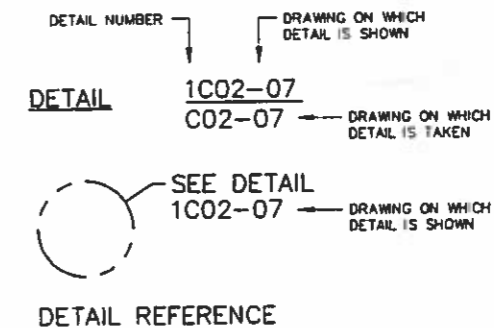
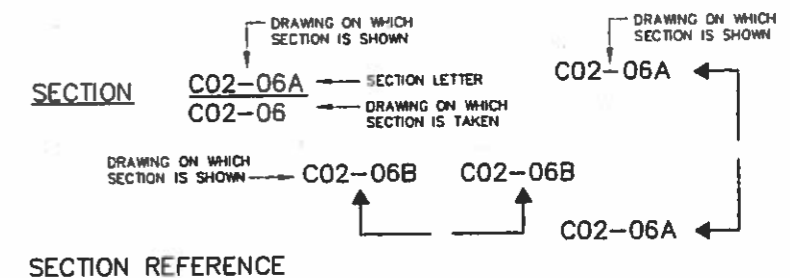
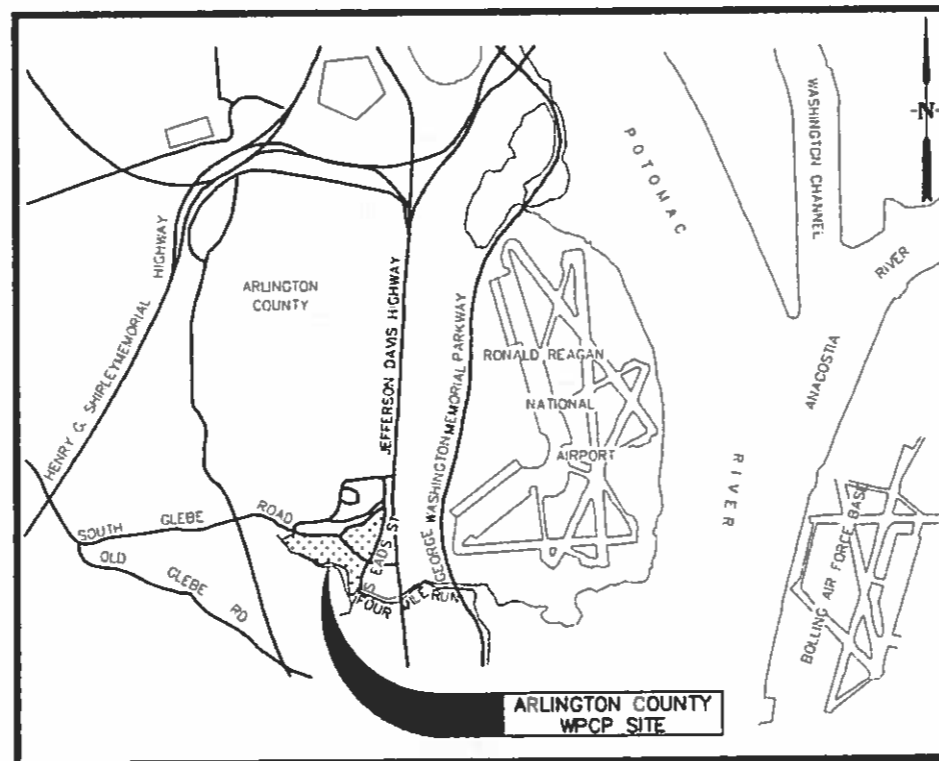




ARLINGTON COUNTY, VIRGINIA WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION HOUSEHOLD HAZARDOUS MATERIALS PHASE 7E 100% SUBMITTAL

BID NO. 124-07

MAY 2007



**MALCOLM
PIRNIE**

MALCOLM PIRNIE, INC.
1101 WILSON BOULEVARD, SUITE 1400
ARLINGTON, VA. 22209

**SWM 04-945
FOUR MILE RUN WATERSHED**

ABBREVIATIONS				SYMBOLS			
GENERAL				VALVES			
<p>AB ANCHOR BOLT</p> <p>AC ALTERNATING CURRENT</p> <p>ACP ASBESTOS CEMENT PIPE</p> <p>ACT ACOUSTICAL TILE</p> <p>ACTU ACTUATOR</p> <p>AD AREA DRAIN</p> <p>ADD ADDENDUM</p> <p>ADJ ADJUSTABLE</p> <p>ADPT ADAPTER</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AGGR AGGREGATE</p> <p>AL ALUMINUM</p> <p>ALLOW ALLOWANCE/ALLOWABLE</p> <p>ALT ALTERNATE</p> <p>AND AND</p> <p>APPROX APPROXIMATE</p> <p>ARCH ARCHITECT(URAL)</p> <p>ARV AIR RELEASE VALVE</p> <p>ASB ASBESTOS</p> <p>ASPH ASPHALT</p> <p>ASSOC ASSOCIATION</p> <p>AST ACTIVATED SLUDGE TANK</p> <p>ASTM AMERICAN SOCIETY FOR TESTING MATERIALS</p> <p>AT ASPHALT TILE</p> <p>AT AT</p> <p>AUTH AUTHORITY</p> <p>AUTO AUTOMATIC</p> <p>AVG AVERAGE</p> <p>AWL AVERAGE WATER LEVEL</p> <p>B/L BASELINE</p> <p>BC BACK OF CURB</p> <p>BET BETWEEN</p> <p>BF BLIND FLANGE</p> <p>BFE BOTTOM OF FTG ELEV.</p> <p>BFV BUTTERFLY VALVE</p> <p>BL BUILDING LINE</p> <p>BLDG BUILDING</p> <p>BM BENCH MARK</p> <p>BOT BOTTOM</p> <p>BPRV BACK PRESSURE REGULATING VALVE</p> <p>BRK BRICK</p> <p>BRZ BRONZE</p> <p>BSMT BASEMENT</p> <p>BV BALL VALVE</p> <p>BWD BACKWASH DRAIN</p> <p>BWS BACKWASH SUPPLY</p>	<p>CA COMPRESSED AIR</p> <p>CB CATCH BASIN</p> <p>CCT CHLORINE CONTACT TANK</p> <p>CE CONSTRUCTION EASEMENT</p> <p>CENT CENTRIFUGAL</p> <p>CF CUBIC FEET</p> <p>CFM CUBIC FEET PER MINUTE</p> <p>CG CHLORINE GAS</p> <p>C CENTER LINE</p> <p>CL2 CHLORINE</p> <p>CLG CEILING</p> <p>CLR CLEARANCE</p> <p>OMP CORRUGATED METAL PIPE</p> <p>CMU CONCRETE MASONRY UNIT</p> <p>CONV CONE VALVE</p> <p>CO CLEAN OUT</p> <p>COL COLUMN</p> <p>CONC CONCRETE</p> <p>CONN CONNECTION</p> <p>CONST CONSTRUCTION</p> <p>CONT CONTINUATION</p> <p>CORP CORPORATION</p> <p>CORR CORRUGATED</p> <p>CPLG COUPLING</p> <p>CPVC CHLORINATED POLYVINYL CHLORIDE</p> <p>CRANE BRIDGE CRANE/ HOIST</p> <p>CTL CONTROL JOINT</p> <p>CTL CONTROL</p> <p>CV CHECK VALVE</p> <p>CY CUBIC YARD</p> <p>DEG DEGREE</p> <p>DI DUCTILE IRON</p> <p>DIA DIAMETER</p> <p>DIM DIMENSION</p> <p>DISCH DISCHARGE</p> <p>DIV DIVISION</p> <p>DN DOWN</p> <p>DV DIAPHRAGM VALVE</p> <p>DWG DRAWING</p> <p>DWL DOWEL</p> <p>E EAST/EASEMENT</p> <p>EA EACH</p> <p>EF EACH FACE</p> <p>EFF EFFLUENT</p> <p>EL ELEVATION</p> <p>ENGR ENGINEER</p> <p>ENT ENTRANCE</p> <p>EP EDGE OF PAVEMENT</p>	<p>EQ EQUAL</p> <p>EQU EQUIP</p> <p>EQUIV EQUIVALENT</p> <p>EW EACH WAY</p> <p>EXIST EXISTING</p> <p>EXP EXPANSION</p> <p>FAC FACILITY</p> <p>FDM FOUNDATION</p> <p>FFL FINISH FLOOR</p> <p>FH FIRE HYDRANT</p> <p>FIG FIGURE</p> <p>FIN FINISH(ED)</p> <p>FIX FIXTURE</p> <p>FL FLOOR</p> <p>FLG FLANGE</p> <p>FM FLOW METER</p> <p>FPT FEMALE PIPE THREAD</p> <p>FRP FIBERGLASS REINFORCED PLASTIC</p> <p>FT FEET OR FOOT</p> <p>GALV GALVANIZED</p> <p>GLV GLOBE VALVE</p> <p>GND GROUND</p> <p>GPM GALLONS PER MINUTE</p> <p>GR GRADE</p> <p>GV GATE VALVE</p> <p>HB HOSE BIB</p> <p>HORIZ HORIZONTAL</p> <p>HPT HIGH POINT</p> <p>HTR HEATER</p> <p>HWL HIGH WATER LEVEL</p> <p>ID INSIDE DIAMETER</p> <p>IN INCH(ES)</p> <p>INF INFLUENT</p> <p>INV INVERT</p> <p>INV EL INVERT ELEVATION</p> <p>ISO ISOLATION</p> <p>JB JUNCTION BOX</p> <p>JCT JUNCTION</p> <p>JPT JUNCTION POINT</p> <p>LPT LOW POINT</p> <p>LWL LOW WATER LEVEL</p> <p>MAX MAXIMUM</p> <p>MECH MECHANICAL</p> <p>MFR MANUFACTURER</p> <p>MH MANHOLE</p> <p>MIN MINIMUM</p> <p>MISC MISCELLANEOUS</p> <p>MJ MECHANICAL JOINT</p>	<p>N NORTH</p> <p>NF NEAR FACE</p> <p>NIC NOT IN CONTRACT</p> <p>NOM NOMINAL</p> <p>NPT NATIONAL PIPE THREAD</p> <p>NO.# NUMBER</p> <p>OC ON CENTER</p> <p>OPNG OPENING</p> <p>OPP OPPOSITE</p> <p>ORIG ORIGINAL</p> <p>OVHD OVERHEAD</p> <p>P/L PROPERTY LINE</p> <p>PCF POUNDS PER CUBIC FOOT</p> <p>% PERCENT</p> <p>PERP PERPENDICULAR</p> <p>PIS PRESSURE INDICATING SWITCH</p> <p>POLY POLYETHYLENE</p> <p>PPY POLYPROPYLENE</p> <p>PRV PRESSURE REDUCING VALVE</p> <p>PRS PRESSURE SWITCH</p> <p>PRV PRESSURE RELIEF VALVE</p> <p>PS PUMPING STATION</p> <p>PSF POUNDS PER SQUARE FOOT</p> <p>PSI POUNDS PER SQUARE INCH</p> <p>PV PLUG VALVE</p> <p>PVC POLYVINYL CHLORIDE</p> <p>PVMT PAVEMENT</p> <p>PVRV PRESSURE/VACUUM RELIEF VALVE</p> <p>PWL PEAK WATER LEVEL</p> <p>QTY QUANTITY</p> <p>R/W RIGHT OF WAY</p> <p>RCP REINFORCED CONCRETE PIPE</p> <p>RED REDUCER</p> <p>REF REFERENCE</p> <p>REF PT REFERENCE POINT</p> <p>REG REGULATOR</p> <p>REINF REINFORCING</p> <p>REQD REQUIRED</p> <p>REV REVISION</p> <p>RJ RESTRAINED JOINT</p> <p>SAN SANITARY SEWER (SITE)</p> <p>SCH SCHEDULE</p> <p>SD STORM DRAIN</p> <p>SDMH STORM DRAIN MANHOLE</p> <p>SEC SECONDARY</p> <p>SECT SECTION</p> <p>SEW SEWER</p>	<p>SF SQUARE FOOT</p> <p>SG SLIDE GATE</p> <p>SHT SHEET</p> <p>SI SQUARE INCH</p> <p>SIM SIMILAR</p> <p>SJ STEEL JOIST</p> <p>SLG SLUICE GATE</p> <p>SPEC SPECIFICATION</p> <p>SQ SQUARE</p> <p>SS STAINLESS STEEL</p> <p>SSMH SANITARY SEWER MANHOLE</p> <p>ST STREET</p> <p>STA STATION</p> <p>STD STANDARD</p> <p>STL STEEL</p> <p>STRUCT STRUCTURAL OR STRUCTURE</p> <p>SUCT SUCTION</p> <p>SUPT SUPERINTENDENT</p> <p>SV SOLENOID VALVE</p> <p>SW SWITCH</p> <p>SYS SYSTEM</p> <p>TC TOP OF CURB</p> <p>TEL TELEPHONE</p> <p>TEMP TEMPERATURE</p> <p>THD THREAD(ED)</p> <p>TOS TOP OF SLAB</p> <p>TOW TOP OF WALL</p> <p>TYP TYPICAL</p> <p>UD UNDER DRAIN</p> <p>UG UNDERGROUND</p> <p>UGN UNLESS OTHERWISE NOTED</p> <p>VB VALVE BOX</p> <p>VDOT VIRGINIA DEPARTMENT OF TRANSPORTATION</p> <p>VERT VERTICAL</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>VOL VOLUME</p> <p>W/D WIDTH</p> <p>W/H WITH</p> <p>W/O WITHOUT</p> <p>WF WIDE FLANGE</p> <p>WH WALL HYDRANT</p> <p>WHS WASH HOSE STATION</p> <p>WL WATER LEVEL</p> <p>WPCP WATER POLLUTION CONTROL PLANT</p> <p>YD YARD</p> <p>YH YARD HYDRANT</p> <p>YR YEAR</p>			

BUILDING	PIPING	PIPING CONNECTION ABBREVIATIONS	PIPING	
<p>ACB CARBON BUILDING</p> <p>ACDB CHLOR-DECHLOR BUILDING</p> <p>ALRF LIME REACTION FACILITY</p> <p>ASE ACTIVATED SECONDARY EFFLUENT</p> <p>BIO BIOLOGICAL SOLIDS PROCESSING BLDG (INCINERATOR)</p> <p>DAFT DISSOLVED AIR FLOTATION</p> <p>DCB DISTRIBUTION CENTERS</p> <p>DWB DEWATERING BUILDING</p> <p>ETPS EQUALIZATION TANK PUMP STATION</p> <p>FADF FILTRATION AND DISINFECTION FACILITY</p> <p>FEQ FLOW EQUALIZATION TANKS</p> <p>MFF METHANOL FEED FACILITY</p> <p>NFF NORTH FERRIC FACILITY</p> <p>NMB NEW MAINTENANCE BUILDING</p> <p>PCL PRIMARY CLARIFIER</p> <p>PEPS PRIMARY EFFLUENT PUMPING STATION</p> <p>PGTB GRAVITY THICKENER BUILDING</p> <p>PTB PRELIMINARY TREATMENT BUILDING</p> <p>SFF SOUTH FERRIC FACILITY</p> <p>SHF SODIUM HYPOCHLORITE FACILITY</p> <p>SST SLUDGE STORAGE TANKS</p>	<p>ABAN ABANDONED</p> <p>ACID SULFURIC ACID</p> <p>AIR AIR</p> <p>ASE ACTIVATED SLUDGE (SECONDARY) EFFLUENT</p> <p>ATE AERATION TANK EFFLUENT</p> <p>ATM ATMOSPHERE</p> <p>BA BLOWER AIR</p> <p>BTE BACKWASH TANK EFFLUENT</p> <p>BWE BACKWASH EFFLUENT</p> <p>BWS BACKWASH SUPPLY</p> <p>BWW BACKWASH WASTE</p> <p>CA COMPRESSED AIR</p> <p>CAS CALUSTIC</p> <p>CEN CENTRATE</p> <p>CL LIQUID CHLORINE</p> <p>CLG CHLORINE GAS</p> <p>CLS CHLORINE SOLUTION</p> <p>CLW CAKE LUBRICATION WATER</p> <p>COW COUNTY WATER (POTABLE)</p> <p>CWR COOLING WATER RETURN</p> <p>CWS COOLING WATER SUPPLY</p> <p>DG DIGESTER GAS</p> <p>DPOL DRY POLYMER</p> <p>DR DRAIN (GENERAL)</p> <p>DS DIGESTED SLUDGE</p> <p>EBE EQUALIZATION BASIN EFFLUENT</p> <p>EBI EQUALIZATION BASIN INFLUENT</p> <p>EBO EQUALIZATION BASIN OVERFLOW</p> <p>EG EXHAUST GAS</p> <p>FA FOUL AIR</p> <p>FB FILTER BACKWASH</p> <p>FD FLOOR DRAIN</p> <p>FE FILTER EFFLUENT</p> <p>FeCL FERRIC CHLORIDE</p> <p>FI FILTER INFLUENT</p> <p>FIL FILTRATE</p> <p>FOL FUEL OIL</p> <p>FOR FUEL OIL RETURN</p> <p>FOS FUEL OIL SUPPLY</p> <p>FOV FUEL OIL VENT</p> <p>FPW FIRE PROTECTION WATER</p> <p>FSC FINAL SKIMMINGS</p> <p>FTS FLOTATION THICKENED SLUDGE</p> <p>FTU FLOTATION THICKENER UNDERFLOW</p> <p>FW FLUSHING WATER</p> <p>GAS GAS</p>	<p>GFE GRAVITY FILTER EFFLUENT</p> <p>GS GRIT SLURRY</p> <p>GTO GRAVITY THICKENER OVERFLOW</p> <p>GTS GRAVITY THICKENED SLUDGE</p> <p>HO HYDRAULIC OIL</p> <p>HOD HYDRAULIC OIL DRAIN</p> <p>HPEW-AWT HOT PLANT EFFLUENT WATER - ADVANCED WASTEWATER TREATMENT</p> <p>HWR WATER RETURN</p> <p>HWS HOT WATER SUPPLY</p> <p>LAV LAVATORY</p> <p>LO LUBE OIL</p> <p>LOD LUBE OIL DRAIN</p> <p>LPA LOW PRESSURE AIR</p> <p>LPOL LIQUID POLYMER</p> <p>LS LIME SLURRY</p> <p>LT LIME TRANSFER</p> <p>LWSJ LAP WELDED SUP JOINT</p> <p>NaOCL SODIUM HYPOCHLORITE</p> <p>NaOS SODIUM BISULFITE</p> <p>PEW PLANT EFFLUENT WATER</p> <p>PHA PHOSPHORIC ACID</p> <p>RAS RETURN ACTIVATED SLUDGE</p> <p>SEED FILTER SEED</p> <p>SAMPL SAMPLE</p>	<p>ACCMP ASPHALT COATED CORRUGATED METAL PIPE</p> <p>AL ALUMINUM</p> <p>BS BELL AND SPIGOT (PUSH-ON)</p> <p>BW BUTT AND WRAP (FRP)</p> <p>CI CAST IRON PIPE</p> <p>CIS CAST IRON SOIL</p> <p>CPVC CHLORINATED POLYVINYL CHLORIDE</p> <p>CU COPPER</p> <p>DI DUCTILE IRON</p> <p>FL FLANGED</p> <p>FRP FIBERGLASS REINFORCED PLASTIC</p> <p>GALV GALVANIZED</p> <p>GS GALVANIZED STEEL</p> <p>MJ MECHANICAL JOINT</p> <p>PCCP PRE-STRESSED CONCRETE CYLINDER PIPE</p> <p>POLY POLYETHYLENE</p> <p>PPY POLYPROPYLENE</p> <p>PVC POLYVINYL CHLORIDE</p> <p>RC REINFORCED CONCRETE</p> <p>RCP REINFORCED CONCRETE PIPE</p> <p>RJ RESTRAINED JOINT</p> <p>SS STAINLESS STEEL</p> <p>SSP SEAMLESS STEEL PIPE</p> <p>STL STEEL</p> <p>T&G TONGUE AND GROOVE</p> <p>THD THREAD(ED)</p>	<p>EXISTING PIPING, EQUIPMENT & STRUCTURES</p> <p>NEW PIPING, EQUIPMENT & STRUCTURES</p> <p>FLEXIBLE CONNECTION</p> <p>REDUCER</p> <p>BLIND FLANGE</p> <p>CAP OR PLUG</p> <p>FEMALE QUICK COUPLING CONNECTION</p> <p>UNION</p> <p>FLANGE</p> <p>BELL & SPIGOT</p> <p>MECHANICAL JOINT</p> <p>WELDED</p> <p>FLEXIBLE COUPLING</p> <p>HARNESSED FLEXIBLE COUPLING</p> <p>FLANGE COUPLING ADAPTER</p> <p>HARNESSED FLANGE COUPLING ADAPTER</p> <p>EXPANSION JOINT</p> <p>HARNESSED EXPANSION JOINT</p> <p>BLIND FLANGE</p>
<p>LINE WORK</p> <p>PROPOSED LINE WORK</p> <p>EXISTING LINE WORK</p> <p>EXISTING TO BE DEMOLISHED</p> <p>FUTURE WORK</p> <p>PROPOSED TEXT</p> <p>EXISTING TEXT</p>			<p>GENERAL</p> <p>SLUICE GATE</p> <p>BLUICE GATE</p> <p>MECH. BAR SCREEN</p> <p>METERING PUMP</p> <p>VERTICAL TURBINE PUMP W/ VARIABLE FREQUENCY DRIVE</p> <p>PLUNGER PUMP</p> <p>CENTRIFUGAL PUMP</p> <p>ELECTRIC MOTOR</p> <p>BLOWER</p> <p>FLOW ELEMENT</p> <p>FLOW ELEMENT</p> <p>PRESSURE GAUGE</p> <p>SUBMERSIBLE MIXER</p> <p>FLAME ARRESTOR</p> <p>CALIBRATION COLUMN</p> <p>HOSE PUMP</p> <p>PULSATION DAMPER</p> <p>WYE STRAINER</p> <p>FLOW INDICATOR</p> <p>SUMP PUMP</p> <p>YARD HYDRANT</p> <p>DRAIN</p> <p>STATIC METER</p> <p>LEVEL ELEMENT</p> <p>FAN (ODOR CONTROL)</p> <p>SINGLE BASKET STRAINER</p>	

	DESIGNED: JKP	DRAWN: AJS	CHECKED: WOH	ENGINEER: WOI	CAD REF: 1000.30000	APPROVED:	<p>ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT</p> <p>UPGRADE AND EXPANSION PHASE 7E</p>	<p>GENERAL</p> <p>GENERAL NOTES, SYMBOLS AND ABBREVIATIONS</p>	THE SCALE BAR SHOWN BELOW MEASURES ONE (1) INCH ON THE ORIGINAL DRAWING.	DATE: MAY 2007
NO.	ISSUED FOR	DATE	BY	APPROVED	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)	VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)				

SPECIAL NOTES

1. THIS FACILITY IS A MUNICIPAL WASTEWATER TREATMENT PLANT THAT RECEIVES SOME INDUSTRIAL AND HOSPITAL CONTRIBUTIONS. THIS FACILITY HAS A VARIETY OF CHEMICALS AND ORGANISMS (BACTERIAL, VIRAL, ETC.) THROUGH WHICH PERSONNEL CAN BE EXPOSED TO VIA A VARIETY OF EXPOSED INDIVIDUALS WHO ARE IMPROPERLY PROTECTED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING CONTRACTUAL EMPLOYEES THE PROPER INOCULATIONS AND PERSONAL PROTECTIVE EQUIPMENT (PPE) AS REQUIRED BY FEDERAL, STATE, LOCAL LAWS AND STANDARD WASTEWATER INDUSTRY AND CONSTRUCTION PRACTICE. THE OWNER'S REPRESENTATIVES AND EMPLOYEES MAY PERFORM CLEANING OF EQUIPMENT AND/OR AREAS PRIOR TO SAID EQUIPMENT AND/OR AREAS BEING TURNED OVER TO THE CONTRACTOR. THE CLEANING METHODS THAT WILL BE USED ARE STANDARD FOR THIS INDUSTRY AND GENERALLY CONSIST OF DRY SWEEPING, SHOVELING, OR THE HOSEING OR WASHING DOWN OF EQUIPMENT WITH PLANT EFFLUENT WATER, DEPENDING ON THE SPECIFIC CIRCUMSTANCES AND WILL BE THE OPTION SELECTED BY THE OWNER.

ANY OTHER LEVEL(S) OF CLEANING OR DECONTAMINATION THAT THE CONTRACTOR DESIRES WILL BE AT THE SOLE RISK AND EXPENSE OF THE CONTRACTOR(S). QUANTITIES OF LIQUIDS, SOLIDS, SLUDGES, ETC. THAT THE OWNER DEEMS NORMAL, WILL NOT BE CLEANED OR REMOVED BY THE OWNER. BY ACCEPTING THIS CONTRACT, THE CONTRACTOR AGREES THAT THERE WILL BE NO WORK SLOW DOWNS, STOPPAGES OR ANY CLAIMS FOR DELAY BASED ON BIOLOGICAL OR CHEMICAL HAZARDS, CONTAMINATION, ETC.






SITE NOTES

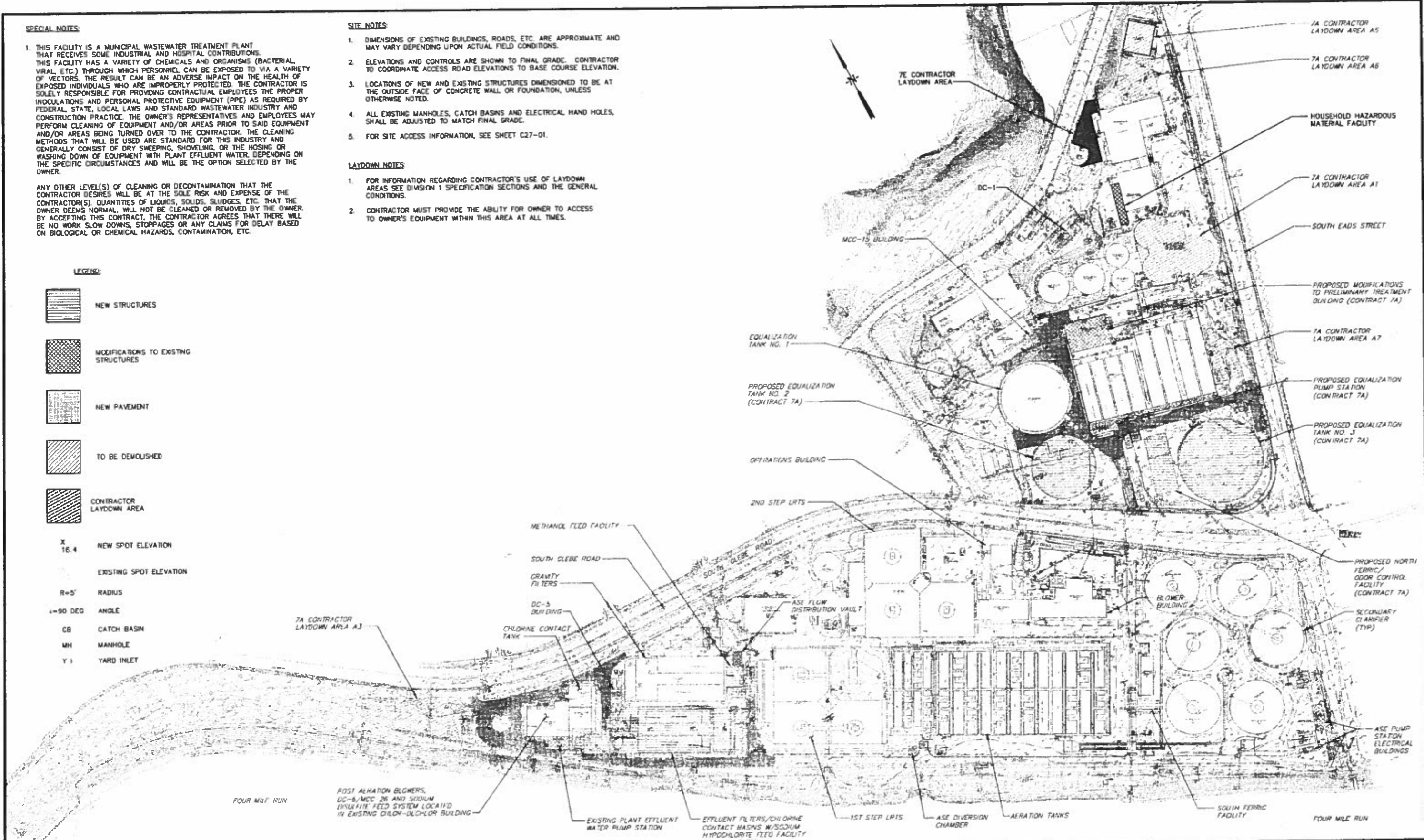
- DIMENSIONS OF EXISTING BUILDINGS, ROADS, ETC. ARE APPROXIMATE AND MAY VARY DEPENDING UPON ACTUAL FIELD CONDITIONS.
- ELEVATIONS AND CONTROLS ARE SHOWN TO FINAL GRADE. CONTRACTOR TO COORDINATE ACCESS ROAD ELEVATIONS TO BASE COURSE ELEVATION.
- LOCATIONS OF NEW AND EXISTING STRUCTURES DIMENSIONED TO BE AT THE OUTSIDE FACE OF CONCRETE WALL OR FOUNDATION, UNLESS OTHERWISE NOTED.
- ALL EXISTING MANHOLES, CATCH BASINS AND ELECTRICAL HAND HOLES, SHALL BE ADJUSTED TO MATCH FINAL GRADE.
- FOR SITE ACCESS INFORMATION, SEE SHEET C27-01.

LAYDOWN NOTES

- FOR INFORMATION REGARDING CONTRACTOR'S USE OF LAYDOWN AREAS SEE DIVISION 1 SPECIFICATION SECTIONS AND THE GENERAL CONDITIONS.
- CONTRACTOR MUST PROVIDE THE ABILITY FOR OWNER TO ACCESS TO OWNER'S EQUIPMENT WITHIN THIS AREA AT ALL TIMES.

LEGEND:

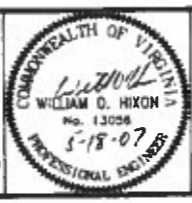
-  NEW STRUCTURES
-  MODIFICATIONS TO EXISTING STRUCTURES
-  NEW PAVEMENT
-  TO BE DEMOLISHED
-  CONTRACTOR LAYDOWN AREA
- X 16.4 NEW SPOT ELEVATION
- EXISTING SPOT ELEVATION
- R=5' RADIUS
- ∠=90 DEG ANGLE
- CB CATCH BASIN
- MH MANHOLE
- Y I YARD INLET



DESIGNED	JKP/SFP
DRAWN	RWC
CHECKED	JKP
PROJECT	WQH
CAD REF. NO.	1G0040000
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION PHASE 7E

GENERAL LOCATION PLAN - PROPOSED

SCALE: 1" = 100'

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING	DATE: MAY 2007
	DRAWING NUMBER
	G00-04
	SHEET . OF

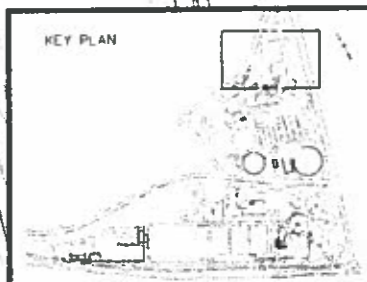
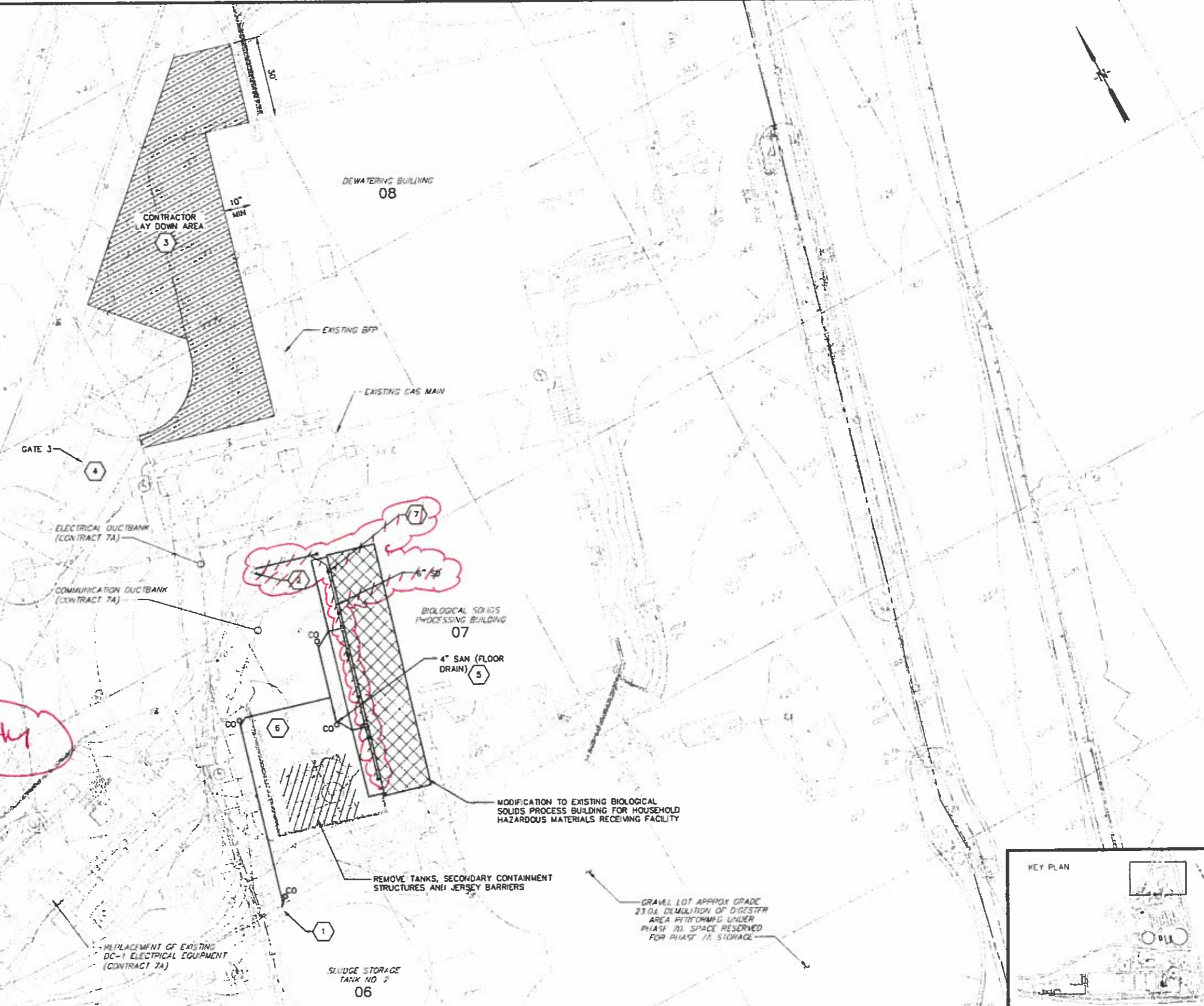
YARD PIPING GENERAL NOTES:

1. THE CONTRACT DRAWINGS ARE CONSIDERED TO BE SUBSTANTIALLY COMPLETE AND ACCURATE WITH RESPECT TO THE TYPES AND LOCATIONS OF EXISTING BURIED PIPING, ELECTRICAL DUCTBANKS AND OTHER FACILITIES BUT ARE NOT GUARANTEED TO BE ABSOLUTELY SO. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIS OWN INVESTIGATIONS TO FULLY INFORM HIMSELF OF THE LOCATION, CHARACTER, CONDITIONS AND EXTENT OF ALL EXISTING FACILITIES AS MAY BE ENCOUNTERED AND AS MAY AFFECT THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL HAVE NO CLAIM FOR DELAYS OR ADDITIONAL MONIES DUE TO HIS FAILURE TO MAKE HIS OWN INVESTIGATIONS.
2. CONSTRUCTION DRAWINGS OF THE EXISTING FACILITIES, BURIED PIPING, AND ELECTRICAL DUCTBANKS ARE AVAILABLE FOR INSPECTION AT THE WPCP OPERATIONS BUILDING BETWEEN THE HOURS OF 7:30 A.M. AND 3:00 P.M. NO REPRESENTATION IS MADE AS TO THE COMPLETENESS OR ACCURACY OF THE EXISTING CONSTRUCTION CONTRACT DRAWINGS.
3. VARIOUS PIPELINES ARE SHOWN ON THE CONTRACT DRAWINGS IN DIAGRAM FORM. WHERE SUCH PIPELINES ARE SHOWN ONLY IN DIAGRAM, THEY SHALL BE ARRANGED CLEAR OF OTHER PIPELINES, STRUCTURES, EQUIPMENT AND WALKING AREAS, AND BE ACCESSIBLE FOR MAINTENANCE. SUCH PIPELINES SHALL BE FITTED AND INSTALLED IN NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH APPROVED SHOP AND WORKING DRAWINGS.
4. PIPELINES SHALL BE FURNISHED, FABRICATED, ERECTED AND OTHERWISE INSTALLED TO LINES, ELEVATIONS, LOCATIONS AND DIMENSIONS AS SHOWN, SPECIFIED OR REQUIRED FOR A COMPLETE INSTALLATION. THE CONTRACTOR SHALL MEASURE ALL DIMENSIONS SHOWN ON THE DRAWINGS AND SHALL TAKE SUCH FIELD DIMENSIONS AS MAY BE NECESSARY TO PROPERLY INSTALL ALL PIPELINES.
5. THE CONTRACTOR SHALL PERFORM TEST PITS (AT NO ADDITIONAL COST TO THE OWNER) AND ANY OTHER MEASUREMENTS AND INVESTIGATIONS AS HE SHALL DEEM NECESSARY, TO DETERMINE THE EXACT LOCATIONS OF THE EXISTING UTILITIES PRIOR TO ORDERING AND SUBMITTING SHOP DRAWINGS FOR NEW PIPE, FITTINGS, ACCESSORIES AND OTHER APPURTENANCES. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ADJUSTMENTS OF LOCATIONS, LAYOUT, LENGTHS AND ELEVATIONS IN NEW CONSTRUCTION AND PROVIDE ALL NECESSARY PIPE AND FITTINGS TO SUIT EXISTING FACILITIES.
6. THE COST OF FURNISHING, FABRICATING, LOCATING, ERECTING AND OTHERWISE COMPLETELY AND PROPERLY INSTALLING ALL PIPELINES SHALL BE INCLUDED IN THE LUMP SUM CONTRACT BID AMOUNT AND NO SEPARATE PAYMENT WILL BE MADE THEREFOR.
7. THE OWNER RESERVES THE RIGHT TO LET OTHER CONTRACTS AND TO PERMIT OTHER UTILITIES AND THEIR CONTRACTORS TO PERFORM WORK WITHIN THE GENERAL AREAS OF THIS CONTRACT. THE CONTRACTOR SHALL MAKE SUCH REASONABLE ADJUSTMENTS IN HIS OPERATIONS AND SCHEDULES AS MAY BE REQUIRED FOR THE PURPOSE OF COORDINATING HIS WORK WITH THAT BEING PERFORMED BY OTHERS.
8. CONTRACTOR SHALL ASSUME THAT ALL EXISTING PIPING IS CONCRETE ENCASED AND PILE SUPPORTED.

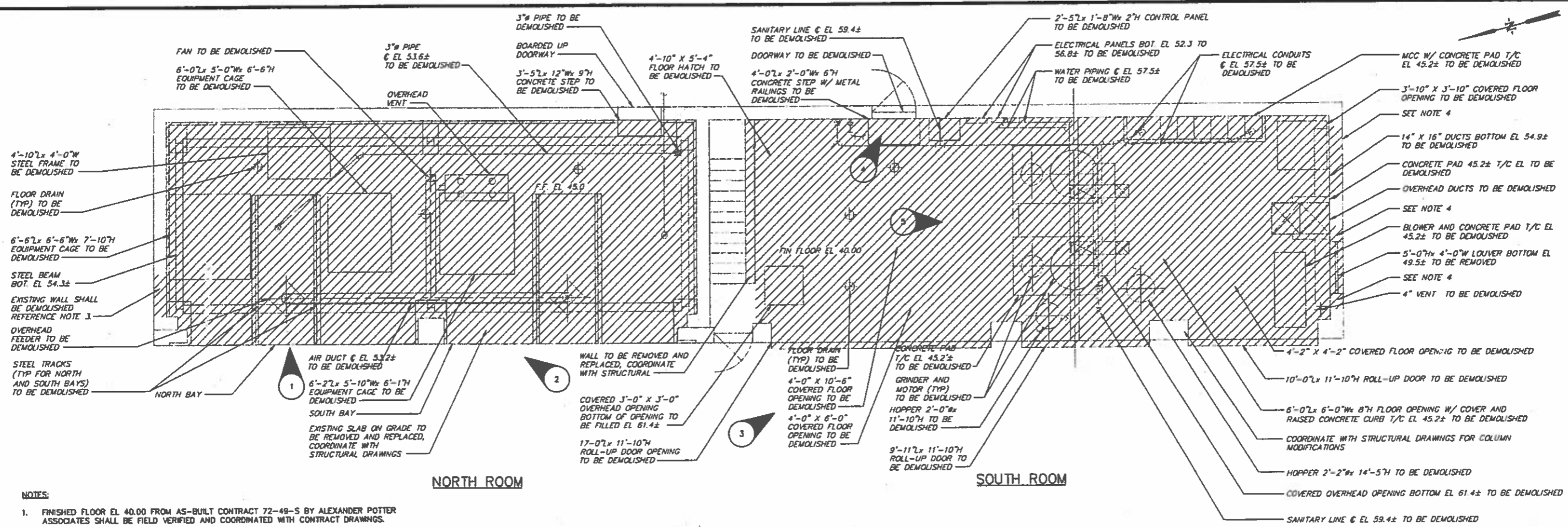
- 1 CONNECT 4" SAN TO EXISTING STRUCTURE
- 2 CONNECT 6" STORM TO EXISTING STRUCTURE
- 3 CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO BACK OF DEWATERING BUILDING FOR OWNER DELIVERIES OPERATIONS.
- 4 SITE ACCESS THROUGH EXISTING GATE 3.
- 5 MAINTAIN 3' MINIMUM COVER ON 4" SAN SEWER LINE.
- 6 CORE DRILL THROUGH EXISTING RETAINING WALL AND PROVIDE LINK TYPE MECHANICAL SEAL.

DOWNSPOUTS TYPICAL SEE A27-04

DELETE STORM SYSTEM



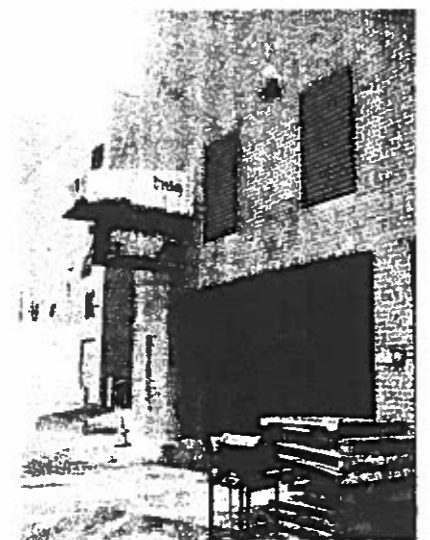
NC	ISSUED FOR	DATE	BY	APP'D BY	DESIGNED: PP DRAWN: AJS CHECKED: PP PROJECTOR: WOH CAD REF NO: 10001GN10	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)	COMMONWEALTH OF VIRGINIA WILLIAM O. HIXON No. 13058 5-18-07 PROFESSIONAL ENGINEER	MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1101 Wilson Boulevard Suite #400 Arlington, VA 22209	ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	CIVIL HOUSEHOLD HAZARDOUS MATERIALS FACILITY SITE PLAN AND YARD PIPING SCALE: 1" = 20' 10 0 10 20	DATE: MAY 2007 DRAWING NUMBER: C27-01 SHEET OF
	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.										



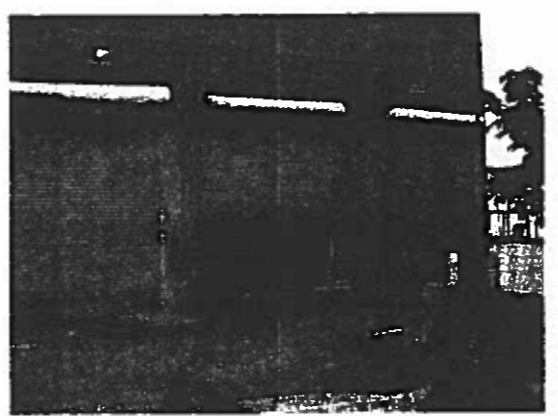
- NOTES:**
1. FINISHED FLOOR EL 40.00 FROM AS-BUILT CONTRACT 72-49-S BY ALEXANDER POTTER ASSOCIATES SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACT DRAWINGS.
 2. REFERENCE SITE PLAN DRAWING C27-01 FOR THE DEMOLITION AND REMOVAL OF THE EXISTING ACID STORAGE TANK AND JERSEY BARRIERS.
 3. COORDINATE WITH 'H' DRAWINGS FOR EXTENT OF WALL TO BE REMOVED AND EXACT LOCATION OF OPENING.
 4. COORDINATE WITH 'A' DRAWINGS FOR EXTENT OF WALL TO BE REMOVED AND EXACT LOCATION OF OPENING.



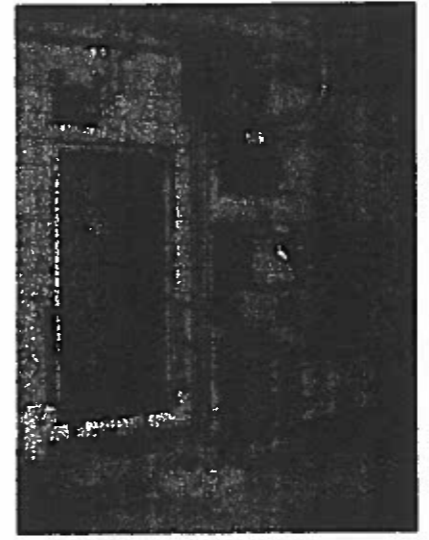
1. NORTH ROOM - NORTH BAY



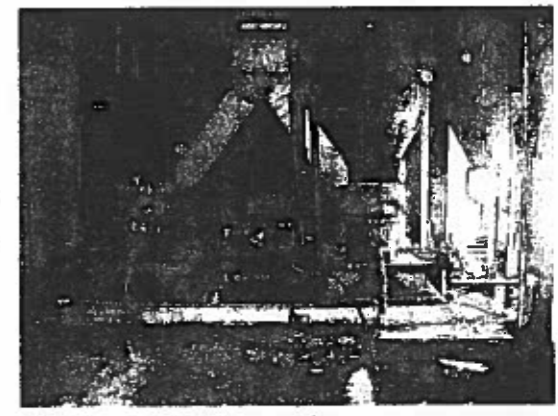
2. NORTH ROOM - OVERHEAD CONVEYOR CHUTE



3. SOUTH ROOM - ROLL-UP DOORS (3)



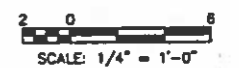
4. SOUTH ROOM - DOORWAY & INSTRUMENTATION & ELECTRICAL PANELS



5. SOUTH ROOM - EQUIPMENT & MCC

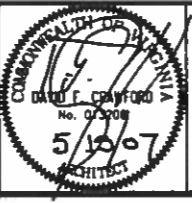
NORTH ROOM

SOUTH ROOM



DESIGNED	DFC/CM
DRAWN	JDW
CHECKED	DFC
PROLENGR.	DFC
CAD REF. NO.	1DD10HHWO
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



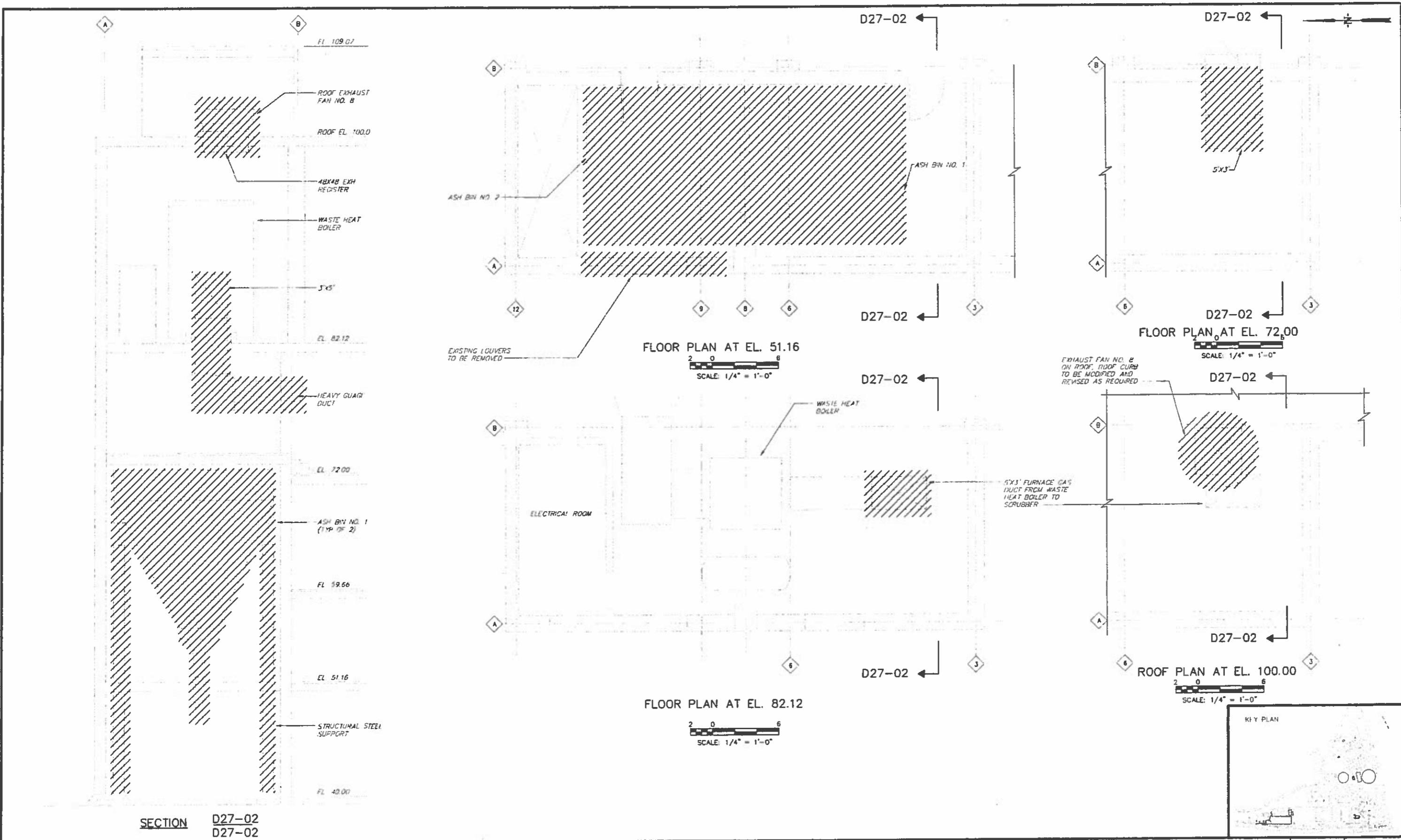
MALCOLM PIRNIE
 Independent Environmental Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

DEMOLITION
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
DEMOLITION PLAN

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
 DATE: MAY 2007
 DRAWING NUMBER: **D27-01**
 SHEET OF



SECTION D27-02
D27-02

NO	ISSUED FOR	DATE	BY	APPROVED

DESIGNED RMN
DRAWN RMN
CHECKED ST/JMC
PROLENGR JMC
CAD REF. NO. 10020HHWO



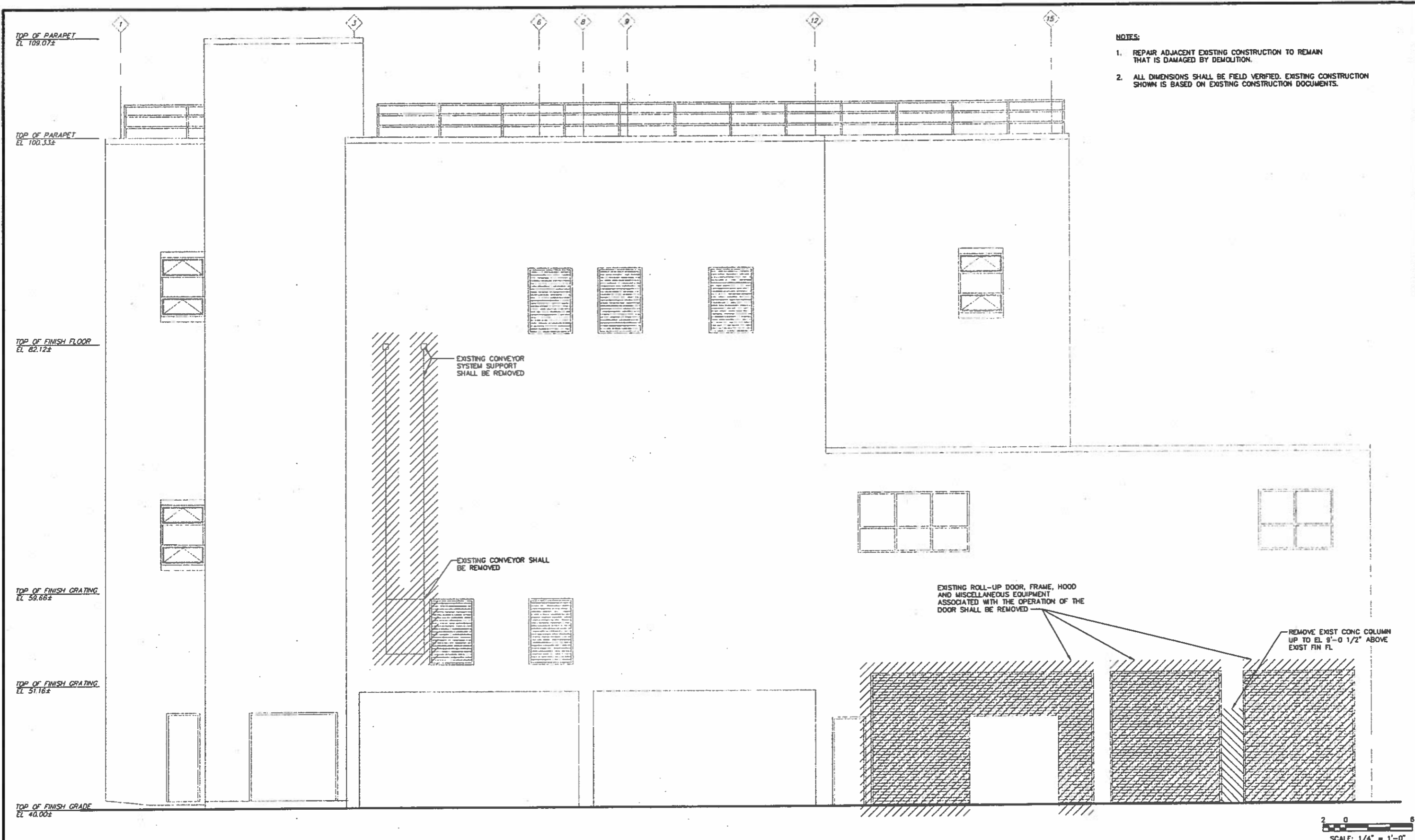
MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
110' Wilson Boulevard Suite 1400
Arlington, VA 22209



ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

DEMOLITION
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
COLLECTION AREA DEMOLITION PLANS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING
DATE: MAY 2007
DRAWING NUMBER: **D27-02**
SHEET OF



- NOTES:**
1. REPAIR ADJACENT EXISTING CONSTRUCTION TO REMAIN THAT IS DAMAGED BY DEMOLITION.
 2. ALL DIMENSIONS SHALL BE FIELD VERIFIED. EXISTING CONSTRUCTION SHOWN IS BASED ON EXISTING CONSTRUCTION DOCUMENTS.

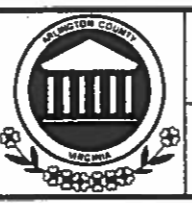


DESIGNED	DFC
DRAWN	MH
CHECKED	DFC
PROJ. ENGR.	DFC
CAD REF. NO.	1D030HHWO
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
 Independent Environmental Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



**ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E**

**DEMOLITION
 HOUSEHOLD HAZEROUS MATERIALS FACILITY
 WEST ELEVATION DEMOLITION**

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
 DATE: MAY 2007
 DRAWING NUMBER
D27-03
 SHEET OF

TOP OF PARAPET
EL 109.07±

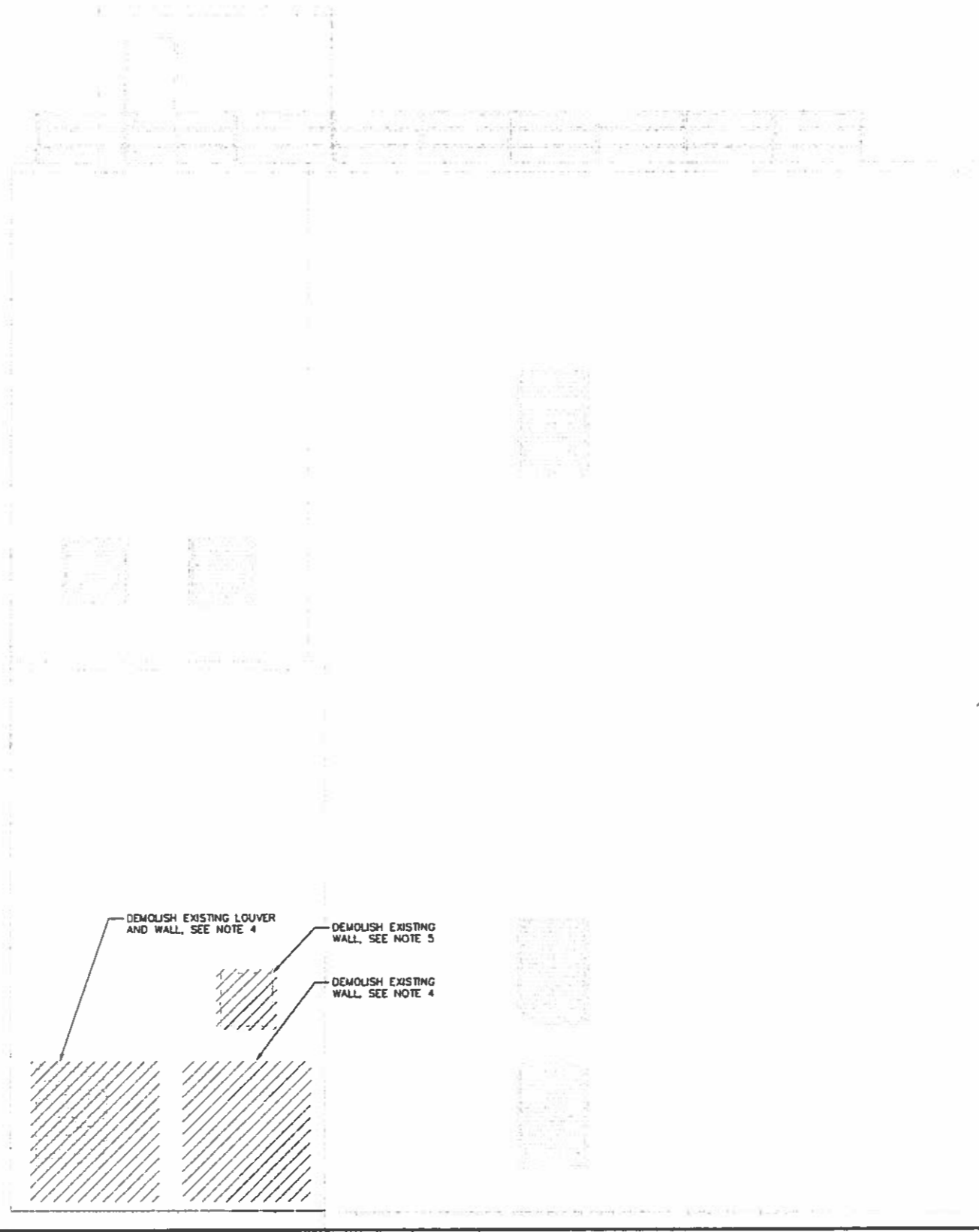
TOP OF PARAPET
EL 100.33±

TOP OF FINISH FLOOR
EL 82.12±

TOP OF FINISH GRATING
EL 59.66±

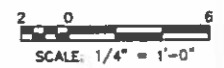
TOP OF FINISH GRATING
EL 51.16±

TOP OF FINISH GRADE
EL 40.00±



NOTES:

1. REPAIR ADJACENT EXISTING CONSTRUCTION TO REMAIN THAT IS DAMAGED BY DEMOLITION.
2. ALL DIMENSIONS SHALL BE FIELD VERIFIED. EXISTING CONSTRUCTION SHOWN IS BASED ON EXISTING CONSTRUCTION DOCUMENTS.
3. COORDINATE WITH DRAWING A27-01 FOR ALL OPENINGS IN EXISTING WALL. OPENINGS SHALL BE SAW-CUT. COORDINATE HEAD AND JAMB DETAILS WITH A00-02.
4. COORDINATE WITH DRAWINGS A27-01 AND A27-02 FOR EXTENT OF WALL TO BE REMOVED AND EXACT LOCATION OF OPENINGS.
5. COORDINATE WITH "H" DRAWINGS FOR EXTENT OF WALL TO BE REMOVED AND EXACT LOCATION OF OPENINGS.



NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED: DFC
 DRAWN: MH
 CHECKED: DFC
 PROJ ENGR: DFC
 CAD REF. NO. 1D031HHWO



MALCOLM PIRNIE
 Independent Environmental
 Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



**ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT**

**UPGRADE AND EXPANSION
 PHASE 7E**

**DEMOLITION
 HOUSEHOLD HAZEROUS MATERIALS FACILITY
 SOUTH ELEVATION DEMOLITION**

THE SCALE BAR
 SHOWN BELOW
 MEASURES ONE
 INCH LONG ON
 THE ORIGINAL
 DRAWING.

DATE: MAY 2007
 DRAWING NUMBER: **D27-04**
 SHEET OF

GENERAL

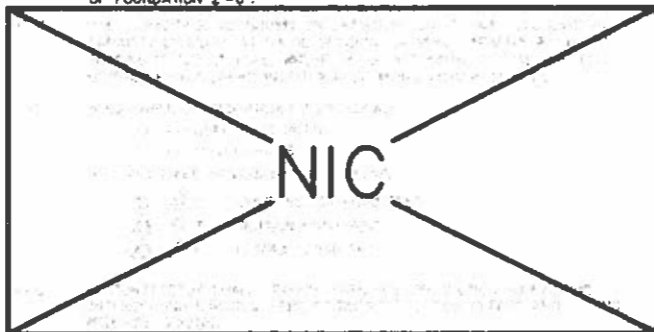
- G-1 THESE NOTES ARE GENERAL AND SUPPLEMENTAL TO THE SPECIFICATIONS. THESE NOTES APPLY TO THE ENTIRE PROJECT UNLESS MODIFIED OR NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.
- G-2 STANDARD DETAILS, SHOWN ON DRAWINGS S00-02 THRU S00-06 SHALL BE USED WHEN REFERRED TO, OR WHEN LESS RESTRICTIVE OR DIFFERENT DETAILS ARE SHOWN ON THE DRAWINGS.
- G-3 DESIGN IS IN ACCORDANCE WITH AND CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUBC), EXCEPT WHERE OTHER APPLICABLE CODES AND THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
- G-4 LIVE LOADS: AS SHOWN ON DRAWINGS.
- G-5 SEISMIC DESIGN BY VSBC:
HORIZONTAL: DESIGN SPECTRAL RESPONSE ACCELERATIONS
S_{0.5} = 0.203
S₁ = 0.112
VERTICAL: ACCELERATION SHALL BE ASSUMED TO BE 2/3 OF HORIZONTAL
SEISMIC DESIGN CATEGORY: B
SITE SOIL CLASS: D
USE GROUP: II
- G-6 WIND DESIGN: 90 MPH, EXPOSURE C, I = 1.15 PER ASCE 7-98, OR BY VUBC.
- G-7 ALL DIMENSIONS INDICATED (*) ARE TO BE VERIFIED EITHER BY FIELD MEASUREMENTS FOR EXISTING STRUCTURES OR BY SHOP DRAWINGS FOR EQUIPMENT FURNISHED. STRUCTURAL DIMENSIONS NOT SHOWN BUT CONTROLLED BY OR RELATED TO EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR WITH THE MANUFACTURER PRIOR TO CONSTRUCTION.
- G-8 EQUIPMENT ANCHOR BOLT SIZES, TYPES, AND PATTERNS SHALL BE VERIFIED WITH THE MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO INSURE ACCURACY OF PLACEMENT.
- G-9 STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH DRAWINGS OF ALL OTHER DISCIPLINES AND MANUFACTURER'S SHOP DRAWINGS.
- G-10 IF A CONFLICT IS FOUND BETWEEN DIFFERENT PORTIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY. CONTINUED CONSTRUCTION OF THE AREA IN CONFLICT SHALL BE AT THE CONTRACTOR'S OWN RISK UNTIL THE CONFLICT IS RESOLVED BY THE OWNER.
- G-11 WHENEVER ONE MEMBER IS FASTENED TO ANOTHER WITH FASTENINGS (BOLTS, WELDS, ETC.) SET AT A UNIFORM SPACING, THERE SHALL BE A MINIMUM OF TWO FASTENINGS PER PIECE CONNECTED AND THE FIRST AND LAST FASTENINGS SHALL BE LOCATED NOT TO EXCEED 1/4 SPACE FROM EACH END.
- G-12 STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND TEMPORARY SUPPORTS WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR. OVERSTRESSING OF ANY STRUCTURAL ELEMENT IS PROHIBITED.
- G-13 NO BACKFILL SHALL BE PLACED AGAINST ANY WALL UNLESS ALL SUPPORTING ELEMENTS OF THE STRUCTURE HAVE BEEN CONSTRUCTED AND HAVE REACHED THE SPECIFIED MINIMUM CONCRETE STRENGTH.

GENERAL (CON'T)

- G-18 NO COLD WEATHER CONSTRUCTION OR HOT WEATHER CONSTRUCTION, AS DEFINED IN SPECIFICATION SECTION 03345, IS PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNER.
- G-19 OPENINGS AND PENETRATIONS:
THE CONTRACTOR SHALL SUBMIT COMPOSITE DRAWINGS INDICATING ALL FLOOR OPENINGS AND PENETRATIONS THROUGH STRUCTURAL MEMBERS REQUIRED TO ACCOMMODATE THE HVAC, PLUMBING AND ELECTRICAL WORK. THE CONTRACTOR SHALL FOLLOW THE TYPICAL FRAMING DETAILS AT OPENINGS AND REINFORCEMENT DETAILS AT PENETRATIONS THROUGH STRUCTURAL MEMBERS. ACCORDINGLY, THE CONTRACTOR SHALL SUBMIT SHOP DETAILS TO THE OWNER FOR THE REVIEW.
- G-20 ALL GRATING TO BE ALUMINUM, UNLESS NOTED OTHERWISE.

FOUNDATIONS

- F-1 DESIGN ASSUMPTIONS:
A) ALLOWABLE BEARING PRESSURE, AS SHOWN ON DRAWINGS
B) GROUNDWATER:
1) MAXIMUM ELEVATION: EL. 5.00
2) 100-YEAR FLOOD ELEVATION: VARIES, EL. 5.00 (MIN) TO EL. 11.00 (MAX)
- F-2 CONCRETE GENERAL NOTES APPLY TO FOUNDATIONS.
- F-3 MINIMUM DEPTH FROM ADJACENT FINISHED GRADE TO BOTTOM OF FOUNDATION 2'-6".



F-7 PROVIDE SELECT BORROW FILL UNDER SLABS ON GRADE AND FOUNDATIONS WHERE NEEDED. INSTALL WORKING MAT OVER FILL. PLACE 4" NON-STRUCTURAL UNREINFORCED WORKING MAT USING CLASS B CONCRETE IMMEDIATELY AFTER EXCAVATING TO FINAL GRADE AT ALL STRUCTURES UNLESS INDICATED OTHERWISE. WORKING MAT TO BE CONTINUOUS INCLUDING AT GRADE CHANGES TO FOUNDATION BOTTOM.



CONCRETE

- C-1 CONCRETE 28-DAY COMPRESSIVE STRENGTH:
CLASS A - 4500 PSI
CLASS AF - 4500 PSI
CLASS AS - 4500 PSI
CLASS B - 3000 PSI
- C-2 REINFORCEMENT: ASTM A615, GRADE 60, OR ASTM A706, GRADE 60 WHERE REINFORCEMENT IS TO BE WELDED.
- C-3 CONCRETE COVER FOR REINFORCING:
A) SURFACES CAST AGAINST SUBGRADE 3" MIN
B) TOP SURFACES OF SLABS WHERE PVC WATERSTOP IS REQUIRED IN WALLS 3" MIN
C) FORMED SURFACES IN CONTACT WITH WEATHER, SOIL, OR LIQUID 2" MIN
D) BOTTOM SURFACES OF SLABS OVER LIQUID 2" MIN
E) SURFACES NOT IN CONTACT WITH WEATHER, SOIL, OR LIQUID 1 1/2" MIN
- C-4 CONSTRUCTION JOINTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. WHERE NOT SHOWN, CONSTRUCTION JOINTS SHALL BE LOCATED AT NO MORE THAN 40' ON CENTER. CONSTRUCTION JOINT LOCATIONS SHALL BE AS APPROVED BY THE OWNER.

CONCRETE (CON'T)

- C-5 EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DOCUMENTS, SHALL BE PROVIDED FOR PRIOR TO PLACING CONCRETE.
- C-6 AT ALL TYPICAL CURBS, EQUIPMENT PADS, AND PIPE SUPPORT PIERS, REINFORCING DOWELS SHOWN MAY BE REPLACED WITH MATCHING DOWELS SET IN EPOXY IN DRILLED HOLES AS SPECIFIED. DOWELS LOCATED CLOSER THAN 3" FROM ANY EDGE OF CONCRETE SHALL NOT BE REPLACED WITH DRILLED DOWELS.
- C-7 WHERE DRILLED EPOXY DOWELS ARE SHOWN TO BE PLACED INTO HARDENED CONCRETE, ADJUST THE DOWEL LOCATIONS AS NEEDED TO AVOID DRILLING THROUGH ANY REINFORCING BARS. IF THE DOWEL LOCATION NEEDS TO BE MODIFIED, CONTACT THE OWNER.
- C-8 WHERE HORIZONTAL CONSTRUCTION JOINTS, LOCATED ABOVE THE FOUNDATION SLAB, EXTEND BEYOND WHERE NEEDED, THEY SHALL BE TERMINATED AT A VERTICAL CONSTRUCTION JOINT AS APPROVED BY THE OWNER.
- C-9 DOWELS, ANCHOR BOLTS, PIPES, AND OTHER EMBEDDED ITEMS SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
- C-10 CONDUITS AND PIPES EMBEDDED IN OR PENETRATING THROUGH CONCRETE SHALL BE SPACED ON CENTER NOT LESS THAN 3 TIMES THEIR OUTSIDE DIMENSION, BUT NOT LESS THAN 2 1/2" CLEAR. OUTSIDE DIMENSION OF EMBEDDED ITEMS SHALL NOT EXCEED 1/3 OF THE CONCRETE MEMBER THICKNESS. CLEAR SPACING REQUIREMENTS SHALL APPLY FOR EMBEDDED CONDUITS OR PIPES CROSSING AT AN ANGLE LESS THAN 60 DEGREES.
- C-11 THE EFFECTIVE DIMENSION USED TO MEET MEMBER THICKNESS LIMITATIONS SHALL BE THE SUM OF THE OUTER DIMENSIONS OF CROSSING ELEMENTS.
- C-12 EMBEDDED CONDUITS AND PIPES SHALL BE LOCATED BETWEEN THE LAYERS OF REINFORCEMENT AND A MINIMUM OF 2 1/2" CLEAR FROM APPROXIMATELY PARALLEL REINFORCING BARS. REQUIREMENTS FOR EMBEDDED ELEMENTS CROSSING REINFORCING BARS SHALL BE AS REQUIRED FOR CROSSING EMBEDDED ELEMENTS.
- C-13 CONDUITS AND PIPES SHALL NOT BE EMBEDDED IN OR PASS THROUGH COLUMNS OR BEAMS UNLESS INDICATED OTHERWISE OR AUTHORIZED BY OWNER.
- C-14 REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY METAL PIPE, PIPE FLANGE, METAL CONDUIT, OR OTHER METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM CLEARANCE OF 2 INCHES SHALL BE PROVIDED.
- C-15 ALL EXPOSED CORNERS SHALL HAVE A 3/4" CHAMFER OR A 1/2" RADIUS TOOLED CORNER.
- C-16 LAP SPLICES SHALL BE IN ACCORDANCE WITH THE TABLE SHOWN ON DRAWING S00-02.

SPECIAL INSPECTION

- I-1 THE FOLLOWING ITEMS SHALL BE SUBJECT TO SPECIAL INSPECTION, MADE AND WITNESSED BY OR UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. TEST REPORTS, CERTIFICATES OF INSPECTION SHALL BE PREPARED AND FILED WITH THE DEPARTMENT OF BUILDINGS:
A. TEST BORINGS
B. SHORING, BRACING, STRUCTURAL STABILITY
C. CONCRETE INSPECTION PER SPECIFICATIONS
D. WELDING INSPECTION PER SPECIFICATIONS
E. MASONRY INSPECTION PER SPECIFICATIONS
F. CONCRETE ANCHORS AND ANCHOR BOLTS
G. STRUCTURAL STEEL CONNECTIONS
- I-2 THE DESIGNATED INSPECTING AGENCY FOR SPECIAL INSPECTION SHALL PERFORM ON SITE INSPECTION IN ACCORDANCE WITH VSBC REGULATIONS UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF VIRGINIA.
- I-3 THE DESIGNATED INSPECTING AGENCY IS RESPONSIBLE FOR ALL REQUIRED TESTING AND INSPECTION (INCLUDING SPECIAL INSPECTION). THE SPECIAL INSPECTION ENGINEERS ARE RESPONSIBLE FOR FILING AND OBTAINING APPROVAL OF ALL STATEMENTS, TEST AND INSPECTION REPORTS, INCLUDING STEEL AND CONCRETE PRODUCER'S CERTIFICATES.
- I-4 CONTRACTOR TO NOTIFY THE SPECIAL INSPECTION ENGINEERS AT LEAST 48 HOURS PRIOR TO START OF WORK.

ABBREVIATIONS

AB	ANCHOR BOLTS	ID	INSIDE DIAMETER
ADD'L	ADDITIONAL	IF	INSIDE FACE
AL	ALUMINUM	INV	INVERT
ALT	ALTERNATE	JT	JOINT
APPROX	APPROXIMATE	KO	KNOCK OUT
ARCH	ARCHITECTURAL	L	ANGLE (STRUCTURAL SHAPE)
BAL	BALANCE	LL	LIVE LOAD
BET	BETWEEN	LLH	LONG LEG HORIZ
BL	BUILDING LINE	LLV	LONG LEG VERT
BLDG	BUILDING	LOC	LOCATION
BLK	BLOCK	LPT	LOW POINT
BM	BEAM	LW	LONG WAY
BOT	BOTTOM	MAS	MASONRY
BRG	BEARING	MAX	MAXIMUM
C	CHANNEL STRUCTURAL SHAPE	MECH	MECHANICAL
CANT'L	CANTILEVER	MEZZ	MEZZANINE
CJ	CONSTRUCTION JOINT	MFR	MANUFACTURE
CL	CLEAR	MH	MANHOLE
CMU	CONCRETE MASONRY UNIT	MID	MIDDLE
COL	COLUMN	MIN	MINIMUM
COMP	COMPRESSIBLE	N	NORTH
CONC	CONCRETE	NF	NEAR FACE
CONN	CONNECTION	NIC	NOT IN CONTRACT NUMBER
CONST	CONSTRUCTION	#	NUMBER
CONT	CONTINUOUS	NTS	NOT TO SCALE
CSFG	CASTING	OC	ON CENTER
C/C	CENTER TO CENTER	OD	OUTSIDE DIAMETER
CTR	CENTER	OF	OUTSIDE FACE
DET	DETAIL	OPNG	OPENING
DIA	DIAMETER	OPP	OPPOSITE
DIAG	DIAGONAL	PC	PRECAST CONCRETE
DIM	DIMENSION	PCO	PILE CUT OFF
DL	DEAD LOAD	PL	PLATE
DN	DOWN	PSF	POUNDS PER SQUARE FOOT
DO	DITTO	PVC	POLYVINYL CHLORIDE
DP	DEEP	R	RADIUS, RISER
DWG	DRAWING	RD	ROOF DRAIN
DWL	DOWEL	REIN	REINFORCEMENT
E	EAST	REQD	REQUIRED
EA	EACH	RM	ROOM
EF	EACH FACE	RO	ROUGH OPENING
EJ	EXPANSION JOINT	S	SOUTH
EL	ELEVATION	SECT	SECTION
ELEC	ELECTRICAL	SH	SHEET
EMB	EMBEDMENT	SIM	SIMILAR
ENCL	ENCLOSURE	SL	SLAB
EQ	EQUAL	SP	SPIRAL
EQUIP	EQUIPMENT	SPEC	SPECIFICATION
ES	EACH SIDE	SQ	SQUARE
EW	EACH WAY	SS	STAINLESS STEEL
EW T&B	EACH WAY TOP & BOTTOM	STD	STANDARD
EXIST	EXISTING	STR	STIRRUP
EXP	EXPANSION	STL	STEEL
EXT	EXTERIOR	STRUCT	STRUCTURAL
FB	FLOOR BEAM	SW	SHORT WAY
FD	FLOOR DRAIN	T&B	TOP AND BOTTOM
FDN	FOUNDATION	TOC	TOP OF CONCRETE
FF	FAR FACE	THK	THICK
FIN	FINISH	T/	TOP OF
FL	FLOOR	T	TREAD
FTG	FOOTING	TYP	TYPICAL
GA	GAUGE	UON	UNLESS OTHERWISE NOTED
GALV	GALVANIZE	VERT	VERTICAL
GB	GRADE BEAM	WF	WIDE FLANGE STRUCTURAL SHAPE, WIDTH, WEST
GD	GRADE	W/	WITH
GRG	GRATING	WP	WORKING POINT
H	HIGH	WS	WATERSTOP
HT	HEIGHT		
HORIZ	HORIZONTAL		
HPT	HIGH POINT		
HS	HIGH STRENGTH		
HVAC	HEATING, VENTILATING & AIR CONDITIONING		



- G-15 DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- G-16 CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
- G-17 WHERE CONNECTIONS TO OR MODIFICATIONS OF EXISTING STRUCTURES ARE SHOWN, EXISTING FOUNDATIONS, WALLS, COLUMNS, SLABS, BEAMS, FLOORS, DECKS, (CONCRETE, STEEL, TIMBER, ETC.) ARE ASSUMED TO BE IN GOOD CONDITION. THIS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR. UNSOUND CONDITIONS SHALL BE REPORTED TO THE OWNER. ALL UNSOUND STRUCTURAL ELEMENTS SHALL BE REPAIRED TO SOUND CONDITION AS APPROVED BY THE OWNER. EXISTING CONSTRUCTION: DIMENSIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR BEFORE WORK COMMENCES. VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS SHALL BE REPORTED TO THE OWNER.

DESIGNED	SM/JC
DRAWN	PJM
CHECKED	LT
PROLENGR	DB
CAD REF NO.	15X00G0NO
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HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209

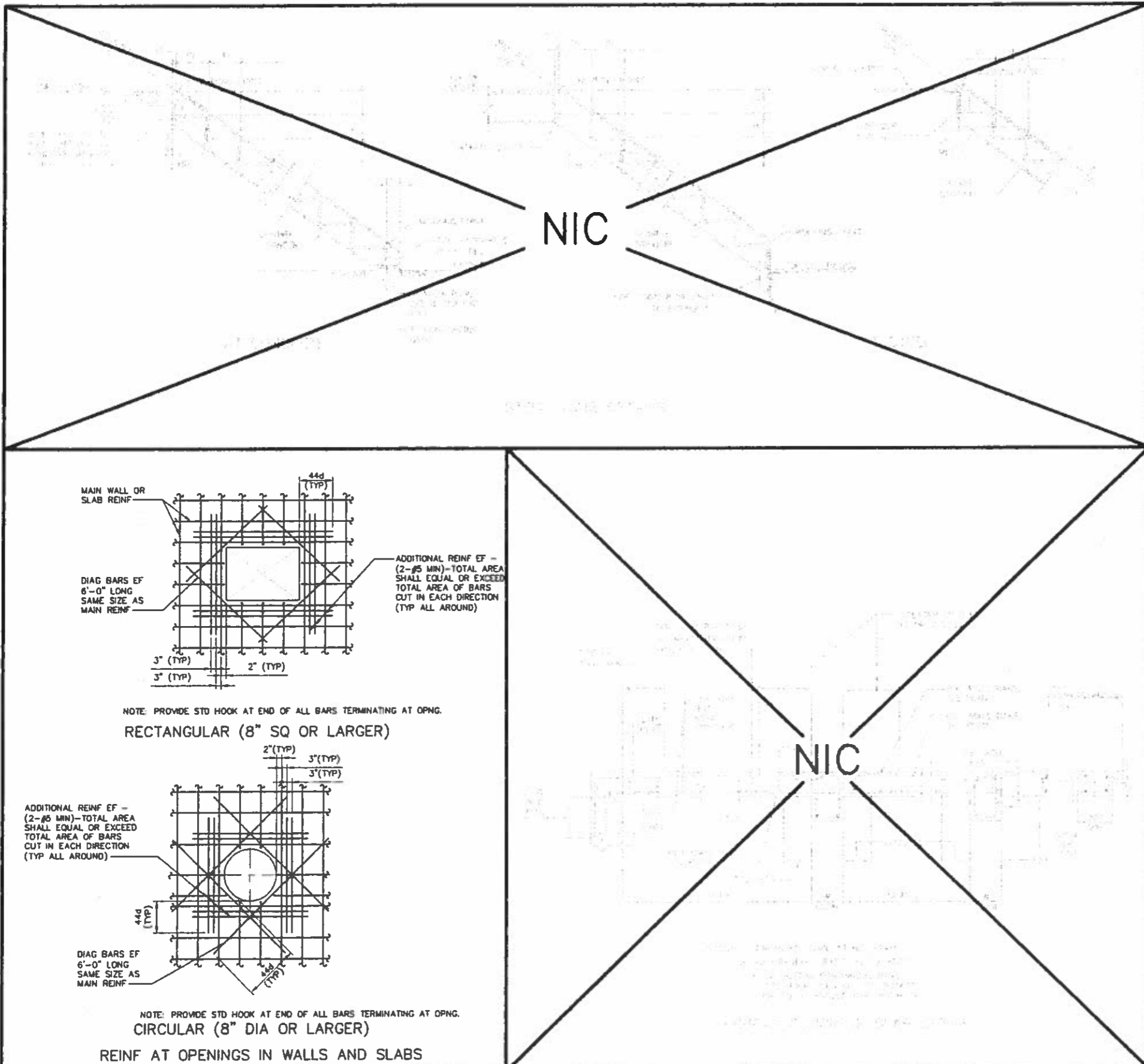


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
PHASE 7E

STRUCTURAL
GENERAL NOTES
AND ABBREVIATIONS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007 DRAWING NUMBER S00-01 SHEET . OF
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REINFORCING LAP SPLICE & EMBEDMENT LENGTH

BAR SIZE	MIN LAP LENGTH (IN)				MIN EMBEDMENT LENGTH (IN)		
	TOP BARS		OTHER BARS		STRAIGHT BARS		WITH STD HOOK
	CLASS A	CLASS B	CLASS A	CLASS B	TOP BARS	OTHER BARS	
SLABS & WALLS WITH 2" + COVER							
#3	16	21	12	16	16	12	6
#4	16	21	12	16	16	12	7
#5	20	25	15	19	20	15	9
#6	24	30	18	23	24	18	10
#7	33	43	25	33	33	27	12
#8	38	49	29	37	38	29	14
#9	49	63	37	48	49	37	15
#10	60	78	46	60	60	46	17
#11	75	97	57	74	75	57	19
SLABS & WALLS WITH < 2" COVER							
#3	16	21	12	16	16	12	8
#4	16	21	12	16	16	12	10
#5	20	25	15	19	20	15	12
#6	24	30	18	23	24	18	15
#7	38	49	29	37	38	29	17
#8	47	62	36	47	47	36	19
#9	58	76	44	58	58	44	22
#10	71	91	54	70	71	54	25
#11	85	110	65	84	85	65	27
BEAMS & COLUMNS WITH 3.75" CLEAR SPACING **							
#3	16	21	12	16	16	12	8
#4	16	21	12	16	16	12	7
#5	20	25	15	19	20	15	9
#6	24	30	18	23	24	18	10
#7	33	43	25	33	33	25	12
#8	39	51	30	39	39	30	14
#9	50	64	38	49	50	38	15
#10	60	78	46	60	60	46	17
#11	72	94	55	72	72	55	19

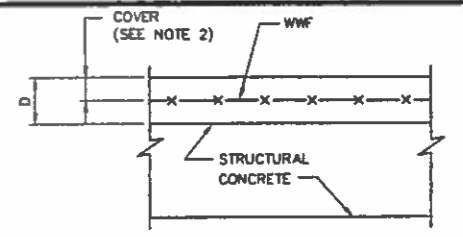
** FOR BAR CLEAR SPACING LESS THAN 3.75", ADD 48%
 FOR BAR CLEAR SPACING LESS THAN 2.25", ADD 104%

- NOTES:**
- NOTES FOR SPLICE AND EMBEDMENT TABLE:
 - THE MINIMUM LENGTH OF LAPS FOR SPLICES SHALL BE AS GIVEN IN THE TABLE FOR CLASS "B" LAPS UNLESS SHOWN OTHERWISE ON THE DRAWINGS. PROVIDE CLASS "A" LAPS ONLY WHERE NOTED ON THE DRAWINGS.
 - THE SPLICE AND EMBEDMENT LENGTHS FOR WALLS AND SLABS ARE BASED ON A 5" MINIMUM ON CENTER BAR SPACING. SEE THE DRAWINGS FOR SPLICE AND EMBEDMENT WHERE BARS ARE SPACED CLOSER THAN 5".
 - HOOK EMBEDMENTS APPLY ONLY WHERE THE SIDE COVER (NORMAL TO THE HOOK PLANE) IS AT LEAST 2.5". THE COVERS REFERENCED ON THE TABLE ARE FROM THE HOOK EXTENSION TO THE FACE OF THE CONCRETE.
 - THE TABLE DOES NOT APPLY TO LIGHTWEIGHT CONCRETE OR EPOXY COATED REINFORCING BARS. SEE ACI 318 FOR APPROPRIATE ADDITIONAL MULTIPLIERS FOR THOSE CASES.
 - WHERE SPLICES ARE REQUIRED BETWEEN BARS OF DIFFERENT SIZES, THE LAP LENGTH SHALL BE NO LESS THAN THE EMBEDMENT LENGTH OF THE LARGER BAR OR THE LAP LENGTH OF THE SMALLER BAR, WHICHEVER IS GREATER.
 - VERTICAL REINFORCEMENT FOR CONCRETE OR MASONRY SHALL BE SPLICED WITH DOWEL BARS OF THE SAME SIZE AND SPACING FROM THE FOUNDATION USING A STANDARD SPLICE LENGTH.
 - DOWELS SHOWN EXTENDING FROM PREVIOUSLY PLACED CONCRETE SHALL EXTEND ONE SPLICE LENGTH BEYOND THE JOINT, UNLESS DIMENSIONED OTHERWISE. WHERE A DIMENSION IS PROVIDED, THE BAR SPLICING TO THE DOWEL SHALL END ONE SPLICE LENGTH FROM THE END OF THE DOWEL.

D	WWF
2" TO 4"	6x6 - W 1.4 x W 1.4 *
5" TO 8"	6x6 - W 2.0 x W 2.0
9" PLUS	6x6 - W 2.9 x W 2.9

* NON WATER BEARING FILL ONLY. NO REINF REQD FOR WATER BEARING FILL

TYPICAL WWF FOR CONCRETE FILL

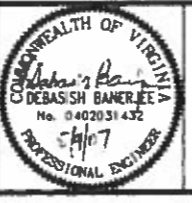


- NOTES:**
- PROVIDE WWF IN CONCRETE FILL AS TABULATED, UNLESS OTHERWISE NOTED ON THE PLANS AND/OR SECTIONS.
 - COVER FOR WATER BEARING FILL: 2" MIN TO 3" MAX. COVER FOR NON WATER BEARING FILL: 1" MIN TO 2" MAX.

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 Independent Environmental Engineers, Scientists & Consultants
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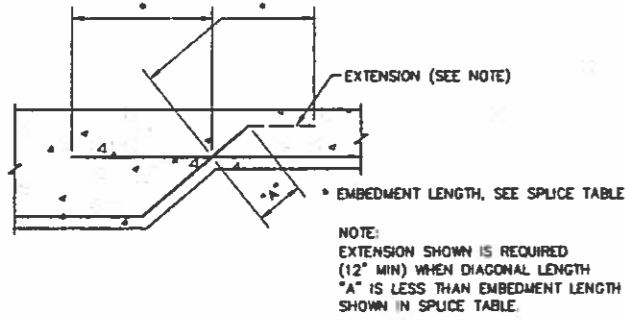
**ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT**

**UPGRADE AND EXPANSION
 PHASE 7E**

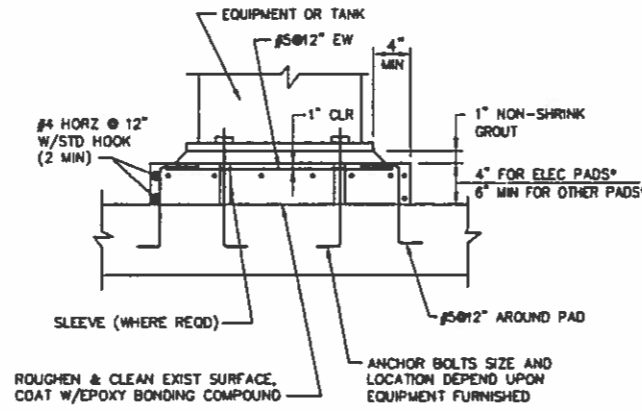
**STRUCTURAL
 MISCELLANEOUS STANDARD DETAILS
 SHEET 1**

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

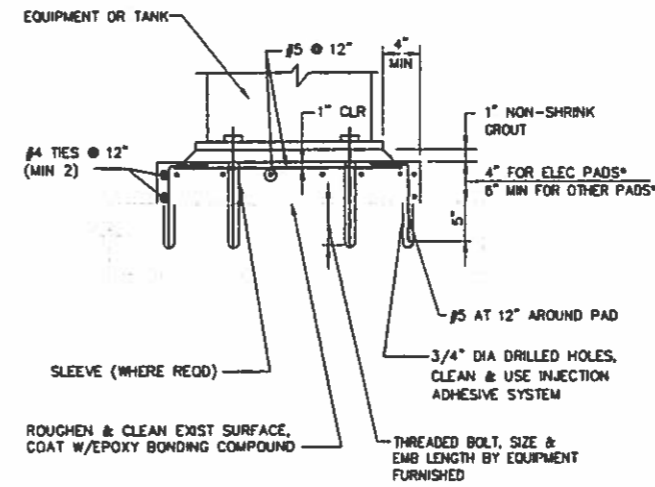
DATE: MAY 2007
 DRAWING NUMBER
S00-02
 SHEET OF



SPLICE LENGTH OF REINFORCEMENT INTERSECTING DIAGONALLY



TYPICAL EQUIPMENT SUPPORT PAD DETAIL

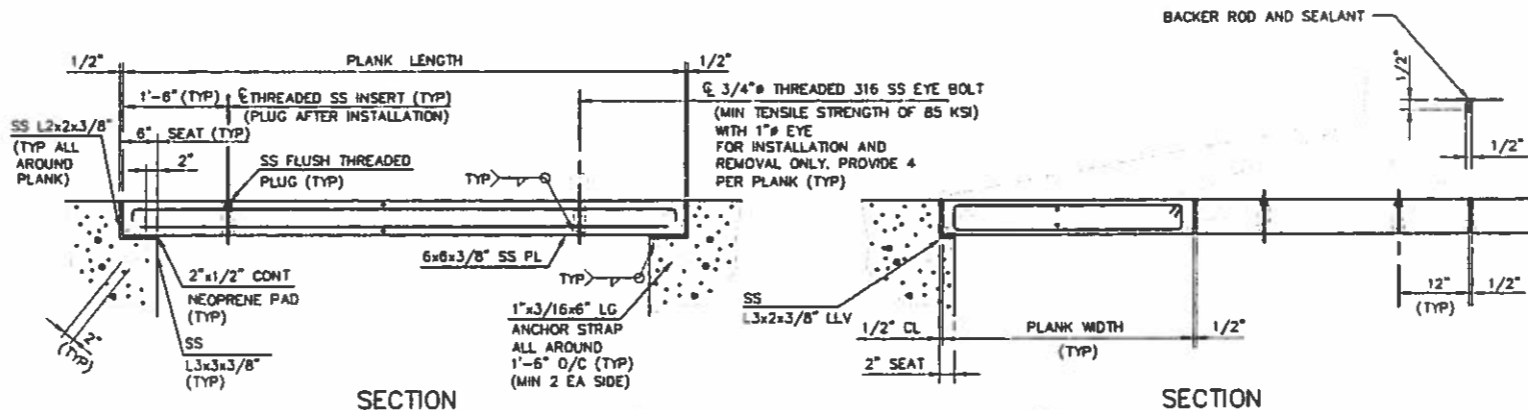


TYPICAL EQUIPMENT SUPPORT PAD DETAIL ON EXISTING CONCRETE

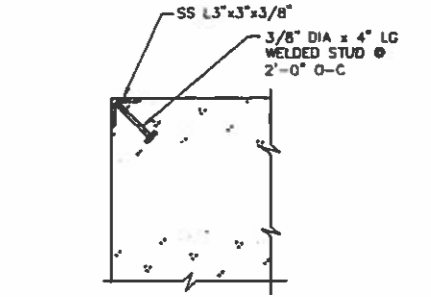
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NIC

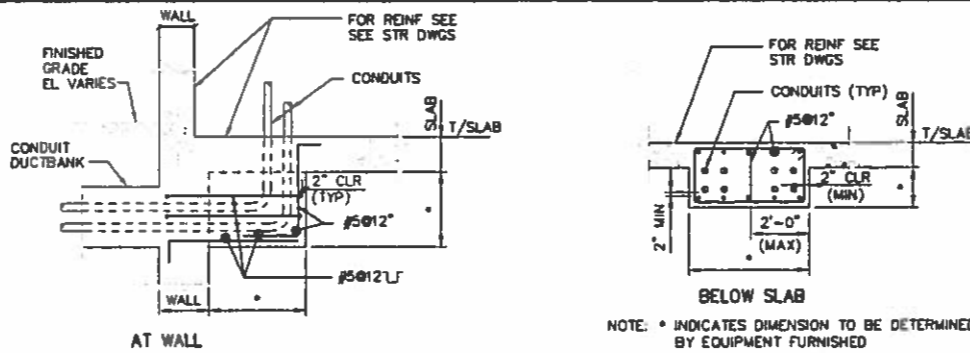
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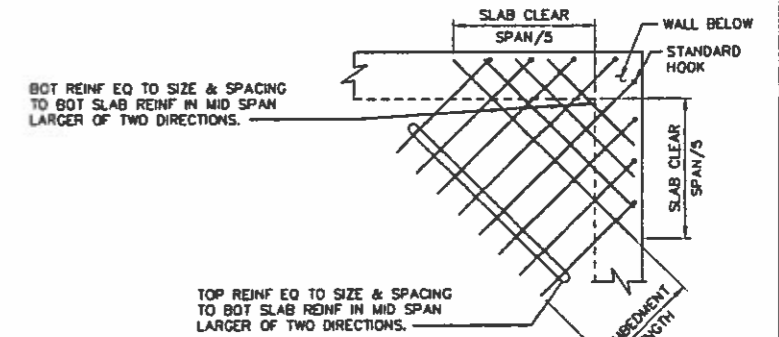
REMOVABLE PRECAST PLANKS



TYPICAL CORNER GUARD DETAIL NOT TO SCALE



TYPICAL CONDUIT ENCASEMENT DETAIL



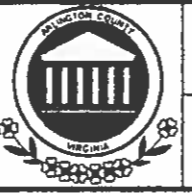
ADDITIONAL SLAB REINFORCEMENT

TYPICAL REINFORCING AT EXTERIOR CORNERS FOR 2-WAY SLABS 8\"/>

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ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

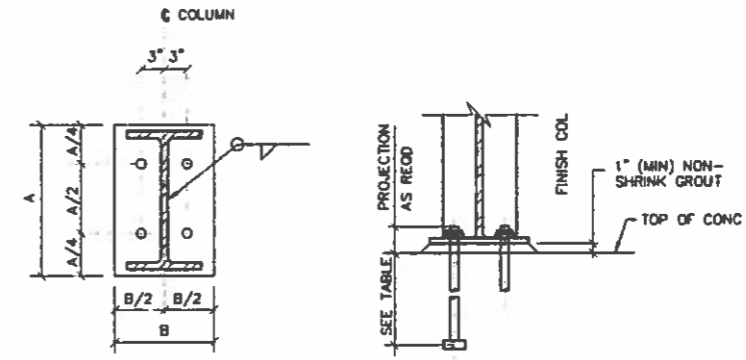
STRUCTURAL
 MISCELLANEOUS STANDARD DETAILS
 SHEET 2

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
 DRAWING NUMBER: S00-03
 SHEET OF

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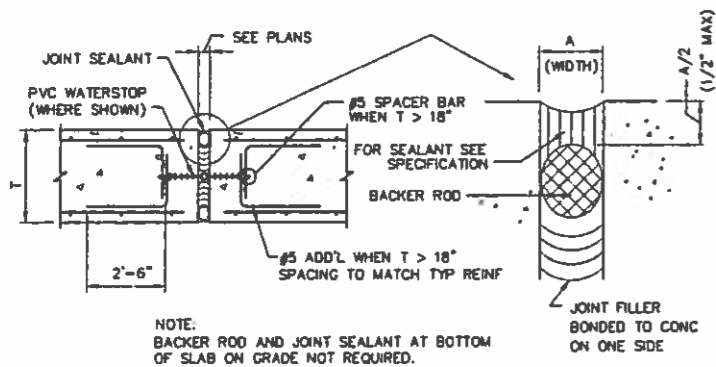
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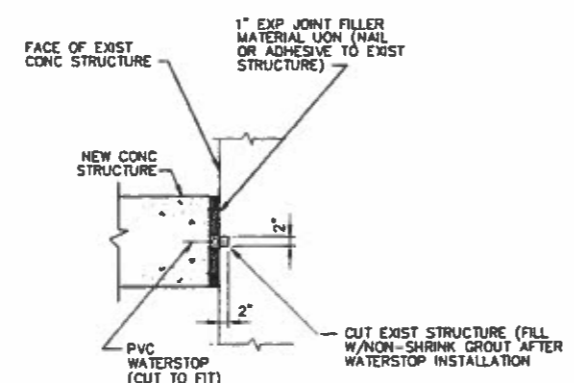
TYPICAL BASE PLATE DETAIL

EMBEDMENT TABLE	
ANCHOR SIZE	MIN EMBEDMENT
1/2"	4"
5/8"	4.5"
3/4"	5"
7/8"	6"
1"	7"

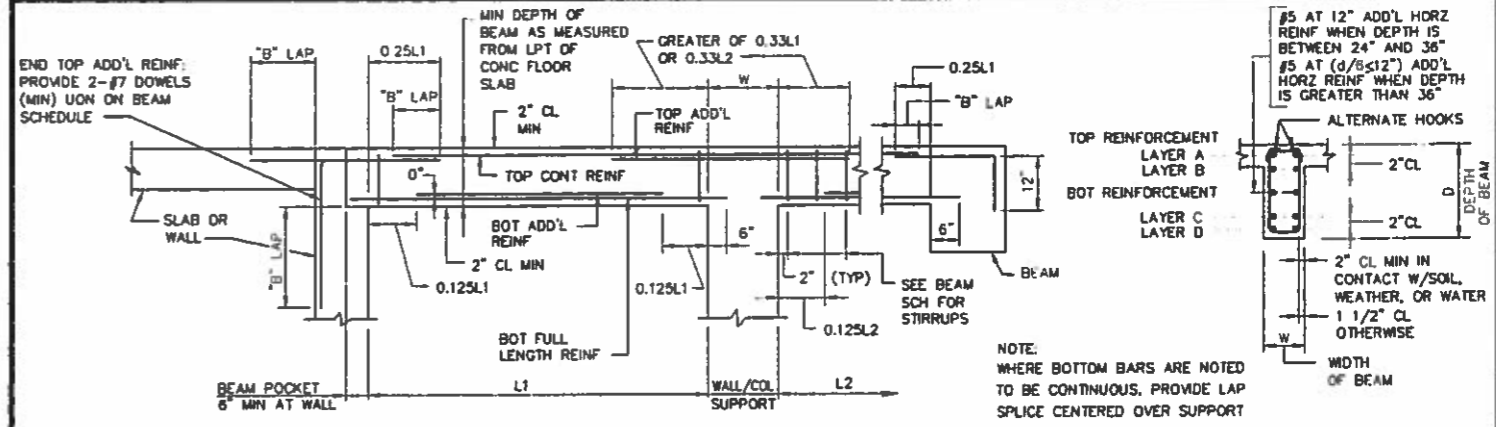
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EXPANSION JOINT DETAIL AT WALLS AND SLABS



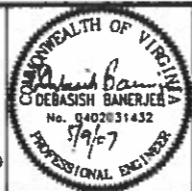
EXPANSION JOINT DETAIL AT NEW AND EXISTING STRUCTURES



TYPICAL REINFORCED CONCRETE BEAM DETAIL

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 CAD REF. NO. 15X03GEN0



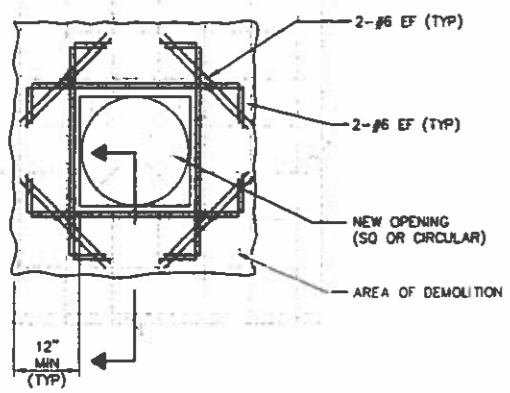
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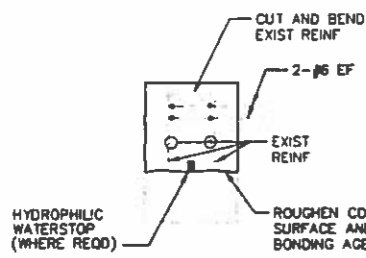
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 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

STRUCTURAL
 MISCELLANEOUS STANDARD DETAILS
 SHEET 3

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
 DATE: MAY 2007
 DRAWING NUMBER: S00-04
 SHEET OF

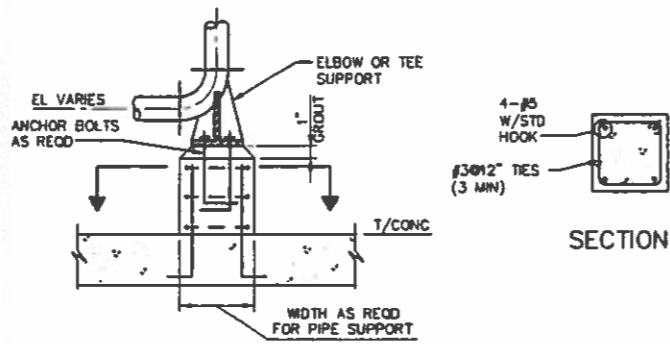


ELEVATION



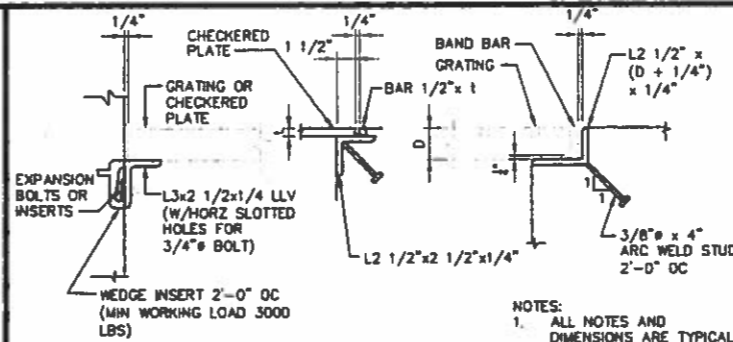
SECTION

REINFORCING OF NEW OPENING IN EXISTING WALL/SLAB



CONCRETE PEDESTAL DETAIL

SCALE: NO SCALE



TYPICAL GRATING AND CHECKERED PLATE SUPPORT DETAILS

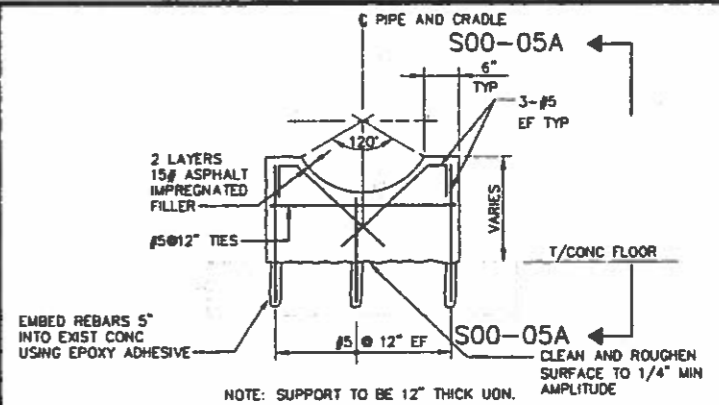
NOT TO SCALE

GRATING SCHEDULE

LL = 150 PSF
MAX DEFLECTION = SPAN/360 OR 1/4"

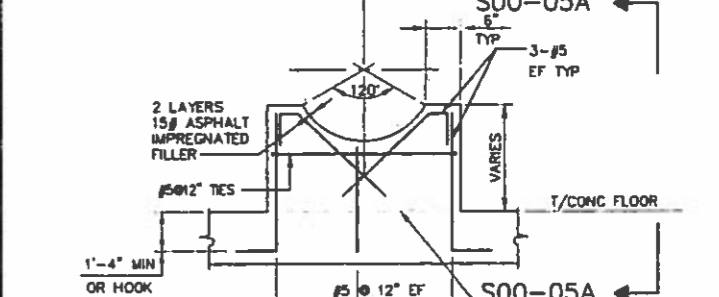
SPAN	ALUMINUM (SERRATED)		STAINLESS STEEL OR GALVANIZED (SERRATED)	
	BRG BARS 1" CLEAR	FRAME	BRG BARS 1" CLEAR	FRAME
4'-0" OR LESS	1 3/4x3/16	L 2x2x1/4	1 1/2x3/16	L 2x2x1/4
4'-1" TO 5'-0"	2 1/4x3/16	L 2 1/2x2x1/4	1 3/4x3/16	L 2x2x1/4
5'-1" TO 6'-0"	2 1/2x3/16	L 3x2x1/4	2 x 3/16	L 2 1/2x2x1/4
6'-1" TO 7'-0"	3 x 3/16	L 3 1/2x2 1/2x1/4	2 1/4x3/16	L 2 1/2x2x1/4
7'-1" TO 8'-0"	3 1/4x1/4	L 3 1/2x2 1/2x1/4	2 1/4x1/4	L 3x2 1/2x1/4

* HEAVY DUTY (NOT STANDARD)

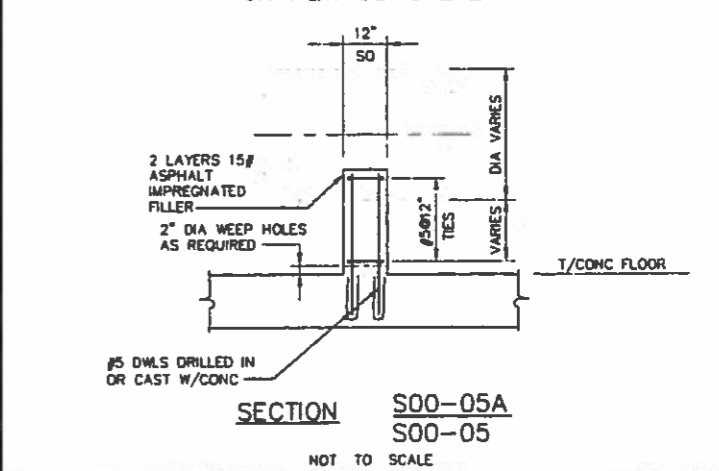


CRADLE PIPE SUPPORT ON EXISTING CONC SLAB

NOTE: SUPPORT TO BE 12" THICK UON.

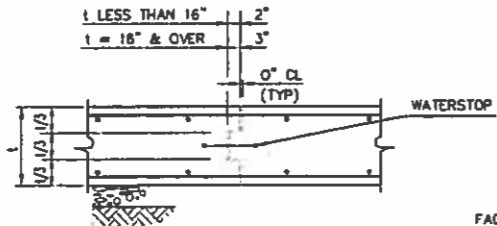


CRADLE PIPE SUPPORT ON NEW CONCRETE



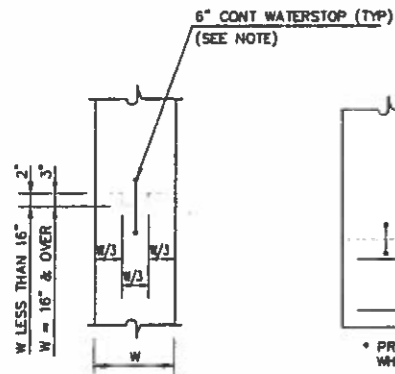
SECTION S00-05A S00-05

NOT TO SCALE



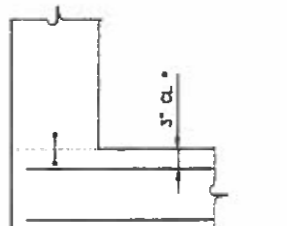
SLAB ON GRADE

NOTE: OMIT KEY FOR SLABS LESS THAN 12" THICK.



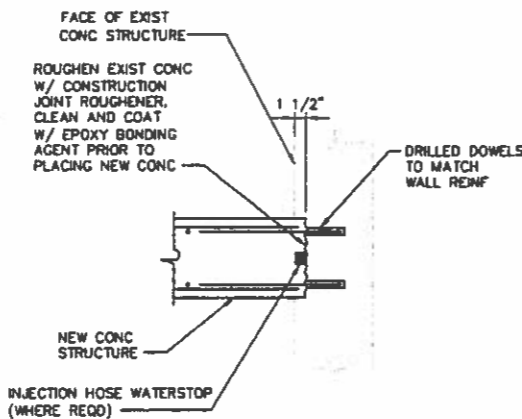
STANDARD WALL

NOTE: OMIT KEY FOR WALLS LESS THAN 12" THICK.

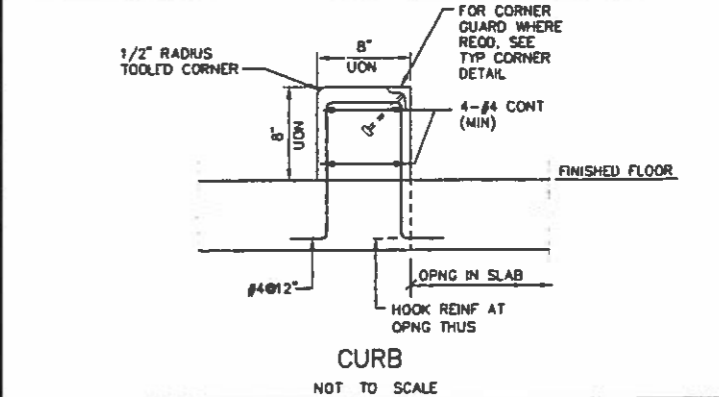
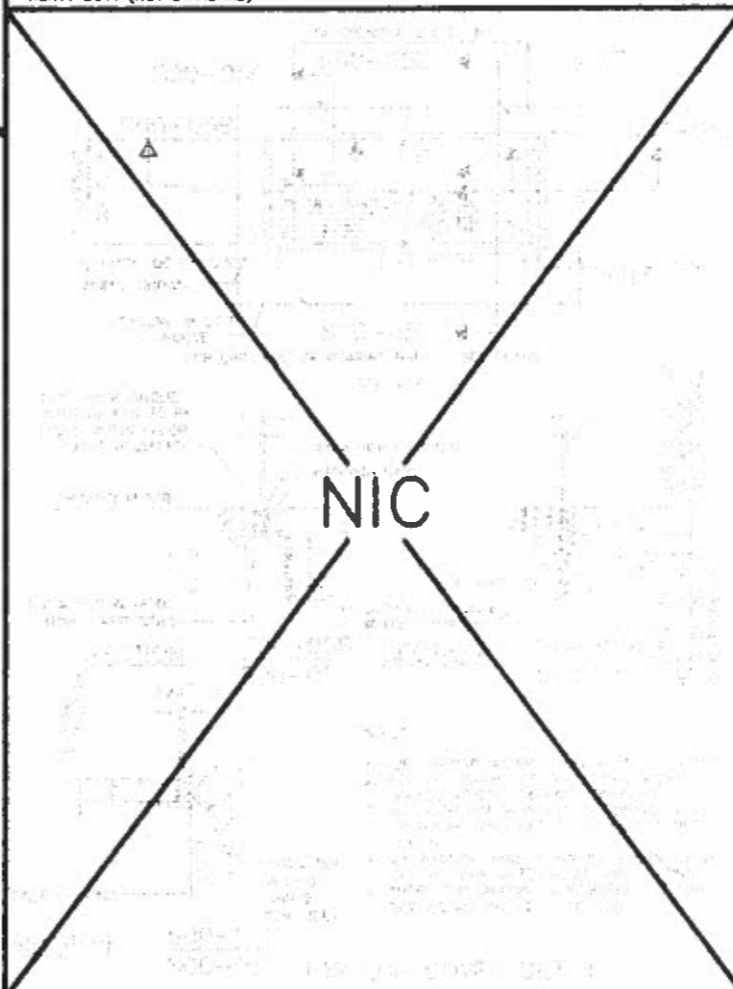


WALL AND FLOOR SLAB

* PROVIDE 3" COVER TO TOP BARS WHERE WATERSTOP IS REQD



NEW TO EXISTING STRUCTURES



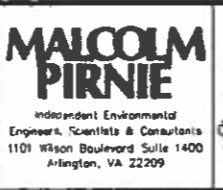
CURB

NOT TO SCALE

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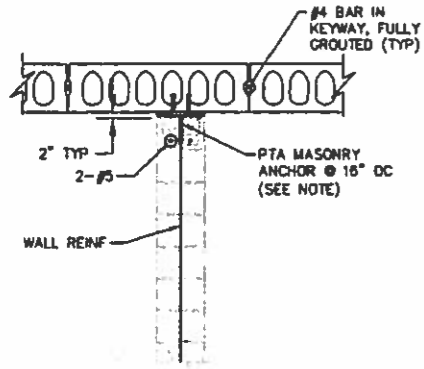
ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION PHASE 7E

STRUCTURAL MISCELLANEOUS STANDARD DETAILS

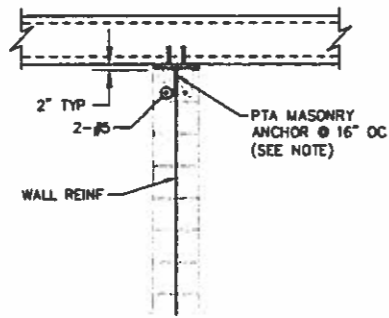
SHEET 4

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING	DATE: MAY 2007
	DRAWING NUMBER
	S00-05
	SHEET OF

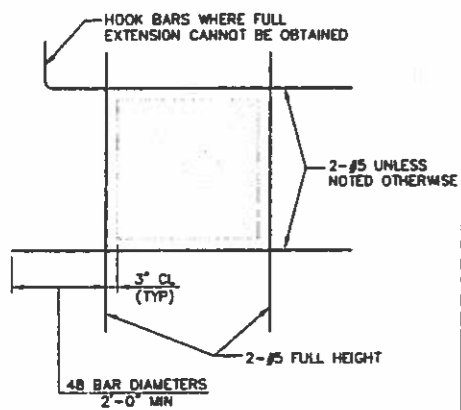
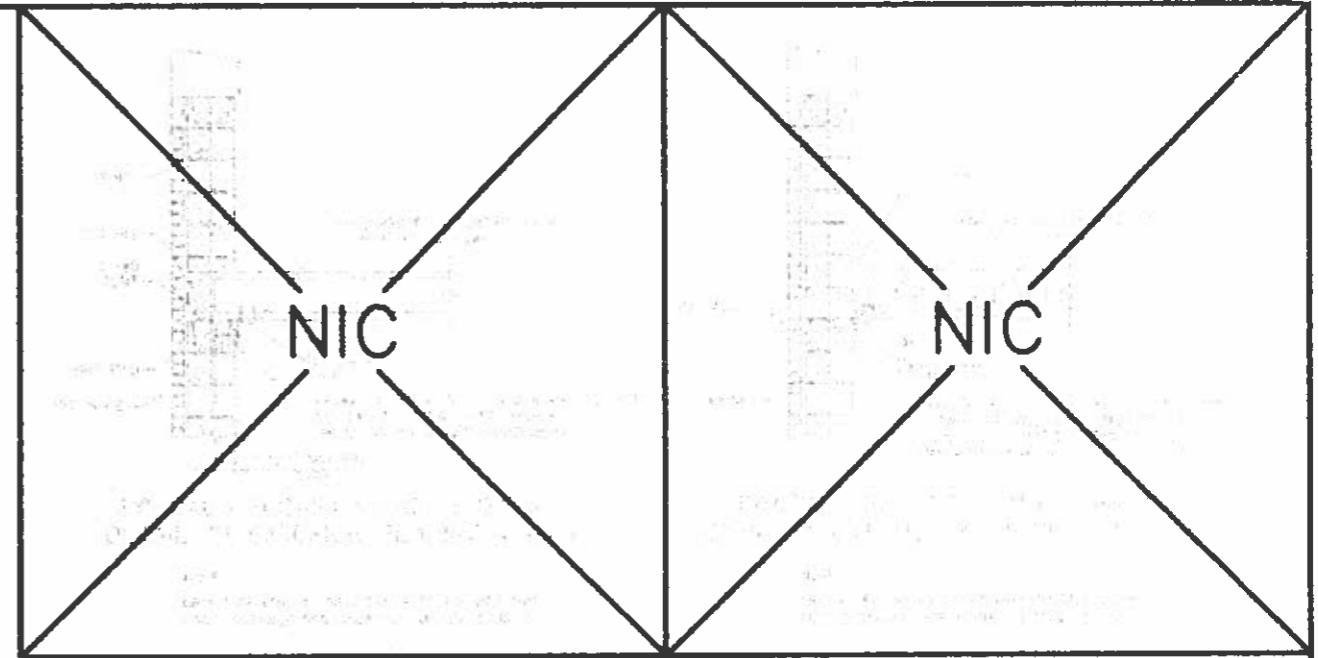
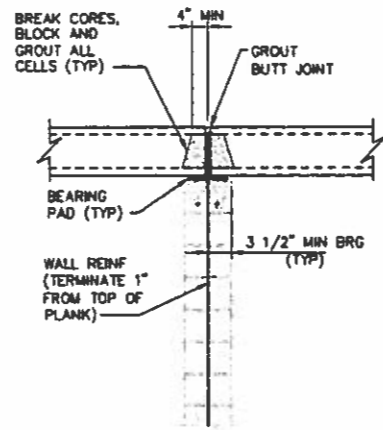


TYPICAL PRECAST PLANK SUPPORT
DETAIL AT INTERIOR NON-BEARING WALLS

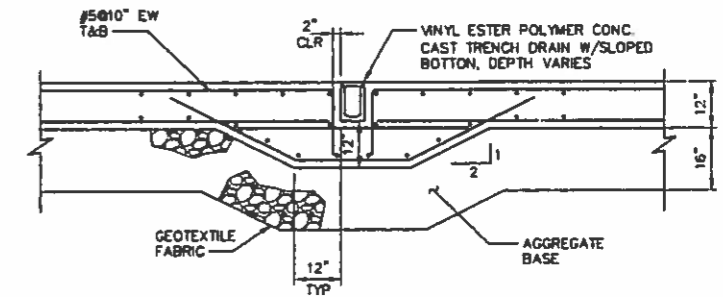
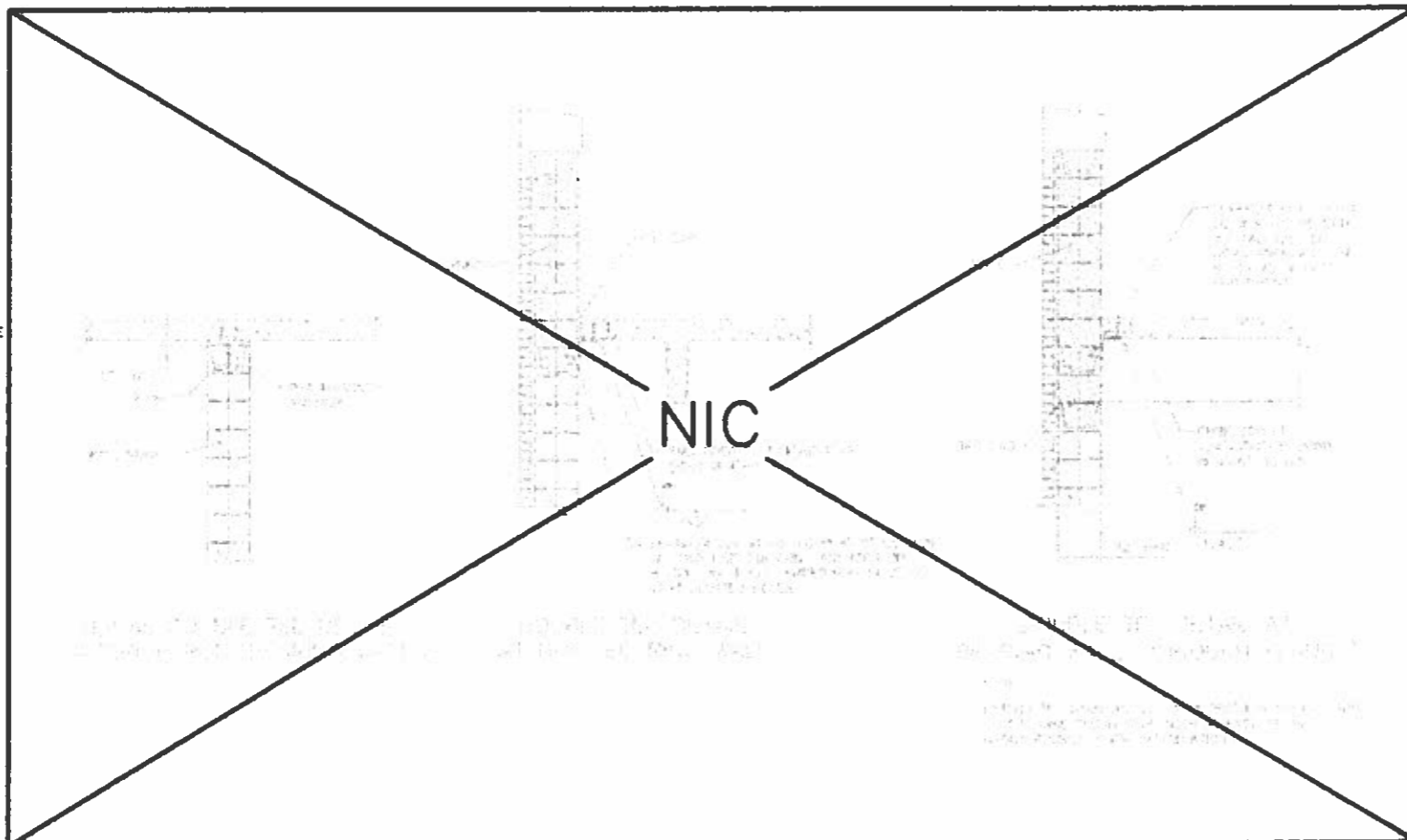
NOTE:
DO NOT CUT PRESTRESSING STRANDS
WITH ANCHOR CONNECTION, ADJUST
LOCATION IF NECESSARY.



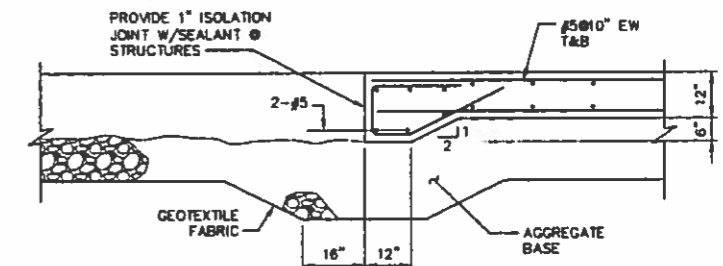
TYPICAL PRECAST PLANK SUPPORT DETAIL
AT INTERIOR BEARING WALLS



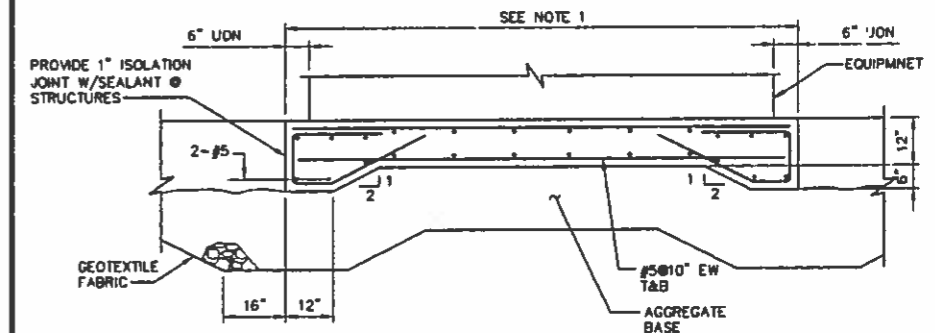
TYPICAL REINFORCEMENT AT
MASONRY WALL OPENINGS



TRENCH DRAIN DETAIL



SLAB ISOLATION JOINT DETAIL

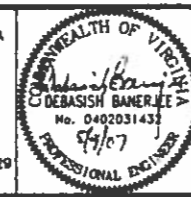


EQUIPMENT PAD DETAIL

NOTE:
1. REFER TO OTHER SHEETS FOR SIZE AND
LOCATION OF EXTERIOR PAD-MOUNTED EQUIPMENT

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PIRNIE**
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1101 Wilson Boulevard Suite 1400
Arlington, VA 22209

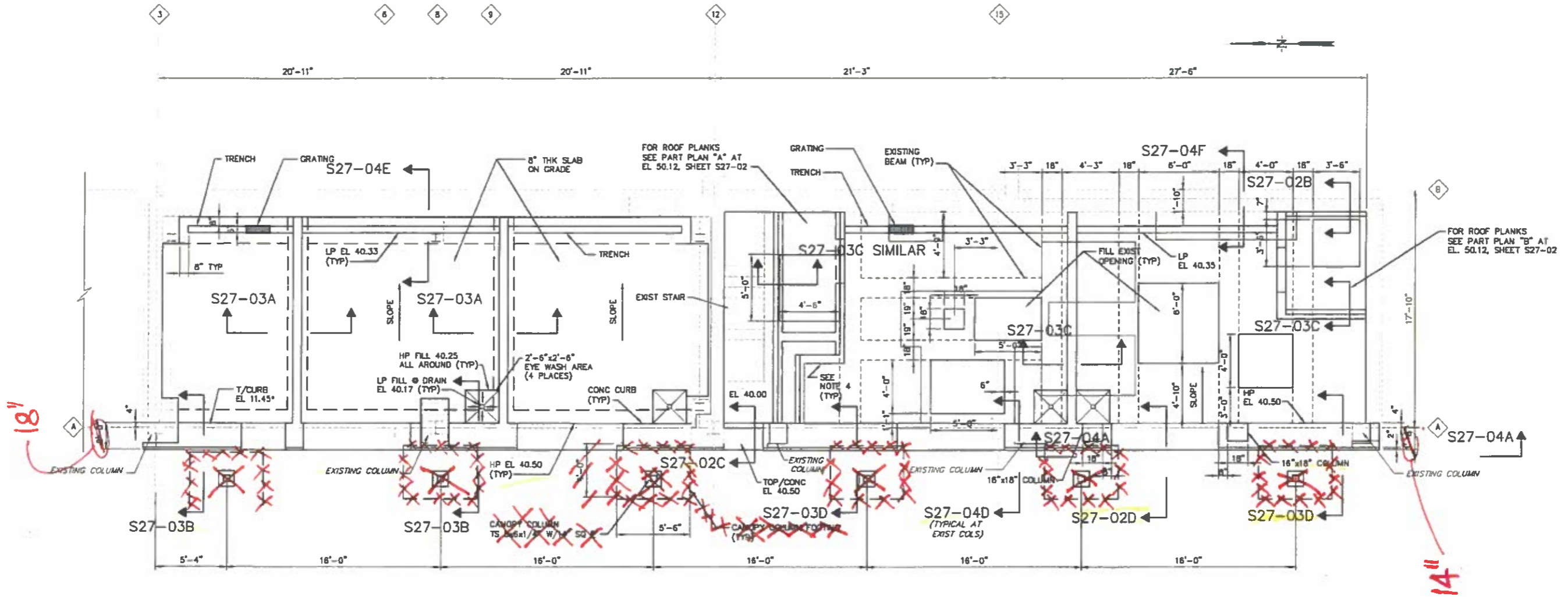


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

STRUCTURAL
MISCELLANEOUS STANDARD DETAILS
SHEET 5

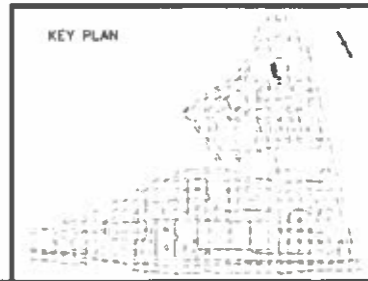
THE SCALE BAR
SHOWN BELOW
MEASURES ONE
INCH LONG ON
THE ORIGINAL
DRAWING.

DATE: MAY 2007
DRAWING
NUMBER
S00-06
SHEET OF



PLAN
 2 0 6
 SCALE: 1/4" = 1'-0"

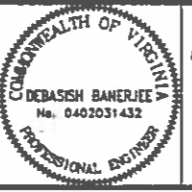
- NOTES:
1. ALL DIMENSIONS AND ELEVATION OF EXISTING STRUCTURES SHALL BE FIELD VERIFIED.
 2. SEE DEMOLITION DRAWINGS FOR REMOVAL OF EXISTING COLUMNS, SLABS ON GRADE AND OTHER ITEMS.
 3. SLAB ON GRADE:
 THICKNESS = 8" MIN.
 REINF: #5@12" E.W.
 4. CONCRETE CURBS UNDER MASONRY WALL SHALL BE COORDINATED WITH "A" DWGS.
 5. SEE SH S-27-03 FOR TYPICAL OPENING CLOSURE DETAIL.
 6. DESIGN LIVE LOAD=125 PSF.
 7. DESIGN BLAST PRESSURE ON MASONRY WALLS IN FLAMMABLE STORAGE AREA AND REACTIVE/EXPLOSIVE AREA = 100 PSF.



NO.	ISSUED FOR	DATE	BY	APPROVED

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 PROJ ENGR: DB
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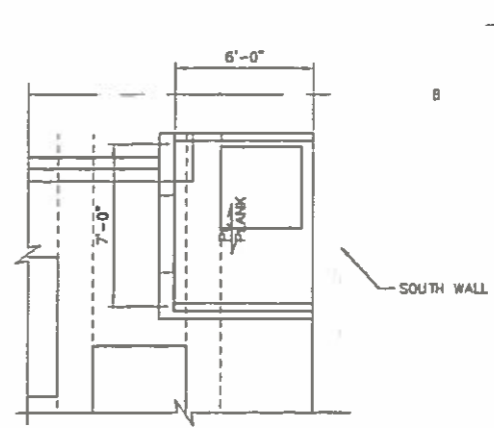
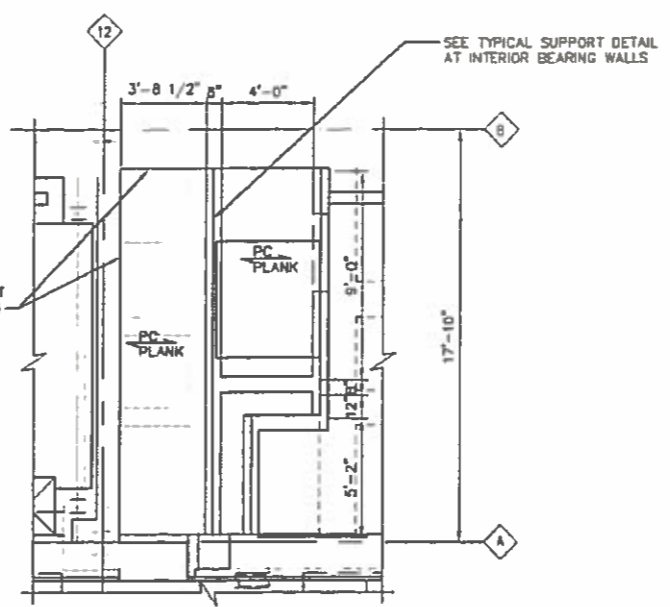
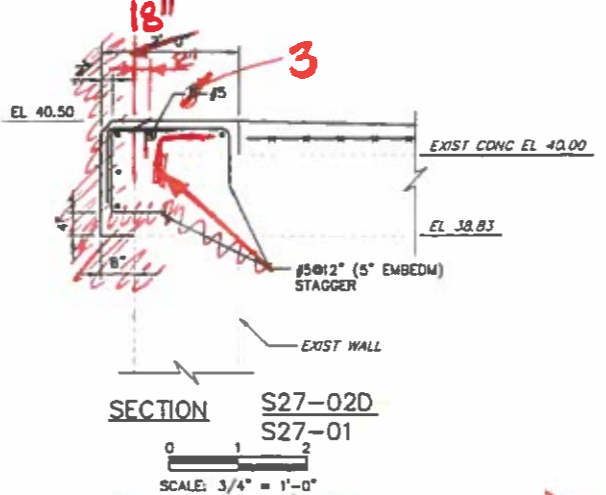
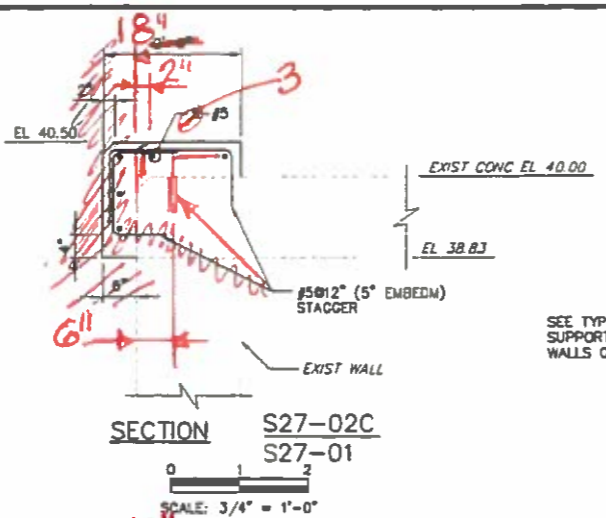
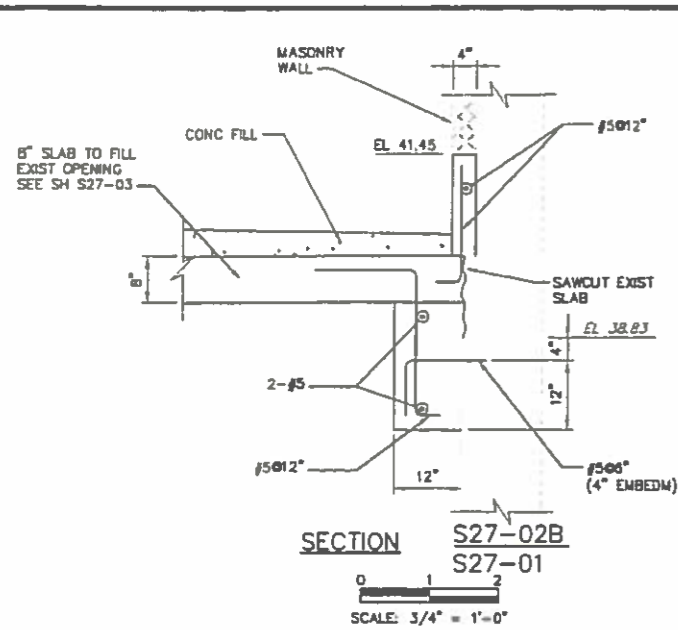
MALCOLM PIRNIE
 Independent Environmental Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

STRUCTURAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 PLAN AT EL 41.50

DATE: MAY 2007
 DRAWING NUMBER: S27-01
 SHEET OF

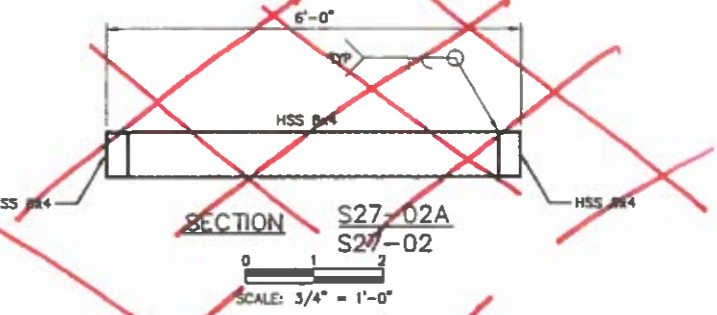


- NOTES:
1. PRECAST CONC PLANKS: 6" THICK.
 2. DESIGN LOAD:
LIVE LOAD=50 PSF
BLAST PRESSURE = 100 PSF ALL DIRECTIONS
 3. SEE STANDARD DETAILS FOR PLANK SUPPORT AND EDGE CONDITIONS.

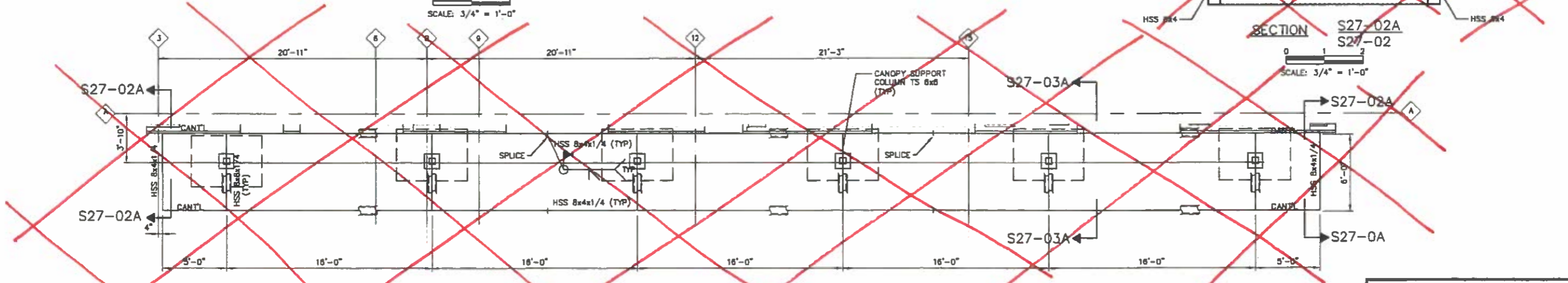
- NOTES:
1. PRECAST CONC PLANKS: 6" THICK.
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LIVE LOAD=50 PSF
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 3. SEE STANDARD DETAILS FOR PLANK SUPPORT AND EDGE CONDITIONS.

PART PLAN "B" AT EL 50.12
SCALE: 1/4" = 1'-0"

PART PLAN "A" AT EL 50.12
SCALE: 1/4" = 1'-0"

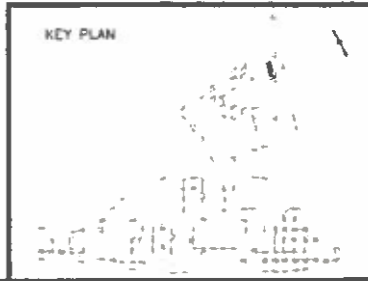


- NOTES:
1" TOP OF STEEL



- NOTE:
1. ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHALL BE FIELD VERIFIED.
 2. TOP OF STEEL EL 52.67.
 3. DESIGN LIVE LOAD=50 PSF.
 4. FIELD SPLICE SHALL BE DONE AT GRADE.
 5. PROVIDE SUPPORT TO CANOPY FRAME AT ENDS AND AT A SPACING OF 30'-0" MAX ALONG THE SPAN DURING LIFTING.

CANOPY SUPPORT PLAN
SCALE: 1/4" = 1'-0"



DESIGNED	JC
DRAWN	EER/AK
CHECKED	DB
PROJ ENGR.	DB
CAD REF. NO.	15063HAZO
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



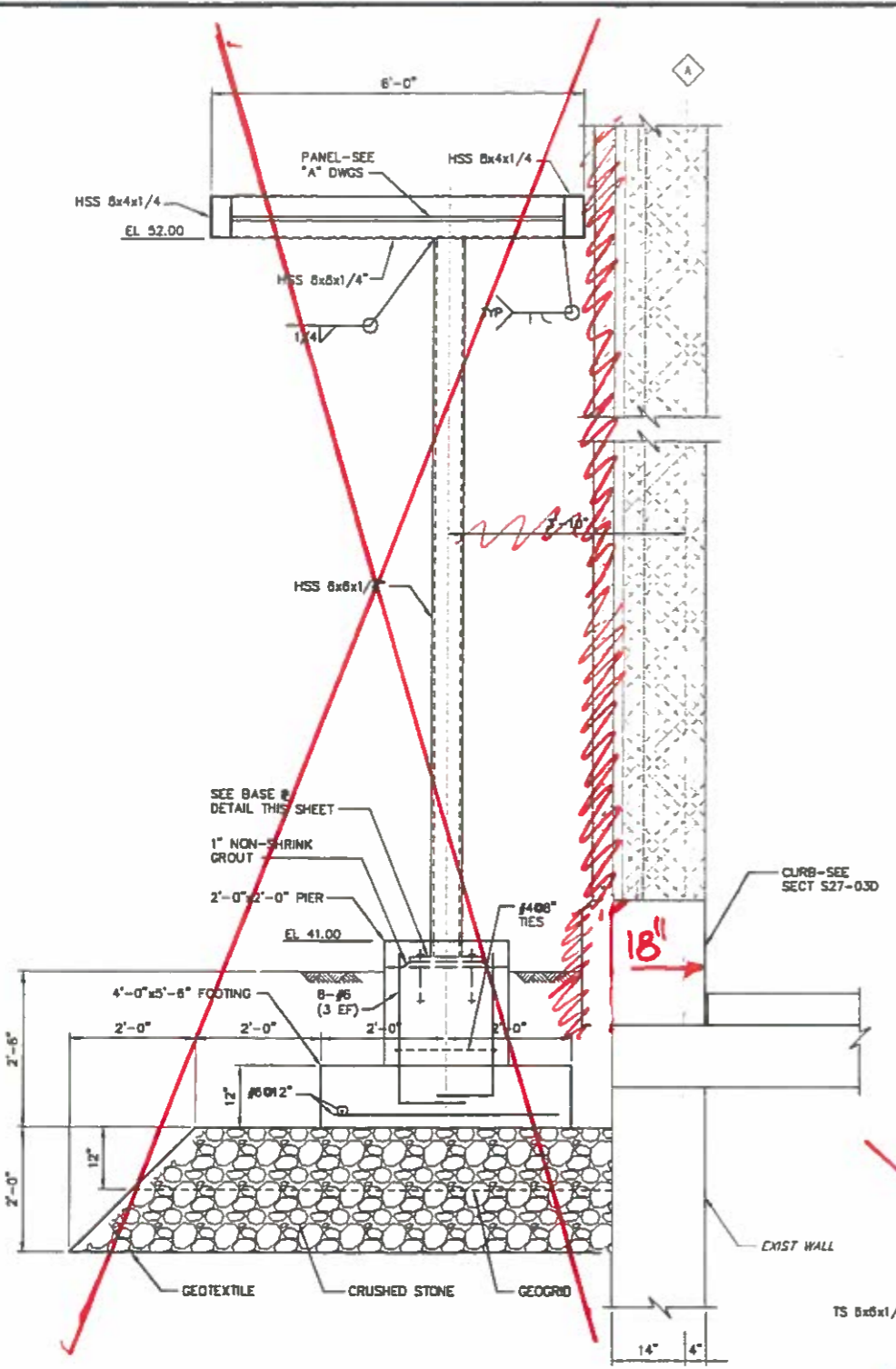
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Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1100
Arlington, VA 22209



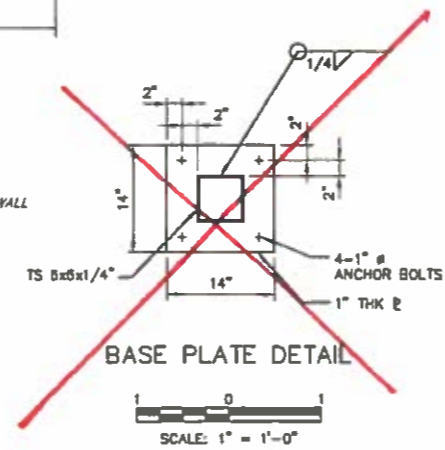
ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

STRUCTURAL
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
PART PLANS AND CANOPY DETAILS

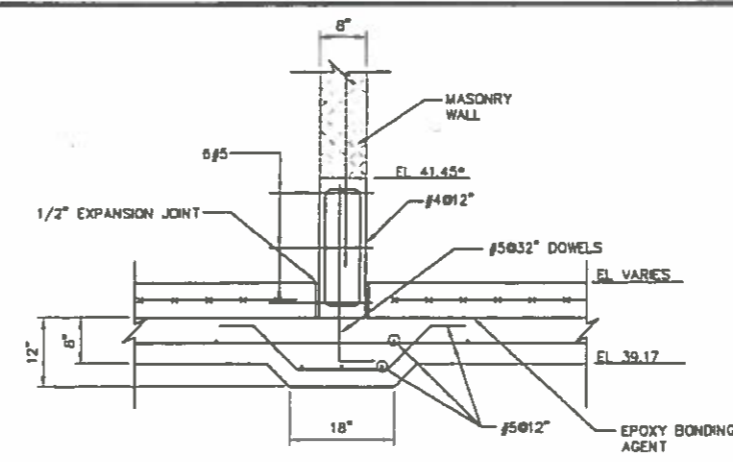
DATE: MAY 2007
DRAWING NUMBER
S27-02
SHEET OF



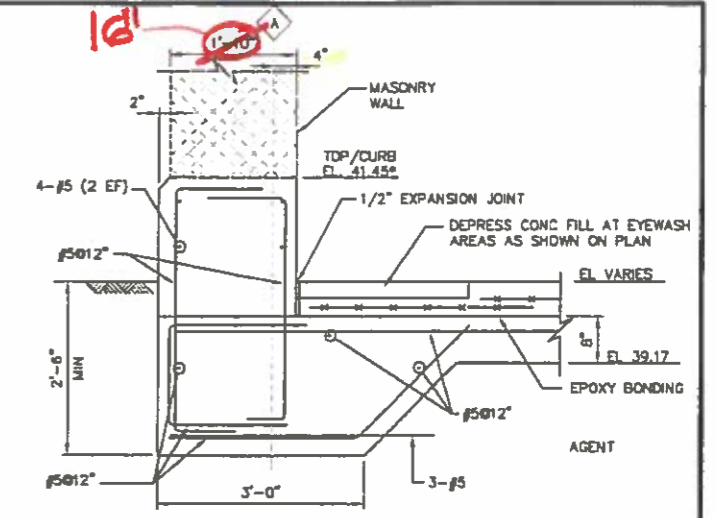
SECTION S27-03A
S27-02
SCALE: 3/4" = 1'-0"



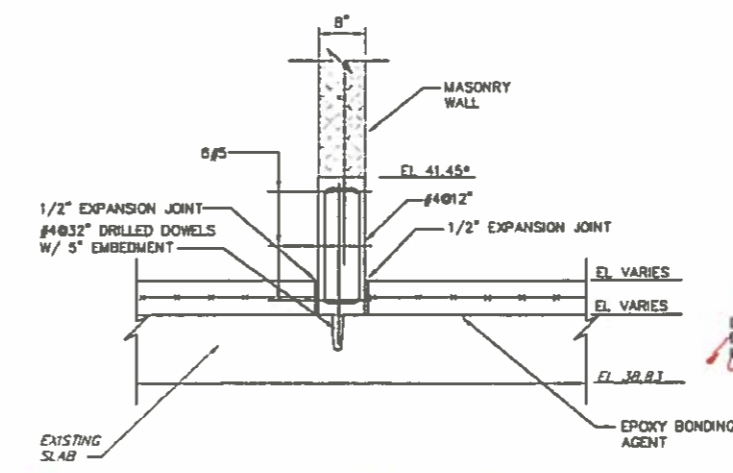
SCALE: 1" = 1'-0"



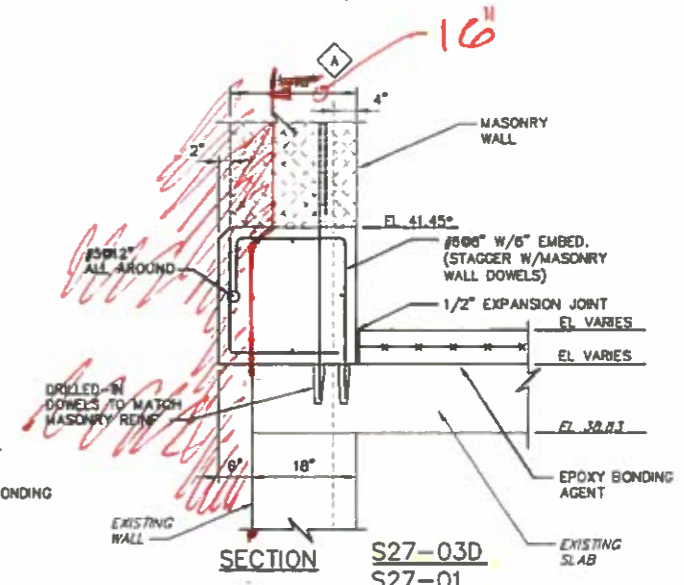
SECTION S27-03A
S27-01
SCALE: 3/4" = 1'-0"



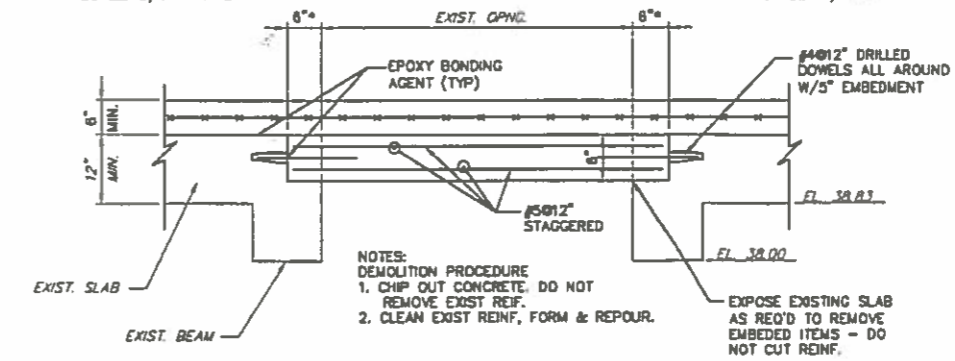
SECTION S27-03B
S27-01
SCALE: 3/4" = 1'-0"



SECTION S27-03C
S27-01
SCALE: 3/4" = 1'-0"



SECTION S27-03D
S27-01
SCALE: 3/4" = 1'-0"



TYPICAL OPENING CLOSURE DETAIL
SCALE: 3/4" = 1'-0"

DESIGNED	JC
DRAWN	EER
CHECKED	DB
PROLENGR.	DB
CAD REF. NO.	1S064HAZD
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)

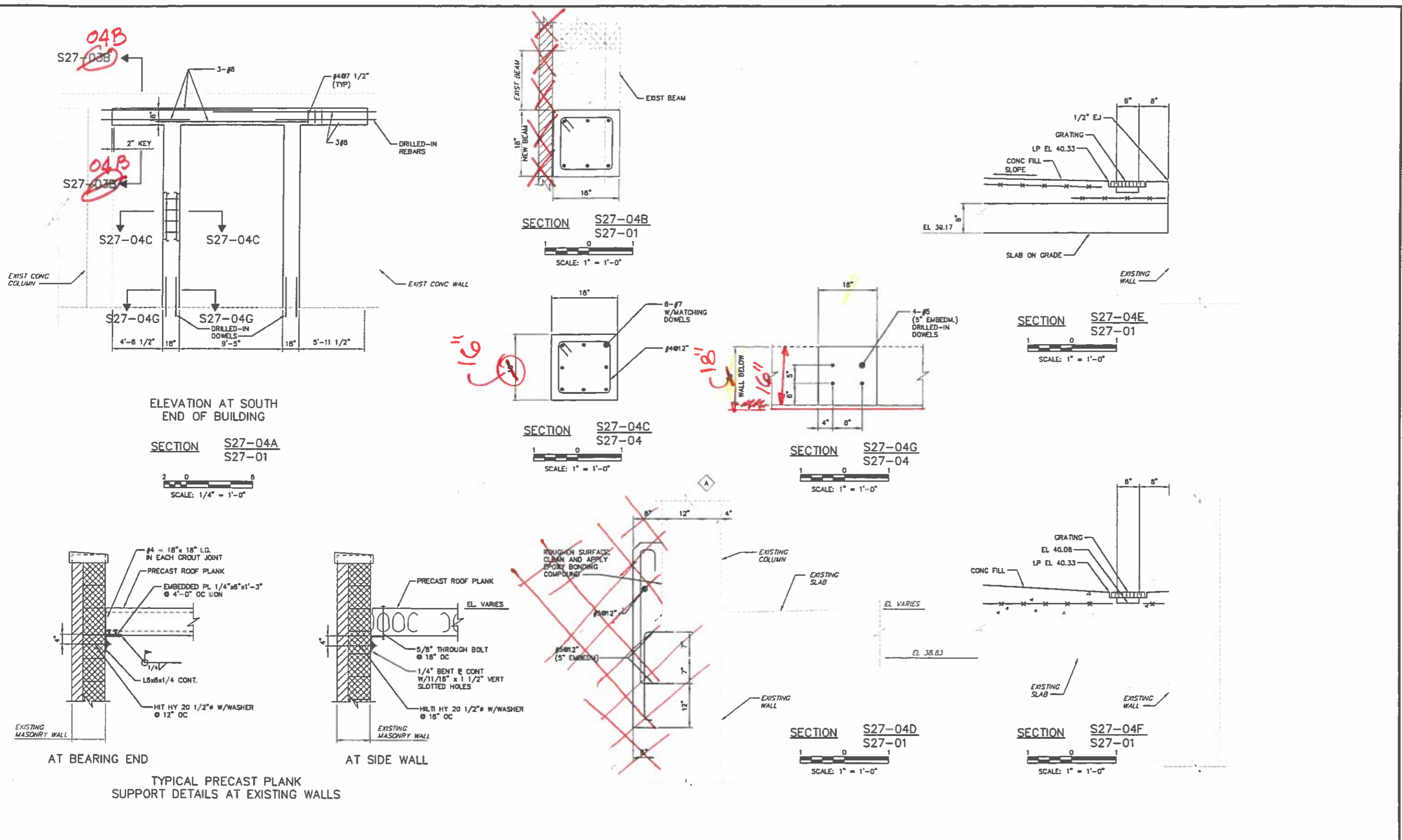


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

STRUCTURAL
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
SECTIONS AND DETAILS
SHEET 1

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007 DRAWING NUMBER S27-03 SHEET OF
---	---

PLAN STING
JC
EER
DB
DB
065HA



ELEVATION AT SOUTH END OF BUILDING

SECTION S27-04A S27-01

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

SECTION S27-04B S27-01

SCALE: 1" = 1'-0"

SECTION S27-04C S27-04

SCALE: 1" = 1'-0"

SECTION S27-04G S27-04

SCALE: 1" = 1'-0"

SECTION S27-04E S27-01

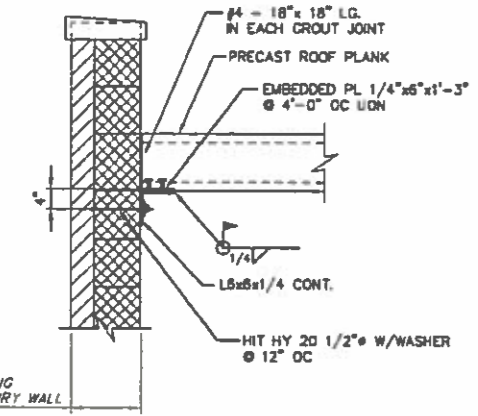
SCALE: 1" = 1'-0"

SECTION S27-04D S27-01

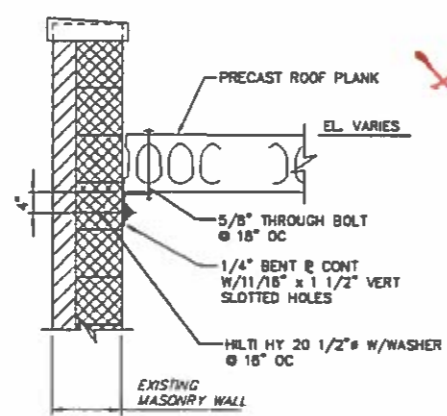
SCALE: 1" = 1'-0"

SECTION S27-04F S27-01

SCALE: 1" = 1'-0"



AT BEARING END



AT SIDE WALL

TYPICAL PRECAST PLANK SUPPORT DETAILS AT EXISTING WALLS

DESIGNED	JC	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1883 (NA83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)			ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	STRUCTURAL HOUSEHOLD HAZARDOUS MATERIALS FACILITY SECTIONS AND DETAILS SHEET 2	DATE: MAY 2007
DRAWN	EER						DRAWING NUMBER
CHECKED	DB						S27-04
PROJ. ENGR.	DB						
CAD REF. NO.	1S065HAZ0						
NO.	ISSUED FOR	DATE	BY	APPROVED			SHEET OF

ABBREVIATIONS:

ACOUS ACQUSTICAL
ACT ACQUSTICAL TILE
ADMIN ADMINISTRATION
AFF ABOVE FINISHED FLOOR
AHU AIR HANDLING UNIT
ALT ALTERNATE
AL ALUMINUM
ANCH ANCHOR
AB ANCHOR BOLT
& AND
ARCH ARCHITECT(URAL)
@ AT
B & B BALLED & BURLAPPED
BSMT BASEMENT
BM BEAM
BEL BELOW
BET BETWEEN
BLK BLOCK
BD BOARD
BOT BOTTOM
BRK BRICK
BC BRICK COURSES
BLDG BUILDING
BUR BUILT-UP ROOFING
CAB CABINET
CP CAST IN PLACE
CLG CEILING
CD CEILING DIFFUSER
CR CEILING REGISTER
CER CERAMIC
CT CERAMIC TILE
C/S CIVIL SANITARY
CLO CLOSET
COL COLUMN
CONC CONCRETE
CB CONCRETE BLOCK
CONST CONSTRUCTION
CONT CONTINUOUS
CONTR CONTRACTOR
CJ CONTROL JOINT
CP CONTROL PANEL
CTSK COUNTERSINK
CRS COURSE
CU CUBIC
CL CLEAR
DETS DETAILS
DIA DIAMETER
DIM DIMENSION
DO DOOR OPENING
DR DOOR
DN DOWN
DOW DOWEL
DWG DRAWING
DF DRINKING FOUNTAIN
EA EACH
E EAST
EWC ELECTRIC WATER COOLER
ELEC ELECTRICAL
EL ELEVATION
EMER EMERGENCY
ES EMERGENCY SHOWER
ESB ENERGY SAVING BALLAST
ENGR ENGINEER
EQ EQUAL
EQUIP EQUIPMENT
EXIST EXISTING
EXP EXPANSION
EXP BT EXPANSION BOLT
EJ EXPANSION JOINT
EXT EXTERIOR
FAC FACILITY
FT FEET OR FOOT
FRP FIBER REINFORCED PLASTIC
FWP FIBROUS WOOD PANEL
FIN FINISH(ED)
FFL FINISH FLOOR

FIN. GR. FINISHED GRADE
FFE FINISHED FLOOR ELEVATION
FE FIRE EXTINGUISHER
FEC FIRE EXTINGUISHER CABINET
FP FIREPROOF
FBL FIXED BLADE LOUVER
FL FLOOR
FD FLOOR DRAIN
FL EL FLOOR ELEVATION
GA GAGE
GALV GALVANIZED
GS GALVANIZED STEEL
GC GENERAL CONTRACTOR
GL GLASS
GSFT GLAZED STRUCTURAL FACE TILE
GWF GLAZED WALL FINISH
GR GRADE
GRAN GRANITE
GND GROUND
GOFB GROUND AND CEMENTITIOUS FILLED FACE CONCRETE BLOCK
GOFB GROUND AND CEMENTITIOUS FILLED FACE - SLOTTED ACQUSTICAL BLOCK
GYP GYPSUM
GWB GYPSUM WALL BOARD
HPC HANDICAP
HDM HARDENER
HDW HARDWARE
HDR HEADER
HVAC HEATING, VENTILATING AND AIR CONDITIONING
HDCT HEAVY DUTY CONCRETE TOPPING
HT HEIGHT
HPT HIGH POINT
HS HIGH STRENGTH
HM HOLLOW METAL
HORZ HORIZONTAL
IN INCH(ES)
INFO INFORMATION
ID INSIDE DIMENSION
IF INSIDE FACE
INSUL INSULATION
INT INTERIOR
JC JANITOR'S CLOSET
JT JOINT
J JOIST
LAB LABORATORY
LAM LAMINATED
LAV LAVATORY
LVR LOUVER
LPT LOW POINT
MAINT MAINTENANCE
MH MANHOLE
MFR MANUFACTURER
MO MASONRY OPENING
MATL MATERIAL
MAX MAXIMUM
MECH MECHANICAL
MED MEDIUM
MET METAL
MEZZ MEZZANINE
MISC MISCELLANEOUS
MIN MINIMUM
MOD MODULAR
MLDG MOLDING
NOM NOMINAL
N NORTH
NA NOT APPLICABLE
NIC NOT IN CONTRACT
NTS NOT TO SCALE
NUMBER
OFF OFFICE
OC ON CENTER
OPNG OPENING
OPP OPPOSITE
OD OVERFLOW DRAIN
OH OVERHEAD
OHCD OVERHEAD COILING DOOR
OHSD OVERHEAD SLIDING DOOR

PTD PAINTED
PNL PANEL
PTN PARTITION
% PERCENT
PERF PERFORATED
P PLASTER
PL PLATE
PT POINT
PVC POLYVINYL CHLORIDE
PVF POLYVINYL FLUORIDE
PCP PORTLAND CEMENT PLASTER
PSF POUNDS PER SQUARE FOOT
PJ PREMOLDED JOINT
QTY QUANTITY
QT QUARRY TILE
RAD RADIUS
REF REFERENCE
REF PT REFERENCE POINT
REFR REFRIGERATOR
REINF REINFORCING
REDD REQUIRED
RT RIGHT
R RISER
RF ROOF
RD ROOF DRAIN
RFG ROOFING
RM ROOM
RO ROUGH OPENING
RUB RUBBER
SECT SECTION
SHT SHEET
SM SHEET METAL
SMS SHEET METAL SCREWS
S SOUTH
SPEC SPECIFICATION
SPKLR SPRINKLER
SQ SQUARE
SQ FT SQUARE FEET
SS STAINLESS STEEL
STD STANDARD
STA STATION
STL STEEL
SJ STEEL JOIST
STOR STORAGE
STRUC STRUCTURAL
SUSP SUSPENDED
S GRID SUSPENDED GRID
TEL TELEPHONE
TER TERRAZZO
TC TERRA COTTA
THKN'S THICKNESS
THD THREAD(ED)
THRU THROUGH
TOC TOP OF CONCRETE
TC TOP OF CURB
TOD TOP OF DECK
TOF TOP OF FOOTING
TOM TOP OF MASONRY
TOS TOP OF SLAB
TOS TOP OF STEEL
TOW TOP OF WALL
TOP TOPPING
TSM TRANSOM
T TREAD
TYP TYPICAL
TW TREAD WIDTH
UL UNDERWRITERS LABORATORY
UNFIN UNFINISHED
UNO UNLESS NOTED OTHERWISE
UNON UNLESS OTHERWISE NOTED
UR URINAL
UTIL UTILITY
VAR VARIES
V VENT
VERT VERTICAL

VEST VESTIBULE
VCT VINYL COMPOSITE TILE
VCB VINYL COVE BASE
VNYL CHEMICAL RESISTANT SHEET VINYL
VP VISION PANEL
WC WATER CLOSET
WT WEIGHT
W WEST
W WIDTH
WO WINDOW OPENING
W WITH
W/O WITHOUT
WD WOOD

SYMBOLS:

- (A) STRUCTURAL COLUMN CENTERLINE
WALL CENTERLINE IF NOT COLUMN
- EXISTING COLUMN CENTERLINE
- NUMBER
- (A) ACCESSORY, LAB FURNITURE & EQUIPMENT KEY
- (B) UL RATED DOOR AND FRAME IN HOURS
- (B) FIRE RESISTANCE RATING IN HOURS
- FIRE EXTINGUISHER LOCATIONS
- (A) BUILDING ELEVATION THIS SIDE
- CENTERLINE
- Ø DIAMETER
- (E) EXT SIGN LOCATION
- WALL ELEVATION SYMBOL
- WALL NUMBER
- SHEET NUMBER
- DOOR NUMBER SYMBOL
- DOOR TYPE
- ROOM NUMBER
- CEILING FINISH SYMBOL
HEIGHT ABOVE FINISH FLOOR
- WALL PARTITION TYPE
- ROOF DRAIN
SIZE & TRIBUTARY AREA
- DEMOLITION
- NEW CONSTRUCTION
- EXISTING CONSTRUCTION

GENERAL NOTES:

1. THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
2. ITEMS NOT NOTED ON DRAWINGS SHALL BE CONSIDERED THE SAME AS NOTED ITEMS WHICH ARE GRAPHICALLY REPRESENTED IN THE SAME MANNER.
3. FOR CONCRETE AND STEEL SIZES AND CONFIGURATIONS SEE "S" DRAWINGS.
4. FOR LOCATION OF HVAC EQUIPMENT AND PADS COORDINATE W/ "H" DRAWINGS.
5. ● FE "A" INDICATES DRY CHEMICAL FIRE EXTINGUISHER TYPE SPECIFIED.
6. ● FE "B" INDICATES CARBON DIOXIDE FIRE EXTINGUISHER TYPE SPECIFIED.
7. • VERIFY DIMENSION WITH MANUFACTURER OF EQUIPMENT SUPPLIED.
8. FOR DOOR SCHEDULE AND DETAILS, REFERENCE SHEET A00-02.
9. FOR BOLLARD DETAILS, REFERENCE SHEET A00-02.
10. FOR ROOM FINISH SCHEDULE, REFERENCE SHEET A00-02.
11. FOR EXACT LOCATION AND SIZE OF HVAC EQUIPMENT AND VENTS COORDINATE WITH "H" DRAWINGS.
12. COORDINATE W/ ELECTRICAL DWGS FOR LOCATION & SIZE OF RECESSED ELECTRICAL DEVICES IN WALLS. SEE ELECTRICAL DWGS FOR LOCATIONS AND DETAILS.
13. COORDINATE W/ ELECTRICAL DWGS FOR LIGHT FIXTURE TYPES AND LOCATIONS.
14. COORDINATE EXTENT OF DEMOLITION WORK WITH "D" DRAWINGS.
15. VERTICAL MASONRY WALL REINFORCEMENT SHALL BE #5 AT 32" OC UNLESS OTHERWISE NOTED. ALL WALL CELLS WITH VERTICAL REINFORCING BARS SHALL BE GROUTED SOLID FULL HEIGHT AND WIDTH.
16. FOR TYPICAL SPECIAL BRICK DETAILS REFERENCE SHEET A00-02.
17. PROVIDE FULLY GROUTED VERTICALLY REINFORCED CELL AT EACH EXTERIOR CORNER AND "T" INTERSECTION OF ALL MASONRY.
18. ALL CONCRETE BLOCK AND CONCRETE OPENINGS FOR ALL DOORS, WINDOWS, LOUVERS AND MISCELLANEOUS OPENINGS SHOWN ARE NOMINAL DIMENSIONS. ACTUAL ROUGH OPENING (RO) ARE AS FOLLOWS:
CONCRETE BLOCK WALLS: ACTUAL OPENING SHALL BE 3/8" LARGER THAN DIMENSION SHOWN
CONCRETE WALLS: ACTUAL OPENING SHALL BE 1/2" LARGER THAN DIMENSION SHOWN
19. LIGHT FIXTURES SHOWN ABOVE DOORS ON "E" DRAWINGS SHALL BE CENTERED ON DOORS.
20. DAMPPROOFING SHALL BE APPLIED TO THE OUTSIDE FACE OF CONCRETE UNIT MASONRY IN ALL CAVITY WALLS IN ACCORDANCE WITH SPECIFICATION SECTION 07111.

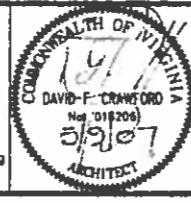
CONSTRUCTION STAGING REQUIREMENTS:

1. INSTALL DOOR FRAMES AS SHOWN AND SPECIFIED AS THE WORK PROGRESSES. DO NOT HANG DOORS AND INSTALL FINISH HARDWARE UNTIL ALL WORK BY ALL CONTRACTORS HAS BEEN COMPLETED IN AN AREA AND THERE IS NO FURTHER CONSTRUCTION ACTIVITIES OR REQUIRED ENTRY BY ANY CONTRACTOR. DOORS AND FINISHED HARDWARE INSTALLED AND SUBSEQUENTLY DAMAGED IN ANY WAY FOR ANY REASON SHALL BE IMMEDIATELY REPLACED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE COUNTY. IMMEDIATELY MEANS FROM THE TIME THE DAMAGE IS OBSERVED AND REPORTED TO THE GENERAL CONTRACTOR BY CONSTRUCTION MANAGEMENT TO THE TIME OF REINSTALLATION SHALL NOT BE MORE THAN ONE MONTH.
2. DOOR FRAMES SHALL BE BOXED OUT IN WOOD TO PREVENT CONSTRUCTION DAMAGE.
3. INSTALL TEMPORARY 3/4" PLYWOOD DOORS AND LOCKS. REMOVE WHEN CONSTRUCTION ACCESS AND ACTIVITIES ARE FINISHED IN AN AREA AND AT THE TIME WHEN DOORS AND FINISH HARDWARE ARE INSTALLED.

HAZARDOUS MATERIAL CLASSIFICATIONS									
	OFFICE 101	STORAGE 102	CORROSIVE STORAGE AREA 103	LATEX/TOXICS STORAGE AREA 104	RESTROOM 105	COMPUTER STORAGE AREA 106	FLAMMABLE STORAGE AREA 107	REACTIVE AREA 108	MECH ROOM
ARCH	OCCUPANCY CLASSIFICATION	F2	F2	H4	H4	H3	H3	H3	
	CONSTRUCTION TYPE	11B	11B	11B	11B	11B	11B	11B	
ELEC	NEC CLASSIFICATION	NA	NA	CLASS I DIV1	CLASS I DIV1	NA	CORROSIVE	CLASS I DIV1	CLASS I DIV1
HVAC	MATERIAL OF CONSTRUCTION	NON CORROSIVE	NON CORROSIVE	CORROSIVE	CORROSIVE	NON CORROSIVE	CORROSIVE	CORROSIVE	NON CORROSIVE

DESIGNED MH
DRAWN MH
CHECKED DFC
PROLENGR DFC
CAD REF. NO. 1A0000000
APPROVED

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ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

ARCHITECTURAL
GENERAL
ABBREVIATIONS, SYMBOLS & GENERAL NOTES

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
DATE: MAY 2007
DRAWING NUMBER
A00-01
SHEET OF

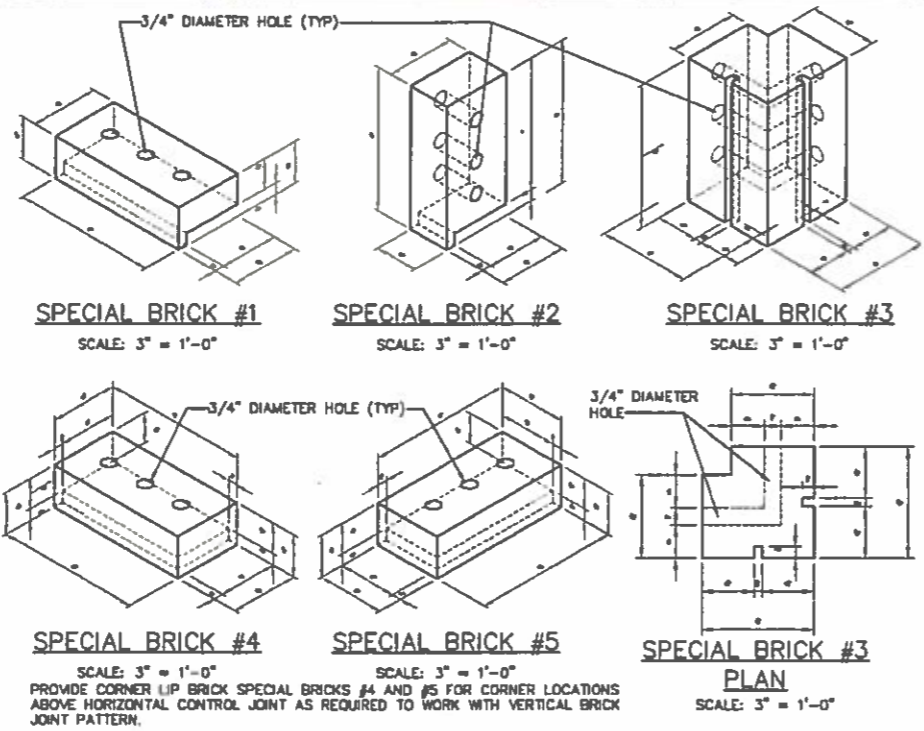
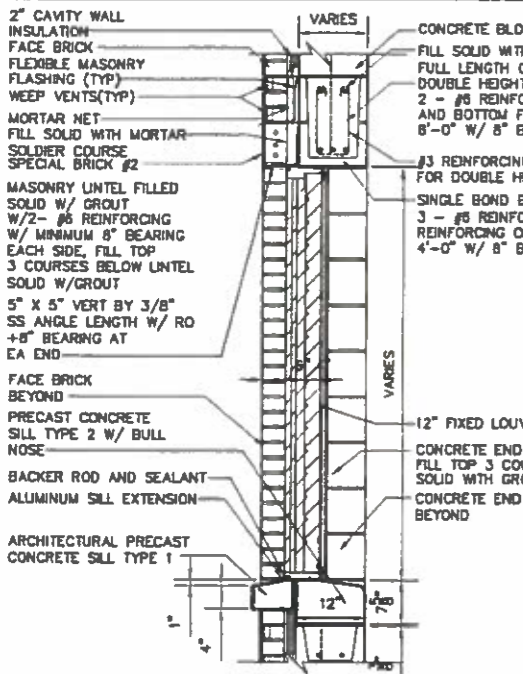
FINISH LEGEND	
FLOOR	CONCRETE HARDENER CONCRETE HEAVY DUTY CONCRETE TOPPING CHEMICAL RESISTANT CONCRETE TOPPING ACCESS FLOOR QUARRY TILE
WALLS	PAINTED CONCRETE BLOCK EXISTING BRICK VENEER PAINTED SLOTTED ACOUSTICAL CONCRETE BLOCK ACOUSTICAL WALL BARRIER PAINTED CONCRETE CHEMICAL RESISTANT CONCRETE COATING RUBBER COVE BASE ACOUSTICAL WALL PANEL PERFORATED EXT SOUND BARRIER CHEMICAL RESISTANT CONCRETE TOPPING QUARRY TILE BASE COVE
CEILING	ACOUSTICAL CEILING TILE WITH EXPOSED SUSPENSION SYSTEM PAINTED - CHEMICAL RESISTANT EPOXY PRECAST CONCRETE PLANK PAINTED CONCRETE ACOUSTICAL CEILING PANEL PAINTED CONCRETE

ROOM FINISH SCHEDULE									
ROOM & NUMBER	WALL MATERIAL				FLOOR		WINDOW TREATMENT	CEILING TYPE	REMARKS
	N	E	S	W	MAT'L	BASE			
HOUSEHOLD HAZARDOUS MATERIALS (AREA 27)									
OFFICE 101	PTB	PTB	PTB	PTB	HDCT	HDCT	-	XPC	KTC
STORAGE AREA 102	PTB	PTB	PTB	PTB	HDCT	HDCT	-	XPC	KTC
CORROSIVE STORAGE AREA 103	PTB	PTB	PTB	PTB	CRCT	CRCT	-		PTC
LATEX/TOXIC STORAGE AREA 104	PTB	PTB	PTB	PTB	CRCT	CRCT	-		PTC
RESTROOM 105	QT/PTB	QT/PTB	QT/PTB	QT/PTB	QT	QT	-		QT/PTB
COMPUTER STORAGE AREA 106	PTB	PTB	PTB	PTB	CRCT	CRCT	-		PTC
FLAMMABLE STORAGE AREA 107	PTB	PTB	PTB	PTB	CRCT	CRCT	-		PTC
REACTIVE/EXPLOSIVE AREA 108	PTB	PTB	PTB	PTB	CRCT	CRCT	-		PCP

DOOR SCHEDULE																
BUILDING NAME	DOOR NUMBER	DOOR		ROUGH OPENING / FRAME SIZE		MATERIAL TYPE	DOOR TYPE	DOOR ELEV	DETAILS			UL RATED	PEH	HOW	REMARKS	
		WIDTH	HEIGHT	WIDTH	HEIGHT				HEAD	JAMB	THRESHOLD					
HOUSEHOLD HAZARDOUS MATERIALS (AREA A27)	101-1	3'-0"	6'-0"	-	-	-	-	-	-	-	-	-	NR	-	****	
	101-2	3'-0"	6'-10"	3'-4"	7'-0"	AL	A	A2	A	A	B	-	R	-	*	
	103-1	203'-10"	8'-0"	8'-0"	8'-0"	AL	B	B	A	A	B	-	R	-	*	
	104-1	203'-10"	8'-10"	8'-0"	8'-0"	AL	B	B	A	A	B	-	R	-	*	
	105-1	2'-8"	6'-10"	3'-0"	7'-0"	AL	A	A1	A	A	A	-	R	-	*	
	106-1	3'-0"	7'-10"	3'-4"	8'-0"	AL	A	A	A	B	B	MT	-	NR	-	*
	106-2	203'-10"	8'-10"	8'-0"	8'-0"	AL	B	B	A	A	A	-	R	-	*	
	107-1	203'-10"	8'-10"	8'-0"	8'-0"	AL	B	B	A	A	A	-	R	-	*	
108-1	3'-0"	7'-10"	3'-4"	8'-0"	HM	C	A	B	B	G	A	R	-	*		

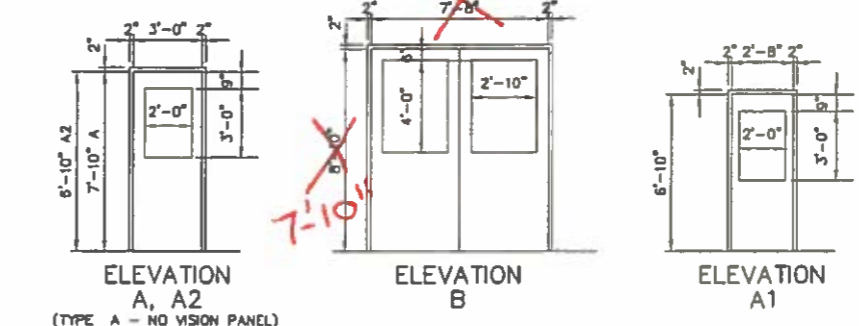
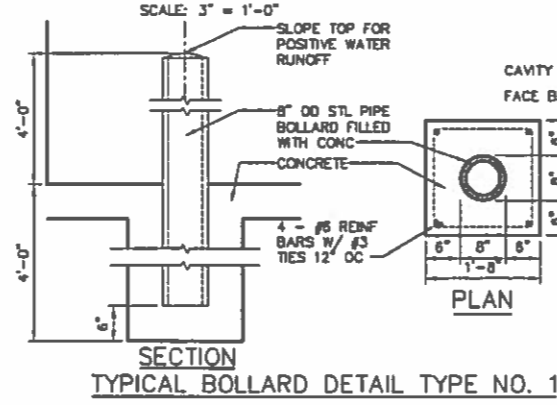
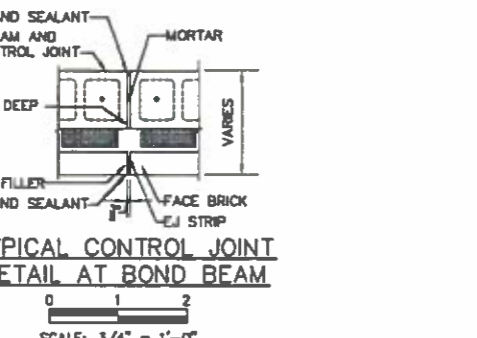
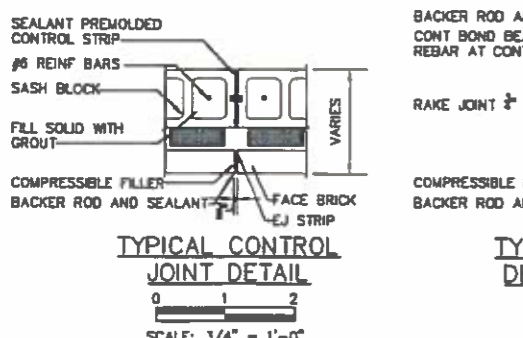
PEH - INDICATES PANIC EXIT HARDWARE - R=REQUIRED, NR= NOT REQUIRED
AL - INDICATES ALUMINUM DOOR AND FRAME
HM - INDICATES HOLLOW METAL DOOR AND FRAME
MT - INDICATES MARBLE THRESHOLD
* - CARD ACCESS AND INTRUSION DETECTION
**** - COORDINATE WITH SPECIFICATION SECTION 10805
HDW - INDICATES HARDWARE TYPES. REFERENCE DOOR HARDWARE SCHEDULE IN PARAGRAPH 3.08A SPECIFICATION SECTION 08712 FOR DOOR HARDWARE TYPES.

DOOR TYPES:
A - ALUMINUM DOOR AND FRAME - SINGLE DOOR
B - ALUMINUM DOOR AND FRAME - DOUBLE DOOR
C - HOLLOW METAL DOOR AND FRAME - SINGLE DOOR

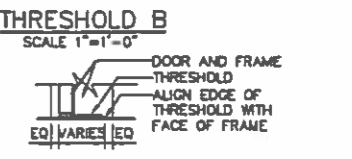
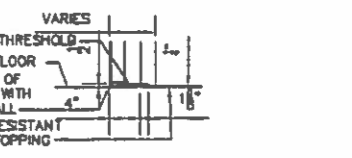
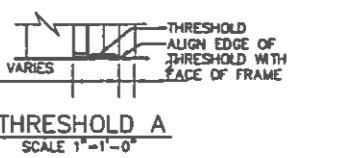
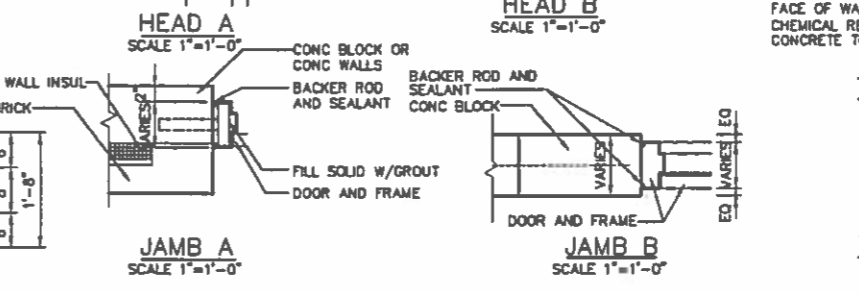
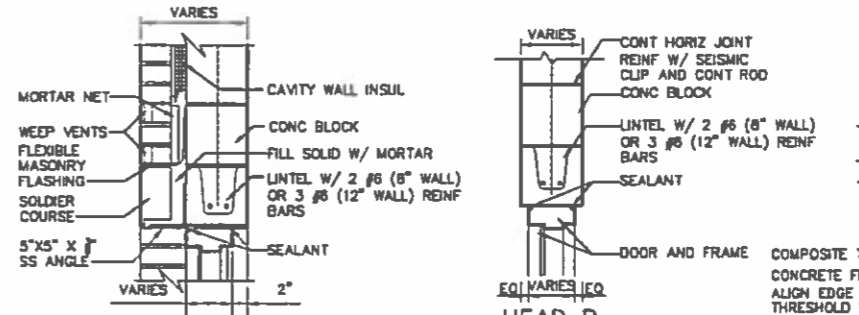


NOTES:
1. VERTICAL MASONRY WALL REINFORCEMENT SHALL BE #5 AT 32" OC UNLESS OTHERWISE NOTED.
2. WHERE SPECIAL BRICK SOLDIER COURSE OCCURS ON LOOSE LINTEL ANGLES ABOVE DOORS, WINDOWS, OR LOUVERS, PROVIDE SPECIAL BRICKS ON THE BEARING ENDS OF EACH LINTEL. PROVIDE STAINLESS STEEL SHIMS IN THE MORTAR JOINT UNDER THE BEARING ENDS OF THE LINTEL ANGLE.

TYPICAL SPECIAL BRICK DETAILS FOR ALL BUILDINGS
SCALE: 3" = 1'-0"

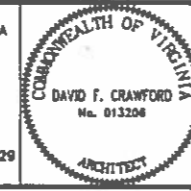


ELEVATION TYPES
SCALE 1/4" = 1'-0"



DESIGNED	MH
DRAWN	MH
CHECKED	DFC
PROJENR.	DFC
CAD REF. NO.	1A0010000
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209



ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION PHASE 7E

ARCHITECTURAL GENERAL
ROOM FINISH, DOOR SCHEDULES, DOOR DETAILS AND MISCELLANEOUS DETAILS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
DATE: MAY 2007
DRAWING NUMBER
A00-02
SHEET OF

NOTES:

1. REFERENCE DRAWING A00-04, FOR SIGNAGE TYPES.
2. FINAL SIGNAGE TEXT MESSAGE AND QUANTITY OF ALL SIGNS TO BE DETERMINED AFTER AWARD OF CONTRACT.
3. "T/B" - INDICATED TEXT/BRILLE
"NA" - INDICATED NOT APPLICABLE OR NOT USED.
"AS NEEDED" - INDICATES EXACT QUANTITY TO BE DETERMINED.
4. THE "LOCATION" COLUMN ON THIS SCHEDULE IDENTIFIES THE ROOM NUMBERS(R#), DOOR NUMBERS(D#) AND/OR AREAS THAT THE SIGN IS LOCATED IN OR NEAR. SOME SIGNS ARE LOCATED JUST OUTSIDE OF THE DOOR THAT ENTERS INTO THE ROOMS INDICATED. (OSD) - INDICATES "OUTSIDE OF DOOR".
(BS) - INDICATES "BOTH SIDES OF DOOR". FINAL LOCATIONS AND EXACT ARRANGEMENTS OF ALL SIGNS TO BE DETERMINED AND PROVIDED BY ENGINEER AFTER AWARD OF THE CONTRACT.
5. <#> - INDICATES THE QUANTITY OF THAT SIGN NUMBER IN THAT SPECIFIC ROOM OR AREA.
6. FOR ACCIDENT PREVENTION, HEALTH, SAFETY AND WARNING SIGNS, HAZARD COMMUNICATION SIGNS AND HAZARD RATING/RIGHT-TO-KNOW SIGNS, CONTRACTOR SHALL PROVIDE 10 SIGNS FOR EACH AREA NOTED IN THE SIGNAGE SCHEDULE, IN ADDITION TO QUANTITIES INDICATED ON THE SCHEDULE. SEE NOTE 2 ABOVE.
7. PROVIDE SELF-LUMINOUS "EXIT" SIGNS AND "AREA OF RESCUE ASSISTANCE" SIGNS AS SHOWN ON ARCHITECTURAL FLOOR PLAN DRAWINGS. SYMBOL [E] INDICATES EXIT SIGN LOCATION.
8. PROVIDE 1 ROOM NAME IDENTIFICATION SIGNS FOR EVERY INTERIOR DOOR AS DESCRIBED IN THE SIGNAGE SCHEDULE. LOCATED ON ENTRY SIDE OF DOOR TO ROOM IDENTIFIED. PROVIDE 1 ROOM NAME IDENTIFICATION SIGNS FOR EVERY EXTERIOR DOOR AS DESCRIBED IN THE SIGNAGE SCHEDULE. LOCATED ON INSIDE OF DOOR TO ROOM IDENTIFIED. VERIFY DOOR NUMBERS WITH ENGINEER.
9. PROVIDE AT EACH TUNNEL ENTRANCE A DIRECTIONAL /INFORMATIONAL SIGNS INDICATING WHERE THE TUNNEL LEADS TO AND A BUILDING NAME SIGN ON THE TUNNEL SIDE OF THE ENTRANCE.
10. PROVIDE AREA NAME SIGNS FOR EACH AREA IDENTIFIED. FINAL LIST OF AREAS, QUANTITIES AND LOCATION TO BE DETERMINED BY ENGINEER AFTER AWARD OF CONTRACT.
11. PROVIDE STAIR IDENTIFICATION SIGN BOTH ON THE OCCUPANCY SIDE OF EACH STAIR DOOR AND IN THE STAIR ENCLOSURE ON EVERY FLOOR LANDING. FOR STAIRS WITH VESTIBULES, PROVIDE SIGN ON OUTSIDE OF VESTIBULE AS NOTED ON SCHEDULE.
12. PROVIDE FLOOR NUMBERING SIGN ON EVERY FLOOR LANDING IN EACH STAIR ENCLOSURE AND AT EACH ELEVATOR LANDING BOTH IN ELEVATOR SHAFT AND IN ELEVATOR LOBBY.
13. PROVIDE FLOOR DESIGNATION ELEVATOR DOOR JAMB SIGN AT ALL HOIST WAY ENTRANCES ON BOTH SIDES OF JAMB AT THE HEIGHT OF 60" ABOVE FINISH FLOOR. DESIGNATION SHALL BE 2" HIGH. COORDINATE WITH ELEVATOR SPECIFICATIONS AND ELEVATOR MANUFACTURER. (NOT USED)
14. PROVIDE ELEVATOR IDENTIFICATION SIGN ON EACH ELEVATOR LANDING, LOCATE DIRECTLY ABOVE FLOOR DIAGRAM EXIT/EVACUATION SIGN. (NOT USED)
15. PROVIDE FLOOR DIAGRAM EXIT/EVACUATION SIGN AT EACH ELEVATOR LANDING, LOCATE DIRECTLY ABOVE THE ELEVATOR CALL BUTTON. PROVIDE A SIGN ON THE OCCUPANCY SIDE OF EACH STAIR DOOR, WHERE NO ELEVATOR IS PRESENT. PROVIDE ADDITIONAL SIGNS AT LOCATIONS AS DIRECTED BY THE COUNTY FIRE MARSHALL AND THE ENGINEER. (NOT USED)
16. PROVIDE ONE FIRE EXTINGUISHER SIGN FOR EACH SURFACE MOUNTED FIRE EXTINGUISHER SHOWN. LOCATE SIGN ABOVE FIRE EXTINGUISHER AT 6"-8" AFF. FIELD VERIFY EXACT LOCATION.
17. PROVIDE ONE FIRE ALARM PULL SIGN FOR EACH FIRE ALARM PULL. FIELD VERIFY EXACT LOCATION.
18. PROVIDE FIRE HOSE SIGNS FOR EACH STAIR DOOR WHERE FIRE HOSE STAND PIPE IS LOCATED AND AT FIRE HOSE. FIELD VERIFY EXACT LOCATION.
19. PROVIDE ONE "WARNING NON-POTABLE WATER, NOT FOR DRINKING PURPOSES" SIGN FOR ALL SERVICE SINKS, SAMPLE SINKS, HOSE STATIONS, HOSE REELS AND BIBBS AND AT YARD HYDRANTS, UNLESS OTHERWISE NOTED IN SCHEDULE. FIELD VERIFY EXACT LOCATION, QUANTITY AND SIGN LOCATIONS.
20. PROVIDE BOTH "CAUTION FLOOR SLIPPERY WHEN WET" AND "CAUTION CLEAN UP ALL SPILLS, WEAR PERSONAL PROTECTIVE EQUIPMENT" SIGNS FOR ALL SERVICE SINKS, SAMPLE SINKS, HOSE STATIONS, HOSE REELS AND BIBBS. FIELD VERIFY EXACT LOCATION, QUANTITY AND SIGN LOCATIONS.
21. PROVIDE ONE EMERGENCY EYE WASH/SHOWER SIGN FOR EACH EMERGENCY EYE WASH/SHOWER. PROVIDE DOUBLE SIDED SIGN SUSPENDED FROM ABOVE FOR EACH FREE STANDING EYE WASH/SHOWER. FIELD VERIFY EXACT LOCATION.
22. FOR MONORAIL AND CRANE CAPACITY SIGNS, VERIFY CAPACITY TO BE POSTED WITH ACTUAL CAPACITY OF MONORAIL AND CRANE PROVIDED. FIELD VERIFY EXACT LOCATION.

23. PROVIDE AT LEAST ONE FLOOR LOADING SIGN FOR EACH SPACE. FIELD VERIFY EXACT MAXIMUM ALLOWABLE LOADING, QUANTITY AND LOCATION WITH ENGINEER.
24. PROVIDE ONE TELEPHONE SIGN FOR EACH TELEPHONE TO BE IDENTIFIED FOR USE DURING EMERGENCY SITUATIONS. FIELD VERIFY EXACT LOCATION WITH ENGINEER.
25. PROVIDE AT ALL SHUT OFF VALVES, START/STOP PUSH BUTTONS, EMERGENCY PULL CORDS AND SHUT OFF SWITCHES, THE APPROPRIATE SHUT OFF SIGN THAT APPLIES. VERIFY EXACT QUANTITY AND LOCATION OF THE DEVICES AND THE SIGNS WITH ENGINEER.
26. PROVIDE DIRECTIONAL ARROW SIGNS FOR ITEMS LISTED IN SCHEDULE THAT ARE NOT DIRECTLY ALONG PATHS OF TRAVEL OR WHICH ARE OBSTRUCTED FROM VIEW. VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER.
27. FIELD VERIFY EXTERIOR SIGNS THAT REQUIRE ATTACHMENT TO FENCES. PROVIDE ENGINEER APPROVED MATERIALS AND FASTENERS TO SECURELY ATTACH THESE SIGNS.
28. SIGNS REQUIRED AT YARD HYDRANTS SHALL BE MOUNTED WITHIN 10 FEET OF THE HYDRANT, ON A VERTICAL SURFACE OR ON A STANDARD SIGN POST AT THE HEIGHT OF 4 FEET ABOVE FINISH GRADE.
29. PROVIDE AT ALL AUDIO-VISUAL ALARMS, BEACONS, BELLS AND HORNS THE APPROPRIATE WARNING/IDENTIFICATION SIGN THAT DESCRIBES WHY THE DEVICE IS ACTIVATED AND WHAT ACTION NEEDS TO BE DONE. VERIFY EXACT QUANTITY AND LOCATION OF THE DEVICES AND THE SIGNS WITH ENGINEER.
30. SEE SPRINKLER PIPING SYSTEM SPECIFICATIONS, FOR SIGNAGE REQUIREMENTS ASSOCIATED WITH THE SPRINKLER PIPING SYSTEM. IN ADDITION, PROVIDE SIGNS THAT INDICATE THE LOCATION OF THE SPRINKLER SYSTEM'S EQUIPMENT, CONTROLS VALVES, AND SWITCHES THAT REQUIRED BEING IDENTIFIED. FIELD VERIFY LOCATION WITH PLANT MANAGEMENT AND ENGINEER.
31. SIGN NUMBERS WITH LETTERS ARE SPECIFIC TO THE BUILDING IDENTIFIED BY THOSE LETTERS. THE LETTER DESIGNATIONS ARE AS FOLLOWS:
"HM" - INDICATES HOUSEHOLD HAZARDOUS MATERIALS (AREA 27)
32. FOR SIGNS DELETED OR NOT PROVIDED AS A RESULT OF CHANGES FROM THAT SHOWN ON THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL CREDIT THE COUNTY THE COST OF THESE SIGNS.
33. PROVIDE ONE EXIT PUSH BUTTON SIGN FOR EACH EXIT PUSH BUTTON. FIELD VERIFY EXACT LOCATION.

PICTOGRAM SYMBOLS LIST:

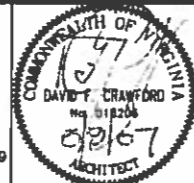
- | | |
|--|--|
| 1 INTERNATIONAL ACCESSIBILITY SYMBOL | 36 CORROSIVE, CHEMICAL BURN |
| 1A ROTATED INTERNATIONAL ACCESSIBILITY SYMBOL OVER SLOPED LINE, INDICATING "RAMP" | 37 CHEMICAL STORAGE |
| 2 INTERNATIONAL ACCESSIBILITY SYMBOL CROSSED OUT, "NOT ACCESSIBLE" | 38 CONFINED SPACE |
| 3 MAN | 39 CONFINED SPACE "TEST ATMOSPHERE" EQUIPMENT SYMBOL |
| 4 MAN AND INTERNATIONAL ACCESSIBILITY SYMBOL | 40 POISON |
| 5 WOMAN | 41 RADIOACTIVE |
| 6 WOMAN AND INTERNATIONAL ACCESSIBILITY SYMBOL | 42 WELDING ARC AND EYE PROTECTION |
| 7 WOMAN AND MAN WITH VERTICAL LINE BETWEEN THEM | 43 ULTRAVIOLET LIGHT AND EYE PROTECTION |
| 8 WOMAN AND MAN WITH VERTICAL LINE BETWEEN THEM AND INTERNATIONAL ACCESSIBILITY SYMBOL | 44 HOT |
| 9 ELEVATOR | 46 NO SMOKING, EATING OR DRINKING |
| 10 STAIR | 47 SLIPPERY FLOOR |
| 11 STAIR WITH PERSON WALKING DOWN AND FLAME, "IN CASE OF FIRE ..." | 48 TRIPPING HAZARDS |
| 12 NO SMOKING | 49 LOW HEADROOM |
| 13 FIRE EXTINGUISHER | 50 FORK LIFT |
| 14 FIRST AID | 51 MOVING PART OR EQUIPMENT |
| 15 TELEPHONE | 52 PINCH |
| 16 TELEPHONE TDD | 53 SEVER |
| 17 CAFETERIA, FORK AND KNIFE | 54 EQUIPMENT STARTS AUTOMATICALLY |
| 18 "AUTHORIZED PERSONNEL ONLY" (SOLID CIRCLE WITH HORIZONTAL LINE IN IT) | 55 PROTECTIVE CLOTHING AND EQUIPMENT |
| 19 "NOT AN EXIT, OR "STOP" (HAND IN A CIRCLE) | 56 GLOVES |
| 20 "NOT AN ENTRANCE" | 57 BOOTS / FOOT PROTECTION |
| 21 "NO ADMITTANCE", OR "KEEP OUT" (PERSON IN A CIRCLE CROSSED OUT) | 58 SELF-CONTAINED AIR RESPIRATOR |
| 22 FIRE HOSE | 59 VAPOR RESPIRATOR |
| 23 FIRE ALARM | 59A RESPIRATOR |
| 24 FIRE | 60 DUST MASK |
| 25 EMERGENCY EYE WASH | 61 APRON |
| 26 EMERGENCY EYE WASH AND SHOWER | 62 FACE SHIELD |
| 27 SAFETY SHOWER | 63 SAFETY GOGGLES |
| 28 EMERGENCY SWITCH | 64 SAFETY GLASSES |
| 29 "HIGH VOLTAGE" ELECTRICAL BOLT | 65 HEARING PROTECTION |
| 30 ELECTRICAL BOLT AND PERSON | 66 HARD HAT |
| 31 ELECTRICAL BOLT AND HAND | 67 FALL PROTECTION EQUIPMENT REQUIRED |
| 32 NO OPEN FLAMES, MATCHES, OR SPARKS | 68 INSURED HAND |
| 33 FLAMMABLE | 69 WASH YOUR HANDS |
| 34 EXPLOSION | 70 KEEP AREA CLEAN, BROOM |
| 35 BIOHAZARD | 71 SPILL RESPONSE EQUIPMENT |
| | 72 KEEP DOOR CLOSED |
| | 73 LOCK OUT DEVICES |
| | 74 CHOCK WHEELS |
| | 75 NO PARKING |

SIGNAGE SCHEDULE

SIGN NUMBER	QUAN.	SIGN TYPE	MESSAGE	FORMS OF MESSAGE /SYMBOL TYPE (AS REQUIRED)	MATERIAL/SPECIAL INSTRUCTIONS	LOCATION	OPTIONS/REMARKS
HOUSEHOLD HAZARDOUS MATERIALS (AREA 27)							
HM-1	2	D-1	001 PUMP ROOM	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-2	2	D-1	002 STAIR NO 3	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-3	2	D-1	003 MECHANICAL RM/ STORAGE AREA	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-4	1	D-1	004 SOUTH FADF STAGING ROOM	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-5	1	D-1	005 STAIR NO 2	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-6	1	D-1	006 NORTH FADF STAGING ROOM	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-7	1	D-1	007 STAIR NO 1	TEXT, T/B	ACRYLIC	AT ENTRY SIDE OF DOORS	
HM-8	1	D-1	101 STAIR NO 1	TEXT, T/B	ACRYLIC	INSIDE OF DOOR	

DESIGNED DMCS
DRAWN DMCS
CHECKED DFC
PROJECTOR DFC
CAD REF. NO. 1A00SIGN-1
APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
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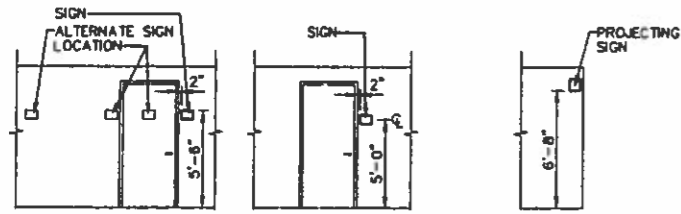


**ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT**
UPGRADE AND EXPANSION
PHASE 7E

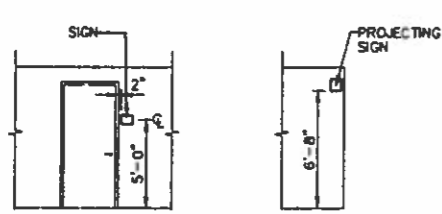
**ARCHITECTURAL
GENERAL
SIGNAGE NOTES AND SCHEDULE**

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

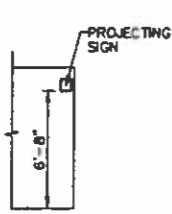
DATE: MAY 2007
DRAWING NUMBER
A00-03
SHEET OF



ELEVATION 1
NON ANSI
SCALE: 3/16" = 1'-0"



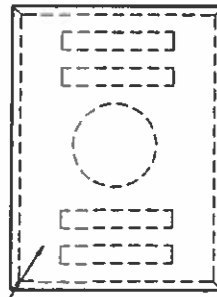
ELEVATION 2
ANSI STANDARD
(ON LATCH SIDE)
SCALE: 3/16" = 1'-0"



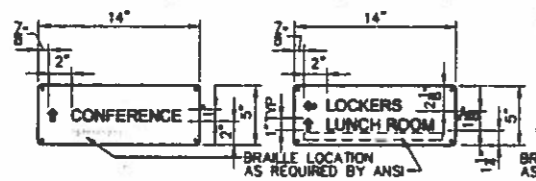
ELEVATION 3
(PROJECTED SIGN)
SCALE: 3/16" = 1'-0"

NOTES:

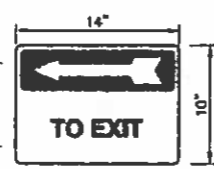
1. FINAL SIGNAGE WORDING AND QUANTITY OF ALL SIGNS TO BE DETERMINED AFTER AWARD OF CONTRACT.
2. REFERENCE DRAWING A00-03 FOR SIGNAGE SCHEDULE.
3. FOR SIGNAGE LOCATIONS REFERENCE SIGNAGE SCHEDULE ON DRAWINGS A00-03.
4. THE SIGNS SHOWN ON THIS SHEET ARE A COMPREHENSIVE STANDARD GUIDE INTENDED TO GRAPHICALLY INDICATE THE APPEARANCE OF THE SIGNS. THIS SHEET IS FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SIGNS CONTAINED ON THIS SHEET ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
5. PROVIDE ALL PERMANENT DIRECTIONAL/INFORMATIONAL, ROOM NAME, BUILDING NAME, AREA NAME, ACCESSIBLE AREA, FLOOR NUMBERING, ELEVATOR IDENTIFICATION, STAIR IDENTIFICATION, FIRE PREVENTION AND RESTRICTION SIGNS WITH BOTH RAISED TEXT AND BRAILLE TO COMPLY WITH ANSI A117.1, THE AMERICANS WITH DISABILITIES ACT OF 1990, OSHA REGULATIONS, NFPA GUIDELINES, AND INTERNATIONAL BUILDING CODE 2000 WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE "USBC" (2000 EDITION). FIELD VERIFY EXACT LOCATION OF SIGNS WITH PLANT MANAGEMENT AND ENGINEER.
6. PROVIDE HAZARD RATING SIGNS / RIGHT-TO-KNOW SIGNS, LABELS AND TAGS TO COMPLY WITH NFPA 704, OSHA 1910.1200, AND OSHA SUBPART Z, FOR PROPER IDENTIFICATION OF ALL THE CHEMICALS AND MATERIALS PRESENT, THE HAZARDS ASSOCIATED WITH THESE CHEMICALS AND MATERIALS, AND WHERE THEY ARE LOCATED. VERIFY EXACT INFORMATION FOR SIGNS AND LOCATION OF SIGNS IN THE FIELD WITH ENGINEER.
7. PROVIDE ALL ACCIDENT PREVENTION, HEALTH, SAFETY AND WARNING SIGNS IN COMPLIANCE WITH ANSI Z535.1, ANSI Z535.2, ANSI Z535.3 AND OSHA 1910.44 AND 1910.145. FIELD VERIFY EXACT LOCATION OF SIGNS WITH PLANT MANAGEMENT AND ENGINEER.
8. FLOOR DIAGRAM EXIT SIGN SHALL MEET ALL THE REQUIREMENTS OF THE COUNTY FIRE MARSHALL. COORDINATE WITH THE FIRE MARSHALL THE ITEMS REQUIRED TO BE INDICATED AND THEIR LOCATIONS. THE SIGNS SHALL BE REVIEWED AND APPROVED BY THE FIRE MARSHALL AND THE ENGINEER PRIOR TO FABRICATION.
9. FIELD VERIFY WHICH SIGNS REQUIRE BEING SUSPENDED, AND WHAT THEY WILL BE SUSPENDED FROM. PROVIDE ENGINEER APPROVED MATERIALS AND FASTENERS TO SECURELY ATTACH AND SUSPEND THESE SIGNS.
10. SUSP. DOUBLE SIDED SIGN - INDICATES SIGNS THAT WILL IN SOME CASES NEED TO BE SUSPENDED. THOSE THAT ARE SUSPENDED WILL BE A CUSTOM DOUBLE SIDED SIGN. FIELD VERIFY EXACT LOCATION.
11. FIELD VERIFY DIRECTION ARROW HEADS SHOULD BE POINTING ON ALL DIRECTIONAL SIGNS. VERIFY EXACT LOCATION OF SIGNS WITH PLANT MANAGEMENT AND ENGINEER.
12. ALL SIGNS SHALL BE PLACED SO THAT THEY ARE READILY VISIBLE AND READABLE. DOORS SHALL NOT BLOCK SIGNS WHEN IN OPEN POSITION. VERIFY EXACT ARRANGEMENT AND PLACEMENT OF SIGNS WITH PLANT MANAGEMENT AND ENGINEER.



TYPE A:
DEDICATION
TABLET



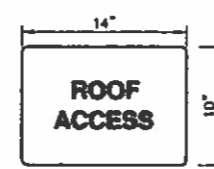
TYPE B-1:
DIRECTIONAL
/ INFORMATION
TYPE B-2:
DIRECTIONAL
/ INFORMATION
TYPE B-3:
DIRECTIONAL
/ INFORMATION



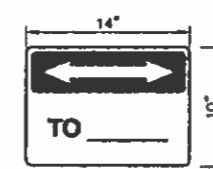
TYPE C-1:
DIRECTIONAL
ARROW



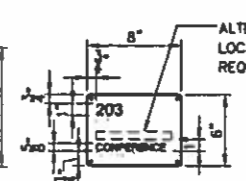
TYPE C-2:
DIRECTIONAL
ARROW



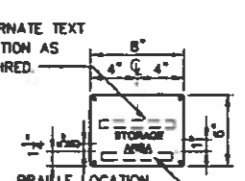
TYPE C-3:
INFORMATION



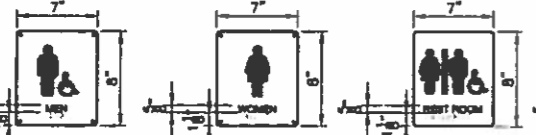
TYPE C-4:
DIRECTIONAL
ARROW



TYPE D-1:
ROOM NAME
& NUMBER



TYPE D-2:
AREA NAME



TYPE E-1:
ACCESSIBLE
AREAS (ANSI)
TYPE E-2:
ACCESSIBLE
AREAS (ANSI)
TYPE E-3:
ACCESSIBLE
AREAS (ANSI)

WALL MOUNTING
BRACKET

TYPE F:
ACCESSIBLE
AREAS



TYPE G:
FLOOR
NUMBERING SIGN



TYPE G-1:
ELEVATOR
IDENTIFICATION



TYPE G-2:
STAIR & FLOOR
IDENTIFICATION



TYPE G-3:
STAIR & FLOOR
IDENTIFICATION



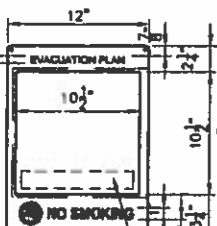
TYPE H-1:
EXIT / FIRE
PREVENTION SIGN
NOTE: CONFORM WITH BUILDING
CODE STANDARDS.



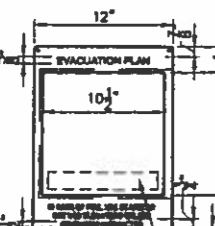
TYPE H-2:
EXIT / FIRE
PREVENTION
SIGN



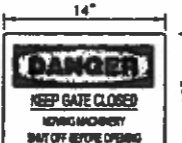
TYPE I:
RESTRICTION
SIGN



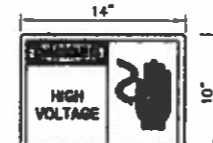
TYPE J-1:
FLOOR DIAGRAM
EXIT SIGN



TYPE J-2:
FLOOR DIAGRAM
EXIT SIGN



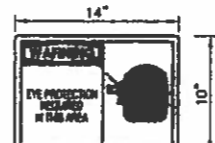
TYPE K-1:
DANGER



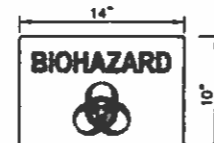
TYPE K-2:
DANGER



TYPE M-1:
WARNING



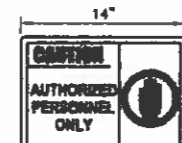
TYPE M-2:
WARNING



TYPE M-3:
BIOHAZARD



TYPE L-1:
CAUTION



TYPE L-2:
CAUTION



TYPE N-1:
NOTICE



TYPE N-2:
NOTICE



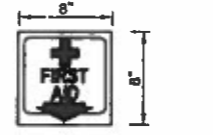
TYPE O-1:
GENERAL
SAFETY



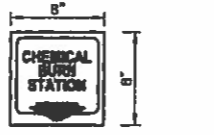
TYPE O-2:
GENERAL
SAFETY



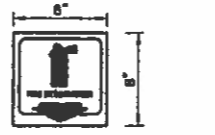
TYPE O-3:
GENERAL
SAFETY



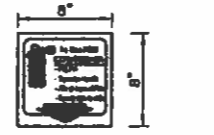
TYPE P:
FIRST AID
2-WAY SIGN



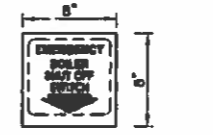
TYPE P-1:
IMPORTANT
MESSAGE
2-WAY SIGN



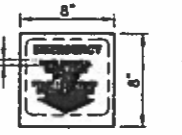
TYPE Q:
FIRE EQUIPMENT
2-WAY SIGN



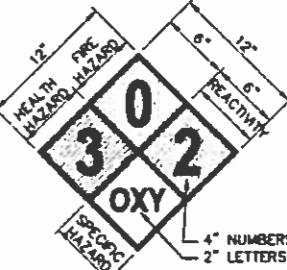
TYPE Q-1:
FIRE EQUIPMENT
2-WAY SIGN



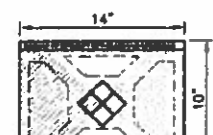
TYPE Q-2:
EMERGENCY
MESSAGE
2-WAY SIGN



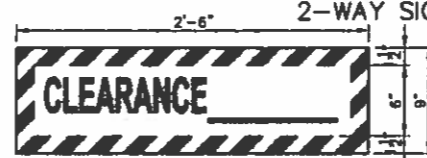
TYPE Q-3:
EMERGENCY
MESSAGE
2-WAY SIGN



TYPE R-1:
HAZARD
RATING SIGN



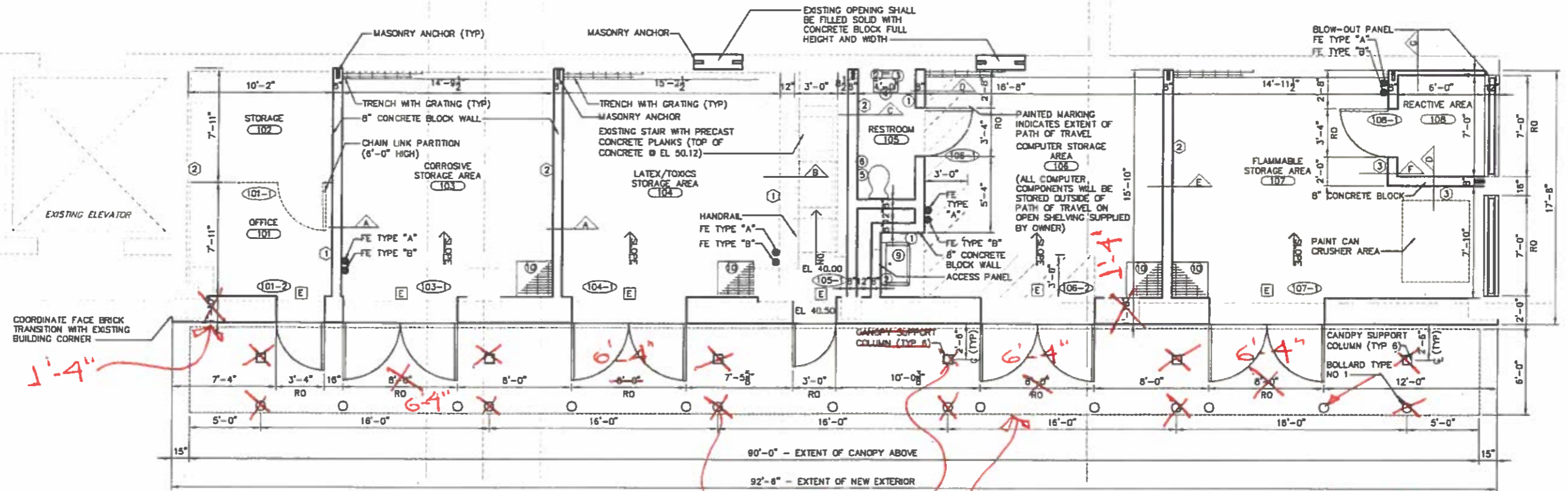
TYPE R-2:
HAZARD RATING
SIGN WITH
EMERGENCY
GUIDE



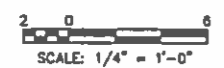
TYPE S-1:
NOTICEABLE MESSAGE



DESIGNED	DMCS	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)			ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	ARCHITECTURAL GENERAL SIGNAGE TYPES AND NOTES	DATE: MAY 2007
DRAWN	DMCS						DRAWING NUMBER
CHECKED	DFC						A00-04
PROJECTED	DFC						SHEET . OF
CAD REF NO.	1A00SIGN-2						
NO.	ISSUED FOR	DATE	BY	APPROVED			

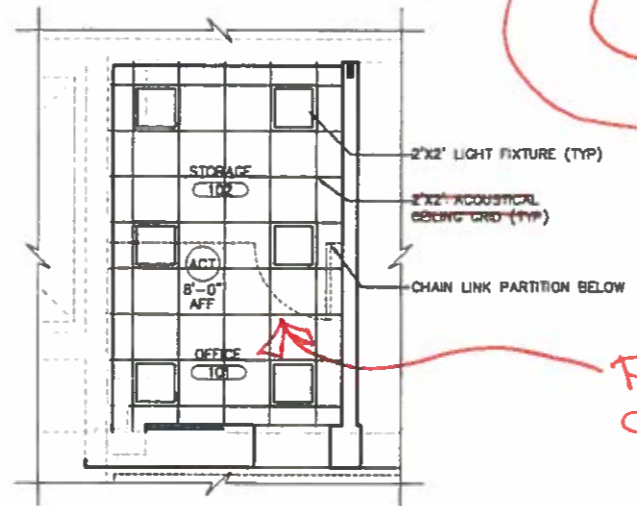


FLOOR PLAN AT EL 40.50

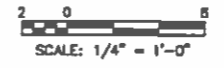


- NOTES:**
- ALL FLOOR AREAS SHALL BE FINISHED WITH CHEMICAL RESISTANT CONCRETE TOPPING.
 - REPAIR ADJACENT EXISTING CONSTRUCTION TO REMAIN THAT IS DAMAGED BY DEMOLITION.
 - COORDINATE EXTENT OF DEMOLITION WORK WITH D27 SERIES OF DRAWINGS.
 - ALL DIMENSIONS TO BE FIELD VERIFIED. EXISTING CONSTRUCTION SHOWN IS BASED ON EXISTING CONSTRUCTION DOCUMENTS.
 - SEE SHEET A00-02 FOR ROOM FINISH SCHEDULE.
 - SEE SHEET A00-02 FOR DOOR SCHEDULE AND DETAILS.
 - PROVIDE CONT FIELD REVEAL EDGE AT ALL CEILING PERIMETERS.
 - FOR EXTENT OF SUPPLY AND RETURN AIR DIFFUSERS AND ALL HVAC EQUIPMENT COORDINATE WITH 'H' DRAWINGS.
 - DRAWINGS DO NOT SHOW THE EXTENT OF ALL EXISTING EQUIPMENT, CONDUIT, PIPING AND SIMILAR ITEMS MOUNTED ON EXISTING SUBSTRATE. FIELD VERIFY THE EXTENT AND LOCATIONS OF ALL SUCH ITEMS.
 - FOR WALL TYPES A, B, C, D, E & F SEE SHEET A27-05.

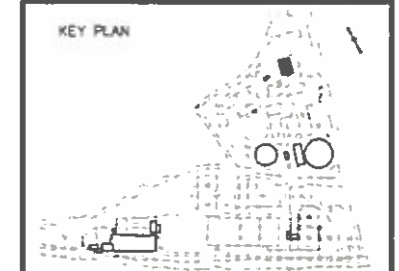
- ACCESSORY SYMBOL LIST:**
- (1) PAPER TOWEL DISPENSER
 - (2) SOAP DISPENSER
 - (3) MIRROR
 - (4) SINK
 - (5) TOILET TISSUE DISPENSER
 - (6) SANITARY NAPKIN DISPOSAL UNITS
 - (7) SANITARY NAPKIN DISPENSER
 - (8) ACCESS DOOR PANEL
 - (9) SLOP SINK
 - (10) EMERGENCY EYEWASH/SHOWER UNIT
 - (11) CONTROL PANELS
 - (F) FIRST AID KIT
- CEILING FINISH SCHEDULE:**
- (ACT) ACOUSTICAL CEILING TILE WITH EXPOSED SUSPENSION SYSTEM



REFLECTED CEILING PLAN



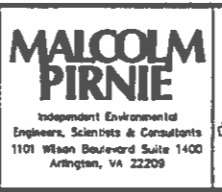
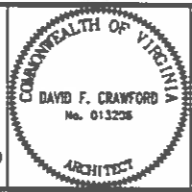
DELETE CANOPY ABOVE
DELETE CANOPY POSTS
DELETE BOLLARDS ASSOCIATED w/ CANOPY POSTS
DELETE ACOUSTICAL CLG & GRID



DESIGNED	DFC
DRAWN	MH
CHECKED	DFC
PROJENGR.	DFC
CAD REF. NO.	1A030HHWO
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
 PHASE 7E

ARCHITECTURAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 COLLECTION AREA FLOOR PLAN AT EL 40.50

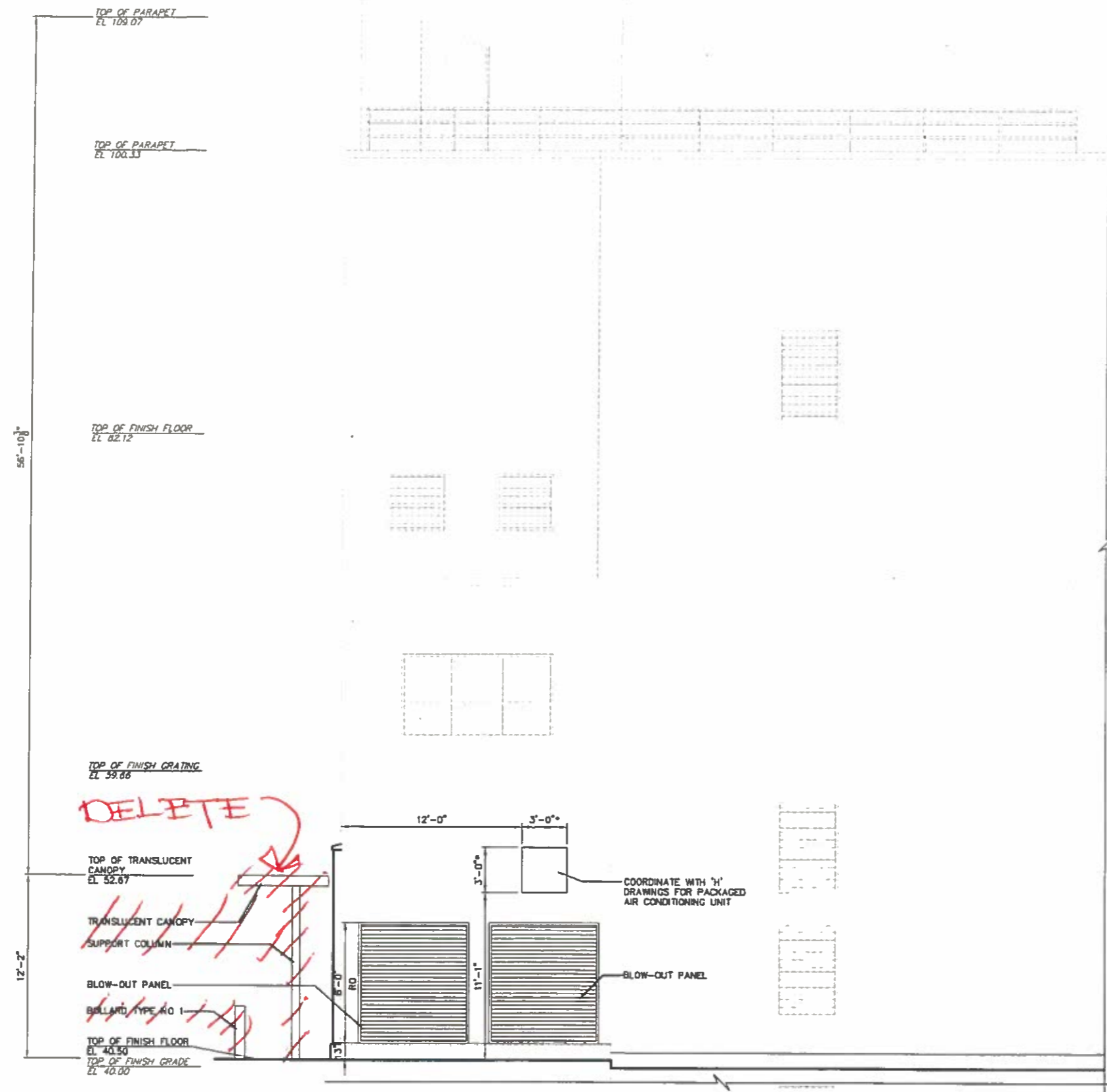
DATE: MAY 2007

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DRAWING NUMBER
A27-01

SHEET . OF

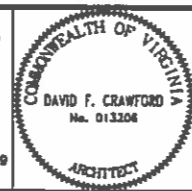
NOTES:
 1. FOR LOUVER DETAILS REFERENCE SHEET A00-02.



User: Malcom PIRNIE, Project: ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT, Phase: 7E, Drawing: HOUSEHOLD HAZARDOUS MATERIALS FACILITY COLLECTION AREA SOUTH ELEVATION, Date: 05/01/2007, Time: 10:16:47 AM, Location: A77-02

NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED DFC
 DRAWN MH
 CHECKED DFC
 PROLENGR. DFC
 CAD REF. NO. 1A035HHWO
 APPROVED



MALCOLM PIRNIE
 Independent Environmental
 Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

ARCHITECTURAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 COLLECTION AREA SOUTH ELEVATION

THE SCALE BAR
 SHOWN BELOW
 MEASURES ONE
 INCH LONG ON
 THE ORIGINAL
 DRAWING.

DATE: MAY 2007
 DRAWING
 NUMBER
A27-02
 SHEET . OF

TOP OF PARAPET
EL. 109.07

TOP OF PARAPET
EL. 100.33

TOP OF FINISH FLOOR
EL. 62.12

TOP OF FINISH GRATING
EL. 59.68

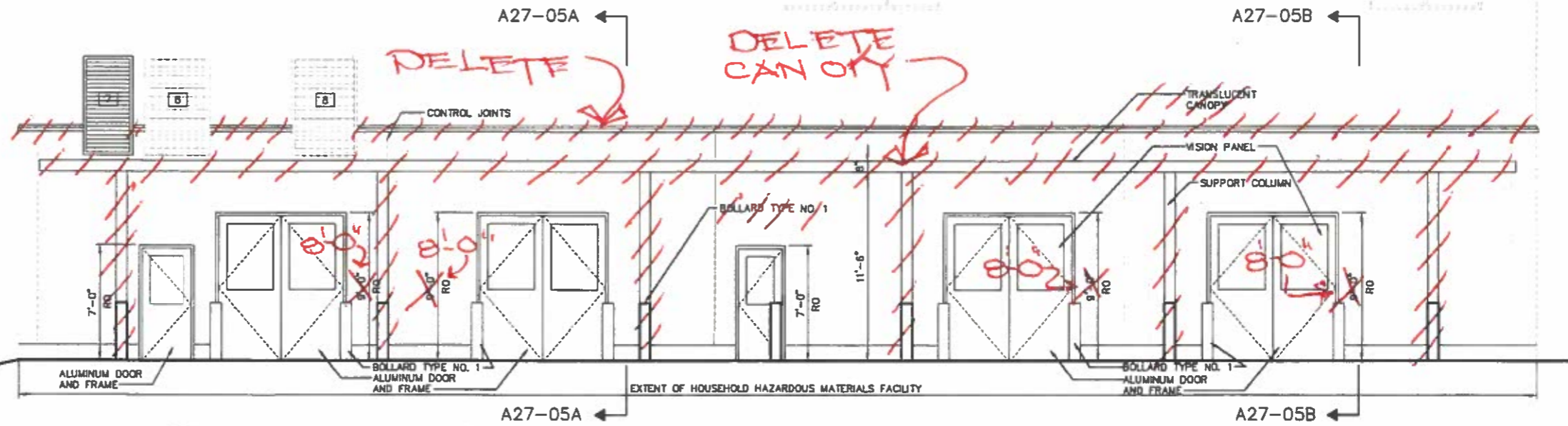
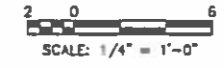
TOP OF TRANSLUCENT
CANOPY
EL. 52.67

TOP OF FINISH FLOOR
EL. 40.50
TOP OF FINISH GRADE
EL. 40.00

WEST ELEVATION

- NOTES:
- FOR DOOR SCHEDULE AND DETAILS REFERENCE SHEET A00-02.
 - FOR LOUVER DETAILS REFERENCE SHEET A00-02.

- LEGEND:
- 7 INDICATES 3'-0" X 5'-0" FIXED LOUVER INSTALLED IN EXISTING OPENING.
 - 8 INDICATES EXISTING FIXED LOUVER TO BE REPLACED.

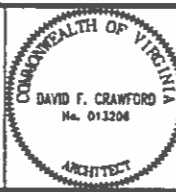


A:\Projects\2007\Arlington County\Arlington County Water Pollution Control Plant\Phase 7E\Arch\A27-03.dwg

NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED DFC
 DRAWN MH
 CHECKED DFC
 PROLENGR. DFC
 CAD REF. NO. 1A031HHWO

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



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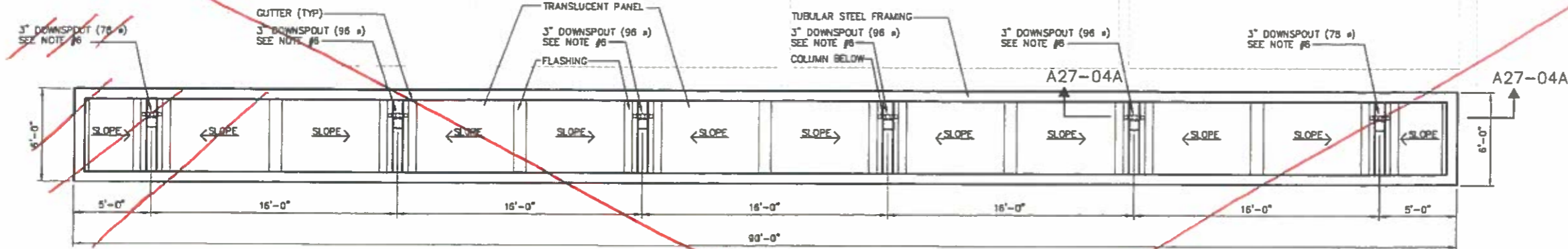


ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

ARCHITECTURAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 COLLECTION AREA WEST ELEVATION

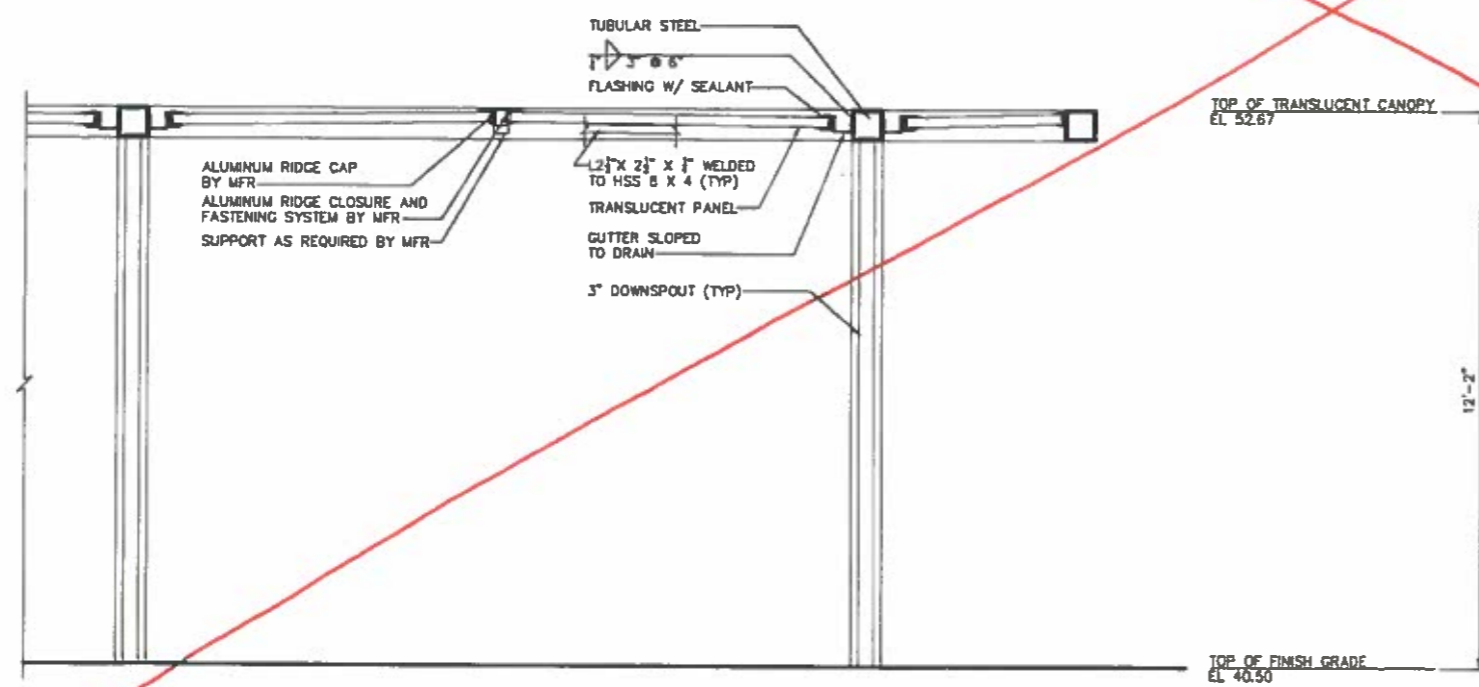
THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING
 DATE: MAY 2007
 DRAWING NUMBER: **A27-03**
 SHEET . OF

- NOTES:**
- REPAIR ADJACENT EXISTING CONSTRUCTION TO REMAIN THAT IS DAMAGED BY DEMOLITION.
 - COORDINATE EXTENT OF DEMOLITION WORK WITH 'D' DRAWINGS
 - ALL DIMENSIONS TO BE FIELD VERIFIED. EXISTING CONSTRUCTION BASED ON EXISTING CONSTRUCTION DOCUMENTS.
 - TRANSLUCENT CANOPY FLASHING AND DETAILING SHALL BE IN ACCORDANCE WITH SPECIFICATION AND MANUFACTURERS RECOMMENDATION.
 - COORDINATE WITH 'S' SHEETS FOR TUBULAR STEEL SIZES AND DETAILS.
 - FOR CONT OF 3" DOWNSPOUTS SEE CIVIL DWG C27-01.



CANOPY ROOF PLAN
 2 0 6
 SCALE: 1/4" = 1'-0"

DELETE CANOPY



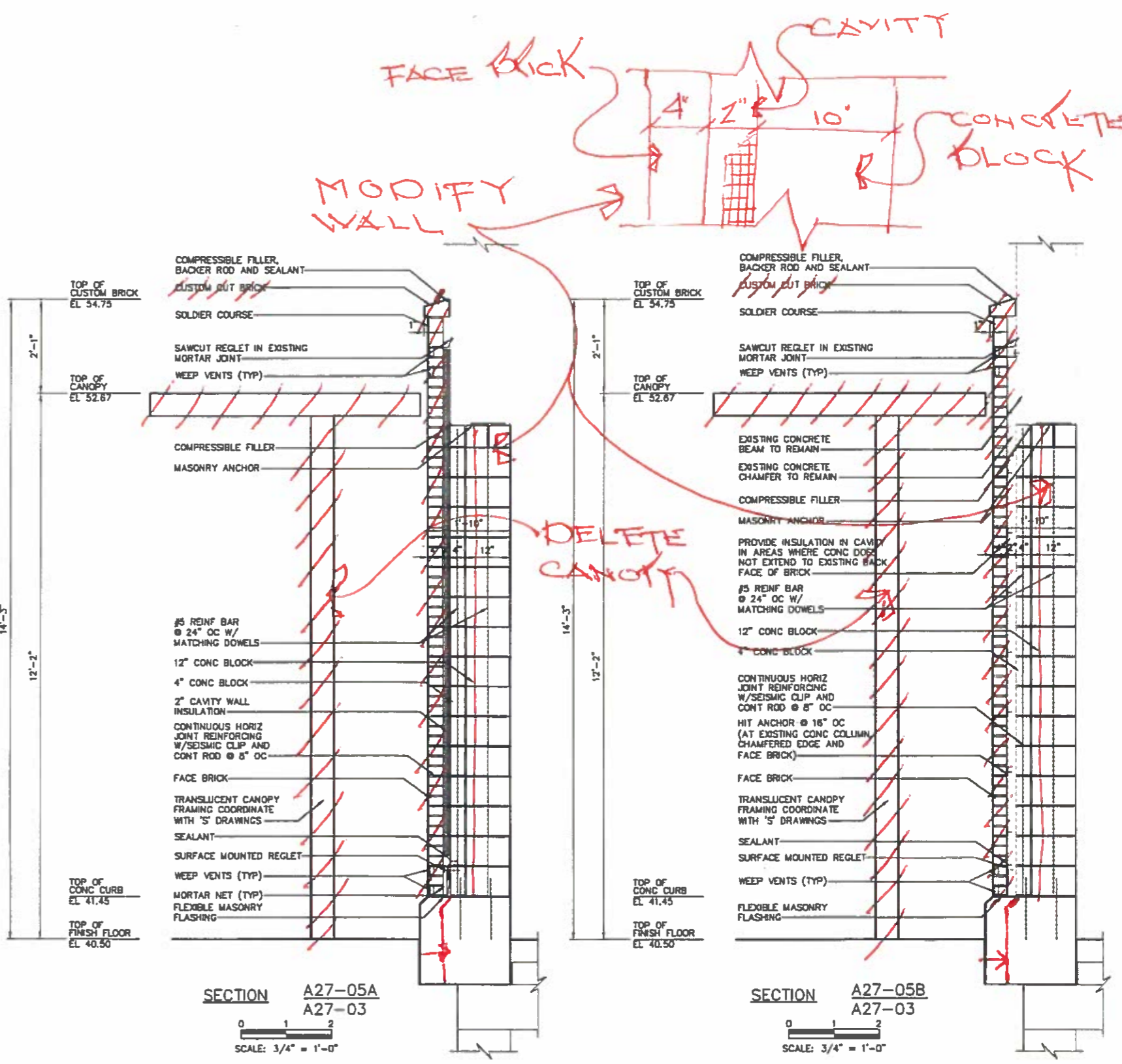
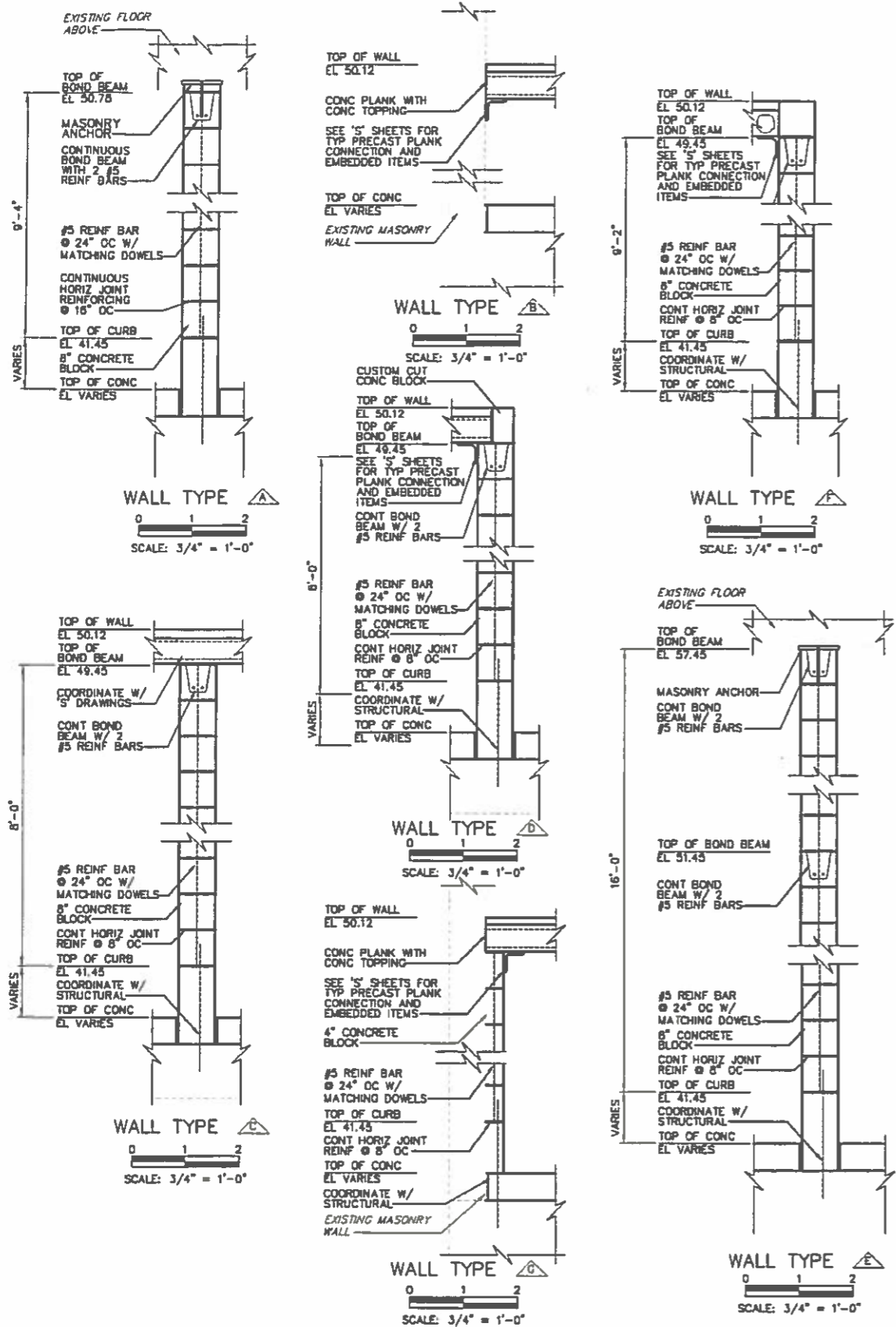
SECTION A27-04A
A27-04
 2 0 2
 SCALE: 1/2" = 1'-0"

* NOTE - FOR ADDITIONAL INFORMATION REFERENCE STRUCTURAL DRAWINGS

LARRY BLANCHARD, Senior Project Engineer, 5/14/2007, Phase 7 Upgrade and Expansion of Household Hazardous Materials Facility, Arlington County, VA. Issue 05/22/2007, Sheet 15 of 16. Layout: A27-04

NO.	ISSUED FOR	DATE	BY	APPROVED	DESIGNED: DFC DRAWN: MH CHECKED: DFC PROJ. ENGR.: DFC CAD REF. NO. 1A034HHWO	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)	 DAVID F. CRAWFORD No. 013206 ARCHITECT	 MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1101 Wien Boulevard Suite 1400 Arlington, VA 22209	 ARLINGTON COUNTY VIRGINIA	ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	ARCHITECTURAL HOUSEHOLD HAZARDOUS MATERIALS FACILITY COLLECTION AREA CANOPY PLAN AND SECTION	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007 DRAWING NUMBER A27-04 SHEET . OF
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NOTES:
 1. VERTICAL MASONRY WALL REINFORCEMENT SHALL BE #5 AT 32" OC UNLESS OTHERWISE NOTED.



DATE: MAY 2007
 DRAWING NUMBER: A27-05
 SHEET OF

DESIGNED	DFC
DRAWN	MH
CHECKED	DFC
PROLENGR.	DFC
CAD REF. NO.	1.A036HHWO
NO.	ISSUED FOR
	DATE
	BY
	APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)

COMMONWEALTH OF VIRGINIA

DAVID F. CRAWFORD
 No. 013206
 ARCHITECT

MALCOLM PIRNIE
 Independent Environmental
 Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
 PHASE 7E

ARCHITECTURAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 COLLECTION AREA WALL TYPES AND SECTIONS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
 DRAWING NUMBER: A27-05
 SHEET OF

ABBREVIATIONS

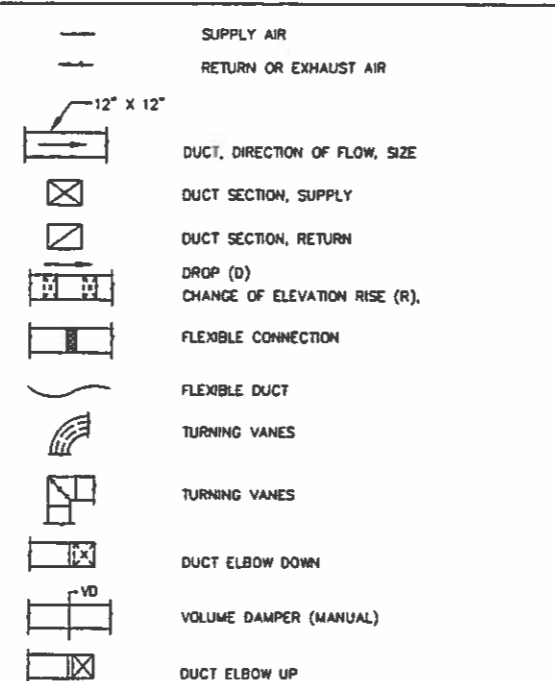
DUCTWORK & MISCELLANEOUS

PIPING & ACCESSORIES

GENERAL NOTES:

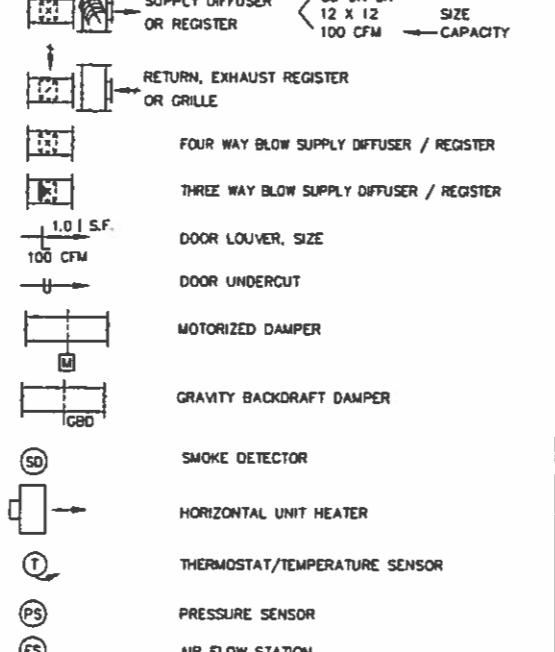
AD ACCESS DOOR
 AF/FI FAN AIRFLOW/BACKWARD INCLINED FAN
 AFF ABOVE FINISHED FLOOR
 AFS AIR FLOW SWITCH (PR. DIFF. SW.)
 AL ALUMINUM
 APD AIR PRESSURE DROP
 APPROX APPROXIMATE
 ATC AUTOMATIC TEMPERATURE CONTROL
 AUTO AUTOMATIC
 BDD/GBD GRAVITY/BACKDRAFT DAMPER
 BOD BOTTOM OF DUCT
 BLDG BUILDING
 BOT EL BOTTOM ELEVATION
 BHP BRAKE HORSE POWER
 BTUH BRITISH THERMAL UNITS PER HOUR
 C CENTER LINE
 CAP CAPACITY
 CD CEILING DIFFUSER
 CFM CUBIC FEET OF STANDARD AIR PER MINUTE
 CONC CONCRETE
 COND CONDENSATE
 CONN CONNECTION
 CONT CONTINUATION
 CO CLEANOUT
 CG CEILING GRILLE
 CR CEILING REGISTER
 CFMB COMBINATION FILTER MIXING BOX
 CP CONTROL PANEL
 DIA DIAMETER
 DET DETAIL
 DN DOWN
 DWG DRAWING
 DX DIRECT EXPANSION
 DBL DOUBLE
 EA EACH
 EAT ENTERING AIR TEMPERATURE
 EG EXHAUST GRILLE
 EL ELEVATION
 ER EXHAUST REGISTER
 EQUIP EQUIPMENT
 EWT ENTERING WATER TEMPERATURE
 EXH EXHAUST
 EXST EXISTING
 ET EXPANSION TANK
 FC FLEXIBLE CONNECTION
 FF FLAT FILTER
 FD FIRE DAMPER W/ ACCESS DOOR
 FLEX FLEXIBLE
 FLG FLANGED
 FLR FLOOR
 FPM FEET PER MINUTE
 FT FEET
 F&B FACE & BYPASS DAMPER
 FB FIXED BLADE LOUVER
 GPM GALLONS PER MINUTE
 CB CABINET HEATER
 CC COOLING COIL
 HC HEATING COIL
 ID INSIDE DIAMETER
 KW KILOWATT
 LAT LEAVING AIR TEMPERATURE
 LWT LEAVING WATER TEMPERATURE
 MAX MAXIMUM
 MBH THOUSAND BTUH
 MD MOTORIZED DAMPER
 MED MEDIUM
 MECH MECHANICAL
 MER MECHANICAL EQUIPMENT ROOM
 MIN MINIMUM
 MFR MANUFACTURER
 MOD MOTOR OPERATED DAMPER
 MOL MOTOR OPERATED LOUVER
 MB MIXING BOX
 MTD MOUNTED
 NK NECK
 NO NORMALLY OPEN
 NC NORMALLY CLOSED
 NFA NET FREE AREA
 NIC NOT IN CONTRACT
 OCC OCCUPIED
 OH OPPOSITE HAND
 OPNG OPENING
 PD PRESSURE DROP
 PRV PRESSURE REDUCING VALVE
 PE PNEUMATIC/ELECTRIC
 TYP TYPICAL
 SUP SUPPLY
 RA RETURN AIR
 RED REDUCER
 REQ'D REQUIRED
 RG RETURN GRILLE
 RM ROOM
 RR RETURN REGISTER
 RO ROOF OPENING
 RR RETURN REGISTER
 RO ROOF OPENING
 SD SMOKE DETECTOR
 EB EQUALIZATION BASIN INFLUENT

HOPE HIGH DENSITY POLYETHYLENE
 GBD GRAVITY BACKDRAFT DAMPER
 FRP FIBERGLASS REINFORCED PLASTIC
 SP STATIC PRESSURE
 SG SUPPLY GRILLE
 SHT SHEET
 SR SUPPLY DIFFUSER
 SR SUPPLY REGISTER
 SRV SAFETY RELIEF VALVE
 SS STAINLESS STEEL
 SM SHEET METAL
 TDH TOTAL DYNAMIC HEAD
 TE/TEFC TOTALLY ENCLOSED FAN COOLED TRANSFER GRILLE
 TC TRANSFER GRILLE
 TI TEMPERATURE INDICATOR
 TSP TOTAL STATIC PRESSURE
 UNON UNLESS OTHERWISE NOTED
 VD VOLUME DAMPER
 WB WET BULB
 WC WATER GAUGE
 WPD WATER PRESSURE DROP
 WTR WATER TEMPERATURE RISE WITH
 W/ CONNECTION POINT, NEW TO EXISTING



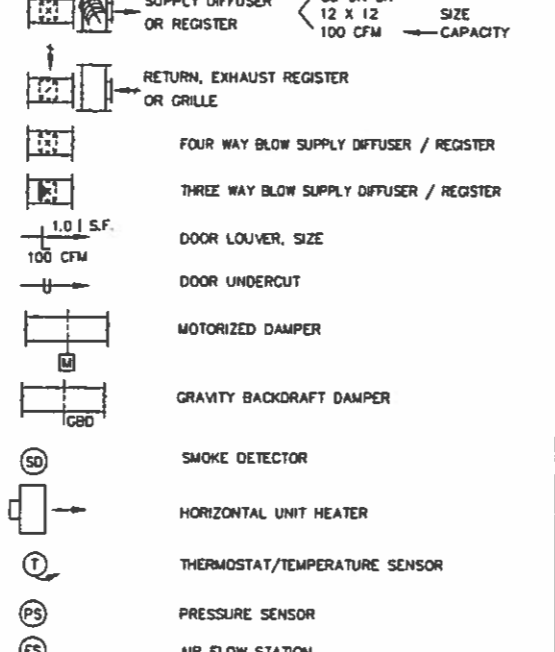
EQUIPMENT

ACC AIR COOLED CONDENSER
 ACCU AIR COOLED CONDENSING UNIT
 AFU AIR FILTRATION UNIT
 AHU AIR HANDLING UNIT/AIR COND. UNIT
 AS AIR SEPARATOR
 AVA AUDIO VISUAL ALARM
 CSP CONTROL SYSTEM PANEL
 CH CHILLER
 CF CHEMICAL FEEDER
 CWP CONDENSER WATER PUMP
 DCOL DUAL COMBINATION OPERABLE LOUVER
 DDC DIRECT DIGITAL CONTROL
 EF EXHAUST FAN
 EUIH ELECTRIC UNIT HEATER
 FACP FIRE ALARM CONTROL PANEL
 FTR FIN TUBE RADIATION
 GMFU GLYCOL MAKE-UP FEED UNIT
 HDC DUCT MOUNTED COIL
 HJU HEATING AND VENTILATING UNIT
 HWB HOT WATER BOILER
 OCF ODOR CONTROL FAN
 OCU ODOR CONTROL UNIT
 P PUMP
 RF RETURN FAN
 RIV ROOF MOUNTED INTAKE VENT
 RRV ROOF MOUNTED RELIEF VENT
 SF SUPPLY FAN
 SPP SMOKE PURGE PANEL
 UH UNIT HEATER
 VAV VARIABLE AIR VOLUME BOX
 CRAC CONTROL ROOM AIR CONDITIONING UNIT
 PTAC PACKAGED TERMINAL AIR CONDITIONING UNIT
 RTU PACKAGED ROOFTOP AIR HANDLING UNIT
 HUH HOT WATER UNIT HEATER
 FCU FAN COIL UNIT



ET EXPANSION TANK
 FC FLEXIBLE CONNECTION
 FF FLAT FILTER
 FD FIRE DAMPER W/ ACCESS DOOR
 FLEX FLEXIBLE
 FLG FLANGED
 FLR FLOOR
 FPM FEET PER MINUTE
 FT FEET
 F&B FACE & BYPASS DAMPER
 FB FIXED BLADE LOUVER
 GPM GALLONS PER MINUTE
 CB CABINET HEATER
 CC COOLING COIL
 HC HEATING COIL
 ID INSIDE DIAMETER
 KW KILOWATT
 LAT LEAVING AIR TEMPERATURE
 LWT LEAVING WATER TEMPERATURE
 MAX MAXIMUM
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 MD MOTORIZED DAMPER
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 RO ROOF OPENING
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HOPE HIGH DENSITY POLYETHYLENE
 GBD GRAVITY BACKDRAFT DAMPER
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 SP STATIC PRESSURE
 SG SUPPLY GRILLE
 SHT SHEET
 SR SUPPLY DIFFUSER
 SR SUPPLY REGISTER
 SRV SAFETY RELIEF VALVE
 SS STAINLESS STEEL
 SM SHEET METAL
 TDH TOTAL DYNAMIC HEAD
 TE/TEFC TOTALLY ENCLOSED FAN COOLED TRANSFER GRILLE
 TC TRANSFER GRILLE
 TI TEMPERATURE INDICATOR
 TSP TOTAL STATIC PRESSURE
 UNON UNLESS OTHERWISE NOTED
 VD VOLUME DAMPER
 WB WET BULB
 WC WATER GAUGE
 WPD WATER PRESSURE DROP
 WTR WATER TEMPERATURE RISE WITH
 W/ CONNECTION POINT, NEW TO EXISTING



BUILDING ABBREVIATIONS

NMB NEW MAINTENANCE BUILDING ADDITION
 DAFT DISSOLVED AIR FLOTATION
 PTB PRELIMINARY TREATMENT BUILDING
 FADF FILTRATION AND DISINFECTION FACILITY
 SHF SODIUM HYPOCHLORITE FACILITY
 ACDB POST AERATION FACILITY
 MFF METHANOL FEED FACILITY
 NFF NORTH FERRIC FACILITY
 SFF SOUTH FERRIC FACILITY
 HHM HOUSEHOLD HAZARDOUS MATERIALS
 DC-1 DISTRIBUTION CENTER 1
 DC-5 DISTRIBUTION CENTER 5

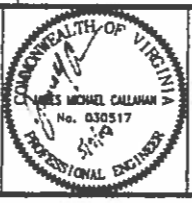
1. THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATION CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PROJECT IN PARTICULAR AND SHOULD BE USED FOR CLARIFICATION ONLY.
2. ALL DUCT DIMENSIONS ARE CLEAR DIMENSIONS TO INSIDE OF DUCT. DIMENSIONS TO DUCTS FROM FLOOR OR WALL SHALL BE TO THE OUTSIDE OF THE DUCT.
3. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
4. EQUIPMENT SIZE AND LOCATIONS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED BY EQUIPMENT FURNISHED. EQUIPMENT PADS ARE UNDER GENERAL CONTRACT. REFER TO STRUCTURAL DRAWINGS UNDER GENERAL CONTRACT FOR EQUIPMENT PAD DETAILS.
5. FINAL SIZES OF FLOOR OPENINGS, DUCT PLENUMS, AND TRANSITIONS AND PIPING CONNECTIONS, AND CONCRETE PAD TO ALL EQUIPMENT SHALL BE DETERMINED BY EQUIPMENT FURNISHED.
6. SERVICE & INSPECTION OPENINGS IN DUCTWORK SHALL BE PROVIDED WITH AIRTIGHT ACCESS DOORS AS PER NFPA-90A.
7. FOR EXTENT OF NFPA (NEC) SPACE HAZARD AREA CLASSIFICATION OF SPACES, SEE ELECTRICAL DRAWINGS UNDER ELECTRICAL CONTRACT
8. INSTALL FIRE DAMPERS IN DUCTS PASSING THRU FIRE RATED PARTITIONS RATED AT 1 HOUR OR MORE.
9. DUCTS AND PIPE ELEVATIONS INDICATED ON DESIGN DRAWING ARE BASED ON AVOIDING ANY OBSTRUCTIONS FROM THE EQUIPMENT DESIGN LAYOUTS OF OTHER CONTRACTS. CONTRACTOR TO FIELD COORDINATE FOR EXACT ELEVATIONS FOR ACTUAL FIELD CONDITIONS DURING CONSTRUCTION.
10. WHERE PIPING & EQUIPMENT IS TO BE REMOVED, WORK ALSO INCLUDES REMOVAL OF ALL SUPPORTS, HANGERS, PADS ETC. (TYPICAL FOR ALL REMOVAL DWGS.).
11. CONTRACTOR SHOULD NOTE THAT THE WORK IS DONE IN MULTIPLE STAGES IN THE EXISTING STRUCTURES UNDER CONTRACT DP-1(G, H, E, P) WITH NO INTERRUPTION OF THE NORMAL PLANT OPERATION. COORDINATE WITH OTHER CONTRACT DP-1(G, E, P) FOR THE STAGING OF DEMOLITION AND NEW CONSTRUCTION WORK IN EACH STRUCTURE. REFER TO MECHANICAL DRAWINGS UNDER DP-1 CONTRACT FOR THE GENERAL ARRANGEMENT OF STAGING SEQUENCES AND NOTES REFERRING TO DEMOLITION AND NEW CONSTRUCTION IN AREAS IN EACH STRUCTURE.
12. THE CORROSIVE AND NON-CORROSIVE DESIGNATION TABLE IS LINKED TO MATERIALS OF CONSTRUCTION DESCRIBED WITHIN THE SPECIFICATIONS AND/OR ON THE DRAWINGS WITH AREAS THAT TEND TO CONTAIN AGGRESSIVE ATMOSPHERE, ELEVATED LEVELS OF MOISTURE, OUTDOOR EXPOSURE TO THE ELEMENTS.
13. THE CORROSIVE AND NON-CORROSIVE DESIGNATION TABLE IS INTENDED TO APPLY ONLY WHERE SPECIFICALLY REFERENCED AND APPLIES TO HVAC SPECIFICATIONS AND DRAWINGS ONLY
14. ANY AREAS NOT LISTED IN THE CORROSIVE AND NON-CORROSIVE DESIGNATION TABLE BUT SHOWN ON THE HVAC DRAWINGS TO CONTAIN WORK SHALL BE DESIGNATED A CORROSIVE AREA
15. FOR ROOM CLASSIFICATIONS REFER TO ELECTRICAL DRAWING

CORROSIVE AND NON-CORROSIVE AREA DESIGNATION TABLE

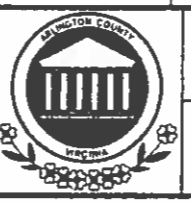
BUILDING	ROOMS	CORROSIVE ATMOSPHERE	NON-CORROSIVE ATMOSPHERE
HOUSEHOLD HAZARDOUS MATERIALS	CORROSIVE, LATEX/TONIC, COMPUTER & FLAMMABLE STORAGE AREAS	X	
	OFFICE & MECHANICAL ROOM		X

DESIGNED	DF
DRAWN	DF
CHECKED	JMC
PROJ. ENGR.	JMC
CAD REF. NO.	1H010000
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
 Independent Environmental Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

HVAC
 GENERAL
 SYMBOLS, LEGENDS, GENERAL NOTES
 AND ABBREVIATIONS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007 DRAWING NUMBER H00-01 SHEET OF
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FAN SCHEDULE

MARK	LOCATION	SERVICE	TYPE	FAN DATA				MOTOR				DESIGN BASE LOREN COOK MODEL NO.	NOTES
				CFM	SP WG	WHEEL DIA (IN)	RPM	BHP	HP	RPM	ELECT CHAR V/PH/Hz		
HMM-FAN-EXH-01	HOUSEHOLD HAZARD. MATER.	CORROSIVE STORAGE AREA	BASE MTD. CENTRIF.	510	0.5	16	1065	0.06	0.5	1725	460/3/60	120CA-SWSI	1, 2, 3, 4, 6
HMM-FAN-EXH-02	HOUSEHOLD HAZARD. MATER.	LATEX/TOXICS STOR. AREA	BASE MTD. CENTRIF.	510	0.5	16	1065	0.06	0.5	1725	460/3/60	120CA-SWSI	1, 2, 3, 4, 6
HMM-FAN-EXH-03	HOUSEHOLD HAZARD. MATER.	COMPUTER STORAGE AREA	BASE MTD. CENTRIF.	1300	0.5	16	1900	0.32	0.5	1725	460/3/60	120CA-SWSI	1, 2, 3, 6
HMM-FAN-EXH-04	HOUSEHOLD HAZARD. MATER.	FLAMMABLE STORAGE AREA	BASE MTD. CENTRIF.	1300	0.5	16	1900	0.32	0.5	1725	460/3/60	120CA-SWSI	1, 2, 3, 4, 6
HMM-FAN-EXH-05	HOUSEHOLD HAZARD. MATER.	MECHANICAL AREA	BASE MTD. CENTRIF.	1350	0.5	16	1961	0.351	0.5	1725	460/3/60	120CA-SWSI	1, 2, 6
HMM-FAN-SUP-01	HOUSEHOLD HAZARD. MATER.	MECHANICAL AREA	INLINE CENTRIF.	1350	0.5	14	1267	0.325	0.334	1725	120/1/60	14CVB-S	1, 2, 5

NOTES:
 1. ALUMINUM CONSTRUCTION 3. CORROSIVE RESISTANT. 5. SCHEDULE TYPE D
 2. BELT DRIVE 4. NEC CLASS. 1 DIV 1 EXPLOSION PROOF 6. SCHEDULE TYPE E

PUMP SCHEDULE

MARK NO.	LOCATION	SERVICE	FLUID	TEMP (F)		PUMP TYPE	MIN EFF. (%)	FLOW (GPM)	TOTAL HD. (FT. H O) 2	MOTOR DATA				DESIGN BASE MFR. & MODEL NO.	NOTES
				MIN	MAX					RPM	BHP	V/PH	HP		
HMM-PUMP-HW-01	HMM	HHW AREAS	WATER	32	225	INLINE	-	28	35	1730	1.2	460/3	1.5	BELL & GOSSETT PD40-T	
HMM-PUMP-HW-02	HMM	HHW AREAS	WATER	32	225	INLINE	-	28	35	1730	1.2	460/3	1.5	BELL & GOSSETT PD40-T	

PACKAGED TERMINAL AIR CONDITIONING SCHEDULE

MARK NO.	LOCATION	TOTAL FLOW CFM	O.A FLOW CFM	COOLING			VOLTAGE V/PH/Hz	MIN. CIRCUIT CAPACITY	TIME DELAY FUSES	NEMA RECEPTACLE TYPE REQ.	DESIGN BASE		NOTES
				CAPACITY BTU/HR	EER	FLA WATTS					MFR.	MODEL NO.	
HMM-PTAC-01	FLAMMABLE STORAGE AREA	320	0	12000	11.0	8.8	-	208/1/60	10.7	20	-	MARC CLIMATE CONTROLS INC. RC9X12-21-C1	1, 2
HMM-ACU-01	OFFICE AREA	250	0	7400	9.5	3.2	643	208/1/60	8.8	15	-	FREDRICH SV10J10A	1

NOTES: 1. HARDWIRED 2. CLASS 1, DIVISION 1 EXPLOSION PROOF

ELECTRIC UNIT HEATER SCHEDULE

MARK NO.	LOCATION	SERVICE	SERVICE VOLTAGE & PHASE	INPUT KW	OUTPUT MBH	FAN CFM	AIR DATA		FAN MOTOR DATA				FAN DISCHARGE TYPE	THROW FT	MOUNTING HEIGHT A.F.F. FT	DESIGN BASE CHROMALOX MODEL NO.	NOTE
							EAT F	LAT F	RPM	VOLTS	PH	HP					
HMM-EUH-01	HOUSEHOLD HAZARDOUS MATER.	CORROSIVE STORAGE AREA	480/3	5.0	17.0	950	55	72	1000	480	3	1/50	HORIZONTAL	18	8	CXH-05-43-32	1, 2, 3, 5
HMM-EUH-02	HOUSEHOLD HAZARDOUS MATER.	LATEX/TOXICS STORAGE AREA	480/3	5.0	17.0	950	55	72	1000	480	3	1/50	HORIZONTAL	18	8	CXH-05-43-32	1, 2, 3, 5
HMM-EUH-03	HOUSEHOLD HAZARDOUS MATER.	COMPUTER STORAGE AREA	480/3	10.0	34.0	750	55	97	1550	480	3	1/50	HORIZONTAL	27	9	H0H-10-43-32	2, 3, 5
HMM-EUH-04	HOUSEHOLD HAZARDOUS MATER.	FLAMMABLE STORAGE AREA	480/3	10.0	34.0	750	55	97	1550	480	3	1/50	HORIZONTAL	27	9	CXH-10-43-32	1, 2, 3, 5
HMM-EBH-01	HOUSEHOLD HAZARDOUS MATER.	COMPUTER STORAGE - SHOWER	120/1	1	3.4	-	55	-	-	120	1	-	HORIZONTAL	27	3"	QMKC-2514W	4, 5

NOTE: 1. NEC CLASS 1, DIV 1 (EXPLOSION PROOF) 2. MOUNTING BRACKETS 3. WALL MOUNTED THERMOSTAT 4. QMARK 5. CORROSIVE RESISTANT

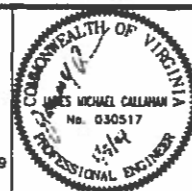
HEATING AND VENTILATION UNIT/AIR HANDLING UNIT SCHEDULE

MARK NO.	LOCATION	AREA SERVED	SUPPLY FAN DATA				MOTOR DATA				ELECTRIC COIL DATA				CHILLED WATER COIL DATA				HW COIL DATA				WEIGHT (LBS)	DESIGN BASE MFR. & MODEL NO.	NOTES												
			FLOW CFM	O.A. CFM	E.S.P. IN. W.G.	T.S.P. IN. W.G.	O.V. FPM	FAN RPM	BHP	HP OR FLA	V/PH	MBH	KW	V/PH	FACE AREA SQ.FT.	AIR PD	AIR TEMP F ENT	AIR TEMP F LVG	MBH (TOT/SEN)	APD (IN.)	EAT (F) (DB/WB)	LAT (F) (DB/WB)				GPM	WPD (FT.)	EWT (F)	LWT (F)	MBH	APD (IN.)	EAT (F)	LAT (F)	GPM	WPD (FT.)	EWT (F)	LWT (F)
HMM-HVU-01	HOUSEHOLD HAZARD. MATER.	CORROSIVE STORAGE AREA	500	500	1.0	2.5	1000	2100	0.6	0.75	460/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1493	AIR ZONE INTNL - 4WH1004B	1, 2
HMM-HVU-02	HOUSEHOLD HAZARD. MATER.	LATEX/TOXICS AREA	500	500	1.0	2.5	1000	2100	0.6	0.75	460/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1493	AIR ZONE INTNL - 4WH1004B	1, 2
HMM-HVU-03	HOUSEHOLD HAZARD. MATER.	COMPUTER STORAGE FACILITY	1310	1310	1.0	2.5	1635	1763	1.25	1.5	460/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1493	AIR ZONE INTNL - 4MQ1001B	1, 2
HMM-HVU-04	HOUSEHOLD HAZARD. MATER.	FLAMMABLE STORAGE AREA	1310	1310	1.0	2.5	1635	1763	1.25	1.5	460/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1493	AIR ZONE INTNL - 4MQ1001B	1, 2

NOTE: 1. CORROSIVE RESISTANT COATING 2. REFER TO SPEC. SECTION 15720 (DETAILS OF CONSTRUCTION - TYPE I)

DESIGNED	DF
DRAWN	DF
CHECKED	JMC
PROJECTOR	JMC
CAD REF. NO.	1H020000
ISSUED FOR	
DATE	
BY	
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID NORTH AMERICAN DATUM 1983 (NAD 83)
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 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



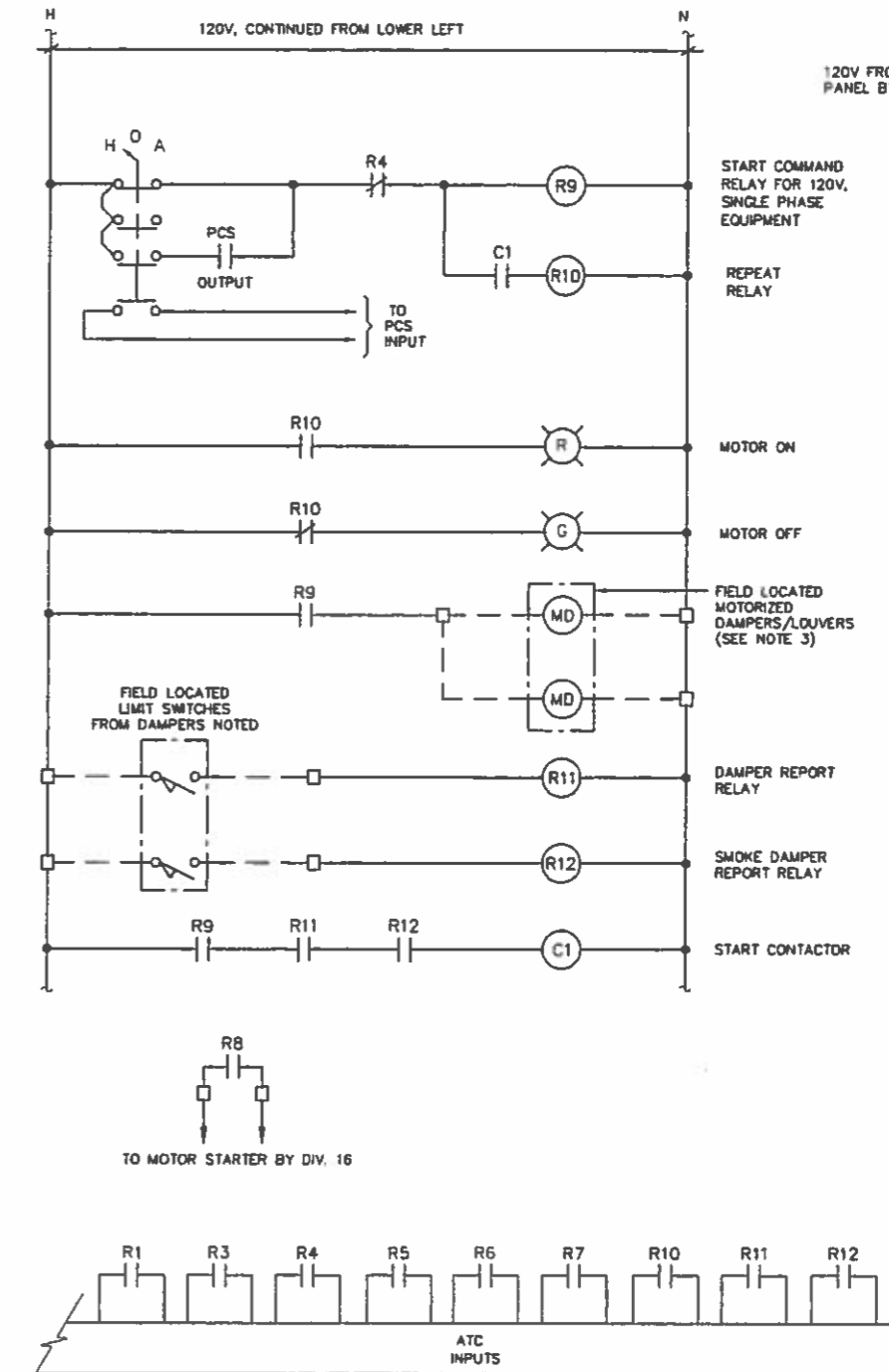
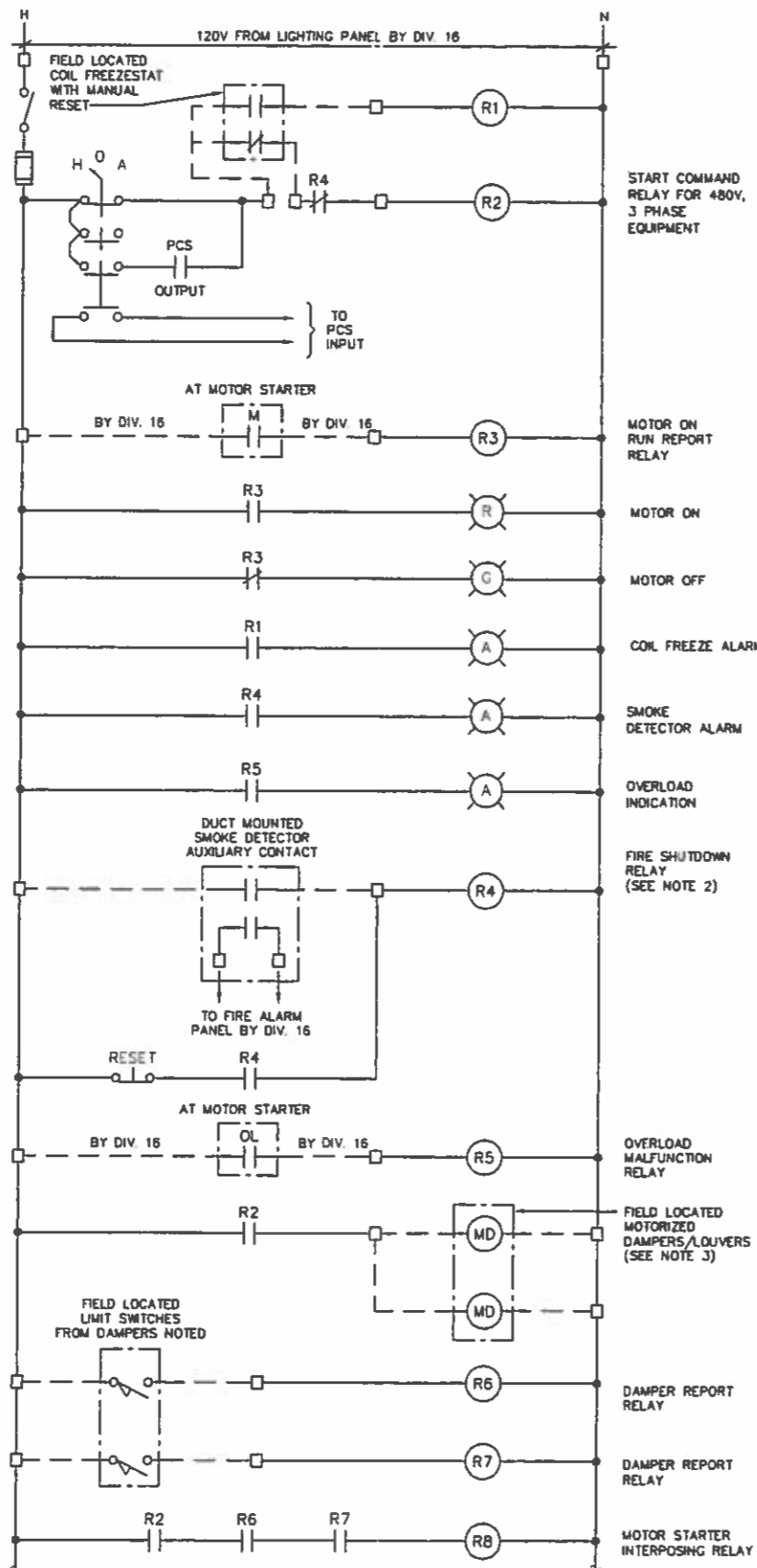
ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

HVAC
 GENERAL
 EQUIPMENT SCHEDULES

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
 DATE: MAY 2007
 DRAWING NUMBER: **H00-02**
 SHEET OF

NOTES:

1. THE CONTROL SCHEMATICS SHOWN REPRESENT A TYPICAL INTERFACE FOR 480V/3 PHASE AND 120V/1 PHASE OPERATED EQUIPMENT WHICH REQUIRE MANUAL PROVISIONS INDEPENDENT FROM THE PROGRAMMABLE LOGIC CONTROLLERS. NOT ALL REQUIRED SYSTEM CONTROLS ARE SHOWN. PROVIDE COMPLETE CONTROLS FOR PROPER OPERATION OF EACH SYSTEM AS DESCRIBED IN SPEC. SECTION 15950 SEQUENCE OF OPERATIONS. ALL EQUIPMENT SHOWN MAY NOT BE REQUIRED.
2. PROVIDE A FIRE SHUTDOWN RELAY, RESET AND ASSOCIATED CIRCUITRY WHICH ACTIVATES FROM DUCT MOUNTED SMOKE DETECTORS. SCHEMATIC SHOWS A SINGLE ZONE WHERE MULTI-ZONES ARE REQUIRED, SHUTDOWN ASSOCIATED ZONE FANS AS REQUIRED.
3. PROVIDE CONTROLS AND ASSOCIATED CIRCUITRY FOR MOTORIZED DAMPERS OR LOUVERS IDENTIFIED. THE INTENT IS TO ENSURE THAT DAMPERS ARE OPEN BEFORE THE FAN CAN BE STARTED IN THE "HAND" POSITION. WHERE EQUIPMENT IS PROVIDED WITH A RETURN AND OUTSIDE AIR DAMPER, THE RETURN DAMPER SHALL BE PROVEN OPEN BEFORE THE UNIT CAN START. SCHEMATIC SHOWS TWO MOTORIZED DAMPERS, WHERE ADDITIONAL DAMPERS, NO DAMPERS, OR A SINGLE DAMPER IS SPECIFIED, ADJUST THE CONTROLS ACCORDINGLY.
4. FIELD WIRING SHOWN SHALL BE PROVIDED BY DIVISION 15 UNLESS SPECIFICALLY NOTED OTHERWISE. SOFTWARE INTERLOCKS ARE NOT SHOWN ON THIS DRAWING AND ARE DESCRIBED IN SPEC. SECTION 15950 SEQUENCE OF OPERATIONS.



LEGEND:
 ——— PANEL WIRING BY DIV. 15
 - - - FIELD WIRING BY DIV. 15 EXCEPT WHERE NOTED OTHERWISE

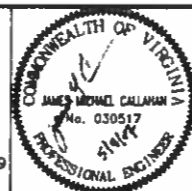
ATC SCHEMATIC NO. 1 - TYPICAL CONTROL SCHEMATIC
 (SEE NOTE NO. 1)

UNLESS NOTED OTHERWISE, ALL DEVICES SHOWN ON THIS CONTROL SCHEMATIC ARE LOCATED IN ATC PANELS.

DESIGNED	DF	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
DRAWN	DF	VERTICAL DATUM IS REFERENCED TO NATIONAL GEODEIC VERTICAL DATUM OF 1929 (NGVD 29)
CHECKED	JMC	
PROJENCR	JMC	
CAD REF. NO.	1H030000	
ISSUED FOR	APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODEIC VERTICAL DATUM OF 1929 (NGVD 29)



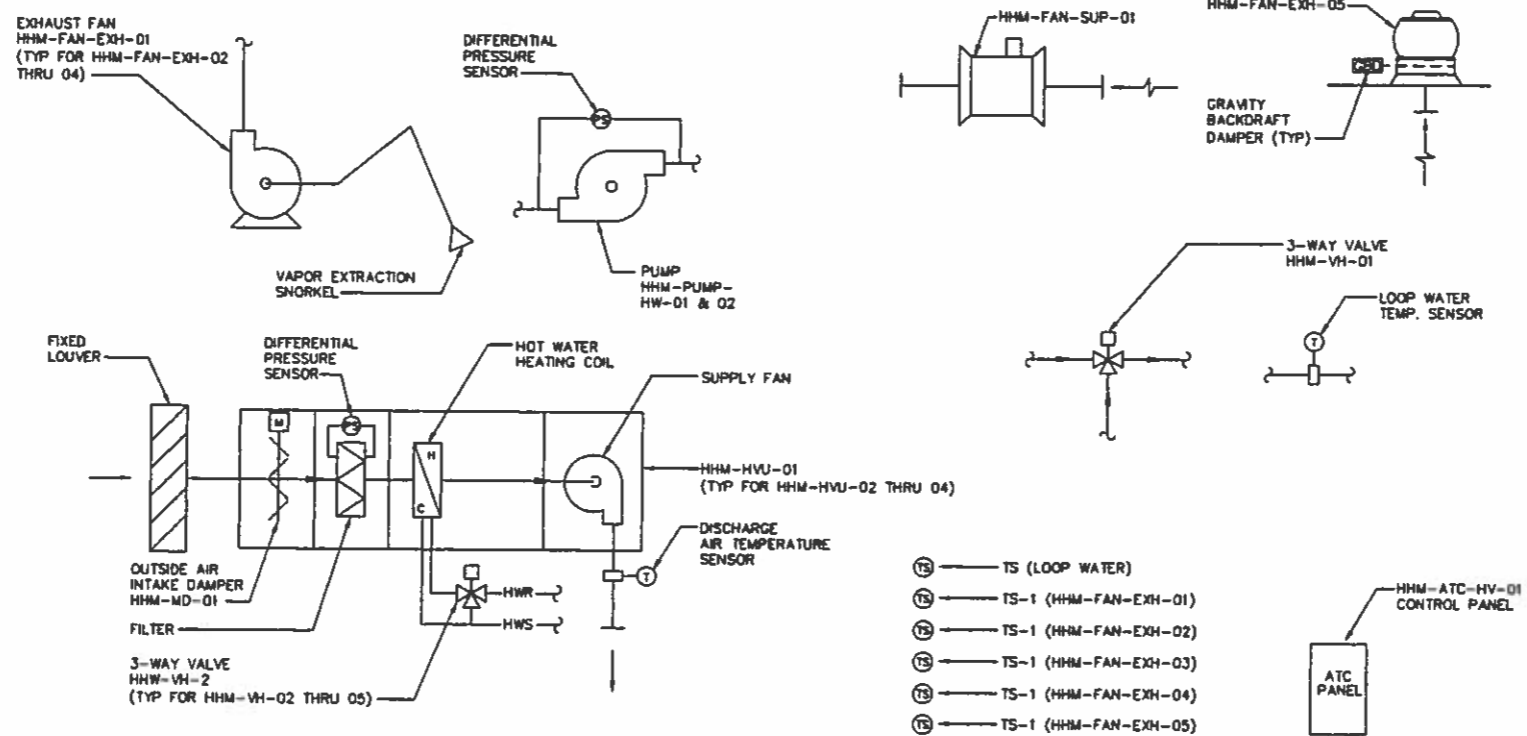
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ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION PHASE 7E

HVAC GENERAL CONTROL SCHEMATICS I

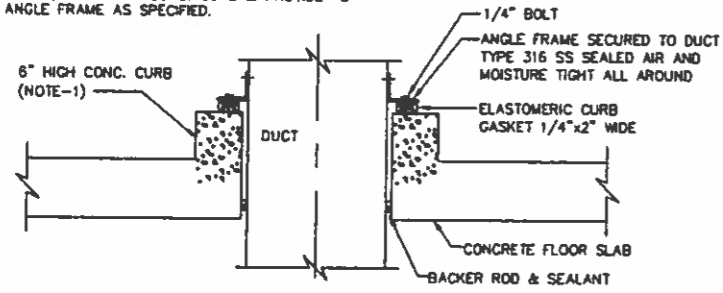
THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
	DRAWING NUMBER
	H00-03
	SHEET . OF



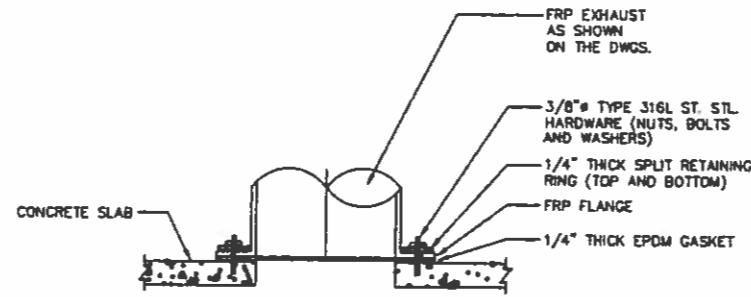
HOUSEHOLD HAZARDOUS MATERAILS FACILITY - HHM

NO.	ISSUED FOR	DATE	BY	DESIGNED	DF	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)				ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT	HVAC GENERAL CONTROL SCHEMATICS II	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING	DATE	MAY 2007	
				DRAWN	DF								CHECKED	JMC	DRAWING NUMBER
				PROJENGR	JMC	VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)								SHEET	OF
				CAD REF NO.	1H040000			MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1701 Wilson Boulevard Suite 1400 Arlington, VA 22209							

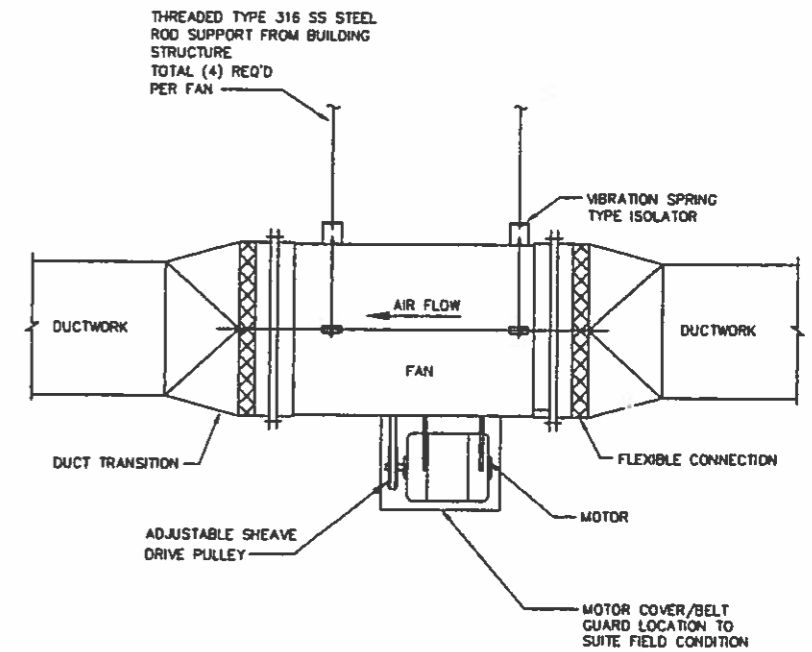
NOTES:
 1. WHERE DUCT PASSES THRU METAL PLATE FLOOR/
 PLATFORM, DISREGARD CONC. CURB & PROVIDE 3"
 SS ANGLE FRAME AS SPECIFIED.



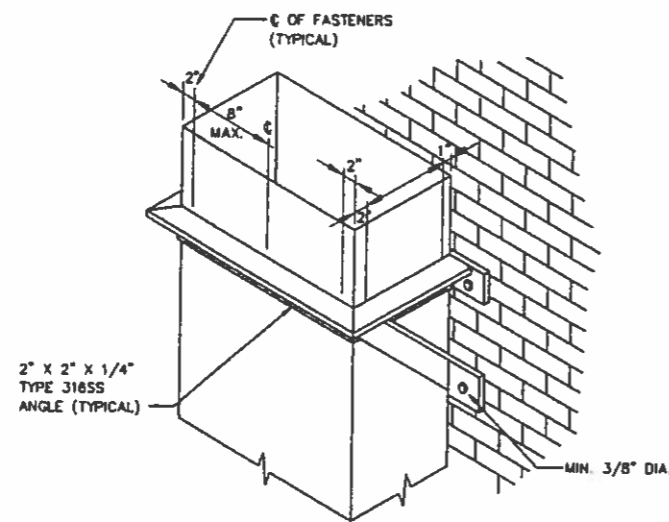
TYPICAL FLOOR SLAB DUCT PENETRATION DETAIL



FLANGED DUCT CONNECTION DETAIL

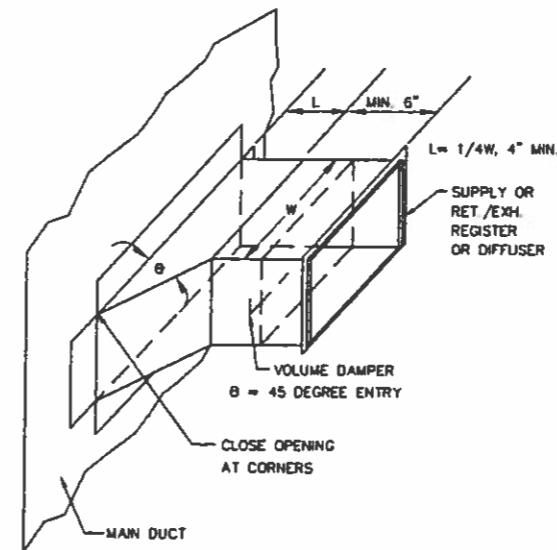


SUSPENDED IN-LINE FAN INSTALLATION DETAIL



VERTICAL DUCT SUPPORTS FROM WALL

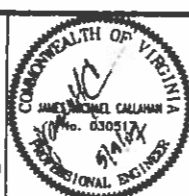
NOTE:
 ALL SUPPORT STEEL & HARDWARE
 TO BE TYPE 316 SS



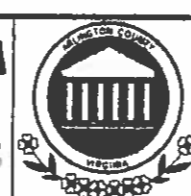
45° DUCT BRANCH & AIR INLET/OUTLET CONNECTION DETAIL

DESIGNED	DF
DRAWN	DF
CHECKED	JMC
PROJ. ENGR.	JMC
CAD REF. NO.	1H060000
ISSUED FOR	
DATE	
BY	
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
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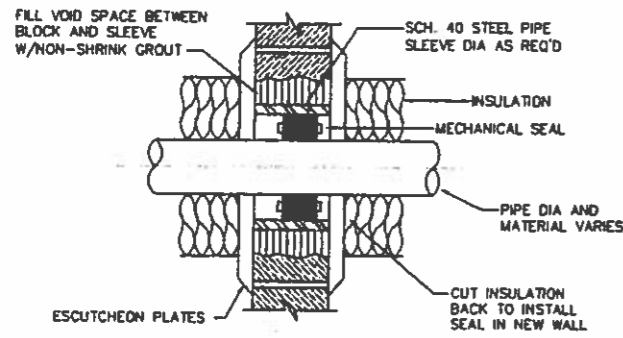
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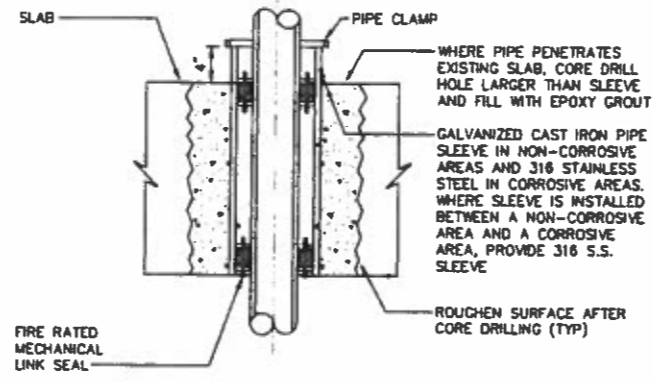
ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

HVAC
 GENERAL
 DETAILS II

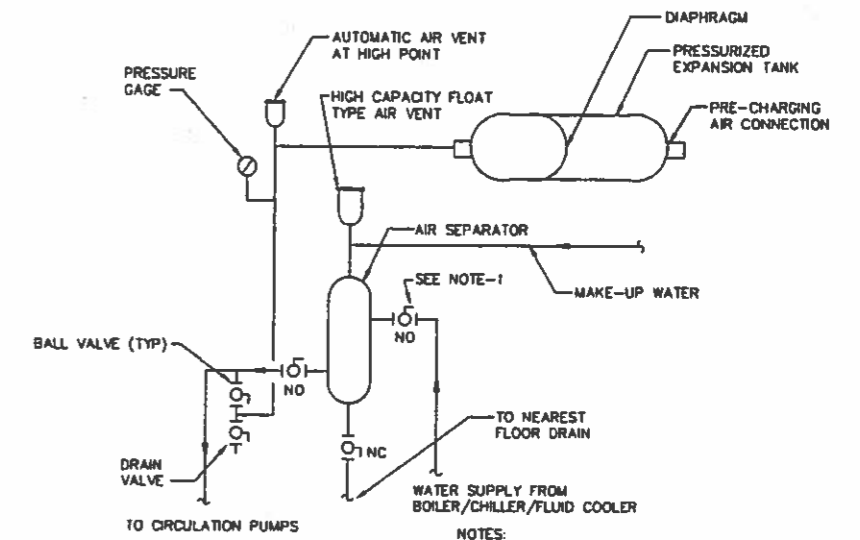
THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
	DRAWING NUMBER
	H00-06
	SHEET OF



TYPICAL DETAIL
PIPE SLEEVE WITH MECHANICAL SEALS FOR INSULATED PIPE AT WALLS
NOTE: WHERE PIPE PASSES THRU EXISTING FLOOR SLAB OR WALL, CORE DRILL FOR PIPE ROOTING & SLEEVE INSULATION

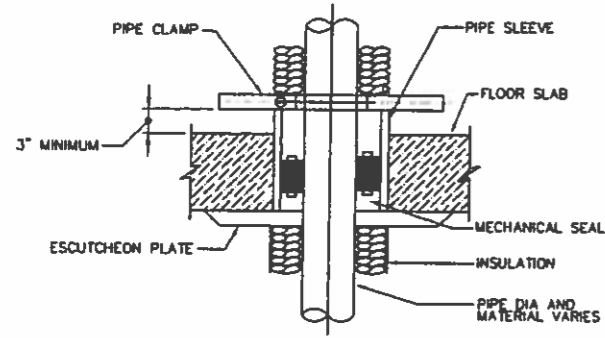


PIPE PENETRATION (FLOOR)



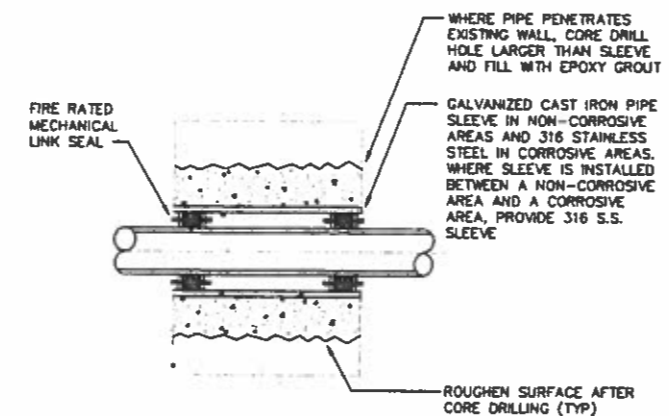
NOTES:
1. A. BALL VALVES: 2 1/2" & SMALLER SIZE.
B. GATE VALVES: 3" & LARGER SIZE.
2. REFER TO PIPING SCHEMATIC DIAGRAM FOR LOCATION OF EXPANSION TANK & AIR SEPARATOR IN EACH PIPING SYSTEM.

EXPANSION TANK PIPING DETAIL



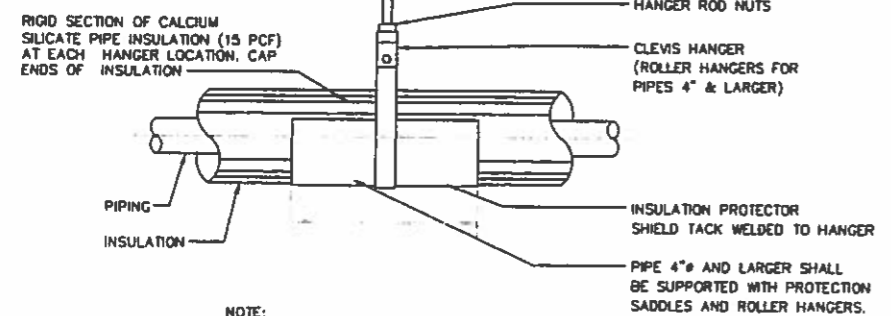
TYPICAL DETAIL
OPENING WITH MECHANICAL SEAL FOR INSULATED PIPES AT FLOOR SLABS

PIPE SLEEVE DETAIL



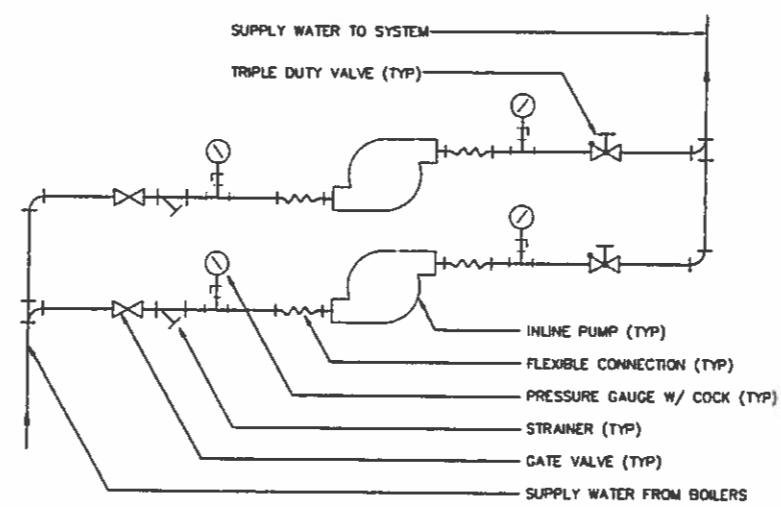
PIPE PENETRATION (WALL)

PIPE DIAMETER	7" SHIELD LENGTH	SHIELD THICKNESS
1/2" TO 1 1/2"	12"	18 USG
2" TO 3"	12"	16 USG
4" TO 5"	18"	16 USG
6" TO 14"	24"	14 USG



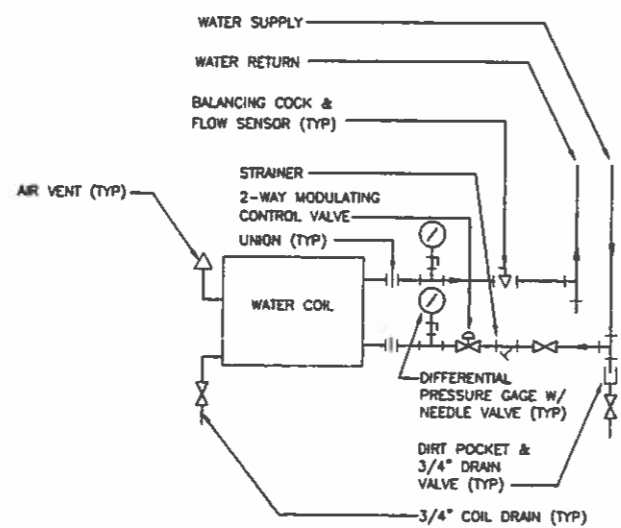
NOTE:
ALL HANGER SUPPORT STEEL & HARDWARE TO BE TYPE 316 SS

TYPICAL DETAIL HANGER ARRANGEMENT OF INSULATED PIPING

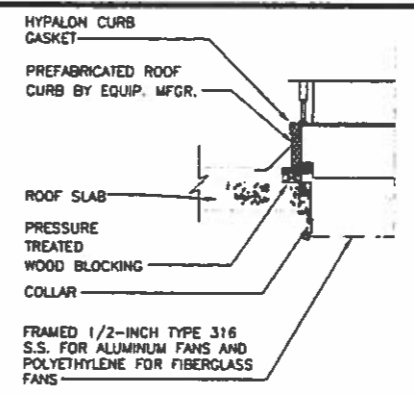


HOT WATER INLINE PUMP CONNECTIONS

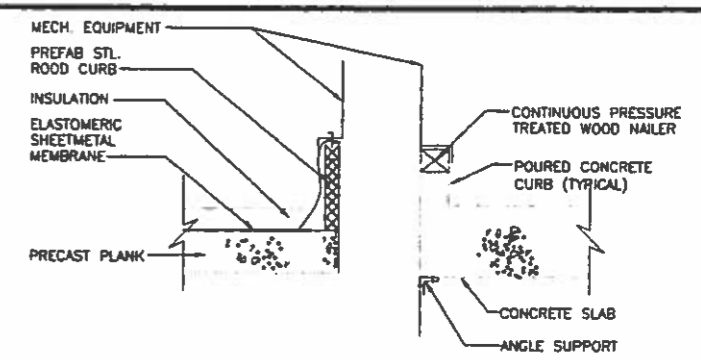
NO. ISSUED FOR DATE BY APPROVED	DESIGNED DF DRAWN DF CHECKED JMC PROJENGR. JMC CAD REF. NO. 1H070000	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)			ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	HVAC GENERAL DETAILS III	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING. DATE: MAY 2007 DRAWING NUMBER H00-07 SHEET OF
--	--	---	--	--	--	---	--



WATER COIL DETAIL
(2 WAY VALVE)



PRECAST PLANK ROOF STRUCTURES W/ INSULATION BELOW MEMBRANE
DAFT (MCC-15)
DC-5
DC-1
PTB

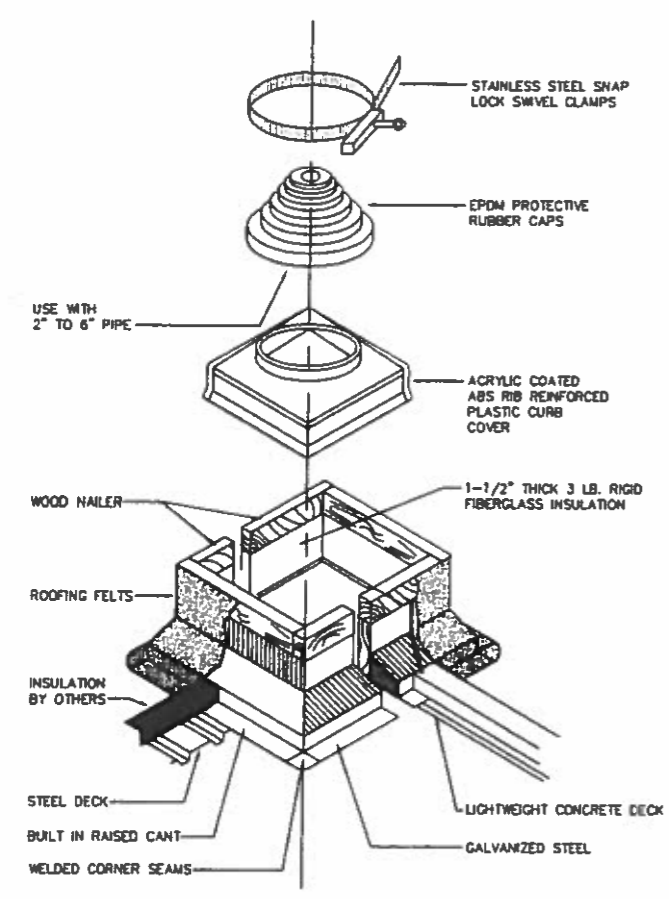


PRECAST PLANK ROOF STRUCTURES W/ INSULATION ON TOP
MFF
NFF
SFF
SHF
DCB

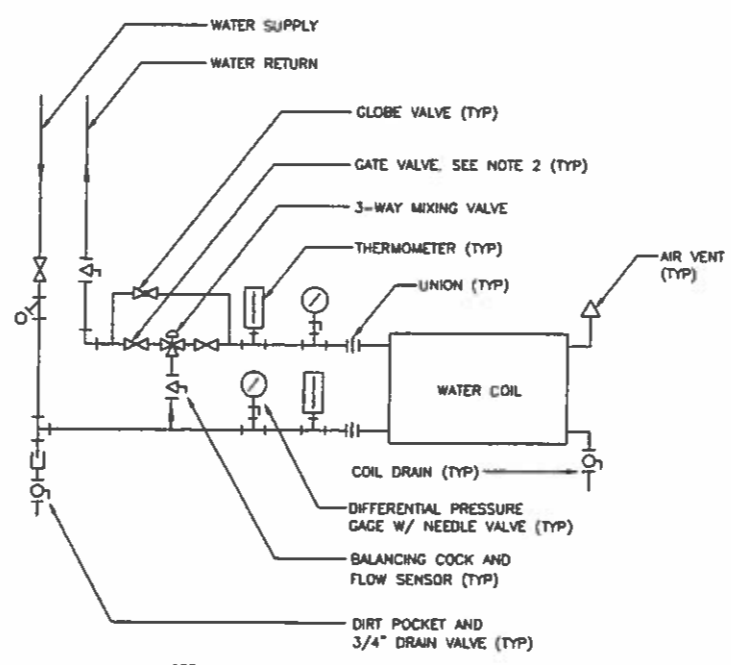
POURED CONCRETE ROOF STRUCTURES
FADF

NOTE 1: PROVIDE 18" HIGH CURB UNLESS INDICATED ON DRAWINGS.

TYPICAL ROOF MOUNTED HVAC EQUIPMENT ON PREFABRICATED OR POURED CONCRETE CURB DETAIL

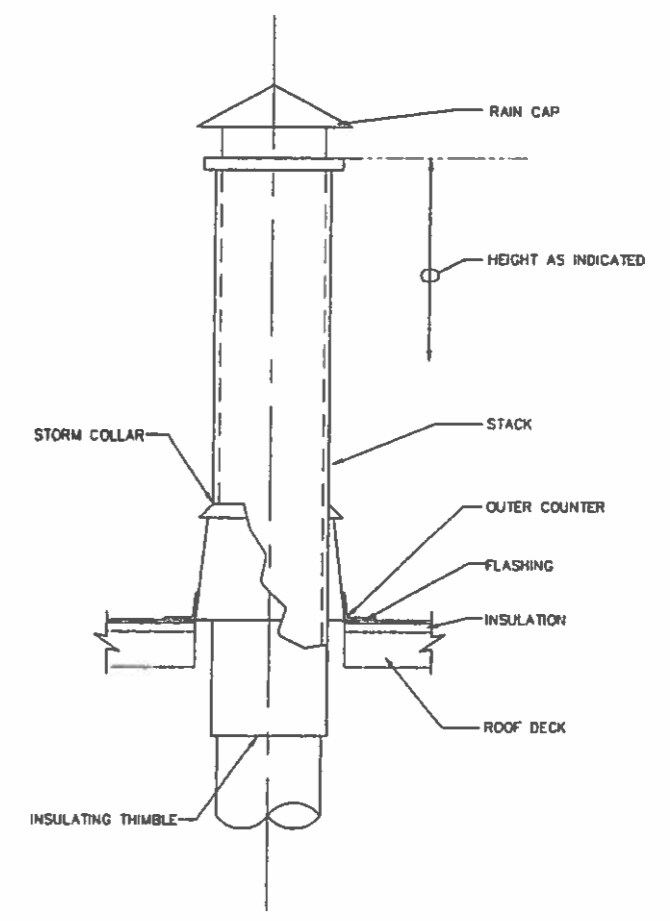


PIPE CURB ISOMETRIC DETAIL



NOTE:
1. TYPICAL PIPING FOR COOLING AND HEATING COILS.
2. 2 1/2" AND SMALLER ISOLATION VALVES SHALL BE BALL TYPE.

WATER COIL DETAIL
(3 WAY MIXING VALVE)

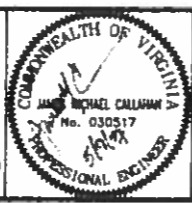


BOILER STACK ROOF PENETRATION & STACKHEAD DETAIL

NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED DF
DRAWN DF
CHECKED JMC
PROVENC. JMC
CAD REF. NO. 1H090000

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



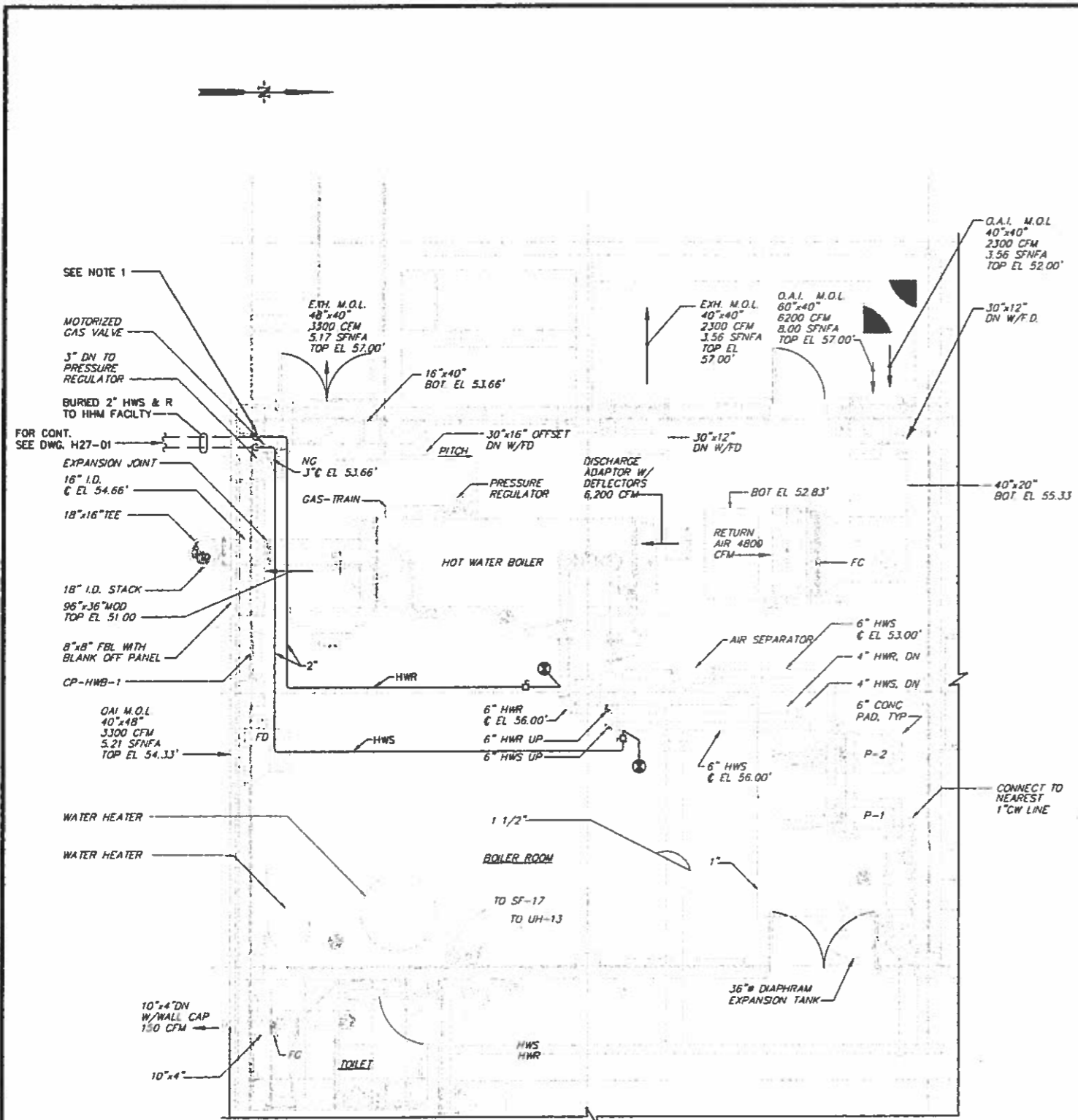
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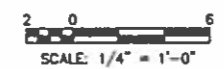
ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

HVAC
GENERAL
DETAILS V

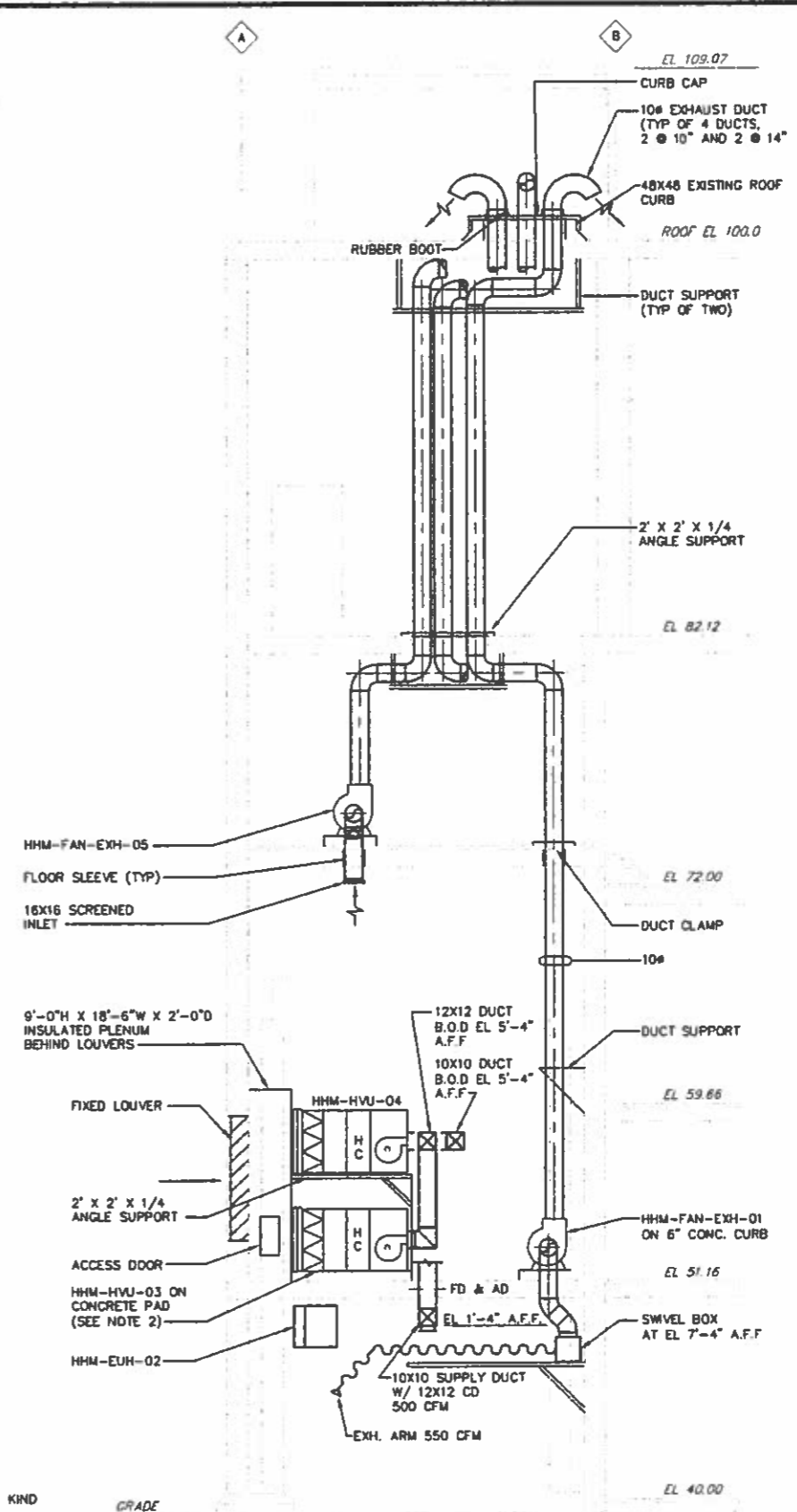
THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
DATE: MAY 2007
DRAWING NUMBER
H00-09
SHEET . OF



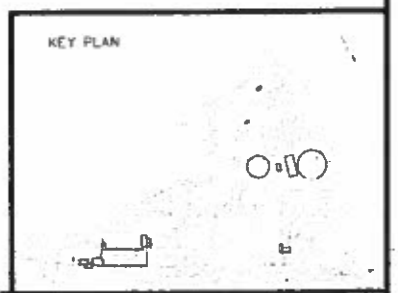
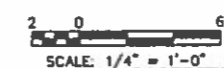
**CENTRIGUGE DEWATERING BUILDING
PARTIAL PLAN**



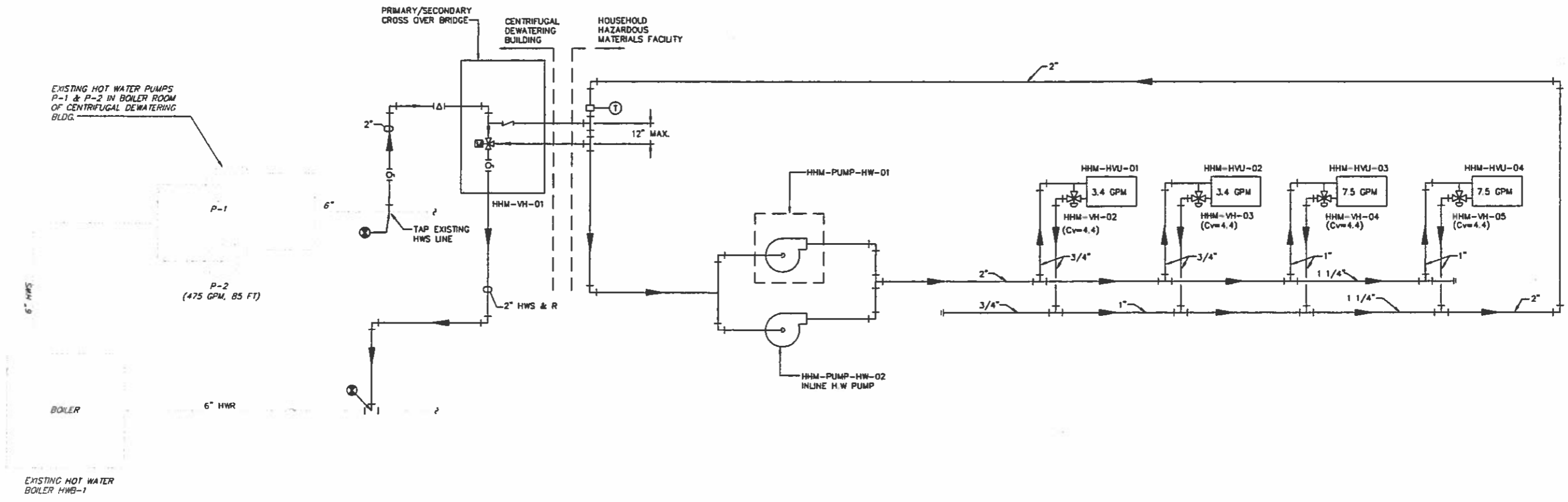
- NOTES:
- EXCAVATE FLOOR AND BLDG. WALL FOR PIPE PENETRATION. SLEEVE FOR NEW PIPE PENETRATIONS AND PATCH BLDG. IN KIND
 - REFER TO STRUCTURAL DETAIL FOR CONCRETE PAD INFORMATION.



**SECTION H27-02A
H27-01**



NO	ISSUED FOR	DATE	BY	DESIGNED	RMN	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)			ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT	HOUSEHOLD HAZARDOUS MATERIALS FACILITY COLLECTION AREA	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE	MAY 2007
				DRAWN	RMN							DRAWING NUMBER	H27-02
				CHECKED	JMC	VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)			UPGRADE AND EXPANSION PHASE 7E	PARTIAL PLAN AND SECTION		SHEET	0"
				PROJENGR	JMC							CAD REF. NO.	1H020HHM0



NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED RMN
 DRAWN RMN
 CHECKED JMC
 PROJ ENGR JMC
 CAD REF NO. 1H030HHMO

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



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 Independent Environmental Engineers, Scientists & Consultants
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 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 HVAC
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 COLLECTION AREA
 PIPING SCHEMATIC

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
 DRAWING NUMBER: **H27-03**
 SHEET OF

SYMBOLS

SYMBOL	DESCRIPTION
— CSW —	COLD SERVICE WATER PIPING
—	SANITARY PIPING ABOVE GRADE / FLOOR (SOIL OR WASTE)
—	SANITARY PIPING BELOW GRADE / FLOOR (SOIL OR WASTE)
—	VENT PIPING
— FAI —	FRESH AIR INLET
— TW —	TEPID WATER PIPING
— SD —	STORM DRAINAGE PIPING ABOVE GRADE / FLOOR
— SD —	STORM DRAINAGE PIPING BELOW GRADE / FLOOR
—	COLD WATER PIPING
—	HOT WATER PIPING
— PD —	PUMP DISCHARGE PIPING (SUMP PUMP OR SEWAGE EJECTOR)
— C —	NATURAL GAS PIPING
— IW —	INDIRECT WASTE PIPING
— F.S. —	FLOOR SWITCH
—	GATE VALVE (4-INCH & LARGER PIPING)
—	GLOBE VALVE
—	BALL VALVE
—	CHECK VALVE
—	CHECK VALVE
—	DIRECTION OF PITCH DOWN
—	FLOW - IN DIRECTION OF ARROW
—	PIPE DROP OR DOWN, UNLESS OTHERWISE NOTED
—	PIPE RISE OR UP, UNLESS OTHERWISE NOTED
—	RISE OR DROP IN RUN OF PIPE
—	BRANCH - TOP CONNECTION
—	BRANCH - BOTTOM CONNECTION
—	BRANCH CONNECTION SIDE
—	CAP ON END OF PIPE
—	UNION (SCREWED)
—	CLEANOUT PLUG
— FCO —	FLOOR CLEANOUT DECK PLATE
—	VALVE IN VERTICAL (TYPE AS SPECIFIED OR NOTED)
— WCO —	WALL CLEANOUT
—	STRAINER - WYE TYPE W/ BALL VALVE BLOW-OFF
— WHA —	WATER HAMMER ARRESTER
—	PRESSURE GAUGE WITH GAUGE COCK
—	THERMOMETER (STRAIGHT SCALE)
—	EXISTING PIPING, STRUCTURE AND EQUIPMENT
—	EXISTING PIPING, STRUCTURE AND EQUIPMENT TO BE REMOVED
— V —	PLUMBING STACK NUMBER

—	HOSE BIBB
—	WALL HYDRANT
—	AQUASTAT
—	P-TRAP
— FD —	FLOOR DRAIN (TYPE AS SPECIFIED OR NOTED)
— RD —	ROOF DRAIN (TYPE AS SPECIFIED OR NOTED)
—	SQUARE FOOT
—	HOUSE OR RUNNING TRAP
—	PRESSURE REDUCING VALVE (PRV)
—	DRAIN VALVE (NORMALLY CLOSED)
—	REDUCED PRESSURE ZONE BACKFLOW
—	HOSE REEL
—	VACUUM BREAKER
—	CORE DRILL PIPE PENETRATION AND MECH. SEAL AS REQUIRED

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
BLDG	BUILDING
BFP	BACKFLOW PREVENTER
BTUH	BRITISH THERMAL UNIT / HOUR
CA	COMPRESSED AIR
CFH	CUBIC FEET PER HOUR
CW	COLD WATER
CRV	CHEMICAL RESISTANT VENT
CRW	CHEMICAL RESISTANT WASTE
C	CENTERLINE
CLG	CEILING
CLW	CLOTHES WASHER
CONN	CONNECT
CONT	CONTINUATION
DFU	DRAINAGE FIXTURE UNIT
DIA	DIAMETER
DN	DOWN (PENETRATES FLOOR SLAB)
EL	ELEVATION
EWC	ELECTRIC WATER COOLER
EES	EMERGENCY EYEWASH AND SHOWER
EW	EYE WASH
FAI	FRESH AIR INLET
FCO	FLOOR CLEANOUT
FPW	FIRE PROTECTION WATER
FD	FLOOR DRAIN
FL	FLOOR
FS	FLOW SWITCH
FT	FEET
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HCL	HANDICAPPED LAVATORY
HCPD	HANDICAPPED
HR	HOSE REEL
HW	HOT WATER
HWC	HOT WATER CIRCULATION LINE
IE	INVERT ELEVATION
IW	INDIRECT WASTE
INCR	INCREASER
JS	JANITOR'S SINK
LAV	LAVATORY
MR	MOP RECEPTOR
MH	MANHOLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
PD	PUMP DISCHARGE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH (GAUGE)
RD	ROOF DRAIN
RCO	RISER CLEANOUT
RPDA	REDUCED PRESSURE DETECTOR ASSEMBLY
RPP-BFP	REDUCED PRESSURE PRINCIPLE - BACKFLOW PREVENTER
S	SOIL
SAN	SANITARY
SPD	SUMP PUMP DISCHARGE LINE
ST STL	STAINLESS STEEL
SD	STORM DRAIN
SW	SERVICE WATER
SH	SHOWER
SK	SINK
SS	SERVICE SINK
TW	TEPID WATER
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VTR	VENT THROUGH ROOF
VIV	VALVE IN VERTICAL
W	WASTE
WC	WATER CLOSET
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTER

GENERAL NOTES:

- ALL FLOOR DRAINS ARE AT LOW POINTS OF FLOORS. LOCATIONS AND ELEVATIONS ARE SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL FLOOR DRAINS FOR EQUIPMENT SHALL BE FIELD COORDINATED AND LOCATED ADJACENT TO THE EQUIPMENT OR PADS IN THE APPROXIMATE LOCATIONS SHOWN ON THE DRAWINGS.
- ALL BRANCH PIPING TO EQUIPMENT OR FIXTURES SHALL BE PROVIDED WITH SHUTOFF VALVES, WHETHER SHOWN, OR NOT SHOWN ON DRAWINGS.
- TEMPERATURE OF DOMESTIC HOT WATER SHALL BE 160F IN THE TANK AND 110F TO THE FIXTURES.
- ALL PIPING SHALL BE CONCEALED WITHIN WALLS, PIPE SPACES AND HUNG CEILINGS EXCEPT IN MECHANICAL SPACES OR WHERE NOTED.
- CHANGES IN DIRECTION IN DRAINAGE PIPING SHALL BE MADE BY THE USE OF 45 DEGREE ELLS, LONG SWEEPS, 90 DEGREE WYES W/CO'S OR BY A COMBINATION OF EQUIVALENT FITTINGS. THERE SHALL BE NO DOUBLE WYES IN THE HORIZONTAL PLANE.
- SANITARY TEES AND QUARTER BENDS MAY BE USED IN DRAINAGE LINES ONLY WHERE DIRECTION OF FLOW IS FROM HORIZONTAL TO THE VERTICAL.
- ALL VENT RISERS RUN STRAIGHT THROUGH ROOF SHALL HAVE AN APPROVED EXPANSION JOINT SYSTEM INSTALLED BELOW ROOF.
- ALL CONTROL WIRING SHALL BE 120 VOLTS UNLESS OTHERWISE SPECIFIED. TRANSFORMERS SHALL BE PROVIDED WHERE REQUIRED.
- THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
- WHERE NEW PIPING CONNECTS TO EXISTING PIPING MODIFY EXISTING PIPING AS REQUIRED TO MAKE NEW CONNECTION.
- ALL NEW PIPE PENETRATIONS THROUGH EXISTING FLOORS, WALLS OR CEILINGS SHALL BE CORE DRILLED.
- ALL ROOF DRAINS ARE AT LOW POINTS OF ROOFS. LOCATIONS AND ELEVATIONS ARE SHOWN ON THE ARCHITECTURAL PLANS.
- ALL EQUIPMENT AND CONTROL MECHANISMS SHALL BE PIPED THROUGH UNION CONNECTIONS.
- ALL WYE TYPE STRAINERS SHALL HAVE A 3-INCH LONG THREADED NIPPLE, THREADED END BALL VALVE AND PLUG ON BLOWDOWN SIDE.
- ALL VENT PIPING SHALL BE PITCHED SO AS TO DRAIN BACK TO SOIL OR WASTE PIPE.
- ALL DRAINAGE PIPING SHALL SLOPE AT A MIN. OF 1/8" PER FT. UNLESS OTHERWISE NOTED.
- AN ACCESSIBLE CLEANOUT SHALL BE PROVIDED AT THE BASE OF EACH SOIL STACK, WASTE STACK AND ROOF LEADER.
- A FLUSH-OUT TEE WITH A DRAIN VALVE SHALL BE PROVIDED AT THE BASE OF ALL CW, SW, HW SUPPLY AND RETURN RISERS AND AT ALL PIPING LOW POINTS.
- ALL HOT AND COLD WATER PIPING SHALL BE INSULATED.
- TRAPS SHALL BE PROVIDED AT ALL FLOOR DRAINS EXCEPT WHERE NOTED.
- VENT LINES SERVING FLOOR DRAIN HEADERS SHALL BE TAKEN OFF ABOVE THE CENTERLINE OF THE SOIL PIPE, AND THE VENT PIPE SHALL RISE AT AN ANGLE NOT MORE THAN 45°.
- ALL EXPOSED PIPING, FITTINGS AND VALVES IN FINISHED WASHROOMS SHALL BE CHROME PLATED.
- CHOP OUT ALL EXISTING CONCRETE EMBEDDED ITEMS TO BE REMOVED INCLUDING SLEEVES, DRAINS, ETC.
- SEE STRUCTURAL DRAWINGS FOR CONCRETE FLOOR PATCHING DETAILS.
- CAP OFF ALL OPEN ENDS OF EXISTING PIPE.
- CORE DRILL BOTH WALL AND FLOORS AS REQUIRED FOR ALL PIPE PENETRATIONS, WHETHER INDICATED OR NOT.
- PROVIDE HOT WATER TEMPERATURE MAINTENANCE HEAT TRACING ON ALL DOMESTIC HOT WATER PIPING, FROM THE HOT WATER HEATER TO THE PLUMBING FIXTURE/CONNECTIONS.

CORROSIVE AND NON-CORROSIVE AREA DESIGNATION TABLE

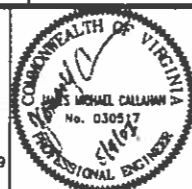
BUILDING	ROOMS	CORROSIVE ATMOSPHERE	NON-CORROSIVE ATMOSPHERE
HOUSEHOLD HAZARDOUS MATERIALS	CORROSIVE, LATEX/TOXIC, COMPUTER & FLAMMABLE STORAGE AREAS	X	
	OFFICE		X

NO	ISSUED FOR	DATE	BY	APPROVED

DESIGNED RPB
 DRAWN RMN
 CHECKED JMC
 PROJENGR ST/JMC
 CAD REF. NO. 1P010000

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

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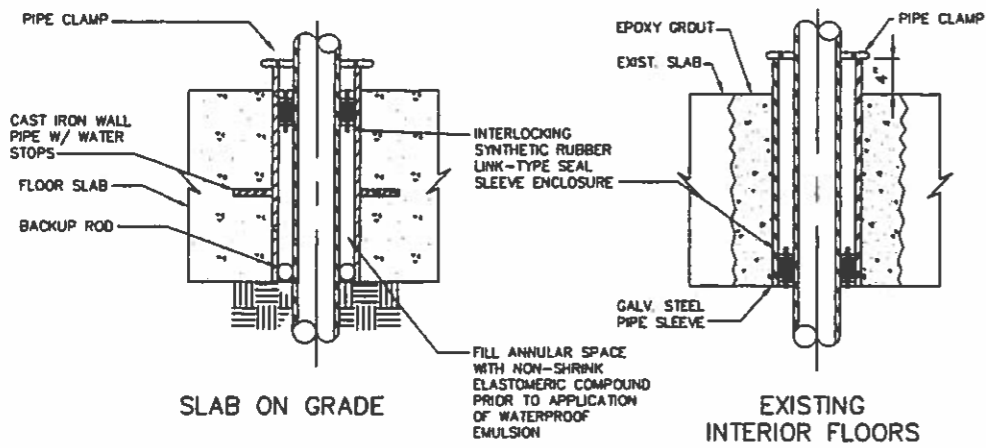


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
PHASE 7E

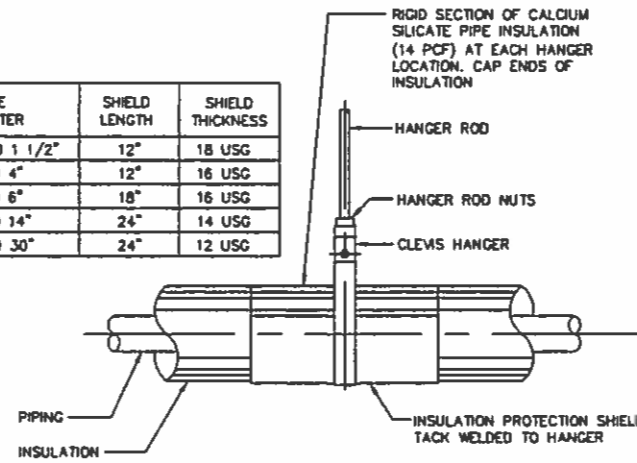
PLUMBING
GENERAL
SYMBOLS, GENERAL NOTES
AND ABBREVIATIONS

THE SCALE BAR SHOWN BELOW MEASURES ONE (1) INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
	DRAWING NUMBER
	P00-01
	SHEET OF

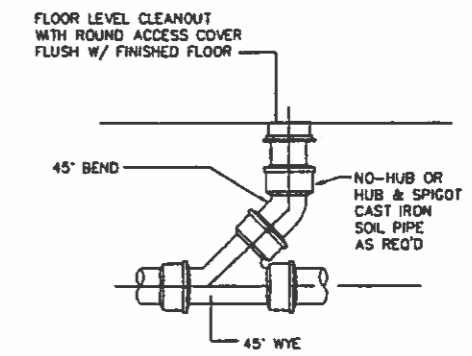


PIPE SLEEVES THRU FLOOR

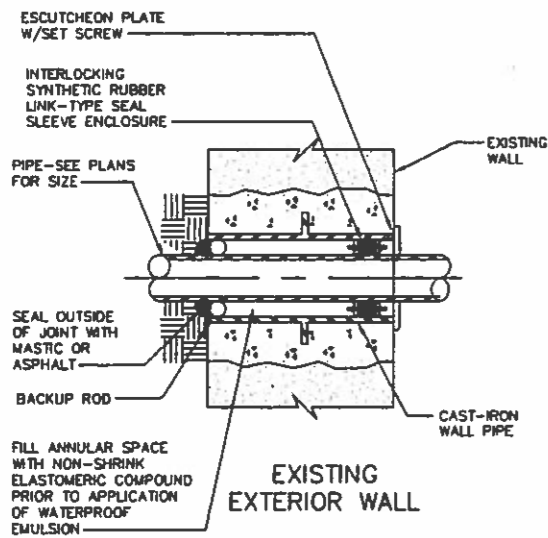
PIPE DIAMETER	SHIELD LENGTH	SHIELD THICKNESS
1/2" TO 1 1/2"	12"	18 USG
2" TO 4"	12"	16 USG
5" TO 6"	18"	16 USG
8" TO 14"	24"	14 USG
16" TO 30"	24"	12 USG



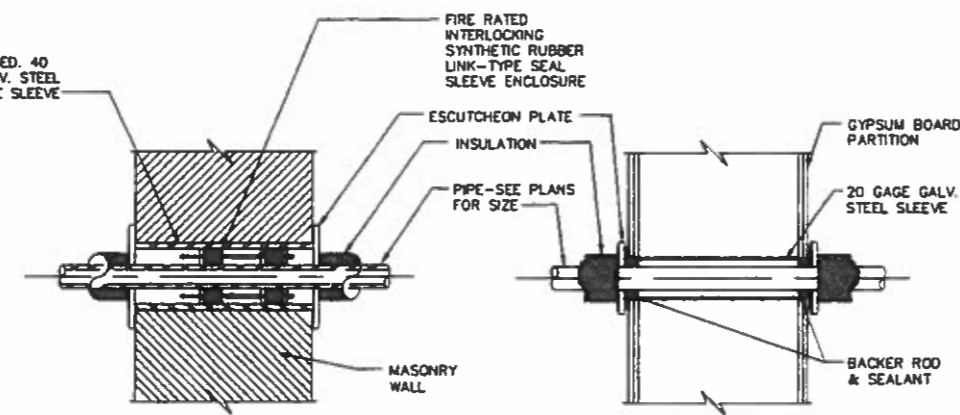
TYPICAL DETAIL HANGER ARRANGEMENT OF INSULATED PIPING



CLEANOUT

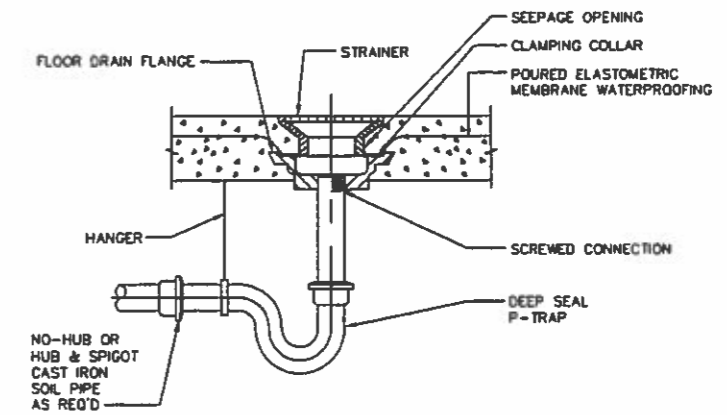


EXISTING EXTERIOR WALL



INTERIOR WALL

INTERIOR WALL PIPE SLEEVES THRU WALL



DETAIL FD-1 FLOOR DRAIN

DESIGNED	RPB
DRAWN	RMN
CHECKED	JMC
PROJECTOR	ST/JMC
CAD REF NO.	1P020000
ISSUED FOR	
DATE	
BY	
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
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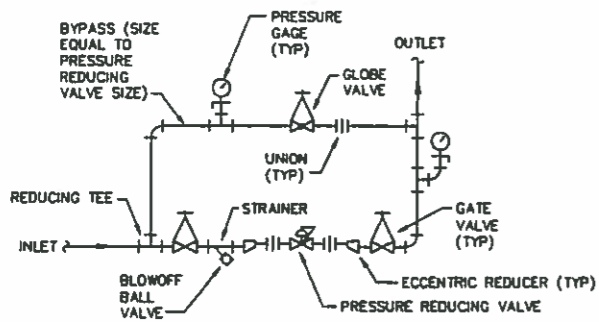
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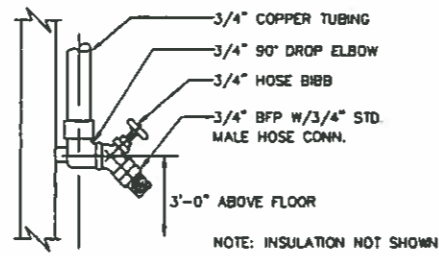
ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

PLUMBING
 GENERAL
 DETAILS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE, MAY 2007
	DRAWING NUMBER
	P00-02
	SHEET . OF



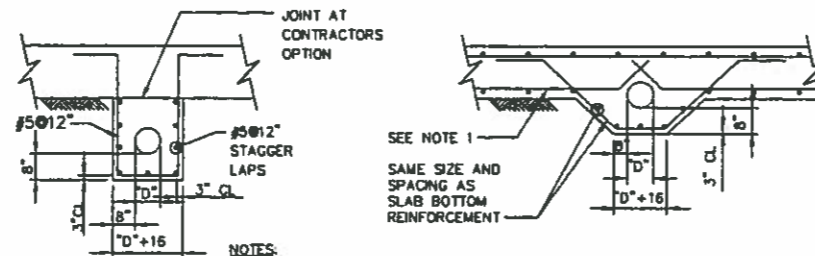
PRESSURE REDUCING VALVE STATION DETAIL



HOSE BIBB DETAIL (HB)

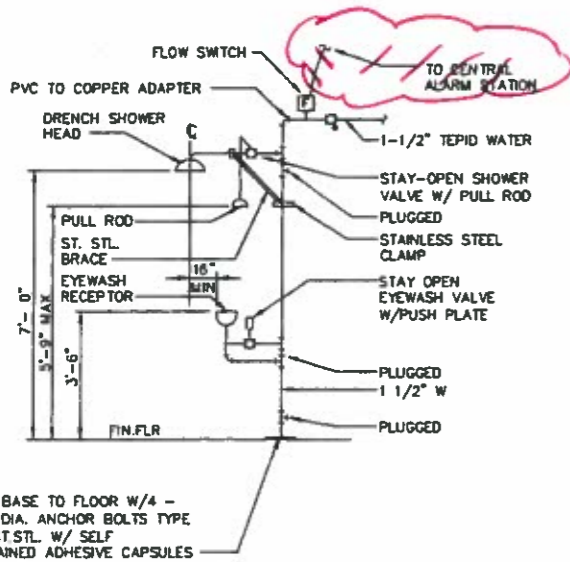
HOT WATER HEATER SCHEDULE									
MARK	LOCATION	SERVICE	TYPE	CAPACITY		RECOVERY RATE @ 100 F RISE	VOLT	PHASE	REMARKS
				NOMINAL IN GAL	HEATING ELEMENT KW				
HHM-EHW-01	MECHANICAL/STORAGE ROOM	DOMESTIC WATER HTG	ELECTRIC STORAGE	120	12	49 GPM	460	3	ELECTRIC - VERTICAL TANK

EXPANSION TANK SCHEDULE									
MARK	LOCATION	SERVICE	TYPE	CAPACITY		MAX WORKING PRESSURE PSIG	MAX TEMPERATURE F	WATER HEATER CAPACITY GAL	REMARKS
				TOTAL VOLUME GAL					
HHM-PET-01	MECHANICAL/STORAGE ROOM	DOMESTIC WATER HTG	DIAPHRAM TYPE	10.3		150	200	120	PRE-PRESSURIZED

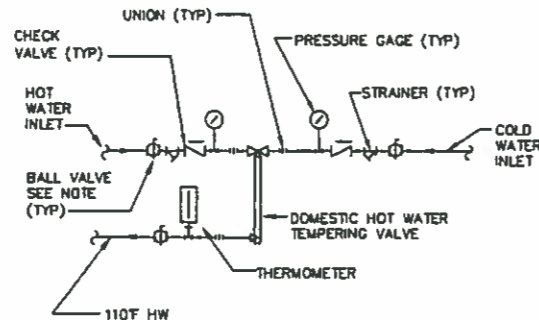


PIPE ENCASEMENT DETAIL

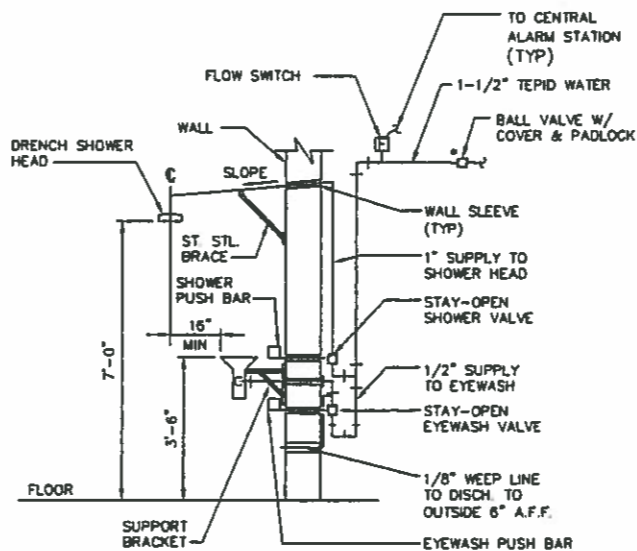
- NOTES:
1. BOTTOM REINFORCEMENT TO BE CONTINUOUS WHERE POSSIBLE.
 2. FOR PIPE SIZE "D" AND ELEVATION, SEE MECHANICAL DRAWINGS.
 3. ALL PIPES LOCATED BENEATH BASE SLABS SHALL BE ENCASED IN CONCRETE UNLESS OTHERWISE NOTED.
 4. COORDINATE PIPING AND ENCASEMENT WITH CONTRACT NC-316.



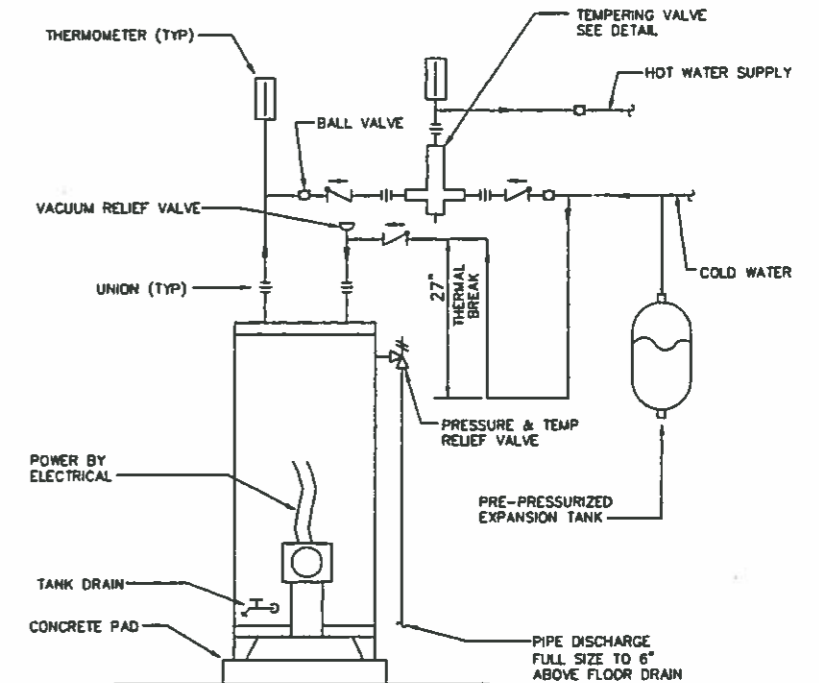
INTERIOR EMERGENCY SHOWER AND EYEWASH(EES-1) DETAIL



DOMESTIC HOT WATER TEMPERING VALVE PIPING DETAIL

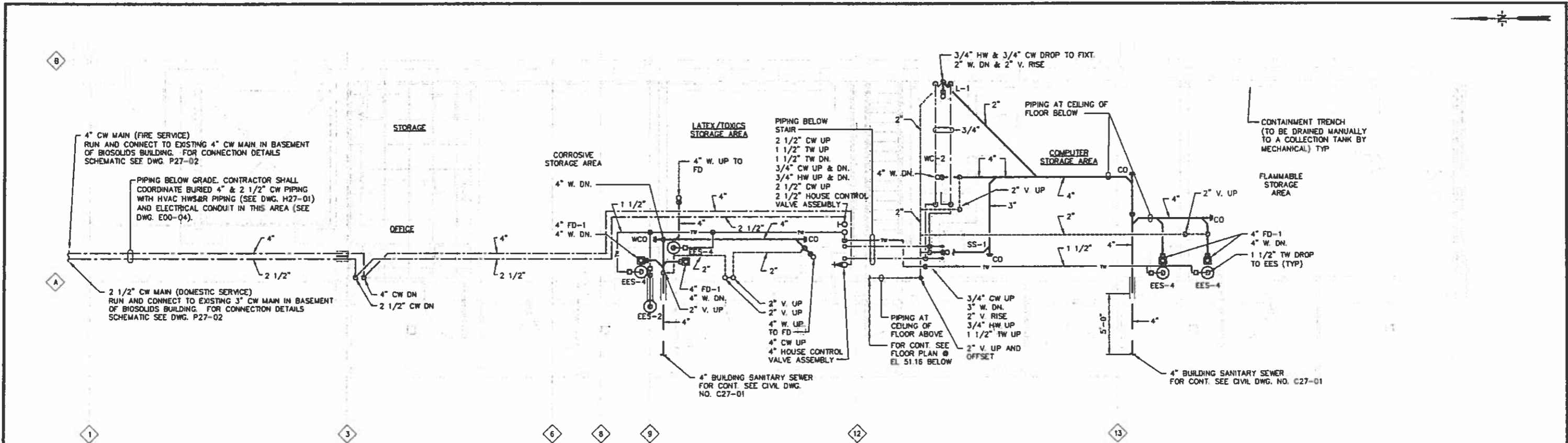


WALL MOUNTED FREEZEPROOF EMERGENCY SHOWER AND EYEWASH(EES-2) DETAIL

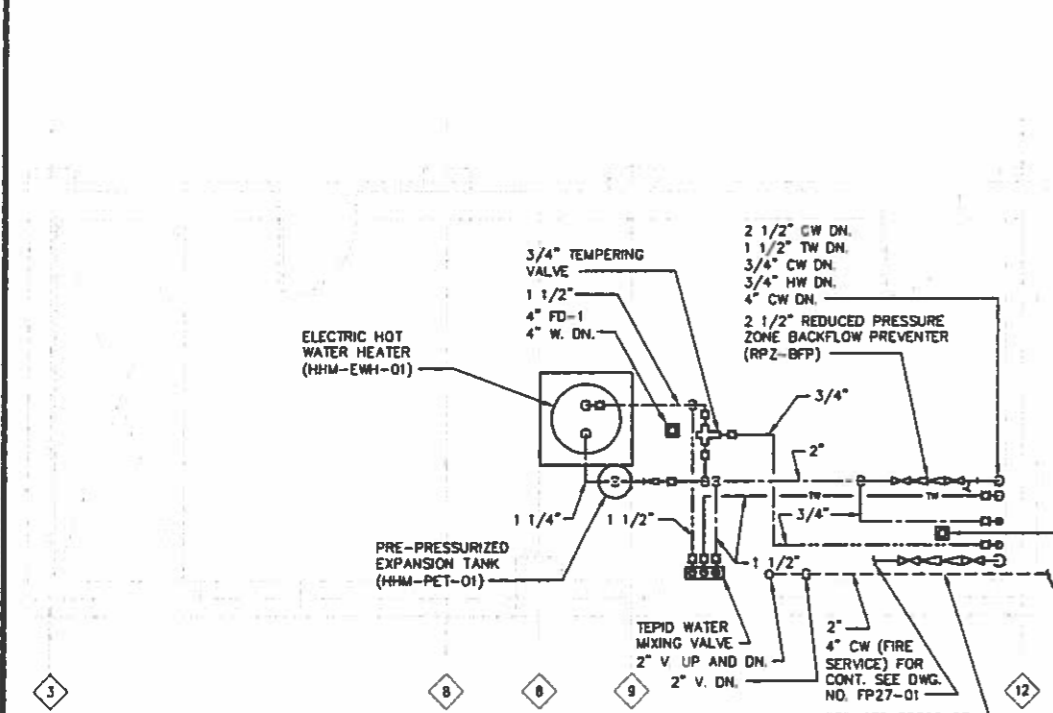
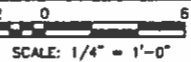


HOT WATER HEATER DETAIL

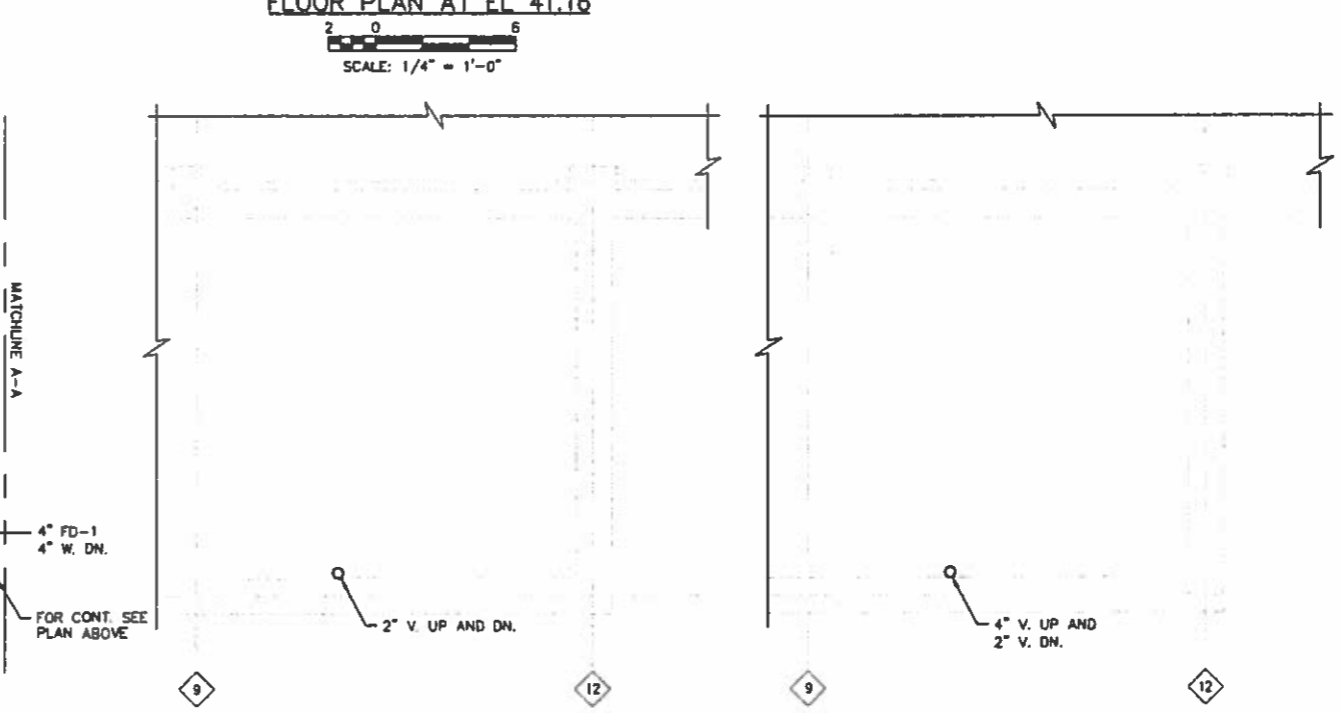
NO.	ISSUED FOR	DATE	BY	APPROVED	DESIGNED RPB	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)				ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	PLUMBING GENERAL DETAILS AND SCHEDULES	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
					CHECKED RMN								VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



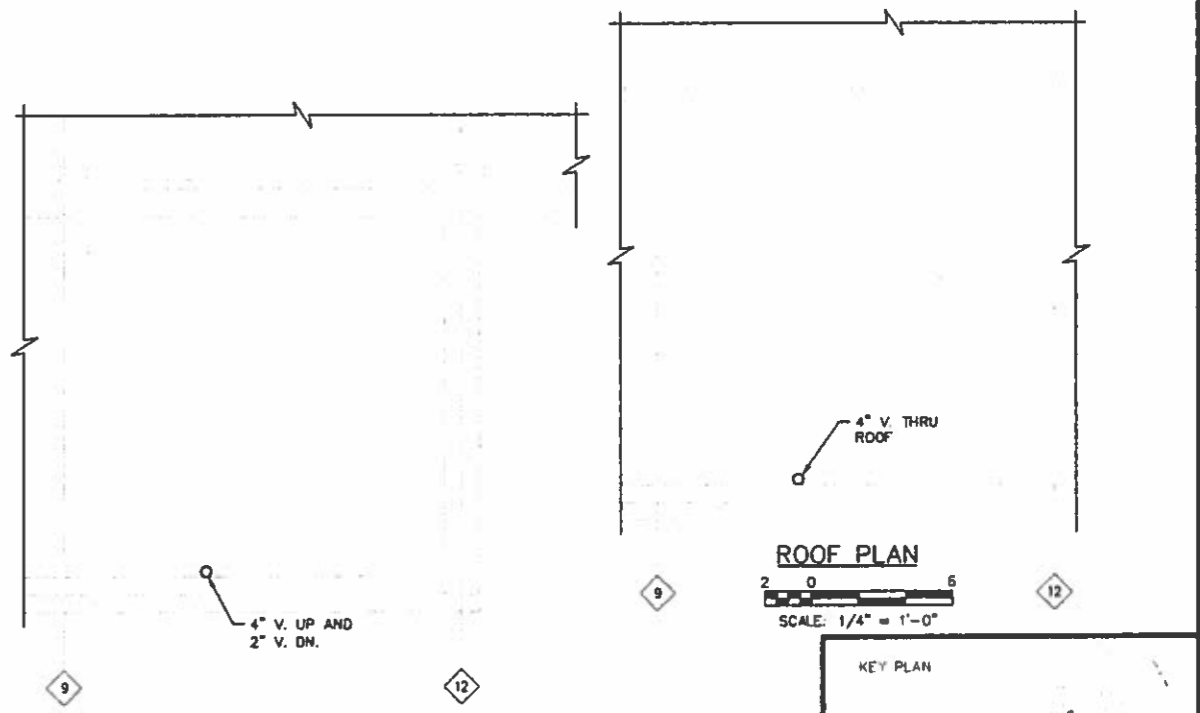
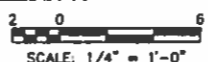
FLOOR PLAN AT EL 41.16



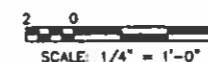
FLOOR PLAN AT EL 51.16



FLOOR PLAN AT EL 72.00



FLOOR PLAN AT EL 82.00



- NOTES:
1. FOR KEY OF SYMBOLS, GENERAL NOTES AND ABBREVIATIONS SEE DWG NO. P00-01.
 2. FOR DETAILS, SEE DWG. NOS. P00-02 AND P00-03.
 3. PROVIDE ELECTRIC HEAT TRACING ON ALL COLD WATER & TEPID WATER PIPING, VERTICAL & HORIZONTAL RUNNING ABOVE GROUND INSIDE ALL STORAGE AREAS.

DESIGNED	RPB
DRAWN	JAT
CHECKED	JMC
PROJ. ENGR.	ST/JMC
CAD REF. NO.	1P010HHMO
DATE	APPROVED

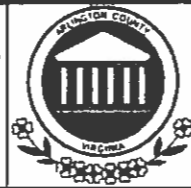
HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE

Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209

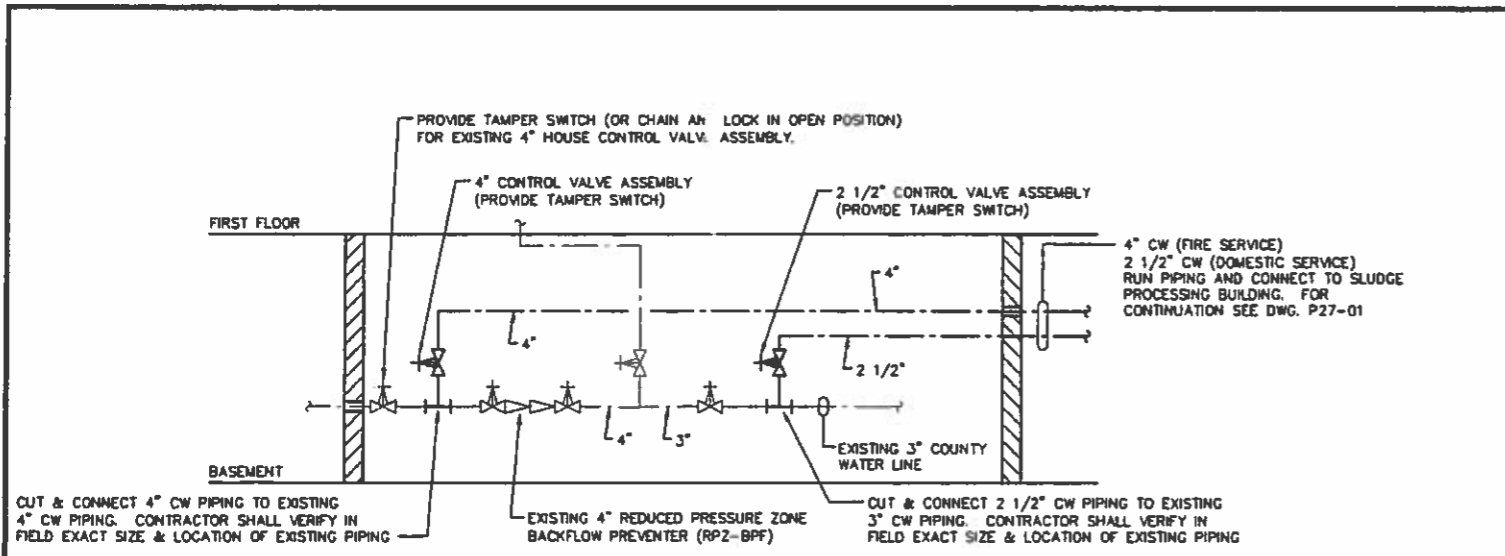


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

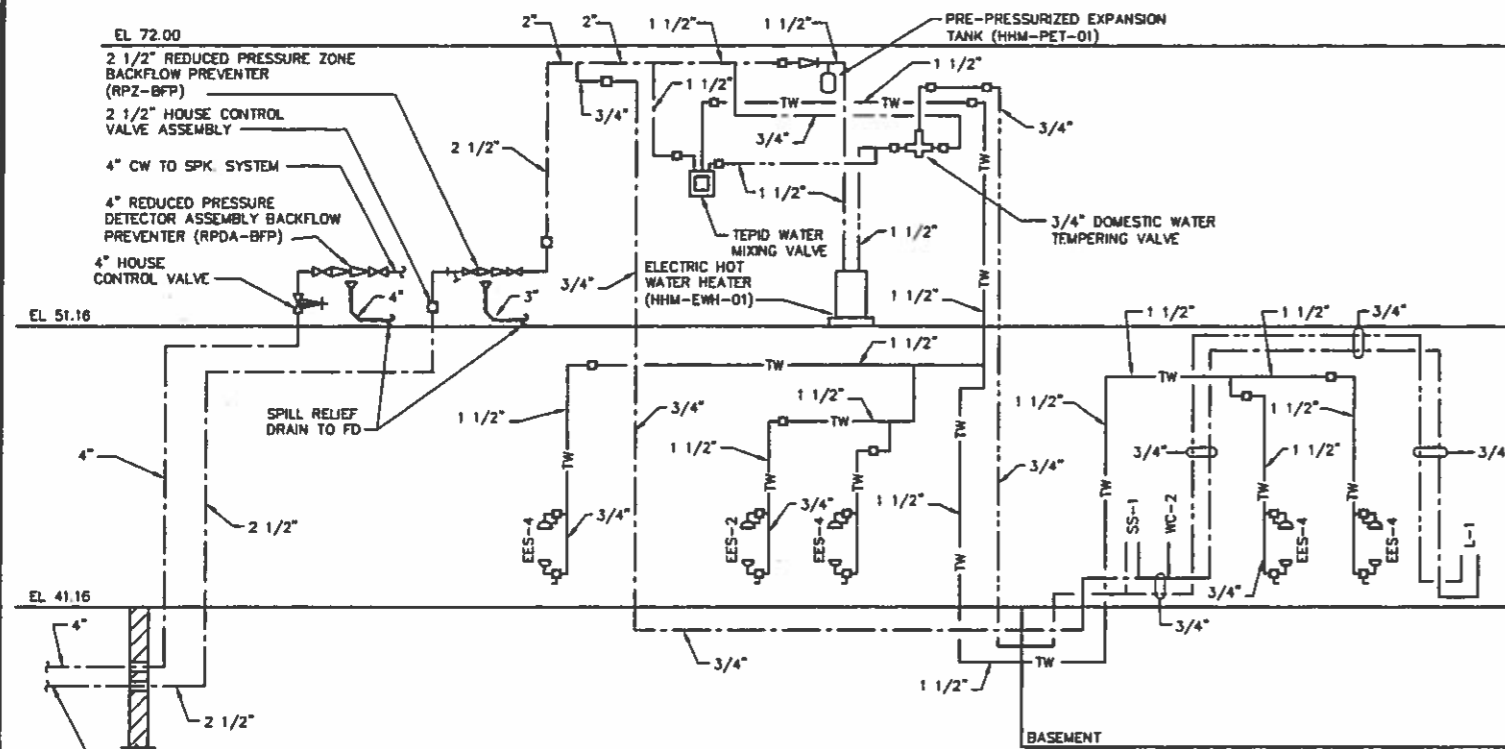
UPGRADE AND EXPANSION
PHASE 7E

PLUMBING
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
FLOOR PLANS AT EL 41.16 - 82.00

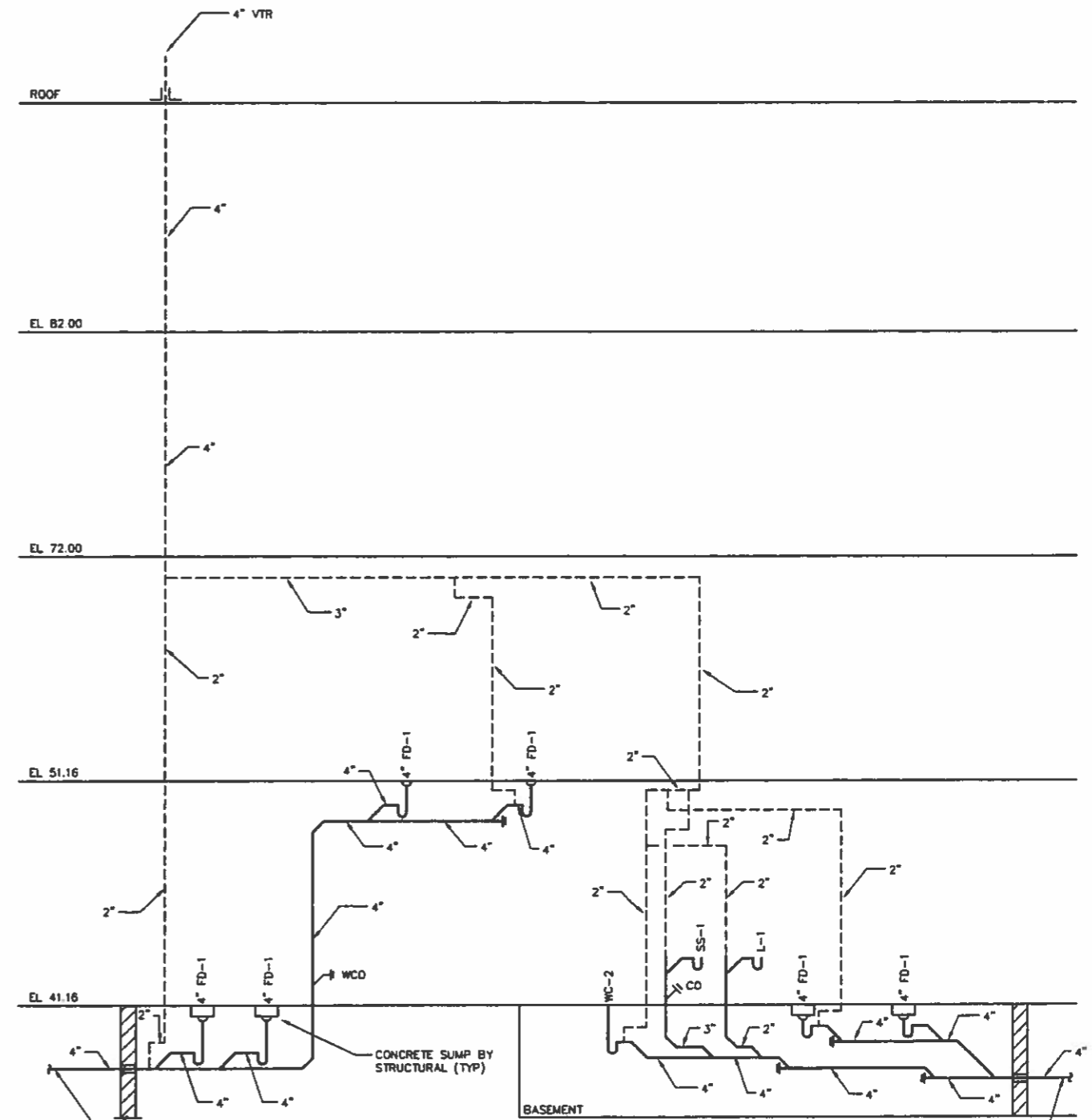
DATE	MAY 2007
DRAWING NUMBER	P27-01
SHEET	OF



BIOSOLIDS BUILDING (EL 18.00)



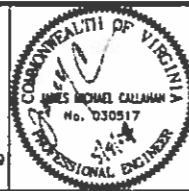
DOMESTIC WATER RISER DIAGRAM



SANITARY RISER DIAGRAM

NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED RPB
DRAWN JAT
CHECKED JMC
PROJENGR ST/JMC
CAD REF NO. 1P020HHMO



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Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209



ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
PHASE 7E

PLUMBING
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
COLLECTION AREA - RISER DIAGRAMS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
DRAWING NUMBER: P27-02
SHEET OF

SYMBOLS

SYMBOL	DESCRIPTION
— SP —	SPRINKLER MAIN PIPING
— — —	SPRINKLER BRANCH PIPING
— DR —	SPRINKLER DRAIN PIPING
— PA —	PREACTION SPRINKLER PIPING
— D —	DRY PIPE SPRINKLER PIPING
— — —	SPRINKLER PIPING BELOW DUCT OR OBSTRUCTION
— F —	FIRE WATER PIPING
— — —	COLD WATER PIPING
— FO —	FOAM PIPING
— PFW —	PREACTION FOAM/WATER PIPING
— DF —	DELUGE FOAM/WATER PIPING
— DC —	DRY CHEMICAL PIPING
— — —	GATE VALVE 4-INCH & LARGER (PIN-)
— — —	DRAIN & TEST ASSEMBLY (NORMALLY CLOSED)
— — —	WATER FLOW SWITCH
— — —	GATE VALVE (OS&Y)
— — —	PRESSURE REDUCING VALVE
— — —	CHECK VALVE
— — —	PIPE DOWN OR DROP, UNLESS OTHERWISE NOTED
— — —	PIPE UP OR RISE, UNLESS OTHERWISE NOTED
— — —	RISE OR DROP IN RUN OF PIPE
— — —	CAP ON END OF PIPE
— — —	PLUGGED TEE
— — —	VALVE IN VERTICAL (TYPE AS SPECIFIED OR NOTED)
— — —	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
— — —	SIAMESE CONNECTION (FIRE DEPARTMENT INLET)
— — —	FLOOR CONTROL VALVE ASSEMBLY
— — —	CHECK VALVE W/ AUTO-BALL DRIP
— — —	EXTENDED COVERAGE UPRIGHT SPRINKLER HEAD
— — —	PENDENT SPRINKLER HEAD (CONCEALED TYPE)
— — —	PENDENT SPRINKLER HEAD (FLUSH TYPE)
— — —	UPRIGHT SPRINKLER HEAD
— — —	UPRIGHT SPRINKLER HEAD BELOW DUCT OR OBSTRUCTION
— — —	SIDEWALL SPRINKLER HEAD (STANDARD COVERAGE)
— — —	SIDEWALL SPRINKLER HEAD (EXTENDED COVERAGE)
— — —	RISER NUMBER DESIGNATION
— — —	RISER
— — —	ALARM BELL/STROBE
— — —	ALARM HORN/STROBE
— — —	SMOKE DETECTOR
— — —	FLAME DETECTOR
— — —	ALARM BELL (COMMON TROUBLE ALARM)
— — —	MANUAL RELEASE STATION
— — —	PIPE SLOPE DOWN
— — —	HYDRAULIC CALCULATION NODE NUMBER

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
C.V.	CHECK VALVE
C.W.	COLD WATER
CLG.	CEILING
CONN.	CONNECT
CONT.	CONTINUATION
DC	DRY CHEMICAL
DF	DELUGE FOAM/WATER
DN.	DOWN (PENETRATES FLOOR SLAB)
DR.	DRAIN
F.	FIRE
F.D.H.V.	FIRE DEPARTMENT HOSE VALVE
F.S.P.	FIRE STANDPIPE
FL.	FLOOR
FO	FOAM
G.C.	GENERAL CONTRACTOR
G.P.M.	GALLONS PER MINUTE
GAL.	GALLONS
IN.	INCH
MAX.	MAXIMUM
MIN.	MINIMUM
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N.T.S.	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
OS&Y	OUTSIDE SCREW & YOKE GATE VALVE
PA	PREACTION
P.R.V.	PRESSURE REDUCING VALVE
P.S.I.G.	POUNDS PER SQUARE INCH (GAUGE)
RPDA-BFP	REDUCED PRESSURE DETECTOR ASSEMBLY BACKFLOW PREVENTION
SPK.	SPRINKLER
T.S.	TAMPER SWITCH
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
UP.	UP (PENETRATES FLOOR SLAB)
V.I.V.	VALVE IN VERTICAL

GENERAL NOTES

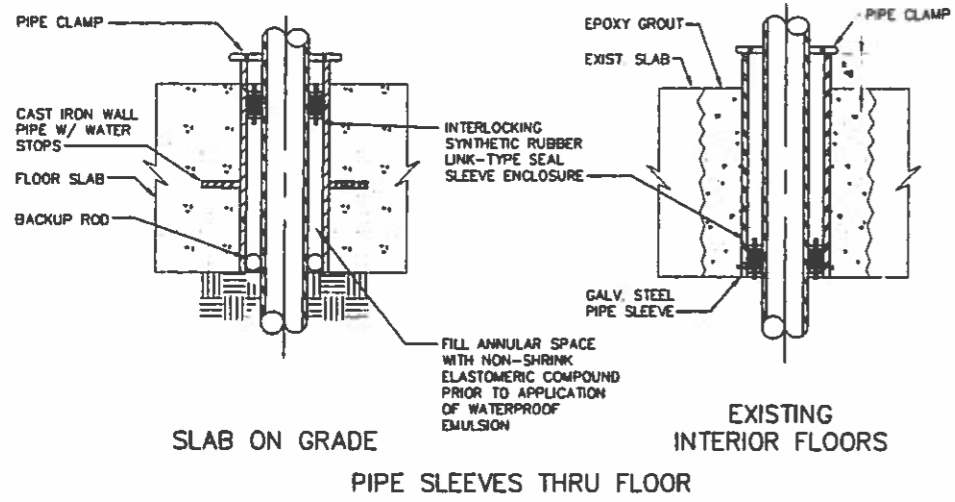
1. THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
2. ALL PIPING SHALL BE CONCEALED WITHIN WALLS, PIPE SPACES AND HUNG CEILING EXCEPT IN MECHANICAL SPACES OR WHERE NOTED.
3. PENDENT SPRINKLER HEADS SHALL BE INSTALLED ON CENTER LINES OF CEILING TILES AND CORRIDORS UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND APPURTENANCES TO COMPLETE THE INSTALLATION ACCORDING TO CODE REQUIREMENT, WHETHER INDICATED ON DRAWING OR NOT.
5. CONTRACTOR SHALL SUBMIT HYDRAULIC CALCULATIONS.
6. SPK BRANCH PIPING SHALL BE A MINIMUM OF 1 INCH UNLESS OTHERWISE NOTED.
7. CONTRACTOR SHALL INCLUDE IN THE LUMP SUM PRICE ANY AND ALL SPK HEADS TO BE LOCATED BENEATH DUCTWORK, CABLE TRAYS, PIPING AND OBSTRUCTIONS AS REQUIRED BY CODE OR AS DIRECTED BY THE ENGINEER.
8. CONTRACTOR SHALL ADJUST SPK HEAD LOCATIONS TO COORDINATE WITH DUCTS, LIGHTING FIXTURES, ETC. TO AVOID IMPAIRING THE SPK DISCHARGE.
9. PROVIDE SEISMIC RESTRAINTS FOR SPRINKLER PIPING IN ACCORDANCE WITH INTERNATIONAL FIRE CODE AND NFPA 13 REQUIREMENTS.

WATER FLOW DATA:
 HYDRANT FLOW TEST CONDUCTED ON JANUARY 6, 2005 AT
 9:10 A.M. ON COUNTY WATER MAIN ON SOUTH GLEBE ROAD.
 HYDRANT#H-1025:
 STATIC PRESSURE: 90 PSI
 RESIDUAL PRESSURE: 75 PSI
 FLOW: 1453 GPM

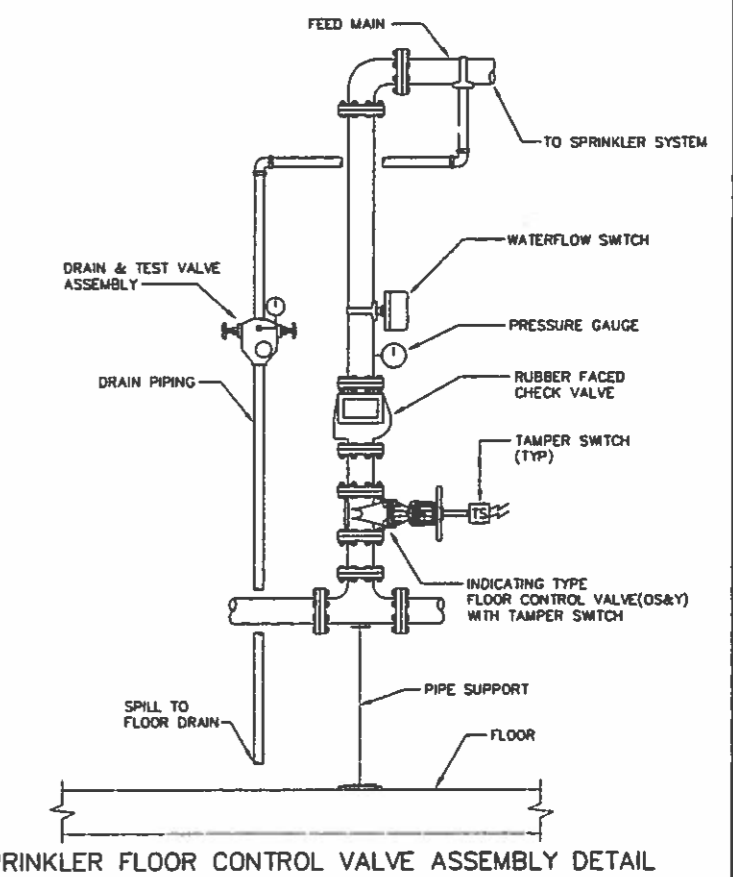
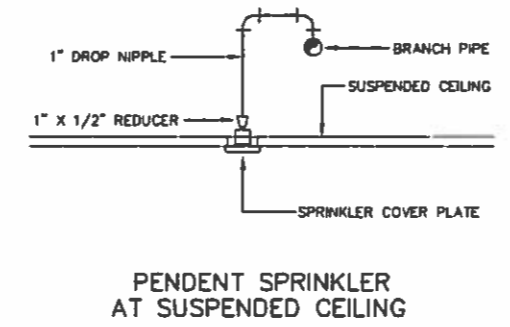
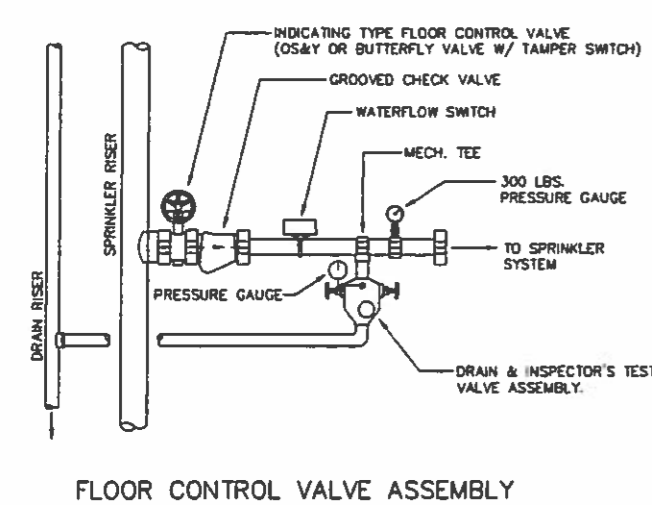
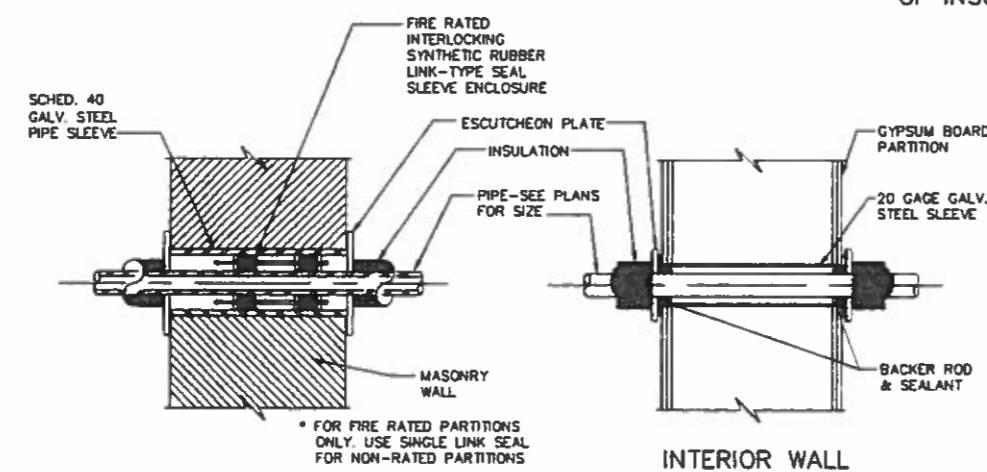
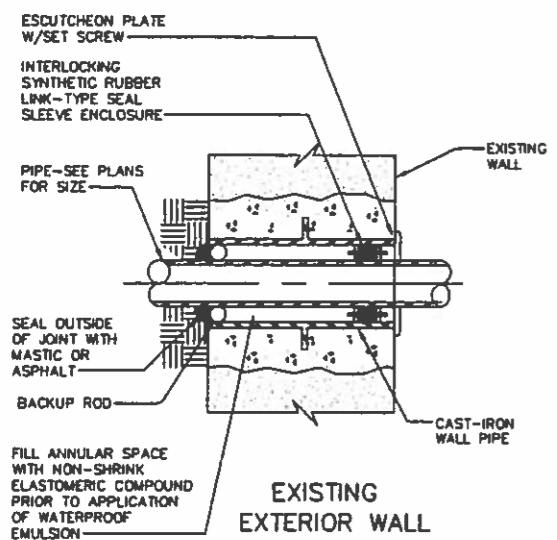
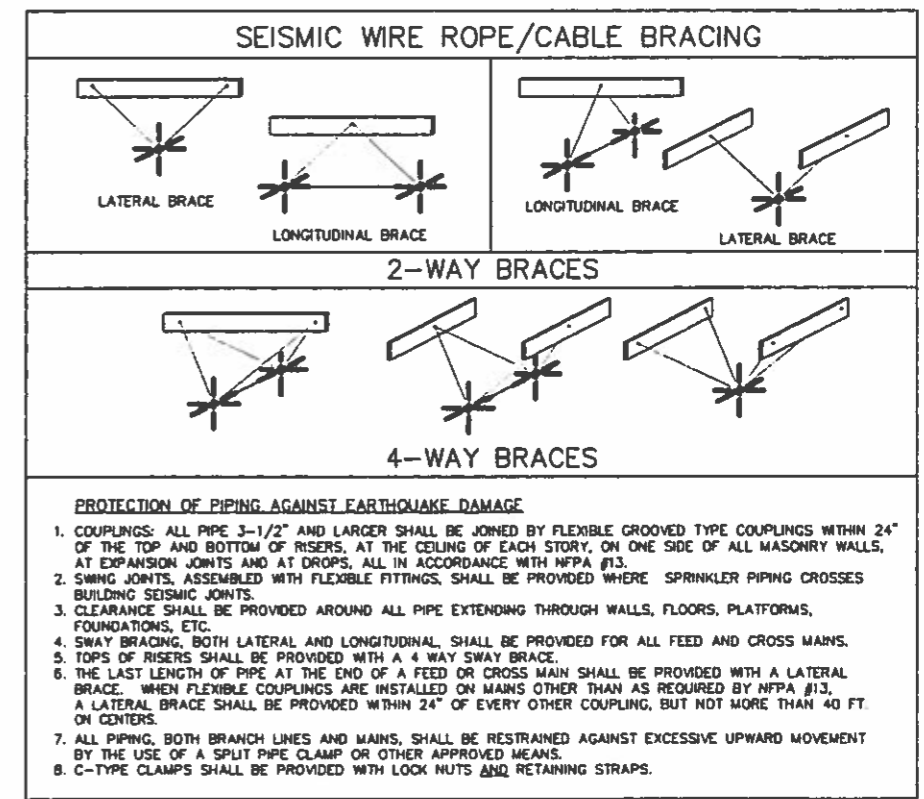
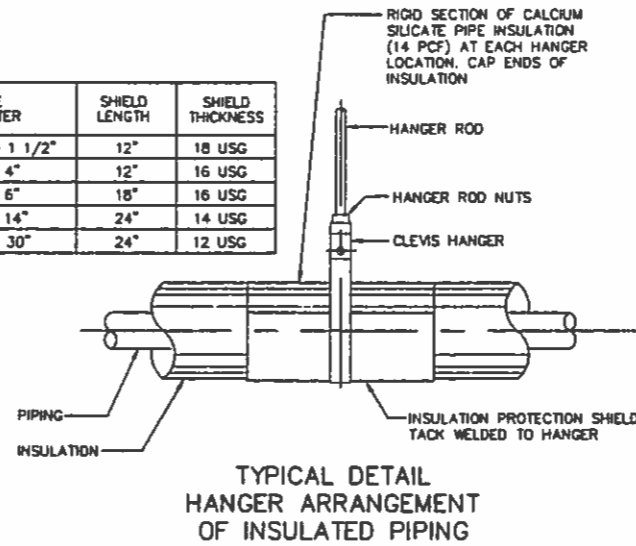
SPRINKLER DESIGN CRITERIA

LOCATION	OCCUPANCY CLASSIFICATION	GPM DENSITY/ AREA OF SPRINKLER OPERATION IN SF	SPRINKLER HEAD		
			TYPE	TEMPERATURE RATING °F	MAX. SPRINKLER COVERAGE SQ. FT.
OFFICE AREAS	LIGHT HAZARD	0.1/1500	PENDENT CONCEALED TYPE	165	225
MECHANICAL ROOMS	ORDINARY HAZARD GROUP 1	0.15/1500	UPRIGHT	225	130
COMPUTER STORAGE AREA	ORDINARY HAZARD GROUP 1	0.15/1500	UPRIGHT	165	130
TOILET/LOCKER ROOMS	LIGHT HAZARD	0.1/1500	PENDENT CONCEALED TYPE	165	225
FLAMMABLE STORAGE AREA	EXTRA HAZARD GROUP 1	0.3/2500	UPRIGHT	165	100
LATEX/TOXICS STORAGE AREA	ORDINARY HAZARD GROUP 2	0.2/1500	UPRIGHT	165	130
CORROSIVE STORAGE AREA	ORDINARY HAZARD GROUP 2	0.2/1500	UPRIGHT	165	130

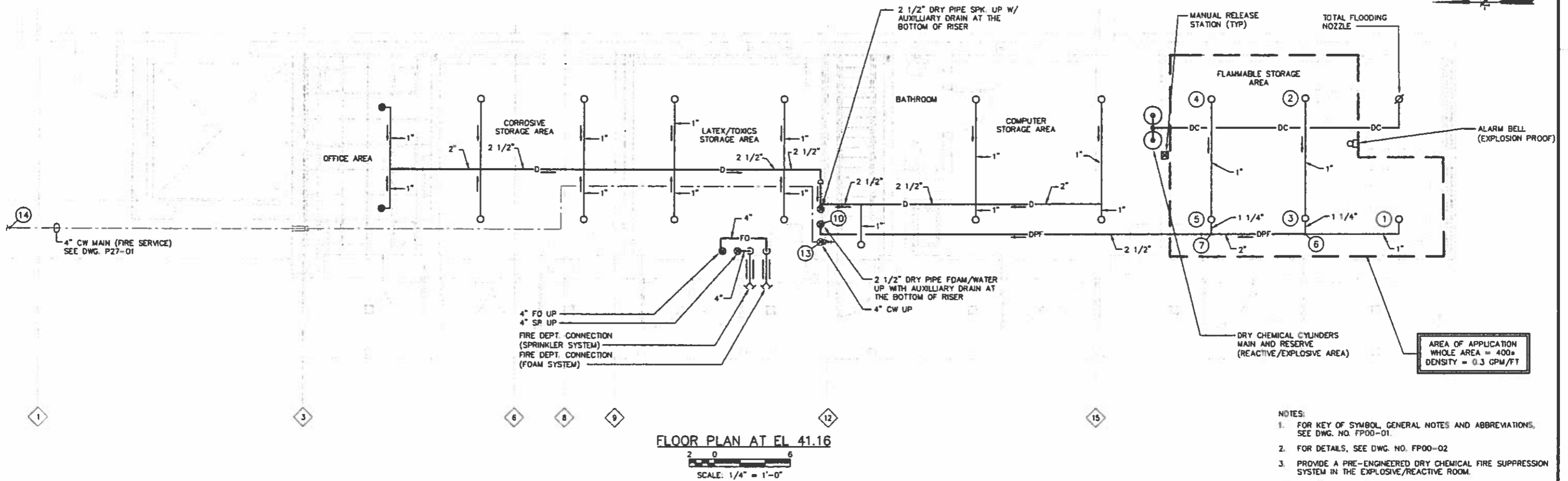
NO. _____ ISSUED FOR _____ DATE _____ BY _____ APPROVED _____	DESIGNED: RPB DRAWN: RMN CHECKED: JMC PROJENGR: ST/JMC CAD REF. NO: 1FP010000	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)	 MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1101 Wilson Boulevard Suite 1400 Arlington, VA 22209	 ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	FIRE PROTECTION GENERAL SYMBOLS, GENERAL NOTES AND ABBREVIATIONS	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING. DATE: MAY 2007 DRAWING NUMBER: FP00-01 SHEET . OF
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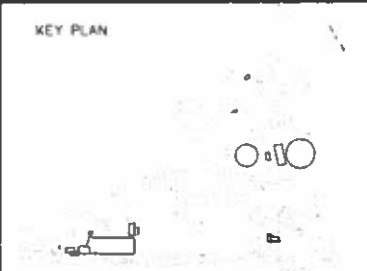
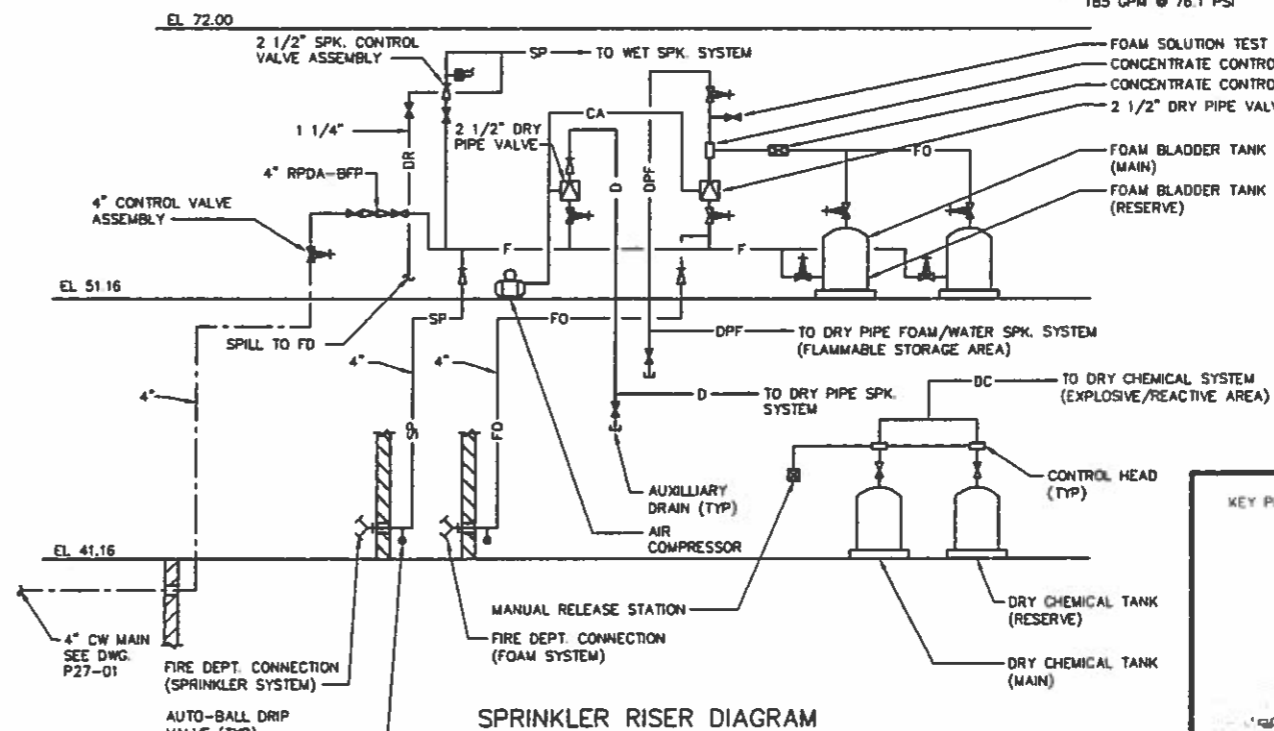
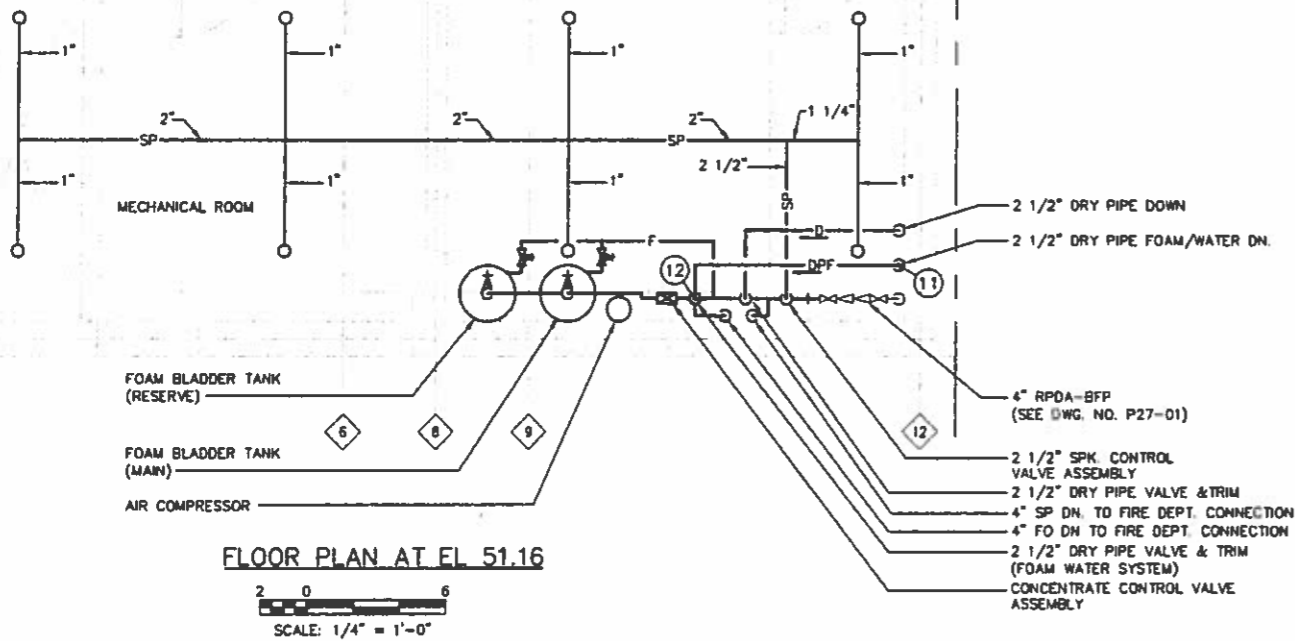
PIPE DIAMETER	SHIELD LENGTH	SHIELD THICKNESS
1/2" TO 1 1/2"	12"	18 USG
2" TO 4"	12"	16 USG
5" TO 6"	18"	16 USG
8" TO 14"	24"	14 USG
16" TO 30"	24"	12 USG



DESIGNED: RPB	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)			ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	FIRE PROTECTION GENERAL MISCELLANEOUS DETAILS	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
DRAWN: RMN	VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)						DRAWING NUMBER: FP00-02
CHECKED: JMC							SHEET OF
PROJ ENGR: ST/JMC							
CAD REF. NO. 1FP020000							
ISSUED FOR: _____	DATE: _____	BY: _____	APPROVED: _____				



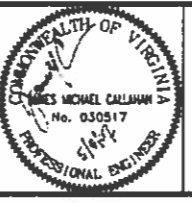
- NOTES:
- FOR KEY OF SYMBOL, GENERAL NOTES AND ABBREVIATIONS, SEE DWG. NO. FP00-01.
 - FOR DETAILS, SEE DWG. NO. FP00-02.
 - PROVIDE A PRE-ENGINEERED DRY CHEMICAL FIRE SUPPRESSION SYSTEM IN THE EXPLOSIVE/REACTIVE ROOM.
 - DRY CHEMICAL FIRE SUPPRESSION SYSTEM PIPING SHALL BE SIZED BY THE MANUFACTURER.
 - CORE DRILL OPENINGS IN CONCRETE AS REQUIRED.
 - AVAILABLE WATER PRESSURE & FLOW AT BUILDING ENTRANCE: 185 GPM @ 76.1 PSI



NO.	ISSUED FOR	DATE	BY	APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE

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ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
PHASE 7E

FIRE PROTECTION
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
FLOOR PLANS AT EL 41.16, 51.16
AND RISER DIAGRAM

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
DRAWING NUMBER: **FP27-01**
SHEET OF

ELECTRICAL SYMBOLS

- CT CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- TRANSFORMER
- PFD FUSE - PFD DENOTES PULL FUSE DISCONNECT TYPE
- LIGHTNING ARRESTOR
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR
- AIR INTERRUPTER SWITCH WITH FUSING WHERE NOTED
- JUNCTION BOX; SIZE AS REQUIRED BY N.E.C.
- TERMINAL BOX; SIZE AS REQUIRED BY N.E.C. AND TO ACCOMMODATE ALL TERMINATIONS ON TERMINAL BLOCKS. TERMINATIONS TO INCLUDE SPARE WIRING.
- PULL BOX; SIZE AS REQUIRED BY N.E.C.
- TWO OR THREE POLE MANUAL STARTER, 20A
- POWER ON-OFF SNAP SWITCH, 1PH, 120V AC, 20A
- POWER RECEPTACLE, 3 PHASE, 4 WIRE, 480V A.C. WITH DISCONNECT SWITCH. REFER TO DRAWINGS FOR AMPERE RATING.
- POWER RECEPTACLE, 2 POLE, 3 WIRE 250 VOLTS A.C. REFER TO DRAWINGS FOR AMPERE RATINGS
- POWER RECEPTACLE, 480 VOLTS, REFER TO DRAWINGS FOR NUMBER OF POLES, WIRES AND AMPERATE RATINGS
- PRIMARY, SECONDARY, AND COMMUNICATION/TELEPHONE MANHOLES
- INDICATES GROUND CONDUCTOR
- INDICATES HOMERUN AND CONDUIT TAG; REFER TO ONE LINE AND INTERCONNECTION DIAGRAM
- MOTOR STARTER/CONTROLLER (NON-COMBINATION - COMBINATION - MANUAL) RV DENOTES REDUCED VOLTAGE
- LOCAL CONTROL PANEL WITH CONTROLLERS FURNISHED BY EQUIPMENT VENDOR.
- PUSH-BUTTON STATION
- PUSH-BUTTON STATION WITH LOCKOUT FEATURE
- SELECTOR SWITCH
- INDICATING LIGHT
- CONTROL STATION
- HAND-OFF-AUTO SELECTOR SWITCH CONTROL STATION
- DEVICE LOCATED IN FIELD AT OR NEAR MOTOR
- DEVICE LOCATED IN CONTROL PANEL
- CONTROL STATION FURNISHED BY EQUIPMENT VENDOR
- AMMETER - AMMETER SWITCH
- VOLTMETER - VOLTMETER SWITCH
- MICROPROCESSOR BASED METERING DEVICE WITH LOCAL DISPLAY
- ELECTRONIC INTERFACE METER WITH LOCAL DISPLAY AND COMMUNICATIONS CAPABILITY
- LINE SWITCH DISCONNECT - UNFUSED OR FUSED F DENOTES FUSING ONLY WHERE INDICATED. FIRST NUMBER DENOTES SWITCH AMP RATING. SECOND NUMBER DENOTES FUSE SIZE WHEN PROVIDED.

- (FRAME SIZE) (TRIP SIZE) MOLDED CASE THERMAL-MAGNETIC CIRCUIT BREAKER INDICATES 2 POLE BREAKER
- (FRAME SIZE) (SENSOR RATING) MOLDED CASE CIRCUIT BREAKER WITH RMS TYPE SOLID STATE MULTIFUNCTION TRIP PROGRAMMER. BOTTOM NUMBER INDICATES SENSOR.
- (FRAME SIZE) (SENSOR RATING) MOLDED CASE CIRCUIT BREAKER WITH MOTOR OPERATOR, THERMAL-MAGNETIC OR SOLID STATE TRIP TYPE AS NOTED.
- (FRAME SIZE) (SENSOR RATING) DRAWOUT POWER CIRCUIT BREAKER, MANUALLY OPERATING WITH RMS TYPE SOLID STATE MULTIFUNCTION TRIP PROGRAMMER WITH COMMUNICATION CAPABILITY. BOTTOM NUMBER INDICATES SENSOR.
- (FRAME SIZE) (SENSOR RATING) DRAWOUT POWER CIRCUIT BREAKER, ELECTRICALLY OPERATED WITH RMS TYPE SOLID STATE MULTIFUNCTION TRIP PROGRAMMER WITH COMMUNICATION CAPABILITY. BOTTOM NUMBER INDICATES SENSOR.
- (CONTINUOUS RATING) AC COMBINATION FULL VOLTAGE NON-REVERSING STARTER WITH MAGNETIC BREAKER AND SOLID STATE OVERLOAD WITH COMMUNICATION CAPABILITY.
- (MOTOR CIRCUIT PROTECTOR)
- ELECTRIC MOTOR (NUMBER INDICATES HORSEPOWER). FOR FANS, MOUNT CONTROL STATION ADJACENT TO FAN AND PROVIDE CHANNEL SUPPORT FOR 120 VOLT BRANCH CIRCUIT MOTORS. NUMERALS DENOTES DISTRIBUTION OR LIGHTING PANEL AND BRANCH CIRCUIT NUMBER.
- UNIT HEATER - NUMERAL DENOTES LIGHTING PANEL AND BRANCH CIRCUIT NUMBER
- LIGHTNING ROD
- GROUND TEST POINT
- GROUND ROD
- GROUND GRID CABLE CONNECTION
- GROUND
- #4/0 GROUND CABLE BURIED 2'-6" BELOW GRADE
- FIXTURE DESIGNATION SYMBOL. SEE LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION AND TYPE. ALL FIXTURES SHOWN IN A ROOM WITH THIS SYMBOL SHALL BE OF TYPE INDICATED BY LETTER. NUMBER IN SYMBOL INDICATES LAMP WATTAGE AND NUMBER OF LAMPS WHERE MORE THAN ONE (UNLESS OTHERWISE NOTED). NUMBER BELOW SYMBOL INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR OR AS NOTED.
- LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER (LP1-2). CROSS LINES INDICATE NUMBER OF CONDUCTORS. HALF HASH MARKS INDICATES NEUTRAL. NUMBER DENOTES WIRE SIZE WHEN NOT #12 AWG. CONTINUE CONDUIT AND WIRE RUN FROM BOX TO DEVICE IN ROOM OR AREA AS NOTED BY BRANCH CIRCUIT NUMBER #10 AWG WIRING SHALL BE USED FOR RUNS BETWEEN PANEL AND FIRST LIGHTING FIXTURE OR RECEPTACLE EXCEEDING 50 FT, UNLESS OTHERWISE NOTED ON DRAWING.
- WALL SWITCH SENSOR, COMBINATION PASSIVE INFRARED AND ULTRASONIC
- SINGLE POLE SWITCH - LOWER CASE LETTER DENOTES SWITCHING.
- TWO POLE SWITCH
- THREE-WAY SWITCH
- FOUR-WAY SWITCH
- SINGLE POLE MANUAL STARTER
- VARIABLE SPEED FAN SWITCH

- DUPLEX CONVENIENCE RECEPTACLE, 2 POLE, 3 WIRE, 120 VOLTS A.C. 20 AMP RECEPTACLE DESIGNATIONS, FIRST NUMBER DENOTES PANEL. SECOND NUMBER DENOTES CIRCUIT NUMBER. GF - DENOTES GROUND FAULT TYPE. IF RECEPTACLE IS IN WET OR CORROSIVE LOCATIONS, COVER SHALL BE WEATHERPROOF WHILE-IN-USE TYPE. SS - DENOTES SURGE SUPPRESSION TYPE
- SINGLE CONVENIENCE RECEPTACLE, 2 POLE, 3 WIRE. REFER TO DRAWINGS FOR AMPERE AND VOLTAGE RATING.
- FOUR GANG RECEPTACLE, 2 POLE, 3 WIRE. REFER TO DRAWINGS FOR AMPERE AND VOLTAGE RATING.
- PHOTOCELL
- FLUORESCENT LIGHTING FIXTURE - SURFACE OR PENDANT MOUNTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE. FIRST NUMERAL DENOTES LIGHTING PANEL (LP1), SECOND NUMBER DENOTES BRANCH CIRCUIT NUMBER. LOWER CASE LETTER DENOTES SWITCHED CIRCUIT.
- FLUORESCENT LIGHTING FIXTURE WITH BATTERY PACK - SURFACE OR PENDANT MOUNTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE. FIRST NUMERAL DENOTES LIGHTING PANEL (LP1), SECOND NUMBER DENOTES BRANCH CIRCUIT NUMBER.
- CEILING OR PENDANT MOUNTED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE.
- CEILING OR PENDANT MOUNTED LIGHTING FIXTURE WITH QUARTZ BACKUP. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE.
- EXIT SIGN, WALL OR CEILING MOUNTED AS INDICATED ON DRAWINGS. ARROW INDICATES CHEVRON DIRECTION.
- WALL MOUNTED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE.
- POLE OR STANCHION MOUNTED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE FOR TYPE.
- TWO (2) POLE OR STANCHION MOUNTED LIGHTING FIXTURES
- POLE MOUNTED FIXTURE WITH GF RECEPTACLE
- 2 LAMP SELF CONTAINED DC EMERGENCY LIGHTING UNIT. SEE LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION. LETTER DENOTES FIXTURE TYPE.
- MOTORIZED VALVE WITH CONTROLLER
- THERMOSTAT
- MOTORIZED DAMPER
- LOUVER MOTOR
- POWER TRANSDUCER
- MANUAL OPERATOR
- SPEED TRANSMITTER
- LOCK FOR RESPECTIVE KEY INTERLOCK WITH KEY CAPTIVE IN LOCK
- LOCK FOR RESPECTIVE KEY INTERLOCK
- OVER TEMPERATURE DEVICE
- INDICATES NEW EQUIPMENT/CONDUIT
- INDICATES EXISTING EQUIPMENT/CONDUIT
- INDICATES CONCEALED OR UNDERGROUND EQUIPMENT/CONDUIT
- INDICATES EQUIPMENT DEMOLITION

- GENERAL NOTES:
- THE SYMBOLS AND ABBREVIATIONS LIST ON THESE SHEETS ARE A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
 - ALL MATERIALS AND EQUIPMENT SHALL CONFORM TO THE AREA CLASSIFICATION REQUIREMENTS NOTED. ALL OUTDOOR AREAS ARE CORROSIVE. INDOOR AREA DESIGNATIONS FOR WET, CORROSIVE AND CLASSIFIED LOCATIONS ARE INDICATED ON THE VARIOUS DRAWINGS. MATERIALS AND EQUIPMENT SHALL MEET NEC AND NEMA REQUIREMENTS IN ACCORDANCE WITH THE FOLLOWING:
 - A. WET LOCATIONS: NEMA 4.
 - B. CORROSIVE LOCATIONS: NEMA 4X
 - C. HAZARDOUS LOCATIONS: MEET REQUIREMENTS FOR THE CLASS AND DIVISION DESIGNATED.
 - D. DUSTY LOCATIONS: NEMA 12. ALL INDOOR AREAS NOT DESIGNATED ON DRAWINGS ARE DUSTY LOCATIONS.
 - REFER TO SPECIFICATION SECTION 16501 FOR LIGHTING FIXTURE SCHEDULE
 - REFER TO INSTRUMENTATION DRAWINGS FOR SECURITY SYSTEM WIRING REQUIREMENTS. PROVIDE A CONDUIT SYSTEM, 3/4" MINIMUM SIZE AND ASSOCIATED CABLES, AS REQUIRED BY THE DIAGRAMMATICAL PRESENTATION GIVEN.
 - REFER TO THE VARIOUS DIAGRAMMATIC ELECTRICAL DIAGRAMS SHOWN ON THE DRAWINGS FOR DEVICE POWER AND CONTROL CONNECTIONS AND THE ASSOCIATED POWER AND WIRING REQUIREMENTS. PROVIDE A CONDUIT SYSTEM, 3/4" MINIMUM SIZE AND ASSOCIATED CABLES, AS REQUIRED BY THE DIAGRAMMATICAL PRESENTATION GIVEN.
 - REFER TO INSTRUMENTATION DRAWINGS FOR FIELDBUS DEVICE DETAILS, CONNECTIONS AND TERMINATION REQUIREMENTS. PROVIDE ALL ASSOCIATED TERMINATIONS AND ENCLOSURES REQUIRED BY THE ACTUAL INSTALLATION.

MISCELLANEOUS SPECIAL SYSTEMS

- DOOR CONTACT
- CARD READER
- REQUEST TO EXIT SWITCH
- GLASS BREAK DETECTOR
- MOTION SENSOR
- SECURITY CAMERA WITH PAN-TILT-ZOOM OR FIXED FOCUS
- ALARM CONTROL PANEL
- SECURITY AND INTRUSION ALARM CONTROL PANEL
- FIRE ALARM CONTROL PANEL
- FIRE ALARM SYSTEM STROBE LIGHT/HORN COMBINATION
- FIRE ALARM SYSTEM MANUAL PULL STATION
- SPEAKER HORN H = HORN PS = PAGING SPEAKER C = CEILING MOUNTED SPEAKER
- AUDIO VISUAL DEVICE
- AUDIO VISUAL STATION
- COMMUNICATION/TELEPHONE
 - D = DESK HANDSET AND SYSTEM OUTLET JACK
 - W = WALL HANDSET AND SYSTEM OUTLET JACK
 - EX = EXPLOSION PROOF
 - WP = WEATHERPROOF
 - (K) = KEYSSET
 - (I) = INTERCOM
- END OF LINE RESISTOR
- FLOW SWITCH
- TAMPER SWITCH

DESIGNED	MAC
DRAWN	MAC
CHECKED	FAS
PROLENGR	FAS
CAD REF. NO.	1E0010000
ISSUED FOR	
DATE	
BY	
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE

Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209



ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION
PHASE 7E

GENERAL
SYMBOLS AND LEGEND SHEET 1

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
DRAWING NUMBER: E00-01
SHEET . OF

ABBREVIATIONS:

- AFF ABOVE FINISH FLOOR
- AFG ABOVE FINISHED GRADE
- AWG AMERICAN WIRE GAUGE
- BKR BREAKER
- CBV CABLE BY VENDOR, INSTALLED BY CONTRACTOR
- CC COMMUNICATION CONDUIT
- CKT CIRCUIT
- CNTL CONTROL
- CP CONTROL PANEL
- CPT CONTROL POWER TRANSFORMER
- DN DOWN
- DPDT DOUBLE POLE DOUBLE THROW SWITCH
- DVP DOMINION VIRGINIA POWER - THE LOCAL UTILITY
- EC EMPTY CONDUIT
- EL ELEVATION
- EXP EXPLOSION PROOF
- EXIST EXISTING
- FC# FIBER CABLE, # IS CABLE NUMBER
- FDR FEEDER
- FIXT FIXTURE
- FIELDBUS FIELDBUS CABLE
- FTBHR FIELDBUS TERMINAL BLOCK HOMERUN 3/4" C FIELDBUS CABLE
- GND GROUND
- HOA HAND-OFF-AUTOMATIC
- HT HEAT TAPE
- HTR HEATER
- JB JUNCTION BOX
- K KCMIL
- LA LIGHTNING ARRESTOR
- LCP LOCAL CONTROL PANEL
- LTG LIGHTING
- MCC MOTOR CONTROL CENTER
- MTS MANUAL TRANSFER SWITCH
- NA NON-AUTOMATIC
- NTS NOT TO SCALE
- PB PULL BOX
- PFD PULL FUSE DISCONNECT
- PNL PANEL
- PPFC PROTECTED POWER FACTOR CORRECTION CAPACITORS
- PT POTENTIAL TRANSFORMER
- RECEP RECEPTACLE
- (S) (SH) SHIELDED CABLE
- SP SPARE
- SS SELECTOR SWITCH
- SWBD SWITCHBOARD
- SWGR SWITCHGEAR
- TBD TO BE DEMOLISHED
- EXIST EXISTING
- TFC# TEMPORARY FIBER CABLE, # IS CABLE NUMBER
- USE UNDERGROUND SERVICE ENTRANCE CABLE
- WP WEATHERPROOF
- XFMR TRANSFORMER
- N.E.C. NATIONAL ELECTRIC CODE
- (TYP) TYPICAL
- FUT FUTURE

INSTRUMENTS:

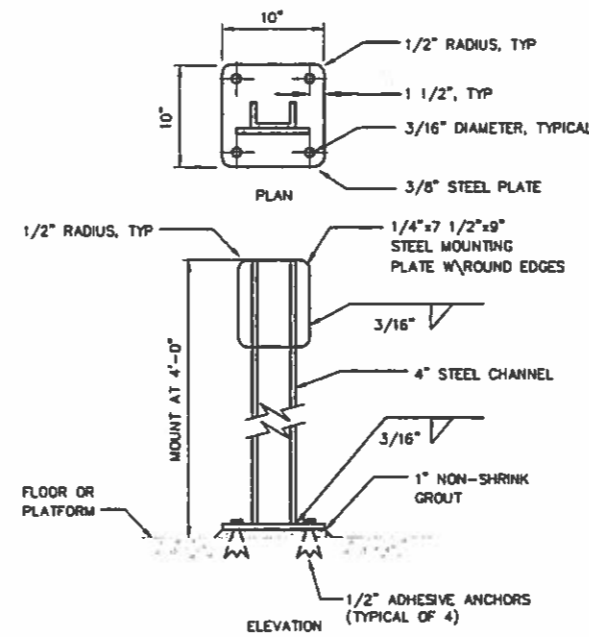
- INSTRUMENT DEVICE: LETTERS IDENTIFY DEVICE FUNCTION, NUMBERS WHERE INDICATED DENOTE LOOP NUMBER
- PRESSURE SWITCH (PSH DENOTES PRESSURE SWITCH HIGH AND PSL DENOTES PRESSURE LOW)
- FLOW SWITCH (FSH DENOTES FLOW SWITCH HIGH AND FSL DENOTES FLOW SWITCH LOW)
- LEVEL TRANSMITTER (LE DENOTES LEVEL ELEMENT)
- ANALYSIS TRANSMITTER (AE DENOTES ANALYSIS ELEMENT)
- TEMPERATURE TRANSMITTER (TE DENOTES TEMPERATURE ELEMENT)
- TEMPERATURE SWITCH (TSH DENOTES TEMPERATURE SWITCH HIGH AND TSL DENOTES TEMPERATURE SWITCH LOW)

NOTES:

1. PROVIDE INSULATED GROUND BUSHINGS FOR ALL CONDUITS AND BOND TOGETHER AND TO GROUND BUS AS SHOWN. WHENEVER EXISTING CONDUITS ARE USED PROVIDE AN INSULATED BUSHING FOR EACH CONDUIT AND BOND TO GROUND BUS.
2. CONDUIT SHALL BE EMBEDDED IN STRUCTURAL CONCRETE WHEN RUN IN THE CENTER OF SLABS AND WALLS. UNLESS NOTED OTHERWISE CONDUIT SHALL BE EMBEDDED IN STRUCTURAL CONCRETE ONLY WHEN THE CONCRETE THICKNESS AND CONDUIT SPACING CRITERIA DESCRIBED ON THE STRUCTURAL DRAWINGS CAN BE SATISFIED. CONTRACTOR SHALL CONFIRM CONCRETE THICKNESS AND CONDUIT SPACING WHEN CONDUIT EMBEDDMENT IS INTENDED.
3. PROVIDE CONCRETE CURB TWO-INCH HIGH AND TWO-INCH ALL AROUND CONDUIT WHENEVER CONDUITS PENETRATE THE FLOOR WITHOUT AN EQUIPMENT PAD.

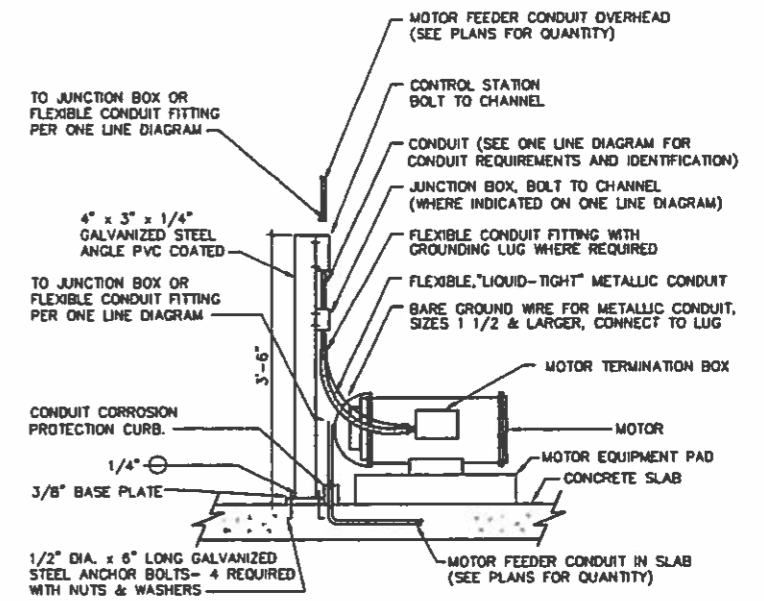
TYPE OF CONNECTION	BOLTED OR COMPRESSION		WELDED
	BURNDY CAT#	T&B CAT#	CADWELL CAT#
CABLE TO LUG 	YA	54000 SERIES	LA
CABLE TO ROD 	-	53000 SERIES	GT
ROD 	GAR	-	CR
CABLE TO CABLE 	GX	53000 SERIES	TV OR TA
CABLE TO PIPE 	-	-	HA OR VS
CABLE TO FLAT SURFACE 	GB	-	HA OR HS
BRAID TO PIPE 	GG	-	-

CONNECTIONS GROUNDING

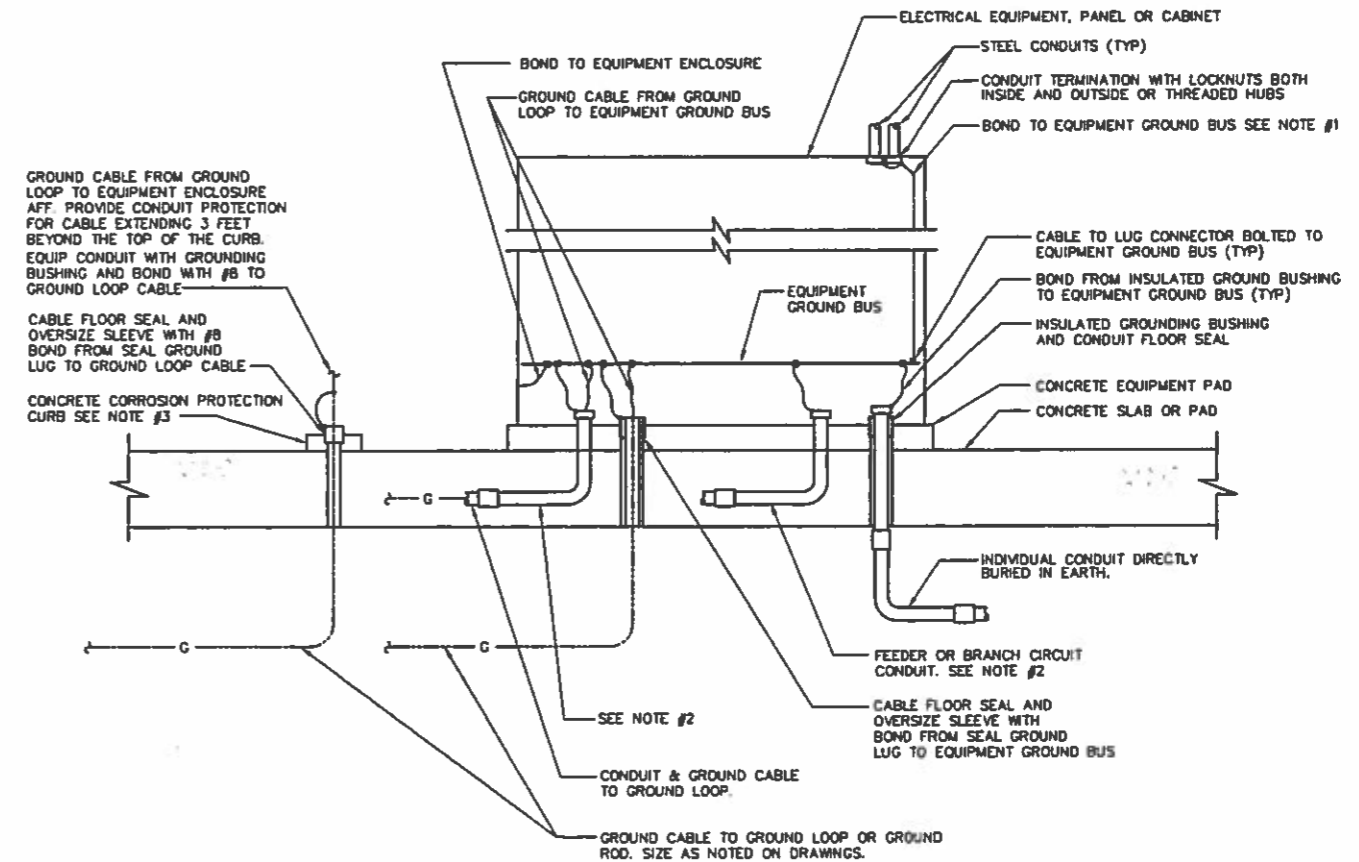


EQUIPMENT MOUNTING PEDESTAL N.T.S.

EQUIPMENT MOUNTING PEDESTAL NOTES:
1. USE WASHERS AND SPLIT LOCK-WASHERS UNDER ALL NUTS.



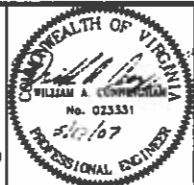
ELECTRIC MOTOR TERMINATION AND DEVICE MOUNTING DETAIL



TYPICAL EQUIPMENT GROUNDING AND CONDUIT DETAILS

DESIGNED: MAC
DRAWN: MAC
CHECKED: FAS
PROJ. ENGR: FAS
CAD REF NO: 1E0020000
APPROVED:

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
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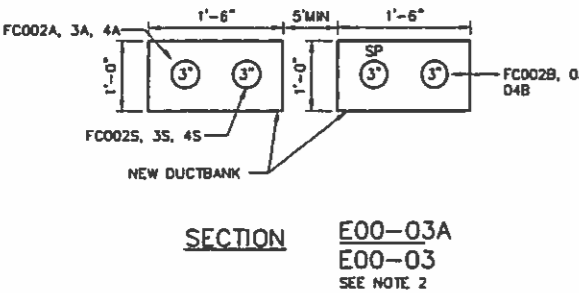
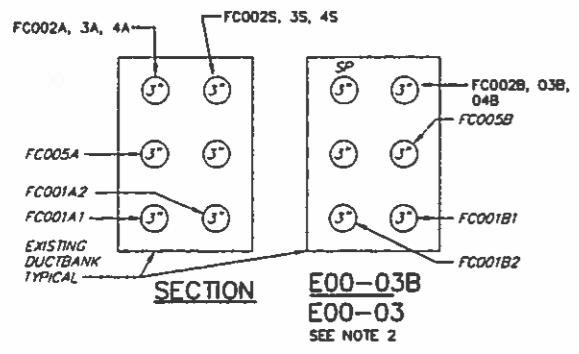


ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION PHASE 7E

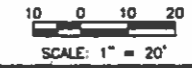
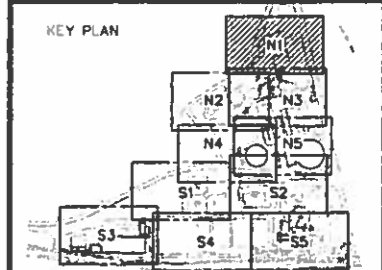
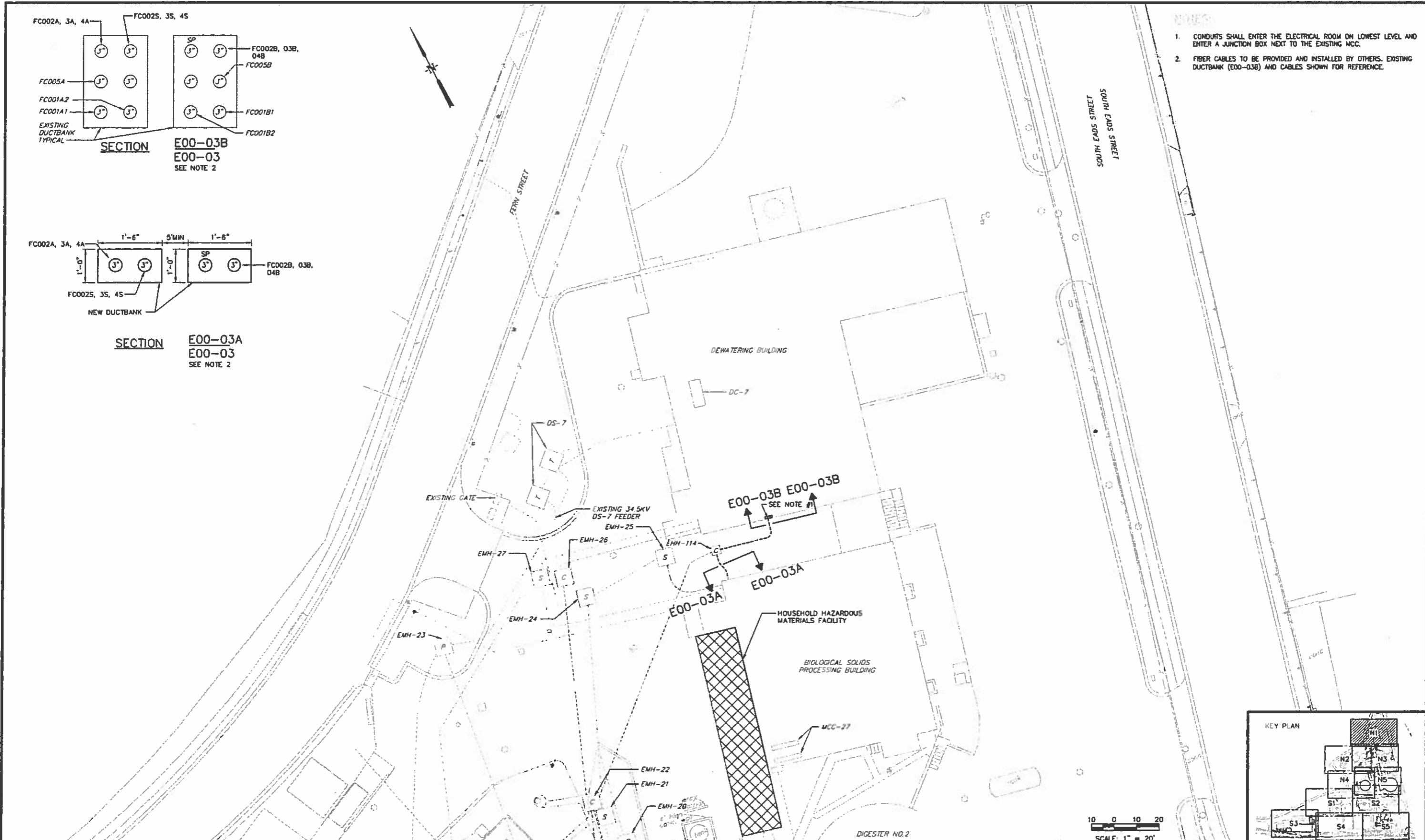
GENERAL SYMBOLS AND LEGEND SHEET 2

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
DRAWING NUMBER: **E00-02**
SHEET OF



- NOTES**
1. CONDUITS SHALL ENTER THE ELECTRICAL ROOM ON LOWEST LEVEL AND ENTER A JUNCTION BOX NEXT TO THE EXISTING MCC.
 2. FIBER CABLES TO BE PROVIDED AND INSTALLED BY OTHERS. EXISTING DUCTBANK (E00-03B) AND CABLES SHOWN FOR REFERENCE.



NO.	ISSUED FOR	DATE	BY	APPROVED	DESIGNED: MAC	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)				ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	ELECTRICAL GENERAL SITE FACILITIES - AREA N1 PLAN	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
					DRAWING NUMBER: E00-03								SHEET OF

LEGEND

- TRUNK FIBER OPTIC CABLE
- - - BRANCH FIBER OPTIC CABLE
- - - ETHERNET CABLE (CAT 5)
- - - COAXIAL CABLE
- - - COPPER WIRE



COMPUTER

F/C

FIBER TO COPPER MEDIA CONVERTER(S) REPRESENTS MULTIPLE CONVERTERS. SELECT APPROPRIATE MEDIA CONVERTERS IN ACCORDANCE WITH SECTION 16796.

FBP2-1

FIBER BRANCH PANEL

FPP1

FIBER PATCH PANEL

DC

DOOR CONTACT

PS

24V POWER SUPPLY

CR

CARD READER

EX

REQUEST TO EXIT DEVICES

M

MASTER INTERCOM STATION

PTZ C-XX

CLOSED CIRCUIT VIDEO CAMERA (PTZ) WITH PAN/TILT/ZOOM

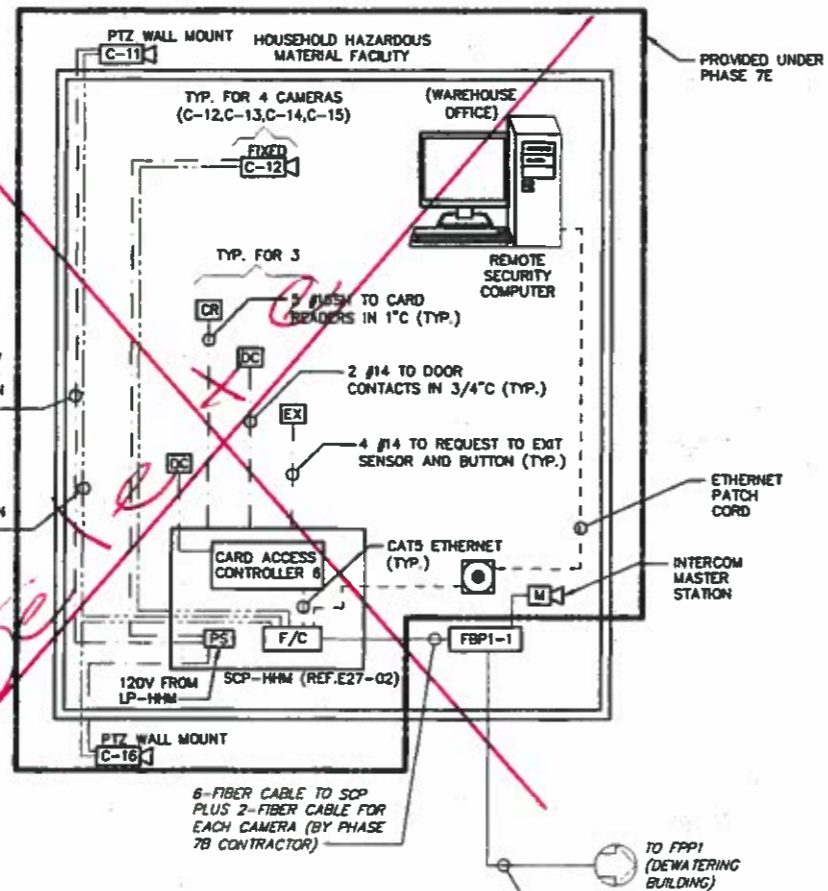
FIXED C-XX

CLOSED CIRCUIT VIDEO CAMERA FIXED

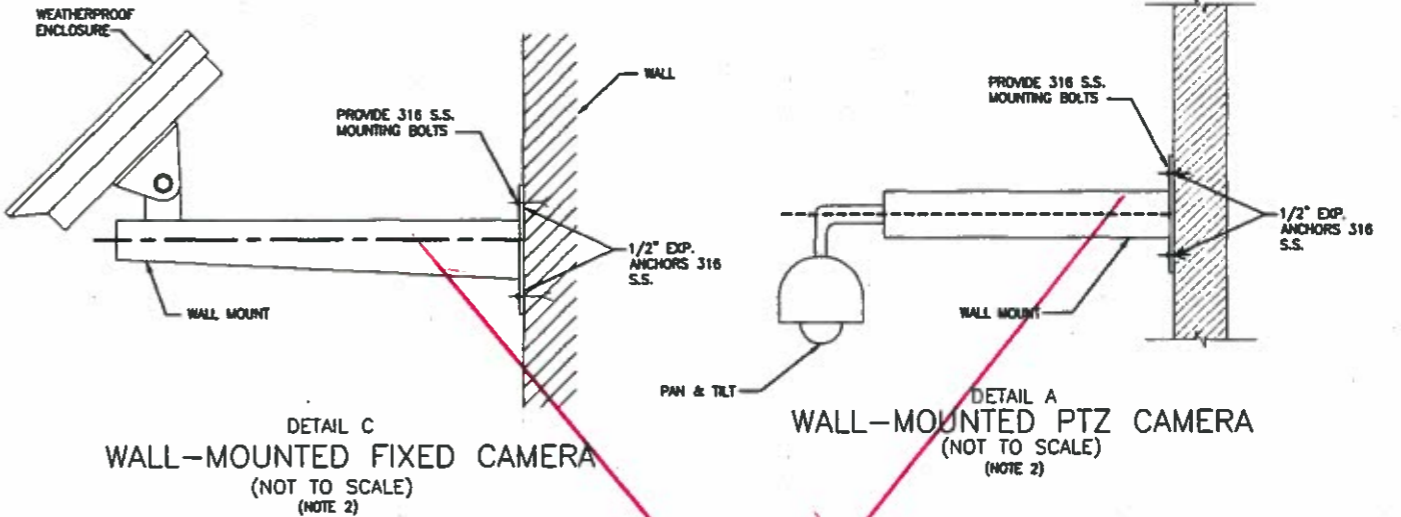
SCP-XXX

SECURITY ACCESS CONTROL CABINET, WHERE XXX DEFINES LOCATION

PC JACK

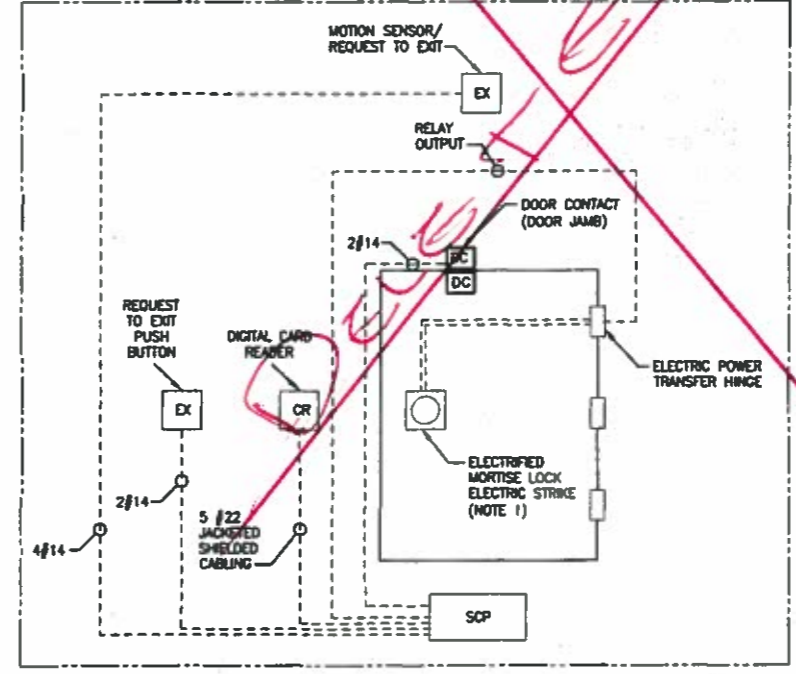


BLOCK DIAGRAM



DETAIL C WALL-MOUNTED FIXED CAMERA (NOT TO SCALE) (NOTE 2)

DETAIL A WALL-MOUNTED PTZ CAMERA (NOT TO SCALE) (NOTE 2)



CARD ACCESS / INTRUSION DETECTION DETAIL (NOT TO SCALE) (NOTE 1)

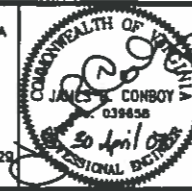
- NOTES:
1. THE RISER DIAGRAM SHOWN ON THIS SHEET IS FOR DIAGRAMMATICAL PURPOSES ONLY AND TO SHOW THE REQUIRED NUMBER OF EQUIPMENT AND INCIDENTALS. CONTRACTOR SHALL PROVIDE A CONDUIT SYSTEM (MINIMUM SIZE CONDUIT TO BE 3/4") FOR THE RISER DIAGRAM SHOWN.
 2. LOCATIONS FOR CAMERAS SHOWN ON SITE PLANS. MINIMUM 8 FT. HEIGHT TO BE COORDINATED WITH OWNER PRIOR TO INSTALLATION.

DETAILS

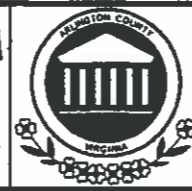
- NOTES:
1. COORDINATE ALL CARD ACCESS INSTALLATION WITH DOOR HARDWARE. FURNISHED UNDER DIVISION 8. SEE ARCHITECTURAL DOOR SCHEDULE, ARCHITECTURAL SHEETS.
 2. CONTRACTOR TO PROVIDE A CONDUIT SYSTEM, 3/4" MIN. FOR DIAGRAM SHOWN.
 3. FOR CARD ACCESS AND DOOR HARDWARE DETAILS, SEE SECURITY SYSTEM DETAILS.
 4. PROVIDE POWER TO ALL SECURITY PANELS AS SHOWN ON ELECTRICAL PLANS FOR EACH FACILITY.

DESIGNED	RJK
DRAWN	IG
CHECKED	JJC
PROJENGR.	JBC
CAD REF. NO.	1E0040000
NO.	ISSUED FOR
	DATE
	BY
	APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODEIC VERTICAL DATUM OF 1929 (NGVD 29)



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 Independent Environment Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209

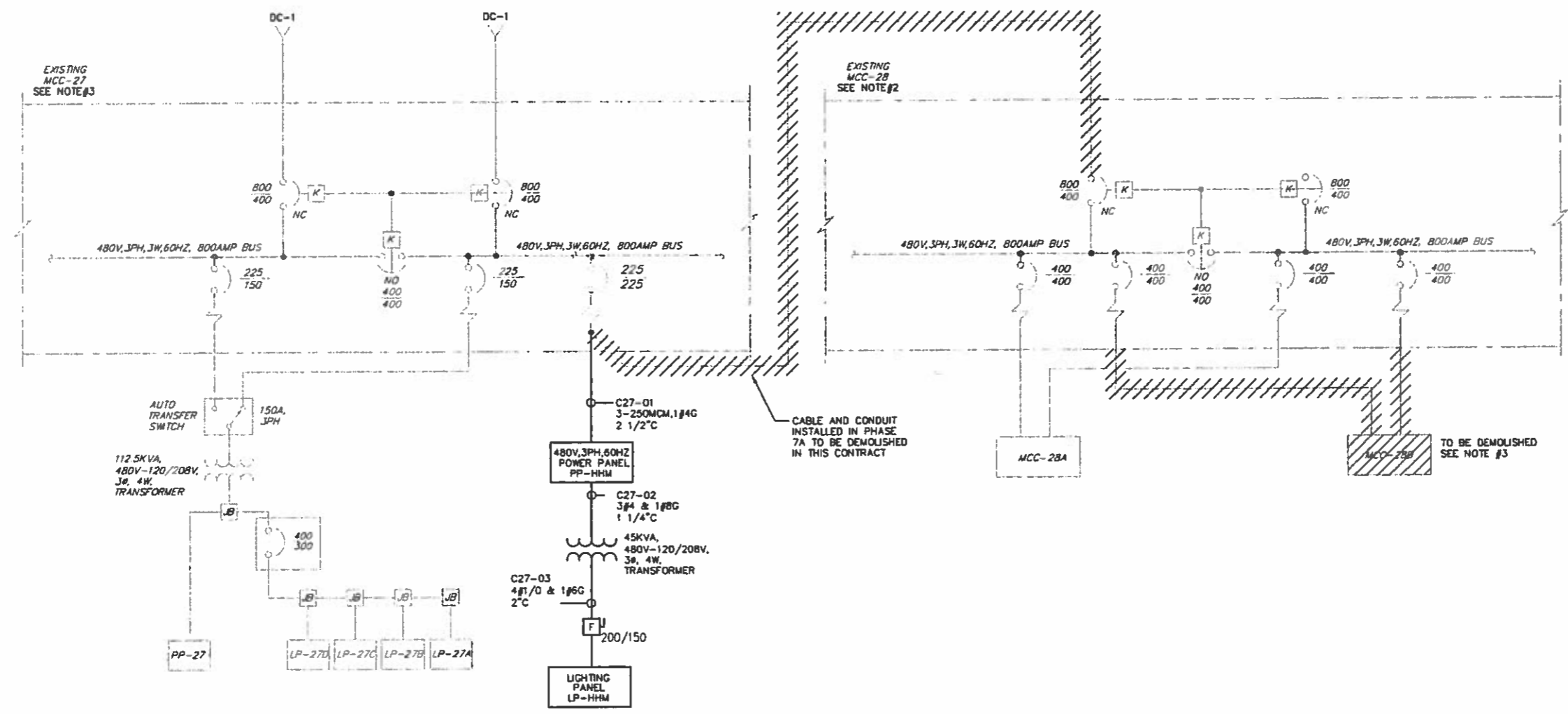


ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION PHASE 7E

ELECTRICAL GENERAL SECURITY MONITORING SYSTEM BLOCK DIAGRAM AND DETAILS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: APRIL 2007
	DRAWING NUMBER
	E00-04
	SHEET OF

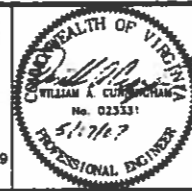
- NOTES:
1. REMOVE EXISTING SUPPLY FEEDERS, 2-SETS OF 500 MCM, AS SHOWN FOR EACH OF THE TWO SUPPLIES FROM DC-1 TO MCC-27 AND 28.
 2. DISCONNECT MCC-28 FROM ITS SOURCE OF SUPPLY AND ABANDONED IN PLACE. FOR RESUPPLY OF MCC-28 EQUIPMENT SEE DWG E27-05.
 3. REMOVE MCC-28B AND ASSOCIATED SUPPLY FEEDERS SHOWN IN ORDER TO CONSTRUCT THE NEW HOUSEHOLD HAZARDOUS MATERIALS FACILITY. FOR RESUPPLY OF MCC-28B EQUIPMENT SEE DWG E27-04.



NO.	ISSUED FOR	DATE	BY

DESIGNED SMS
 DRAWN SMS
 CHECKED WAC
 PROJENGR FAS
 CAD REF NO. 1E048M270
 APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



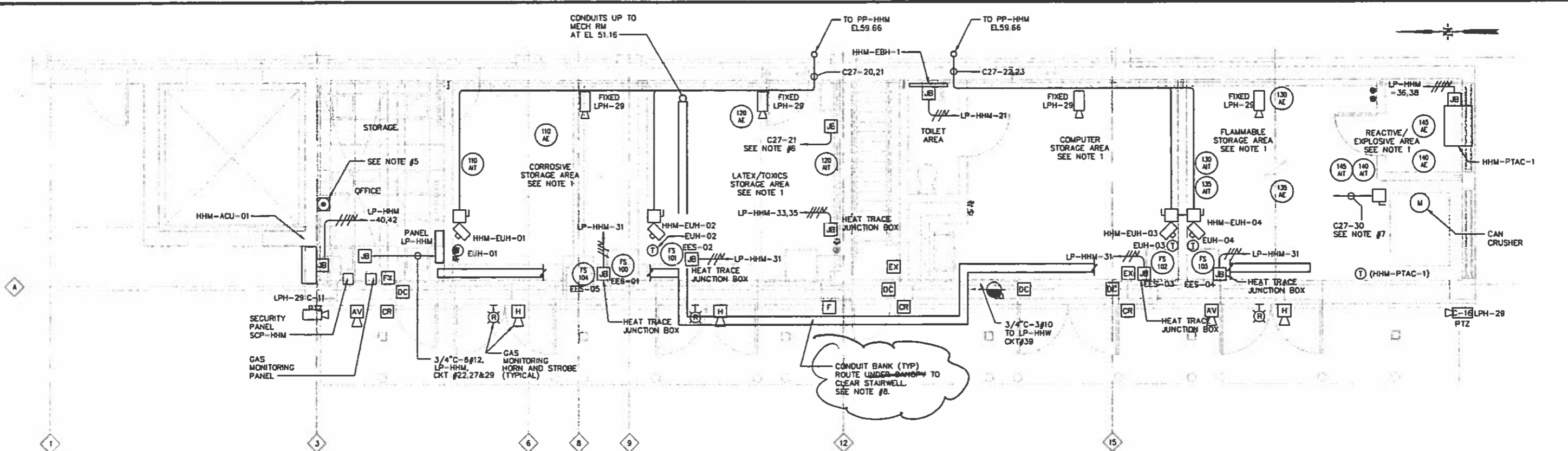
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 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



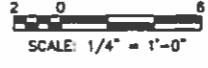
ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

ELECTRICAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 ONE LINE DIAGRAM - MODIFICATION

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
 DATE: MAY 2007
 DRAWING NUMBER: E27-01
 SHEET OF

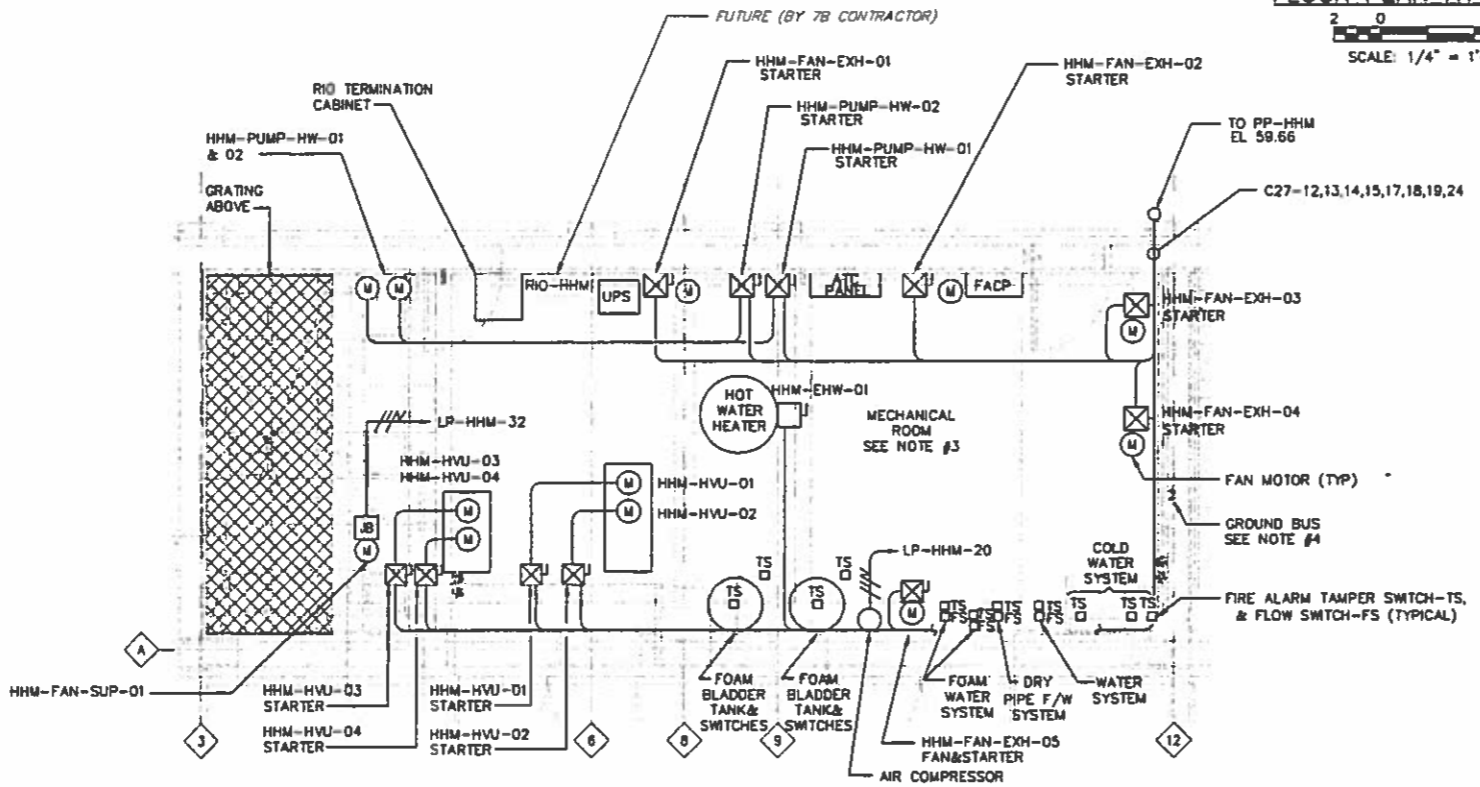


FLOOR PLAN AT EL 41.16

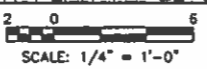


NOTES:

- EACH OF THE STORAGE AREAS SHOWN, WITH THE EXCEPTION OF THE COMPUTER STORAGE AREA ARE CLASSIFIED AS A CLASS I, DIVISION 1, GROUP "D" HAZARDOUS LOCATIONS. COMPUTER STORAGE AREA IS CONSIDERED AS A CORROSIVE LOCATION. ALL MATERIALS, EQUIPMENT AND INCIDENTALS IN THESE AREAS SHALL CONFORM TO THE REQUIREMENTS OF THE LOCATIONS DESIGNATED.
- FOR ADDITIONAL CABLE AND CONDUITS SEE DWG E27-07
- PROVIDE MOUNTING PEDESTAL FOR EACH HVU-STARTER, LOCATE ADJACENT TO UNITS AS SHOWN.
- PROVIDE 1/4"x2"x6" LONG HARD DRAWN COPPER BAR STOCK WITH STANDOFF. FASTEN TO WALL AS REQUIRED.
- PROVIDE PC OUTLET AND CONNECT TO SECURITY PANEL WITH 3/4"C-DATA HIGHWAY CABLE.
- PROVIDE A 3/4-INCH EMPTY CONDUIT FOR FUTURE CAN CRUSHER. ROUTE TO PANEL PP-HHM AS REQUIRED.
- PROVIDE C27, 30, 4#12, 3/4"C FOR CAN CRUSHER. ROUTE TO PANEL PP-HHM WITH CONDUITS C27-22 AND 23.
- INSTRUMENTATION AND OTHER DEVICE CONDUIT BANK. CONNECT INSTRUMENTS AND OTHER DEVICES AS DEFINED BY THE VARIOUS DIAGRAMS PRESENTED FOR THIS FACILITY. ROUTE ALL CONDUITS IN ACCORDANCE WITH THE SPECIFIED REQUIREMENTS DESCRIBED UNDER SECTION 16050.

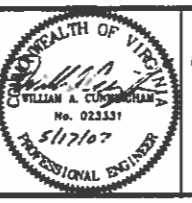


FLOOR PLAN AT EL 51.16



DESIGNED	SMS
DRAWN	SMS
CHECKED	WAC
PROJECTOR	FAS
CAD REF NO.	1E049HHM0
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



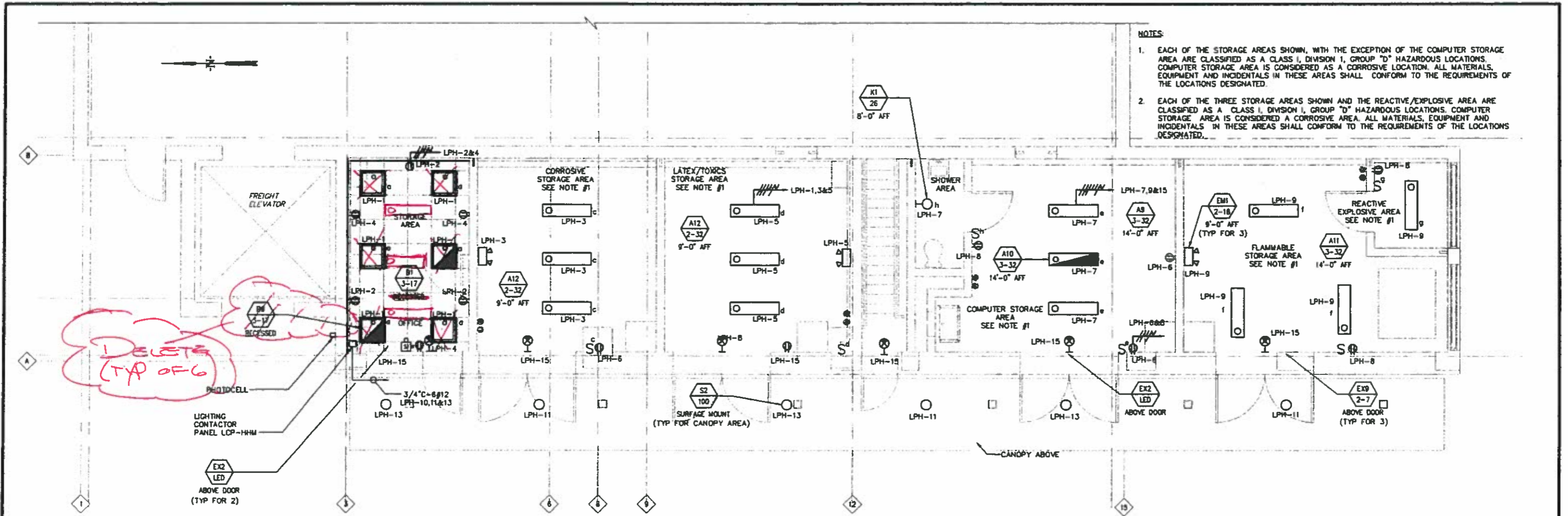
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 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

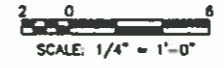
ELECTRICAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 POWER PLAN AT EL 41.16 AND 51.16

DATE: MAY 2007
 DRAWING NUMBER: **E27-02**
 SHEET OF

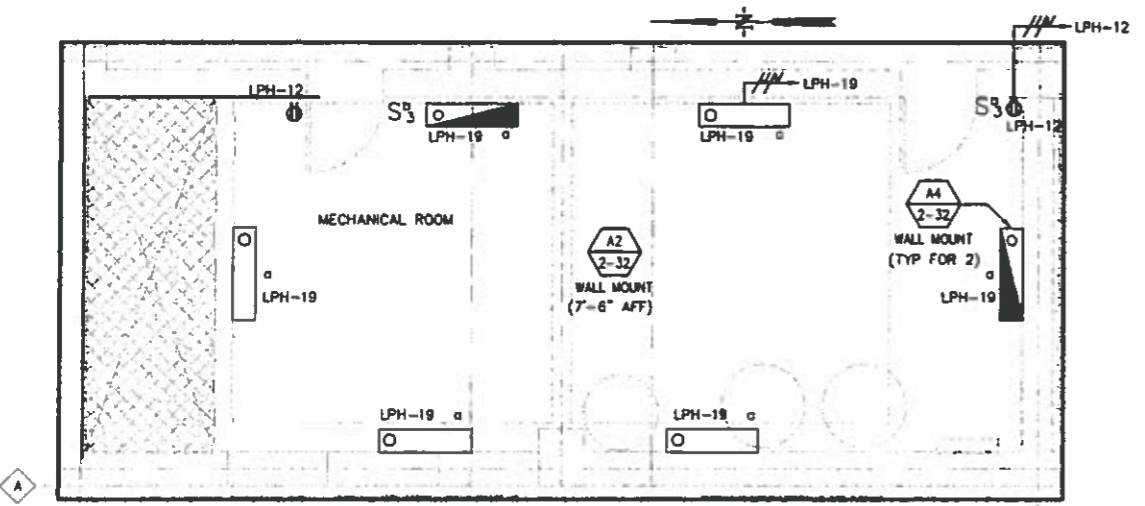


- NOTES:
- EACH OF THE STORAGE AREAS SHOWN, WITH THE EXCEPTION OF THE COMPUTER STORAGE AREA ARE CLASSIFIED AS A CLASS I, DIVISION 1, GROUP "D" HAZARDOUS LOCATIONS. COMPUTER STORAGE AREA IS CONSIDERED AS A CORROSIVE LOCATION. ALL MATERIALS, EQUIPMENT AND INCIDENTALS IN THESE AREAS SHALL CONFORM TO THE REQUIREMENTS OF THE LOCATIONS DESIGNATED.
 - EACH OF THE THREE STORAGE AREAS SHOWN AND THE REACTIVE/EXPLOSIVE AREA ARE CLASSIFIED AS A CLASS I, DIVISION 1, GROUP "D" HAZARDOUS LOCATIONS. COMPUTER STORAGE AREA IS CONSIDERED AS A CORROSIVE AREA. ALL MATERIALS, EQUIPMENT AND INCIDENTALS IN THESE AREAS SHALL CONFORM TO THE REQUIREMENTS OF THE LOCATIONS DESIGNATED.

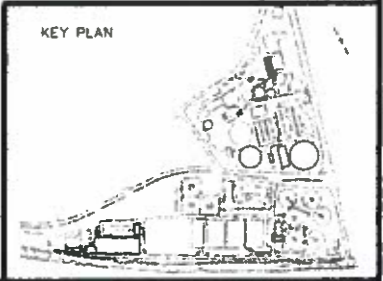
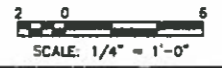
FLOOR PLAN AT EL 40.00



ABBREVIATIONS:
LPH = LIGHTING PANEL LP-HHM



FLOOR PLAN AT EL. 51.16



NO.	ISSUED FOR	DATE	BY	APPROVED
DESIGNED	SMS			
DRAWN	SMS			
CHECKED	WAC			
PROJENOR	FAS			
CAD REF. NO.	1E050HHMO			

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



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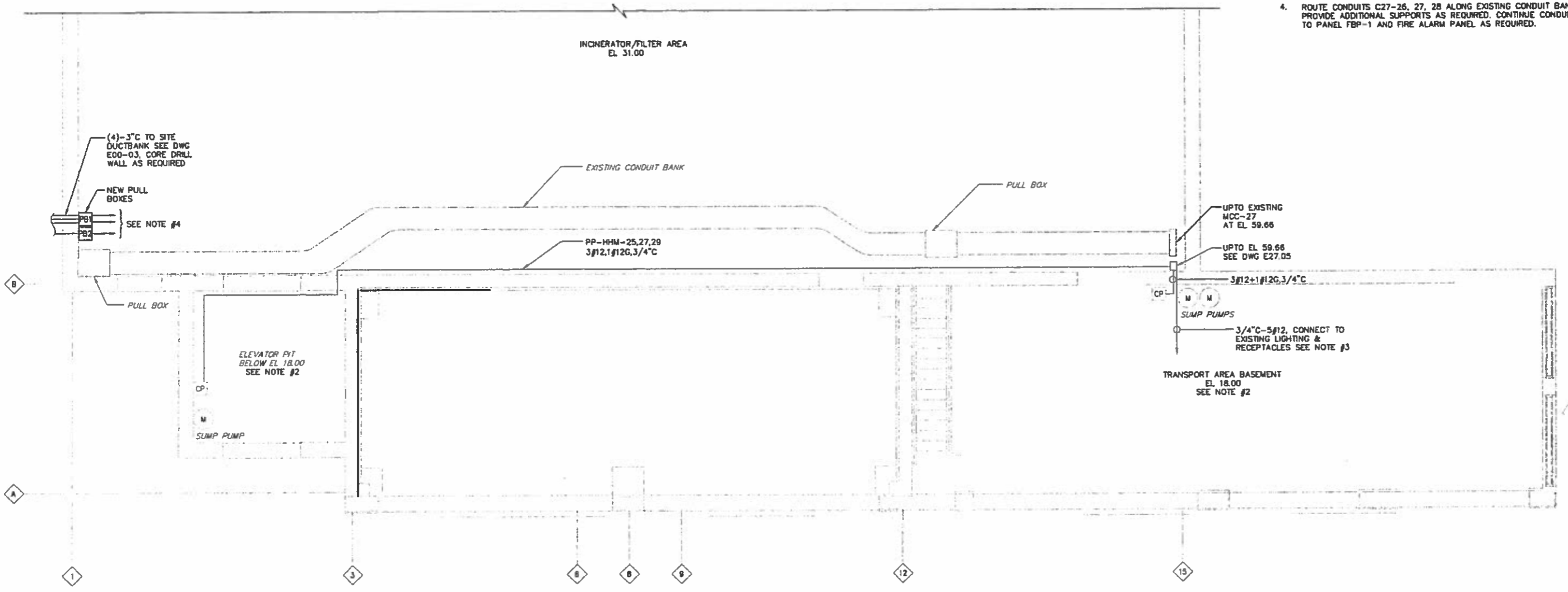


ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

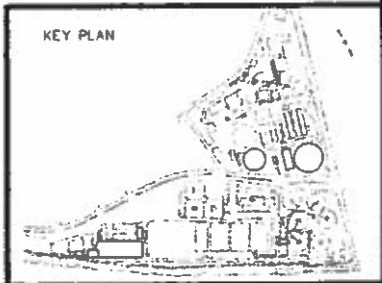
ELECTRICAL
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
LIGHTING PLAN

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
DATE: MAY 2007
DRAWING NUMBER: **E27-03**
SHEET . OF

- NOTES:
1. THIS DRAWING REPRESENTS A COMPOSITE OF CERTAIN AREAS OF THE MULTI-LEVEL SLUDGE PROCESSING BUILDING. AREAS SHOWN ARE AT VARYING ELEVATIONS AS NOTED BY THE ELEVATIONS SHOWN. CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS WITHIN EACH AREA AS REQUIRED TO EXECUTE THE WORK PRESENTED. CERTAIN AREAS MAY REQUIRE TEMPORARY LIGHTING IN ORDER TO EXECUTE WORK. CONTRACTOR SHALL PROVIDE ALL TEMPORARY FACILITIES NECESSARY.
 2. DISCONNECT THE EXISTING SUMP PUMPS SHOWN WITHIN THE ELEVATOR PIT AND TRANSPORT AREA BASEMENT FROM THE SOURCE OF SUPPLY FROM MCC-28B. CONNECT SUMP PUMPS TO THE NEW SOURCE SUPPLY AS SHOWN FROM PP-HHM.
 3. DISCONNECT THE TRANSPORT AREA BASEMENT AND PLATFORM AREA EL. 29.00 AHEAD OF EXISTING LIGHTING AND RECEPTACLE CIRCUITS AND RECONNECT TO NEW SUPPLY FROM LP-HHM-16,17,25.
 4. ROUTE CONDUITS C27-26, 27, 28 ALONG EXISTING CONDUIT BANK SHOWN. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED. CONTINUE CONDUITS UP VERTICALLY TO PANEL FBP-1 AND FIRE ALARM PANEL AS REQUIRED.

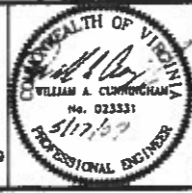


FLOOR PLAN AT EL 18.00 AND EL 31.00
 SCALE: 1/4" = 1'-0"



DESIGNED	MAC
DRAWN	MAC
CHECKED	WAC
PROLENGR.	FAS
CAD REF NO.	1E051HHMO
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



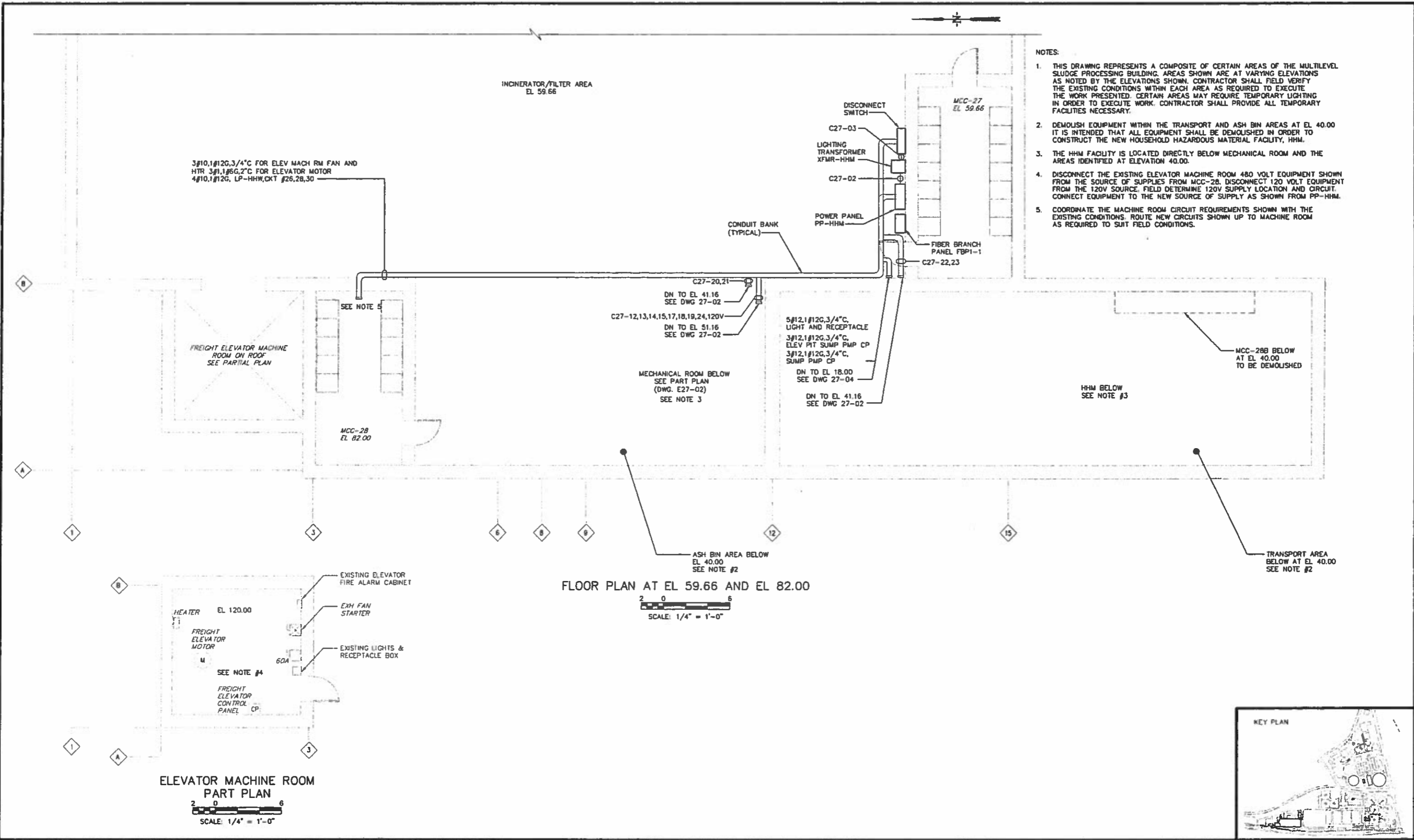
MALCOLM PIRNIE
 Independent Environmental Engineers, Scientists & Consultants
 1101 Wilson Boulevard Suite 1400
 Arlington, VA 22209



ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 ELECTRICAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 POWER PLAN AT EL 18.00 AND 31.00
 UPGRADE AND EXPANSION
 PHASE 7E

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: MAY 2007
DRAWING NUMBER
E27-04
SHEET . OF



NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED: SMS
 DRAWN: SMS
 CHECKED: WAC
 PROJENGR: FAS
 CAD REF. NO. 1E052HHMO

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)



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ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

ELECTRICAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 POWER PLAN AT EL. 59.66 AND 82.00

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

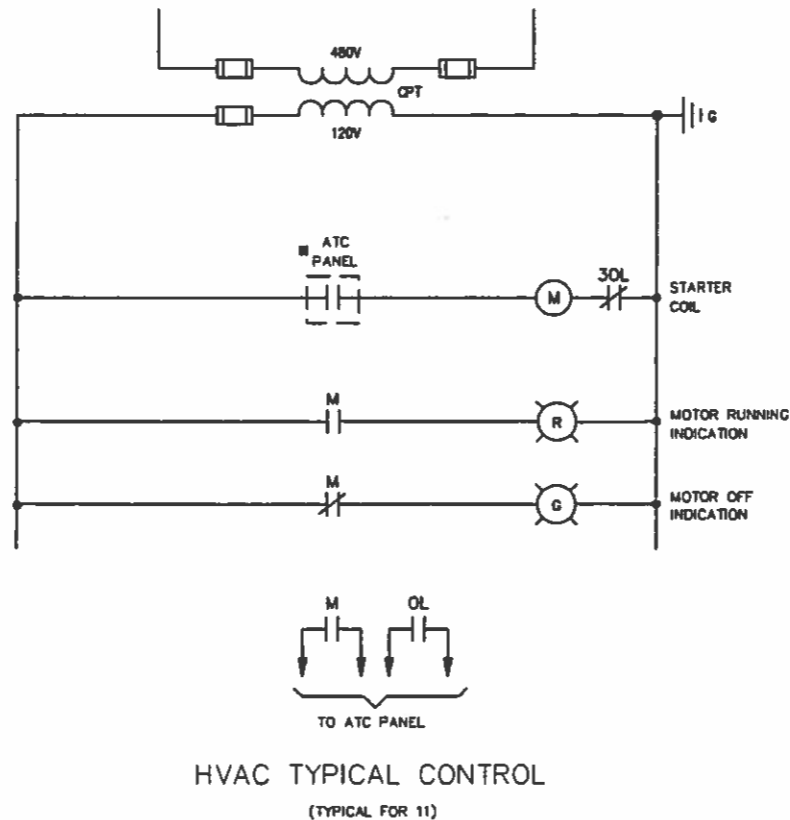
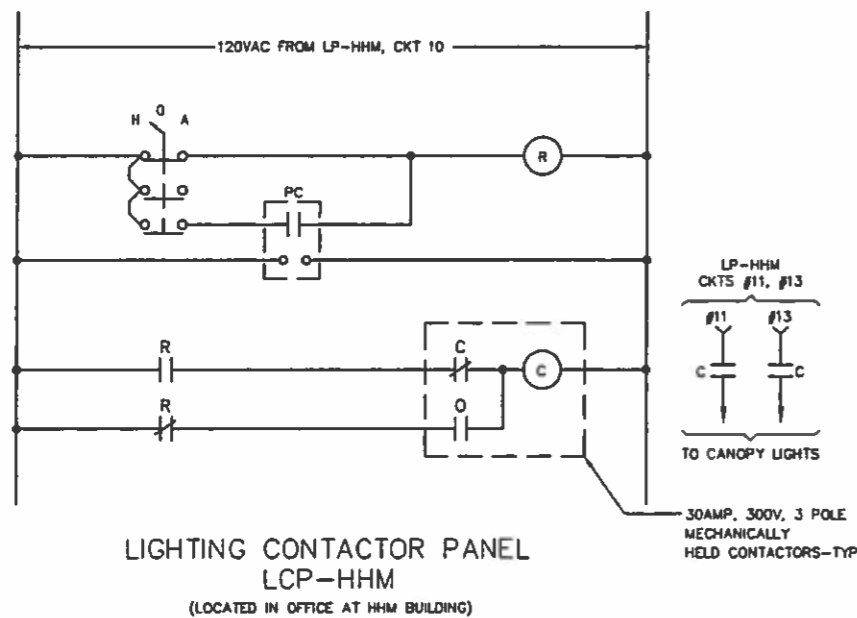
DATE: MAY 2007
 DRAWING NUMBER: **E27-05**
 SHEET . OF

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD KVA	KVA PER PHASE			LOAD KVA	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
				A	B	C				
1			3.3	3.8		0.5			2	
3	20	HMM-EUH-01 AND EUH-02	3.3		3.8	0.5			4	
5			3.3			3.8	0.5		6	
7			-	0.5		0.5			8	
9	20	FUTURE CAN CRUSHER	-		0.5	0.5			10	
11			-			0.5	0.5		12	
13			3.3	4.0		0.7			14	
15	20	HMM-EUH-03	3.3		4.0	0.7			16	
17			3.3			4.0	0.7		18	
19			3.3	4.0		0.7			20	
21	20	HMM-EUH-04	3.3		4.0	0.7			22	
23			3.3			4.0	0.7		24	
25			0.4	11.4		11.0			26	
27	20	SUMP PMP CONT PANEL (ELEV PIT)	0.4		11.4	11.0			28	
29			0.4			11.4	11.0		30	
31			3.7	4.1		0.4			32	
33	20	ELEVATOR MACH ROOM FAN & HTR	3.7		4.1	0.4			34	
35			3.7			4.1	0.4		36	
37			4.0	5.0		1.0			38	
39	20	ELECTRIC HOT WATER HEATER HMM-EHW-01	4.0		5.0	1.0			40	
41			4.0			5.0	1.0		42	
43			0.2	1.2		1.0			44	
45	20	HMM-FAN-EF-05	0.2		1.2	1.0			46	
47			0.2			1.2	1.0		48	
49			1.3	1.3		-			50	
51	20	CAN CRUSHER	1.3		1.3	-			52	
53			1.3			1.3	-		54	
55			-	15		15			56	
57	30	SPARE	-		15	15			58	
59			-		15	15			60	
POWER PANEL: PP-HHM LOCATION: INCINERATOR/FILTER AREA BUILDING: SLUDGE PROCESSING BLDG			TOTAL KVA	50.3	50.3	50.3	SERVICE CHARACTERISTICS: 480 VOLT - 3 PHASE - 3 WIRE - 60 Hz PROVIDE 225AF/225AT MAIN BREAKER & GROUND BUS 65,000 AMP INTERRUPTING RATING			
			GRAND CONNECTED TOTAL KVA	150.9						

PROVIDE GFI TYPE CIRCUIT BREAKERS

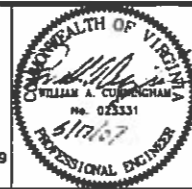
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD KVA	KVA PER PHASE			LOAD KVA	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
				A	B	C				
1	20	LIGHTING - OFFICE/STORAGE	0.5	1.1		0.54		RECEPTACLE - OFFICE/STORAGE	20	2
3	20	LIGHTING - CORROSIVE STORAGE	0.3		1.0	0.54		RECEPTACLE - OFFICE/STORAGE	20	4
5	20	LIGHTING - TOXIC STORAGE	0.3			0.5	0.18	RECEPTACLE - HAZARDOUS STORAGE	20	6
7	20	LIGHTING - COMPUTER STORAGE	0.4	0.6		0.18		RECEPTACLE - HAZARDOUS STORAGE	20	8
9	20	LIGHTING - FLAMMABLE STORAGE	0.5		0.9	0.33		LTG CONTACTOR PANEL LCP-HHM	20	10
11	20	LIGHTING - CANOPY	0.9			1.3	0.36	RECEPTACLES - MECHANICAL ROOM	20	12
13	20	LIGHTING - CANOPY	0.9	1.4		0.5		FIRE ALARM CONTROL PANEL	20	14
15	20	LIGHTING - EXIT SIGN	0.12		1.9	1.74		RECEPTACLE-AREA EL. 18.0 & 29.0	20	16
17	20	LIGHTING - AREA EL.18.0	1.0			2.0	1.0	UPS	20	18
19	20	LIGHTING - MECHANICAL ROOM	1.0	1.3		.33		AIR COMPRESSOR	20	20
21	20	HMM-EBH-01	1.0		1.3	.33		GAS MONITORING PANEL	20	22
23	20	HMM-ATC-1	1.0			1.0	-	SPARE	20	24
25	20	LIGHTING - AREA EL. 29.0	1.0	1.5		0.5		LIGHTING - MACHINE ROOM	20	26
27	20	SCP-HHM	0.5		0.9	0.36		RECEPTACLES - MACHINE ROOM	20	28
29	20	CAMERAS	0.6			1.1	0.5	FIRE ALARM PANEL - MACHINE ROOM	20	30
31	20	EYEWASH STATIONS - HEAT TRACE	1.1	1.5		0.4		HMM-FAN-SUP-01	20	32
33	20	HEAT TRACE	.65		1.3	-		SPARE	20	34
35			.65			0.9	0.9	HMM-PTAC-01	20	36
37	20	SPARE	-	0.9		0.9			20	38
39			-		4.5	.33			20	40
41	30	CHARGER OUTLET	-			4.5	.33	HMM-ACU-01	20	42
LIGHTING PANEL: LP-HHM LOCATION: INCINERATOR/FILTER AREA BUILDING: SLUDGE PROCESSING BLDG			TOTAL KVA	8.3	11.8	11.3	SERVICE CHARACTERISTICS: 120/208 VOLT - 3 PHASE - 4 WIRE - 60 Hz PROVIDE 150A MAIN BREAKER & SOLID NEUTRAL & GROUND BUS 10,000 AMP INTERRUPTING RATING			
			GRAND CONNECTED TOTAL KVA	31.4						

NOTES:
1. CONTRACTOR SHALL PROVIDE BRANCH CIRCUIT WIRING AND CONDUIT FOR ALL LP-HHM CIRCUITS, RUN 2#12&1#12G, 3/4" UNLESS OTHERWISE NOTED.



DESIGNED	SMS
DRAWN	SMS
CHECKED	WAC
PROLENGR.	FAS
CAD REF NO.	1E053HHM0
ISSUED FOR	
DATE	
BY	
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETC VERTICAL DATUM OF 1929 (NGVD 29)



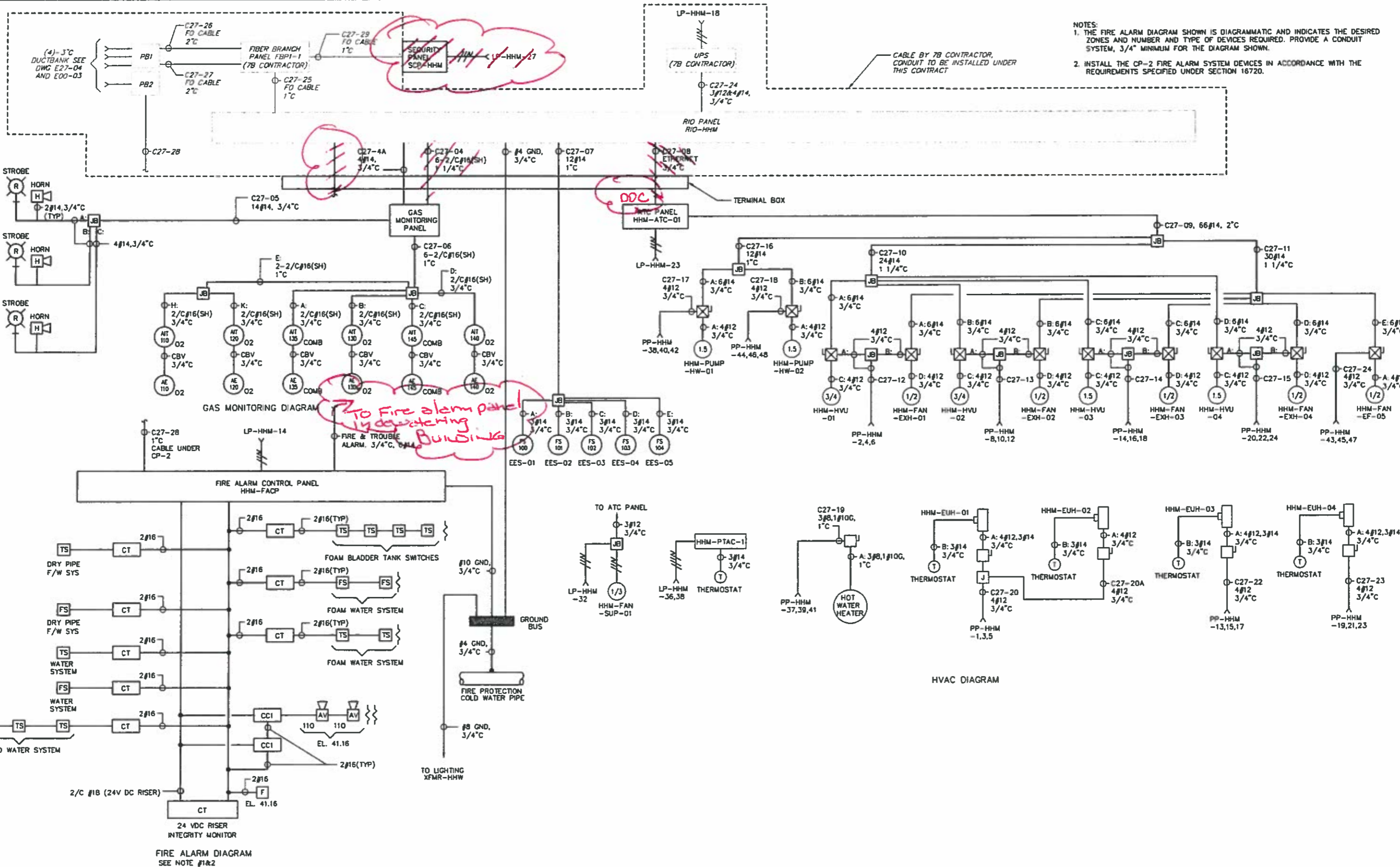
MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209



ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

ELECTRICAL
HOUSEHOLD HAZARDOUS MATERIALS FACILITY
PANEL SCHEDULES

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007
	DRAWING NUMBER
	E27-06
	SHEET . OF



NOTES:
 1. THE FIRE ALARM DIAGRAM SHOWN IS DIAGRAMMATIC AND INDICATES THE DESIRED ZONES AND NUMBER AND TYPE OF DEVICES REQUIRED. PROVIDE A CONDUIT SYSTEM, 3/4" MINIMUM FOR THE DIAGRAM SHOWN.
 2. INSTALL THE CP-2 FIRE ALARM SYSTEM DEVICES IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED UNDER SECTION 16720.

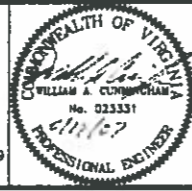
FIRE ALARM DIAGRAM
 SEE NOTE #1&2

HVAC DIAGRAM

NO.	ISSUED FOR	DATE	BY	APPROVED

DESIGNED	SMS
DRAWN	SMS
CHECKED	WAC
PROJENGR.	FAS
CAD REF NO.	1E054HHMO

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)
 VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)

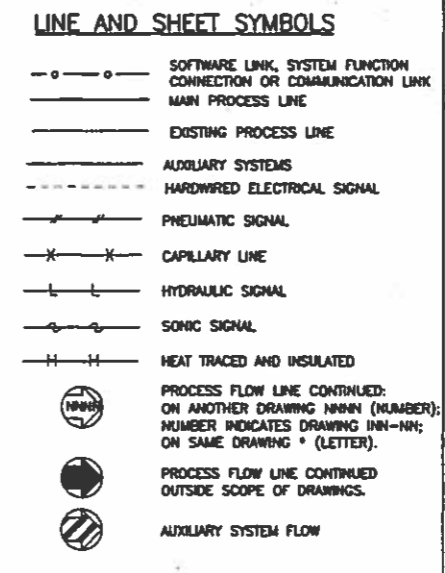
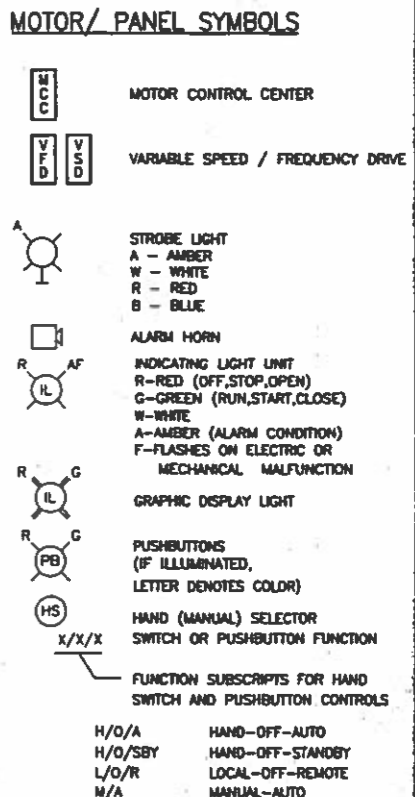
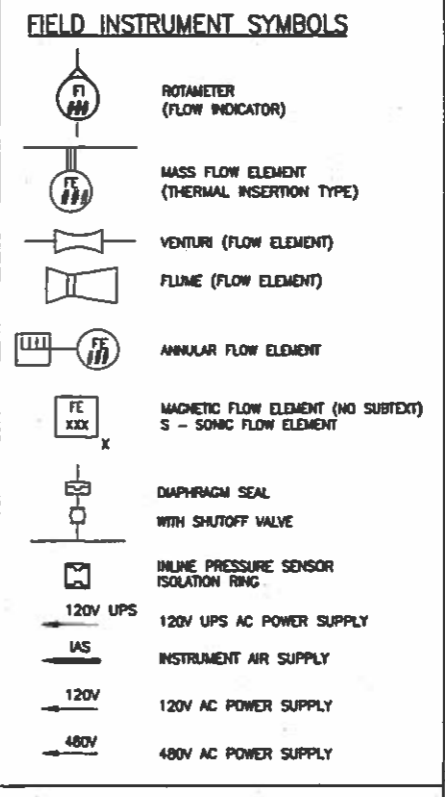
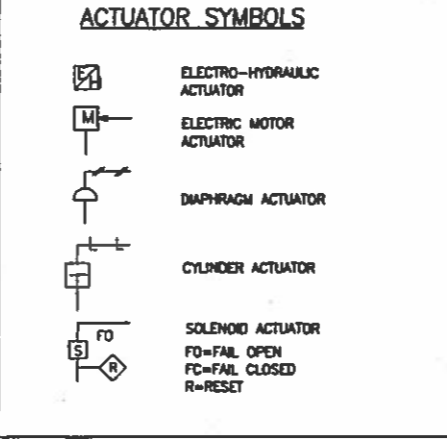
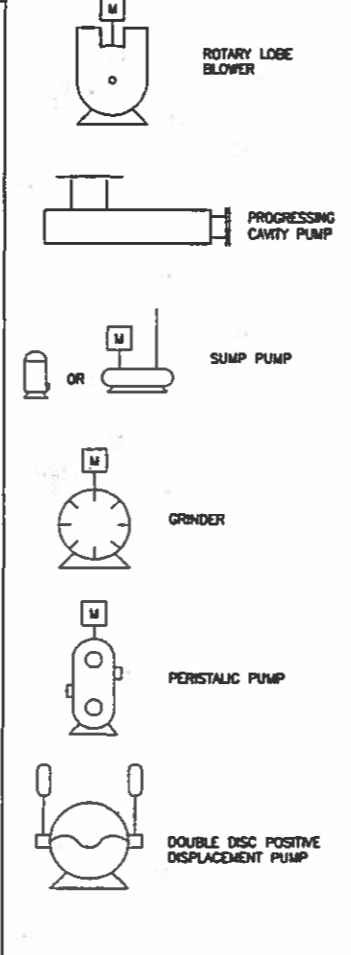
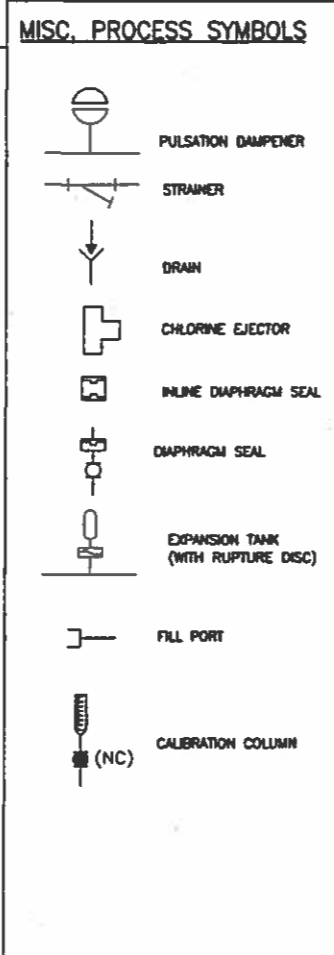
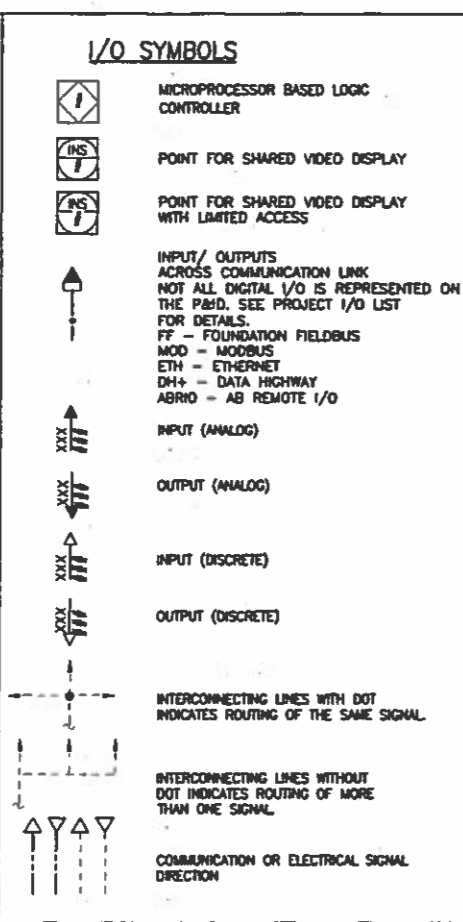
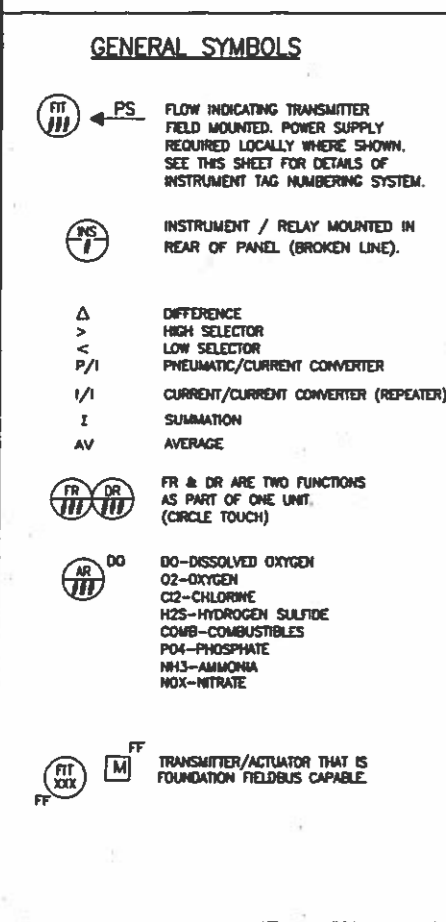
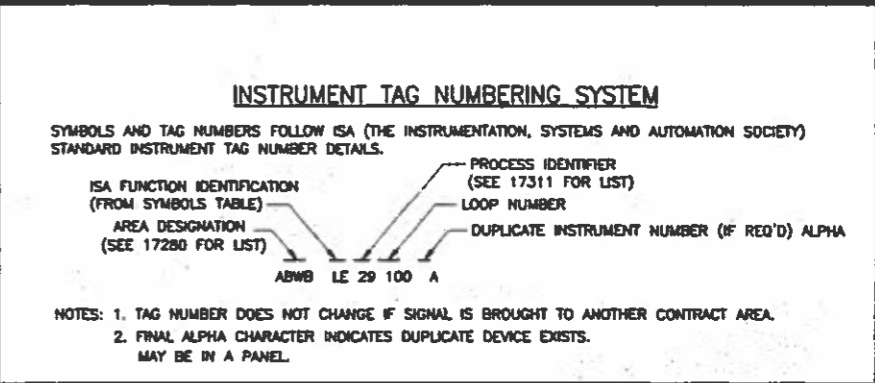
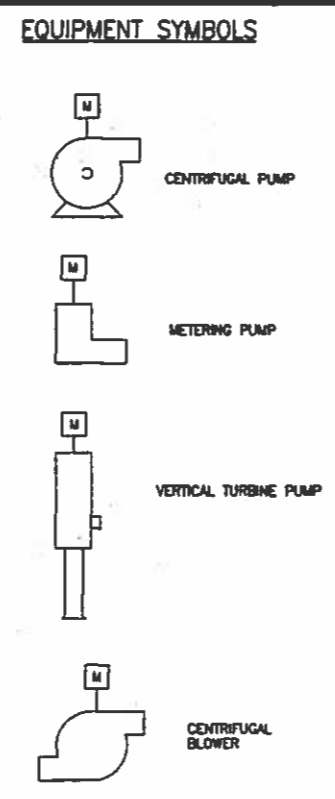
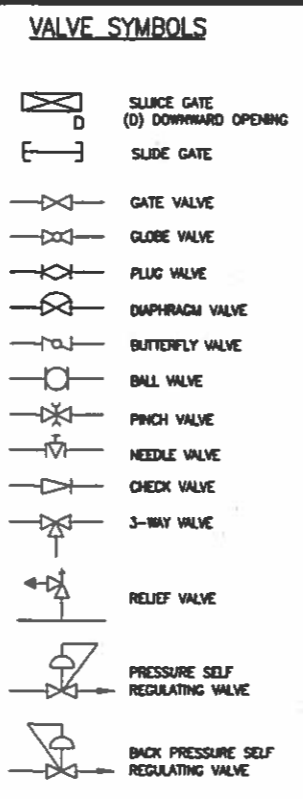


ARLINGTON COUNTY
 WATER POLLUTION CONTROL PLANT
 UPGRADE AND EXPANSION
 PHASE 7E

ELECTRICAL
 HOUSEHOLD HAZARDOUS MATERIALS FACILITY
 BLOCK DIAGRAM

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE: MAY 2007 DRAWING NUMBER E27-07 SHEET OF
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FIRST LETTER		SUCCEEDING LETTERS,		
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS			
B	BURNER FLAME CONDUCTIVITY (ELECTRICAL)			
C	CONDUCTIVITY (ELECTRICAL)			
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL		
E	VOLTAGE (EMF)	PRIMARY ELEMENT		
F	FLOW RATE	RATIO (FACTOR)		
G	GALGING (DIMENSIONAL)	GLASS GAUGE (UNCALIBRATED)		
H	HAND (MANUALLY INITIATED)			HIGH
I	CURRENT (ELECTRICAL)	INDICATE		
J	POWER	SCAN		
K	TIME OR TIME SCHEDULE		CONTROL STATION	
L	LEVEL	LIGHT (PILOT)		LOW
M	MOISTURE OR HUMIDITY			MIDDLE OR INTER-MEDIATE
N	COMMAND			
O	NOT USED	ORIFICE (RESTRICTION)		OPEN
P	PRESSURE OR VACUUM	POINT (TEST CONNECTION)		
Q	QUANTITY	INTEGRATE OR TOTALIZE		
R	RADIOACTIVITY	RECORD OR PRINT		
S	SPEED, FREQUENCY/ SAFETY		SWITCH, TRANSMIT	
T	TEMPERATURE		MULTIFUNCTION	
U	MULTIFUNCTION	MALFUNCTION	MULTIFUNCTION	
V	VIBRATION		VALVE, DAMPER OR LOUVER	
W	WEIGHT OR FORCE	WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT STATUS	Y AXIS	RELAY OR COMPUTE	
Z	POSITION		DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	



DESIGNED	RJK
DRAWN	MW
CHECKED	JJC
PROJENGR.	JBC
CAD REF. NO.	110010000
NO.	ISSUED FOR
DATE	BY
APPROVED	

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)

MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209

ARLINGTON COUNTY
WATER POLLUTION CONTROL PLANT
UPGRADE AND EXPANSION
PHASE 7E

INSTRUMENTATION
GENERAL
SYMBOLS AND LEGEND

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: APRIL 2007
DRAWING NUMBER: 100-01
SHEET OF

SYMBOLS AND LEGEND

——— REDUNDANT BRANCH FIBER OPTIC CABLE
 - - - - REDUNDANT PROCESS NETWORK LINK
 1. ETHERNET CONTROLLER COMMUNICATION
 2. REMOTE I/O NETWORK COMMUNICATION



REMOTE I/O PROCESSOR (RIO)

F/C

FIBER TO COPPER CONVERTER

FPP-X

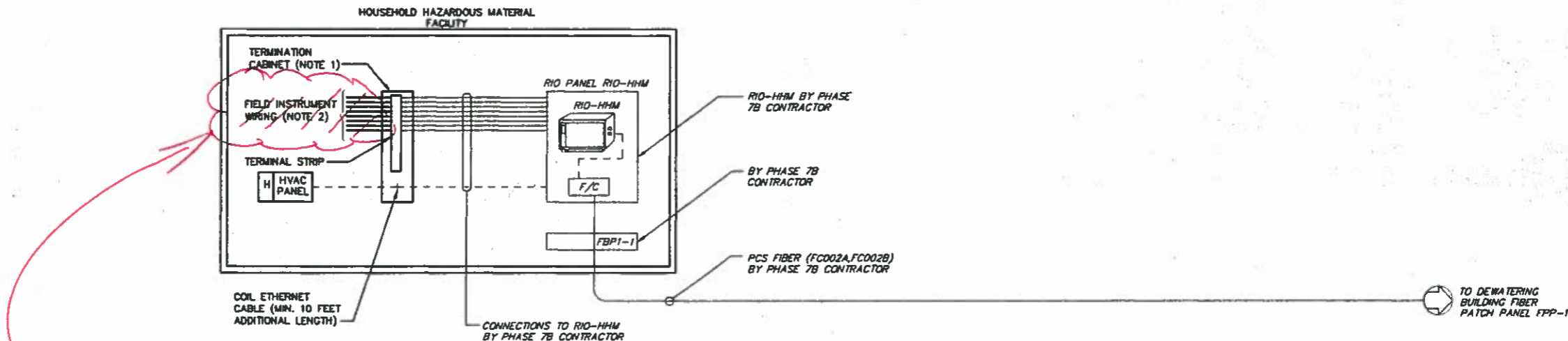
FIBER PATCH PANEL (TRUNK)

FBPX-X

FIBER BRANCH PANEL (BRANCH)

X NNN
 NNN

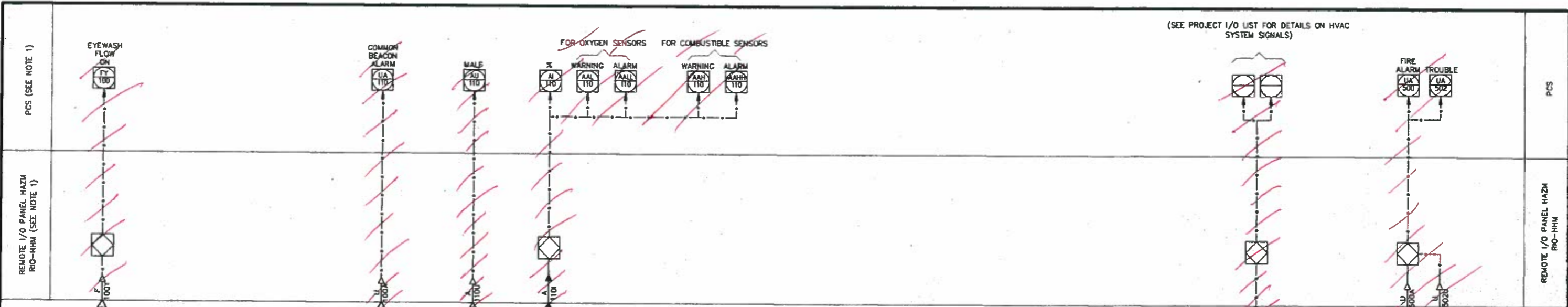
FIELD EQUIPMENT CONNECTED WITH COMMUNICATION LINK
 H - HVAC PANEL



- GENERAL NOTES:
1. PROVIDE WALL-MOUNT TERMINATION CABINET AND INTERIOR COMPONENTS IN ACCORDANCE WITH SPECIFICATION 17320. FOR LOCATION, SEE DWG E27-02. ETHERNET CABLING SHALL BE BROUGHT TO TERMINATION CABINET AND COILED AS SHOWN.
 2. ALL INPUT/OUTPUT WIRING FROM FIELD INSTRUMENTS SHALL BE TERMINATED AT TERMINATION CABINET FURNISHED UNDER THIS CONTRACT.

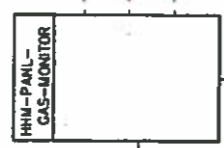
Delete

	DESIGNED RJK	HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)		MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1101 Wilson Boulevard Suite 1400 Arlington, VA 22209	ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E	INSTRUMENTATION GENERAL NORTH PLANT SITE - PROCESS CONTROL SYSTEM BLOCK DIAGRAM I	DATE: APRIL 2007 DRAWING NUMBER 100-02	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.
NO.	ISSUED FOR	DATE						

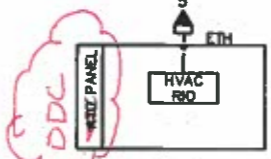


EMERGENCY EYEWASH AND SHOWER STATION (TYP. OF 5 STATIONS, EES-1 THROUGH EES-5)

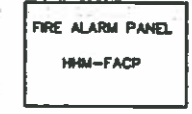
DIP FOR 8-GAS DETECTORS



PROVIDES LOCAL INDICATION ONLY

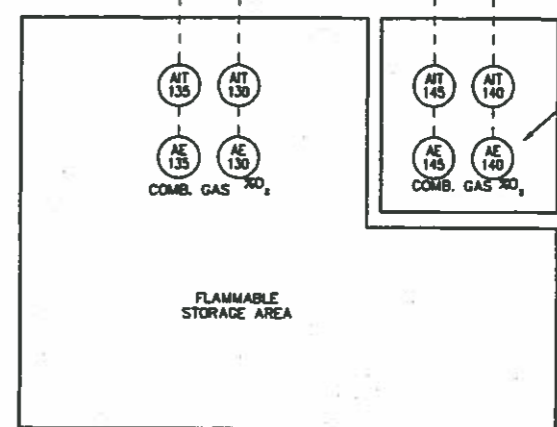
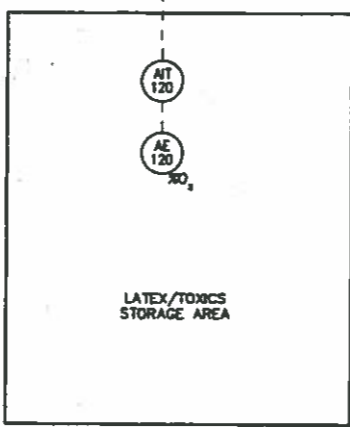
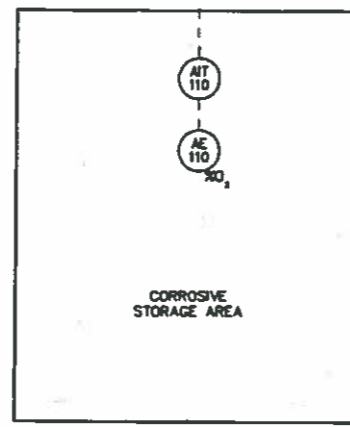


PROVIDED BY HVAC SUPPLIER UNDER SECTION 15950

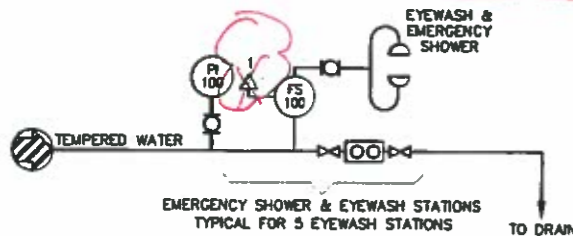


FIRE ALARM PANEL (PROVIDED UNDER SECTION 16)

PROVIDES LOCAL INDICATION ONLY



PAINT CAN CRUSHER AREA



- NOTES:
1. RIO-HHM AND PCS BY PHASE 7B CONTRACTOR.
 2. GAS MONITORING, FIRE ALARM, AND EMERGENCY EYEWASH LOOP NUMBER DESIGNATIONS ON THIS DRAWING SHALL BE PRECEDED BY "HHM-89".
 3. HVAC LOOP NUMBER DESIGNATIONS ON THIS DRAWING SHALL BE PRECEDED BY "HHM-89".

DESIGNED: RJK DRAWN: IG CHECKED: JJC PROLENGR: JBC CAD REF. NO.: 11003HHMO				HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83) VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)		 MALCOLM PIRNIE Independent Environmental Engineers, Scientists & Consultants 1101 Wilson Boulevard Suite 1400 Arlington, VA 22209		 ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION PHASE 7E		INSTRUMENTATION HOUSEHOLD HAZARDOUS MATERIALS FACILITY P&ID		THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING. DATE: APRIL 2007 DRAWING NUMBER: 127-01 SHEET OF	
NO.	ISSUED FOR	DATE	BY	APPROVED									