

# POWERMASTER - 311 JARCO DRIVE

## HARNETT COUNTY, NORTH CAROLINA SITE PLAN

1st SUBMITTAL TO HARNETT COUNTY: JULY 2, 2020



**VICINITY MAP**  
SCALE: 1" = 50'

### SITE INFORMATION

LOCATION:	311 JARCO DRIVE FUQUAY-VARINA, NC 27526
MUNICIPALITY:	HARNETT COUNTY
ZONING:	IND
ACREAGE:	2.74 AC
NC WATERSHED:	WS-IV-P CAPE FEAR RIVER (LILLINGTON)
LAND USE CLASSIFICATION:	MEDIUM DENSITY RESIDENTIAL
<b>BUILDING:</b>	
TOTAL DWELLING UNITS:	1
OFFICE SPACE:	2,500 SF
INDUSTRIAL SPACE:	7,100 SF
TOTAL BLDG.:	9,600 SF
<b>PARKING:</b>	
OFFICE (2,500 SF):	2,500 SF / 200 SF
1 SPACE PER 200 SF	= 13 SPACES
INDUSTRIAL (5,500 SF):	7,100 SF / 500 SF
1 SPACE PER 500 SF	= 14 SPACES
TOTAL REQUIRED SPACES:	27 SPACES
TOTAL PROPOSED SPACES:	25 REGULAR SPACES 2 HIC SPACE = 27 SPACES
<b>IMPERVIOUS / PVIOUS AREAS</b>	
PROPOSED BUILDING:	9,100 SF (0.21 AC)
PROPOSED PAVEMENT:	45,870 SF (1.05 AC)
PROPOSED SIDEWALK:	426 SF (0.01 AC)
TOTAL IMPERVIOUS:	55,396 SF (1.27 AC) (46%)
MAX. ALLOWABLE IMPERVIOUS:	70% (W/ SNIA APPROVAL)
TOTAL PVIOUS:	63,959 SF (1.47 AC) (54%)

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### General Notes:

- ORIGINAL TOPOGRAPHICAL AND BOUNDARY DATA PERFORMED BY MAULDIN-WATKINS SURVEYING, PA. SITE BENCHMARK IS AVAILABLE FROM SURVEYOR. CONTOURS SHOWN HEREON ARE FROM AN ACTUAL FIELD SURVEY.
- THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OF FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. THE OWNER SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF ANY EXISTING FACILITIES.
- ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
- ALL STRUCTURAL FILL MATERIAL SHALL BE FREE OF ALL STICKS, ROCKS, AND CLUMPS OF MUD.
- UNUSABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN AN APPROVED SOLID WASTE LANDFILL.
- THERE IS EXISTING UNDERGROUND WATER, SEWER, ELECTRICAL, AND FIBER OPTIC ON-SITE OR WITHIN CLOSE PROXIMITY. CONTRACTORS SHALL DIG WITH EXTREME CAUTION.
- CONCRETE SUB SHALL BE RESPONSIBLE FOR ALL SCORE JOINTS AND EXPANSION JOINTS. SHOULD A QUESTION ARISE ABOUT THE PROPOSED PATTERN CONSULT WITH THE ENGINEER PRIOR TO POURING.
- CONTRACTOR TO FURNISH ALL PAVEMENT MARKINGS AS SHOWN.
- LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. CONTACT THE NC ONE CALL CENTER AT LEAST 48 HOURS PRIOR TO DIGGING @ 1.800.632.4949. THE SURVEYOR HAS ONLY LOCATED THE UTILITIES THAT ARE ABOVE GROUND AT THE TIME OF FIELD SURVEY. UNDERGROUND LINES SHOWN HEREON ARE APPROXIMATE OR AS REPORTED BY VARIOUS RESPONSIBLE PARTIES. THE SURVEYOR DOES NOT GUARANTEE THAT ANY UNDERGROUND STRUCTURES SUCH AS UTILITIES, TANKS AND PIPES ARE LOCATED HEREON.
- ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND/OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, HARNETT COUNTY, AND HARNETT REGIONAL WATER.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET HARNETT COUNTY SPECIFICATIONS AND STANDARDS, LATEST EDITION. ALL WORK WITHIN NCDOT RIGHT-OF-WAY SHALL MEET THE SPECIFICATIONS AND STANDARDS OF NCDOT.
- ALL CONCRETE PIPE IS TO BE ASTM C-76, CLASS III WITH RAM-NEK.
- THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD ZONE PER FEMA MAP, FEMA COMMUNITY MAP #: 3720065400J, DATED OCTOBER 3, 2006.
- ALL LOT DIMENSIONS SHOWN ARE APPROXIMATE. CONSULT THE BOUNDARY SURVEY OF ACTUAL SITE BOUNDARY INFORMATION.
- WETLANDS ARE NOT PRESENT ON SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL IN OR ADJACENT TO NCDOT RIGHT-OF-WAY. ALL SIGNS, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- PRIOR TO PLACING ABC STONE BASE, THE CONTRACTOR SHOULD NOTIFY THE PROJECT ENGINEER TO INSPECT AND PROOF ROLL THE SUBGRADE. ANY STONE PLACE WITHOUT PRIOR APPROVAL WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DESIGN/FIELD CONDITIONS QUITE EASILY MAY VARY FROM THAT REPRESENTED IN THE INITIAL SOILS REPORT AND/OR TOPOGRAPHICAL REPORT. ISOLATED AREAS MAY SHOW UP WEAK AND ADVERSE SOILS OR GROUNDWATER CONDITIONS MAY BE DISCOVERED THAT WERE NOT REVEALED DURING THE INITIAL SOILS INVESTIGATION. THEREFORE, THE OWNER/CLIENT IS TO BE AWARE THAT CURRY ENGINEERING GROUP, PLLC WILL NOT AND CANNOT BE HELD RESPONSIBLE FOR ANY FAILURES TO EITHER A STREET OR PARKING LOT PAVEMENT DESIGN UNLESS WE CAN BE FULLY AND TOTALLY INVOLVED IN THE CONSTRUCTION PROCESS WHICH MAY INCLUDE, BUT MAY NOT NECESSARILY BE LIMITED TO, TESTING SUBGRADE AND BASE DENSITY. ENGAGING THE DESIGN ENGINEER FOR THE EVALUATION OF THE SUBGRADE AND FOR THE OBSERVATION OF PROOF ROLLING SUBGRADE AND BASE AT VARIOUS STEPS OF CONSTRUCTION. OPPORTUNITY FOR THE DESIGN ENGINEER TO CALL IN A SOILS ENGINEER FOR CONSULTATION AND ADVICE, ETC. - STEPS WHICH TAKEN ALTOGETHER WITH THE INITIAL DESIGN SHOWN ON THE PLANS, CONSTITUTE THE COMPLETE DESIGN OF THE ROAD, STREET OF PARKING AREA (PRIVATE OR PUBLIC). THE DESIGN ENGINEER MUST BE GIVEN THE FULL LATITUDE AND OPPORTUNITY TO COMPLETE THE DESIGN BY FULLY PARTICIPATING IN THE CONSTRUCTION PROCESS. PLAN DESIGN IS A SMALL PORTION OF THE DESIGN AND CANNOT BE SEPARATED FROM THE CONSTRUCTION PROCESS IF THE OWNER'S CLIENT'S DESIRE IS TO HAVE THE DESIGN ENGINEER STAND BEHIND THE COMPLETED DESIGNED PROJECT.
- ALL UTILITY SERVICES, (POWER, TELEPHONE, CABLE, ETC.) ARE PROPOSED TO BE UNDERGROUND. DO NOT SEED OR MULCH DISTURBED AREAS UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN INSTALLED.
- LIGHTS ARE LEASED AND SUPPLIED BY DUKE ENERGY. SEE PHOTOMETRICS SHEET FOR DETAILS.
- WATER IS TO BE PROVIDED BY HARNETT REGIONAL WATER.
- THE BUILDING SETBACK LINES SHOWN ON THIS PLAT ARE FOR THE ENGINEER'S USE IN ESTABLISHING MINIMUM LOT FRONTAGES AT THE SETBACK LINE AND FOR RESERVING SUFFICIENT BUILDING AREA. BUILDING CONTRACTORS ARE TO VERIFY LOT LINE SETBACKS BEFORE SETTING FORMS OR DIGGING FOOTINGS.
- REGULATORY SIGNS, STOPS SIGNS AND STREET NAME SIGNS SHALL BE MANUFACTURED FROM HIGH INTENSITY REFLECTIVE MATERIALS.
- ALL EXCESS TOPSOIL AND UNCLASSIFIED EXCAVATION IS TO BE HAULLED OFF-SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ALL SITE CONSTRUCTION MUST BE INSPECTED BY THE PROJECT ENGINEER AT THE FOLLOWING STAGES:
  - COMPLETION OF GRADING SUBGRADE PRIOR TO PLACING STONE BASE.
  - COMPLETION OF STONE PLACEMENT PRIOR TO PAVING.
  - FINAL INSPECTION WHEN ALL WORK IS COMPLETE.
- THE SURVEYOR DID NOT VISIBLY SEE ANY CEMETERIES IN ANY OPEN AREAS UNLESS OTHERWISE NOTED.
- THIS PROPERTY DOES NOT DEPICT ENCUMBRANCES THAT ARE FOUND DURING A THOROUGH TITLE SEARCH.
- ALL HVAC UNITS FOR THE PROPOSED BUILDING WILL BE SCREENED FROM PUBLIC RIGHT OF WAY.
- ALL CURB AND GUTTER TO BE 24" STANDARD CURB AND GUTTER. ALL CURB AND GUTTER WITHIN NCDOT RW SHALL BE 30" STANDARD.
- ALL CURB AND GUTTER AND SIDEWALK CONCRETE IS TO BE MINIMUM 3,000 PSI AT 28 DAYS, AIR ENTRAINED.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS INDICATED OTHERWISE.
- PROVIDE HANDICAP SIGNS, MARKINGS AND RAMPS AS SHOWN.
- HANDICAP RAMPS ARE TO MEET "ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" AS DETAILED IN THE FEDERAL REGISTER, VOLUME 56, NUMBER 144 DATED JULY 26, 1991, RULES AND REGULATIONS ACTIVATED JANUARY 26, 1992. FOR ADDITIONAL INFORMATION, REFER TO THE 2012 NC STATE BUILDING CODE CHAPTER 11, "ACCESSIBILITY." ALL STREET RETURNS TO HAVE H.C. RAMPS.
- CONTRACTOR SHALL NOT POUR ANY CONCRETE BEFORE FORMS ARE INSPECTED BY THE PROJECT ENGINEER AND/OR OWNER. ANY CONCRETE THAT HAS NOT BEEN APPROVED BY THE ENGINEER AND/OR OWNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL AREAS NOT COVERED BY BUILDING OR PARKING SHALL BE COVERED WITH 4" MINIMUM OF TOPSOIL, FREE OF ROOT MATTER AND ROCKS AND GRASSED.
- CONTRACTOR SHALL SAW-CUT TO PROVIDE SMOOTH TRANSITIONS WHERE EXISTING ASPHALT AND/OR CURB AND GUTTER IS TO BE REMOVED.
- THE CONTRACTOR SHALL PROVIDE ALL THE MATERIAL AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPE AND FITTINGS SHALL BE INSPECTED PRIOR TO BEING COVERED.
- ALL HANDICAP SPACES ARE TO RECEIVE A HANDICAP SIGN AND HANDICAP SYMBOL PAINTED ON THE ASPHALT. NOTE STALLS TO RECEIVE "VAN ACCESSIBLE" SIGNAGE.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE POINTS.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD CONDITIONS WHEN POSSIBLE. BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF THE CLEARANCES ARE LESS THAN SPECIFIED ON THE PLANS OR 12 INCHES, WHICH EVER IS LESS, CONTACT THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- THE CONTRACTOR SHALL INCLUDE IN HIS CONTRACT PRICE THE REMOVAL AND DISPOSAL OF ANY EXCESS TOPSOIL HE DETERMINES IS NOT REQUIRED TO PERFORM THE FINAL GRADING AND LANDSCAPING OPERATION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL REQUIRED/NECESSARY SHEETING, SHORING, AND SPECIAL EXCAVATION MEASURES REQUIRED ON THE PROJECT TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THE DRAWINGS. HARNETT COUNTY, HARNETT REGIONAL WATER, & CURRY ENGINEERING ACCEPT NO RESPONSIBILITY FOR THE DESIGN TO INSTALL SAID ITEMS.
- THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE DAILY RECORD KEEPING OF THE AS-BUILT CONDITION OF ALL OF THE UNDERGROUND UTILITIES, CONSTRUCTION STAKEOUT ASSOCIATED WITH THE PROJECT.
- ALL WATER LINE AND SEWER LINE INSTALLATION SHALL CONFORM TO THE STANDARDS AND DETAILS OF THE STATE OF NORTH CAROLINA DEPARTMENT OF HEALTH CONSTRUCTION PERMIT AND HARNETT REGIONAL WATER.
- THE LAND DISTURBANCE PERMIT MUST BE KEPT ON THE WORK SITE AND SHOWN UPON REQUEST.
- THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ALL MATERIAL AND LABOR ASSOCIATED WITH THE TESTING OF THE WATER AND SEWER LINES REQUIRED BY THE STATE OF NORTH CAROLINA DEPARTMENT OF HEALTH & HARNETT REGIONAL WATER.
- THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DE-WATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
- NATURAL GAS MAY BE AVAILABLE. SEE CONTACT INFORMATION THIS SHEET.
- TESTING BY CONTRACTOR: CONTRACTOR SHALL EMPLOY AT HIS EXPENSE AN OUTSIDE INDEPENDENT SOIL TESTING SERVICE (APPROVED BY THE ARCHITECT) TO PERFORM SOIL TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. COPIES OF RESULTS OF TESTS SHALL BE SUBMITTED BY THE TESTING SERVICE DIRECTLY TO THE CONTRACTOR, THE ARCHITECT, AND THE STRUCTURAL ENGINEER. -THE TESTING SERVICE WILL CLASSIFY PROPOSED ON-SITE AND BORROW SOILS TO VERIFY THAT SOILS COMPLY WITH SPECIFIED REQUIREMENTS AND TO PERFORM REQUIRED FIELD AND LABORATORY TESTING. (MINIMUM REQUIRED SOIL BEARING CAPACITY IS NOTED ON THE STRUCTURAL DRAWINGS). -IN PAVED AND BUILDING SLAB AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 2000 SQUARE FEET OF FILL IN EACH COMPACTED FILL LAYER. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION. -IN FOUNDATION WALL AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH OF FILL IN EACH COMPACTED FILL LAYER, WITH NO LESS THAN TWO TESTS ALONG A WALL FACE. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION.
- COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS AND THE TOP 12" OF SUBGRADE IN CUT AREAS TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 FOR STRUCTURES, SLABS, AND PAVEMENTS AND 95% OF MAXIMUM DENSITY FOR LAWNS OR UNPAVED AREAS.
- THE BUILDING CONTRACTOR AND THE SITE WORK CONTRACTOR ARE TO COORDINATE THE INSTALLATION OF DRAINAGE PIPES AROUND THE BUILDING STRUCTURE.
- ANY RELOCATION OF EXISTING UTILITIES WILL BE AT THE COST OF THE DEVELOPER/OWNER. THE TOWN WILL NOT ACCEPT RESPONSIBILITY FOR DAMAGES TO CURB AND GUTTER OR STREET IMPROVEMENTS INSTALLED PRIOR TO UNDERGROUND SERVICES, NOR WILL THE TOWN ABSORB THE COST FOR BORINGS TO INSTALL UNDERGROUND SERVICE, PAVEMENT PATCHING OR DAMAGE TO LANDSCAPING. THESE WILL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER.
- FIRE DEPARTMENT VEHICULAR ACCESS TO ALL STRUCTURES UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES. IN AREAS WHERE GROUND SURFACES ARE SOFT OR LIKELY TO BECOME SOFT, HARD ALL WEATHER SURFACE ROADS SHALL BE PROVIDED AND MAINTAINED.
- ADDRESS NUMBERS, BOTH COMMERCIAL AND RESIDENTIAL, MUST BE POSTED ON THE FRONT OF THE STRUCTURE. NEAREST TO THE MAIN ENTRANCE IN A POSITION TO BE PLAINLY LEGIBLE, VISIBLE, AND UNOBSTRUCTED FROM THE STREET OR ROAD FRONTING THE PROPERTY.
- DISTURBED AREA IS IN EXCESS OF 1 ACRE AND FORMAL SEDIMENTATION & EROSION CONTROL PLAN APPROVAL WAS REQUIRED AS A CONDITION OF CONSTRUCTION PLAN APPROVAL. A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE KEPT ON SITE AT ALL TIMES. THE APPROVED SEDIMENTATION & EROSION CONTROL PLAN SHOULD BE REGARDED AS MINIMUM REQUIREMENTS; ADDITIONAL MEASURES SHALL BE PUT IN PLACE AS NEEDED TO ENSURE THAT NO SEDIMENT IS RELEASED FROM THE SITE.
- (CONSTRUCTION/SITE PLANS) WATER AND SEWER PERMIT APPLICATIONS HAVE BEEN APPROVED BY THE DENR. PERMIT NUMBERS ARE AS FOLLOWS:
  - WATER PERMIT NUMBER: N/A
  - SEWER PERMIT NUMBER: N/A
- COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION. THIS INCLUDES APPROVED CONSTRUCTION PLANS, APPROVED EROSION CONTROL PLANS, ENCROACHMENT AGREEMENTS, DRIVEWAY PERMITS, WATER/SEWER PERMITS, ETC.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL HARNETT COUNTY, HARNETT REGIONAL WATER AND NCDENR STANDARDS AND SPECIFICATIONS.
- MAINTAIN MINIMUM 3' COVER FOR ALL WATER PIPE.
- WHERE WATERLINE CROSSES:
  - SANITARY SEWER: WATERLINE SHALL CROSS ABOVE AND MAINTAIN 2' VERTICAL SEPARATION OR 10' OF HORIZONTAL SEPARATION. IF THIS SEPARATION CANNOT MAINTAIN OR IF WATERLINE PASSES BELOW SEWER LINE THEN BOTH WATERLINE AND SEWER LINE SHALL BE CLASS 50 DUCTILE IRON PIPE FOR A MINIMUM OF 10' EACH SIDE OF CROSSING.
  - STORM SEWER: WHERE WATERLINE CROSSES ABOVE MAINTAIN 1' VERTICAL SEPARATION. WHERE WATERLINE CROSSES BELOW MAINTAIN 2' VERTICAL SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED WATERLINE SHALL BE CLASS 50 DUCTILE IRON PIPE FOR MINIMUM OF 10' EACH SIDE OF CROSSING.
- WHERE SANITARY SEWER CROSSES STORM MAINTAIN 2' SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED SANITARY SEWER SHALL BE CLASS 50 DUCTILE IRON PIPE FOR MINIMUM OF 10' EACH SIDE OF CROSSING.
- REFERENCE NC 15A, 18C, .0906 FOR ADDITIONAL CROSSING INFORMATION. THIS CRITERIA SHALL BE MET AT ALL CROSSINGS.
- THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY AGRICULTURAL DISTRICT.
- HOURS OF OPERATION WILL BE 7 AM - 6 PM, MONDAY-FRIDAY.

### OWNER'S CONSENT FORM

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.

1/4/2021 Hal B Farthing III  
DATE OWNER SIGNATURE

### UTILITY AGENCIES:

WATER & SEWER HARNETT COUNTY PUBLIC UTILITIES DEPT. 700 MCKINNEY PARKWAY LILLINGTON, NC 27546 910.893.7575 CONTACT: MR. SHANE CUMMINGS	NCDENR-DWQ SEWER NCDENR DIVISION OF WATER RESOURCES FAYETTEVILLE REGIONAL OFFICE 225 GREEN STREET SUITE 714 FAYETTEVILLE, NC 28301 910.433.3300
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NCDENR-PUBLIC WATER SUPPLY  
NCDENR DIVISION OF WATER RESOURCES  
RALEIGH REGIONAL OFFICE  
512 N. SALISBURY STREET  
RALEIGH, NC 27604  
919.707.9100

### GOVERNING AGENCIES:

PLANNING/ZONING/LANDSCAPE HARNETT COUNTY PLANNING DEPT. 108 E. FRONT ST. LILLINGTON, NC 27546 910.893.7525 OPT. 4 CONTACT: MR. LANDON CHANDLER	STORMWATER NCDEQ DIVISION OF ENERGY, MINERAL & LAND RESOURCES RALEIGH REGIONAL OFFICE 512 N. SALISBURY STREET RALEIGH, NC 27604 919.807.6369 CONTACT: MR. ROBERT PATTERSON, PE
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ENGINEERING  
MS CONSULTANTS, INC  
920 MAIN CAMPUS DRIVE  
RALEIGH, NC 27606  
919.818.2235  
CONTACT: MR. BILL DREITZLER, PE  
EROSION CONTROL  
NCDEQ DIVISION OF ENERGY, MINERAL & LAND RESOURCES  
FAYETTEVILLE REGIONAL OFFICE  
225 GREEN STREET, SUITE 714  
FAYETTEVILLE, NC 28301  
910.433.3300  
CONTACT: MS. JODI PACE

### Developer:

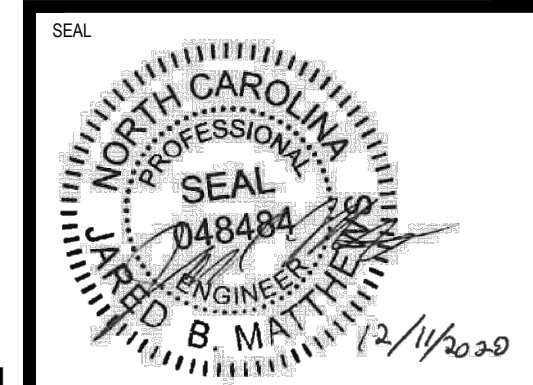
Powermaster Electric, Inc  
7621 Purfoy Road Suite 101  
Fuquay-Varina, NC 27526  
919.557.4477  
Contact: Hal Farthing

### Surveyor:

Mauldin-Watkins Surveying, PA  
P.O. BOX 444/1301 W. Broad Street  
Fuquay-Varina, NC 27526  
919.552.9326  
Contact: Wayne Mauldin, PLS

### Civil Engineering:

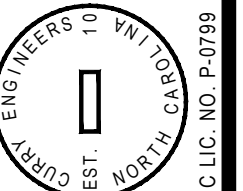
The Curry Engineering Group, PLLC  
NC License # P-0799  
PO Box 2018  
205 S. Fuquay Ave  
Fuquay-Varina, NC 27526  
919.552.0849 (o)  
919.880.9857 (m)  
Contact: Don Curry, PE  
don@curryeng.com



RELEASED FOR CONSTRUCTION

LOT #9 - JARCO DRIVE  
COVER SHEET

208 S. Fuquay Avenue  
Fuquay-Varina, NC 27708  
T (919) 552-2649  
F (919) 552-2643



Curry  
ENGINEERING  
C-00

1	2020/07/17	ISSUED COMMENTS
2	2020/08/26	HARNETT COUNTY COMMENTS
3	2020/09/22	ISSUED COMMENTS
4	2020/09/22	ISSUED COMMENTS
5	2020/11/19	REVISION COMMENTS
6	2020/11/19	REVISION COMMENTS
DATE:	7/2020	HCRZ SCALE: SCALE
FILE NO.:	2019068	CRG. SHEET SIZE: 24" x 36"

JOSEPH KENT REVELS  
D.B.2298, PG.255

NOTES:

1. THE PROPERTY SHOWN HEREON IS SUBJECT TO ALL EASEMENTS OF RECORD AFFECTING SAME.
2. NO TITLE SEARCH HAS BEEN PERFORMED BY THIS FIRM DURING THE COURSE OF THIS SURVEY.
3. THIS SURVEYOR DOES NOT CERTIFY TO THE EXISTENCE OR NON-EXISTENCE OF ANY UNDER GROUND UTILITIES THAT MAY OR MAY NOT BE PRESENT ON THIS SITE.
4. THE INFORMATION PRESENTED HERE IS FROM A COMBINATION OF HISTORIC AERIAL BASE FILE INFORMATION, AS-BUILTS, AND RECENT SURVEY.

LEGEND:

- EXISTING IRON PIPE (CONTROL POINT)
- IRON STAKE SET (UNLESS OTHERWISE NOTED)
- EXISTING CONCRETE MONUMENT (CONTROL POINT)
- CONCRETE MONUMENT SET
- × COMPUTED POINT ONLY
- ⊙ SANITARY SEWER MANHOLE
- ⊙ 40 D NAIL
- EIS EXISTING IRON STAKE
- PROPERTY BOUNDARY
- - - HERITAGE TREE BUFFER
- - - EASEMENT
- - - 500 YR FLOOD PLAIN
- - - FLD 100 YR FLOOD PLAIN
- - - FW FLOODWAY
- - - WETLANDS BOUNDARY
- - - RIPARIAN BUFFER
- - - OVERHEAD POWER
- - - U/G FIBER
- - - U/G TELECOMMUNICATIONS
- - - EXISTING WATER
- - - EXISTING SANITARY SEWER
- - - FLOOD HAZARD SOILS BOUNDARY
- - - MINOR CONTOUR
- - - 350 - MAJOR CONTOUR

Curve	Radius	Length	Chord	Chord Bear.
C1	60.00'	90.11'	81.83'	N 41°59'41" W

AREA = 3.035 ACRES

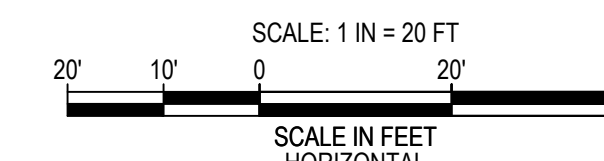
CALVIN'S PLACE S/D  
M.B.2001, PG.1186

CALVIN'S PLACE S/D  
M.B.2001, PG.1186

JARCO DRIVE  
60' PUBLIC R/W

Surveyor:

Mauldin-Watkins Surveying, PA  
P.O. BOX 444/1301 W. Broad Street  
Fuquay-Varina, NC 27526  
919.552.9326  
Contact: Wayne Mauldin, PLS

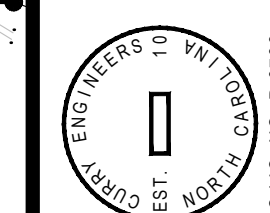


PROFESSIONAL ENGINEER SEAL NOT AFFIXED TO SHEET AS ENGINEER DOES NOT CERTIFY INFORMATION PROVIDED BY OTHERS

RELEASED FOR CONSTRUCTION

LOT #9 - JARCO DRIVE  
EXISTING CONDITIONS

208 S. Fuquay Avenue  
Fuquay-Varina, NC 27526  
T (919) 552-2499  
F (919) 552-2493



**Curry**  
ENGINEERING

C-01

1. 2009/03/17  
 2. 2009/03/26  
 3. 2009/04/02  
 4. 2009/04/22  
 5. 2009/11/19  
 6. 2009/11/19  
 DATE: 7/20/20  
 FILE NO: 2019068  
 CRG. SHEET SIZE: 24 x 36

PLAN SHEET FOR JARCO DRIVE - JARCO LOT 9 - HARNETT COUNTY PLANNING DEPARTMENT - JARCO LOT 9 - HARNETT COUNTY PLANNING DEPARTMENT - JARCO LOT 9 - HARNETT COUNTY PLANNING DEPARTMENT  
 DATE: 11/11/2020 10:22 AM

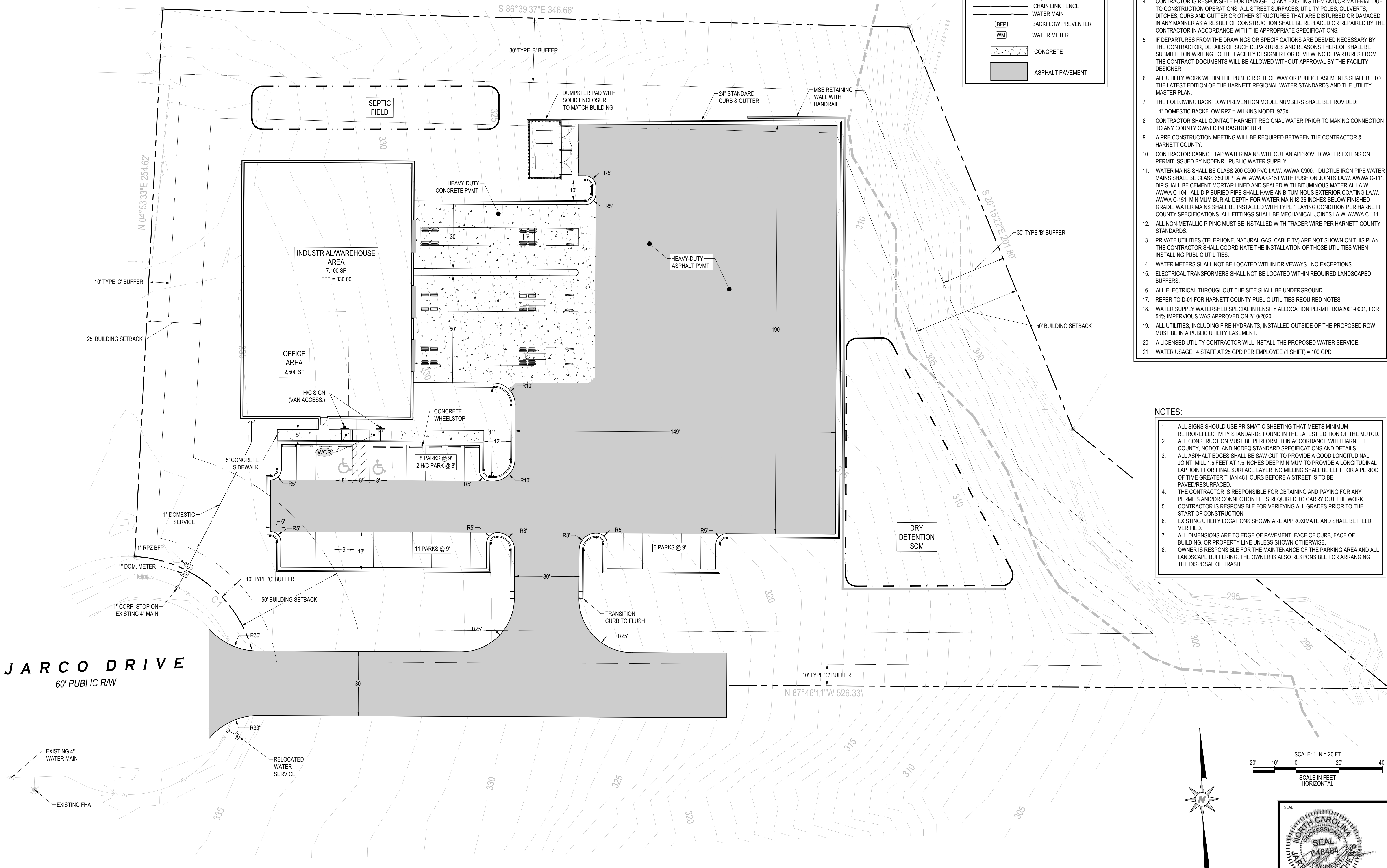
**JARCO DRIVE**  
60' PUBLIC R/W

**LEGEND:**

- SIGN
- LOT LINE
- RIGHT OF WAY LINE
- PHASE LINE
- SETBACK LINE
- BMP LIMITS
- EASEMENT
- CHAIN LINK FENCE
- WATER MAIN
- BACKFLOW PREVENTER
- WATER METER
- CONCRETE
- ASPHALT PAVEMENT

- GENERAL NOTES:**
- ALL CONSTRUCTION SHALL BE PER HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
  - THERE SHALL BE NO UNPERMITTED DISTURBANCE IN THE EXISTING WETLANDS
  - CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, RIGHT-OF-WAYS AND UTILITIES, PUBLIC OR PRIVATE, BEFORE WORKING IN THESE AREAS.
  - CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL DUE TO CONSTRUCTION OPERATIONS. ALL STREET SURFACES, UTILITY POLES, CULVERTS, DITCHES, CURB AND GUTTER OR OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS.
  - IF DEPARTURES FROM THE DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED IN WRITING TO THE FACILITY DESIGNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS WILL BE ALLOWED WITHOUT APPROVAL BY THE FACILITY DESIGNER.
  - ALL UTILITY WORK WITHIN THE PUBLIC RIGHT OF WAY OR PUBLIC EASEMENTS SHALL BE TO THE LATEST EDITION OF THE HARNETT REGIONAL WATER STANDARDS AND THE UTILITY MASTER PLAN.
  - THE FOLLOWING BACKFLOW PREVENTION MODEL NUMBERS SHALL BE PROVIDED:  
- 1" DOMESTIC BACKFLOW RPZ = WILKINS MODEL 975XL
  - CONTRACTOR SHALL CONTACT HARNETT REGIONAL WATER PRIOR TO MAKING CONNECTION TO ANY COUNTY OWNED INFRASTRUCTURE.
  - A PRE CONSTRUCTION MEETING WILL BE REQUIRED BETWEEN THE CONTRACTOR & HARNETT COUNTY.
  - CONTRACTOR CANNOT TAP WATER MAINS WITHOUT AN APPROVED WATER EXTENSION PERMIT ISSUED BY NCDENR - PUBLIC WATER SUPPLY.
  - WATER MAINS SHALL BE CLASS 200 C900 PVC I.A.W. AWWA C900. DUCTILE IRON PIPE WATER MAINS SHALL BE CLASS 350 DIP I.A.W. AWWA C-151 WITH PUSH ON JOINTS I.A.W. AWWA C-111. DIP SHALL BE CEMENT-MORTAR LINED AND SEALED WITH BITUMINOUS MATERIAL I.A.W. AWWA C-104. ALL DIP BURIED PIPE SHALL HAVE AN BITUMINOUS EXTERIOR COATING I.A.W. AWWA C-151. MINIMUM BURIAL DEPTH FOR WATER MAIN IS 36 INCHES BELOW FINISHED GRADE. WATER MAINS SHALL BE INSTALLED WITH TYPE 1 LAYING CONDITION PER HARNETT COUNTY SPECIFICATIONS. ALL FITTINGS SHALL BE MECHANICAL JOINTS I.A.W. AWWA C-111.
  - ALL NON-METALLIC PIPING MUST BE INSTALLED WITH TRACER WIRE PER HARNETT COUNTY STANDARDS.
  - PRIVATE UTILITIES (TELEPHONE, NATURAL GAS, CABLE TV) ARE NOT SHOWN ON THIS PLAN. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THOSE UTILITIES WHEN INSTALLING PUBLIC UTILITIES.
  - WATER METERS SHALL NOT BE LOCATED WITHIN DRIVEWAYS - NO EXCEPTIONS.
  - ELECTRICAL TRANSFORMERS SHALL NOT BE LOCATED WITHIN REQUIRED LANDSCAPED BUFFERS.
  - ALL ELECTRICAL THROUGHOUT THE SITE SHALL BE UNDERGROUND.
  - REFER TO D-01 FOR HARNETT COUNTY PUBLIC UTILITIES REQUIRED NOTES.
  - WATER SUPPLY WATERSHED SPECIAL INTENSITY ALLOCATION PERMIT. BOA2001-0001. FOR 54% IMPERVIOUS WAS APPROVED ON 2/10/2020.
  - ALL UTILITIES, INCLUDING FIRE HYDRANTS, INSTALLED OUTSIDE OF THE PROPOSED ROW MUST BE IN A PUBLIC UTILITY EASEMENT.
  - A LICENSED UTILITY CONTRACTOR WILL INSTALL THE PROPOSED WATER SERVICE.
  - WATER USAGE: 4 STAFF AT 25 GPD PER EMPLOYEE (1 SHIFT) = 100 GPD

- NOTES:**
- ALL SIGNS SHOULD USE PRISMATIC SHEETING THAT MEETS MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD.
  - ALL CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH HARNETT COUNTY, NCDOT, AND NCEQ STANDARD SPECIFICATIONS AND DETAILS.
  - ALL ASPHALT EDGES SHALL BE SAW CUT TO PROVIDE A GOOD LONGITUDINAL JOINT. MILL 1.5 FEET AT 1.5 INCHES DEEP MINIMUM TO PROVIDE A LONGITUDINAL LAP JOINT FOR FINAL SURFACE LAYER. NO MILLING SHALL BE LEFT FOR A PERIOD OF TIME GREATER THAN 48 HOURS BEFORE A STREET IS TO BE PAVED/RESURFACED.
  - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
  - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
  - ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, FACE OF BUILDING, OR PROPERTY LINE UNLESS SHOWN OTHERWISE.
  - OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF THE PARKING AREA AND ALL LANDSCAPE BUFFERING. THE OWNER IS ALSO RESPONSIBLE FOR ARRANGING THE DISPOSAL OF TRASH.



SCALE: 1 IN = 20 FT  
SCALE IN FEET HORIZONTAL

RELEASED FOR CONSTRUCTION

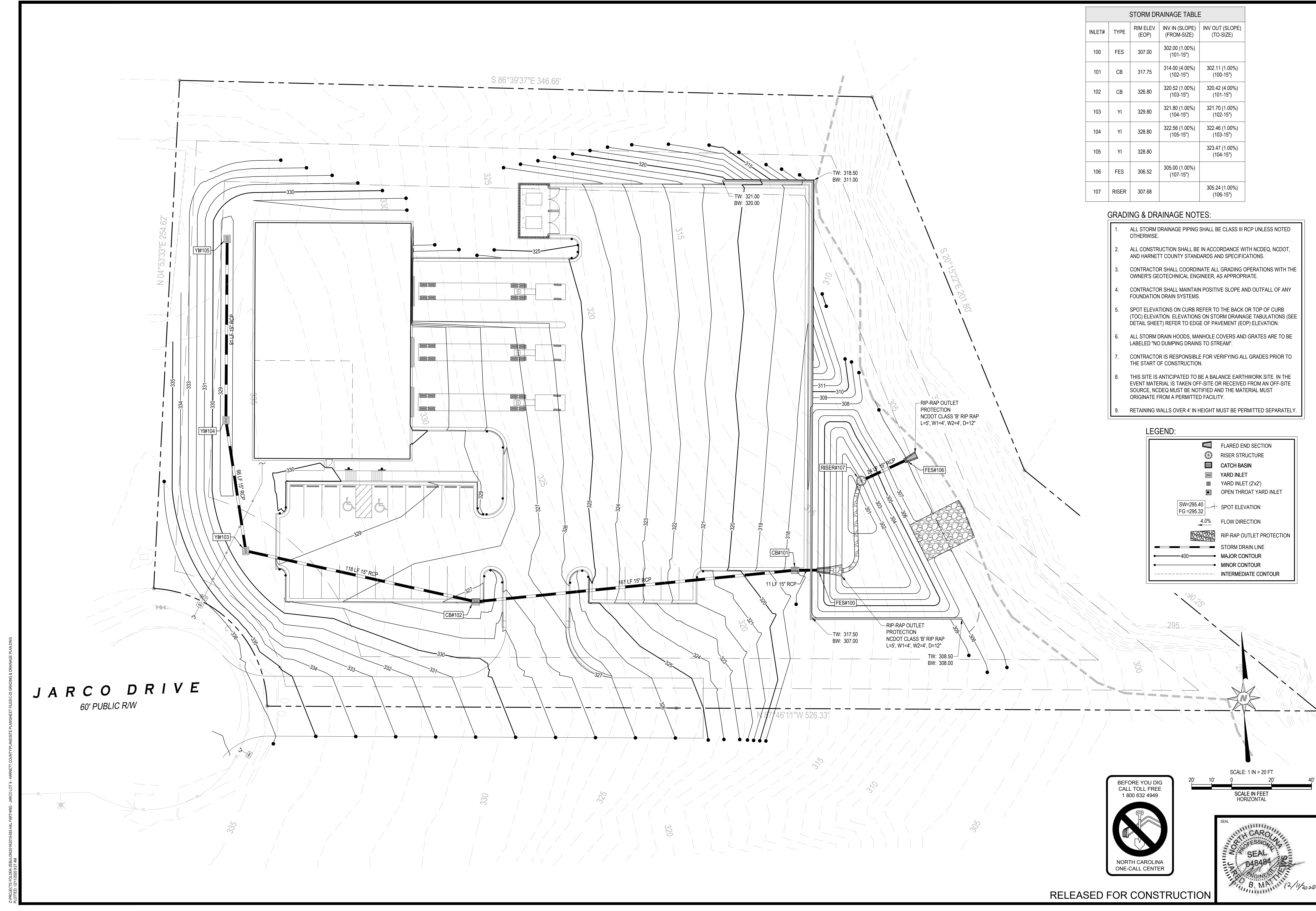
**LOT #9 - JARCO DRIVE**  
**SITE & UTILITY PLAN**

208 S. Fidelity Avenue  
Fayetteville, NC 27708  
T (919) 552-2449  
F (919) 552-2493

**Curry**  
ENGINEERING

C-02

DATE: 7/20/20  
FILE NO.: 2019068  
CRG. SHEET SIZE: 24 x 36

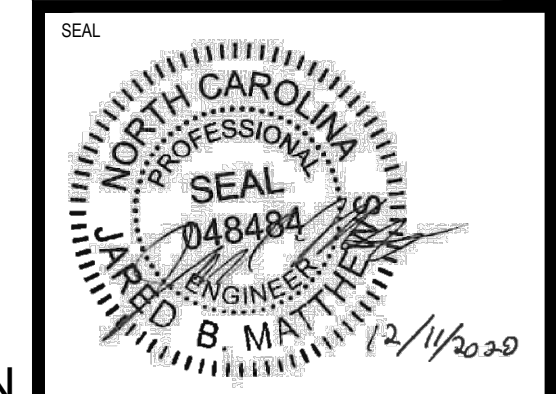
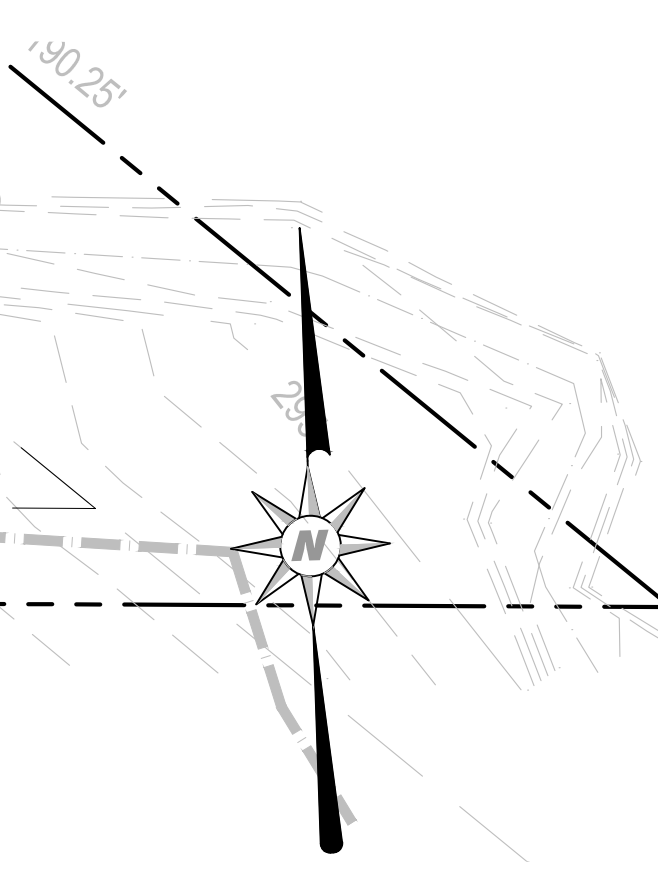


STORM DRAINAGE TABLE				
INLET#	TYPE	RIM ELEV (EOP)	INV IN (SLOPE) (FROM-SIZE)	INV OUT (SLOPE) (TO-SIZE)
100	FES	307.00	302.00 (1.00%) (101-15")	
101	CB	317.75	314.00 (4.00%) (102-15")	302.11 (1.00%) (100-15")
102	CB	326.80	320.52 (1.00%) (103-15")	320.42 (4.00%) (101-15")
103	YI	329.80	321.80 (1.00%) (104-15")	321.70 (1.00%) (102-15")
104	YI	328.80	322.56 (1.00%) (105-15")	322.46 (1.00%) (103-15")
105	YI	328.80		323.47 (1.00%) (104-15")
106	FES	306.52	305.00 (1.00%) (107-15")	
107	RISER	307.68		305.24 (1.00%) (106-15")

- GRADING & DRAINAGE NOTES:**
- ALL STORM DRAINAGE PIPING SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDOT, NCDOT, AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
  - CONTRACTOR SHALL COORDINATE ALL GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER, AS APPROPRIATE.
  - CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE AND OUTFALL OF ANY FOUNDATION DRAIN SYSTEMS.
  - SPOT ELEVATIONS ON CURB REFER TO THE BACK OR TOP OF CURB (TOC) ELEVATION. ELEVATIONS ON STORM DRAINAGE TABULATIONS (SEE DETAIL SHEET) REFER TO EDGE OF PAVEMENT (EOP) ELEVATION.
  - ALL STORM DRAIN HOODS, MANHOLE COVERS AND GRATES ARE TO BE LABELED "NO DUMPING DRAINS TO STREAM".
  - CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
  - THIS SITE IS ANTICIPATED TO BE A BALANCE EARTHWORK SITE. IN THE EVENT MATERIAL IS TAKEN OFF-SITE OR RECEIVED FROM AN OFF-SITE SOURCE, NCDOT MUST BE NOTIFIED AND THE MATERIAL MUST ORIGINATE FROM A PERMITTED FACILITY.
  - RETAINING WALLS OVER 4' IN HEIGHT MUST BE PERMITTED SEPARATELY.

**LEGEND:**

- FLARED END SECTION
- RISER STRUCTURE
- CATCH BASIN
- YARD INLET
- YARD INLET (2x2')
- OPEN THROAT YARD INLET
- SW=295.40  
FG=295.32
- SPOT ELEVATION
- 4.0%
- FLOW DIRECTION
- RIP-RAP OUTLET PROTECTION
- STORM DRAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- INTERMEDIATE CONTOUR



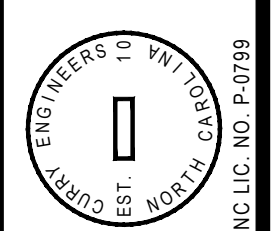
RELEASED FOR CONSTRUCTION

**REVISIONS**

NO.	DATE	BY	DESCRIPTION
1	2020/08/17		ISSUED COMMENTS
2	2020/08/26		HARNETT COUNTY COMMENTS
3	2020/09/02		ISSUED COMMENTS
4	2020/09/22		ISSUED COMMENTS
5	2020/11/09		ISSUED COMMENTS
6	2020/11/19		ISSUED COMMENTS
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**LOT #9 - JARCO DRIVE  
GRADING & DRAINAGE PLAN**

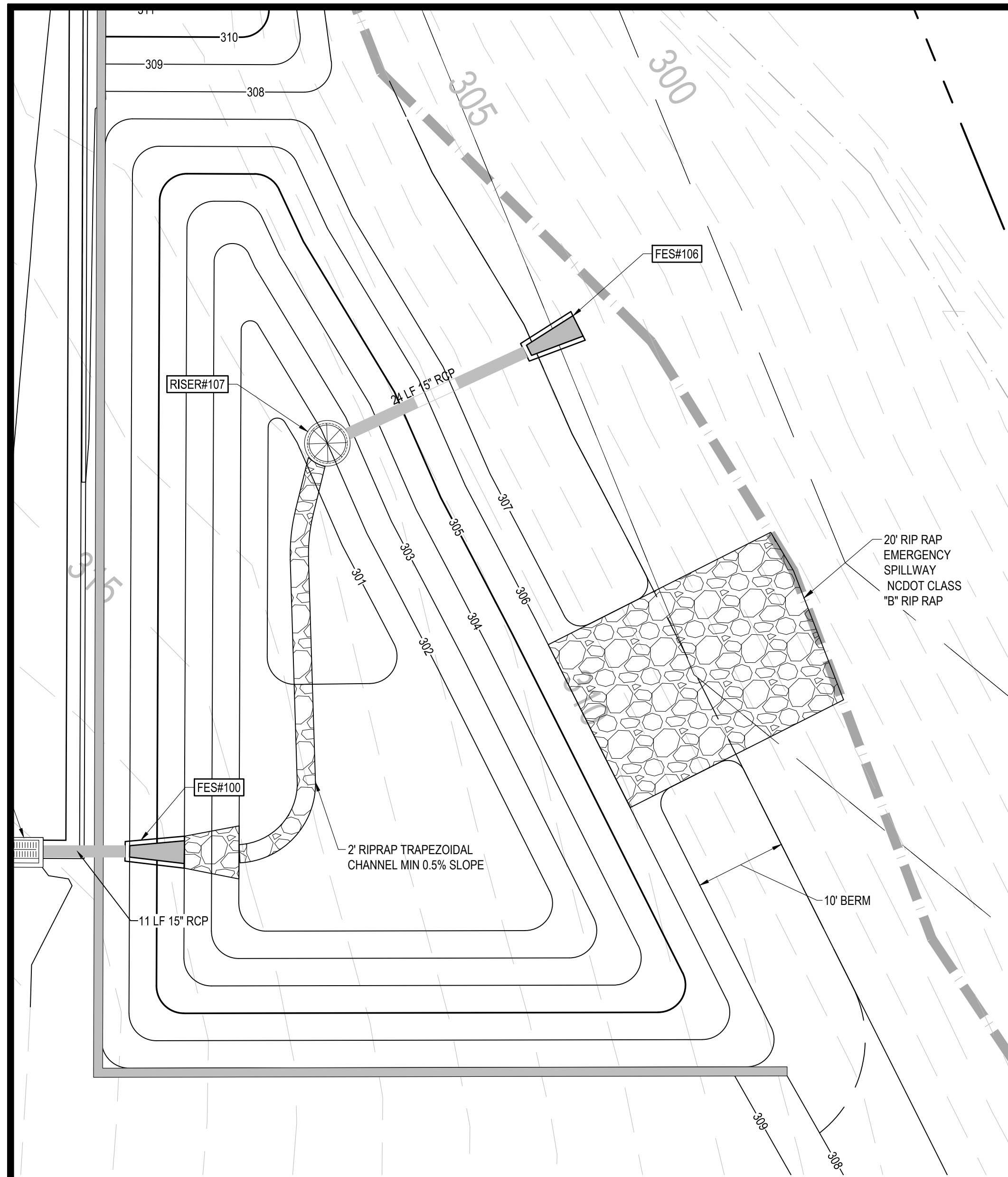
208 S. Fidelity Avenue  
Fayetteville, NC 27706  
T (919) 552-2499  
F (919) 552-2493



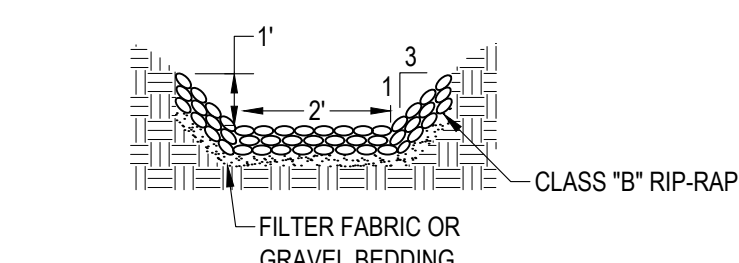
**Curry**  
ENGINEERING

C-03

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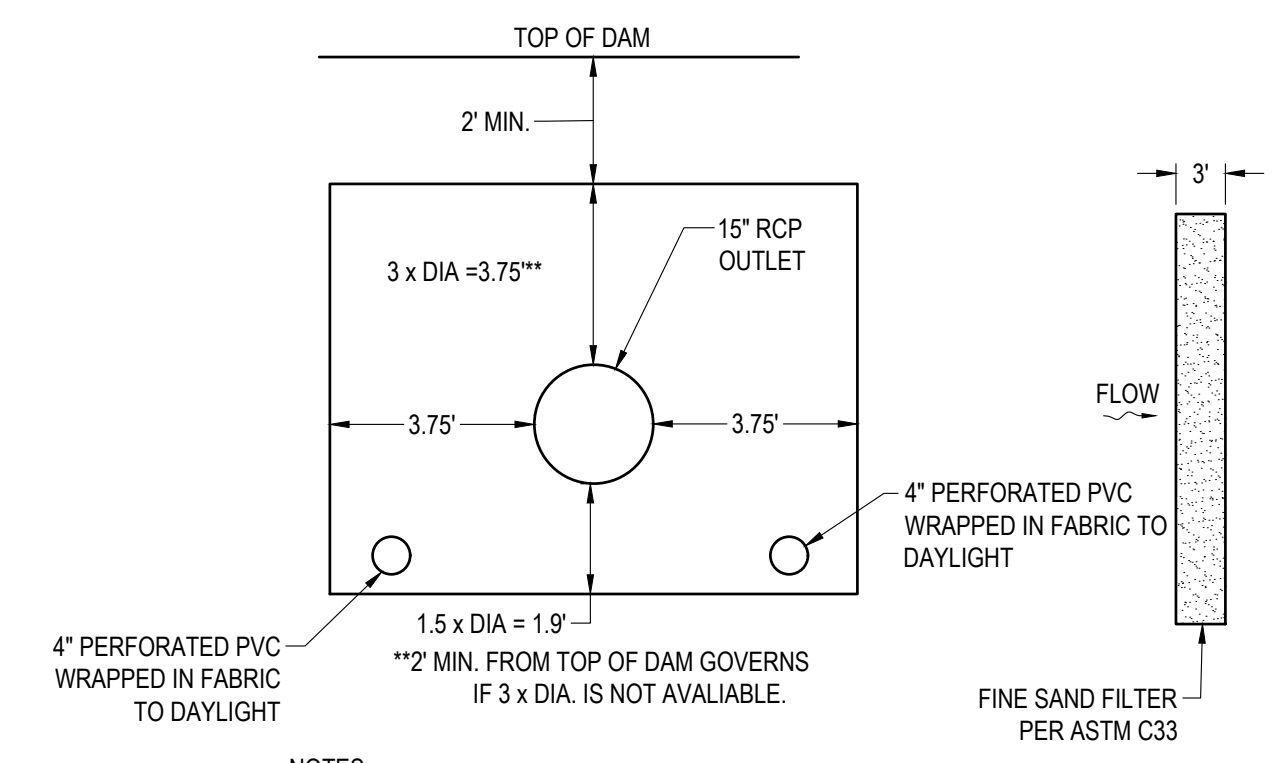


**1** SCM LAYOUT  
C-04 SCALE: N.T.S.



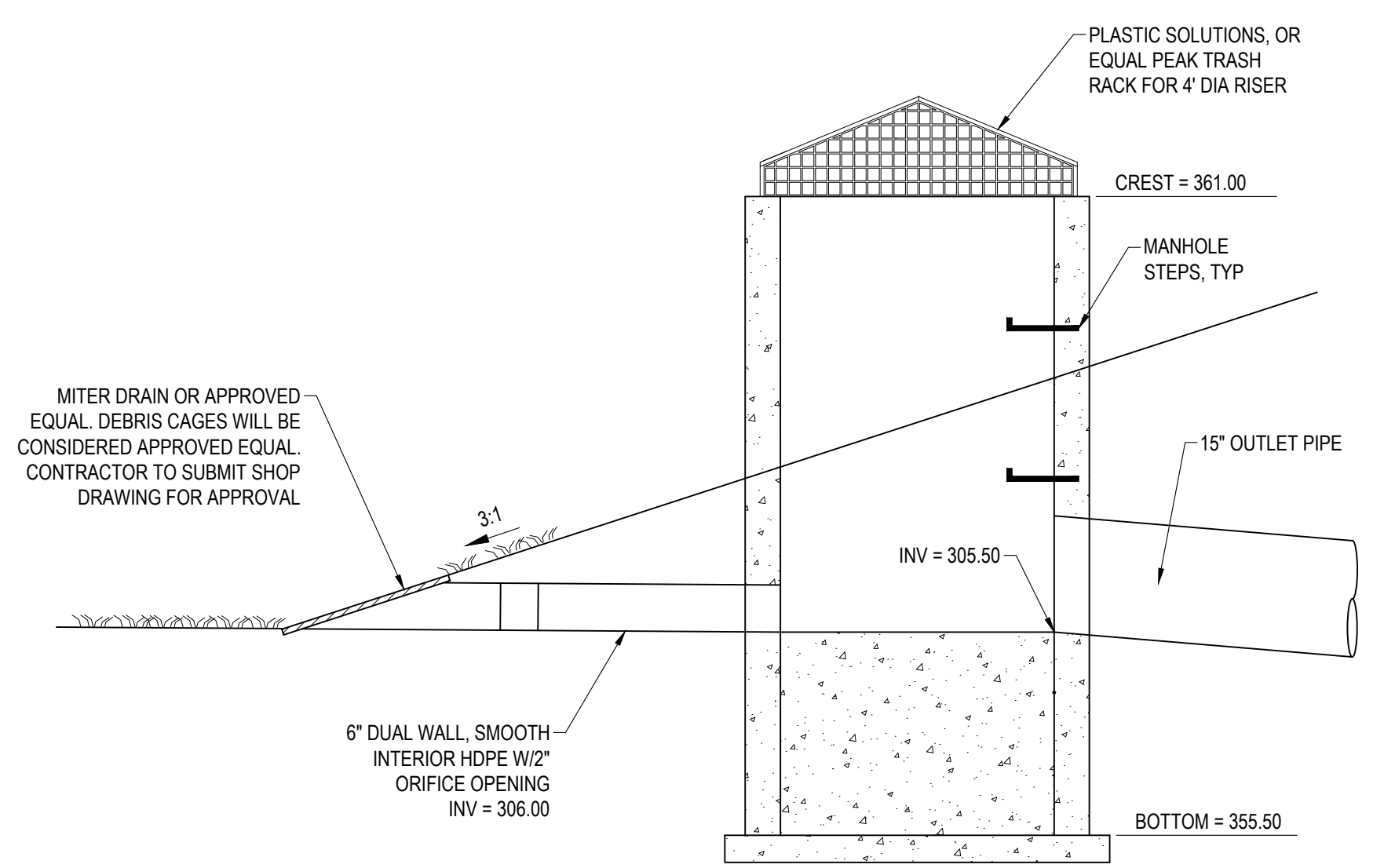
STONE CLASSIFICATION	RIP RAP DEPTH
A	12"
B	18"
CLASS 1	24"
CLASS 2	24"-36"

**2** RIP-RAP CHANNEL  
C-04 SCALE: N.T.S.



- NOTES:**
- CONTRACTOR SHALL INSTALL FILTER DIAPHRAGM ON DAM OUTLET PIPE.
  - COORDINATE WITH ENGINEER ON APPROVED MATERIALS AND INSTALLATION TECHNIQUES PRIOR TO INSTALLATION.

**3** SAND DIAPHRAGM  
C-04 SCALE: N.T.S.

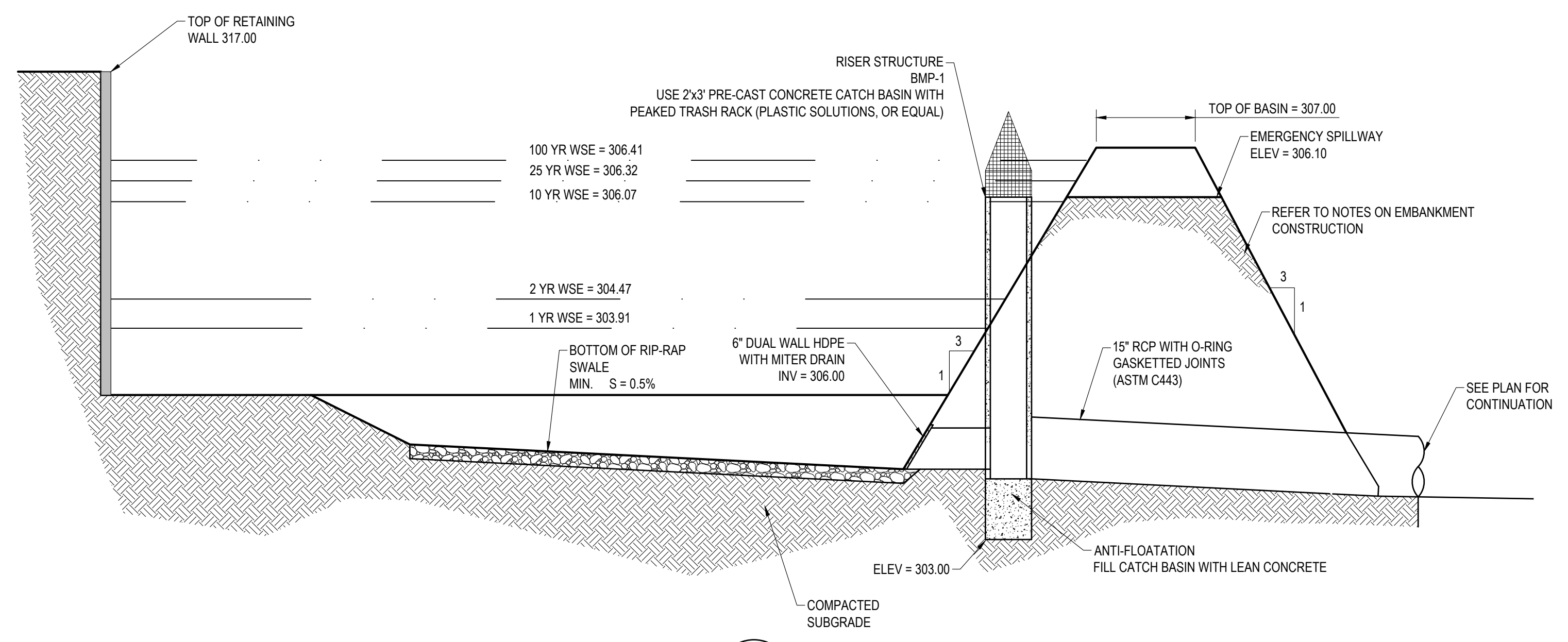


**4** RISER STRUCTURE DETAIL  
C-04 SCALE: N.T.S.

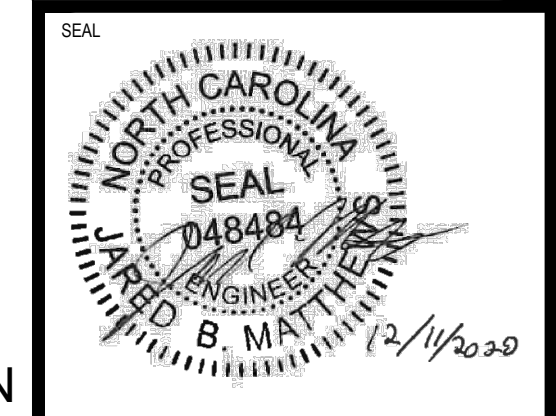
- GENERAL NOTES:**
- THIS SITE IS LOCATED IN THE CAPE FEAR RIVER BASIN, MEDIUM DENSITY COMMERCIAL.
  - DRY DETENTION BASIN SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES STORMWATER BMP MANUAL - LATEST EDITION. DRY DETENTION BASIN PROVIDES MINIMAL WATER QUALITY TREATMENT.
  - THE PROJECT MEETS THE REQUIREMENTS OF NCDOT BMP MANUAL, LATEST EDITION.
  - MAXIMUM SLOPE OF BASIN IS 3:1.
  - ALL SIDE SLOPES, EMBANKMENTS AND SPILLWAYS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR PER ASTM-D698.
  - CONTROLLED FILL, AS SPECIFIED BY THE RESIDENT ENGINEER, IN THE DAM EMBANKMENT SHALL BE PLACED IN 6-INCH LOOSE LAYERS (3-INCH LOOSE LAYERS WITHIN 3- FEET OF EITHER SIDE OF THE PRINCIPAL SPILLWAY PIPE TO A DEPTH OF 2- FEET OVER THE PIPE) AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM-D698.
  - ALL VISIBLE ORGANIC DEBRIS SUCH AS ROOTS AND LIMBS SHALL BE REMOVED FROM THE FILL MATERIAL PRIOR TO COMPACTION TO THE REQUIRED DENSITY. SOILS WITH ORGANIC MATTER CONTENT EXCEEDING 5% BY WEIGHT SHALL BE USED. STONES GREATER THAN 3-INCH (IN ANY DIRECTION) SHALL BE REMOVED FROM THE FILL PRIOR TO COMPACTION.
  - FILL MATERIAL PLACED AT DENSITIES LOWER THAN SPECIFIED MINIMUM DENSITIES OR AT MOISTURE CONTENTS OUTSIDE THE SPECIFIED RANGES OR OTHERWISE NOT CONFORMING TO SPECIFIED REQUIREMENTS SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIALS.
  - ANY FILL LAYER THAT IS SMOOTH DRUM ROLLED TO REDUCE MOISTURE PENETRATION DURING A STORM EVENT SHALL BE PROPERLY SCARIFIED PRIOR TO THE PLACEMENT OF THE NEXT SOIL LIFT.
  - SURFACE WATER AND STREAM FLOW SHALL BE CONTINUOUSLY CONTROLLED THROUGHOUT CONSTRUCTION AND THE PLACEMENT OF CONTROLLED FILL.
  - FOUNDATION AREAS MAY REQUIRE UNDERCUTTING OF COMPRESSIBLE AND/OR UNSUITABLE SOILS IN ADDITION TO THAT INDICATED ON THE PLANS. ALL SUCH UNDERCUTTING SHALL BE PERFORMED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER AND SHALL BE MONITORED AND DOCUMENTED. IN NO CASE SHALL THERE BE AN ATTEMPT TO STABILIZE AND PORTIONS OF THE FOUNDATION SOILS WITH CRUSHED STONE.
  - TREATMENT OF SEEPAGE AREAS, SUBGRADE PREPARATION, FOUNDATION DEWATERING AND ROCK FOUNDATION PREPARATION (I.E., TREATMENT WITH SLUSH GROUTING, DENTAL CONCRETE, ETC.) MAY BE REQUIRED AT THE DISCRETION OF THE RESIDENTIAL ENGINEER. ALL SUCH ACTIVITIES SHALL BE CLOSELY MONITORED AND DOCUMENTED BY THE GEOTECHNICAL ENGINEER.
  - FILL ADJACENT TO THE RISER AND PRINCIPAL SPILLWAY PIPE SHALL BE PLACED SO THAT LIFTS ARE AT THE SAME LEVEL ON BOTH SIDES OF THE STRUCTURES.
  - EARTHWORK COMPACTON WITHIN 3- FEET OF ANY STRUCTURES SHALL BE ACCOMPLISHED BY MEANS OF HAND TAMPERS, MANUALLY DIRECTED POWER TAMPERS OR PLATE COMPACTORS OR MINIATURE SELF- PROPELLED ROLLERS.
  - COMPACTON BY MEANS OF DROP WEIGHTS FROM A CRANE OR HOIST SHALL NOT BE PERMITTED.
  - HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO PASS OVER CAST-IN- PLACE STRUCTURES UNTIL ADEQUATE CURING TIME HAS ELAPSED.
  - TO RE- ESTABLISH VEGETATION AFTER CONSTRUCTION, A 2- TO 3- INCH LAYER OF TOPSOIL SHALL BE PLACED ON THE DISTURBED EMBANKMENT SURFACE AND THE AREA SEEDED AND MULCHED OR HYDROSEEDDED.
  - ALL RISER STRUCTURES, INCLUDING WEIR WALL TYPE STRUCTURES, SHALL BE REINFORCED CONCRETE. BRICK/ CONCRETE BLOCK AND MORTAR TYPE STRUCTURES WILL NOT BE ACCEPTED.
  - ALL RISER STRUCTURES SHALL BE LOCATED SUCH THAT DIRECT ACCESS FROM THE DAM EMBANKMENT CAN BE ACHIEVED.
  - RISER STRUCTURES WITH MULTIPLE BARREL SECTIONS SHALL HAVE GASKETTED JOINTS, AND EACH SECTION SHALL BE BOLTED TO ADJACENT SECTIONS WITH STAINLESS STEEL STRAPS.

PEAK RUNOFF CALCULATIONS				
STORM EVENT	PRE	POST	POST-INFILTRATION	ELEV.
1-YR	Q1=2.07 cfs	Q1=3.13 cfs	1.14 cfs	303.91
2-YR	Q1=3.32 cfs	Q1=4.921 cfs	1.14 cfs	304.47
10-YR	Q1=7.27 cfs	Q1=10.49 cfs	1.65 cfs	306.07

**5** SCM RUNOFF SUMMARY  
C-04 SCALE: N.T.S.



**6** DRY DETENTION - SECTION A  
C-04 SCALE: N.T.S.



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**LOT #9 - JARCO DRIVE**  
**SCM PLAN & SECTIONS**

208 S. Fidelity Avenue  
Fayetteville, NC 27708  
T (910) 582-2849  
F (910) 582-2843

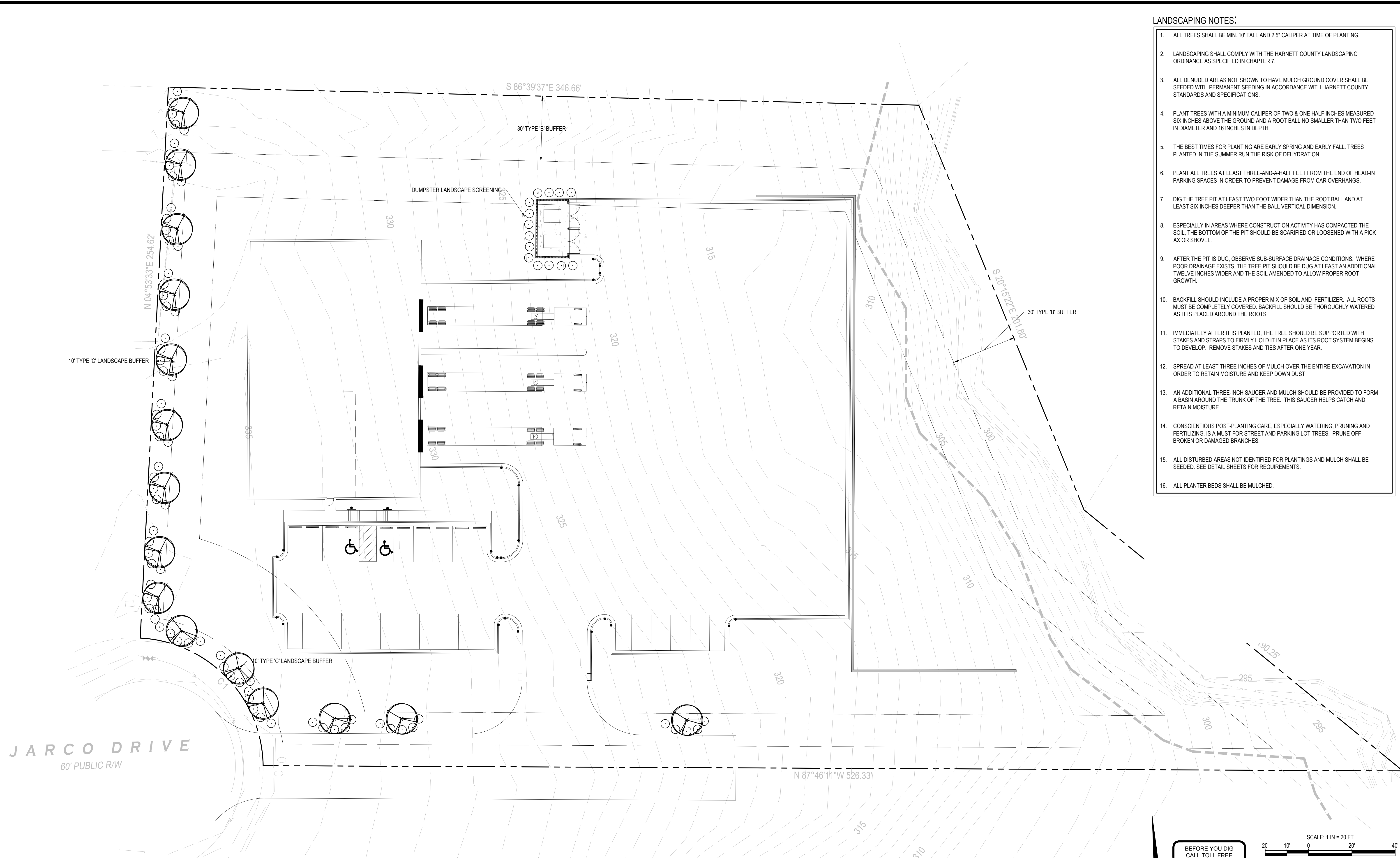
**Curry**  
ENGINEERING  
C-04

DRAWN BY: J. B. MATTHEWS, DATE: 12/1/2020, PROJECT: JARCO DRIVE, SHEET: SCM PLAN & SECTIONS, SCALE: AS SHOWN, PLOTTED: 12/1/2020 12:28 AM

REVISIONS	
NO.	DESCRIPTION
1	2020/08/17
2	2020/08/26
3	2020/09/02
4	2020/09/22
5	2020/11/19
6	2020/11/19
7	2020/11/19

DATE: 12/1/2020  
FILE NO: 2019068  
CRG. SHEET SIZE: 24 x 36

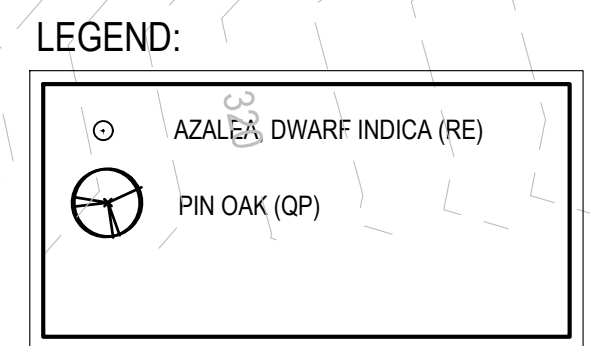
PROJECT: 1805 - 254.62 - JARCO DRIVE - JARCO LOT 9 - HARNETT COUNTY PLANNING DEPARTMENT - LANDSCAPE PLAN  
 DATE: 11/12/2023 AM



- LANDSCAPING NOTES:**
- ALL TREES SHALL BE MIN. 10' TALL AND 2.5" CALIPER AT TIME OF PLANTING.
  - LANDSCAPING SHALL COMPLY WITH THE HARNETT COUNTY LANDSCAPING ORDINANCE AS SPECIFIED IN CHAPTER 7.
  - ALL DENUDED AREAS NOT SHOWN TO HAVE MULCH GROUND COVER SHALL BE SEEDED WITH PERMANENT SEEDING IN ACCORDANCE WITH HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
  - PLANT TREES WITH A MINIMUM CALIPER OF TWO & ONE HALF INCHES MEASURED SIX INCHES ABOVE THE GROUND AND A ROOT BALL NO SMALLER THAN TWO FEET IN DIAMETER AND 18 INCHES IN DEPTH.
  - THE BEST TIMES FOR PLANTING ARE EARLY SPRING AND EARLY FALL. TREES PLANTED IN THE SUMMER RUN THE RISK OF DEHYDRATION.
  - PLANT ALL TREES AT LEAST THREE-AND-A-HALF FEET FROM THE END OF HEAD-IN PARKING SPACES IN ORDER TO PREVENT DAMAGE FROM CAR OVERHANGS.
  - DIG THE TREE PIT AT LEAST TWO FOOT WIDER THAN THE ROOT BALL AND AT LEAST SIX INCHES DEEPER THAN THE BALL VERTICAL DIMENSION.
  - ESPECIALLY IN AREAS WHERE CONSTRUCTION ACTIVITY HAS COMPACTED THE SOIL, THE BOTTOM OF THE PIT SHOULD BE SCARIFIED OR LOOSENED WITH A PICK AX OR SHOVEL.
  - AFTER THE PIT IS DUG, OBSERVE SUB-SURFACE DRAINAGE CONDITIONS. WHERE POOR DRAINAGE EXISTS, THE TREE PIT SHOULD BE DUG AT LEAST AN ADDITIONAL TWELVE INCHES WIDER AND THE SOIL AMENDED TO ALLOW PROPER ROOT GROWTH.
  - BACKFILL SHOULD INCLUDE A PROPER MIX OF SOIL AND FERTILIZER. ALL ROOTS MUST BE COMPLETELY COVERED. BACKFILL SHOULD BE THOROUGHLY WATERED AS IT IS PLACED AROUND THE ROOTS.
  - IMMEDIATELY AFTER IT IS PLANTED, THE TREE SHOULD BE SUPPORTED WITH STAKES AND STRAPS TO FIRMLY HOLD IT IN PLACE AS ITS ROOT SYSTEM BEGINS TO DEVELOP. REMOVE STAKES AND TIES AFTER ONE YEAR.
  - SPREAD AT LEAST THREE INCHES OF MULCH OVER THE ENTIRE EXCAVATION IN ORDER TO RETAIN MOISTURE AND KEEP DOWN DUST.
  - AN ADDITIONAL THREE-INCH SAUCER AND MULCH SHOULD BE PROVIDED TO FORM A BASIN AROUND THE TRUNK OF THE TREE. THIS SAUCER HELPS CATCH AND RETAIN MOISTURE.
  - CONSCIENTIOUS POST-PLANTING CARE, ESPECIALLY WATERING, PRUNING AND FERTILIZING, IS A MUST FOR STREET AND PARKING LOT TREES. PRUNE OFF BROKEN OR DAMAGED BRANCHES.
  - ALL DISTURBED AREAS NOT IDENTIFIED FOR PLANTINGS AND MULCH SHALL BE SEEDED. SEE DETAIL SHEETS FOR REQUIREMENTS.
  - ALL PLANTER BEDS SHALL BE MULCHED.

**PLANTING SCHEDULE:**

KEY	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SIZE	HEIGHT
TREES						
QP	15	PIN OAK	QUERCUS PALUSTRIS	B&B	2.5" CAL	10'
SHRUBS						
RE	89	AZALEA DWARF INDICA	RHODODENDRON ERIOCARPUM	GAL.	3 GAL.	18"



SCALE: 1 IN = 20 FT  
SCALE IN FEET HORIZONTAL

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**LOT #9 - JARCO DRIVE  
LANDSCAPE PLAN**

**Curry ENGINEERING**  
C-05

208 S. Fidelity Avenue  
Fayetteville, NC 27808  
T (919) 552-2949  
F (919) 552-2943

REVISIONS:

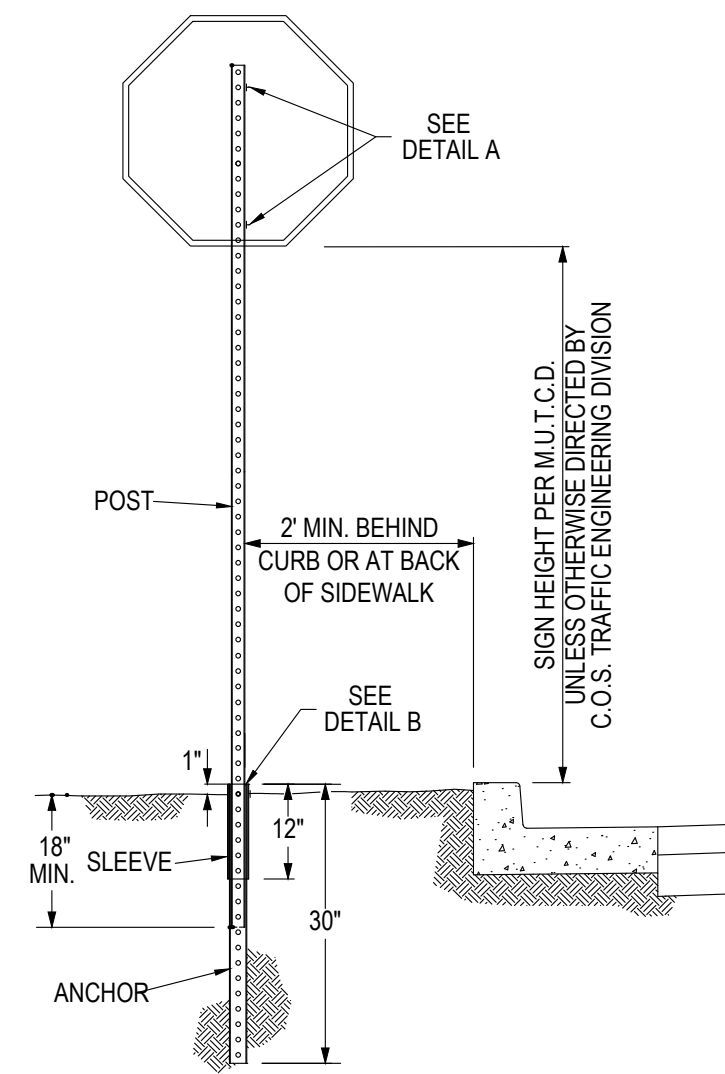
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3	2023/10/02	ISSUED COMMENTS		
4	2023/10/26	HARNETT COUNTY COMMENTS		
5	2023/11/09	ISSUED COMMENTS		
6	2023/11/29	HARNETT COUNTY COMMENTS		
7	2023/12/11	ISSUED COMMENTS		

DATE: 11/20/23  
SCALE: AS SHOWN  
FILE NO.: 2019068  
CRG. SHEET SIZE: 24 x 36

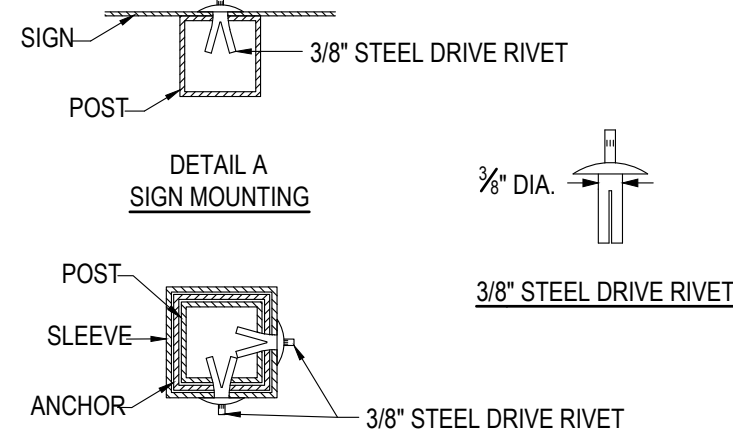




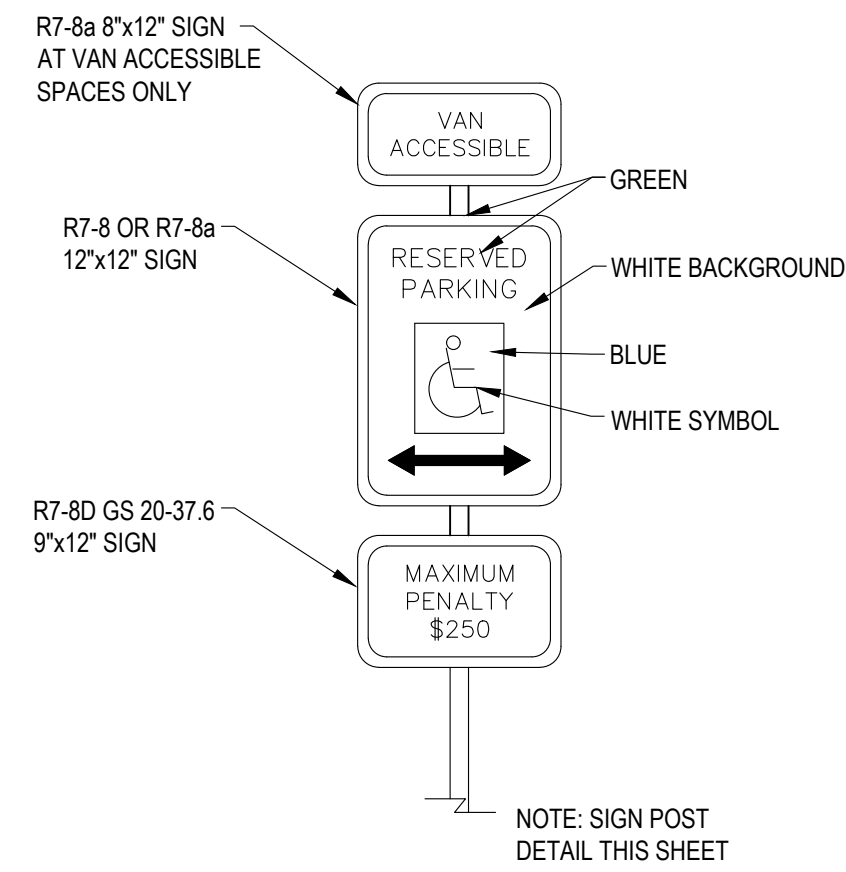




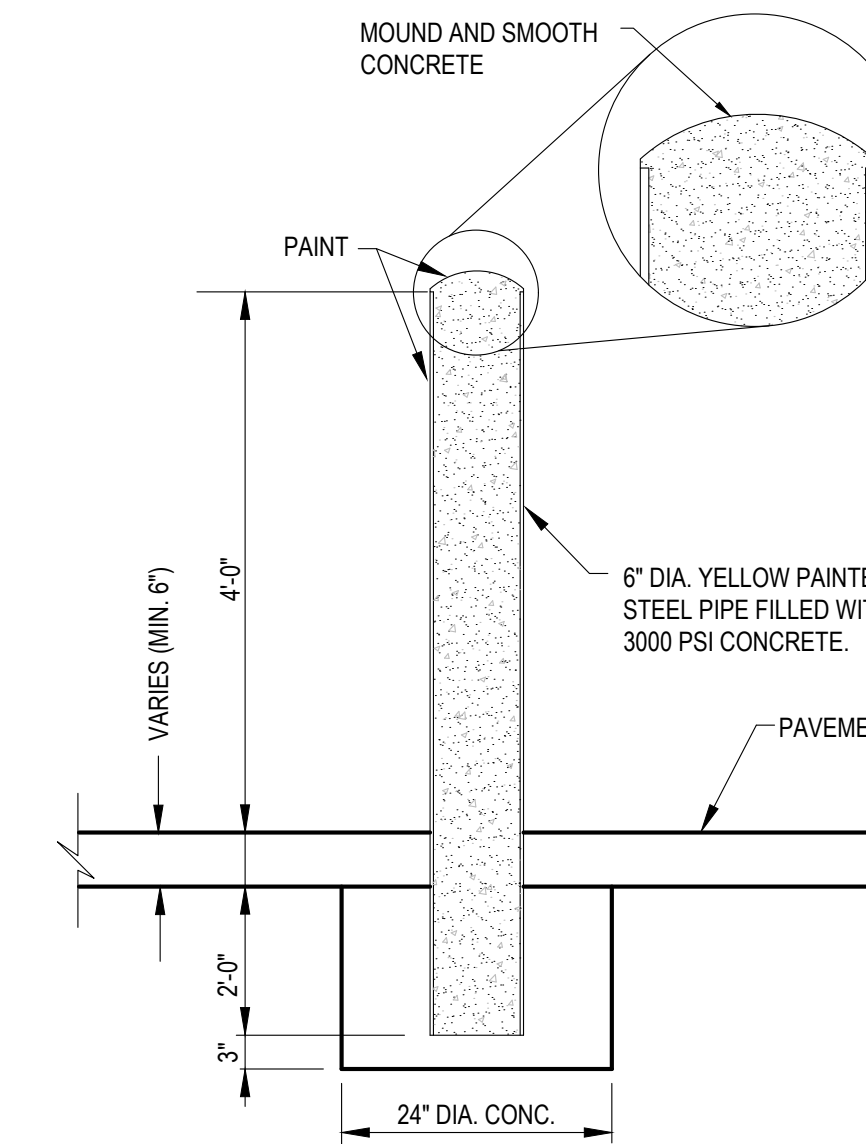
**1 SIGN INSTALLATION DETAIL**  
D-03 SCALE: NTS



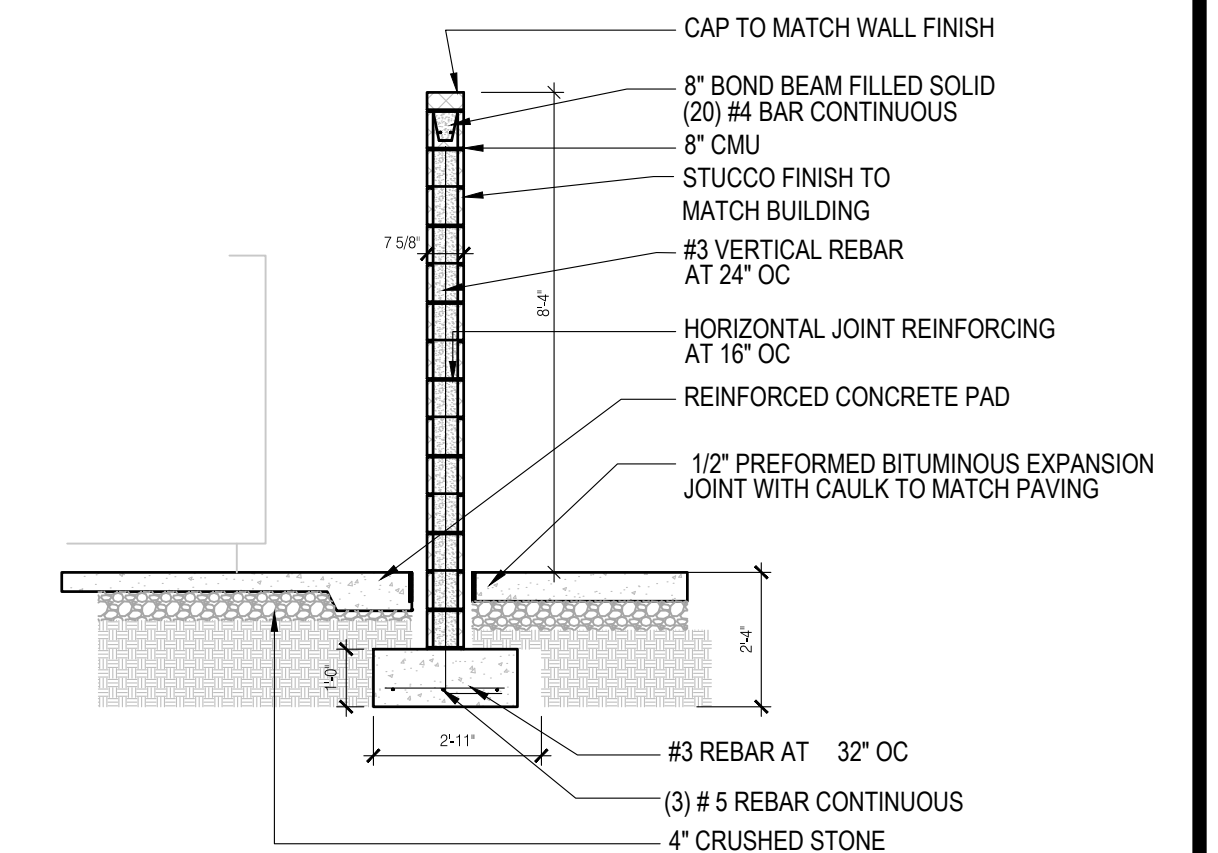
**2 STOP SIGN**  
D-03 SCALE: NTS



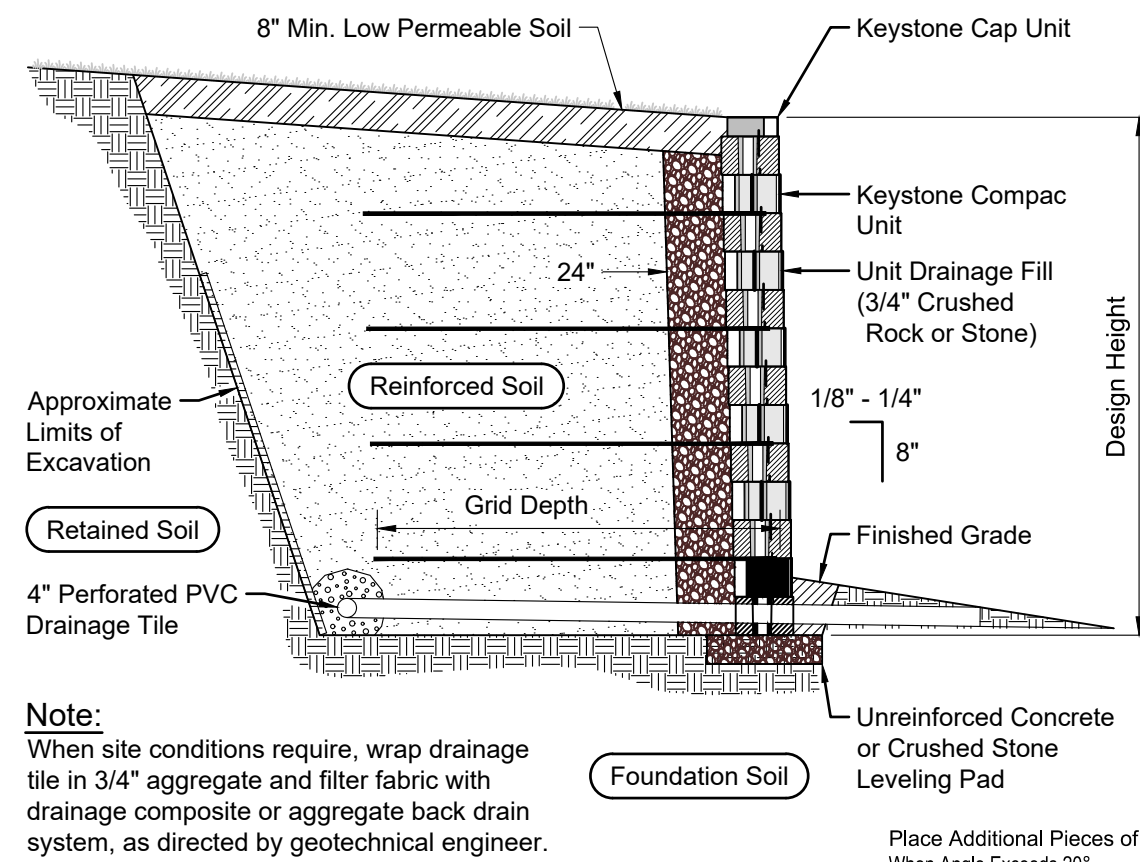
**3 ACCESSIBLE PARKING SIGNAGE**  
D-03 SCALE: NTS



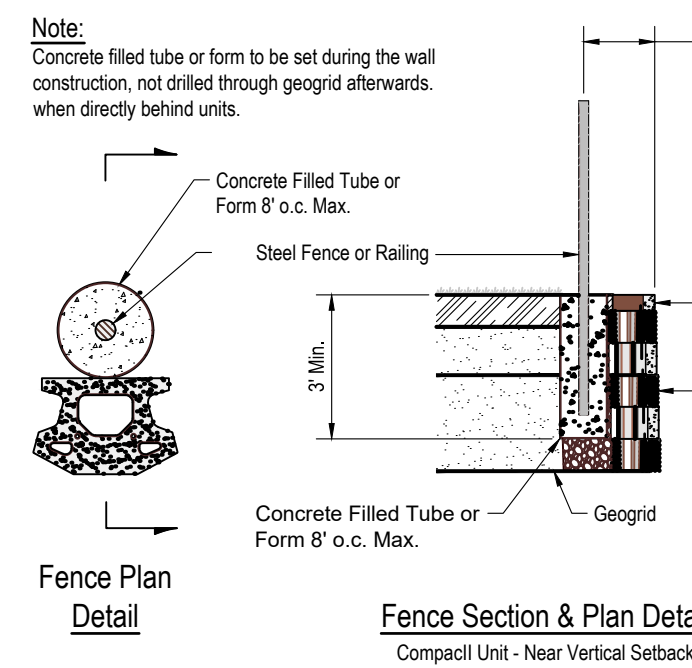
**4 BOLLARD**  
D-03 SCALE: NTS



**5 DUMPSTER ENCLOSURE**  
D-03 SCALE: NTS



**6 RETAINING WALL DETAILS**  
D-03 SCALE: NTS

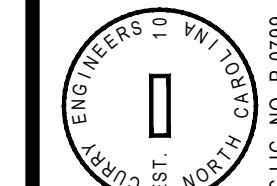


**7 DUMPSTER ENCLOSURE GATE**  
D-03 SCALE: NTS

PROJECT NO. 2019068 - JARCO LOT 9 - HANNETT COUNTY PLANSHEET FLS0102 SITE DETAILS.DWG  
 PLOTTED: 11/12/2020 10:23 AM

**LOT #9 - JARCO DRIVE**  
**SITE DETAILS I**

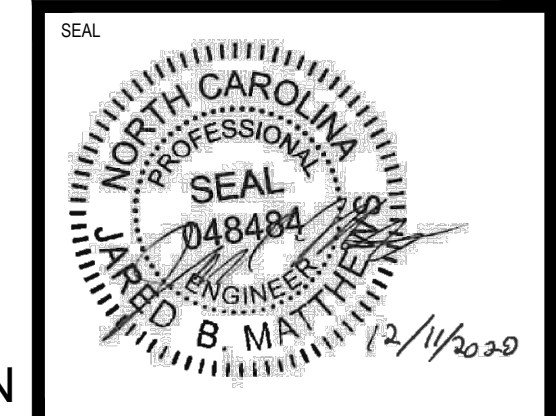
208 S. Fuquay Avenue  
 Fuquay/Varina, NC 27090  
 T (919) 552-2499  
 F (919) 552-2493



**Curry**  
 ENGINEERING

**D-03**

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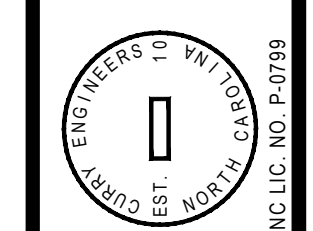
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2	2020/08/20	HANNETT COUNTY COMMENTS	
3	2020/08/22	ISSUED COMMENTS	
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6	2020/11/19	HANNETT COUNTY COMMENTS	
7	2020/11/19	ISSUED COMMENTS	
8	2020/11/19	HANNETT COUNTY COMMENTS	
9	2020/11/19	ISSUED COMMENTS	
10	2020/11/19	HANNETT COUNTY COMMENTS	

DATE: 11/20/20  
 FILE NO.: 2019068  
 HORIZ. SCALE: SCALE  
 VERT. SCALE: SCALE  
 CNG. SHEET SIZE: 24 x 36

REVISIONS	
NO.	DATE
1	2020/08/17
2	2020/08/20
3	2020/08/20
4	2020/08/22
5	2020/11/19
6	2020/11/19
7	2020/11/19
DATE	7/2020
FILE NO.	2019068
CRG. SHEET SIZE	24 x 36

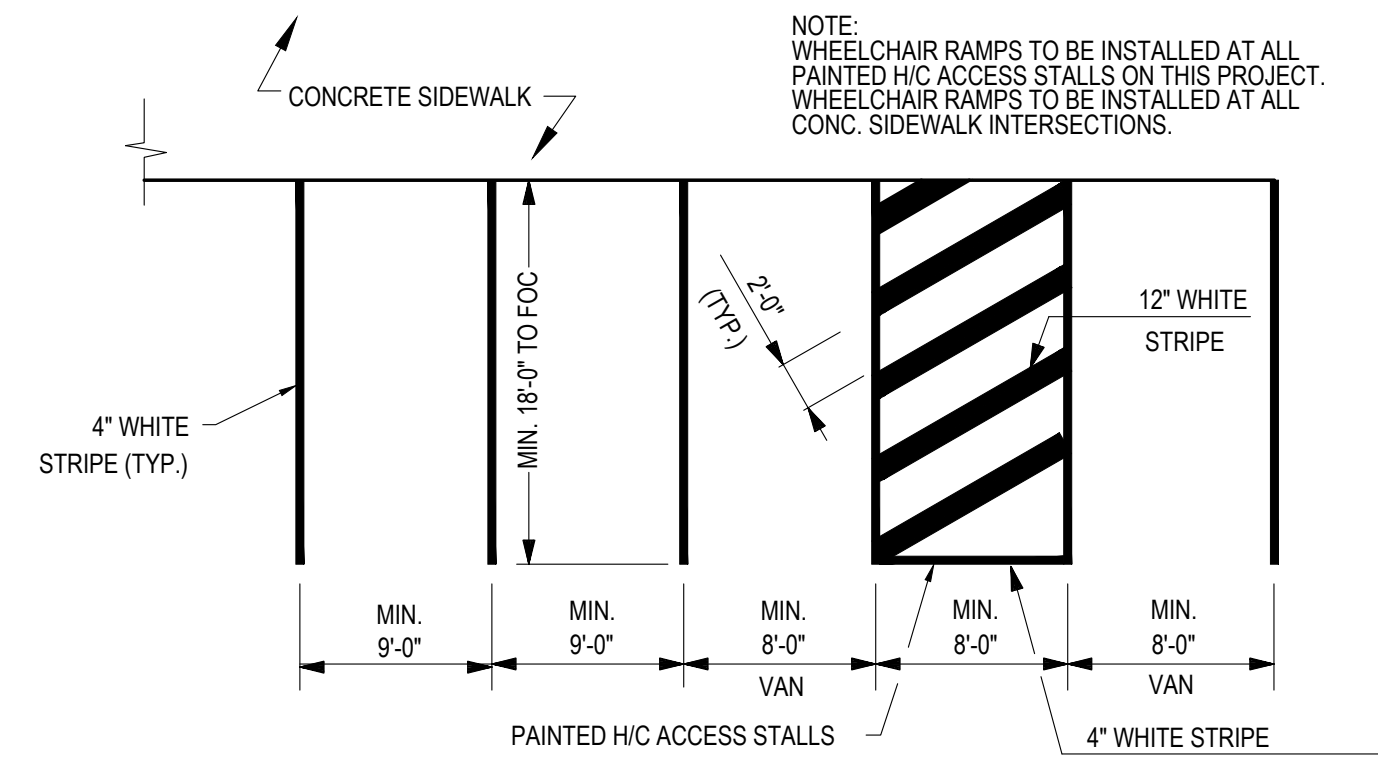
**LOT #9 - JARCO DRIVE**  
**SITE DETAILS II**

208 S. Fidelity Avenue  
 Fuquay-Varina, NC 27090  
 T (919) 552-2449  
 F (919) 552-2493

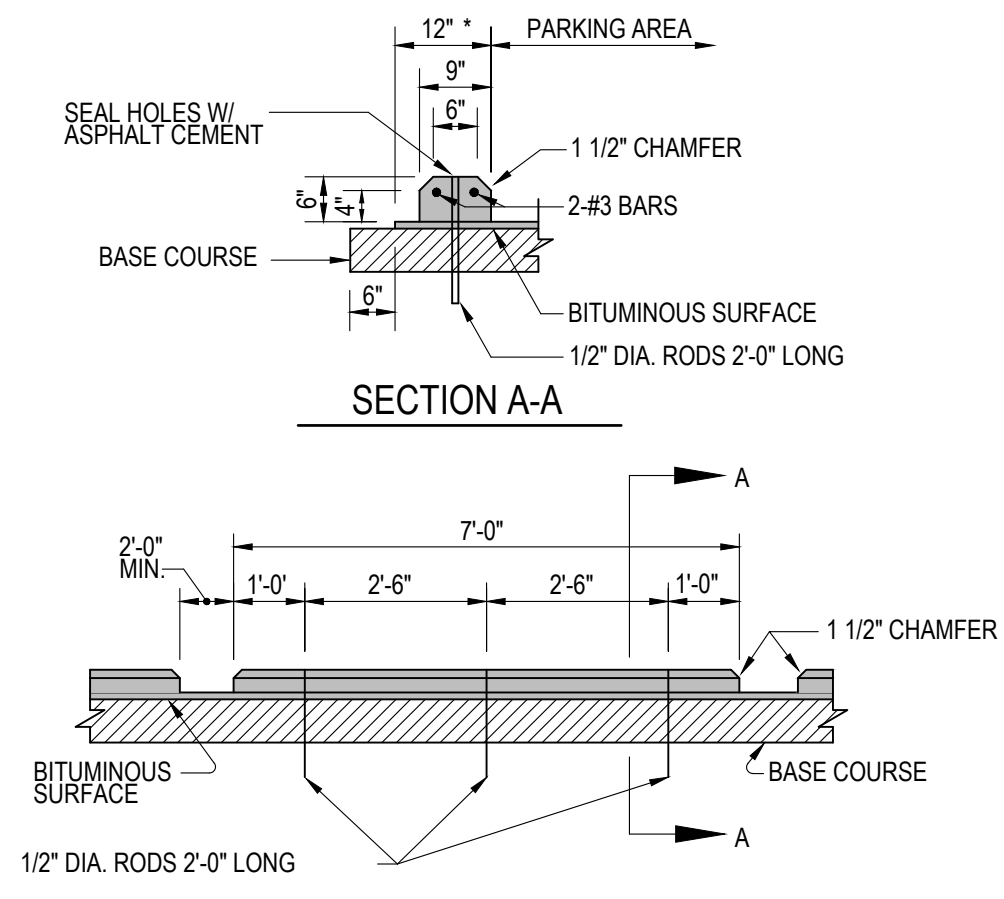


**Curry**  
 ENGINEERING

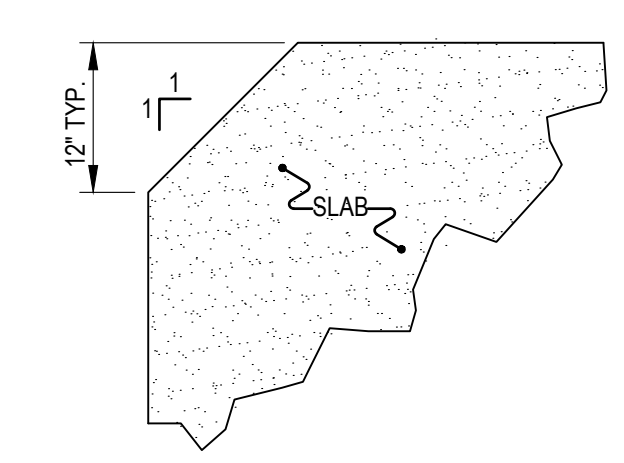
**D-04**



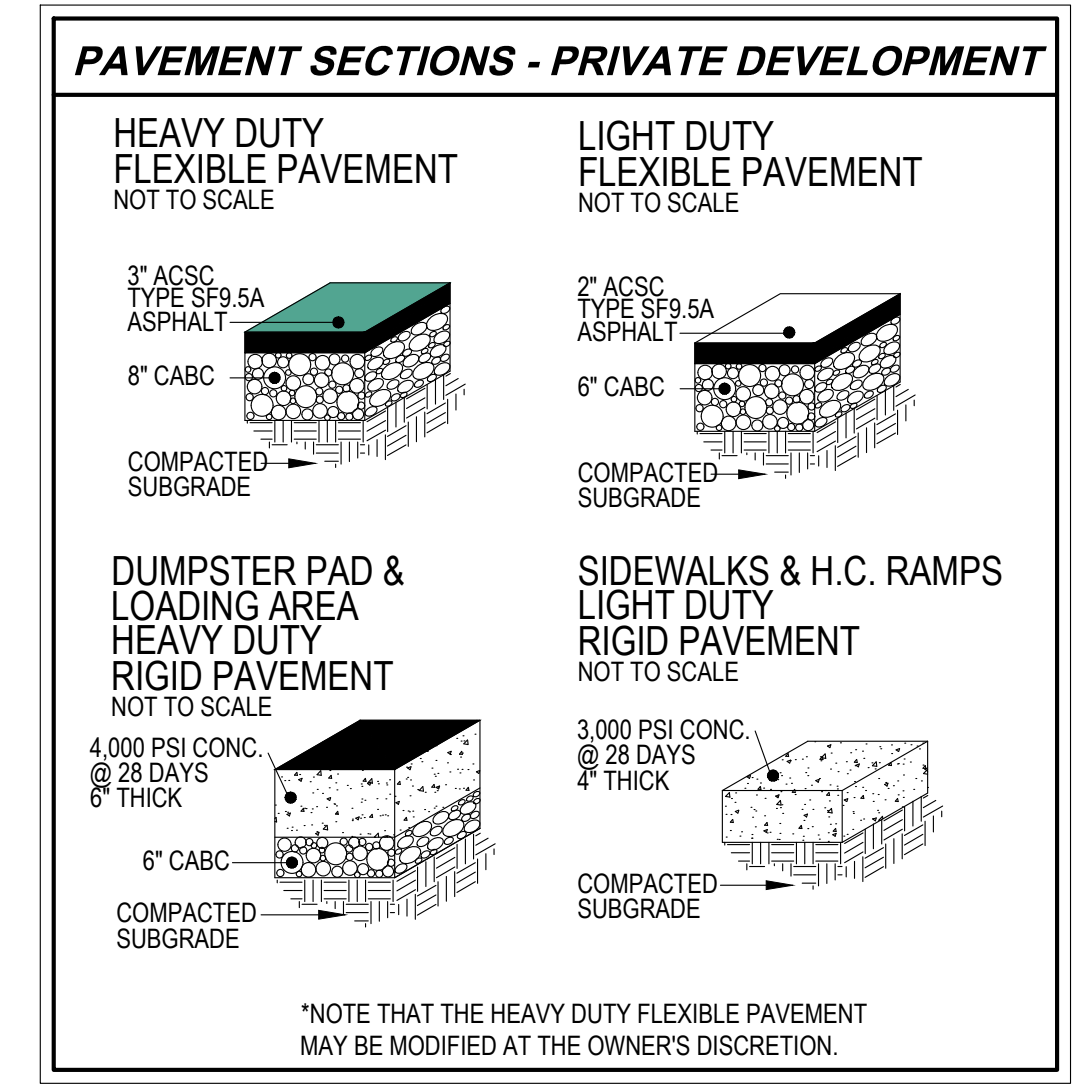
**1** 90 DEG. HANDICAP STALLS - TYPICAL  
 D-04 SCALE: NTS



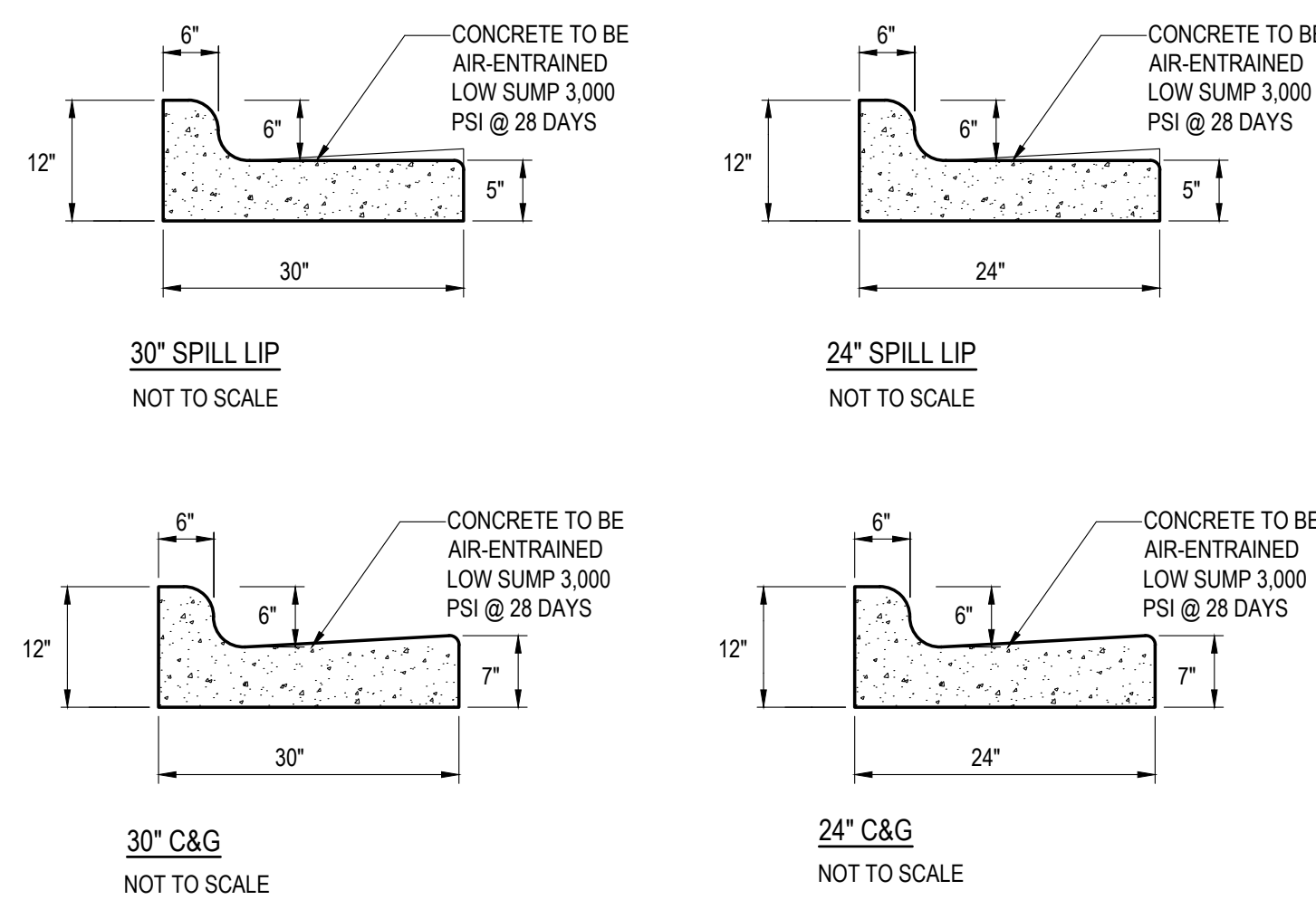
**2** WHEEL STOP  
 D-04 SCALE: NTS



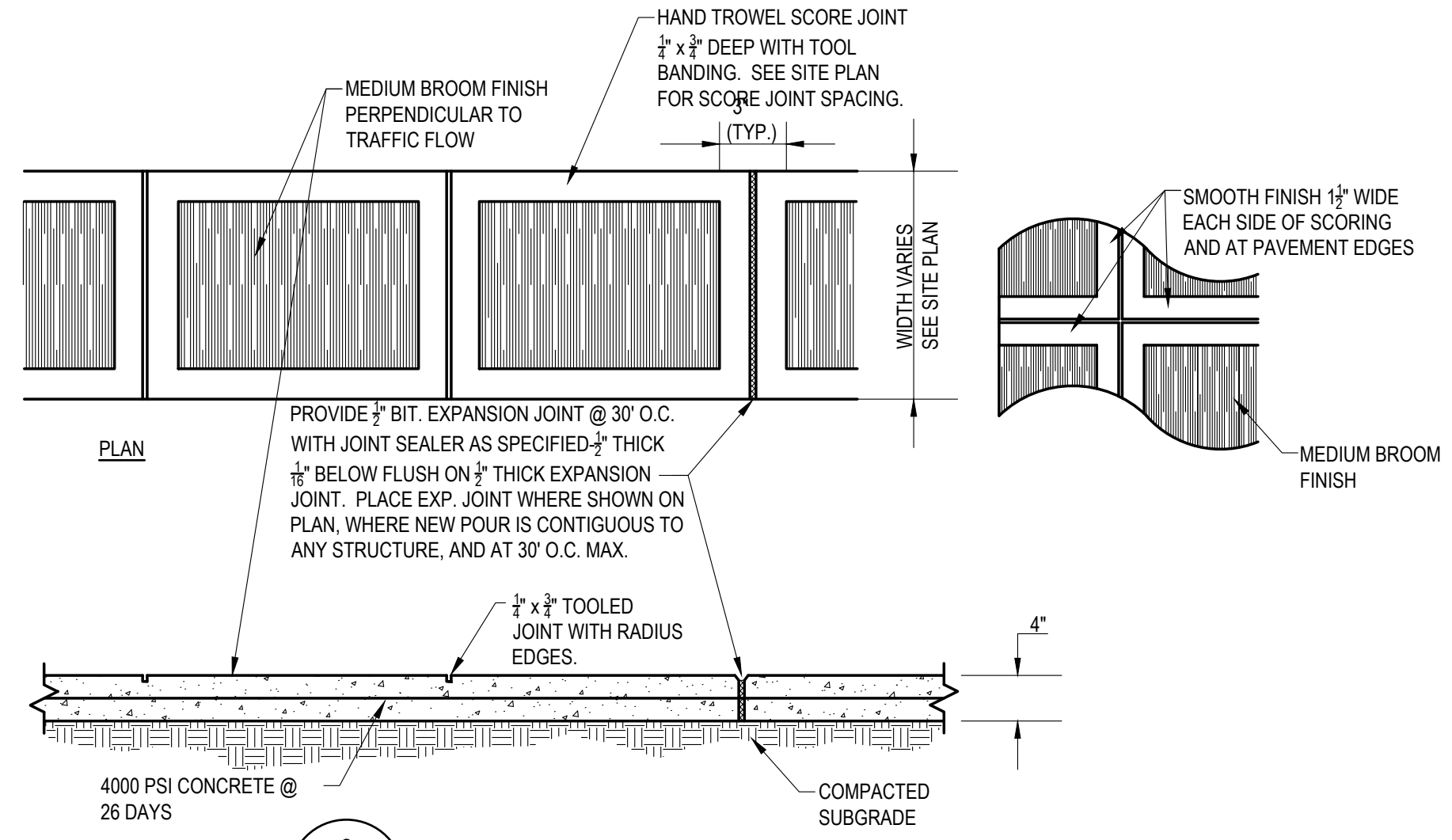
**3** CONCRETE CORNER DETAIL  
 D-04 SCALE: NTS



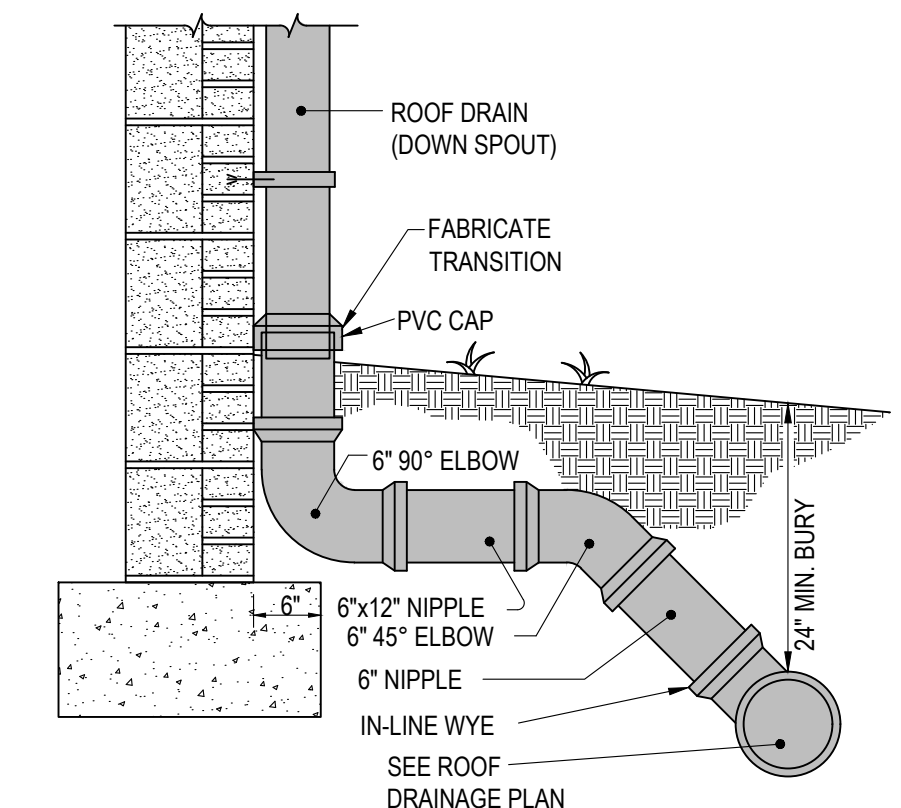
**4** PAVEMENT SECTIONS - PRIVATE ROADWAYS & PARKING LOTS  
 D-04 SCALE: NTS



**5** CURB AND GUTTER  
 D-04 SCALE: NTS



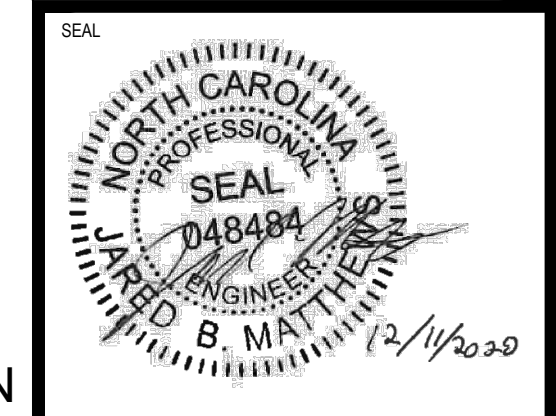
**6** CONCRETE SIDEWALK - SITE  
 D-04 SCALE: NTS

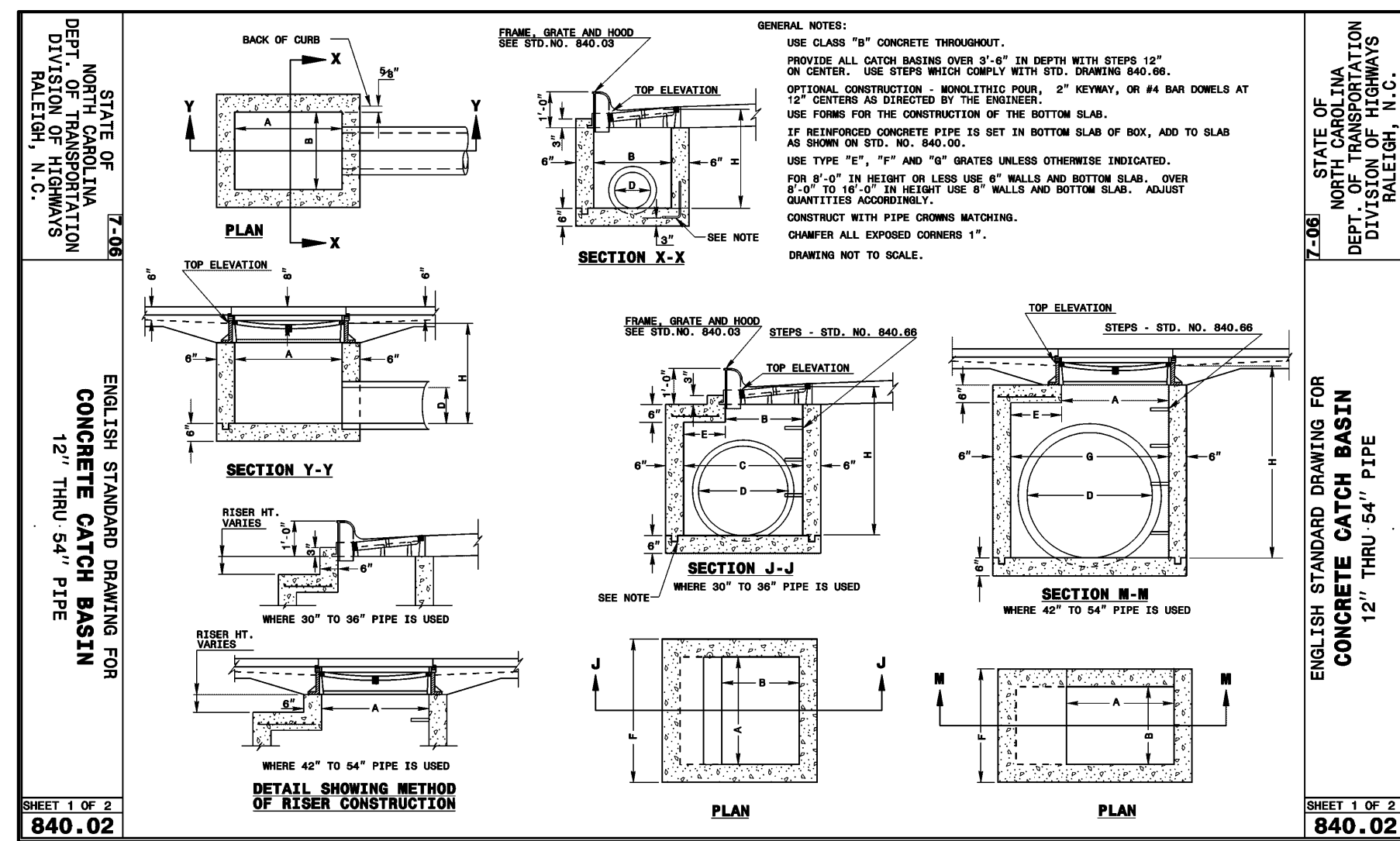


**7** ROOF DRAIN TIE-IN  
 D-04 SCALE: NTS

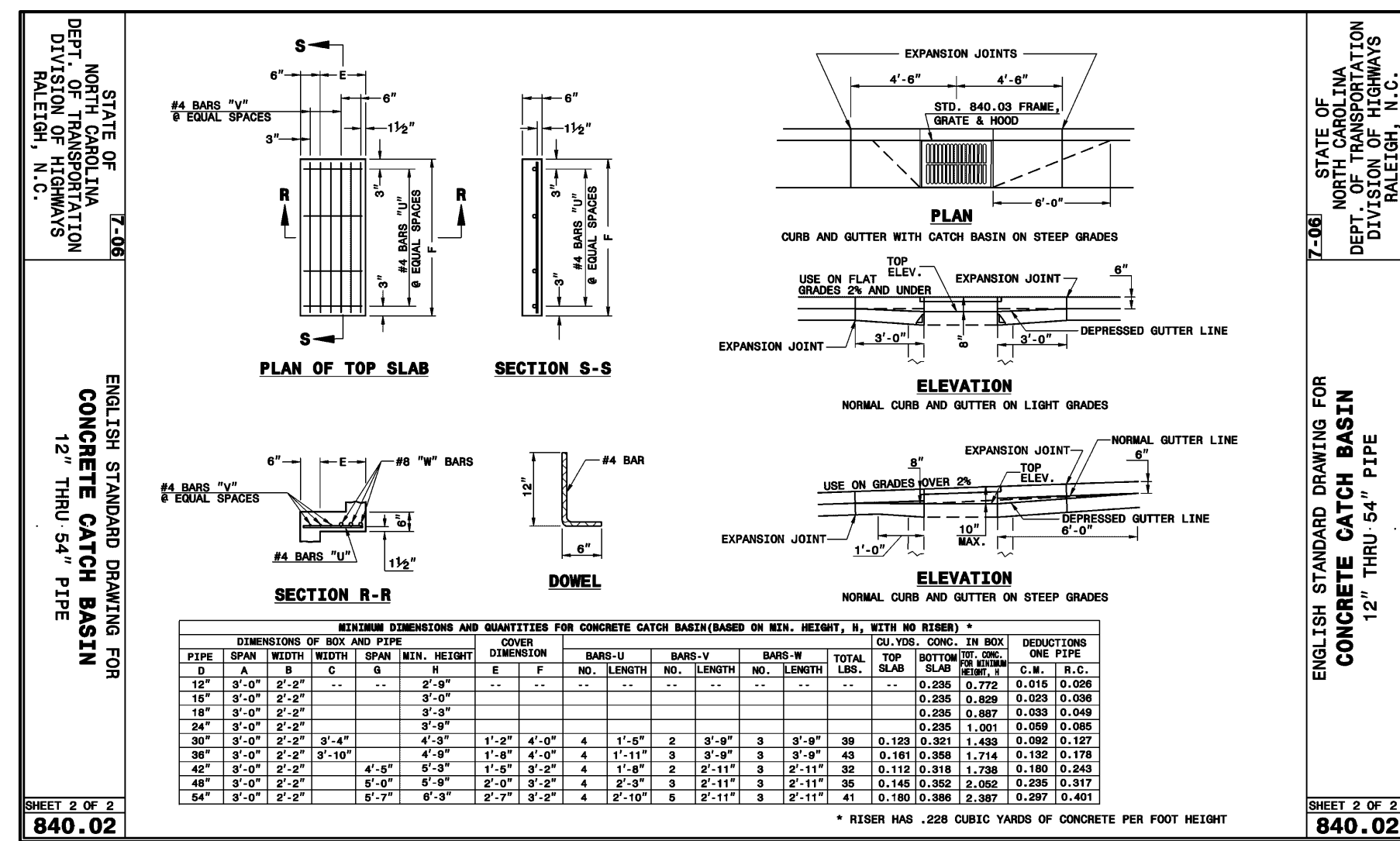
PROJECT: 19168 - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE - JARCO DRIVE  
 PLOTTED: 11/11/2020 10:23 AM

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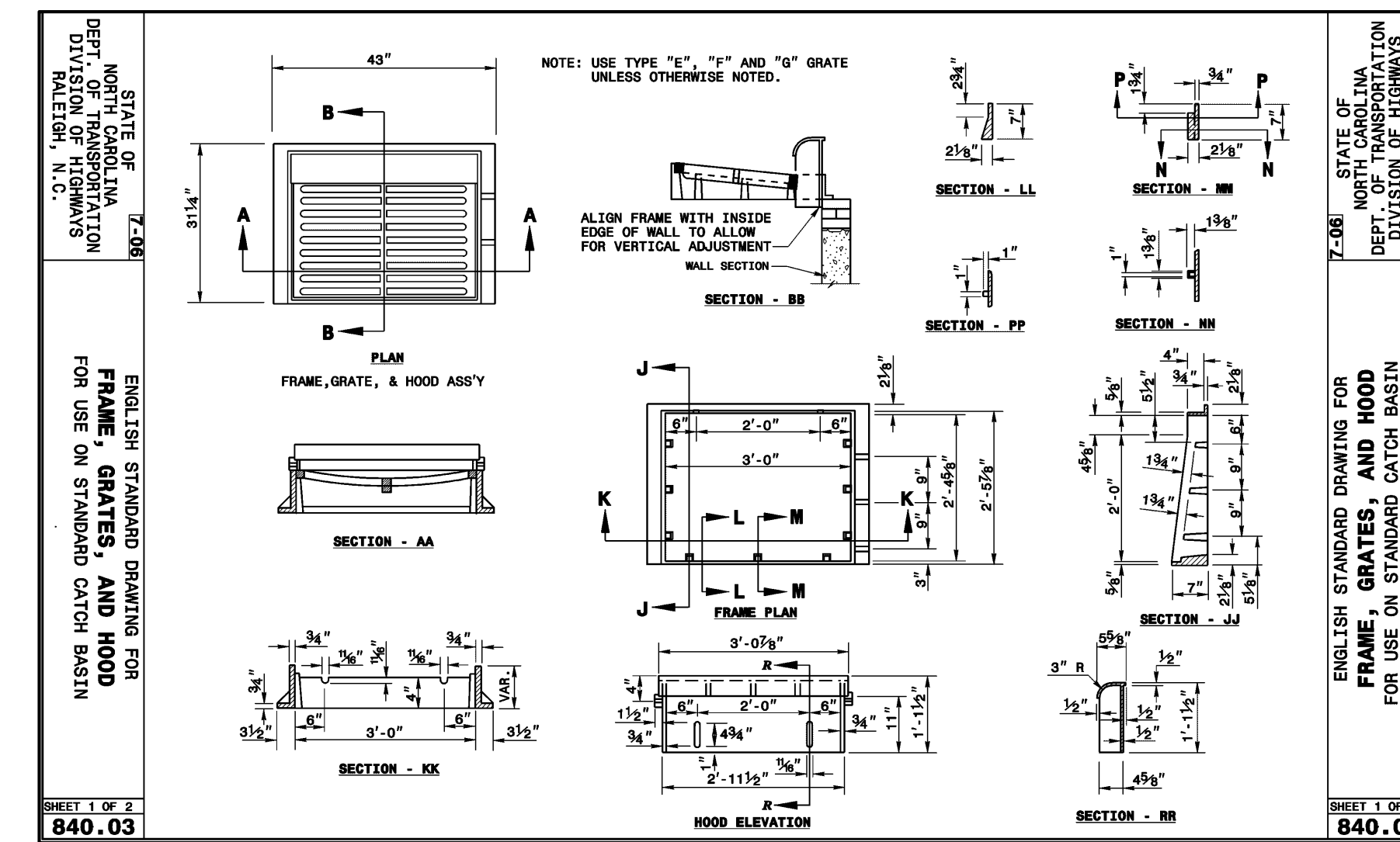




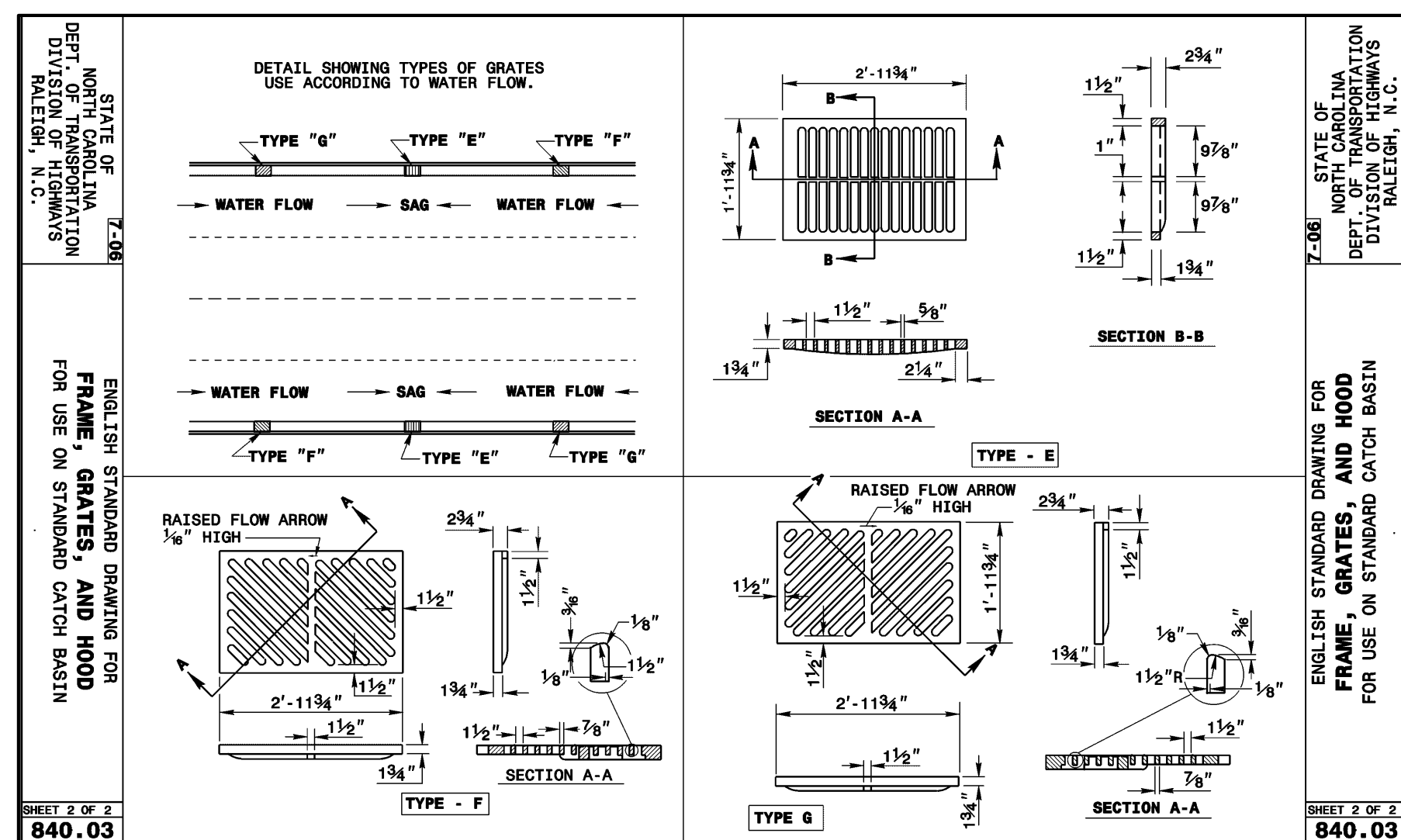
1 CONCRETE CATCH BASIN 1 of 2  
D-05 SCALE: NTS



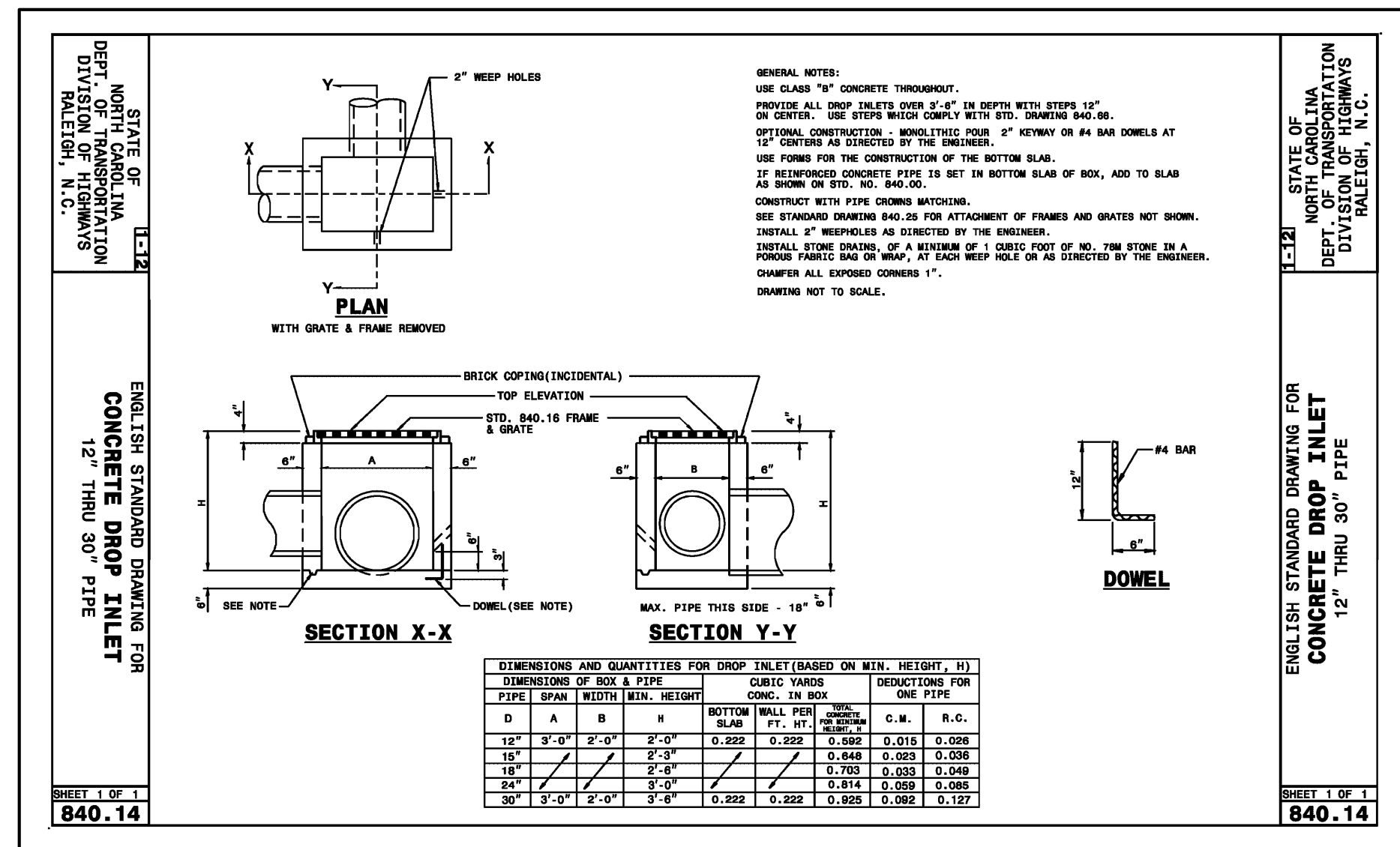
2 CONCRETE CATCH BASIN 2 OF 2  
D-05 SCALE: NTS



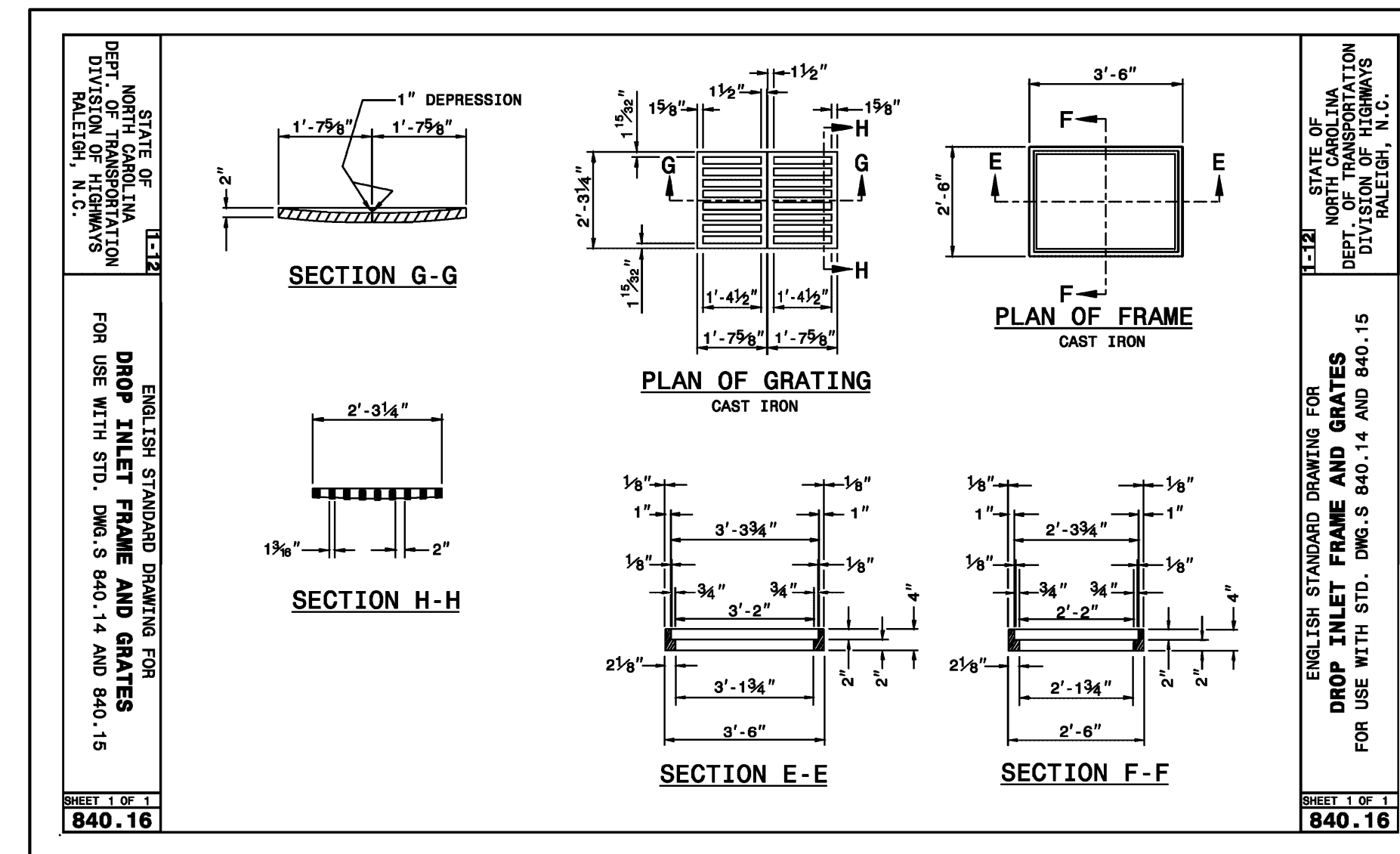
3 FRAME, GRATES, AND HOOD 1 OF 2  
D-05 SCALE: NTS



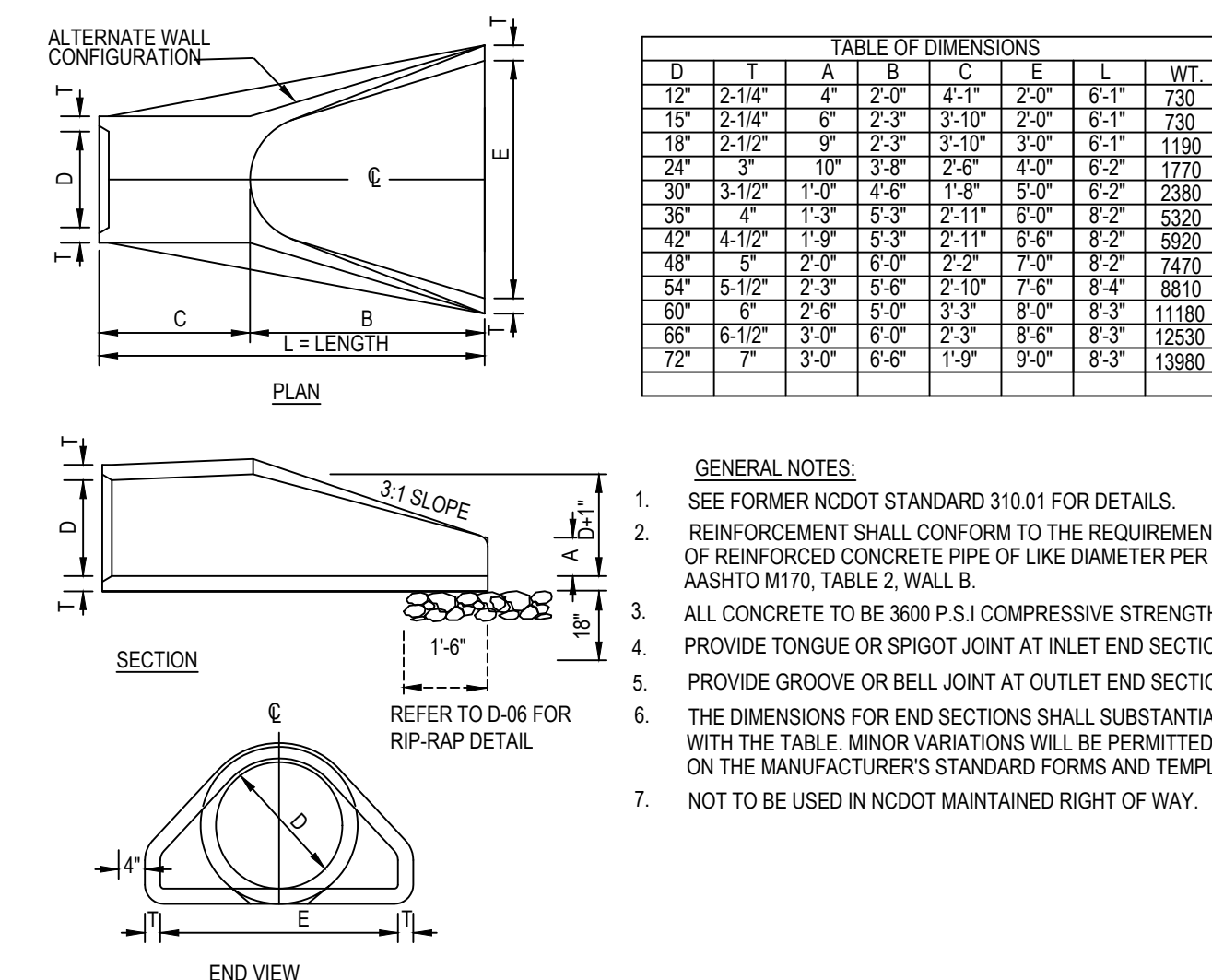
4 FRAME, GRATES, AND HOOD 2 OF 2  
D-05 SCALE: NTS



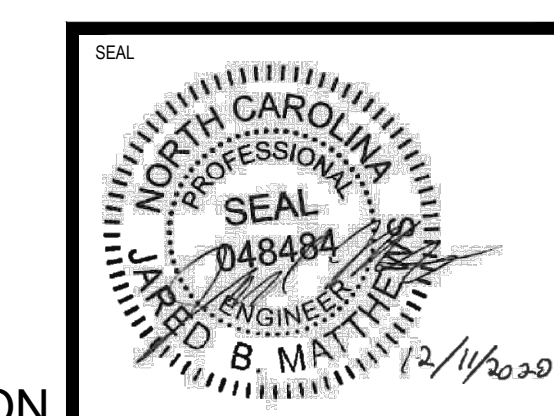
5 CONCRETE DROP INLET  
D-05 SCALE: NTS



6 DROP INLET FRAME & GRATE  
D-05 SCALE: NTS



7 FLARED END SECTION  
D-05 SCALE: NTS



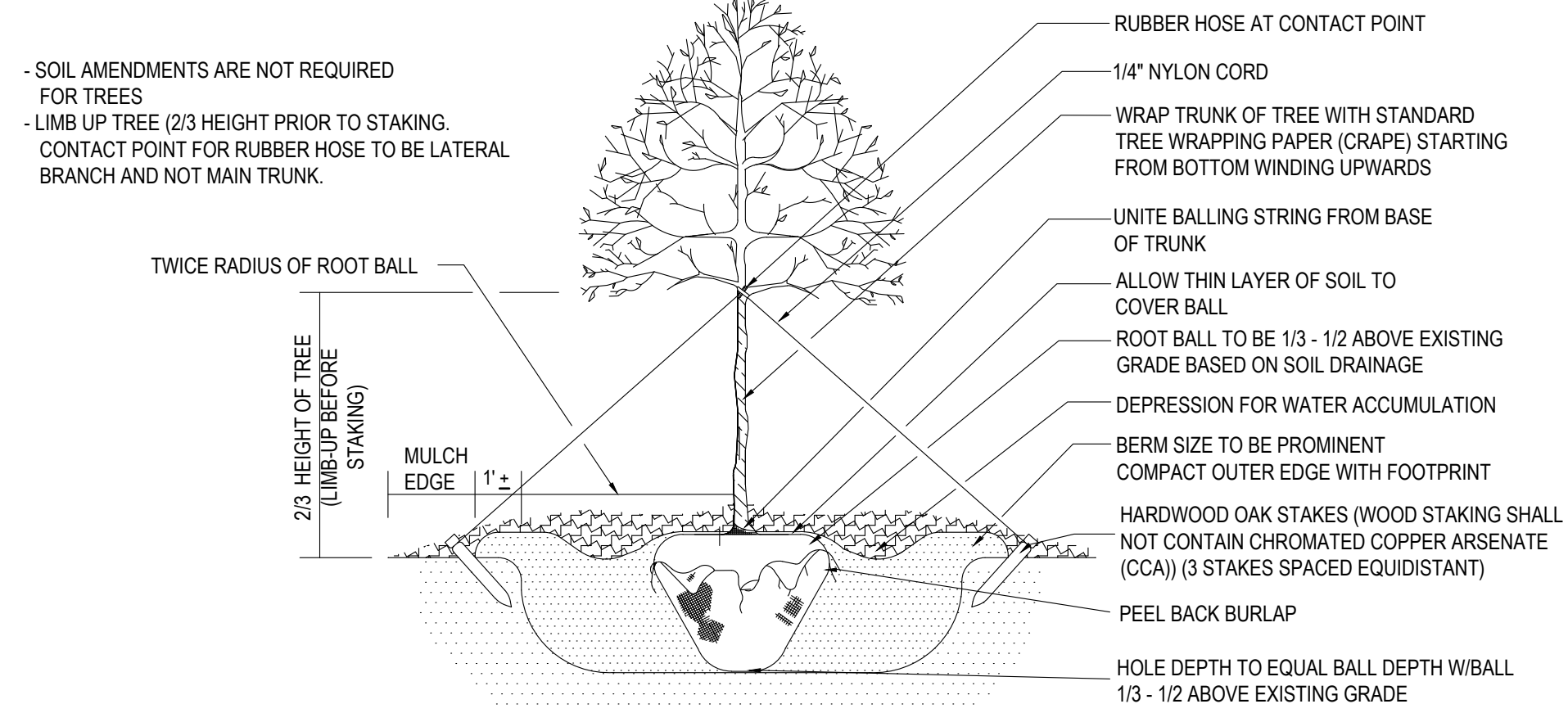
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LOT #9 - JARCO DRIVE  
STORM DRAINAGE DETAILS

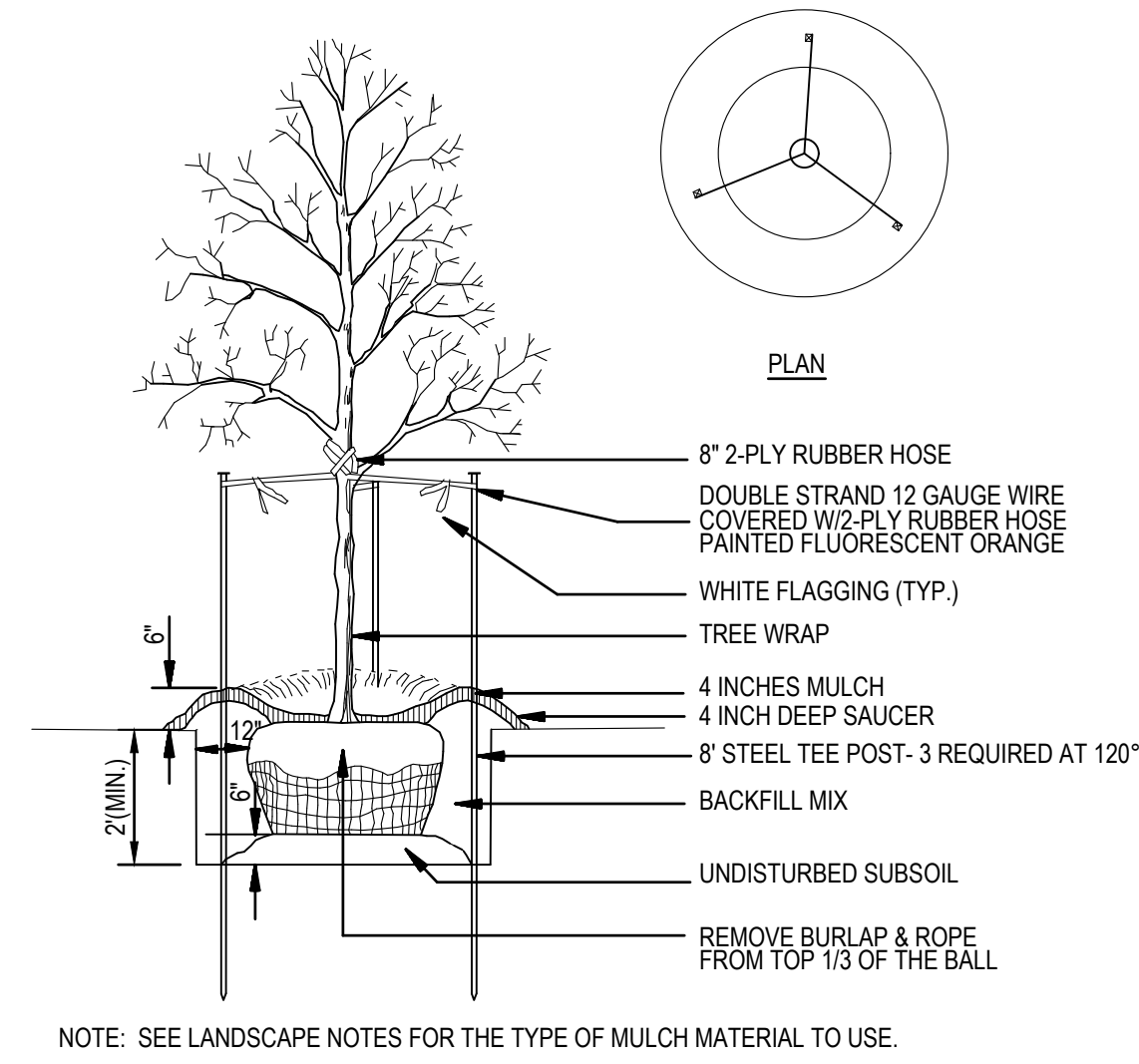
Curry Engineering  
208 S. Fidelity Avenue  
Fayetteville, NC 27808  
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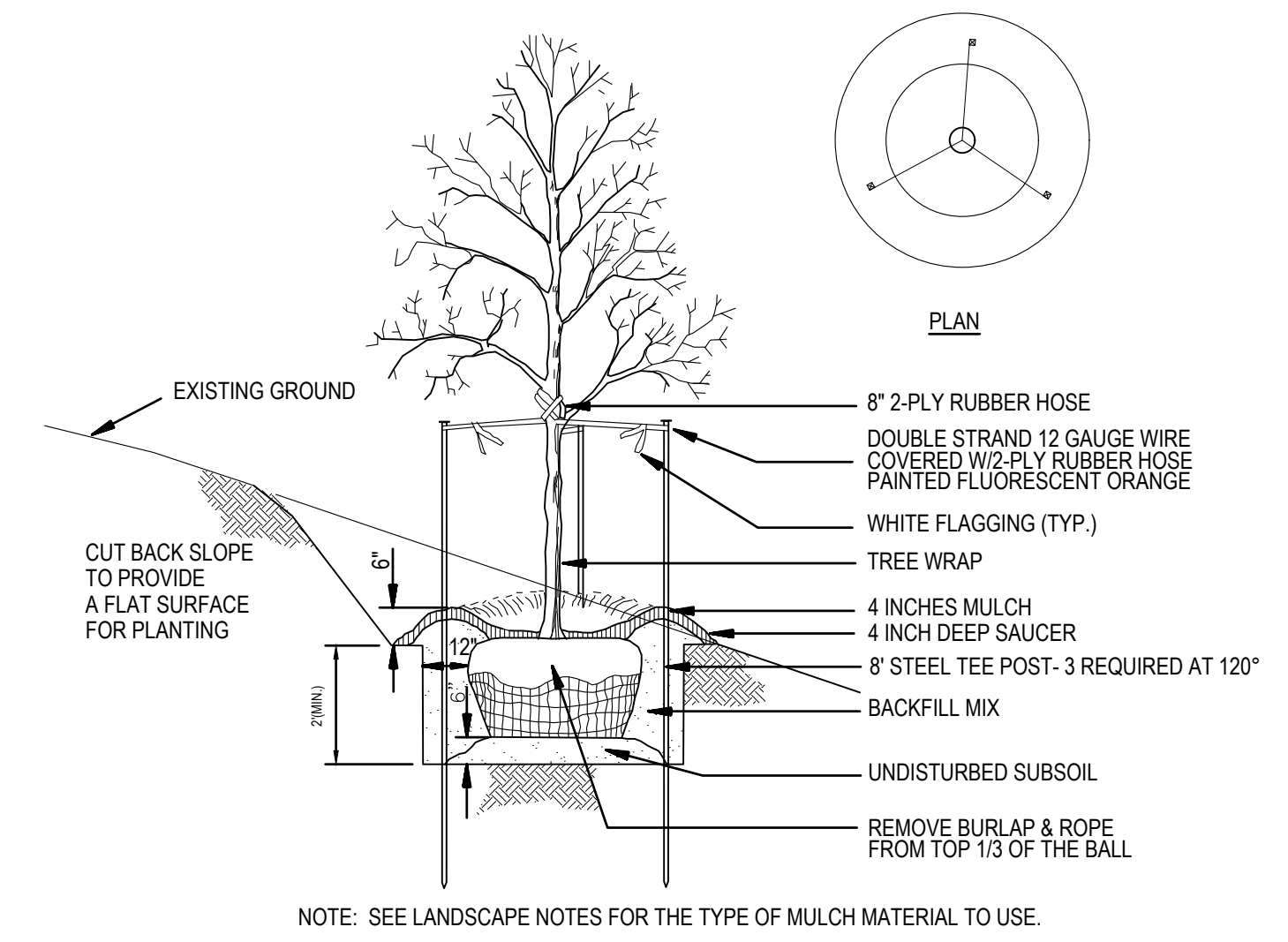
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FILE NO: 2019088  
CONG. SHEET SIZE: 24x36



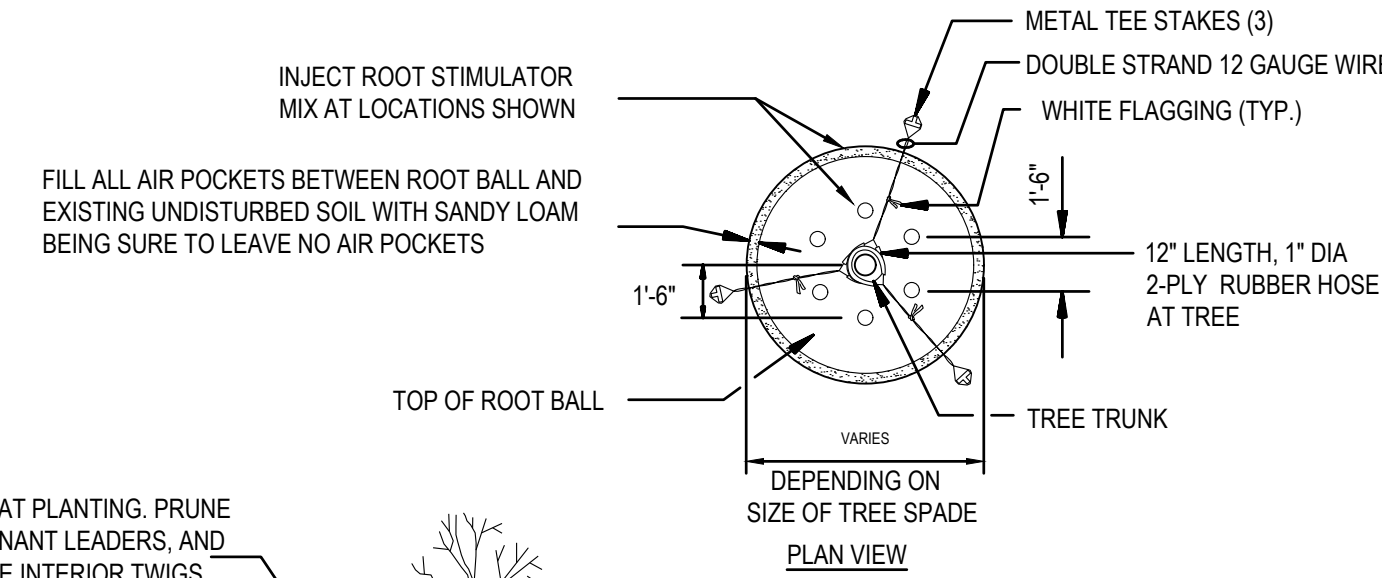
1 TREE STAKING & PLANTING DETAIL  
D-06 SCALE: NTS



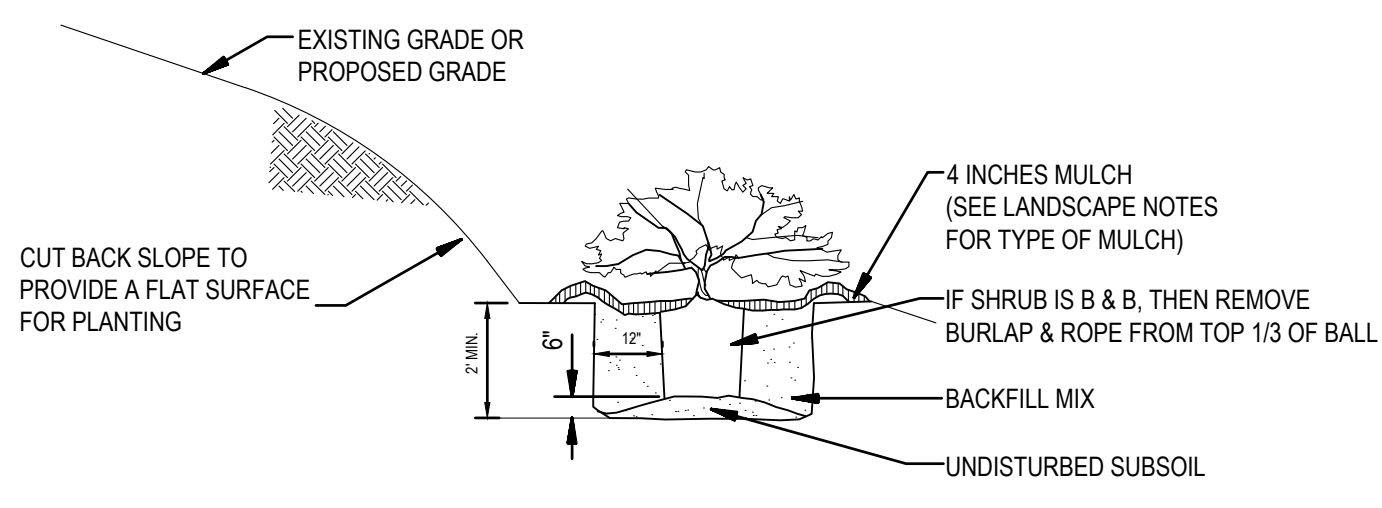
2 TREE PLANTING  
D-06 SCALE: NTS



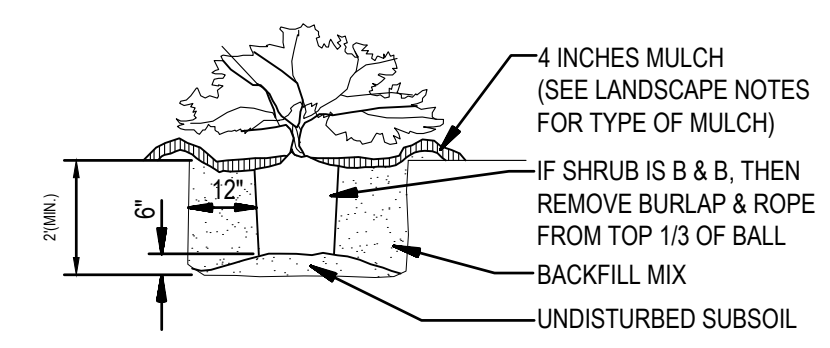
3 TREE PLANTING ON SLOPE  
D-06 SCALE: NTS



4 MACHINE DUG TREE PLANTING  
D-06 SCALE: NTS



5 SHRUB PLANTING ON SLOPE  
D-06 SCALE: NTS



6 SHRUB PLANTING  
D-06 SCALE: NTS

- NOTE:
1. PLANT TREES WITH A MINIMUM CALIPER OF TWO INCHES MEASURED SIX INCHES ABOVE THE GROUND AND A ROOT BALL NO SMALLER THAN TWO FEET IN DIAMETER AND 16 INCHES IN DEPTH.
  2. THE BEST TIMES FOR PLANTING ARE EARLY SPRING AND EARLY FALL. TREES PLANTED IN IN THE SUMMER RUN THE RISK OF DEHYDRATION.
  3. PLANT ALL TREES AT LEAST THREE-AND-A-HALF FEET FROM THE END OF HEAD-IN PARKING SPACES IN ORDER TO PREVENT DAMAGE FROM CAR OVERHANGS.
  4. DIG THE TREE PIT AT LEAST TWO FOOT WIDER THAN THE ROOT BALL AND AT LEAST SIX INCHES DEEPER THAN THE BALL VERTICAL DIMENSION.
  5. ESPECIALLY IN AREAS WHERE CONSTRUCTION ACTIVITY HAS COMPACTED THE SOIL, THE BOTTOM OF THE PIT SHOULD BE SCARIFIED OR LOOSENED WITH A PICK AX OR SHOVEL.
  6. AFTER THE PIT IS DUG, OBSERVE SUB-SURFACE DRAINAGE CONDITIONS. WHERE POOR DRAINAGE EXISTS, THE TREE PIT SHOULD BE DUG AT LEAST AN ADDITIONAL TWELVE INCHES WIDER AND THE SOIL AMENDED TO ALLOW ROOTS GROW PROPERLY.
  7. BACKFILL SHOULD INCLUDE A PROPER MIX OF SOIL AND FERTILIZER. ALL ROOTS MUST BE COMPLETELY COVERED. BACKFILL SHOULD BE THOROUGHLY WATERED AS IT IS PLACED AROUND THE ROOTS.
  8. IMMEDIATELY AFTER IT IS PLANTED, THE TREE SHOULD BE SUPPORTED WITH STAKES AND STRAPS TO FIRMLY HOLD IT IN PLACE AS ITS ROOT SYSTEM BEGINS TO DEVELOP. REMOVE STAKES AND TIES AFTER ONE YEAR.
  9. SPREAD AT LEAST THREE INCHES OF MULCH OVER THE ENTIRE EXCAVATION IN ORDER TO RETAIN MOISTURE AND KEEP DOWN WEEDS. AN ADDITIONAL THREE-INCH SAUCER AND MULCH SHOULD BE PROVIDED TO FORM A BASIN AROUND THE TRUNK OF THE TREE. THIS SAUCER HELPS CATCH AND RETAIN MOISTURE.
  10. CONSCIENTIOUS POST-PLANTING CARE, ESPECIALLY WATERING, PRUNING AND FERTILIZING, IS A MUST FOR STREET AND PARKING LOT TREES. PRUNE OFF BROKEN OR DAMAGED BRANCHES.

PROJECT NO. 2019-068, 2019-069, 2019-070, 2019-071, 2019-072, 2019-073, 2019-074, 2019-075, 2019-076, 2019-077, 2019-078, 2019-079, 2019-080, 2019-081, 2019-082, 2019-083, 2019-084, 2019-085, 2019-086, 2019-087, 2019-088, 2019-089, 2019-090, 2019-091, 2019-092, 2019-093, 2019-094, 2019-095, 2019-096, 2019-097, 2019-098, 2019-099, 2019-100, 2019-101, 2019-102, 2019-103, 2019-104, 2019-105, 2019-106, 2019-107, 2019-108, 2019-109, 2019-110, 2019-111, 2019-112, 2019-113, 2019-114, 2019-115, 2019-116, 2019-117, 2019-118, 2019-119, 2019-120, 2019-121, 2019-122, 2019-123, 2019-124, 2019-125, 2019-126, 2019-127, 2019-128, 2019-129, 2019-130, 2019-131, 2019-132, 2019-133, 2019-134, 2019-135, 2019-136, 2019-137, 2019-138, 2019-139, 2019-140, 2019-141, 2019-142, 2019-143, 2019-144, 2019-145, 2019-146, 2019-147, 2019-148, 2019-149, 2019-150, 2019-151, 2019-152, 2019-153, 2019-154, 2019-155, 2019-156, 2019-157, 2019-158, 2019-159, 2019-160, 2019-161, 2019-162, 2019-163, 2019-164, 2019-165, 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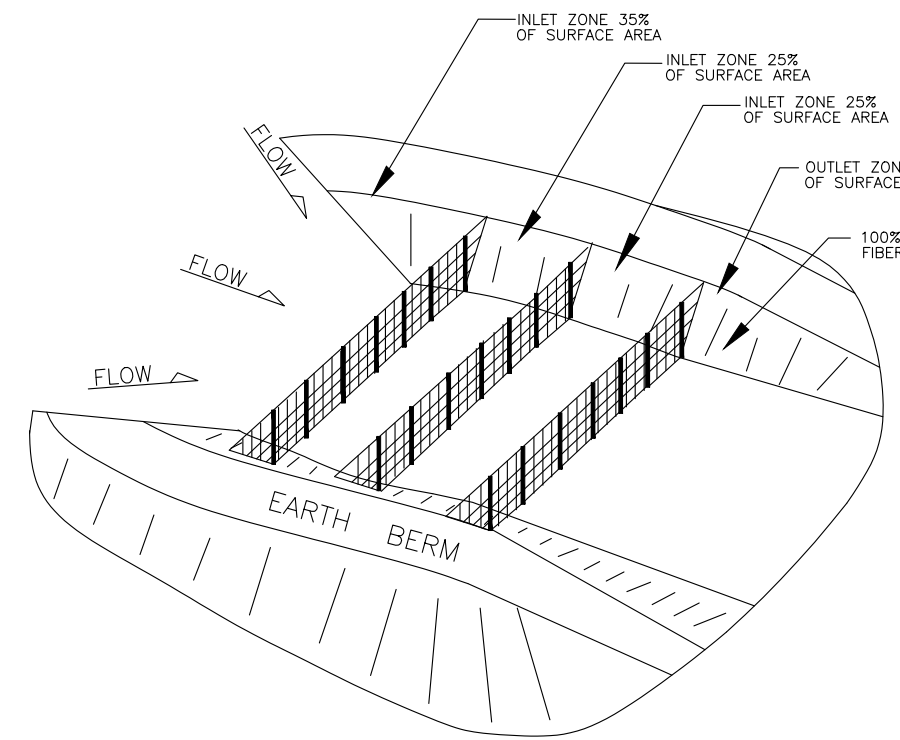
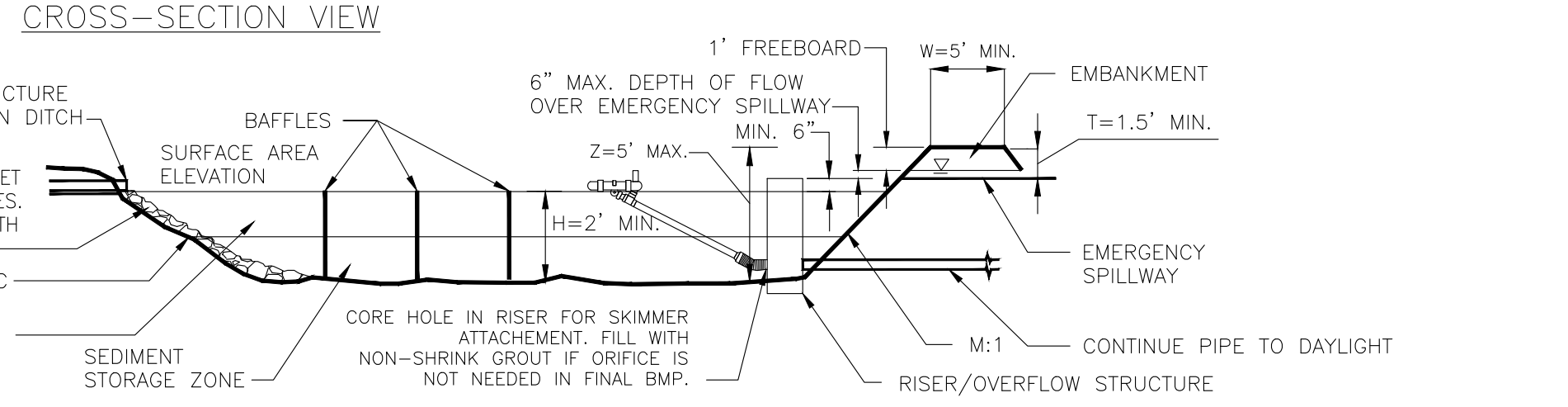
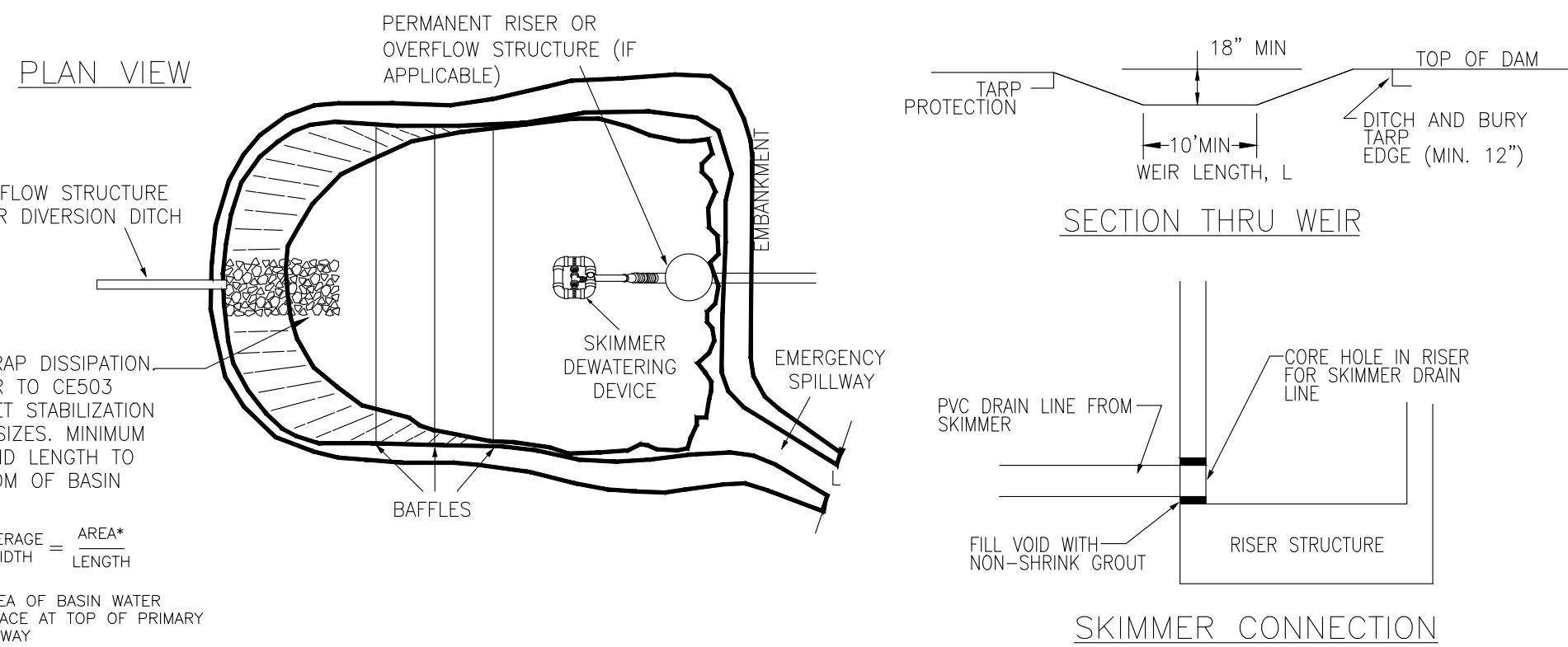












**GENERAL NOTES:**

1. DRIVE 5" STEEL POST AT LEAST 24" INTO SOLID GROUND.
2. USE STAPLES 1" APART HORIZONTALLY AND VERTICALLY TO ATTACH THE FILTER FABRIC TO THE WIRE FENCE.
3. MINIMUM BAFFLE SPACING IS 10'.
4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERMS SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.
5. REFER TO NCSCPDM SECTION #6.65 FOR ADDITIONAL SPECIFICATIONS

**MAINTENANCE**

INSPECT BAFFLES DAILY AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

**CONSTRUCTION SPECIFICATION**

1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
2. INSTALL POSTS OR SAW HORSES ACROSS THE WIDTH OF THE SEDIMENT TRAP (PRACTICE 6.62, SEDIMENT FENCE).
3. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
4. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES.
5. WHEN USING POSTS, ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
6. WRAP POROUS MATERIAL, LIKE JUTE BACKED BY COIR MATERIAL, OVER A SAWHORSE OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS FOR ANCHORING. THE FABRIC SHOULD HAVE FIVE TO TEN PERCENT OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE, OR STAPLES.
7. THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8-INCH EROSION CONTROL MATTING STAPLES.
8. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.

**MAINTENANCE**

INSPECT SKIMMER DAILY. REPAIR AS NECESSARY.

TRASH: IF THE INLET SCREEN CLOGS AND THERE IS WATER IN THE BASIN, TUGGING ON THE ROPE SEVERAL TIMES WILL USUALLY WASH THE TRASH OFF AND RESTORE FLOW. IF NOT, PULL THE INLET TO THE SIDE OF THE BASIN AND USE A STICK TO CLEAN THE SCREEN. OPEN THE SCREEN DOOR AND REMOVE ANY TRASH OR SEDIMENT INSIDE SO GRASS OR TREES DO NOT GROW IN THE INLET. (YES, THIS CAN HAPPEN!)

SEDIMENT ACCUMULATION AROUND SKIMMER: A SHALLOW, LONG BASIN, USING BAFFLES, AND INFLOW IN THE BASIN AT THE OPPOSITE END FROM THE OUTLET HELP KEEP SEDIMENT AWAY FROM THE SKIMMER. IF SEDIMENT RESTRICTS SKIMMER MOVEMENT, PULL THE SKIMMER TO ONE SIDE AND EXCAVATE UNDER IT.

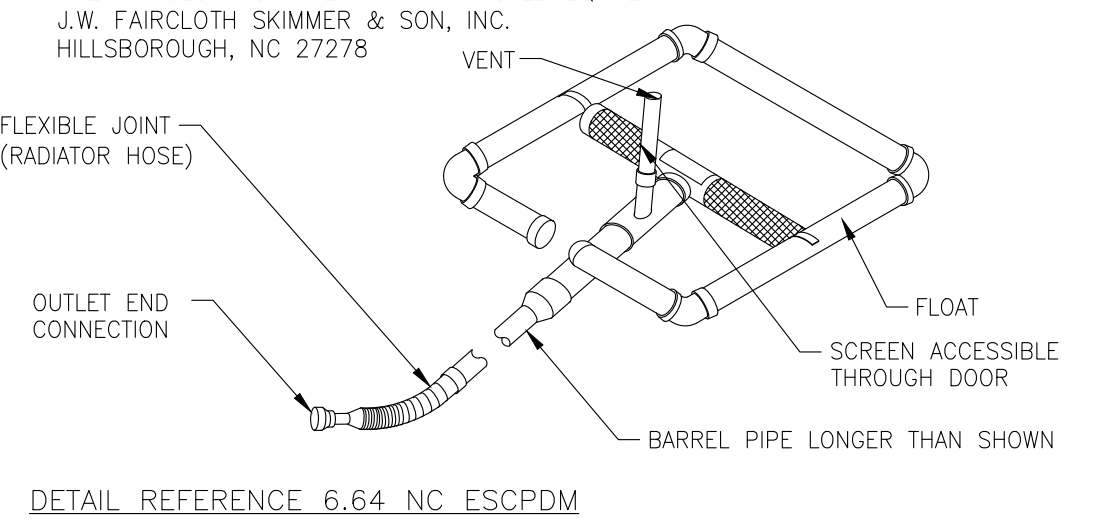
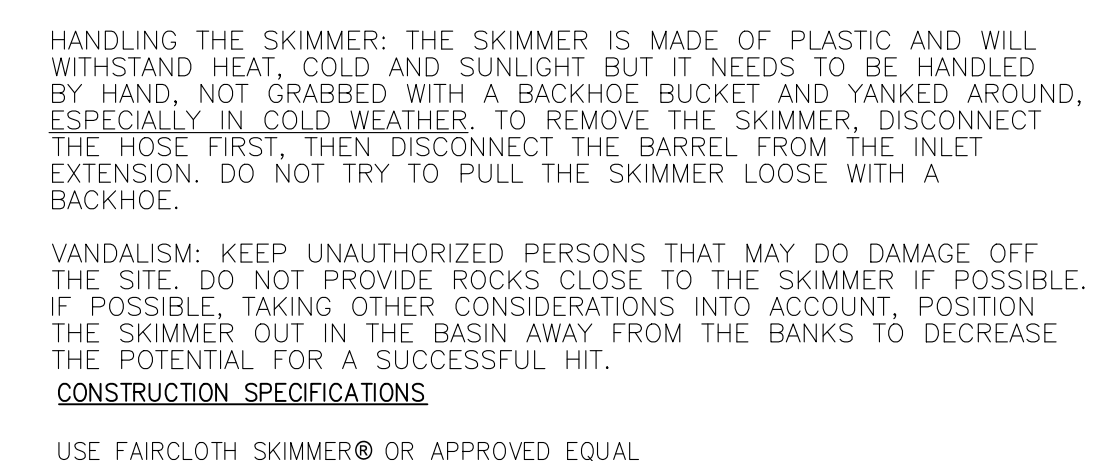
ICE: TRY TO KEEP ICE BROKEN UP AT THE INLET AND AROUND THE BARREL TO KEEP WATER FLOWING, MAKING IT LESS LIKELY THE INLET WILL FREEZE. SPRAY PAINTING THE FLOAT BLACK TO ABSORB HEAT IS RECOMMENDED. USE PAINT THAT WILL STICK TO PVC PLASTIC.

HANDLING THE SKIMMER: THE SKIMMER IS MADE OF PLASTIC AND WILL WITHSTAND HEAT, COLD AND SUNLIGHT BUT IT NEEDS TO BE HANDLED BY HAND, NOT GRABBED WITH A BACKHOE BUCKET AND YANKED AROUND, ESPECIALLY IN COLD WEATHER. TO REMOVE THE SKIMMER, DISCONNECT THE HOSE FIRST, THEN DISCONNECT THE BARREL FROM THE INLET EXTENSION. DO NOT TRY TO PULL THE SKIMMER LOOSE WITH A BACKHOE.

VANDALISM: KEEP UNAUTHORIZED PERSONS THAT MAY DO DAMAGE OFF THE SITE. DO NOT PROVIDE ROCKS CLOSE TO THE SKIMMER IF POSSIBLE. IF POSSIBLE, TAKING OTHER CONSIDERATIONS INTO ACCOUNT, POSITION THE SKIMMER OUT IN THE BASIN AWAY FROM THE BANKS TO DECREASE THE POTENTIAL FOR A SUCCESSFUL HIT.

**CONSTRUCTION SPECIFICATIONS**

USE FAIRCLOTH SKIMMER® OR APPROVED EQUAL  
J.W. FAIRCLOTH SKIMMER & SON, INC.  
HILLSBOROUGH, NC 27278



2 POROUS BAFFLE  
SCALE: NTS

3 DEWATERING SKIMMER  
SCALE: NTS

**GENERAL NOTES:**

1. REFER TO NCSCPDM SECTION #6.64 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SKIMMER SEDIMENT BASINS.
2. DEFINITIONS:
  - H - DEPTH FROM BOTTOM BASIN TO SURFACE AREA ELEVATION
  - Z - HEIGHT OF BASIN
  - L - WIDTH OF EMERGENCY SPILLWAY
  - T - DISTANCE BETWEEN EMERGENCY SPILLWAY AND BERM.
  - M - SIDE SLOPE
  - W - BERM WIDTH

**MAINTENANCE**

INSPECT SKIMMER SEDIMENT BASINS DAILY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

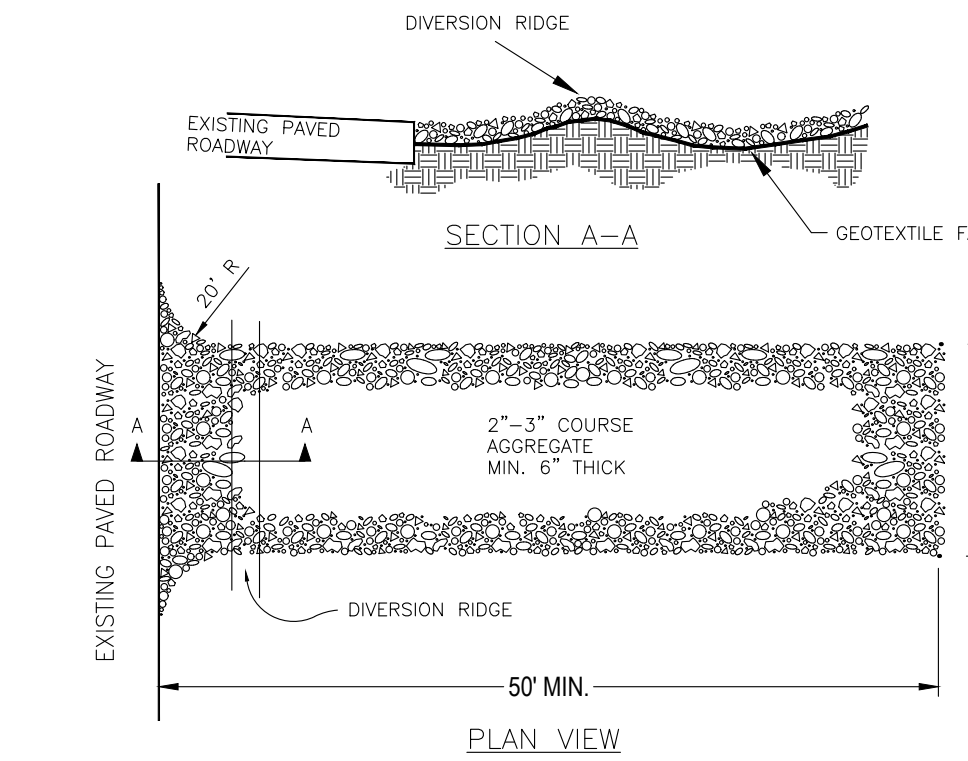
IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

**CONSTRUCTION SPECIFICATION**

1. CLEAR, GRUB, AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
2. ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
3. SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OR PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.
4. CONDUIT SPILLWAYS (RISERS) - SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATER-TIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN THE BARREL SECTIONS BY APPROVED WATER-TIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2-FT OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR OTHER SATISFACTORY MEANS TO PREVENT FLOTATION. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
5. SKIMMER - PLACE THE BARREL (TYPICALLY 4-INCH SCHEDULE 40 PVC PIPE) ON A FIRM SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM THE FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
6. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURERS INSTRUCTIONS, OR AS DESIGNED.
7. LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE. ATTACH THE FLEXIBLE JOINT TO THE BARREL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACH A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.
8. EARTHEN SPILLWAYS-INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY. THE SPILLWAY SHOULD BE LINED WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTOM AND SIDES AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8-INCH STAPLES OR PINS. THE FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPLICED; OTHERWISE WATER CAN GET UNDER THE FABRIC. IF THE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE SPILLWAY, MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTION(S) SHOULD OVERLAP THE LOWER SECTION(S) SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS. (ADAPTED FROM "A MANUAL FOR DESIGNING, INSTALLING AND MAINTAINING SKIMMER SEDIMENT BASINS," FEBRUARY, 1999. J. W. FAIRCLOTH & SON.)
9. INLETS-DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).
10. EROSION CONTROL-CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION (REFERENCES: SURFACE STABILIZATION).
11. INSTALL POROUS BAFFLES AS SPECIFIED IN PRACTICE 6.65, POROUS BAFFLES.
12. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY (REFERENCES: SURFACE STABILIZATION).



4 STANDARD CONSTRUCTION ENTRANCE  
SCALE: NTS

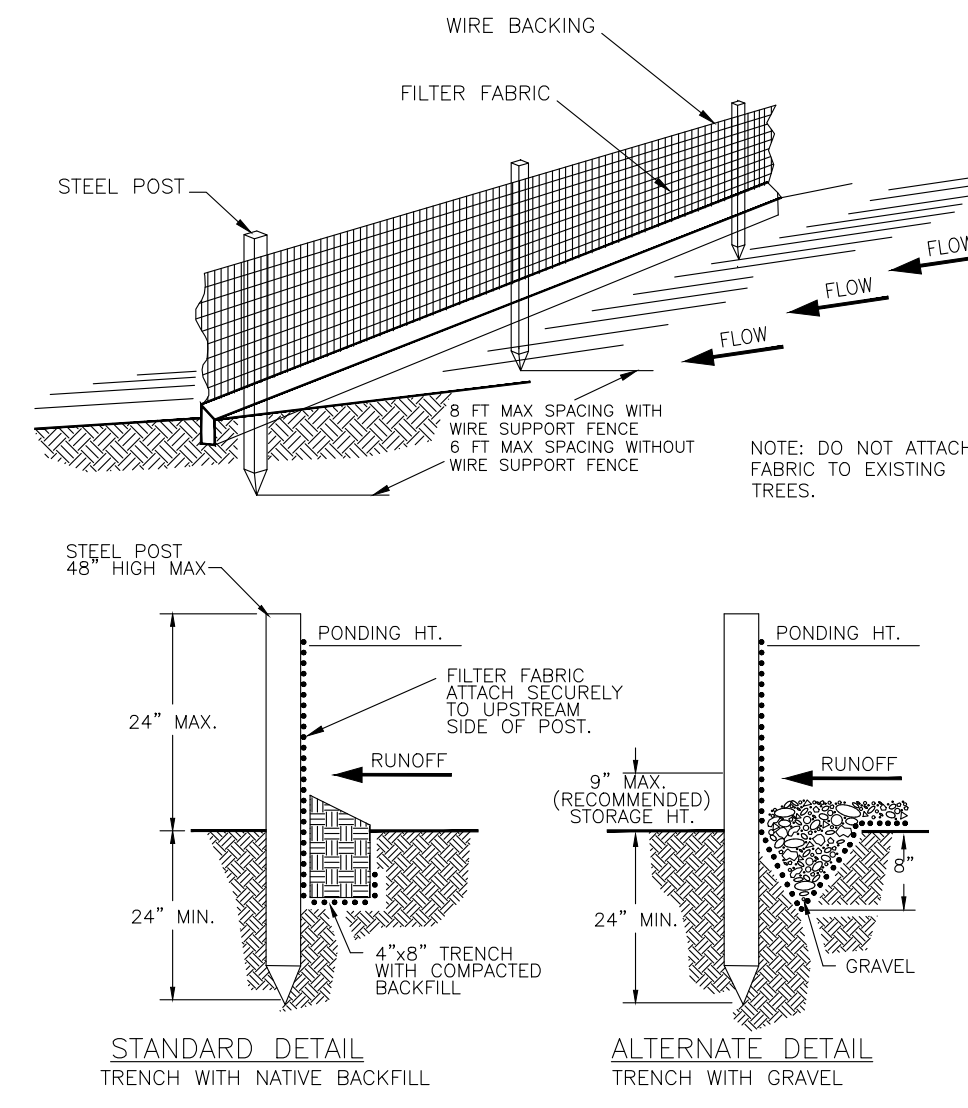
**CONSTRUCTION SPECIFICATIONS**

1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

**MAINTENANCE**

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE AFTER EACH RAINFALL. INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT DAILY AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

DETAIL REFERENCE 6.06 NC ESCPDM



5 STANDARD TEMPORARY SILT FENCE  
SCALE: NTS

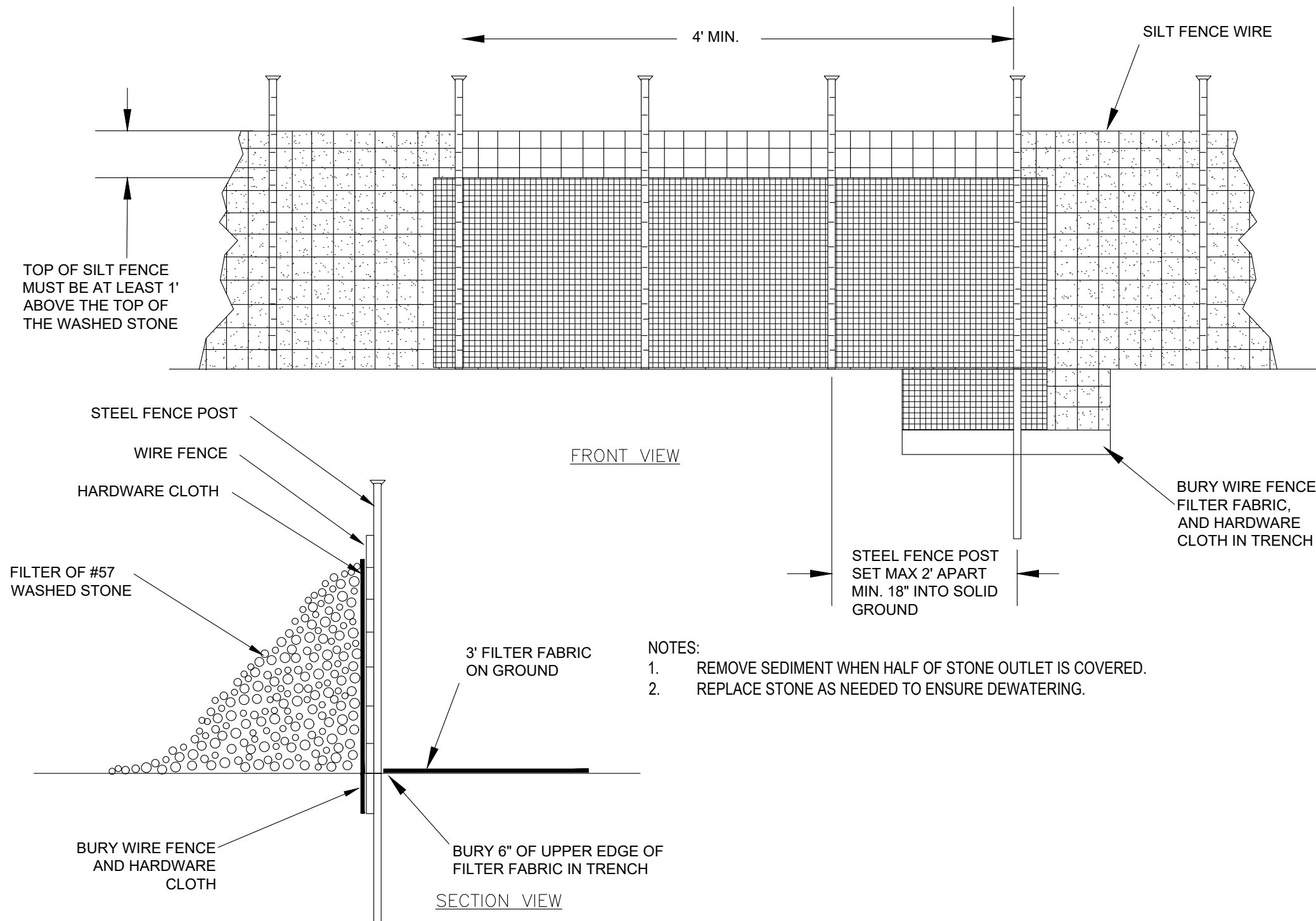
**CONSTRUCTION SPECIFICATIONS**

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 6481, 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 120° 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.

**MAINTENANCE**

INSPECT SEDIMENT FENCES DAILY AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. 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. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

DETAIL REFERENCE 6.62 NC ESCPDM



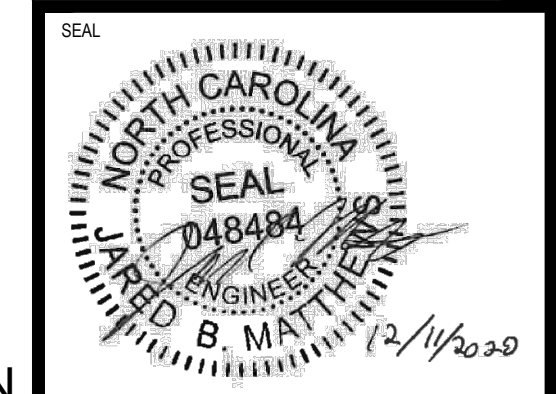
6 STANDARD SILT FENCE OUTLET  
SCALE: NTS

**NOTES:**

1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

1 SKIMMER SEDIMENT BASIN  
SCALE: NTS

DRAWN BY: J. W. FAIRCLOTH, P.E., 208 S. FIGHTING AVENUE, FARMVILLE, NC 27830. DATE: 12/11/2020. 24x36. RELEASED FOR CONSTRUCTION



RELEASED FOR CONSTRUCTION

**LOT #9 - JARCO DRIVE**

**EROSION CONTROL DETAILS III**

REVISIONS

NO.	DATE	DESCRIPTION
1	2020/11/19	ISSUED FOR PERMITS
2	2020/11/19	ISSUED FOR PERMITS
3	2020/11/19	ISSUED FOR PERMITS
4	2020/11/19	ISSUED FOR PERMITS
5	2020/11/19	ISSUED FOR PERMITS
6	2020/11/19	ISSUED FOR PERMITS

DATE: 12/11/2020  
SCALE: 1/8\"/>

**Curry**

ENGINEERING

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FARMVILLE, NC 27830  
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NORTH CAROLINA PROFESSIONAL ENGINEER  
LICENSE NO. 048484  
J.W. FAIRCLOTH  
12/11/2020

**EC-05**

### 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.

Required Ground Stabilization Timeframes		
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	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed -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
(d) Slopes 3:1 to 4:1	14	-10 days for Falls Lake Watershed -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones there is zero slope
(e) Areas with slopes flatter than 4:1	14	-10 days for Falls Lake Watershed unless there is zero slope

**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:
- | Stabilization   | Permanence   |
|---|--|
| <ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Roller erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul> | <ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil stabilization matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Roller erosion control products with grass seed</li> </ul> |

### POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

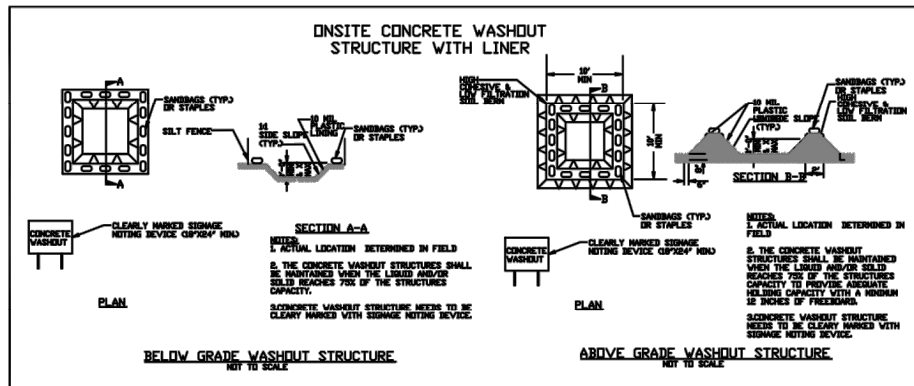
- ### EQUIPMENT AND VEHICLE MAINTENANCE
- Maintain vehicles and equipment to prevent discharge of fluids.
  - Provide drip pans under any stored equipment.
  - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
  - Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
  - Remove leaking vehicles and construction equipment from service until the problem has been corrected.
  - 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
- Never bury or burn litter and debris in approved waste containers.
  - Provide a sufficient number and size of waste containers (eg dumpster, trash receptacle) on site to contain construction and domestic wastes.
  - Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
  - 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.
  - Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
  - Anchor all lightweight items in waste containers during times of high winds.
  - Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
  - Dispose waste off-site at an approved disposal facility.
  - On business days, clean up and dispose of waste in designated waste containers.

- ### PAINT AND OTHER LIQUID WASTE
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
  - Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
  - Contain liquid wastes in a controlled area.
  - Containment must be labeled, sized and placed appropriately for the needs of site.
  - Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

- ### PORTABLE TOILETS
- 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.
  - Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
  - 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.

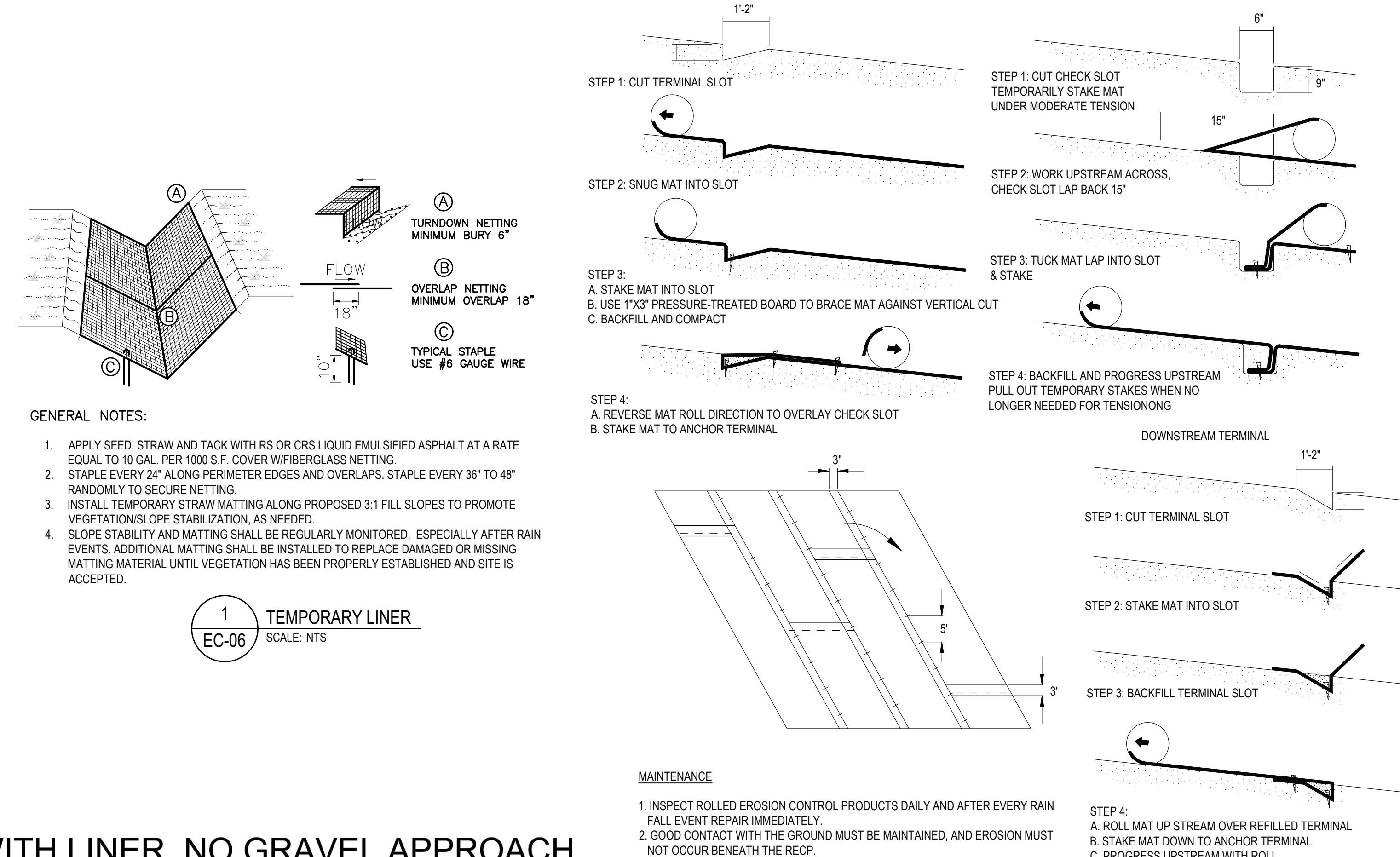
- ### EARTHEN STOCKPILE MANAGEMENT
- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
  - Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
  - Provide stable stone access point when feasible.
  - 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.



- ### CONCRETE WASHOUTS
- Do not discharge concrete or cement slurry from the site.
  - Dispose of, or recycle/strengthen, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
  - 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.
  - 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 standards details are not available, use one of the two types of temporary concrete washouts provided on this detail.
  - 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.
  - 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.
  - Locate washouts in an easily accessible area, on level ground and install a concrete entrance pad in front of the washout. Additional controls may be required by the approving authority.
  - 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.
  - Remove loadings 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.
  - At the completion of the concrete work, remove remaining loadings and dispose in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

- ### HERBICIDES, PESTICIDES AND RODENTICIDES
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
  - 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.
  - 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.
  - Do not store herbicides, pesticides and rodenticides on site.

- ### HAZARDOUS AND TOXIC WASTE
- Create designated hazardous waste collection area on-site.
  - Place hazardous waste containers under cover or in secondary containment.
  - Do not store hazardous chemicals, drums or bagged materials directly on the ground.



**GENERAL NOTES:**

- APPLY SEED, STRAW AND TACK WITH RS OR CRS LIQUID EMULSIFIED ASPHALT AT A RATE EQUAL TO 10 GAL PER 1000 S.F. COVER WITH BERGLASS NETTING.
- STAPLE EVERY 24\"/>

### 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 (note 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-measuring device approved by the Division.
(2) E&S Measures	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 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 (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	1. Identification of the discharge outfall 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 $\geq$ 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 correct future releases.
(5) Streams or wetlands onsite or offsite	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours (before accessible)	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)(d) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phases of grading installation of perimeter E&S measures, cleaning and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground covers. 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.

### PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### SECTION B: RECORDKEEPING

The approved E&S plan as well as any approved deviation shall be kept on the site. The approved E&S plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&S 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&S measure has been installed and does not significantly deviate from the location, dimensions and relative elevations shown on the approved E&S plan.	Initial and date each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures or if the E&S measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S 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&S plan.	Initial and date a copy of the approved E&S 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&S measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&S measures.	Initial and date a copy of the approved E&S 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&S 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:

- This General Permit as well as the Certificate of Coverage, after it is received.
- 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 122.414]

### PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### SECTION C: REPORTING

**1. Occurrences that Must be Reported**  
Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- 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).
- 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. 143-215.65.
- Anticipated bypasses and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

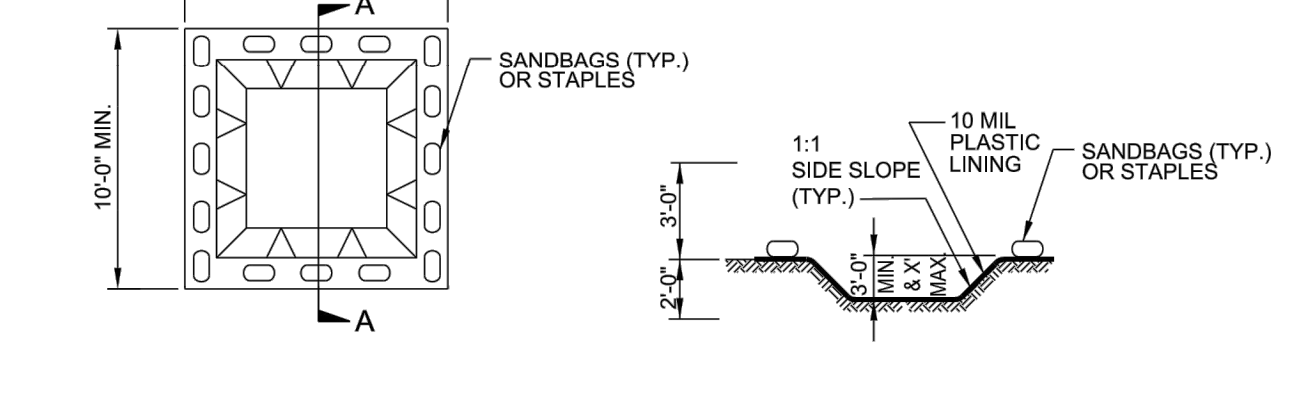
#### 2. Reporting Timeframes and Other Requirements

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.

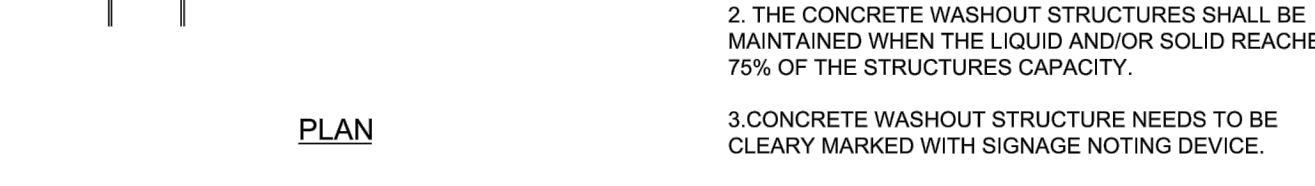
- | Occurrence  | Reporting Timeframes (After Discovery) and Other Requirements   |
|---|---|
| (a) Visible sediment deposition in a stream or wetland  | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that contains 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.</li> <li>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 it determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul> |
| (b) Oil spills and release of hazardous substances per Item 1(b)-(c) above  | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification. The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> <li>Within 24 hours, an oral or electronic notification.</li> </ul>   |
| (c) Unanticipated bypasses (40 CFR 122.414(m)(3))   | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>   |
| (d) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.414(l)(7)) | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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 recurrence of the noncompliance. (40 CFR 122.414(l)(8)).</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>   |

### WITH LINER, NO GRAVEL APPROACH

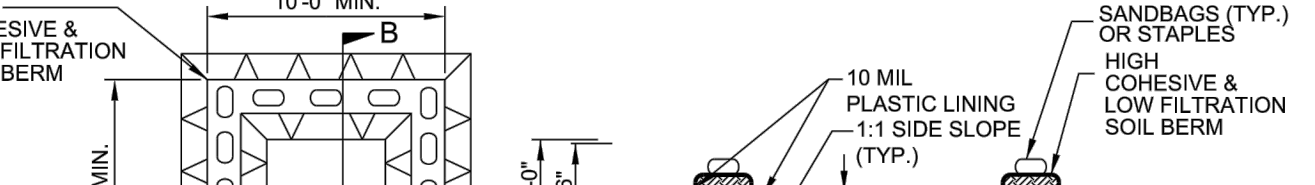
#### ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



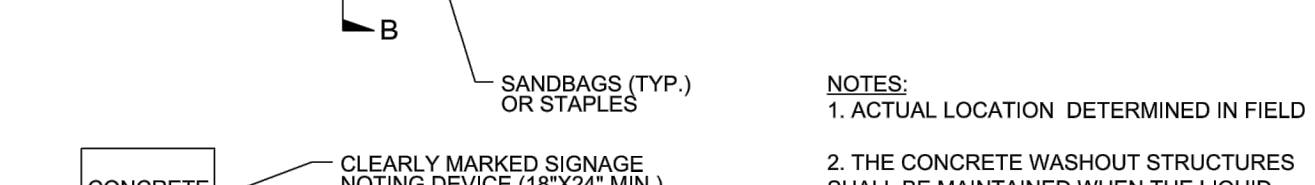
**SECTION A-A**  
NOTES:  
1. ACTUAL LOCATION DETERMINED IN FIELD  
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.  
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



**SECTION B-B**  
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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



**SECTION C-C**  
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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



**SECTION D-D**  
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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



**SECTION E-E**  
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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

### PART II, SECTION 6, 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 it 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:

- The E&S 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&S plan authority has approved these items.
- 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.
- 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 sized, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- 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.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- 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.

### PART II, SECTION 6, 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 it 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:

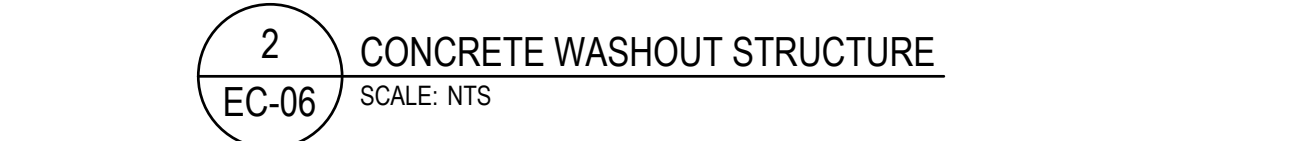
- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit.
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- 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.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- 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.

## NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING



EFFECTIVE: 04/01/19

EFFECTIVE: 04/01/19



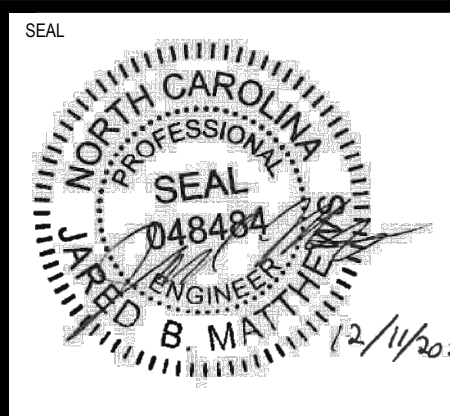
**SECTION F-F**  
NOTES:  
1. ACTUAL LOCATION DETERMINED IN FIELD  
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.  
3. CONCRETE WASHOUT STRUCTURE NEEDS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

EFFECTIVE: 04/01/19

RELEASED FOR CONSTRUCTION

LOT #9 - JARCO DRIVE  
EROSION CONTROL DETAILS IV

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NORTH CAROLINA PROFESSIONAL ENGINEERING SEAL  
J. B. MATTHEWS  
12/11/2020  
EC-06



DRAWN BY: J. B. MATTHEWS, REGISTERED PROFESSIONAL ENGINEER, LICENSE NO. 12179, STATE OF NORTH CAROLINA, EXPIRES 12/11/2020





