NORTH CAROLINA BUILDING CODE SUMMARY – NC 2018 BUILDING CODE

NAME OF PROJECT: A POOL FOR: LEXINGTON PLANTATION
PROJECT ADDRESS: 400 CENTENNIAL PARKWAY, CAMERON, NORTH CAROLINA
OWNER / CONTACT: VILLAGE OF LEXINGTON HOA
PHONE #: TELEPHONE: 910.484.5400
EMAIL: jamie@littleandyoung.net
OWNED BY: ■ PRIVATE ☐ CITY/COUNTY ☐ STATE
CODE ENFORCEMENT: ☐ CITY ■ COUNTY ☐ STATE

DESIGN PROFESSIONALS

CONTACT: ROBERT C. EVANS, ARCHITECT

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	EMAIL
ARCHITECTURAL	ROBERT C. EVANS, ARCHITECT	ROBERT C. EVANS	6530	910.624.9259	rcearch@gmail.com
CIVIL					
ELECTRICAL					
FIRE ALARM					
PLUMBING					
MECHANICAL					
SPRINKLER					
STRUCTURAL					
RETAINING WALL					
OTHER					

BUILDING CODE DATA

2018 NC BUILDING CODE: ☐ NEW BUILDING ☐ ADDITION ☐ RENOVATION ■ NEW POOL
☐ FIRST TIME INTERIOR COMPLETION
☐ SHELL/CORE – CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS
☐ PHASED CONSTRUCTION – SHELL/CORE – CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ PRESCRIPTIVE ☐ REPAIR ☐ CHAPTER 14
ALTERATION: ☐ LEVEL I ☐ LEVEL II ☐ LEVEL III
☐ HISTORIC PROPERTY ☐ CHANGE OF USE

CONSTRUCTED: (date) UNKNOWN CURRENT OCCUPANCY: –
RENOVATED: (date) UNKNOWN PROPOSED OCCUPANCY: ASSEMBLY, A-3

RISK CATEGORY: (table 1604.5) CURRENT: ☐ I ☐ II ☐ III ☐ IV
PROPOSED: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA

CONSTRUCTION TYPE: ☐ I-A ☐ I-B ☐ II-A ■ II-B ☐ III-A ☐ III-B ☐ IV-A ☐ V-A ☐ V-B

SPRINKLERS: ■ NO ☐ PARTIAL ☐ YES ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
STANDPIPES: ■ NO ☐ YES CLASS ☐ I ☐ II ☐ III ☐ WET ☐ DRY
FIRE DISTRICT: ■ NO ☐ YES FLOOD HAZARD AREA: ■ NO ☐ YES

BUILDING HEIGHT: – FEET – NUMBER OF STORIES ☐ UNLIMITED PER

MEZZANINE: ■ NO ☐ YES
HIGH RISE: ■ NO ☐ YES CENTRAL REFERENCE SHEET # (IF PROVIDED)
FLOOD HAZARD: ■ NO ☐ YES
SPECIAL INSPECTION REQUIRED: ■ NO ☐ YES CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

GROSS BUILDING AREA TABLE:

FLOOR	POOL	DECK	SUB-TOTAL
GROUND FLOOR	1,200	4,207	5,407
		TOTAL	5,407

ALLOWABLE AREA

PRIMARY OCCUPANCY CLASSIFICATION(S):
■ ASSEMBLY ☐ A-1 ☐ A-2 ☐ A-3 ■ A-4 ☐ A-5
☐ BUSINESS
☐ EDUCATIONAL
☐ FACTORY ☐ F-1 MODERATE ☐ F-2 LOW
☐ HAZARDOUS ☐ H-1 DETONATE ☐ H-2 DEFLAGRATE ☐ H-3 COMBUST ☐ H-4 HEALTH ☐ H-5 HPM
☐ INSTITUTIONAL ☐ I-1 CONDITION ☐ 1 ☐ 2
☐ I-2 CONDITION ☐ 1 ☐ 2
☐ I-3 CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ MERCANTILE
☐ RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
☐ STORAGE ☐ S-1 MODERATE ☐ S-2 LOW ☐ HIGH-PILED
☐ PARKING GARAGE ☐ OPEN ☐ ENCLOSED ☐ REPAIR GARAGE
☐ UTILITY AND MISCELLANEOUS

ACCESSORY OCCUPANCY CLASSIFICATION: N/A
INCIDENTAL USES (Table 509): N/A
SPECIAL USES (CHAPTER 4-LIST CODE SECTIONS): N/A
SPECIAL PROVISIONS (CHAPTER 5-LIST CODE SECTIONS): N/A
MIXED OCCUPANCY: ■ NO ☐ YES SEPARATION: _____ HR. EXCEPTION:

☐ NON-SEPARATED MIXED OCCUPANCY (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ SEPARATED MIXED OCCUPANCY (508.4) – See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR OPEN SPACE INCREASE[1,5]	(E) ALLOWABLE AREA OR UNLIMITED[2,3]
ONE	ASSEMBLY, A-4	5,407	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–

1 – FRONTAGE AREA INCREASES FROM SECTION 506.2.
2 – UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
3 – MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES x D (MAXIMUM 3 STORIES) (506.2)
4 – THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.
5 – FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT N/A

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET (TABLE 504.3)	N/A	N/A	N/A
BUILDING HEIGHT IN STORIES (TABLE 504.4)	N/A	N/A	N/A

1 – PROVIDE CODE REFERENCE IF THE "SHOWN ON PLANS" QUANTITY IS NOT BASED ON TABLE 504.3 OR 504.4.

FIRE RESISTANCE RATINGS N/A

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/– * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES							
BEARING WALLS							
EXTERIOR							
NORTH							
EAST							
WEST							
SOUTH							
INTERIOR							
NONBEARING WALLS AND PARTITIONS							
EXTERIOR							
NORTH							
EAST							
WEST							
SOUTH							
INTERIOR							
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS							
FLOOR CEILING ASSEMBLY							
COLUMNS SOPPORTING FLOORS							
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS							
ROOF CEILING ASSEMBLY							
COLUMNS SUPPORTING ROOF							
SHAFTS ENCLOSURES – EXIT							
SHAFTS ENCLOSURES – OTHER							
CORRIDOR SEPARATION							
OCCUPANCY / FIRE BARRIER SEPARATION							
PARTY / FIRE WALL SEPARATION							
SMOKE BARRIER SEPARATION							
SMOKE PARTITION							
TENANT SEPARATION							
INCIDENTAL USE SEPARATION							

* INDICATE SECTION NUMBER PERMITTING REDUCTION

PERCENTAGE OF WALL OPENINGS CALCULATIONS N/A

WALL	FIRE SEPARATION DISTANCE FROM PROPERTY LINES*(FAMILY)	DEGREE OF OPENINGS PROTECTION TABLE 705.8	PERCENTAGE OF ALLOWABLE AREA	ACTUAL PERCENTAGE OF OPENING ON PLANS
NORTH				
SOUTH				
EAST				
WEST				

LIFE SAFETY SYSTEMS

EMERGENCY LIGHTING: ☐ NO ☐ YES
EXIT SIGNS: ☐ NO ☐ YES
FIRE ALARM: ☐ NO ☐ YES
(SPRINKLER MONITORING)
SMOKE DETECTION SYSTEM: ☐ NO ☐ YES
CARBON MONO. DETECTION: ☐ NO ☐ YES
PANIC HARDWARE: ☐ NO ■ YES

LIFE SAFETY PLAN A5

Check items that are applicable to this project:
☐ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
■ Occupancy types for each area as it relates to occupant load calculations (Table 1004.1.1)
■ Occupant loads for each area
☐ Exit access travel distance (1017)
■ Common path of travel distance (1006.2.1 & 1006.3.2(1))
☐ Dead end lengths (1020.4)
■ Clear exit widths for each exit door
■ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
■ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
☐ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

EXIT REQUIREMENTS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS REQUIRED	MINIMUM[2] NUMBER OF EXITS SHOWN ON PLANS	TRAVEL DISTANCE ALLOWABLE TRAVEL DISTANCE (TABLE 1004.2.4)	TRAVEL DISTANCE ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1004.1) REQUIRED DISTANCE BETWEEN EXIT DOORS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1004.1) ACTUAL DISTANCE SHOWN ON PLANS
DECK	2	2	(EXTERIOR)	104'-1"	44'-9"	84'-8"

1 Corridor dead ends (Section 1004.3.2.3)
2 Single exits (Table 1005.2.2)
3 Common path of travel (Section 1004.2.5)

ACCESSIBLE DWELLING UNITS (SECTION 1107) N/A

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
–	–	–	–	–	–	–	–

ACCESSIBLE PARKING (SECTION 1106) N/A - SEE CIVIL PLANS

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WITH 5' ACCESS ASLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 132" ACCESS ASLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 8' ACCESS ASLE	TOTAL # ACCESSIBLE PROVIDED
NEW	–	–	–	–	–	–
TOTAL REQUIRED	–	–	–	–	–	–
TOTAL PROVIDED	–	–	–	–	–	–

PLUMBING FIXTURE REQUIREMENTS N/A - SEE BUILDING PLANS

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS /TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE	NOTES & EXCEPTIONS
SPACE	EXIST'G											
	NEW											
	REQ'D											

SPECIAL APPROVALS N/A

(Describe special approvals from local jurisdictions, County of State Department of Health, NC Department of Insurance, International Code Council, etc.)

ENERGY SUMMARY N/A

EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: ☐ NO ☐ YES ☐ UNKNOWN
EXEMPT BUILDING: ☐ NO ☐ YES (CODE OR STATUTORY REF.)
CLIMATE ZONE: ☐ 3A ☐ 4A ☐ 5A
METHOD OF COMPLIANCE: ENERGY CODE: ☐ PERFORMANCE ☐ PRESCRIPTIVE
ASHRAE 90.1 ☐ PERFORMANCE ☐ PRESCRIPTIVE

THERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)

ROOF/CEILING ASSEMBLY
DESCRIPTION OF ASSEMBLY: –
U-VALUE OF TOTAL ASSEMBLY: –
R-VALUE OF INSULATION: –
SKYLIGHTS IN EACH ASSEMBLY: –
U-VALUE OF SKYLIGHT: –
TOTAL SQ.FT. OF SKYLIGHTS IN EACH ASSEMBLY: –

EXTERIOR WALLS
DESCRIPTION OF ASSEMBLY: –
U-VALUE OF TOTAL ASSEMBLY: –
R-VALUE OF INSULATION: –
OPENINGS
U-VALUE OF ASSEMBLY: –
SOLAR HEAT GAIN COEFFICIENT: –
PROJECTION FACTOR: –
DOOR R-VALUE: –

WALLS BELOW GRADE
DESCRIPTION OF ASSEMBLY: –
U-VALUE OF TOTAL ASSEMBLY: –
R-VALUE OF INSULATION: –

FLOORS OVER UNCONDITIONED SPACE
DESCRIPTION OF ASSEMBLY: –
U-VALUE OF TOTAL ASSEMBLY: –
R-VALUE OF INSULATION: –

FLOORS SLAB ON GRADE
DESCRIPTION OF ASSEMBLY: –
U-VALUE OF TOTAL ASSEMBLY: –
R-VALUE OF INSULATION: –
HORIZONTAL/VERTICAL REQUIREMENT: –
SLAB HEATED: – –

STRUCTURAL DESIGN N/A

DESIGN LOADS:
IMPORTANCE FACTORS: SNOW – SEISMIC
LIVE LOADS: ROOF – MEZZANINE FLOOR –
GROUND SNOW LOADS: psf
WIND LOADS: BASIC WIND SPEED – mph (ASCE-7) EXPOSURE CATEGORY –

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:
RISK CATEGORY (Table 1604.5): ☐ 1 ☐ 2 ☐ 3 ☐ 4
SPECTRAL RESPONSE ACCELERATION: Sms: – %g Sm1: – %g
SITE CLASSIFICATION: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
DATA SOURCE: ☐ FIELD TEST ☐ PRESUMPTIVE ☐ HISTORICAL DATA
BASIC STRUCTURAL SYSTEM: ☐ BEARING WALL ☐ DUAL w/ SPECIAL MOMENT FRAME
☐ BUILDING FRAME ☐ DUAL w/ INTERMEDIATE R/C OR SPECIAL STEEL
☐ MOMENT FRAME ☐ INVERTED PENDULUM
ANALYSIS PROCEDURE: ☐ SIMPLIFIED ☐ EQUIVALENT LATERAL FORCE ☐ DYNAMIC
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED: ☐ YES ☐ NO

LATERAL DESIGN CONTROL: ☐ EARTHQUAKE ☐ WIND

SOIL BEARING CAPACITY:
FIELD TEST: – psf
PRESUMPTIVE BEARING CAPACITY: – psf
PILE SIZE, TYPE AND CAPACITY: –

SPECIAL INSPECTIONS CHAPTER 17 N/A

SPECIAL INSPECTIONS SHALL BE CONDUCTED ON ALL PROJECTS THAT FALL WITHIN BUILDING CATEGORIES AND/OR CONTAIN ELEMENTS SUBJECT TO SPECIAL INSPECTIONS AS PRESCRIBED BY REVISED SECTION 1704.
To schedule the required preconstruction meeting with the City of Raleigh please call 807-5111
List whom will inspect the required special inspections
Fabricator of load bearing components –
Soil tests –
Concrete, caissons, piles, piers, precast –
Post tension concrete –
Modular construction –
Steel and connections, welds, bolts, anchors –
Fire spray tests –
Smoke control –
Seismic, wind designs, Quality Assurance –
Retaining wall –
Masonry –
Wood –
Alternate Methods –
EFIS –
Other (describe) –
Other (describe) –
Owner or agent –

ELECTRICAL SUMMARY N/A

ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: ☐ Prescriptive ☐ Performance ☐ Energy Cost Budget
* Provide a standard riser diagram which indicates designated points for check metering.
* Provide a standard panel schedule description which identifies different end use loads.

Lighting schedule
Lamp type required in fixture
Number of lamps in fixture
Ballast type used in the fixture
Number of ballasts in fixture
Total wattage per fixture
Total interior wattage specified vs. allowed
Total exterior wattage specified vs. allowed

Equipment schedules with motors (not used for mechanical systems)
Motor horsepower
Number of phases
Minimum efficiency
Motor type
# of poles

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
Reviewed for Code Compliance
09/21/2022
Harnett COUNTY NORTH CAROLINA

MECHANICAL SUMMARY N/A

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Method of Compliance: ☐ Prescriptive ☐ Performance ☐ Energy Cost Budget
THERMAL ZONE
Exterior design conditions
Winter dry bulb
Summer dry bulb
Interior design conditions
Winter dry bulb
Summer dry bulb
Relative humidity
BUILDING HEATING LOAD
BUILDING COOLING LOAD
MECHANICAL SPACING CONDITIONING SYSTEM
Unitary
Description of unit
Heating efficiency
Cooling efficiency
Heat output of unit
Cooling output of unit
Boiler
Total boiler output. If oversized, state reason
Chiller
Total chiller capacity. If oversized, state reason.
LIST EQUIPMENT EFFICIENCIES
EQUIPMENT SCHEDULES WITH MOTORS (mechanical systems)
Motor horsepower
Number of phases
Minimum efficiency
Motor type
# of poles

SHELL VARIABLE FORM N/A

Check each applicable line to match scope of work. Edit as necessary to provide clear detail of installation.
MECHANICAL:
☐ No work ☐ Equipment set ___ with ___ without power ☐ Gas line
☐ Trunk line installed ___ with ___ without outlets ☐ Install complete operational system
☐ Other
PLUMBING:
☐ No work ☐ Install water service and sewer ☐ Install complete plumbing system
☐ Install building drain ___ and ___ or water distribution main ___ with ___ without branches
☐ Other
SPRINKLER:
☐ Install complete plumbing system
BUILDING:
☐ Install slab ___ partial ___ complete ☐ Install demising walls
☐ Install interior partitioning ___ partial ___ complete ☐ Install ceilings
☐ White box (additional interior completion permits are required for Certificate of Occupancy and power)
☐ Other
ELECTRICAL:
☐ House panel (CONNECTING TO) ☐ Service laterals to meter centers/panels located on buildings
☐ Demise wall and ceilings only ☐ Conduit, duct, raceway, in slab
☐ Power and lighting circuits to "J" Box ☐ Install light fixtures
☐ Install ___ Heat/AC ___ Elevator ___ Generator ___ Parking lot lighting
☐ Install complete system
☐ Other
Please Provide full information on any Alternative Methods and Means incorporated into the design of this project. Provide specific details and incorporate into plan submittal any supporting documents or agreement letters.

WALL LEGENDS N/A

☐ FIRE PARTITIONS 709 ☐ FIRE WALLS 706 ☐ FIRE BARRIERS 707
☐ SMOKE PARTITIONS 711 ☐ SMOKE BARRIERS 710 ☐ SHAFT ENCLOSURE 708

OCCUPANT CONTENT

POOL	1,200 sf / 50	=	24 PERSONS
DECK	3,184 sf / 15	=	212 PERSONS
TOTAL OCCUPANT CONTENT			236 PERSONS

Robert Charles Evans
ARCHITECT
545 PEARL STREET, FAYETTEVILLE, NORTH CAROLINA 28303

ROBERT C. EVANS REGISTERED ARCHITECT NORTH CAROLINA 6530 FAYETTEVILLE, N.C.

09.06.22

OWNERS: VILLAGE OF LEXINGTON HOA
PO BOX 87209
FAYETTEVILLE, NC 28304

LOCATION: LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

DRAWN: J.PARRISH
SCALE: AS SHOWN
REVISIONS:
DATE: September 6, 2022

SHEET NO: A0

GENERAL POOL NOTES:

1. THE POOL DEPTH MARKING SHALL CONFORM WITH NC RULE 2523. PROVIDE SIDEWALL DEPTH MARKING IN THE PERIMETER IDENTICAL TO, AND DIRECTLY BELOW THE DECK SURFACE DEPTH MARKERS. THE DEPTH MARKERS SHALL BE 5" HIGH LETTERS ON 6" SQUARE TILING, PLACED IN LOCATIONS SHOWN, NOT MORE THAN 25' APART. SEE DEPTH MARKER DETAILS FOR PAINTED MARKER OPTION.
2. THE SANITARY FACILITIES SERVING THE POOL AREA SHALL MEET 15A NCAC 18A.2500 – RULES REGULATING PUBLIC SWIMMING POOLS – SECTION .2526 "DRESSING AND SANITARY FACILITIES".
3. DRESSING FACILITY FLOORS SHALL BE CONTINUOUS THROUGHOUT THE AREAS. FLOORS SHALL HAVE A SLIP-RESISTANT SURFACE THAT SHALL BE SMOOTH, TO INSURE COMPLETE CLEANING. FLOOR DRAINS SHALL BE PROVIDED, AND FLOORS SHALL BE SLOPED NOT LESS THAN ¼ INCH PER FOOT TOWARD THE DRAINS TO INSURE POSITIVE DRAINAGE.
4. THE SKIMMERS, RETURN FILTERS AND OTHER SHELL FIXTURES SHALL BE FIELD LOCATED AS SHOWN ON SIDES OF THE POOL.
5. ALL POOL PLUMBING PIPING SHALL BE SCHEDULE 40 PVC.
6. A GROUND FAULT INTERRUPTER (GFI) SHALL BE INSTALLED ON THE CIRCUIT SERVING THE UNDERWATER LIGHTS, WITH ALL CIRCUITRY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
7. THIS DRAWING IS BASED UPON DESIGNS AND SPECIFICATIONS BY THE POOL BUILDER AND OTHERS.
8. THE POOL BUILDER SHALL VERIFY THAT ALL DESIGN ELEMENTS ARE CORRECT AND WILL FUNCTION AS INTENDED.
9. THE MINIMUM SIZE FOR THE CHEMICAL STORAGE ROOM IS BASED ON THE TOTAL POOL VOLUME.
10. THREE HOSE BIBS (2) DECKSIDE AND (1) IN PUMP ROOM; LOCATE SO THAT NO PORTION OF POOL/DECK IS MORE THAN 100' FROM HOSE BIB; SEE A1 AND A2 FOR LOCATIONS.
11. MIRRORS IN TOILET AREAS SHALL BE SHATTERPROOF.
12. THERE SHALL BE A CLEARANCE OF NOT MORE THAN SIX INCHES, NOR LESS THAN THREE INCHES BETWEEN ANY HAND RAIL AND THE SWIMMING POOL WALL.
13. "INTERNATIONAL NO DIVING" SYMBOLS WILL BE A MINIMUM OF 6" DIAMETER IN ALL LOCATIONS.
14. POOL FINISH INCLUDING BOTTOM AND SIDES, SHALL BE OF WHITE OR LIGHT COLORED MATERIAL DETERMINED VISUALLY TO CONTRAST LEAST WITH A VALUE OF GRAY WHITER THAN 50 PERCENT BLACK ON AND ARTISTS GRAY SCALE, OR SHOWN BY REFLECTANCE TESTING TO REFLECT NORE THAN 50 PERCENT OF VISIBLE LIGHT.
15. CONSTRUCTED PARTITIONS IN SANITARY FACILITIES WILL BE MADE OF MATERIAL THAT WILL NOT BE DAMAGED BY WATER.
16. SIGNS WITH LEDGIBLE LETTERS WILL BE PROVIDED NEXT TO EMERGENCY PHONE THAT STATES ADDRESS OF THE POOL, TELEPHONE NUMBER OF EMERGENCY PHONE AND DIALING INSTRUCTIONS.
17. "POOL CLOSED" SIGNS WHERE VISIBLE FROM ALL BATHER ENTRANCES AS WELL AS FROM ALL AREAS OF THE DECK.
18. THE LEADING EDGE OF EACH STEP AT STAIRS SHALL BE MARKED WITH A CONTRASTING, SLIP– RESISTANT, COLOR TILE BAND AT LEAST 2" WIDE VISIBLE FROM ABOVE AND SPACED NO MORE THAN 1" FROM THE EDGE OF THE STEP TREAD AND SPACED FROM ADJACENT TILES.
19. THE SUNSHELF FINISH SHALL BE SLIP RESISTANT.
20. THE STORAGE ROOM AND PUMP ROOM ARE TO MEET NEC 680.14
21. THE EQUIPMENT AND CHEMICAL STORAGE ROOM CEILNG HEIGHT SHALL BE 8'-0" MINIMU AND THE LIGHTING FOR EACH ROOM SHALL BE MINIMUM 100 WATTS.
22. THE EQUIPMENT ROOM AND THE CHEMICAL STORAGE ROOM SHALL EACH HAVE EXHAUST FAN WITH DISCHARGE TO BUILDING EXTERIOR AND BE DIRECTED AWAY FROM POOL AREA. EXHAUST FANS SHALL RUN CONTINUOUSLY.
23. A SUMP FOR FILTER BACKWASH SHALL BE LOCATED AS SHOWN AND INSTALLED FLUSH WITH THE EQUIPMENT ROOM FLOOR. THE SUMP SHALL DISCHARGE INTO APPROVED MUNICIPAL SANITARY SEWER SYSTEM OR APPROVED STORM SEWER SYSTEM.
24. THE OWNER/GENERAL CONTRACTOR SHALL FURNISH THE BACKFLOW PREVENTION DEVICE FOR THE POOL FILL PIPING. THE POOL FILL WATER SHALL BE FROM THE APPROVED MUNICIPAL WATER SYSTEM.
25. THE POOL OPERATIONAL PROCEDURE SHALL BE POSTED ON THE EQUIPMENT ROOM WALL.
26. BOTH THE EQUIPMENT AND CHEMICAL STORAGE ROOM ENTRY DOORS SHALL BE EITHER STEEL OR WOOD, WITH 12" SQUARE, SCREENED LOUVER FOR VENTILATION AND SUPPLY OPENING FOR AIR EXCHANGE.
27. PROVIDE SHELVING FOR DRY STORAGE OF POOL CHEMICALS PER 15A NCAC 18A.2534.

15A NCAC 18A .2528 FENCES

PUBLIC SWIMMING POOLS SHALL BE COMPLETELY ENCLOSED BY A FENCE, WALL, BUILDING, OR OTHER ENCLOSURE, OR ANY COMBINATION THEREOF, WHICH ENCLOSES THE SWIMMING POOL AREA SUCH THAT ALL OF THE FOLLOWING CONDITIONS ARE MET:

1. THE TOP OF THE BARRIER SHALL BE AT LEAST 48 INCHES ABOVE GRADE MEASURED ON THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL. THE MAXIMUM VERTICAL CLEARANCE BETWEEN GRADE AND THE BOTTOM OF THE BARRIER SHALL BE TWO INCHES MEASURED ON THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL;
2. OPENINGS IN THE BARRIER SHALL NOT ALLOW PASSAGE OF A FOUR-INCH-DIAMETER SPHERE AND SHALL PROVIDE NO EXTERNAL HANDHOLDS OR FOOTHOLDS. SOLID BARRIERS THAT DO NOT HAVE OPENINGS SHALL NOT CONTAIN INDENTATIONS OR PROTRUSIONS EXCEPT FOR NORMAL CONSTRUCTION TOLERANCES AND TOOLED MASONRY JOINTS;
3. WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS 45 INCHES OR MORE, SPACING BETWEEN THE VERTICAL MEMBERS SHALL NOT EXCEED FOUR INCHES. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN THE VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1.75 INCHES IN WIDTH;
4. WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS LESS THAN 45 INCHES, THE HORIZONTAL MEMBERS SHALL BE LOCATED ON THE SWIMMING POOL SIDE OF THE FENCE. SPACING BETWEEN THE VERTICAL MEMBERS SHALL NOT EXCEED 1.75 INCHES IN WIDTH. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN THE VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1.75 INCHES IN WIDTH;
5. MAXIMUM MESH SIZE FOR CHAIN LINK FENCES SHALL BE A 2.25 INCH SQUARE UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR THE BOTTOM THAT REDUCE THE OPENINGS TO NO MORE THAN 1.75 INCHES;
6. WHERE THE BARRIER IS COMPOSED OF DIAGONAL MEMBERS, THE MAXIMUM OPENING FORMED BY THE DIAGONAL MEMBERS SHALL BE NO MORE THAN 1.75 INCHES;
7. ACCESS GATES SHALL COMPLY WITH THE DIMENSIONAL REQUIREMENTS FOR FENCES AND SHALL BE EQUIPPED TO ACCOMMODATE A LOCKING DEVICE. EFFECTIVE APRIL 1, 2011, PEDESTRIAN ACCESS GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AND SHALL BE SELF-CLOSING AND HAVE A SELF-LATCHING DEVICE EXCEPT WHERE A GATE ATTENDANT AND LIFEGUARD ARE ON DUTY.
8. GATES OTHER THAN PEDESTRIAN ACCESS GATES SHALL HAVE A SELF-LATCHING DEVICE. WHERE THE RELEASE MECHANISM OF THE SELF-LATCHING DEVICE IS LOCATED LESS THAN 54 INCHES FROM THE BOTTOM OF THE GATE, THE RELEASE MECHANISM SHALL REQUIRE THE USE OF A KEY, COMBINATION OR CARD READER TO OPEN OR SHALL BE LOCATED ON THE POOL SIDE OF THE GATE AT LEAST THREE INCHES BELOW THE TOP OF THE GATE, AND THE GATE AND BARRIER SHALL HAVE NO OPENINGS GREATER THAN 0.5 INCH WITHIN 18 INCHES OF THE RELEASE MECHANISM; AND
9. GROUND LEVEL DOORS AND WINDOWS OPENING FROM OCCUPIED BUILDINGS TO INSIDE THE POOL ENCLOSURE SHALL BE SELF-CLOSING OR CHILD PROTECTED BY MEANS OF A BARRIER OR AUDIBLE ALARM.
10. PUBLIC SWIMMING POOL FENCES CONSTRUCTED PRIOR TO MAY 1, 2010 MAY VARY FROM THE PROVISIONS OF PARAGRAPH (A) OF THIS RULE AS FOLLOWS:
11. THE MAXIMUM VERTICAL CLEARANCE BETWEEN GRADE AND THE BOTTOM OF THE BARRIER MAY EXCEED TWO INCHES, BUT SHALL NOT EXCEED FOUR INCHES;
12. WHERE THE BARRIER IS COMPOSED OF VERTICAL AND HORIZONTAL MEMBERS AND THE SPACE BETWEEN VERTICAL MEMBERS EXCEEDS 1.75 INCHES, THE DISTANCE BETWEEN THE TOPS OF THE BOTTOM HORIZONTAL MEMBER AND THE NEXT HIGHER HORIZONTAL MEMBER MAY BE LESS THAN 45 INCHES, BUT SHALL NOT BE LESS THAN 30 INCHES;
13. GATES OTHER THAN PEDESTRIAN ACCESS GATES ARE NOT REQUIRED TO HAVE SELF-LATCHING DEVICES IF THE GATES ARE KEPT LOCKED; AND
14. GATES MAY SWING TOWARDS A POOL WHERE NATURAL TOPOGRAPHY, LANDSCAPE POSITION OR EMERGENCY EGRESS REQUIREMENTS PREVENT GATES FROM SWINGING AWAY FROM THE POOL. (C) PUBLIC SWIMMING POOLS PERMITTED PRIOR TO APRIL 1, 2010 WITH EXISTING FENCES THAT DO NOT COMPLY WITH THE DIMENSIONAL REQUIREMENTS OF SUBPARAGRAPHS (A)(1) THROUGH (A)(6) AND (B)(1) THROUGH (B)(2) SHALL NOT BE DENIED AN OPERATION PERMIT SOLELY DUE TO THE PREEXISTING NON-COMPLIANCE. OPERATION PERMITS SHALL BE DENIED TO AN OWNER OR OPERATOR WHO FAILS TO COMPLY WITH SUBPARAGRAPHS (A)(1) THROUGH (A)(6) AND (B)(1) THROUGH (B)(2) OF THIS RULE WHEN: (1) AT LEAST FIFTY PERCENT (50%) OF THE FENCE HAS BEEN DAMAGED OR DESTROYED; OR (2) THE OWNER OR OPERATOR ELECTS TO REPLACE THE FENCE.

POOL EQUIPMENT SCHEDULE

TAG	QTY.	MANUFACTURER	MODEL #	FIXTURE DESCRIPTION
A	1	PENTAIR	INTELLIFLO VSF	SELF PRIMING VARIABLE SPEED PUMP 3.0 HP 125 GPM (SPEED SETTING 5) @ 65.00' ASSUMED TDH W/INTEGRAL HAIR & LINT STRAINER (NSF)
AS	1	PENTAIR	HC#3330	COMMERCIAL AUTOMATIC (EROSION) CHLORINATOR/ BROMINATOR WITH PENTAIR FLOW INDICATOR FOR CHLORINATOR R172082
B	1	PENTAIR	TR-140C	36" ø FILTER (7.06 SQ/FT FILTER SURFACE AREA – 140 GPM MAX. – FILTER RATE @ 20 GPM / SQ./FT FILTER SURFACE AREA)
BF	1	WATTS	009RPZ	1" BACKFLOW PREVENTER (BY OTHERS)
C	1	PENTAIR	261055	FILTRATION VALVE – 2" MULTI-PORT VALVE KIT – SIDE MOUNT PORTS
CC	1	ROLA-CHEM	554223	READY TO MOUNT ORP/pH-CONTROLLER
CP	1	ROLA-CHEM	RC-25/53	CHEMICAL PUMP RC-25/53 SC
CT	1	ROLA-CHEM	561015 (TANK) 561115 (COVER)	15 GALLON ACID STORAGE TANK WITH COVER
DR	2	AQUASTAR	12MF101	MAIN DRAIN COVER; 12" X 12" (71.2 SQ./IN. INTAKE OPENING EACH); ASME/ANSI- A112.19.8 – 2007, VGB COMPLIANT ANSI/APSP 16-2011 AND NSF 50-2008; COMPLIANT 71.2 SQ. IN. OPEN AREA; 274 GPM @ 1.2 FPS WITH ASA 12"X12" PRE-MANFACTURED DRAIN SUMP
FD	1			FLOOR DRAIN BY OTHERS
FM	1	B/W INDUSTRIES	F30300P	IN-LINE FLOW METER – 3" TOP MOUNT; 80 TO 300 GPM
HB	3			3/4" HOSE BIB WITH VACUUM BREAKER – LOCATE AS SHOWN IN EQUIPMENT ROOM & DECKING PLAN
HR	2	S.R. SMITH	3HR-7-049	HANDRAIL- 7' STAINLESS STEEL 2-BEND WITH 2 BRONZE ANCHOR SOCKETS (AS-100B) & 2 ESCUTHEONS (EP-100F)
LD	2	S.R. SMITH	LF-24-3B	LADDER – STAINLESS STEEL 3-STEP WITH 2 BRONZE ANCHOR SOCKETS (AS-100B) & 2 ESCUTHEONS (EP-100F); SLIP-RESISTANT TREADS
RF	6	PENTAIR	08417-0000	FLOOR RETURN INLET – 1-1/2" INLET FIXTURES WITH ADJUSTABLE NOZZLES
RW	5	HAYWARD	SP-1419C	WALL RETURN INLET -1-1/2" EYEBALL INLET FIXTURES WITH ADJUSTABLE NOZZLES
SK	4	PENTAIR	506300	SKIMMER ASSEMBLY
UL	2	PENTAIR	601302	UNDERWATER WHITE LED POOL LIGHT – 500 WATT EQUIVALENT, UL LISTED, 120 VOLT
VP	1	CMP	25505-000-000	VGB COMPLIANT 2" POOL VACUUM PORT TO INCLUDE CMP "VAC LOCK"
WL	1	PENTAIR	T40-FW	1" WATER LEVEL CONTROLLER – AUTOMATIC POOL WATER FILL AND WATER LEVEL CONTROLLER
SIGN	2	RAINBOW	#R234100 (NC)	POOL RULES SIGN
SIGN	4	RAINBOW	#R230600	NO DIVING SIGN
SIGN	2	RAINBOW	#R235100	NO LIFEGUARD SIGN
SIGN	2	NASSCO	#33631014115	PLEASE SHOWER BEFORE ENTERING POOL

POOL SIGNAGE

1. "NO DIVING" (MIN 4" LETTERS) (4 SIGNS)
2. "WARNING – NO LIFEGUARD ON DUTY" (MIN 4" HIGH LETTERS) (2 SIGNS)
3. "PLEASE SHOWER BEFORE ENTERING POOL" (MIN 4" HIGH LETTERS) (2 SIGNS)
4. FOLLOWING ON 1 SIGN:
(A) "CHILDREN SHOULD NOT USE THE SWIMMING POOL WITH ADULT SUPERVISION" (MIN 1" HIGH LETTERS)
(B) "ADULTS SHOULD NOT SWIM ALONE" (MIN 1" HIGH LETTERS)
(C) "NO PETS ALLOWED"
(D) "NO GLASS CONTAINERS"

MAINTENANCE EQUIP.

(1) – DPD CHLORINE & pH TEST KIT
(1) – 36" WALL BRUSH
(1) – 22" VAC HEAD (RP-222)
(1) – 12' x 24' TELESCOPIC POLE
(1) – 40' (MIN) x 1-1/2" VACUUM HOSE
(1) – LEAF SKIMMER NET
(1) – SPARE PUMP STRAINER BASKET
(1) – 9" SS ALGAE BRUSH

SAFETY EQUIPMENT

(1) – 16' STRAIGHT POLE w/ LIFE HOOK ATTACHED
(1) – 20" CGA LIFE RING w/ 1/4" x 40' THROW ROPE ATTACHED
(1) – DIRECT DIAL TELEPHONE IN WEATHERPROOF BOX. MOUNTED DECKSIDE – SEE POOL & DECK PLAN – THIS SHEET

POOL DECKING NOTES:

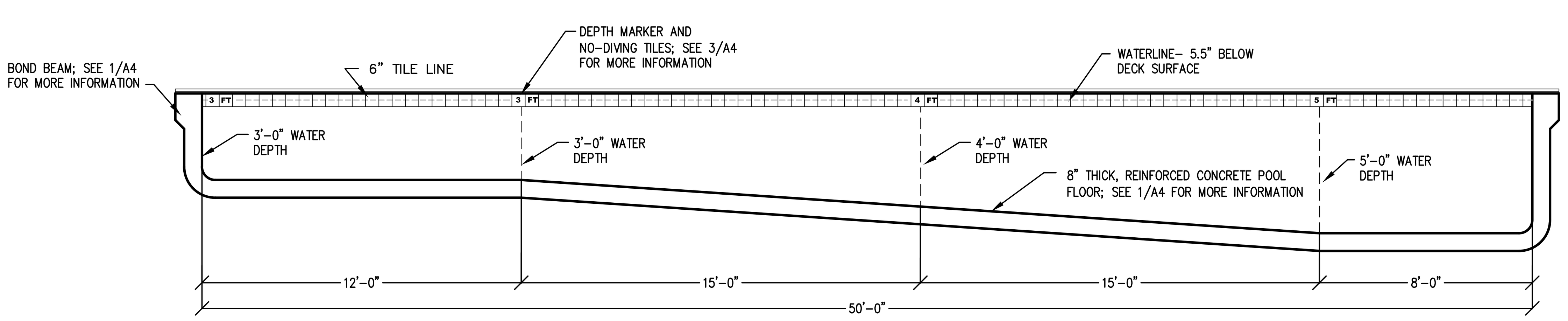
1. POOL DECKING SHALL BE 4" THICK 3,000 PSI FIBER REINFORCED CONCRETE.
2. THE DECK SURFACE SHALL SLOPE 1/4" (MIN) TO 1/2" (MAX) PER FOOT FROM POOL WATERS EDGE TO DECK DRAINS, OR DECK EDGE AS SHOWN.
3. ALL DECKING SURFACES SHALL BE A COMBINATION OF CONCRETE PAVERS AND CAST IN PLACE CONCRETE TEXTURED FOR SLIP-RESISTANT FINISH.
4. FIELD LOCATE ALL CONCRETE CONTROL JOINTS AND EXPANSION JOINTS IN PLACES THAT WILL REDUCE THE LIKELIHOOD OF DECK CRACKING, PROVIDE PREMOLDED EXPANSION JOINTS, SET FLUSH WITH DECK LEVEL AS NEEDED.
5. PLACEMENT OF ANY POOL DECK FURNITURE OR EQUIPMENT SHALL NOT INTERFERE WITH A MINIMUM OF 6'-0" CLEAR WALKING SPACE ALL AROUND THE POOL

POOL DATA

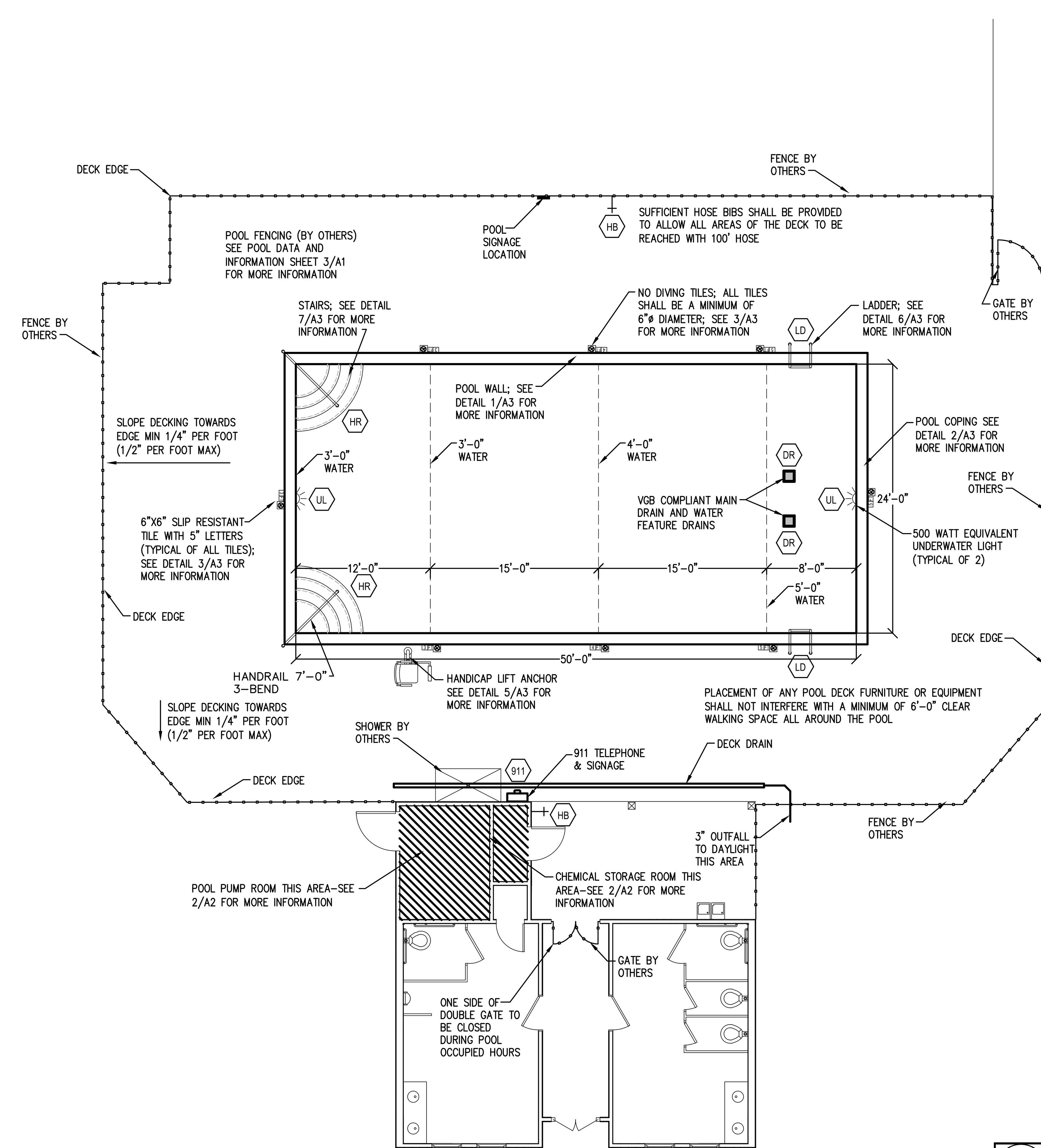
POOL AREA (50'-0" X 24'-0"; 3'-0" TO 5'-0" DEEP)	1200 SF
POOL PERIMETER	148 LINEAR FEET
POOL VOLUME	34820 GALLONS
MINIMUM FILTRATION CYCLE (6.0 HOURS)	97 GPM
DESIGN FILTRATION CYCLE (4.64 HOURS)	125 GPM
MINIMUM FILTER AREA (@ 20 GPM/SF SURFACE AREA)	4.85 SF
DESIGN FILTER AREA (@ 17.70 GPM/SF SURFACE AREA)	7.06 SF
COMBINED POOL AND DECK AREA	4384 SF
NET DECK AREA	3184 SF
POOL OCCUPANCY LIMIT	80 PERSONS
UW POOL LIGHTING REQUIRED (SQ/FT X 0.5 WATTS)	600 WATTS
UW POOL LIGHTING (PROVIDED)	1000 WATTS
CHEMICAL STORAGE (16.00 SF MINIMUM REQUIRED)	20 SF PROVIDED

NIGHT SWIMMING NOT ALLOWED

3 / A1 POOL DATA & INFORMATION
SCALE: NOT TO SCALE



2 / A1 POOL PROFILE
SCALE: 1/4" = 1'-0"



1 / A1 POOL AND DECK PLAN
SCALE: 1/8" = 1'-0"

Robert Charles Evans

ROBERT C. EVANS
REGISTERED ARCHITECT
NORTH CAROLINA
FAYETTEVILLE, N.C.

09.06.22

LOCATION:
LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

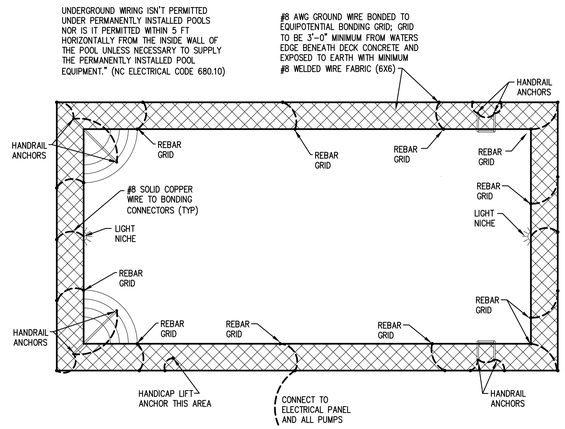
OWNERS:
VILLAGE OF LEXINGTON HOA
PO BOX 87209
FAYETTEVILLE NC 28304

DRAWN: J.PARRISH
SCALE: AS SHOWN
REVISIONS:
DATE: AUG 11TH 2022

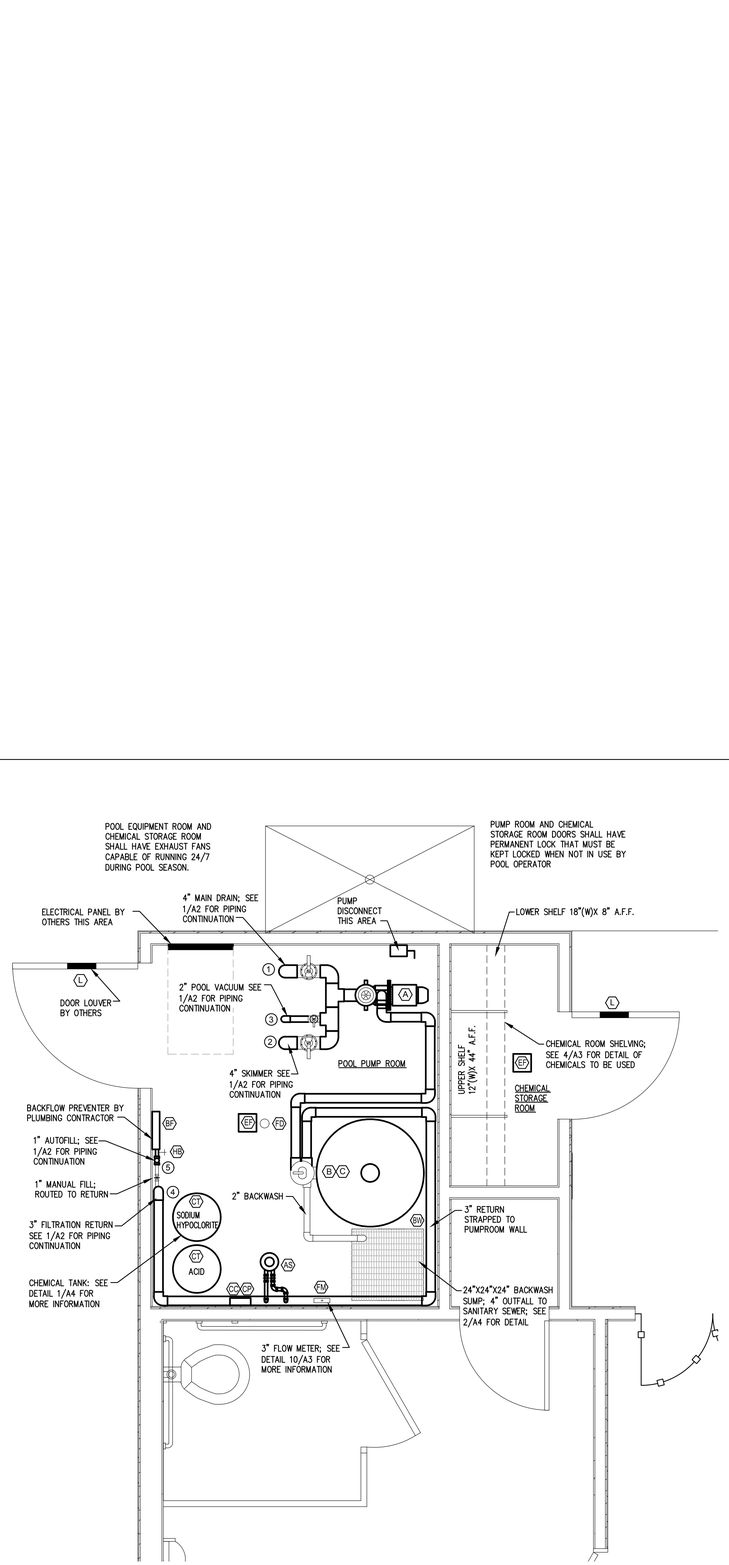
SHEET NO:
A1

ELECTRICAL SCHEDULE

ITEM	QTY	HP	WATTS	AMPS	VOLT	PHASE
POOL PUMP	1	3.0	3840	16	230	1ø
LIGHTING	2	N/A	500 EQUIV.	–	120	
CHEMICAL SYSTEM PUMP	2	N/A	60	–	120AC/ 12VDC	
H/C LIFT	1	N/A	–	–	24DC	
H/C LIFT BATTERY CHARGER	1	N/A	–	–	120AC/ 24VDC	



3 / A2 EQUIPOTENTIAL BONDING
SCALE: 1/8" = 1'-0"



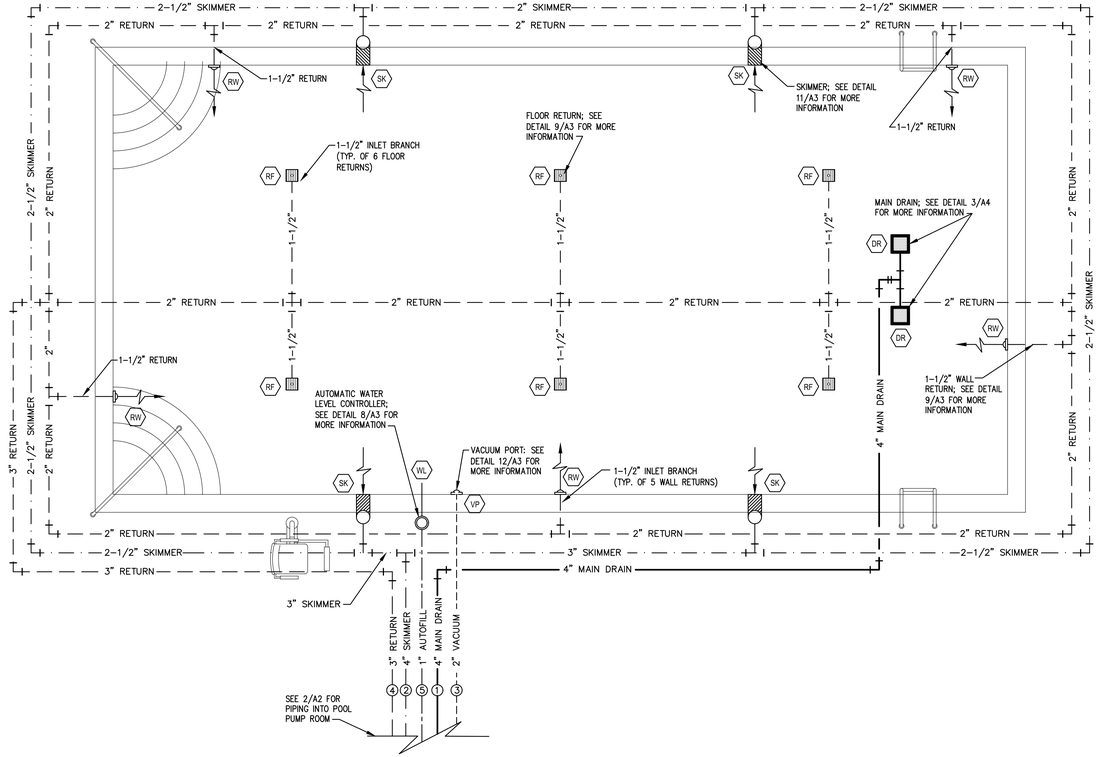
POOL PUMP ROOM EQUIPMENT KEY

TAG	DESCRIPTION
A	3.0 HP PENTAIR INTELLIFLO VSF CIRCULATION PUMP
AS	HC#3330 AUTO SANITIZER WITH FLOW INDICATOR (SECONDARY SYSTEM)
B	36" HI-RATE SAND FILTER PENTAIR TR-140C
BF	1" RPZ BACKFLOW PREVENTER BY G.C.
BT	300 BACKWASH HOLDING TANK WITH 30 GPM MAX TO BACKWASH SUMP
BW	24"X24"X24" BACKWASH SUMP WITH 6" OUTFALL PIPE TO SANITARY SEWER
C	2" MULTI-PORT SELECTOR VALVE
CC	CHEMICAL CONTROLLER
CP	CHEMICAL PUMP (ACID) RC 25/53
CT	15 GAL HDPE CHEMICAL TANK (ACID)
EF	POWER EXHAUST VENTILATORS (2) BY OTHERS
FM	3" FLOW METER
FD	2" FLOOR DRAIN TO SANITARY SEWER BY OTHERS
HB	3/4" HOSE BIB BY GENERAL CONTRACTOR
L	LOUVERS IN DOORS 12" X 12" +/-, SET NEAR BOTTOM OF DOORS.
SG	SALINE GENERATING SYSTEM TO INCLUDE ORP AND PH SENSORS, CONTROLS TO AUTOMATICALLY MAINTAIN CHLORINE AND PH LEVELS IN POOL (PRIMARY SYSTEM)

POOL PUMP ROOM PIPING KEY

TAG	DESCRIPTION
①	4" MAIN DRAIN WITH PVC BALL VALVE
②	4" SKIMMER WITH PVC BUTTERFLY VALVE
③	2" VACUUM WITH PVC BALL VALVE
④	3" RETURN
⑤	1" AUTO FILL LINE (DOMESTIC WATER SUPPLY BY G.C.)
⑥	1" MANUAL POOL FILL CONNECT TO POOL RETURN

2 / A2 PUMP/CHEMICAL STORAGE ROOMS
SCALE: 1/2" = 1'-0"



1 / A2 POOL PIPING PLAN
SCALE: 1/4" = 1'-0"

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6530
FAYETTEVILLE, N.C.
NORTH CAROLINA

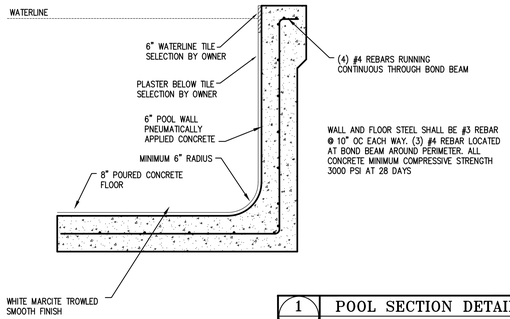
09.06.22

LOCATION:
LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

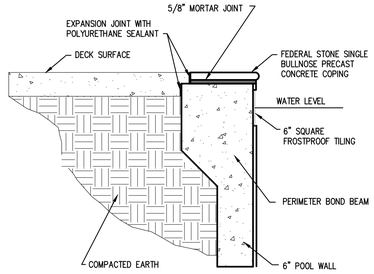
OWNERS:
VILLAGE OF LEXINGTON HOA
PO BOX 87209
FAYETTEVILLE NC 28304

DRAWN: JPARRISH
SCALE: AS SHOWN
REVISIONS:
DATE: AUG 11TH 2022

SHEET NO:
A2



1 / A3 — POOL SECTION DETAIL
SCALE: NOT TO SCALE



2 / A3 — COPING DETAIL
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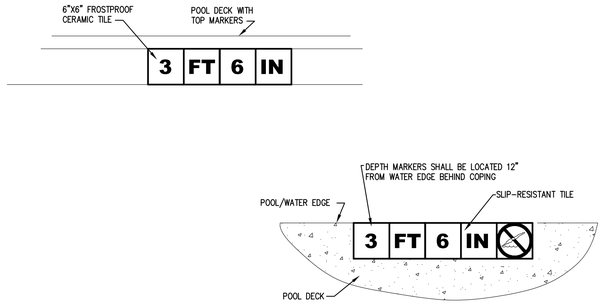
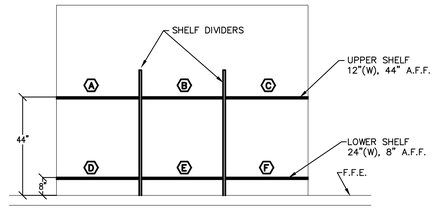


DEPTH MARKERS SHALL BE PROVIDED ON THE DECK (NON-SKID) AT MAX AND MIN DEPTHS. BREAK BETWEEN DEEP AND SHALLOW PORTIONS AND AT INTERMEDIATE INCREMENTS. DEPTH MARKERS SHALL BE MINIMUM 4" HIGH AND OF COLOR CONTRASTING WITH BACKGROUND. DEPTH MARKERS AND INTERNATIONAL NO DIVE SYMBOLS SHALL BE NO MORE THAN 25' APART

3 / A3 — DEPTH MARKER DETAIL
SCALE: NOT TO SCALE

CHEMICAL ROOM SHELVING LAYOUT

TAG	ITEM TYPE	ITEM DESCRIPTION	QUANTITY
A	MISC. SUPPLIES	MISC. SUPPLIES	VARIES
B	ANCILLARIES	GLB ALGIMYCIN 2000, STAINTRINE, ROBARB SUPER BLUE	1 GAL, 1 GAL, 1/2 GAL
C	MISC. SUPPLIES	TEST KITS, THERMOMETERS, CYANURIC ACID	N/A, N/A, 8 LBS
D	OXIDIZER	CALCIUM HYPOCHLORITE	100 LBS
E	PH LOWERING CHEMICALS	MURIATIC ACID	4 GALLONS
F	OXIDIZER	PROTEAM 3 PURETABS (TRICHLOR TABS)	100 LBS
G	BALANCING CHEMICALS	SODIUM BICARBONATE, SODA ASH, CALCIUM CHLORIDE	50 LBS BAGS EACH
SHELVING & DIVIDERS: WOODEN CONSTRUCTION			



4 / A3 — CHEMICAL ROOM SHELVING DETAIL
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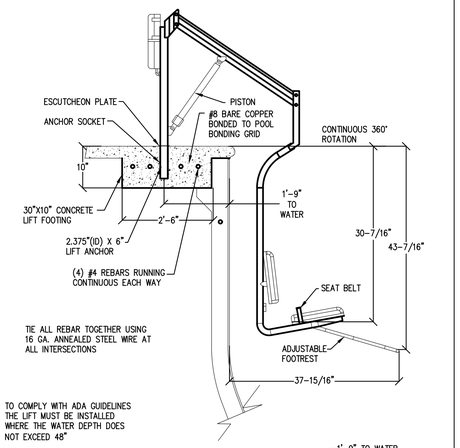
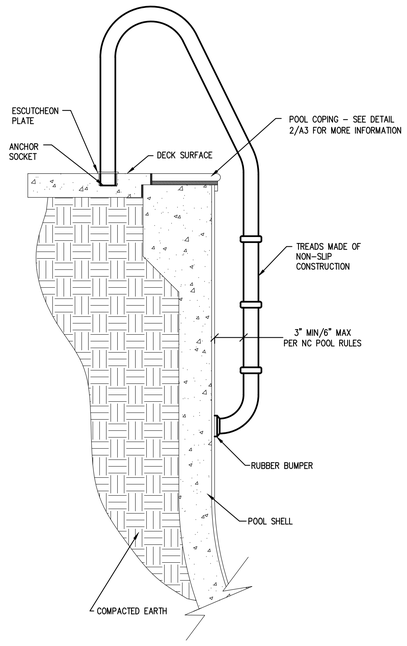
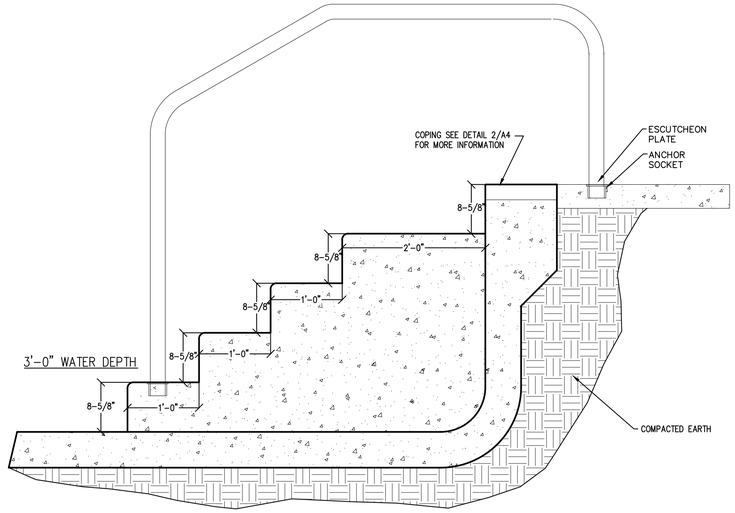


5 / A3 — HANDICAP LIFT DETAIL
SCALE: NOT TO SCALE

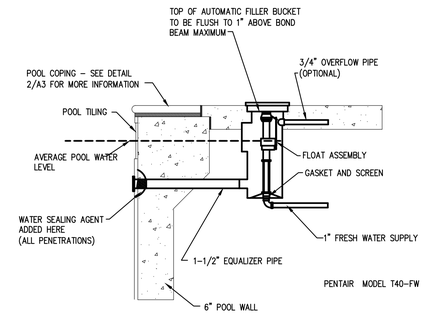


6 / A3 — LADDER DETAIL
SCALE: NOT TO SCALE

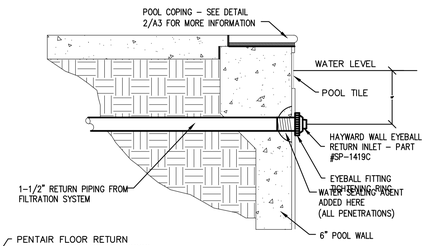
THE LEADING EDGE OF THE STAIRS SHALL BE MARKED WITH A CONTRASTING, SLIP-RESISTANT COLOR TILE BAND AT LEAST 2" WIDE VISIBLE FROM ABOVE AND SPACES NO MORE THAN 1" FROM THE EDGE OR FROM ADJACENT TILES



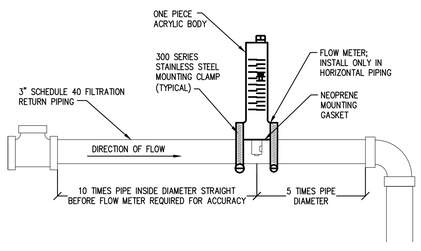
7 / A3 — MAIN STAIR DETAIL
SCALE: NOT TO SCALE



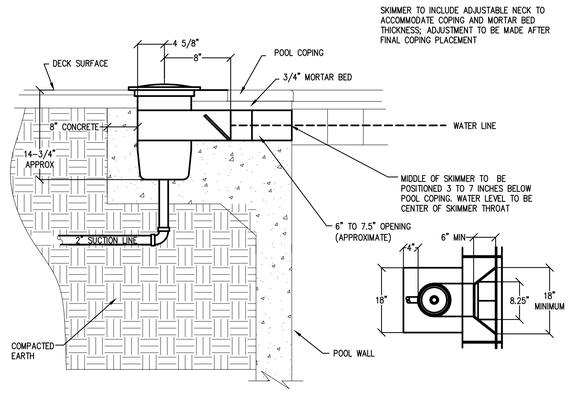
8 / A3 — AUTOMATIC WATER FILL DETAIL
SCALE: NOT TO SCALE



9 / A3 — WALL & FLOOR RETURN DETAIL
SCALE: NOT TO SCALE



10 / A3 — HORIZONTAL FLOW METER DETAIL
SCALE: NOT TO SCALE



11 / A3 — SKIMMER DETAIL
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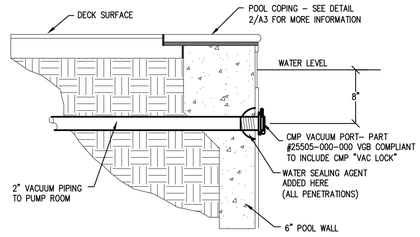

12 / A3 — VACUUM DETAIL
SCALE: NOT TO SCALE

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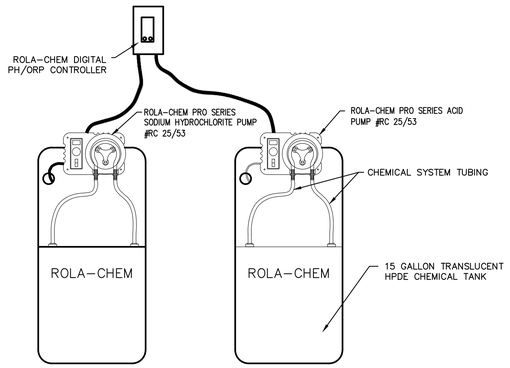
09.06.22

LOCATION: LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

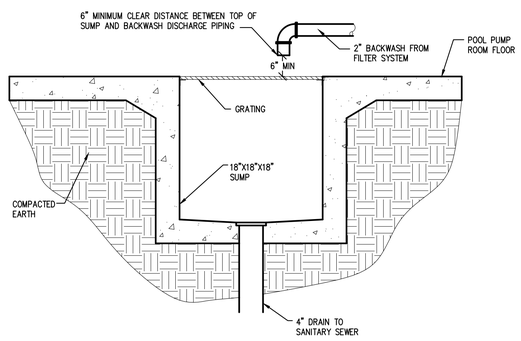
OWNERS: VILLAGE OF LEXINGTON HOA
PO BOX 87209
FAYETTEVILLE NC 28304

DRAWN: JPARRISH
SCALE: AS SHOWN
REVISIONS:
DATE: AUG 11TH 2022

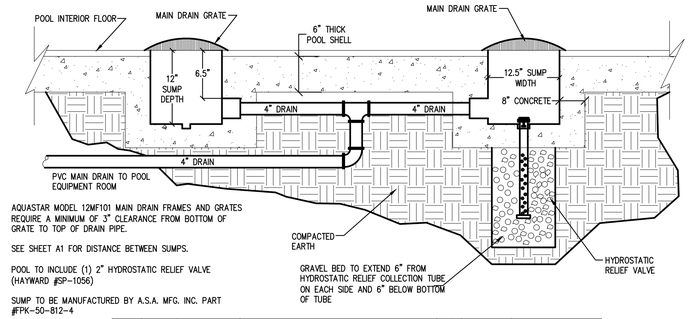
SHEET NO:
A3



1 / A4 — 2 TANK SANITATION DETAIL
SCALE: NOT TO SCALE



2 / A4 — SUMP DETAIL
SCALE: NOT TO SCALE



AQUASTAR MODEL 12MF101 MAIN DRAIN FRAMES AND GRATES REQUIRE A MINIMUM OF 3" CLEARANCE FROM BOTTOM OF GRATE TO TOP OF DRAIN PIPE.

SEE SHEET A1 FOR DISTANCE BETWEEN SUMPS.

POOL TO INCLUDE (1) 2" HYDROSTATIC RELIEF VALVE (HAYWARD #SP-1056)

SUMP TO BE MANUFACTURED BY A.S.A. MFG. INC. PART #FPK-50-B12-4

GRAVEL BED TO EXTEND 6" FROM HYDROSTATIC RELIEF COLLECTION TUBE ON EACH SIDE AND 6" BELOW BOTTOM OF TUBE

TAG	SIZE	SERVICE	DRAIN OPENING	PIPE SIZE	SUMP SIZE	PART NUMBER
DR	12"X12"	MAIN DRAIN	71.2 SQ. IN. OPEN AREA; 274 GPM @ 1.2 FPS	4"	12" X 12.5"	AQUASTAR 12MF101

3 / A4 — MAIN DRAIN/HYDROSTATIC RELIEF DETAIL
SCALE: NOT TO SCALE

Robert Charles Evans
Architect
2504 RAEFORD ROAD, SUITE 102, FAYETTEVILLE, NORTH CAROLINA

ROBERT C. EVANS REGISTERED ARCHITECT 6930 NORTH CAROLINA FAYETTEVILLE, N.C.

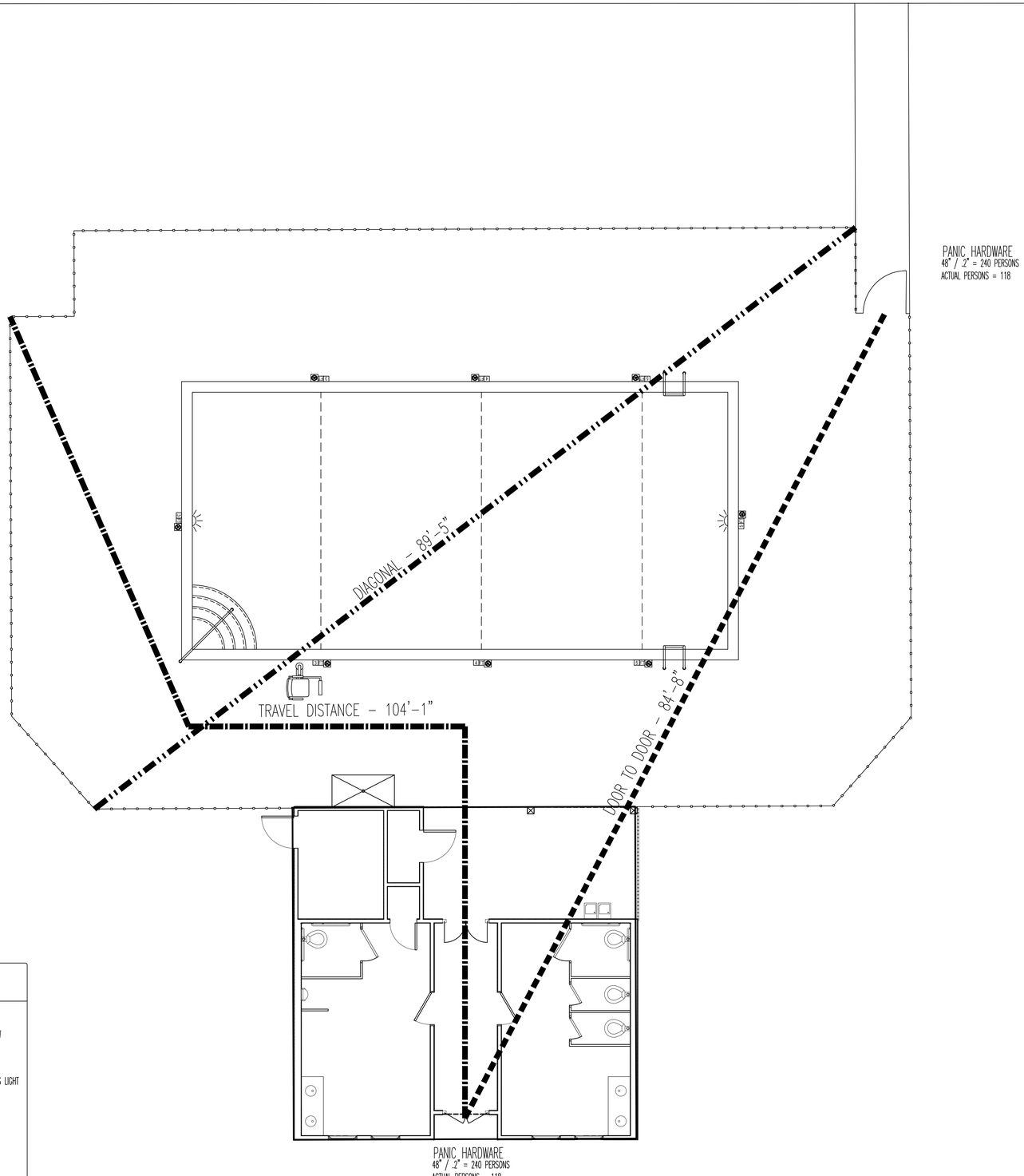
09.06.22

OWNERS:
VILLAGE OF LEXINGTON HOA
PO BOX 87209
FAYETTEVILLE NC 28304

LOCATION:
LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

DATE: AUG 11TH 2022
REVISIONS:
SCALE: AS SHOWN
DRAWN: J.PARRISH

SHEET NO:
A4



01 A0 LIFE SAFETY PLAN
3/16" = 1'-0"

OCCUPANT CONTENT

POOL	1,200 sf / 50	=	24 PERSONS
DECK	3,184 sf / 15	=	212 PERSONS
TOTAL OCCUPANT CONTENT			236 PERSONS

EXIT SIGN w/ DIRECTIONAL ARROW
EXIT SIGN
EXIT SIGN w/ EMERGENCY EGRESS LIGHT
EMERGENCY EGRESS LIGHT
FX FIRE EXTINGUISHER

NOTES:
1. SEE ARCHITECTURAL BUILDING PLANS FOR LOCATION OF EXIT LIGHTS, EMERGENCY EGRESS LIGHTS AND FIRE EXTINGUISHERS.

Robert Charles Evans
ARCHITECT
545 PEARL STREET, FAYETTEVILLE, NORTH CAROLINA 28303
ROBERT C. EVANS
REGISTERED ARCHITECT
NORTH CAROLINA
FAYETTEVILLE, N.C.

09.06.22

OWNERS:
VILLAGE OF LEXINGTON HOA
PO BOX 87729
FAYETTEVILLE, NC 28304

LOCATION:
LEXINGTON PLANTATION
400 CENTENNIAL PARKWAY
CAMERON, NC

DATE: September 6, 2022
REVISIONS:
SCALE: AS SHOWN
DRAWN: J.PARRISH

SHEET NO:
A5

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Lexington Plantation Pool House

Address: 400 Centennial Parkway Cameron, NC Zip Code 28326

Owner/Authorized Agent: Village at Lexington HOA Phone # (910) 484 - 5400 E-Mail jamie@littleandyoung.n

Owned By: ☐ City/County ☒ Private ☐ State

Code Enforcement Jurisdiction: ☐ City_____ ☒ County Harnett ☐ State

CONTACT: Christopher G. Herndon, PE CWI

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				(____)_____	
Civil	Draper Aden Associates	Andrew P. Mericle, PE	041595	(919) 827-0864	americle@daa.com
Electrical				(____)_____	
Fire Alarm				(____)_____	
Plumbing	Coastal Plains Engineering, PA	Christopher S. Locklear, PE	020193	(910) 521-7213	coastalplainseng@gmail.com
Mechanical				(____)_____	
Sprinkler-Standpipe				(____)_____	
Structural	Draper Aden Associates	Christopher G. Herndon, PE CWI	043810	(919) 827-0864	cherndon@daa.com
Retaining Walls >5' High				(____)_____	
Other				(____)_____	

("Others" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC CODE FOR: ☒ New Construction ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core
☐ Phased Construction – Shell/Core
☐ Renovation

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14

Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____ **ORIGINAL OCCUPANCY(S)** (Ch. 3): _____

RENOVATED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____

RISK CATEGORY (table 1604.5) **Current:** ☐ I ☒ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☒ V-B

Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ☒ No ☐ Yes (Primary) **Flood Hazard Area:** ☒ No ☐ Yes

Special Inspections Required: ☐ No ☒ Yes

Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENO/ALTER (SQ.FT)	SUB-TOTAL
6th Floor				
5th Floor				
4th Floor				
3rd Floor				
2nd Floor				
Mezzanine				
1st Floor		992		
Basement				
TOTAL				

ALLOWABLE AREA

Primary Occupancy Classification: SELECT ONE

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐
Educational ☐
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 Condition ☐ 1 ☐ 2
☐ I-2 Condition ☐ 1 ☐ 2
☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☒

Accessory Occupancy Classification(s): _____

Incidental Uses (Table 509): _____

Special Uses (Chapter 4 – List Code Sections) _____

Special Provisions: (Chapter 5 – List Code Sections): _____

Mixed Occupancy: ☒ No ☐ Yes Separation: ____ Hr. Exception: _____

☐ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (508.4) -
See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	UTILITY	992	5,500		5,500

[1] Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase I_f = 100 [F/P - 0.25] x W/30 = _____ (%)

[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40	20	
Building Height in Stories (Table 504.4)	1	1	

[1] Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
[2] The maximum height of air traffic control towers must comply with Table 412.3.1
[3] The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls		0					
Exterior		0					
North	114'						
East	77'						
West	186'						
South	102'						
Interior		0					
Nonbearing Walls and Partitions		0					
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions		0					
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Column Supporting Floors							
Roof Construction, including supporting beams and joists		0					
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPERTY LINES	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☐ Yes
Exit Signs: ☐ No ☐ Yes
Fire Alarm: ☐ No ☐ Yes
Smoke Detection Systems: ☐ No ☐ Yes ☐ Partial _____
Carbon Monoxide Detection: ☐ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: LS1.0

☐ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations (if not on the site plan)
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
☒ Occupant loads for each area
☒ Exit access travel distances (1017)
☒ Common path of travel distances (1006.2.1 & 2006.3.2(1))
☐ Dead end lengths (1020.4)
☒ Clear exit widths for each exit door
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☒ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
☐ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS / TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW	1	3		1	2	2		1	1	1
	REQ'D										

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

_____

_____

_____

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the **North Carolina Energy Conservation Code** shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)

Exempt Building: ☐ No ☒ Yes (Provide Code or Statutory reference): U/M OCCUPANCY CLASSIFICATION

Climate Zone: ☐ 3A ☒ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
Total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
Projection factor: _____
Door R-Values: _____

Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/Vertical requirement: _____
Slab Heated: _____

DRAWING LIST

SHEET NUMBER	SHEET NAME
A0.1	APPENDIX B
A1.0	ELEVATIONS & FLOOR PLAN
LS1.0	LIFE SAFETY PLAN
S0.1	GENERAL NOTES
S0.2	APPENDIX B
S1.0	FOUNDATION & FRAMING PLANS

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NC Firm License # F-1429
• Hampton Roads, VA
• Fayetteville, NC
• Northern Virginia
• Richmond, VA
• Blacksburg, VA
• Charlottesville, VA
• Virginia Beach, VA

APPENDIX B
Lexington Plantation Pool House
400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: CGH
DRAWN BY: CGH
CHECKED BY: AC
SCALE:
DATE: 8/11/22
PROJECT NUMBER: 2101033

A0.1

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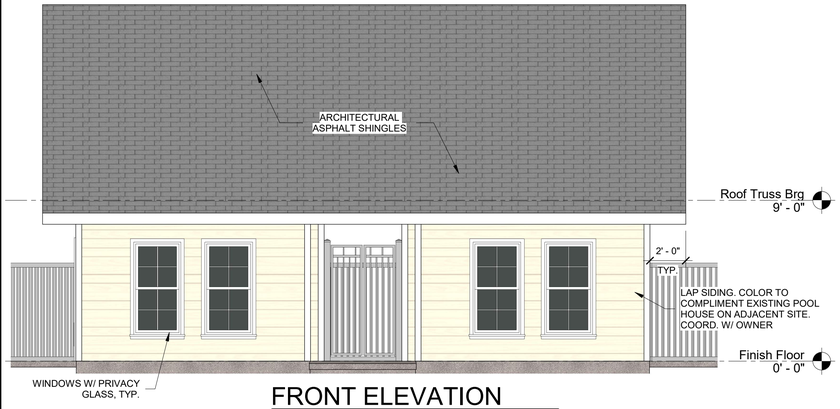
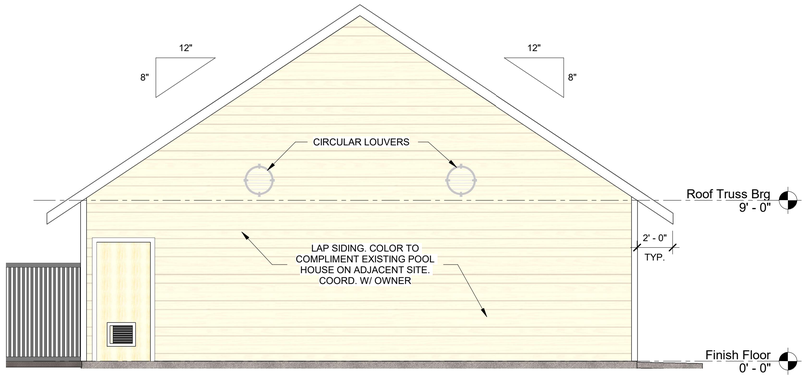


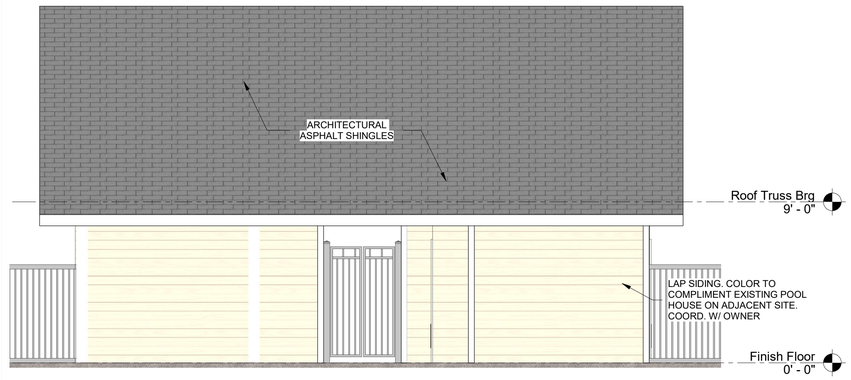
FRONT ELEVATION

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



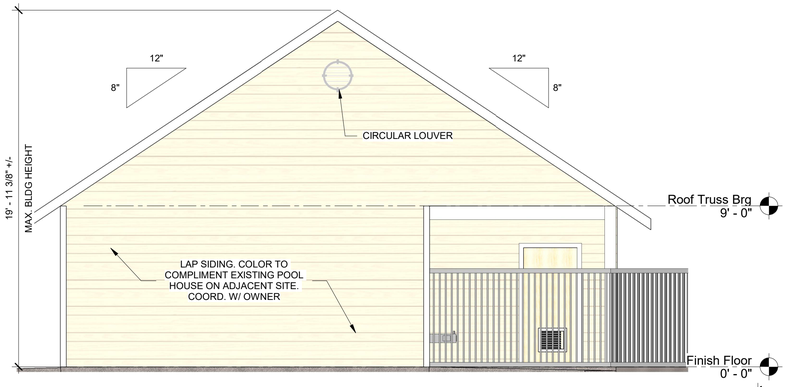
LEFT ELEVATION

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



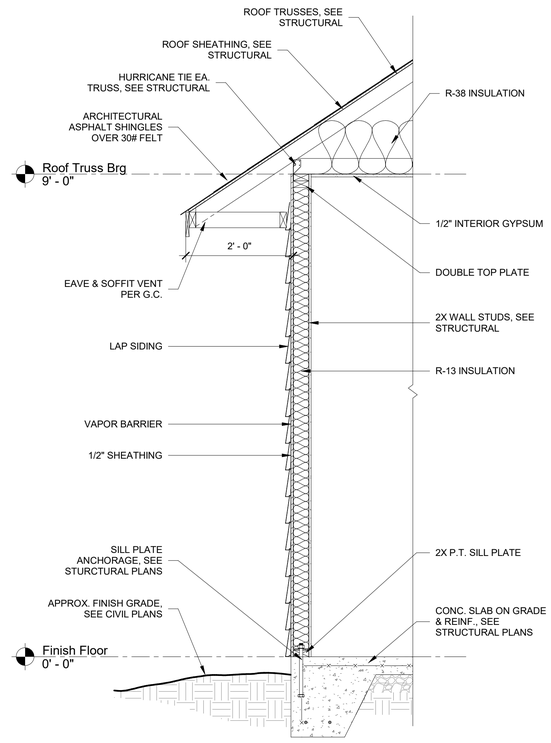
REAR ELEVATION

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



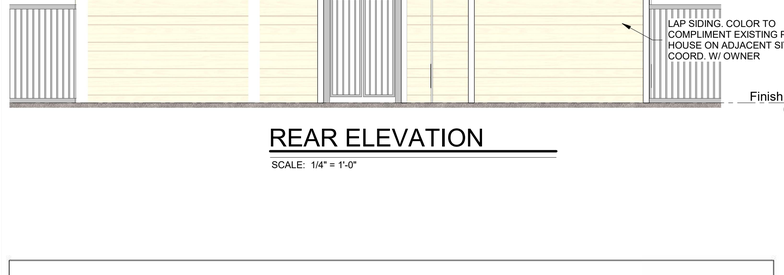
RIGHT ELEVATION

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

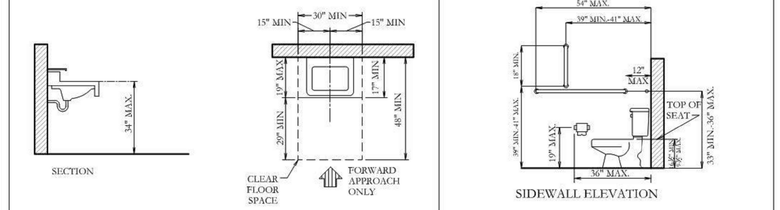


TYP. WALL SECTION

SCALE: 3/4" = 1'-0"

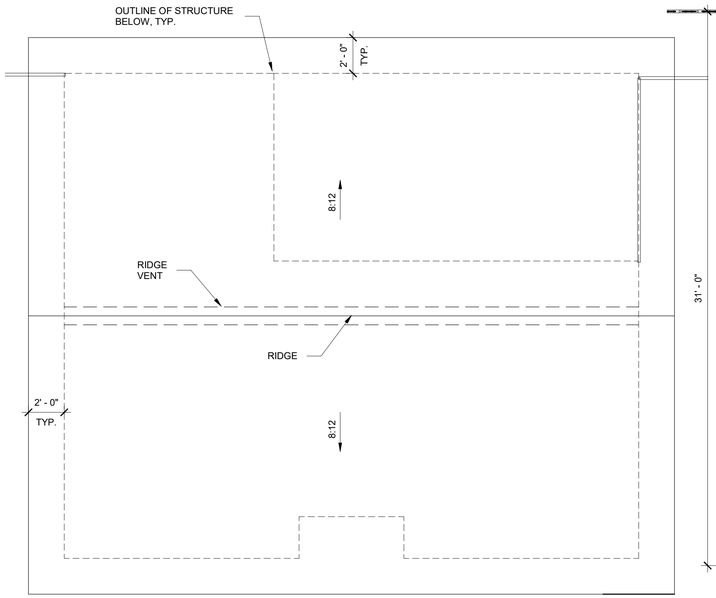


ACCESSIBLE BATHROOM LAYOUT



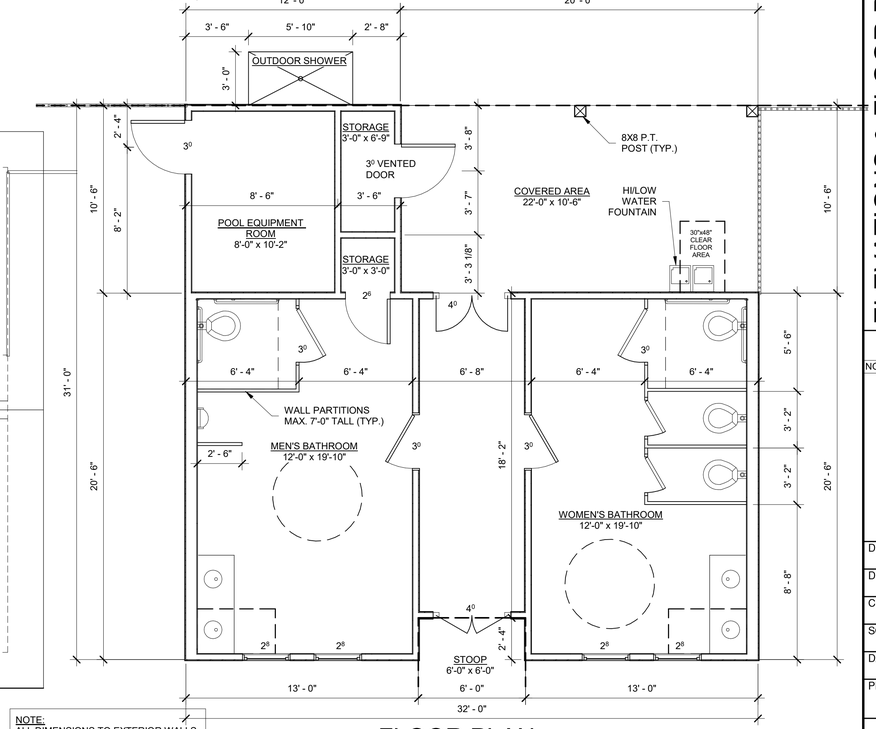
SINKS

TOILET ACCESSORIES



ROOF PLAN

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



NOTE:
ALL DIMENSIONS TO EXTERIOR WALLS ARE TO OUTSIDE FACE OF STUD, TYP.

FLOOR PLAN

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

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ELEVATIONS & FLOOR PLAN

Lexington Plantation Pool House

400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: CGH
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SCALE: As indicated
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A1.0

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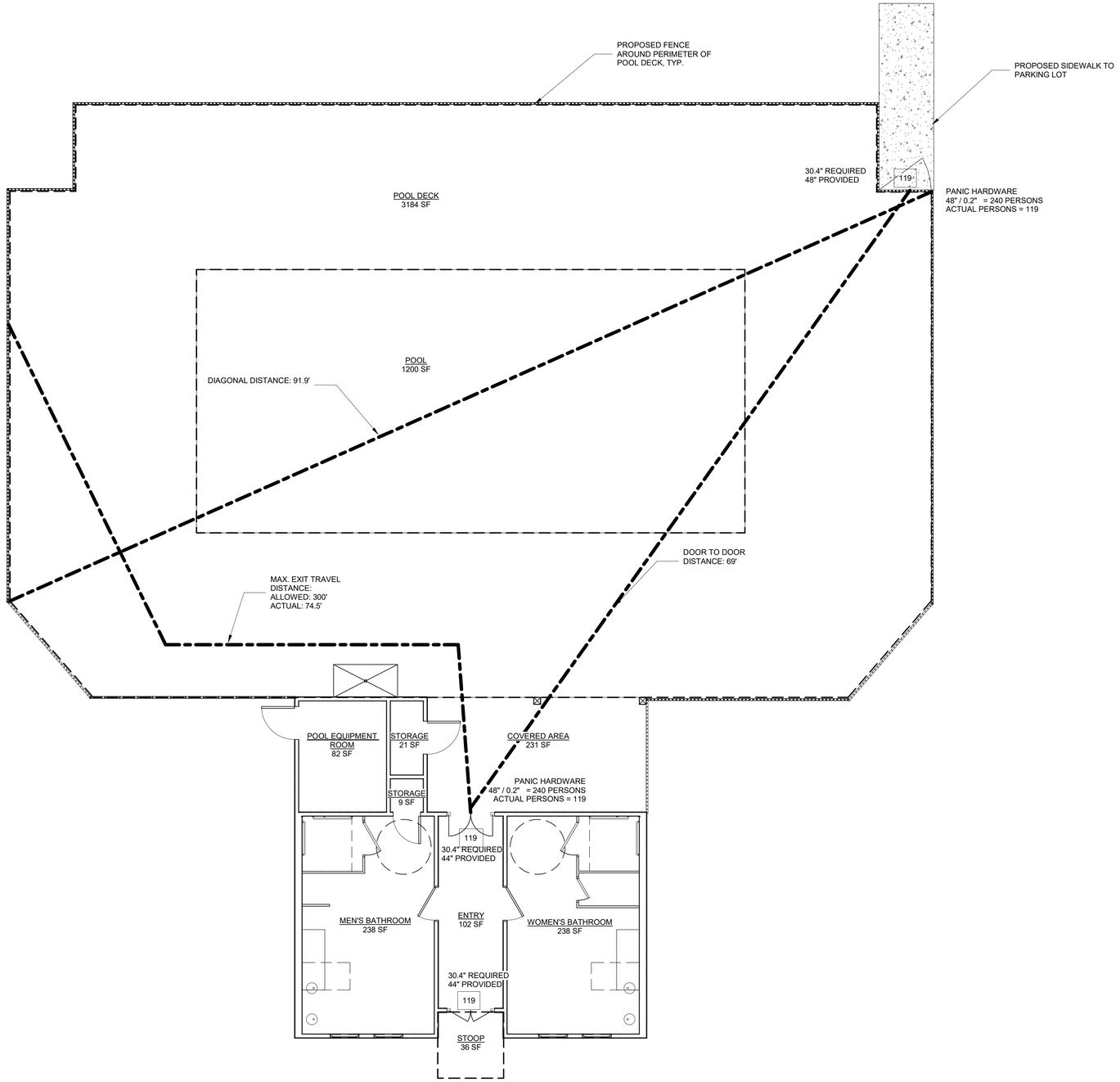

LIFE SAFETY PLAN

SCALE: 3/16" = 1'-0"

BUILDING CODE NOTES:

1. APPLICABLE CODES: 2018 NORTH CAROLINA STATE BUILDING BUILDING CODE/ 2015 INTERNATIONAL BUILDING CODE

2. OCCUPANCY CLASSIFICATION:
   PROPOSED BUILDING USE: ANCILLARY STRUCTURE TO SERVICE COMMUNITY POOL
   PROPOSED CLASSIFICATION: U - UTILITY AND MISCELLANEOUS (POOL HOUSE)
   A - ASSEMBLY (POOL & POOL DECK)

3. CONSTRUCTION TYPE:
   PROPOSED: TYPE VB CONSTRUCTION, NON-SPRINKLERED

4. HEIGHT AND AREA LIMITATIONS:
   AREA:
   TABULAR AREA (TABLE 506.2): 5,500 SF
   ALLOWABLE AREA (100% OPEN PERIMETER): 5,500 SF

   ACTUAL AREA:

	GROSS SF	NET SF*
PROPOSED AREA:	992 GSF	588 NSF

   * NET SF = AREA INSIDE EXTERIOR WALLS

   HEIGHT:
   ALLOWABLE HEIGHT (TABLE 504.3): 40'-0" (1 STORY)
   PROPOSED HEIGHT: 20'-0" (1 STORY)

5. OCCUPANT LOAD:

USE	SIZE	OCC'S PER SF	OCCS.
POOL	1,200 SF	1 OCC PER 50 SF	24
POOL DECK	3,184 SF	1 OCC PER 15 SF	213
		TOTAL:	237

   NOTE: POOL HOUSE SQUARE FOOTAGE IS CONSIDERED NON-SIMULTANEOUS OCCUPANCY

6. MEANS OF EGRESS

SPACE	EXITS REQ'D	EXITS PROVIDED
POOL + POOL DECK	2	2

ELEMENT	WIDTH REQ'D	WIDTH PROVIDED
POOL GATE TO PARKING LOT	30.4	48"
POOL GATES AT FRONT OF BLDG	30.4	44"

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LIFE SAFETY PLAN

Lexington Plantation Pool House

400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: CGH
DRAWN BY: CGH
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LS1.0

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GENERAL STRUCTURAL NOTES AND SPECIFICATIONS

DESIGN CRITERIA:

1. DESIGNED UNDER THE PROVISIONS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE/INTERNATIONAL BUILDING CODE(IBC) 2015/ASCE 7-10

2. DESIGN LOADS:

LIVE LOADS:

ROOF LIVE LOAD	= 20 PSF
FIRST FLOOR SLAB ON GRADE	= 100 PSF

SNOW LOADS:

DESIGN GROUND SNOW LOAD, Pg	= 10 PSF
SNOW EXPOSURE FACTOR, Ce	= 1.0
SNOW IMPORTANCE FACTOR, Is	= 1.0??
THERMAL FACTOR, Ct	= 1.2
FLAT ROOF SNOW LOAD, Pf	= 8.4 PSF

WIND LOAD (ULTIMATE):

DESIGN WIND VELOCITY:V3S	= 120 MPH
RISK CATEGORY:	= II
WIND IMPORTANCE FACTOR, Iw	= 1.0
EXPOSURE:	= C
INTERNAL PRESSURE COEF.	= ±0.18
EDGE STRIP, a	= 3 FT
END ZONE, 2a	= 6 FT

MAIN WINDFORCE RESISTING SYSTEM DESIGN PRESSURES:

INTERIOR ZONE:	WALL:	= 24.7 PSF
	ROOF:	= 17 PSF
END ZONE:	WALL:	= 31.1 PSF
	ROOF:	= 21.3 PSF

COMPONENT AND CLADDING WIND PRESSURES: (A= 100 SF)

NET ROOF UPLIFT AT CORNER	= -36.7 PSF
NET ROOF UPLIFT AT EDGE STRIP	= -36.7 PSF
NET ROOF UPLIFT AT INTERIOR	= -31.4 PSF
WALL PRESSURE AT CORNER	= -42 PSF
WALL PRESSURE AT INTERIOR	= -34 PSF

WIND BASE SHEAR = 10.6 KIPS ULTIMATE (PLAN N-S)
= 5.1 KIPS ULTIMATE (PLAN E-W)

SEISMIC LOAD (ULTIMATE):

SEISMIC SITE CLASSIFICATION:	= D
SEISMIC DESIGN CATEGORY:	= C
RISK CATEGORY:	= II
SEISMIC IMPORTANCE FACTOR, Ie	= 1.0

DESIGN EARTHQUAKE:

Ss	= 20.5 % g
S1	= 9.3 % g
Sds	= 0.219g
Sd1	= 0.149g

SEISMIC ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE WITH DYNAMIC CHARACTERISTICS
LATERAL FORCE RESISTING SYSTEM: LIGHT FRAME WOOD WALLS WITH STRUCTURAL WOOD SHEAR PANELS
RESPONSE MODIFICATION COEFFICIENT, R = 6.5
DEFLECTION AMPLIFICATION FACTOR, Cd = 4

SEISMIC BASE SHEAR = 1 KIPS ULTIMATE

WIND FORCE GOVERNS LATERAL DESIGN

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER TRADES DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL COMPARE AND VERIFY STRUCTURAL DRAWINGS AND SPECIFICATIONS w/ ARCHITECTURAL AND ALL OTHER TRADES DWGS., SPECIFICATIONS, AND REQUIREMENTS AND REPORT ANY DISCREPANCY TO THE STRUCTURAL ENGINEER AND DESIGN TEAM PRIOR TO DEMOLITION, FABRICATION, AND / OR INSTALLATION OF ANY STRUCTURAL MEMBERS.

4. VERIFY NUMBER, SIZE, AND LOCATION OF ALL ROOF OPENINGS FROM APPROVED SHOP DRAWINGS.

5. NO LOADS IN EXCESS OF DESIGN LOADS LISTED SHALL BE PLACED ON ANY AREA DURING CONSTRUCTION UNLESS ADEQUATE SHORING OR OTHER METHOD IS APPROVED TO SUPPORT THE EXCESSIVE LOADS. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE UNTIL PERMANENT BRACING IS COMPLETED.

6. WHERE ALIGNMENT OF MATERIALS SUCH AS WALLS AND FACING MATERIALS WILL BE AFFECTED BY DEFLECTIONS AND ROTATIONS OF THE STRUCTURE DURING PLACEMENT OF THE MATERIALS, PROCEDURES SHALL BE USED WHICH WILL ASSURE THE CORRECT FINAL POSITIONS OF MATERIALS.

7. ALL NOTES ON STRUCTURAL DRAWINGS SHALL BE ASSUMED TYPICAL UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATIONS.

8. SECTIONS AND DETAILS ARE TO BE USED IN ALL SIMILAR LOCATIONS UNLESS OTHERWISE SHOWN BY OTHER DETAILS AND/OR SECTIONS.

9. SEE ARCHITECTURAL DRAWINGS FOR WEATHERPROOFING DETAILS.

10. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION OF CONSTRUCTION OF THE PROJECT AND THEN, ONLY TO SUPPORT THE DESIGN LOADS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION AND FOR THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS OCCURRING DURING CONSTRUCTION. FURNISH ALL TEMPORARY BRACING, SHORING, AND/OR SUPPORT AS REQUIRED.

11. CHECK ALL DIMENSIONS AGAINST THE REQUIREMENTS OF OTHER CONTRACT DOCUMENTS. RESOLVE APPARENT INCONSISTENCIES IN THE CONTRACT DOCUMENTS WITH THE ARCHITECT/ ENGINEER BEFORE PROCEEDING WITH WORK.

12. PROMPTLY NOTIFY THE ENGINEER OF ANY STRUCTURAL MEMBER CALLED OUT ON THE ARCHITECTURAL, MECHANICAL, PLUMBING, OR ELECTRICAL DRAWINGS THAT IS NOT IDENTIFIED ON THE STRUCTURAL DRAWINGS.

13. WHERE CONFLICT EXISTS AMONG THE VARIOUS PARTS OF THE ENTIRITY OF THE STRUCTURAL SUBMITTAL (CONTRACT DOCUMENTS, STRUCTURAL DRAWINGS, GENERAL NOTES, SPECIFICATIONS, SECTIONS, ETC.) THE STRICTEST REQUIREMENTS, AS INDICATED BY THE STRUCTURAL ENGINEER, SHALL GOVERN, U.N.O.

SUBMITTALS FOR APPROVAL:

CONCRETE:

- **PRODUCT DATA:** FOR EACH TYPE OF PRODUCT.
- **DESIGN MIXTURES:** FOR EACH CONCRETE MIXTURE.
- **STEEL REINFORCEMENT SHOP DRAWINGS:** PLACING DRAWINGS THAT DETAIL FABRICATION, BENDING, AND PLACEMENT.

WOOD PRE-ENGINEERED TRUSSES:

- **PRODUCT DATA:** FOR METAL-PLATE CONNECTORS, METAL TRUSS ACCESSORIES, AND FASTENERS.
- **SHOP DRAWINGS:** SHOW FABRICATION AND INSTALLATION DETAILS FOR TRUSSES.

- SHOW LOCATION, PITCH, SPAN, CAMBER, CONFIGURATION, AND SPACING FOR EACH TYPE OF TRUSS REQUIRED.
- INDICATE SIZES, STRESS GRADES, AND SPECIES OF LUMBER.
- INDICATE LOCATIONS OF PERMANENT BRACING REQUIRED TO PREVENT BUCKLING OF INDIVIDUAL TRUSS MEMBERS DUE TO DESIGN LOADS.
- INDICATE LOCATIONS, SIZES, AND MATERIALS FOR PERMANENT BRACING REQUIRED TO PREVENT BUCKLING OF INDIVIDUAL TRUSS MEMBERS DUE TO DESIGN LOADS.
- INDICATE TYPE, SIZE, MATERIAL, FINISH, DESIGN VALUES, ORIENTATION, AND LOCATION OF METAL CONNECTOR PLATES.
- SHOW SPLICE DETAILS AND BEARING DETAILS.

- **DELEGATED-DESIGN SUBMITTAL:** FOR METAL-PLATE-CONNECTED WOOD TRUSSES INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

WOOD ENGINEERED CONSTRUCTION:

- **ENGINEERED WOOD PRODUCT DATA:** FOR EACH TYPE OF PRODUCT.

WOOD EXTERIOR CARPENTRY:

- **PRODUCT DATA:** FOR PRESERVATIVE-TREATED WOOD PRODUCTS.

SPECIAL INSPECTIONS:

1. SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 NORTH CAROLINA STATE BUILDING CODE. AN APPROVED SPECIAL INSPECTION AGENCY SHALL BE PROVIDED BY THE OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL INSPECTION PROCEDURES WITH THE OWNER AND THE OWNER'S AGENT. A FINAL REPORT OF INSPECTIONS DOCUMENTING COMPLETION OF ALL WORK SHALL BE SUBMITTED TO THE CODE OFFICIAL.

2. SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION SHALL MEET REQUIREMENTS OF SECTION 1705.3 AND TABLE 1705.3.

3. SPECIAL INSPECTIONS FOR WOOD CONSTRUCTION SHALL MEET REQUIREMENTS OF SECTION 1705.5.

DIVISION 3:

CONCRETE NOTES:

1. ALL DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL, FORM WORK, MIXING, HANDLING, PLACING, FINISHING, AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH CURRENT EDITIONS OF ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI-315) AND ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318).

2. CONCRETE SHALL CONFORM TO ASTM C94. MINIMUM STRENGTH AT 28 DAYS SHALL BE 3000 PSI FOR FOOTING CONCRETE AND 4000 PSI FOR ALL OTHER CONCRETE. FOR CONCRETE OTHER THAN SLABS ON GRADE, MAXIMUM WATER-TO-CEMENT RATIO SHALL BE 0.60 WITH MAXIMUM SLUMP OF 4 INCHES. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 INCH, AND ALL AGGREGATES SHALL CONFORM TO ASTM C33.

3. CONCRETE SLABS ON GRADE SHALL BE FINISHED TO THE FOLLOWING TOLERANCES:

	FF=25	FL=20
MINIMUM LOCALIZED:	FF=15	FL=10

4. EXTERIOR CONCRETE SHALL BE AIR ENTRAINED, AIR CONTENT TO BE BETWEEN 5 AND 7 PERCENT BY VOLUME.

5. ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 (S1), NEW BILLET STEEL DEFORMED BARS, GRADE 60. UNLESS NOTED OTHERWISE, ALL REINFORCING BAR SPLICES SHALL BE ACI CLASS B TENSION LAP SPLICES, U.N.O. WELDED WIRE FABRIC (W.W.F.) SHALL MEET ASTM A1064. MINIMUM W.W.F. LAP AT SPLICES SHALL BE 8 INCHES.

6. THE FOLLOWING CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT NEAREST THE DESCRIBED SURFACE, UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 INCHES

7. COORDINATE LOCATIONS AND DEPTHS OF ALL FLOOR SLAB DEPRESSIONS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.

8. UNLESS NOTED OTHERWISE, SLABS ON GRADE SHALL HAVE EITHER CONSTRUCTION JOINTS OR SAW CUT JOINTS SPACED SO THE JOINTS FORM PANELS IN THE SLAB WITH NO SLAB PANEL GREATER THAN 144 SQUARE FEET NOR MORE THAN 12 FEET IN ANY ONE DIRECTION. INSTALL SAW CUT CONSTRUCTION JOINTS AS SOON AS THE SLAB IS CAPABLE OF BEING SAWN WITHOUT RAVELING, BUT IN NO CASE LATER THAN 8 HOURS AFTER FINAL FINISHING BEGINS. CONTRACTOR TO SUBMIT ONE PLAN SHOWING CONSTRUCTION AND CONTROL JOINT LAYOUT FOR ALL SLABS ON GRADE.

9. INTERIOR SLAB CONCRETE SHALL RECEIVE A STEEL TROWEL FINISH. IMMEDIATELY FOLLOWING FINISHING, THE CONCRETE SHALL BE PROTECTED FROM PREMATURE OR EXCESSIVE DRYING, TEMPERATURE EXTREMES AND INJURY.

10. CAST SIX CYLINDERS OF EACH CONCRETE POUR. TEST TWO CYLINDERS SEVEN DAYS AFTER CASTING AND TWO 28 DAYS AFTER CASTING. HOLD TWO CYLINDERS FOR POSSIBLE TEST UNTIL 60 DAYS AFTER CASTING. DISPOSE OF CYLINDERS IF TEST IS NOT REQUESTED. SEND REPORTS TO ARCHITECT, CONTRACTOR AND STRUCTURAL ENGINEER.

DIVISION 5:

POST INSTALLED ANCHORS AND DOWELS NOTES:

1. ANCHOR OR DOWEL CAPACITY USED IN CONSTRUCTION SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY THE MANUFACTURER OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.

2. INSTALL ANCHORS AND DOWELS STRICTLY IN ACCORDANCE WITH THE MANUFACTURER INSTRUCTIONS.

3. ANCHOR CAPACITY DEPENDS ON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE OR MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH THE SPACING AND EDGE CLEARANCES INDICATED ON THE PROJECT DRAWINGS, AND MANUFACTURER REQUIREMENTS.

4. INSTALL ANCHORS AND DOWELS IN HOLES DRILLED PER MANUFACTURER REQUIREMENTS, TO DEPTH INDICATED, AND NOT LESS THAN MINIMUM EMBEDMENT DEPTH RECOMMENDED BY ADHESIVE MANUFACTURER. HOLES SHALL BE CLEANED AND BLOWN OUT PER MANUFACTURER REQUIREMENTS. HOLES SHALL BE KEPT FREE AND CLEAR OF DIRT, DEBRIS, AND MOISTURE UNTIL ADHESIVE AND DOWEL OR ANCHOR IS INSTALLED. ADHESIVE AND DOWELS OR ANCHORS SHALL BE INSTALLED DURING THE SAME WORK DAY THAT HOLES ARE CORED. CONTRACTOR SHALL PROVIDE CONTINUOUS INSPECTION DURING CORING AND INSTALLATION OF THE FIRST 10% OF ANCHORS INSTALLED, AFTER WHICH TIME PERIODIC INSPECTION SHALL BE PROVIDED.

5. ADHESIVE ANCHOR SHALL CONSIST OF THREADED ROD, NUT, WASHER, AND ADHESIVE.

THREADED ROD:	ASTM A36
NUTS:	ASTM A563
WASHERS:	ASTM F436
ADHESIVE:	SPECIFIED HILTI ADHESIVE, OR EQUAL.
CORROSION PROTECTION:	ROD, NUT, AND WASHER SHALL BE ZINC PLATED PER ASTM B633 FOR SERVICE CONDITION SC-1, OR ZINC COATED BY MECHANICAL PROCESS IN ACCORDANCE WITH ASTM B695.

6. ADHESIVE DOWEL SHALL CONSIST OF REINFORCING BAR AND ADHESIVE.

REINFORCING BAR:	ASTM A615 GRADE 60 DEFORMED BAR
ADHESIVE:	SPECIFIED HILTI ADHESIVE, OR EQUAL.

7. INSTALL SCREW ANCHORS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN PROCEDURES. SCREW ANCHORS SHALL BE EMBEDDED IN GROUTED MASONRY AND SHALL NOT BE INSTALLED IN MASONRY BED OR HEAD JOINTS. SCREW ANCHORS SHALL BE ZINC PLATED PER ASTM B633 FOR SERVICE CONDITION SC-1, OR ZINC COATED BY MECHANICAL PROCESS IN ACCORDANCE WITH ASTM B695.

DRAPER ADEN ASSOCIATES REVIEW

THESE PLANS HAVE BEEN SUBJECTED TO TECHNICAL AND QUALITY REVIEWS BY:

CHRISTOPHER G. HERNDON, PE		7/9/21
NAME: PRINTED	SIGNATURE	DATE
PROJECT ENGINEER		
CHRISTOPHER G. HERNDON, PE		7/9/21
NAME: PRINTED	SIGNATURE	DATE
PROJECT MANAGER		
DAVID W. SPRIGGS, PE		7/9/21
NAME: PRINTED	SIGNATURE	DATE
QUALITY REVIEWER		

DIVISION 6:

STRUCTURAL (ROUGH) CARPENTRY NOTES:

1. WOOD FOR STUDS, BEAMS, JOISTS, HEADERS, AND PLATES SHALL BE NO. 2 SOUTHERN YELLOW PINE, WITH MOISTURE CONTENT NOT TO EXCEED 15%. ALL WOOD LINTELS AND HEADERS SHALL HAVE NO SPLITS.

2. PLYWOOD SHALL BE APA RATED SHEATHING WITH EXTERIOR GLUE. WHERE ROOF SHEATHING PANEL EDGES ARE NOT BLOCKED, INSTALL (1) PLYWOOD SHEATHING CLIP AT EACH SPANNING PANEL EDGE.

3. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, GROUND, OR EXPOSED TO WEATHER / MOISTURE, SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD U1.

4. WOOD ROOF TRUSSES SHALL BE DESIGNED AND FABRICATED BY A MEMBER FIRM OF THE TRUSS PLATE INSTITUTE TO CARRY THE FULL DEAD AND LIVE LOADS INDICATED AT THE INDICATED SPACINGS AND SPANS. TRUSSES SHALL BE SECURELY BRACED DURING ERECTION AS WELL AS WITH PERMANENT BRACING, SUCH THAT TRUSSES ARE PLUMB AND STRAIGHT UNDER ALL INDICATED DEAD, LIVE, AND LATERAL LOADS. ENGINEERING DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. SEE FRAMING NOTES.

5. UNLESS NOTED OTHERWISE, ALL FASTENING TO STRUCTURAL WOOD SHALL BE IN ACCORDANCE WITH TABLE 2304.10.1 OF THE 2018 NORTH CAROLINA BUILDING CODE. CONNECTIONS OF TRUSSES TO WOOD PLATES OR NAILER BEARINGS SHALL BE WITH STANDARD SIMPSON "HURRICANE" ANCHORS OR EQUAL.

6. WHERE INDICATED "MICROLLAM"/LVL LUMBER SHALL BE EQUAL TO THAT AS MANUFACTURED BY THE TRUS JOIST CORPORATION, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S STANDARDS.

PRE-ENGINEERED WOOD TRUSS NOTES:

1. REFER TO DESIGN CRITERIA NOTES IN CONJUNCTION WITH THESE NOTES.

2. ALL ROOF MEMBERS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES, ETC. WOOD ROOF TRUSSES SHALL BE DESIGNED AND FABRICATED BY A MEMBER FIRM OF THE TRUSS PLATE INSTITUTE, TO CARRY THE FULL DEAD AND LIVE LOADS INDICATED AT THE INDICATED SPACINGS AND SPANS. TRUSSES SHALL BE SECURELY BRACED DURING ERECTION AS WELL AS WITH PERMANENT BRACING, SUCH THAT TRUSSES ARE PLUMB AND STRAIGHT UNDER ALL INDICATED DEAD, LIVE, AND LATERAL LOADS. ALL WOOD ROOF TRUSSES, METAL CONNECTORS, HANGERS, ETC., REQUIRED FOR THE COMPLETE ROOF FRAMING SYSTEM SHALL BE DESIGNED AND SPECIFIED BY TRUSS MANUFACTURER'S STRUCTURAL ENGINEER. TRUSS MANUFACTURER SHALL SUBMIT DETAILED SHOP DRAWINGS AND CALCULATIONS BEARING STRUCTURAL ENGINEER'S STAMP PRIOR TO FABRICATION.

3. WOOD ROOF TRUSS SYSTEM SHALL BE FABRICATED TO PROVIDE THE ROOF LINES INDICATED ON THE ARCHITECTURAL PLANS, SECTIONS, AND ELEVATIONS.

4. ROOF TRUSSES ARE NOT STABLE UNTIL PROPERLY BRACED AND SHEATHED. PROPER HANDLING, SAFETY PRECAUTIONS, AND TEMPORARY BRACING ARE THE RESPONSIBILITY OF THE CONTRACTOR. TEMPORARY BRACING DURING CONSTRUCTION IS REQUIRED, AND SHALL BE PROVIDED BY CONTRACTOR, IN ADDITION TO THE PERMANENT BRACING NEEDED TO REDUCE BUCKLING LENGTH OF INDIVIDUAL MEMBER. CONTRACTOR SHALL ENSURE THAT ALL TRUSSES ARE STABLE AND PLUMB DURING INSTALLATION OF PERMANENT BRACING.

5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY BRACE ROOF FRAMING INCLUDING BOTH TEMPORARY AND PERMANENT BRACING, EVEN THOUGH ALL BRACING MAY NOT NECESSARILY BE SHOWN ON THESE DRAWINGS. BRACING SHOWN ON ROOF FRAMING PLAN, BUILDING CROSS SECTIONS, ETC., AND ROOF TRUSS MANUFACTURER'S SHOP DRAWINGS IS SPECIAL BRACING REQUIRED IN ADDITION TO NORMAL BRACING RECOMMENDATIONS.

6. PERMANENT TRUSS TOP CHORD BRACING: PLYWOOD ROOF SHEATHING

7. PERMANENT TRUSS CHORD BOTTOM CHORD BRACING: GYPSUM BOARD CEILING OR RIGID SOFFIT. PROVIDE CONTINUOUS 2x4 BOTTOM CHORD BRIDGING AT 10 FT. MAX ON CENTER WHERE GYPSUM BOARD CEILING OR RIGID SOFFIT DOES NOT EXIST. ANCHOR EACH END OF EACH LINE OF CONTINUOUS BOTTOM CHORD BRIDGING WITH DIAGONAL BRACING TO FORM A "BRACED BAY" ACROSS STRUCTURE IN THE PLANE OF THE BOTTOM CHORD.

8. PERMANENT TRUSS VERTICAL WEB BRACING: 2x4 CROSS BRACING INSTALLED IN THE PLANE OF THE WEBS AS TRUSSES ARE ERECTED. AT EACH WEB REQUIRING BOTTOM CHORD BRIDGING, BUT NOT TO EXCEED 18 FOOT INTERVALS ALONG LENGTH OF TRUSS.

9. TYPICAL BRACING MEMBERS TO BE 2x4 (MINIMUM) CONNECTED TO TRUSS WITH MIN. (2) 16d NAILS AT EACH TRUSS. MIN. LENGTH OF EACH BRACING MEMBER TO BE 8 FT. CROSS AND DIAGONAL BRACES TO RUN AT APPROXIMATELY 45 DEGREE ANGLES.

10. ALL WOOD ROOF TRUSSES SHALL BE CONNECTED TO BEARING WALL TOP PLATES WITH "SIMPSON STRONG TIE" STANDARD METAL HURRICANE ANCHORS AT EACH END, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

11. PROVIDE AND INSTALL METAL H CLIPS AT ALL PLYWOOD BUTT JOINTS WHICH OCCUR BETWEEN ROOF TRUSSES OR RAFTERS WHICH ARE SPACED GREATER THAN 16"o.c.

12. IT SHALL BE THE ROOF TRUSS MANUFACTURER'S RESPONSIBILITY TO VERIFY WITH THE GENERAL CONTRACTOR THE SIZES, WEIGHTS, AND LOCATIONS, ETC., OF ALL THE EQUIPMENT AND MATERIALS, SUCH AS HVAC EQUIPMENT AND ETC., TO BE LOCATED OR SUSPENDED BELOW ROOF TRUSSES, ETC. AND DESIGN TRUSSES TO SUPPORT THESE ADDITIONAL LOADS.

13. COORDINATE WOOD TRUSS TAILS, CANTILEVERS, AND END DIMENSIONS WITH ARCHITECTURAL WALL SECTIONS AND EAVE DETAILS.

14. TRUSS DESIGN LOADS U.N.O. OR SCHEDULED SHALL BE AS FOLLOWS:

TOP CHORD LIVE LOAD	20 PSF
BOTTOM CHORD LIVE LOAD	10 PSF (NON-ATTIC AREAS)
	20 PSF OR WEIGHT OF MECHANICAL UNITS AS REQUIRED (ATTIC AREAS)
WIND UPLIFT	15 PSF (** OR PER TRUSS MANUFACTURER)
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD DEAD LOAD	10 PSF

DIVISION 31:

FOUNDATION EARTHWORK NOTES:

1. FOUNDATION SIZES AND ELEVATIONS ARE BASED ON AN ASSUMED ALLOWABLE SAFE SOIL BEARING CAPACITY OF 2,000 PSF. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR STRUCTURALLY COMPACTED FILL OF AT LEAST THIS WORKING SAFE CAPACITY. IF SOIL OF THIS QUALITY IS NOT FOUND AT THE ELEVATIONS INDICATED, FOOTINGS MAY NEED TO BE LOWERED OR ENLARGED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER.

2. FOUNDATION PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH RECOMMENDATIONS MADE BY PROJECT GEOTECHNICAL ENGINEER.

3. ALL STRUCTURALLY COMPACTED FILL SHALL BE OF MATERIAL CLASSIFIED CL, ML, SC, SM, SP, SW, GC, GM, OR GW ACCORDING TO ASTM D-2487, FREE FROM CLAY BALLS, TRASH, DEBRIS, OR OTHER DELETERIOUS MATTER.

4. AFTER STRIPPING MATERIAL FROM AREA TO BE GRADED, REMOVE ALL UNSUITABLE MATERIAL FROM EXPOSED SUB-GRADE, SUCH AS DEBRIS, TRASH, ORGANIC MATTER, OR SOFT SOIL. SOIL SURFACES RECEIVING COMPACTED STRUCTURAL FILL SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. AREAS EXHIBITING EXCESSIVE PUMPING, WEAVING, OR RUTTING SHALL BE EXCAVATED AND REPLACED WITH COMPACTED STRUCTURAL FILL OR SCARIFIED, DRIED, AND RECOMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.

5. ALL FILL SHALL BE PLACED IN 6"-8" UNCOMPACTED LIFTS (MAXIMUM) AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR). THE MOISTURE CONTENT OF FILL AT TIME OF PLACEMENT SHALL BE WITHIN +/- 2% OF THE OPTIMUM MOISTURE CONTENT DETERMINED IN THE LABORATORY. COMPACTED FILL SUB-GRADES WITH A SLOPE GREATER THAN 4H:1V SHALL BE BENCHED TO ALLOW PLACEMENT OF HORIZONTAL LIFTS.

6. ALL FOUNDATION EXCAVATIONS SHALL BE OBSERVED BY THE PROJECT GEOTECHNICAL ENGINEER, AND APPROVED FOR FOOTINGS, PRIOR TO PLACING CONCRETE. ALL FOUNDATIONS SHALL BE CONCRETED PROMPTLY FOLLOWING INSPECTION.

7. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING CONSTRUCTION TO DIRECT WATER AWAY FROM FOUNDATION CONSTRUCTION AREAS. ANY SUB-GRADE SOILS WEAKENED BY THROUGH SATURATION OR DISTURBANCE SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL.

8. CONTRACTOR SHALL COORDINATE EXTERIOR SITE WORK, INCLUDING STEPS, WALKS, WALLS, AND FINISHED GRADES, WITH FOUNDATION WORK.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043810 8-11-22 ENGINEER CHRISTOPHER G. HERNDON

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• Richmond, VA • Blacksburg, VA • Charlottesville, VA
NC Firm License # F-1429

GENERAL NOTES

Lexington Plantation Pool House

400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY:	CGH
DRAWN BY:	CGH
CHECKED BY:	DWS
SCALE:	12" = 1'-0"
DATE:	8/11/22
PROJECT NUMBER:	2101033

S0.1

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2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Lexington Plantation Pool House
Address: 400 Centennial Parkway Cameron, NC Zip Code 28326
Owner/Authorized Agent: Village at Lexington HOA Phone # (910) 484 - 5400 E-Mail jamie@littleandyoung.net
Owned By: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☒ County Harnett ☐ State

CONTACT: Christopher G. Herndon, PE CWI

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				(___)_____	
Civil	Draper Aden Associates	Andrew P. Mericle, PE	041595	(919) 827-0864	americle@daa.com
Electrical				(___)_____	
Fire Alarm				(___)_____	
Plumbing	Coastal Plains Engineering, PA	Christopher S. Locklear, PE	020193	(910) 521-7213	coastalplainseng@gmail.com
Mechanical				(___)_____	
Sprinkler-Standpipe				(___)_____	
Structural	Draper Aden Associates	Christopher G. Herndon, PE CWI	043810	(919) 827-0864	cherndon@daa.com
Retaining Walls >5' High				(___)_____	
Other				(___)_____	

("Others" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC CODE FOR: ☒ New Construction ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core
☐ Phased Construction – Shell/Core
☐ Renovation

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED:(date) _____ **ORIGINAL OCCUPANCY(S)** (Ch. 3):_____
RENOVATED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3):_____

RISK CATEGORY (table 1604.5) **Current:** ☐ I ☒ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☒ V-B
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes (Primary) **Flood Hazard Area:** ☒ No ☐ Yes
Special Inspections Required: ☐ No ☒ Yes

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 1.0
Seismic (I_E) 1.0

Live Loads: Roof 20 psf
Mezzanine _____ psf
Floor 100 psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)
Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☒ C ☐ D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV
Spectral Response Acceleration S_S 20.5 %g S_1 9.3 %g
Site Classification (ASCE 7) ☐ A ☐ B ☒ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☒ Presumptive ☐ Historical Data
Basic structural system ☒ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 2,000 psf
Pile size, type, and capacity _____

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www.draperaden.com
• Hampton Roads, VA
• Fayetteville, NC
• Northern Virginia
• Richmond, VA
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NC Firm License # F-1429

NORTH CAROLINA PROFESSIONAL SEAL 043810 8-11-22 ENGINEER CHRISTOPHER G. HERNDON

APPENDIX B
Lexington Plantation Pool House
400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: CGH
DRAWN BY: CGH
CHECKED BY: DWS
SCALE:
DATE: 8/11/22
PROJECT NUMBER: 2101033

S0.2

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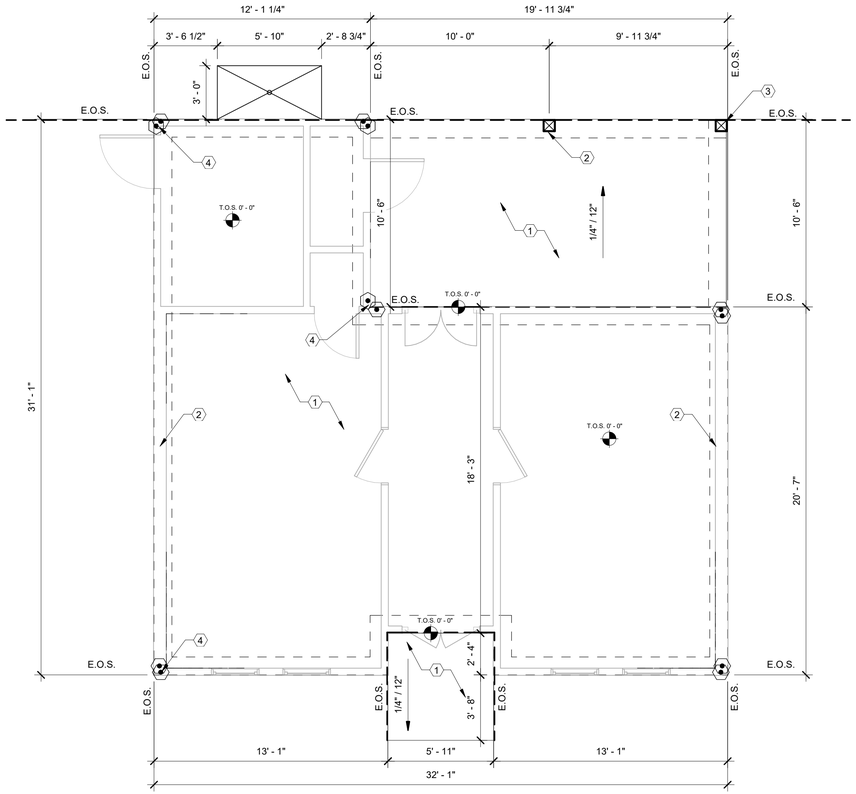


FOUNDATION PLAN

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

FOUNDATION PLAN GENERAL NOTES:

1. SEE SHEET S0.1 FOR GENERAL STRUCTURAL NOTES.
2. SEE ARCH. PLAN FOR TYPICAL WALL SECTION
3. CONTRACTOR TO COORDINATE ALL DIMENSIONS, ELEVATIONS AND OPENINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO EXECUTING WORK.
4. REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE MATERIAL REQUIREMENTS.
5. TYPICAL PERIMETER FOUNDATION CONSTRUCTION IS 18" DEEP BY 12" WIDE TURNDOWN SLAB REINFORCED W/ (2) #5 CONT., BOT..
6. TYPICAL ANCHOR BOLT OF EXT. STUD WALL SILL PLATE: 5/8" DIA. ANCHOR BOLTS @ 6'-0"o.c. MAX. w/ MIN. 9" EMBEDMENT.
7. TYPICAL LAP SPLICE FOR REBAR: 48 BAR DIAMETERS.

FOUNDATION PLAN KEYNOTES:

⟨1⟩ - 4" CONC. SLAB ON GRADE REINFORCED W/ 6X6-W1.4XW1.4 MID-DEPTH OVER 10 MIL VAPOR BARRIER ON 4" COMPACTED POROUS FILL.

⟨2⟩ - TURNDOWN SLAB AT PERIMETER, TYP. SEE "FOUNDATION PLAN GENERAL NOTES"

⟨3⟩ - 8X8 PRESSURE TREATED POST, TYP. SECURE TO CONC. SLAB W/ SIMPSON CPT88Z CONCEALED POST TIE W/ (2) 1/2"ø HOT DIP GALVANIZED THREADED RODS W/ HILTI HIT-HY200 ADHESIVE, MIN. EMBED 6".

⟨4⟩ - SYMBOL DENOTES HOLD DOWN AT THIS LOCATION, TYP.. SEE "SHERWALL NOTE" THIS SHEET FOR MORE INFO

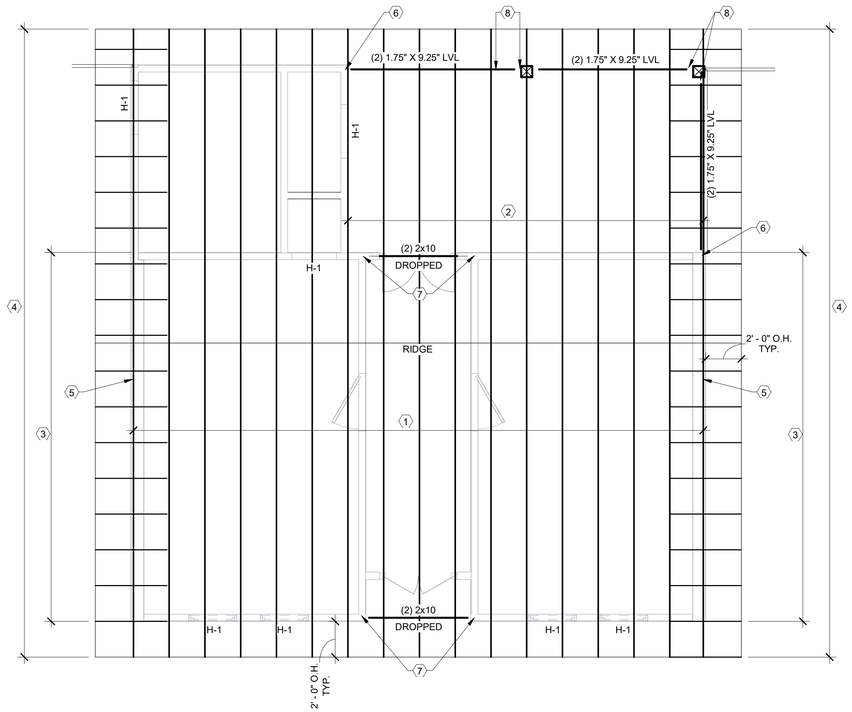
⟨5⟩ - OUTDOOR SHOWER, SLOPE TO DRAIN ALL SIDES, TYP.

NOTE:
LATERAL BRACING SYSTEM - LIGHT FRAME WOOD WALLS WITH WOOD SHEAR PANELS

SHEARWALL NOTE:
ALL EXTERIOR WALLS TO BE CONSTRUCTED THUS:
WALL STUDS & WALL SHEATHING PER "DESIGN ITEMS" THIS SHEET.
5/8" DIA. ANCHOR BOLTS W/ 1/4"x3"x3" PLATE WASHERS TO BE INSTALLED @ 6'-0"o.c. (MAX.) & WITHIN 1'-0" (MAX.) FROM CORNERS & SILL PLATE SPLICE LOCATIONS.

INSTALL (1) HDU2-SDS2.5 w/ DOUBLE STUD @ LOCATIONS INDICATED ON PLAN THUS: ⟨●⟩

AT HOLD DOWN LOCATIONS, SECURE W/ 5/8" DIA. THREADED RODS W/ HILTI HIT-HY200 ADHESIVE W/ 9" EMBEDMENT INTO TURNDOWN SLAB.



FRAMING PLAN

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

FRAMING PLAN GENERAL NOTES:

1. SEE SHEET S0.1 FOR GENERAL STRUCTURAL NOTES.
2. SEE ARCH. PLAN FOR TYPICAL WALL SECTION
3. PROVIDE SOLID BLOCKING BETWEEN TRUSSES AT BEARING LOCATIONS @ 4'-0" O.C. (MAX), TYP.
4. BRACE TOP OF ALL INTERIOR STUD WALLS TO STRUCTURE ABOVE.
5. ALL WOOD IN CONTACT w/ CONCRETE OR EXPOSED TO WEATHER TO BE TREATED.
6. COORDINATE BRIDGING REQUIREMENTS FOR PRE-ENGINEERED FRAMING w/ MANUFACTURER.

DESIGN ITEMS:

EXTERIOR WALLS:	2x4 STUDS @ 16"o.c. (MAX), U.N.O.	
EXTERIOR WALL SHEATHING:	7/16" PLYWOOD SHEATHING (1-SIDED)	
FASTENING:	8d NAILS	@ 6"o.c. ALONG PANEL EDGES @ 12"o.c. AT INTERMEDIATE SUPPORTS
ROOF SHEATHING:	1/2" PLYWOOD	
FASTENING:	8d NAILS	@ 6"o.c. ALONG PANEL EDGES @ 12"o.c. AT INTERMEDIATE SUPPORTS

FRAMING PLAN KEYNOTES:

⟨1⟩ - PRE-ENGINEERED WOOD ROOF TRUSSES @ 2'-0" O.C. (MAX.), TYP., U.N.O.

⟨2⟩ - ROOF TRUSSES BEAR ON WALL/BEAM BELOW, TYP. @ THIS LOCATION ONLY. PROVIDE FULL HEIGHT TRUSS BLOCKS PER MANUF. @ 2'-0" O.C. BTWN. TRUSSES TO TRANSFER LOAD TO SHEARWALL BELOW, TYP.

⟨3⟩ - 2X8 STUDS @ 1'-4" O.C. (MAX.), TYP.

⟨4⟩ - 2X4 OUTRIGGERS @ 2'-0" O.C. (MAX.), TYP.

⟨5⟩ - STEP DOWN GABLE END TRUSS TO ALLOW FOR 2X4 OUTRIGGERS

⟨6⟩ - (3) 2X STUDS UNDER PORCH BAND BRG. STUD SIZE TO MATCH WALL STUDS AT BEARING LOCATIONS

⟨7⟩ - (2) 2X4 STUDS AT BEAM BEARING LOCATION

⟨8⟩ - SECURE BEAMS TO COL. W/ SIMPSON HUC410 HANGERS, TYP.

ROOF CONNECTION SCHEDULE

CONDITION	CONNECTION REQ'D
ROOF TRUSSES @ 2'-0" O.C.	H2.5A
2X4 OUTRIGGERS TO STEP DOWN GABLE END TRUSS	H2.5A
2X4 OUTRIGGERS TO ROOF TRUSS	A35 CLIP

NOTES:
- ALL HANGERS, STRAPS & TIES REFERENCED IN TABLE ABOVE ARE STANDARD CONNECTORS MANUFACTURED BY SIMPSON STRONG TIE. ALTERNATIVE HANGERS ARE TO BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION.
- ALL CONNECTORS & FASTENERS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED OR STAINLESS STEEL, TYP.

WOOD HEADER SCHEDULE

HEADER MARK	HEADER DESCRIPTION	SUPPORT EA. END
H-1	(2) 2X6	(2) JACK STUDS

NOTES:
- ALL HEADERS TO BEAR ON A MIN. OF (2) JACK STUDS EA. END
- FOR OPENINGS IN EXTERIOR WALLS UNDER 4'-0" USE (2) FULL HEIGHT STUDS EA. END
- PROVIDE 2X4 PLATE TOP & BOT OF ALL HEADERS, TYP.
- INSTALL 1/2" SHEATHING SPACER BETWEEN HEADER PLIES AS REQ'D, TYP.

ROOF TRUSSES TO BE PRE-ENGINEERED WOOD TRUSSES SPACED @ 2'-0"o.c. (MAX.) UNLESS NOTED OTHERWISE.
SEE GENERAL STRUCTURAL NOTES FOR OTHER REQ. (TYP.)

NOTE:
FINAL SIGNED AND SEALED TRUSS CALCULATIONS TO BE REVIEWED BY S.E.R. PRIOR TO FABRICATION FOR COORDINATION w/ BUILDING STRUCTURAL REQUIREMENTS.

NOTE:
PROVIDE PERMANENT TRUSS BOTTOM CHORD BRACING:
GYPSUM BOARD SHEATHING

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043810 8-11-22 CHRISTOPHER G. HERNDON

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• Richmond, VA
• Blacksburg, VA
• Charlottesville, VA

FOUNDATION & FRAMING PLANS
Lexington Plantation Pool House
400 Centennial Parkway Cameron, NC 28326

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: CGH
DRAWN BY: CGH
CHECKED BY: DWS
SCALE: As indicated
DATE: 8/11/22
PROJECT NUMBER: 2101033

S1.0

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LEXINGTON PLANTATION POOL

HARNETT COUNTY, NORTH CAROLINA

PARCEL DATA

OWNER/DEVELOPER:	VOLA, LLC PO BOX 1328 CARY, NC 27512
ZONING:	RA-20R
SETBACKS:	

30' - FRONT SETBACK- IF STREET R/W IS 60' OR MORE
35' - FRONT SETBACK - IF STREET R/W IS LESS THAN 60'
25' - REAR SETBACK
20' - CORNER SETBACK
10' /5' SIDE SETBACK

PIN:	9594-09-9184
DEED REFERENCE:	BOOK 2948, PAGE 429
FLOOD PLAIN INFO:	
ZONE:	X
MAP NUMBER:	3710958400J
EFFECTIVE DATE:	OCT 3, 2006
PARCEL AREA:	3.61 ACRES
LAND USE CLASS:	COMPACT MIXED USE/LDR
PARKING:	44 STANDARD & 4 HANDICAP = 48 TOTAL
SWIMMING:	1/15 sf OF POOL, 1200SF - 80 SWIMMERS MAX
EST. WATER/SEWER USAGE:	10 GAL/DAY/SWIMMER - 800 GAL/DAY

NOTES:

- PARKING AREAS, DRIVE AISLES, ACCESS ROADS WILL HAVE AN ASPHALT OR CONCRETE SURFACE.
- PARKING AREAS AND DRIVE AISLES ARE REQUIRED TO BE SCREENED/LANDSCAPED.
- PROPOSED DISTURBED AREA IS UNDER ONE ACRE - NO EROSION CONTROL PLAN IS REQUIRED PER NCDEQ
- PROPERTY OWNER IS TO BE RESPONSIBLE FOR MAINTAINING PARKING AREAS, LANDSCAPING AND ALL OTHER SITE APPURTENANCES
- THIS DEVELOPMENT IS WITHIN THE FIVE MILE MILITARY CORRIDOR OVERLAY ZONE, AND MAY BE SUBJECT TO MILITARY TRAINING ACTIVITIES.
- OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PARKING AREAS, DRIVE AISLES, AND ALL LANDSCAPE BUFFERING.
- LANDSCAPE BUFFERING SHALL BE IN ACCORDANCE WITH THE HARNETT COUNTY ZONING ORDINANCE.
- PROJECT WILL BE SERVED BY HRW FOR WATER AND SEWER.
- THE WATER AND SEWER TAPS WILL BE INSTALLED BY PRIVATE UTILITY CONTRACTOR.
- PROPERTY IS NOT IN A WATERSHED DISTRICT.

BUFFER REQUIREMENTS
ALL BUFFER TYPES SHALL INCLUDE:

1. A STAGGERED ROW OF LARGE MATURING TREES SPACED NOT MORE THAN 30 FEET APART; AND
2. LOW GROWING EVERGREEN SHRUBS, EVERGREEN GROUND COVER, OR MULCH COVERING THE BALANCE OF THE BUFFER AREA.

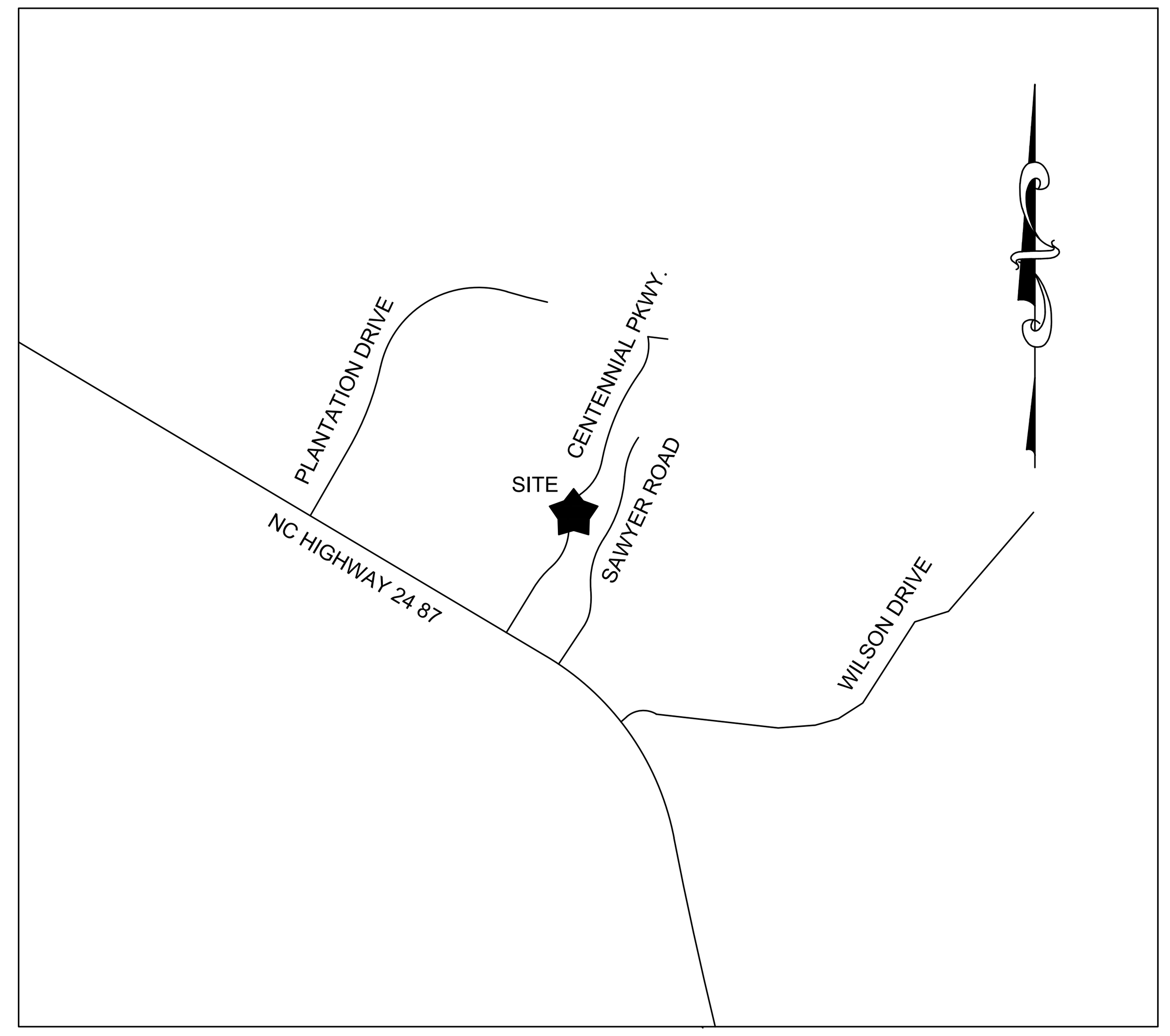
TYPE "A"- (MINIMUM WIDTH OF 15 FEET)
OPTION 1: A ROW OF EVERGREEN SHRUBS PLACED NOT MORE THAN FOUR(4) TO SIX(6) FEET APART WHICH WILL GROW TO FORM A CONTINUOUS HEDGE OF AT LEAST SIX(6) FEET IN HEIGHT WITHIN TW0(2) YEARS OF PLANTING; OR

OPTION 2: A MASONRY WALL LOCATED WITHIN THE REQUIRED BUFFER AREA; SUCH WALL SHALL BE A MINIMUM HEIGHT OF SIX(B) FEET (ABOVE FINISHED GRADE); AND, IF A BLOCK WALL, IT SHALL BE PAINTED ON ALL SIDES; OR AN OPAQUE FENCE SIX(6) FEET IT HEIGHT.

OPTION 3: A BERM MEETING THE REQUIREMENTS OF HARNETT COUNTY UDO

TYPE "D" -(MINIMUM WIDTH OF 15 FEET)
OPTION 1: A ROW OF EVERGREEN SHRUBS, 10 SHRUBS FOR EVERY REQUIRED LARGE MATURING TREE, PLACED NOT MORE FOUR(4) FEET APART WHICH WILL ROW TO FORM A CONTINUOUS HEDGE OF AT LEAST SIX (6) FEET IN HEIGHT WITHIN TWO(2) YEARS OF PLANTING; OR

OPTION 2: AN OPAQUE FENCE LOCATED WITHIN THE REQUIRED BUFFER AREA; SUCH FENCE SHALL. BE A MINIMUM HEIGHT IF SIX(B) FEET IN HEIGHT.



VICINITY MAP
NOT TO SCALE

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER
C2.0	GENERAL NOTES
C2.1	ESC NOTES
C2.2	HRW NOTES
C3.0	EXISTING CONDITIONS, DEMO, & ESC PLAN
C4.0	SITE & UTILITY PLAN
C5.0	GRADING PLAN
C6.0	ESC & SITE DETAILS
C7.0	HRW DETAILS

DRAPER ADEN ASSOCIATES REVIEW

THESE PLANS HAVE BEEN SUBJECTED TO TECHNICAL AND QUALITY REVIEWS BY:

NAME:		01.??.2022
PROJECT DESIGNER	SIGNATURE	DATE
NAME:		01.??.2022
PROJECT MANAGER	SIGNATURE	DATE
NAME:		01.??.2022
QUALITY REVIEWER	SIGNATURE	DATE

NORTH CAROLINA 811
North Carolina One-Call Center
811 Know what's below. Call before you dig.

AS THE OWNER OF RECORD, I HEREBY FORMALLY CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON THIS SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES

DATE OWNER SIGNATURE

NORTH CAROLINA PROFESSIONAL SEAL 041595 8.11.22 ENGINEER ANDREW P. MERICLE

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• Richmond, VA • Blacksburg, VA • Charlottesville, VA
• Hampton Roads, VA • Fayetteville, NC • Northern Virginia • Virginia Beach, VA

COVER
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SCALE:	NONE
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

C1.0

GENERAL NOTES

1. DIMENSIONS AND RADII ARE TO EDGE OF PAVEMENT, WHERE APPLICABLE, UNLESS OTHERWISE INDICATED.
2. DIMENSIONS AT BUILDING ARE TO OUTSIDE FACE, UNLESS OTHERWISE INDICATED.
3. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM THE LOCAL AND STATE AGENCIES.
4. ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND AT HIS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
5. ALL PAVING MATERIALS AND DRAINAGE STRUCTURES SHALL BE BUILT AND INSTALLED IN ACCORDANCE WITH NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
6. THE LOCATION OF EXISTING SEWER, WATER OR GAS LINES, CONDUITS OR OTHER STRUCTURES ACROSS, UNDERNEATH, OR OTHERWISE ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND IF SHOWN ARE ONLY APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS, IF THERE APPEARS TO BE A CONFLICT, OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS. FOR ASSISTANCE IN LOCATING EXISTING UTILITIES CALL "NC ONE CALL", DIAL 811.
7. ALL WATER AND SEWER CONSTRUCTION AND MATERIALS SHALL CONFORM WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE HARNETT REGIONAL WATER.
8. WHERE PAVEMENT IS BEING REMOVED, THE CONTRACTOR SHALL REMOVE AGGREGATE BASE MATERIAL TO SUB-GRADE.
9. DAMAGE TO UTILITIES (INCLUDING UNDERGROUND) OR PROPERTY OF OTHERS BY CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS BY CONTRACTOR AT NO COST TO OWNER.
10. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO LIKE-NEW CONDITION.
11. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITION.
12. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY INSPECTORS.
13. PARKING SPACES SHALL BE DELINEATED BY FOUR INCH WIDE WHITE TRAFFIC PAINT.
14. LANDSCAPING AND SITE IMPROVEMENTS WILL BE INSTALLED AND MAINTAINED SO AS NOT TO INTERFERE WITH SIGHT DISTANCE NEEDS OF DRIVERS WITHIN THE PARKING AREA AND AT ENTRANCE/EXIT LOCATIONS.
15. THE CONTRACTOR SHALL NOTIFY THE ALL APPLICABLE REGULATORY AGENCIES AND THE ENGINEER AT LEAST 24 HOURS PRIOR TO STARTING WORK ON THIS PROJECT.
16. UNLESS OTHERWISE NOTED, ALL CONCRETE PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS III.
17. ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY (29 CFR PART 1926).
18. VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
19. DEVIATIONS FROM, OR CHANGES TO THESE PLANS WILL NOT BE ALLOWED.
20. MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO THE PLANS IF NECESSARY. THE EXISTENCE AND/OR LOCATION OF UTILITIES SHOWN ON THESE PLANS MAY BE ONLY APPROXIMATELY CORRECT. TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. REPAIR AT YOUR OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. IF A UTILITY IS DAMAGED DURING CONSTRUCTION, STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER.
21. PROPERLY SECURE THE CONSTRUCTION AREA AT ALL TIMES AGAINST UNAUTHORIZED ENTRY AND ADEQUATELY PROTECT EQUIPMENT, MATERIALS, AND COMPLETED WORK FROM THEFT AND VANDALISM. THE OWNER IS NOT RESPONSIBLE FOR THE LOSS OF ANY MATERIAL STORED AT THE SITE.

GENERAL CONSTRUCTION AND GEOTECHNICAL NOTES

ENGINEERED FILL

1. ALL CONTROLLED FILL ZONES ARE TO BE MONITORED BY A FULL TIME GEOTECHNICAL ENGINEERING SERVICES FIRM.
2. ENGINEERED FILLS SHALL BE PROPERLY PLACED ACCORDING TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
3. ALL SUMMARY REPORTS FROM THE GEOTECHNICAL ENGINEER REPRESENTING THE PROJECT MUST STATE HIS PROFESSIONAL OPINION ON THE SATISFACTORILY COMPLETED PHASES OF CONSTRUCTION SUCH AS; SLOPE CUTS, SUBDRAINAGE SYSTEMS, PREPARATION OF SUBGRADES AND COMPACTION OF EARTH FILLS.
4. NO FILLS SHALL HAVE ZONES THAT EXCEED TWO (2) FEET IN ELEVATION WITHOUT CONDUCTING COMPACTION TEST AND OBTAINING RESULTS OF 95% OR GREATER.
5. THE GEOTECHNICAL ENGINEER MUST SUBMIT A DETAILED ANALYSIS, ITEMIZING THE FIELD DENSITY TEST RESULTS. THIS REPORT SHALL BE ACCOMPANIED WITH A COPY OF THE SITE PLAN SHEET AND INDICATE THE TEST LOCATIONS AND ELEVATIONS. THE GEOTECHNICAL ENGINEER MUST PROVIDE ENOUGH DESIGNATED TESTING IN ALL FILL ZONES TO ADEQUATELY EXAMINE AND CERTIFY THE INTEGRITY OF THE FILL.
6. THE GEOTECHNICAL ENGINEER MUST SUBMIT A CERTIFIED BUILDING PAD REPORT FOR EACH FILL PAD LOCATION. THIS REPORT SHALL PROFILE THE FILL MATERIAL PLACEMENT AND PROVIDE THE COMPACTION TEST RESULTS. ALL REPORTS WILL BE ACCOMPANIED BY THE SITE PLAN, INDICATING THE TEST LOCATIONS AND ELEVATIONS.
7. NO BUILDING PADS IN FILL ZONES WILL HAVE STRATUMS EXCEEDING TWO (2) FEET IN ELEVATION WITHOUT TEST VERIFYING DENSITY.
8. THESE GEOTECHNICAL NOTES SHALL IN NO WAY LESSEN THE REQUIREMENTS OF THE SUBMITTED SOILS REPORT.

ROAD SUBGRADE

1. INSPECTION AND APPROVAL OF THE SUBGRADE WILL BE REQUIRED PRIOR TO THE PLACEMENT OF THE APPROVED PAVEMENT SECTION MATERIAL.
2. ANY CLAY DEPOSITS IN THE TOP TWO FEET OF THE SUBGRADE MUST BE REMOVED OR ADDRESSED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
3. SUBGRADE APPROVAL SHALL BE ACCOMPANIED BY THE SUPPORTING DOCUMENTATION VERIFYING DENSITY TEST RESULTS OF 95% OR GREATER.
4. THE ENTIRE SUBGRADE WILL HAVE BEEN PROOFROLLED IN THE PRESENCE OF THE SITE INSPECTOR AND GEOTECHNICAL REPRESENTATIVE. PROOFROLLING SHALL BE A RUBBER TIRE VEHICLE SUCH AS A LOADED TEN (10) TON TRUCK OF APPROVED COMPACTION EQUIPMENT.
5. THE FINAL SUBGRADE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND SITE INSPECTOR BEFORE PLACEMENT OF PAVEMENT SECTION MATERIALS.

GENERAL UTILITY NOTES

1. FIRE HYDRANT VALVE AND ALL VALVE BOXES SHALL HAVE CONCRETE DONUT INSTALLED AT GRADE.
2. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA; EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION AS INDICATED. ALTHOUGH, HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.
3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION SO THAT CONTRACTOR IS FAMILIAR AND UNDERSTANDS EXISTING CONDITIONS.
4. FIELD CHANGES MAY BE NECESSARY DUE TO EXISTING UTILITY LOCATIONS. THE ENGINEER AND HARNNET COUNTY DEPARTMENT OF PUBLIC UTILITIES SHALL BE CONTACTED BEFORE MAKING THESE CHANGES.
5. WATER LINE TO BE INSTALLED A MINIMUM OF 3 FEET BELOW GRADE.
6. WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION, IN WHICH CASE A VERTICAL SEPARATION OF AT LEAST 24" SHALL BE MAINTAINED BY EITHER LAYING THE WATER MAIN IN A SEPARATE TRENCH WITH THE BOTTOM AT LEAST 24" ABOVE THE SEWER OR LAYING THE WATER MAIN ON A BENCH IN THE SAME TRENCH AT LEAST 24" ABOVE THE SEWER.
7. WHERE A WATER MAIN CROSSES OVER A SEWER, MAINTAIN AT LEAST 24" VERTICAL SEPARATION BETWEEN THE PIPES. IF AN 24" VERTICAL SEPARATION IS NOT POSSIBLE, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS (DIP) AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FT ON EACH SIDE OF THE POINT OF CROSSING.
8. WHERE A WATER MAIN CROSSES UNDER A SEWER, MAINTAIN AT LEAST 24" VERTICAL SEPARATION BETWEEN THE PIPES. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS (DIP) AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FT ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION
CONSTRUCTION OF POOL HOUSE AND POOL WITH FENCING THE TOTAL AREA OF LAND DISTURBANCE ASSOCIATED WITH THIS PROJECT WILL BE 0.5 ACRES. NO SIGNIFICANT CHANGES TO THE EXISTING DRAINAGE AND HYDROLOGIC PATTERNS ARE PROPOSED.

EXISTING CONDITIONS
THE EXISTING SITE IS CLEARED.

DEVELOPMENT IMPACTS
THE DEVELOPMENT IMPACTS TO THE TOPOGRAPHY, SOILS, HYDROLOGY, AND GEOLOGY WILL BE MINOR.

CRITICAL EROSION AREAS
1. CARE MUST BE TAKEN TO PREVENT SEDIMENT FROM BEING TRACKED ONTO ADJACENT ROADWAYS.
2. CARE MUST BE TAKEN TO PREVENT SEDIMENTATION EXITING THE PROJECT SITE AREA.
3. CARE MUST BE TAKEN TO PREVENT SEDIMENTATION FROM COLLECTING IN THE EXISTING PARKING LOT.

STOCKPILING
TOPSOIL STOCKPILING IS NOT ANTICIPATED. SPOILS TO BE HAULED OFFSITE.

STRUCTURAL PRACTICES
CONSTRUCTION ENTRANCE
SILT FENCE
SILT FENCE OUTLET
TEMP. DIVERSION BERM
PIPE OUTLET PROTECTION
PERMANENT DIVERSION BERM
ROCK DOUGHNUT CULVERT INLET PROTECTION
TEMPORARY DITCH SEDIMENT TRAPS (NCDOT SEDIMENT DAM TYPE B)
TEMPORARY WATTLE CHECK DAMS
ROLLED EROSION CONTROL PRODUCTS (RECP)

VEGETATIVE PRACTICES
TOPSOILING
TEMPORARY SEEDING
PERMANENT SEEDING
MULCHING

MANAGEMENT STRATEGIES
1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING.
3. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
4. AFTER ACHIEVING ADEQUATE STABILIZATION AND UPON APPROVAL FROM THE NCDEQ INSPECTOR, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED.

PERMANENT STABILIZATION
THE DISTURBED AREAS WILL BE PERMANENTLY STABILIZED THROUGH THE USE OF IMPERVIOUS SURFACES AND PERMANENT SEEDING.

MANAGEMENT STRATEGIES
1. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES 1/3 THE WAY TO THE TOP OF THE BARRIER.
2. THE SEDIMENT TRAP AND BASIN SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

NORTH CAROLINA PROFESSIONAL SEAL 041595 8.11.22 ENGINEER ANDREW P. MERICLE

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GENERAL NOTES
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	-
DRAWN BY:	-
CHECKED BY:	
SCALE:	NONE
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

IMPLEMENTING THE DETAILS AND SPECIFICATIONS ON THIS PLAN SHEET WILL RESULT IN THE CONSTRUCTION ACTIVITY BEING CONSIDERED COMPLIANT WITH THE GROUND STABILIZATION AND MATERIALS HANDLING SECTIONS OF THE NCG01 CONSTRUCTION GENERAL PERMIT (SECTIONS E AND F, RESPECTIVELY). THE PERMITTEE SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE DELEGATED AUTHORITY HAVING JURISDICTION. ALL DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET MAY NOT APPLY DEPENDING ON SITE CONDITIONS AND THE DELEGATED AUTHORITY HAVING JURISDICTION.

SECTION E: GROUND STABILIZATION

REQUIRED GROUND STABILIZATION TIMEFRAMES (FOR HIGH QUALITY WATERSHEDS)

SITE AREA DESCRIPTION	STABILIZE WITHIN THIS MANY CALENDAR DAYS AFTER CEASING LAND DISTURBANCE	TIMEFRAME VARIATIONS
(a) PERIMETER DIKES, SWALES, DITCHES, AND PERIMETER SLOPES	7	NONE
(b) HIGH QUALITY WATER (HQW) ZONES	7	NONE
(c) SLOPES STEEPER THAN 3:1	7	NONE FOR HIGH QUALITY WATERSHEDS
(d) SLOPES 3:1 TO 4:1	7	-7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH AND WITH SLOPES STEEPER THAN 4:1 -7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND HQW ZONES
(e) AREAS WITH SLOPES FLATTER THAN 4:1	7	-7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND HQW ZONES

NOTE: AFTER THE PERMANENT CESSATION OF CONSTRUCTION ACTIVITIES, ANY AREAS WITH TEMPORARY GROUND STABILIZATION SHALL BE CONVERTED TO PERMANENT GROUND STABILIZATION AS SOON AS PRACTICABLE BUT IN NO CASE LONGER THAN 90 CALENDAR DAYS AFTER THE LAST LAND DISTURBING ACTIVITY. TEMPORARY GROUND STABILIZATION SHALL BE MAINTAINED IN A MANNER TO RENDER THE SURFACE STABLE AGAINST ACCELERATED EROSION UNTIL PERMANENT GROUND STABILIZATION IS ACHIEVED.

GROUND STABILIZATION SPECIFICATION

STABILIZE THE GROUND SUFFICIENTLY SO THAT RAIN WILL NOT DISLODGE THE SOIL. USE ONE OF THE TECHNIQUES IN THE TABLE BELOW:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. SELECT FLOCCULANTS THAT ARE APPROPRIATE FOR THE SOILS BEING EXPOSED DURING CONSTRUCTION, SELECTING FROM THE *NC DWR LIST OF APPROVED PAMS/FLOCCULANTS*.
2. APPLY FLOCCULANTS AT OR BEFORE THE INLETS TO EROSION AND SEDIMENT CONTROL MEASURES.
3. APPLY FLOCCULANTS AT THE CONCENTRATIONS SPECIFIED IN THE *NC DWR LIST OF APPROVED PAMS/FLOCCULANTS* AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
4. PROVIDE PONDING AREA FOR CONTAINMENT OF TREATED STORMWATER BEFORE DISCHARGING OFFSITE.
5. STORE FLOCCULANTS IN LEAK-PROOF CONTAINERS THAT ARE KEPT UNDER STORM-RESISTANT COVER OR SURROUNDED BY SECONDARY CONTAINMENT STRUCTURES.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC PLAN DOCUMENTATION

THE APPROVED E&SC PLAN AS WELL AS ANY APPROVED DEVIATION SHALL BE KEPT ON THE SITE. THE APPROVED E&SC PLAN MUST BE KEPT UP-TO-DATE THROUGHOUT THE COVERAGE UNDER THIS PERMIT. THE FOLLOWING ITEMS PERTAINING TO THE E&SC PLAN SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES DURING NORMAL BUSINESS HOURS.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. ADDITIONAL DOCUMENTATION TO BE KEPT ON SITE

IN ADDITION TO THE E&SC PLAN DOCUMENTS ABOVE, THE FOLLOWING ITEMS SHALL BE KEPT ON THE SITE AND AVAILABLE FOR INSPECTORS AT ALL TIMES DURING NORMAL BUSINESS HOURS, UNLESS THE DIVISION PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL:

(a) THIS GENERAL PERMIT AS WELL AS THE CERTIFICATE OF COVERAGE, AFTER IT IS RECEIVED.
(b) RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS TWELVE MONTHS. THE PERMITTEE SHALL RECORD THE REQUIRED OBSERVATIONS ON THE INSPECTION RECORD FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT INCLUDES ALL THE REQUIRED ELEMENTS. USE OF ELECTRONICALLY-AVAILABLE RECORDS IN LIEU OF THE REQUIRED PAPER COPIES WILL BE ALLOWED IF SHOWN TO PROVIDE EQUAL ACCESS AND UTILITY AS THE HARD-COPY RECORDS.

3. DOCUMENTATION TO BE RETAINED FOR THREE YEARS

ALL DATA USED TO COMPLETE THE E-NOI AND ALL INSPECTION RECORDS SHALL BE MAINTAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST. [40 CFR 122.41]

EQUIPMENT AND VEHICLE MAINTENANCE

1. MAINTAIN VEHICLES AND EQUIPMENT TO PREVENT DISCHARGE OF FLUIDS.
2. PROVIDE DRIP PANS UNDER ANY STORED EQUIPMENT.
3. IDENTIFY LEAKS AND REPAIR AS SOON AS FEASIBLE, OR REMOVE LEAKING EQUIPMENT FROM THE PROJECT.
4. COLLECT ALL SPENT FLUIDS, STORE IN SEPARATE CONTAINERS AND PROPERLY DISPOSE AS HAZARDOUS WASTE (RECYCLE WHEN POSSIBLE).
5. REMOVE LEAKING VEHICLES AND CONSTRUCTION EQUIPMENT FROM SERVICE UNTIL THE PROBLEM HAS BEEN CORRECTED.
6. BRING USED FUELS, LUBRICANTS, COOLANTS, HYDRAULIC FLUIDS AND OTHER PETROLEUM PRODUCTS TO A RECYCLING OR DISPOSAL CENTER THAT HANDLES THESE MATERIALS.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. NEVER BURY OR BURN WASTE. PLACE LITTER AND DEBRIS IN APPROVED WASTE CONTAINERS.
2. PROVIDE A SUFFICIENT NUMBER AND SIZE OF WASTE CONTAINERS (E.G DUMPSTER, TRASH RECEPTACLE) ON SITE TO CONTAIN CONSTRUCTION AND DOMESTIC WASTES.
3. LOCATE WASTE CONTAINERS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
4. LOCATE WASTE CONTAINERS ON AREAS THAT DO NOT RECEIVE SUBSTANTIAL AMOUNTS OF RUNOFF FROM UPLAND AREAS AND DOES NOT DRAIN DIRECTLY TO A STORM DRAIN, STREAM OR WETLAND.
5. COVER WASTE CONTAINERS AT THE END OF EACH WORKDAY AND BEFORE STORM EVENTS OR PROVIDE SECONDARY CONTAINMENT. REPAIR OR REPLACE DAMAGED WASTE CONTAINERS.
6. ANCHOR ALL LIGHTWEIGHT ITEMS IN WASTE CONTAINERS DURING TIMES OF HIGH WINDS.
7. EMPTY WASTE CONTAINERS AS NEEDED TO PREVENT OVERFLOW. CLEAN UP IMMEDIATELY IF CONTAINERS OVERFLOW.
8. DISPOSE WASTE OFF-SITE AT AN APPROVED DISPOSAL FACILITY.
9. ON BUSINESS DAYS, CLEAN UP AND DISPOSE OF WASTE IN DESIGNATED WASTE CONTAINERS.

PAINT AND OTHER LIQUID WASTE

1. DO NOT DUMP PAINT AND OTHER LIQUID WASTE INTO STORM DRAINS, STREAMS OR WETLANDS.
2. LOCATE PAINT WASHOUTS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
3. CONTAIN LIQUID WASTES IN A CONTROLLED AREA.
4. CONTAINMENT MUST BE LABELED, SIZED AND PLACED APPROPRIATELY FOR THE NEEDS OF SITE.
5. PREVENT THE DISCHARGE OF SOAPS, SOLVENTS, DETERGENTS AND OTHER LIQUID WASTES FROM CONSTRUCTION SITES.

PORTABLE TOILETS

1. INSTALL PORTABLE TOILETS ON LEVEL GROUND, AT LEAST 50 FEET AWAY FROM STORM DRAINS, STREAMS OR WETLANDS UNLESS THERE IS NO ALTERNATIVE REASONABLY AVAILABLE. IF 50 FOOT OFFSET IS NOT ATTAINABLE, PROVIDE RELOCATION OF PORTABLE TOILET BEHIND SILT FENCE OR PLACE ON A GRAVEL PAD AND SURROUND WITH SAND BAGS.
2. PROVIDE STAKING OR ANCHORING OF PORTABLE TOILETS DURING PERIODS OF HIGH WINDS OR IN HIGH FOOT TRAFFIC AREAS.
3. MONITOR PORTABLE TOILETS FOR LEAKING AND PROPERLY DISPOSE OF ANY LEAKED MATERIAL. UTILIZE A LICENSED SANITARY WASTE HAULER TO REMOVE LEAKING PORTABLE TOILETS AND REPLACE WITH PROPERLY OPERATING UNIT.

EARTHEN STOCKPILE MANAGEMENT

1. SHOW STOCKPILE LOCATIONS ON PLANS. LOCATE EARTHEN-MATERIAL STOCKPILE AREAS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS, SEDIMENT BASINS, PERIMETER SEDIMENT CONTROLS AND SURFACE WATERS UNLESS IT CAN BE SHOWN NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
2. PROTECT STOCKPILE WITH SILT FENCE INSTALLED ALONG TOE OF SLOPE WITH A MINIMUM OFFSET OF FIVE FEET FROM THE TOE OF STOCKPILE.
3. PROVIDE STABLE STONE ACCESS POINT WHEN FEASIBLE.
4. STABILIZE STOCKPILE WITHIN THE TIMEFRAMES PROVIDED ON THIS SHEET AND IN ACCORDANCE WITH THE APPROVED PLAN AND ANY ADDITIONAL REQUIREMENTS. SOIL STABILIZATION IS DEFINED AS VEGETATIVE, PHYSICAL OR CHEMICAL COVERAGE TECHNIQUES THAT WILL RESTRAIN ACCELERATED EROSION ON DISTURBED SOILS FOR TEMPORARY OR PERMANENT CONTROL NEEDS.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. OCCURRENCES THAT MUST BE REPORTED

PERMITTEES SHALL REPORT THE FOLLOWING OCCURRENCES:

(a) VISIBLE SEDIMENT DEPOSITION IN A STREAM OR WETLAND.

(b) OIL SPILLS IF:

- THEY ARE 25 GALLONS OR MORE,
- THEY ARE LESS THAN 25 GALLONS BUT CANNOT BE CLEANED UP WITHIN 24 HOURS,
- THEY CAUSE SHEEN ON SURFACE WATERS (REGARDLESS OF VOLUME), OR
- THEY ARE WITHIN 100 FEET OF SURFACE WATERS (REGARDLESS OF VOLUME).

(C) RELEASES OF HAZARDOUS SUBSTANCES IN EXCESS OF REPORTABLE QUANTITIES UNDER SECTION 311 OF THE CLEAN WATER ACT (REF: 40 CFR 110.3 AND 40 CFR 117.3) OR SECTION 102 OF CERCLA (REF: 40 CFR 302.4) OR G.S. 143-215.85.

(d) ANTICIPATED BYPASSES AND UNANTICIPATED BYPASSES.

(e) NONCOMPLIANCE WITH THE CONDITIONS OF THIS PERMIT THAT MAY ENDANGER HEALTH OR THE ENVIRONMENT.

2. REPORTING TIMEFRAMES AND OTHER REQUIREMENTS

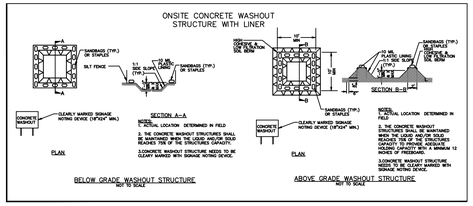
AFTER A PERMITTEE BECOMES AWARE OF AN OCCURRENCE THAT MUST BE REPORTED, HE SHALL CONTACT THE APPROPRIATE DIVISION REGIONAL OFFICE WITHIN THE TIMEFRAMES AND IN ACCORDANCE WITH THE OTHER REQUIREMENTS LISTED BELOW. OCCURRENCES OUTSIDE NORMAL BUSINESS HOURS MAY ALSO BE REPORTED TO THE DEPARTMENT'S ENVIRONMENTAL EMERGENCY CENTER PERSONNEL AT (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

SEDIMENT BASINS AND TRAPS THAT RECEIVE RUNOFF FROM DRAINAGE AREAS OF ONE ACRE OR MORE SHALL USE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN THESE DEVICES NEED TO BE DRAWN DOWN FOR MAINTENANCE OR CLOSE OUT UNLESS THIS IS INFEASIBLE. THE CIRCUMSTANCES IN WHICH IT IS NOT FEASIBLE TO WITHDRAW WATER FROM THE SURFACE SHALL BE RARE (FOR EXAMPLE, TIMES WITH EXTENDED COLD WEATHER). NON-SURFACE WITHDRAWALS FROM SEDIMENT BASINS SHALL BE ALLOWED ONLY WHEN ALL OF THE FOLLOWING CRITERIA HAVE BEEN MET:

(a) THE E&SC PLAN AUTHORITY HAS BEEN PROVIDED WITH DOCUMENTATION OF THE NON-SURFACE WITHDRAWAL AND THE SPECIFIC TIME PERIODS OR CONDITIONS IN WHICH IT WILL OCCUR. THE NON-SURFACE WITHDRAWAL SHALL NOT COMMENCE UNTIL THE E&SC PLAN AUTHORITY HAS APPROVED THESE ITEMS,
(b) THE NON-SURFACE WITHDRAWAL HAS BEEN REPORTED AS AN ANTICIPATED BYPASS IN ACCORDANCE WITH PART III, SECTION C, ITEM (2)(C) AND (D) OF THIS PERMIT,
(c) DEWATERING DISCHARGES ARE TREATED WITH CONTROLS TO MINIMIZE DISCHARGES OF POLLUTANTS FROM STORMWATER THAT IS REMOVED FROM THE SEDIMENT BASIN. EXAMPLES OF APPROPRIATE CONTROLS INCLUDE PROPERLY SITED, DESIGNED AND MAINTAINED DEWATERING TANKS, WEIR TANKS, AND FILTRATION SYSTEMS,
(d) VEGETATED, UPLAND AREAS OF THE SITES OR A PROPERLY DESIGNED STONE PAD IS USED TO THE EXTENT FEASIBLE AT THE OUTLET OF THE DEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE,
(e) VELOCITY DISSIPATION DEVICES SUCH AS CHECK DAMS, SEDIMENT TRAPS, AND RIPRAP ARE PROVIDED AT THE DISCHARGE POINTS OF ALL DEWATERING DEVICES, AND
(f) SEDIMENT REMOVED FROM THE DEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE IS DISPOSED OF IN A MANNER THAT DOES NOT CAUSE DEPOSITION OF SEDIMENT INTO WATERS OF THE UNITED STATES.



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

CONCRETE WASHOUTS

1. DO NOT DISCHARGE CONCRETE OR CEMENT SLURRY FROM THE SITE.
2. DISPOSE OF, OR RECYCLE SETTLED, HARDENED CONCRETE RESIDUE IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS AND AT AN APPROVED FACILITY.
3. MANAGE WASHOUT FROM MORTAR MIXERS IN ACCORDANCE WITH THE ABOVE ITEM AND IN ADDITION PLACE THE MIXER AND ASSOCIATED MATERIALS ON IMPERVIOUS BARRIER AND WITHIN LOT PERIMETER SILT FENCE.
4. INSTALL TEMPORARY CONCRETE WASHOUTS PER LOCAL REQUIREMENTS, WHERE APPLICABLE. IF AN ALTERNATE METHOD OR PRODUCT IS TO BE USED, CONTACT YOUR APPROVAL AUTHORITY FOR REVIEW AND APPROVAL. IF LOCAL STANDARD DETAILS ARE NOT AVAILABLE, USE ONE OF THE TWO TYPES OF TEMPORARY CONCRETE WASHOUTS PROVIDED ON THIS DETAIL.
5. DO NOT USE CONCRETE WASHOUTS FOR DEWATERING OR STORING DEFECTIVE CURB OR SIDEWALK SECTIONS. STORMWATER ACCUMULATED WITHIN THE WASHOUT MAY NOT BE PUMPED INTO OR DISCHARGED TO THE STORM DRAIN SYSTEM OR RECEIVING SURFACE WATERS. LIQUID WASTE MUST BE PUMPED OUT AND REMOVED FROM PROJECT.
6. LOCATE WASHOUTS AT LEAST 50 FEET FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE. AT A MINIMUM, INSTALL PROTECTION OF STORM DRAIN INLET(S) CLOSEST TO THE WASHOUT WHICH COULD RECEIVE SPILLS OR OVERFLOW.
7. LOCATE WASHOUTS IN AN EASILY ACCESSIBLE AREA, ON LEVEL GROUND AND INSTALL A STONE ENTRANCE PAD IN FRONT OF THE WASHOUT. ADDITIONAL CONTROLS MAY BE REQUIRED BY THE APPROVING AUTHORITY.
8. INSTALL AT LEAST ONE SIGN DIRECTING CONCRETE TRUCKS TO THE WASHOUT WITHIN THE PROJECT LIMITS. POST SIGNAGE ON THE WASHOUT ITSELF TO IDENTIFY THIS LOCATION.
9. REMOVE LEAVINGS FROM THE WASHOUT WHEN AT APPROXIMATELY 75% CAPACITY TO LIMIT OVERFLOW EVENTS. REPLACE THE TARP, SAND BAGS OR OTHER TEMPORARY STRUCTURAL COMPONENTS WHEN NO LONGER FUNCTIONAL. WHEN UTILIZING ALTERNATIVE OR PROPRIETARY PRODUCTS, FOLLOW MANUFACTURER'S INSTRUCTIONS.
10. AT THE COMPLETION OF THE CONCRETE WORK, REMOVE REMAINING LEAVINGS AND DISPOSE OF IN AN APPROVED DISPOSAL FACILITY. FILL PIT, IF APPLICABLE, AND STABILIZE ANY DISTURBANCE CAUSED BY REMOVAL OF WASHOUT.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. STORE AND APPLY HERBICIDES, PESTICIDES AND RODENTICIDES IN ACCORDANCE WITH LABEL RESTRICTIONS.
2. STORE HERBICIDES, PESTICIDES AND RODENTICIDES IN THEIR ORIGINAL CONTAINERS WITH THE LABEL, WHICH LISTS DIRECTIONS FOR USE, INGREDIENTS AND FIRST AID STEPS IN CASE OF ACCIDENTAL POISONING.
3. DO NOT STORE HERBICIDES, PESTICIDES AND RODENTICIDES IN AREAS WHERE FLOODING IS POSSIBLE OR WHERE THEY MAY SPILL OR LEAK INTO WELLS, STORMWATER DRAINS, GROUND WATER OR SURFACE WATER. IF A SPILL OCCURS, CLEAN AREA IMMEDIATELY.
4. DO NOT STOCKPILE THESE MATERIALS ONSITE.

HAZARDOUS AND TOXIC WASTE

1. CREATE DESIGNATED HAZARDOUS WASTE COLLECTION AREAS ON-SITE.
2. PLACE HAZARDOUS WASTE CONTAINERS UNDER COVER OR IN SECONDARY CONTAINMENT.
3. DO NOT STORE HAZARDOUS CHEMICALS, DRUMS OR BAGGED MATERIALS DIRECTLY ON THE GROUND.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

SELF-INSPECTIONS ARE REQUIRED DURING NORMAL BUSINESS HOURS IN ACCORDANCE WITH THE TABLE BELOW. WHEN ADVERSE WEATHER OR SITE CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION MAY BE DELAYED UNTIL THE NEXT BUSINESS DAY ON WHICH IT IS SAFE TO PERFORM THE INSPECTION. IN ADDITION, WHEN A STORM EVENT OF EQUAL TO OR GREATER THAN 1.0 INCH OCCURS OUTSIDE OF NORMAL BUSINESS HOURS, THE SELF-INSPECTION SHALL BE PERFORMED UPON THE COMMENCEMENT OF THE NEXT BUSINESS DAY. ANY TIME WHEN INSPECTIONS WERE DELAYED SHALL BE NOTED IN THE INSPECTION RECORD.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: THE RAIN INSPECTION RESETS THE REQUIRED 7 CALENDAR DAY INSPECTION REQUIREMENT.

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS REQUIRED DURING CONSTRUCTION IN ACCORDANCE WITH THE CURRENT EDITION OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL MANUAL. ALL DEVICES REFERRED TO IN THESE PLANS CAN BE FOUND IN THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL MANUAL.
2. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED AND MULCHED PER THE NPDES SCHEDULE AFTER REACHING FINAL GRADE. AREAS WHICH HAVE BEEN DISTURBED AND HAVE NOT REACHED FINAL GRADE, BUT WHICH ARE TO REMAIN UNDISTURBED FOR LONGER THAN 7 DAYS ARE TO BE TEMPORARILY SEEDED AND MULCHED PER THE NPDES SCHEDULE. AS UPSTREAM AREAS ARE STABILIZED WITH PERMANENT GROUND COVER, DOWNSTREAM TEMPORARY DEVICES ARE TO BE REMOVED. CONTRACTOR SHALL FOLLOW THE STABILIZATION TIME TABLE INCLUDED IN THIS SET OF DRAWINGS.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERIODICALLY INSPECT ALL SEDIMENT AND EROSION CONTROL DEVICES AND ENSURE THAT THEY ARE IN GOOD WORKING ORDER. AT A MINIMUM, ALL DEVICES SHALL BE INSPECTED DAILY AND AFTER MAJOR RAINFALL EVENTS. ANY DEVICE NEEDING REPAIRS SHALL BE REPAIRED WITHIN 24 HOURS.
4. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES IF DURING THE COURSE OF CONSTRUCTION THE ENGINEER OR NCDEQ INSPECTOR DETERMINES THAT THEY ARE REQUIRED.
5. SILT SHALL BE REMOVED FROM SILT FENCES WHEN THE SILT REACHES APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
6. THE CONTRACTOR SHALL PERIODICALLY TOP DRESS THE CONSTRUCTION ENTRANCE WITH CLEAN STONE. IF THE CONSTRUCTION ENTRANCE FAILS TO REMOVE DIRT FROM THE TIRES OF VEHICLES ENTERING A PUBLIC RIGHT-OF-WAY A WASH RACK SHALL BE INSTALLED AND THE TIRES WASHED. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ANY REQUIRED WATER FOR THE WASHING OF TIRES. DIRT TRACKED ONTO THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
7. ALL EROSION AND SILTATION MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.
8. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED PER THE NPDES SCHEDULE AFTER BACKFILL. NO MORE THAN FIVE HUNDRED FEET OF TRENCH IS TO BE OPEN AT ONE TIME.
9. ALL TEMPORARY EARTH BERMS, DIVERSIONS, AND SILT DAMS ARE TO BE MULCHED AND SEEDED FOR VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO STOCKPILES ON SITE AS WELL AS SOIL (INTENTIONALLY) TRANSPORTED FROM THE PROJECT SITE.
10. ELECTRIC POWER, TELEPHONE, GAS SUPPLY, AND OTHER UTILITY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED IMMEDIATELY AFTER BACKFILL.
11. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY INLET PROTECTION PRACTICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
12. ANY DISTURBED AREA NOT PAVED, SODDED, OR BUILT UPON, IS TO BE SEEDED PER THE TEMPORARY AND PERMANENT SEEDING SCHEDULE INCLUDED IN THESE DRAWINGS. MODIFY AS APPLICABLE DEPENDING ON PROPOSED TIME OF CONSTRUCTION.
13. CONTRACTOR STAGING AREA(S) SHALL BE RETURNED TO BETTER THAN ORIGINAL CONDITIONS AT THE COMPLETION OF THE WORK.
14. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
15. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL SCHEDULE THE MEETING WITH THE HARNETT COUNTY INSPECTOR ASSIGNED TO THE PROJECT.
16. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL MANUAL AND THE NORTH CAROLINA SEDIMENTATION POLLUTION CONTROL ACT OF 1973.
17. ALL DISTURBED AREAS NOT BUILT UPON OR LANDSCAPED SHALL BE SEEDED IN ACCORDANCE WITH THE NEW STABILIZATION TIME FRAMES AND NOTE BELOW, AND SHALL RECEIVE PERMANENT GROUND COVER IN ACCORDANCE WITH NOTE BELOW.
18. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 15 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING; AND, A PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. G.S.113A-57(2); G.S. 113-57(3); 15A NCAC 048 0107(B). SEE STABILIZATION TIME TABLES THIS SHEET.

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CHECKED FOR DAMAGE, STABILITY AND OPERATION FOLLOWING EVERY RAINFALL EVENT PRODUCING 1/2 INCH OR MORE OF RUNOFF AND AT LEAST ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED. MAINTENANCE SPECIFIED IN STRUCTURE CONSTRUCTION SPECIFICATIONS SHALL BE PERFORMED. RECORDS OF THESE INSPECTIONS ARE TO BE MAINTAINED AND MADE AVAILABLE FOR INSPECTION BY NCDEQ, THE OWNER, AND ENGINEER ON SITE AT ALL TIMES.
2. DISTURBED AREAS LEFT INACTIVE BETWEEN PERIODS OF GRADING ACTIVITY SHALL BE TEMPORARILY SEEDED WITHIN 7 WORKING DAYS. NCG01 SECTION IIB (2).
3. PERMANENT GROUND COVER VEGETATION SHALL BE SHALL BE APPLIED TO ALL AREAS WITH TEMPORARY VEGETATION AND ALL UNCOVERED DISTURBED AREAS WITHIN 7 WORKING DAYS OR 90 CALENDAR DAYS, WHICHEVER IS SHORTER, AFTER COMPLETION OF GRADING.
3. PERMANENT GROUND COVER VEGETATION SHALL BE SHALL BE APPLIED TO ALL AREAS WITH TEMPORARY VEGETATION AND ALL UNCOVERED DISTURBED AREAS BEFORE THE CONCLUSION OF THE PROJECT.
4. ALL SEEDED AREAS WHERE VEGETATION IS DAMAGED OR COVER IS NOT ADEQUATE SHALL BE PREPARED AND RESEEDED AS NECESSARY TO PRODUCE A VIGOROUS, DENSE VEGETATIVE COVER.
5. RECORD DAILY RAINFALL AMOUNTS AND MAINTAIN IN AN ONSITE LOG.

SEAL 041595
8.11.22
ANDREW P. MERICLE

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ESC NOTES
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY: -
DRAWN BY: -
CHECKED BY:
SCALE: NONE
DATE: 4.26.22
PROJECT NUMBER: 2101033-01

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2019 HRW REQUIRED UTILITY NOTES

(REVISION 7 – NOVEMBER 2019)
THE FOLLOWING UTILITY NOTES SHOULD BE ADDED TO THE COVERSHEET OF UTILITY PLANS FOR PROJECTS LOCATED IN HARNETT COUNTY:

WATER

A. THE FIRE MARSHAL'S OFFICE SHALL APPROVE ALL HYDRANT TYPES AND LOCATIONS IN NEW SUBDIVISIONS. HOWEVER, HARNETT REGIONAL WATER (HRW) PREFERS THE CONTRACTORS TO INSTALL ONE OF THE FOLLOWING FIRE HYDRANTS:
  1. MUELLER - SUPER CENTURION 250 A-423 MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
  2. AMERICAN DARLING - MARK B-84-B MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
  3. WATEROUS - PACER B-67-250 MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE) OR APPROVED EQUAL FOR STANDARDIZATION.

B. FIRE HYDRANTS ARE INSTALLED AT CERTAIN ELEVATIONS. ANY GRADE CHANGE IN THE VICINITY OF ANY FIRE HYDRANT WHICH IMPEDES ITS OPERATION SHALL BECOME THE RESPONSIBILITY OF THE UTILITY CONTRACTOR FOR CORRECTION. CORRECTIONS WILL BE MONITORED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND THE HARNETT COUNTY FIRE MARSHAL.

C. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND PROVIDE THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE WATER LINE SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OF THE PROPOSED WATER LINES THAT WILL SERVE THIS PROJECT.

D. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM - 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.

E. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW AND THE UTILITY CONTRACTOR WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE REGISTERED LAND SURVEYOR (RLS) SHOULD STAKE OUT ALL LOT CORNERS AND THE GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OF THE WATER LINE(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING AND UTILITY CONSTRUCTION.

F. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE EXTENSION(S), AND ASSOCIATED WATER SERVICES IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.

G. THE WATER MAIN(S), FIRE HYDRANTS, SERVICE LINES, METER SETTERS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED IN STRICT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER (HRW). THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED WATER MAIN(S), WATER SERVICE LINES AND ALL ASSOCIATED METER SETTERS AND METER BOXES FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW WATER MAIN(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION (NCDEQ, DEH, PWS) AND ACCEPTED BY HRW.

H. PRIOR TO ACCEPTANCE, ALL SERVICES WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL METER BOXES MUST BE FLUSH WITH THE GROUND LEVEL AT FINISH GRADE AND THE METER SETTERS MUST BE A MINIMUM OF 8" BELOW THE METER BOX LID. METER SETTERS SHALL BE CENTERED IN THE METER BOX AND SUPPORTED BY BRICK, BLOCK OR STONE.

I. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S) CONSTRUCTED IN HARNETT COUNTY. THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.

J. POTABLE WATER MAINS CROSSING OTHER UTILITIES AND NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN THE POTABLE WATER MAIN AND ALL OTHER UTILITIES. NCDOT REQUIRES THE NEW WATER MAINS TO BE INSTALLED UNDER THE STORM WATER LINES. THE POTABLE WATER MAIN SHALL BE INSTALLED WITH TWENTY-FOUR (24") INCHES OF VERTICAL SEPARATION AND WITH DUCTILE IRON PIPE WHEN DESIGNED TO BE PLACED UNDER A NON-POTABLE WATER LINE SUCH AS SANITARY SEWER OR STORM SEWER LINES. IF THESE SEPARATIONS CANNOT BE MAINTAINED THEN THE WATER MAIN SHALL BE INSTALLED WITH DUCTILE IRON PIPE. BOTH THE POTABLE WATER MAIN AND THE NON-POTABLE WATER LINE MUST BE CAST IRON OR DUCTILE IRON PIPE (DIP) IF THE STATE MINIMUM SEPARATIONS CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE MUST BE LAID SO THE MECHANICAL JOINTS ARE AT LEAST (10') FEET FROM THE POINT WHERE THE POTABLE WATER MAIN CROSSES THE NON-POTABLE WATER LINE.

K. POTABLE WATER MAINS INSTALLED PARALLEL TO NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF TEN (10') FEET BETWEEN THE POTABLE WATER MAIN AND SANITARY SEWER MAINS, SEWER LATERALS AND SERVICES. THE HORIZONTAL SEPARATION BETWEEN THE POTABLE WATER MAIN AND ANY OTHER UTILITY OR STORM SEWER SHALL NOT BE LESS THAN FIVE (5') FEET. THE POTABLE WATER MAIN MUST BE DUCTILE IRON PIPE IF THIS HORIZONTAL SEPARATION OF TEN (10') FEET CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST TEN (10') FEET BEYOND THE POINT WHERE THE MINIMUM REQUIRED HORIZONTAL SEPARATION OF TEN (10') FEET CAN BE RE-ESTABLISHED.

L. METER SETTERS SHALL BE INSTALLED IN PAIRS ON EVERY OTHER LOT LINE WHERE POSSIBLE TO LEAVE ADEQUATE SPACE FOR OTHER UTILITIES TO BE INSTALLED AT A LATER TIME. THE METER SETTERS SHALL BE INSTALLED AT LEAST ONE (1') FOOT INSIDE THE RIGHT-OF-WAY AND AT LEAST THREE (3') TO FIVE (5') FEET FROM THE PROPERTY LINE BETWEEN THE LOTS.

M. HRW REQUIRES THAT METER BOXES FOR ¾" SERVICES SHALL BE 12" WIDE X 17" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH CAST IRON LIDS/COVERS. METER BOXES FOR 1" SERVICES SHALL BE 17" WIDE X 21" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS. METER BOXES FOR 2" SERVICES SHALL BE 20" WIDE X 32" LONG ABS PLASTIC BOXES AT LEAST 20" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS.

N. MASTER METERS MUST BE INSTALLED IN CONCRETE VAULTS SIZED FOR THE METER ASSEMBLY AND ASSOCIATED APPURTENANCES SO AS TO PROVIDE AT LEAST EIGHTEEN (18") INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE CONCRETE VAULT AND THE BOTTOM OF THE METER SETTER. THE MASTER METER MUST BE PROVIDED TEST PORTS IF THE METER IS NOT EQUIPPED WITH TEST PORTS FROM THE MANUFACTURER IN ACCORDANCE WITH THE HRW ESTABLISHED STANDARD SPECIFICATIONS AND DETAILS. DUCTILE IRON PIPE MUST BE USED FOR THE MASTER METER VAULT PIPING AND VALVE VAULT PIPING. THE UTILITY CONTRACTOR MUST PROVIDE SHOP DRAWINGS FOR THE METER VAULTS TO HRW PRIOR TO ORDERING THE CONCRETE VAULTS.

O. THE UTILITY CONTRACTOR WILL INSTALL POLYETHYLENE SDR-9 WATER SERVICE LINES THAT CROSS UNDER THE PAVEMENT INSIDE A SCHEDULE 40 PVC CONDUIT TO ALLOW FOR REMOVAL AND REPLACEMENT IN THE FUTURE. TWO (2) INDEPENDENT ¾" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - TWO (2") INCH SCHEDULE 40 PVC CONDUIT OR TWO (2) INDEPENDENT 1" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - THREE (3") INCH SCHEDULE 40 PVC CONDUIT, BUT EACH WATER SERVICE SHALL BE TAPPED DIRECTLY TO THE WATER MAIN. SPLIT SERVICES ARE NOT ALLOWED BY HRW.

P. THE WATER MAIN(S), FIRE HYDRANTS, GATE VALVES, SERVICE LINES, METER SETTERS AND ASSOCIATED APPURTENANCES MUST BE RATED FOR 200 PSI AND HYDROSTATICALLY PRESSURE TESTED TO 200 PSI. THE HYDROSTATIC PRESSURE TEST(S) MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR MUST NOTIFY HRW WHEN THEY ARE READY TO BEGIN FILLING IN LINES AND COORDINATE WITH HARNETT REGIONAL WATER TO WITNESS ALL PRESSURE TESTING.

Q. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE(S) PRIOR TO MAKING THE TAP ON THE EXISTING WATER MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE IN HARNETT COUNTY. ALL NEW WATER LINE EXTENSIONS MUST BEGIN WITH A RESILIENT WEDGE TYPE GATE VALVE SIZED EQUAL TO THE DIAMETER OF THE NEW WATER LINE EXTENSION IN ORDER TO PROVIDE A MEANS OF ISOLATION BETWEEN HARNETT REGIONAL WATER'S EXISTING WATER MAINS AND THE NEW WATER LINE EXTENSIONS UNDER CONSTRUCTION.

R. ALL WATER MAINS WILL BE CONSTRUCTED WITH SDR-21 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE RATED FOR AT LEAST 200 PSI OR GREATER. ALL PIPES MUST BE PROTECTED DURING LOADING, TRANSPORT, UNLOADING, STAGING, AND INSTALLATION. PVC PIPE MUST BE PROTECTED FROM EXTENDED EXPOSURE TO SUNLIGHT PRIOR TO INSTALLATION.

S. ALL WATER MAINS WILL BE FLUSHED AND DISINFECTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. ALL WATER SAMPLES COLLECTED FOR BACTERIA TESTING WILL BE COLLECTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND TESTED IN THE HRW LABORATORY.

T. ALL FITTINGS LARGER THAN TWO (2") INCHES DIAMETER SHALL BE DUCTILE IRON. HRW REQUIRES THAT MECHANICAL JOINTS BE ASSEMBLED WITH GRIP RINGS AS "MEGALUG" FITTINGS ARE NOT APPROVED BY HARNETT REGIONAL WATER FOR PIPE SIZES SMALLER THAN TWELVE INCHES (12") DIAMETER. PVC PIPE USED FOR WATER MAINS SHALL BE CONNECTED BY SLIP JOINT OR MECHANICAL JOINT WITH GRIP RINGS. GLUED PIPE JOINTS ARE NOT ALLOWED ON PVC PIPE USED FOR WATER MAINS IN HARNETT COUNTY.

U. HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL WATER LINES. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING.

V. THE UTILITY CONTRACTOR WILL PROVIDE PROFESSIONAL ENGINEER (PE) AND THE HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE FIELD DRAWINGS TO IDENTIFY THE INSTALLED LOCATIONS OF THE WATER LINE(S) AND ALL ASSOCIATED SERVICES. ALL CHANGE ORDERS MUST BE PRE-APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.

W. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED WATER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE WATER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS DURING WATER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.

X. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO HAVE A SIGNED NCDOT ENCROACHMENT AGREEMENT POSTED ON SITE AND NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED OR VERIFIED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.). THE UTILITY CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO THE SATISFACTION OF THE RELATED UTILITY COMPANY.

Y. THE UTILITY CONTRACTOR SHALL PROVIDE HRW WITH AT LEAST ONE (1) FIRE HYDRANT WRENCH AND ONE (1) BREAK-AWAY FLANGE KIT FOR EVERY SUBDIVISION WITH FIRE HYDRANTS DEVELOPED IN HARNETT COUNTY. THESE ITEMS MUST BE PROVIDED TO HRW BEFORE THE FINAL INSPECTION WILL BE SCHEDULED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. IN ADDITION, THE UTILITY CONTRACTOR SHALL INSTALL A 4" X 4" CONCRETE VALVE MARKER AT THE EDGE OF THE RIGHT-OF-WAY TO IDENTIFY THE LOCATION OF EACH GATE VALVE INSTALLED IN THE NEW WATER SYSTEM WITH THE EXCEPTION OF THE FIRE HYDRANT ISOLATION VALVES. THE CONTRACTOR SHALL MEASURE THE DISTANCE FROM THE CENTER OF THE CONCRETE MARKER TO THE CENTER OF THE VALVE BOX. THIS DISTANCE (IN LINEAR FEET) SHALL BE STAMPED ON THE BRASS PLATE LOCATED ON THE TOP OF THE CONCRETE VALVE MARKER. IN LIEU OF INSTALLING THE CONCRETE VALVE MARKERS, THE UTILITY CONTRACTOR MAY PROVIDE AT LEAST TWO MEASUREMENTS FROM TWO INDEPENDENT PERMANENT ABOVE GROUND STRUCTURES TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS TO IDENTIFY THE VALVE LOCATIONS. THE PROFESSIONAL ENGINEER (PE) MUST INCLUDE THESE MEASUREMENTS IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.

Z. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE DAMAGE FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE WATER SYSTEM IMPROVEMENTS HAVE BEEN ACCEPTED BY HARNETT REGIONAL WATER. HARNETT REGIONAL WATER WILL PROVIDE MAINTENANCE AND REPAIRS WHEN REQUESTED AND BILL THE DEVELOPER AND/OR UTILITY CONTRACTOR IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW WATER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE WATER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. THE FINAL INSPECTION OF WATER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.

AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO INSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ACCESSED TO THE DEVELOPER.

SANITARY SEWER

A. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND SUPPLY A COPY OF THE SEWER PERMIT FOR THE CONSTRUCTION AND OPERATION OF THE WASTEWATER COLLECTION SYSTEM TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE SANITARY SEWER LINE, SEWER LIFT STATION AND ASSOCIATED FORCE MAIN SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE SEWER PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE DURING THE CONSTRUCTION OF THE SEWER SYSTEM IMPROVEMENTS.

B. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WASTEWATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM - 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.

C. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. HRW WILL STAMP THE APPROVED PLANS AS "RELEASED FOR CONSTRUCTION" AND PROVIDE COPIES TO THE UTILITY CONTRACTOR. THE REGISTERED LAND SURVEYOR (RLS) SHALL STAKE OUT ALL LOT CORNERS AND ESTABLISH GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET AND SEWER LINE BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OR INSTALLATION OF THE MANHOLES, SANITARY SEWER GRAVITY LINE(S), SEWER LIFT STATIONS AND/OR SANITARY SEWER FORCE MAIN(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING OR UTILITY CONSTRUCTION.

D. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY GRAVITY SEWER LINE(S), MANHOLE(S), SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S) IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.

E. THE SANITARY SEWER LATERAL CONNECTIONS SHOULD BE INSTALLED 90° (PERPENDICULAR) TO THE SANITARY SEWER GRAVITY LINES WITH SCHEDULE 40 PVC PIPE. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE THE PROFESSIONAL ENGINEER (PE) WITH ACCURATE MEASUREMENTS FOR LOCATING SANITARY SEWER SERVICE LATERAL AND ASSOCIATED EACH SANITARY SEWER CLEAN-OUT. THESE MEASUREMENTS SHOULD BE TAKEN FROM THE NEAREST DOWNSTREAM MANHOLE UP ALONG THE SANITARY SEWER MAIN TO THE IN-LINE WYE FITTING (OR TAPPING SADDLE) AND THEN ANOTHER MEASUREMENT FROM THE IN-LINE WYE FITTING (OR TAPPING SADDLE) TO THE 4" X 4" LONG SWEEP COMBINATION WYE FITTING AT THE BOTTOM OF THE SEWER CLEAN-OUT STACK. THESE FIELD MEASUREMENTS MUST BE PROVIDED TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS FROM THE UTILITY CONTRACTOR FOR PROPER DOCUMENTATION IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.

F. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER GRAVITY LINE(S), SANITARY SEWER FORCE MAIN(S), SANITARY SEWER SERVICE LATERAL(S) AND ALL ASSOCIATED SEWER CLEAN-OUT(S) IN THE PROPOSED SANITARY SEWER SYSTEM FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER LINE(S) AND ASSOCIATED APPURTENANCES HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW. ALL NEW SANITARY SEWER LINES MUST HAVE AT LEAST THREE (3 FT.) FEET OF COVER AND EXTEND UNDER ALL EXISTING WATER MAIN AND STORM WATER LINES WITH A LEAST 24" OF VERTICAL CLEARANCE BELOW THE BOTTOM OF THE EXISTING WATER MAIN AND STORM WATER LINES.

G. THE SANITARY SEWER GRAVITY LINE(S), MANHOLE(S), SANITARY SEWER SERVICE LATERAL(S) AND ASSOCIATED CLEAN-OUT(S) SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. THE SANITARY SEWER GRAVITY LINE(S) MUST PNEUMATICALLY PRESSURE TESTED WITH COMPRESSED AIR AT 5 PSI AND THE SANITARY SEWER FORCE MAIN(S) MUST HYDROSTATICALLY PRESSURE TESTED WITH WATER OR AIR AT 200 PSI. SANITARY SEWER MANHOLES MUST BE VACUUM TESTED TO 10 INCHES OF MERCURY AND CANNOT DROP BELOW 9 INCHES IN 60 SECONDS FOR 4 FT. DIAMETER MANHOLES, 75 SECONDS FOR 5 FT. DIAMETER MANHOLES. ALL TESTS MENTIONED ABOVE MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND ENGINEER.

H. PRIOR TO ACCEPTANCE, ALL SEWER SERVICE LATERALS WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL SEWER CLEAN-OUTS MUST BE INSTALLED SO THE 4" X 4" LONG SWEEP COMBINATION WYE IS AT LEAST THREE (3') FEET BUT NO MORE THAN FOUR (4') FEET BELOW THE FINISH GRADE UNLESS OTHERWISE APPROVED IN WRITING BY HRW. THE SEWER CLEANOUTS SHALL HAVE A FOUR (4") SCHEDULE 40 PVC PIPE STUBBED UP FROM BOTH ENDS OF THE 4" X 4" LONG SWEEP COMBINATION WYE TO BE AT LEAST TWO (2') FEET ABOVE THE FINISH GRADE AND COVER EACH END WITH A FOUR (4") INCH TEMPORARY CAP TO KEEP OUT DIRT, SAND, ROCKS, WATER AND CONSTRUCTION DEBRIS. THE VERTICAL STACK ON EACH CLEAN-OUT MUST BE PROVIDED WITH A CONCRETE DONUT FOR PROTECTION.

I. ONCE THE SANITARY SEWER GRAVITY LINE(S) HAVE BEEN INSTALLED, PNEUMATICALLY PRESSURE TESTED AND IN PLACE FOR AT LEAST 30 DAYS, THE UTILITY CONTRACTOR MUST CONTACT THE HRW UTILITY CONSTRUCTION INSPECTOR TO WITNESS THE MANDREL TEST ON EACH PVC SANITARY SEWER GRAVITY LINE. THE UTILITY CONTRACTOR WILL NOTIFY HRW TO SCHEDULE THE MANDREL TESTING. THE MANDREL AND PROVING RING MUST BE SUPPLIED BY THE UTILITY CONTRACTOR. CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS (AT THE UTILITY CONTRACTOR'S EXPENSE) MAY BE REQUIRED BY THE HRW UTILITY CONSTRUCTION INSPECTOR IF THE MANDREL AND MIRROR TAMPING TESTING CANNOT BE COMPLETED WITH SATISFACTORY RESULTS. THE SANITARY SEWER LINES SHOULD BE FLUSHED CLEAN USING A SEWER BALL OF THE PROPER DIAMETER BEFORE ANY MANDREL TESTING CAN BE PERFORMED. THE UTILITY CONTRACTOR IS RESPONSIBLE TO REMOVE ALL DIRT, SAND, SILT, GRAVEL, MUD AND DEBRIS FROM THE NEWLY CONSTRUCTED SEWER LINES EXERCISING CARE TO KEEP THE HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER SYSTEMS CLEAN. SANITARY SEWER FORCE MAIN(S) SHALL BE PRESSURE TESTED TO 200 PSI FOR AT LEAST 2 HOURS LIKE WATER LINES.

J. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER SYSTEM(S) FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER SYSTEM(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW.

K. HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL SANITARY SEWER FORCE MAINS. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING. THE TRACER WIRE IS NOT REQUIRED FOR THE GRAVITY SEWER LINE(S) BETWEEN MANHOLES.

L. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE SEWER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE SEWER LINES AS WELL AS THE INSTALLED LOCATIONS OF THE MANHOLE(S), SANITARY SEWER GRAVITY LINE(S), SANITARY SEWER SERVICE LATERALS, CLEAN-OUTS, SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S). THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.

M. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.).

N. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH EXISTING UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED SANITARY SEWER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE SANITARY SEWER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION OF EXISTING UTILITIES AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS DURING SANITARY SEWER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.

O. WHEN MAKING A TAP ON AN EXISTING SEWER FORCE MAIN, THE UTILITY CONTRACTOR MUST HAVE A PERMIT FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) PRIOR TO BEGIN THE TAP WORK. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE AND GATE VALVE PRIOR TO MAKING THE TAP ON AN EXISTING SANITARY SEWER FORCE MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE ON SANITARY SEWER FORCE MAINS IN HARNETT COUNTY. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STYLE "CB" SEWER SADDLES WITH STAINLESS STEEL BANDS OR APPROVED EQUAL FOR ALL TAPS MADE ON EXISTING SANITARY SEWER GRAVITY LINES IN HARNETT COUNTY.

P. THE UTILITY CONTRACTOR SHALL PROVIDE A GREASE TRAP FOR EACH SANITARY SEWER SERVICE LATERAL THAT WILL BE CONNECTED TO A RESTAURANT, FOOD PROCESSING FACILITY AND ANY OTHER COMMERCIAL OR INDUSTRIAL FACILITY AS REQUIRED BY THE HARNETT COUNTY FAT, OIL & GREASE ORDINANCE. THE GREASE TRAP MUST BE RATED FOR A MINIMUM CAPACITY OF AT LEAST 1,000 GALLONS UNLESS OTHERWISE APPROVED IN WRITING BY THE HRW PRE-TREATMENT COORDINATOR. GARBAGE DISPOSALS SHOULD NOT BE INSTALLED IN HOMES AND BUSINESSES THAT DISCHARGE WASTEWATER TO THE HARNETT REGIONAL WATER'S SANITARY SEWER SYSTEM AS THEY ARE NOT APPROVED BY HRW.

Q. EACH SEWER LIFT STATION MUST BE PROVIDED WITH THREE PHASE POWER (AT LEAST 480 VOLTS) AND CONSTRUCTED TO MEET THE MINIMUM REQUIREMENTS OF THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE (NEC) AND HARNETT REGIONAL WATER STANDARD SPECIFICATIONS AND DETAILS. IF THREE PHASE POWER IS NOT AVAILABLE FROM THE POWER COMPANY OTHER ARRANGEMENTS MUST BE APPROVED BY HRW ENGINEERING PRIOR TO THE START OF CONSTRUCTION.

R. WHERE A NEW SANITARY SEWER FORCE MAIN IS CONNECTED TO AN EXISTING MANHOLE IN THE HARNETT REGIONAL WATER SEWER COLLECTIONS SYSTEM, THE UTILITY CONTRACTOR MUST PROVIDE A PROTECTIVE COATING (COAL TAR EPOXY) FOR THE INTERIOR SURFACES OF THE MANHOLE TO PROTECT IT AGAINST CORROSION, EROSION AND DETERIORATION FROM THE RELEASE OF SEWER GASES SUCH AS METHANE AND HYDROGEN SULFIDE.

S. THE SEWER LIFT STATION DESIGN AND ASSOCIATED EQUIPMENT MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS FOR HARNETT COUNTY SEWER LIFT STATIONS 2009 EDITION. EACH SANITARY SEWER LIFT STATION MUST BE CONSTRUCTED WITH AN ALL-WEATHER ACCESS ROAD THAT IS AT LEAST 20 FEET WIDE. THE LIFT STATION SITE MUST BE COVERED WITH WEED BLOCKING MATERIAL AND AT LEAST SIX (6") INCHES OF # 57 STONE (CRUSH AND RUN).

T. ONCE A SEWER LIFT STATION HAS BEEN INSTALLED, THE UTILITY CONTRACTOR IS RESPONSIBLE TO SCHEDULE A DRAW DOWN TEST WITH HRW ENGINEERING AND COLLECTIONS STAFF, THE PROFESSIONAL ENGINEER (PE), THE ELECTRICIAN, THE ORIGINAL EQUIPMENT MANUFACTURER'S (OEM) REPRESENTATIVES [FOR BOTH THE PUMPS AND THE GENERATOR]. THIS DRAW DOWN TEST MUST BE COMPLETED WITH POWER SUPPLIED FROM THE ELECTRICAL UTILITY COMPANY AND WITH POWER SUPPLIED BY THE EMERGENCY GENERATOR WITH SATISFACTORY RESULTS BEFORE FINAL INSPECTIONS ARE CONDUCTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.

U. ONCE THE UTILITY CONTRACTOR COMPLETES THE INSTALLATION OF A SEWER LIFT STATION, THE PROFESSIONAL ENGINEER (PE) MUST SUBMIT THE SEWER PERMIT CERTIFICATION AND AS-BUILT RECORD DRAWINGS TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND HRW FOR FINAL APPROVAL. THE UTILITY CONTRACTOR MUST SUPPLY HRW ENGINEERING STAFF WITH THREE ORIGINAL OPERATION & MAINTENANCE (O&M) MANUALS ALONG WITH THE ASSOCIATED PUMP CURVES AND ELECTRICAL SCHEMATICS FOR THE ASSOCIATED SEWER LIFT STATION EQUIPMENT INCLUDING ALL WARRANTY INFORMATION AND DOCUMENTATION.

V. ONCE THE UTILITY CONTRACTOR COMPLETES THE INSTALLATION OF A SEWER LIFT STATION, THE DEVELOPER MUST PAY HRW THE ESTABLISHED SYSTEM CONTROL AND DATA ACQUISITION (SCADA) FEES BEFORE THE SCADA SYSTEM WILL BE INSTALLED AT THE NEW SEWER LIFT STATION. THE SCADA SYSTEM MUST BE INSTALLED AND OPERATIONAL BEFORE THE UTILITIES MAY BE ACCEPTED BY HRW AND PLACED INTO OPERATION.

W. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE ALL NECESSARY EQUIPMENT AND DEVICES FOR THE TESTING AND INSPECTION OF THE SANITARY SEWER SYSTEM. THE EQUIPMENT AND DEVICES MAY INCLUDE BUT NOT LIMITED TO LAMPING WITH MIRRORS, MANDRELS, SEWER BALLS, PLUGS, AIR COMPRESSORS AND ASSOCIATED COMPRESSED AIR LINES. IF THE HRW UTILITY CONSTRUCTION INSPECTOR DEEMS THAT A CLOSED CIRCUIT VIDEO CAMERA INSPECTION OF THE NEWLY CONSTRUCTED SEWER SYSTEM IS NECESSARY, THEN ALL COSTS FOR THE CLOSED CIRCUIT CAMERA INSPECTION WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR. ALL CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS MUST BE RECORDED ON VHS TAPES THAT WILL RELEASED TO HRW FOR RECORD KEEPING, REVIEW AND APPROVAL OF THE SEWER SYSTEM.

X. ANY USE OF SEWER PLUGS TO TEMPORARILY BLOCK HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES MUST BE COORDINATED WITH THE HRW COLLECTIONS SUPERVISOR AT LEAST TWO (2) DAYS IN ADVANCE OF INSTALLING THE PLUGS. THE SEWER PLUGS MUST BE REMOVED AS SOON AS POSSIBLE ONCE THE NEW SANITARY SEWER LINES HAVE BEEN INSPECTED, PRESSURE TESTED, MANDREL TESTED, APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW TO ALLOW THE SEWER TO FLOW AS DESIGNED IN HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES OR WHEN SO ORDERED BY THE HRW COLLECTIONS SUPERVISOR TO LIMIT INTERRUPTIONS TO THE NORMAL FLOW OF THE SANITARY SEWER COLLECTION SYSTEM(S). THE UTILITY CONTRACTOR MUST PROVIDE THE PUMPS HOSES AND NECESSARY CONNECTORS FOR A TEMPORARY PUMP AROUND SETUP IF REQUIRED BY THE HRW COLLECTIONS SUPERVISOR. MR. RANDOLPH CLEGG, HRW COLLECTIONS SUPERVISOR MAY BE CONTACTED BETWEEN 8:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY AT (910) 893-7575 EXTENSION 3241.

Y. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE OR DAMAGE RESULTING FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE SEWER SYSTEM IMPROVEMENTS HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW SANITARY SEWER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE SANITARY SEWER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. HRW WILL PROVIDE MAINTENANCE AND WARRANTY REPAIRS IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. HRW WILL INVOICE THE DEVELOPER AND/OR UTILITY CONTRACTOR FOR MATERIALS AND LABOR IN SUCH CASES.

Z. IN DEVELOPMENTS AND PROJECTS THAT REQUIRE UTILITY EASEMENTS TO BE ESTABLISHED FOR FUTURE HRW RIGHT-OF-WAY, THE REGISTERED LAND SURVEYOR (RLS) MUST PROVIDE THE HRW RIGHT-OF-WAY AGENT WITH AN OFFICIAL COPY OF THE RECORDED PLAT AND LEGAL DESCRIPTION OF THE SAID EASEMENT AS RECORDED WITH THE HARNETT COUNTY REGISTER OF DEEDS. THE RECORDED DOCUMENTS MUST BE PROVIDED TO THE HRW RIGHT-OF-WAY AGENT BEFORE THE UTILITY IMPROVEMENTS WITHIN THE SAID EASEMENT CAN BE PLACED INTO OPERATION. ANY AND ALL EASEMENTS THAT MUST BE OBTAINED FROM ADJOINING PROPERTY OWNERS MUST BE PROVIDED TO HRW BY THE DEVELOPER AT NO COST TO HARNETT COUNTY. THE FINAL INSPECTION OF ALL SANITARY SEWER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.

AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO INSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ACCESSED TO THE DEVELOPER.

SEAL
041595
8.11.22
ANDREW P. MERICLE

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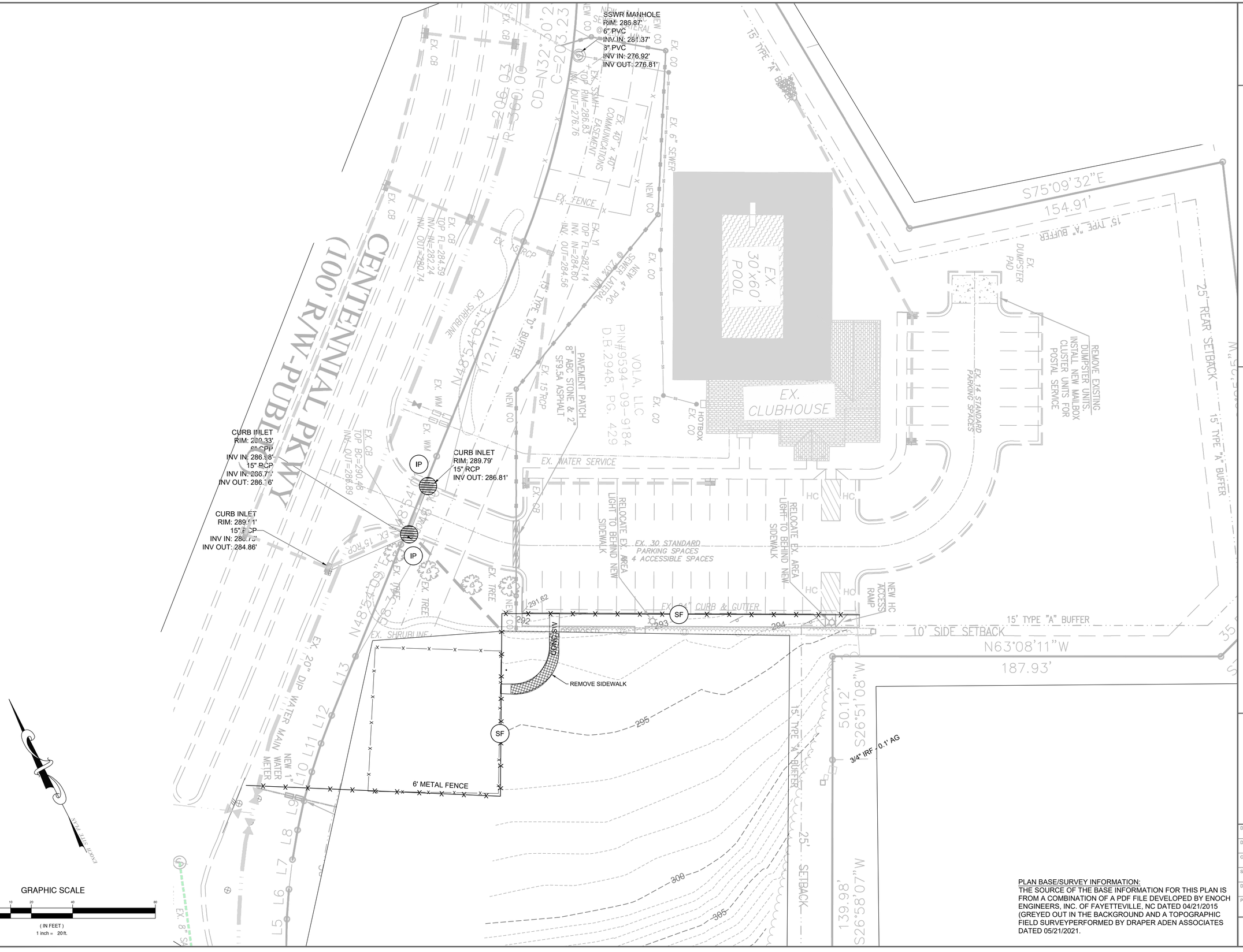
• Northern Virginia
• Virginia Beach, VA

HRW NOTES
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY: -
DRAWN BY: -
CHECKED BY:
SCALE: NONE
DATE: 4.26.22
PROJECT NUMBER: 2101033-01

C2.2



NORTH CAROLINA PROFESSIONAL ENGINEER ANDREW P. MERICLE
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• Virginia Beach, VA

EXISTING CONDITIONS, DEMO, & ESC PLAN
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	APM
DRAWN BY:	APM
CHECKED BY:	APM
SCALE:	1" = 20'
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

C3.0

PLAN BASE/SURVEY INFORMATION:
THE SOURCE OF THE BASE INFORMATION FOR THIS PLAN IS FROM A COMBINATION OF A PDF FILE DEVELOPED BY ENOCH ENGINEERS, INC. OF FAYETTEVILLE, NC DATED 04/21/2015 (GREYED OUT IN THE BACKGROUND AND A TOPOGRAPHIC FIELD SURVEYPERFORMED BY DRAPER ADEN ASSOCIATES DATED 05/21/2021.

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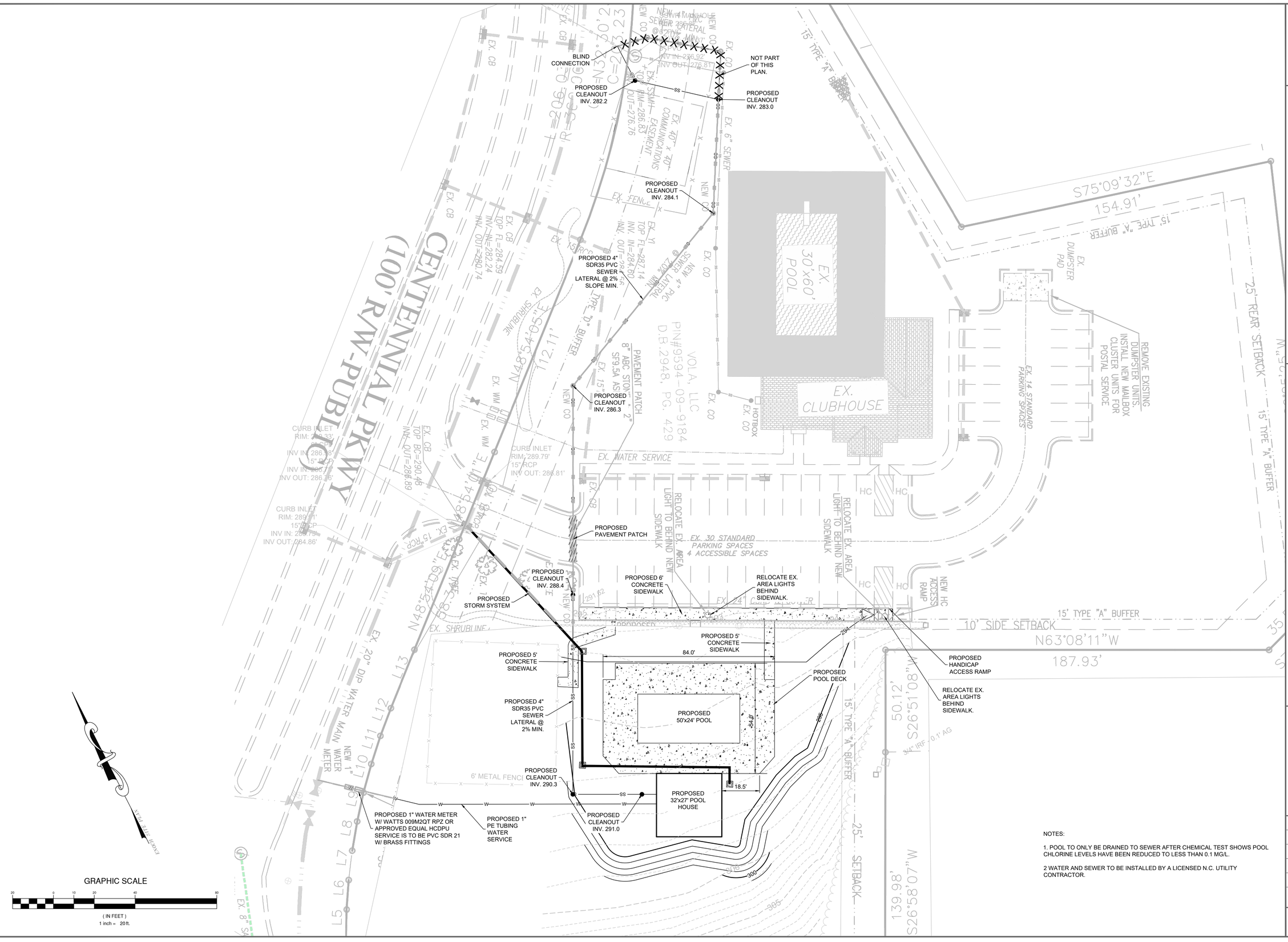

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

1. POOL TO ONLY BE DRAINED TO SEWER AFTER CHEMICAL TEST SHOWS POOL CHLORINE LEVELS HAVE BEEN REDUCED TO LESS THAN 0.1 MG/L.

2 WATER AND SEWER TO BE INSTALLED BY A LICENSED N.C. UTILITY CONTRACTOR.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 041595 8.11.22 ANDREW P. MERICLE

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• Virginia Beach, VA

SITE & UTILITY PLAN
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	APM
DRAWN BY:	APM
CHECKED BY:	APM
SCALE:	1" = 20'
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

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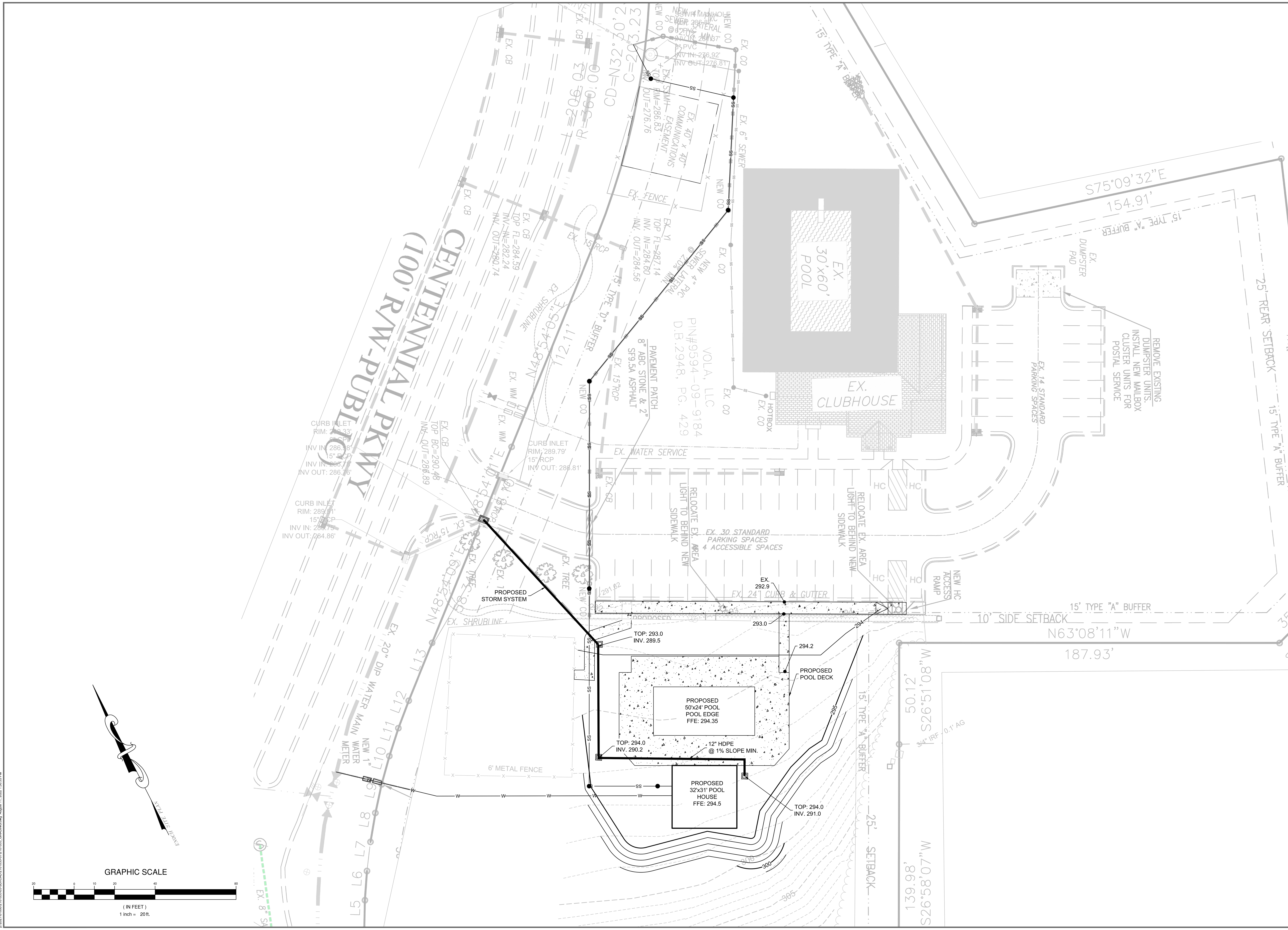

NORTH CAROLINA PROFESSIONAL SEAL 041595 8.11.22 ENGINEER ANDREW P. MERICLE

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GRADING PLAN
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	APM
DRAWN BY:	APM
CHECKED BY:	APM
SCALE:	1" = 20'
DATE:	4.26.22
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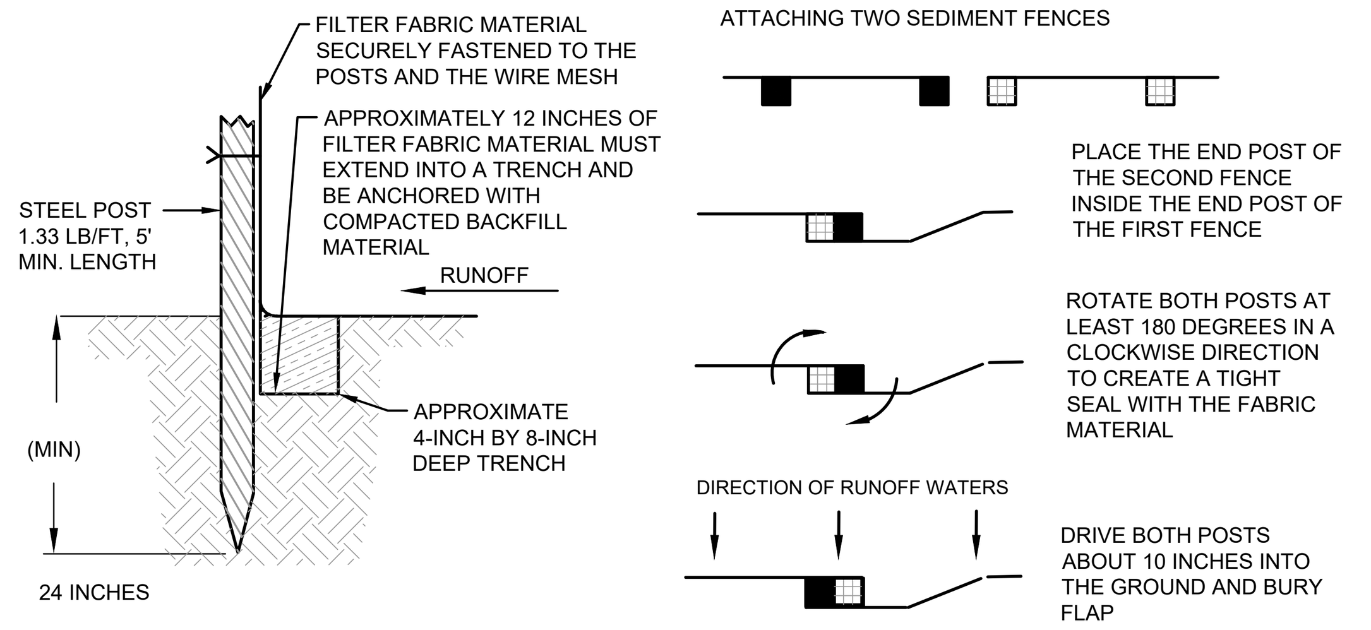
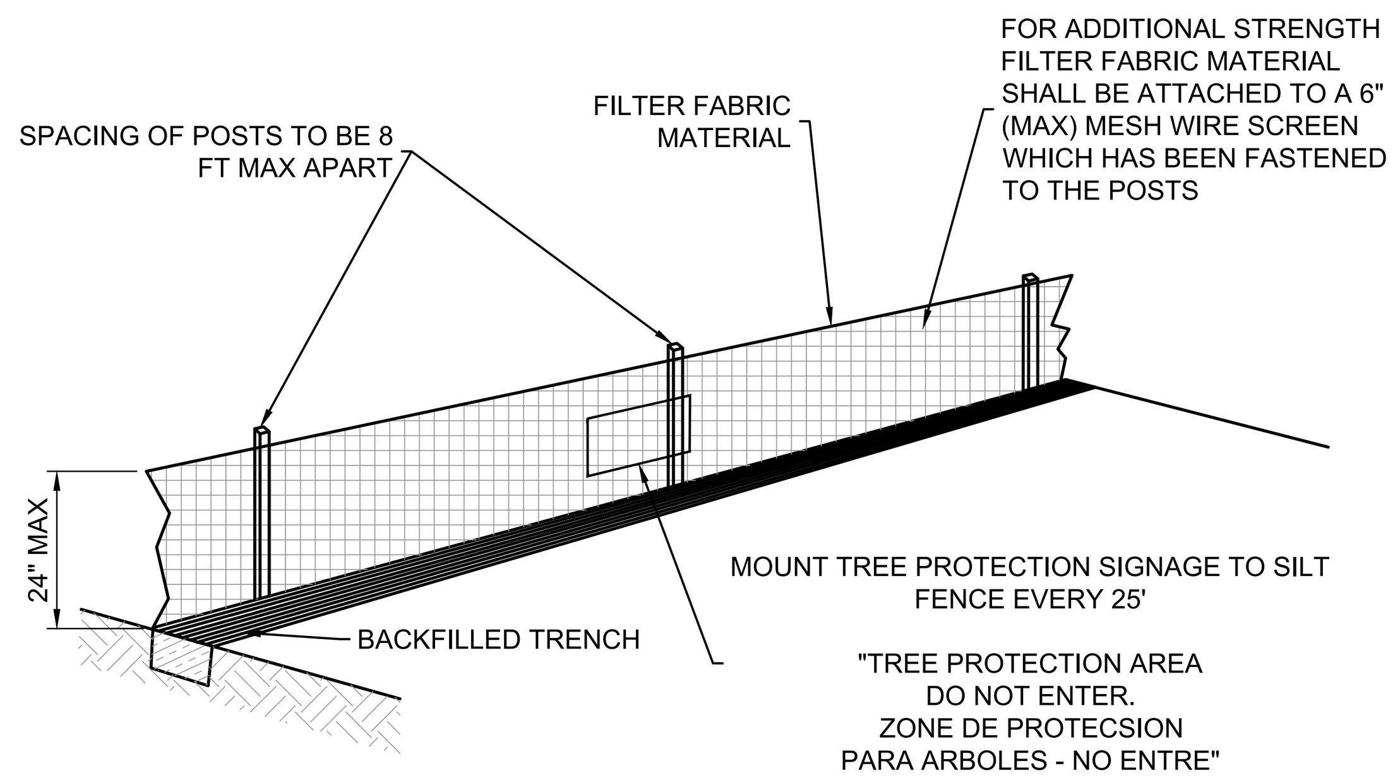
C5.0





MATERIALS

1. USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120º F.
2. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
3. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

CONSTRUCTION

1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE THE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.)
3. CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER (FIGURE 6.62A).
8. PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH COMPACTED SOIL PLACED OVER THE FILTER FABRIC. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
10. DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

SEDIMENT FENCE INSTALLATION USING THE SLICING METHOD

INSTEAD OF EXCAVATING A TRENCH, PLACING FABRIC AND THEN BACKFILLING TRENCH, SEDIMENT FENCE MAY BE INSTALLED USING SPECIALLY DESIGNED EQUIPMENT THAT INSERTS THE FABRIC INTO A CUT SLICED IN THE GROUND WITH A DISC.

INSTALLATION SPECIFICATIONS

1. THE BASE OF BOTH END POSTS SHOULD BE AT LEAST ONE FOOT HIGHER THAN THE MIDDLE OF THE FENCE. CHECK WITH A LEVEL IF NECESSARY.
2. INSTALL POSTS 4 FEET APART IN CRITICAL AREAS AND 6 FEET APART ON STANDARD APPLICATIONS.
3. INSTALL POSTS 2 FEET DEEP ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT THE FABRIC FROM UPSTREAM WATER PRESSURE.
4. INSTALL POSTS WITH THE NIPPLES FACING AWAY FROM THE SILT FABRIC.
5. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8 INCHES OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1 INCH VERTICALLY APART. ALSO, EACH TIE SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
6. WRAP APPROXIMATELY 6 INCHES OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. NO MORE THAN 24 INCHES OF A 36 INCH FABRIC IS ALLOWED ABOVE GROUND LEVEL.
8. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION.
9. COMPACTION IS VITALLY IMPORTANT FOR EFFECTIVE RESULTS. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQUARE INCH. COMPACT THE UPSTREAM SIDE FIRST, AND THEN EACH SIDE TWICE FOR A TOTAL OF 4 TRIPS.

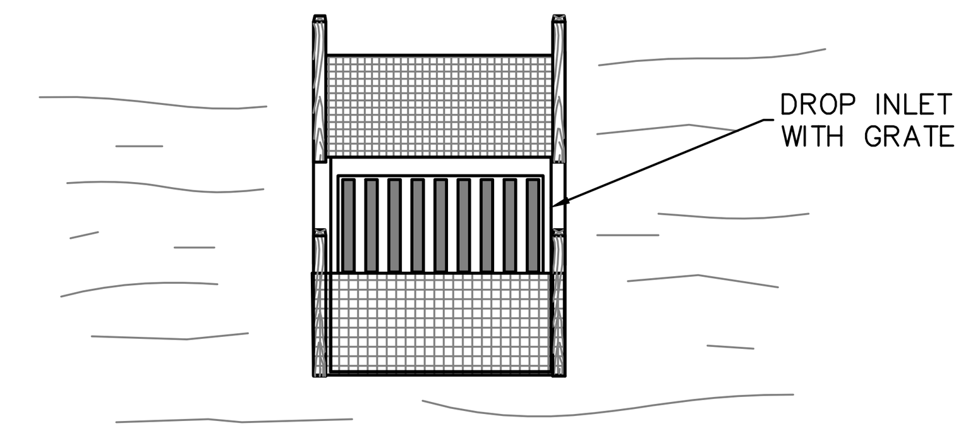
MAINTENANCE

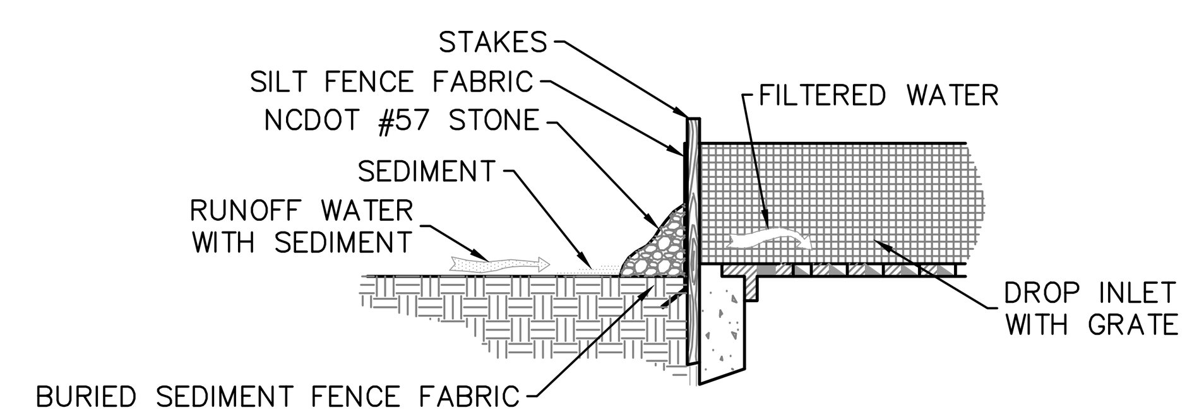
1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

6.8 C3.0 C6.0 SEDIMENT FENCE
NOT TO SCALE

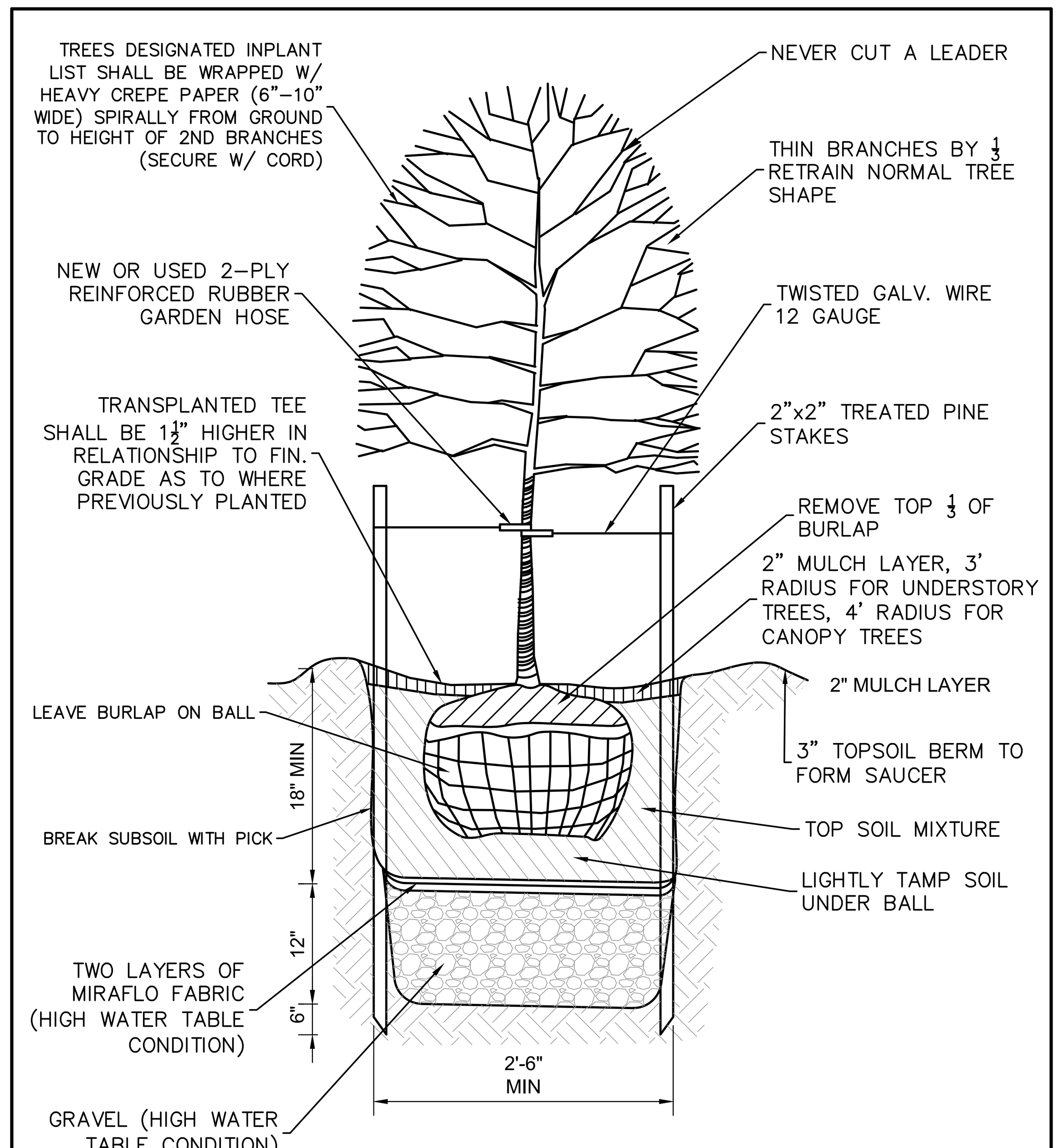
CONSTRUCTION SPECIFICATIONS

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.

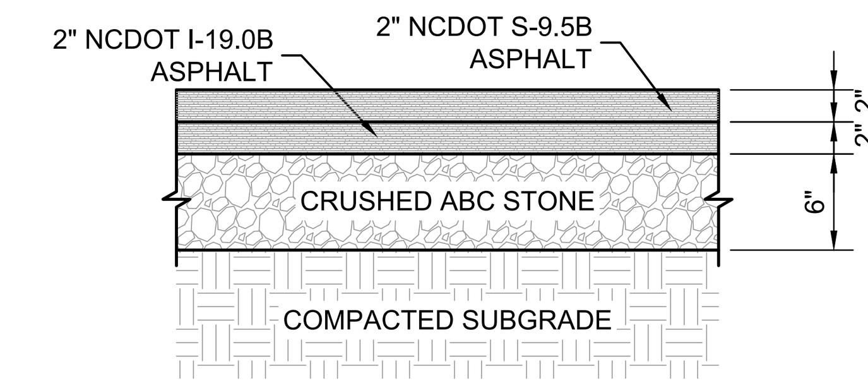




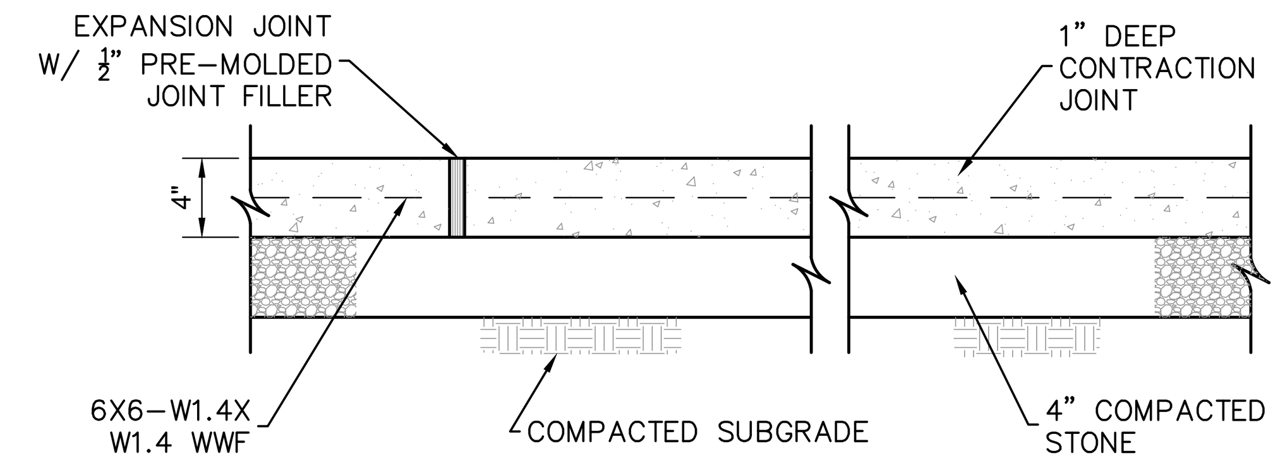
6.50 Sheet C6.0 INLET PROTECTION
NOT TO SCALE



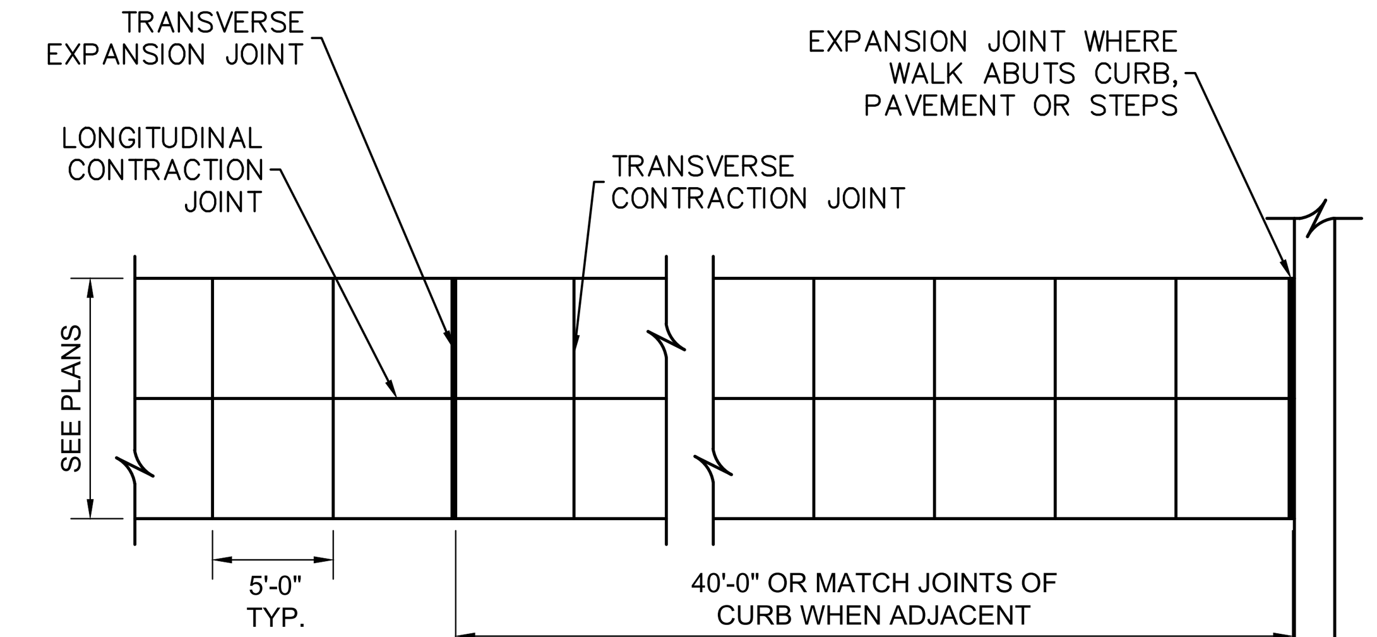
1 C7.0 C6.0 TREE PLANTING
NOT TO SCALE



2 C4.0 C6.0 STANDARD DUTY ASPHALT
NOT TO SCALE



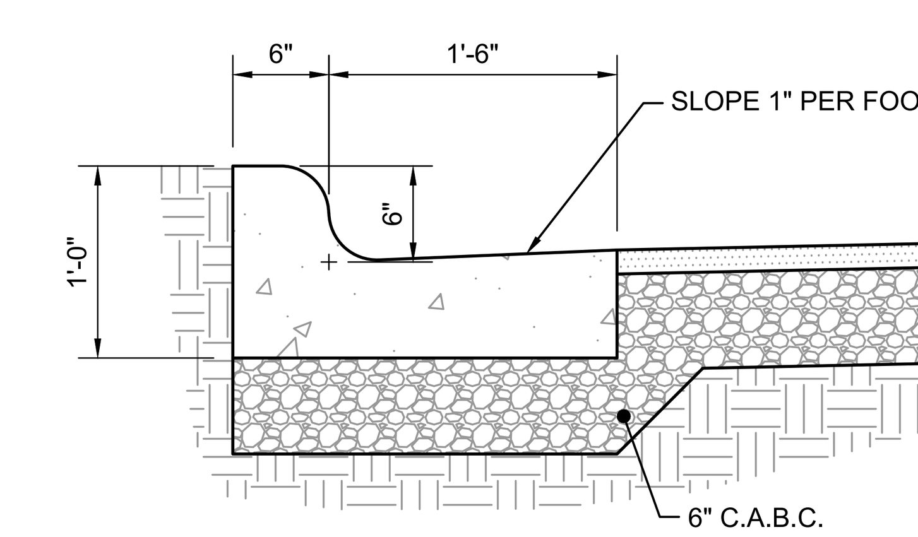
LONGITUDINAL SECTION



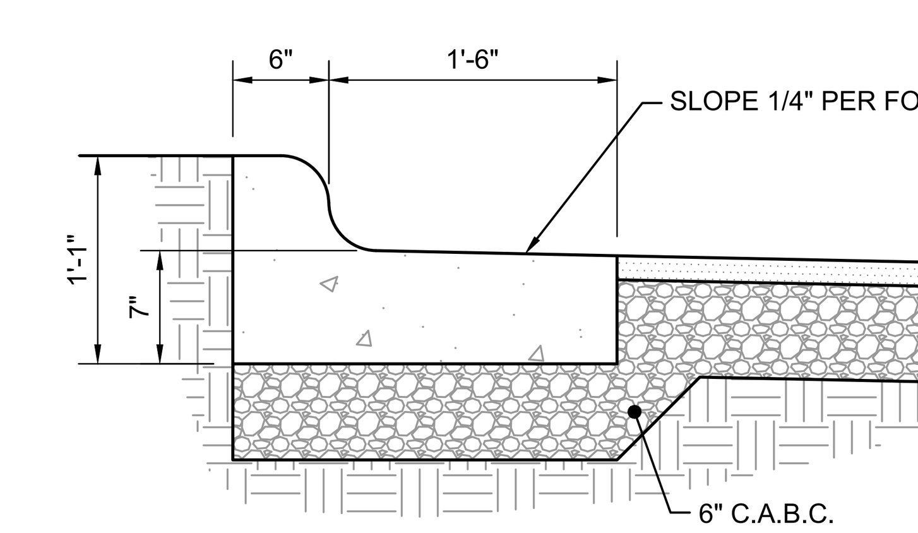
PARTIAL PLAN

WALK WIDTH	LONGITUDINAL CONTRACTION JOINT
< 5'-11"	NONE
6'-0" - 7'-11"	ONE ALONG WALK AT CENTERLINE
8'-0" - 12'-0"	TWO ALONG WALK AT THIRD POINTS

3 C4.0 C6.0 SIDEWALK
NOT TO SCALE



AT LOW EDGE



AT HIGH EDGE

4 C4.0 C6.0 CONCRETE CURB AND GUTTER
NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 041595 8.11.22 ENGINEER ANDREW P. MERICLE

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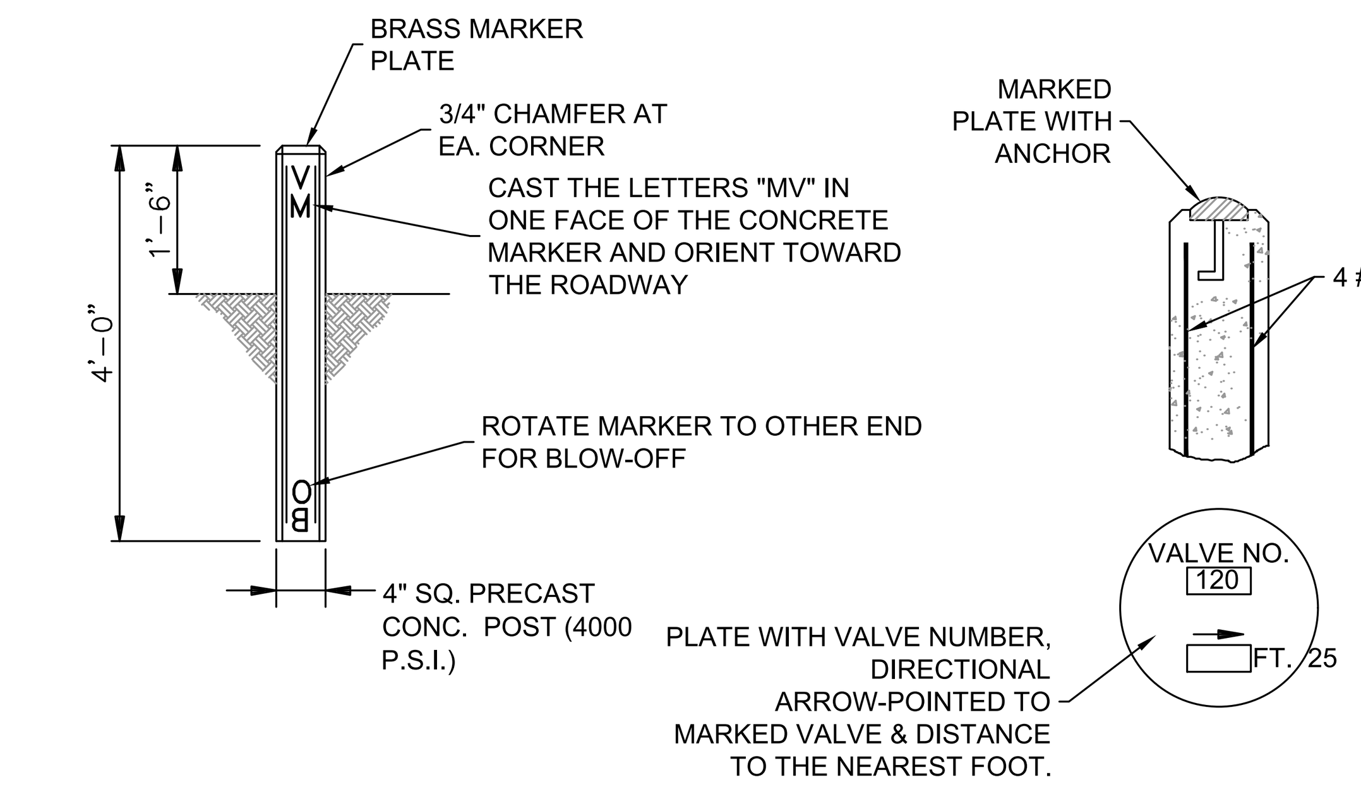
ESC & SITE DETAILS
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

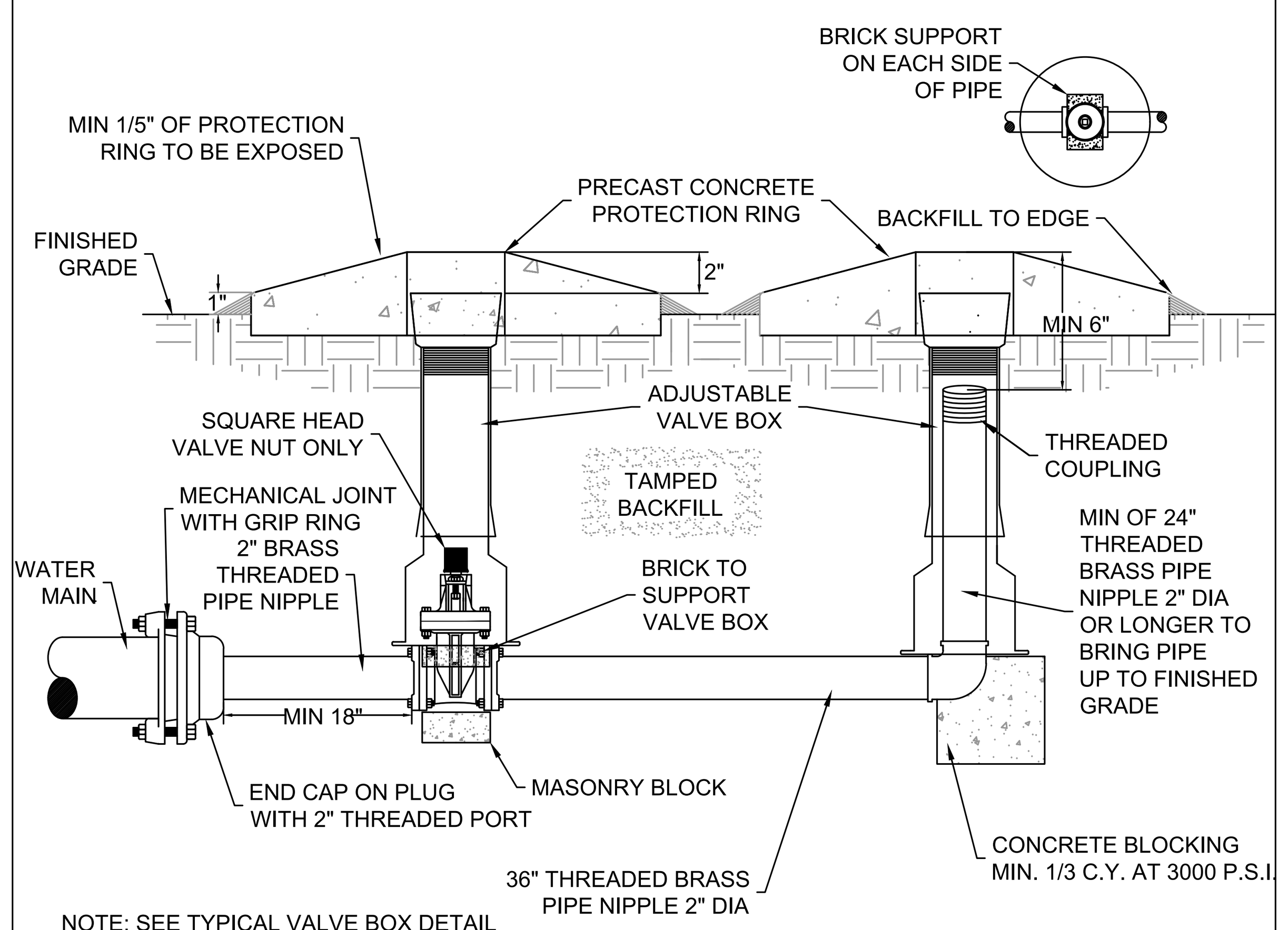
DESIGNED BY:	APM
DRAWN BY:	APM
CHECKED BY:	APM
SCALE:	NONE
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

C6.0



NOTES: PAINT MARKER BLUE AFTER INSTALLATION

TYPICAL VALVE MARKER DETAIL W/1
NOT TO SCALE



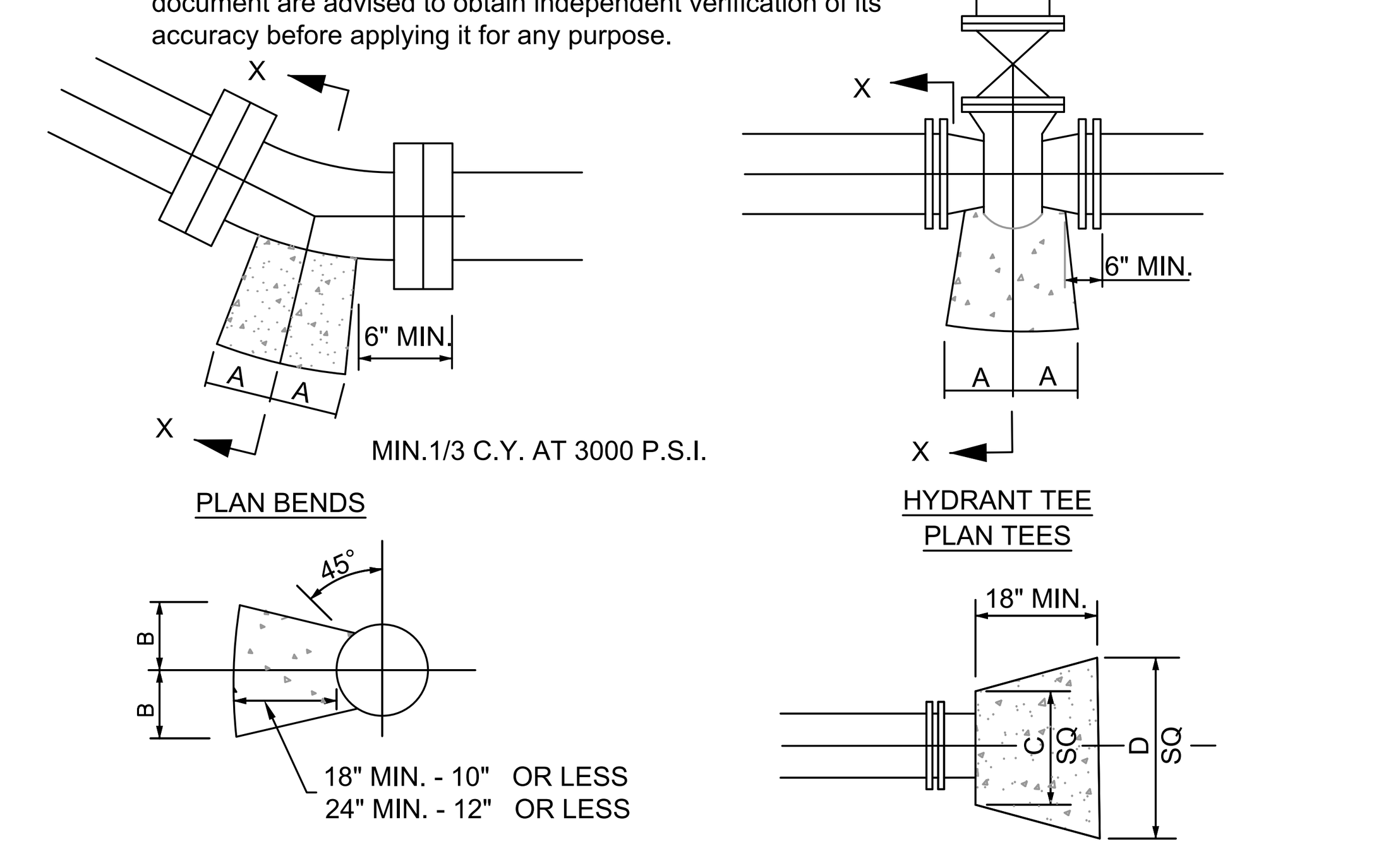
NOTE: SEE TYPICAL VALVE BOX DETAIL FOR BRICK INSTALLATION

TYPICAL PERMANENT BLOW-OFF ASSEMBLY DETAIL W/4
NOT TO SCALE

NOTES: NOTES:
1. CONCRETE SHALL BE 3,000 PSI MIN.
2. CONCRETE FOR THRUST BLOCKING SHALL BE KEPT FAIRLY DRY, THUS MAKING THE CONCRETE WEDGE SHAPE MORE EASILY FORMED WITH THE WIDEST PART (BLOCKING AREA) AGAINST UNDISTURBED SOIL.
3. NO CONCRETE SHALL COVER ANY BOLTS OR GLANDS.
4. ALL PIPING AND ACCESSORIES TO BE WRAPPED WITH 10 MIL. POLYETHYLENE PRIOR TO POURING BLOCKING.
5. VOLUME OF THRUST BLOCKING SHALL BE AS SHOWN ON THE THRUST BLOCKING SCHEDULE.

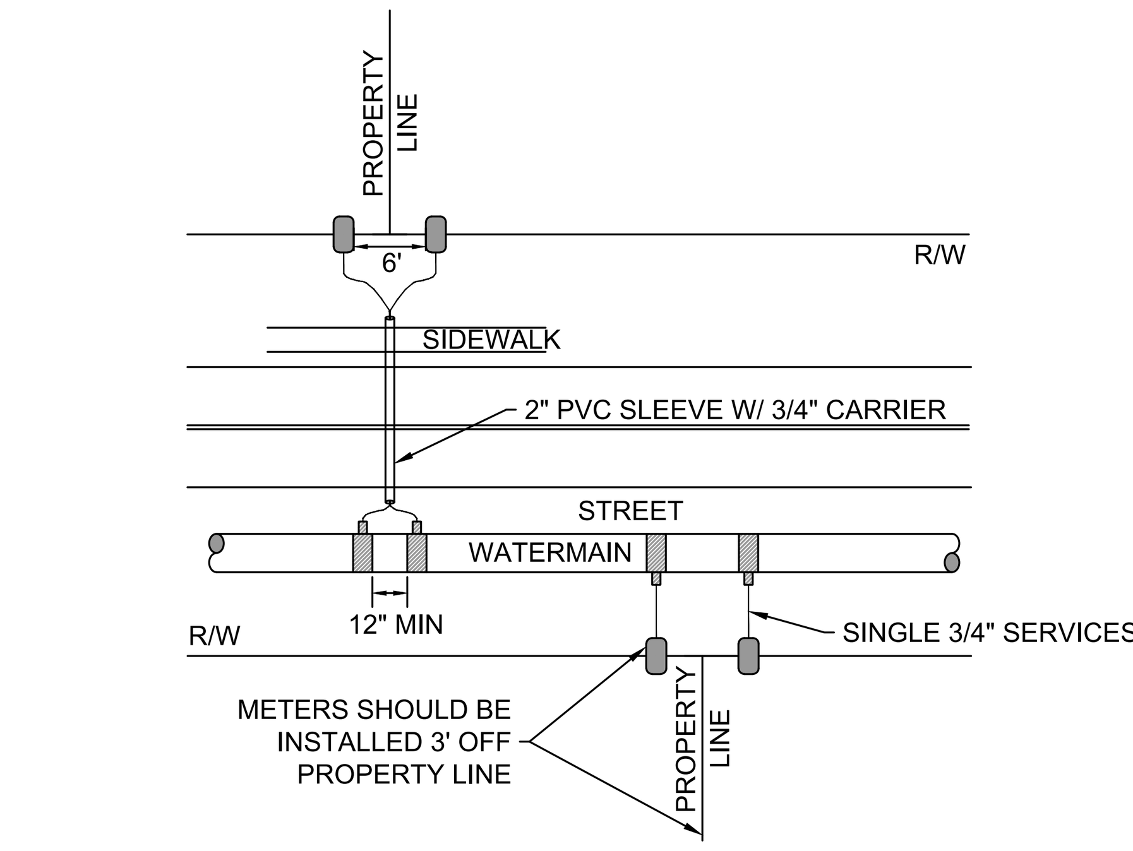
RECORD DRAWINGS

This record drawing is intended for general information only, and has been prepared, in part, based upon information furnished by others. While this information is believed to be reliable, Draper Aden Associates did not perform an as-built survey, and cannot assure its accuracy. Thus, Draper Aden Associates is not responsible for the accuracy of this record drawing or for any errors or omissions which may have been incorporated into it as a result. Those relying on this record document are advised to obtain independent verification of its accuracy before applying it for any purpose.



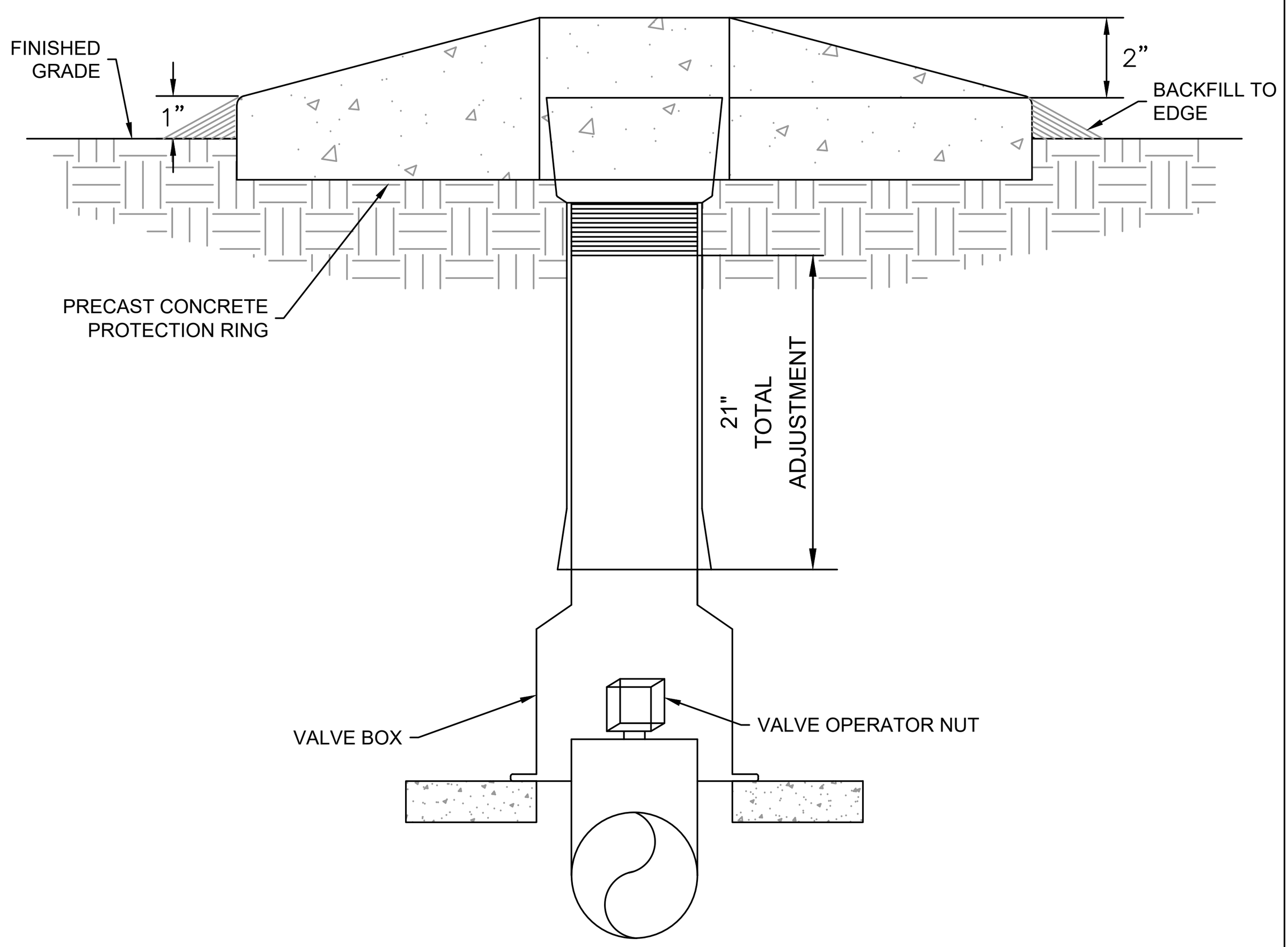
PIPE SIZE	90° BEND		45° BEND		22.5° BEND		11.25° BEND		TEE		PLUG	
	A	B	A	B	A	B	A	B	A	B	C	D
4"	8"	12"	8"	8"	6"	6"	6"	6"	8"	9"	10"	16"
6"	10"	12"	8"	10"	8"	8"	8"	8"	10"	10"	12"	18"
8"	15"	13"	10"	10"	8"	8"	8"	8"	10"	12"	12"	24"
10"	16"	14"	10"	12"	6"	10"	6"	10"	11"	14"	14"	25"
12"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	16"	30"
14"	22"	18"	14"	16"	10"	14"	10"	14"	16"	18"	18"	34"
16"	26"	20"	16"	18"	12"	16"	12"	16"	18"	20"	20"	36"

TYPICAL THRUST BLOCK DETAIL W/7
NOT TO SCALE

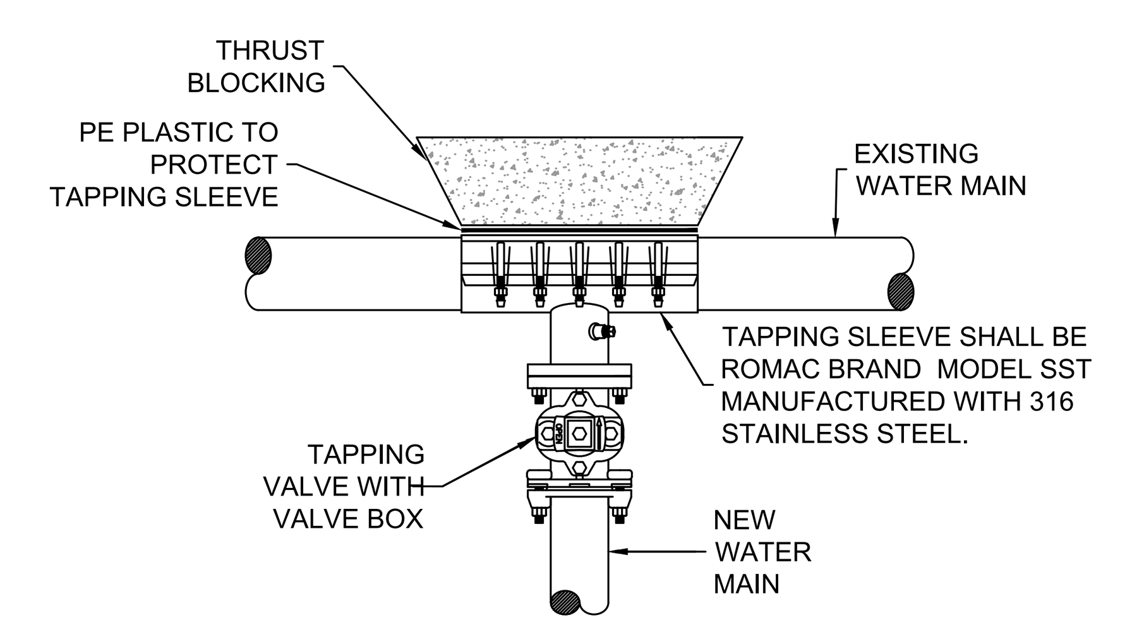


NOTES:
1. INSTALL METER AT R/W
2. "TWO (2)-3/4" SERVICE LINES MUST BE INSTALLED INSIDE A 2" SLEEVE."
3. "TWO (2)-1" SERVICE LINES MUST BE INSTALLED INSIDE A 3" SLEEVE."
4. SLEEVES SHOULD BE SCHEDULE 40 PVC PIPE.
5. SEE DETAIL FOR SERVICE MATERIAL AND METER SETTING
6. SERVICE LINE SHALL BE 3' BELOW FINISHED GRADE OF DITCHES.
7. CONDUIT MUST EXTEND PAST PREPOSED SIDEWALK.

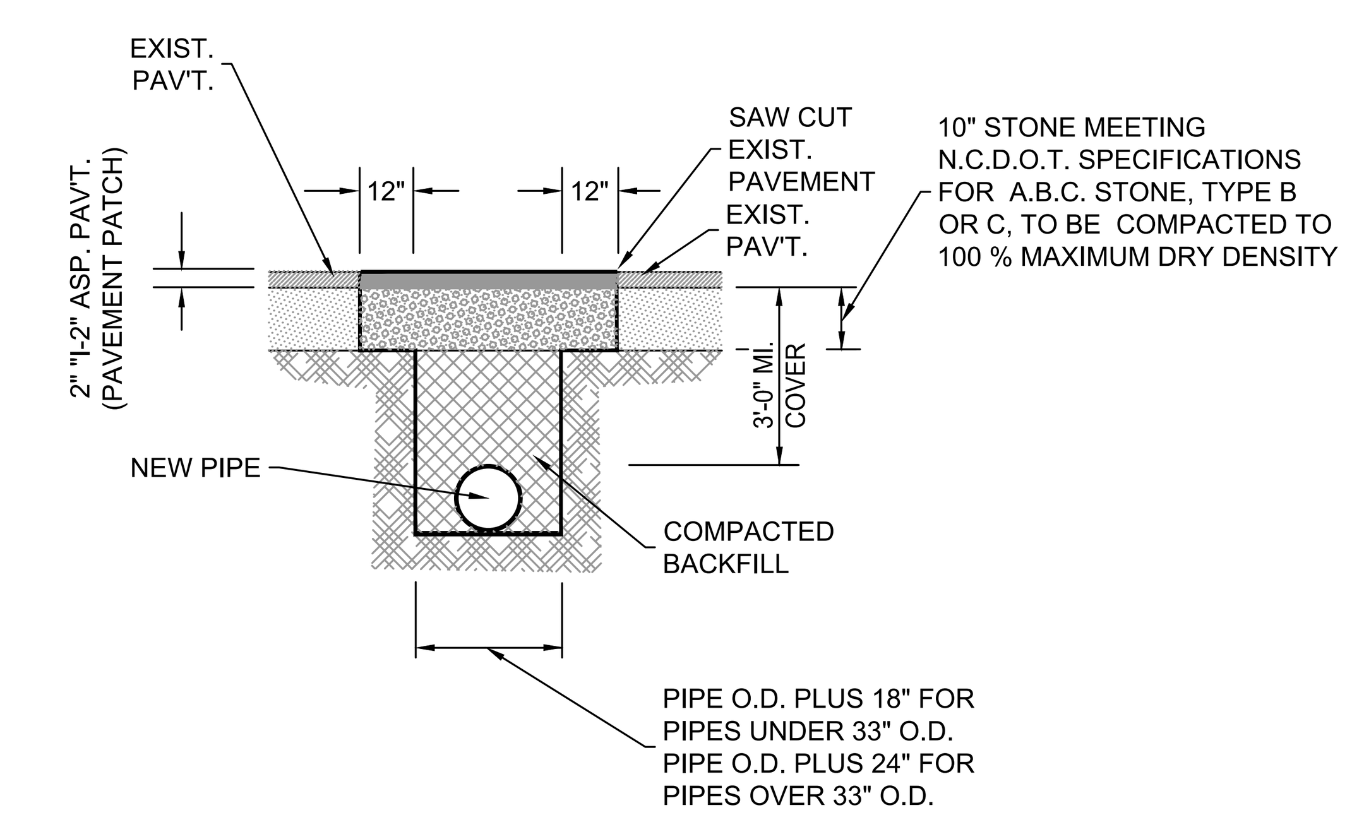
TYPICAL DOMESTIC WATER SERVICE INSTALLATION DETAIL W/12
NOT TO SCALE



TYPICAL VALVE BOX DETAIL W/2
NOT TO SCALE

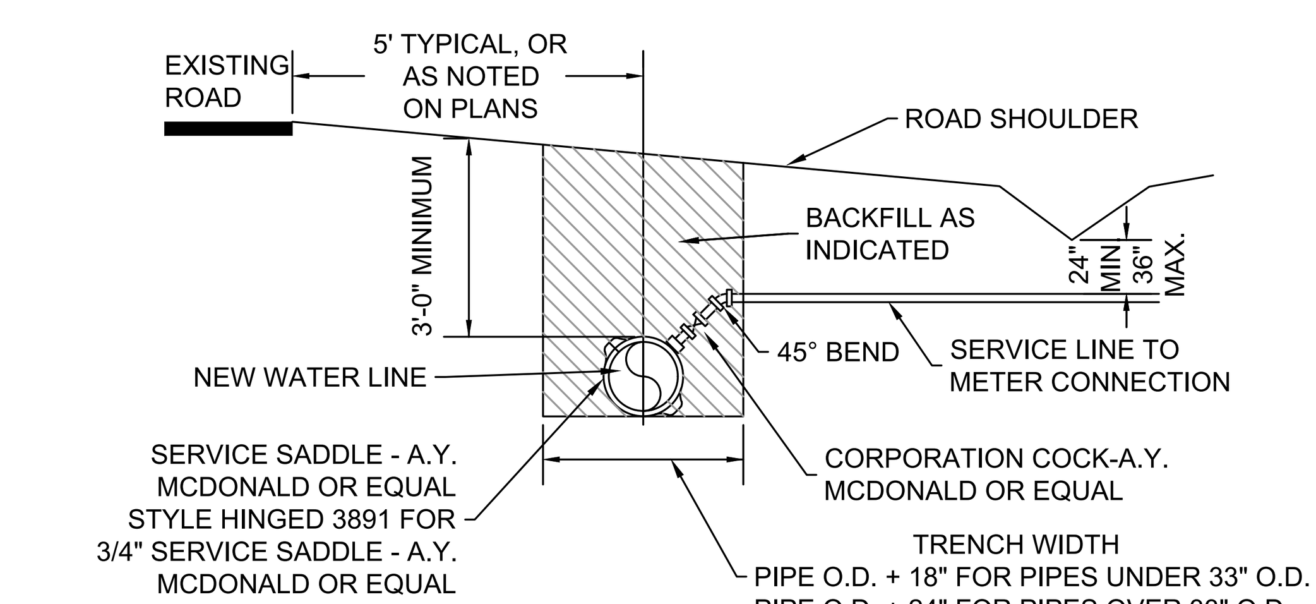


TYPICAL TAPPING SLEEVE AND VALVE ASSEMBLY DETAIL W/5
NOT TO SCALE



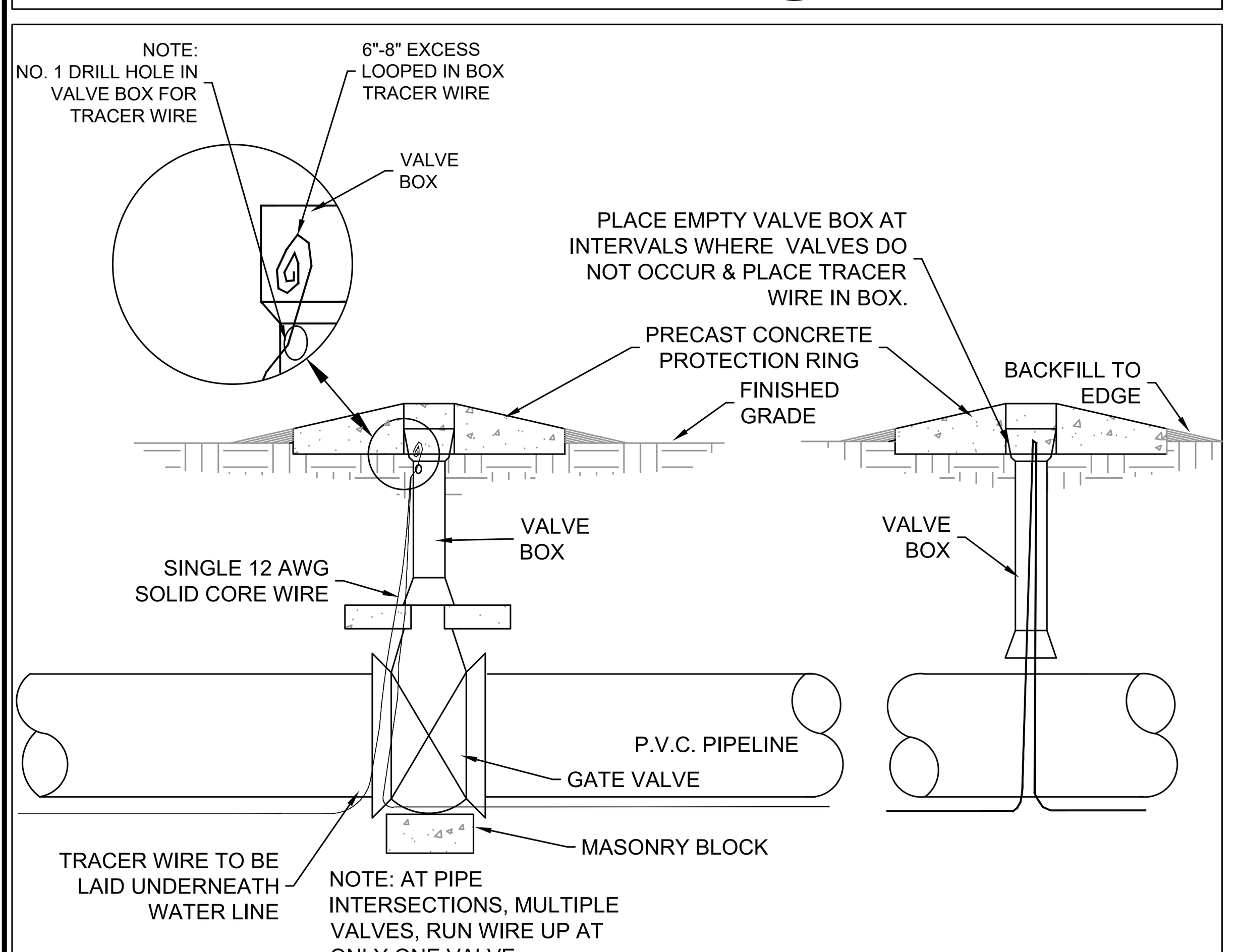
NOTES:
1. PAVEMENT SHALL BE CUT TO TRUE LINE AND REMOVED BEFORE TRENCH IS CUT.
2. STONE AND PAVEMENT TO BE PLACED WITH LEAST INTERFERENCE TO TRAFFIC.
3. STABILIZED AGGREGATE TO BE SECURED FROM AN APPROVED QUARRY.
4. ALL PAVEMENT REPAIRS TO BE IN ACCORDANCE WITH N.C.D.O.T. SPECIFICATIONS.

TYPICAL TRENCH IN BITUMNOUS SURFACE AREAS DETAIL W/10
NOT TO SCALE



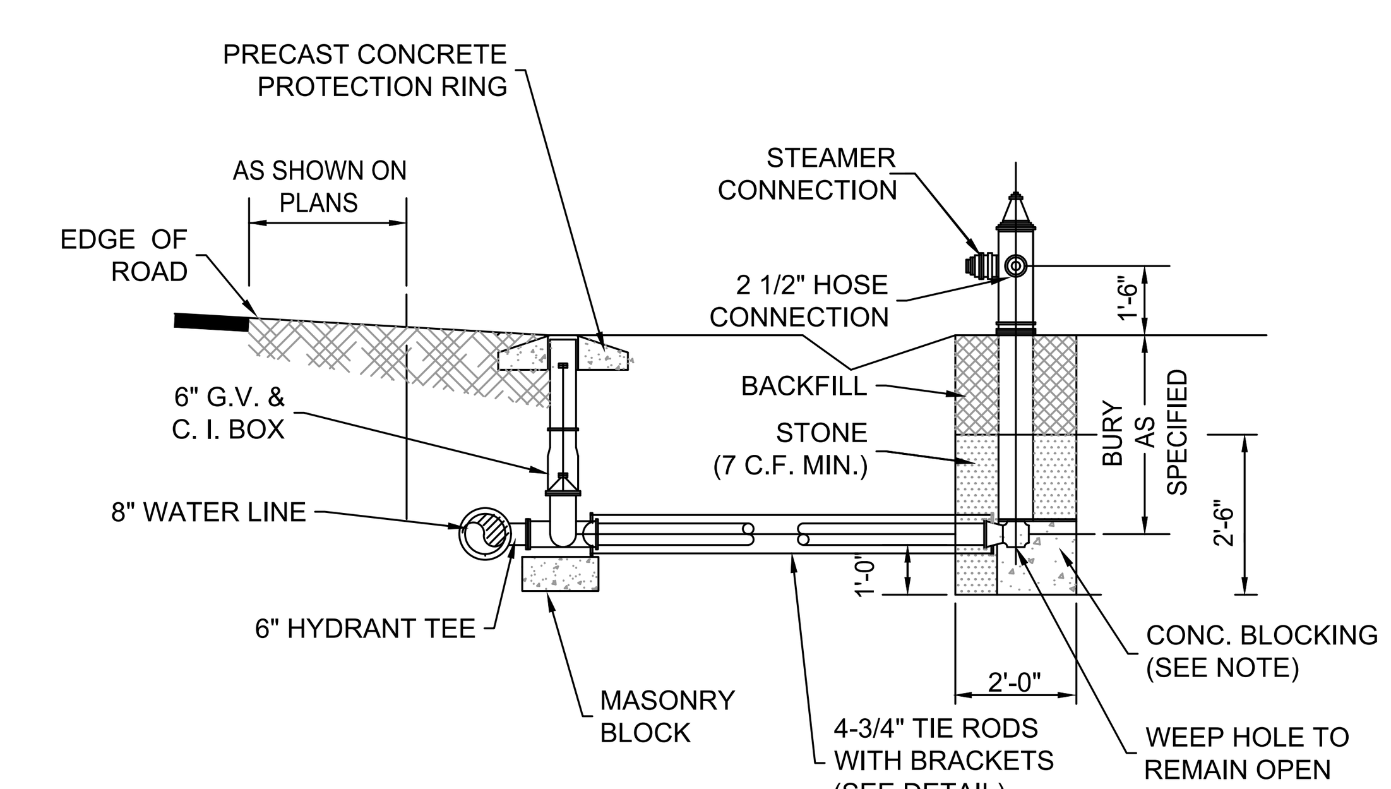
NOTE:
1. "SERVICE CONNECTION" IN PROPOSAL TO INCLUDE SERVICE SADDLE, 45° BEND, CORPORATION COCK AND ALL LABOR INVOLVED IN MAKING A COMPLETE SERVICE CONNECTION.
2. SERVICE PIPING TO BE 3/4" SDR-9 PE TUBING
3. ALL BRASS FITTINGS SHALL BE COMPRESSION TYPE

TYPICAL WATER SERVICE CONNECTION USING TAPPING SADDLE DETAIL W/13
NOT TO SCALE



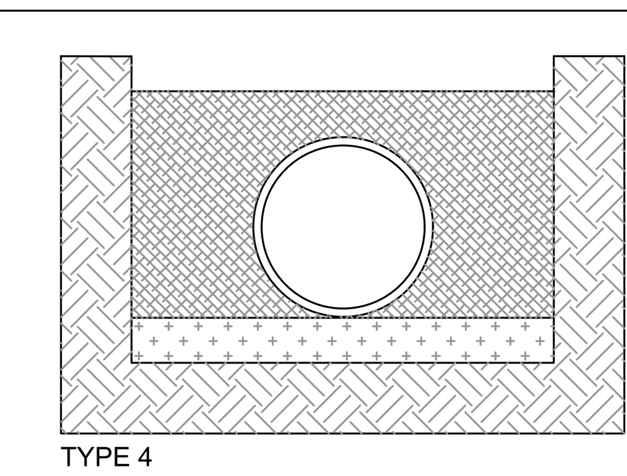
NOTES:
1. DRILL HOLE IN VALVE BOX TO INSERT TRACER WIRE,BRING UP TO INSIDE AND ROLL UP AT LEAST 6"-8" EXCESS
2. PLACE TRACER WIRE IN VALVE BOX AT 1,000" INTERVALS OR AS NOTED ON THE PLANS, TYPICAL.
3. DO NOT SPLICE WIRE WHEN BEGINNING A NEW SPOOL. INSTEAD INSTALL A VALVE BOX AND ATTACH EACH WIRE WITH A BRASS SCREW TO THE VALVE BOX.

TYPICAL TRACER WIRE INSTALLATION DETAIL W/3
NOT TO SCALE



NOTE:
1. TIE HYDRANT TO MAIN LINE W/TIE RODS IN LIEW OF CONC. BLOCKING IN SANDY SOIL.
2. MECHANICAL JOINTS USED WITH GRIP RINGS

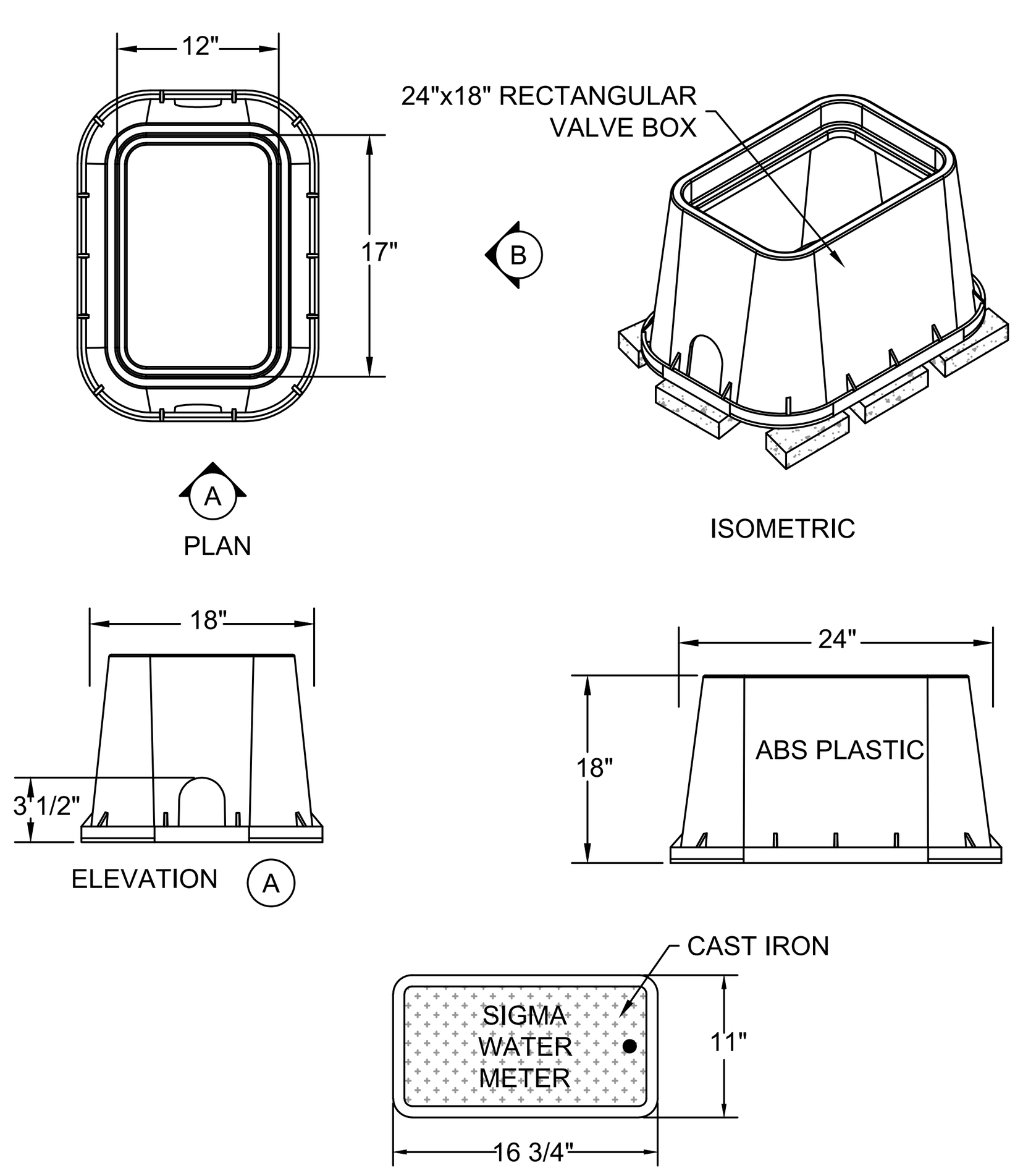
TYPICAL HYDRANT INSTALLATION DETAIL W/6
NOT TO SCALE



ALL PVC WATER LINE AND PVC FORCE MAIN.

PIPE BEDDED IN SAND, GRANULAR MATERIAL OR GRADED GRAVEL TO THE DEPTH OF 1/8 PIPE DIAMETER, 4" MIN. JOB EXCAVATED MATERIAL COMPACTED TO 4" ABOVE TOP OF PIPE. (APPROX. 95% STANDARD PROCTOR, AASHTO T-99)

TYPICAL LAYING CONDITIONS DETAIL W/11
NOT TO SCALE



METER BOX DETAIL FOR 3/4" SERVICE W/15
NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 041595 8.11.22 ENGINEER ANDREW P. MERICLE

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HRW DETAILS
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

REVISIONS

DESIGNED BY:	-
DRAWN BY:	-
CHECKED BY:	
SCALE:	NONE
DATE:	4.26.22
PROJECT NUMBER:	2101033-01

C7.0