

**POHICK BAY REGIONAL PARK
MARINA BUILDING RESTROOM RENOVATIONS
6501 Pohick Bay Drive
Lorton, Virginia 22079**

PROJECT MANUAL
September 28, 2022



NOVA Parks
Northern Virginia Regional Park Authority
5400 Ox Road
Fairfax Station, Virginia 22039

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INVITATION TO BID
POHICK BAY REGIONAL PARK
MARINA BUILDING RESTROOM RENOVATIONS
6501 Pohick Bay Drive
Lorton, Virginia 22079

Sealed bids will be received by mail or in person at the Northern Virginia Regional Park Authority Headquarters, 5400 Ox Road, Fairfax Station, Virginia 22039, until **Thursday, October 27, 2022, at 1 p.m.** Bids will be opened in public at that time.

The project includes renovations to make the existing restroom building ADA compliant. The Contractor shall furnish all equipment, material, and labor in accordance with the project manual and plans.

Five percent bid bond or certified check is required for all bids over \$500,000. All bids and bid bonds shall remain valid for ninety days. Performance and Labor and Material Payment bonds shall be required of the successful bidder for all contracts awarded over \$500,000.

The Project Manual can be downloaded from the NOVA Parks website (www.novaparks.com) at <https://www.novaparks.com/about/bids-proposals> The Contractor shall be responsible to verify and obtain any addendum prior to the bid date. Project addenda will be posted on the website.

The Project documents include the following:

- Project manual dated September 28, 2022
- Plans by ZHA Architects, PC and SAH Engineering
(17 pages total) Dated 11/19/2022 - Sheets CS.1, CS.2, AS-1, A-1, A-2, SP-1, SP-2, SP-3, SP-4, SP-5, PA-1, E001, E002, M001, P001, P002, P003.

Questions concerning this project shall be directed to the attention of Jake Bumbrey, NOVA Parks Project Manager. All questions regarding the project or bid shall be in writing and can be sent via email to jbumbrey@nvrpa.org.

All interested Bidders should formally register with NOVA Parks by contacting Kiley Christian via email at kchristian@nvrpa.org or by calling 703-359-4626. Bidders shall provide Mrs. Christian with the following information:

Company Name
Contact person
Address
Phone and Fax number
Email address

Project Addenda will be posted on the NOVA Parks website as well as emailed to those registered. Access to the restroom building can be arranged by calling the park at 703-339-6104 or emailing the Park Manager, Brad Jackson, at bjackson@nvrpa.org.

FORM OF PROPOSAL - PAGE 1 OF 2
POHICK BAY REGIONAL PARK
MARINA BUILDING RESTROOM RENOVATIONS
6501 Pohick Bay Drive,
Lorton, Virginia 22079

PROPOSAL

To furnish all material, labor, tools, equipment and supplies to perform all work specified herein and shown in the contract documents.

Name of Bidding Company:	
Address of Bidder:	
Telephone Number:	
Signature /Title:	
Print or Type Name:	
Date:	
Virginia Contractor's License Number:	

To: Brian Nolan, Director of Planning and Development
NOVA Parks
5400 Ox Road
Fairfax Station, Virginia 22039
(703) 352-5900

Pursuant to and in compliance with the contract documents, the undersigned proposes and agrees, if this proposal is accepted, to furnish all labor, materials, supplies, equipment, and other facilities, and to perform all work described in the project manual in the manner therein prescribed for consideration of the following amount.

The low bidder shall be determined by the sum of the Base Bid and whichever Alternates are chosen by NOVA Parks. Bidders shall fill in all blank spaces on the Form of Proposal.

FORM OF PROPOSAL - PAGE 2 OF 2
POHICK BAY REGIONAL PARK
MARINA BUILDING RESTROOM RENOVATIONS
6501 Pohick Bay Drive,
Lorton, Virginia 22079

BASE BID: All work as described in the project manual and plans.

Dollars / \$ _____

Unit Price for Unsuitable Soils: Should poor soils be encountered at proposed subgrade and require removal; the contractor agrees to remove and dispose of poor soils off site and replace excavated area with properly compacted VDOT 21-A stone at the following total cost per cubic yard:

\$ _____ / CUYD

Dollars / \$ _____

Acknowledges Receipt of Addendum # _____ dated _____.

Acknowledges Receipt of Addendum # _____ dated _____.

Acknowledges Receipt of Addendum # _____ dated _____.

SUPPLEMENTAL GENERAL CONDITIONS

PART 1 – GENERAL

All bidders shall submit their bids on the enclosed Form of Proposal.

Contractor shall provide at least 48 hours' notice prior to beginning of work.

Materials may be stored on site with prior approval from NOVA Parks. Only materials to be used on this project may be stored on site.

Contractor shall not begin work until an acceptable certificate of insurance is provided to Owner.

Contractor must have a valid Virginia Class A Contractor license at the opening of bids and must be provided on the form of proposal.

In the event the accepted base bid amount exceeds \$500,000, the acceptable low bidder must provide the appropriate bonds, certificate of insurance and signed contract within 10 calendar days of being notified of the Owner's intent to award a contract.

The Contractor will have 65 days from the notice to proceed to complete the project. If the work is not completed within the time required, as that may be adjusted by change orders, there shall be imposed on the Contractor liquidated damages of \$200.00 per day for each day beyond the contract time it takes to complete the work.

All work will be completed during weekday business hours of 7 am to 6 pm. Weekend work will not be permitted on this project unless approval is granted by NOVA Parks.

Contractor should verify lengths and conditions and provide bids that reflect actual lengths and conditions.

Any Contractor that chooses to use a subcontractor for any portion of the job must provide NOVA Parks with the subcontractor qualifications for approval after the submission of bids.

NOVA Parks will obtain a building permit. Contractor shall be responsible to obtain all other required permits and is responsible to schedule all required inspections.

The Contractor shall, within five (5) days of the receipt of intent to award, prepare and submit to NOVA Parks and the Engineer a schedule for the completion of the work within the timeframe set forth in the Contract Documents. This progress schedule shall be related to the entire Project; shall include all the work; and shall meet the time for completion requirements of the Contract. It shall include an allowance for anticipated delays caused by ordinary adverse weather conditions and shall provide for the expeditious and practical execution of the Work within the time requirements of the Contract Documents. The schedule shall set forth as much detail as deemed necessary by NOVA Parks.

The Contractor shall not award work to a single Subcontractor in excess of 50 percent of the Contract price without prior written approval of NOVA Parks.

The NOVA Parks' acceptance of the schedule is not a representation or agreement that the schedule is logical or can be performed in the time or sequence indicated, but only that NOVA Parks approves of the construction in that time and in that sequence.

The Contractor shall provide a list of materials that have lead times that could delay the timeframe set forth in the Contract documents.

The Owner reserves the right to disqualify any bidder who is determined not to have adequate experience or favorable client references. Any bidder disqualifications shall be at the sole discretion of NOVA Parks.

The Contractor shall be responsible for all miscellaneous damages caused by his forces to park property during this project.

The Contractor shall contact Miss Utility. The Contractor shall be responsible for any damages to marked underground utilities.

Submittals shall be made to the owner for approval of all materials not specified in the project manual or for requested substitutions of specified materials. Acceptance of a substitution shall be at the sole discretion of NOVA Parks. A request for substitution must be made at least 7 days before the bid if the Contractor wishes to use it in his bid. If accepted, NOVA Parks will issue an addendum to all bidders.

The Contractor shall remove and properly dispose of all waste material generated from this project.

If a dumpster is to be used, its location must be coordinated with the Park Manager.

PART 2 – WARRANTY AND AS-BUILTS

The Contractor shall provide a written warranty to NOVA Parks covering all defects in materials and workmanship for the period of one year from the date of project completion. All warranties provided by the equipment and material manufacturers shall also be provided to NOVA Parks.

The Contractor shall maintain during the progress of the work a complete and up-to-date set of “as built” plans and specifications that shall be available for inspection by the Owner and Architect at any time. These documents shall be marked up to record all changes in the work as they occur. As-built documents shall be neatly marked with red colored pencil or ink. One complete electronic copy and one complete paper copy shall be delivered to the Owner in a satisfactory condition prior to final acceptance of and payment for the work.

PART III - PROTECTION OF ARCHAEOLOGICAL RESOURCES AND ARTIFACTS

1. PROTECTION OF ARCHAEOLOGICAL RESOURCES

- A. The Owner and the local jurisdiction have determined that there may be archaeological resources on this site. The Contractor shall recognize preservation responsibilities as defined in the "Archaeological and Historic Preservation Act of 1974" and revised in 1992 and shall be governed by them and the provisions contained herein.
- B. The Contractor shall notify the Owner at least 48 hours prior to any ground disturbing activities.
- C. In the event that archaeological resources are identified during construction, all work shall be temporarily suspended in those areas. Work shall not resume in those areas until notified by the Owner.
- D. The Contractor shall provide access to the site for any archaeological staff, as directed by the Owner.
- E. The Contractor shall keep accurate records of any delays associated with suspended work related to archaeological resources and shall submit any claims for extension of time to the Owner in accordance with the general conditions. Monetary claims for such delays shall be approved at the sole discretion of the Owner.

2. ARTIFACTS

- A. All artifacts found on the site shall remain the property of the Owner.
- B. All artifacts discovered on the site shall be left in place and intact, until removed by the Owner, or by his archaeological staff, or as otherwise directed by the Owner.

*******END OF SUPPLEMENTAL GENERAL CONDITIONS*******

The Contractor shall provide three copies of an Owner's manual detailing equipment specifications and proper use and maintenance of all materials. Each copy should be bound in a sturdy three ring binder, indexed, and labeled as follows:

OPERATING & MAINTENANCE MANUAL
POHICK BAY REGIONAL PARK
MARINA BUILDING RESTROOM RENOVATIONS
6501 Pohick Bay Drive,
Lorton, Virginia 22079

The manuals shall include the following:

1. Name, address, telephone number and contact person (if applicable) of all Contractor(s) involved in the project.
2. The Contractors' written one-year warranties as noted above.
3. Complete manufacturers' operating and maintenance instructions for all materials and equipment.
4. Manufacturers' warranties for all materials and equipment.
5. List of color selections used for all finishes, to include the brand name, manufacturer, and color numbers.



NOVA PARKS

COMFORT STATION UPGRADE

POHICK BAY REGIONAL PARK
ROUTE 242, FAIRFAX COUNTY,, VA

ARCHITECT

ZHA ARCHITECTS, PC
10614 FIESTA ROAD
FAIRFAX, VIRGINIA 22032
TEL. (703) 352-1933

OWNER

NOVA PARKS
5400 OX ROAD
FAIRFAX STATION, VA 22039
TEL. (703) 359-4606
FAX. (703) 273-0905

MECH/ELECT/PLUMBING

SAH DESIGN GROUP
22636 GLEN DRIVE, SUITE 305
STERLING, VA 20164
TEL. (571) 267-7240

ISSUED FOR PERMIT

11.19.2021



ABBREVIATIONS					PROJECT DATA		CODE ANALYSIS STRUCTURE ORIGINALLY BUILT IN 1976			DRAWING INDEX	
A.B.	ANCHOR BOLT	F.S.	FLOOR SINK	PLYWD.	PLYWOOD	PROJECT	POHICK BAY REGIONAL PARK COMFORT STATION UPGRADE ROUTE 242, FAIRFAX COUNTY, VIRGINIA TELEPHONE: (703) 339-6104	SCOPE OF WORK INTERIOR RENOVATION AND UPGRADE OF EXISTING RESTROOM FACILITY TO MEET CURRENT ACCESSIBILITY CODES. WORK TO INCLUDE:		COVER SHEET	
A/C	AIR CONDITION	FT.	FOOT	PLWD.	PLYWOOD	OWNER	NORTHERN VIRGINIA REGIONAL PARK AUTHORITY 5400 OX ROAD, FAIRFAX STATION, VA 22039 TELEPHONE: 703.352.5900	- REPLACEMENT OF PLUMBING FIXTURES - REPLACEMENT OF TOILET PARTITIONS - REPLACEMENT OF LIGHTING - REPLACEMENT OF WASHROOM ACCESSORIES - NEW WALL AND FLOOR FINISHES - NEW EXTERIOR SIDEWALK		CS.1 COVER SHEET	
A.F.F.	ABOVE FINISH FLOOR	FTG.	FOOTING	P.O.S.	POINT OF SALE	ARCHITECT	ZHA ARCHITECTS, PC 10614 FIESTA ROAD FAIRFAX, VA 22032 TELEPHONE: 703.352.1933			CS.2 PROJECT INFO, CODE ANALYSIS, DRAWING INDEX & SYMBOLS	
ALT.	ALTERNATE	F.V.	FIELD VERIFY PRIOR TO CONSTRUCTION	PREFAB.	PREFABRICATED	DRAWING HIERARCHY		CODES		CIVIL	
ALUM.	ALUMINUM	GA.	GAUGE	P.S.F.	POUNDS PER SQ. FOOT					PA-1 GEOMETRY PLAN (FOR INFORMATION PURPOSES ONLY)	
APPROX.	APPROXIMATE	GALV.	GALVANIZED	P.S.I.	POUNDS PER SQ. INCH	GENERAL NOTES		SYMBOLS		ARCHITECTURAL	
ARCH.	ARCHITECTURAL	G.C.	GENERAL CONTRACTOR	P.T.	PRESSURE TREATED					AS-1 ARCHITECTURAL SITE PLAN A-1 DEMOLITION, FLOOR PLAN & REFLECTED CEILING PLAN A-2 INTERIOR ELEVATIONS, DOOR & FINISH SCHEDULE SP-1 SPECIFICATIONS SP-2 SPECIFICATIONS SP-3 SPECIFICATIONS SP-4 SPECIFICATIONS SP-5 SPECIFICATIONS	
AUX.	AUXILIARY	GOVT.	GOVERNMENT	PTD.	PAINTED						
ATTEN.	ATTENUATION	G.P.M.	GALLONS PER MINUTE	PTN.	PARTITION					ELECTRICAL	
BD.	BOARD	GRD.	GROUND	P.V.C.	POLYVINYL CHLORIDE					E001 ELECTRICAL FLOOR PLANS E002 ELECTRICAL DETAILS	
BIT.	BITUMINOUS	G.W.	GREASY WASTE	RAD. (R)	RADIUS					MECHANICAL	
BLK'G.	BLOCKING	GYP.	GYPSUM	R.D.	ROOF DRAIN					M001 HVAC FLOOR PLANS	
B.O.	BOTTOM OF	H.B.	HOSE BIB	RECEPT.	RECEPTACLE					PLUMBING	
BM.	BEAM	H.C.	HOLLOW CORE	REF.	REFERENCE					P001 PLUMBING FLOOR PLANS P002 RISER DIAGRAM P003 PLUMBING DETAILS	
BOT., BOTT.	BOTTOM	H.D.	HAND DRYER	REINF.	REINFORCING						
BR.	BRICK	H.E.	HEXAGONAL	REQ'D.	REQUIRED						
BRZ.	BRONZE	HEX.	HEXAGONAL	REV.	REVISED, REVISION						
BU.	BUILT-UP	H.M.	HOLLOW METAL	R.M.	ROOM						
C	COURSING	H.C.	HANDICAP	R.O.	ROUGH OPENING						
CER.	CERAMIC	HR.	HOOR	SAT	SUSPENDED ACOUSTICAL TILE						
C, COND.	CONDUIT	HT., HGT.	HOT-HEIGHT	S.C.	SOLID CORE						
C.J.	CONTROL JOINT	H.W.	HOT WATER	SH	SHEET						
CLG.	CEILING	ICF	INSULATION CONCRETE FORMS	SPEC.	SPECIFICATION PROJECT MANUAL						
CLR.	CLEAR	I.D.	INSIDE DIAMETER	S/S, S.S.	STAINLESS STEEL						
CMU	CONCRETE MASONRY UNIT	IN.	INCH	STD.	STANDARD						
C.O.	CLEAN OUT	INT.	INTERIOR	STOR.	STORAGE						
COL.	COLUMN	INSUL.	INSULATION	STL.	STEEL						
CONC.	CONCRETE	JAN.	JANITOR	STRUCT.	STRUCTURAL						
CONN.	CONNECTION	JST.	JOIST	SURF. MTD.	SURFACE MOUNTED						
CONT.	CONTINUOUS	JSTS.	JOISTS	SUSP.	SUSPENDED						
CONTR.	CONTRACTOR	JT.	JOINT	TOILET	TOILET						
C.T.	CERAMIC TILE	K.O.	KNOCK OUT	TEL.	TELEPHONE						
CTR.	CENTER	L	LONG	TEMP.	TEMPERATURE						
C.W.	COLD WATER	LAM.	LAMINATE	THRU.	THROUGH						
DBL.	DOUBLE	LAV.	LAVATORY	T&G	TONGUE AND GROOVE						
DET.	DETAIL	L.L.H.	LONG LEG HORIZONTAL	T.O.S.	TOP OF STEEL						
DIA.	DIAMETER, DIAGRAM	L.L.V.	LONG LEG VERTICAL	TYP.	TYPICAL						
DN.	DOWN	LOC.	LOCATION	U.C.	UNDER CUT						
DTLS.	DETAILS	L.P.	LOW POINT	U.L.	UNDERWRITERS LABORATORY						
DWG.	DRAWING	L.T.	LIGHT	U.O.N.	UNLESS OTHERWISE NOTED						
EA.	EACH	MAS.	MASONRY	UR.	URINAL						
E.F.	EXHAUST FAN	MAT'L.	MATERIAL	UTIL.	UTILITY						
E.J.	EXPANSION JOINT	MAX.	MAXIMUM	V.C.T.	VINYL COMPOSITION TILE						
ELECT.	ELECTRIC	MEMB.	MEMBRANE	VEN.	VENEER						
ELEV., EL.	ELEVATION	MEZZ.	MEZZANINE	VENT.	VENTILATION						
EQ.	EQUAL	MFR.	MANUFACTURER	VERT.	VERTICAL						
EQUIP.	EQUIPMENT	MIN.	MINIMUM	VEST.	VESTIBULE						
E.W.	EACH WAY	MISC.	MISCELLANEOUS	V.I.F.	VERIFY IN FIELD						
E.W.C.	ELECTRIC WATER COOLER	MTD.	MOUNTED	V.R.	VAPOR RETARDER						
EXT.	EXTERIOR	MTL.	METAL	V.T.R.	VENT THRU ROOF						
EXIST.	EXISTING	N.I.C.	NOT IN CONTRACT	V.W.C.	VINYL WALL COVERING						
F.C.	FIRE CODE	NO., #	NUMBER	W/	WITH						
F.D.	FLOOR DRAIN	NOM.	NOMINAL	W.C.	WATER CLOSET						
F.E.	FIRE EXTINGUISHER	N.T.S.	NOT TO SCALE	WD/W	WOOD						
FIN.	FINISH	O.C.	ON CENTER	WH.	WATER HEATER						
F.F.	FINISH FLOOR	OFF.	OFFICE	W/O	WITHOUT						
FLR.	FLOOR	O.H.	OVER HEAD	W.P.	WATER PROOF						
FIXT.	FIXTURE	O/O	OUT-TO-OUT	W.W.F.	WELDED WIRE FABRIC						
F.O.M.	FACE OF MASONRY	OPNG.	OPENING	W.W.M.	WELDED WIRE MESH						
F.O.S.	FACE OF STUD	OPP.	OPPOSITE	ANGLE	ANGLE						
F.R.	FIRE RETARDANT	P L	PLATE	AT	AT						
F.R.P.	FIBERGLASS REINFORCED PANEL			<	CENTER LINE						
FRTW.	FIRE RETARDANT TREATED WOOD			~	DIAMETER						

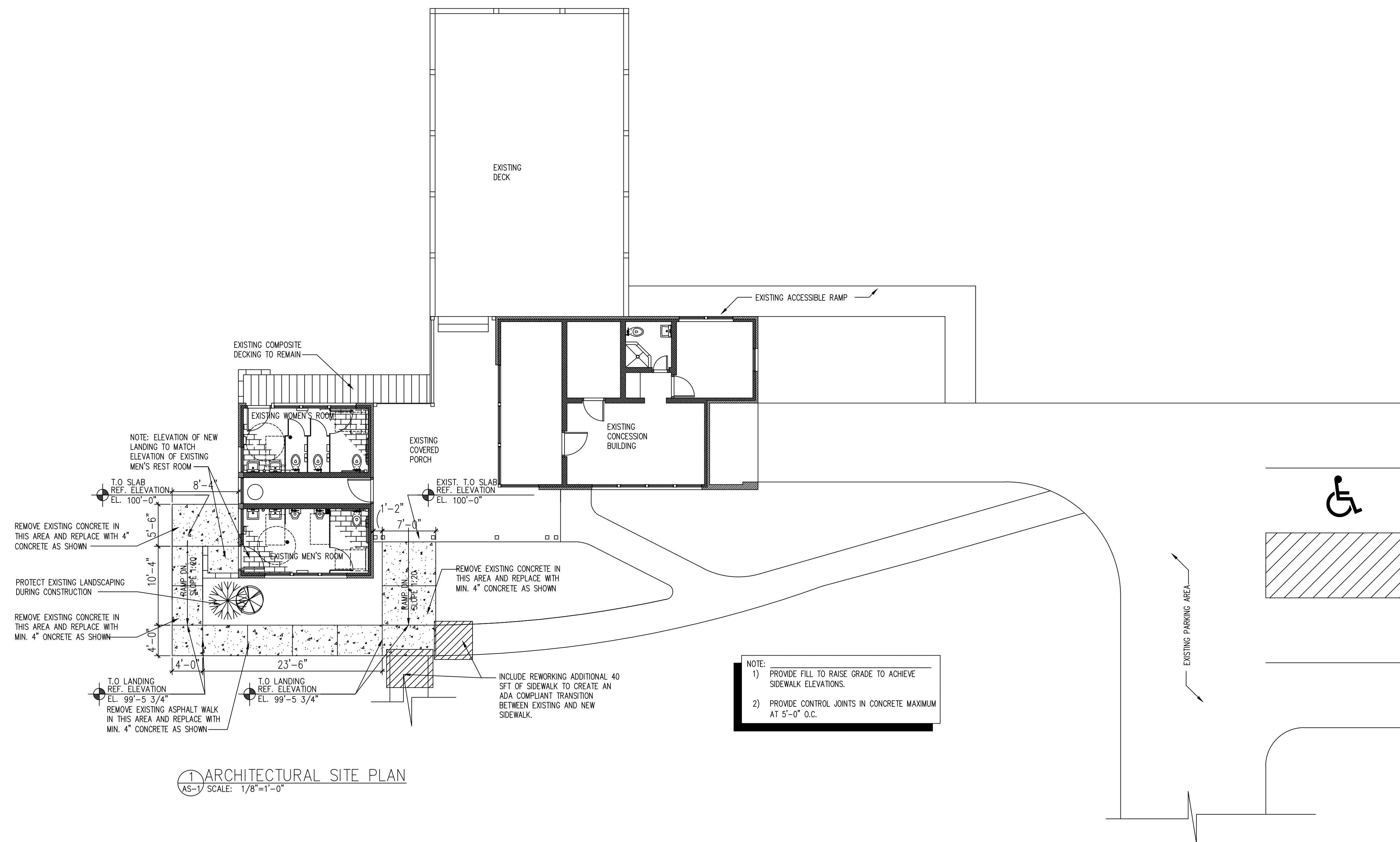
PROJECT DATA		CODES	
1. DO NOT SCALE THE DRAWINGS		• VIRGINIA UNIFORM STATEWIDE BUILDING CODE 2015	
2. ALL NEW WALL DIMENSIONS ARE TO THE FACE OF STUDS UNLESS NOTED OTHERWISE.		• VIRGINIA EXISTING BUILDING CODE 2015	
3. NOTES APPLIED TO AN ELEMENT OF DRAWING SHALL APPLY TO ALL SIMILAR INSTANCES OF THAT ELEMENT IN OTHER DRAWINGS UNLESS NOTED OTHERWISE.		• INTERNATIONAL BUILDING CODE 2015	
		• NATIONAL ELECTRICAL CODE 2014	
		• INTERNATIONAL PLUMBING CODE 2015	
		• INTERNATIONAL MECHANICAL CODE 2015	
		• INTERNATIONAL FUEL GAS CODE 2015	
		• VIRGINIA STATEWIDE FIRE PREVENTION CODE 2015	
		• INTERNATIONAL ENERGY CONSERVATION CODE 2015	
		• ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES ANSI A117.1 2009	
* IN THE EVENT OF SMALL SCALE DRAWING CONFLICTS WITH LARGE SCALE DRAWING – THE LARGE SCALE DRAWING PREVAILS.			
* IF A DRAWING CONFLICTS WITH A SCHEDULE THE SCHEDULE PREVAILS.			
* IF A DRAWING OR SCHEDULE CONFLICTS WITH THE PROJECT MANUAL THE PROJECT MANUAL PREVAILS			
* IN THE EVENT OF A VARIANCE, ADDENDA PREVAIL OVER PROJECT MANUAL, DRAWINGS AND SCHEDULES			
* IN THE EVENT OF A VARIANCE, REVISIONS PREVAIL OVER ADDENDA, PROJECT MANUAL, DRAWINGS AND SCHEDULES			

DRAWING HIERARCHY		CODES	
1. DO NOT SCALE THE DRAWINGS		• VIRGINIA UNIFORM STATEWIDE BUILDING CODE 2015	
2. ALL NEW WALL DIMENSIONS ARE TO THE FACE OF STUDS UNLESS NOTED OTHERWISE.		• VIRGINIA EXISTING BUILDING CODE 2015	
3. NOTES APPLIED TO AN ELEMENT OF DRAWING SHALL APPLY TO ALL SIMILAR INSTANCES OF THAT ELEMENT IN OTHER DRAWINGS UNLESS NOTED OTHERWISE.		• INTERNATIONAL BUILDING CODE 2015	
		• NATIONAL ELECTRICAL CODE 2014	
		• INTERNATIONAL PLUMBING CODE 2015	
		• INTERNATIONAL MECHANICAL CODE 2015	
		• INTERNATIONAL FUEL GAS CODE 2015	
		• VIRGINIA STATEWIDE FIRE PREVENTION CODE 2015	
		• INTERNATIONAL ENERGY CONSERVATION CODE 2015	
		• ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES ANSI A117.1 2009	
* IN THE EVENT OF SMALL SCALE DRAWING CONFLICTS WITH LARGE SCALE DRAWING – THE LARGE SCALE DRAWING PREVAILS.			
* IF A DRAWING CONFLICTS WITH A SCHEDULE THE SCHEDULE PREVAILS.			
* IF A DRAWING OR SCHEDULE CONFLICTS WITH THE PROJECT MANUAL THE PROJECT MANUAL PREVAILS			
* IN THE EVENT OF A VARIANCE, ADDENDA PREVAIL OVER PROJECT MANUAL, DRAWINGS AND SCHEDULES			
* IN THE EVENT OF A VARIANCE, REVISIONS PREVAIL OVER ADDENDA, PROJECT MANUAL, DRAWINGS AND SCHEDULES			

GENERAL NOTES		SYMBOLS	
1. GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION AS DETAILED HEREIN. EACH CONTRACTOR SHALL RESPECT THE WORK OF OTHER CONTRACTORS AND IS RESPONSIBLE FOR AND LIABLE TO REPAIR OR REPLACE ANY DAMAGE CAUSED BY HIS WORK.		(ALL MATERIALS SHOWN BELOW MAY NOT APPEAR ON THE DWG.S)	
2. THE GENERAL CONTRACTOR SHALL PROVIDE ON-SITE WEATHER-PROTECTED STORAGE SPACE IN LOCATION DIRECTED BY OWNERS REPRESENTATIVE.		DETAIL NO. 1 A-1 SHEET NO. 1 ELEV. NO. 1 INTERIOR ELEVATION SECTION NO. 1 A2 SHEET NO. 1 BUILDING SECTION SECTION NO. 1 A6 SHEET NO. 1 WALL SECTION DRAWING NO. 1 A1 TITLE SCALE: 1/8"=1'-0" SHEET NO. 2 A6 SHEET NO. 2 DETAIL REFERENCE	STORE FRONT & WINDOW TYPE TOILET ACCESSORY DOOR TYPE DATUM ELEVATION PARTITION TYPE FINISH REFERENCE COLUMN LINE LOBBY ROOM NAME ROOM FINISH NO. FINISH CEILING HEIGHT CENTER LINE
3. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH LOCAL AND STATE CODES AND REGULATIONS HAVING JURISDICTION. THE CONTRACTOR SHALL PROTECT AND INDEMNIFY THE OWNER AND ARCHITECT AGAINST ANY CLAIM OR LIABILITY ARISING FROM VIOLATION OF ANY SUCH CODE OR REGULATION.			
4. THE GENERAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS, AND APPROVALS.			
5. WORKMANSHIP SHALL BE OF THE HIGHEST TYPE, AND MATERIALS USED OR SPECIFIED OF THE BEST QUALITY THAT THE MARKET AFFORDS. ALL INSTALLATIONS AND APPLICATIONS SHALL CONFORM TO THE MANUFACTURERS' SPECIFICATIONS.			
6. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL SUBCONTRACTORS FOR TRADES WHETHER THEY RECEIVE THEIR CONTRACT FROM THE CONTRACTOR OR OWNER. THE GENERAL CONTRACTOR'S INSTRUCTIONS SHALL BE FOLLOWED BY ALL TRADES.			
7. THE MECHANICAL AND ELECTRICAL TRADES SHALL PREPARE ALL DRAWINGS REQUIRED TO SECURE A PERMIT FOR THEIR PORTION OF THE WORK. INSTALL THEIR WORK AS RAPIDLY AS THE OTHER WORK PERMITS, AND SHALL COMPLETE THE WORK BY THE TIME THE OTHER TRADES HAVE FINISHED.			
8. EXAMINATION OF SITE AND DOCUMENTS: THE GENERAL CONTRACTOR, BEFORE SUBMITTING HIS PROPOSAL, SHALL VISIT THE SITE AND EXAMINE FOR HIMSELF ALL EXISTING CONDITIONS AND LIMITATIONS WHICH AFFECT THE CONTRACT. HE SHALL CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS. TITLES AND SUBDIVISIONS IN THESE DOCUMENTS ARE FOR CONVENIENCE, AND NO REAL OR ALLEGED ERRORS IN ARRANGEMENT OF DOCUMENTS SHALL BE REASON FOR OMISSION OR DUPLICATION BY ANY CONTRACTOR.			
9. THE OWNER RESERVES THE RIGHT TO AWARD OTHER CONTRACTS IN CONNECTION WITH THIS WORK. THE GENERAL CONTRACTOR SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE EXECUTION OF THEIR WORK AND SHALL PROPERLY CONNECT AND COORDINATE HIS WORK WITH THEIRS.			
10. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE UNLESS SPECIFIED OTHERWISE FOR A LONGER PERIOD OF TIME.			
11. AT THE END OF EACH DAY, CONTRACTORS SHALL REMOVE ALL THEIR TRASH AND DEBRIS FROM THE SITE AND/OR WITHIN THE BUILDING (AREA SHOULD BE SWEEP CLEAN). IF TRASH AND DEBRIS ARE NOT REMOVED, THE OWNER MAY (AT HIS OPTION) PAY FOR ITS REMOVAL AND BACK CHARGE THE CONTRACTOR.			
12. THE GENERAL CONTRACTOR SHALL COORDINATE THE LOCATION AND SIZE OF OPENINGS FOR VENTS, PIPES, INSERTS, BOXES, HANGERS, ETC.			
13. THE GENERAL CONDITIONS FOR THIS CONTRACT SHALL BE AS CONTAINED IN THE BID DOCUMENTS			
14. ALL ERECTION, DETAILS, MATERIALS, METHODS, ETC., SHOWN AND/OR NOTED ON ANY PLAN OR SECTION SHALL APPLY TO ALL OTHER SIMILAR LOCATIONS UNLESS OTHERWISE NOTED.			
15. THE GENERAL CONTRACTOR SHALL SAFELY SHORE, BRACE, OR SUPPORT ALL WORK AS REQUIRED. THIS WORK SHALL BE THE FULL RESPONSIBILITY OF THE GENERAL CONTRACTOR, AND NO ACT, DIRECTION, OR REVIEW OF ANY SYSTEM OR METHOD BY THE ARCHITECT SHALL RELIEVE THE CONTRACTOR OF THIS RESPONSIBILITY. ALL NEW CONSTRUCTION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE PROVISIONS LISTED UNDER CHAPTER 33 OF IBC 2012. CONTRACTOR SHALL FOLLOW SAFETY GUIDELINES ESTABLISHED BY OSHA AND OTHER LOCAL AND FEDERAL GUIDELINES.			
16. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW OR INDICATE ALL FASTENING OR FRAMING TECHNIQUES AND/OR DEVICES, OR TO SHOW ALL CONDITIONS PRESENT.			
17. SUBMIT SAMPLES OF ALL PAINTS AND STAINS FOR APPROVAL.			
18. PROVIDE FIRE STOPPING AT PENETRATIONS THROUGH ANY EXISTING FIRE RATED ASSEMBLIES AROUND VENTS, PIPES, HIGH AND LOW VOLTAGE ELECTRICAL WIRING, DUCTS CHUTES THROUGH CEILINGS, FLOORS AND WALLS WITH UL TESTED AND APPROVED MEANS OF PENETRATION PROTECTION SYSTEM THAT INCLUDES FIRE SAFING AND PROTECTIVE COLLAR AS APPLICABLE.			
19. PROVIDE ALL ITEMS INDICATED BY NOTE OR DRAWING, UNLESS INDICATED AS EXISTING TO REMAIN.			
20. CONCEALED INSULATION SHALL COMPLY WITH IBC 2012 TO HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE DEVELOPED INDEX OF NOT MORE THAN 450.			

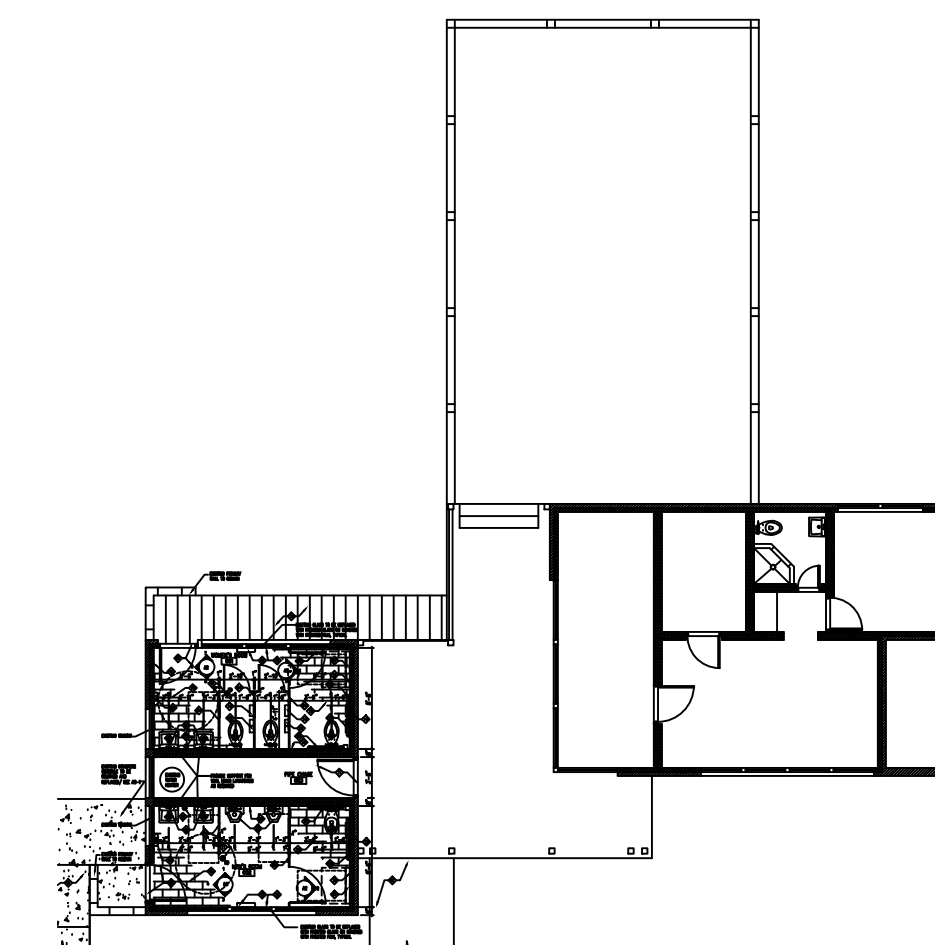
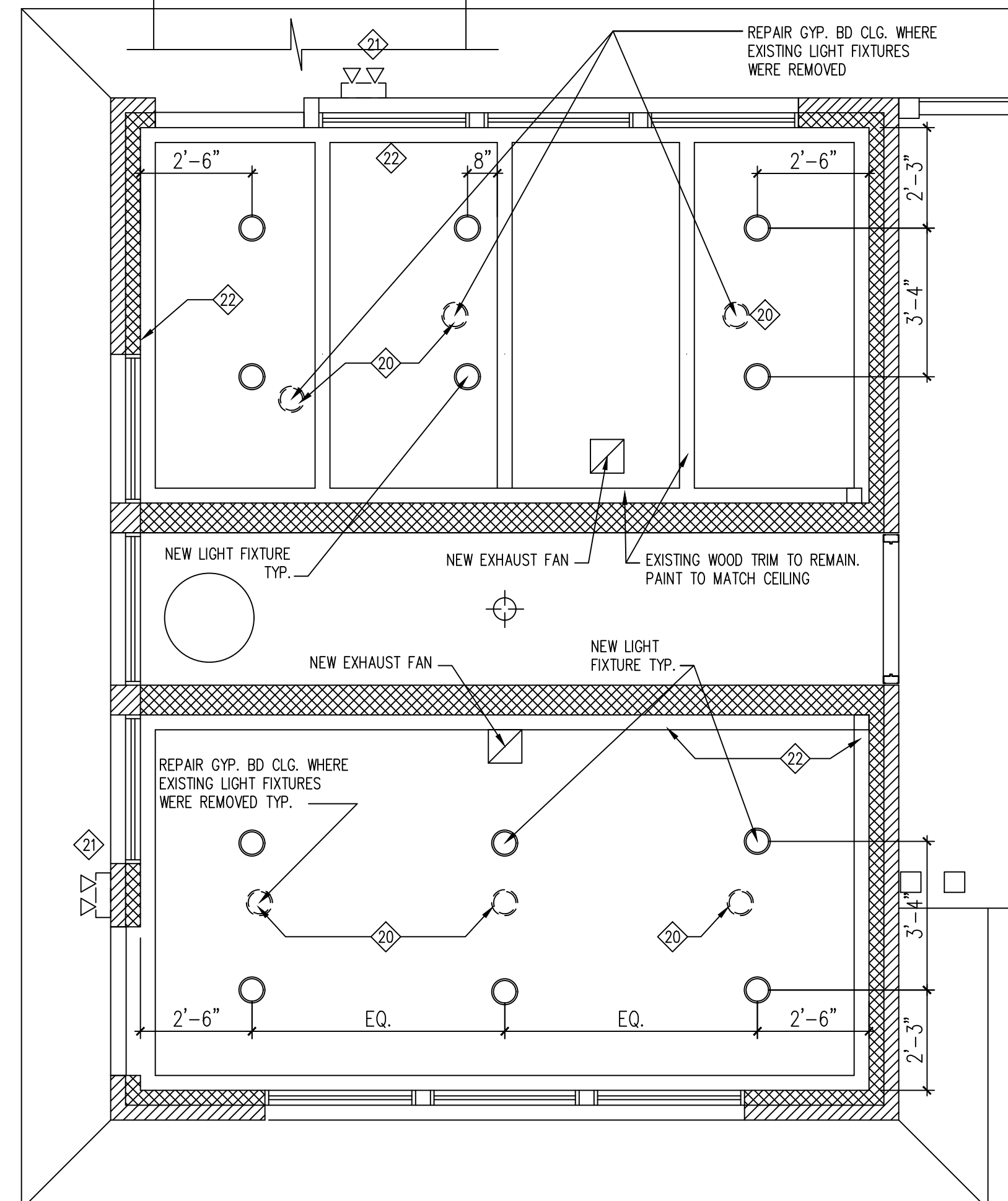
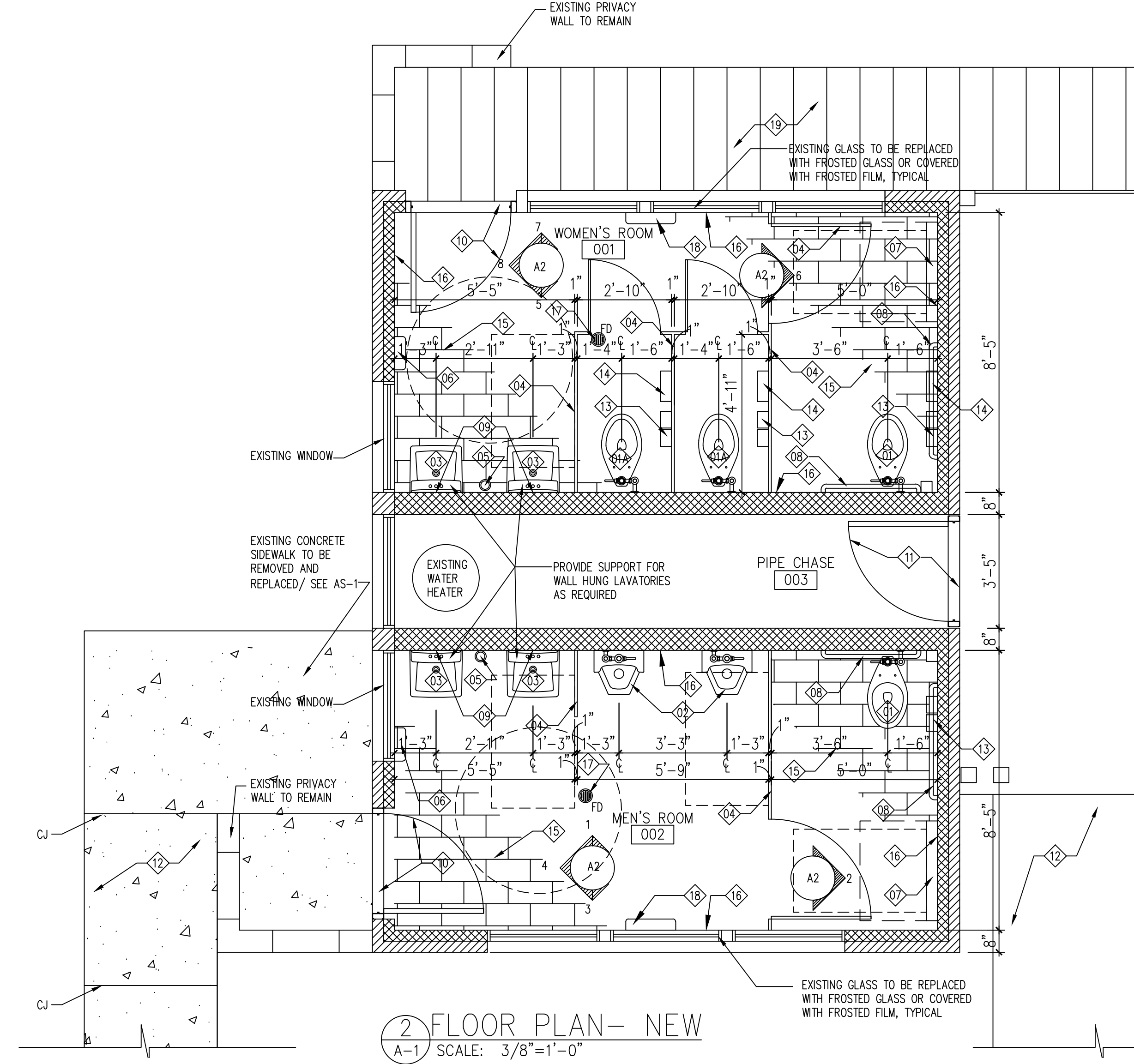
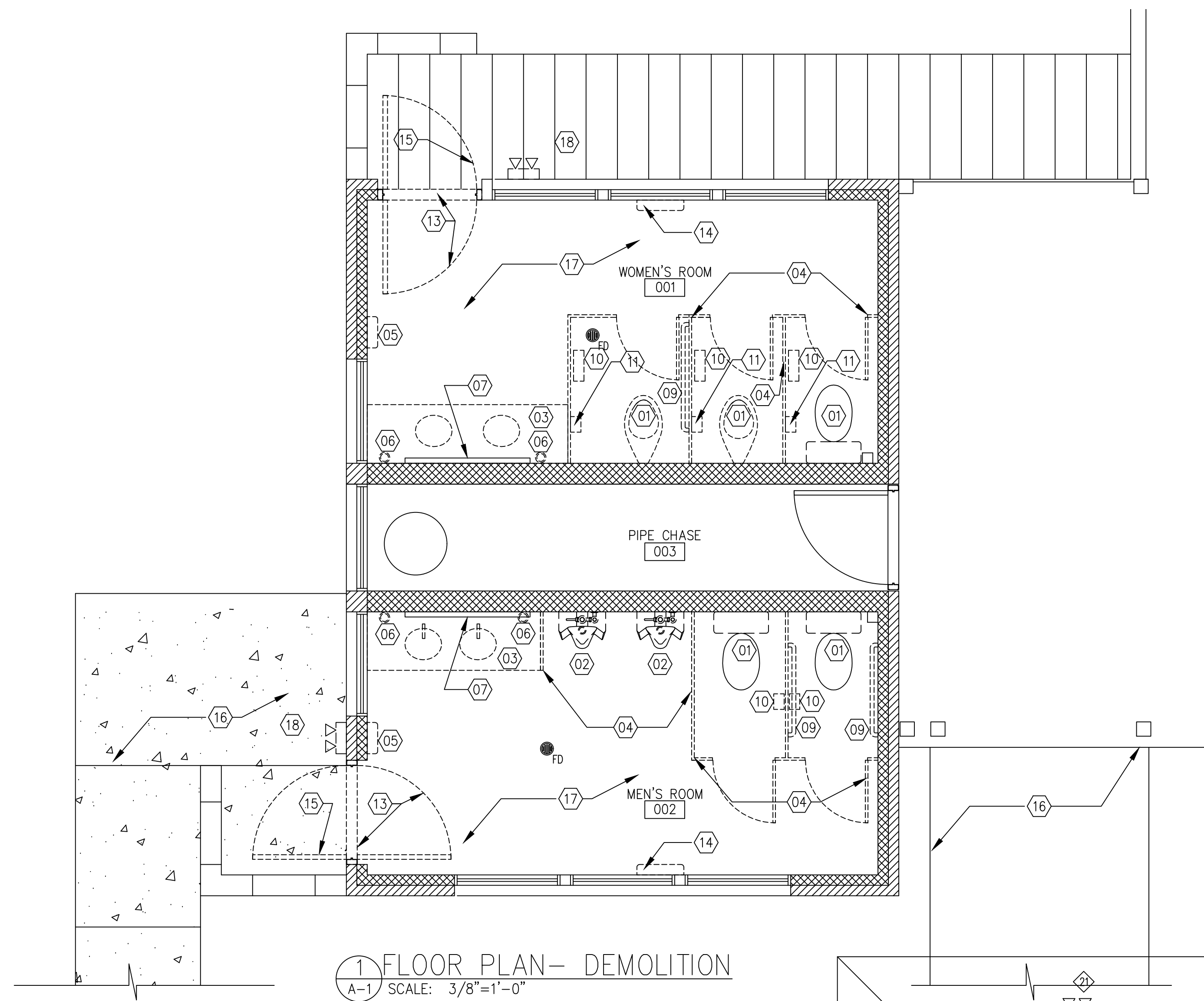
MATERIALS		LOCATION MAP	
(ALL MATERIALS SHOWN BELOW MAY NOT APPEAR ON THE DWG.S)		SITE	
BRICK CEMENT MORTAR/ SAND/PLASTER CONCRETE MASONRY UNIT (C.M.U.) CONCRETE RIGID INSULATION BATT INSULATION EARTH GRAVEL STONE WOOD FINISH WOOD ROUGH (CONTINUOUS) WOOD ROUGH (SPACED)	METAL – FERROUS (STEEL) METAL – ELEVATION GYPSUM BOARD PLYWOOD CLAY PAVERS TILE – CERAMIC /STRUCTURAL RESILIENT MATERIALS ASPHALT,CORK, RUBBER, ETC. ACOUSTICAL TILE GROUND FACE BLOCK PREFORMED INSULATED METAL PANEL	COMFORT STATION UPGRADE POHICK BAY REGIONAL PARK, 6501 POHICK BAY DR., LORTON, VA 22079 PROJECT NUMBER: 21104 SCALE: AS SHOWN PROJECT INFO, CODE ANALYSIS DRAWING INDEX & SYMBOLS	

COMFORT STATION UPGRADE POHICK BAY REGIONAL PARK, 6501 POHICK BAY DR., LORTON, VA 22079 PROJECT NUMBER: 21104 SCALE: AS SHOWN PROJECT INFO, CODE ANALYSIS DRAWING INDEX & SYMBOLS		CS.2	
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DATE	DESCRIPTION
11/19/21	ISSUED FOR PERMIT



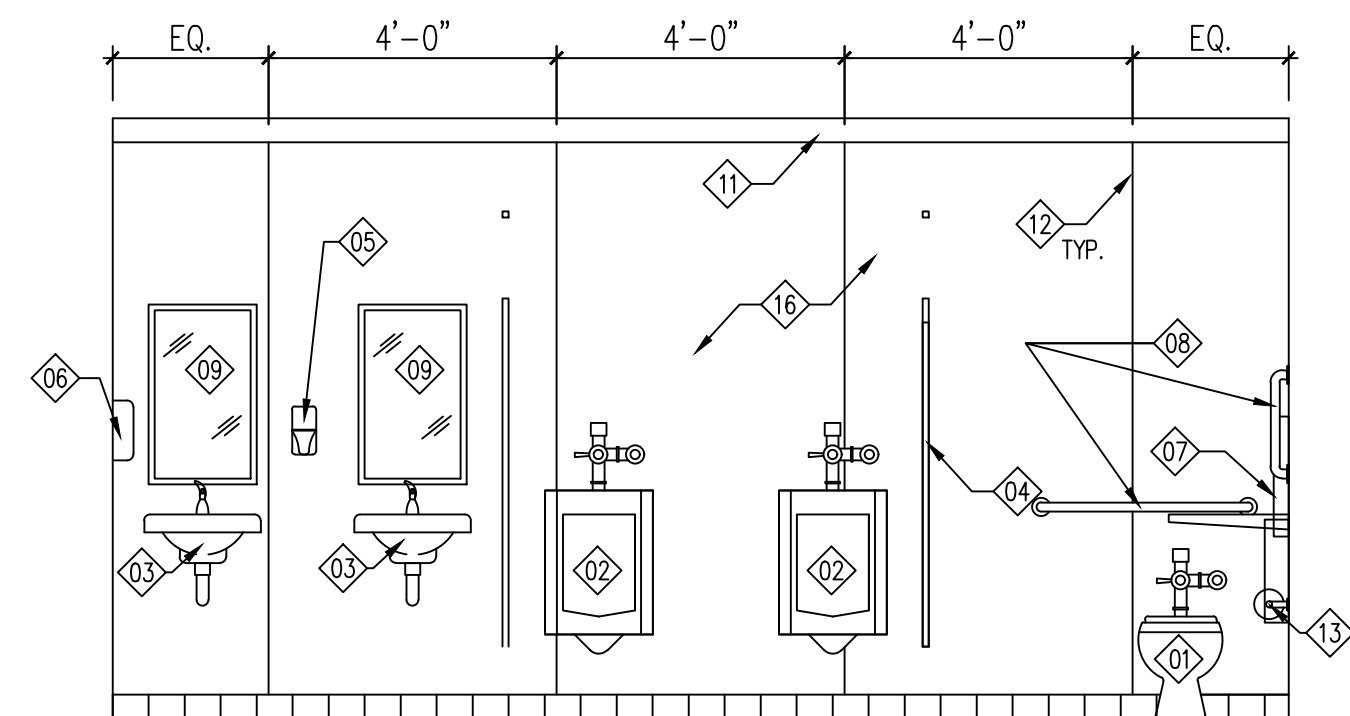


DEMOLITION KEY NOTES

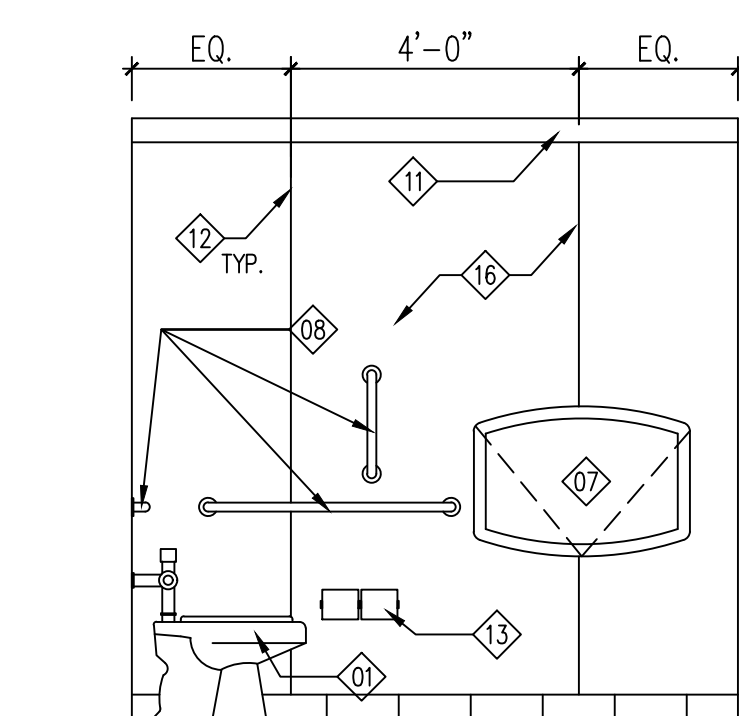
- 01 REMOVE EXISTING FLOOR MOUNTED WATER CLOSET
- 02 REMOVE EXISTING URINAL
- 03 REMOVE VANITIES AND LAVATORIES
- 04 REMOVE TOILET PARTITIONS/ PARTITION DOORS
- 05 REMOVE EXISTING HAND DRYER
- 06 REMOVE EXISTING SOAP DISPENSER
- 07 REMOVE EXISTING MIRROR
- 08 REMOVE EXISTING INTERIOR LIGHT FIXTURE
- 09 REMOVE EXISTING GRAB BARS
- 10 REMOVE EXISTING TOILET PAPER DISPENSER
- 11 REMOVE EXISTING SANITARY NAPKIN DISPOSAL
- 12 REMOVE EXISTING CEILING EXHAUST GRILL
- 13 REMOVE EXISTING HOLLOW METAL DOOR ON EXTERIOR OF BUILDING INCLUDING THRESHOLD AND HARDWARE
- 14 REMOVE EXISTING ELECTRIC WALL HEATER
- 15 REMOVE EXISTING SCREEN DOOR
- 16 REMOVE EXISTING CONCRETE SIDEWALK - SEE ARCHITECTURAL SITE PLAN
- 17 REMOVE EXISTING CERAMIC FLOOR TILE
- 18 REMOVE SIFFITI MOUNTED LIGHT FIXTURE

NEW CONSTRUCTION KEY NOTES

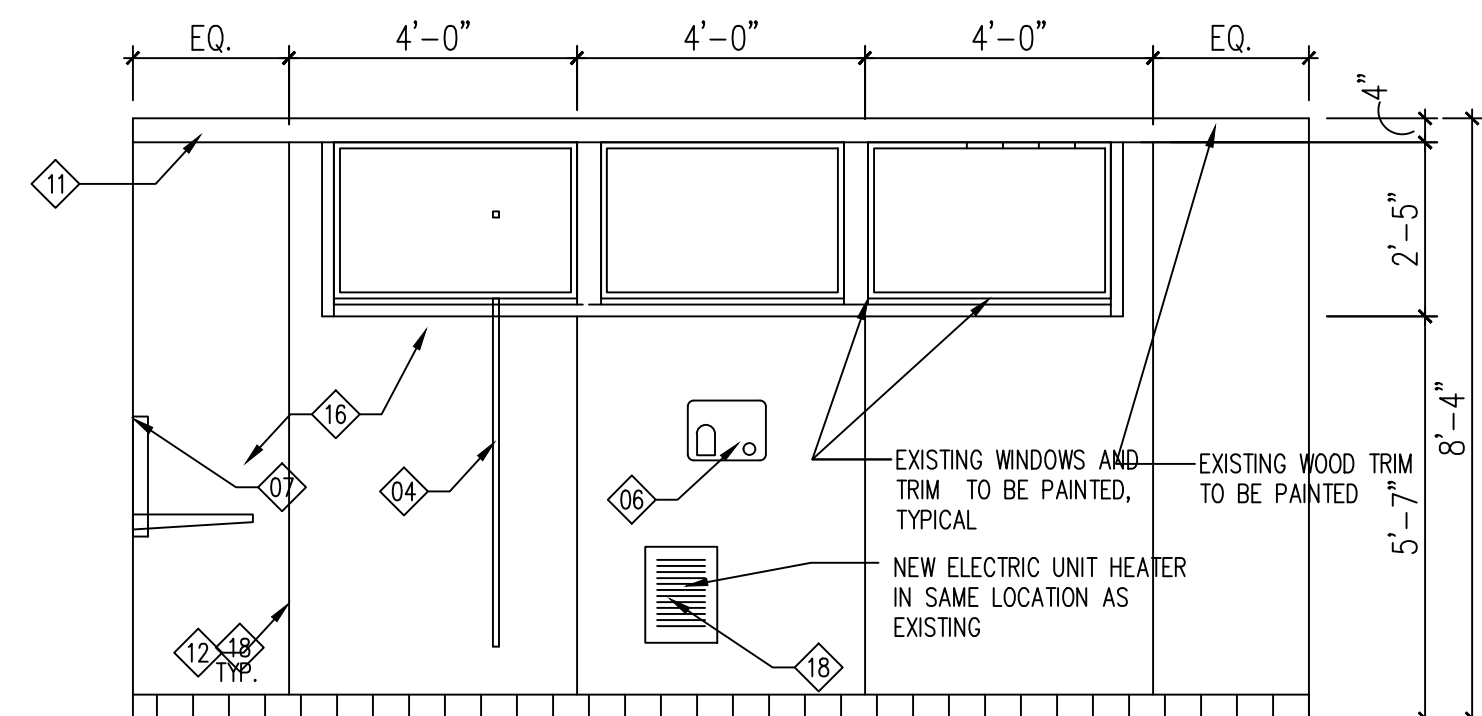
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- 02 NEW FLOOR MOUNTED WATER CLOSET
- 03 NEW URINAL
- 04 NEW ADA COMPLIANT LAVATORY
- 05 NEW SOLID PLASTIC TOILET PARTITIONS
- 06 NEW SOAP DISPENSER
- 07 NEW ELECTRIC HAND DRYER
- 08 NEW WALL MOUNTED BABY CHANGING TABLE
- 09 NEW GRAB BARS
- 10 NEW FRAMED MIRROR
- 11 NEW HOLLOW METAL DOOR, THRESHOLD AND HARDWARE
- 12 NEW CONCRETE SIDEWALK - SEE ARCHITECTURAL SITE PLAN
- 13 NEW TOILET PAPER DISPENSER
- 14 SANITARY NAPKIN DISPOSAL
- 15 NEW CERAMIC FLOOR TILE
- 16 NEW TOP ON WALLS OVER EXIST. CERAMIC TILES
- 17 EXISTING FLOOR DRAIN TO REMAIN
- 18 NEW WALL HEATER
- 19 EXISTING SYNTHETIC DECK BOARDS TO REMAIN
- 20 REPAIR/INSTALL DRYWALL TO LIKE-NEW CONDITION
- 21 PROVIDE NEW EXTERIOR LIGHT FIXTURE
- 22 EXISTING WOOD TRIM TO BE PAINTED



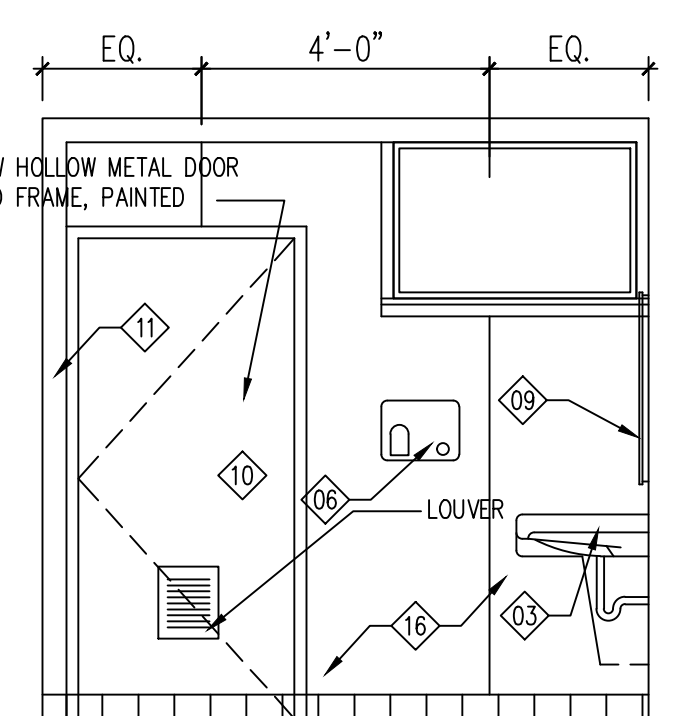
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A-2 SCALE: 3/8"=1'-0" MEN'S



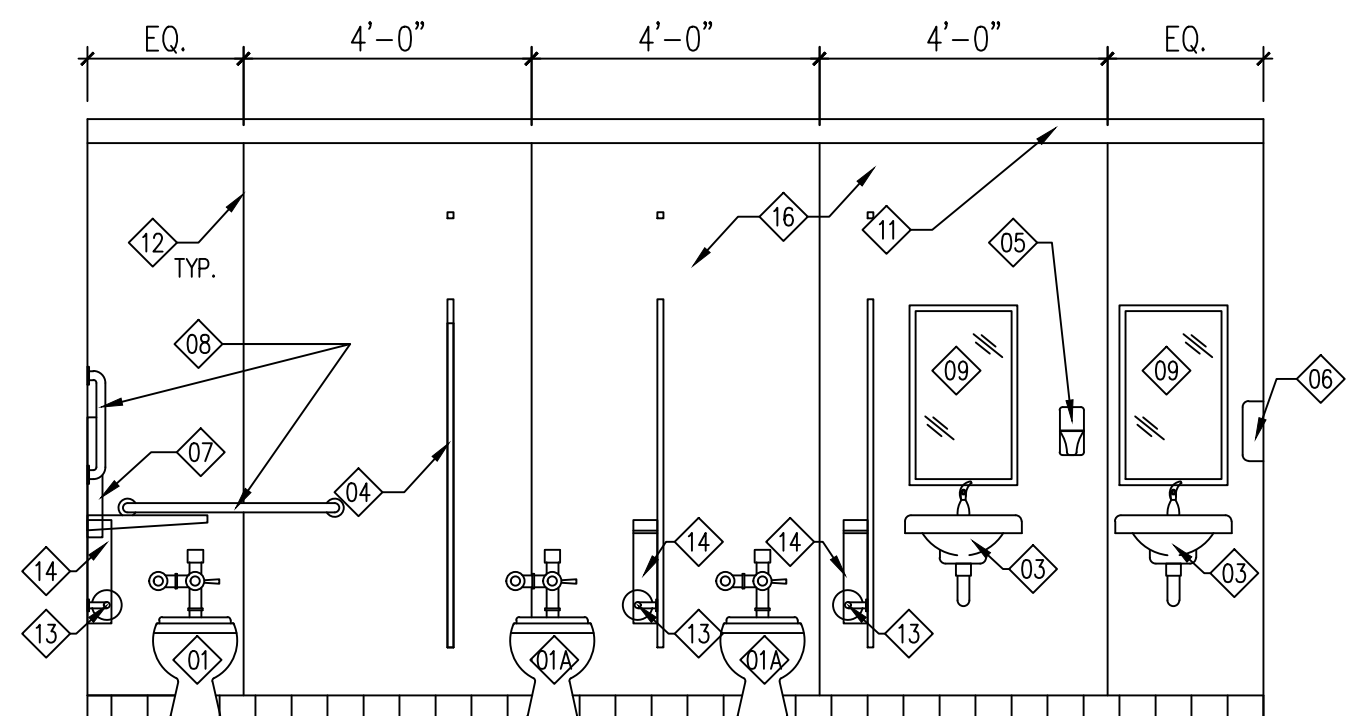
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A-2 SCALE: 3/8"=1'-0" MEN'S



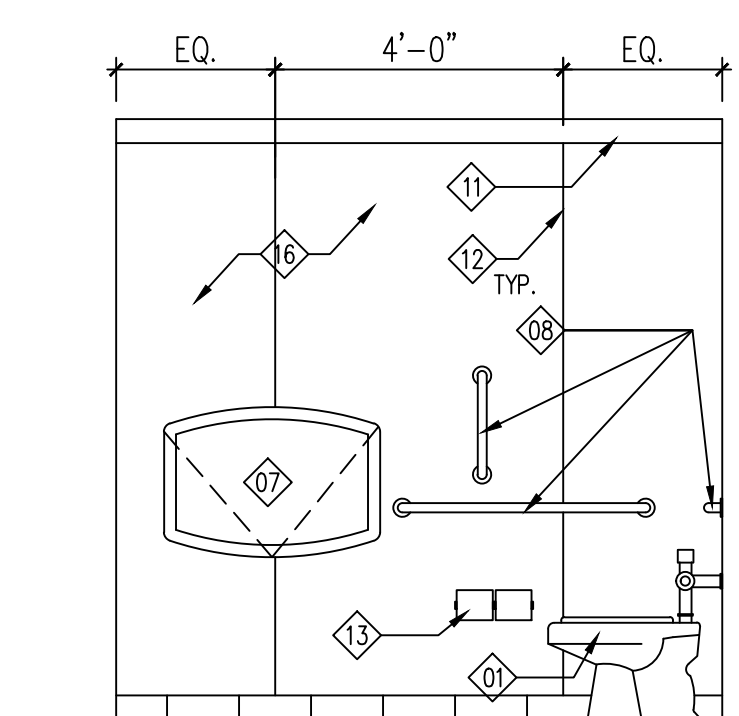
3 INTERIOR ELEVATION
A-2 SCALE: 3/8"=1'-0" MEN'S



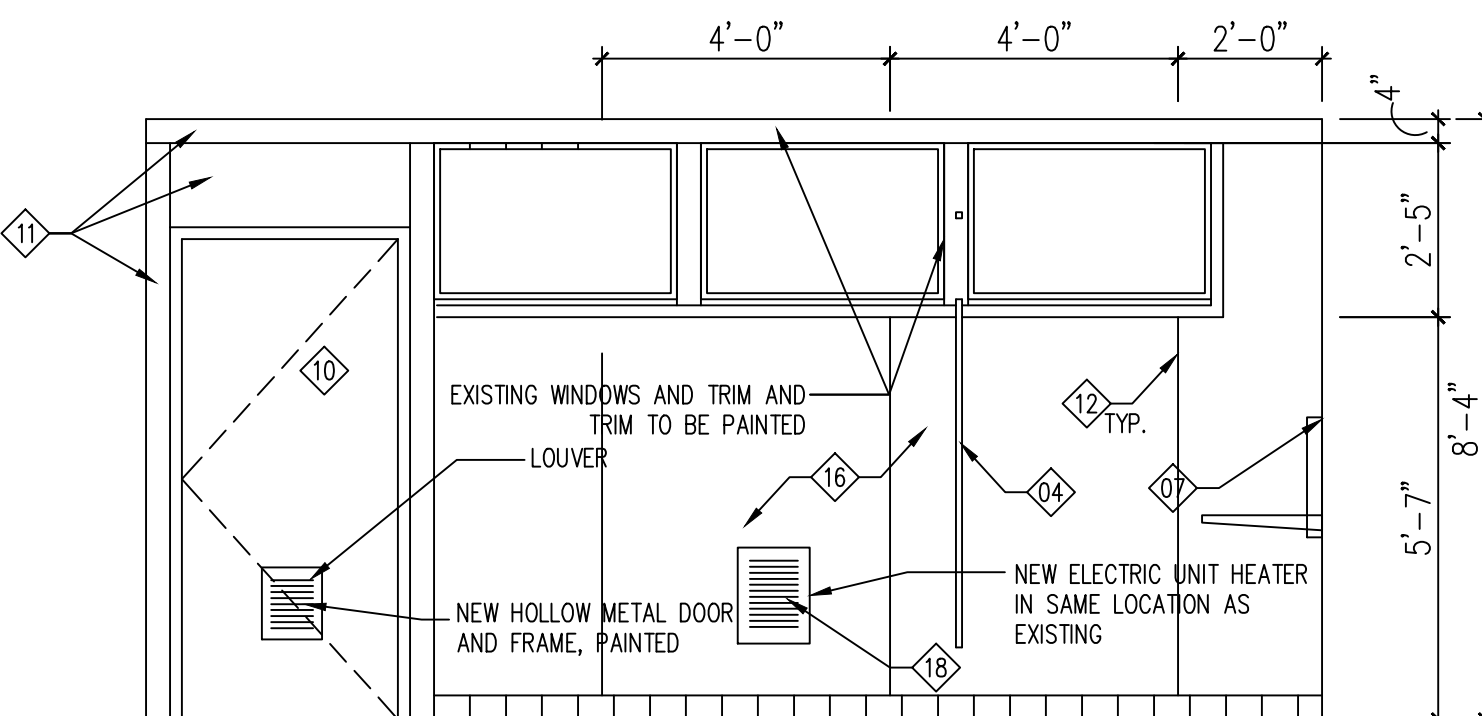
4 INTERIOR ELEVATION
A-2 SCALE: 3/8"=1'-0" MEN'S



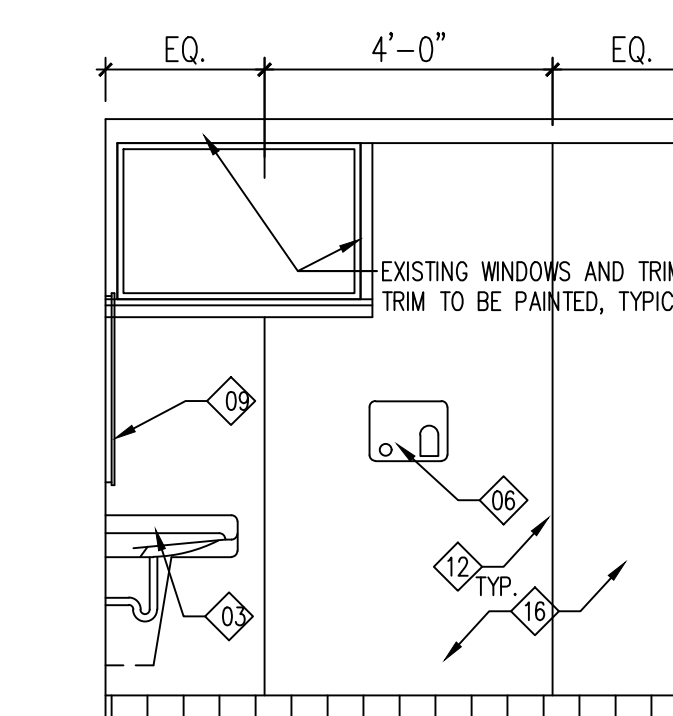
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A-2 SCALE: 3/8"=1'-0" WOMEN'S



6 INTERIOR ELEVATION
A-2 SCALE: 3/8"=1'-0" WOMEN'S



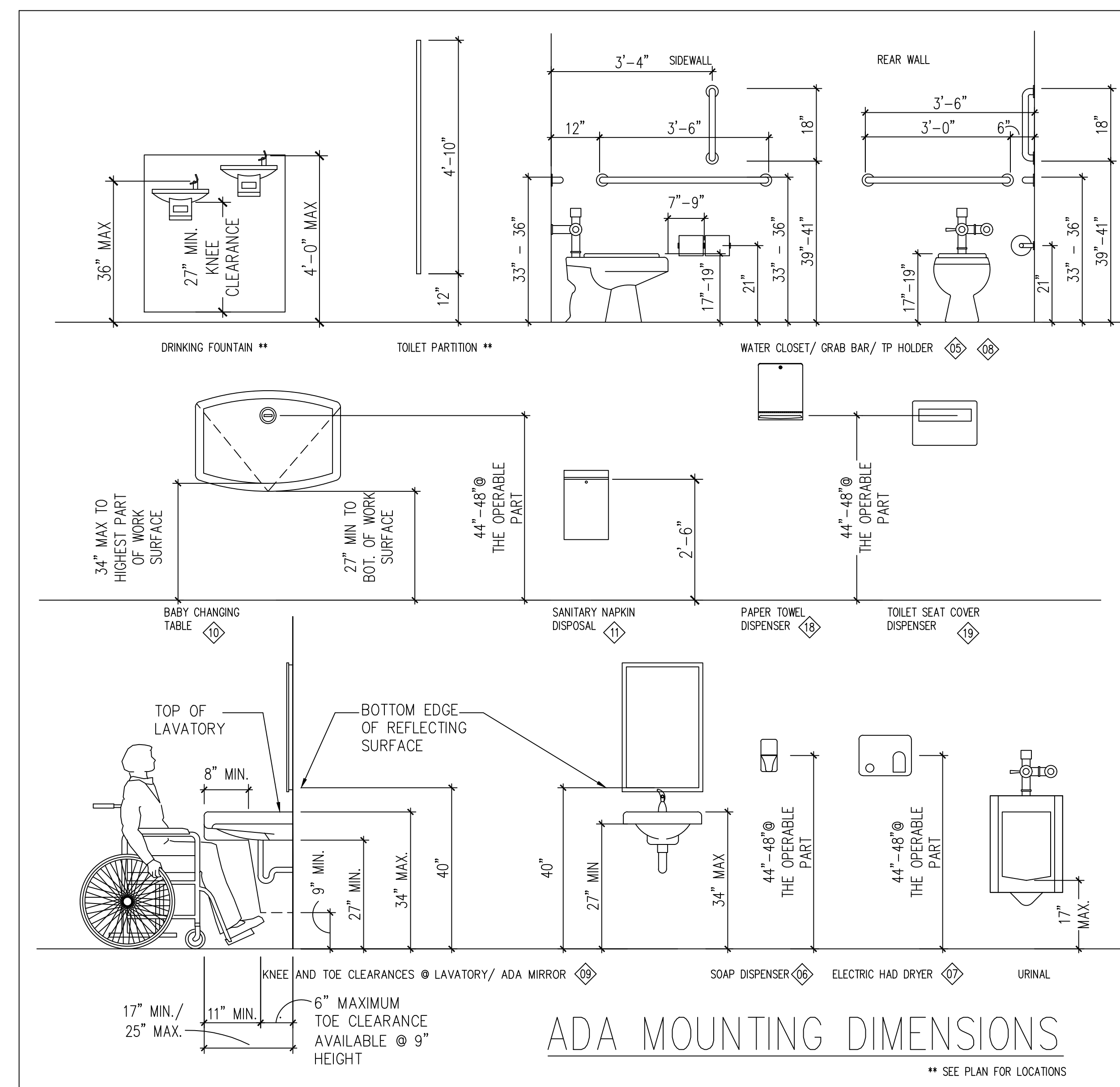
7 INTERIOR ELEVATION
A-2 SCALE: 3/8"=1'-0" WOMEN'S



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

NEW CONSTRUCTION KEY NOTES

- | | |
|--|-------------------------------|
| 01 NEW ADA COMPLIANT FLOOR MOUNTED WATER CLOSET | 11 PAINT EXISTING WINDOW TRIM |
| 01A NEW FLOOR MOUNTED WATER CLOSET | 12 JOINT BETWEEN FRP PANELS. |
| 02 NEW URINAL | 13 NEW TOILET PAPER DISPENSER |
| 03 NEW ADA COMPLIANT LAVATORY | 14 SANITARY NAPKIN DISPOSAL |
| 04 NEW SOLID PLASTIC TOILET PARTITIONS | 15 NOT USED |
| 05 NEW SOAP DISPENSER | 16 NEW FRP ON WALLS |
| 06 NEW ELECTRIC HAND DRYER | 17 NOT USED |
| 07 NEW WALL MOUNTED BABY CHANGING TABLE | 18 NEW WALL HEATER |
| 08 NEW GRAB BARS | |
| 09 NEW FRAMED MIRROR | |
| 10 NEW HOLLOW METAL DOOR, THRESHOLD AND HARDWARE | |



TOILET ACCESSORIES SCHEDULE

ITEM #	DESCRIPTION	MANUFACTURER	MODEL NO.	LOCATION/ COMMENTS
05	NEW GRAB BARS	BOBRICK	B-6806-18" B-6806-36" B-6806-42"	MENS/ WOMENS
06	NEW SOAP DISPENSER	BOBRICK	B-166-1830	SUPPLIED BY OWNER/ INSTALLED BY CONTRACTOR
07	NEW ELECTRIC HAND DRYER	EXCEL DRYER	EXCELATOR RECO XL-GR-ECO	SUPPLIED BY OWNER/ INSTALLED BY CONTRACTOR
08	NEW TOILET PAPER DISPENSER	--	--	SUPPLIED BY OWNER/ INSTALLED BY CONTRACTOR
09	NEW FRAMED MIRROR	BOBRICK	B-166-1830	MENS/ WOMENS
10	NEW WALL MOUNTED BABY CHANGING TABLE	KOALA KARE	KB 200	MENS/ WOMENS
11	NEW SANITARY NAPKIN DISPOSAL	--	--	WOMENS

FINISH SCHEDULE

ROOM	FLOOR	BASE	WALL				CEILING	REMARKS
			NORTH	EAST	SOUTH	WEST		
MENS RESTROOM	CERAMIC TILE	CERAMIC TILE	FRP / PAINT	FRP / PAINT	FRP / PAINT	FRP / PAINT	PAINTED	COLOR TO BE SELECTED BY THE ARCHITECT
WOMENS RESTROOM	CERAMIC TILE	CERAMIC TILE	FRP / PAINT	FRP / PAINT	FRP / PAINT	FRP / PAINT	PAINTED	COLOR TO BE SELECTED BY THE ARCHITECT

DOOR SCHEDULE

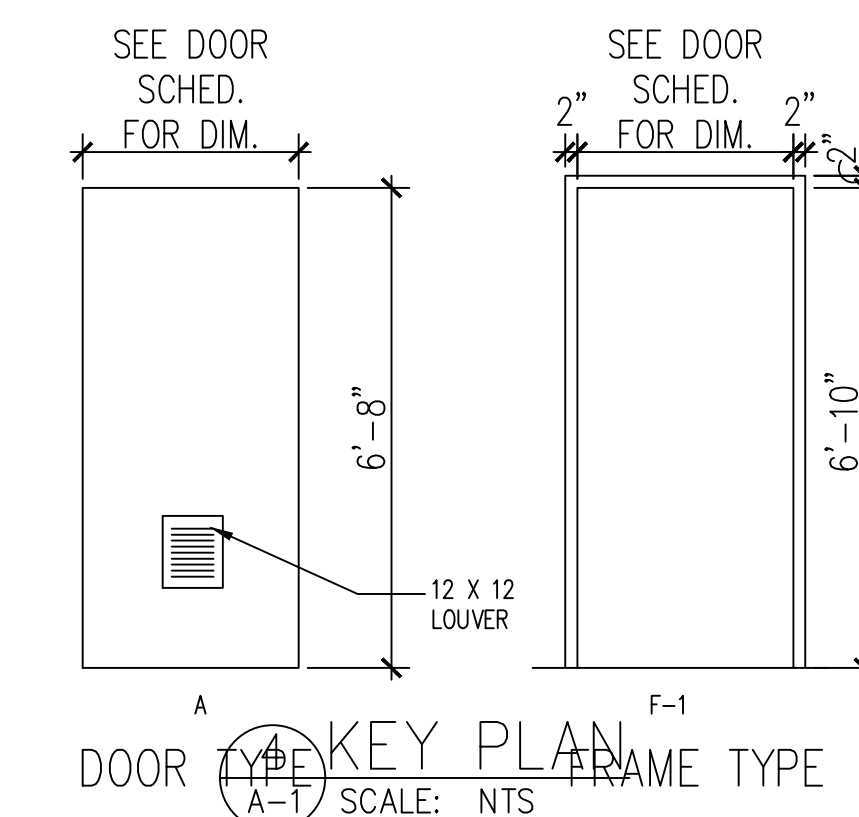
NO.	ROOM	DOOR					FRAME						
		TYPE	SIZE	THICK.	MAT.	FIN.	TYPE	MAT	FIN	HEAD	JAMB	HDWR	REMARKS
01	MENS RESTROOM	A	3'-0" X 6'-8"	1 1/2"	HM	PAINTED	F-1	HM	PAINT	--	--	T-1	EXISTING FRAME TO BE REFINISHED
02	WOMENS RESTROOM	A	3'-0" X 6'-8"	1 1/2"	HM	PAINTED	F-1	HM	PAINT	--	--	T-1	EXISTING FRAME TO BE REFINISHED

HARDWARE SCHEDULE

HARDWARE SET - 1 MEN/WOMEN RESTROOMS AND MECHANICAL ROOM

SINGLE DOORS EA. DOOR TO HAVE:			
3 EA.	HINGES *	TA2714 4.5 X 4.5	US 26D MCK
1 EA.	PUSH/PULL **	1001-3/ 1013-3B	US 26D TRM
1 EA.	DEADBOLT *	484	US 26D SAR
1 EA.	CLOSER	2701	689 YAL
1 EA.	KICKPLATE	K0050 8" X 2" LDW	US 32D TRM
3 EA.	SILENCERS	1229 A	ALUM TRM
1 EA.	THRESHOLD	256***	ALUM PEMCO

* NOTE: LOCATION/ SIZE OF HINGES AND DEADBOLTS ON DOORS TO MATCH LOCATION AND SIZE OF EXISTING HINGES AND DEADBOLTS ON EXISTING FRAMES.
** NOTE: DELETE PUSH/PULL AT MECHANICAL ROOM DOOR # 3.
*** USE PEMCO THRESHOLD AT DOOR # 3.



DATE	DESCRIPTION
11/19/21	ISSUED FOR PERMIT



SP-1

(Contd. from SP-1)

3.02 TIMING OF SUBMITTALS

A. General

- Make all Submittals enough in advance of scheduled dates for installation to provide all required time for reviews for securing necessary approvals, for possible revision and Resubmittals, and for placing orders and securing delivery.
- In scheduling, allow a minimum of fourteen (14) full calendar days for the Architect's initial review following receipt of the Submittals. Allow additional time if the Architect requires coordination with subsequent Submittals.
 - The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related Submittals are received.
 - If an Intermediate Submittal is necessary, process the same as the initial Submittal. Allow fourteen (14) calendar days for reprocessing each Submittal.

LETTER OF CONFORMANCE

PROJECT: _____ PROJECT NO.: _____

CITY: _____ STATE: _____

CONTRACTOR: _____

The following product(s) has been selected for use in the above referenced project from the list of specified items.

Section Number: _____ Section Name: _____

Drawing Number(s): _____ Detail Number(s): _____

SPECIFIED ITEM TO BE USED:

Statement of Conformance:

This Letter of Conformance is provided as a Submittal for Information in accordance with Section 01 33 00 - Submittals and Substitutions. The undersigned hereby declares that the Product identified above by manufacturer's name and model number is (one of) the product(s) specified and is suitable for the intended use as defined within the Contract Documents and will be provided and placed in operational condition in accordance with the manufacturer's published instructions and the Contract Documents.

SUBCONTRACTOR/SUPPLIER:

(Contact name of subcontractor/supplier offering above product)

(Subcontractor / Supplier name and address)

CONTRACTOR:

(Contact name of Contractor)

(Contractor signature and Title of Signatory)

CONTRACTOR'S SUBSTITUTION REQUEST
(Use separate form for each request)

Date: _____ Request No.: _____

TO: [Architect] [Owner's Representative] _____
Phone: _____ Fax: _____

PROJECT: _____ Project No.: _____

CONTRACTOR: _____

SPECIFIED ITEM: _____ Paragraph _____

Section: _____ Page: _____ ; _____ Description: _____

Drawing Number(s): _____ Detail Number(s): _____

The undersigned request consideration of the following:

PROPOSED SUBSTITUTION: _____

REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS: _____

SAVINGS OR CREDIT TO OWNER for ACCEPTING SUBSTITUTE: \$ _____

Attached data includes description, Specifications, Drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

- Proposed substitution has been fully checked and coordinated with the Contract Documents.
- The proposed substitution does not affect dimensions shown on Drawings.
- The proposed substitution does not require revisions to mechanical or electrical work.
- The undersigned will pay for changes to the building design, including architectural and engineering design, detailing, and construction costs caused by the requested substitution.
- The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
- Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

Attachments: The attached data is furnished herewith for evaluation of the proposed substitution.

☐ Catalog ☐ Drawings ☐ Sample s ☐ Report s ☐ Tests ☐ Other _____

Submitted by:

(Firm)

(Authorized Legal Signature)

(Address)

(Telephone)

For use by the Architect: ☐ Accepted ☐ Accepted as Noted ☐ Rejected: Submit Specified Item

BY: _____
(Authorized Signature)

Date: _____ Remarks: _____

END OF SECTION

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 Specification Sections apply to work of this Section.

1.02 SUMMARY

- A. This Section requires the selective removal and subsequent offsite disposal of the following:
- B. Portions of existing buildings indicated on drawings and as required to accommodate new construction.
- C. Relocation or temporary removal and protection of pipes, conduits, ducts, and other mechanical and electrical work.

1.03 QUALITY ASSURANCE

- A. Contractor Qualifications: A company who specializes in the selective demolition of buildings with a minimum of 3 years experience on projects of a similar size and scope.

1.04 SUBMITTALS

- A. Schedule indicating proposed sequence of operations for selective demolition work to Owner's Representative for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required.
- B. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
- C. Photographs of existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Owner's Representative prior to start of work.

1.05 JOB CONDITIONS

- A. Occupancy: Owner will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations.
- B. Condition of Structures: Engineer/Architect assumes no responsibility for actual condition of items or structures to be demolished.
- C. Protections: Provide temporary barricades and other forms of protection to protect Owner's personnel from injury due to selective demolition work.
- D. Provide protective measures as required to provide free and safe passage of Owner's personnel to occupied portions of building.
- E. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
- F. Protect from damage existing finish work that is to remain in place.
- G. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage occurs to structure or interior areas of existing building.
- H. Damages: Promptly repair damages caused to adjacent facilities by demolition work.
- I. Utility Services: Maintain existing utilities to remain in service and protect them against damage during demolition operations.
- J. Do not interrupt utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.
- K. Maintain fire protection services during selective demolition operations.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREPARATION

- A. Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.

3.02 DEMOLITION

- A. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
- B. Demolish concrete in small sections. Cut concrete at junctures with construction to remain using power-driven masonry saw or hand tools: do not use power-driven impact tools unless authorized by Owner's Representative.
- C. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner's Representative in written, accurate detail. Pending receipt of directive from Engineer, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

3.03 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from building site debris, rubbish, and other materials resulting from demolition operations. Transport and legally dispose offsite.

- B. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.

3.04 CLEANUP AND REPAIR

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site.
- B. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start operations.

END OF SECTION

SECTION 08 11 13 - HOLLOW METAL DOORS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Exterior Hollow Metal Doors

1.02 SUBMITTALS

- A. Submit Shop Drawings and product data indicating pertinent dimensioning, construction, component connections and locations, anchorage methods and locations, hardware locations and installation details, and the following:
- Elevations of each door design.
 - Details of doors including vertical and horizontal edge details.
 - Frame details for each frame type including dimensioned profiles.
 - Details and locations of reinforcement and preparations for hardware.
 - Details of anchorages, accessories, joints, and connections.
- B. Door Schedule: Submit schedule of doors and frames using same reference numbers for details and openings as those on Contract Drawings.

1.03 QUALITY ASSURANCE

- A. Hollow metal doors and frames shall be fabricated in accordance with standards and specifications established by Steel Door Institute, complying with ANSI A250.8-1998 (SDI-100) "Recommended Specifications for Standard Steel Doors and Frames" and as specified.
- B. Acoustical qualities: Doors shall have a minimum sound transmission classification (STC) of 29 per ASTM E413, when tested in a fixed position according to ASTM E90.

1.04 PROJECT CONDITIONS

- A. Field Measurements: Verify openings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow metal work cardboard wrapped or crated to provide protection during transit and job storage.
- Provide additional protection to prevent damage to finish of factory-finished doors and frames.
 - Deliver welded frames with two removable spreader bars across bottom of frames.
- B. Label each item, before shipping, with metal or plastic tags to show their location, size, door swing, and other pertinent information.
- C. Inspect doors and frames on delivery for damage, and notify shipper and supplier if damage is found. Minor damages may be repaired provided refinished items match new work and are acceptable to Architect. Remove and replace damaged items that cannot be repaired as directed.
- D. Store doors and frames at building site under cover. Place units on minimum 4-inch-high wood blocking. Avoid using non-vented plastic or canvas shelters that could create a humidity chamber. If door packaging becomes wet, remove cartons immediately. Provide minimum 1/4-inch spaces between stacked doors to permit air circulation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturers:

- Steelcraft, an Allegion Brand (888-758-9823)
- Ceco Door, an ASSA ABLOY Group Company (615-661-5030)
- Republic Doors and Frames (800-733-3667)
- CURRIES, an ASSA ABLOY Group Company (800-377-3948)

2.02 MATERIALS

- A. Hot-Rolled Steel Sheets: ASTM A1011 and A568, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- B. Cold-Rolled Steel Sheets: ASTM A1008 and A568, Commercial Steel (CS), Type B; suitable for exposed applications.
- C. Hot dipped zinc coated steel shall be of the alloyed type and comply with ASTM A924 and A653.
- D. Hardware reinforcing on doors shall comply with ANSI/SDI A250.6. The physical performance levels shall be in accordance with ANSI/SDI A250.4.

2.03 HOLLOW METAL DOORS

A. General:

- Fabricate steel door units to comply with ANSI/SDI A250.8, and to be rigid, neat in appearance, and free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site.

B. Hollow Metal Doors:

- Exterior Doors: Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical-endurance level:
 - Flush Door:
 - Thickness: 1-3/4"
 - Model: "L Series"; Steelcraft, an Allegion Brand, or approved substitution by other listed manufacturers.
 - Level 3, Extra Heavy Duty, 16-gage, and Physical Performance Level B (Extra Heavy Duty), Model 2 (Seamless).
 - Exterior doors shall be fabricated as thermal insulating door and frame assemblies and tested in accordance with ASTM C236 or ASTM C272 on fully operable door assemblies. Provide thermal-rated assemblies with U-factor of 0.24 or better. Hot-dipped galvanized with a stretcher level degree of flatness.
- All exterior swing-out doors shall have the top and bottoms closed to eliminate moisture penetration. Door tops shall not have holes or openings.

C. Door Fabrication:

- Fabricate doors and frames in accordance with ANSI/SDI A250.8.
- Workmanship: The finished work shall be rigid, neat in appearance, and free from defects; form molding members straight and true with joints coped or mitered, well formed and in true alignment. All welded joints on exposed surfaces shall be dressed smooth so they are invisible after finishing.
- Door Sizes and Clearances: Doors shall be of type, sizes, and design indicated. The clearances for doors shall be 1/8" at jams and heads and 3/4" at bottom, unless indicated or specified otherwise. Clearances at meeting edges of pairs of doors shall be 1/4" (1/8" on fire doors).
- Exterior Doors: Provide weep-hole openings in bottom of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

- Provisions for Hardware: Mortise, reinforce, drill, and tap doors at factory to receive all mortise-type hardware. Provide reinforcing only for doors to receive surface-applied hardware, except push plates and kick plates; drilling and tapping for surface-applied hardware will be done in the field. Provide metal reinforcing plates for surface-applied hardware as required. The gauges of metal for reinforcing plates shall comply with manufacturer's recommendation for the type of hardware used and the size and thickness of doors, provided that the minimum requirements are as follows:
 - Hinge Reinforcement - 3/16 Inch
 - Strike Reinforcement - 11 Gauge
 - Closers and Bracket Reinforcement - 12 Gauge
 - Mortise Covers - 26 Gauge
 - The gauges used shall not be lighter than those required by Commercial Standard CS 242-62.

2.04 FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

- Finish steel doors and frames after assembly.

- B. Factory Prime Coating for Field Painted Finish: Unless specified otherwise, provide manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI/SDI A250.10 for acceptance criteria.

- Clean and chemically treat metal surfaces to assure maximum paint adherence. Follow with a dip or spray coat of lead-free, rust-inhibitive metallic oxide, zinc chromate, or synthetic resin primer on all exposed surfaces. Finished surfaces shall be smooth and free from irregularities and rough spots.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of standard steel doors and frames.

- Examine roughing-in for embedded and built-in anchors to verify actual locations of standard steel frame connections before frame installation.

3.02 GENERAL

- A. Fabricate and install hollow metal units and their accessories in strict accordance with these Specifications and manufacturer's data.

END OF SECTION

SECTION 09 30 00 - TILING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

- Floor and Wall Tile and Accessories
- Crack Suppression Membrane
- Leveling Coat, Mortar, Grouts, and Adhesives

1.02 REFERENCES

- A. Tile Council of North America, Inc. (TCNA):

- "Hand Book for Ceramic, Glass, and Stone Tile Installation", 2015 Edition or later.
- TCNA Technical Bulletin: "Coefficient of Friction and the DCOF AcuTest", 2013

- B. American National Standards Institute (ANSI)

- A108/A118/A136.1 - "American Standard Specification for the Installation of Ceramic Tile".
- A108.5 - Ceramic Tile Installed with Dry-Set Portland Cement Mortar.
- A108.6 - Specifications for Ceramic Tile Installed with Chemical-Resistant, Water-Cleanable Tile-Setting and -Grouting Epoxy
- A108.10 - Specifications for Installation of Grout in Tilework.
- A118 - Latex-Portland Cement Mortar4
- A118.1 - Dry-Set Portland Cement Mortar
- A118.3 - Chemical-Resistant, Water-Cleanable, Tile-Setting and -Grouting Epoxy and Water-Cleanable Tile-Setting Epoxy Adhesive
- A118.4 – "Latex-Portland Cement Mortar"
- A118.7 – "Polymer Modified Cement Grouts"
- A118.12 "Crack Isolation Membranes for Thin-set Ceramic Tile and Dimension Stone Installation"
- A136.1 - Organic Adhesives for Installation of Ceramic Tile
- A137.1 - Recommended Standard Specifications for Ceramic Tile

- C. ASTM International (ASTM) Publications: (Former American Society for Testing and Materials)

- C241 "Standard Test Method for Abrasion Resistance of Stone Subjected to Foot Traffic"
- C503 "Standard Specification for Marble Dimension Stone (Exterior)"
- C627 "Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester"
- C1028 "Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method"

1.03 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.

- B. Product Data: Submit "Letter of Conformance" in accordance with Section 01 33 00 indicating specified items selected for use in project with the following supporting data.

- C. Product Data: For each type of product specified.

1.04 DEFINITIONS

- A. Large Format Tiles (LFT): Tiles with at least one side greater than 15-inches long.
- B. Wet Area: Includes tile surfaces that are either soaked, saturated, or regularly and frequently subjected to moisture such as tub enclosures, showers, swimming pools, commercial kitchens and exterior areas.

(Contd. on SP-3)



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Telephone: (703)262-1933 Fax: (703)269-9171

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11/19/21	ISSUED FOR PERMIT



COMFORT STATION UPGRADE POHICK BAY REGIONAL PARK, 6501 POHICK BAY DR., LORTON, VA 22079	SCALE: AS SHOWN	SPECIFICATIONS
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(Contd. from SP-2)

1.05 QUALITY ASSURANCE

- A. In addition to complying with all pertinent codes and regulations, conform to ANSI A108/A118/A136.1 – “American Standard Specification for the Installation of Ceramic Tile” and ISQ Classifications for Ceramic Tiles, Grouts and Adhesives.
- B. Source Limitations:
- Obtain tile of each type and color form same production run. All tiles within the same area shall be of consistent quality in appearance and shall have the same physical characteristics.
 - A single manufacturer shall produce all tile accessories. Obtain setting and grouting materials from a single manufacturer.
 - Provide surface preparation products in combination with crack isolation and waterproof, setting mortar, and grout from a single manufacturer to provide a single source system warranty.

- C. Performance Requirements:
- DCOF AcuTest: For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM A137.1-2012:
 - All Horizontal Surfaces: COF ≥ 0.42 when wet.
 - Floor substrate and installation tolerance requirements to be coordinated with other trades:
 - Maximum allowable variation in the tile substrate:
 - For all tiles with all edges shorter than 15 inches the maximum allowable variation is 1/4-inch in 10 feet from the required plane, with no more than 1/16-inch variation in 12 inches when measured from the high points in the surface.
 - For all tiles with all edges at least 15 inches the maximum allowable variation is 1/8-inch in 24 feet from the required plane, when measured from the high points in the surface.

1.06 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver packaged materials and store in original containers with seals unbroken and labels intact until time of use in accordance with manufacturer's directions. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.
- B. Comply with ANSI A137.1 for labeling sealed tile packages.
- C. Prevent damage or contamination to materials by water, freezing, foreign matter, and other causes.

1.07 PROJECT CONDITIONS

- A. Substrate shall be prepared to receive new tile in a manner acceptable to the tile manufacturer; and in accordance with ANSI Standard Installation Specification A108.1 through A108.13; and TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation".
- B. Environmental Limitations: Do not install tile until construction in spaces is completed and ambient temperature and humidity conditions are being maintained to comply with referenced standards and manufacturer's written instructions.

1.08 EXTRA MATERIALS

- A. One (1) case of each type of tile and base tile.

PART 2 PRODUCTS

2.01 FLOOR AND WALL TILE

- A. Approved Manufacturers:
- Ceramic Technics Ltd. (770-740-0050)
 - Architectural Ceramics (301-520-3316)
 - Crossville, Inc. (931-484-2110)
 - Stone Peak Ceramics, Inc. (804-629-6212)
 - Ceramica Magica (312-513-9384)
- B. Floor Tile: Refer to Finish Schedule on Drawings.
- C. Wall Tile: Not applicable.
- D. Tile Base and Accessories: Provide special shapes such as bull-nose edges and other accessories as required, to match wall tile.
- Provide matching bull-nose tile at all exposed edges.

2.02 CRACK SUPPRESSION MEMBRANE

- A. Approved Manufacturers:
- Sheet Membrane:
 - "Dal-Seal TS", Dal-Tile (800-933-Tile).
 - "Laticrete 170 Sound & Crack Isolation Mat"; Laticrete International Inc. (800-243-4788).
 - "Mapeguard 2, Crack Isolation and Sound Control"; Mapei Corp. (800-426-2734).
 - "ECB Green Anti-Fracture Membrane" National Applied Construction Products, Inc. (800-633-4622).
 - "Nobleseal CIS Crack Isolation Sheet", The Noble Co., (800-878-5788).
 - "TEC Hydraflex Waterproofing Crack Isolation Membrane"; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023).

- B. General: Product that complies with ANSI A118.12 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
- C. Provide self-bonding elastomeric membrane capable of heavy-duty service per ASTM C627. Liquid-applied products will not be allowed.
- D. Primer: As required by the membrane manufacturer.
- E. Furnish in 12 inch and 36 inch wide sheets in lengths required.

2.03 LEVELING COAT

- A. Concrete Leveling and Patching Compounds:
- Verify with manufacturer of the setting materials that the product utilized is compatible with their products.
 - For areas up to 4 square feet:
 - Feather finish, use to smooth ridges, fill cracks, gouges and joints.
 - "SD-F"; Ardex (724-203-5000)
 - "Planiprep FF"; Mapei Corp. (800-426-2734)
 - "Versa Patch"; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)
 - "NXT Level Plus with NXT Primer"; Laticrete International Inc. (800-243-4788)
 - Trowelable underlayment patch for thickness from feather edge to 3 inch without aggregate
 - "Quickpatch"; Mapei Corp. (800-426-2734)
 - "Fast Set Deep Patch"; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)

- "NXT Level Plus with NXT Primer"; Laticrete International Inc. (800-243-4788)
- c. Trowelable underlayment patch for thickness up to ½ inch without aggregate; up to 1 inch with aggregate. Can be feather edged.
 - "SD-P/ Primer P-82"; Ardex (724-203-5000)
3. For areas exceeding 4 square feet:
- Self-leveling, pourable or pumpable underlayment for thicknesses up to 5 inches. Can be feather edged. Must be installed a minimum of 1/4 inch.
 - "K-15/Primer P-51"; Ardex (724-203-5000)
 - "Novoplan 2/Primer"; Mapei Corp. (800-426-2734) (Note: Refer to product datasheet for specific requirements based on substrates).
 - "EZ Level TA-323/Multi Purpose Primer"; TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)
 - "NXT Level with NXT Primer"; Laticrete International Inc. (800-243-4788)
- B. Maximum variation in surface of leveling coat shall not exceed 1/8" in 8'-0" from required plane.
- C. Leveling coat shall be cured at least 24 hours before tile is applied.
- D. Surface to which leveling coat is to be applied shall be free of any coatings, oil, and wax.

2.04 MORTAR MATERIALS: FLOOR TILE

- A. Approved Manufacturers:
- Laticrete International Inc. (800-243-4788)
 - Mapei Corp. (800-426-2734)
 - Bonsal America, Inc. - A division of Oldcastle APG (800-738-1621)
 - Custom Building Products (800-272-8786)
 - Hydroment (Bostick Findley Inc.) (800-523-2678)
 - TEC Specialty Products, H.B. Fuller Construction Products, Inc. (800-832-9023)
 - Ardex (724-203-5000)
- B. Acceptable Products: Refer to Setting and Grout Material Schedule at end of this Section and Finish Schedule on the Interior Design Drawings.
- C. Bond Coat: Thin Set Mortar with Polymer or Acrylic/Latex Additive

2.05 GROUT MATERIALS

- A. Latex Portland Cement Grout consisting of mortar with an acrylic latex or polymer epoxy additive. Use in conformance with ANSI A108.5 and ANSI A108.10 Materials shall conform to ANSI A118.3 and ANSI A118.7.
- Color as shown on Finish Schedule on Drawings.
- B. Approved Manufacturers:
- Laticrete International Inc. (800-243-4788):
 - All joints 1/8" or greater:
 - "Permacolor Grout"
 - All joints widths less than 1/8":
 - "Permacolor Grout"
 - Mapei Corp. (800-426-2734)
 - All joints 1/8" or greater:
 - "Ultracolor Plus" (Sanded)
 - All joints widths less than 1/8":
 - "Keracolor U" (unsanded)
 - Ready to use Grout for joints widths from 1/16" to 1/2":
 - "Flexcolor CQ"
 - Custom Building Products (800-272-8786)
 - All joints 1/8" or greater:
 - "Polyblend Sanded Tile Grout" (sanded)"
 - All joints widths less than 1/8":
 - "Polyblend Non-Sanded Tile Grout" (unsanded)
 - Hydroment (Bostick findley, Inc.) (800-523-2678)
 - All joints 1/8" or greater:
 - "Ceramic Tile Grout / #425 Multi Purpose Acrylic Latex Additive" (sanded)
 - All joints widths less than 1/8":
 - "Dry Tile Grout / #425 Multi Purpose Acrylic Latex Additive" (unsanded)
 - TEC Specialty Construction Brands (800-832-9023)
 - All joints 1/8" or greater:
 - "TEC Accucolor Sanded Grout / 869 Latex Additive"
 - All joints widths less than 1/8":
 - "TEC Accucolor Unsanded Grout / 869 Latex Additive"

- 2.06 THRESHOLDS
- A. See door details on drawings.

2.07 ACCESSORIES

- A. Edging and Transition Strips for floor tile:
1. Approved Manufacturers:
- Schluter Systems (800-574-8481)
 - Ceramic Tool Company, Inc. (800-236-5230)
 - Approved Substitution by Marriott International
2. Miter corners and angles. Install in longest lengths possible with closely fitted and aligned butt joints, and with horizontal leg keyed into the mortar bed. Top edge shall be set flush with finished floor tile. Clean and remove any mortar stains.
3. Model: Refer to Interior Finish Schedule.
4. Material: Refer to Interior Finish Schedule.
5. Color: Refer to Interior Finish Schedule.

2.08 OTHER MATERIALS:

- A. Joint Sealant to include sealing of ceramic tile surfaces at internal and external corners, transitions in plane and where ceramic tile work abuts dissimilar materials.
- Refer to Section 07920 (07 92 00) for sealant specifications.
- B. Other materials, including adhesives not specifically described but required for a complete and proper installation of tiles, shall be only as recommended by the manufacturer of material to which it is applied.

2.09 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.
- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 EXECUTION

3.01 INSPECTION:

- A. Installer must examine the areas and conditions under which flooring and accessories are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 PREPARATION:

- A. Prior to laying flooring, vacuum and remove all contaminants from surfaces to be covered and inspect subfloor. Start of flooring installation indicates acceptance of subfloor conditions and full responsibility for completed work. Use leveling compound as recommended by flooring manufacturer for filling small cracks and depressions in subfloors.
- Concrete Subfloors:
 - Slab substrates are dry and free of curing compounds, sealers, hardeners, residual adhesives, adhesive removers, and other materials whose presence would interfere with bonding of tile adhesive or mortar and comply with surface finish requirements of ANSI A108.01. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by manufacturer.
 - Subfloor Moisture Conditions: Before installing flooring Contractor shall verify that Moisture emission rate of not more than 3 lb/1000 sq. ft./24 hours when tested by calcium chloride moisture test in compliance with CR1 104.6.2.1 and does not exceed the capacity of the specified adhesive or mortar, with subfloor temperatures not less than 55 deg F, or as recommended by manufacturer.
 - New concrete surfaces shall be wood-floated or broom finished. Overtroweled slabs are not acceptable.
- B. Apply concrete slab primer for ceramic tile, if recommended by flooring manufacturer, prior to application of adhesive. Apply in compliance with manufacturer's directions.

3.03 CRACK SUPPRESSION MEMBRANE

- A. Install membrane in strict accordance with manufacturer's specifications and ANSI A108.17.
- B. Provide width of membrane as recommended by membrane manufacturer, but no less than three (3) times the width of the tile used at all control joints, existing cracks in concrete floor and other locations as required to comply with TCNA's "Handbook for Ceramic Tile Installation".

3.04 TILE INSTALLATION - GENERAL

- A. Comply with the ANSI A108 Series and TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation".
- B. Handle, store, mix, and apply mortar and grout in compliance with manufacturer's instructions.
- C. Extend tile work into recesses and under equipment and fixtures to form a complete covering without interruptions. Terminate work neatly at obstructions, edges, and corners without disruption of pattern, joint alignment, or bridging of Expansion Joints or Control Joints.
- D. Install tile after finishing operations, including painting, have been completed. Moisture content of concrete slabs, building air temperature, and relative humidity must be within limits recommended by the flooring manufacturer.
- E. Expansion Joints: Provide expansion joints, control joints and pressure relieving joints of widths and locations according to TCNA Handbook Construction No. EJ171, and as approved by Architect. Do not saw cut joints after application.
- F. Lay tile from center marks established from center of area so that tile at opposing edges of the area are of equal width. Adjust as necessary to avoid use of cut widths less than 1/2 tile at edge perimeters. Lay tile square to room axis unless otherwise shown.
- G. Match tiles for color and pattern by using tile from cartons in same sequence as manufactured and packaged. Cut tile neatly in and around all fixtures. Broken, cracked, chipped, or deformed tile are not acceptable.
- H. Lay tile with grain in tile running in same direction. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Grind cut edges of tile abutting trim, finish, or built-in items.
- I. Sound tile after setting and replace hollow sounding units.
- J. Grout tile to comply with the requirements of the ANSI A108.10 tile installation standards:

3.05 FLOOR TILE INSTALLATION

- A. General: Install tiles designated for floor installations in accordance with TCNA's "Handbook for Ceramic Tile Installation,
- B. Back Buttering: For installations indicated, obtain 100% mortar coverage by complying with applicable special requirements for back buttering of tile in referenced ANSI A108 series of tile installation standards:
- Exterior tile floors.
 - Tile floors in wet areas, including showers, tub enclosures, laundries, and swimming pools.
 - Tile floors composed of tiles 8"x 8" or larger.
 - Tile floors composed of rib-backed tiles.
 - Thin porcelain veneer tile floors composed of tile less than 8mm in thickness.
 - All Tiles larger than 16" x 16", or with at least one edge 24" or greater.
- C. Large Format Tiles (LFT) shall be installed in a medium bed of setting material.
- D. Metal Edge Strips: Install at locations indicated or at all locations where exposed edge of tile flooring meets carpet, wood, or other flooring, unless otherwise indicated.

3.06 GROUTING

- A. Joints shall be packed full and free of all voids or pits, joints shall not be raked. Excess grout shall be cleaned from the surface with water as work progresses. Cleaning shall be done while mortar is fresh and before it hardens on the surface.
- B. Grout shall be installed in accordance with ANSI A108.10 (A108.6 for epoxy) and the manufacturer's recommended procedures and precautions during application and cleaning.
- Tile shall be grouted using latex Portland cement grout unless noted otherwise.
- C. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.07 ADJUST AND CLEAN

- A. Clean grout and setting material from face of tile while materials are workable. Leave tile face clean and free of all foreign matter.
- B. Leave finished installation clean and free of cracked, chipped, broken, unbonded, or otherwise defective work.

- C. Protection: When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed surface. Protect installed tile work with Kraft paper or other heavy covering during the construction period to prevent damage. Prohibit all foot and wheel traffic from using tiled floors for at least 3 days, preferably 7 days.
- D. Before final inspection, remove protective coverings and rinse neutral cleaner from all tile surfaces.

END OF SECTION

SECTION 09 77 70 - FIBERGLASS REINFORCED WALL PANELS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Prefinished polyester glass reinforced plastic sheets and adhered to unfinished existing masonry wall.
- PVC trim.
- 1.2 SUBMITTALS
- A. Product Data: Submit sufficient manufacturer's data to indicate compliance with these specifications, including:
- Preparation instructions and recommendations.
 - Storage and handling requirements and recommendations.
 - Installation methods.
- B. Shop Drawings: Submit elevations of each wall showing location of paneling and trim members with respect to all discontinuities in the wall elevation.
- C. Selection Samples: Submit manufacturer's standard color pattern selection samples representing manufacturer's full range of available colors and patterns.

1.3 QUALITY ASSURANCE

- A. Conform to building code requirements for interior finish for smoke and flame spread requirements as tested in accordance with:
- ASTM E 84 (Method of test for surface burning characteristics of building Materials)
 - Wall Required Rating – Class C.
- B. Sanitary Standards: System components and finishes to comply with:
- United States Department of Agriculture (USDA) / Food Safety & Inspection Services (FSIS) requirements for food preparation facilities, incidental contact.
 - Food and Drug Administration (FDA) 2013 Food Code 6-101.11.
 - Canadian Food Inspection Agency (CFIA) requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials factory packaged on strong pallets.
- B. Store panels and trim lying flat, under cover and protected from the elements. Allow panels to acclimate to room temperature (range of 60 to 75°F) for 48 hours prior to installation.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Building are to be fully enclosed prior to installation with sufficient heat (70°) and ventilation consistent with good working conditions for finish work
- B. During installation and for not less than 48 hours before, maintain an ambient temperature and relative humidity within limits required by type of adhesive used and recommendation of adhesive manufacturer.
- Provide ventilation to disperse fumes during application of adhesive as recommended by the adhesive manufacturer.

1.6 WARRANTY

- A. Furnish one-year guarantee against defects in material and workmanship.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- A. Marlite; 1 Marlite Drive, Dover, OH 44622. 800-377-1221 FAX (330) 343-4668 Email: info@marlite.com www.marlite.com

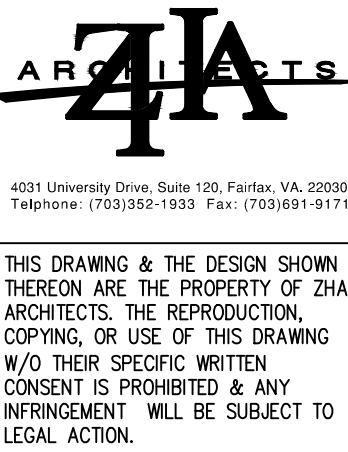
B. Product:

- Standard FRP

2.2 PANELS

- A. Fiberglass reinforced thermosetting polyester resin panel sheets complying with ASTM D 5319.
- Dimensions:
 - Thickness – 0.090 " (2.29mm) nominal
 - Width - 4'-0" (1.22m) nominal
 - Length – [10'-0" (3.0m)][8'-0" (2.4m)] [As indicated on the drawings] nominal
 - Tolerance:
 - Length and Width: +/-1/8 " (3.175mm)
 - Square - Not to exceed 1/8 " for 8 foot (2.4m) panels or 5/32 " (3.96mm) for 10 foot (2.4m) panels
- B. Properties: Resistant to rot, corrosion, staining, denting, peeling, and splintering.
- Flexural Strength - 1.7 x 104 psi per ASTM D 790.
 - Flexural Modulus – 6.0 x 105 psi per ASTM D 790.
 - Tensile Strength – 8.0 x 103 psi per ASTM D 638.
 - Tensile Modulus – 9.43 x 105 psi per ASTM D 638.
 - Water Absorption - 0.17% per ASTM D 570.
 - Barcol Hardness (scratch resistance) of 30 as per ASTM D 2583.
 - Izod Impact Strength of 7.0 ft. lbs./in ASTM D 256
- C. Back Surface: Smooth. Imperfections which do not affect functional properties are not cause for rejection.
- D. Front Finish:
- Color: To be selected by Architect from Manufacturers' standard colors
 - Surface Marlite Standard FRP: Pebbled.
 - Fire Rating: Class C (III) Fire Rating.
 - Size.
 - Marlite Standard FRP
 - 48" x 108" [1.2m x 2.7m] x .090" (3mm) nom.

(Contd. on SP-4)



DATE	DESCRIPTION
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11/19/21 ISSUED FOR PERMIT
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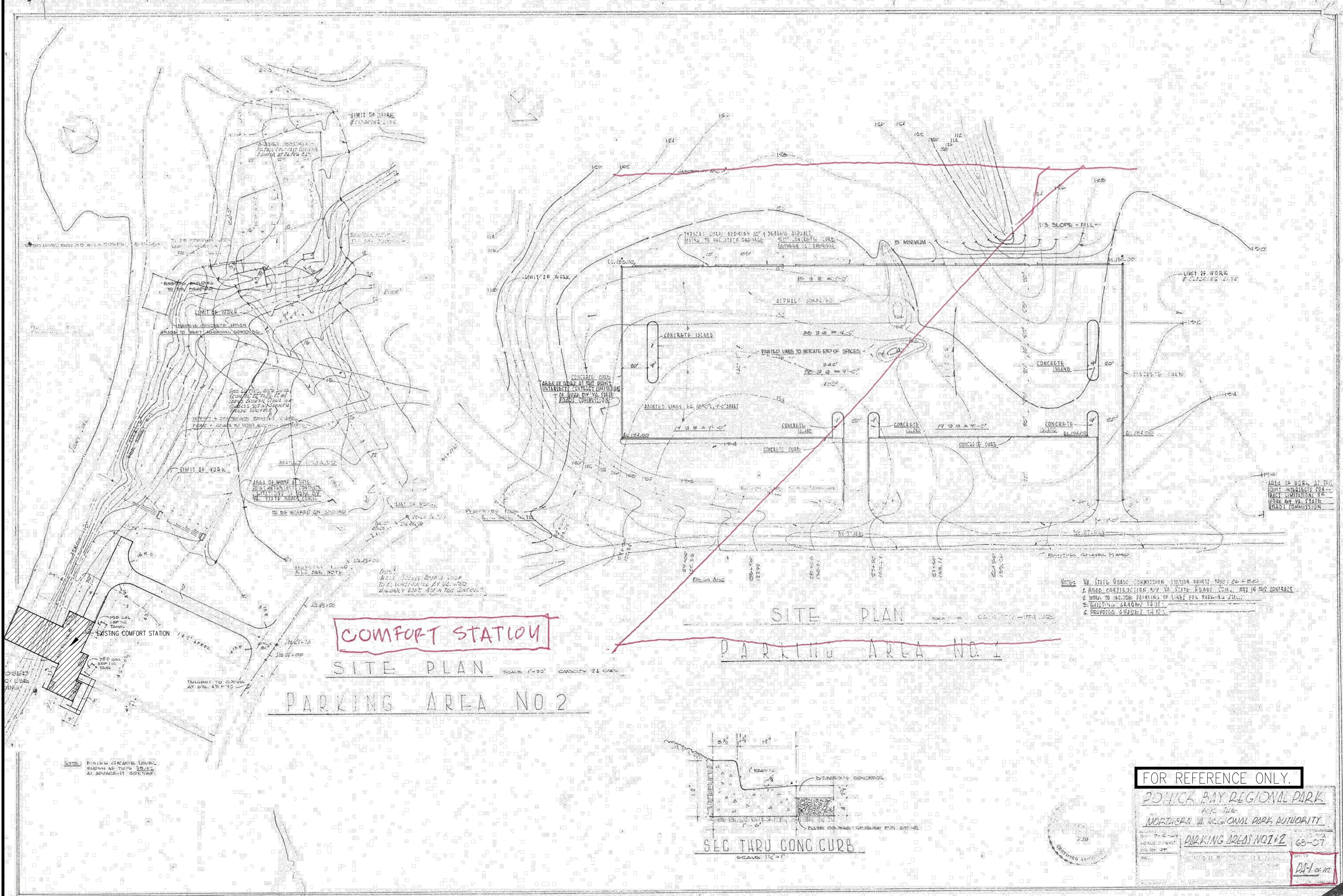


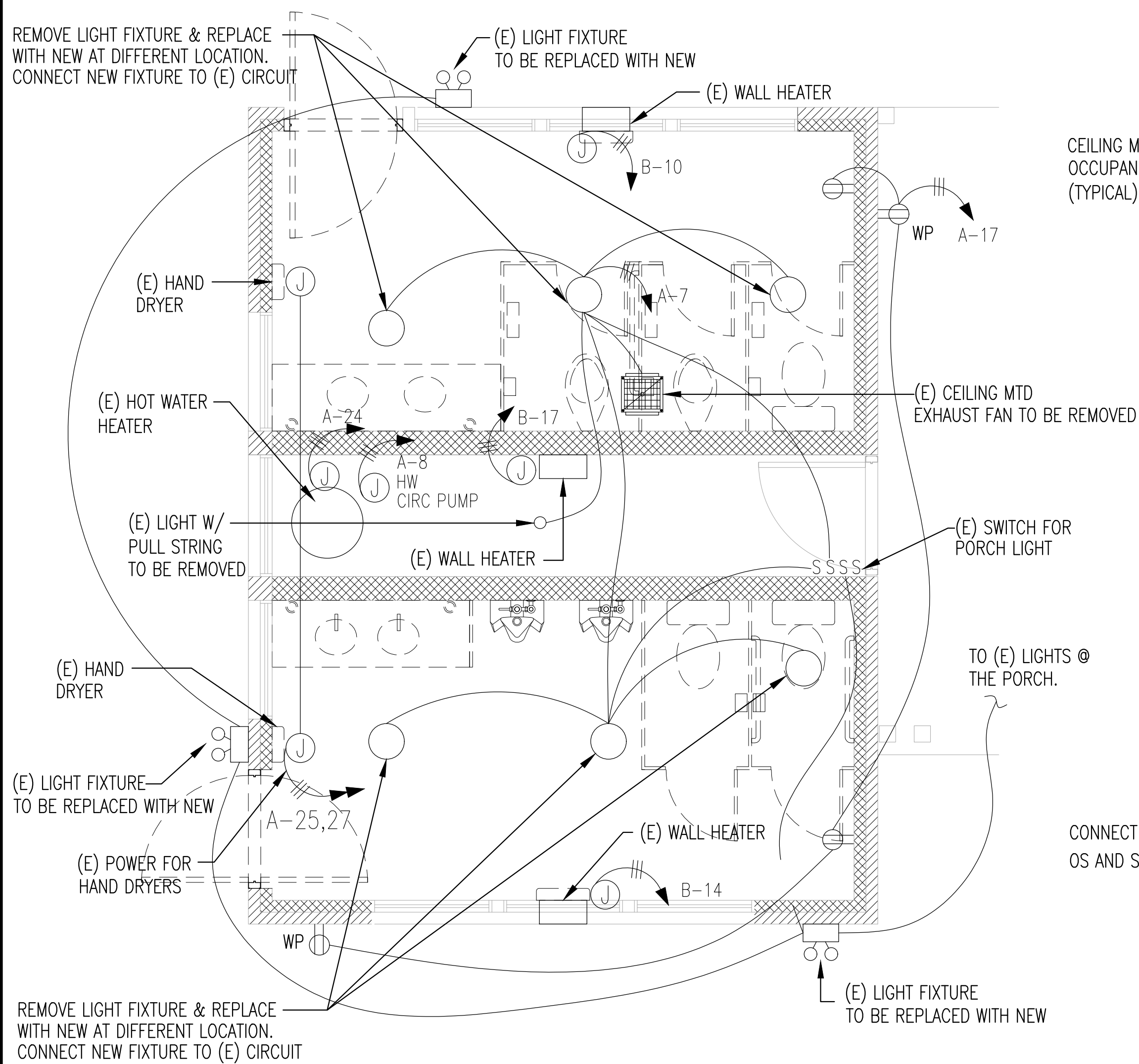
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EXISTING SITE PLAN

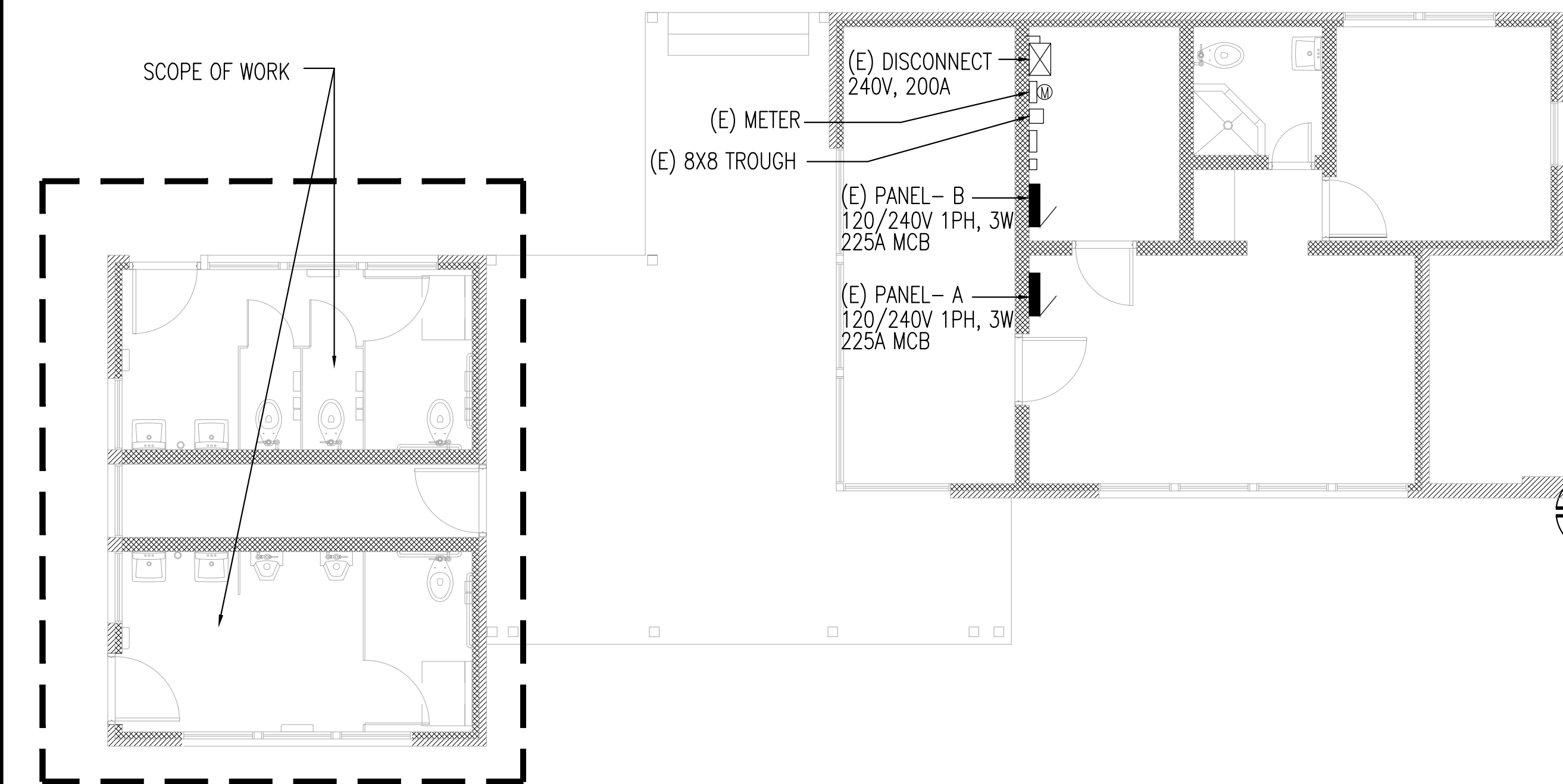
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POHICK BAY REGIONAL PARK,
6501 POHICK BAY DR., LORTON, VA 22079

PROJECT NUMBER: 21104

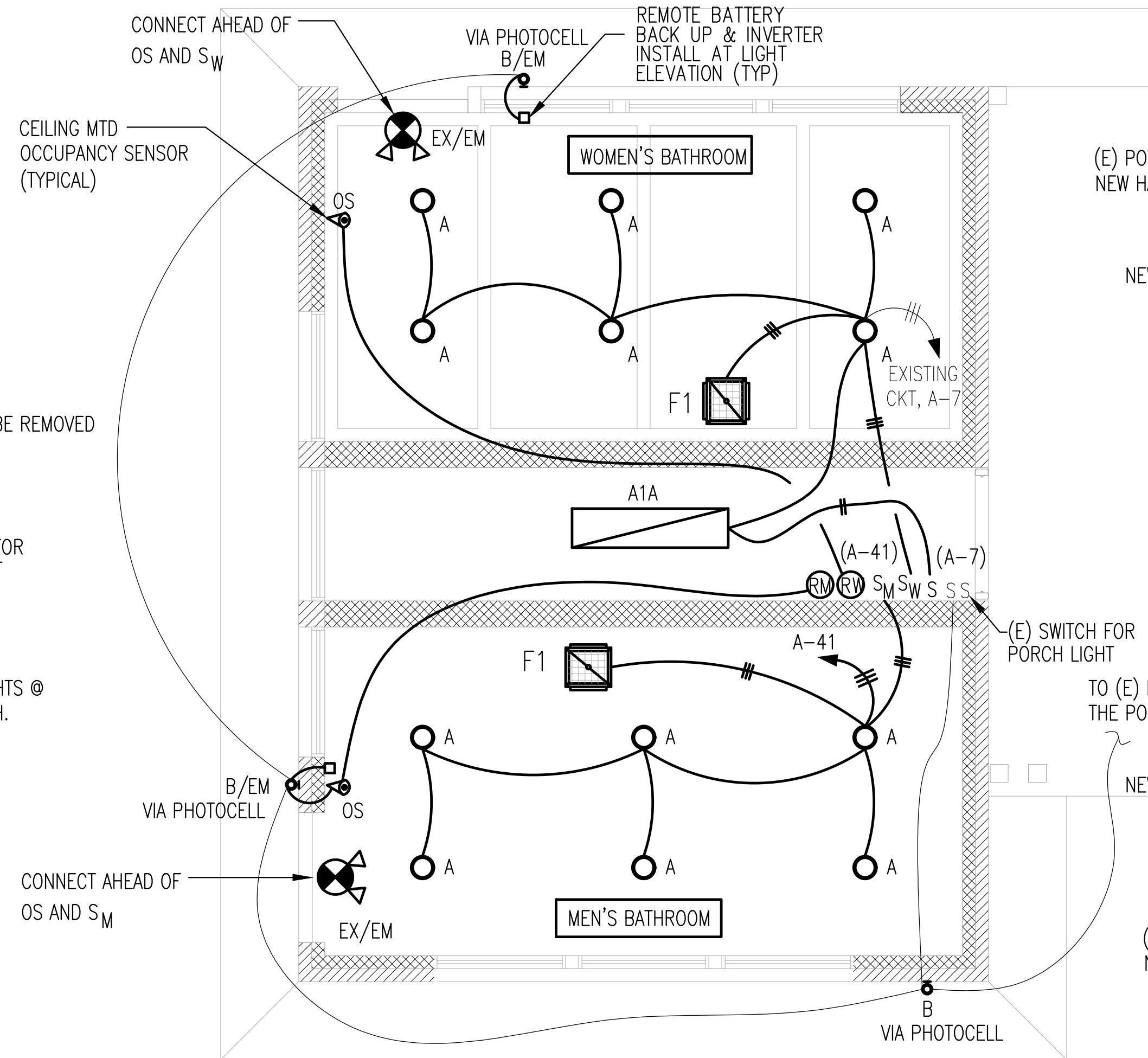




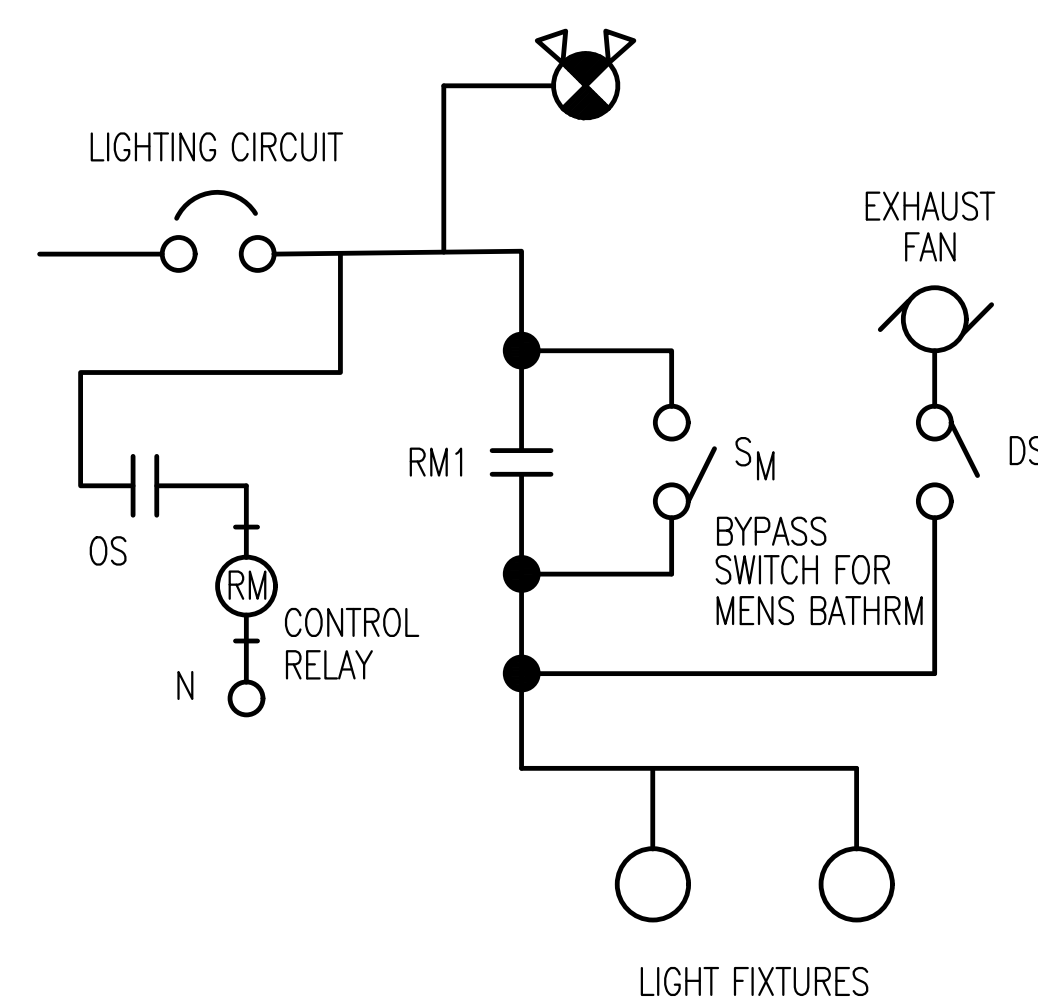
1 **ELECTRICAL EXISTING CONDITION FLOOR PLAN**
E001 SCALE: 3/8" = 1' - 0"



4 **LOCATION OF ELECTRICAL PANELS**
E001 SCALE: 3/16" = 1' - 0"

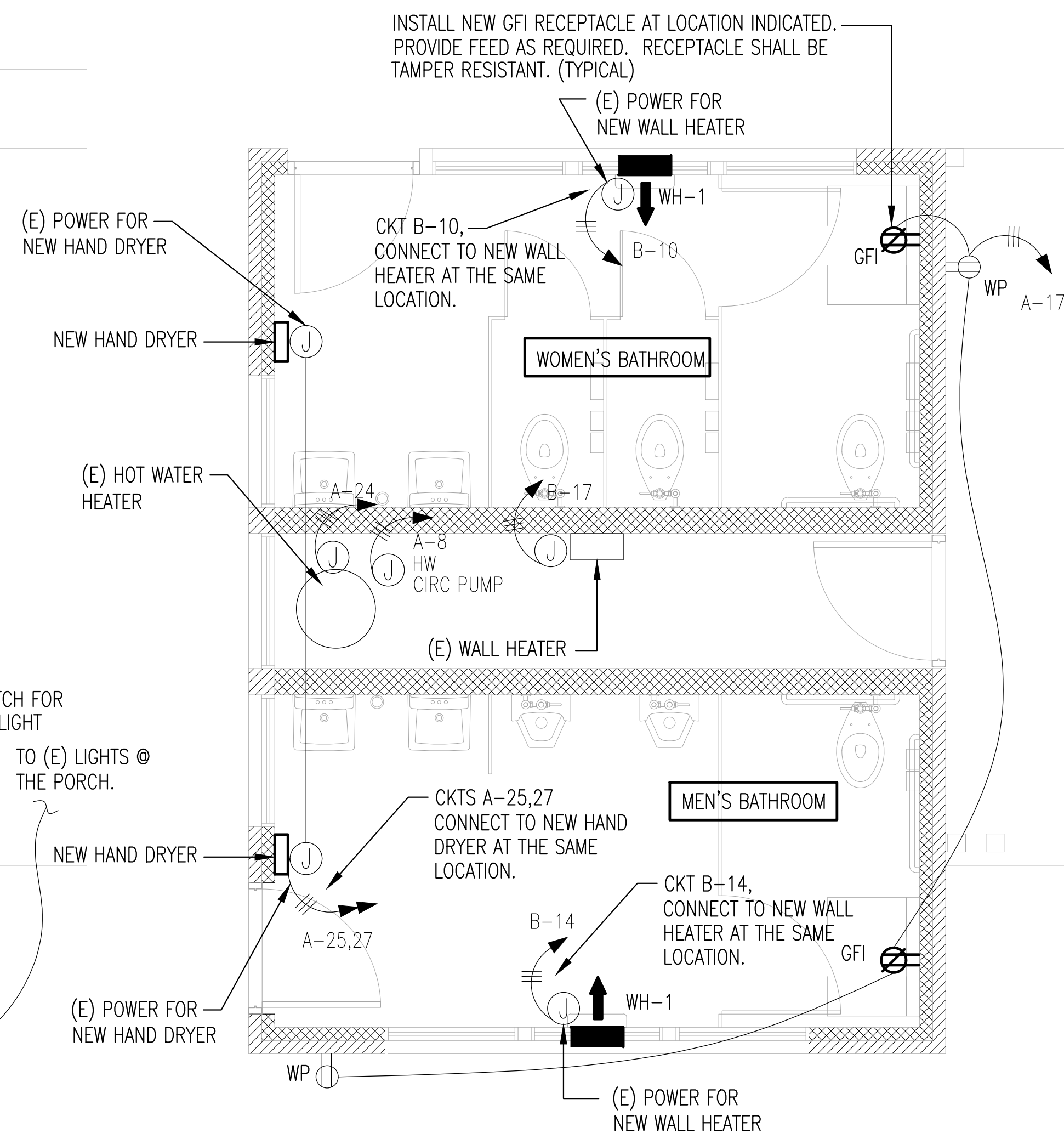


2 **ELECT. NEW FLOOR PLAN, LIGHTING**
E001 SCALE: 3/8" = 1' - 0"



5 **BATHROOM WIRING SCHEMATIC**
E001 NTS

* TYPICAL FOR BOTH MEN AND WOMEN BATHROOM. THE DIAGRAM SHOWN IS FOR MEN'S BATHROOM.



3 **ELECT. NEW FLOOR PLAN, POWER**
E001 SCALE: 3/8" = 1' - 0"

ELECTRICAL DESIGN NOTES

- EXISTING ELECTRICAL PANELS AND ALL CKTS SHALL REMAIN INTACT UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL VERIFY ALL CIRCUITING AT THE JOB SITE. PROVIDE A TYPED PANEL SCHEDULE AFTER COMPLETION OF THE PROJECT AND POST IN THE PANEL DOOR.
- ALL EXISTING FEEDS TO LIGHTING AND RECEPTACLES SHALL REMAIN INTACT. SOME MODIFICATIONS OR EXTENSIONS MAY BE NEEDED AS INDICATED.
- REMOVE EXISTING BATHROOM LIGHT FIXTURES AND REPLACE WITH NEW AT LOCATION SHOWN. RECONNECT TO THE EXISTING FEED. INSTALL NEW CEILING MTD OCCUPANCY SENSOR. PROVIDE RELAY AND BY PASS SWITCH FOR CONTROL OF LIGHTING AT EACH BATHROOM. SOME RE-WIRING AND NEW WIRING WILL BE REQUIRED TO INSTALL OCCUPANCY SENSOR AND BY PASS SWITCH. REFER TO DETAIL ON THIS SHEET. MODIFY & RE-USED (E) CONDUIT & WIRING WHERE FEASIBLE. NEW WIRING IN THE BATHROOM SHALL BE PLACED IN EMT CONDUIT. WHERE FEASIBLE NEW WIRING CAN RUN IN THE MECHANICAL CHASE. MC CABLE CAN BE USED IN MECHANICAL CHASE.
- INSTALL NEW HAND DRYER AT THE SAME LOCATION . CONNECT TO EXISTING FEED.
- INSTALL NEW GFI RECEPTACLE AT LOCATION INDICATED. PROVIDE FEED AS REQUIRED. RECEPTACLE SHALL BE TAMPER RESISTANT.
- INSTALL NEW COMBO EXIT AND EMERGENCY WALL PACK AND CONNECT TO AREA LIGHTING AHEAD OF THE MAIN. SEE DETAIL.
- REMOVE ALL EXTERIOR LIGHTING AND REPLACED WITH NEW AT THE SAME LOCATION. THE LIGHT BESIDES DOOR SHALL HAVE BATTERY BACK UP.
- EXISTING WALL HEATER SHALL BE REMOVED AND REPLACED WITH NEW UNIT HEATER. CONNECT TO EXISTING FEED.
- EXISTING HOT WATER HEATER SHALL BE REMAIN INTACT. NO POWER WORK NEEDED.
- EXISTING EXHAUST FAN SHALL BE REPLACED WITH NEW. CONNECT EACH EXHAUST FAN TO EXISTING CIRCUITS.

SYMBOLS

	JUNCTION BOX		HOME RUN TO PANEL BOARD. INDICATE NUMBER OF CIRCUITS BY NUMBER OF ARROWS. ANY CIRCUIT WITHOUT SUCH DESIGNATION INDICATES A THREE-WIRE CIRCUIT. FOR A GREATER NUMBER OF WIRES INDICATE AS FOLLOWS: /// (3 WIRES) /// (4 WIRES), ETC.		EXIT SIGN W/ EMERGENCY LIGHT
	EXISTING RECEPTACLE OUTLET		NEW GFI RECEPTACLE		CEILING MTD OCCUPANCY SENSOR
	SWITCH, MEN'S BATHROOM		RELAY, MEN'S BATHROOM		NEW CEILING LIGHT FIXTURE
	SWITCH, WOMEN'S BATHROOM		RELAY, WOMEN'S BATHROOM		EXIT SIGN W/ EMERGENCY LIGHT

GENERAL DEMOLITION NOTES:

* THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO PLACING BID AND BEFORE START OF CONSTRUCTION. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED TO THE EXTENT FEASIBLE. ALL CONFLICTS BETWEEN EXISTING SYSTEMS AND WHAT SHOWN ON THE PROJECT PLANS SHALL BE REPORTED TO THE ENGINEER FOR HIS DECISION ON HOW TO PROCEED. IT MUST BE NOTED THAT THE EXISTING MEP SYSTEM IF CALLED TO BE REMOVED, SHALL BE CONSIDERED AS "TOTAL DEMOLITION". IF THERE ARE ITEMS NOT SHOWN ON MEP DEMOLITION PLANS, THE CONTRACTOR SHALL STILL CONSIDER THEIR TOTAL DEMOLITION & REMOVAL AS PART OF THE SCOPE OF WORK, IF SUCH WORK IS NEEDED TO ACCOMMODATE THE CONSTRUCTION SCOPE OF WORK.

* THE EXISTING CONDITIONS SHOWN ON THE MEP DRAWINGS ARE BASED ON AN ENGINEERING SURVEY AND MAY NOT BE BASED ON THE VERIFIED AS-BUILT CONDITIONS OR DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY LAYOUT, AND CONDITIONS OF THE EXISTING SYSTEMS, AND SHALL REPORT TO ENGINEER REQUIRED MODIFICATIONS TO THE DESIGN DOCUMENTS, TO ACCOMMODATE THE INTENT OF THE DESIGN.

* MODIFICATIONS TO THE EXISTING SYSTEMS, IF REQUIRED TO ACCOMMODATE THE INTENT OF THE DESIGN, SHALL BE CONSIDERED AS A PART OF SCOPE OF WORK.

* ALL DEMOLITION ITEMS SHALL BE DISPOSED OF THE JOB SITE IN AN APPROVED MANNER.

* WHENEVER AN ITEM IS CALLED TO BE REMOVED, ALL COMPONENTS RELATED TO THAT ITEM SHALL BE REMOVED AS WELL AND IN THEIR ENTIRETY. ABANDONING SYSTEMS AND EQUIPMENT IN PLACE OR ABOVE CEILING IS NOT PERMITTED.

* WHERE APPLICABLE ALL UNUSED ROOF & EXTERIOR WALL OPENING & PENETRATIONS SHALL BE PATCHED IN AN APPROVED MANNER. SURFACES SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.

* ANY WORK WHICH MAY REQUIRE SHUT DOWN OF ANY MAIN UTILITY OR SERVICES SHALL BE COORDINATED WITH BUILDING MANAGEMENT, 48 HRS. IN ADVANCE.

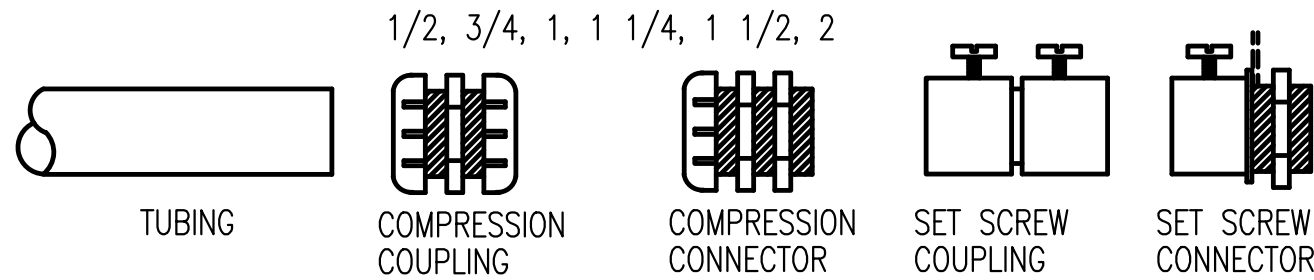
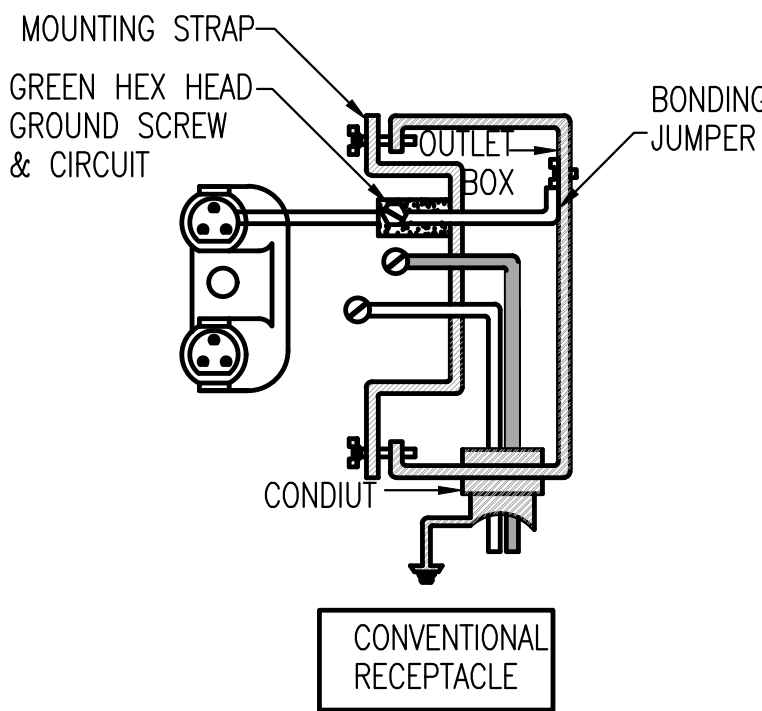
* ALL CUTTING AND PATCHING SHALL BE DONE BY ELECTRICAL CONTRACTOR. ALL SURFACES SHALL BE FINISHED AS INDICATED ON ARCHITECTURAL PLANS BY OTHERS.

LIGHT FIXTURE SCHEDULE

TYPE A	RECESSED DOWN LIGHT, H.E. WILLIAMS, V6DR-L23/835-DIM-UNV-LW-OF LED, 26.9W, UNV VOLTS, PRISMATIC POLYCARBONATE LENS, LENSED DOWNLIGHT
TYPE A1A	1 X 4 LED FIXTURE WITH LENS FOR UTILITY AREA. H.E. WILLIAMS, 11-4-L52/835-(L43)-S-AF12125, SURFACE MTD 42.3W, 5101 LUMENS, UNV VOLTS, WHITE STEEL DOOR, DAMP LOCATION LISTED
TYPE B	EXTERIOR LIGHT, ALCON LIGHTING 12302-S SURFACE, CEILING MOUNTED, LED 12" TALL, WHITE FINISH, SILVER REFLECTOR, 28W
TYPE B/EM	EXTERIOR LIGHT, ALCON LIGHTING 12302-S SURFACE, CEILING MOUNTED, LED 12" TALL, WHITE FINISH, SILVER REFLECTOR, 28W EMERGENCY: MOUNTED REMOTE INVERTER (90 MINUTES)

LED EXIT SIGN W/EMERGENCY LIGHTS (EX/EM)

- * TWO 5.4 WATT 6V LAMPS; 3.6 WATT DOWN LIGHT.
- * NICKEL-CADMIUM BATTERY PROVIDES A MINIMUM OF 90 MINUTES OF ILLUMINATION IN EMERGENCY MODE.
- * FEATURES BROWNOUT PROTECTION, AC INDICATOR LED LIGHT WITH PUSH TO TEST BUTTON.
- * MEETS AND EXCEEDS UL 924, NFPA 101, NEC AND OSHA ILLUMINATION STANDARDS.
- * 18.3"W X 8.5"H X 2.8"D.
- * EMEDCO OR APPROVED EQUAL MANUFACTURER



ELECTRICAL METALLIC TUBING

* USE FOR ALL HOMERUS & FEEDERS TO MOTORS, HVAC EQUIPMENT & WHERE INDICATED.

RECEPTACLE INSTALLATION.

SCALE: N.T.S.

EXISTING PANEL-A

PANEL SCHEDULE															
PANEL LOCATION:	UTILITY ROOM			SECTION	1ST	SUPPLIED FROM:		TVSS SIZE:				-			
PANEL:	A			NEMA ENCLOSURE TYPE	1	MAIN BREAKER FRAME RATING:	225	INTERRUPTING CAPACITY (AIC):				10kAIC			
MOUNTING TYPE:	SURFACE			LN VOLTAGE:	240/120	PHASE:	1P	MLO or MCB:				MCB			
LL VOLTAGE:	240			LN VOLTAGE:	240/120	WIRE:	3	MAIN BREAKER TRIP RATING:				200			
CKT#	OCPD		WIRE	CONDUIT	LOAD DESCRIPTION	LOAD CODE	Load (kVA)		LOAD CODE	LOAD DESCRIPTION	CONDUIT	WIRE	OCPD		CKT#
	AMPS	POLE					Aa	Ba					POLE	AMPS	
1	20	1P3W			LIGHTS - UTILITY / SALES AREA	L	0.80	A	L	LIGHTS - HALL OFFICE			1P3W	20	2
3	20	1P3W			PAVILION LIGHTS	B		B	L	LIGHTS - STORAGE BATH			1P3W	20	4
5	20	1P3W			OUTSIDE LIGHTS	L		A	L	DECK - STRIP LIGHT			1P3W	20	6
7	20	1P3W			WOMEN/MEN LIGHTS	L		B	M	HOT WATER RECIRCULATION			1P3W	20	8
9	20	1P3W			RECEPT OFFICE	R		A	KA	RECEPT - BACK SPLASH			1P3W	20	10
11	20	1P3W			RECEPT UTILITY	R		B	KA	RECEPT - ICE MACHINE			1P3W	20	12
13	20	1P3W			RECEPT SALES	R		A	KA	RECEPT - BACK STORE			1P3W	20	14
15	20	1P3W			WATER PROOF RECEPT	R		B	KA	RECEPT - UNDER COUNTER			1P3W	20	16
17	20	1P3W			RECEPTS REST ROOM	R		A	KA	RECEPT - COKE MACHINE			1P3W	20	18
19	20	1P3W			RECEPT PAVILION	R		B	R	RECEPT			1P3W	20	20
21	20	1P3W			HOOD FAN	F		A	R	W.P. RECEPT DECK			1P3W	20	22
23	20	1P3W			ATTIC EXHAUST FAN	F		B	HMH	HOT WATER HEATER			2P3W	100	24
25	30	1P3W			WOMEN - HAND DRYER	ML		A	HMH						26
27	30	1P3W			MEN - HAND DRYER	ML		B	HE						28
29	20	1P3W			OFFICE REST RM - HAND DRYER	ML		A	HE	O.D. AC			2P3W	30	30
31	20	1P3W			ICE CREAM FREEZER	KA		B	HE						32
33	30	2P3W			EX CIRCUIT	ML		A	HE	O.D. AC			2P3W	40	34
35						ML		B	KA						36
37	60	2P3W			EX CIRCUIT	ML		A	KA	ICE MACHINE			2P3W	20	38
39						ML		B	KA						40
41	20	1P3W	12	1/2	MENS BATHROOM LIGHTING	L	0.80	A	KA	ELECTRIC RANGE			2P3W	40	42

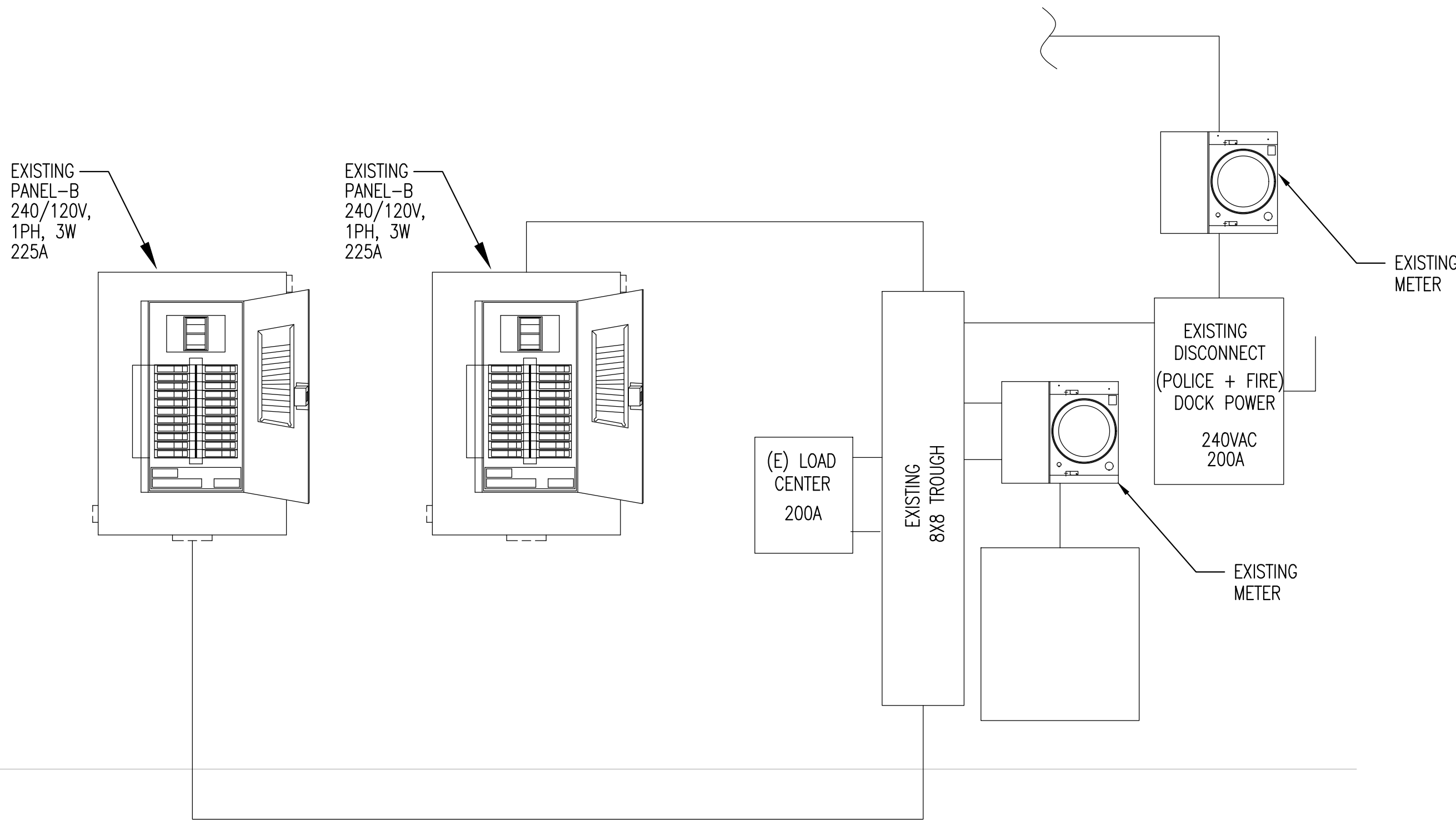
- * PANEL-A IS AN EXISTING PANEL.
- * CIRCUIT #41 IS NEW WITH 1P-20A, #12 IN 1/2" FOR MENS BATHROOM LIGHTING.

DELETED LOADS:	ADDED LOADS
3 EXISTING EXTERIOR LIGHTS: 3 X 150W = 450 W	13 TYPE A FIXTURE: 13 X 26.9W = 349.7 W
6 EXISTING INTERIOR BATHROOM LIGHTS: 6 X 200W = 1200 W	3 TYPE B FIXTURE: 3 X 28W = 84 W
TOTAL LOADS: 1650 W	TOTAL LOADS: 433.7 W

EXISTING PANEL-B

PANEL SCHEDULE															
PANEL LOCATION:	UTILITY ROOM			SECTION	1ST	SUPPLIED FROM:		TVSS SIZE:				-			
PANEL:	B			NEMA ENCLOSURE TYPE	1	MAIN BREAKER FRAME RATING:	225	INTERRUPTING CAPACITY (AIC):				10kAIC			
MOUNTING TYPE:	SURFACE			LN VOLTAGE:	240/120	PHASE:	1P	MLO or MCB:				MCB			
LL VOLTAGE:	240			LN VOLTAGE:	240/120	WIRE:	3	MAIN BREAKER TRIP RATING:				200			
CKT#	OCPD		WIRE	CONDUIT	LOAD DESCRIPTION	LOAD CODE	Load (kVA)		LOAD CODE	LOAD DESCRIPTION	CONDUIT	WIRE	OCPD		CKT#
	AMPS	POLE					Aa	Ba					POLE	AMPS	
1	30	2P3W			RECEPT - SALES	R	0.00	A	HE	HEATER - OFFICE BATH			2P3W	30	2
3						R		B	HE						4
5						R		A	HE						6
7	30	2P3W			RECEPT - SALES	R		B	HE	HEATER - OFFICE			2P3W	30	8
9	40	2P3W			RECEPT - SALES	R		A	HE	HEATER - WOMENS BATHROOM			2P3W	30	10
11						R		B	HE						12
13	30	2P3W			RECEPT - UTILITY ROOM	R		A	HE	HEATER - MENS BATHROOM			2P3W	30	14
15						R		B	HE						16
17	30	2P3W			HEATER - UTILITY ROOM	HE		A	ML	WELL HOUSE			2P3W	50	18
19						HE		B	ML						20
21	20	1P3W			RECEPT FOUNTAIN	R		A	R	RECEPT - OUTSIDE VENDING			1P3W	20	22
23	20	1P3W			EX CIRCUIT	R		B	R	EX CIRCUIT			1P3W	20	24
25					SPACE			A		SPACE					26
27					SPACE			B		SPACE					28
29					SPACE			A		SPACE					30
31					SPACE			B		SPACE					32
33					SPACE			A		SPACE					34
35					SPACE			B		SPACE					36
37					SPACE			A		SPACE					38
39					SPACE			B		SPACE					40
41					SPACE			A		SPACE					42

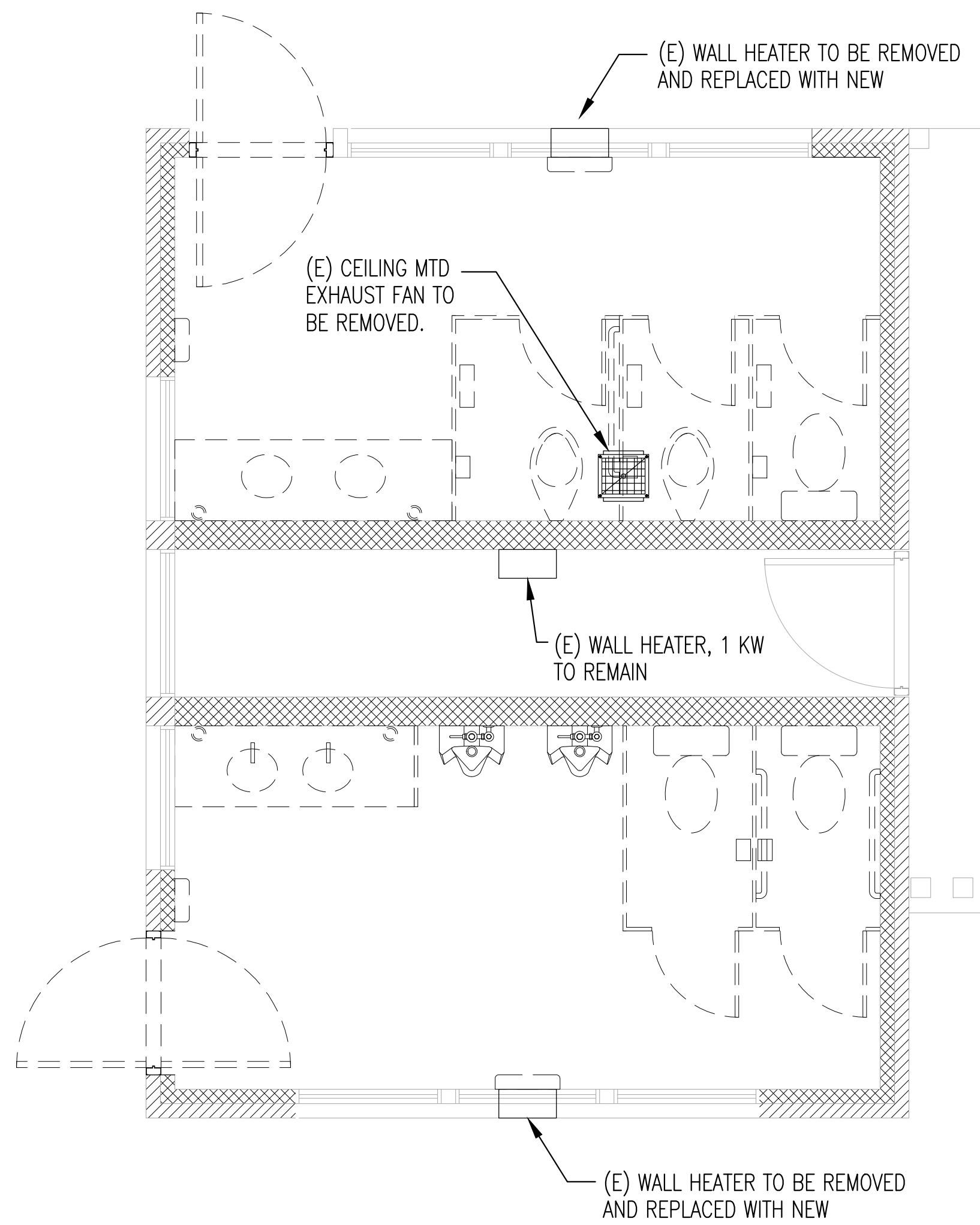
- * PANEL-B IS AN EXISTING PANEL.
- * NO ELECTRICAL WORK NEEDED.



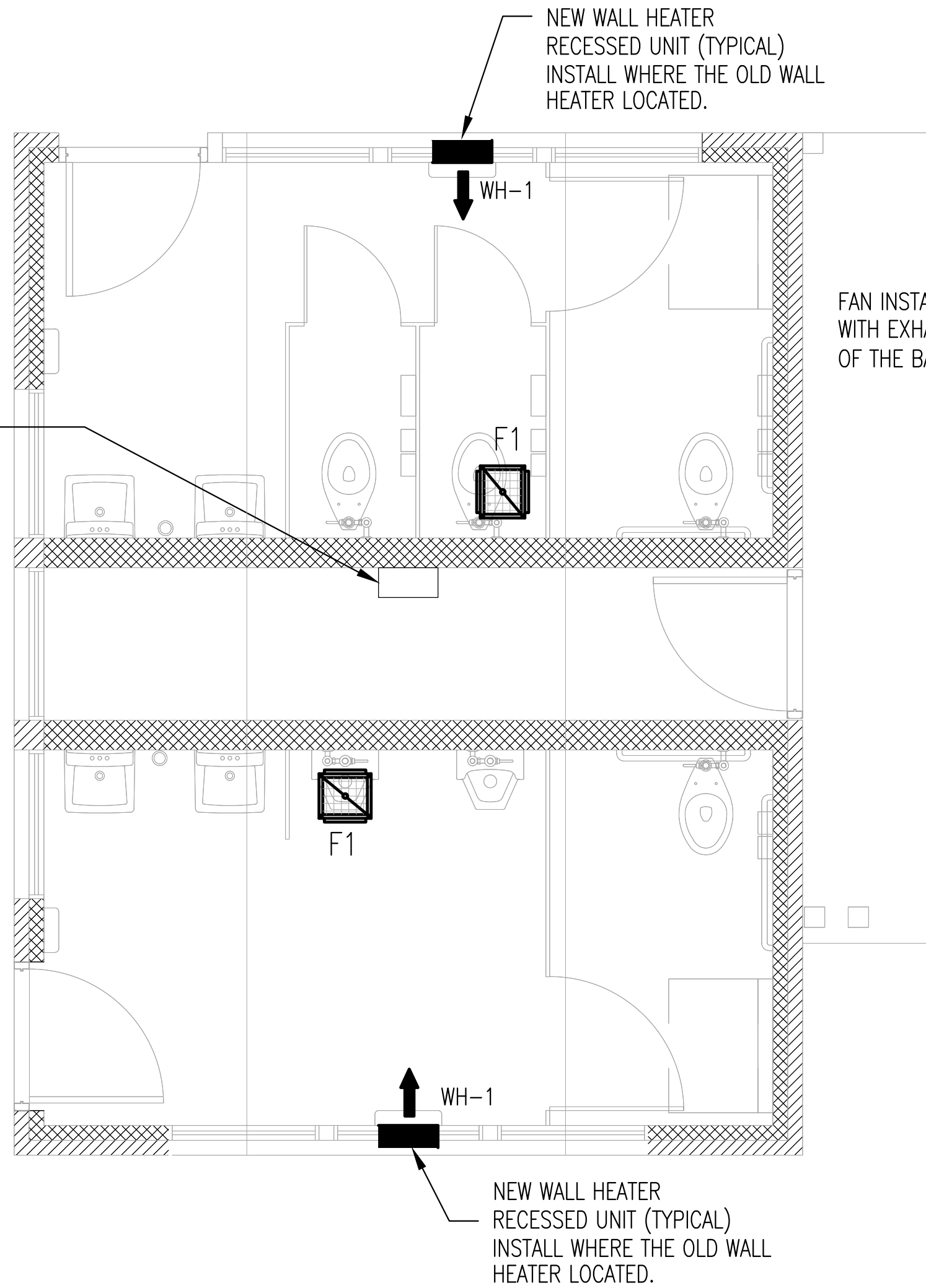
EXISTING POWER RISER DIAGRAM

SCALE: N.T.S.

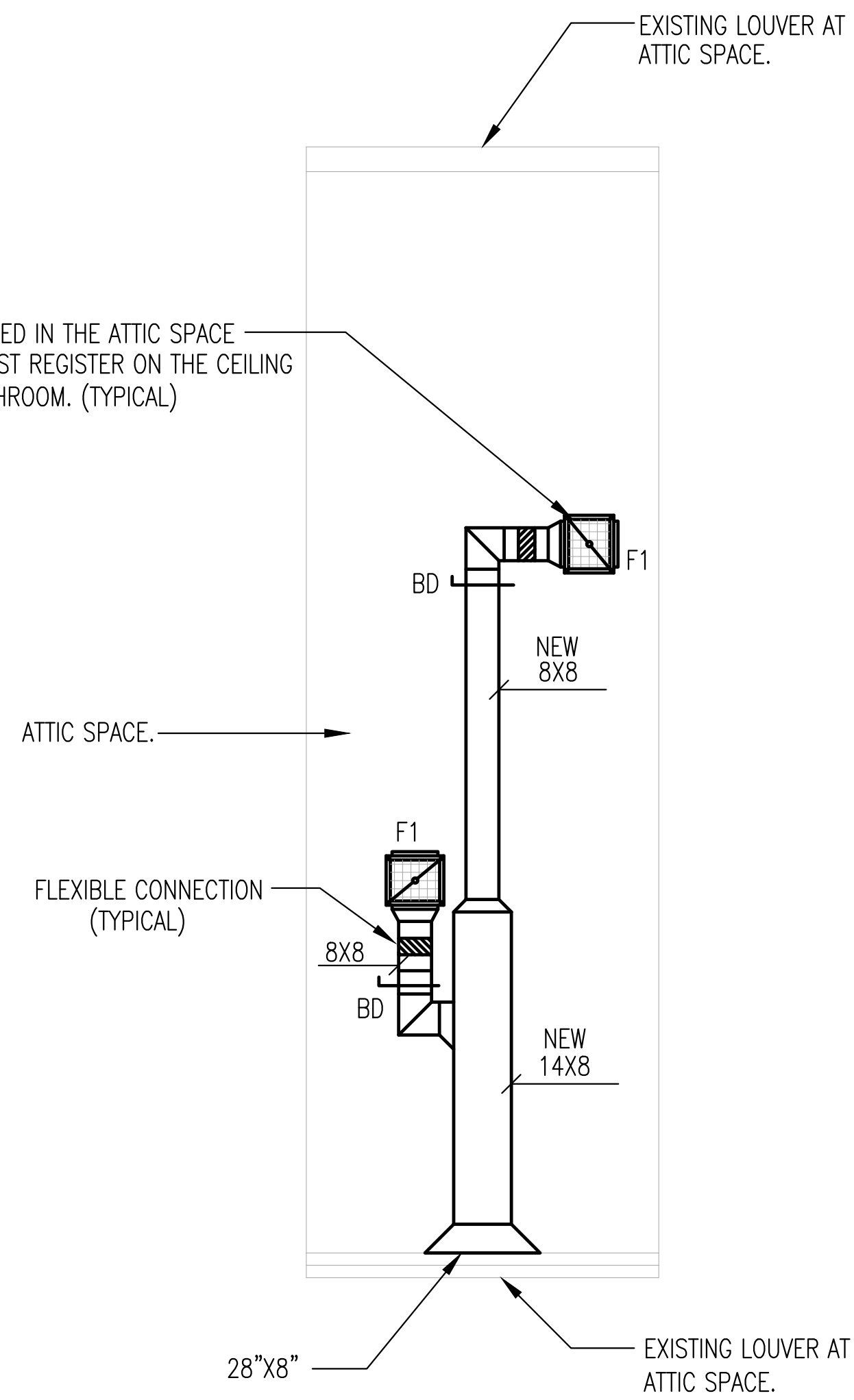
EXISTING POWER RISER DIAGRAM IS ONLY SHOW FOR INFORMATION. MAIN SERVICES AND PANELS ARE EXISTING TO REMAIN. NO ELECTRICAL WORK NEEDED.



1 HVAC EXISTING CONDITION FLOOR PLAN
MO01 SCALE: 3/8" = 1' - 0"



2 HVAC NEW FLOOR PLAN
MO01 SCALE: 3/8" = 1' - 0"



3 HVAC ATTIC SPACE PLAN
MO01 SCALE: 3/8" = 1' - 0"

SYMBOLS

	CEILING MOUNTED EXHAUST FAN
BD	BACK DRAFT DAMPER
	DUCTWORK
	WALL HEATER



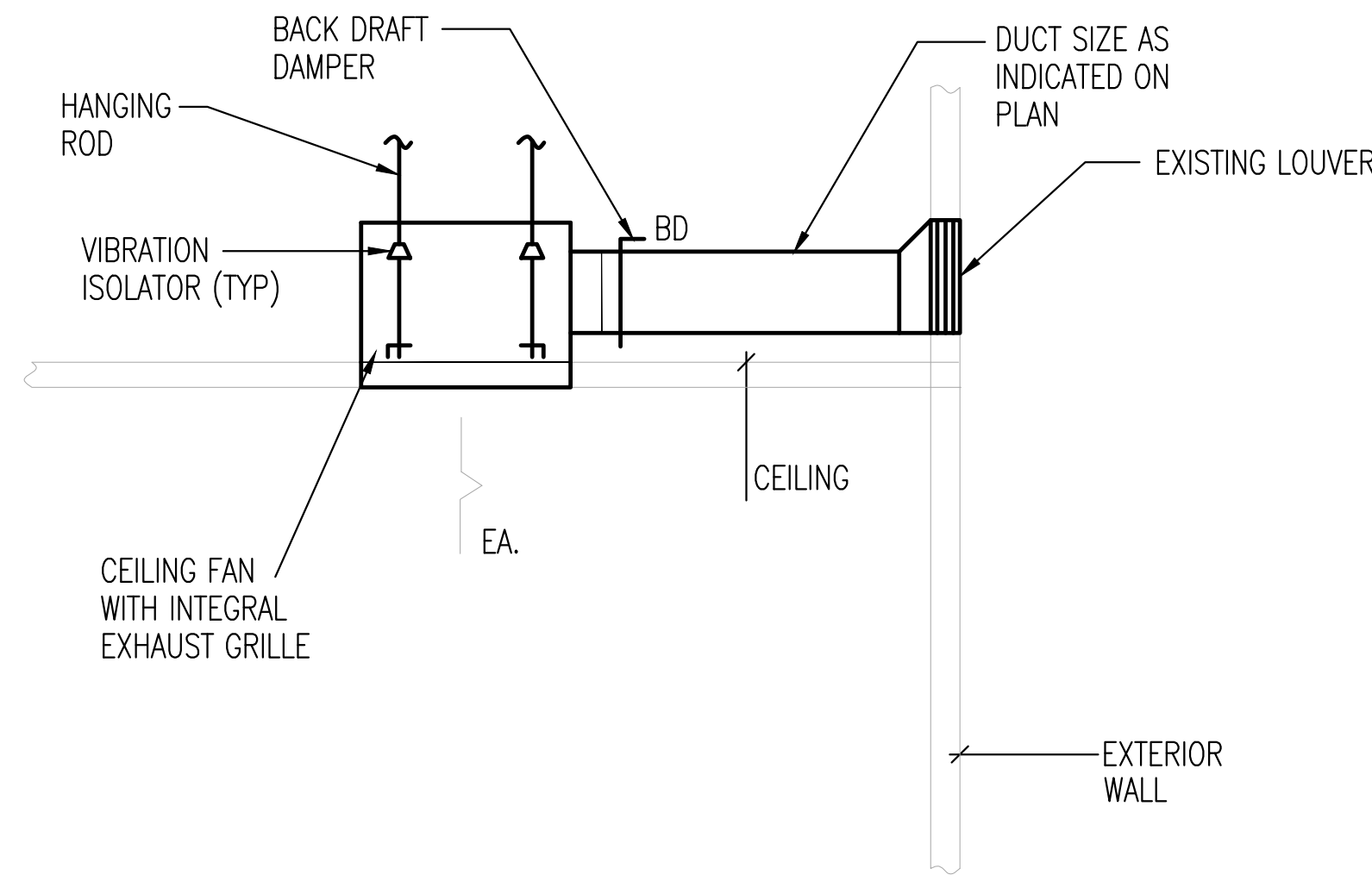
EXHAUST FAN SCHEDULE											
TYPE	SERVICE	TYPE	CFM	ESP IN WC	MOTOR HP	ELECTRICAL DATA					CONTROL
						V	PH	HZ	FLA	MOCP	
F1	BATHROOM	CABINET	300	0.125	1/12	120	1	60	5.80 AMPS	15.0 AMPS	INTERLOCK WITH LIGHT SWITCH

- * CEILING MOUNTED CABINET TYPE EXHAUST FAN.
- * PROVIDE FAN FROM GREENHECK OR APPROVED EQUAL MANUFACTURER.
- * ALL CABINET FANS SHALL BE PROVIDED WITH BUILT IN EXHAUST REGISTER OF A SIZE RECOMMENDED BY MANUFACTURER AND BACK DRAFT DAMPERS.

ELECTRIC HEATER SCHEDULE									
TAG	SERVICE	TYPE	TC	KW	ELECTRICAL DATA				
					V	PH	HZ	MCA	MOCP
WH-1	BATHROOM	FAN POWERED RECESSED	17.0 MBH	5	208	1	60	24 AMPS	30 AMPS

- * PROVIDE BUILT IN TYPE HEATING THERMOSTAT.
- * UNIT SHALL BE FULLY RECESSED.
- * PROVIDE FULLY RECESSED ARCHITECTURAL UNITS FROM MARKEL NO EXCEPTION TAKEN. 3320 SERIES, MODEL # F3327TD-RP

- ### DESIGN NOTES
1. INSTALL CABINET FAN WITH BUILT IN REGISTER AT EACH BATHROOM.
 2. SUPPORT UNIT FROM STRUCTURE, AND PROVIDE VIBRATION ISOLATOR.
 3. PROVIDE UNIT WITH BACK DRAFT DAMPER.
 4. PROVIDE FLEXIBLE CONNECTION AT EACH FAN OUTLET.
 5. COORDINATE WITH ELECTRICIAN FOR FAN CONTROL.

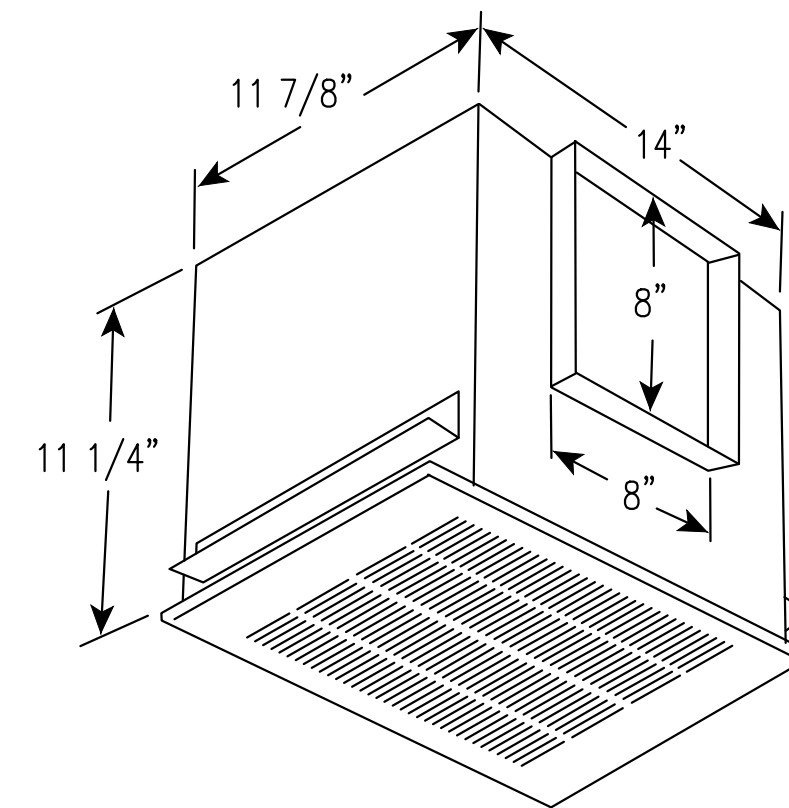


5 CABINET FAN, INSTALLATION SCHEMATIC.
MO01 SCALE: N.T.S.

* INSTALL FAN AS PER MANUFACTURER INSTALLATION REQUIREMENTS.

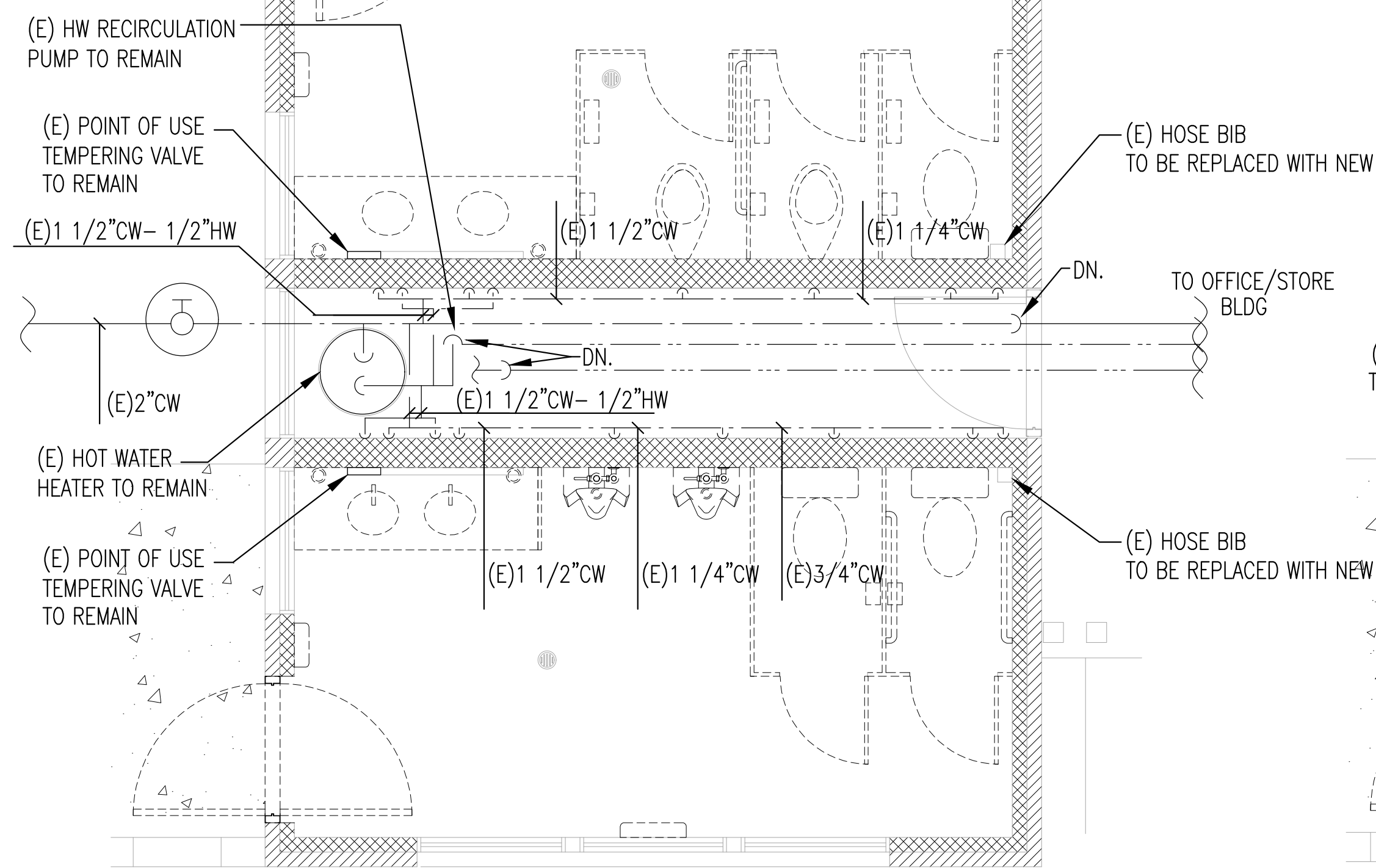
4 ELECTRIC WALL HEATER INFORMATION
MO01 SCALE: N.T.S.

- | | |
|---|--|
| * AUTOMATIC FAN DELAY CIRCUIT | * STEEL BLOCK FIN ELEMENT |
| * AUTOMATIC RESET THERMAL LIMIT | * VANE AXIAL FAN BLADE: 600 RPM MOTOR; 175 CFM |
| * POWDER COATED 18 GAUGE STEEL GRILL WITH EXTRUDED ALUMINUM FRONT FRAME | * ROUGH IN DIMENSIONS: 14 1/8" WIDE X 19 1/2" HIGH X 4" DEEP |
| | * GRILL DIMENSIONS: 15 29/32" WIDE X 20 27/32" HIGH |
| | * BUILT-IN TAMPER PROOF THERMOSTAT |

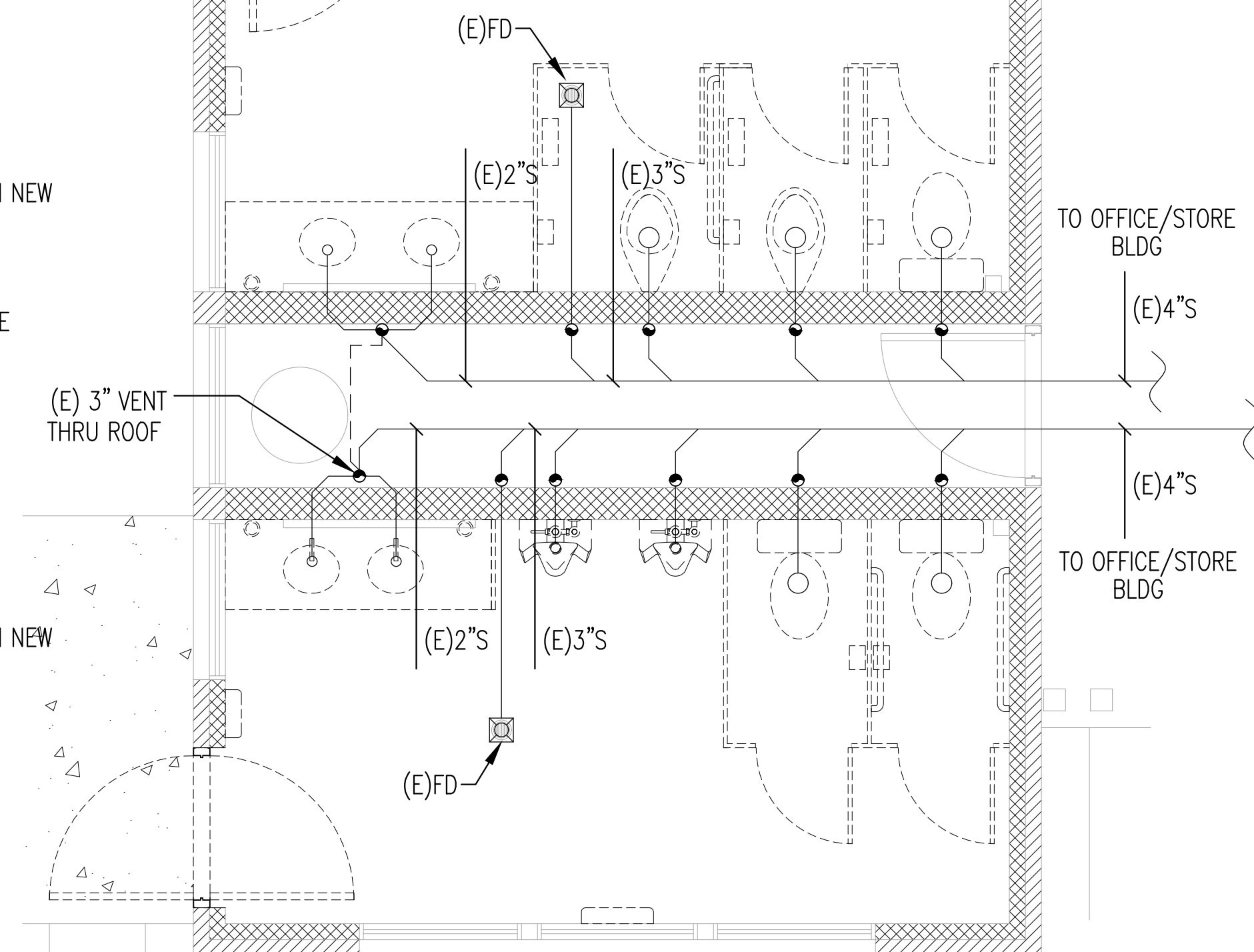


6 CABINET EXHAUST FAN DETAIL
MO01 SCALE: N.T.S.

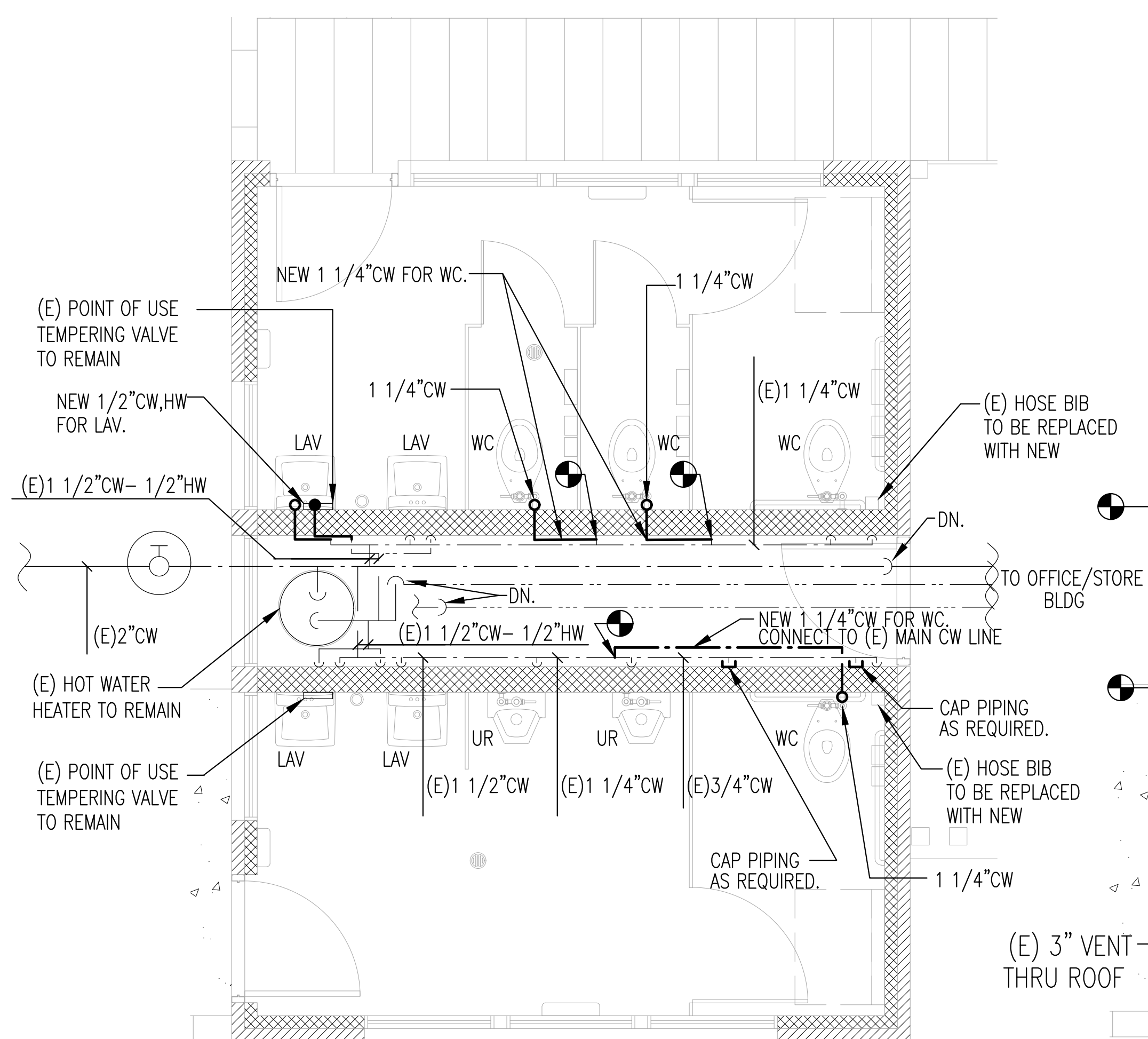
* MANUFACTURER, GREENHECK MODEL SP-A390.



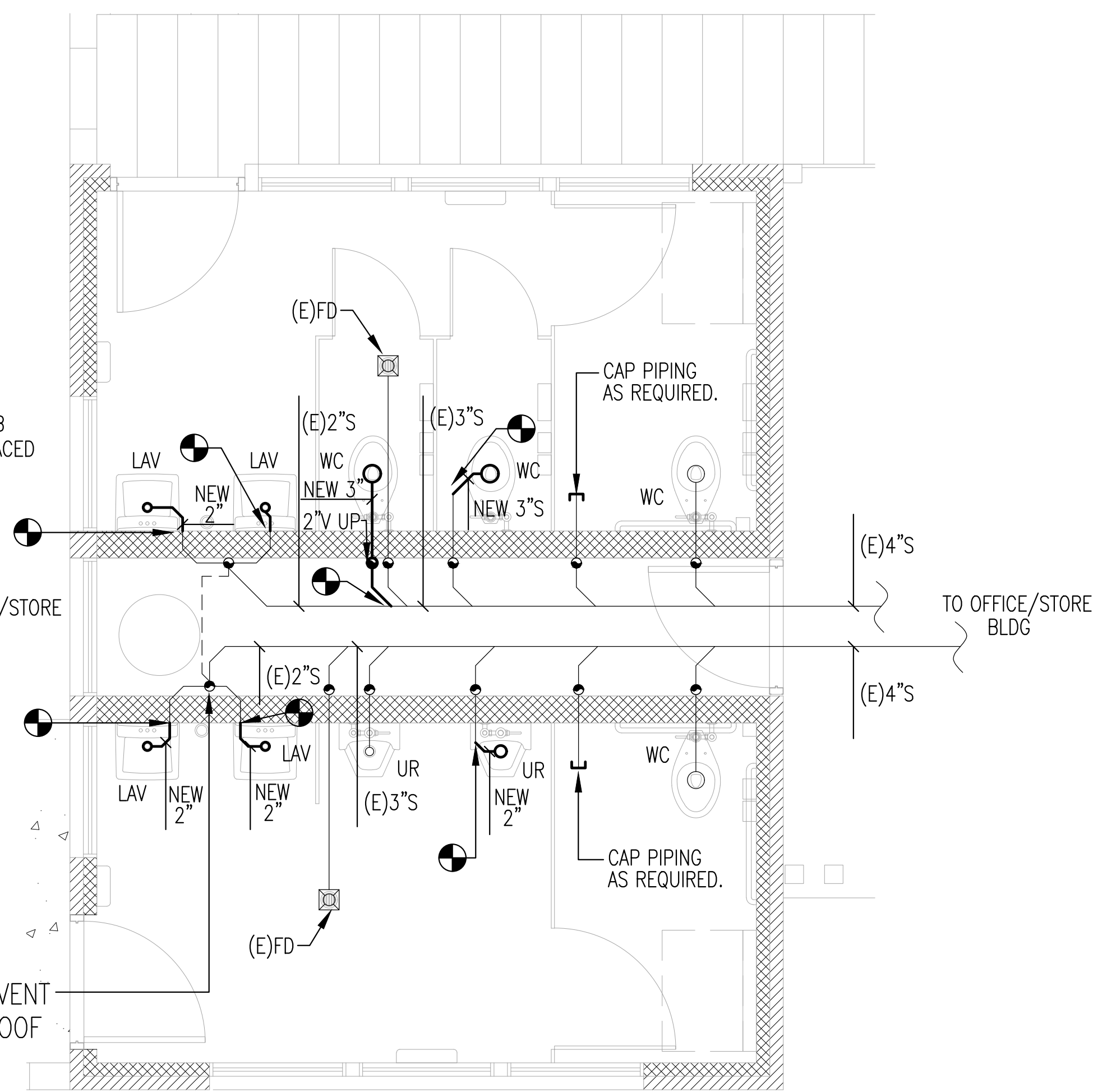
1 PLUMBING DEMOLITION FLOOR PLAN
 SCALE: 3/8" = 1' - 0"



2 PLUMBING DEMOLITION FLOOR PLAN
 SCALE: 3/8" = 1' - 0"



3 PLUMBING NEW FLOOR PLAN, WATER
 SCALE: 3/8" = 1' - 0"



4 PLUMBING NEW FLOOR PLAN, SEWER
 SCALE: 3/8" = 1' - 0"

GENERAL DEMOLITION NOTES:

* THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO PLACING BID AND BEFORE START OF CONSTRUCTION. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED TO THE EXTENT FEASIBLE. ALL CONFLICTS BETWEEN EXISTING SYSTEMS AND WHAT SHOWN ON THE PROJECT PLANS SHALL BE REPORTED TO THE ENGINEER FOR HIS DECISION ON HOW TO PROCEED. IT MUST BE NOTED THAT THE EXISTING MEP SYSTEM IF CALLED TO BE REMOVED, SHALL BE CONSIDERED AS "TOTAL DEMOLITION".

IF THERE ARE ITEMS NOT SHOWN ON MEP DEMOLITION PLANS. THE CONTRACTOR SHALL STILL CONSIDER THEIR TOTAL DEMOLITION & REMOVAL AS PART OF THE SCOPE OF WORK, IF SUCH WORK IS NEEDED TO ACCOMMODATE THE CONSTRUCTION SCOPE OF WORK.

* THE EXISTING CONDITIONS SHOWN ON THE MEP DRAWINGS ARE BASED ON AN ENGINEERING SURVEY AND MAY NOT BE BASED ON THE VERIFIED AS-BUILT CONDITIONS OR DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY LAYOUT, AND CONDITIONS OF THE EXISTING SYSTEMS, AND SHALL REPORT TO ENGINEER REQUIRED MODIFICATIONS TO THE DESIGN DOCUMENTS, TO ACCOMMODATE THE INTENT OF THE DESIGN.

* MODIFICATIONS TO THE EXISTING SYSTEMS, IF REQUIRED TO ACCOMMODATE THE INTENT OF THE DESIGN, SHALL BE CONSIDERED AS A PART OF SCOPE OF WORK.

* ALL DEMOLITION ITEMS SHALL BE DISPOSED OF THE JOB SITE IN AN APPROVED MANNER.

* WHENEVER AN ITEM IS CALLED TO BE REMOVED, ALL COMPONENTS RELATED TO THAT ITEM SHALL BE REMOVED AS WELL AND IN THEIR ENTIRETY. ABANDONING SYSTEMS AND EQUIPMENT IN PLACE OR ABOVE CEILING IS NOT PERMITTED.

* WHERE APPLICABLE ALL UNUSED ROOF & EXTERIOR WALL OPENING & PENETRATIONS SHALL BE PATCHED IN AN APPROVED MANNER. SURFACES SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.

* ANY WORK WHICH MAY REQUIRE SHUT DOWN OF ANY MAIN UTILITY OR SERVICES SHALL BE COORDINATED WITH BUILDING MANAGEMENT, 48 HRS. IN ADVANCE.

* ALL CUTTING AND PATCHING SHALL BE DONE BY PLUMBING CONTRACTOR. ALL SURFACES SHALL BE FINISHED AS INDICATED ON ARCHITECTURAL PLANS BY OTHERS.

PLUMBING DEMOLITION NOTES

- ALL EXISTING MAIN DOMESTIC WATER PIPING, SEWER AND VENT LINES IN THE MECHANICAL CORRIDOR BEHIND THE BATHROOM SHALL REMAIN INTACT.
- EXISTING HOT WATER HEATER, CIRCULATOR PUMP AND ALL ASSOCIATED PIPING SHALL REMAIN INTACT.
- MAKE MODIFICATIONS TO THE PIPING AS REQUIRED TO ACCOMMODATE DEMOLITION OF EXISTING PLUMBING FIXTURES AND INSTALLATION OF NEW FIXTURES.
- REMOVE ALL EXISTING PLUMBING FIXTURES (FLOOR MTD. TOILETS, URINAL, AND WALL HUNG LAVATORIES) WITH ALL ASSOCIATED PIPING. REMOVE PIPING AS REQUIRED. REMOVE ANY EXISTING UN-USED PIPING IN THE BATHROOMS.
- REMOVE ALL STOP VALVES, FAUCETS AND ALL ACCESSORIES INSIDE EACH BATHROOM.
- MODIFY EXISTING PIPING AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW PLUMBING FIXTURES.
- EXISTING FLOOR DRAINS SHALL REMAIN AT THE SAME LOCATION. EXISTING GRATES SHALL BE REPLACED WITH NEW .
- EXISTING HOSE BIBS SHALL BE REPLACED WITH NEW.
- EXISTING POINT OF USE TEMPERING VALVE FOR LAVATORY SHALL REMAIN AND SHALL BE RE-USED. MODIFY EXISTING PIPING AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW LAVATORY.

SYMBOLS

	NEW SEWER PIPE
	NEW VENT PIPE
	NEW COLD WATER PIPE
	NEW HOT WATER PIPE
	EXISTING SEWER PIPE
	EXISTING VENT PIPE
	EXISTING COLD WATER PIPE
	EXISTING HOT WATER PIPE
	POINT OF CONNECTION NEW TO EXISTING CONTRACTOR POINT OF CONNECTION
	BALL VALVE
	CHECK VALVE OR BACK FLOW VALVE



PLUMBING FIXTURE DESCRIPTION

WC WATER CLOSET, AMERICAN STANDARD, MADERA FLO WISE 16-1/2" HEIGHT ELONGATED FLUSHOMETER TOILET, VITREOUS CHINA, HIGH EFFICIENCY TOILET (1.1 GPF TO 1.6 GPF) FULLY GLAZED 2-1/8" TRAPWAY, ELONGATED BOWL, POWERFUL DIRECT-FED SIPHON JET ACTION 16-1/2" RIM HEIGHT FOR ACCESSIBLE APPLICATION, 1-1/2" INLET SPUD. 2 BOLT CAPS. SEAT: AMERICAN STANDARD # 5901.100 HEAVY DUTY OPEN FRONT LESS COVER. FLUSHOMETER VALVE: 1.6 GPF, SENSOR-OPERATED, AMERICAN STANDARD SELECTRONIC DC POWER # 6065.161.002

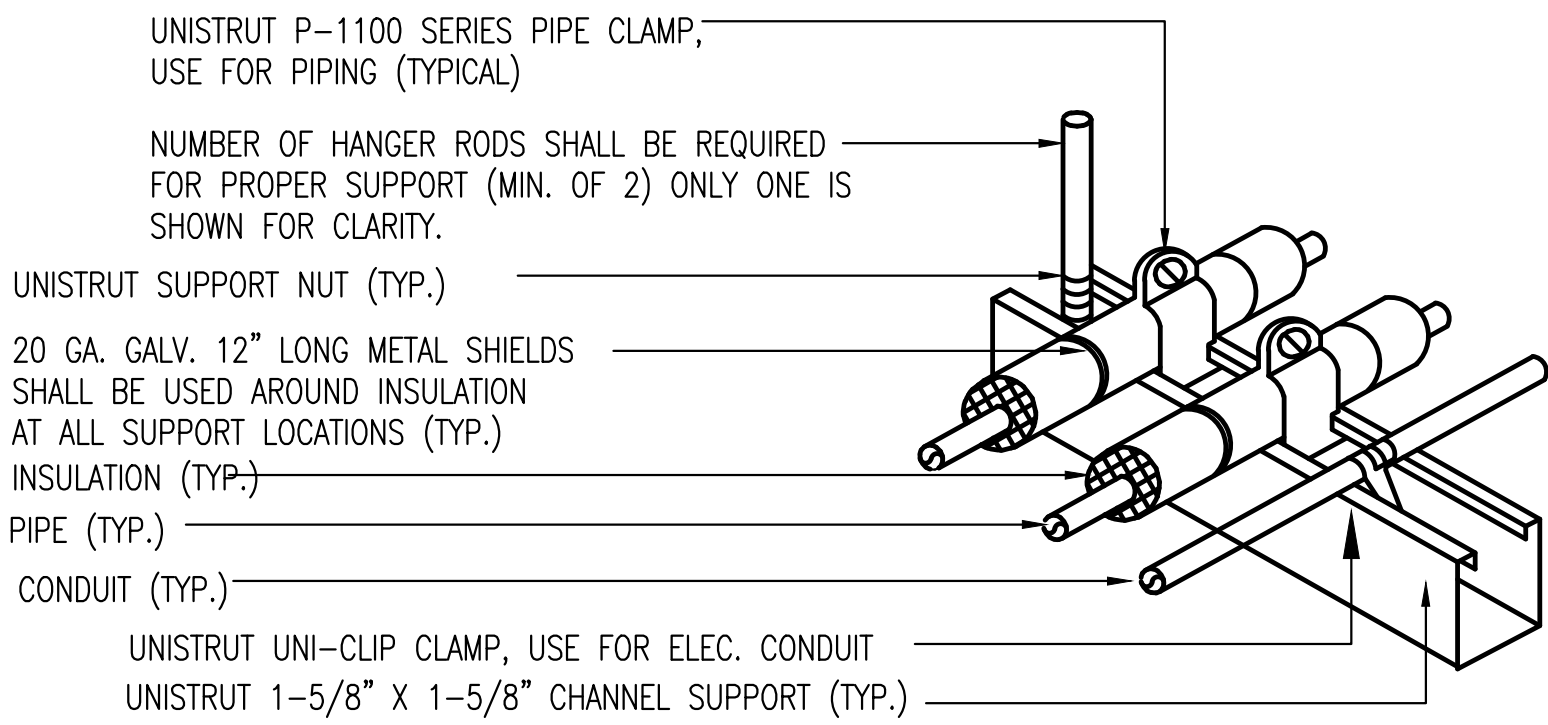
LAV LAVATORY, AMERICAN STANDARD, LUCERNE WALL-HUNG LAVATORY, 0356.041, VITREOUS CHINA, FRONT OVERFLOW, D-SHAPED BOWL, SELF-DRAINING DECK AREA WITH CONTOURED BACK AND SIDE SPLASH SHIELDS, FAUCET LEDGE.

FAUCET AMERICAN STANDARD ELECTRONIC 0.5 GPM DECK MOUNTED ELECTRONIC BATHROOM FAUCET WITH TOUCH FREE SENSOR.

UR URINAL, AMERICAN STANDARD, WASHBROOK FLOWISE UNIVERSAL URINAL, VITREOUS CHINA WITH EVERCLEAN, PERMANENT EVERCLEAN, ULTRA HIGH EFFICIENCY, LOW CONSUMPTION. OPERATES IN THE RANGE OF 0.125 GPF TO 1.0 GPF, FLUSHING RIM, ELONGATED 14" RIM FROM FINISHED WALL, WASHOUT FLUSH ACTION, 3/4" INLET SPUD, OUTLET CONNECTION THREADED 2" INSIDE, 2 WALL HANGERS FLUSH VALVE: 1.0 GPF FLUSH VALVE: SENSOR-OPERATED, AMERICAN STANDARD SELECTRONIC #6063.101.002 DC POWER

PLUMBING FIXTURE ROUGH IN SCHEDULE.

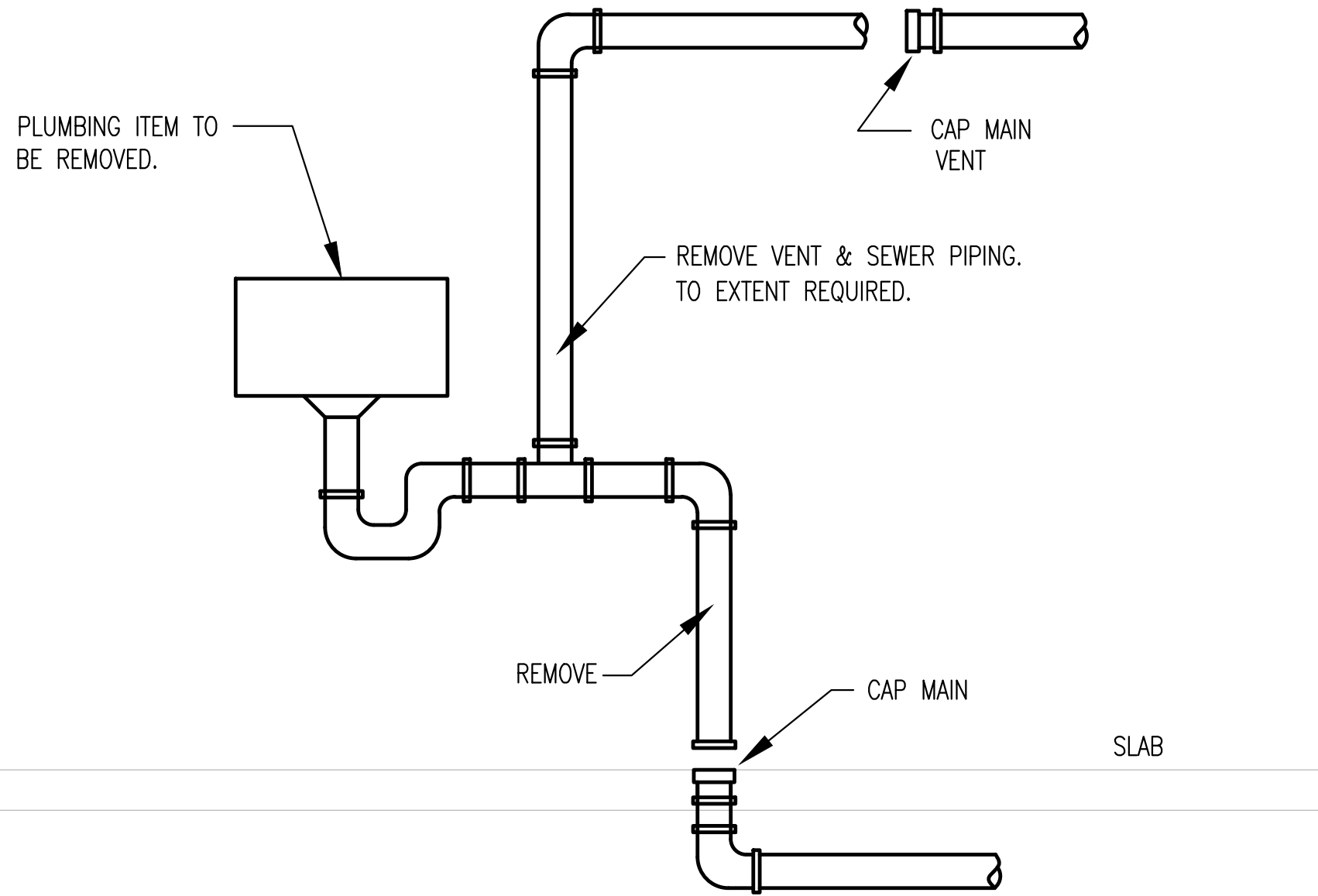
TAG	DESCRIPTION	SERVICE	SEWER & VENT ROUGH INS.			WATER ROUGH INS		REMARKS.
			MIN TRAP	SEWER	VENT	COLD	HOT	
WC	WATER CLOSET	PUBLIC BATHROOM	NA	3"	2"	1 1/4"	NA	FLUSH VALVE FLOOR MOUNTED
LAV	LAVATORY	PUBLIC BATHROOM	1 1/2"	2"	1 1/2"	1/2"	1/2"	WALL MOUNTED, ADA UNDER COUNTER
UR	URINAL	PUBLIC BATHROOM	2"	2"	2"	3/4"	NA	



- NOTES:
1. ALL PIPE CONDUIT, ETC. OF ALL TRADES SHALL BE COMBINED ON SAME SUPPORT CHANNEL WHERE PRACTICAL.
 2. SUPPORT CHANNEL LENGTH SHALL NOT BE DETERMINED UNTIL ALL PIPING, CONDUIT, ETC. TO BE SUPPORTED IS COORDINATED.
 3. SUPPORT CHANNEL SPACING SHALL BE NO MORE THAN 10'-0"

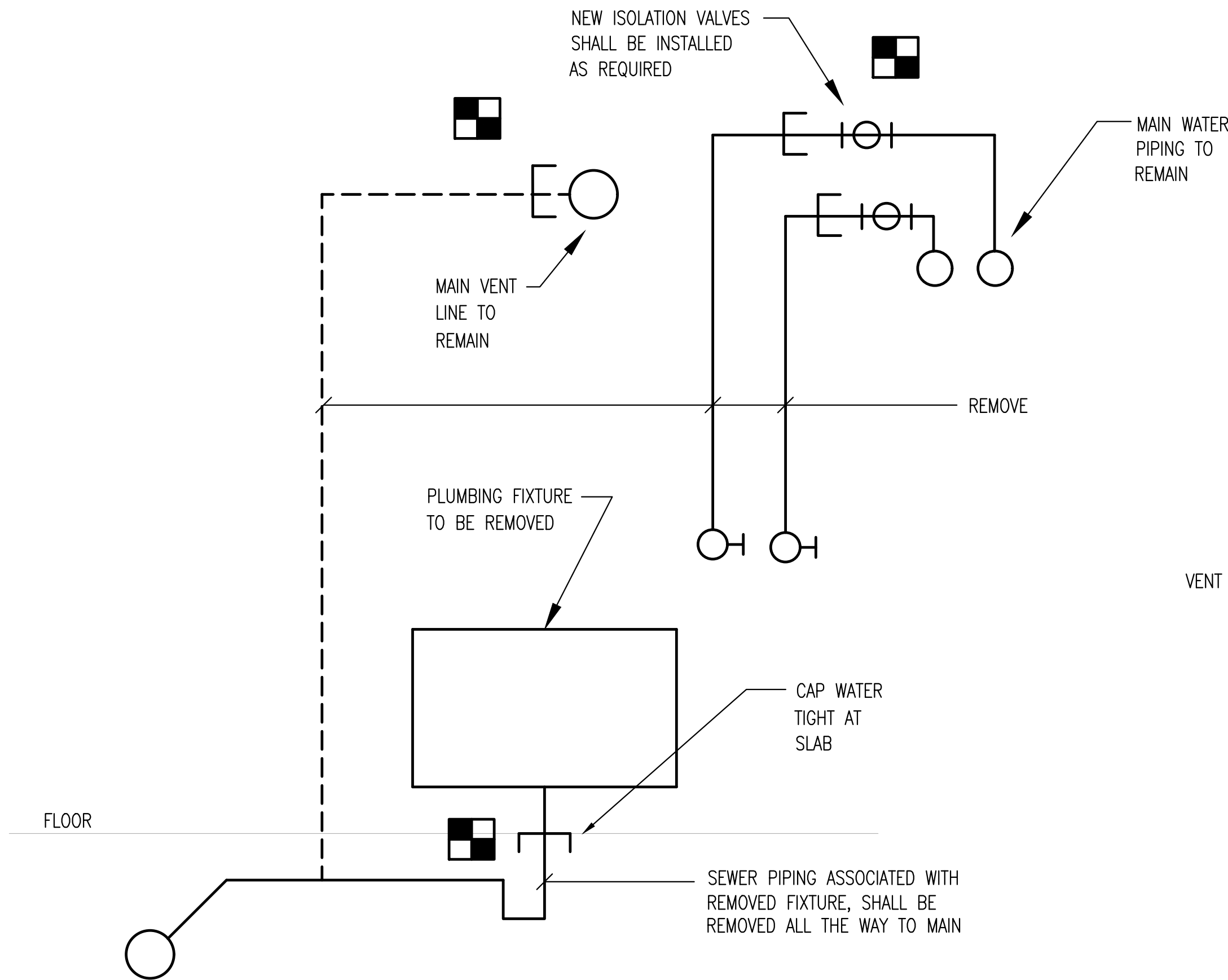
1 PIPING SUPPORT ABOVE CEILING.

SCALE: N.T.S.



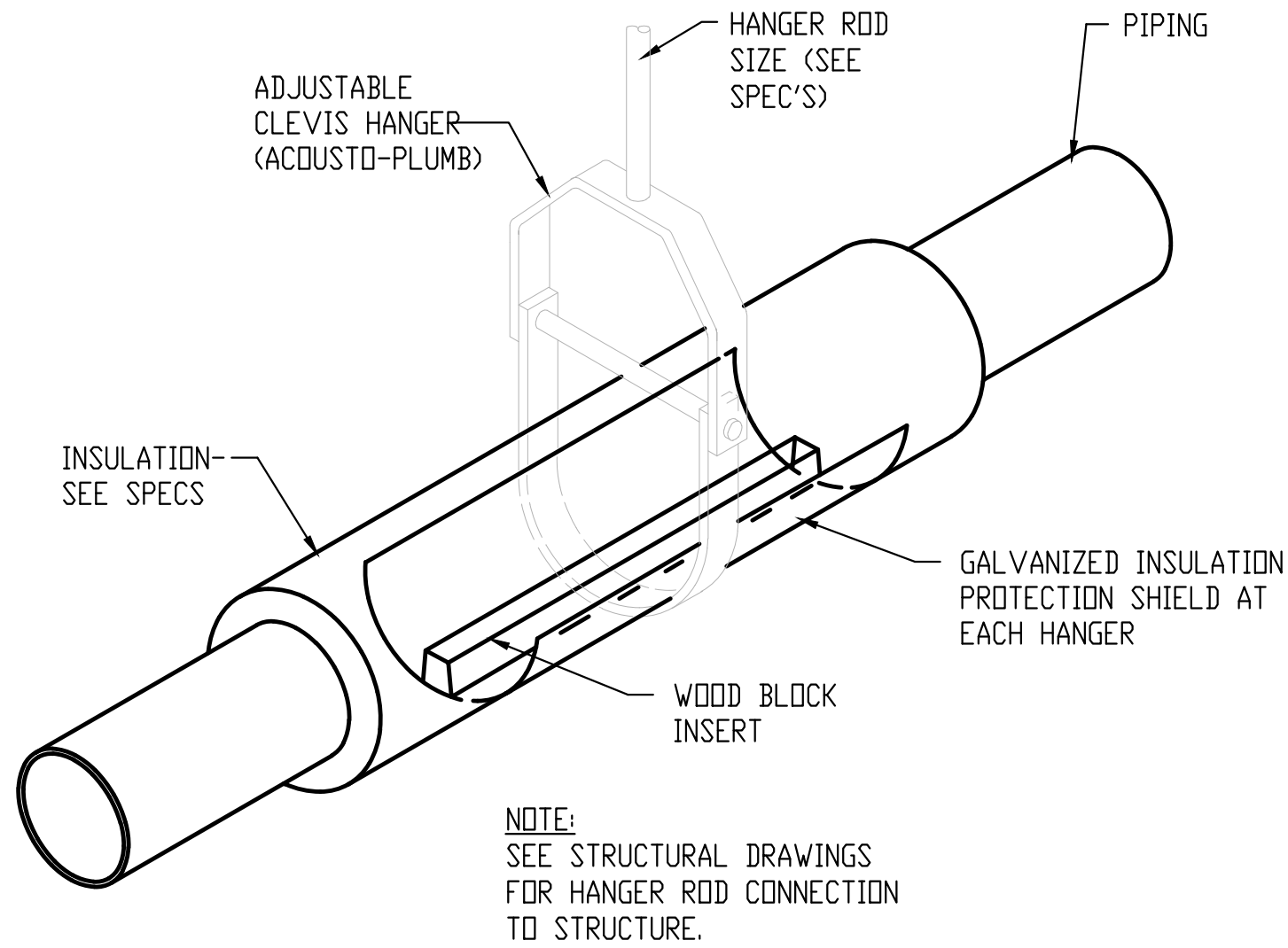
2 PLUMBING DEMOLITION DETAIL.

SCALE: N.T.S.



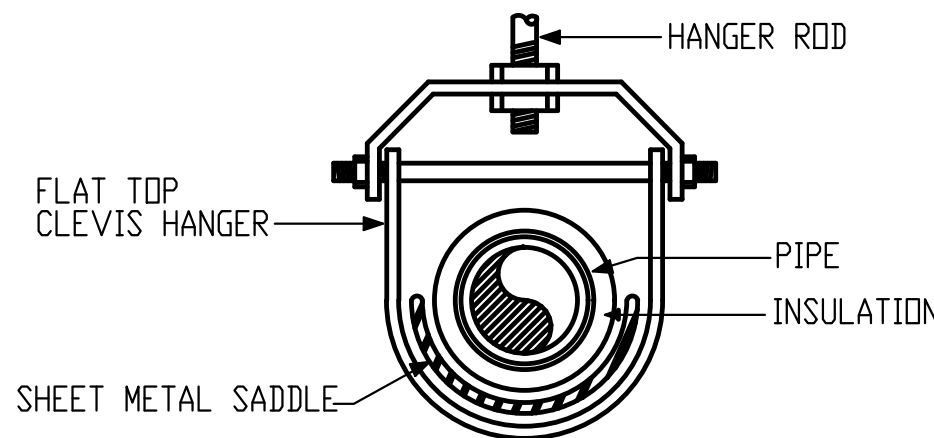
3 PLUMBING DEMOLITION DETAIL

SCALE: N.T.S.



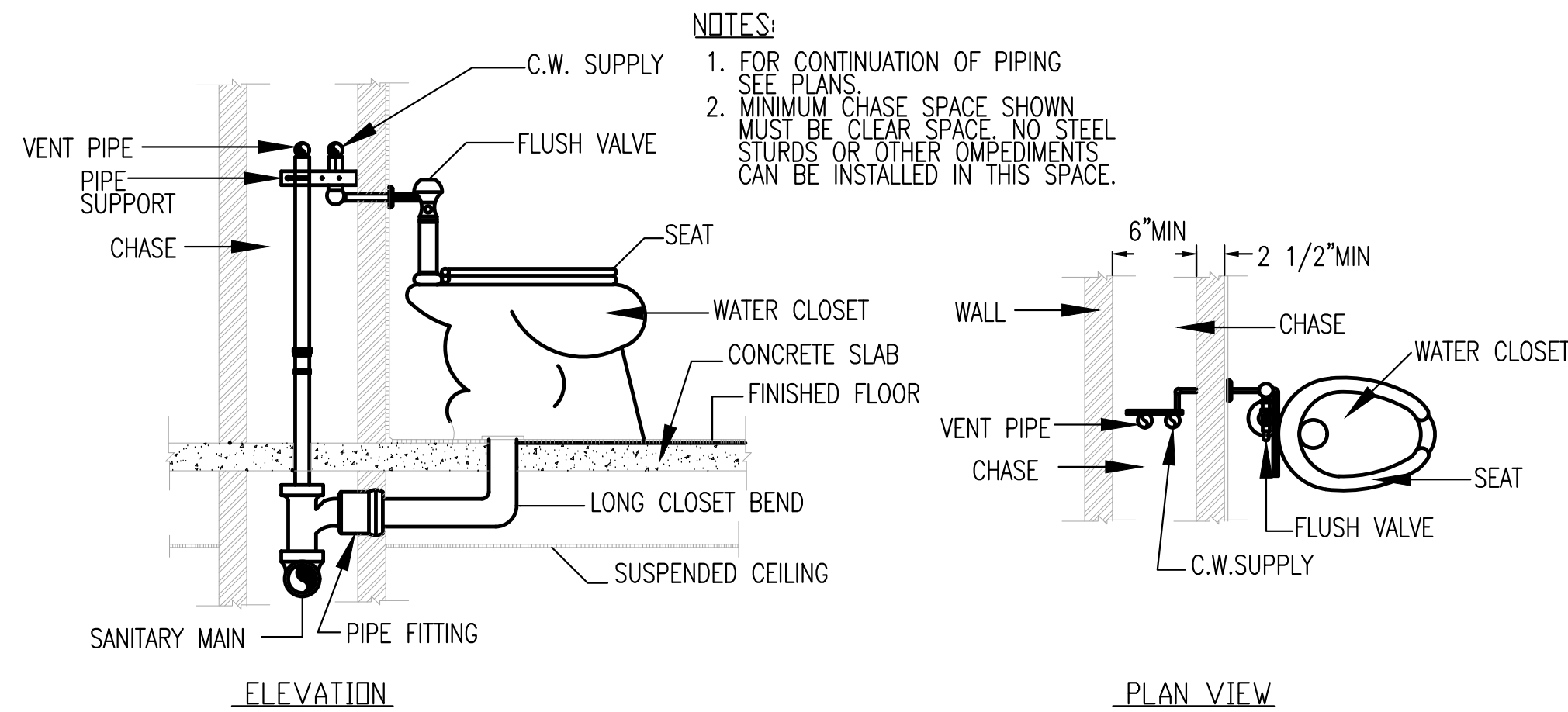
4 PIPE HANGER AND INSULATION DETAIL

SCALE: N.T.S.



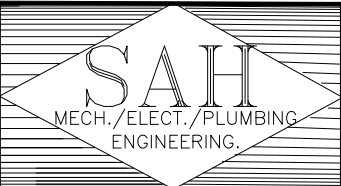
5 PIPE HANGER.

SCALE: N.T.S.



6 FLOOR MTD. WATER CLOSET

SCALE: N.T.S.



11/19/2021	ISSUED FOR PERMIT
9/15/2021	FOR ARCHITECT'S REVIEW
DATE	DESCRIPTION



NVRPA DOCUMENT GC 101
INSTRUCTIONS TO BIDDERS AND
GENERAL CONDITIONS OF THE CONTRACT
FOR CONSTRUCTION

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES;
CONSULTATION WITH AN ATTORNEY IS ENCOURAGED
2018 EDITION

ARTICLE NUMBER	TITLE
1.	Definitions
2.	Contract Documents
3.	Laws and Regulations
4.	Conditions at Site or Structure
5.	Explanation to Bidders
6.	Preparation and Submission of Bids
7.	Bid Guarantee
8.	Withdrawal or Modification of Bids
9.	Receipt and Opening of Bids
10.	Errors in Bids
11.	Rejection of Bids
12.	Standard Forms
13.	Award of Contract
14.	Contract Security
15.	Progress Schedules
16.	Shop Drawings, Product Data, Samples
17.	Materials, Services and Facilities
18.	Inspection and Testing
19.	Substitutions
20.	Patents
21.	Surveys, Permits, Regulations
22.	Protection of Work, Property and Persons
23.	Supervision by Contractor
24.	Changes in the Work
25.	Changes in the Contract Sum or Other Relief
26.	Time for Completion and Liquidated Damages
27.	Correction of Work
28.	Suspension of Work, Authority's Right to Stop and Carry Out the Work
29.	Termination
30.	Uses of the Premises
31.	Payment to the Contractor
32.	Substantial Completion of the Work
33.	Final Completion and Final Payment
34.	Insurance
35.	Assignments
36.	Indemnification
37.	Contractor Liability
38.	Separate Contracts
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40.	Engineer
41.	Warranty
42.	Contractual Disputes

**GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT WITH
THE NORTHERN VIRGINIA REGIONAL PARK AUTHORITY**

Article 1: DEFINITIONS

- (a) **Addenda** – Written or graphic instruments issued prior to the Award of the Contract which modify or interpret the Contract Documents, Drawings, and Specifications by additions, deletions, clarifications, or corrections
- (b) **Engineer** – The design professional, including an architect, that has contracted with the Authority to design the Project and administer the Contract on behalf of the Authority. If no Project Engineer is designated all duties and responsibilities which the Engineer would otherwise have shall be the duties and responsibilities of the Authority.
- (c) **Authority** – The Northern Virginia Regional Park Authority.
- (d) **Change Order** – A written order to the Contractor authorizing an addition, deletion or revision in the Work within the general scope of the Contract Documents or authorizing an adjustment in the Contract Price or Contract Time. A Change Order, which adjusts the Contract Price or Contract Time, must be signed by the Authority, Contractor and Engineer. A Change Order includes a Field Order, as hereafter defined.
- (e) **Construction Change Directive** - A written order to the Contractor signed by the Authority directing an addition, deletion or revision in the Work within the general scope of the Contract Documents prior to an agreement between the Authority and the Contractor as to an adjustment in the Contract Price or Contract Time. Upon receipt of a Construction Changes Directive, the Contractor shall promptly proceed with the change in the Work described therein.
- (f) **Contract Sum** – The total monies payable to the Contractor under the terms and Conditions of the Contract Documents.
- (g) **Contract Time** – The specific date or the number of days stated in the Contract Documents or the Notice to Proceed for Substantial Completion of the Work.
- (h) **Contractor** – Any person or entity who has a contract directly with the Authority for the performance of the Work or a part thereof.
- (i) **Day** – A calendar day of 24 hours lasting from midnight one day to midnight the next day.
- (j) **Drawings** – The graphic and pictorial part of the Contract Documents that show the characteristics and scope of the Work to be performed and that has been prepared by or for the Authority. The term is used interchangeably with the word “Plans” and includes Standard Details.
- (k) **Field Order** – A written order issued by the Engineer or the Authority to the Contractor during construction effecting a change in the Work, but not involving an adjustment in the Contract Price or an extension of the Contract Time.
- (l) **Inspector** – The authorized representative of the Authority assigned to make detailed inspection of any or all portions of the Work. The Inspector is authorized to stop the Work in accordance with Article 29.
- (m) **Notice of Award** – The written notice of the acceptance of the Bid from the Authority to the successful Bidder.
- (n) **Special Conditions** – General requirements that are unique to a particular Contract.
- (o) **Standard Details** – Details showing standard products, methods, and materials contained within the Plans or other agency standards such as the current versions of the Fairfax County Public Facilities Manual or the Virginia Department of Highways and Transportation Road and Bridge standards and specifications.

- (p) **Specifications – Special Conditions, Standard Specifications and Standard Details.**
- (q) **Subcontractor – An individual, firm or corporation having a direct contract with the Contractor or with any other subcontractor for the performance of a part of the Work at the site.**

Substantial Completion – That date as certified by the Engineer when the construction of the Project or a specified part thereof is sufficiently completed in accordance with the Contract Documents so that the Project or specified part can be utilized for the purposes for which it is intended and when the Contractor has received all final inspections and occupancy permits from the appropriate jurisdictions.
- (r) **Supplementary General Conditions – Modifications to General Conditions required for the Project.**
- (s) **Supplier – Any person or organization who supplies materials or equipment for the Work (including that fabricated to a special design) but who does not perform labor at the site.**
- (t) **Work – Any and all labor, materials, equipment, and all obligations, duties, and responsibilities expressly stated or reasonably implied for the successful completion of the construction required by the Contract Documents. The Contractor’s Work includes payment of all sales, consumer, use, and other similar taxes required by law.**
- (u) **Written Notice – Any notice to any party of the Contract relative to any part of the Contract in writing and considered delivered and the service thereof completed when posted by mail to the party at its last given address, or delivered in person to the party or its authorized representative at the Project.**

Article 2: CONTRACT DOCUMENTS

- (a) **The agreement entered into by the parties shall consist of the Form of Construction Contract, the Form of Proposal submitted by the Contractor, the Supplemental General Conditions, these General Conditions, the specifications and drawings, including all modifications thereof, all of which shall be referred to collectively as the “Contract Documents.” The Form of Construction Contract shall be signed by the Authority and Contractor in as many original counterparts as may be mutually agreed upon. The Contract may be amended only by a written amendment to the Contract or a Change Order signed by both parties.**
- (b) **The Contract Documents are complimentary and what is required by one shall be binding on the Contractor as if required by all. In the event of any inconsistency between the Contract Documents, Contractor shall provide the greater quality or quantity of Work with no increase in the Contract Sum. The intent of the Contract Documents is that the Contractor shall furnish all labor, materials, tools, equipment, utilities, transportation and incidental work necessary for the proper execution of the Work in accordance with, or reasonably inferable from, the Contract Documents. In the event of conflicts among the Contract Documents, the Authority may designate the written or drawn provision or feature which shall be used and no additions to or deductions from the Contract Sum, or modification to the Contract Time, shall result from the choice. In case of conflicts, the Contract Documents shall take precedence in the following order: the Construction Contract; The Supplemental General Conditions; the General Conditions; the Special Conditions; the specifications; and the drawings.**
- (c) **This Contract is an entire and integrated agreement and is not severable.**
- (d) **Contractor shall identify in writing to the Authority and the Engineer, as soon as possible, any discrepancies, errors, omissions and/or inconsistencies or ambiguities, discovered by the Contractor in the Contract Documents. Work done by the Contractor after its discovery of such discrepancies, errors, omissions and/or inconsistencies or ambiguities and prior to response from the Engineer shall be done at the Contractor’s sole risk and cost.**

Article 3: LAWS AND REGULATIONS

- (a) In the performance of the Work, the Contractor shall comply with the requirements of all local, state and federal laws, codes, statutes, ordinances, rules, regulations and lawful orders of any public authority relating to the performance of the Work (the “Legal Requirements”).
- (b) All Contractors and Subcontractors for the Project must be properly licensed under the laws of the Commonwealth of Virginia and in good standing before submitting any bid and before commencing any Work. Upon the request of the Authority, any Contractor or Subcontractor for the Project shall promptly provide proof of its licensure.
- (c) The Contract and all other contracts and subcontracts are subject to the provisions of Article 3 and 5, Chapter 4, Title 40.1, Code of Virginia, 1950, as amended, relating to labor unions and the “right to work,” and all Contractors or Subcontractors, whether residents or nonresidents of the Commonwealth, who perform any work related to the project shall comply with all of the provisions of these code sections.
- (d) The Contractor shall furnish the Authority copies of affidavits upon request giving the original dates, renewal dates and expiration dates of all labor contracts related to any phase of the work to be performed on the project site under this Contract.
- (e) Contractor shall comply with all local, state and federal safety codes, statutes, rules, practices and regulations.

(f) EQUAL OPPORTUNITY EMPLOYMENT

- (1) During the performance of the Agreement, the Contractor agrees as follows:
 - (i) The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability or other basis prohibited by federal or state law relating to discrimination in employment, except where there is a bona-fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - (ii) The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that Contractor is an equal opportunity employer.
 - (iii) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the notice, advertisement, and solicitation requirements of this paragraph.
- (2) The Contractor shall cause to be included the provisions of the foregoing paragraphs a.(i), a.(ii) and a.(iii) (substituting the subcontractor or vendor for Contractor as the obligated party) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

(g) DRUG-FREE WORKPLACE

- (1) During the performance of the Agreement, the Contractor agrees to (i) provide a drug-free workplace for the Contractor’s employees, (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition, (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace, and (iv) cause to be included the provisions of the foregoing clause (substituting the subcontractor or vendor for the Contractor as the

obligated party) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- (2) For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with the Agreement by Contractor where its employees are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Agreement.

(h) NO EMPLOYMENT OF UNAUTHORIZED ALIENS

Contractor represents and warrants that Contractor does not, and shall not during the performance of this Agreement, knowingly employ any unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

(i) STATEMENT OF NONDISCRIMINATION AGAINST FAITH-BASED ORGANIZATIONS

The Authority does not discriminate against faith-based organizations. (See Va. Code § 2.2-4343.1).

(j) PROMPT PAYMENT REQUIREMENTS

Within seven days after Contractor receives amounts paid for work subject to the Agreement performed by any “subcontractor,” as defined in Code of Virginia § 2.2-4347, Contractor shall take one of the two following actions:

- (1) Pay the subcontractor for the proportionate share of the total payment received from Owner attributable to the work performed by the subcontractor; or
- (2) Notify Owner and the subcontractor in writing of Contractor’s intent to withhold all or part of the subcontractor’s payment and the reason for nonpayment.

(k) Contractor shall provide its Federal employer identification number with each application to Owner for payment.

(l) Contractor shall pay interest to any “subcontractor” on all amounts owed by Contractor that remain unpaid after seven days following receipt by Contractor of payment from Owner for work performed by such subcontractor relating to the Agreement except as to amounts withheld as retainage.

(m) Contractor shall include in its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.

(n) No obligation imposed by this section shall be construed to create any obligation of Owner under Code of Virginia § 2.2-4354, no modification to the Agreement may be made for the purpose of providing reimbursement for the interest charge, and Contractor shall not invoice Owner for any such charge.

(o) LIMITATION ON OWNER’S LIABILITY FOR INTEREST

Owner shall not be liable to pay any interest to Contractor under any circumstance except in the case of amounts that Owner does not dispute to be due and payable to Contractor; interest shall accrue beginning on the 60th day after payment is due at a rate of 3% per annum.

(p) AUTHORIZATION TO CONDUCT BUSINESS IN VIRGINIA

The provisions of Va. Code § 2.2-4311.2 are incorporated by reference. If Contractor is a business entity described in Va. Code § 2.2-4311.2.A, Contractor must be authorized to transact business in Virginia if required by law to be so authorized and shall not allow its existence or certificate authority or registration to transact business to lapse or be revoked or cancelled during the term of the contract.

Article 4: CONDITIONS AT SITE OR STRUCTURE

- (a) All Bidders and Contractors shall visit the site and shall be responsible for having ascertained pertinent local conditions such as location, accessibility and general character of the site or building, and the character and extent of existing work within or adjacent to the site and to compare those conditions with the Contract Documents and the Legal Requirements. Claims, as a result of the Bidder's and/or Contractor's failure to comply with the foregoing, will not be considered by the Authority and are waived by the Contractor.**

If in the performance of the Contract the Contractor discovers subsurface or latent conditions at the site that are materially different from those typical for the locality or indicated in the Contract Documents, the Contractor shall report the conditions to the Engineer and the Authority in writing before the conditions are disturbed. Upon such notice, or upon its own observation of such conditions, the Engineer shall promptly make such recommendations as it finds necessary to address the different conditions. Any change in the cost of the work or time needed for completion must be processed pursuant to the requirements of the Contract Documents.

Article 5: EXPLANATION TO BIDDERS

No oral explanation in regard to the meaning of drawings and specifications will be made and no oral instructions will be given before the award of the contract. Bidders shall identify in writing to the Authority and the Engineer any believed discrepancies, omissions, ambiguities or errors in the Contract Documents. Bidders must submit such a writing at least six (6) days prior to the time set for the receipt of bids to allow a sufficient time for a reply to reach them before the submission of their bids, but if there are two (2) weeks or less between the first bid advertisement and the time set for receipt of bids, then bidders may act up to three (3) days prior to the time set for receipt of bids. Any interpretation made will be in the form of an addendum to the specifications, which will be forwarded to all bidders, and its receipt by the bidder shall be acknowledged on the Bid Form.

Article 6: PREPARATION AND SUBMISSION OF BIDS

- (a) Bids shall be submitted in duplicate on the forms furnished, or true copies thereof, and shall be signed in ink. Erasures or other changes in a bid shall be explained or noted over the signature of the bidder. Bids containing any conditions, omissions, unexplained erasures, alterations or items not called for in the proposal, or irregularities of any kind, may be rejected by the Authority as being incomplete.**
- (b) Each bid must give the full business address and contact information for the bidder and must be signed by a person with authority to bind the bidder. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership or an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed with the legal name of the corporation followed by the name of the state in which they are incorporated and by the signature and designation of the president, secretary or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. A bid by a person who affixes to its signature the word "President," "Secretary," "Agent," or other designation without disclosing its principal, may be held to be the bid of the individual signing. When requested by the Authority, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished.**
- (c) Bids with the bid guarantee shall be enclosed in a sealed envelope, which shall be marked and addressed as indicated by the advertisement or invitation to bid. Prior to submitting a bid, the bidder must be in compliance with and have the licenses required under Virginia Code Section 54.1-**

1100, et seq. The bidder shall place on the outside of the envelope containing the bid and shall place in the bid over its signature whichever of the following notations is appropriate, inserting its Contractor license number.

If the bidder shall fail to provide this information on its bid or on the envelope containing the bid and shall fail to promptly provide the Contractor license number to the Authority in writing when requested to do so before the opening of bids, its bid will not be considered.

- (d) The owner reserves the right to disqualify any Contractor and refuse to accept the bid of any bidder which has been convicted, or entered a plea of guilty or nolo contendere in any federal or state court to any charge involving any unlawful, corrupt or collusive practice involving a public contract either federal, state, or local or which has been determined in any judicial proceeding to have violated any antitrust, bid-rigging or collusive practice statute in connection with any public contract, or against whom such formal criminal prosecution or other judicial proceeding has been initiated.

Article 7: BID GUARANTEE

- (a) Any bid exceeding Five Hundred Thousand Dollars (\$500,000) shall be accompanied by a bid guarantee of not less than five percent (5%) of the amount of the bid, which may be certified check or cashier's check, or a Bid Bond made payable to the Authority. Bid Bonds shall be submitted on AIA Document A310. Such Bid Bond or check shall be submitted with the understanding that it shall guarantee that the bidder will not withdraw its bid during the period up to and including ninety (90) days following the opening of bids; that if its bid is accepted, it will enter into a formal contract with the Authority in accordance with the Form of Construction Contract included as a part of the Contract Documents, and that the referenced Performance Bond and Labor and material Payment Bond will be given; and that in the event of the withdrawal of the bid within the period, or failure to enter into the contract and give the bonds within ten (10) days after it has received notice of acceptance of its bid, the bidder shall be liable to the Authority for the difference between the amount of the bidder's bid and the amount of the bid for the next higher bidder to perform the Work but such amount shall not exceed the amount of the bid guarantee.
- (b) The Bid Bonds and checks will be returned to all except the three lowest bidders after the formal opening of the bids. The remaining Bid Bonds and checks will be returned to the lowest bidders after the Authority and the accepted bidder have executed the Contract and the Performance Bond and the Payment Bond have been approved by the Authority.
- (c) If the required Contract and bonds have not been executed within ninety (90) days after the date of the opening of the bids, then the bond or check of any bidder will be returned upon its request, provided it has not been notified of the acceptance of the bid prior to the date of such request.

Article 8: WITHDRAWAL OR MODIFICATION OF BIDS

A bidder may withdraw or modify its bid only by written notice delivered to the Authority prior to the time fixed for receipt of bids.

Article 9: RECEIPT AND OPENING BIDS

- (a) It is the responsibility of the bidder to assure that its bid is delivered to the place designated for receipt of bids and prior to the time set for receipt of bids. The Authority will not consider bids received after the time set for receipt of bids.
- (b) Bids will be opened at the time and place stated in the advertisement and the lowest bidder will be announced. The officer or agent of the Authority, whose duty it is to open the bids, will decide when the specified time has arrived. No responsibility will be attached to any officer or agent for the premature opening of a bid not properly addressed and identified.

Article 10: ERRORS IN BIDS

A bidder may withdraw its bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake in the bid, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of quantity of work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn. Under this provision a bidder requesting to withdraw its bid shall follow the procedures set forth in Section 2.2-4330 of the Code of Virginia. The bidder must give notice in writing of its claim of right to withdraw its bid within the time frame required by Section 2.2-4330 of the Code of Virginia and shall submit its original work papers to the Authority in compliance with the requirements of Section 2.2-4330 of the Code of Virginia. Failure to strictly comply with the requirements of Section 2.2-4330 of the Code of Virginia shall constitute a waiver of the right to withdraw the bid.

No bid may be withdrawn when the result would be the awarding of the Contract on another bid of the same bidder. No bidder who is permitted to withdraw a bid shall for compensation supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted, without the approval of the Authority. The person or firm to whom the Contract was awarded and the withdrawing bidder are jointly liable to the Authority in an amount equal to any compensation paid to or for the benefit of the withdrawing bidder without such approval.

If a bid is withdrawn under authority of this section, the next higher bidder shall be deemed to be the low bidder on the project.

Article 11: REJECTION OF BIDS

The Authority reserves the right to reject any and all bids when such rejection is in the interest of the Authority, and will reject the bid of a bidder who is not a responsible bidder. (See § 2.2-4319, Code of Virginia, 1950, as amended.)

Article 12: STANDARD FORMS

The copies of the Form of Construction Contract, and AIA Document A312, Performance Bond and the Labor and Material Payment Bond are incorporated into the General Conditions by reference and are made a part hereof to the same extent as though fully set forth herein.

Article 13: AWARD OF CONTRACT

- (a) The Contract will be awarded as soon as possible to the lowest responsive and responsible bidder, provided its bid is reasonable and it is in the interest of the Authority to accept it. The Authority reserves the right to waive any informality in bids received when such waiver is in the interest of the Authority; also to accept any item in the bid unless otherwise specified by the Authority. Each bidder shall be prepared, if so requested by the Authority, to present evidence of its experience, qualifications and financial ability to carry out the terms of the Contract.
- (b) If the bid forms contain alternate prices, the Authority may in its sole discretion, unless otherwise specified in the invitation for bid, select whatever alternates it chooses to accept subsequent to the bid opening but prior to the determination of the low bidder. The low bidder shall be determined by comparing each bidder's bid total based on the sum of the base bid and the alternates selected by the Authority.
- (c) Pursuant to the Virginia Public Procurement Act, in the event the lowest responsible bid exceeds available funds for the project, the Authority may enter into negotiations with the lowest responsible bidder in an effort to arrive at a contract amount within the limits of available funds. In such event, the Authority will inform the bidder of the amount of funds available, and will negotiate in good faith toward achieving the funding limit, preferably without any change in the scope or other change in the Contract Documents. However, negotiations may include change in scope, quantity of materials, or other changes, so long as any such changes are within the general scope of the original design. If the Authority and bidder reach agreement, the Authority may award a contract in accordance with procedures or actions approved by the Authority Board. The Authority may terminate negotiations

at any time prior to the award of a contract, and proceed as otherwise permitted by the Virginia Public Procurement Act.

Article 14: CONTRACT SECURITY

For all contracts of Five Hundred Thousand Dollars (\$500,000.00) or more, the Contractor shall deliver to the Authority or its designated representative, an AIA Document A312, Performance Bond and Labor and Material Payment Bond, each fully executed by one or more surety companies legally authorized to do business in Virginia and each in an amount equal to one hundred percent (100%) of the original Contract Sum. The bonds shall be conditioned as set forth in § 2.2-4337 of the Code of Virginia, as amended. Sureties shall be selected by the Contractor subject to approval by the Authority. No contract shall be deemed to be in effect until the bonds have been approved by the Authority. For the purposes of all Labor and Material Payment Bonds entered into pursuant to this Article, the term “subcontractors” as used in § 2.2-4337 A.2 of the Code of Virginia is interpreted to mean any contractors who participated in the prosecution of the Work undertaken by the Contractor, whether such subcontractor had a direct contract with the Contractor or whether there were one or more other intervening subcontractors.

Article 15: PROGRESS SCHEDULES

- (a) The Contractor shall, within ten (10) days of receipt of notice of award, prepare and submit to the Authority and Engineer a schedule for the completion of the Work within the timeframe set forth in the Contract Documents. This progress schedule shall be related to the entire Project; shall include all the Work; and shall meet the time for completion requirements of the Contract. It shall include an allowance for anticipated delay caused by ordinary adverse weather conditions and shall provide for the expeditious and practical execution of the Work within the time requirements of the Contract Documents. The schedule shall set forth as much detail as deemed necessary by the Authority.
- (b) The Authority’s acceptance of the schedule is not a representation or agreement that the schedule is logical or can be performed in the time or sequence indicated, but only that the Authority approves of the construction in that time and in that sequence.

Article 16: SHOP DRAWINGS, PRODUCT DATA and SAMPLES

- (a) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- (b) Product Data are illustrations, standard schedules, performance charts, instruction, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of Work.
- (c) Samples are physical examples, which illustrate materials, equipment or workmanship and establish standards of quality and esthetics by which the Work will be judged.
- (d) The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Authority or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.
- (e) By preparing and submitting Shop Drawings, Product Data and Samples, the Contractor represents that it has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that it has checked and coordinated the information contained within such submittals with the requirements of the Work and the Contract Documents.
- (f) The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Engineer’s approval of Shop Drawings, Product Data or Samples unless the Contractor had specifically informed the Engineer in writing of such deviation at the time of submission and the Engineer has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility of errors or omissions in the Shop Drawings, Product Data or Samples by the Engineer’s approval thereof.

- (g) The Contractor shall direct specific attention, inviting or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Engineer on previous submittals.
- (h) No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Engineer. All such portions of the Work shall be in accordance with approved submittals.

Article 17: MATERIALS, SERVICES, AND FACILITIES

- (a) Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.
- (b) Manufactured articles, materials, and equipment shall be stored, applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, and as approved by the Engineer.
- (c) Materials, supplies, and equipment shall be in accordance with samples, shop drawings, and catalogue cuts submitted by the Contractor and approved by the Engineer and Authority.
- (d) Materials, supplies, or equipment to be incorporated into the work shall not be purchased by the Contractor or the Subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.
- (e) All Work included in this Contract shall be performed to the standards specified. The Contractor shall employ no plant, equipment, materials, methods or persons to which the Engineer or the Authority reasonably objects, and shall remove no plant, equipment or other facilities from the site of the work without permission of the Engineer and the Authority. The Contractor's failure to comply with these requirements will constitute a breach of Contract and as such may result in a termination of the Contractor by the Authority.

Article 18: INSPECTION AND TESTING

- (a) All materials and equipment used in the construction of the Project shall be subject to adequate inspection and testing in accordance with generally accepted industry standards and the Legal Requirements as defined in the Contract Documents.
- (b) If the Contract Documents or the Legal Requirements require any part of the Work to specifically be inspected, tested or approved by someone other than the Contractor, the Contractor shall initiate and coordinate those inspections, test, or approvals with the proper authorities and shall give the Engineer and the Authority three (3) working days written notice of each such inspection. The Contractor shall then furnish the Engineer and the Authority with the required certificates of inspection, testing or approval. Unless otherwise specifically provided for, the Contractor shall bear all costs of such inspections, tests or approvals.
- (c) Inspection, test, or approvals by the Engineer or others will not relieve the Contractor from its obligations to perform the Work in accordance with the requirements of the Contract Documents.
- (d) The Authority, the Engineer and their representatives shall at all times have access to the Work. In addition, authorized representatives and agents of any participating federal, state or local agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. All such records shall remain available and accessible during performance of the Contract and until three years from the date of Final Payment, or, in case of dispute, for a period of three years after resolution of the dispute, whichever is later. The Contractor shall provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof.
- (e) If any work is covered without the approval of the Engineer contrary to requirements of the Contract Documents, it must, if requested by the Engineer or the Authority, be uncovered for its observation and then recovered at the Contractor's expense.

- (f) If the Engineer or the Authority considers it necessary or advisable that approved covered work be inspected or tested by others, the Contractor, at the Engineer's or the Authority's request, shall uncover, expose or otherwise make that portion of the Work available for observation, inspection or testing as the Engineer or the Authority may require. If it is found that such work is defective, the Contractor will bear all the expenses of such uncovering, exposure, and observation as well as all expenses for the inspection, testing, and satisfactory reconstruction of that portion of the Work. If, however, such work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction, and an appropriate Change Order will be issued.

Article 19: SUBSTITUTIONS

- (a) After the Contract has been executed, the Authority and the Engineer will consider a written request for the substitution of products or materials specified by the Contract Documents. The Authority is not obligated to consider substitutions and such consideration is the Authority's sole discretion. By making requests for substitutions, the Contractor represents and certifies:
- (1) that the Contractor has personally investigated the proposed substitute product or material and determined that it is equal or superior in all respects to that specified by the Contract Documents.
 - (2) that the Contractor will provide the Authority with a warranty of the substituted product equal or superior to the warranty furnished in connection with the product or material originally specified by the Contract Documents.
 - (3) that the cost data presented is complete and includes all related costs under this Contract and Contractor waives all claims for any additional costs related to the substitution; and
 - (4) that the Contractor will coordinate the installation of the substituted product or material and that the Contractor will make all changes necessitated by the use of the substituted product without any additional cost to the Authority.

Article 20: PATENTS

The Contractor shall pay all applicable royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and save the Authority harmless from loss on account thereof, except that the Authority will be responsible for any such loss when a particular process, design or the product of a particular manufacturer or manufacturers as specified is an infringement of a patent. However, if the Contractor has reason to believe that such particular process, design or product is an infringement, he shall be responsible for such loss unless he gives written notice to the Authority and the Engineer of the possible infringement.

Article 21: SURVEYS, PERMITS, REGULATIONS

- (a) The Authority will furnish all boundary surveys and establish all baselines for locating the principal component parts of the Work together with suitable number of benchmarks adjacent to the Work as shown in the Contract Documents.
- (b) Permits and licenses of a temporary nature necessary for the prosecution of the work, such as building, plumbing, and electrical permits, shall be secured and paid for by the Contractor unless otherwise stated in the Contract Documents. Permits, licenses, and easements for permanent use of structures or permanent changes in existing facilities shall be secured and paid for by the Authority unless otherwise specified.
- (c) The Contractor shall give all notices and comply with all permits and the Legal Requirements in the performance of the Work. The Contractor shall promptly notify the Engineer in writing if it comes to its attention that the Contract Documents are at variance with any such requirement.

- (d) If any permit, license or certificate expire, be revoked, terminated or suspended because of any act or omission of the Contractor, it shall not be entitled to any additional compensation for direct costs or to an extension of the Contract Time.
- (e) Permits obtained by the Authority for this Project are available for inspection in the Authority's offices.

Article 22: PROTECTION OF WORK, PROPERTY AND PERSONS

- (a) The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work, in compliance with industry standards and the Legal requirements. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to all employees on the work and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction. In case of suspension of work for any cause whatever, the contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Work, provide for proper drainage and shall erect any necessary temporary structures, signs, or other facilities at its expense. During such period or suspension of work, the Contractor shall properly and continuously maintain in acceptable growing condition all living material in newly established plantings, seedings, and sodding furnished under this Contract, and shall take adequate precautions to protect new growth and other important growth against injury. Contractor shall also notify owners of adjacent utilities when prosecution of the Work may affect them.
- (b) In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in the Contract Documents.

Article 23: SUPERVISION BY CONTRACTOR

- (a) The Contractor shall supervise and direct the work. It shall be solely responsible for the means, methods, techniques, sequencers and procedures of construction. The Contractor shall employ and maintain on the work a qualified supervisor or superintendent ("Supervisor") and provide a resume of its experience. This Supervisor shall have been designated in writing as the Contractor's representative at the site and shall not thereafter be changed unless such change is approved by or directed by the Authority. The Authority shall have the right to approve this Supervisor or order its removal from the job site, which right shall not be unreasonably exercised. This Supervisor shall have full authority to act on behalf of the Contractor and all communications given to the Supervisor shall be as binding as if given to the Contractor. This Supervisor shall be present on the site at all times as required to perform adequate supervision, control and coordination of the Work as determined by the Engineer or the Authority.
- (b) The Contractor shall be responsible to the Authority for the acts and omissions of its employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.
- (c) The Contractor shall not be relieved from its obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Engineer and the Authority in their administration of the Contract or by inspections, tests, or approvals required or performed by persons other than the Contractor.
- (d) Prior to commencing work, the Contractor shall check all work performed by others that is necessary for the execution of the Contractor's work and shall promptly report to the Engineer in writing any deficiencies in such work which render it unacceptable or unsuitable for the Contractor's Work or which will increase the cost of the Work. Failure to give such written notice shall relieve the Authority of any responsibility therefore. The Contractor shall be responsible for all elevations, grades, and proper fitting of its Work.

Article 24: CHANGES IN THE WORK

- (a) The Authority, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, with the Contract Sum and the Contract Time being adjusted accordingly. All such changes in Work shall be authorized by written Change Order signed by the Authority and the Engineer, and shall be performed under the applicable conditions of the Contract Documents.
- (b) The cost or credit to the Authority resulting from a change in the Work shall be determined in one or more of the following ways:

 - (1) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
 - (2) by unit prices stated in the Contract Documents or subsequently agreed upon;
 - (3) by cost to be determined in a manner agreed upon by the parties and a combined overhead and profit of 15% of such costs if the Contractor performs the work with its own forces, or 15% for the combined overhead and profit of a Subcontractor performing the work with its own forces and 5% for the Contractor; in no event shall the total mark-up for overhead and profit exceed 20% of the cost; or
 - (4) by the method provided in Article 25(c).
- (c) If none of the methods set forth above is agreed upon, the Contractor, provided it receives a Construction Change Directive signed by the Authority, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Engineer on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Article 25(b)(3) above, the Contractor shall keep and present, in such form as the Engineer may prescribe, an itemized accounting together with appropriate supporting data of the costs for inclusion in a Change Order. Unless otherwise provided in the Contract Documents, costs shall be limited to the following: cost of materials, including sales tax and cost of delivery,, cost of labor, including social security, unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; bond premiums; and rental value of equipment and machinery. The amount of credit to be allowed by the Contractor to the Authority for any deletion or change that results in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Engineer. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any, with respect to that change.
- (d) The Engineer or the Authority also may at any time by issuing a Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the work so ordered and should the Contractor believe that such Field Order entitles it to a change in Contract Price or Time, or both, it shall give the Engineer and the Authority Written Notice thereof within ten days after the receipt of the Field Order. Failure to provide such written notice shall be deemed a waiver of any claims arising from or relating to the Field Order. Failure to proceed with work changed by a Field Order or a Change Order shall constitute a breach of contract and shall be cause for the termination of the Contract. All requests for a Change Order arising out of a Field Order must have a copy of the referenced Field Order attached.
- (e) Where the Work is contracted for on a unit price basis and the actual quantity of work for any pay item exceeds the estimated quantity by more than 25% of that amount stated in the Contract Documents, a Change Order will be issued for any increase or decrease in unit cost, which results from the increased work. If the quantity variation is such as to cause an increase in the time necessary for completion, the Authority shall, upon receipt of a written request for an extension of time, make an appropriate adjustment for extending the completion date in accordance with Article 26.

Article 25: CHANGES IN THE CONTRACT SUM OR OTHER RELIEF

- (a) If the Contractor wants to make a claim for an increase in the Contract Sum, or for any other relief under the Contract, it shall give the Engineer and the Authority written notice of the claim within ten (10) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute any additional Work, except in an emergency endangering life or property. The notice shall set forth the basis for the claim and the relief or increase in the Contract Sum requested by the Contractor. After providing notice of its claim, Contractor shall provide the Authority and the Engineer with any information and/or documents requested by them to evaluate the claim. No such claim shall be valid unless so made. If the Authority and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Engineer in accordance with Article 40(e). Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.
- (b) If the Contractor claims that additional cost is required because of, but not limited to,
 - (1) any written interpretation of the Contract Documents;
 - (2) any order by the Authority to stop the Work where the Contractor was not at fault; or
 - (3) any Field Order directed change in the Work; the Contractor shall make such claim as provided in Article 25(a).

Article 26: TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- (a) All time limits stated in the Contract Documents are of the essence of the Contract.
- (b) The Contractor shall proceed with the Work with the diligence necessary to insure Substantial Completion within the Contract Time. It is expressly understood and agreed by and between the Contractor and the Authority that the Contract Time for the completion of the Work described herein is a reasonable and adequate time, taking into consideration the average climate and economic conditions and other factors prevailing in the locality of the Work.
- (c) If the Contractor shall fail to Substantially Complete the Work within the Contract Time, or extension of time granted by the Authority, then the Contractor shall pay to the Authority liquidated damages as specified in the Contract Documents for each calendar day after the date of Substantial Completion until the Work achieves Substantial Completion. Contractor agrees that the amount of liquidated damages is reasonable and waives any right it may have to contest the amount of liquidated damages as being unreasonable or a penalty. If liquidated damages are not set forth in the Contract Documents, Contractor shall be liable to Owner for any loss or damage arising from the Contractor's failure to complete the Work by the date of Substantial Completion.
- (d) If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Authority or the Engineer, or by any employee of either, or by any separate contractor employed by the Authority, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, unusual and adverse weather conditions that could not be reasonably anticipated, unavoidable casualties, or any causes beyond the Contractor's control, or by delay authorized by the Authority, then the Contract Time shall be extended by Change Order for such reasonable time as the Engineer may determine.
- (e) Any claim for extension of time shall be made in writing to the Engineer and the Authority within (10) days after the commencement of the event giving rise to or causing the claimed delay; otherwise it shall be waived. The notice shall set forth the basis for the extension of time and any other relief requested by the Contractor. After providing notice of its claim, Contractor shall provide the Authority and the Engineer with any information and/or documents requested by them to evaluate the claim. In the case of a continuing delay only one notice of claim is necessary. The Contractor shall precisely identify the delay and its cause, and provide an estimate of the probable effect of such delay on the progress of the Work.
- (f) Contractor hereby expressly waives any claims against the Authority and the Engineer for any indirect or direct damages, costs or expenses which the Contractor or its Subcontractors may incur as a result of any delay in the performance of the Contract, except and then only to the extent that

the delay is caused by any act or omission of the Authority or the Engineer, or their agents or employees, and is due to causes within their control. In such event, Contractor may seek direct costs arising solely from the delay but shall not be entitled to any indirect costs including, without limitation, home office overhead costs. It is understood and agreed that the Contractor's sole and exclusive remedy in case of any noncompensable delay shall be an extension of the Contract Time, but only as determined in accordance with the provisions of the Contract Documents.

- (g) In the event that Contractor has incurred a delay for which it believes it is entitled to compensation under this Contract, it shall give the Authority written notice of that claim within ten (10) days of the commencement of the delay, and shall identify what it considers to be the cause of and expected duration of the delay.

Article 27: CORRECTION OF WORK

- (a) The Contractor shall promptly remove from the premises all work rejected by the Engineer or the Authority for failure to comply with the Contract Documents whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract Documents and without expense to the Authority and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.
- (b) Unauthorized work shall be any work done or materials ordered by the Contractor prior to receipt of the Notice to Proceed, previously rejected work incorporated into the Project, work done contrary to or regardless of the instructions of the Engineer, extra work performed without proper written authority, work done beyond the limits shown on the Plans, except as herein specified, any extra work done without written authority from the Engineer or the Authority, or any work done after discovery of a discrepancy, ambiguity, or inconsistency and before the Engineer provides any necessary instructions to the Contractor. The Authority shall not pay for unauthorized work. Unauthorized work may, at the Authority's sole discretion, be ordered removed or replaced at the Contractor's expense.

Article 28: SUSPENSION OF WORK; THE AUTHORITY'S RIGHT TO STOP AND CARRY OUT THE WORK

- (a) The Authority may order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the Authority.

- (b) **The Authority's Right to Stop the Work**

If the Contractor fails to correct defective Work as required, fails to carry out the Work in accordance with the Contract Documents, or if an emergency situation exists that threatens the safety of persons or property, the Authority, in addition to any other remedies it may have, by a written notice direct the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated. Contractor shall be liable to the Authority for any loss of damages arising from the stoppage of the Work including, without limitation, any loss or damage arising from a delay in the completion of the Work.

- (c) **Authority's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within two (2) days after receipt of written notice from the Authority to commence and continue correction for such default or neglect with diligence and promptness, the Authority may, after two (2) days following receipt by the Contractor of an additional written notice of its decision to do so, make good such deficiencies without prejudice to any other remedy it may have. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Engineer's additional services or other services as may be required and made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Authority. All charges and back charges made against monies otherwise owed to or due to the Contractor shall be deemed accepted

unless the Contractor rejects them in writing to the Authority within ten (10) days of receipt and states fully its reasons for rejecting them.

Article 29: TERMINATION

- (a) If the Contractor is adjudged a bankrupt or insolvent, or if it makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the Contractor or for any of its property, or if it files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if it fails to supply sufficient skilled workmen or suitable materials or equipment, or if it fails to make prompt payments to subcontractors or for labor, materials or equipment, or if it refuses or fails to prosecute the Work or any separable part thereof, with such diligence as will insure its completion within the Contract Time, or if it fails to complete the Work within the Contract Time required, or if it disregards laws, ordinances, rules, regulations, directions or orders of any public body having jurisdiction over the Work, or if it disregards the authority of the Engineer, or if it otherwise violates any provision of the Contract Documents, then the Authority may, without prejudice to any other right or remedy, seven (7) days after delivery of a written notice to the Contractor and its surety, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, and finish the Work by whatever method it may deem expedient. In such case, the Contractor will not be entitled to receive any future payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess will be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Authority. Such cost incurred by the Authority will be determined by the Engineer and incorporated in a Change Order.
- (b) If termination for cause by the Authority is deemed to be improper, it shall be deemed a termination for convenience.
- (c) Where the Contractor's services have been so terminated by the Authority, the termination shall not affect any rights the Authority then has or that may thereafter accrue against the Contractor. Any retention or payment of monies by the Authority due the Contractor will not release the contractor from compliance with the Contract Documents.
- (d) Termination for Convenience

The Authority may, effective not less than after seven (7) days from delivery of a written notice to the Contractor, without cause and without prejudice to any other rights or remedies it may have, terminate this Construction Contract for its own convenience for any reason. When this Construction Contract has been terminated for convenience, the Contractor shall be paid only for Work performed through the date of termination. The Contractor shall not be entitled to anticipated profits on unperformed portions of the Work.

Article 30: USE OF THE PREMISES

- (a) The Authority will have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the Work or the restoration of any damaged work, except such as may be caused by agents or employees of the Authority.
- (b) Prior to Substantial Completion, the Authority, with the concurrence of the Contractor, may use any completed or substantially completed portion of the Work. Such use shall not constitute a final acceptance of such portions of the Work unless otherwise stated so in writing.

Article 31: PAYMENTS TO THE CONTRACTOR

- (a) Prior to submitting its first application for payment, the Contractor shall submit to the Authority and the Engineer a schedule of values allocating the costs of the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as may be required by the Authority and the Engineer. This schedule, as approved, shall be used as a basis for

Contractor's applications for payment, which shall be submitted on the current edition of the AIA Application and Certification for Payment ("Application for Payment"), AIA Document G702.

- (b) At least twenty days before each progress payment falls due (but not more than once a month), the Contractor, the Engineer, and the Authority shall meet at the Project to determine the percentage of completion of the individual items in the schedule of values. If no agreement is reached, the Contractor shall prepare its Application for Payment using percentages it considers correct. Thereafter, the Contractor shall submit to the Engineer three (3) copies of its completed and signed Applications for Payment covering the work performed during the period of the Application for Payment and supported by such data as the Engineer may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work, the Application for Payment shall also be accompanied by such supporting data, satisfactory to the Engineer, as will protect the Authority's interests therein, including applicable insurance. See Article 32(c). The Engineer will, within fifteen days after receipt of each Application for Payment, either certify in writing its approval of payment for an amount based either on the agreed percentages of completion or the percentages the Engineer considers correct and present the Application for Payment to the Authority, or return the Application for Payment to the contractor stating in writing its reasons for refusing to approve payment. If payment has been refused, the Contractor may make the necessary corrections and resubmit the Application for Payment to the Engineer. The Authority will, within thirty days of its receipt of an approved Application for Payment, pay the Contractor a progress payment in the amount certified by the engineer, unless the Authority has reason to refuse payment of that amount in whole or in part, in which event it shall state its reasons in writing to the Contractor. The Authority will retain five (5) percent of the amount of each payment due until final completion and acceptance of all work. However, the Authority may, in its sole discretion, reduce the amount retained to 150% of the value of work remaining when the work is substantially complete. The decision to reduce retainage and the amount of such reduction shall be solely that of the Authority. On completion and acceptance of a part of the Work on which the price is stated separately in the Contract Documents, payment may be made in full, including retained percentages less authorized deductions. Prior to receiving each payment, and as part of its Applications for Payment, the Contractor shall certify in writing that it has made payment from the proceeds of prior payments and that it will make timely payments from the proceeds of progress and final payment then due it, to its subcontractors and suppliers in accordance with its contractual arrangement with them. If requested by the Authority, the Contractor shall provide evidence of such payments, including affidavits by subcontractors and suppliers.
- (c) The Application for Payment may also include an allowance for the cost of major materials and equipment not yet incorporated in the Work. When requested in writing by the Contractor and approved in writing by the Authority, payment will be made for nonperishable major material and equipment delivered and properly stored at the Work site or other approved site. Material for which payment has been made, wholly or partially, shall not be removed from the Work site or other approved site unless authorized by the Authority in writing.
- (d) The Contractor shall indemnify and save the Authority and its agents harmless from all losses, damages, liabilities, including attorney's fees, arising out of the demands of Subcontractors, laborers, workmen, mechanics, materialmen and furnishers of machinery parts thereof, equipment, tools, and all supplies incurred in the furtherance of the performance of the Work. The Contractor shall, at the Engineer's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the Contractor fails to do so, the Authority may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor will be resumed in accordance with the terms of the Contract Documents. In no event, however, shall the provisions of the foregoing sentence be construed to impose any obligations upon the Authority to either the Contractor, its Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Authority will be considered as a payment made under the Contract Documents by the Authority to the Contractor and the Authority will not be liable to the Contractor for any such payments in good faith.
- (e) If the Authority fails to make a payment when due under the terms of this Contract, interest shall accrue on monies due and owing at the rate of 3% per annum commencing sixty (60) days after the date the payment was due.

- (f) The Authority may reduce in whole or in part any approved Application for Payment, whether or not it has been paid, to the extent necessary to protect the Authority from loss because of:
- (1) defective Work not remedied;
 - (2) failure to timely or properly pay Subcontractors;
 - (3) evidence that the Work cannot be completed for the amount remaining to be paid; or
 - (4) damage to the Authority;
 - (5) a persistent failure to carry out the Work in accordance with the Contract Documents.

Article 32: SUBSTANTIAL COMPLETION OF THE WORK

- (a) When the Contractor considers that the Work or, if agreed to by the Authority, a designated portion thereof is Substantially Complete as defined in Article 1, the Contractor shall prepare for submission to the Engineer a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Engineer on the basis of its inspection determines that the Work or designated portion thereof is Substantially Complete, it will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Authority and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Authority and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.
- (b) Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Engineer, the Authority shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

Article 33: FINAL COMPLETION AND FINAL PAYMENT

- (a) Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Engineer will promptly make such inspection and, when it finds the Work acceptable under the Contract Documents and the Contract fully performed, it will promptly issue a final Certificate for Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance stated therein is due and payable to the Contractor. If the Contractor has completed all of the requirements and conditions, Final Payment shall be made within 30 days of receipt of the Contractor's Application. The Engineer's Final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Article 32(b) have been fulfilled.
- (b) Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Engineer (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Authority or its property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment, (3) if required by the Authority, other data establishing payment or satisfaction of all such obligations, such as receipts, release and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Authority, (4) two (2) binders containing all product and equipment manuals, warranties and guarantees, and (5) as-built drawings. If any Subcontractor refuses to furnish a release or waiver required by the Authority, the Contractor may furnish a bond satisfactory to the Authority to indemnify it against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Authority all

monies that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

- (c) If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Engineer so confirms, the Authority shall, upon application by the Contractor and certification by the Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance of the Contract Sum is less than the retainage stipulated in the Contract Documents, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Engineer prior to certification of such payment. Such payment shall then be made under the terms and conditions governing final payment. However, that payment shall not constitute a waiver of any claims the Authority may then or thereafter have.
- (d) The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing, properly reserved pursuant to these General Conditions, and identified by the Contractor as unsettled at the time of the final Application for Payment. Such contractual claims, whether form money or other relief, shall be submitted in writing not later than 60 days after final payment. The Authority's Capital Programs Director shall review such contractual claims and issue a final decision in writing within 90 days after receipt.

Article 34: INSURANCE

(a) Contractor's Liability Insurance

The Contractor shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by itself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- (1) claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts;
- (2) claims for damages because of bodily injury, occupational sickness or disease, or death of its employees;
- (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees;
- (4) claims for damages insured by usual personal injury liability coverage, which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person;
- (5) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting there from; and
- (6) claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:

- (1) Premises Operations (including X, C and U coverage);
- (2) Independent Contractor's Protective;
- (3) Products and Completed Operations;
- (4) Personal Injury Liability with Employment Exclusions deleted;
- (5) Contractual, including provisions for indemnity obligations under this Agreement;

- (6) Owned, non-owned and hired motor vehicles;
- (7) Broad Form Property Damage including Completed Operation

Contractor shall have and maintain the following insurance in the amounts set forth below unless otherwise agreed to by the Owner in writing:

- (1) Workers' Compensation Insurance in an amount as required by state law. Workers' Compensation per statutory limits and employer's liability in the following minimum amounts: EL Each Accident - \$500,000, EL Disease Policy Limit - \$500,000, EL Disease Each Employee - \$500,000.
- (2) Commercial General Liability Insurance including coverage for bodily injury, property damage, contractual liability and products/completed operations with a minimum coverage of \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Property damage coverage shall include coverage for explosion, collapse and underground hazards. Coverage for products/completed operations shall extend for a period of three (3) years after the date of substantial completion. Property damage in the amount of not less than \$1,000,000 for any one accident. Additional limits may be required.
- (3) Comprehensive Automobile Liability Insurance for bodily injury and property damage with a minimum coverage of \$1,000,000 per occurrence and \$1,000,000 in the aggregate.
- (4) Excess or Umbrella insurance supplementing coverage under the Commercial General Liability, Comprehensive Automobile Liability Insurance and Employer's Liability Insurance policies with a minimum coverage of \$1,000,000 per occurrence and \$1,000,000 in the aggregate

The Contractor shall endorse the Authority on its insurance policy as an additional insured to protect the interests of the public. Certificates of Insurance and Additional Insured Endorsements acceptable to the Authority shall be filed with the Authority prior to commencement of the Work. These Certificates and Endorsements shall contain a provision that coverages afforded under the policies will not be cancelled until at least thirty days prior written notice has been given to the Authority. Insurance certificates must include an additional insured endorsement naming the following as an additional insured: "The Northern Virginia Regional Park Authority, its officers, directors, agents, employees, and volunteers." The endorsement must be completed on endorsement form CG 20 10 11 85 or CG 20 10 07 04 or such other form acceptable to the Authority.

(b) **The Authority's Liability Insurance**

The Authority shall be responsible for purchasing and maintaining its own liability insurance and, at its option, may purchase and maintain such insurance as will protect it against claims that may arise from operations under the Contract.

(c) **Property Insurance**

Unless otherwise provided, the Authority shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of the Authority, the Contractor, Subcontractors, and Sub-subcontractors in the Work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief. If the Authority does not intend to purchase such insurance for the full insurable value of the entire Work, it shall inform the Contractor in writing prior to commencement of the Work. The Contractor may then affect insurance that will protect the interests of itself, its Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Authority. If not covered under the all risk insurance or otherwise provided in the Contract Documents, the Contractor shall effect and maintain similar property insurance on portions of the

Work stored off the site or in transit when such portions of the Work are to be included in an Application for Payment.

- (d) The Authority shall purchase and maintain such boiler and machinery insurance as may be required by the Contract Documents or by law. This insurance shall include the interests of the Authority, the Contractor, Subcontractor and Sub-subcontractors in the Work**
- (e) Any loss insured under Article 34(c) is to be adjusted with the Authority and made payable to the Authority as trustee for the insured's, as their interests may appear. The Contractor shall pay each Subcontractor a just share of any insurance monies received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to its Sub-subcontractors in similar manner.**
- (f) If the Contractor requests in writing that insurance for risks other than those described in Article 34(c) or (d) or other special hazards be included in the property insurance policy, the Authority may, if possible and in its sole discretion, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.**
- (g) The Authority and the Contractor waive all rights against (1) each other and the Subcontractors, Sub-subcontractors, agents and employees each of the other, and (2) the Engineer and separate contractors, if any, and their subcontractors, sub-contractors, agents and employees, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to Article 34(c) or (d) or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Engineer as trustee. The foregoing waiver afforded the Engineer, its agents and employees shall not extend to the liability imposed by Article 36(a). The Authority or the Contractor, as appropriate, shall require of the Engineer, separate contractors, Subcontractors and Sub-subcontractors by appropriate agreements, written where legally required for validity, similar waivers each in favor of all other parties enumerated in this Article 34(g).**
- (h) If required in writing by the Contractor, the Authority as trustee shall, upon the occurrence of an insured loss, deposit in a separate account any money so received, and shall distribute it in accordance with the interests of the parties. If after such loss no other special agreement is made, replacement of damaged work shall be covered by an appropriate Change Order.**
- (i) The Authority as trustee shall have power to adjust and settle any loss with the insurers.**
- (j) If the Authority finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy or use shall not commence prior to a time mutually agreed to by the Authority and the Contractor and to which the insurance company or companies providing the property insurance have consented by endorsement to the policy or policies. This insurance shall not be cancelled or lapsed on account of such partial occupancy or use. Consent of the Contractor and of the insurance company or companies to such occupancy or use shall not be unreasonably withheld.**

Article 35: ASSIGNMENTS

Neither the Contractor nor the Authority shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of its rights, title, or interest therein, or its obligations thereunder, without written consent of both parties.

Article 36: INDEMNIFICATION

- (a) To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Authority, the Engineer and their agents, officers, directors and employees from and against all claims, damages, losses and expense, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any party or person described in this Article.
- (b) In any and all claims against the Authority or the Engineer or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone whose acts any of them may be liable, the indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit act.
- (c) The Authority shall retain such monies due or to become due the Contractor under the Contract as considered necessary by the Authority until such suits, claims for damages costs or losses have been settled or otherwise disposed of or satisfactory evidence to that effect has been furnished to the Authority.

Article 37: CONTRACTOR LIABILITY

The Contractor shall be liable to Authority for all costs the Authority incurs as a result of the Contractor's failure to perform this Contract in accordance with its terms. The Contractor's failure to perform shall include the failure of its suppliers and or Subcontractors of any tier to perform. Contractor's liability shall include, but not be limited to, (1) damages, liquidated damages, and other delay costs payable to the Authority; (2) the Authority's increased costs of performance, such as extended overhead and increased performance costs resulting from Contractor-caused delays, improper Contractor work, or termination of the Contractor; (3) warranty and rework costs; (4) liability to third parties; (5) excess costs; and (6) attorney's fees and related costs.

Article 38: SEPARATE CONTRACTS

- (a) The Authority reserves the right to let other contracts in connection with this Project. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate its work with theirs. If the proper execution or results of any part of the Contractor's work depends upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that render it unsuitable for such proper execution and results. The commencement of work by the Contractor shall indicate an acceptance of the previous contractor's work.
- (b) The Authority may perform additional work related to the Project by itself, or it may let other contracts containing provisions similar to these. The Contractor shall afford the other contractors who are parties to such contracts, the Authority, if it is performing the additional work itself, reasonable opportunity for the introduction and storage of materials and equipment and the execution of work and shall properly connect and coordinate it Work with theirs.

- (c) If the performance of additional work by other contractors or the Authority is not specified in the Contract Documents prior to the execution of the Contract, Written Notice thereof shall be given to the Contractor prior to starting any such additional work. If the Contractor believes that the performance of such additional work by the Authority or others will result in additional expense to the Contractor or entitle it to an extension of the Contract Time, it may make a claim therefore as provided in Articles 25, 26 and 27.

Article 39: SUBCONTRACTING

- (a) The Contractor may utilize the services of Subcontractors – which will have been approved by the Authority prior to commencement of the work – on those parts of the Work that, under normal contracting practices are performed by Subcontractors. The Contractor shall submit a list of proposed Subcontractors prior to commencement of the Work for the Authority’s review and approval. The Contractor shall not employ a Subcontractor to which the Authority may object. The Authority shall not withhold its approval unreasonably.
- (b) The Contractor shall not award work to a single Subcontractors in excess of 50 percent of the Contract Price without prior written approval of the Authority.
- (c) The Contractor shall be fully responsible to the Authority for the acts and omissions of its Subcontractors and of persons either directly or indirectly employed by them, as it is for the acts and omissions of person directly employed by it. The Contractor shall be fully responsible for the coordination of the work of the trades, Subcontractors and suppliers, and their officers, agents and employees.
- (d) By an appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities that the Contractor, by the Contract Documents, assumes toward the Authority and the Engineer. The agreement shall preserve and protect the rights of the Authority and the Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by these Documents, has against the Authority. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with its Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph and identify to the Subcontractor any terms and conditions of the proposed Subcontract that may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to its Sub-subcontractors.
- (e) Nothing contained in the Contract Documents shall create any contractual arrangement between any Subcontractor and the Authority.
- (f) Within seven (7) days after receipt of amounts paid to it, contractor shall either:
- (1) Pay its subcontractors for the proportionate share of the total payment received attributable to the work performed by the subcontractor under the contract; or
 - (2) Notify the Authority and subcontractor in writing of his intentions to withhold all or part of the subcontractor’s payment with the reasons for the nonpayment.
- (g) Contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor that the contractor is subject to in subparagraph (f) and Article 32(e).

Article 40: ENGINEER

- (a) The Engineer will act as the Authority's representative during the construction period and until final payment.
- (b) The Engineer will visit the site at intervals appropriate to the stage of construction to familiarize itself and determine in general if the work is proceeding in accordance with the Contract Documents. However, the Engineer will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of its on-site observations, it will keep the Authority informed of the progress of the Work, and will endeavor to guard the Authority against defects and deficiencies in the Work of the Contractor.
- (c) The Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and it will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Engineer will not be responsible for or have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the Work. This Article shall in no way change the Engineer's responsibilities or liability to Authority.
- (d) The Engineer will render interpretations necessary for the proper execution or progress of the Work, with reasonable promptness and in accordance with any time limit agreed upon. Either party to the Contract may make a written request to the Engineer for such interpretations.
- (e) Claims, disputes, and other matters in question between the Contractor and the Authority relating to the execution or progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Engineer for decision, which it will render in writing within a reasonable time. Unless the Contractor provides written notice to the Authority and the Engineer of any objection to the Engineer's decision, the Engineer's decision shall be final and binding.
- (f) All interpretations and decisions of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. The Engineer will endeavor to secure faithful performance by both the Authority and The Contractor, will not show partiality to either, and will not be liable for the result of any interpretation or decision rendered in good faith in such capacity.
- (g) The Engineer's decisions in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents and agreed to by the Authority.
- (h) The parties agree to perform the Work, accept the interpretation or otherwise follow the decision of the Engineer so as to not delay the progress of the Work. Notwithstanding this provision, the Authority may stop the Work pending a judicial review of the Engineer's decision.
- (i) The Engineer will have authority to reject Work, which does not conform to the Contract Documents.
- (j) The Engineer will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- (k) The Engineer will conduct inspections to determine the dates of Substantial Completion and final completion, will receive and forward to the Authority for the Authority's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of Article 34.
- (l) Notwithstanding any other provision to the contrary, Article 40(e) to (h) shall not apply to this project if there IS no Project Engineer.

Article 41: WARRANTY

- (a) The Contractor warrants to the Authority and the Engineer that all materials and equipment furnished under this Contract will be new unless otherwise specified and that all Work will be performed in a good and workmanlike manner and will be of good quality, free from faults and defects and in conformance with the Contract Documents and the Legal Requirements. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Engineer, the Contractor shall furnish satisfactory evidence of the kind and quality of materials and equipment.
- (b) The Contractor shall promptly correct all Work rejected by the Engineer as defective or as failing to conform to the Contract Documents whether observed before or after substantial Completion and whether or not fabricated, installed, or completed. The Contractor shall bar all costs of correcting such rejected Work, including compensation for the Engineer's additional services made necessary thereby.
- (c) If, within one year after the Date of Substantial Completion of the Work or designated portion thereof or within one year after acceptance by the Authority of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Authority to do so unless the Authority has previously given the Contractor a written acceptance of such condition. This obligation shall survive termination of the Contract. The Authority shall give such notice promptly after discovery of the condition.

Article 42: CONTRACTUAL DISPUTES

Contractual claims, whether for money or for other relief, shall be submitted in writing not later than (60) sixty days after final payment; however, written notice of the Contractor's intention to file such claim must be given at the time of the occurrence or beginning of the work upon which the claim is based. A written decision upon any such claims will be made by the Authority within thirty (30) days after submittal. The Contractor may not institute legal action prior to receipt of the Authority's decision on the claim unless it fails to render such decision within 120 days. The decision of the Capital Programs Director or other signatory on the Contract shall be final and conclusive unless the Contractor within six (6) months of the date of the final decision on a claim, initiates legal action as provided in § 2.2-4364 of the Code of Virginia. Failure of the Authority to render a decision within 120 days shall not result in the Contractor being awarded the relief claimed nor shall it result in any other relief or penalty. The sole result of the Authority's failure to render a decision within the time allotted shall be the Contractor's right to immediately institute legal action. No administrative appeals procedure pursuant to § 2.2-4365 of the Code of Virginia has established for contractual claims under this Contract.

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