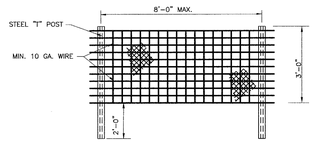
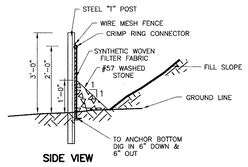
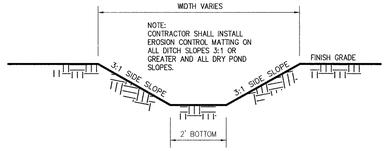
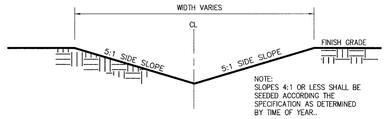




1 C5.1 SILT FENCE DETAIL
N.T.S.

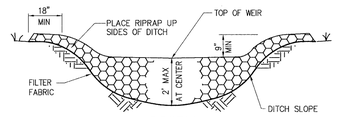


DITCH SECTION

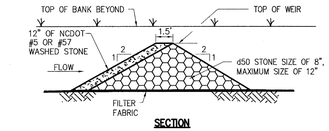


SWALE SECTION

2 C5.1 TYPICAL DITCH/SWALE SECTIONS
N.T.S.



ELEVATION

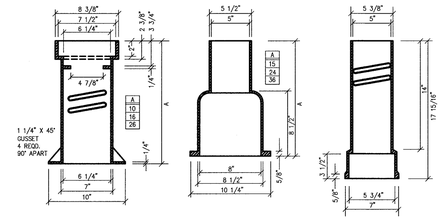


SECTION

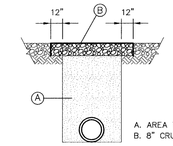
3 C5.1 ROCK SILT CHECK DAM
N.T.S.

SLIP TYPE	EXTENSION INCHES	COMPLETE LBS WT.	TOP & COVER INS. LGTH.	TOP & COVER LBS. WT.	BOTTOM INS. LGTH.	BOTTOM LBS. WT.
461-A	18-24	60	10	35	15	25
562-A	24-36	80	16	45	24	35
564-A	36-48	92	16	47	36	45
664-A	39-60	106	26	63	36	45

NOTE:
VALVE BOX SHALL BE CHARLOTTE UTL-274. VALVE BOX EXTENSION SHALL BE CHARLOTTE UTL-281 SCREW TYPE.

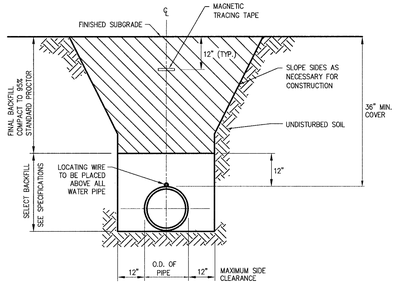


4 C5.1 VALVE BOX DETAIL
N.T.S.

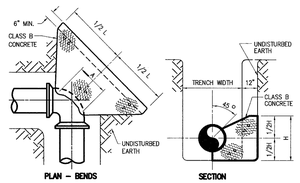


A. AREA TO BE TAMPED.
B. 8" CRUSHED STONE.

5 C5.1 GRAVEL DRIVE REPAIR
N.T.S.



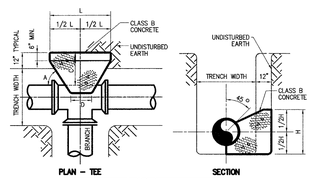
6 C5.1 WATER PIPE TRENCH DETAIL
N.T.S.



PLAN – BENDS SECTION

BUTTRESS DIMENSIONS						
PIPE SIZE	22 1/2 BENDS		45 BENDS		90 BENDS	
	L	H	L	H	L	H
<4"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
4"	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"
6"	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-0"
8"	2'-0"	2'-0"	2'-0"	2'-0"	3'-0"	2'-0"
12"	2'-0"	2'-0"	3'-0"	2'-6"	4'-6"	3'-0"

NOTES:
1. DIMENSION "A" SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE MECH. JOINT BOLTS.
2. FOR SAMPLE CALCULATIONS, SEE THRUST BLOCKING.
3. BUTTRESS DIMENSIONS ARE BASED UPON A SOIL RESISTANCE OF 2000 LBS. PER SQ. FT. AND A WATER PRESSURE OF 150 P.S.I.



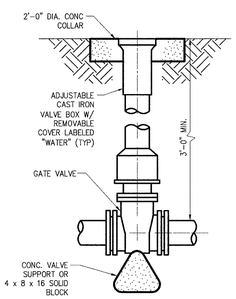
PLAN – TEE SECTION

BUTTRESS DIMENSIONS				
B. D.	L	H	C	D
<4"	1'-0"	1'-0"	SEE NOTE NO. 1	SEE NOTE NO. 2
4"	1'-6"	1'-6"		
6"	2'-0"	2'-0"		
8"	3'-0"	2'-0"		
12"	4'-6"	3'-0"		

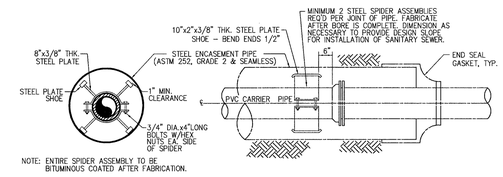
B. D. = BRANCH DIAMETER

NOTES:
1. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE "A" EQUAL TO OR GREATER THAN 45°.
2. DIMENSION "D" SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE MECHANICAL JOINTS.
3. BUTTRESS DIMENSIONS ARE BASED UPON A SOIL RESISTANCE OF 2000 LBS. PER SQ. FT. AND A WATER PRESSURE OF 150 P.S.I.

7 C5.1 THRUST BLOCKING
N.T.S.



8 C5.1 GATE VALVE DETAIL
N.T.S.

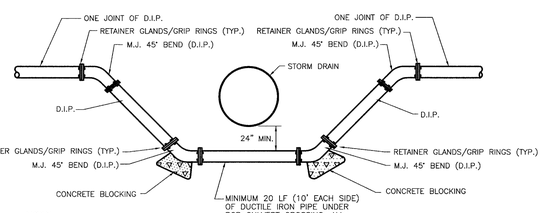


NOTE: ENTIRE SPIDER ASSEMBLY TO BE BITUMINOUS COATED AFTER FABRICATION.

END ELEVATION CASING SECTION

NOTE:
ENDS OF CASING CAN BE SEALED USING MODEL AC PULL-ON END SEAL GASKET, AS MANUFACTURED BY ADVANCE PRODUCT SYSTEMS, INC., OR APPROVED EQUAL IN LIEU OF CONCRETE FILL.

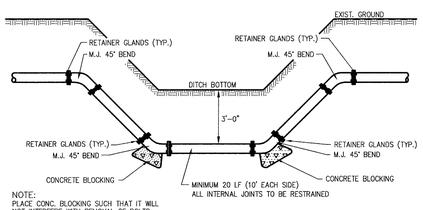
9 C5.1 STEEL ENCASEMENT DETAIL
N.T.S.



NOTE:
PLACE CONC. BLOCKING SUCH THAT IT WILL NOT INTERFERE WITH REMOVAL OF BOLTS.

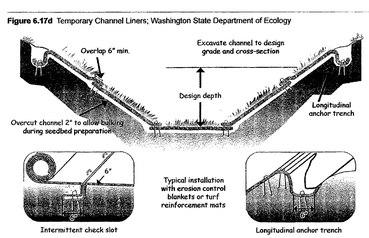
THE CONTRACTOR SHALL NOTIFY ENGINEER FOR INSPECTION OF ALL SUCH CROSSINGS PRIOR TO BACKFILLING. FAILURE TO DO SO WILL RESULT IN CONTRACTOR HAVING TO UNCOVER WATERLINE FOR CROSSING INSPECTION. 24 HOUR ADVANCE NOTICE IS REQUIRED FOR ALL INSPECTIONS.

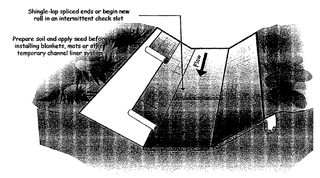
10 C5.1 STORM / WATER CROSSING
N.T.S.



NOTE:
PLACE CONC. BLOCKING SUCH THAT IT WILL NOT INTERFERE WITH REMOVAL OF BOLTS.

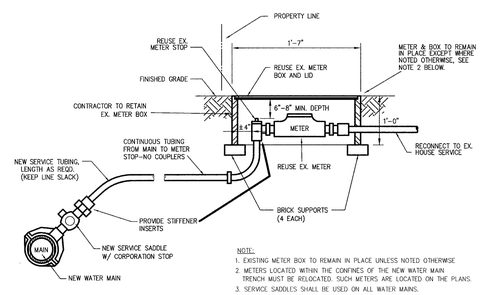
11 C5.1 WATER MAIN – DITCH CROSSING
N.T.S.





NOTES:
1. Design velocities exceeding 2 ft/sec require temporary blankets, mats or similar liners to protect seed and soil until vegetation becomes established.
2. Grass-lined channels with design velocities exceeding 6 ft/sec should include turf reinforcement mats

12 C5.1 ROLLED EROSION CONTROL BLANKET DETAIL
N.T.S.



NOTE:
1. EXISTING METER BOX TO REMAIN IN PLACE UNLESS NOTED OTHERWISE
2. METERS LOCATED WITHIN THE CONFINES OF THE NEW WATER MAIN TRENCH MUST BE RELOCATED. SUCH METERS ARE LOCATED ON THE PLANS.
3. SERVICE SADDLES SHALL BE USED ON ALL WATER MAINS.
4. MINIMUM COVER OVER SERVICE LINE SHALL BE 24"

13 C5.1 WATER SERVICE DETAIL
N.T.S.

SEAL

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19422 TODD JAMES WINEGARD
3/13/15

REV. NO.	DATE	REVISIONS	BY
1	03/13/15	ISSUE FOR CONSTRUCTION	TJH

THE EAST GROUP, P.A.

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PROJECT TITLE
NCDOT HWY 258
GREENE COUNTY
WATER MAIN
Greene County, NC

DRAWING TITLE
Water Main Relocation
Hwy 258
Details

SCALE: AS NOTED	DEPARTMENT: CIVIL
DRAWN BY: SLJ	DATE STARTED: 12/29/14
CHECKED	SHEET No.
APPROVED	DRAWING NO. C5.1
PROJECT NO. 20140221	

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