PARCEL DATA OWNER/DEVELOPER:

VOLA, LLC PO BOX 1328 CARY, NC 27512

ZONING: SETBACKS:

30' - FRONT SETBACK · IF STREET R/W IS 60' OR MORE 35' - FRONT SETBACK - IF STREET R/W IS LESS THAN 60' 25' - REAR SETBACK

RA-20R

20' - CORNER SETBACK 10' /5' SIDE SETBACK

PIN:

9594-09-9184

DEED REFERENCE: BOOK 2948, PAGE 429

FLOOD PLAIN INFO: ZONE: MAP NUMBER: EFFECTIVE DATE: PARCEL AREA: LAND USE CLASS:

Х 3710958400J OCT 3, 2006 3.61 ACRES COMPACT MIXED USE/LDR

PARKING: SWIMMING:

44 STANDARD & 4 HANDICAP = 48 TOTAL 1/15 sf OF POOL, 1200SF - 80 SWIMMERS MAX EST. WATER/SEWER USAGE: 10 GAL/DAY/SWIMMER - 800 GAL/DAY

NOTES:

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

BUFFER REQUIREMENTS

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

TYPE "A"· (MINIMUM WIDTH OF 15 FEET)

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

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

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

TYPE "D" ·(MINIMUM WIDTH OF 15 FEET)

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

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

LEXINGTON PLANTATION POOL HARNETT COUNTY, NORTH CAROLINA



DRAPER ADEN ASSOCIATES REVIEW

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

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

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



DATE



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

OWNER SIGNATURE

SEA 0415 8.11 PADREW P	AROVALIA SIONAL AL 595 VEER CYNN MERININ
Engineering • Surveying • Environmental Services	 114 Edinburgh South Drive, Suite 200 Cary, NC 27511 Sary, NC 27514 Blacksburg, VA Fayetteville, NC Northern Virginia NC Firm License # F-1429 Charlottesville, VA Virginia Beach, VA
DESIGNED BY: DRAWN BY: CHECKED BY: SCALE: NON DATE: 4.26. PROJECT NUMBER: 210103	JE 22 33-01

GENERAL NOTES

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

GENERAL CONSTRUCTION AND GEOTECHNICAL NOTES

ENGINEERED FILI

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

ROAD SUBGRADE

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

GENERAL UTILITY NOTES

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

EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION

EXISTING CONDITIONS THE EXISTING SITE IS CLEARED.

DEVELOPMENT IMPACTS

CRITICAL EROSION AREAS

- LOT.

STOCKPILING

STRUCTURAL PRACTICES CONSTRUCTION ENTRANCE

SILT FENCE

SILT FENCE OUTLET **TEMP. DIVERSION BERM** PIPE OUTLET PROTECTION PERMANENT DIVERSION BERM ROCK DOUGHNUT CULVERT INLET PROTECTION **TEMPORARY WATTLE CHECK DAMS** ROLLED EROSION CONTROL PRODUCTS (RECP)

VEGETATIVE PRACTICES TOPSOILING TEMPORARY SEEDING

PERMANENT SEEDING MULCHING

MANAGEMENT STRATEGIES

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

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

MANAGEMENT STRATEGIES

- ERODE.

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

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

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

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

- TEMPORARY DITCH SEDIMENT TRAPS (NCDOT SEDIMENT DAM TYPE B)

1. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES 1/3 THE WAY TO THE TOP OF THE BARRIER

2. THE SEDIMENT TRAP AND BASIN SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT

SEA 0415 8.11. PHOREW P.	AROX STOVA AL 595 22 MEROX			
Sociates nental Services	 Hampton Roads, VA Fayetteville, NC Northern Virginia Virginia Beach, VA 			
Aden As	 00 Richmond, VA Blacksburg, VA Charlottesville, V 			
Draper / Engineering	114 Edinburgh South Drive, Suite 2 Cary, NC 27511 919-873-1060 Fax: 919-873-1074 www.daa.com NC Firm License # F-1429			
DESIGNED BY:				
DRAWN BY: - CHECKED BY: SCALE: NONE				
4.26.22 PROJECT NUMBER: 2101033-01				
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REQUIRED GROUND S	IZATION			
SITE AREA DESCRIPTION	IZATION FABILIZATION TIMEFRAMES (STABILIZE WITHIN THIS MANY CALENDAR DAYS AFTER CEASING LAND		FOR HIGH QUALITY WATERSHEDS	
) PERIMETER DIKES, SWALES, DITCHES, AND PERIMETER SLOPES	DISTURBANCE 7		NONE	
) HIGH QUALITY WATER (HQW) ZONES	7		NONE	
SLOPES STEEPER THAN 3:1	7		NONE FOR HIGH QUALITY WATERSHEDS	
) SLOPES 3:1 TO 4:1	7		-7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH AND WITH SLOPES STEEPER THAN 4:1 -7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND HQW ZONES	
AREAS WITH SLOPES FLATTER THAN 4:1	7		-7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND HQW ZONES	
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other mulches and tackifie Hydroseeding Rolled erosion control proc without temporary grass se Appropriately applied strav Plastic sheeting	Temporary grass seed covered with straw or other mulches and tackifiers• Permanen other mul other mul • Geotextile reinforcer • Hydroseed • Hydroseed • Hydroseed • Hydroseed • Shrubs or with mulc • Shrubs or with mulc • Uniform a sufficient • Structural retaining • Rolled ero		nt grass seed covered with straw or lches and tackifiers e fabrics such as permanent soil ment matting ding other permanent plantings covered ch and evenly distributed ground cover to restrain erosion I methods such as concrete, asphalt or walls osion control products with grass seed	
APPLY FLOCCULANTS / MEASURES. APPLY FLOCCULANTS / APPROVED PAMS/FLO INSTRUCTIONS. PROVIDE PONDING AF DISCHARGING OFFSITE STORE FLOCCULANTS STORM-RESISTANT CO	AT OR BEFORE TI AT THE CONCEN [®] <i>CCULANTS</i> AND EA FOR CONTAIL IN LEAK-PROOF OVER OR SURROL	HE INLETS TO TRATIONS SPE IN ACCORDAN NMENT OF TR CONTAINERS	EROSION AND SEDIMENT CO CIFIED IN THE <i>NC DWR LIST</i> (NCE WITH THE MANUFACTUF EATED STORMWATER BEFOF THAT ARE KEPT UNDER CONDARY CONTAINMENT STF	OF RER'S RE
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COPIES WILL BE ALLOWED IF SHOWN TO PROVIDE EQUAL ACCESS AND UTILITY AS THE

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

EQUIPMENT AND VEHICLE MAINTENANCE

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

MATERIALS.

- ITTER, BUILDING MATERIAL AND LAND CLEARING WASTE NEVER BURY OR BURN WASTE. PLACE LITTER AND DEBRIS IN APPROVED WASTE
- CONTAINERS.
- PROVIDE A SUFFICIENT NUMBER AND SIZE OF WASTE CONTAINERS (E.G 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.
- 4. CONTAINMENT MUST BE LABELED, SIZED AND PLACED APPROPRIATELY FOR THE NEEDS OF
- 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.
- 4. STABILIZE STOCKPILE WITHIN THE TIMEFRAMES PROVIDED ON THIS SHEET AND IN ACCORDANCE WITH THE APPROVED PLAN AND ANY ADDITIONAL REQUIREMENTS. SOIL STABILIZATION IS DEFINED AS VEGETATIVE, PHYSICAL OR CHEMICAL COVERAGE TECHNIQUES THAT WILL RESTRAIN ACCELERATED EROSION ON DISTURBED SOILS FOR TEMPORARY OR PERMANENT CONTROL NEEDS.

PART III

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING **1. OCCURRENCES THAT MUST BE REPORTED**

PERMITTEES SHALL REPORT THE FOLLOWING OCCURRENCES:

(a) VISIBLE SEDIMENT DEPOSITION IN A STREAM OR WETLAND

(b) OIL SPILLS IF:

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

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

(d) ANTICIPATED BYPASSES AND UNANTICIPATED BYPASSES.

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

2. REPORTING TIMEFRAMES AND OTHER REQUIREMENTS

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

SHALL BE ALLOWED ONLY WHEN ALL OF THE FOLLOWING CRITERIA HAVE BEEN MET:

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

- DEVICES DESCRIBED IN ITEM (C) ABOVE,
- (e) VELOCITY DISSIPATION DEVICES SUCH AS CHECK DAMS, SEDIMENT TRAPS, AND RIPRAP ARE PROVIDED AT THE DISCHARGE POINTS OF ALL DEWATERING DEVICES, AND (f) SEDIMENT REMOVED FROM THE DEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE IS DISPOSED OF IN A MANNER THAT DOES NOT CAUSE DEPOSITION OF SEDIMENT INTO WATERS OF THE UNITED STATES.

HARD-COPY RECORDS.

REQUEST. [40 CFR 122.41]

. DOCUMENTATION TO BE RETAINED FOR THREE YEARS

ONSITE CONCRETE WASHOU PART III STRUCTURE WITH LINER SELF-INSPECTION, RECORDKEEPING AN SECTION A: SELF-INSPECTION 1:1 FLASTIC SANDBAGS (TYP.) SELF-INSPECTIONS ARE REQUIRED DURING NORMAL BUSINESS HOURS IN ACCORDANCE WITH THE TABLE BELOW. WHEN ADVERSE WEATHER OR SITE CONDITIONS WOULD CAUSE SECTION B-B 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 - SANDBAGS (T OR STAPLES ACTUAL LOCATION DETERMINED NSPECTION. IN ADDITION, WHEN A STORM EVENT OF EQUAL TO OR GREATER THAN 1.0 CONCRETE CLEARLY MARKED SIGNAGE SECTION A-A NOTES: 1. ACTUAL LOCATION DETERMINED IN FIELD CONCRETE CLEARLY MARKED SIGNAGE NOTING DEVICE (18"X24" MIN.) 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 1. INCHES OF FREEDOARD. NCH OCCURS OUTSIDE OF NORMAL BUSINESS HOURS, THE SELF-INSPECTION SHALL BE 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY. PERFORMED UPON THE COMMENCEMENT OF THE NEXT BUSINESS DAY. ANY TIME WHEN INSPECTIONS WERE DELAYED SHALL BE NOTED IN THE INSPECTION RECORD. 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE. PLAN 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE. ABOVE GRADE WASHOUT STRUCTURE Frequency BELOW GRADE WASHOUT STRUCTURE nspection records must include Inspect (during normal business hours) (1) Rain gauge Daily aily rainfall amounts maintained in good working CONCRETE WASHOUTS order DO NOT DISCHARGE CONCRETE OR CEMENT SLURRY FROM THE SITE. attended days (and this will determine if a site inspection is DISPOSE OF, OR RECYCLE SETTLED, HARDENED CONCRETE RESIDUE IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS AND AT AN APPROVED FACILITY. approved by the Division. (2) E&SC 1. Identification of the measures inspected MANAGE WASHOUT FROM MORTAR MIXERS IN ACCORDANCE WITH THE ABOVE ITEM At least once per Measures 7 calendar days Date and time of the inspection, AND IN ADDITION PLACE THE MIXER AND ASSOCIATED MATERIALS ON IMPERVIOUS and within 24 Name of the person performing the inspection BARRIER AND WITHIN LOT PERIMETER SILT FENCE. hours of a rain event > 1.0 inch in 4. INSTALL TEMPORARY CONCRETE WASHOUTS PER LOCAL REQUIREMENTS, WHERE properly. 24 hours Description of maintenance needs for the measure APPLICABLE. IF AN ALTERNATE METHOD OR PRODUCT IS TO BE USED, CONTACT YOUR APPROVAL AUTHORITY FOR REVIEW AND APPROVAL. IF LOCAL STANDARD DETAILS ARE (3) Stormwater At least once pe NOT AVAILABLE, USE ONE OF THE TWO TYPES OF TEMPORARY CONCRETE WASHOUTS 7 calendar days Date and time of the inspection . Name of the person performing the inspection outfalls (SDOs) and within 24 PROVIDED ON THIS DETAIL. hours of a rain DO NOT USE CONCRETE WASHOUTS FOR DEWATERING OR STORING DEFECTIVE CURB OR event > 1.0 inch in 24 hours Indication of visible sediment leaving the site, SIDEWALK SECTIONS. STORMWATER ACCUMULATED WITHIN THE WASHOUT MAY NOT BE Description, evidence, and date of corrective actions taken PUMPED INTO OR DISCHARGED TO THE STORM DRAIN SYSTEM OR RECEIVING SURFACE (4) Perimeter of At least once per WATERS. LIQUID WASTE MUST BE PUMPED OUT AND REMOVED FROM PROJECT. ' calendar days of the following shall be made: and within 24 LOCATE WASHOUTS AT LEAST 50 FEET FROM STORM DRAIN INLETS AND SURFACE hours of a rain the site limits WATERS UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY event > 1.0 inch in 2. Description, evidence, and date of corrective actions taken, and AVAILABLE. AT A MINIMUM, INSTALL PROTECTION OF STORM DRAIN INLET(S) CLOSEST 24 hours TO THE WASHOUT WHICH COULD RECEIVE SPILLS OR OVERFLOW (5) Streams or At least once per LOCATE WASHOUTS IN AN EASILY ACCESSIBLE AREA, ON LEVEL GROUND AND INSTALL A wetlands onsite 7 calendar days or offsite and within 24 activity, then a record of the following shall be made: STONE ENTRANCE PAD IN FRONT OF THE WASHOUT. ADDITIONAL CONTROLS MAY BE hours of a rain (where REQUIRED BY THE APPROVING AUTHORITY. Records of the required reports to the appropriate Division accessible) event > 1.0 inch in 8. INSTALL AT LEAST ONE SIGN DIRECTING CONCRETE TRUCKS TO THE WASHOUT WITHIN (6) Groun After each phase THE PROJECT LIMITS. POST SIGNAGE ON THE WASHOUT ITSELF TO IDENTIFY THIS stabilizatio of grading LOCATION. measure drainage facilities, completion of all land-disturbing REMOVE LEAVINGS FROM THE WASHOUT WHEN AT APPROXIMATELY 75% CAPACITY TO ground cover LIMIT OVERFLOW EVENTS. REPLACE THE TARP, SAND BAGS OR OTHER TEMPORARY STRUCTURAL COMPONENTS WHEN NO LONGER FUNCTIONAL. WHEN UTILIZING measures have been provided within the required ALTERNATIVE OR PROPRIETARY PRODUCTS, FOLLOW MANUFACTURER'S INSTRUCTIONS. soon as possible 10. AT THE COMPLETION OF THE CONCRETE WORK, REMOVE REMAINING LEAVINGS AND DISPOSE OF IN AN APPROVED DISPOSAL FACILITY. FILL PIT, IF APPLICABLE, AND STABILIZE NOTE: THE RAIN INSPECTION RESETS THE REQUIRED 7 CALENDAR DAY INSPECTION ANY DISTURBANCE CAUSED BY REMOVAL OF WASHOUT. REQUIREMENT. HERBICIDES, PESTICIDES AND RODENTICIDES **EROSION CONTROL NOTES** STORE AND APPLY HERBICIDES, PESTICIDES AND RODENTICIDES IN ACCORDANCE WITH LABEL RESTRICTIONS. 2. STORE HERBICIDES, PESTICIDES AND RODENTICIDES IN THEIR ORIGINAL CONTAINERS WITH THE LABEL, WHICH LISTS SEDIMENT CONTROL MANUAL 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 SHALL FOLLOW THE STABILIZATION TIME TABLE INCLUDED IN THIS SET OF DRAWINGS. SPILL OR LEAK INTO WELLS, STORMWATER DRAINS, GROUND WATER OR SURFACE WATER. IF A SPILL OCCURS, CLEAN AREA IMMEDIATELY HOURS 4. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES IF DURING THE COURSE OF CONSTRUCTION THE ENGINEER OR NCDEQ DO NOT STOCKPILE THESE MATERIALS ONSITE. INSPECTOR DETERMINES THAT THEY ARE REQUIRED. SILT SHALL BE REMOVED FROM SILT FENCES WHEN THE SILT REACHES APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER. HAZARDOUS AND TOXIC WASTE CREATE DESIGNATED HAZARDOUS WASTE COLLECTION AREAS ON-SITE. 7. ALL EROSION AND SILTATION MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. 2. PLACE HAZARDOUS WASTE CONTAINERS UNDER COVER OR IN SECONDARY CONTAINMENT. FEET OF TRENCH IS TO BE OPEN AT ONE TIME 3. DO NOT STORE HAZARDOUS CHEMICALS, DRUMS OR 9. ALL TEMPORARY EARTH BERMS, DIVERSIONS, AND SILT DAMS ARE TO BE MULCHED AND SEEDED FOR VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY BAGGED MATERIALS DIRECTLY ON THE GROUND. 11. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY INLET PROTECTION PRACTICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS. **Reporting Timeframes (After Discovery) and Other Requirements** Occurrence (a) Visible sediment | • *Within 24 hours,* an oral or electronic notification. MODIFY AS APPLICABLE DEPENDING ON PROPOSED TIME OF CONSTRUCTION. deposition in a • Within 7 calendar days, a report that contains a description of the 13. CONTRACTOR STAGING AREA(S) SHALL BE RETURNED TO BETTER THAN ORIGINAL CONDITIONS AT THE COMPLETION OF THE WORK. stream or wetland sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis • If the stream is named on the <u>NC 303(d) list</u> as impaired for sediment-HARNETT COUNTY INSPECTOR ASSIGNED TO THE PROJECT. related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions. RECEIVE PERMANENT GROUND COVER IN ACCORDANCE WITH NOTE BELOW (b) Oil spills and • Within 24 hours, an oral or electronic notification. The notification release of shall include information about the date, time, nature, volume and hazardous location of the spill or release. substances per Item 1(b)-(c) above (c) Anticipated A report at least ten days before the date of the bypass, if possible bypasses [40 CFR The report shall include an evaluation of the anticipated quality and 122.41(m)(3)] effect of the bypass. (d) Unanticipated Within 24 hours, an oral or electronic notification.

- bypasses [40 CFR Within 7 calendar days, a report that includes an evaluation of the 122.41(m)(3)] quality and effect of the bypass (e) Noncompliance • Within 24 hours, an oral or electronic notification. with the conditions • Within 7 calendar days, a report that contains a description of the of this permit that noncompliance, and its causes; the period of noncompliance, may endanger including exact dates and times, and if the noncompliance has not health or the been corrected, the anticipated time noncompliance is expected to nvironment[40 continue; and steps taken or planned to reduce, eliminate, and CFR 122.41(l)(7)] prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6).
- Division staff may waive the requirement for a written report on a case-by-case basis
- PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT
- SEDIMENT BASINS AND TRAPS THAT RECEIVE RUNOFF FROM DRAINAGE AREAS OF ONE ACRE OR MORE SHALL USE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN THESE DEVICES NEED TO BE DRAWN DOWN FOR MAINTENANCE OR CLOSE OUT UNLESS THIS IS INFEASIBLE. THE CIRCUMSTANCES IN WHICH IT IS NOT FEASIBLE TO WITHDRAW WATER FROM THE SURFACE SHALL BE RARE (FOR EXAMPLE, TIMES WITH EXTENDED COLD WEATHER). NON-SURFACE WITHDRAWALS FROM SEDIMENT BASINS

- MADE AVAILABLE FOR INSPECTION BY NCDEQ, THE OWNER, AND ENGINEER ON SITE AT ALL TIMES. 2. DISTURBED AREAS LEFT INACTIVE BETWEEN PERIODS OF GRADING ACTIVITY SHALL BE TEMPORARILY SEEDED WITHIN 7 WORKING DAYS. NCG01 SECTION IIB (2).
- WITHIN 7 WORKING DAYS OR 90 CALENDAR DAYS, WHICHEVER IS SHORTER, AFTER COMPLETION OF GRADING. BEFORE THE CONCLUSION OF THE PROJECT.
- DENSE VEGETATIVE COVER.
- 5. RECORD DAILY RAINFALL AMOUNTS AND MAINTAIN IN AN ONSITE LOG.

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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 un-

needed). Days on which no rainfall occurred shall be recorded as 'zero." The permittee may use another rain-monitoring device

Indication of whether the measures were operating Description, evidence, and date of corrective actions taken. Identification of the discharge outfalls inspected,

Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,

f visible sedimentation is found outside site limits, then a record Actions taken to clean up or stabilize the sediment that has left

An explanation as to the actions taken to control future

If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction Description, evidence and date of corrective actions taken, and

Regional Office per Part III, Section C, Item (2)(a) of this permit. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm

activity, construction or redevelopment, permanent Documentation that the required ground stabilization

timeframe or an assurance that they will be provided as

1. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS REQUIRED DURING CONSTRUCTION IN ACCORDANCE WITH THE CURRENT EDITION OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL MANUAL. ALL DEVICES REFERRED TO IN THESE PLANS CAN BE FOUND IN THE NORTH CAROLINA EROSION AND

2. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED AND MULCHED PER THE NPDES SCHEDULE AFTER REACHING FINAL GRADE. AREAS WHICH HAVE BEEN DISTURBED AND HAVE NOT REACHED FINAL GRADE, BUT WHICH ARE TO REMAIN UNDISTURBED FOR LONGER THAN 7 DAYS ARE TO BE TEMPORARILY SEEDED AND MULCHED PER THE NPDES SCHEDULE. AS UPSTREAM AREAS ARE STABILIZED WITH PERMANENT GROUND COVER, DOWNSTREAM TEMPORARY DEVICES ARE TO BE REMOVED. CONTRACTOR

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERIODICALLY INSPECT ALL SEDIMENT AND EROSION CONTROL DEVICES AND ENSURE THAT THEY ARE IN GOOD WORKING ORDER. AT A MINIMUM, ALL DEVICES SHALL BE INSPECTED DAILY AND AFTER MAJOR RAINFALL EVENTS. ANY DEVICE NEEDING REPAIRS SHALL BE REPAIRED WITHIN 24

THE CONTRACTOR SHALL PERIODICALLY TOP DRESS THE CONSTRUCTION ENTRANCE WITH CLEAN STONE. IF THE CONSTRUCTION ENTRANCE FAILS TO REMOVE DIRT FROM THE TIRES OF VEHICLES ENTERING A PUBLIC RIGHT-OF-WAY A WASH RACK SHALL BE INSTALLED AND THE TIRES WASHED. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ANY REQUIRED WATER FOR THE WASHING OF TIRES. DIRT TRACKED ONTO THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.

8. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED PER THE NPDES SCHEDULE AFTER BACKFILL. NO MORE THAN FIVE HUNDRED

MULCH IS REQUIRED. THE SAME APPLIES TO STOCKPILES ON SITE AS WELL AS SOIL (INTENTIONALLY) TRANSPORTED FROM THE PROJECT SITE. 10. ELECTRIC POWER, TELEPHONE, GAS SUPPLY, AND OTHER UTILITY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED IMMEDIATELY AFTER BACKFILL.

12. ANY DISTURBED AREA NOT PAVED, SODDED, OR BUILT UPON, IS TO BE SEEDED PER THE TEMPORARY AND PERMANENT SEEDING SCHEDULE INCLUDED IN THESE DRAWINGS.

14. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. 15. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL SCHEDULE THE MEETING WITH THE

16. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL MANUAL AND THE NORTH CAROLINA SEDIMENTATION POLLUTION CONTROL ACT OF 1973. 17. ALL DISTURBED AREAS NOT BUILT UPON OR LANDSCAPED SHALL BE SEEDED IN ACCORDANCE WITH THE NEW STABILIZATION TIME FRAMES AND NOTE BELOW, AND SHALL

18. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 15 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING; AND, A PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. G.S.113A-57(2); G.S. 113-57(3); 15A NCAC 048 0107(B). SEE STABILIZATION TIME TABLES THIS SHEET

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CHECKED FOR DAMAGE, STABILITY AND OPERATION FOLLOWING EVERY RAINFALL EVENT PRODUCING 1/2 INCH OR MORE OF RUNOFF AND AT LEAST ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED. MAINTENANCE SPECIFIED IN STRUCTURE CONSTRUCTION SPECIFICATIONS SHALL BE PERFORMED. RECORDS OF THESE INSPECTIONS ARE TO BE MAINTAINED AND

3. PERMANENT GROUND COVER VEGETATION SHALL BE SHALL BE APPLIED TO ALL AREAS WITH TEMPORARY VEGETATION AND ALL UNCOVERED DISTURBED AREAS

3. PERMANENT GROUND COVER VEGETATION SHALL BE SHALL BE APPLIED TO ALL AREAS WITH TEMPORARY VEGETATION AND ALL UNCOVERED DISTURBED AREAS

4. ALL SEEDED AREAS WHERE VEGETATION IS DAMAGED OR COVER IS NOT ADEQUATE SHALL BE PREPARED AND RESEEDED AS NECESSARY TO PRODUCE A VIGOROUS,

SEAL 041595 8.11.22 NGINEY ate C Õ S S G 5 \triangleleft G rap Ζ С 4 Ш ⊢ 0 Z ()S Ш REVISIONS ESIGNED BY: RAWN BY: HECKED BY: SCALE: NONE 4.26.22 ROJECT NUMBER: 2101033-01 C2.

2019 HRW REQUIRED UTILITY NOTES

(REVISION 7 – NOVEMBER 2019)

THE FOLLOWING UTILITY NOTES SHOULD BE ADDED TO THE COVERSHEET OF UTILITY PLANS FOR PROJECTS LOCATED IN HARNETT COUNTY:

WATER A. THE FIRE MARSHAL'S OFFICE SHALL APPROVE ALL HYDRANT TYPES AND LOCATIONS IN NEW SUBDIVISIONS. HOWEVER, HARNETT REGIONAL WATER (HRW) PREFERS THE CONTRACTORS TO INSTALL ONE OF THE FOLLOWING FIRE HYDRANTS:

- 1. MUELLER SUPER CENTURION 250 A-423 MODEL WITH A 51/4" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
- 2. AMERICAN DARLING MARK B-84-B MODEL WITH A 5¹/₄" MAIN VALVE
- OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE); 3. WATEROUS - PACER B-67-250 MODEL WITH A 51/4" MAIN VALVE OPENING
- THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE) OR APPROVED EQUAL FOR STANDARDIZATION.
- B. FIRE HYDRANTS ARE INSTALLED AT CERTAIN ELEVATIONS. ANY GRADE CHANGE IN THE VICINITY OF ANY FIRE HYDRANT WHICH IMPEDES ITS OPERATION SHALL BECOME THE RESPONSIBILITY OF THE UTILITY CONTRACTOR FOR CORRECTION. CORRECTIONS WILL BE MONITORED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND THE HARNETT COUNTY FIRE MARSHAL.
- C. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND PROVIDE THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE WATER LINE SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OF THE PROPOSED WATER LINES THAT WILL SERVE THIS PROJECT.
- D. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM - 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.
- THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW AND THE UTILITY CONTRACTOR WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE REGISTERED LAND SURVEYOR (RLS) SHOULD STAKE OUT ALL LOT CORNERS AND THE GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OF THE WATER LINE(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING AND UTILITY CONSTRUCTION.
- F. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE EXTENSION(S), AND ASSOCIATED WATER SERVICES IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- G. THE WATER MAIN(S), FIRE HYDRANTS, SERVICE LINES, METER SETTERS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED IN STRICT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER (HRW). THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED WATER MAIN(S), WATER SERVICE LINES AND ALL ASSOCIATED METER SETTERS AND METER BOXES FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW WATER MAIN(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION (NCDEQ, DEH, PWS) AND ACCEPTED BY HRW.
- H. PRIOR TO ACCEPTANCE, ALL SERVICES WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL METER BOXES MUST BE FLUSH WITH THE GROUND LEVEL AT FINISH GRADE AND THE METER SETTERS MUST BE A MINIMUM OF 8" BELOW THE METER BOX LID. METER SETTERS SHALL BE CENTERED IN THE METER BOX AND SUPPORTED BY BRICK, BLOCK OR STONE.
- THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S) CONSTRUCTED IN HARNETT COUNTY. THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.
- POTABLE WATER MAINS CROSSING OTHER UTILITIES AND NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN THE POTABLE WATER MAIN AND ALL OTHER UTILITIES. NCDOT REQUIRES THE NEW WATER MAINS TO BE INSTALLED UNDER THE STORM WATER LINES. THE POTABLE WATER MAIN SHALL BE INSTALLED WITH TWENTY-FOUR (24") INCHES OF VERTICAL SEPARATION AND WITH DUCTILE IRON PIPE WHEN DESIGNED TO BE PLACED UNDER A NON-POTABLE WATER LINE SUCH AS SANITARY SEWER OR STORM SEWER LINES. IF THESE SEPARATIONS CANNOT BE MAINTAINED THEN THE WATER MAIN SHALL BE INSTALLED WITH DUCTILE IRON PIPE. BOTH THE POTABLE WATER MAIN AND THE NON-POTABLE WATER LINE MUST BE CAST IRON OR DUCTILE IRON PIPE (DIP) IF THE STATE MINIMUM SEPARATIONS CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE MUST BE LAID SO THE MECHANICAL JOINTS ARE AT LEAST (10') FEET FROM THE POINT WHERE THE POTABLE WATER MAIN CROSSES THE NON-POTABLE WATER LINE.
- K. POTABLE WATER MAINS INSTALLED PARALLEL TO NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF TEN (10') FEET BETWEEN THE POTABLE WATER MAIN AND SANITARY SEWER MAINS, SEWER LATERALS AND SERVICES. THE HORIZONTAL SEPARATION BETWEEN THE POTABLE WATER MAIN AND ANY OTHER UTILITY OR STORM SEWER SHALL NOT BE LESS THAN FIVE (5') FEET. THE POTABLE WATER MAIN MUST BE DUCTILE IRON PIPE IF THIS HORIZONTAL SEPARATION OF TEN (10') FEET CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST TEN (10') FEET BEYOND THE POINT WHERE THE MINIMUM REQUIRED HORIZONTAL SEPARATION OF TEN (10') FEET CAN BE RE-ESTABLISHED.
- METER SETTERS SHALL BE INSTALLED IN PAIRS ON EVERY OTHER LOT LINE WHERE POSSIBLE TO LEAVE ADEQUATE SPACE FOR OTHER UTILITIES TO BE INSTALLED AT A LATER TIME. THE METER SETTERS SHALL BE INSTALLED AT LEAST ONE (1') FOOT INSIDE THE RIGHT-OF-WAY AND AT LEAST THREE (3') TO FIVE (5') FEET FROM THE PROPERTY LINE BETWEEN THE LOTS.
- M. HRW REQUIRES THAT METER BOXES FOR 3/4" SERVICES SHALL BE 12" WIDE X 17" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH CAST IRON LIDS/COVERS. METER BOXES FOR 1" SERVICES SHALL BE 17" WIDE X 21" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS. METER BOXES FOR 2" SERVICES SHALL BE 20" WIDE X 32" LONG ABS PLASTIC BOXES AT LEAST 20" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS.
- MASTER METERS MUST BE INSTALLED IN CONCRETE VAULTS SIZED FOR THE METER ASSEMBLY AND ASSOCIATED APPURTENANCES SO AS TO PROVIDE AT LEAST EIGHTEEN (18") INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE CONCRETE VAULT AND THE BOTTOM OF THE METER SETTER. THE MASTER METER MUST BE PROVIDED TEST PORTS IF THE METER IS NOT EQUIPPED WITH TEST PORTS FROM THE MANUFACTURER IN ACCORDANCE WITH THE HRW ESTABLISHED STANDARD SPECIFICATIONS AND DETAILS. DUCTILE IRON PIPE MUST BE USED

FOR THE MASTER METER VAULT PIPING AND VALVE VAULT PIPING. THE UTILITY CONTRACTOR MUST PROVIDE SHOP DRAWINGS FOR THE METER VAULTS TO HRW PRIOR TO ORDERING THE CONCRETE VAULTS.

- O. THE UTILITY CONTRACTOR WILL INSTALL POLYETHYLENE SDR-9 WATER SERVICE LINES THAT CROSS UNDER THE PAVEMENT INSIDE A SCHEDULE 40 PVC CONDUIT TO ALLOW FOR REMOVAL AND REPLACEMENT IN THE FUTURE. TWO (2) INDEPENDENT ³/₄" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - TWO (2") INCH SCHEDULE 40 PVC CONDUIT OR TWO (2) INDEPENDENT 1" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - THREE (3") INCH SCHEDULE 40 PVC CONDUIT, BUT EACH WATER SERVICE SHALL BE TAPPED DIRECTLY TO THE WATER MAIN. SPLIT SERVICES ARE NOT ALLOWED BY HRW.
- THE WATER MAIN(S), FIRE HYDRANTS, GATE VALVES, SERVICE LINES, METER SETTERS AND ASSOCIATED APPURTENANCES MUST BE RATED FOR 200 PSI AND HYDROSTATICALLY PRESSURE TESTED TO 200 PSI. THE HYDROSTATIC PRESSURE TEST(S) MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR MUST NOTIFY HRW WHEN THEY ARE READY TO BEGIN FILLING IN LINES AND COORDINATE WITH HARNETT REGIONAL WATER TO WITNESS ALL PRESSURE TESTING.
- Q. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE(S) PRIOR TO MAKING THE TAP ON THE EXISTING WATER MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE IN HARNETT COUNTY. ALL NEW WATER LINE EXTENSIONS MUST BEGIN WITH A RESILIENT WEDGE TYPE GATE VALVE SIZED EQUAL TO THE DIAMETER OF THE NEW WATER LINE EXTENSION IN ORDER TO PROVIDE A MEANS OF ISOLATION BETWEEN HARNETT REGIONAL WATER'S EXISTING WATER MAINS AND THE NEW WATER LINE EXTENSIONS UNDER CONSTRUCTION.
- R. ALL WATER MAINS WILL BE CONSTRUCTED WITH SDR-21 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE RATED FOR AT LEAST 200 PSI OR GREATER. ALL PIPES MUST BE PROTECTED DURING LOADING, TRANSPORT, UNLOADING, STAGING, AND INSTALLATION. PVC PIPE MUST BE PROTECTED FROM EXTENDED EXPOSURE TO SUNLIGHT PRIOR TO INSTALLATION.
- S. ALL WATER MAINS WILL BE FLUSHED AND DISINFECTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. ALL WATER SAMPLES COLLECTED FOR BACTERIA TESTING WILL BE COLLECTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND TESTED IN THE HRW LABORATORY
- ALL FITTINGS LARGER THAN TWO (2") INCHES DIAMETER SHALL BE DUCTILE IRON. HRW REQUIRES THAT MECHANICAL JOINTS BE ASSEMBLED WITH GRIP RINGS AS "MEGALUG" FITTINGS ARE NOT APPROVED BY HARNETT REGIONAL WATER FOR PIPE SIZES SMALLER THAN TWELVE INCHES (12") DIAMETER. PVC PIPE USED FOR WATER MAINS SHALL BE CONNECTED BY SLIP JOINT OR MECHANICAL JOINT WITH GRIP RINGS. GLUED PIPE JOINTS ARE NOT ALLOWED ON PVC PIPE USED FOR WATER MAINS IN HARNETT COUNTY.
- HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL WATER LINES. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING.
- THE UTILITY CONTRACTOR WILL PROVIDE PROFESSIONAL ENGINEER (PE) AND THE E. HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE FIELD DRAWINGS TO IDENTIFY THE INSTALLED LOCATIONS OF THE WATER LINE(S) AND ALL ASSOCIATED SERVICES. ALL CHANGE ORDERS MUST BE PRE-APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS
- W. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED WATER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE WATER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS DURING WATER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.
- PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO HAVE A SIGNED NCDOT ENCROACHMENT AGREEMENT POSTED ON SITE AND NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED OR VERIFIED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.). THE UTILITY CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO THE SATISFACTION OF THE RELATED UTILITY COMPANY.
- Y. THE UTILITY CONTRACTOR SHALL PROVIDE HRW WITH AT LEAST ONE (1) FIRE HYDRANT WRENCH AND ONE (1) BREAK-AWAY FLANGE KIT FOR EVERY SUBDIVISION WITH FIRE HYDRANTS DEVELOPED IN HARNETT COUNTY. THESE ITEMS MUST BE PROVIDED TO HRW BEFORE THE FINAL INSPECTION WILL BE SCHEDULED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. IN ADDITION, THE UTILITY CONTRACTOR SHALL INSTALL A 4" X 4" CONCRETE VALVE MARKER AT THE EDGE OF THE RIGHT-OF-WAY TO IDENTIFY THE LOCATION OF EACH GATE VALVE INSTALLED IN THE NEW WATER SYSTEM WITH THE EXCEPTION OF THE FIRE HYDRANT ISOLATION VALVES. THE CONTRACTOR SHALL MEASURE THE DISTANCE FROM THE CENTER OF THE CONCRETE MARKER TO THE CENTER OF THE VALVE BOX. THIS DISTANCE (IN LINEAR FEET) SHALL BE STAMPED ON THE BRASS PLATE LOCATED ON THE TOP OF THE CONCRETE VALVE MARKER. IN LIEU OF INSTALLING THE CONCRETE VALVE MARKERS, THE UTILITY CONTRACTOR MAY PROVIDE AT LEAST TWO MEASUREMENTS FROM TWO INDEPENDENT PERMANENT ABOVE GROUND STRUCTURES TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS TO IDENTIFY THE VALVE LOCATIONS. THE PROFESSIONAL ENGINEER (PE) MUST INCLUDE THESE MEASUREMENTS IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.
- THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE DAMAGE FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE WATER SYSTEM IMPROVEMENTS HAVE BEEN ACCEPTED BY HARNETT REGIONAL WATER. HARNETT REGIONAL WATER WILL PROVIDE MAINTENANCE AND REPAIRS WHEN REQUESTED AND BILL THE DEVELOPER AND/OR UTILITY CONTRACTOR IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW WATER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE WATER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. THE FINAL INSPECTION OF WATER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.
- AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO INSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED

WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ACCESSED TO THE DEVELOPER.

SANITARY SEWER

- THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND SUPPLY A COPY OF THE SEWER PERMIT FOR THE CONSTRUCTION AND OPERATION OF THE WASTEWATER COLLECTION SYSTEM TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE SANITARY SEWER LINE, SEWER LIFT STATION AND ASSOCIATED FORCE MAIN SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE SEWER PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE DURING THE CONSTRUCTION OF THE SEWER SYSTEM IMPROVEMENTS.
- B. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WASTEWATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM - 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.
- C. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. HRW WILL STAMP THE APPROVED PLANS AS "RELEASED FOR CONSTRUCTION" AND PROVIDE COPIES TO THE UTILITY CONTRACTOR. THE REGISTERED LAND SURVEYOR (RLS) SHALL STAKE OUT ALL LOT CORNERS AND ESTABLISH GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET AND SEWER LINE BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OR INSTALLATION OF THE MANHOLES, SANITARY SEWER GRAVITY LINE(S), SEWER LIFT STATIONS AND/OR SANITARY SEWER FORCE MAIN(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING OR UTILITY CONSTRUCTION.
- THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY GRAVITY SEWER LINE(S), MANHOLE(S), SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S) IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- THE SANITARY SEWER LATERAL CONNECTIONS SHOULD BE INSTALLED 90° (PERPENDICULAR) TO THE SANITARY SEWER GRAVITY LINES WITH SCHEDULE 40 PVC PIPE. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE THE PROFESSIONAL ENGINEER (PE) WITH ACCURATE MEASUREMENTS FOR LOCATING SANITARY SEWER SERVICE LATERAL AND ASSOCIATED EACH SANITARY SEWER CLEAN-OUT. THESE MEASUREMENTS SHOULD BE TAKEN FROM THE NEAREST DOWNSTREAM MANHOLE UP ALONG THE SANITARY SEWER MAIN TO THE IN-LINE WYE FITTING (OR TAPPING SADDLE) AND THEN ANOTHER MEASUREMENT FROM THE IN-LINE WYE FITTING (OR TAPPING SADDLE) TO THE 4" X 4" LONG SWEEP COMBINATION WYE FITTING AT THE BOTTOM OF THE SEWER CLEAN-OUT STACK. THESE FIELD MEASUREMENTS MUST BE PROVIDED TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS FROM THE UTILITY CONTRACTOR FOR PROPER DOCUMENTATION IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW
- F. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER GRAVITY LINE(S), SANITARY SEWER FORCE MAIN(S), SANITARY SEWER SERVICE LATERAL(S) AND ALL ASSOCIATED SEWER CLEAN-OUT(S) IN THE PROPOSED SANITARY SEWER SYSTEM FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER LINE(S) AND ASSOCIATED APPURTENANCES HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW. ALL NEW SANITARY SEWER LINES MUST HAVE AT LEAST THREE (3 FT.) FEET OF COVER AND EXTEND UNDER ALL EXISTING WATER MAIN AND STORM WATER LINES WITH A LEAST 24" OF VERTICAL CLEARANCE BELOW THE BOTTOM OF THE EXISTING WATER MAIN AND STORM WATER LINES.
- G. THE SANITARY SEWER GRAVITY LINE(S), MANHOLE(S), SANITARY SEWER SERVICE LATERAL(S) AND ASSOCIATED CLEAN-OUT(S) SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. THE SANITARY SEWER GRAVITY LINE(S) MUST PNEUMATICALLY PRESSURE TESTED WITH COMPRESSED AIR AT 5 PSI AND THE SANITARY SEWER FORCE MAIN(S) MUST HYDROSTATICALLY PRESSURE TESTED WITH WATER OR AIR AT 200 PSI, SANITARY SEWER MANHOLES MUST BE VACUUM TESTED TO 10 INCHES OF MERCURY AND CANNOT DROP BELOW 9 INCHES IN 60 SECONDS FOR 4 FT. DIAMETER MANHOLES, 75 SECONDS FOR 5 FT. DIAMETER MANHOLES. ALL TESTS MENTIONED ABOVE MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND ENGINEER.
- H. PRIOR TO ACCEPTANCE, ALL SEWER SERVICE LATERALS WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL SEWER CLEAN-OUTS MUST BE INSTALLED SO THE 4" X 4" LONG SWEEP COMBINATION WYE IS AT LEAST THREE (3') FEET BUT NO MORE THAN FOUR (4') FEET BELOW THE FINISH GRADE UNLESS OTHERWISE APPROVED IN WRITING BY HRW. THE SEWER CLEANOUTS SHALL HAVE A FOUR (4") SCHEDULE 40 PVC PIPE STUBBED UP FROM BOTH ENDS OF THE 4" X 4" LONG SWEEP COMBINATION WYE TO BE AT LEAST TWO (2') FEET ABOVE THE FINISH GRADE AND COVER EACH END WITH A FOUR (4") INCH TEMPORARY CAP TO KEEP OUT DIRT, SAND, ROCKS, WATER AND CONSTRUCTION DEBRIS. THE VERTICAL STACK ON EACH CLEAN-OUT MUST BE PROVIDED WITH A CONCRETE DONUT FOR PROTECTION.
- ONCE THE SANITARY SEWER GRAVITY LINE(S) HAVE BEEN INSTALLED, PNEUMATICALLY PRESSURE TESTED AND IN PLACE FOR AT LEAST 30 DAYS, THE UTILITY CONTRACTOR MUST CONTACT THE HRW UTILITY CONSTRUCTION INSPECTOR TO WITNESS THE MANDREL TEST ON EACH PVC SANITARY SEWER GRAVITY LINE. THE UTILITY CONTRACTOR WILL NOTIFY HRW TO SCHEDULE THE MANDREL TESTING. THE MANDREL AND PROVING RING MUST BE SUPPLIED BY THE UTILITY CONTRACTOR. CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS (AT THE UTILITY CONTRACTOR'S EXPENSE) MAY BE REQUIRED BY THE HRW UTILITY CONSTRUCTION INSPECTOR IF THE MANDREL AND MIRROR TAMPING TESTING CANNOT BE COMPLETED WITH SATISFACTORY RESULTS. THE SANITARY SEWER LINES SHOULD BE FLUSHED CLEAN USING A SEWER BALL OF THE PROPER DIAMETER BEFORE ANY MANDREL TESTING CAN BE PERFORMED. THE UTILITY CONTRACTOR IS RESPONSIBLE TO REMOVE ALL DIRT, SAND, SILT, GRAVEL, MUD AND DEBRIS FROM THE NEWLY CONSTRUCTED SEWER LINES EXERCISING CARE TO KEEP THE HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER SYSTEMS CLEAN. SANITARY SEWER FORCE MAIN(S) SHALL BE PRESSURE TESTED TO 200 PSI FOR AT LEAST 2 HOURS LIKE WATER LINES.
- THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER SYSTEM(S) FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER SYSTEM(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW.
- HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL SANITARY SEWER FORCE MAINS. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING. THE TRACER WIRE IS NOT REQUIRED FOR THE GRAVITY SEWER LINE(S) BETWEEN MANHOLES.

- L. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE SEWER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE SEWER LINES AS WELL AS THE INSTALLED LOCATIONS OF THE MANHOLE(S). SANITARY SEWER GRAVITY LINE(S). SANITARY SEWER SERVICE LATERALS, CLEAN-OUTS, SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S). THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN
- WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS. M. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.).
- THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH EXISTING UTILITY N. PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED SANITARY SEWER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE SANITARY SEWER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION OF EXISTING UTILITIES AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS DURING SANITARY SEWER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.
- WHEN MAKING A TAP ON AN EXISTING SEWER FORCE MAIN, THE UTILITY CONTRACTOR MUST HAVE A PERMIT FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) PRIOR TO BEGIN THE TAP WORK. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE AND GATE VALVE PRIOR TO MAKING THE TAP ON AN EXISTING SANITARY SEWER FORCE MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE ON SANITARY SEWER FORCE MAINS IN HARNETT COUNTY. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STYLE "CB" SEWER SADDLES WITH STAINLESS STEEL BANDS OR APPROVED EQUAL FOR ALL TAPS MADE ON EXISTING SANITARY SEWER GRAVITY LINES IN HARNETT COUNTY.
- THE UTILITY CONTRACTOR SHALL PROVIDE A GREASE TRAP FOR EACH SANITARY SEWER SERVICE LATERAL THAT WILL BE CONNECTED TO A RESTAURANT, FOOD PROCESSING FACILITY AND ANY OTHER COMMERCIAL OR INDUSTRIAL FACILITY AS REQUIRED BY THE HARNETT COUNTY FAT, OIL & GREASE ORDINANCE. THE GREASE TRAP MUST BE RATED FOR A MINIMUM CAPACITY OF AT LEAST 1,000 GALLONS UNLESS OTHERWISE APPROVED IN WRITING BY THE HRW PRE-TREATMENT COORDINATOR. GARBAGE DISPOSALS SHOULD NOT BE INSTALLED IN HOMES AND BUSINESSES THAT DISCHARGE WASTEWATER TO THE HARNETT REGIONAL WATER'S SANITARY SEWER SYSTEM AS THEY ARE NOT APPROVED BY HRW.
- EACH SEWER LIFT STATION MUST BE PROVIDED WITH THREE PHASE POWER (AT Q. LEAST 480 VOLTS) AND CONSTRUCTED TO MEET THE MINIMUM REQUIREMENTS OF THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE (NEC) AND HARNETT REGIONAL WATER STANDARD SPECIFICATIONS AND DETAILS. IF THREE PHASE POWER IS NOT AVAILABLE FROM THE POWER COMPANY OTHER ARRANGEMENTS MUST BE APPROVED BY HRW ENGINEERING PRIOR TO THE START OF CONSTRUCTION.
- WHERE A NEW SANITARY SEWER FORCE MAIN IS CONNECTED TO AN EXISTING R MANHOLE IN THE HARNETT REGIONAL WATER SEWER COLLECTIONS SYSTEM, THE UTILITY CONTRACTOR MUST PROVIDE A PROTECTIVE COATING (COAL TAR EPOXY) FOR THE INTERIOR SURFACES OF THE MANHOLE TO PROTECT IT AGAINST CORROSION, EROSION AND DETERIORATION FROM THE RELEASE OF SEWER GASES SUCH AS METHANE AND HYDROGEN SULFIDE.
- S. THE SEWER LIFT STATION DESIGN AND ASSOCIATED EQUIPMENT MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS FOR HARNETT COUNTY SEWER LIFT STATIONS 2009 EDITION. EACH SANITARY SEWER LIFT STATION MUST BE CONSTRUCTED WITH AN ALL-WEATHER ACCESS ROAD THAT IS AT LEAST 20 FEET WIDE. THE LIFT STATION SITE MUST BE COVERED WITH WEED BLOCKING MATERIAL AND AT LEAST SIX (6") INCHES OF # 57 STONE (CRUSH AND RUN).
- ONCE A SEWER LIFT STATION HAS BEEN INSTALLED. THE UTILITY CONTRACTOR IS RESPONSIBLE TO SCHEDULE A DRAW DOWN TEST WITH HRW ENGINEERING AND COLLECTIONS STAFF, THE PROFESSIONAL ENGINEER (PE), THE ELECTRICIAN, THE ORIGINAL EQUIPMENT MANUFACTURER'S (OEM) REPRESENTATIVES [FOR BOTH THE PUMPS AND THE GENERATOR]. THIS DRAW DOWN TEST MUST BE COMPLETED WITH POWER SUPPLIED FROM THE ELECTRICAL UTILITY COMPANY AND WITH POWER SUPPLIED BY THE EMERGENCY GENERATOR WITH SATISFACTORY RESULTS BEFORE FINAL INSPECTIONS ARE CONDUCTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- ONCE THE UTILITY CONTRACTOR COMPLETES THE INSTALLATION OF A SEWER LIFT STATION. THE PROFESSIONAL ENGINEER (PE) MUST SUBMIT THE SEWER PERMIT CERTIFICATION AND AS-BUILT RECORD DRAWINGS TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND HRW FOR FINAL APPROVAL. THE UTILITY CONTRACTOR MUST SUPPLY HRW ENGINEERING STAFF WITH THREE ORIGINAL OPERATION & MAINTENANCE (O&M) MANUALS ALONG WITH THE ASSOCIATED PUMP CURVES AND ELECTRICAL SCHEMATICS FOR THE ASSOCIATED SEWER LIFT STATION EQUIPMENT INCLUDING ALL WARRANTY INFORMATION AND DOCUMENTATION.

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

W. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE ALL NECESSARY EQUIPMENT AND DEVICES FOR THE TESTING AND INSPECTION OF THE SANITARY SEWER SYSTEM. THE EQUIPMENT AND DEVICES MAY INCLUDE BUT NOT LIMITED TO LAMPING WITH MIRRORS, MANDRELS, SEWER BALLS, PLUGS, AIR COMPRESSORS AND ASSOCIATED COMPRESSED AIR LINES. IF THE HRW UTILITY CONSTRUCTION INSPECTOR DEEMS THAT A CLOSED CIRCUIT VIDEO CAMERA INSPECTION OF THE NEWLY CONSTRUCTED SEWER SYSTEM IS NECESSARY, THEN ALL COSTS FOR THE CLOSED CIRCUIT CAMERA INSPECTION WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR. ALL CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS MUST BE RECORDED ON VHS TAPES THAT WILL RELEASED TO HRW FOR RECORD KEEPING, REVIEW AND APPROVAL OF THE SEWER SYSTEM. ANY USE OF SEWER PLUGS TO TEMPORARILY BLOCK HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES MUST BE COORDINATED WITH THE HRW COLLECTIONS SUPERVISOR AT LEAST TWO (2) DAYS IN ADVANCE OF INSTALLING THE PLUGS. THE SEWER PLUGS MUST BE REMOVED AS SOON AS POSSIBLE ONCE THE NEW SANITARY SEWER LINES HAVE BEEN INSPECTED, PRESSURE TESTED, MANDREL TESTED, APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW TO ALLOW THE SEWER TO FLOW AS DESIGNED IN HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES OR WHEN SO ORDERED BY THE HRW COLLECTIONS SUPERVISOR TO LIMIT INTERRUPTIONS TO THE NORMAL FLOW OF THE SANITARY SEWER COLLECTION SYSTEM(S). THE UTILITY CONTRACTOR MUST PROVIDE THE PUMPS HOSES AND NECESSARY CONNECTORS FOR A TEMPORARY PUMP AROUND SETUP IF REQUIRED BY THE HRW COLLECTIONS SUPERVISOR. MR. RANDOLPH CLEGG, HRW COLLECTIONS SUPERVISOR MAY BE CONTACTED BETWEEN 8:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY AT (910) 893-7575 EXTENSION 3241.

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

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

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

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