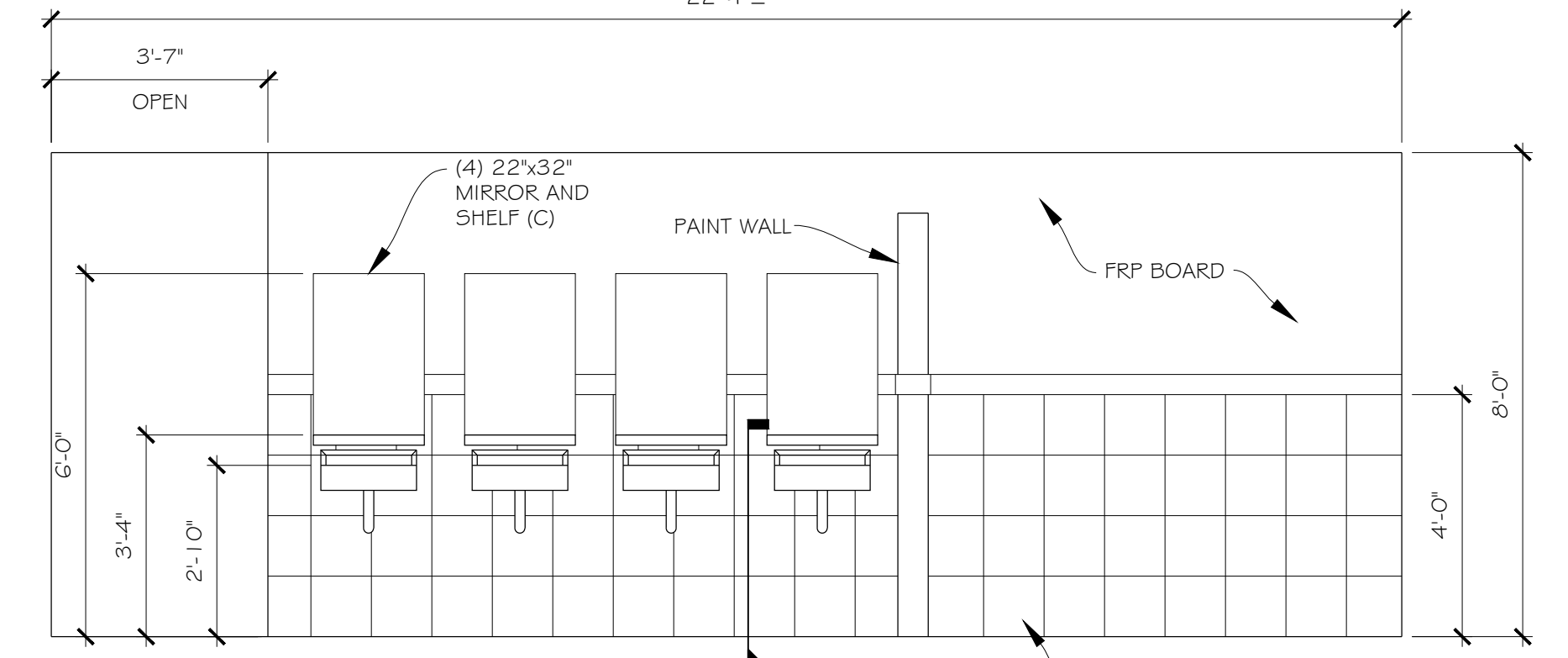
1 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



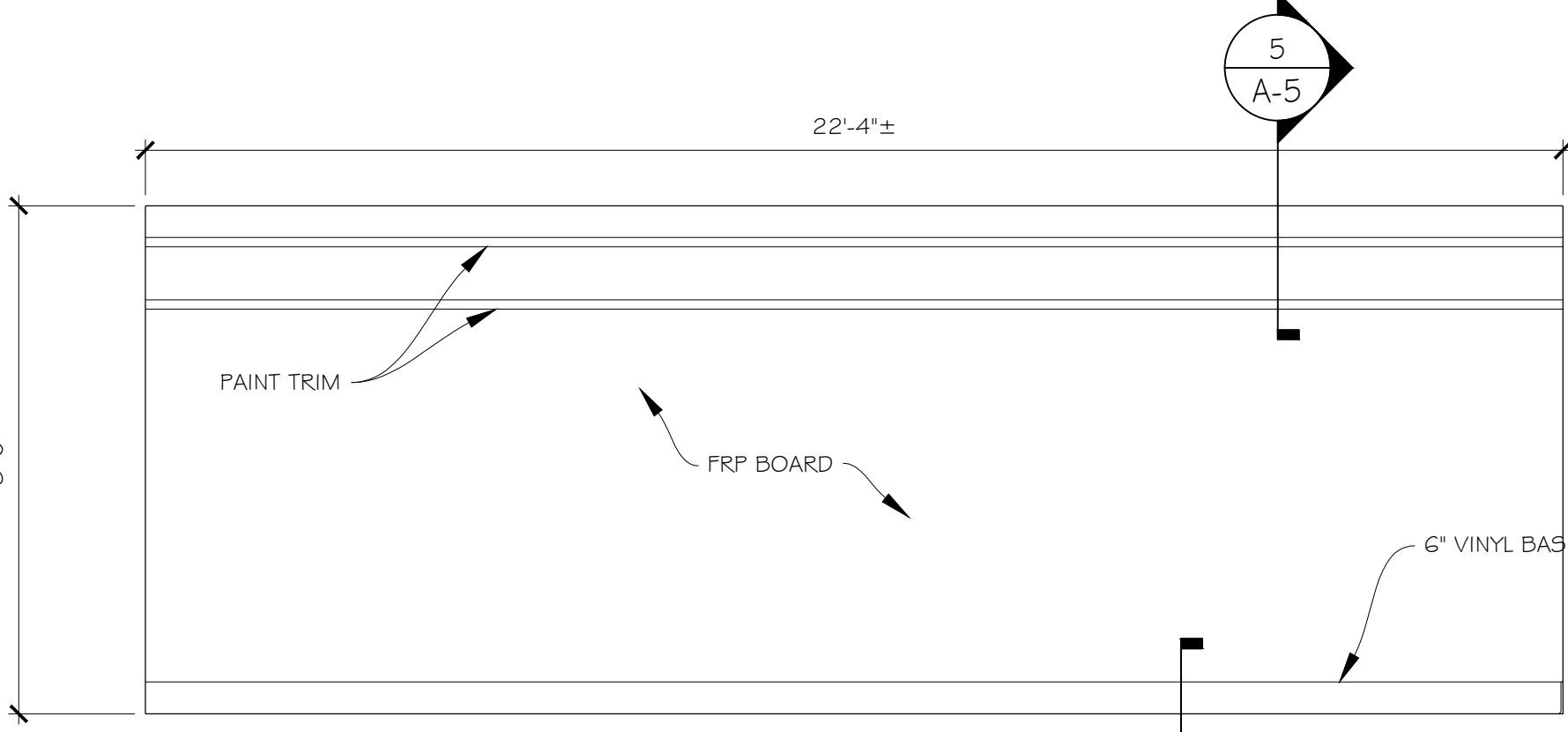
2 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



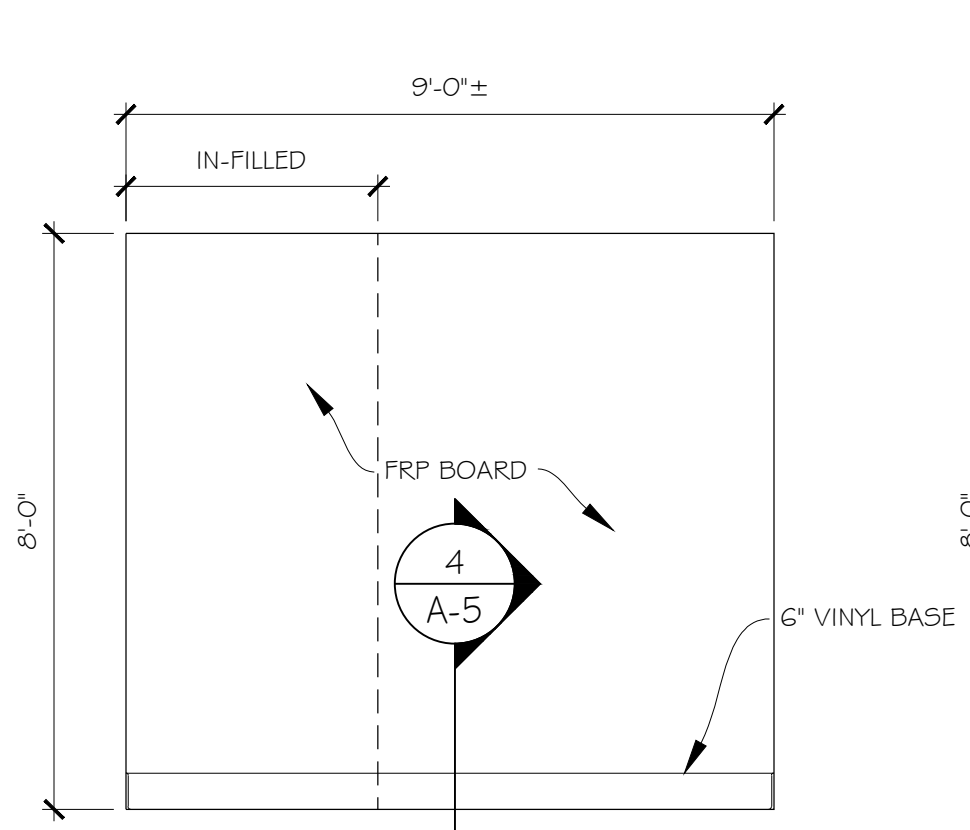
3 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



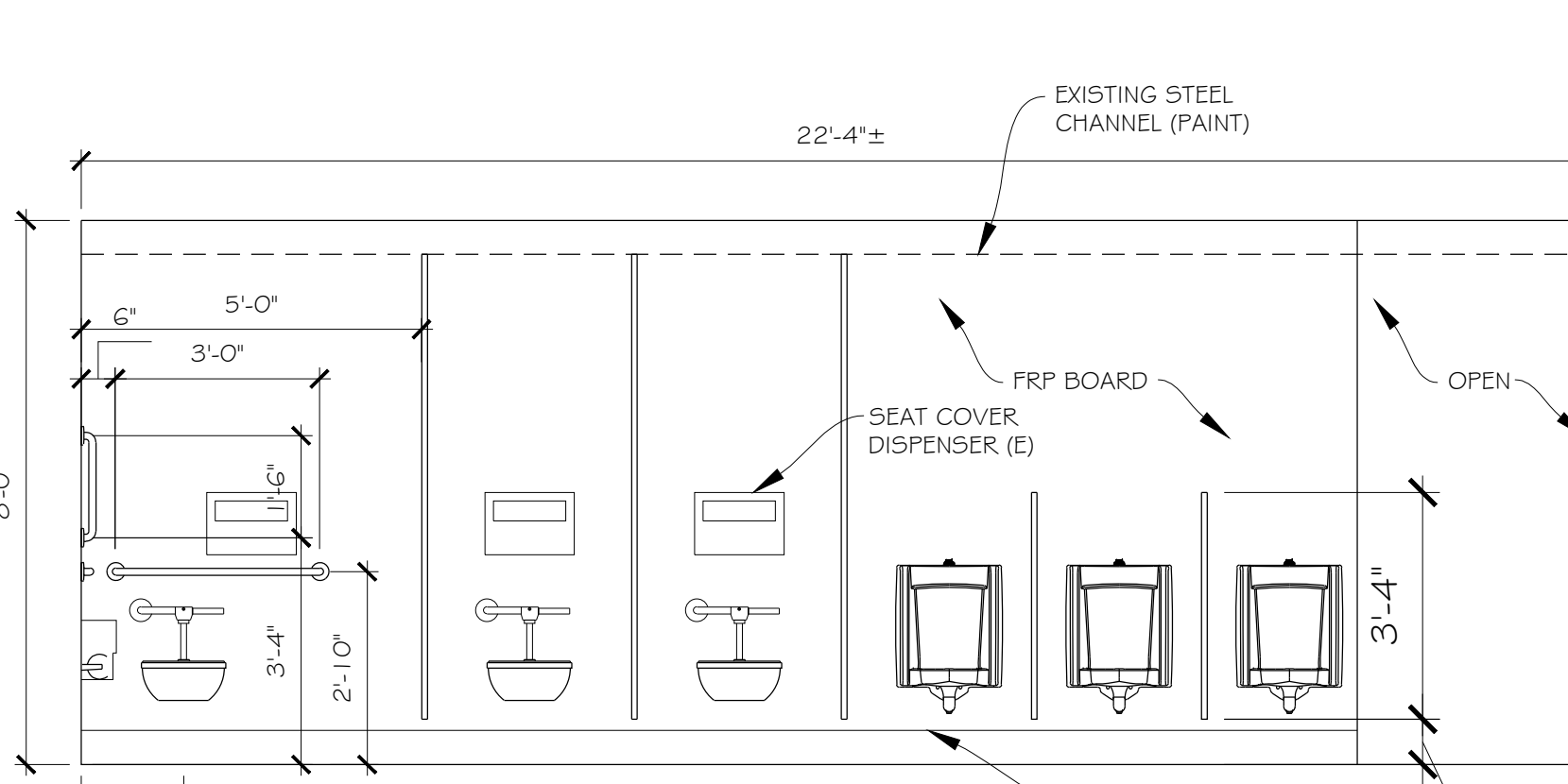
4 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



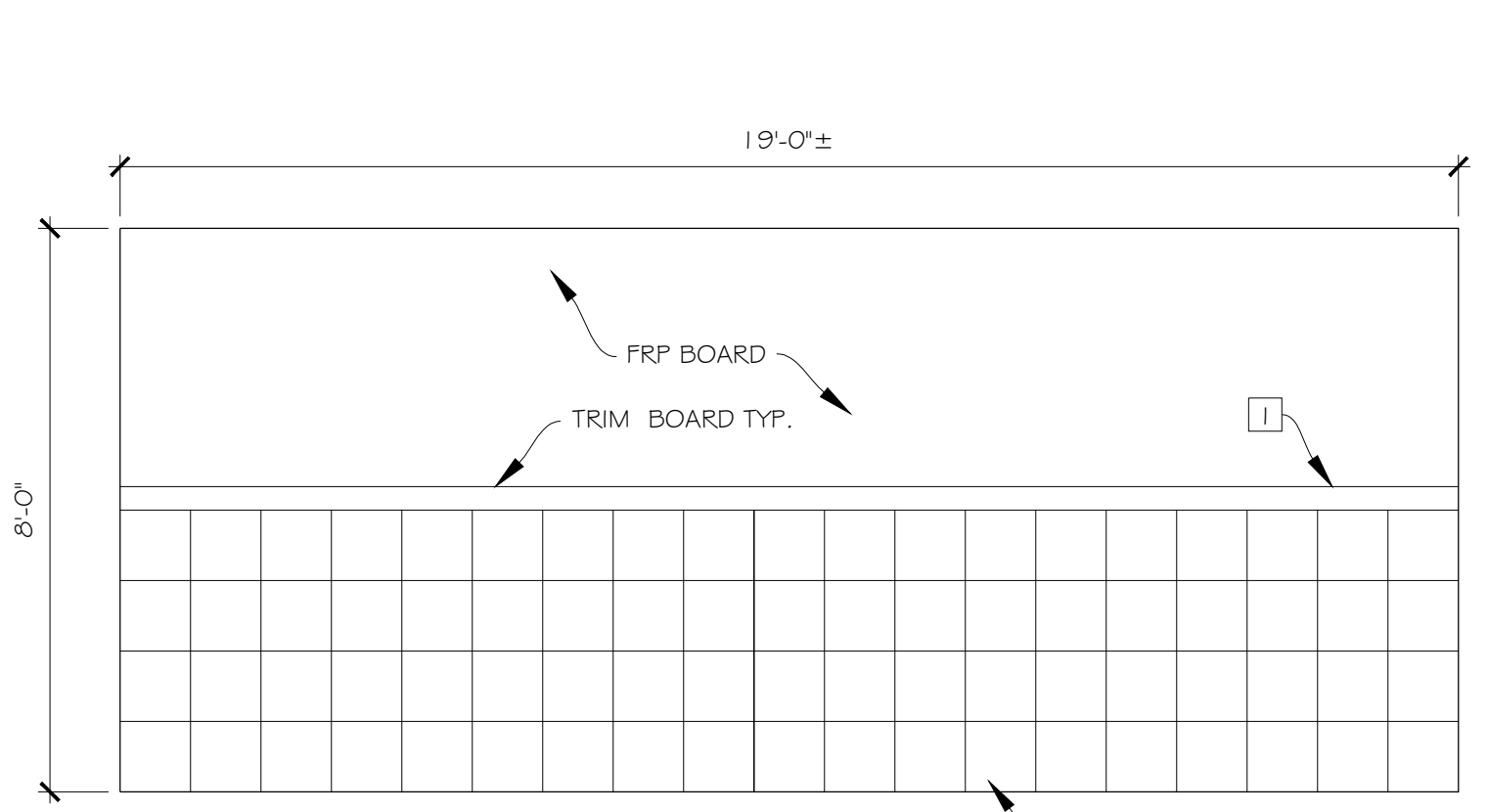
5 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



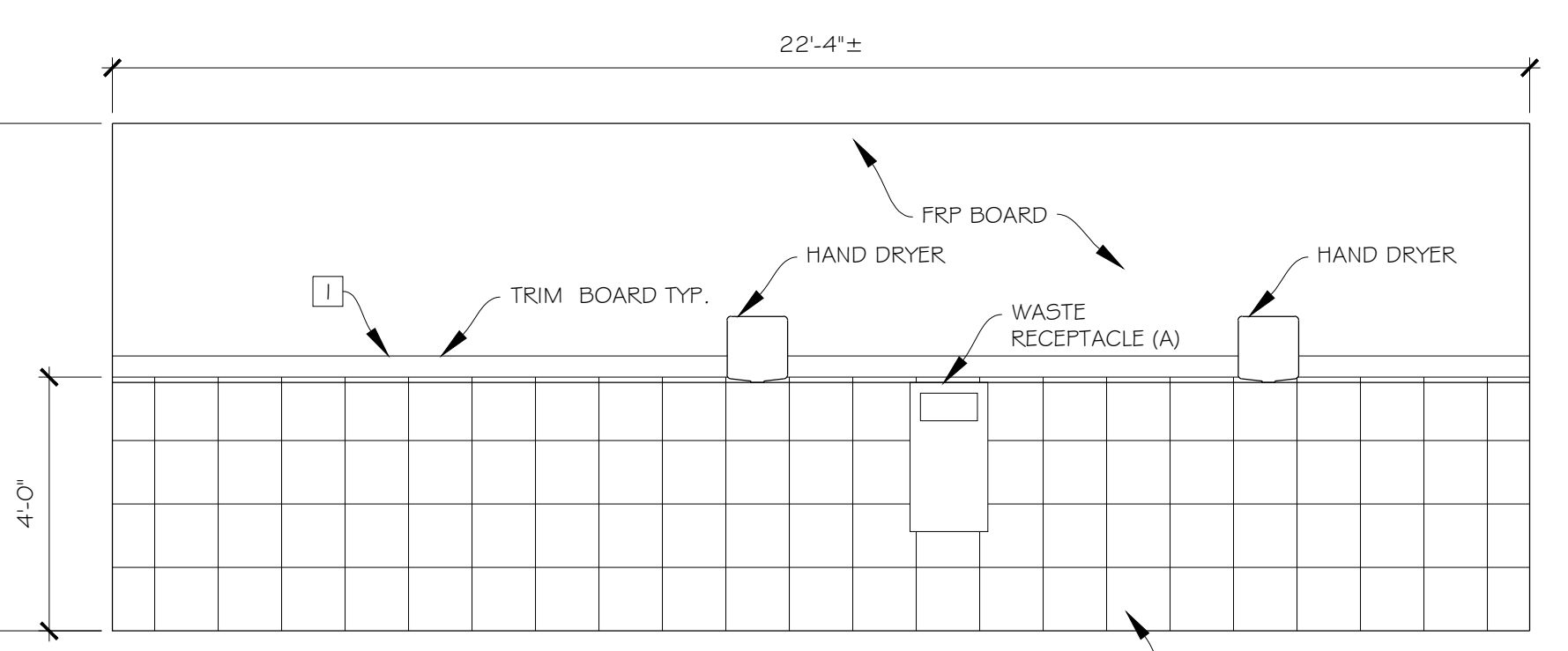
6 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



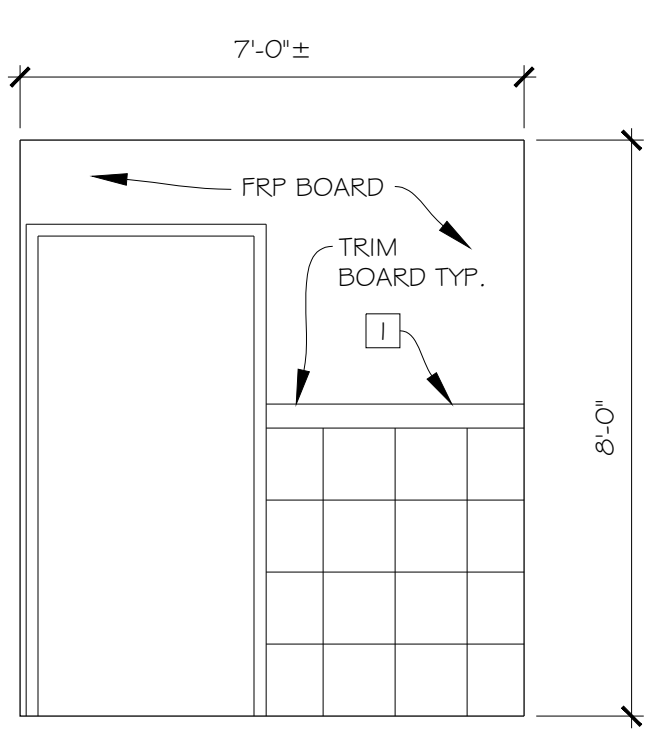
7 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



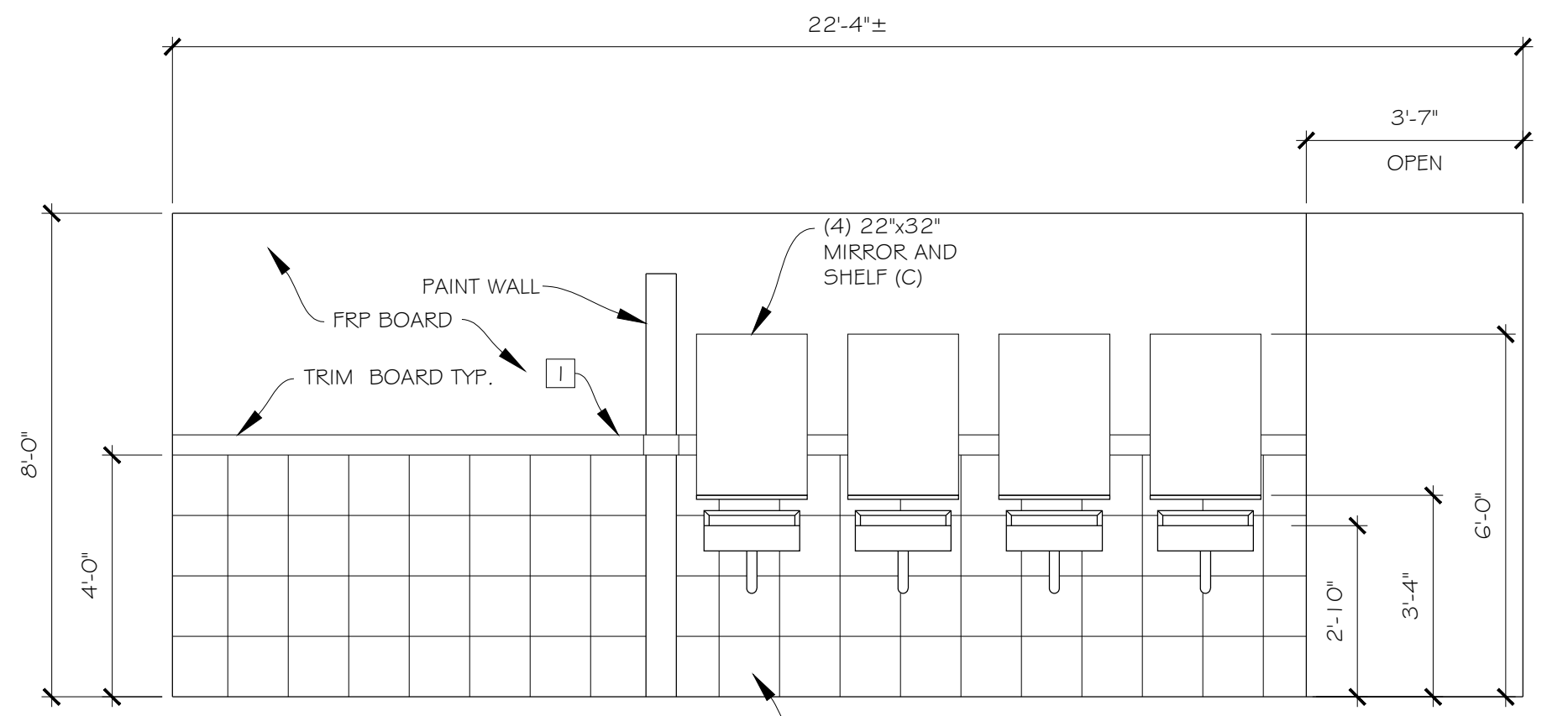
8 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



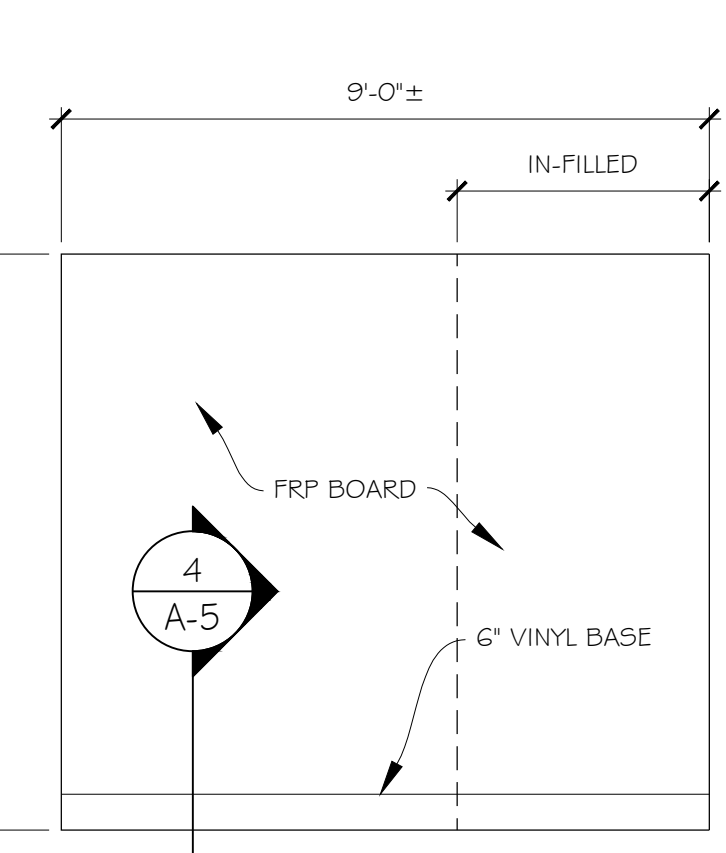
9 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



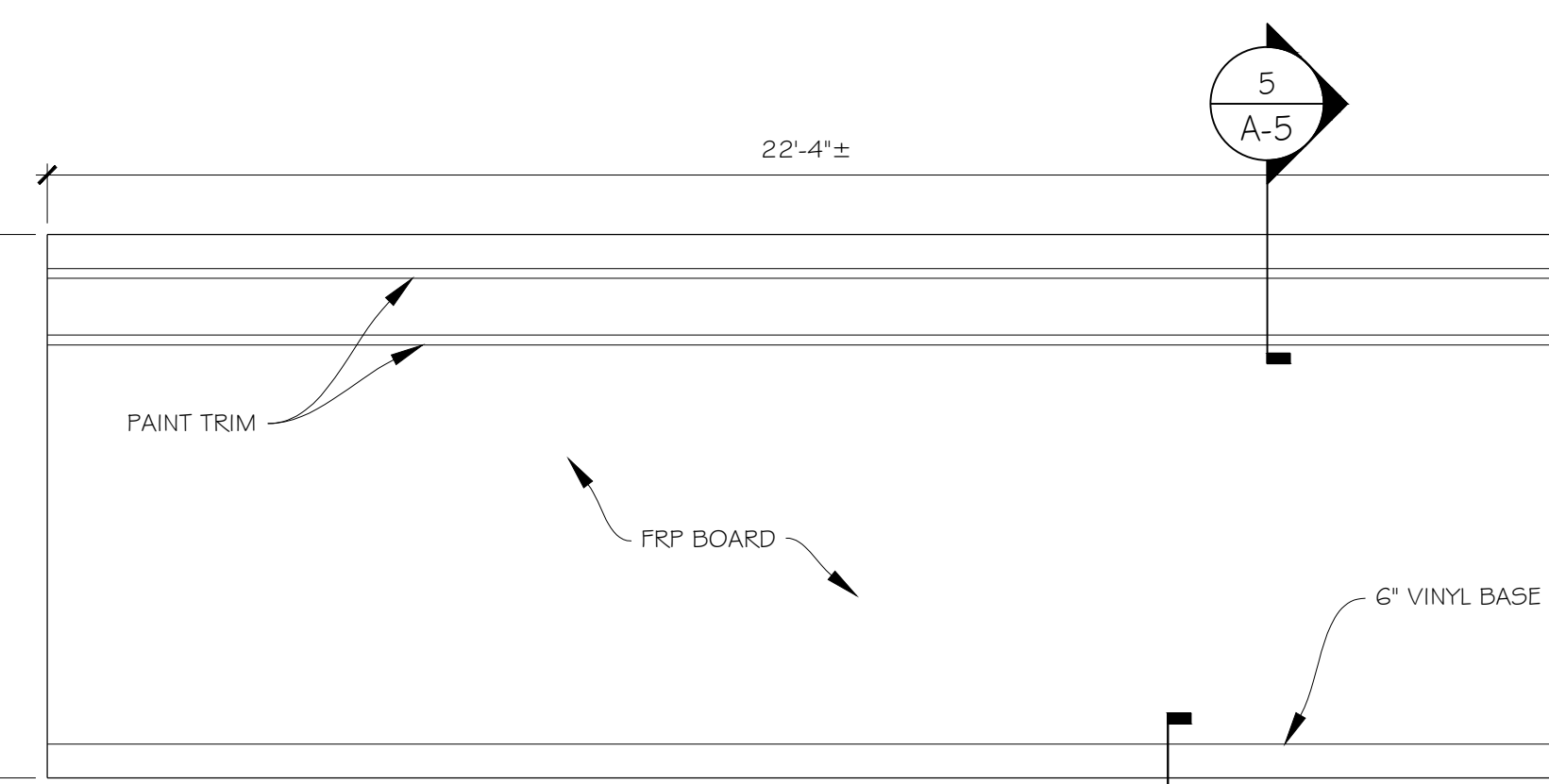
10 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



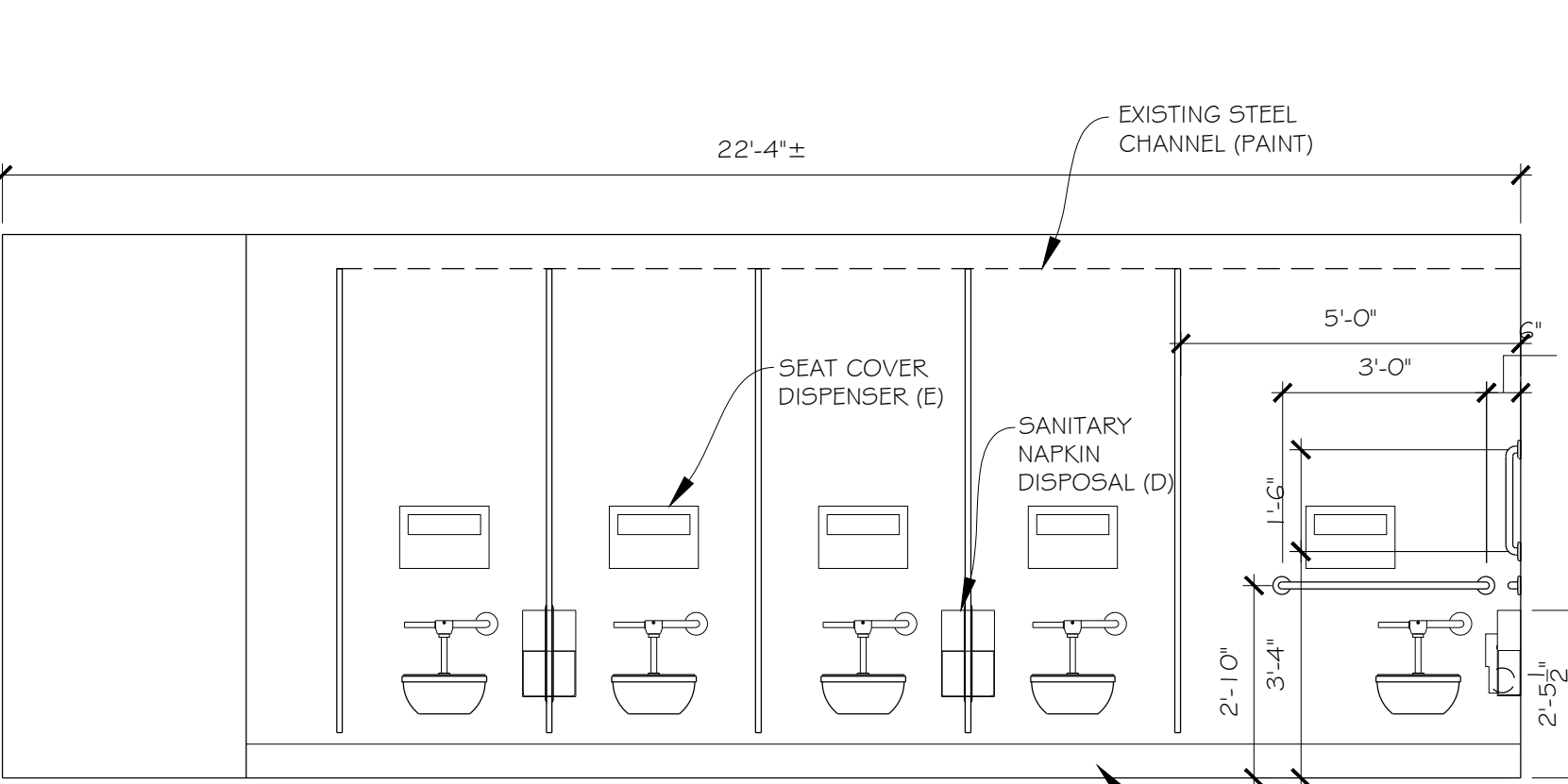
11 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



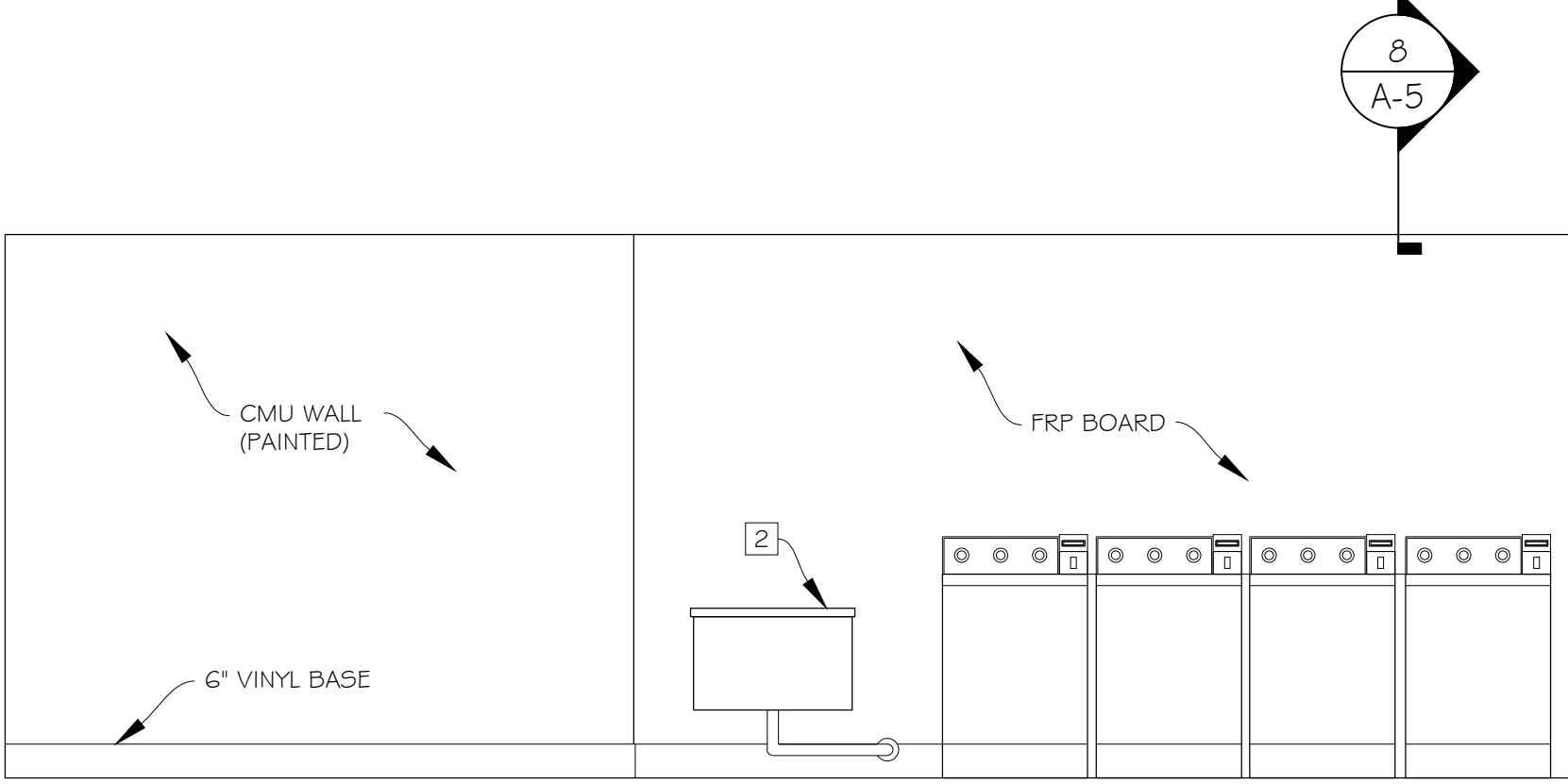
12 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



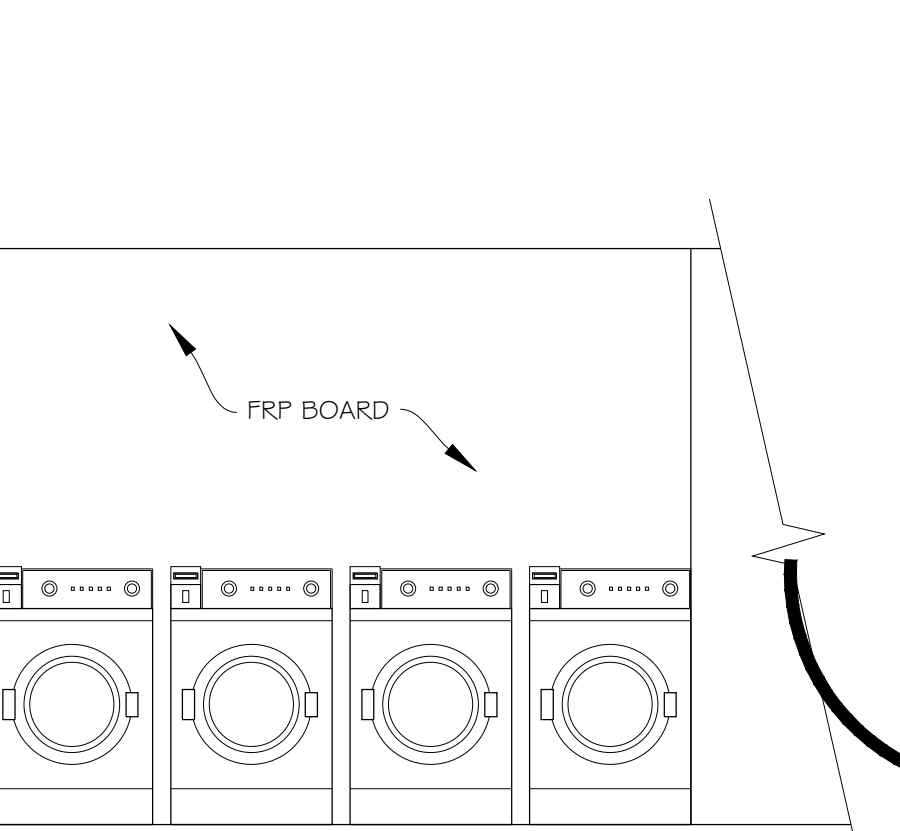
13 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



14 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



15 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"



16 INTERIOR ELEVATION
A-4 SCALE: 3/8" = 1'-0"

- NOTES:
- 1]- PAINT EXISTING TRIM
 - 2]- EXISTING SINK TO REMAIN
 - 3]- OWNER FURNISHED CONTRACTOR INSTALLED

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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA 20121

PROJECT PHASE:
PERMIT SET

DATE:
09/13/2019

SHEET No.
A-4

DOOR SCHEDULE

MARK	ROOM NAME/LOCATION	SIZE			DOOR PROPERTIES				THRESHOLD	LOCKSET	FRAME		FIRE RATING	REMARKS
		WIDTH	HEIGHT	THICKNESS	MATERIAL	HINGES	GLAZING	TYPE			MATERIAL	TYPE		
1	MEN'S WASHROOM	3'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A	ALUMINUM		EXISTING	-	-	EXISTING FRAME TO REMAIN
2	PLUMBING ACCESS SHAFT	1'-8"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	B	-		HM	D	-	LOUVERED DOOR
3	SHOWER - A	2'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A		PRIVACY	HM	D	-	
4	SHOWER - B	2'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A		PRIVACY	HM	D	-	
5	ADA SHOWER	3'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A	ALUMINUM	PRIVACY	HM	D	-	
6	MECHANICAL ROOM	3'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A		STORAGE	HM	D	-	REPAIR SILL
7	LAUNDRY ROOM	3'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	C			HM	D	-	
8	WOMEN'S WASH ROOM	3'-0"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A	ALUMINUM		HM	D	-	
9	PLUMBING ACCESS SHAFT	1'-8"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	B	-		HM	D	-	
10	SHOWER - D	2'-4"	6'-8"	1-3/4"	HM	1-1/2" Pair	-	A		PRIVACY	HM	D	-	

ROOM FINISH SCHEDULE

ROOM NAME	FLOOR	BASE	WALLS	CEILING
MEN'S WASHROOM	EPOXY PAINT *	6" COVE TILE	SEE ELEVATIONS	EXISTING - PAINT
WOMEN'S WASHROOM	EPOXY PAINT *	6" COVE TILE	SEE ELEVATIONS	EXISTING - PAINT
SHOWER A	TILE	6" COVE TILE	12"x12" TILE	1/2" CEMENT BOARD, PAINTED
SHOWER B	TILE	6" COVE TILE	12"x12" TILE	1/2" CEMENT BOARD, PAINTED
SHOWER C	TILE	6" COVE TILE	12"x12" TILE	1/2" CEMENT BOARD, PAINTED
SHOWER D	TILE	6" COVE TILE	12"x12" TILE	1/2" CEMENT BOARD, PAINTED
ROBING AREAS	CONC. *	-	PAINTED CMU	1/2" CEMENT BOARD, PAINTED

* - SEE FLOOR NOTES

NOTES:

CONCRETE FLOORS - MEN'S AND WOMEN'S ROOMS, LAUNDRY, AND SHOWER ROBING AREAS:

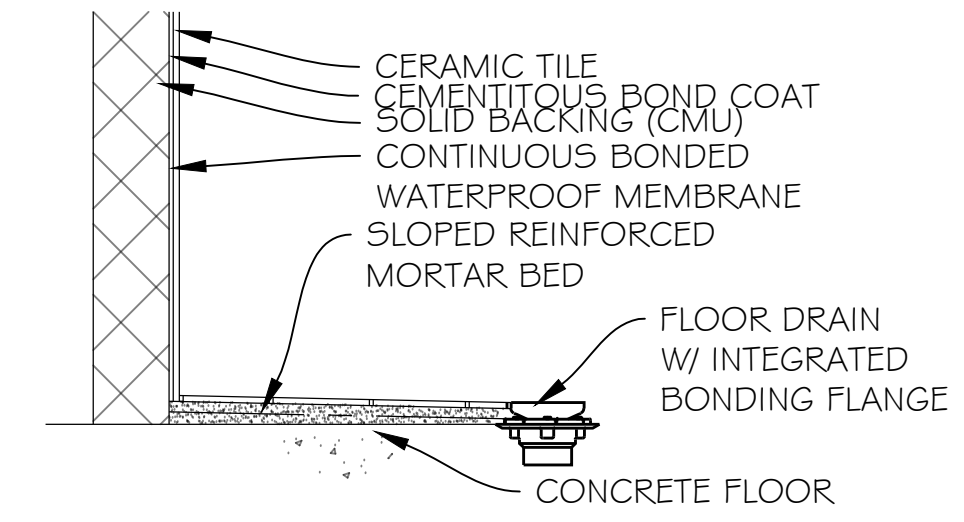
- A. PROFILE FLOOR WITH 180 GRIT
- B. CLEAN CONCRETE FLOOR WITH DENATURED ALCOHOL, AND "ALL-PRO"
- C. INSTALL 2-PART "COROTECH" V440 SERIES WATER BORNE AMINE ADDUCT EPOXY. COLOR (SELECTED BY ARCHITECT AND OWNER)

EXTERIOR:

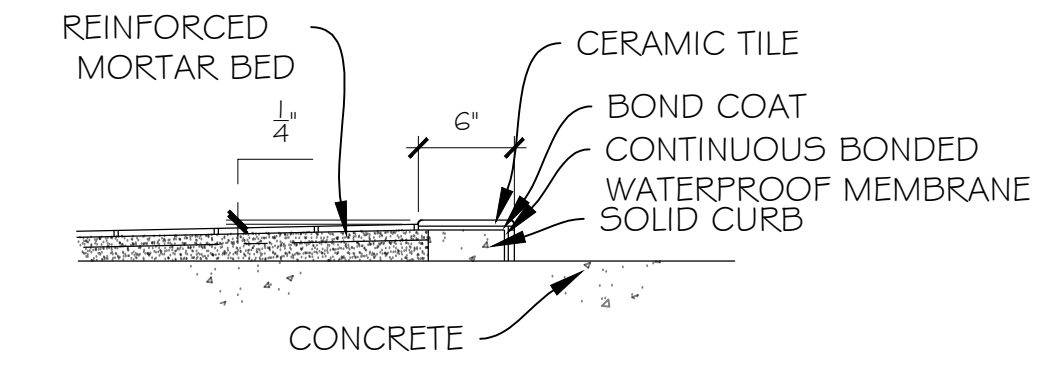
EXTERIOR (WHERE REPAIRED) PAINT TO MATCH EXISTING COLOR

INTERIOR:

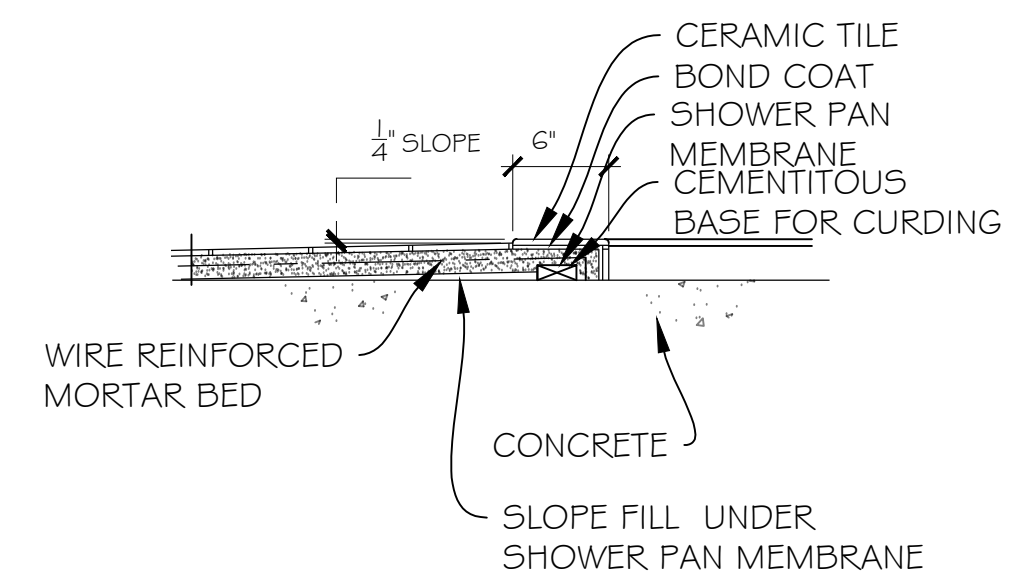
CMU - EXPOSED
 A. COROTECH EPOXY BLOCK FILLER V1 G3
 PAINT - 2 COATS, BENJAMIN MOORE, EPOXY PAINT



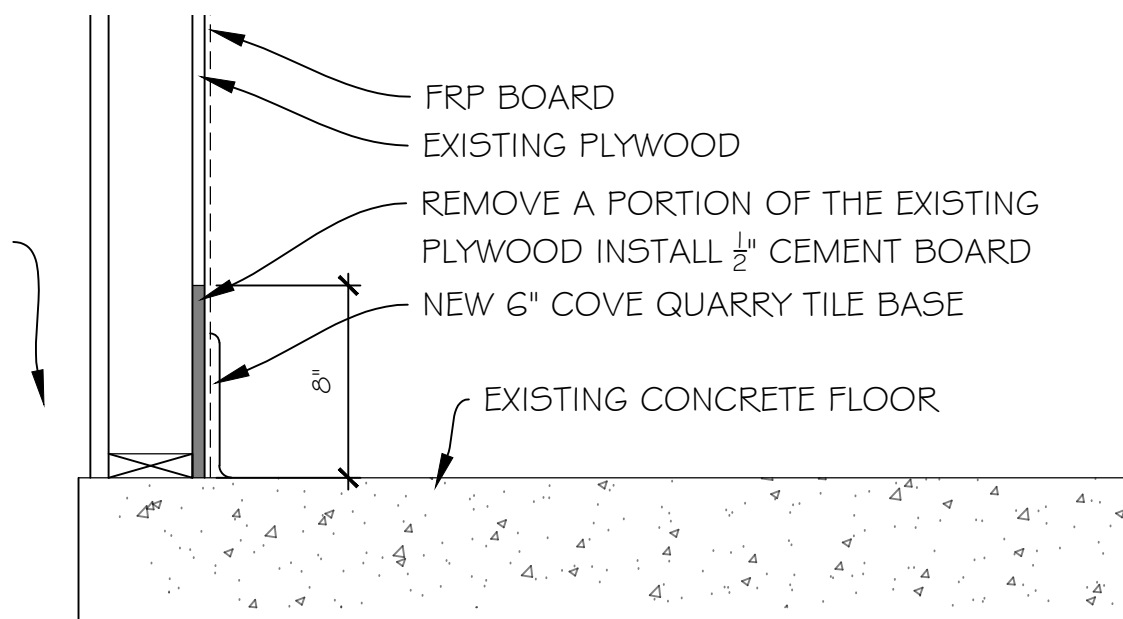
1 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"



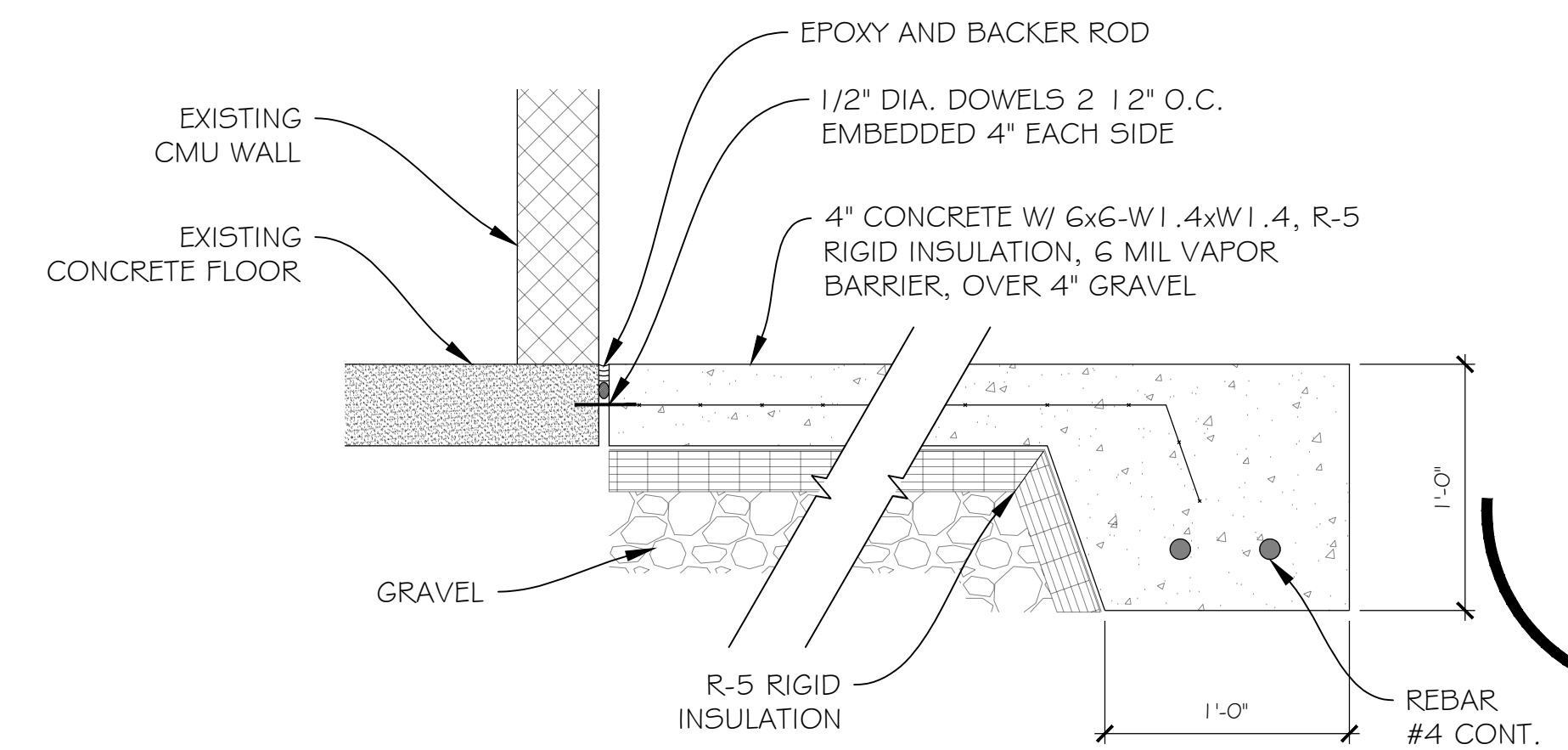
2 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"



3 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"

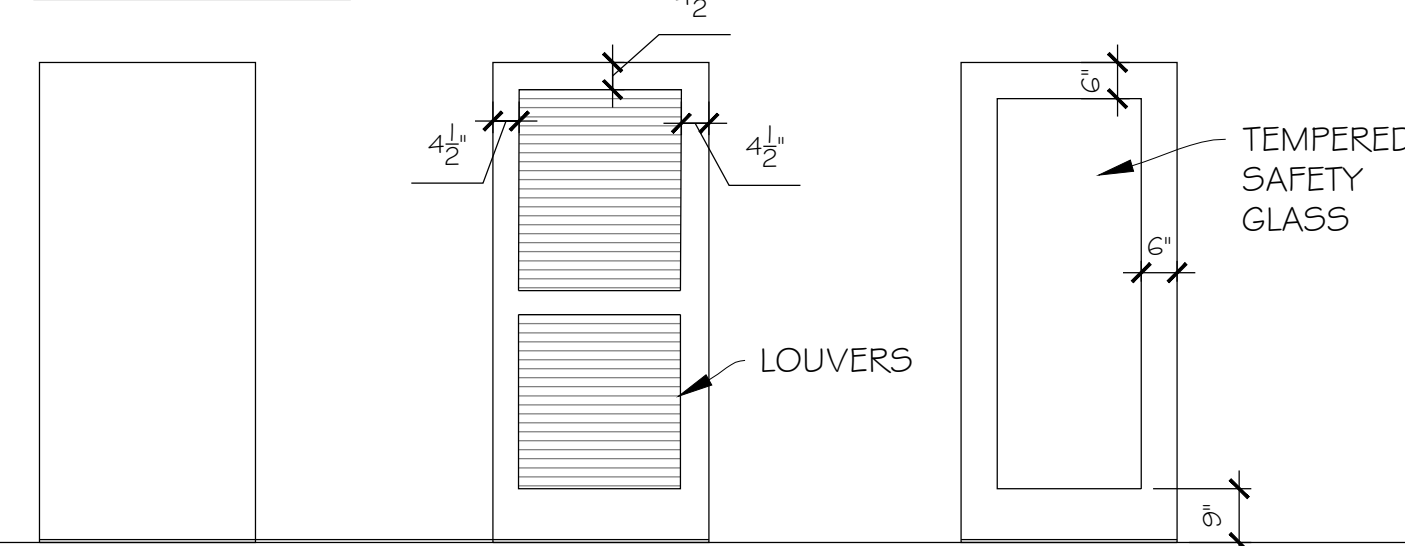


4 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"



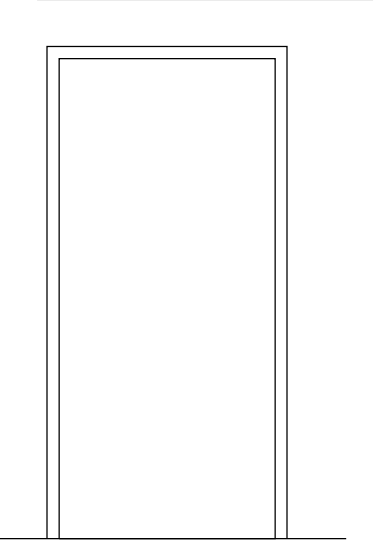
5 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"

DOOR TYPES



FLUSH LOUVERED DOOR FULL LITE

DOOR FRAME



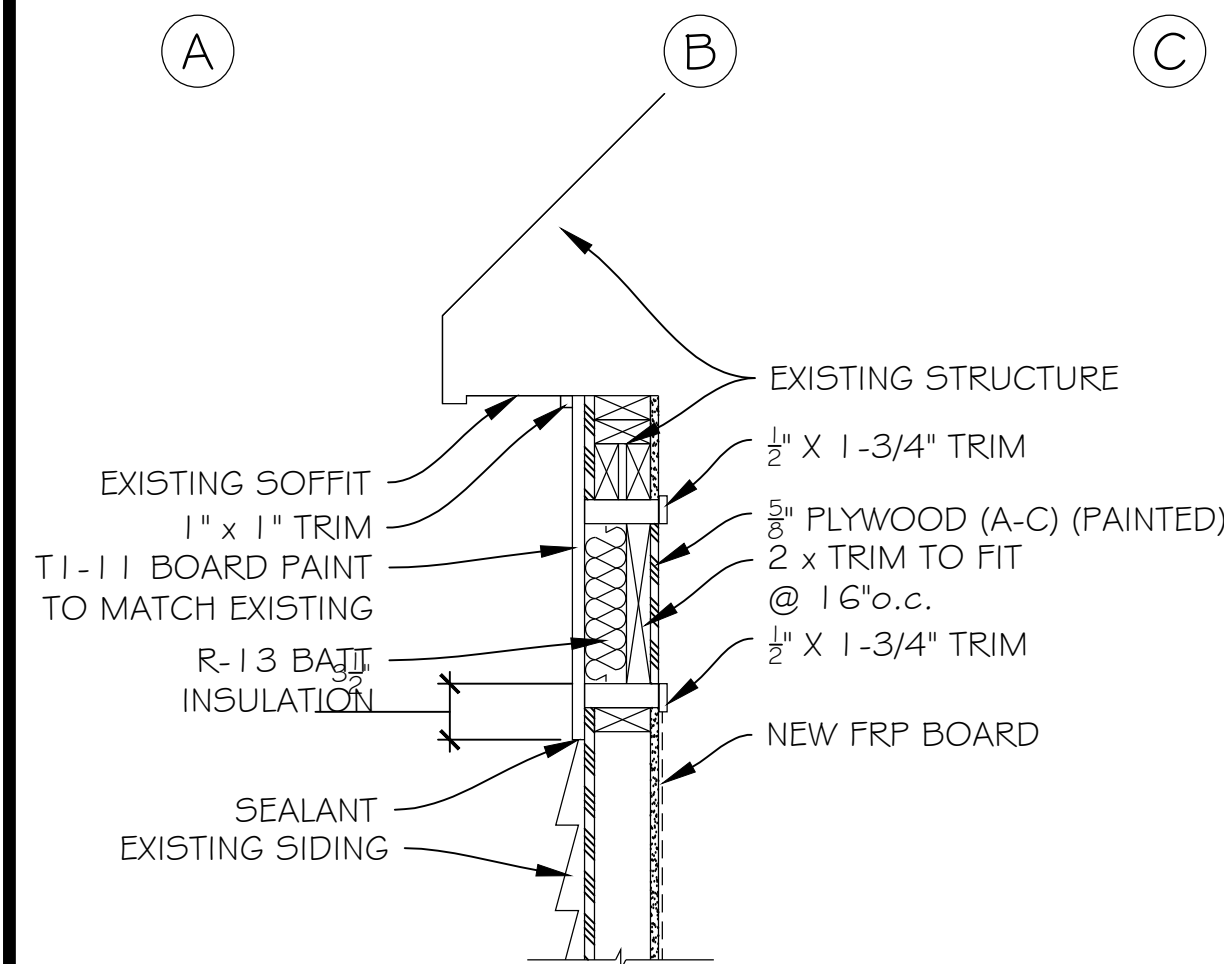
SINGLE METAL DOOR FRAME

(A)

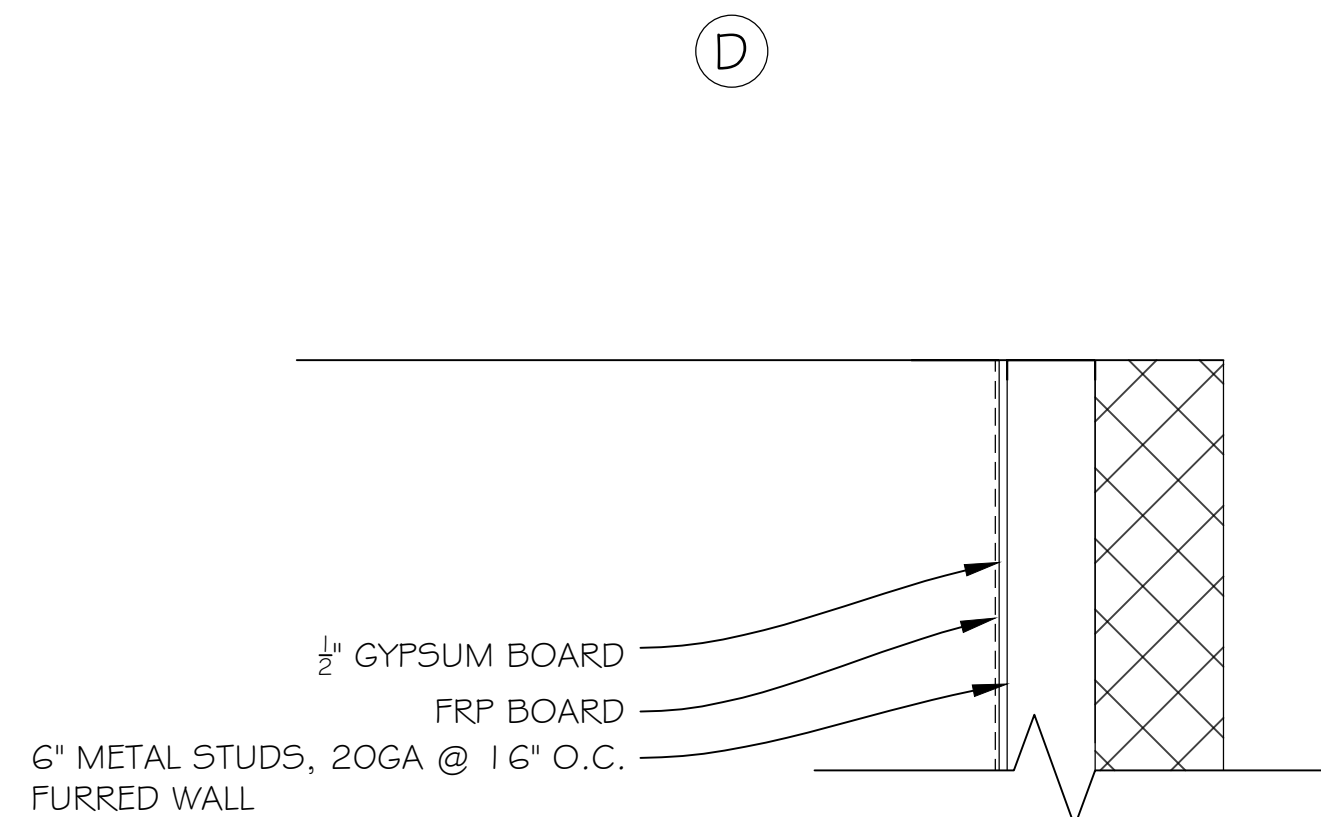
(B)

(C)

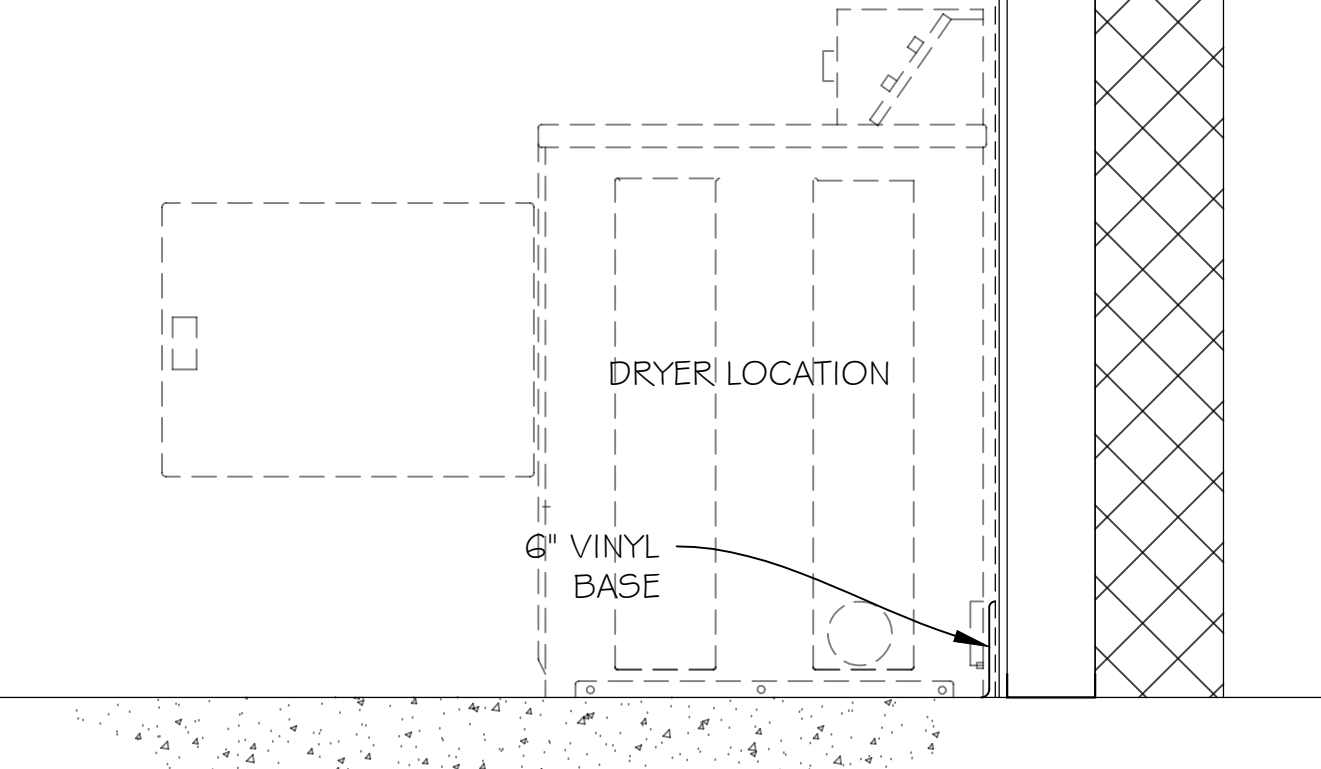
(D)



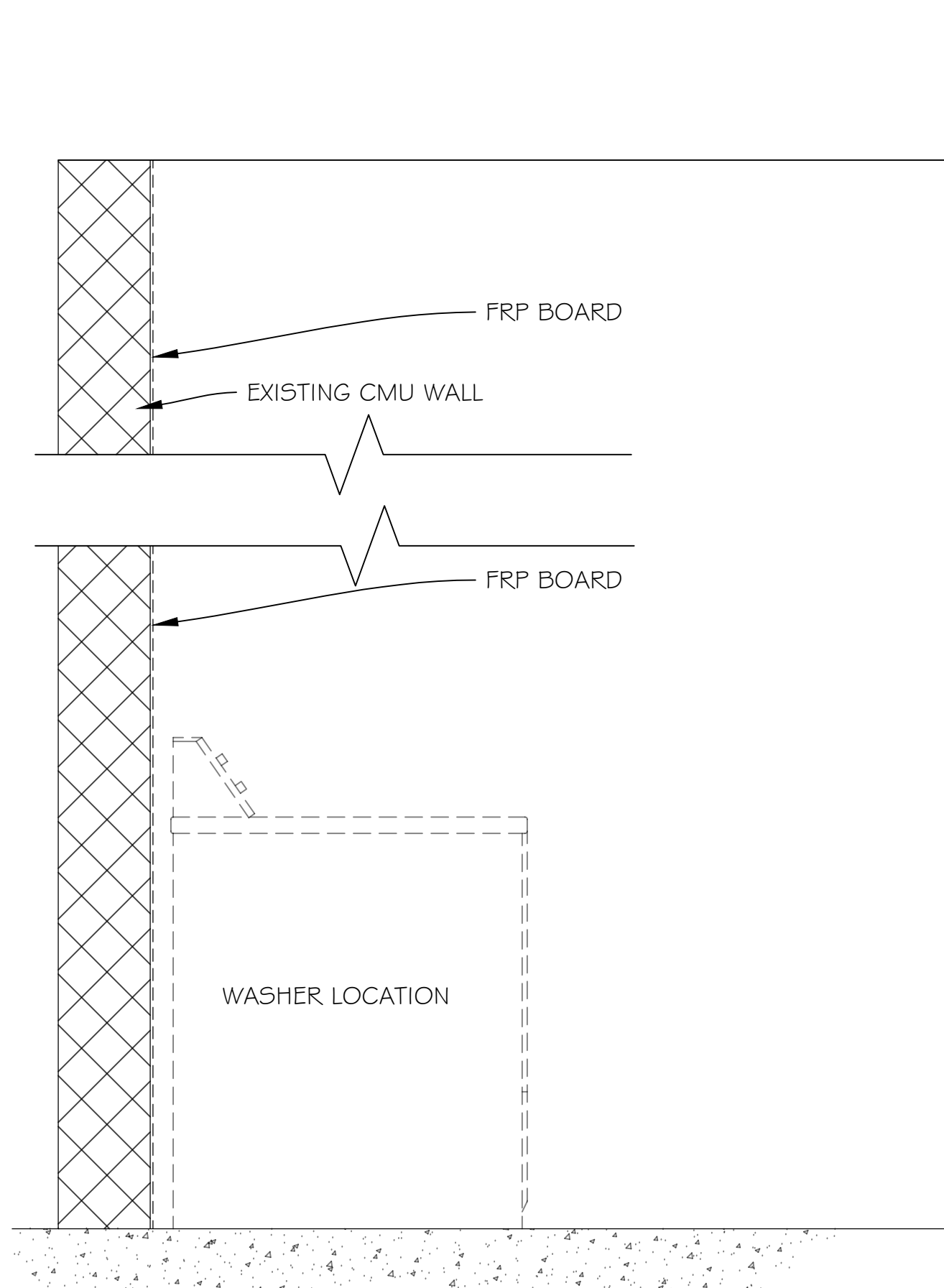
5 DETAIL
 A-5 SCALE: " = 1'-0"
 PAINT TRIM TO MATCH



6 DETAIL
 A-5 SCALE: 1-1/2" = 1'-0"



7 DETAIL @ DRYER
 A-5 SCALE: " = 1'-0"



8 DETAIL @ WASHER
 A-5 SCALE: " = 1'-0"

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BULL RUN BATH HOUSE #2
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PROJECT PHASE:
 PERMIT SET

DATE:
 09/16/2019

SHEET No.
A-5

GENERAL NOTES:

- BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL VISIT THE JOB SITE TO EXAMINE AND FULLY ACQUAINT HIMSELF WITH THE EXISTING CONDITIONS RELATING TO THE SERVICES, SYSTEMS, SITE AND BUILDING; PAYING PARTICULAR ATTENTION TO THE LOCATION OF EXISTING STRUCTURE WATER MAINS, TRANSFORMERS, ETC.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORTS, HANGERS, BOXES, DUCTWORK, PIPING, WIRING, PANELS, ETC. AS REQUIRED BY TRADE, AND SHALL PERFORM DEMOLITION AND MODIFICATION WORK, AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM WITHOUT ADDITIONAL COST TO THE OWNER.
- REQUIREMENTS OF THE ARCHITECTURAL "GENERAL CONDITIONS" SHALL APPLY TO ALL WORK UNDER THESE TRADES.
- CONTRACTOR SHALL ARRANGE AND PAY FOR ALL PERMITS, CERTIFICATES, INSPECTIONS, ETC. AND PAY FOR ALL FEES LEVIED BY STATE, LOCAL, AND MUNICIPAL AUTHORITIES HAVING JURISDICTION OVER WORK DONE UNDER THIS CONTRACT.
- WORK SHALL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS, ORDINANCES, CODES, ETC. OF ANY GOVERNING BODY HAVING JURISDICTION. ALL APPLICABLE ITEMS SHALL BEAR THE UNDERWRITERS LABORATORIES (UL) LABEL AND SHALL BE FACTORY MUTUAL APPROVED. ALL EQUIPMENT SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.
- WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER, LEFT CLEAN AND FREE FROM DEFECTS, AND COMPLETELY OPERABLE. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AS SCHEDULED ON THE DRAWINGS. ALL MATERIAL SHALL BE NEW AND ALL WORK AND MATERIALS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. EXTENDED WARRANTIES FOR SPECIAL EQUIPMENT SHALL BE AS DESCRIBED WITHIN.
- WORK SHALL BE CAREFULLY COORDINATED WITH ALL TRADES INVOLVED, AND THE CONTRACTOR SHALL PROVIDE PROPER CONNECTIONS, FITTINGS, VALVES, PIPING, ETC. FOR ALL EQUIPMENT FURNISHED BY THE OWNER OR THE TRADES INVOLVED IN THIS CONTRACT.
- DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE THE ACTUAL LOCATION OR ROUTING OF EQUIPMENT, PIPING, OR DUCTWORK. DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS CONDITIONS ALLOW TO COMPLETE THE INTENT OF THE CONTRACT. CONTRACTOR SHALL MAKE ANY NECESSARY MINOR OFFSETS, ADJUSTMENTS, ELBOWS OR TRANSITION AS MAY BE NECESSARY DUE TO FIELD CONDITIONS. THE RIGHT IS RESERVED BY THE ENGINEER TO MAKE MINOR CHANGES IN LOCATIONS AND ARRANGEMENTS WHEN REQUIRED BY JOB DEVELOPMENT WITHOUT ADDITIONAL COMPENSATION TO THE CONTRACTOR.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MANUFACTURED ITEMS REQUIRED ON THIS PROJECT. A MINIMUM OF 8 COPIES SHALL BE SUBMITTED. SHEET METAL SHOP DRAWINGS SHALL BE SUBMITTED AT A MINIMUM 1/4" SCALE. SHEET METAL SHOP DRAWINGS SHALL INCLUDE ONE TRANSPARENT COPY AND TWO PRINTS. THE ENGINEER'S APPROVAL OF SHOP OR SETTING DRAWINGS SHALL ONLY BE CONSTRUED TO APPLY TO GENERAL LAYOUT AND CONFORMANCE TO THE DESIGN CONCEPT OF THE PROJECT AND FOR COMPLIANCE WITH THE GENERAL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE RESPONSIBILITY OF ANY DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS MUST REMAIN THE CONTRACTOR'S UNLESS HE HAS, IN WRITING, SPECIFICALLY CALLED TO THE ENGINEER'S ATTENTION SUCH DEVIATIONS AT THE TIME OF SUBMISSION AND HAS RECEIVED THE ENGINEER'S WRITTEN APPROVAL OF SUCH DEVIATIONS.
- PROVIDE REQUIRED TEMPORARY UTILITIES AND PAY ASSOCIATED FEES AND OPERATING COSTS.
- HVAC, ELECTRICAL, AND PLUMBING CONTRACTORS SHALL PERFORM ALL CUTTING AND PATCHING AS REQUIRED FOR THEIR RESPECTIVE WORK, EXCEPT THAT STRUCTURALLY FRAMED OPENINGS SHALL BE CUT & FRAMED BY GENERAL CONTRACTOR. ALL HOLES IN MASONRY FLOORS, AND WALLS SHALL BE CORE DRILLED. EDGES OF TRENCHES IN CONCRETE FLOORS SHALL BE SAW CUT. MAINTAIN FIRE RATING OF FLOORS AND WALLS.
- THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF RECORD "AS-BUILT" DRAWINGS PRIOR TO FINAL PAYMENT. FINAL PAYMENT SHALL NOT BE MADE UNTIL THE RECORD DRAWINGS ARE DEEMED COMPLETE BY THE ENGINEER. THE DRAWINGS SHALL BE DRAFTED BY A PROFESSIONAL DRAFTSMAN ON COPIES OF THESE CONTRACT DOCUMENTS. THE DRAWINGS SHALL INCLUDE EXACT FIELD ROUTING OF ALL WIRING, PIPING, DUCTWORK, ETC.
- MANUFACTURER NAMES GIVEN FOR EQUIPMENT ARE USED AS BASIS FOR SELECTION AND TO ESTABLISH A LEVEL OF QUALITY, NOT WITH INTENT TO LIMIT COMPETITION. EQUIVALENT EQUIPMENT OF OTHER MANUFACTURERS WILL BE CONSIDERED FOR ACCEPTANCE AND INSTALLATION.
- LOCATE AND IDENTIFY ALL CONCEALED BUILDING SYSTEMS PRIOR TO EXECUTION OF THIS WORK INCLUDING CUTTING, EXCAVATING, OR REMOVING ANY PART OF THE BUILDING CONSTRUCTION OF SYSTEM COMPONENTS. CAREFULLY PERFORM ALL WORK TO PREVENT DAMAGE TO THE CONCEALED SYSTEMS OR STRUCTURE. ANY SUCH DAMAGE, BUILDING SYSTEM OUTAGES OR INJURIES RESULTING FROM PERFORMANCE OF THE WORK OF THIS CONTRACT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- INSTALL ACCESS PANELS WHERE REQUIRED. COORDINATE LOCATIONS WITH ARCHITECT.
- MAINTAIN PROPER CLEARANCES AROUND HEAT GENERATING EQUIPMENT AND EQUIPMENT REQUIRING ACCESS MANDATED BY CODE OR FOR MAINTENANCE AND SAFETY.
- WORK SHALL BE PERFORMED BY EXPERIENCED MECHANICS, SPECIALIZING IN THEIR PARTICULAR TRADE, USING PROPER TOOLS AND TECHNIQUES. ALL WORK SHALL BE OF THE HIGHEST QUALITY, CONSISTENT WITH BEST INDUSTRY STANDARDS. WORK JUDGED TO BE SUB-STANDARD SHALL BE REMOVED AND REMADE AT CONTRACTOR'S EXPENSE.

HVAC NOTES:

HEATING, VENTILATING AND AIR CONDITIONING SPECIFICATIONS

- GENERAL
 - MECHANICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION EQUIPMENT, SERVICES AND FACILITIES REQUIRED FOR THE COMPLETE AND PROPER INSTALLATION OF ALL MECHANICAL WORK. ALL FIXTURES, DEVICES, AND EQUIPMENT SHOWN, NOTED, OR REQUIRED ON THE DRAWINGS, AND/OR CONTAINED HEREIN SHALL BE FURNISHED, INSTALLED, TESTED AND MADE READY FOR SATISFACTORY OPERATION.
 - MECHANICAL CONTRACTOR IS TO COORDINATE WITH OTHER TRADES AND OWNER FOR EQUIPMENT LOCATIONS AND CLEARANCES REQUIRED FOR EQUIPMENT. CONTRACTOR TO COORDINATE AND MODIFY LAYOUT ACCORDINGLY.
 - CONTROL WIRING, REGARDLESS OF VOLTAGE, IS TO BE DONE BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS, ETC. FOR ALL EQUIPMENT HE FURNISHES, UNLESS SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS.
- SUBMITTALS:
 - SUBMIT CONTROL WIRING DIAGRAMS FOR ALL EQUIPMENT INCLUDING INTERLOCKS WITH OTHER DEVICES AS DESCRIBED IN CONTROL SEQUENCES OR AS OTHERWISE INDICATED.
 - SUBMIT DRAWINGS OF ALL SLAB PENETRATIONS FOR LANDLORD/ OWNER/ARCHITECT/ENGINEER REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE PENETRATION INSTALLATION.
 - SUBMIT A LIST OF ANY PRODUCT SUBSTITUTIONS, SUBSTITUTED EQUIPMENT DATA, AND THE ASSOCIATED COST SAVINGS AT THE TIME OF BID SUBMISSION. SUBSTITUTIONS AFTER THE CONTRACT IS AWARDED WILL NOT BE ACCEPTED.
 - A MINIMUM OF TWO WEEKS TIME WILL BE REQUIRED FOR A REVIEW OF EACH SUBMITTAL BY THE ARCHITECT AND ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALLOCATING SUFFICIENT TIME IN THE CONSTRUCTION SCHEDULE TO OBTAIN FINAL APPROVAL OF SUBMITTALS, INCLUDING TIME FOR SUBSEQUENT REVIEWS OF SUBMITTALS NOT INITIALLY APPROVED. ANY CLAIMS FOR DELAYS RELATED TO SUBMITTAL REVIEW WILL NOT BE ACCEPTED.
- DEMOLITION:
 - THE CONTRACTOR SHALL REMOVE ANY AND ALL OBSOLETE, UNUSED OR UNNECESSARY ITEMS AS CALLED OUT ON DRAWINGS OR HEREIN SPECIFIED. ANY SUCH ITEMS INTENDED FOR SUCH REMOVAL SHALL BE COMPLETELY VERIFIED AND APPROVED BY THE OWNER AND ENGINEER.
 - ANY EXISTING MECHANICAL EQUIPMENT THAT MAY BE RELOCATED TO ACCOMMODATE NEW WORK MAY BE ACCOMPLISHED BY THE CONTRACTOR, PROVIDED IT IS DONE SO AT NO ADDITIONAL EXPENSE TO THE OWNER AND WRITTEN PERMISSION HAS BEEN OBTAINED FROM THE OWNER AND ENGINEER.
 - ALL MECHANICAL ITEMS REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER, BUT SHALL BE DISPOSED OF, IF SO DIRECTED BY THE OWNER AND ENGINEER. ITEMS SO DIRECTED SHALL BE REMOVED FROM THE PREMISES BY THE CONTRACTOR AT HIS EXPENSE.
- DUCTWORK:
 - ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL UNLESS OTHERWISE NOTED. ALL DUCTWORK SHALL BE IN ACCORDANCE WITH THE LATEST PUBLICATION OF THE ASHRAE GUIDE, SMACNA AND CONSTRUCTED TO PRESSURE CLASSES SPECIFIED BELOW.

DUCTWORK	PRESSURE CLASS ("W.G.")	/SEAL CLASS
CONSTANT VOLUME SYSTEM	2.0/B	
S.A. & O.A. DUCT		
RETURN, EXHAUST AIR DUCT	2.0/B	
 - ALL DUCTWORK SHALL BE CONSTRUCTED TO A 2" PRESSURE CLASS, TYPE B SEAL (UNLESS NOTED OTHERWISE).
 - PROVIDE NON-ASBESTOS TYPE FLEXIBLE CONNECTIONS BETWEEN DUCTS AND FANS AND ALSO IN DUCTS CROSSING BUILDING EXPANSION JOINTS. FLEXIBLE CONNECTIONS SHALL BE OF 30 OZ. GLASS FABRIC VENTIFABRICS, INC. "VENTGLASS" OR APPROVED EQUAL.
 - PROVIDE VOLUME DAMPERS AT BRANCH DUCTWORK CONNECTIONS TO MAIN TRUNK DUCT AND DIFFUSER RUN OUTS.
 - SEAL AND/OR REPAIR ANY DUCTWORK WITH VISUAL OR AUDIBLE SIGNS OF AIR LEAKAGE.
 - DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. SOUND LINE ALL SUPPLY AND RETURN DUCTWORK WITH 1" 2-POUND DENSITY ACOUSTICAL DUCT LINER AS INDICATED ON DRAWINGS. DUCTWORK WITH 16 GAUGE GALVANIZED SHEET METAL WHERE SOUND LINING IS INDICATED ON UNITS DELIVERING MORE THAN 2000 CFM UNLESS OTHERWISE NOTED.
 - INSTALL DUCTWORK TIGHT TO THE UNDERSIDE OF THE BUILDING STRUCTURE. ADJUST THE DUCT ELEVATIONS AS REQUIRED TO MAINTAIN DUCT TIGHT TO BOTTOM OF STRUCTURE WHERE STRUCTURE ELEVATIONS CHANGE.
 - PROVIDE ALL NECESSARY TRANSITIONS IN DUCTWORK FOR CONNECTION TO EQUIPMENT AND ACCESSORIES. REDUCE DUCTWORK SIZES AS NEEDED AT THE POINT OF CONNECTION TO THE EQUIPMENT.
 - SUSPEND DUCTWORK FROM BUILDING STRUCTURE IN ACCORDANCE WITH THE SMACNA DUCT CONSTRUCTION STANDARDS. SECURELY ATTACH DUCTWORK SUPPORTS TO THE BUILDING STRUCTURE.
 - COORDINATE INSTALLATION OF DUCTWORK WITH BUILDING STRUCTURE AND WORK OF OTHER CONTRACTORS. ADJUST DUCTWORK SIZES, LOCATION AND CONFIGURATION, AS REQUIRED TO COORDINATE WITH WORK OF THIS AND OTHER TRADES. WHERE NECESSARY TO AVOID OBSTRUCTIONS, RE-SIZE, OFFSET, RAISE OR LOWER DUCTWORK. DO NOT EXCEED DESIGN VELOCITIES IN ANY DUCT SECTIONS REQUIRING SIZING REVISIONS. INDICATE FIELD COORDINATION ISSUES ON SHOP DRAWINGS.
 - PROVIDE TURNING VANES IN ALL 90 DEG. RECTANGULAR ELBOWS AND SPLITTER VANES IN ALL 90 DEG. RECTANGULAR RADIUS ELBOWS.
 - ELBOWS CONSTRUCTED USING A SHARP 90 DEG. ANGLE ON INSIDE OF ELBOW AND A RADIUS BEND ON OUTSIDE OF ELBOW ("SLED-BOOT FITTING") WILL NOT BE ACCEPTED.
 - PROVIDE 1/2" WIRE MESH SCREENS ON OPEN END DUCTS.
 - PROVIDE VOLUME DAMPERS AT BRANCHES TO TRUNK DUCT AND DIFFUSER RUN-OUTS.
- INSULATION:
 - GENERAL:
 - DUCT INSULATION SHALL BE FIBER GLASS. ALL MATERIAL SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. EXTERNAL INSULATION SHALL BE APPLIED AFTER REQUIRED TESTS AND APPROVALS HAVE BEEN COMPLETED.
 - SURFACE BURNING CHARACTERISTICS:
 - ALL INSULATION AND ACOUSTICAL LINING SHALL HAVE SURFACE BURNING CHARACTERISTIC RATINGS AS TESTED BY ASTM E-84. UL 723, NFPA 255 NOT EXCEEDING.

FLAME SPREAD:	25
SMOKE DEVELOPED:	50
 - COMPOSITE RATING SHALL INCLUDE INSULATION, JACKETING AND ADHESIVE USED TO SECURE JACKETING OR FACING. ALL ACCESSORY ITEMS SUCH AS JACKETING AND FITTINGS, ADHESIVE, MASTIC, CEMENT, TAPE AND CLOTH SHALL HAVE THE SAME RATING AS SPECIFIED ABOVE.

- CLEANING AIR SYSTEMS:
 - ALL DUCT OPENINGS SHALL BE COVERED TEMPORARILY DURING CONSTRUCTION. BEFORE FINAL ADJUSTMENT AND BALANCING, CHEESE CLOTH SHALL BE PLACED OVER EACH DUCT OPENING FOR ENTRAINING PARTICLES DURING THE CLEANING OPERATION. OPERATE ALL SYSTEMS FOR A MINIMUM OF FOUR (4) HOURS. AFTER THIS PERIOD, REMOVE ALL FILTERS. CLEAN ALL SUPPLY DUCTS, GRILLES, AND REGISTERS, IN ALL UNITS, USING A VACUUM CLEANER AND BRUSH. REPLACE FILTERS WITH NEW.
 - BALANCING THE AIR SYSTEMS:
 - OPERATE SYSTEMS AS LONG AS NECESSARY TO TEST AIR FLOW AT CONNECTIONS TO EQUIPMENT. ADJUST DAMPERS, VALVES, FANS & SHEAVES UNTIL EVEN DISTRIBUTION AND REQUIRED DELIVERY OF AIR IS OBTAINED THROUGHOUT. SUBMIT FOR APPROVAL, SEVEN (7) TEST REPORTS SHOWING PERTINENT OPERATING DATA SUCH AS CFM, AND FPM AT EACH OUTLET. FAN RPM, MOTOR CURRENT, ETC., SHALL BE SUBMITTED FOR PERMANENT RECORD. MAKE NECESSARY SETTINGS AND ADJUSTMENTS OF TEMPERATURE REGULATING EQUIPMENT. TEST REPORTS SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER WHO SHALL BE A MEMBER OF A NEBB OR AABC LISTED BALANCING FIRM.
 - AUTOMATIC TEMPERATURE CONTROLS:
 - HVAC UNITS SHALL BE CONTROLLED BY ITS THERMOSTAT.
 - HANGARS AND SUPPORTS:
 - PROVIDE HANGERS AND SUPPORTS AND STEEL FRAMEWORK REQUIRED FOR THE SUPPORT OF VARIOUS SYSTEMS. PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE BY MEANS OF APPROVED HANGERS.
 - HANG HORIZONTAL PIPING WITH ADJUSTABLE WROUGHT IRON OR MALLEABLE IRON HANGERS, SPACED AS RECOMMENDED BY ASHRAE. BANDS OR RINGS SUPPORTING COPPER TUBING SHALL BE HEAVILY PLATED COPPER.
 - PROVIDE PIPE SLEEVES OR SADDLES AT POINTS OF SUPPORT TO PREVENT DAMAGE TO PIPING INSULATION.
 - VIBRATION ISOLATION:
 - INSTALL MOTOR DRIVEN EQUIPMENT WITH VIBRATION ISOLATORS. UNLESS OTHERWISE NOTED, SUSPENDED EQUIPMENT SHALL HAVE SPRING ISOLATOR HANGERS AND BASE MOUNTED EQUIPMENT SHALL HAVE DOUBLE DEFLECTION ISOLATORS. PIPING CONNECTED TO VIBRATING EQUIPMENT SHALL BE ISOLATED BY RESILIENT HANGERS OR FLEXIBLE CONNECTORS.
- FLEXIBLE DUCT:
 - FLEXIBLE DUCT SHALL BE TYPE WICK BY WIRE MOLD COMPANY, OR EQUAL, WITH FIRE RETARDANT FIBERGLASS INSULATION BLANKET, AND ALUMINIZED REINFORCED VAPOR BARRIER. FLEXIBLE DUCT SHALL CONFORM TO NFPA 90A & 90B AND UL STANDARD 723 FOR CLASS 1 AIR DUCT.
 - FLEXIBLE DUCT SHALL BE INSTALLED & SUPPORTED IN ACCORDANCE WITH LATEST SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
 - FLEXIBLE DUCT SHALL BE SUPPORTED AT INTERVALS NO GREATER THAN FOUR FEET. HANGER OR SADDLE MATERIAL IN CONTACT WITH THE FLEXIBLE DUCT SHALL BE A MINIMUM OF ONE INCH WIDE.
 - FLEXIBLE DUCT SHALL ONLY BE USED AS A BRANCH TAKE-OFF FROM MAIN TRUNK DUCT TO A SINGLE DIFFUSER. MAXIMUM LENGTH OF RUN SHALL BE 8 LINEAR FEET. VOLUME DAMPERS SHALL BE INSTALLED AT ALL BRANCH TAKE-OFFS FROM TRUNK DUCT.
 - NO FLEXIBLE DUCT SHALL BE VISIBLE FROM THE OCCUPIED SPACES.
 - DO NOT ROUTE FLEXIBLE DUCT THROUGH FULL HEIGHT PARTITIONS. PROVIDE ROUND RIGID DUCT WHERE FLEXIBLE DUCTS ARE SHOWN TO PASS THROUGH FULL HEIGHT PARTITIONS. PROVIDE TRANSITIONS AND ACCESSORIES AS REQUIRED TO CONNECT FLEXIBLE DUCT TO RIGID DUCT. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FULL HEIGHT PARTITIONS.
- PROJECT CLOSE OUT:
 - PROVIDE SYSTEM DEMONSTRATION TO OWNER.
 - PROVIDE MINIMUM OF (3) EIGHT HOURS OF INSTRUCTION, DEMONSTRATING TYPICAL SERVICE AND REPAIR PROCEDURES, TO OWNER DESIGNATED PERSONNEL.
 - PROVIDE OPERATING AND MAINTENANCE MANUALS, (1) ONE COMPLETE SETS, TO OWNER. INFORMATION TO BE PROVIDED IN INDEXED 3-RING BINDER.
 - PROVIDE TEST-CHECK & START-UP CERTIFICATES FOR ALL EQUIPMENT.
 - PROVIDE APPROVED BALANCING REPORTS.
 - PROVIDE REQUIRED SPARE PARTS.
 - PROVIDE APPROVED "AS-BUILT DRAWINGS".

SYMBOLS

SYMBOL	DESCRIPTION
	THERMOSTAT
	S.A. CFM QUANTITY
	R.A. / E.A. CFM QUANTITY
	SUPPLY: DIFFUSER, CEILING REGISTER WALL REGISTER
	RETURN: GRILLE, CEILING REGISTER WALL REGISTER
	EXHAUST FAN / TRANSFER AIR FAN
	FLEXIBLE DUCTWORK
	SINGLE LINE DUCTWORK
	SINGLE LINE DUCTWORK W/ BRANCH TAKE-OFF & VOLUME DAMPER
	SPIN-IN DUCT FITTING WITH INTEGRAL VOLUME DAMPER
	DUCTWORK
	MANUAL VOLUME DAMPER
	DUCTWORK WITH SOUND LINING
	ELBOW W/ TURNING VANES
	S.A. OR O.A. DUCT TURNING UP, DOWN
	R.A. OR E.A. DUCT TURNING UP, DOWN
	3/4" UNDERCUT
	DOOR LOUVER
	EXISTING WORK
	EXISTING DUCTWORK
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	TERMINATION POINT OF DEMOLITION

NOTE: NOT ALL SYMBOLS MAY BE USED.

ABBREVIATIONS

ABBREVIATION	DEFINITION
AFF	ABOVE FINISHED FLOOR
APD	AIR PRESSURE DROP
BHP	BRAKE HORSE POWER
BJ	BETWEEN JOISTS
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FOOT PER MINUTE
CU. FT.	CUBIC FEET
DB	DRY BULB
DEG.	DEGREE
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXISTING TO BE RELOCATED
ESP	EXTERNAL STATIC PRESSURE
F	FAHRENHEIT
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
FSK	FIBER SCRIM KRAFT
HP	HORSE POWER
LAT	LEAVING AIR TEMPERATURE
LB	POUND
LRA	LOCKED ROTOR AMPS
MBH	1000 BTU
NC	NOISE CRITERIA
NTS	NOT TO SCALE
OA	OUTSIDE AIR
O.E.D.	OPEN END DUCT
PD	PRESSURE DROP
PH, Ø	PHASE
R, (R)	REMOVE
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RE	RELOCATED TO THIS LOCATION
RH	RELATIVE HUMIDITY
RLA	RUNNING LOAD AMPS
RPM	REVOLUTION PER MINUTE
SA	SUPPLY AIR
SR	SUPPLY AIR REGISTER
SP	STATIC PRESSURE
TYP	TYPICAL
V	VOLT
VF	VERIFY IN FIELD
W	WATTS
WB	WET BULB
W.G.	WATER GAUGE
WMS	WIRE MESH SCREEN

SEQUENCE OF OPERATION:

- A) GAS FURNACE UNIT, (E) GFU:
- GAS FURNACE SHALL BE CONTROLLED BY THEIR WALL MOUNTED COOLING/HEATING PROGRAMMABLE THERMOSTATS. OUT SIDE AIR DAMPERS SHALL REMAIN OPEN ONLY IN THE OCCUPIED MODE.
- WHEN SPACE TEMPERATURE DROPS BELOW ITS SET POINT, THE FURNACE SHALL ENERGIZE TO MAINTAIN THE SET POINT OF THE THERMOSTAT. IN HEATING MODE CONDENSING UNIT SHALL REMAIN OFF.
- IN UNOCCUPIED MODE, FURNACE SHALL ENERGIZE TO MAINTAIN 55 DEG. F, WHILE OUTSIDE DAMPER SHALL REMAIN CLOSED, AND CONDENSING UNIT SHALL REMAIN OFF.
- B) EXHAUST FANS:
- EF-1, 2, 3 & 6 SHALL BE CONTROLLED BY LIGHT SWITCH.
EF-4 & 5 SHALL BE CONTROLLED BY TIME CLOCK

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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

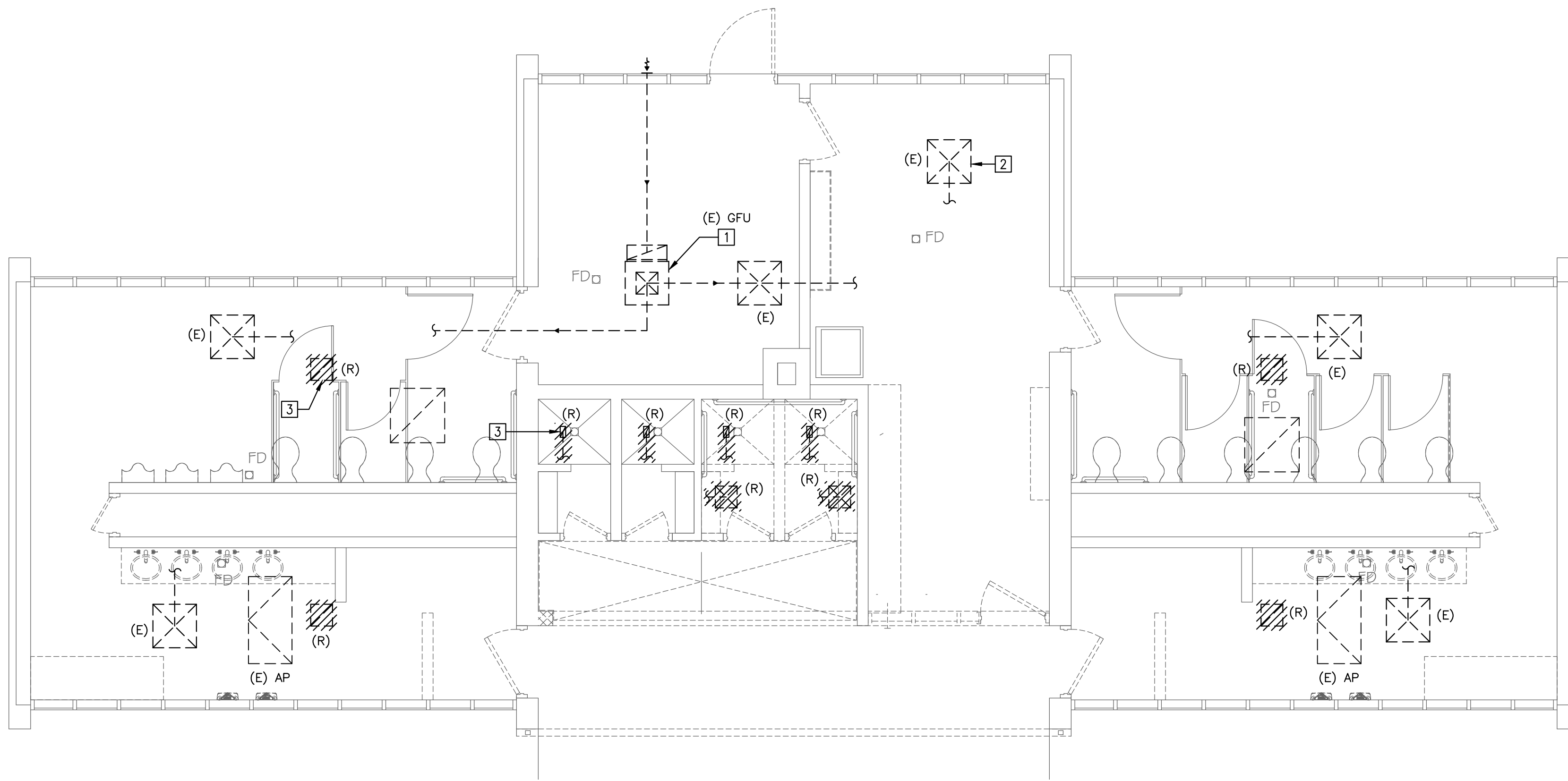
PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

SHEET No.

M-1

MECHANICAL COVER SHEET



FIRST FLOOR PLAN-DEMOLITION WORK

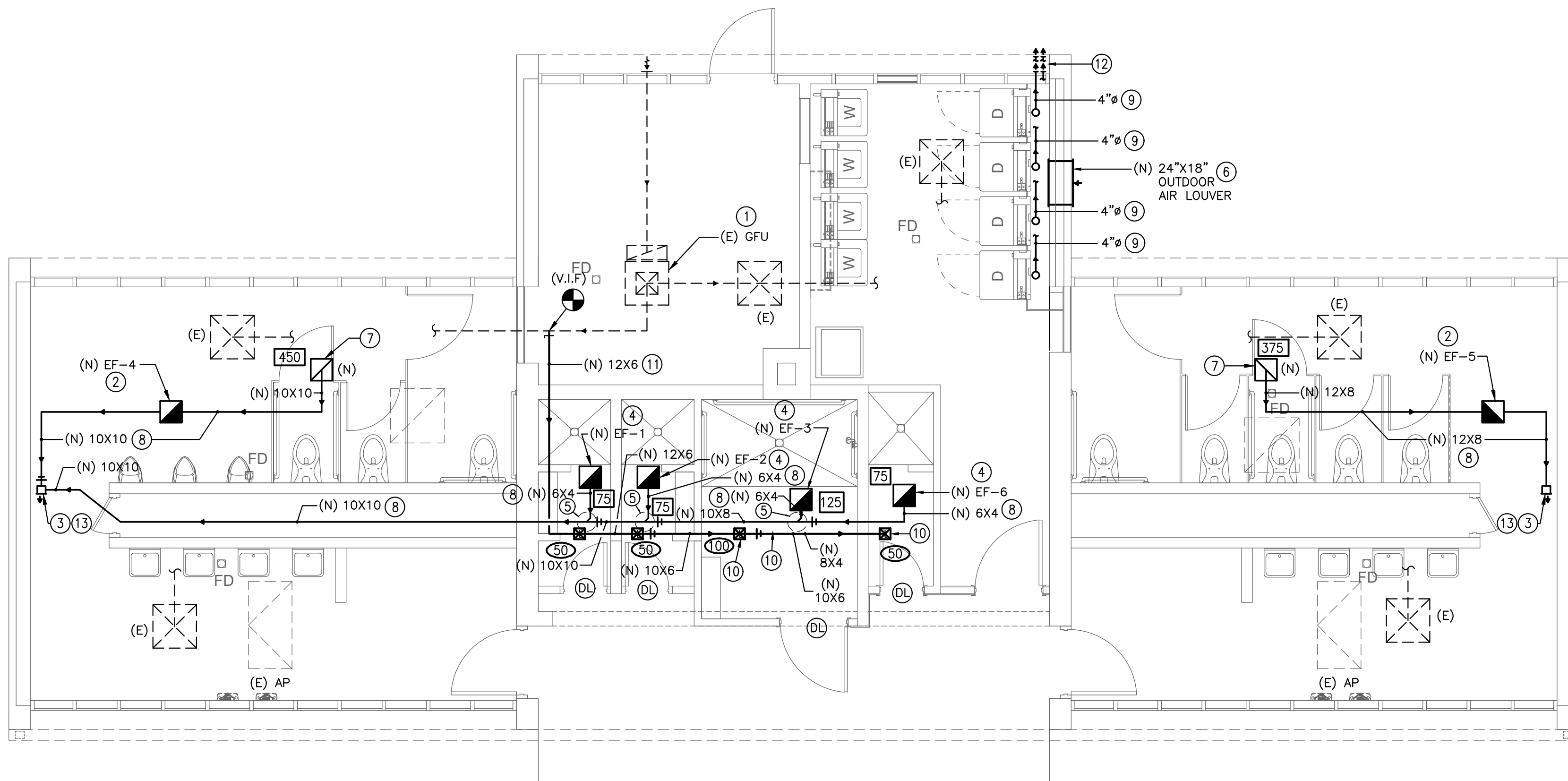
SCALE: 1/4" = 1'-0"

GENERAL NOTES-DEMOLITION/NEW WORK

1. ALL DEMOLISHED EQUIPMENT AND RUBBISH SHALL BE CLEARED, TRANSPORTED AND DISPOSED OF IN A LAWFUL AND RESPONSIBLE MANNER.
2. CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
3. ALL UNUSED PIPE BRANCHES AFTER DEMOLITION SHALL BE REMOVED BACK TO MAIN AND CAPPED.
4. UNDER NO CIRCUMSTANCE SHALL THE WORK PERFORMED UNDER THIS CONTRACT ADVERSELY AFFECT ADJACENT AREAS, WHICH ARE NOT PART OF THIS CONTRACT.
5. IF SUSPECTED ASBESTOS-CONTAINING MATERIALS (ACM) ARE ENCOUNTERED IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL CEASE WORK WITH THE SUSPECT MATERIAL AND AWAIT DIRECTION FROM THE COUNTY PROJECT MANAGER. THE CONTRACTOR SHALL FOLLOW APPLICABLE CODE, SPECIFICATION AND COUNTY GUIDELINES FOR ACM ABETMENT WORK.
6. MAINTAIN EXISTING SYSTEMS AS NECESSARY TO CONTINUE NORMAL OPERATIONS. ALL SERVICE INTERRUPTIONS SHALL BE AT OWNER'S CONVENIENCE.
7. ALL OPENINGS IN WALLS AND FLOORS REMAINING AFTER THE REMOVAL OF EXISTING PIPING, EQUIPMENT ETC. SHALL BE SEALED AND PATCHED TO MATCH EXISTING CONSTRUCTION CONDITIONS.
8. CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
9. DURING THE CONSTRUCTION PHASE, IT IS VERY IMPORTANT TO MAINTAIN UNINTERRUPTED SERVICE TO OTHER AREA. CONTRACTOR SHALL ENSURE THAT THE OTHER PHASES ARE NOT AFFECTED AND PROVIDE TEMPORARY DUCT, CONDUITS, PIPES ETC. AS NECESSARY TO MAINTAIN CONTINUITY.
10. ALL EXISTING AND NEW PIPING TO BE INSPECTED AND PRESSURE TESTED, PROVIDE MODIFICATION AS REQUIRED.

DEMOLITION WORK-KEYED NOTES

- 1 EXISTING GAS FURNACE UNIT (GFU) TO REMAIN. REFURBISH THE UNIT AND IT'S CONTROLS TO FULLY OPERATIONAL. RE-BALANCE THE UNIT TO PROVIDE ADDITIONAL 250 CFM
- 2 EXISTING SUPPLY AIR DIFFUSER TO REMAIN (TYPICAL).
- 3 REMOVE EXISTING EXHAUST AIR GRILLE (TYPICAL).



FIRST FLOOR PLAN-NEW WORK

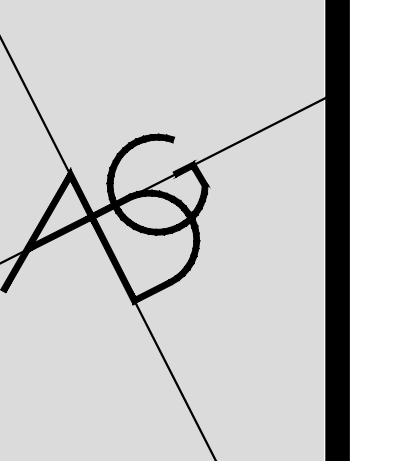
SCALE: 1/4" = 1'-0"

NEW WORK-KEYED NOTES

- 1 EXISTING GAS FURNACE UNIT.
- 2 NEW EXHAUST FAN. INLINE TYPE. PROVIDE SUPPORT. INSTALL THE FAN IN FULL COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS (TYPICAL).
- 3 INSTALL NEW EXHAUST DUCT UP TO EXISTING EXHAUST AIR LOUVER. PROVIDE DUCT PLENUM AS REQUIRED. PROVIDE BIRD SCREEN. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING EXHAUST AIR LOUVER SIZE AND REPLACE THE LOUVER AS REQUIRED. MODIFY THE WALL OPENING AS REQUIRED. FILL UNUSED WALL OPENING. AND SEAL WATER TIGHT. VERIFY IN FIELD (TYPICAL).
- 4 NEW EXHAUST FAN. CEILING MOUNTED. PROVIDE SUPPORT. PROVIDE ACCESS PANEL. INSTALL THE FAN IN FULL COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS (TYPICAL).
- 5 PROVIDE SUB-DUCT CONNECTION. REFER TO DETAIL-"A" IN M-3 DRAWING (TYPICAL).
- 6 PROVIDE AIR INTAKE LOUVER. 24"X18" MODIFY EXISTING WALL AS REQUIRED. REPAIR EXISTING WALL AND SEAL WATER TIGHT.
- 7 NEW EXHAUST AIR GRILLE (TYPICAL).
- 8 NEW EXHAUST AIR DUCT. PROVIDE DUCT SUPPORTS (TYPICAL).
- 9 4" DRYER EXHAUST DUCT. INSTALL THE DUCT AS HIGH AS POSSIBLE. PROVIDE SUPPORT (TYPICAL).
- 10 NEW SUPPLY AIR GRILLE (TYPICAL).
- 11 SUPPLY AIR DUCT. PROVIDE DUCT INSULATION AND DUCT SUPPORT (TYPICAL).
- 12 PROVIDE (4) 4" DRYER EXHAUST DUCT THRU SHEET METAL-COVER PLATE. PROVIDE SUPPORT FOR SHEET METAL-COVER PLATE ON WALL. MODIFY EXISTING WALL OPENING. FILL UNUSED OPENING TO MATCH EXISTING. SEAL WATER TIGHT (TYPICAL).
- 13 THE CONTRACTOR SHALL FIELD VERIFY EXISTING BACK DRAFT DAMPER'S (BDD) OPERATION, AND IT'S DAMPER SIZE. REPLACE THE BDD AS REQUIRED. VERIFY IN FIELD (TYPICAL).

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**BULL RUN BATH HOUSE #2
 ADA RENOVATIONS**
 BULL RUN REGIONAL PARK
 CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
 100% SUBMISSION

SHEET No.

M-2

GENERAL NOTES-DEMOLITION/NEW WORK

- ALL DEMOLISHED EQUIPMENT AND RUBBISH SHALL BE CLEARED, TRANSPORTED AND DISPOSED OF IN A LAWFUL AND RESPONSIBLE MANNER.
- CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
- ALL UNUSED PIPE BRANCHES AFTER DEMOLITION SHALL BE REMOVED BACK TO MAIN AND CAPPED.
- UNDER NO CIRCUMSTANCE SHALL THE WORK PERFORMED UNDER THIS CONTRACT ADVERSELY AFFECT ADJACENT AREAS, WHICH ARE NOT PART OF THIS CONTRACT.
- IF SUSPECTED ASBESTOS-CONTAINING MATERIALS (ACM) ARE ENCOUNTERED IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL CEASE WORK WITH THE SUSPECT MATERIAL AND AWAIT DIRECTION FROM THE COUNTY PROJECT MANAGER. THE CONTRACTOR SHALL FOLLOW APPLICABLE CODE, SPECIFICATION AND COUNTY GUIDELINES FOR ACM ABATEMENT WORK.
- MAINTAIN EXISTING SYSTEMS AS NECESSARY TO CONTINUE NORMAL OPERATIONS. ALL SERVICE INTERRUPTIONS SHALL BE AT OWNER'S CONVENIENCE.
- ALL OPENINGS IN WALLS AND FLOORS REMAINING AFTER THE REMOVAL OF EXISTING PIPING, EQUIPMENT ETC. SHALL BE SEALED AND PATCHED TO MATCH EXISTING CONSTRUCTION CONDITIONS.
- CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
- DURING THE CONSTRUCTION PHASE, IT IS VERY IMPORTANT TO MAINTAIN UNINTERRUPTED SERVICE TO OTHER AREA. CONTRACTOR SHALL ENSURE THAT THE OTHER PHASES ARE NOT AFFECTED AND PROVIDE TEMPORARY DUCT, CONDUITS, PIPES ETC. AS NECESSARY TO MAINTAIN CONTINUITY.
- ALL EXISTING AND NEW PIPING TO BE INSPECTED AND PRESSURE TESTED, PROVIDE MODIFICATION AS REQUIRED.

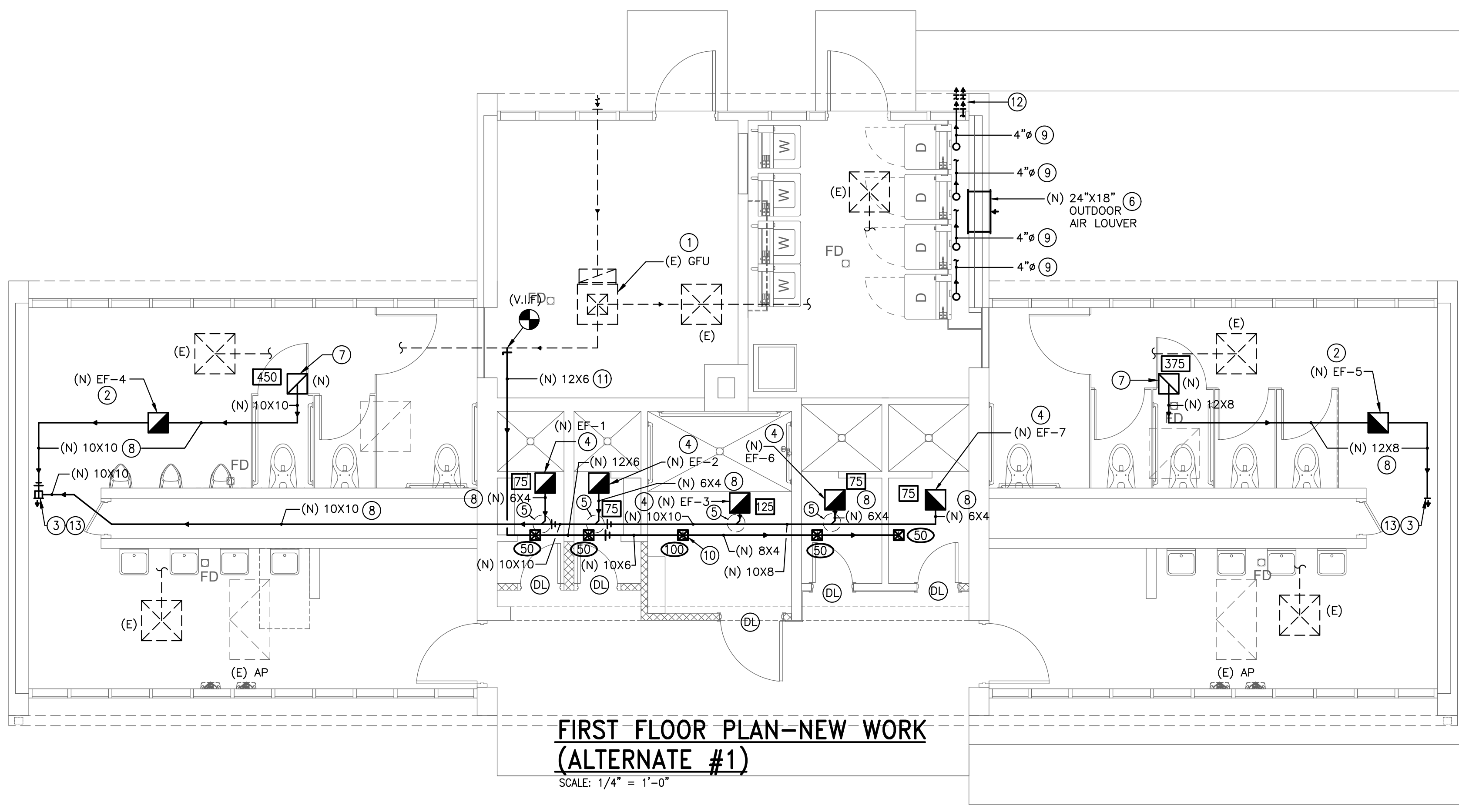
NEW WORK-KEYED NOTES

- EXISTING GAS FURNACE UNIT.
- NEW EXHAUST FAN, INLINE TYPE. PROVIDE SUPPORT. INSTALL THE FAN IN FULL COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS (TYPICAL).
- INSTALL NEW EXHAUST DUCT UP TO EXISTING EXHAUST AIR LOUVER. PROVIDE DUCT PLENUM AS REQUIRED, PROVIDE BIRD SCREEN. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING EXHAUST AIR LOUVER SIZE AND REPLACE THE LOUVER AS REQUIRED. MODIFY THE WALL OPENING AS REQUIRED. FILL UNUSED WALL OPENING, AND SEAL WATER TIGHT. VERIFY IN FIELD (TYPICAL).
- NEW EXHAUST FAN, CEILING MOUNTED. PROVIDE SUPPORT. PROVIDE ACCESS PANEL. INSTALL THE FAN IN FULL COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS (TYPICAL).
- PROVIDE SUB-DUCT CONNECTION. REFER TO DETAIL-"A" IN M-3 DRAWING (TYPICAL).
- PROVIDE AIR INTAKE LOUVER. 24"X18" H. MODIFY EXISTING WALL AS REQUIRED. REPAIR EXISTING WALL AND SEAL WATER TIGHT.
- NEW EXHAUST AIR GRILLE (TYPICAL).
- NEW EXHAUST AIR DUCT. PROVIDE DUCT SUPPORTS (TYPICAL).
- 4" Ø DRYER EXHAUST DUCT. INSTALL THE DUCT AS HIGH AS POSSIBLE. PROVIDE SUPPORT (TYPICAL).
- NEW SUPPLY AIR GRILLE (TYPICAL).
- SUPPLY AIR DUCT. PROVIDE DUCT INSULATION AND DUCT SUPPORT (TYPICAL).
- PROVIDE (4) 4" Ø DRYER EXHAUST DUCT THRU SHEET METAL-COVER PLATE ON WALL. PROVIDE SUPPORT FOR SHEET METAL-COVER PLATE. MODIFY EXISTING WALL OPENING. FILL UNUSED OPENING TO MATCH EXISTING. SEAL WATER TIGHT (TYPICAL).
- THE CONTRACTOR SHALL FIELD VERIFY EXISTING BACK DRAFT DAMPER'S (BDD) OPERATION, AND IT'S DAMPER SIZE. REPLACE THE BDD AS REQUIRED. VERIFY IN FIELD (TYPICAL).

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EXHAUST FAN SCHEDULE

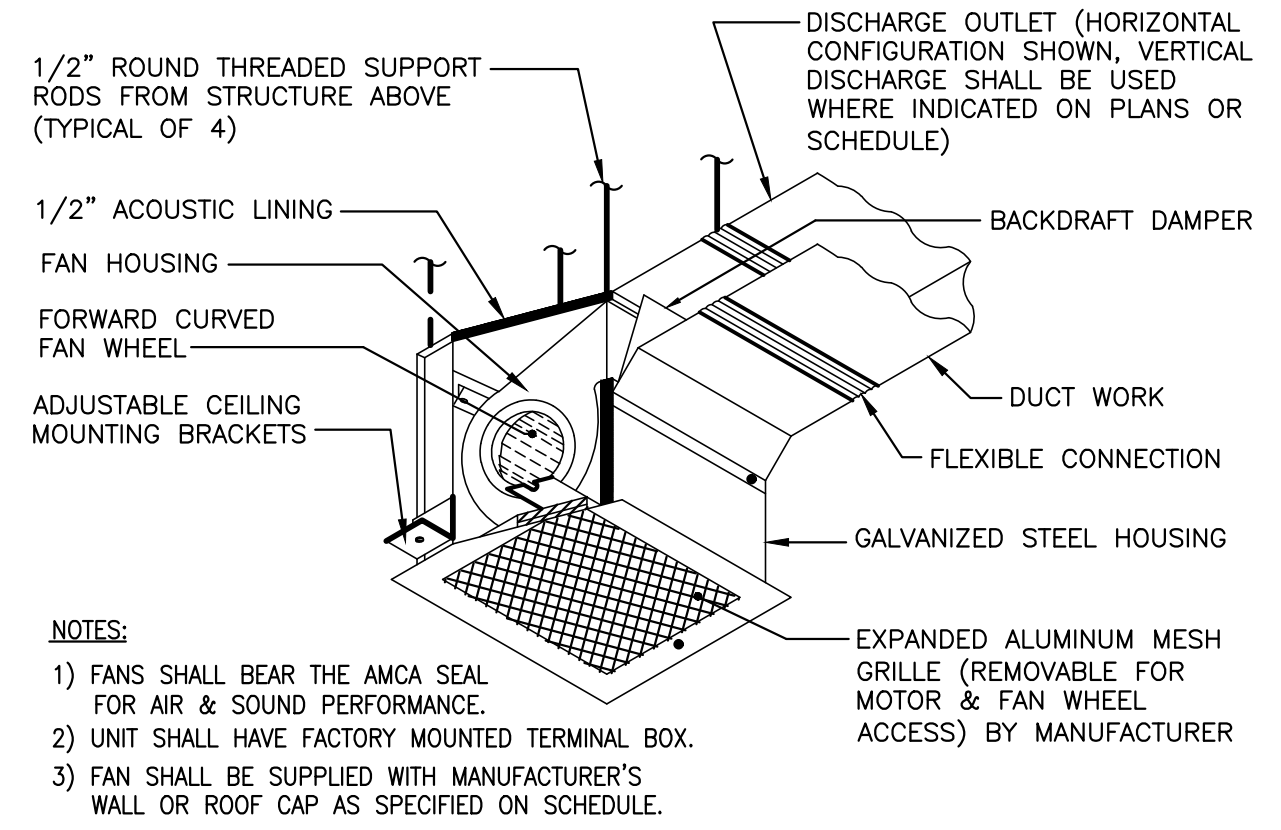
UNIT NO	SERVING	AIR FLOW (CFM)	S.P (IN WG)	FAN TYPE	DRIVE	RPM	MOTOR WATTS/HP	ELECTRICAL DATA V/PH/Hz	BASIS OF DESIGN	APPROX. WEIGHT (LBS)	REMARKS
EF-1, EF-2 EF-6, EF-7 (EF-7 ALTERNATE #1)	SHOWER EXHAUST	75	0.75	CEILING MOUNTED	DIRECT	1750	67 WATTS	120/1/60	GREENHECK MODEL # CSP-A250	35	①②③④⑤
EF-3	TOILET EXHAUST	125	0.5	CEILING MOUNTED	DIRECT	1750	100 WATTS	120/1/60	GREENHECK MODEL # CSP-A250	35	①②③④⑤
EF-4	TOILET EXHAUST	450	0.75	INLINE	DIRECT	1750	1/4 HP	120/1/60	GREENHECK MFR. COMPANY MODEL #SQ-98-VG	75	①②③④⑤
EF-5	TOILET EXHAUST	375	0.75	INLINE	DIRECT	1750	1/4 HP	120/1/60	GREENHECK MFR. COMPANY MODEL #SQ-98-VG	75	①②③④⑤

- NOTE:
- PROVIDE FAN SUPPORTS, VIBRATION ISOLATORS.
 - INSTALL THE FAN AS PER MANUFACTURER'S RECOMMENDATIONS.
 - MECHANICAL CONTRACTOR TO PROVIDE STARTERS AND SWITCHES FOR FANS AND ELECTRICAL CONTRACTOR TO INSTALL THEM.
 - PROVIDE COMPLETE WITH SPRING ISOLATOR, BELT GUARD, INSULATED HOUSING, BACKDRAFT DAMPER, STARTERS AND UNIT MOUNTED DISCONNECT SWITCH.
 - PROVIDE COMPLETE AND INSTALL ALL REQUIRED COMPONENTS AS PER MANUFACTURER'S RECOMMENDATIONS.

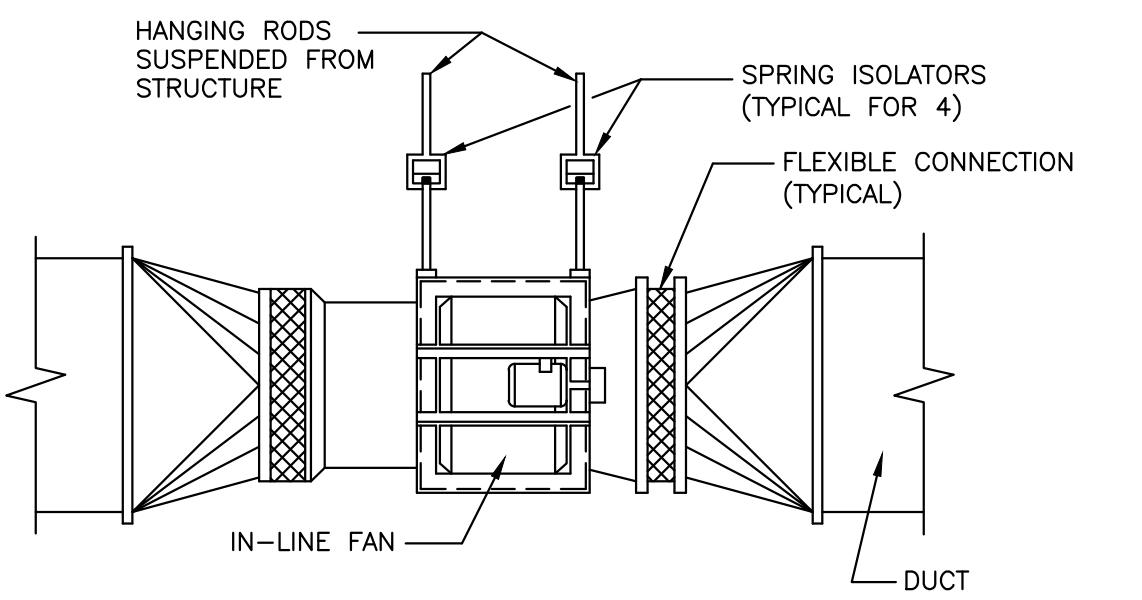
AIR DEVICE SCHEDULE

DESIGNATION	TYPE	AIR FLOW RANGE (CFM)	FACE SIZE	NECK SIZE	P.D. WC	NC	BASIS OF DESIGN
SA REGISTER	SA REGISTER	0-100	8x8	6x6	0.06	13	TITUS-301RS
E.A. GRILLE	E.A. GRILLE	81-140	24x24	-	0.01	-	TITUS-350 FS
E.A. GRILLE	E.A. GRILLE	141-220	24x24	-	0.01	-	TITUS-350 FS
E.A. GRILLE	E.A. GRILLE	221-315	24x24	-	0.01	12	TITUS-350 FS

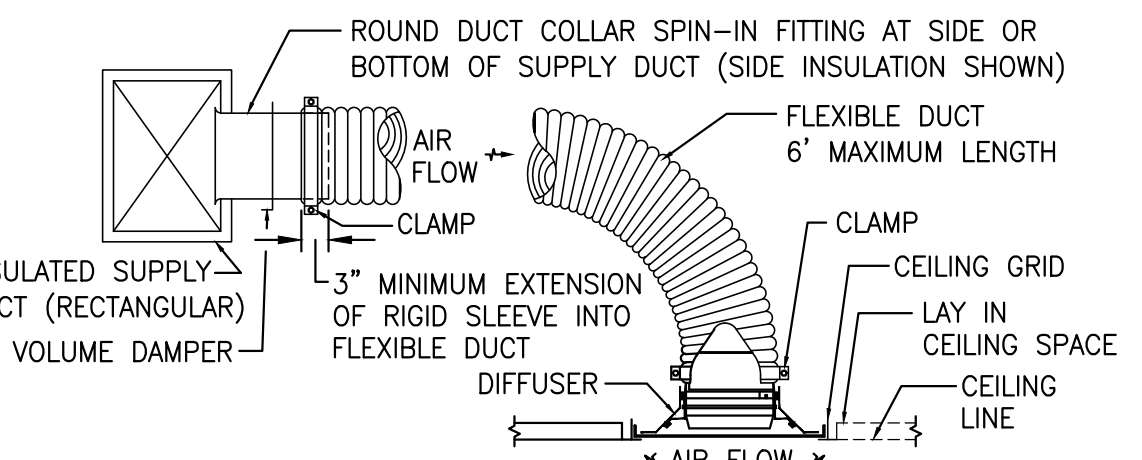
- NOTES:
- ALL FINISH SELECTIONS SHALL BE BY ARCHITECT.
 - PROVIDE BORDER/FRAME AS REQUIRED FOR INTENDED CEILING INSTALLATION.
 - PROVIDE VOLUME DAMPER ON ALL AIR DEVICES
 - AIR DEVICE SHALL BE ALUMINUM MATERIALS.



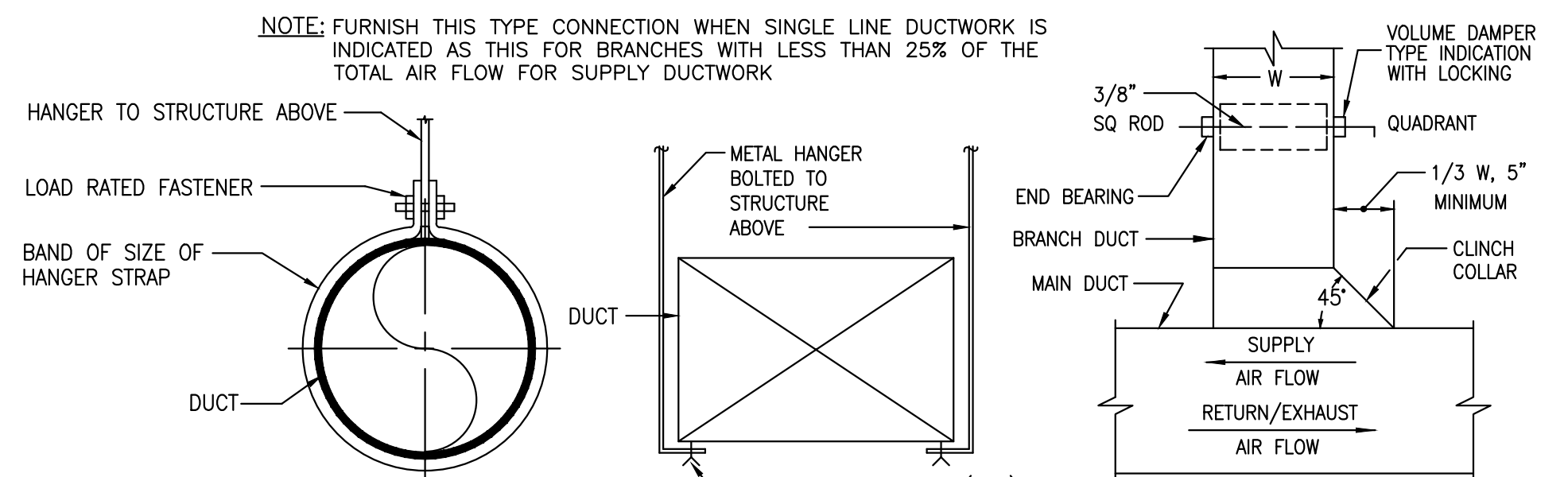
CEILING EXHAUST FAN DETAIL
NO SCALE



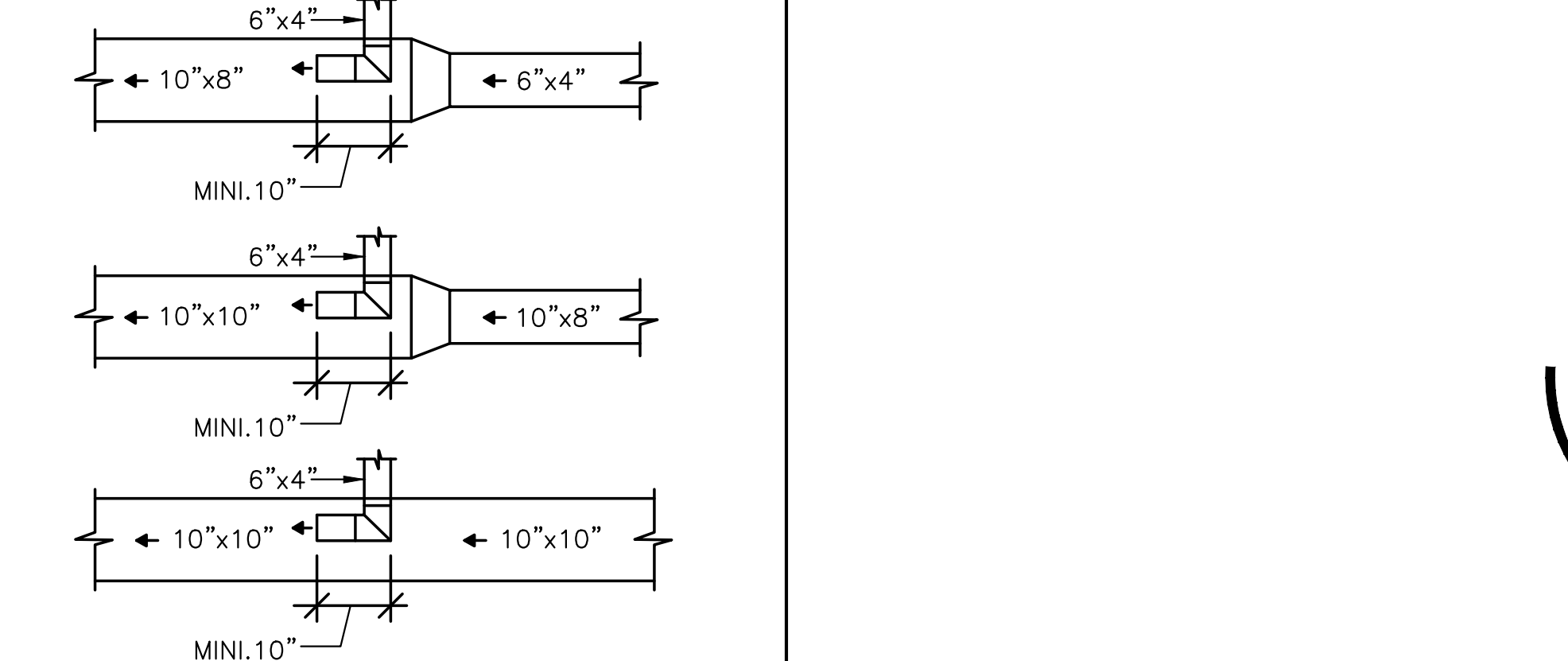
INLINE FAN DETAIL
NO SCALE



TYPICAL DUCT BRANCH DETAIL
NO SCALE



TYPICAL DUCT SUPPORT AND DUCT TAP DETAIL
NO SCALE



DETAIL-"A"
SCALE: NOT TO SCALE

NEW WORK FLOOR PLAN (ALT #1), SCHEDULES AND DETAILS

BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

SHEET No.

M-3

ELECTRICAL ABBREVIATIONS

A	AMP
AFF	ABOVE FINISHED FLOOR
AIC	AMPS INTERRUPTING CAPACITY
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CU	COPPER
DN	DOWN
EC	EMPTY CONDUIT
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FSS	FUSED SAFETY SWITCH
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HP	HORSE POWER
IBC	INTERNATIONAL BUILDING CODE
KVA	KILOVOLT AMPS
KW	KILOWATTS
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFSS	NON FUSED SAFETY SWITCH
P	POLE
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT AMPS
W	WATTS
WP	WEATHERPROOF

ELECTRICAL NOTES

- IT IS THE INTENT OF THESE DRAWINGS AND OTHER RELATED DOCUMENTS TO PRODUCE A COMPLETE AND FUNCTIONING ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TESTS, AND OTHER SERVICES AS MAY BE NECESSARY TO ACHIEVE THIS PRODUCT. THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THE PLANS AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK AND EXTRA COST CLAIMS BASED ON DISCREPANCIES ON THE PLANS WILL NOT BE CONSIDERED.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES HAVING JURISDICTION. ALL EQUIPMENT, DEVICES, AND MATERIAL SHALL BE LISTED WITH UNDERWRITERS LABORATORIES FOR ITS APPLICATION AS INSTALLED AND SHALL BEAR THE UL LABEL.
- THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY SUCH FEES AS MAY BE NECESSARY FOR INSPECTIONS, TESTS, AND OTHER SERVICES WHICH ARE REQUIRED FOR THE COMPLETION OF HIS WORK.
- THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CONDITIONS OF THE PREMISES AND THE CHARACTER AND EXTENT OF WORK REQUIRED PRIOR TO SUBMISSION OF BIDS. ANY DIFFICULTIES IN COMPLYING WITH THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT BEFORE BIDDING.
- ELECTRICAL PLANS ARE DIAGRAMMATIC. DO NOT SCALE DRAWINGS.
- CONSULT PLANS OF ALL OTHER TRADES FOR COORDINATION AND FOR RELATED AND ADJOINING WORK.
- CONSULT ARCHITECTURAL AND STRUCTURAL PLANS AND DETAILS FOR CONSTRUCTION HEADROOM, ROOM FINISHES, CEILINGS, ETC.
- SEE REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.
- CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY SPACING THE CIRCUITS IN THE PANEL AND BALANCE THE LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS.
- SHOP DRAWINGS FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE DELIVERY TO THE JOB SITE. EQUIPMENT, FIXTURES, DEVICES, AND MATERIAL DELIVERED TO THE JOB SITE OR INSTALLED PRIOR TO APPROVAL OF THE SHOP DRAWINGS, AND FOR WHICH THE SHOP DRAWINGS ARE SUBSEQUENTLY REJECTED, SHALL BE REPLACED WITH AN APPROVED ITEM AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL VERIFY WIRE SIZES, C/B AND FUSE RATINGS FOR ALL HVAC EQUIPMENT, AND BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES AFFECTING THE WORK PRIOR TO PROCEEDING.
- ALL WORK SHALL BE DONE AT SUCH TIMES AND IN SUCH A MANNER AS WILL LEAST INTERFERE WITH THE MAINTENANCE AND OPERATION OF ALL RELATED OR AFFECTED SYSTEMS. ALL POWER OUTAGES, FIRE ALARM SHUT DOWNS, ETC SHALL BE COORDINATED WITH OWNER.
- CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SIZING OF ALL MOTOR OVERLOAD DEVICES (HEATERS) IN STARTERS BASED ON ACTUAL NAMEPLATE RATINGS ON THE EQUIPMENT BEING INSTALLED.
- HORSEPOWER RATINGS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.
- CONTRACTOR SHALL NOTE U.L. LABELS ON PACKAGED TYPE MECHANICAL EQUIPMENT. IF U.L. LABEL ON MECHANICAL EQUIPMENT TO ACTUALLY BE INSTALLED CALLS FOR THE OVER CURRENT PROTECTIVE DEVICE TO BE FUSES, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A FUSED DISCONNECT SWITCH WITH PROPER SIZE FUSES AT THE SWITCH LOCATION INDICATED ON DRAWINGS AT NO ADDITIONAL CHARGE TO THE OWNER.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR OR CEILING CONTRACTOR TO INSURE THAT ALL RECESSED LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. LIGHTING FIXTURES SHOULD NOT BE ORDERED UNTIL TYPE OF CEILING HAS BEEN VERIFIED.
- LIGHTING FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE.
- THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT.
- ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FT. SHALL BE PROVIDED WITH A PULL WIRE OF FISH TAPE/CORD.
- ALL CONDUCTORS, RACEWAYS AND CABLES SHALL BE CONCEALED IN CEILING OR WALL UNLESS INDICATED OTHERWISE.
- OPENINGS IN EXISTING BUILDING STRUCTURE FOR PASSAGE OF CONDUITS/CABLES SHALL NOT BE CUT UNTIL THE CONTRACTOR HAS ASKED FOR AND RECEIVED WRITTEN APPROVAL FROM THE ARCHITECT.
- THE LIGHTING FIXTURES SHALL BE FURNISHED AND INSTALLED COMPLETE WITH ALL ACCESSORIES (INCLUDING LAMPS) BY THE ELECTRICAL CONTRACTOR.
- SYMBOLS SHOWN ON THIS SHEET ARE STANDARD SYMBOLS AND MAY NOT NECESSARILY ALL BE APPLICABLE TO THIS PROJECT.
- THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
- ALL PENETRATIONS OF FLOOR AND WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH IBC, NEC AND NFPA.
- CONDUCTORS SHALL BE INSTALLED CONTINUOUS BETWEEN DEVICES, WITH SPLICES LOCATED ONLY IN JUNCTION BOXES OR IN CABINETS. CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO REACH THE FARTHEST TERMINAL IN PANELS. A MINIMUM OF 6" LOOPS SHALL REMAIN WHERE CONNECTIONS OR TAPS ARE TO BE MADE IN BRANCH CIRCUIT WIRING.
- PROVIDE AN UPDATED TYPED PANEL DIRECTORY IN EACH PANEL AFTER COMPLETION OF WORK.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AS BUILT DRAWINGS AND ALL MANUFACTURERS DATA AND WARRANTY LITERATURE AT THE COMPLETION OF THE CONTRACT.
- IF CEILING SPACE IS USED AS PLENUM, APPROPRIATE WIRING SHALL BE USED.
- STARTERS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR, AND INSTALLED BY ELECTRICAL CONTRACTOR AS PER MANUFACTURER'S RECOMMENDATION. COORDINATE EXACT LOCATIONS AND REQUIREMENTS.
- PER NEC 210.4 (B), CIRCUIT BREAKERS FEEDING MULTIWIRE BRANCH CIRCUITS SHALL BE SIMULTANEOUSLY DISCONNECTED WITH IDENTIFIED HANDLE TIE.

EQUIPMENT SPECIFICATIONS

- LIGHT FIXTURES:**
 - BALLAST FOR LIGHTING FIXTURES SHALL OPERATE THE SPECIFIED LAMPS. ELECTRONIC BALLAST SHALL HAVE A POWER FACTOR GREATER THAN .95, LESS THAN 10% HARMONIC DISTORTION, AND 32 WATTS PER LAMP OR LESS INPUT POWER. ALL LAMPS SHALL BE LOW MERCURY TYPE. ALL LIGHT FIXTURES SHALL BE ENERGY STAR LABELED.
 - THE ELECTRICAL CONTRACTOR SHALL PROVIDE SPARE LAMPS EQUAL TO 15% OF THE TOTAL OF ALL LIGHTING FIXTURES INSTALLED ON THE PROJECT.
- RACEWAY:**
 - MINIMUM SIZE OF THE CONDUIT SHALL BE 3/4".
 - PROVIDE FLEXIBLE CONDUIT FOR MOTOR CONNECTIONS, AND FOR OTHER ELECTRICAL EQUIPMENT CONDITIONS, WHERE SUBJECT TO MOVEMENT AND VIBRATION. 18" MAXIMUM LENGTH.
 - PROVIDE LIQUID TIGHT FLEXIBLE CONDUIT FOR CONNECTION OF MOTOR AND FOR OTHER ELECTRICAL EQUIPMENT WHERE SUBJECT TO MOVEMENT AND VIBRATION, AND ALSO WHERE SUBJECT TO ONE OR MORE OF THE FOLLOWING CONDITIONS, UNLESS NOTED OTHERWISE:
 - MOIST AND HUMID ATMOSPHERE WHERE CONDENSATE CAN BE EXPECTED TO ACCUMULATE.
 - CORROSIVE ATMOSPHERE.
 - SUBJECT TO DRIPPING OIL, GREASE OR WATER.
 - ALL CONDUITS SHALL BE GROUNDED PER NEC. CONDUITS ENTERING THE OUTLET BOXES, PANEL CABINETS ETC. MUST BE FITTED WITH A DOUBLE LOCKNUT AND BUSHING.
 - PROVIDE RIGID STEEL, THREADED, THICK WALL CONDUIT, GALVANIZED OR EMT FOR ALL PANEL FEEDERS, AND ALL EXPOSED WIRING IN UNFINISHED AREAS.
 - ALL WIRE RACEWAYS IN OR PASSING THROUGH CONCRETE WALLS, SLABS, OR UNDERGROUND SHALL BE GALVANIZED RIGID STEEL THREADED CONDUIT.
- WIRES AND CABLES:**
 - ALL WIRE AND CABLE SHALL BE COPPER WITH THHN/THWN INSULATION AND ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS WITH 75°C INSULATION UNLESS INDICATED OTHERWISE. ALL CONNECTORS, LUGS, ETC. SHALL BE LISTED FOR 75°C.
 - PROVIDE WIRING NOT SMALLER THAN #12 AWG FOR THE POWER DISTRIBUTION, AND NOT SMALLER THAN #14 AWG FOR THE FIRE ALARM SYSTEM. ARMORED METAL CABLE OR METAL CLAD CABLE, WHERE CONCEALED, MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION AND IN COMPLIANCE WITH APPLICABLE CODES.
 - ALL CIRCUITS 120/208 VOLT OVER 100 FEET AND ALL 277/480 VOLT CIRCUITS OVER 200 FEET FROM PANEL TO FIRST OUTLET SHALL HAVE CONDUCTORS ONE SIZE LARGER THAN NORMALLY REQUIRED WHETHER INDICATED ON PANEL SCHEDULE OR NOT.
 - CONDUCTORS INSTALLED UNDERGROUND OR IN THE WET LOCATIONS SHALL BE U.L. LISTED PER NEC, AND SHALL BE SUITABLE FOR WET LOCATIONS.
- ELECTRICAL BOXES AND FITTINGS:**
 - ALL BOXES AND FITTINGS SHALL BE OF CODE-GAUGE STEEL.
 - JUNCTION AND PULL BOXES: PROVIDE GALVANIZED CODE-GAUGE SHEET STEEL JUNCTION AND PULL BOXES WITH SCREW-ON COVER OF TYPES, SHAPES AND SIZES TO SUIT EACH RESPECTIVE LOCATION AND INSTALLATION, WITH WELDED SEAMS AND EQUIPPED WITH STAINLESS STEEL NUTS, SCREWS, AND WASHERS.
 - PROVIDE WEATHERPROOF OUTLETS FOR INTERIOR AND EXTERIOR LOCATIONS EXPOSED TO WEATHER OR MOISTURE.
 - ALL PULL BOXES SHALL BE FABRICATED FROM #12 OR HEAVIER GAUGE GALVANIZED STEEL AS REQUIRED BY THE NEC, AND SHALL BE EQUIPPED WITH SCREW FASTENED COVER.
- WIRING DEVICES:**
 - PROVIDE DUPLEX, SPECIFICATION GRADE RECEPTACLES 2 POLE, 3 WIRE GROUNDING WITH GREEN HEXAGONAL EQUIPMENT GROUND SCREWS, GROUND TERMINALS AND POLES INTERNALLY CONNECTED TO MOUNTING YOKE, 20 AMPERES, 125 VOLTS, WITH METAL PLASTER EARS, SIDE WIRING, NEMA CONFIGURATION 5-20R. HUBBELL CAT. NO. HBL5362 OR EQUAL.
 - SWITCHES, 20 AMPS, 120/277 VOLTS, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SWITCH HANDLE, AND SIDE WIRED SCREW TERMINALS.
 - ALL SWITCHES AND RECEPTACLES SHALL BE OF WHITE COLOR WITH MATCHING COVER PLATES, OR AS SELECTED BY ARCHITECT.
 - ALL DEVICES INSTALLED IN THE LOCATION EXPOSED TO AMBIENT CONDITIONS SHALL BE WEATHERPROOF.
- PANELBOARDS:**
 - PANELBOARD BUSBARS SHALL BE COPPER.
 - PANELBOARD ENCLOSURES: PROVIDE GALVANIZED SHEET STEEL CABINET, CODE-GAUGE, GUTTERS. PROVIDE FRONTS WITH ADJUSTABLE TRIM CLAMPS, AND DOORS WITH CONCEALED PIANO DOOR HINGES AND DOOR SWINGS AS INDICATED. EQUIPMENT WITH INTERIOR CIRCUIT-DIRECTORY FRAME AND CARD WITH CLEAR PLASTIC COVERING. PROVIDE BAKED GRAY ENAMEL FINISH OVER A RUST INHIBITOR COATING. DESIGN ENCLOSURES FOR RECESSED/SURFACE MOUNTING AS INDICATED. PROVIDE ENCLOSURES WHICH ARE FABRICATED BY SAME MANUFACTURERS AS PANELBOARDS WHICH MATE AND MATCH PROPERLY WITH PANELBOARD TO BE ENCLOSED.
 - CABINETS FOR DISTRIBUTION PANELS SHALL HAVE 6 INCHES OF GUTTER SPACE ON ALL SIDES. PANELBOARDS AND LIGHTING PANELS SHALL HAVE A MINIMUM OF 5" ON ALL SIDES.
 - ALL PANELBOARDS SHALL BE EQUIPPED WITH COMMON KEYED LOCKS. PROVIDE MINIMUM OF ONE KEY PER PANEL PLUS (6) SPARES.
 - PANELBOARDS SHALL BE AS INDICATED ON THE DRAWINGS, WITH BOLT-ON MOLDED CASE CIRCUIT BREAKERS AND COPPER BUS BARS. CIRCUIT BREAKERS AND INTERIORS SHALL BE OF THE SAME MANUFACTURER AND UL LISTED. THE PANELBOARDS SHALL COMPLY WITH ALL APPLICABLE STANDARDS.
- DISCONNECT SWITCHES:**
 - DISCONNECT SWITCHES SHALL BE TYPE HD, HEAVY DUTY, FUSIBLE OR NON-FUSIBLE, AS NOTED, SINGLE THROW, 600-V AC, 1200 A AND SMALLER: UL 98 AND NEMA KS 1, HORSEPOWER RATED, WITH CLIPS OR BOLT PADS TO ACCOMMODATE INDICATED FUSES, LOCKABLE HANDLE WITH CAPABILITY TO ACCEPT TWO PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.

ELECTRICAL SYMBOLS

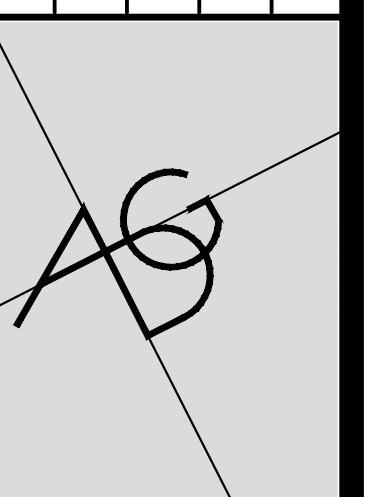
- NOTE: THESE SYMBOLS ARE STANDARD AND ALL MAY NOT BE APPLICABLE TO THIS JOB. ALL MOUNTING HEIGHTS ARE STANDARD UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- FLUORESCENT OR LED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE.
 - LIGHTING FIXTURE ON EMERGENCY CIRCUIT OR WITH EMERGENCY BATTERY BACK-UP.
 - CEILING MOUNTED LIGHTING FIXTURE.
 - WALL MOUNTED LIGHTING FIXTURE.
 - EXIT SIGN. CONNECT TO UNSWITCHED HOT-LEG OF CIRCUIT INDICATED.
 - BATTERY PACK. CONNECT TO UNSWITCHED HOT-LEG OF CIRCUIT INDICATED.
 - BRANCH CIRCUIT WIRING CONCEALED IN WALLS OR CEILING. NUMBER OF HASHES INDICATES NUMBER OF WIRES AND SHOWN ONLY WHERE REQUIRED FOR CLARITY.
 - BRANCH CIRCUIT WIRING RUN UNDER GROUND OR UNDER SLAB.
 - HOME RUN TO PANELBOARD. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS IN HOME RUN.
 - FLUSH MOUNTED SWITCH, +48" AFF.
 - 3 WAY OR 4 WAY FLUSH MOUNTED SWITCH, +48" AFF.
 - FLUSH MOUNTED DIMMER SWITCH, +48" AFF. LUTRON NOVA SERIES OR EQUAL. SIZE AS REQUIRED.
 - MOTOR RATED SWITCH WITH THERMAL OVERLOAD PROTECTION.
 - FLUSH MOUNTED SWITCH WITH OCCUPANCY SENSOR, +48" AFF.
 - CEILING MOUNTED OCCUPANCY SENSOR.
 - FLUSH MOUNTED SWITCH WITH PILOT LIGHT, +48" AFF.
 - JUNCTION BOX, SIZE AS REQUIRED.
 - DUPLEX RECEPTACLE, NEMA 5-20R, +18" AFF, U.O.N.
 - DOUBLE DUPLEX (QUAD) RECEPTACLE, NEMA 5-20R, +18" AFF.
 - DUPLEX RECEPTACLE, NEMA 5-20R, FLOOR MOUNTED.
 - SINGLE RECEPTACLE, NEMA CONFIGURATION AS NOTED, +18" AFF.
 - COMBINATION TV OUTLET AND DUPLEX RECEPTACLE, NEMA 5-20R, +18" A.F.F. TV OUTLET WITH 1" EC TO ACCESSIBLE CEILING SPACE. CABLING BY TENANTS/OWNERS VENDOR.
 - COMMUNICATIONS OUTLET, +18" AFF, UON. PROVIDE PLASTER RING WITH PULL STRING TO ACCESSIBLE CEILING SPACE. CABLING BY TENANTS/OWNERS VENDOR.
 - DATA/TELEPHONE OUTLET. FLOOR MOUNTED. PROVIDE 1" EC TO ACCESSIBLE CEILING SPACE. CABLING BY TENANTS/OWNERS VENDOR.
 - PHOTO-CELL, WALL MOUNT +10'0" A.F.F.
 - 120/208 VOLT PANELBOARD.
 - MOTOR CONNECTION.
 - DISCONNECT SWITCH. 600V, POLES, AMPS, AND FUSING TO MATCH CIRCUIT BREAKER.
 - MOTOR STARTER.
 - ENCLOSED CIRCUIT BREAKER.
 - CEILING SPEAKER, FLUSH MOUNTED.
 - GROUND PER NEC ARTICLE 250.

DEMO/NEW WORK LEGEND

- (E) DENOTES EXISTING TO REMAIN.
- (R) DENOTES EXISTING TO BE REMOVED.
- (RE) DENOTES EXISTING TO BE REMOVED AND RELOCATED.
- (ER) DENOTES NEW LOCATION OF EXISTING ITEM. (*)
- (N) DENOTES NEW TO MATCH EXISTING.
- (*) EXTEND BRANCH CIRCUIT WIRING AS REQUIRED. MAINTAIN INTEGRITY OF EXISTING SYSTEMS.

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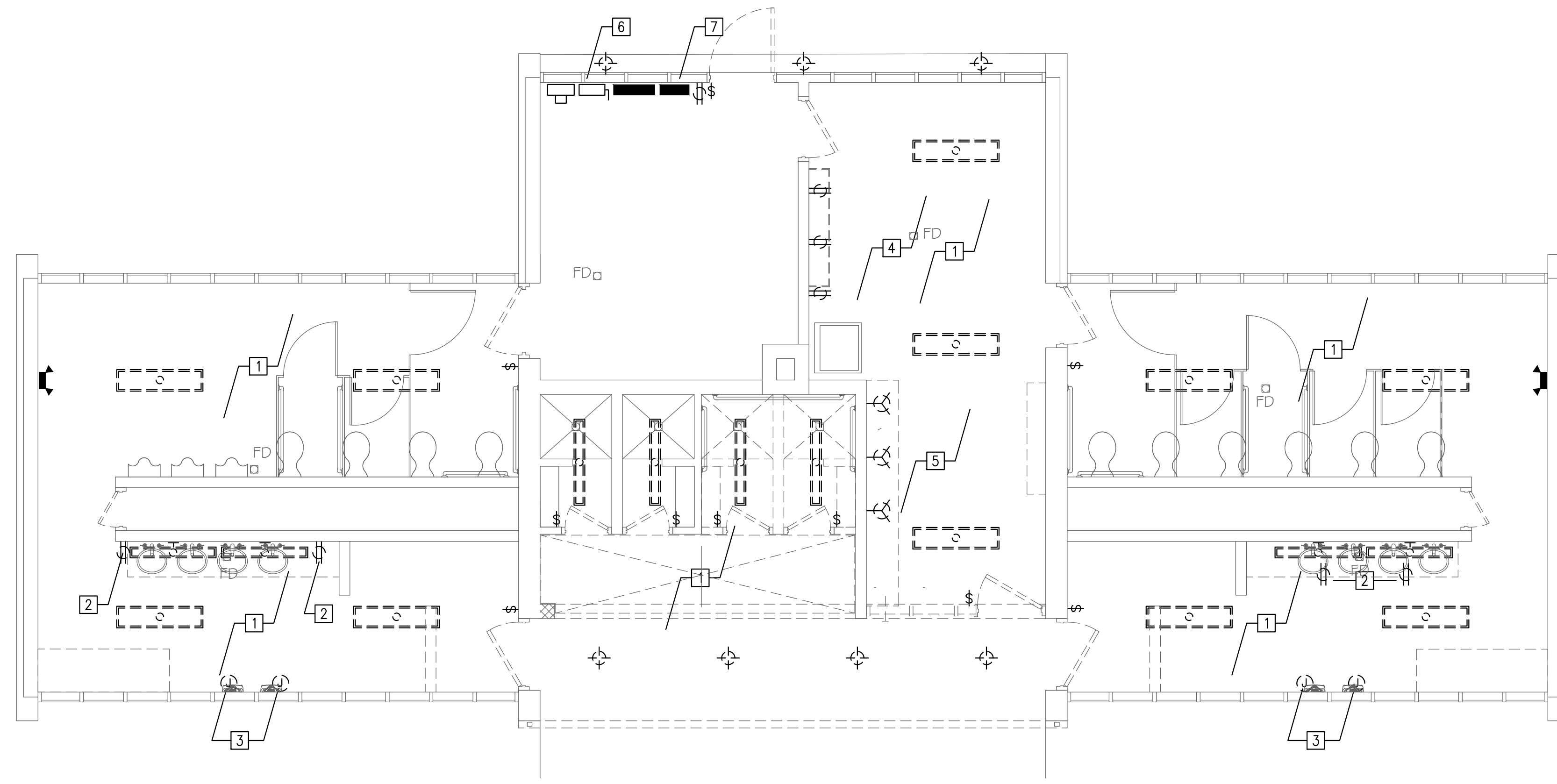
DATE: 09/16/2019
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SHEET No.

E-1

ELECTRICAL DEMOLITION NOTES

1. CONTRACTOR SHALL REMOVE ALL EXISTING WORK THAT WILL NOT BE REUSED DURING NEW CONSTRUCTION. LEAVING THE BUILDING FREE AND CLEAN OF OLD SYSTEMS.
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING, AND WATERPROOFING INTEGRITY IN ALL CASES.
4. ALL REMOVED ITEMS SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR DISPOSAL UNLESS OTHERWISE DIRECTED. CONTRACTOR SHALL COORDINATE FOR ITEMS THAT SHALL BE RETURNED TO OWNER. OTHER ITEMS THAT ARE NOT REQUIRED TO BE TURNED IN SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR DISPOSAL.
5. DEMOLITION SHALL BE WELL COORDINATED TO MINIMIZE DOWN TIME OF SYSTEMS THAT WILL REMAIN IN OPERATION.
6. PROVIDE CAP OFF CONNECTIONS FOR ALL REMOVED OR CUT OFF WORK THAT WILL NOT BE RECONNECTED DURING THE NEW WORK PHASE AND WILL BE REQUIRED TO REMAIN IN OPERATION.
7. REMOVE ALL EXPOSED, ELECTRICAL SERVICES THAT ARE NOT GOING TO BE REUSED IN NEW WORK BACK TO SOURCE.
8. WHEN DEMOLITION WORK IS AFFECTING EXISTING UTILITIES SERVING BASE BUILDING, CONTRACTOR SHALL RELOCATE, REROUTE, OFFSET IN CEILING SPACE, OR UNDER FLOOR SLAB. (SAW CUT SLAB WHEN REQUIRED) AND RELOCATE ALL SERVICES IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND GOOD PRACTICE OF TRADES. COORDINATE WITH BUILDING OWNER REPRESENTATIVE, AND MAKE PROVISIONS FOR TEMPORARY SERVICES AS REQUIRED. CONTRACTOR SHALL COORDINATE AND GIVE ADEQUATE NOTICE TO BUILDING OWNER OR ITS REPRESENTATIVE PRIOR TO WORK IN ANY BASE BUILDING UTILITIES.
9. ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED SHALL BE REMOVED UNLESS OTHERWISE NOTED. MAINTAIN CIRCUIT CONTINUITY FOR DEVICES THAT REMAIN.
10. SUPPORT ALL CEILING MOUNTED DEVICES INDEPENDENT OF CEILING GRIDS & TILES, WHICH WILL BE REMOVED & REINSTALLED WHEN NEW WALLS ARE CONSTRUCTED.



FLOOR PLAN-ELECTRICAL DEMOLITION

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

PLAN KEYED NOTES

1. ALL EXISTING LIGHT FIXTURES, AND CONTROLS TO BE REMOVED AND REPLACED. ASSOCIATED BRANCH CIRCUIT WIRING TO BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO NEW WORK PLAN.
2. EXISTING DUPLEX RECEPTACLE, TO BE REMOVED AND REPLACED. ASSOCIATED BRANCH CIRCUIT WIRING TO BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO NEW WORK PLAN.
3. EXISTING HAND DRYER, TO BE REMOVED AND REPLACED. ASSOCIATED BRANCH CIRCUIT WIRING TO BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO NEW WORK PLAN.
4. EXISTING CLOTHES WASHERS TO BE REMOVED AND REPLACED. ASSOCIATED BRANCH CIRCUIT WIRING TO BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO NEW WORK PLAN.
5. EXISTING CLOTHES DRYERS TO BE REMOVED AND REPLACED. ASSOCIATED BRANCH CIRCUIT WIRING TO BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO NEW WORK PLAN.
6. EXISTING ELECTRICAL SERVICE, METER, SERVICE DISCONNECT SWITCH AND PANELBOARD TO BE REMOVED AND REPLACED. REFER TO NEW WORK PLAN.
7. EXISTING SUB-PANEL TO REMAIN. REFER TO NEW WORK PLAN.

DEMO/NEW WORK LEGEND

- (E) DENOTES EXISTING TO REMAIN.
- (R) DENOTES EXISTING TO BE REMOVED.
- (RE) DENOTES EXISTING TO BE REMOVED AND RELOCATED.
- (ER) DENOTES NEW LOCATION OF EXISTING ITEM. (*)
- (N) DENOTES NEW TO MATCH EXISTING.
- (*) EXTEND BRANCH CIRCUIT WIRING AS REQUIRED. MAINTAIN INTEGRITY OF EXISTING SYSTEMS.

THE PLANS, IDEAS, ARRANGEMENTS, AND DESIGNS INDICATED OR REPRESENTED BY THIS DRAWING (S) ARE OWNED BY, AND ARE THE PROPERTY OF FRANK V. STURGEON, ARCHITECT, AND ARE INTENDED ONLY IN CONNECTION WITH THIS SPECIFIC PROJECT. THESE DRAWINGS SHALL NOT BE USED, IN WHOLE OR IN PART FOR ANY OTHER PURPOSE FOR WHICH THEY WERE NOT ORIGINALLY INTENDED WITHOUT WRITTEN PERMISSION FROM FRANK V. STURGEON, AIA ARCHITECT. © 2017 FRANK V. STURGEON, AIA ARCHITECT EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS, SPECIFICATIONS, AND IDEAS. THESE DOCUMENTS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED (ELECTRONICALLY OR MANUALLY) IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT OBTAINING WRITTEN PERMISSION OR CONSENT FROM FRANK V. STURGEON, AIA ARCHITECT. © 2017

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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

SHEET No.

ELECTRICAL DEMOLITION PLANS

E-2

PANEL 'BH' 120/240 VOLTS 1 PHASE 3 WIRE 400 AMPS
(FED FROM SERVICE SWITCH) SOLID NEUTRAL: YES NEMA TYPE: 1 400 A MAIN CKT. BKR.
LOCATION: UTILITY ROOM GROUND BUS: YES A.I.C. SYM 30K STD. FRAME YES SURFACE MOUNTING

REMARKS: PANELBOARD AND CIRCUIT BREAKERS ARE NEW TO REPLACE EXISTING.

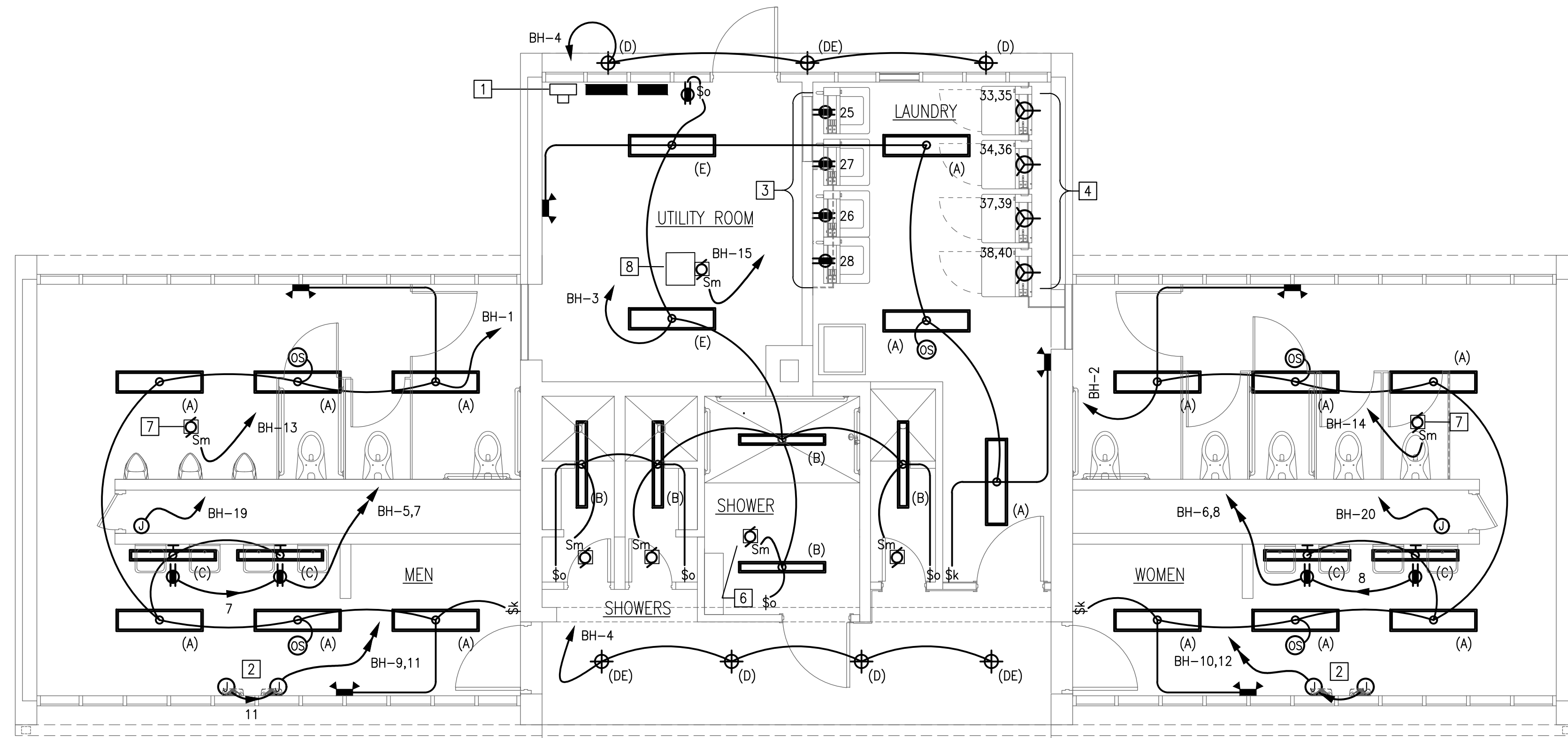
DESCRIPTION	CONNECTED KVA	C.B. AMPS		C.B. AMPS		CONNECTED KVA	DESCRIPTION
		P	TRIP NO.	NO.	P		
LIGHTING-MENS	0.5	1	20	1	2	1	LIGHTING-WOMEN
LIGHTING-UTILITY	0.8	1	20	3	4	1	LIGHTING-EXTERIOR*
RECEPTACLES-MEN	1.2	1	20	5	6	1	RECEPT.-WOMEN
RECEPTACLES-WOMEN	1.2	1	20	7	8	1	RECEPT.-WOMEN
HAND DRYER-MEN	1.0	1	20	9	10	1	HAND DRYER-WOMEN
HAND DRYER-WOMEN	1.0	1	20	11	12	1	HAND DRYER-WOMEN
EXHAUST FAN-MEN	0.7	1	20	13	14	1	EXHAUST FAN-WOM
(E) GAS FURNACE	1.2	1	20	15	16	1	(E) GAS WTR HTR
(E) ATTIC EXH FAN	0.7	1	20	17	18	1	SPARE
(E) PIPE TUNNEL	0.3	1	20	19	20	1	(E) PIPE TUNNEL
SPARE	0.0	1	20	21	22	1	(E) UNIT HEATER
SPARE	0.0	1	20	23	24	1	SPARE
CLOTHES WASHER	1.2	1	20	25	26	1	CLOTHES WASHER
CLOTHES WASHER	1.2	1	20	27	28	1	CLOTHES WASHER
SPARE	0.0	1	20	29	30	1	SPARE
SPARE	0.0	1	20	31	32	1	SPARE
CLOTHES DRYER	5.0	2	30	33	34	2	CLOTHES DRYER
CLOTHES DRYER	5.0	2	30	35	36	2	CLOTHES DRYER
SPARE	0.0	2	30	37	38	2	SPARE
SPARE	0.0	2	30	39	40	2	SPARE
(E) CABIN No. 7	9.6	2	50	41	42	2	(E) CABIN No. 9
(E) CABIN No. 8	9.6	2	50	43	44	2	(E) CABIN No. 9
(E) CABIN No. 9	9.6	2	50	45	46	2	(E) CABIN No. 9
(E) PANEL 'BH2'	21.2	2	125	47	48	2	SPACE
SPACE	0.0	1	53	49	50	1	SPACE
SPACE	0.0	1	53	51	52	1	SPACE
SPACE	0.0	1	53	53	54	1	SPACE
SPACE	0.0	1	53	55	56	1	SPACE
SPACE	0.0	1	53	57	58	1	SPACE
SPACE	0.0	1	53	59	60	1	SPACE

NOTE: RECONNECT EXISTING BRANCH CIRCUITS WHICH REMAIN IN USE AS REQUIRED.

* CONNECT THRU PHOTO-CELL/TIME CLOCK.
CONNECTED LOAD: 84.0 KVA = 350.0 AMPS.
DEMAND LOAD: 84.5 KVA = 352.1 AMPS.

PLAN KEYED NOTES

- NEW ELECTRICAL SERVICE, METER, AND PANEL BOARD REFER TO RISER AND SCHEDULES ON THIS DRAWING.
- NEW HAND DRYER, 1.0 KW, 120V, 1Ø
- NEW CLOTHES WASHERS, .5 HP, 120V, 1Ø. CIRCUIT TO PANEL 'BH'.
- NEW DRYERS, 5 KW, 240V, 1Ø. CIRCUIT TO PANEL 'BH'
- NOT USED.
- NEW SHOWER EXHAUST FANS, 100 WATTS, 120V, 1Ø. TYPICAL FOR 3.
- NEW TOILET EXHAUST FANS, .25 HP, 120V, 1Ø. TYPICAL FOR 2.
- EXISTING GAS FURNACE, .5 HP, 120V, 1Ø.



FLOOR PLAN-LIGHTING & POWER

SCALE: 1/4" = 1'-0"
NOTE: ALL WORK IS NEW, UNLESS OTHERWISE NOTED.

PANEL 'BH2' 120/240 VOLTS 1 PHASE 3 WIRE 125 AMPS
(FED FROM PANEL BH) SOLID NEUTRAL: YES NEMA TYPE: 1 125 A MAIN LUGS ONLY
LOCATION: UTILITY ROOM GROUND BUS: YES A.I.C. SYM 10K STD. FRAME YES SURFACE MOUNTING

REMARKS: PANEL AND CIRCUIT BREAKERS ARE EXISTING, UNLESS OTHERWISE NOTED.

DESCRIPTION	CONNECTED KVA	C.B. AMPS		C.B. AMPS		CONNECTED KVA	DESCRIPTION
		P	TRIP NO.	NO.	P		
(E) CAMP SITE 93	3.6	2	30	1	2	2	(E) CAMP SITE 97
(E) CAMP SITE 89,90	7.2	2	60	3	4	3	(E) CAMP SITE 98
(E) CAMP SITE 91,92	7.2	2	60	7	8	3	(E) CAMP SITE 95
(E) CAMP SITE 94	9.6	2	90	11	12	3	(E) CABIN No. 8
(E) CAMP SITE 95	9.6	2	90	13	14	3	(E) CABIN No. 8
(E) CAMP SITE 96	9.6	2	90	15	16	3	(E) CABIN No. 8

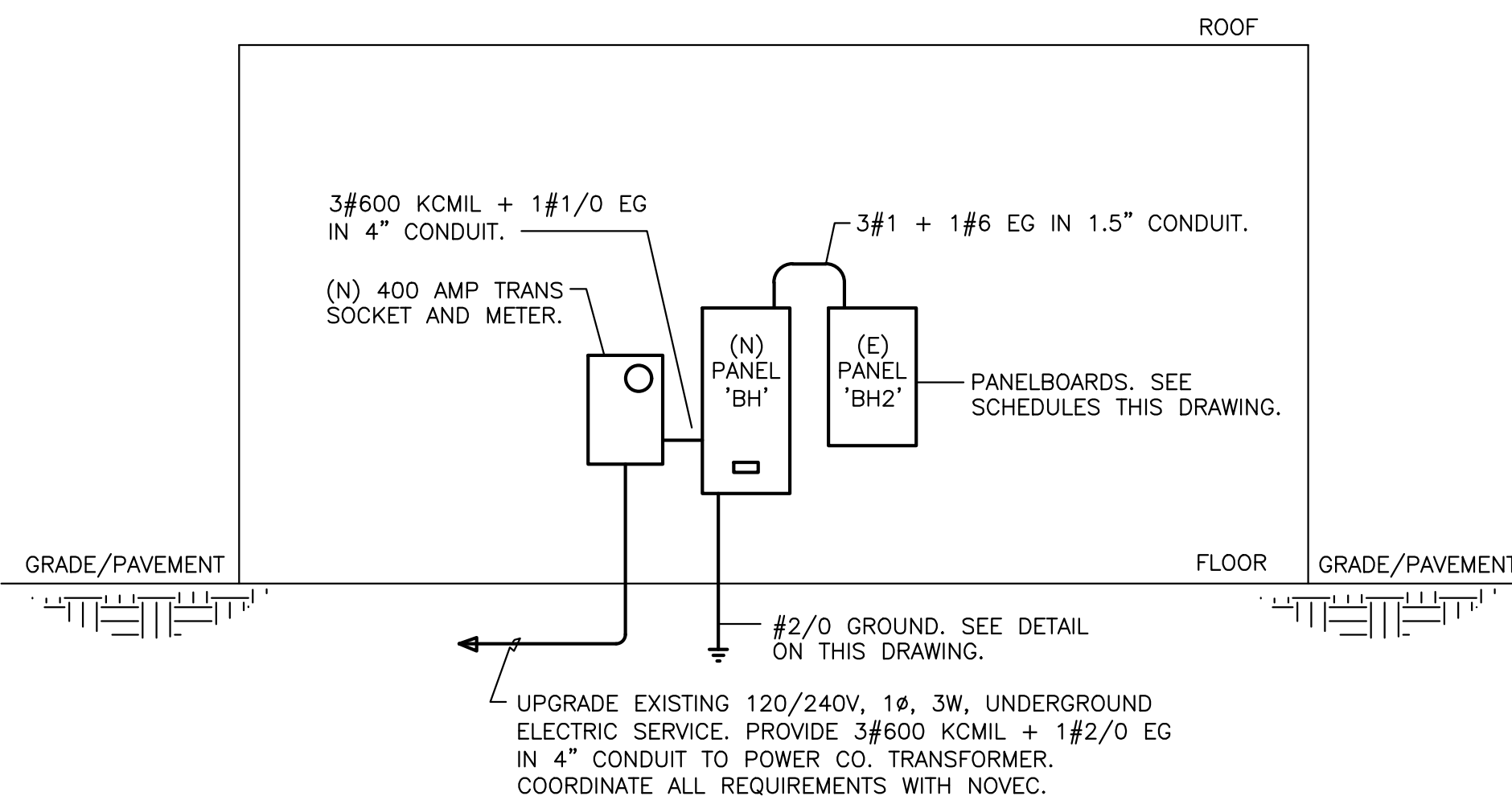
CONNECTED LOAD: 42.0 KVA = 175 AMPS.
DEMAND LOAD: 21.0 KVA = 87.5 AMPS. 50% DF PER NEC 551.73(A)

LIGHTING FIXTURE SCHEDULE

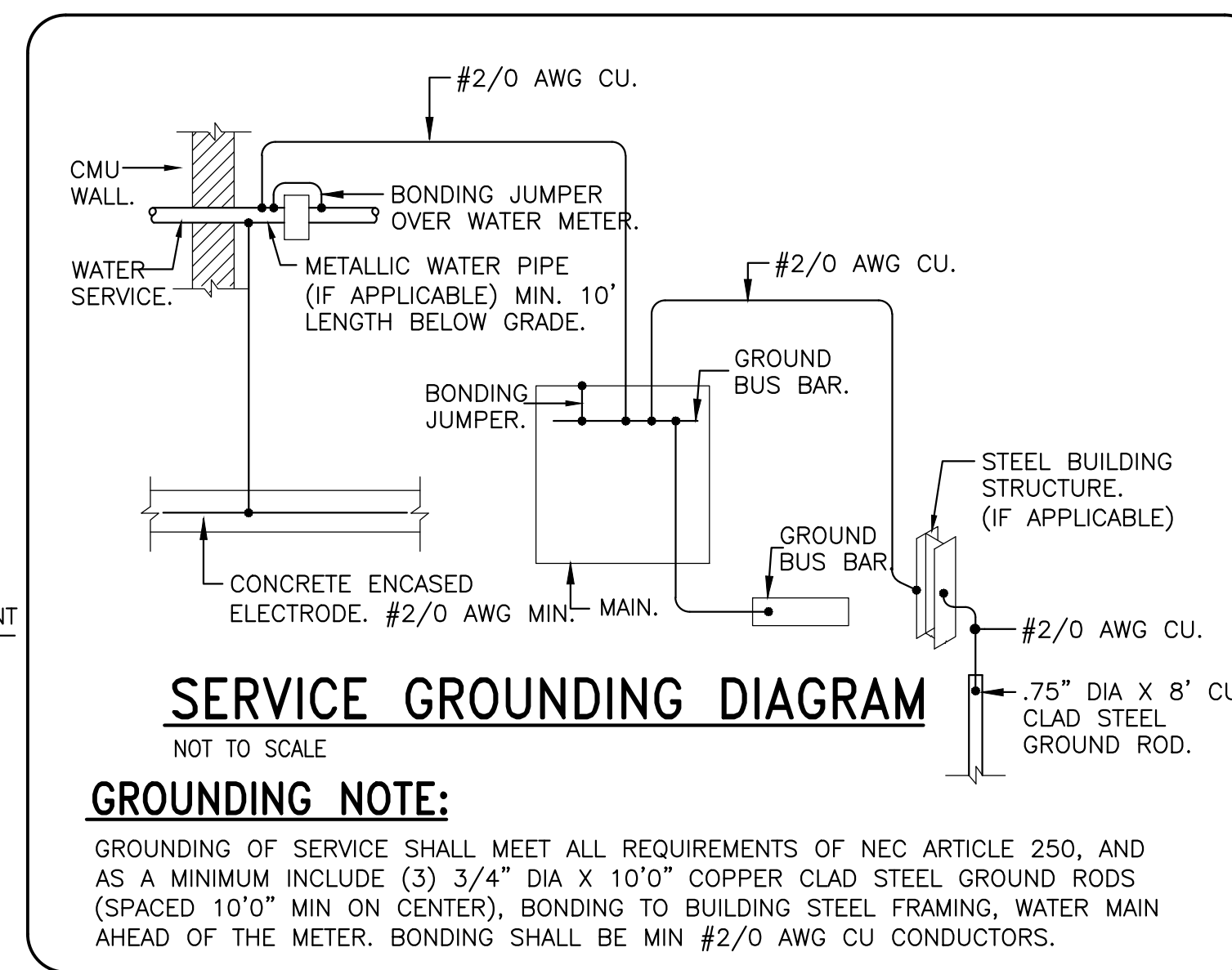
FIXTURE DESIGNATION	FIXTURE TYPE	MANUFACTURER	CATALOG NO.	LAMP		WATTS	QTY	TOTAL	VOLTS	MOUNTING	REMARKS
				NO.	TYPE						
(A)	1' x 4' LINEAR LED LUMINAIRE.	LITHONIA	ALLS4-60L-MVOLT-EZ1-LP835.	1	6000LU/LED	55	17	935	120	SURFACE	
(B)	1' x 4' ENCLOSED LUMINAIRE.	LITHONIA	FEM-L48-40L-LPAFL-MD-MVOLT-GZ10-35K-80CRI-BSL520.	1	4000LU/LED	31	4	124	120	SURFACE	WITH 90 MIN. BATTERY BACK-UP. AND WET LOCATION FITTINGS.
(C)	48" LED VANITY WALL SCONCE.	LITHONIA	FMVCL-48IN-MVOLT-35K-90CRI-BN.	1	2725LU/LED	34	4	136	120	SURFACE	WALL MOUNT ABOVE MIRROR.
(D)	6" LED DOWN LIGHT.	LITHONIA	REAL6CD6-MW-ESL-1000L-35K-MVOLT.	1	1000LU/LED	15	4	60	120	RECESSED	
(DE)	6" LED DOWN LIGHT.	LITHONIA	REAL6CD6-MW-ESL-1000L-35K-MVOLT-ELR.	1	1000LU/LED	15	3	45	120	RECESSED	WITH 90 MIN. BATTERY BACK-UP.
(E)	LED BATTERY PACK WITH 90 MIN. BATTERY BACK-UP.	LITHONIA	EU2-LED-M12-WHITE.	2	LED	2			120	SURFACE	WALL MOUNT +10'0" AFF. UON.
								TOTAL WATTS = 1195			

WIRE & CONDUIT SIZE SCHEDULE
(UNLESS OTHERWISE SHOWN)

CIRCUIT BREAKER TRIP	GROUND WIRE SIZE	1 OR 2 POLE		3 POLE	
		CONDUIT INCHES	WIRE SIZE	CONDUIT INCHES	WIRE SIZE
15A	1#12	.75"	#12	.75"	#12
20A	1#12	.75"	#12	.75"	#12
30A	1#10	.75"	#10	.75"	#10
40A	1#10	.75"	#8	.75"	#8
50A	1#10	1"	#6	1"	#6
60A	1#10	1"	#4	1.25"	#4
70A	1#8	1"	#4	1.25"	#4
80A	1#8	1.25"	#3	1.25"	#3
90A	1#8	1.25"	#2	1.25"	#2
100A	1#8	1.5"	#1	1.5"	#1
125A	1#6			1.5"	#1
150A	1#6			2"	#1/0
175A	1#6			2"	#1/0
200A	1#6			2"	#3/0
225A	1#4			2.5"	#4/0
250A	1#4			2.5"	#250
300A	1#4			2.5"	#350
350A	1#3			3.5"	#500
400A	1#3			3.5"	#600



ELECTRICAL RISER DIAGRAM
NOT TO SCALE



SERVICE GROUNDING DIAGRAM
NOT TO SCALE

GROUNDING NOTE:
GROUNDING OF SERVICE SHALL MEET ALL REQUIREMENTS OF NEC ARTICLE 250, AND AS A MINIMUM INCLUDE (3) 3/4" DIA X 10'0" COPPER CLAD STEEL GROUND RODS (SPACED 10'0" MIN ON CENTER), BONDING TO BUILDING STEEL FRAMING, WATER MAIN AHEAD OF THE METER. BONDING SHALL BE MIN #2/0 AWG CU CONDUCTORS.

INTERIOR LIGHTING CALCULATIONS

RESTROOM SPACE = 1500 SQ. FT.
LIGHTING POWER BUDGET ALLOWANCE @ 0.98/SQ. FT. = 1470 WATTS.
INSTALLED LIGHTING FIXTURES = 1195 WATTS.

EGRESS NOTE:

MEANS OF EGRESS ILLUMINATION COMPLIES WITH IBC 1006.3 AT ALL EXIT DISCHARGE LOCATIONS.

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ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

SHEET No.

E-3

PANEL 'BH' 120/240 VOLTS 1 PHASE 3 WIRE 400 AMPS
(FED FROM SERVICE SWITCH) SOLID NEUTRAL: YES NEMA TYPE: 1 400 A MAIN CKT. BKR.
LOCATION: UTILITY ROOM GROUND BUS: YES A.I.C. SYM 30K STD. FRAME YES SURFACE MOUNTING

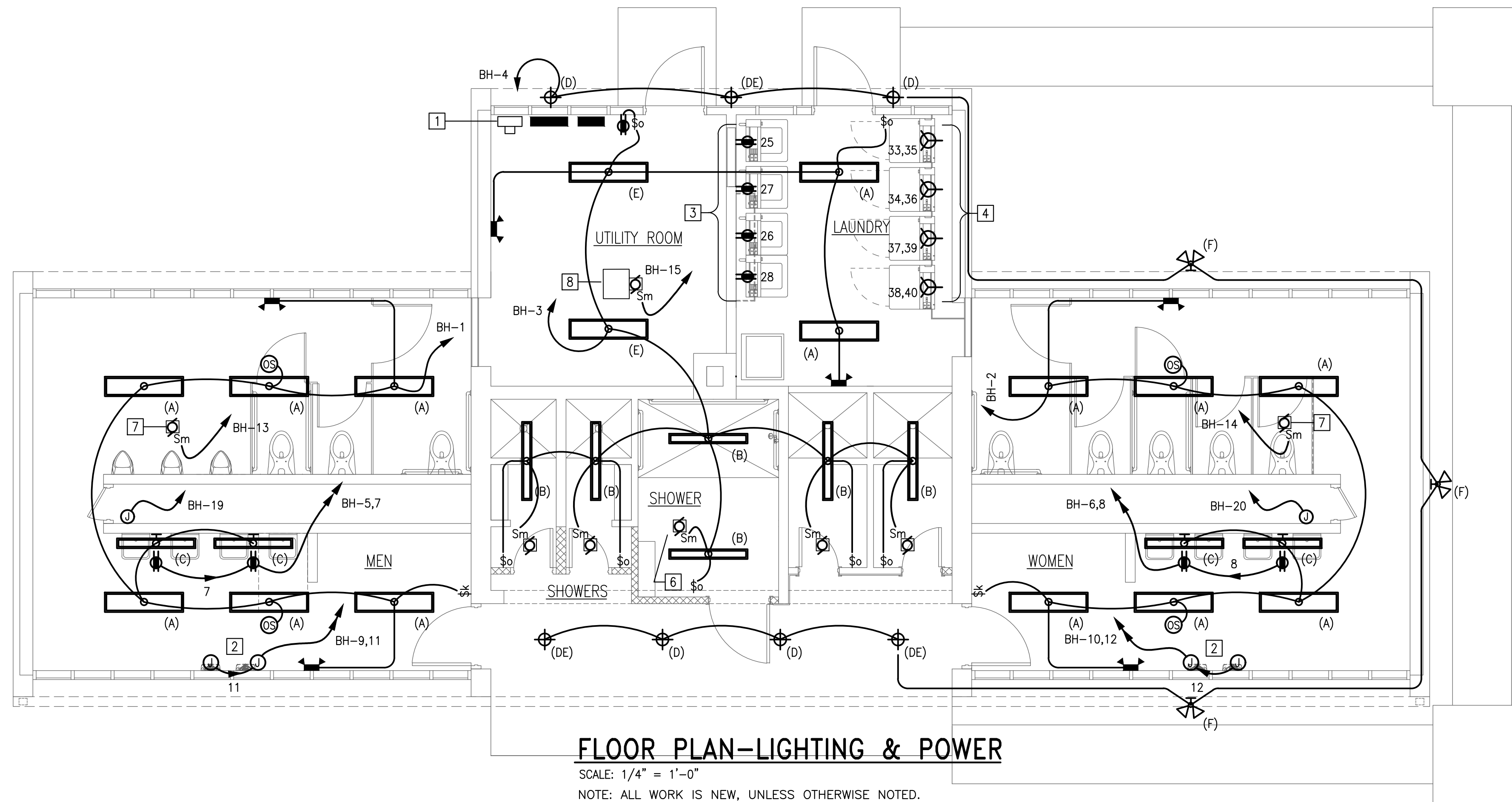
REMARKS: PANELBOARD AND CIRCUIT BREAKERS ARE NEW TO REPLACE EXISTING.

DESCRIPTION	CONNECTED KVA	C.B. AMPS		C.B. AMPS	CONNECTED KVA	DESCRIPTION
		P	TRIP NO.			
LIGHTING-MENS	0.5	1	20	1	2	LIGHTING-WOMEN
LIGHTING-UTILITY	0.8	1	20	3	4	LIGHTING-EXTERIOR*
RECEPTACLES-MEN	1.2	1	20	5	6	RECEPT.-WOMEN
RECEPTACLES-WOMEN	1.2	1	20	7	8	RECEPT.-WOMEN
HAND DRYER-MEN	1.0	1	20	9	10	HAND DRYER-WOMEN
HAND DRYER-WOMEN	1.0	1	20	11	12	HAND DRYER-WOMEN
EXHAUST FAN-MEN	0.7	1	20	13	14	EXHAUST FAN-WOM
(E) GAS FURNACE	1.2	1	20	15	16	(E) GAS WTR HTR
(E) ATTIC EXH FAN	0.7	1	20	17	18	SPARE
(E) PIPE TUNNEL	0.3	1	20	19	20	(E) PIPE TUNNEL
SPARE	0.0	1	20	21	22	(E) UNIT HEATER
SPARE	0.0	1	20	23	24	SPARE
CLOTHES WASHER	1.2	1	20	25	26	CLOTHES WASHER
CLOTHES WASHER	1.2	1	20	27	28	CLOTHES WASHER
SPARE	0.0	1	20	29	30	SPARE
SPARE	0.0	1	20	31	32	SPARE
CLOTHES DRYER	5.0	2	30	33	34	CLOTHES DRYER
CLOTHES DRYER	5.0	2	30	35	36	CLOTHES DRYER
SPARE	0.0	2	30	37	38	SPARE
SPARE	0.0	2	30	39	40	SPARE
(E) CABIN No. 7	9.6	2	45	41	42	(E) CABIN No. 9
(E) PANEL 'BH2'	21.2	2	49	43	44	SPACE
SPACE	0.0	1	53	45	46	SPACE
SPACE	0.0	1	55	47	48	SPACE
SPACE	0.0	1	57	49	50	SPACE
SPACE	0.0	1	59	51	52	SPACE
SPACE	0.0	1	59	53	54	SPACE
SPACE	0.0	1	59	55	56	SPACE
SPACE	0.0	1	59	57	58	SPACE
SPACE	0.0	1	59	59	60	SPACE

NOTE: RECONNECT EXISTING BRANCH CIRCUITS WHICH REMAIN IN USE AS REQUIRED.
* CONNECT THRU PHOTO-CELL/TIME CLOCK.
CONNECTED LOAD: 84.0 KVA = 350.0 AMPS.
DEMAND LOAD: 84.5 KVA = 352.1 AMPS.

PLAN KEYED NOTES

- NEW ELECTRICAL SERVICE, METER, AND PANEL BOARD REFER TO RISER AND SCHEDULES ON THIS DRAWING.
- NEW HAND DRYER, 1.0 KW, 120V, 1Ø
- NEW CLOTHES WASHERS, .5 HP, 120V, 1Ø. CIRCUIT TO PANEL 'BH'.
- NEW DRYERS, 5 KW, 240V, 1Ø. CIRCUIT TO PANEL 'BH'
- NOT USED.
- NEW SHOWER EXHAUST FANS, 100 WATTS, 120V, 1Ø. TYPICAL FOR 3.
- NEW TOILET EXHAUST FANS, .25 HP, 120V, 1Ø. TYPICAL FOR 2.
- EXISTING GAS FURNACE, .5 HP, 120V, 1Ø.



PANEL 'BH2' 120/240 VOLTS 1 PHASE 3 WIRE 125 AMPS
(FED FROM PANEL BH) SOLID NEUTRAL: YES NEMA TYPE: 1 125 A MAIN LUGS ONLY
LOCATION: UTILITY ROOM GROUND BUS: YES A.I.C. SYM 10K STD. FRAME YES SURFACE MOUNTING

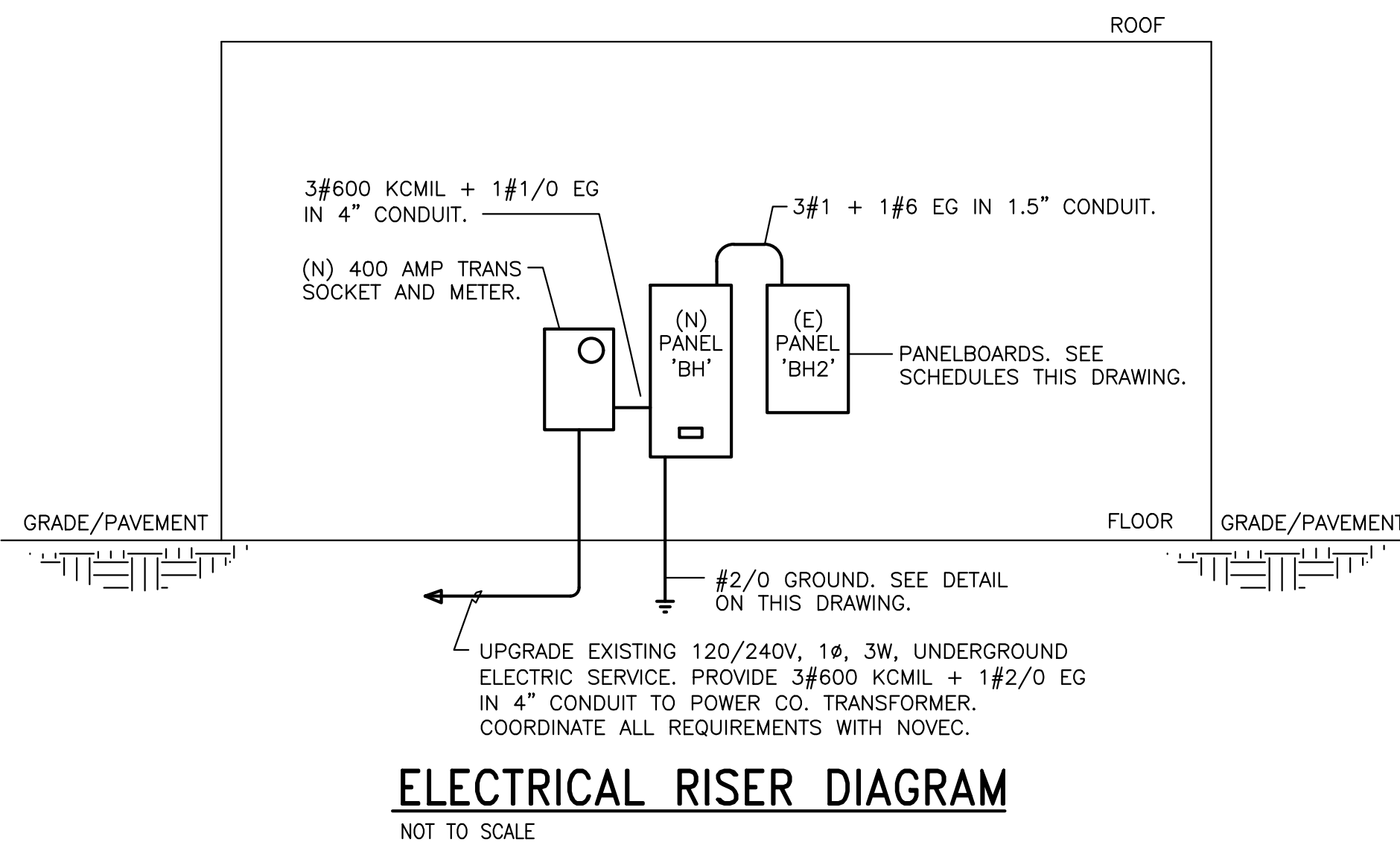
REMARKS: PANEL AND CIRCUIT BREAKERS ARE EXISTING, UNLESS OTHERWISE NOTED.

DESCRIPTION	CONNECTED KVA	C.B. AMPS		C.B. AMPS	CONNECTED KVA	DESCRIPTION
		P	TRIP NO.			
(E) CAMP SITE 93	3.6	2	30	1	2	(E) CAMP SITE 97
(E) CAMP SITE 89,90	7.2	2	30	3	4	(E) CAMP SITE 98
(E) CAMP SITE 91,92	7.2	2	60	5	6	(E) CAMP SITE 95
(E) CAMP SITE 94	9.6	2	50	7	8	(E) CABIN No. 8
		2	50	9	10	
		2	50	11	12	
		2	50	13	14	
		2	50	15	16	

CONNECTED LOAD: 42.0 KVA = 175 AMPS.
DEMAND LOAD: 21.0 KVA = 87.5 AMPS. 50% DF PER NEC 551.73(A)

WIRE & CONDUIT SIZE SCHEDULE
(UNLESS OTHERWISE SHOWN)

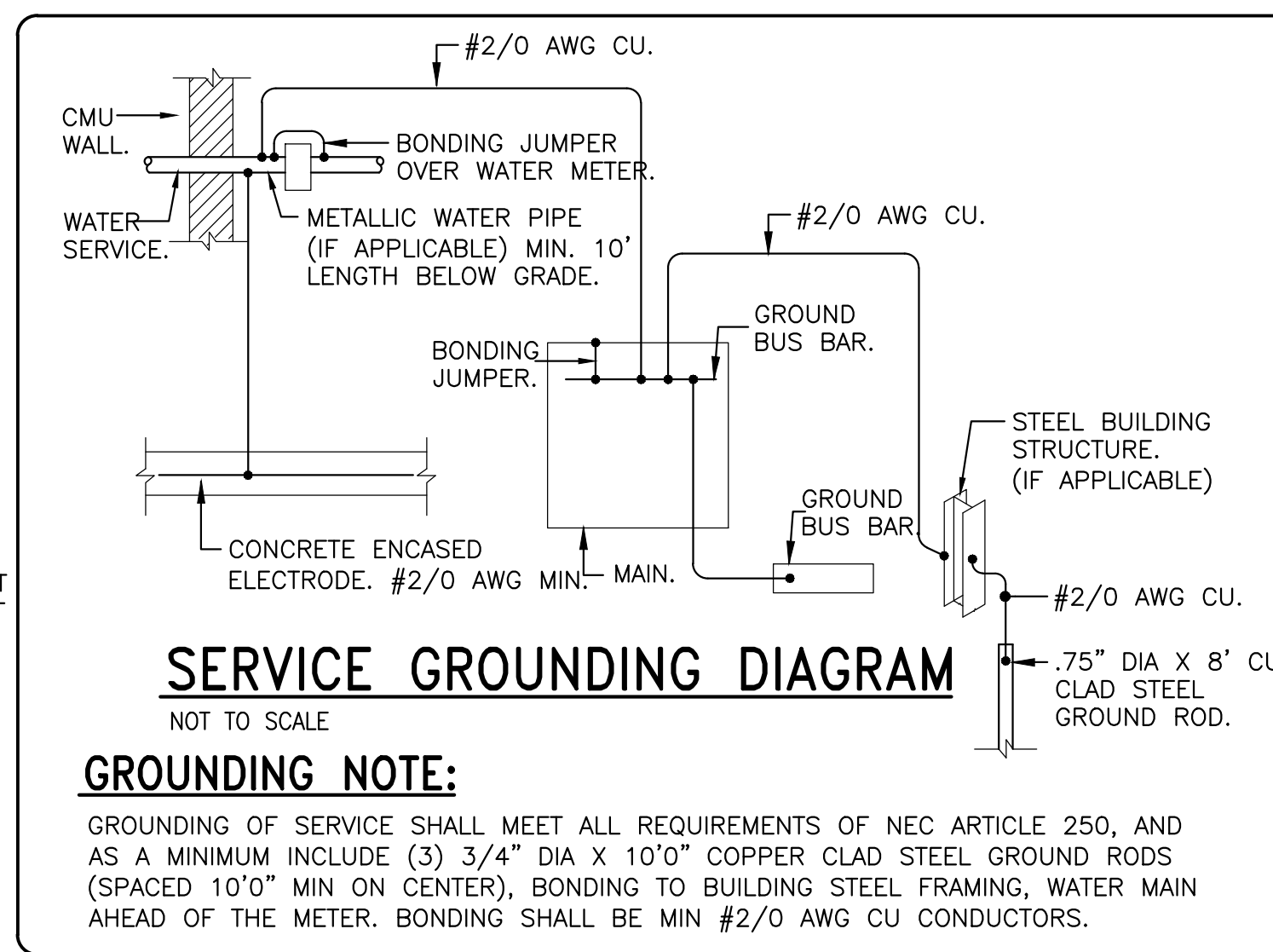
CIRCUIT BREAKER TRIP	GROUND WIRE SIZE	1 OR 2 POLE		3 POLE	
		CONDUIT INCHES	WIRE SIZE	CONDUIT INCHES	WIRE SIZE
15A	1#12	.75"	#12	.75"	#12
20A	1#12	.75"	#12	.75"	#12
30A	1#10	.75"	#10	.75"	#10
40A	1#10	.75"	#8	.75"	#8
50A	1#10	1"	#6	1"	#6
60A	1#10	1"	#4	1.25"	#4
70A	1#8	1"	#4	1.25"	#4
80A	1#8	1.25"	#3	1.25"	#3
90A	1#8	1.25"	#2	1.25"	#2
100A	1#8	1.5"	#1	1.5"	#1
125A	1#6			1.5"	#1
150A	1#6			2"	#1/0
175A	1#6			2"	#2/0
200A	1#6			2"	#3/0
225A	1#4			2.5"	#4/0
250A	1#4			2.5"	#250
300A	1#4			2.5"	#350
350A	1#3			3.5"	#500
400A	1#3			3.5"	#600



LIGHTING FIXTURE SCHEDULE

FIXTURE DESIGNATION	FIXTURE TYPE	MANUFACTURER	CATALOG NO.	LAMP		WATTS	QTY	TOTAL	VOLTS	MOUNTING	REMARKS
				NO.	TYPE						
(A)	1' x 4' LINEAR LED LUMINAIRE.	LITHONIA	ALLS4-60L-MVOLT-EZ1-LP835.	1	6000LU/LED	55	17	935	120	SURFACE	
(B)	1' x 4' ENCLOSED LUMINAIRE.	LITHONIA	FEM-L48-40L-LPAFL-MD-MVOLT-GZ10-35K-80CRI-BSL520.	1	4000LU/LED	31	4	124	120	SURFACE	WITH 90 MIN. BATTERY BACK-UP, AND WET LOCATION FITTINGS.
(C)	48" LED VANITY WALL SCONCE.	LITHONIA	FMVCL-48IN-MVOLT-35K-90CRI-BN.	1	2725LU/LED	34	4	136	120	SURFACE	WALL MOUNT ABOVE MIRROR.
(D)	6" LED DOWN LIGHT.	LITHONIA	REAL6CD6-MW-ESL-1000L-35K-MVOLT.	1	1000LU/LED	15	4	60	120	RECESSED	
(DE)	6" LED DOWN LIGHT.	LITHONIA	REAL6CD6-MW-ESL-1000L-35K-MVOLT-ELR.	1	1000LU/LED	15	3	45	120	RECESSED	WITH 90 MIN. BATTERY BACK-UP.
(F)	TWIN LED PAR FLOOD LIGHT.	LITHONIA	OFTH-300PAR-120-P-WH (WITH PC)	2	18W/LED/PAR	36	6	216	120	SURFACE	WALL MOUNT +9" AFF, UON.
	LED BATTERY PACK WITH 90 MIN. BATTERY BACK-UP.	LITHONIA	EU2-LED-M12-WHITE.	2	LED	2			120	SURFACE	WALL MOUNT +10"0" AFF, UON.

TOTAL WATTS = 1195



INTERIOR LIGHTING CALCULATIONS

RESTROOM SPACE = 1500 SQ. FT.
LIGHTING POWER BUDGET ALLOWANCE @ 0.98/SQ. FT. = 1470 WATTS.
INSTALLED LIGHTING FIXTURES = 1195 WATTS.

EGRESS NOTE:

MEANS OF EGRESS ILLUMINATION COMPLIES WITH IBC 1006.3 AT ALL EXIT DISCHARGE LOCATIONS.

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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

SHEET No.

E-4

PLUMBING NOTES

- THE INTENT OF THESE DRAWINGS IS TO PROVIDE COMPLETE AND PROPERLY FUNCTIONING PLUMBING SYSTEMS. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO ACHIEVE SUCH ENDS. CONTRACTOR IS OBLIGATED TO EXAMINE PLANS AND VISIT THE SITE BEFORE THE BID. ANY OBSERVED FAULTS OR AMBIGUITY IN THIS PLAN SET SHALL BE CALLED TO THE ENGINEER IMMEDIATELY, SO THAT THE MATTER MAY BE RESOLVED PRIOR TO THE SUBMISSION OF THE BUDGET PROPOSAL. BY SUBMISSION OF BID, THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THIS PLAN SET AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK, AND EXTRA COST CLAIMS BASED ON INADEQUACY OF PLANS WILL NOT BE CONSIDERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF DRAWINGS AND TO PROVIDE THE COMPLETE AND FUNCTIONING SYSTEM.
- ALL WORK ON THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS. ALL EQUIPMENT SHALL BE UL LISTED.
- THESE DRAWINGS ARE SCHEMATIC AND INTENDED TO DEPICT THE GENERAL LOCATION OF PLUMBING SYSTEM COMPONENTS. CONSULT ARCHITECTURAL PLANS FOR PROPER DIMENSIONS AND LOCATIONS OF EQUIPMENT.
- CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS AND ARRANGE FOR INSPECTIONS BY LOCAL AUTHORITIES HAVING JURISDICTION WITH THE EXCEPTION OF THE BUILDING PERMIT.
- PLUMBING CONTRACTOR SHALL THOROUGHLY CLEAN HIS WORK AREA DAILY OR AS REQUESTED BY THE GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL ALSO REMOVE HIS TRASH AND DEBRIS AFTER THE COMPLETION OF THE WORK.
- THE PLUMBING WORK SHALL BE PERFORMED IN A WORKMANLIKE FASHION. WORK SHALL BE REJECTED IF, IN OPINION OF THE OWNER'S REPRESENTATIVE, IT IS NOT INSTALLED IN A PROPER MANNER.
- COORDINATE ALL PLUMBING WORK THAT REQUIRES ELECTRICAL POWER WITH THE BUILDING POWER TYPE AND AVAILABILITY.
- VERIFY THE LOCATION, INVERT ELEVATION AND DIRECTION OF FLOW OF ALL PLUMBING PIPING BEFORE THE INSTALLATION OF NEW WORK.
- DOMESTIC WATER PIPING SHALL BE COPPER TUBING, TYPE-L HARD TEMPER, WITH WROUGHT COPPER SOLDER JOINT FITTINGS AND 95-5 SOLDER.
- SANITARY SEWER DRAINAGE PIPING SHALL BE HUBLESS CAST IRON, SERVICE WEIGHT OR PVC TYPE (SCHEDULE 40) DWV WITH SOLVENT CEMENTED, DWV SOCKET TYPE FITTINGS. PVC SHALL NOT BE USED IN PLENUM CEILINGS. INTERIOR SANITARY WASTE PIPING SHALL NOT SLOPE LESS THAN 1/4" PER FOOT, UNLESS AS NOTED ELSEWHERE. MINIMUM SANITARY LINE BELOW GRADE SHALL BE 2" IN DIAMETER.
- ALL SERVICE VALVES ON THIS PROJECT SHALL BE BALL TYPE.
- TEST AND DISINFECT DOMESTIC WATER SYSTEMS IN ACCORDANCE WITH APPLICABLE CODES.
- INSULATION:
PIPE INSULATION SHALL BE MOLDED GLASS FIBER, APPROXIMATELY 3-1/2" POUND DENSITY, WITH A K FACTOR OF .023 AT 75° F EQUAL TO JOHN-MANVILLE "FLAME-SAFE AP-1". WATER HEATER JACKET SHALL BE WHITE KRAFT BONDED TO ALUMINUM FOIL, REINFORCED WITH FIBERGLASS YARN AND HAVING A PRESSURE SENSITIVE TAPE CLOSURE SYSTEM BONDED TO THE LONGITUDINAL LAP.
FITTING AND VALVES SHALL BE COVERED WITH FIBERGLASS INSERT AND WITH FIBER PRE-MOLDED PVC COVERS SIMILAR TO JOHN-MANVILLE "ZESTON".
INSULATION SHALL BE APPLIED IN THE FOLLOWING THICKNESS:
DOMESTIC COLD WATER 1" THICK
DOMESTIC HOT WATER 1" THICK
PROVIDE INSULATION ON ALL COLD WATER PIPING, ON ALL HOT WATER PIPING, ON ALL HOT WATER CIRCULATING PIPING AND ON ALL NEW WATER PIPING RISERS.
- IDENTIFY ALL THE PLUMBING PIPING.
- HANGERS AND SUPPORTS, SHALL BE PER MSS-58 FOR ACCEPTABLE TYPES, MSS-69 FOR INSTALLATION AND SPACING.
- PIPING PENETRATIONS: ALL MASONRY PENETRATIONS SHALL BE CORE-DRILLED, WET WHERE POSSIBLE. OBTAIN OWNER'S PERMISSION PRIOR TO DRILLING. X-RAY FLOOR SLAB PRIOR TO DRILLING FOR ALL CABLE TENSIONED SLABS. DO NOT CUT STRUCTURAL MEMBERS.
- PROVIDE PIPE SLEEVES FOR ALL FLOOR AND MASONRY WALL PENETRATIONS. PACK VOID SPACE WITH APPROVED FLEXIBLE FIREPROOF SEALANT.
- PROVIDE DIELECTRIC FITTING BETWEEN CONNECTION OF DISSIMILAR MATERIALS.
- VALVES:
A. PIPING UP 2" SHALL BE BALL-TYPE SHUT-OFF VALVES, 2-PIECE.
B. CHECK VALVE
C. BACKFLOW PREVENTERS - ALL DEVICES WHICH CONTROL, UTILIZE OR OTHERWISE CONTACT THE POTABLE DOMESTIC WATER SUPPLY SHALL BE EQUIPPED WITH APPROPRIATE BACKFLOW PREVENTION, IN ACCORDANCE WITH LOCAL REQUIREMENTS.
- SUBMITTALS
A. SUBMIT CONTROL WIRING DIAGRAMS FOR ALL EQUIPMENT INCLUDING INTERLOCKS WITH OTHER DEVICES AS DESCRIBED IN CONTROL SEQUENCES OR AS OTHERWISE INDICATED.
B. SUBMIT DRAWINGS OF ALL SLAB PENETRATIONS FOR OWNER/ARCHITECT/ENGINEER REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE PENETRATION INSTALLATION. ALL FLOOR PENETRATIONS SHALL BE CORE-DRILLED AND X-RAYED PRIOR TO WORK.
C. SUBMIT A LIST OF ANY PRODUCT SUBSTITUTIONS, SUBSTITUTED EQUIPMENT DATA, AND THE ASSOCIATED COST SAVINGS AT THE TIME OF BID SUBMISSION. SUBSTITUTIONS AFTER THE CONTRACT IS AWARDED WILL NOT BE ACCEPTED.
D. IMMEDIATELY UPON PROJECT COMPLETION, PREPARE AND SUBMIT AS-BUILT DRAWINGS IN THE FORM OF MARKED-UP CONSTRUCTION DOCUMENTS DETAILING THE AS-BUILT CONDITIONS AND ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. INCLUDE ALL EQUIPMENT SUBSTITUTIONS AND MODIFICATIONS REQUIRED TO ACCOMMODATE THE ACCOMMODATE THE SUBSTITUTIONS.
E. A MINIMUM OF TWO WEEKS TIME WILL BE REQUIRED FOR A REVIEW OF EACH SUBMITTAL BY THE ARCHITECT AND ENGINEER. INVOLVED SUBMITTALS SUCH AS CONTROLS MAY REQUIRE ADDITIONAL TIME TO REVIEW. CONTRACTOR IS RESPONSIBLE FOR ALLOCATING SUFFICIENT TIME IN THE CONSTRUCTION SCHEDULE TO OBTAIN FINAL APPROVAL OF SUBMITTALS, INCLUDING TIME FOR SUBSEQUENT REVIEWS OF SUBMITTALS NOT INITIALLY APPROVED. ANY CLAIMS FOR DELAYS RELATED TO SUBMITTAL REVIEW WILL NOT BE ACCEPTED.
- PIPE INSTALLATION MUST NEVER PROJECT INTO THE AREA DEFINED BY THE FIRE RATED ASSEMBLY.
- ALL PIPING MUST BE RUN WITHIN THE INTERSTITIAL SPACES AND NOT PROJECT INTO THE FINISHED SPACE. HOWEVER, IF IT BECOMES NECESSARY TO HAVE A PIPE PROJECT INTO A FINISHED SPACE IT MUST BE CONCEALED WITH A CHASE BUILT OF SIMILAR MATERIALS TO THAT OF THE ADJACENT FINISHED MATERIALS. IF THIS APPEARS TO BECOME NECESSARY, IT SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER, BEFORE IMPLEMENTATION TO DETERMINE IF REROUTING IS POSSIBLE.
- PROJECT CLOSEOUT:
A. FURNISH "AS-BUILT" DRAWINGS.
B. PROVIDE DOMESTIC WATER STERILIZATION CERTIFICATES.
C. PROVIDE OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT.
D. PROVIDE WARRANTY CERTIFICATES FOR ALL EQUIPMENT.
E. PROVIDE REQUIRED SPARE PARTS.
F. PROVIDE SYSTEM DEMONSTRATION.
G. PROVIDE INSTRUCTION TO OWNER AND DESIGNATED PERSONNEL, DEMONSTRATING TYPICAL MAINTENANCE AND REPAIR PROCEDURES.

SPECIAL NOTES

- DOMESTIC WATER SYSTEM SHALL INCLUDE PIPING, FITTING, PIPING ACCESSORIES, VALVES, VALVE BOXES, HANGERS, SUPPORTS, BACK FLOW PREVENTERS, VACUUM BREAKER AND WATER HEATER, ECT.
- SANITARY SYSTEM SHALL INCLUDE PIPING, FIXTURES, FITTING, PIPING ACCESSORIES, HANGERS AND SUPPORTS.
- ALL EQUIPMENT AND THE SYSTEMS SHALL BE PROVIDED IN CONFORMANCE WITH NFPA, AGA, PDI, MANUFACTURER'S RECOMMENDATIONS, STATE, LOCAL CODES AND ORDINANCES.
- ALL EXPOSED PIPING SHALL BE CHROMED-PLATED.
- FIXTURES INTENDED FOR USE BY HANDICAPPED SHALL BE IN COMPLIANCE WITH ADA REQUIREMENTS.

PLUMBING EQUIPMENT

- TEMPERING VALVE (TV): LAWLOR MODEL TMM-1070, UNIT #86800; POINT OF USE, INTEGRAL BACK FLOW CHECKS, 3/8" CONNECTIONS, 1.5 GPM @ 40 PSI DROP, AND SHALL BE COMPLIANCE WITH ASSE 1070.
- ESCUTCHEONS: PROVIDE NICKLEBRASS OR CHROME PLATED ESCUTCHEONS ON ALL EXPOSED PIPING WHEN THEY PASS THROUGH WALLS.

PLUMBING FIXTURE CONNECTION SCHEDULE

FIXTURE	MARK	MINIMUM CONNECTIONS						REMARKS
		WASTE	VENT	CW	HW	MAX FLOW	GAS MBH	
WATER CLOSET	WC	3"	2"	1"	-	1.28 GAL. FLUSH	NA	AMERICAN STANDARD "AFWALL" WALL HUNG, ELONGATED BOWL, 1.28 GPF, WITH FIXTURE CARRIER, MANUAL FLUSH VALVE. MODEL #2856.128 PROVIDE WATER CLOSET WALL SUPPORT CARRIER.
LAVATORY	LAV	1-1/2"	1-1/2"	1/2"	1/2"	0.5 GPM	NA	AMERICAN STANDARD "LUCERNE" WALL HUNG LAVATORY. MODEL #0355.012 AMERICAN STANDARD "MONTERREY" POLISHED CHROME CENTERSET GOOSENECK LAVATORY FAUCET. MODEL #7502.170VP
URINAL	UR	2"	1-1/2"	3/4"	-	1.0 GAL. FLUSH	NA	AMERICAN STANDARD "WASHBROOK" UNIVERSAL URINAL. MODEL #6590.001
SHOWER	SH-1	2"	1-1/2"	1/2"	1/2"	2.5 GPM	NA	AMERICAN STANDARD-PRESSURE BALANCE VOLUME AND TEMPERATURE CONTROL VALVE MODEL# R121. STUDIO T590.507, WITH TRIM KIT INCLUDING METAL LEVER HANDLE AND FLOW WISE SHOWER HEAD
HANDICAPPED SHOWER	SH-2	2"	1-1/2"	1/2"	1/2"	2.5 GPM	NA	AMERICAN STANDARD-PRESSURE BALANCE VOLUME AND TEMPERATURE CONTROL VALVE MODEL# R121. STUDIO T590.507, WITH TRIM KIT INCLUDING METAL LEVER HANDLE AND FLOW WISE SHOWER HEAD
SHOWER	SH-3	2"	1-1/2"	1/2"	1/2"	2.5 GPM	NA	AMERICAN STANDARD-PRESSURE BALANCE VOLUME AND TEMPERATURE CONTROL VALVE MODEL# R121. STUDIO T590.507, WITH TRIM KIT INCLUDING METAL LEVER HANDLE AND FLOW WISE SHOWER HEAD
SHOWER (ALTERNATE #1)	SH-4	2"	1-1/2"	1/2"	1/2"	2.5 GPM	NA	AMERICAN STANDARD-PRESSURE BALANCE VOLUME AND TEMPERATURE CONTROL VALVE MODEL# R121. STUDIO T590.507, WITH TRIM KIT INCLUDING METAL LEVER HANDLE AND FLOW WISE SHOWER HEAD
SERVICE SINK	SS	2"	1-1/2"	1/2"	1/2"	2.5 GPM	NA	EXISTING TO REMAIN
WASHER	W	2"	1-1/2"	1/2"	1/2"	-	NA	REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFICATION
NON-FREEZE HOSE BIBB	NFHB	NA	NA	3/4"	NA	NA	4.0 GPM	JOSAM MODEL # 71000-14, WITH INTEGRAL VACUUM BREAKER, EXPOSED HOSE CONNECTION, QUARTER TURN KEY, BRONZE NICKEL PLATED. SUITABLE FOR WALL MOUNTING.

REMARKS:

- ALL PLUMBING FIXTURE COLOR SHALL BE SELECTED BY THE ARCHITECT.
- PROVIDE TEMPERING VALVE FOR ALL LAVATORY.
- PROVIDE POINT-OF-USE THERMOSTATIC MIXING VALVE, AND SET HOT WATER OUTLET TO 95° F.

ABBREVIATIONS

BFP	BACKFLOW PREVENTER
CAP	CAPACITY
CONN	CONNECTION
CO	CLEANOUT
CW	COLD WATER
DFU	DRAINAGE FIXTURE UNIT
DF	DRINKING FOUNTAIN
DN	DOWN
E	EXISTING TO REMAIN
ER	EXISTING TO BE RELOCATED
E.C.O.	EXTERIOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
GAL	GALLONS
G.C.O.	GRADE CLEAN OUT
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HUB DRAIN
HS	HAND SINK
HW	HOT WATER
IW	INLET WASTE
KS	KITCHEN SINK
LAV	LAVATORY
MS	MOP SINK
N	NEW
OPS	OPEN SITE DRAIN (FUNNEL DRAIN)
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
R	REMOVE
RE	RELOCATED EXISTING
SAN	SANITARY
SFU	SUPPLY FIXTURE UNIT
SK	SINK
SS	SERVICE SINK
TMV	THERMOSTATIC MIXING VALVE
TV	TEMPERING VALVE
TW	TEMPERED WATER
TYP	TYPICAL
UC	UNDER COUNTER
V	VENT
V.I.F	VERIFY IN FIELD
VIR	VENT THRU ROOF
WH	WATER HEATER
WHA	WATER HAMMER ARRESTOR
WC	WATER CLOSET

PLUMBING SYMBOLS

	SANITARY PIPE
	CONDENSATE DRAIN PIPE
	VENT PIPE
	DOMESTIC COLD WATER PIPE
	DOMESTIC HOT WATER PIPE
	EXISTING PIPING
	CLEAN OUT
	WATER HAMMER ARRESTOR (P.D.I)
	PIPE UP, PIPE DOWN
	SHUT-OFF GATE VALVE, VALVE IN VERTICAL
	CHECK VALVE
	PIPE UNION
	FLOOR DRAIN, FLOOR SINK
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	TERMINATION POINT OF DEMOLITION

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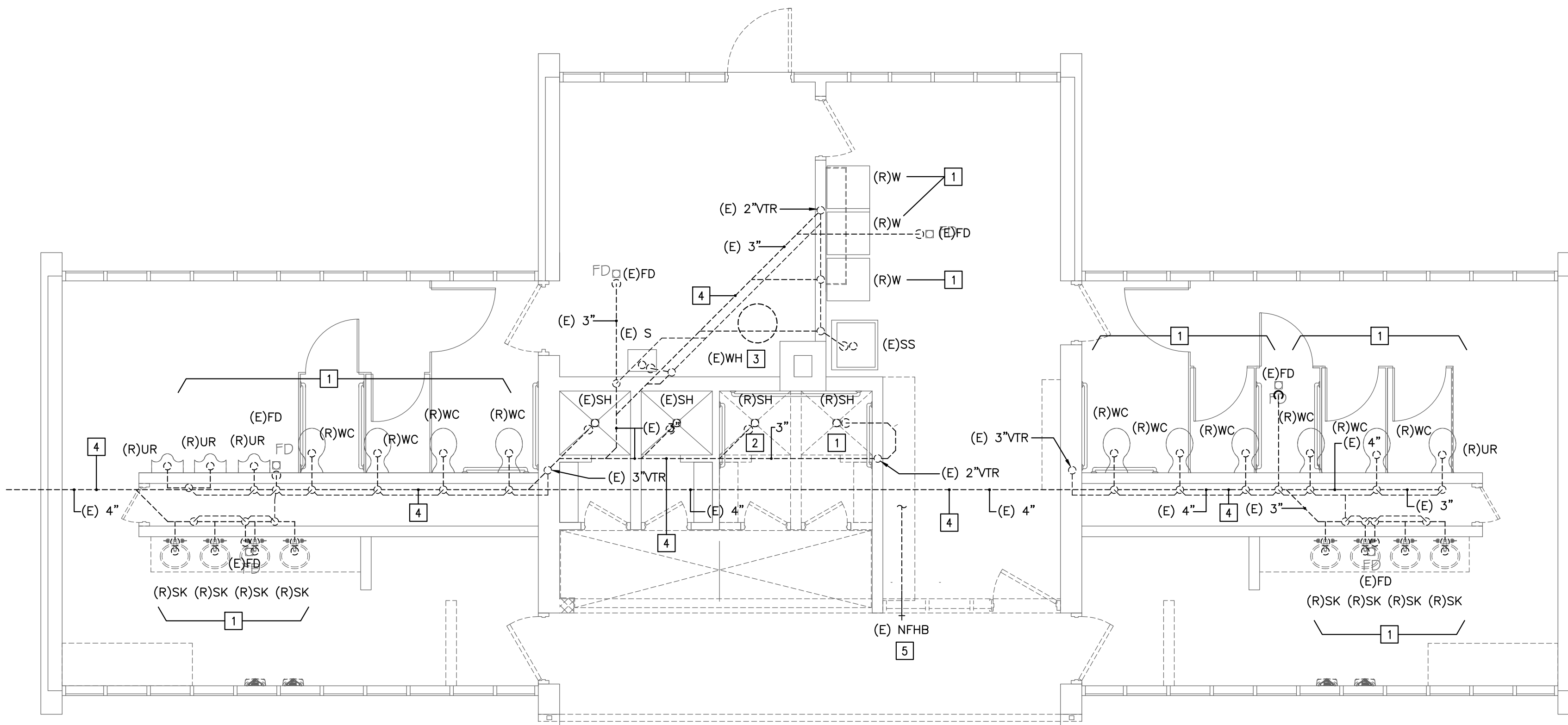
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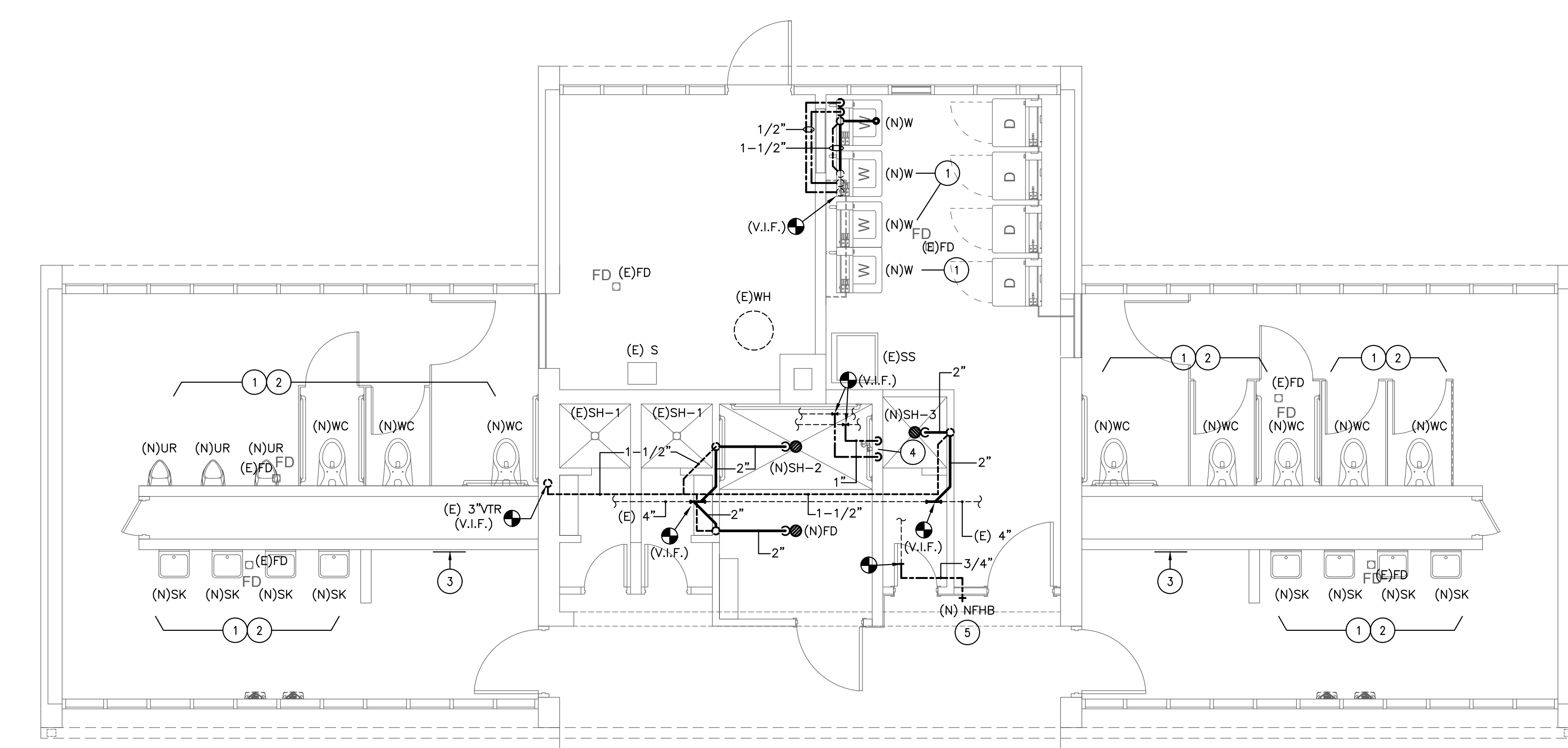
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P-1

PLUMBING COVER SHEET



FIRST FLOOR PLAN-DEMOLITION WORK
SCALE: 1/4" = 1'-0"



FIRST FLOOR PLAN-NEW WORK
SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES

1. CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
2. THE CONTRACTOR SHALL REMOVE ANY AND ALL OBSOLETE, UNUSED OR UNNECESSARY ITEMS AS CALLED OUT ON DRAWINGS OR HEREIN SPECIFIED. ANY SUCH ITEMS INTENDED FOR SUCH REMOVAL SHALL BE COMPLETELY VERIFIED AND APPROVED BY THE ARCHITECT.
3. REMOVE, TRANSPORT AND DISPOSE OF DEMOLISHED EQUIPMENT, RUBBISH AND WASTE IN A LAWFUL AND RESPONSIBLE MANNER.

DEMOLITION WORK - KEY NOTES

- 1 REMOVE EXISTING PLUMBING FIXTURES. CAP AND REUSE EXISTING CW, HW, VENT, & SANITARY PIPES. MODIFY AND PROVIDE ADDITIONAL PIPING AND INSULATION BASED ON LOCATION OF NEW PLUMBING FIXTURES.
- 2 REMOVE EXISTING PLUMBING FIXTURE. CUT AND CAP PIPING IN CONCEALED SPACES. THE LENGTH OF ANY UNVENTED PIPING SHALL NOT EXCEED 2'.
- 3 EXISTING 'STATE' GAS WATER HEATER (WH), MODEL #SBD100199PET. 100 GALLON CAPACITY, 199 MBH GAS INPUT.
- 4 THE CONTRACTOR SHALL PERFORM CAMERA INVESTIGATION FOR ALL EXISTING SANITARY PIPING TO EXAMINE THE CONDITIONS. THE CONTRACTOR SHALL REPLACE ALL EXISTING SANITARY PIPING BASED ON PIPING EVALUATION REPORT AND MAINTAIN PROPER PIPING SLOPE (TYPICAL).
- 5 REMOVE EXISTING HOSE BIBB. MODIFY AND REUSE EXISTING CW PIPING FOR NEW HOSE BIBB.

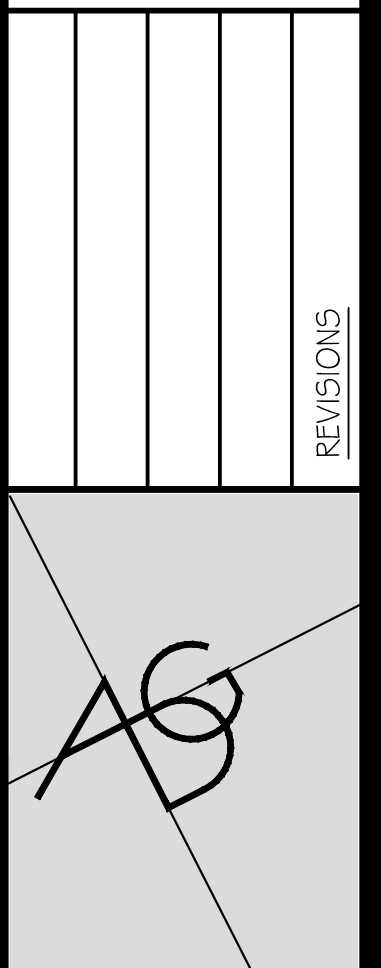
NEW WORK - KEY NOTES

- 1 REUSE EXISTING CW, HW, VENT, & SANITARY PIPES. MODIFY AND PROVIDE ADDITIONAL PIPING AND INSULATION BASED ON LOCATION OF NEW PLUMBING FIXTURES.
- 2 PROVIDE NEW CARRIERS-SUPPORTS AS RECOMMENDED BY FIXTURE MANUFACTURER.
- 3 PROVIDE ACCESS PANEL ON WALL. REFER TO ARCHITECTURAL DRAWING FOR INFORMATION (TYPICAL).
- 4 3/4" CW & HW DN TO SH-2 & SH-3. COORDINATE WITH SHOWER HEAD LOCATION (TYPICAL).
- 5 3/4" CW PIPING TO NEW NON-FREEZE TYPE HOSE BIBB (NFHB). MODIFY AND PROVIDE NEW CW PIPING TO NFHB. PROVIDE PIPING INSULATION.

FIXTURE UNIT (FU) CALCULATIONS

FIXTURE TYPE	FU	EXISTING	NEW	BALANCE	TOTAL FU
WATER CLOSET	4	10	8	(-2)	(-8)
LAVATORY	1	8	8	0	0
URINAL	2	3	3	0	0
SERVICE SINK	2	1	1	0	0
SHOWER	2	4	4	0	0
WASHER	2	3	4	1	2
TOTAL					(-6)

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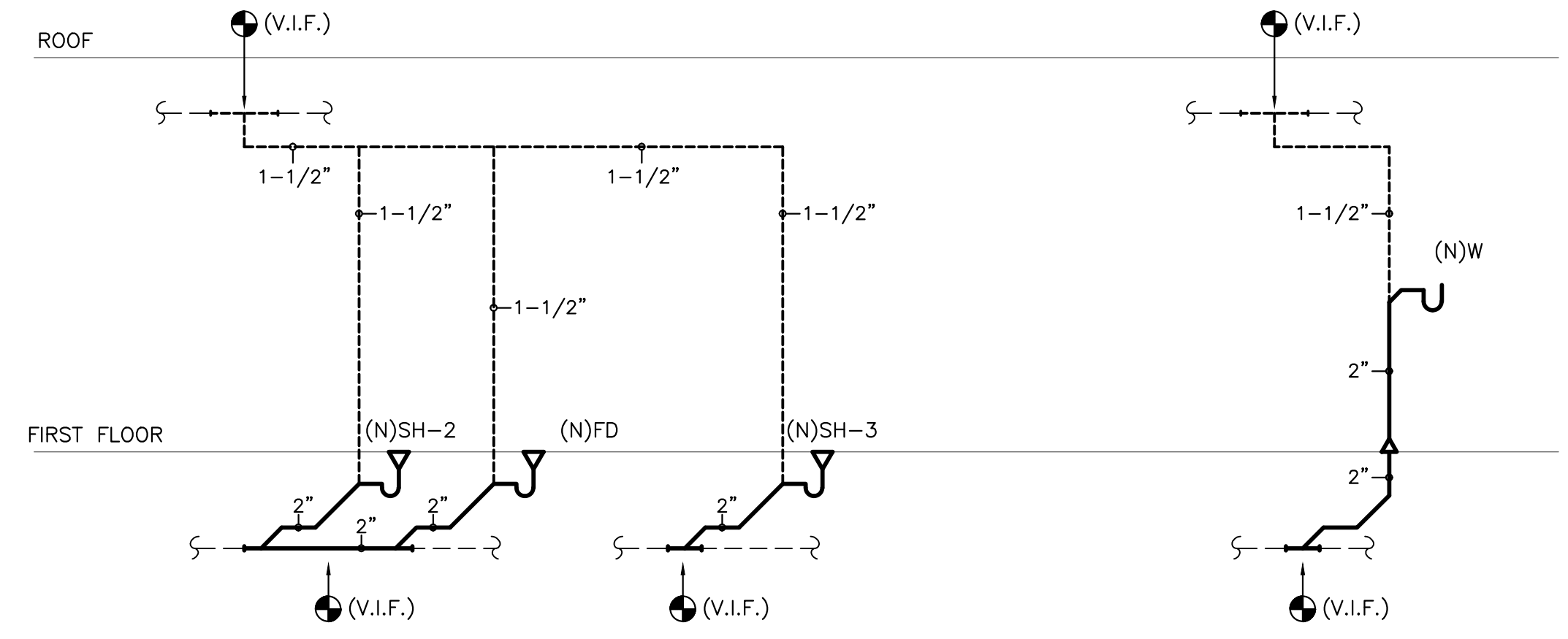


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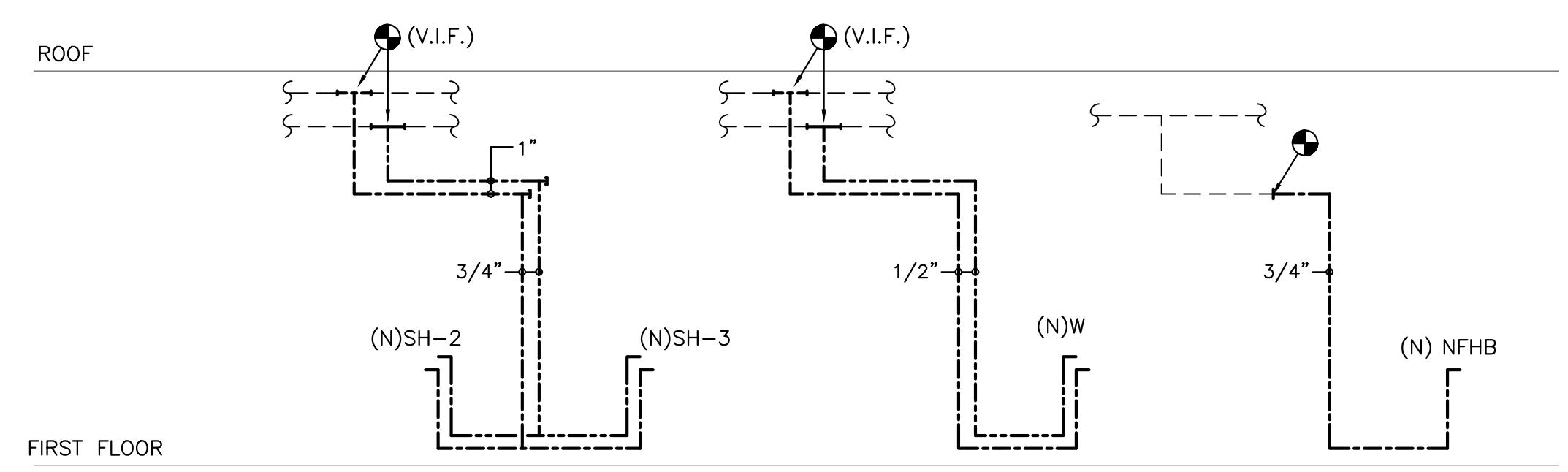
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SHEET No.
P-2

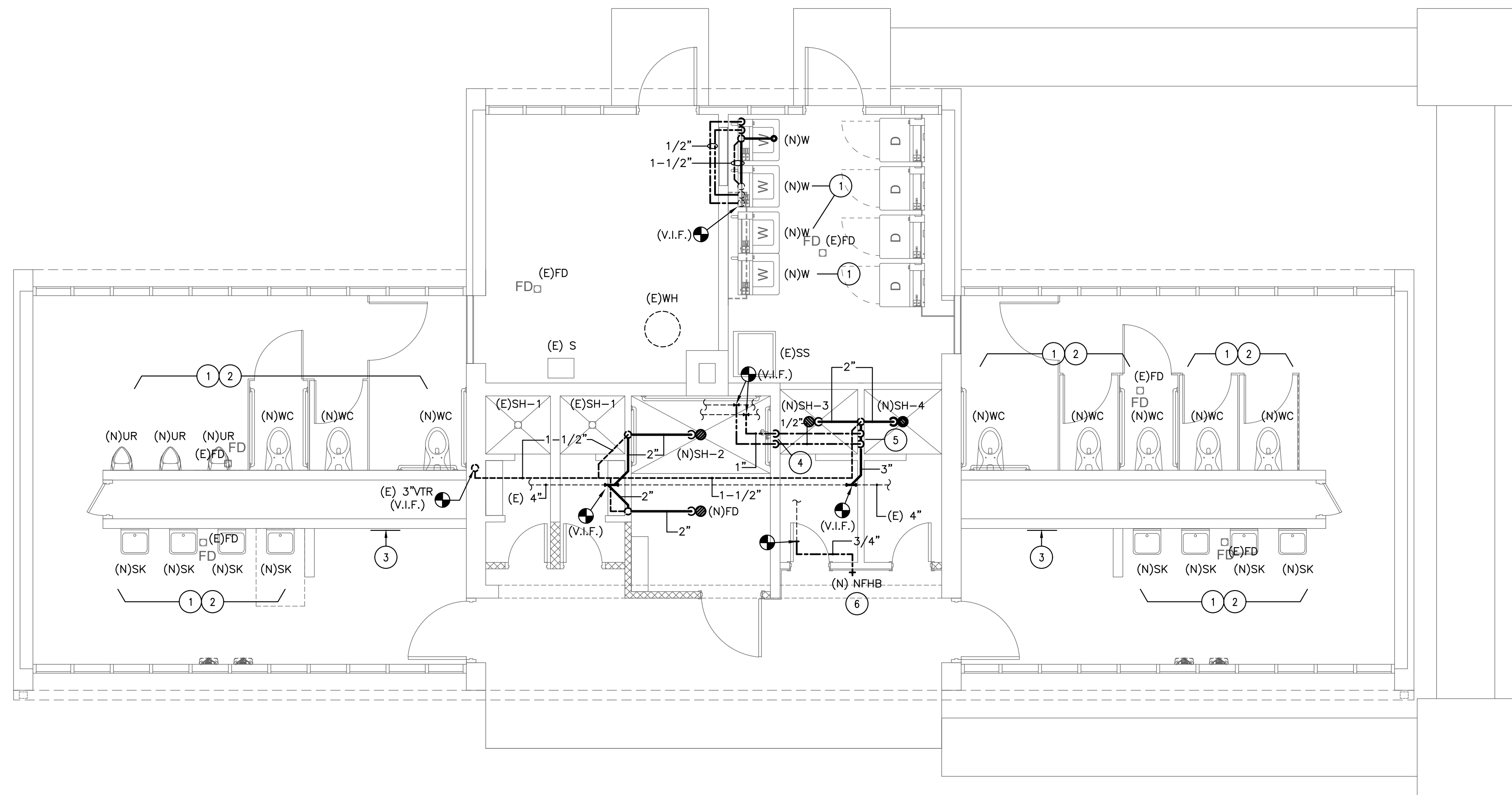


RISER DIAGRAM - SANITARY AND VENT
SCALE: NOT TO SCALE



RISER DIAGRAM - WATER
SCALE: NOT TO SCALE

DEMOLITION AND NEW WORK FLOOR PLANS, AND RISER DIAGRAMS



FIRST FLOOR PLAN-NEW WORK (ALT #1)

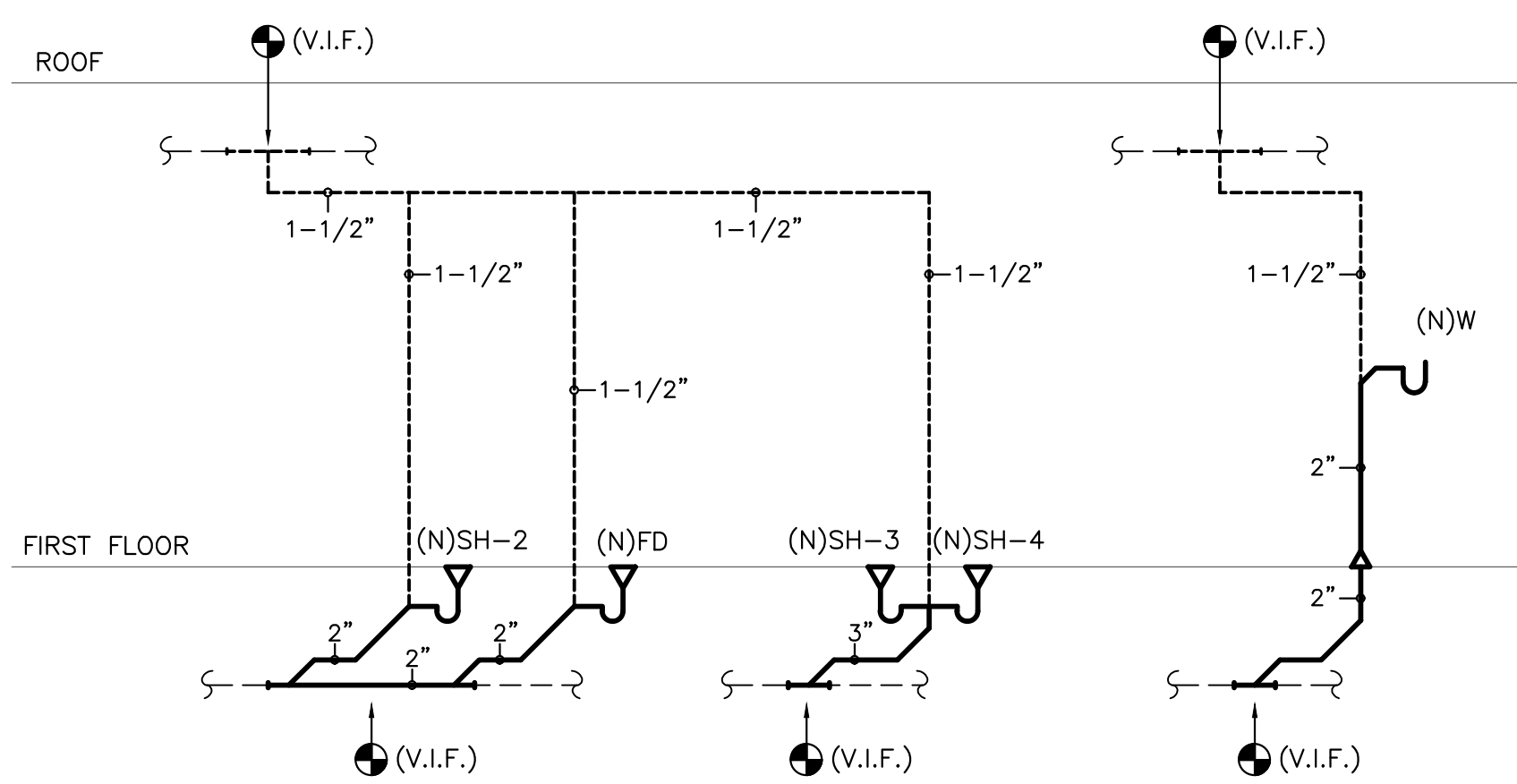
SCALE: 1/4" = 1'-0"

- ### GENERAL DEMOLITION NOTES
- CAP OR PLUG ALL ACTIVE REMAINING SYSTEMS WHERE RECONNECTIONS ARE NOT PLANNED AT POINTS WHERE EXISTING SYSTEM IS RETAINED.
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 - REMOVE, TRANSPORT AND DISPOSE OF DEMOLISHED EQUIPMENT, RUBBISH AND WASTE IN A LAWFUL AND RESPONSIBLE MANNER.

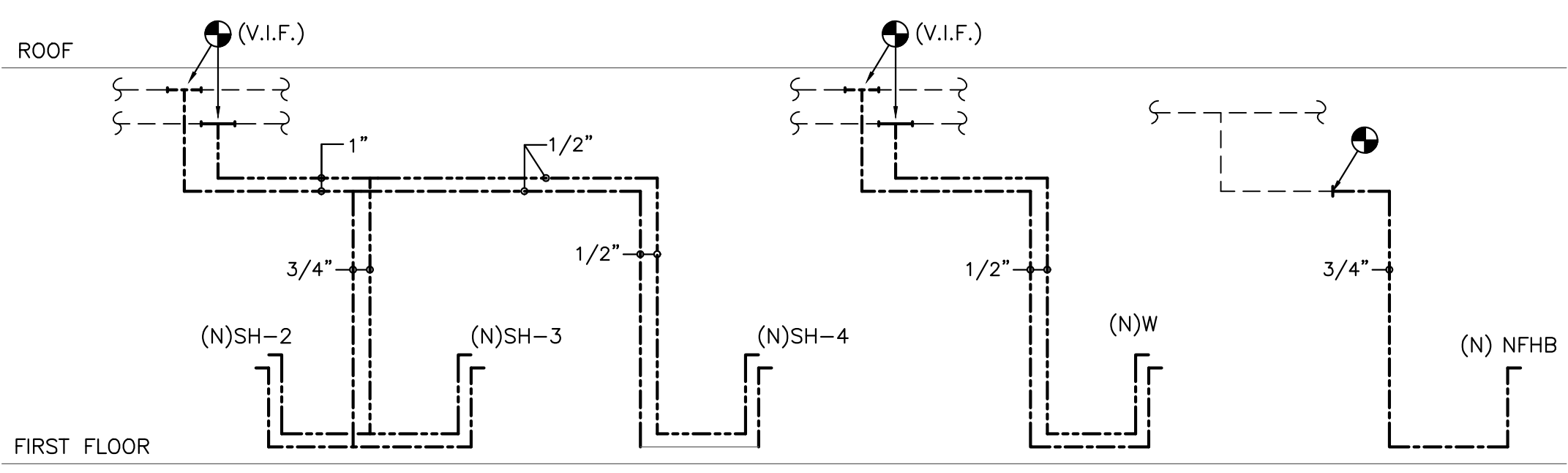
- ### NEW WORK - KEY NOTES
- REUSE EXISTING CW, HW, VENT, & SANITARY PIPES. MODIFY AND PROVIDE ADDITIONAL PIPING AND INSULATION BASED ON LOCATION OF NEW PLUMBING FIXTURES.
 - PROVIDE NEW CARRIERS-SUPPORTS AS RECOMMENDED BY FIXTURE MANUFACTURER.
 - PROVIDE ACCESS PANEL ON WALL. REFER TO ARCHITECTURAL DRAWING FOR INFORMATION (TYPICAL).
 - 3/4" CW & HW DN TO SH-2 & SH-3. COORDINATE WITH SHOWER HEAD LOCATION (TYPICAL).
 - 1/2" CW & HW DN TO SH-4. COORDINATE WITH SHOWER HEAD LOCATION.
 - 3/4" CW PIPING TO NEW NON-FREEZE TYPE HOSE BIBB (NFHB). MODIFY AND PROVIDE NEW CW PIPING TO NFHB. PROVIDE PIPING INSULATION.

FIXTURE UNIT (FU) CALCULATIONS

FIXTURE TYPE	FU	EXISTING	NEW	BALANCE	TOTAL FU
WATER CLOSET	4	10	8	(-2)	(-8)
LAVATORY	1	8	8	0	0
URINAL	2	3	3	0	0
SERVICE SINK	2	1	1	0	0
SHOWER	2	4	5	0	2
WASHER	2	3	4	1	2
TOTAL					(-4)



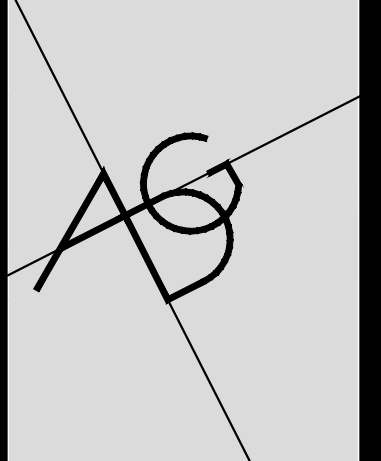
RISER DIAGRAM - SANITARY AND VENT
SCALE: NOT TO SCALE



RISER DIAGRAM - WATER
SCALE: NOT TO SCALE

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BULL RUN BATH HOUSE #2
ADA RENOVATIONS
BULL RUN REGIONAL PARK
CENTREVILLE, VA

PROJECT PHASE:

DATE: 09/16/2019
100% SUBMISSION

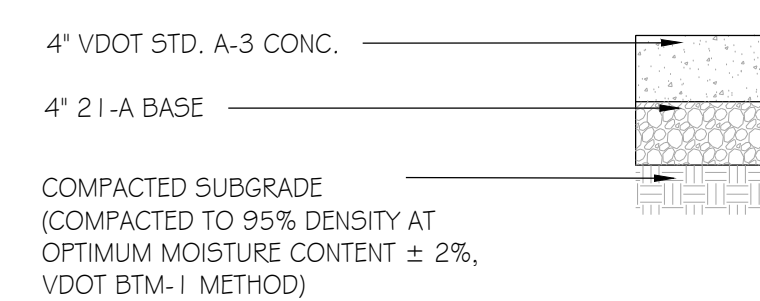
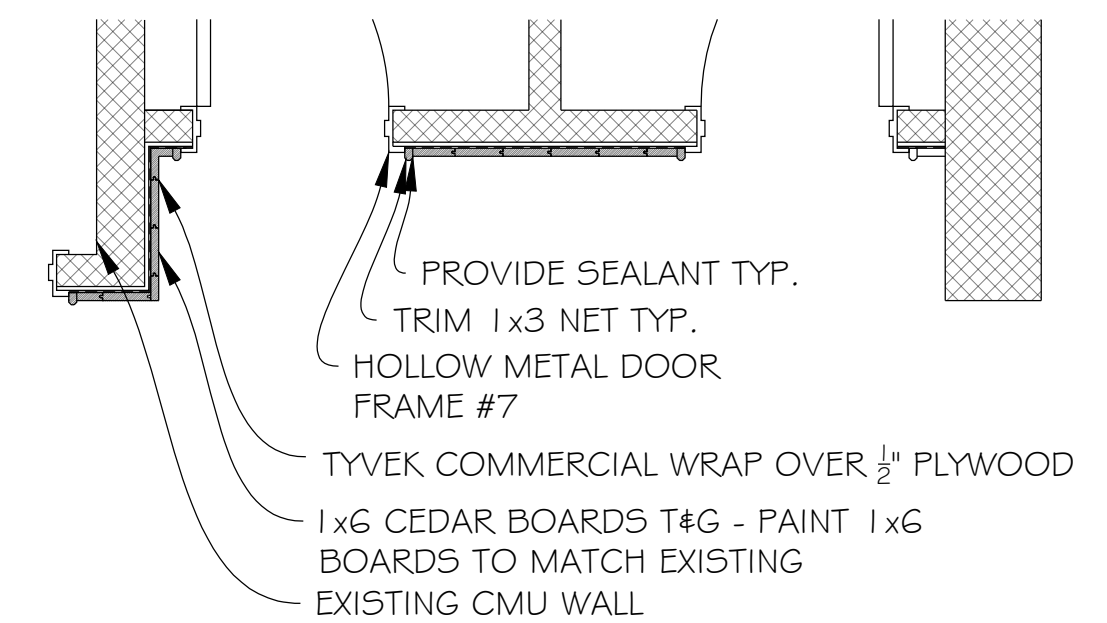
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P-3

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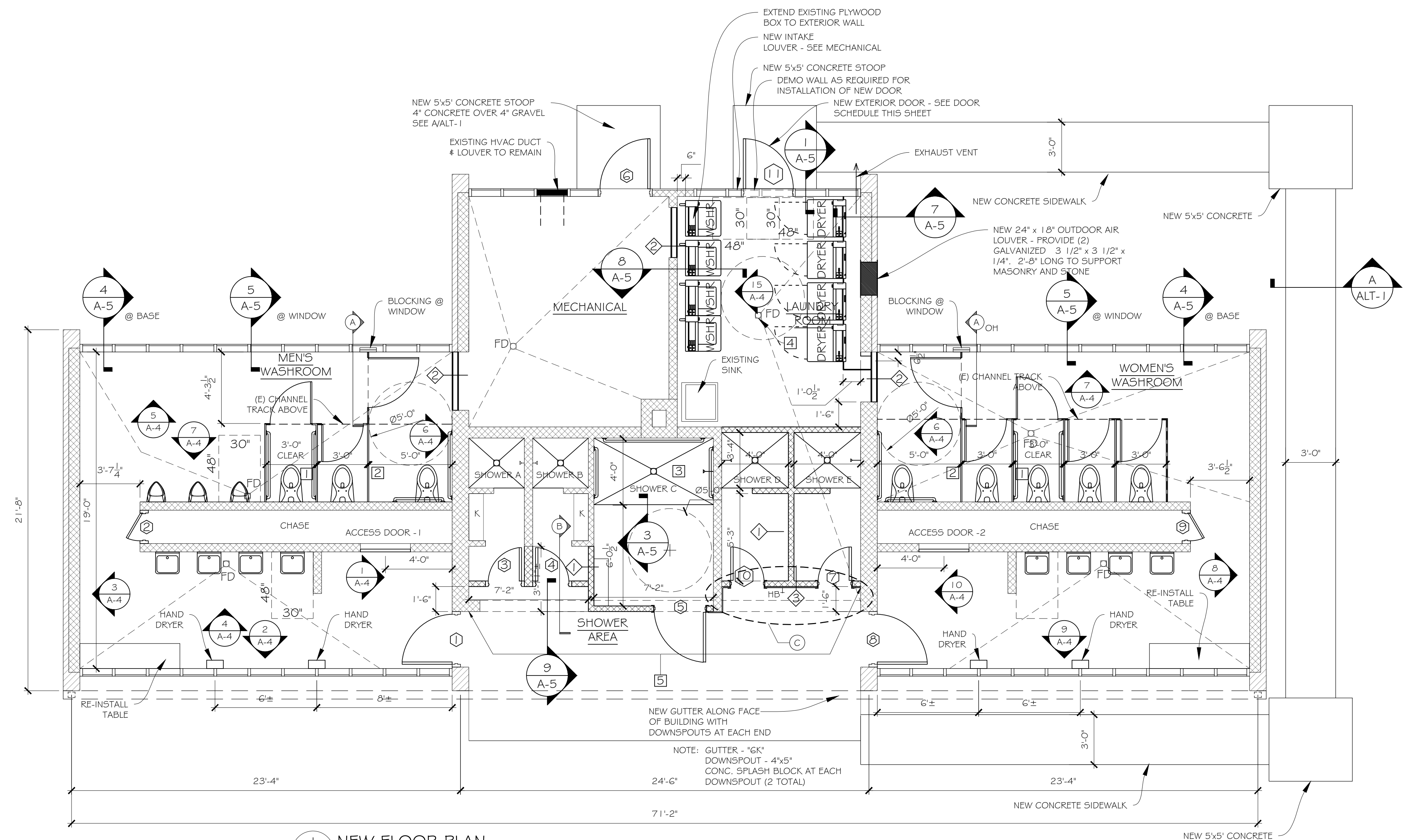
DOOR SCHEDULE:

MARK - 11
 ROOM NAME - LAUNDRY
 W x H x THK - 3'-0" x 6'-8" x 1'-3/4"
 MATERIAL - HM
 HINGES - 1-1/2" Pair
 DOOR TYPE - C
 LOCKSET - PANIC
 FRAME MATERIAL - HM
 FRAME TYPE - D



A ONSITE (PRIVATE) SIDEWALK DETAIL
 ALT-1 NOT TO SCALE (WIDTH AS SHOWN ON PLAN)

C DETAIL - PLAN DETAIL
 SCALE: 1/2" = 1'-0"



1 NEW FLOOR PLAN
 A-3 SCALE: 1/4" = 1'-0"

LEGEND AND NOTES

"K" - EXISTING BENCH TO REMAIN
 "OH" OPPOSITE HAND

NOTE: EACH SHOWER AREA AS FOLLOWS:
 WALLS - 12"x12" TILE
 FLOOR - 2"x2" TILE
 CEILING - 1/2" CEMENT BOARD, PAINTED

ROBING AREA:
 FLOORS - CONCRETE
 WALLS - PAINTED CMU

NOTES:

1	AMBULATORY ACCESSIBLE COMPARTMENT
2	WHEELCHAIR ACCESSIBLE COMPARTMENT
3	WHEELCHAIR ACCESSIBLE SHOWER COMPARTMENT ROLL-ON TYPE SHOWER
4	CONTRACTOR TO "SMOKE-OUT" DRAIN LINE AND CHECK FOR PROPER DRAINAGE
5	REPAINT THIS PORTION OF THE EXTERIOR TO MATCH EXISTING

ADD ALTERNATE #1

REVISIONS

ADG

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BULL RUN BATH HOUSE #2
 ADA RENOVATIONS
 BULL RUN REGIONAL PARK
 CENTREVILLE, VA 20121

PROJECT PHASE:
 PERMIT SET

DATE:
 09/16/2019

SHEET No.
 ALT-1