

G-1 THE DESIGN IS IN ACCORDANCE WITH AND ALL CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE 2012 VIRGINIA UNIFORM STATEWIDE BUILDING CODE.

G-2 ALL DIMENSIONS INDICATED (*) SHALL 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-3 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION IN THE FIELD AS REQUIRED FOR NEW WORK.

G-4 IF A CONFLICT IS FOUND BETWEEN DIFFERENT PORTIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. CONTINUED CONSTRUCTION OF THE AREA IN CONFLICT SHALL BE AT THE CONTRACTOR'S OWN RISK UNTIL THE CONFLICT IS RESOLVED.

G-5 EQUIPMENT ANCHOR BOLT SIZES, TYPES, EMBEDMENT AND PATTERNS SHALL BE VERIFIED WITH THE MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO INSURE ACCURACY OF PLACEMENT.

G-6 THESE NOTES SHALL BE USED IN COORDINATION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND MANUFACTURER'S SHOP DRAWINGS.

G-7 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-8 NO GEOTECHNICAL INVESTIGATION WAS PERFORMED FOR THIS CONTRACT. AS SUCH, FOR THE DESIGN OF EQUIPMENT ANCHORAGE THE CONTRACTOR SHALL ASSUME A SITE CLASS D AND AN OCCUPANCY CATEGORY III.

M-1	DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, LATEST EDITION.	
M-2	STEEL MATERIAL:	
	A) STRUCTURAL TUBING:	ASTM A500, GRADE B OR A501 (42 KSI)
	B) STRUCTURAL PIPE:	ASTM A53, TYPE E OR S, GRADE B (35 KSI)
	C) PLATES AND ANGLES:	ASTM A36 UNO (36 KSI)
	D) STRUCTURAL W SHAPES:	ASTM A992 (50 KSI)
	E) STRUCTURAL S, M, C & H SHAPES:	ASTM A572 GRADE 50 (50 KSI)

A-1 ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE DESIGNED AND INSTALLED TO RESIST THE CONTROLLING CONDITION OF OPERATIONAL FORCES OR SEISMIC FORCES IN ACCORDANCE WITH THE GOVERNING BUILDING CODE. SEISMIC FORCES SHALL ALSO BE AS PER ASCE 7. COMPONENT SEISMIC ATTACHMENTS SHALL BE BOLTED, WELDED, OR OTHERWISE POSITIVELY FASTENED WITHOUT CONSIDERATION OF FRICTIONAL RESISTANCE PRODUCED BY THE EFFECTS OF GRAVITY. A CONTINUOUS LOAD PATH OF SUFFICIENT STRENGTH AND STIFFNESS BETWEEN THE COMPONENT AND THE SUPPORTING STRUCTURE SHALL BE PROVIDED. CONNECTIONS FOR BOTH ORTHOGONAL DIRECTIONS (TRANSVERSE AND LONGITUDINAL) SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE COMMONWEALTH OF VIRGINIA.

A-2 COMPONENT REACTION FORCES AT THE POINT OF ATTACHMENT TO THE STRUCTURE SHALL BE SUBMITTED TO AND COORDINATED WITH THE ENGINEER FOR CONFIRMATION SUPPORTING STRUCTURE CAN WITHSTAND REACTION FORCES.

A-3 CONTRACTOR SHALL PROVIDE SPECIAL SEISMIC CERTIFICATION (SSC) FROM MANUFACTURER OF EQUIPMENT FOR ALL SYSTEMS DEEMED NECESSARY BY SPECIFICATIONS. SPECIAL SEISMIC CERTIFICATION SHALL BE IN COMPLIANCE WITH ASCE 7.

FRP-1 SEE SPECIFICATION 06610 FOR REQUIREMENTS

PC-1 PRECAST VAULTS AND MANHOLES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE COMMONWEALTH OF VIRGINIA. STRUCTURAL DRAWINGS SHALL INDICATE DESIGN IS IN COMPLIANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE.

C-1 CONCRETE MIX DESIGN:

A. COMPRESSIVE STRENGTH (28 DAY) 4500 PSI (MINIMUM)

B. MAXIMUM WATER/CEMENTITIOUS MATERIAL RATIO (BY WEIGHT) 0.42

C. SLUMP RANGE 4" NOMINAL

D. AIR CONTENT $6\% \pm 1.5\%$

E. PORTLAND CEMENT: TYPE I OR TYPE II CONFORMING TO ASTM C 150 WITH TOTAL ALKALIS IN THE CEMENT NOT EXCEEDING 0.80%, TRICALCIUM ALUMINATE NOT MORE THAN 8% AND TETRACALCIUM ALUMINO-FERRITE NOT MORE THAN 12%

F. FLY ASH: FLY ASH SHALL MEET THE REQUIREMENTS OF ASTM C 618 FOR CLASS F AND SHALL CONSTITUTE BETWEEN 15% AND 25% OF THE TOTAL WEIGHT OF THE COMBINED PORTLAND CEMENT AND FLY ASH.

G. SLAG CEMENT: SLAG CEMENT SHALL MEET THE REQUIREMENTS OF ASTM C 989, INCLUDING APPENDIX X3, AND SHALL CONSTITUTE BETWEEN 35% AND 45% OF THE TOTAL WEIGHT OF THE COMBINED PORTLAND CEMENT AND SLAG

H. WATER: WATER USED FOR MIXING CONCRETE SHALL BE CLEAR, POTABLE AND FREE FROM DELETERIOUS SUBSTANCES.

I. COARSE AND FINE AGGREGATES: AGGREGATES SHALL MEET THE GRADATION REQUIREMENTS OF ASTM C 33. COARSE AGGREGATES SHALL BE EITHER SIZE #57 OR SIZE #67 STONE. FINE AGGREGATES SHALL CONSIST OF EITHER NATURAL OR MANUFACTURED SILICEOUS SANDS. AGGREGATES SHALL BE TESTED FOR GRADATION IN CONFORMANCE WITH ASTM C 136.

J. AIR ENTRAINING ADMIXTURE: AIR ENTRAINING ADMIXTURES SHALL BE ADDED TO ALL CONCRETE AND SHALL CONSIST OF A NEUTRALIZED VINYL RESIN SOLUTION OF PURIFIED HYDROCARBON WITH CEMENT CATALYST AND SHALL MEET THE REQUIREMENTS OF ASTM 260.

K. WATER REDUCING ADMIXTURE: WATER REDUCING ADMIXTURE SHALL CONFORM TO ASTM C 494, TYPE A AND SHALL CONTAIN NO MORE THAN 0.05% CHLORIDE IONS. ACCEPTABLE PRODUCTS ARE "EUCON SERIES" BY THE EUCLO CHEMICAL COMPANY, "POZZOLITH SERIES" BY BASF, AND "PLASTOCRETE SERIES" BY SIKKA CORPORATION.

L. ADMIXTURES CONTAINING CALCIUM CHLORIDE, THIOCYANATE OR MORE THAN 0.05 PERCENT CHLORIDE IONS ARE NOT PERMITTED.

M. THE USE OF FLY ASH OR SLAG CEMENT WITHIN THE MIX IS MANDATORY.

N. SUBMITTALS: SUBMIT TO THE ENGINEER CONCRETE MIX DESIGN INCLUDING SOURCES OF ALL MATERIALS, CHEMICAL ANALYSIS OF PORTLAND CEMENT (LESS THAN 1 YEAR OLD), CHEMICAL ANALYSIS OF FLY ASH OR SLAG (LESS THAN 1 YEAR OLD), MANUFACTURERS DATA ON ALL ADMIXTURES AND FIELD EXPERIENCE RECORDS OR TRIAL MIX DATA FOR PROPOSED CONCRETE MIX.

O. CONCRETE SHALL BE SUPPLIED BY A READY MIXED PLANT AND SHALL BE DELIVERED TO THE JOB SITE IN A TRUCK EQUIPPED WITH A MIXING DRUM. ALL CONCRETE DELIVERIES SHALL BE ACCOMPANIED BY A DELIVERY TICKET. ANY CONCRETE DELIVERY THAT DOES NOT INCLUDE A DELIVERY TICKET WILL BE REJECTED.

P. PLACEMENT AND CURING OF CONCRETE SHALL MEET THE REQUIREMENTS OF ACI 308 - SPECIFICATION FOR HOT WEATHER CONCRETING AND ACI 308 STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING WHEN ENVIRONMENTAL CONDITIONS DICTATE SUCH. IN ADDITION, FOR CONCRETE PLACED OUTSIDE OF STRUCTURES, THE SUBGRADE SHALL BE FREE OF FROST AND MOIST PRIOR TO THE PLACING OF CONCRETE.

Q. ALL EXPOSED CONCRETE EDGES SHALL HAVE MINIMUM 3/4" CHAMFER.

C-2 CONCRETE ACCESSORIES:

A. FORMS: FORMS SHALL BE CONSTRUCTED OF WOOD, METAL OR FIBERGLASS AND SHALL BE UTILIZED FOR ALL CONCRETE WORK EXCEPT CONCRETE PLACED DIRECTLY AGAINST GRADE AND THE USE OF SIDE FORMS IS MANDATORY FOR CONSTRUCTION OF EXTERIOR CONCRETE PADS. FORMS SHALL BE COATED WITH A NON-STAINING FORM RELEASE AGENT. SUBMIT MANUFACTURERS DATA FOR FORM RELEASE AGENT TO BE USED.

B. REINFORCING BARS: ALL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 FOR DEFORMED BARS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A165. CONTRACTOR SHALL SUBMIT REINFORCING PLACEMENT DRAWINGS FOR ENGINEERS REVIEW.

C. REINFORCING BAR ACCESSORIES: ACCESSORIES SHALL INCLUDE ALL NECESSARY CHAIRS, SLAB BOLSTERS, CONCRETE BLOCKS, THE WIRES, DIPS, SUPPORTS, SPACERS AND OTHER DEVICES TO POSITION REINFORCING DURING CONCRETE PLACEMENT. SLAB BOLSTERS SHALL HAVE GRAY PLASTIC-COATED LEGS. CONCRETE BLOCKS (DOBBIES), USED TO SUPPORT AND POSITION BOTTOM REINFORCING STEEL, SHALL HAVE THE SAME OR HIGHER COMPRESSIVE STRENGTH AS SPECIFIED FOR THE CONCRETE IN WHICH IT IS LOCATED. 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" SHALL BE PROVIDED.

D. BOND/ADHESIVE SYSTEM: WHERE SHOWN ON THE DRAWINGS, REINFORCING BARS ANCHORED INTO HARDENED CONCRETE WITH A BOND/ADHESIVE SYSTEM SHALL USE A TWO-COMPONENT ADHESIVE MIX WHICH SHALL BE INJECTED WITH A STATIC MIXING NOZZLE FOLLOWING MANUFACTURER'S INSTRUCTIONS. ALL HOLES SHALL BE DRILLED WITH A CARBIDE BIT UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER AND SHALL BE NO LARGER THAN 1/8" THE BAR DIAMETER. IF CORING HOLES IS ALLOWED BY THE MANUFACTURER AND APPROVED BY THE ENGINEER, CORED HOLES SHALL BE REINFORCED IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS. THOROUGHLY CLEAN DRILL HOLES OF ALL DEBRIS AND DRILL DUST WITH COMPRESSED AIR FOLLOWED BY A WIRE BRUSH PRIOR TO INSTALLATION OF ADHESIVE AND REINFORCING BAR. DEGREE OF HOLE DAMPNESS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. WHERE DEPTH OF HOLE EXCEEDS THE LENGTH OF THE STATIC MIXING NOZZLE, A PLASTIC EXTENSION HOSE SHALL BE USED TO ENSURE PROPER ADHESIVE INJECTION FROM THE BACK OF THE HOLE. INJECTION OF ADHESIVE INTO THE HOLE SHALL UTILIZE A PISTON PLUG TO MINIMIZE THE FORMATION OF AIR POCKETS. THE EMBEDMENT DEPTH OF THE BAR SHALL BE PER MANUFACTURER'S RECOMMENDATIONS, SO AS TO PROVIDE A MINIMUM ALLOWABLE BOND STRENGTH THAT IS EQUAL TO 125 PERCENT OF THE YIELD STRENGTH OF THE BAR, UNLESS NOTED OTHERWISE ON THE DRAWINGS. THE ADHESIVE SYSTEM SHALL BE "EPOCON SYSTEM 65" AS MANUFACTURED BY ITW REDHEAD, "HY HY-1000 INJECTION ADHESIVE ANCHOR SYSTEM" AS MANUFACTURED BY HLB, INC. "SCF-XP" AS MANUFACTURED BY SIMPSON STRONG-IR CO. OR "PE-1000 SD" BY POWERS FASTENERS. ENGINEER'S APPROVAL IS REQUIRED FOR USE OF THIS SYSTEM IN LOCATIONS OTHER THAN THOSE SHOWN ON THE DRAWINGS. FAST-SET EPOXY FORMULATIONS SHALL NOT BE ACCEPTABLE. NO OR EQUAL PRODUCTS WILL BE CONSIDERED, UNLESS PRE-QUALIFIED AND APPROVED BY ENGINEER AND OWNER. SUBMIT MANUFACTURERS DATA FOR SYSTEM TO BE USED.

E. EXPANSION JOINT MATERIAL: EXPANSION JOINT MATERIAL SHALL BE SPONGE RUBBER CONFORMING TO ASTM D1752, TYPE I. ALL EXPANSION JOINTS EXPOSED IN THE FINISH WORK SHALL BE SEALED WITH A JOINT SEALER WITH A BOND BREAKER INSTALLED BETWEEN THE EXPANSION JOINT MATERIAL AND THE SEALER. THE SEALER SHALL BE A MULTI-COMPONENT, NON-SOL, LOW-MODULUS POLYURETHANE RUBBER SEALANT MEETING ASTM C-923 TYPE M, GRADE 25, USE NT, M, A, AND D, CAPABLE OF WITHSTANDING 50% IN EXTENSION OR COMPRESSION SUCH AS SIKAFLEX-2C NS/SL, SIKKA CORPORATION, OR SONOLASTIC NP-2, SONNEBORN, OR DYNATROL II BY PEDORA CORPORATION.

F. EPOXY BONDING AGENT: EPOXY BONDING AGENT SHALL CONFORM TO ASTM C881 AND SHALL BE SIKADUR 32 HI-MOD, SIKKA CORPORATION, LYNDENHURST, N.J.; EUCO #452 EPOXY SYSTEM, EUCLO CHEMICAL COMPANY, CLEVELAND, OH; CONCRETE LV1 BY BASF CONSTRUCTION CHEMICALS.

C-3 CONCRETE FINISHES: CONCRETE EQUIPMENT PADS SHALL BE SCREEDED AND FLOATED WITH A WOOD OR MAGNESIUM FLOAT AFTER CONCRETE PLACEMENT AND ALL EDGES SHALL BE EDGED WITH A CONCRETE EDGING TOOL. FOLLOWING FLOATING THE CONCRETE SHALL RECEIVE A TEXTURED FINISH CREATED BY DRAWING A BRUSH OR BURLAP BELT ACROSS THE SURFACE.

ALL EXPOSED SURFACES OF CONCRETE WALLS SHALL HAVE ALL FINIS, SURRS, OFFSETS, MARKS AND ALL OTHER PROJECTIONS LEFT BY THE FORMS REMOVED. ALL HOLES LEFT BY REMOVAL OF ENDS OF REES, AND ALL OTHER HOLES, DEPRESSIONS, BUSHHOLES, AIR/BLOW HOLES OR VOID SHALL BE FILLED SOLID WITH CEMENT GROUT AFTER FIRST BEING THOROUGHLY WETTED AND THEN STRUCK OFF FLUSH. ALL HOLES SHALL BE FILLED WITH TOOLS, SUCH AS SPONGE FLOATS AND TROWELS WHICH WILL PERMIT PACKING THE HOLE SOLIDLY WITH CEMENT GROUT. CEMENT GROUT SHALL CONSIST OF ONE PART CEMENT TO THREE PARTS SAND, EPOXY BONDING AGENT (FOR RE HOLES ONLY) AND THE AMOUNT OF MIXING WATER SHALL BE AS LITTLE AS CONSISTENT WITH THE REQUIREMENTS OF HANDLING AND PLACING. COLOR OF CEMENT GROUT SHALL MATCH THE ADJACENT WALL SURFACE. AFTER ALL SURFACE IMPERFECTIONS HAVE BEEN REPAIRED THE SURFACE SHALL BE PRECOMPANDED AND GROUT CLEANED WITH A SLURRY CONSISTING OF ONE PART CEMENT (INCLUDING AN APPROPRIATE QUANTITY OF WHITE CEMENT IN ORDER TO PRODUCE A COLOR MATCHING THE SURROUNDING CONCRETE) AND 1-1/2 PARTS SAND PASSING THE NO. 10 SIEVE, BY CAMP LOOSE VOLUME. THE SLURRY SHALL BE SPREAD OVER THE SURFACE WITH CLEAN BURLAP PADS OR SPONGE RUBBER FLOATS. MIX PROPORTIONS SHALL BE SUBMITTED TO THE ENGINEER AFTER A SAMPLE OF THE WORK IS ESTABLISHED AND ACCEPTED. ANY SURPLUS SHALL BE REMOVED BY SCRAPING AND THEN RUBBING WITH CLEAN BURLAP.

C-4 CURING: CONCRETE SHALL BE CURED BY PONDING OR CONTINUOUS FLOODING OR SPRINKLING. APPLICATIONS OF MATS OR FABRIC KEPT CONTINUOUSLY MOIST. CONTINUOUS APPLICATION OF STEAM OR APPLICATION OF SHEETING MATERIALS CONFORMING TO ASTM C 171.

C-5 CLEAR DISTANCE FROM ANCHOR BOLTS TO ANY CONCRETE EDGE SHALL BE 4" MINIMUM UNLESS OTHERWISE NOTED.

C-6 CHEMICAL RESISTANT RETROFIT WATERSTOPS: RETROFIT WATERSTOPS SHALL BE MANUFACTURED OF THERMOPLASTIC ELASTOMERIC RUBBER (TPE) UNLESS ALTERNATIVE MATERIAL IS RECOMMENDED BY THE MANUFACTURER AND THE MANUFACTURER SHALL PROVIDE A COMPLETE SYSTEM INCLUDING WATERSTOP, STAINLESS STEEL ANCHORING HARDWARE AND BATTEN BARS AND EPOXY FOR INSTALLATION. AT WATERSTOP INTERSECTIONS FACTORY FABRICATED CORNERS AND TRANSITIONS SHALL BE USED AND SPLICES SHALL BE MADE WITH A THERMOSTATICALLY CONTROLLED HEATING ELEMENT AS APPROVED BY THE MANUFACTURER. WATERSTOP SHALL BE WESTEC MODEL 629 BY SIKKA GREENSTREAK OR APPROVED EQUAL.

D-1 THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DUST FROM RISING BY WETTING DEMOLISHED MASONRY, CONCRETE, PLASTER AND SIMILAR DEBRIS. UNALTERED PORTIONS OF THE EXISTING BUILDINGS AFFECTED BY THE WORK SHALL BE PROTECTED BY DUST-PROOF PARTITIONS AND OTHER ADEQUATE MEANS.

D-2 CONCRETE DEMOLITION WITHIN STRUCTURES BEING MODIFIED SHALL BE SELECTIVE DEMOLITION BY CORE DRILLING OR SAWCUTTING AND CAREFUL REMOVAL OF CONCRETE SHOWN TO BE REMOVED. NO OVER CUTTING OF AREAS TO BE DEMOLISHED SHALL BE PERMITTED. CONTRACTOR SHALL CORE DRILL CORNERS OF OPENING PRIOR TO SAWCUTTING IF NECESSARY. VIBRATORY HAMMERS SHALL NOT BE USED FOR SELECT DEMOLITION WORK. JACK HAMMERS, HOE RAMS AND OTHER HIGH ENERGY DEMOLITION EQUIPMENT MAY BE USED FOR COMPLETE REMOVAL OF A STRUCTURE. EXPLOSIVES SHALL NOT BE USED FOR ANY DEMOLITION.

D-3 UNLESS ANCHORING DEVICES AND/OR REINFORCEMENT ARE NOTED TO REMAIN FOLLOWING DEMOLITION, REMOVE AND/OR BURN BACK ANCHORS AND REINFORCEMENT STEEL 1/2" MIN BELOW SURFACE. VOIDS CREATED SHALL BE FILLED WITH EPOXY RESIN BINDER.

D-4 WHERE DRAWINGS INDICATE A CONCRETE EQUIPMENT PAD TO BE DEMOLISHED, THE FLOOR SLAB SURFACE SHALL BE REPAIRED AS APPROVED BY ENGINEER. FOLLOWING SELECT DEMOLITION AND REMOVAL OF THE EQUIPMENT PAD, THE FLOOR SLAB SURFACE SHALL BE INSPECTED. IF THE FLOOR SLAB IS DAMAGED FROM THE EQUIPMENT PAD REMOVAL THE REPAIR SHALL BE:


- A) SAW CUT THE FLOOR SLAB AROUND THE EQUIPMENT PAD PERIMETER TO A DEPTH OF 1/4 INCH.
- B) SCARIFY AND REMOVE SLAB CONCRETE WITHIN THE PERIMETER TO A NOMINAL 1/4 INCH DEPTH. CLEAN AND REMOVE ALL CONCRETE LAITANCE.
- C) RESURFACE THE AREA BY APPLYING A POLYMER MODIFIED OR SILICA FUME ENHANCED CEMENTITIOUS REPAIR MORTAR, APPROVED BY THE ENGINEER, FOLLOWING THE MANUFACTURER'S SURFACE PREPARATION AND APPLICATION RECOMMENDATIONS. LEVEL AND FINISH THE SURFACE TO MATCH THE FLOOR SLAB SURROUNDING AREA.

D-5 CONCRETE SURFACES LEFT EXPOSED FOLLOWING DEMOLITION SHALL BE SEALED WITH A HIGH-BUILD, MOISTURE TOLERANT, EPOXY RESIN COATING. THE COATING SHALL BE SIKAGUARD 62 BY SIKA CORPORATION OR APPROVED EQUAL. FOR POTABLE WATER APPLICATIONS, REQUIREMENTS OF ANSI/NSF STANDARD 61 SHALL BE SATISFIED.

D-6 A DETAILED CONSTRUCTION AND DEMOLITION PLAN SHALL BE SUBMITTED TO THE ENGINEER AND APPROVED BY THE ENGINEER AND OWNER PRIOR TO BEGINNING CONSTRUCTION. ANY SHUTDOWNS SHALL BE SUBMITTED TO, COORDINATED WITH, AND APPROVED BY THE OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

X-1 ALL EXISTING INFORMATION SHOWN ON THESE DRAWINGS INCLUDING LOCATION, DIMENSIONS, ELEVATIONS, AND CONFIGURATIONS IS DERIVED FROM THE "CARVINS COVE FILTER PLANT IMPROVEMENTS -- PHASE 1, APRIL 1992 BY MATTERN AND CRAIG CONSULTING ENGINEERS" CONTRACT DRAWINGS AND IS NOT GUARANTEED TO BE COMPLETE OR CORRECT.

X-2 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION IN THE FIELD AS REQUIRED FOR DEMOLITION AND MODIFICATIONS.

2 1 NO.	RECORD DRAWINGS FINAL DESIGN ISSUED FOR	04/2015 09/2014 DATE	ALS ALS BY	DESIGNED	AGM		RECORD DRAWING THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER	THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ALAN L. STONE, LIC NUMBER 24446	HAZEN AND SAWYER Environmental Engineers & Scientists 4011 WestChase Boulevard, Suite 500 Raleigh, North Carolina 27607 License No. : C-0381	WESTERN VIRGINIA WATER AUTHORITY ROANOKE, VIRGINIA	GENERAL NOTES	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE	OCTOBER 2014	H&S JOB NUMBER	31197-000	CONTRACT NUMBER	1	DRAWING NUMBER	G2
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