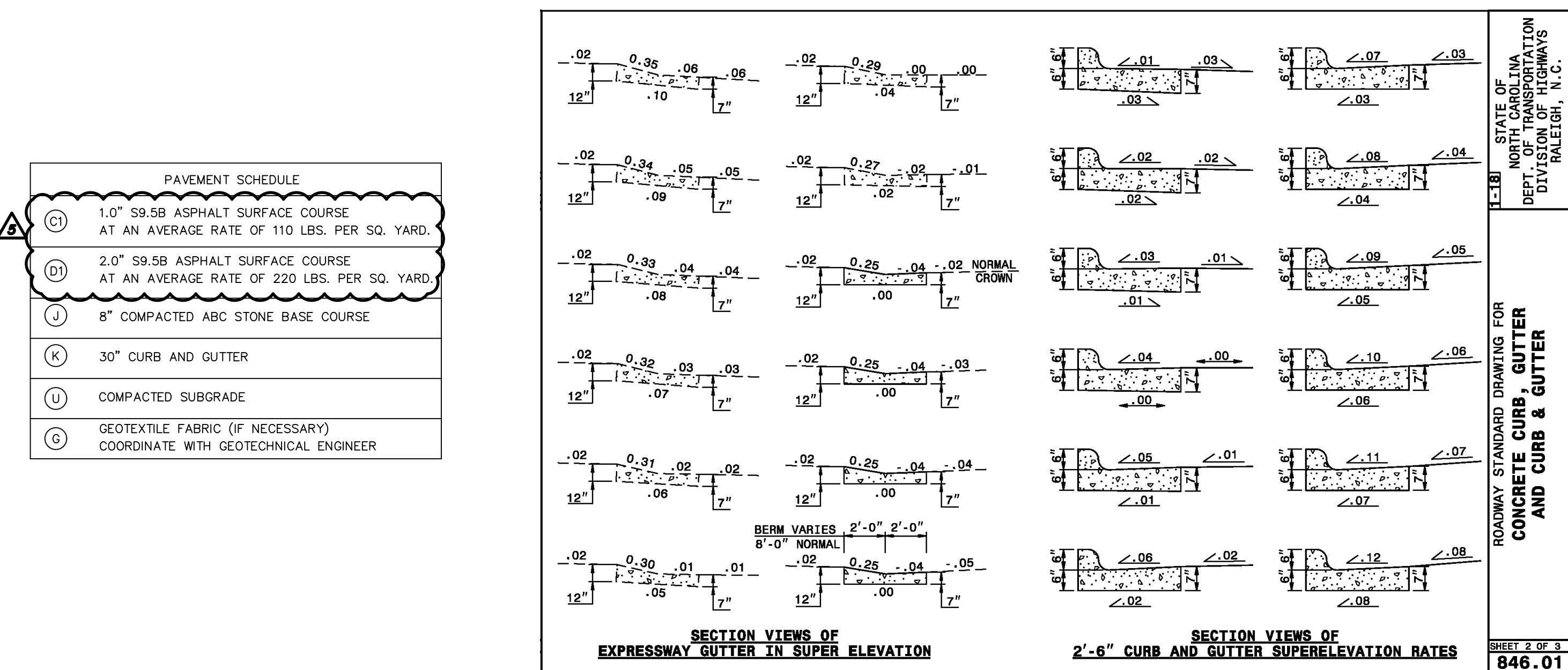
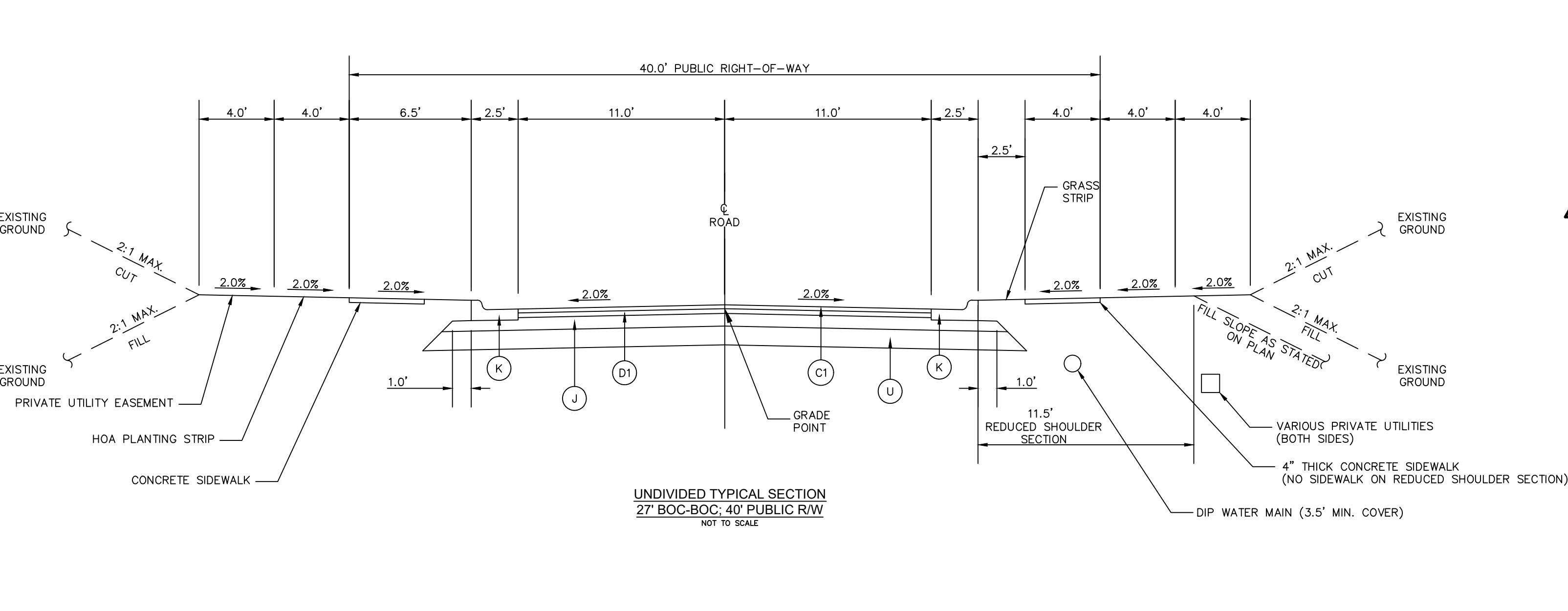
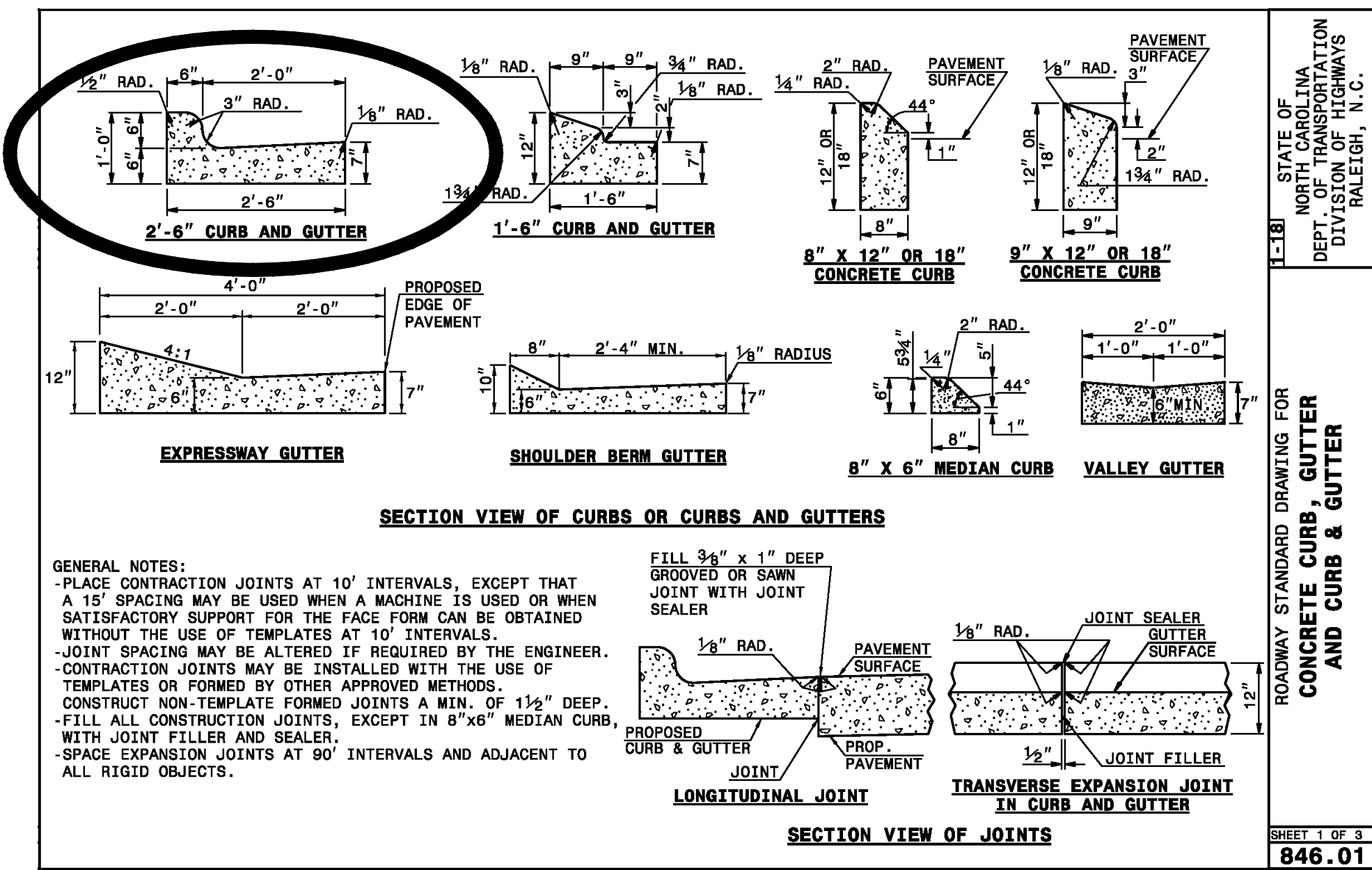
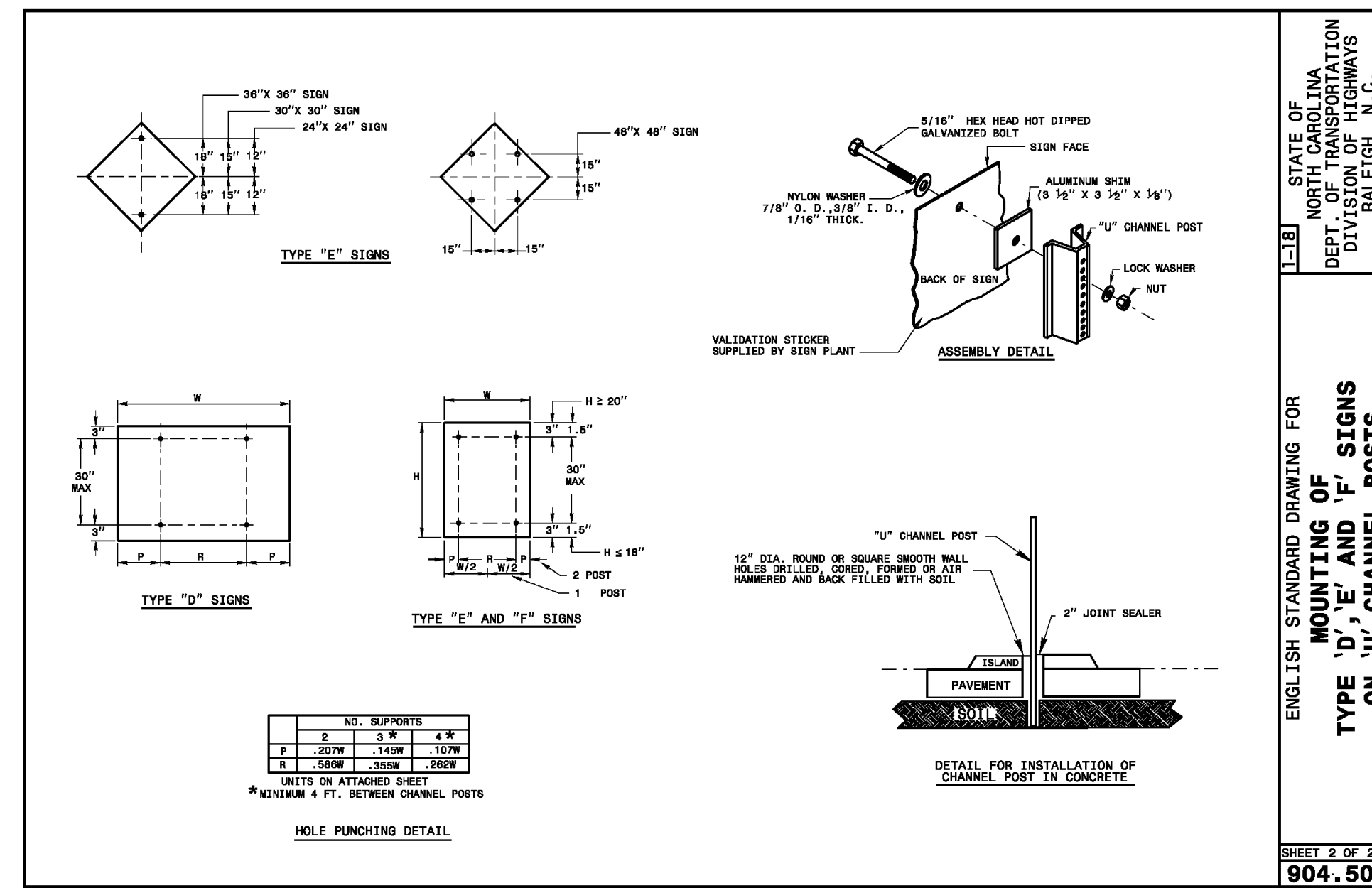
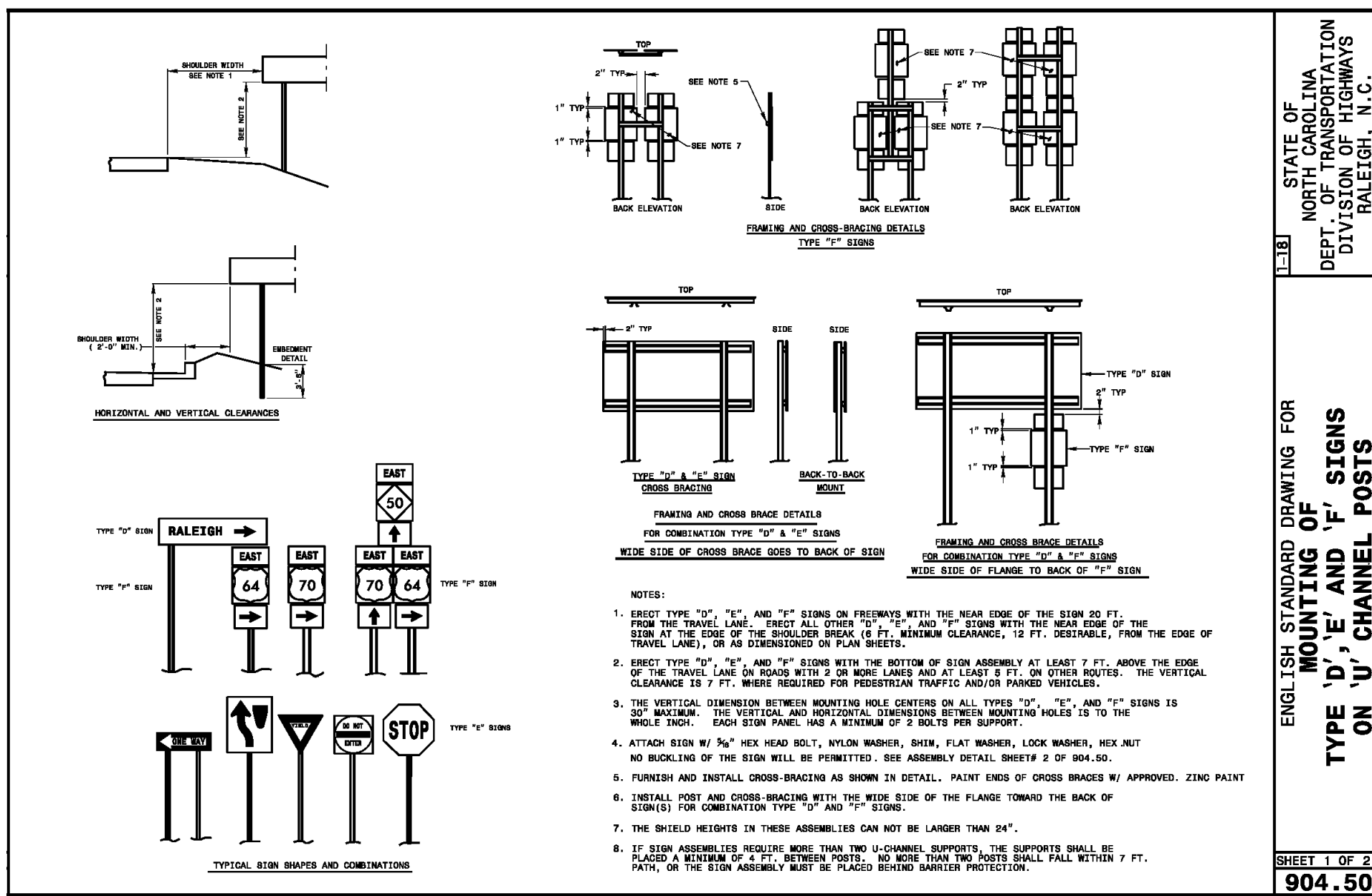
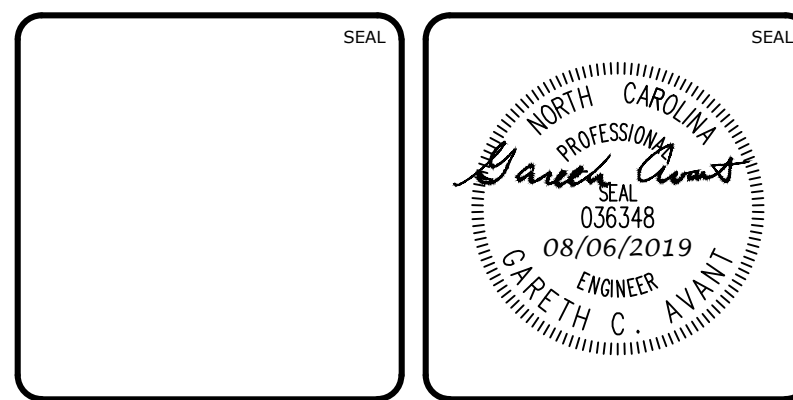


- NOTES:
- CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
  - LOCATE CURB RAMP AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMP OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
  - COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
  - SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
  - REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
  - TERMINATE PARKING A MINIMUM OF 20' BACK OF A PEDESTRIAN CROSSWALK.
  - CONSTRUCT CURB RAMP A MINIMUM OF 4' WIDE.
  - CONSTRUCT THE RUNNING SLOPE OF THE RAMP 0.33% MAXIMUM.
  - ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMP WILL BE 2% MAXIMUM.
  - CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
  - CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
  - CONSTRUCT LANDINGS FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT LANDINGS FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
  - TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
  - SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' LANDING AT THE TOP OF A RAMP, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
  - CURB RAMP WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
  - PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01
  - PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
  - CURB RAMP THROUGH MEDIAN ISLANDS, SINGLE RAMP AT LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR THE DETAILS OR FOR A SPECIAL DESIGN.
- ROADWAY STANDARD DRAWING FOR  
CURB RAMP  
PROPOSED CURB AND GUTTER
- SECTION 3 OF 3  
848.05



REV. NO.	DESCRIPTIONS	DATE
5	REVISIONS PER NCDOT COMMENTS	2019.08.06
4	LIMITS OF DISTURBANCE REVISION	2019.08.05
3	REVISIONS PER NCDOT COMMENTS	2019.07.25
2	REVISIONS PER CHATHAM COUNTY SOIL EROSION AND SEDIMENTATION CONTROL COMMENTS	2019.06.05
1	INITIAL SUBMITTAL	2019.05.09



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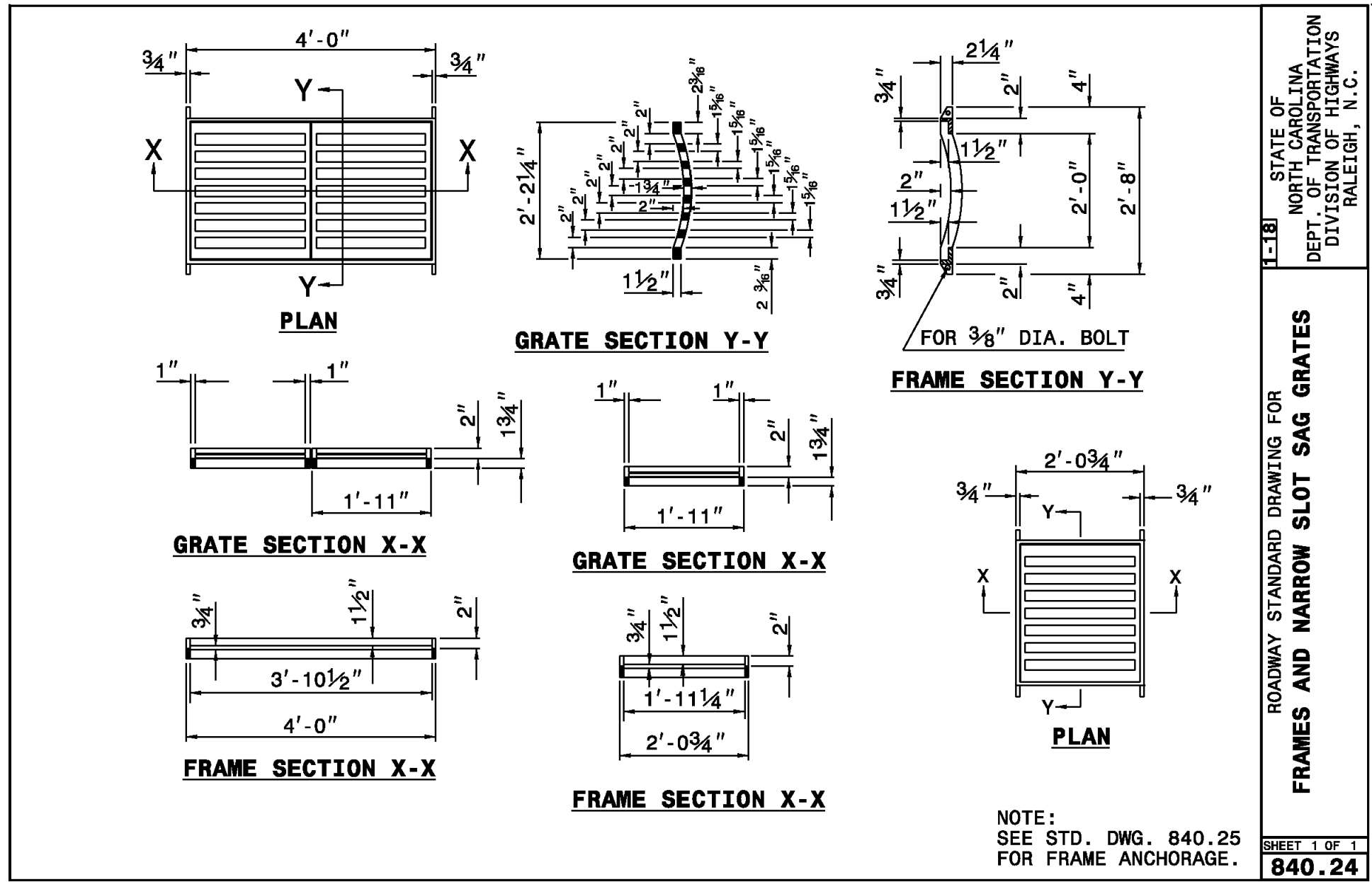
**BRIAR CHAPEL™**

by  
**Newland COMMUNITIES**

**BRIAR CHAPEL  
PHASE 14  
CHATHAM COUNTY, NORTH CAROLINA**

**NCDOT ROADWAY DETAILS**

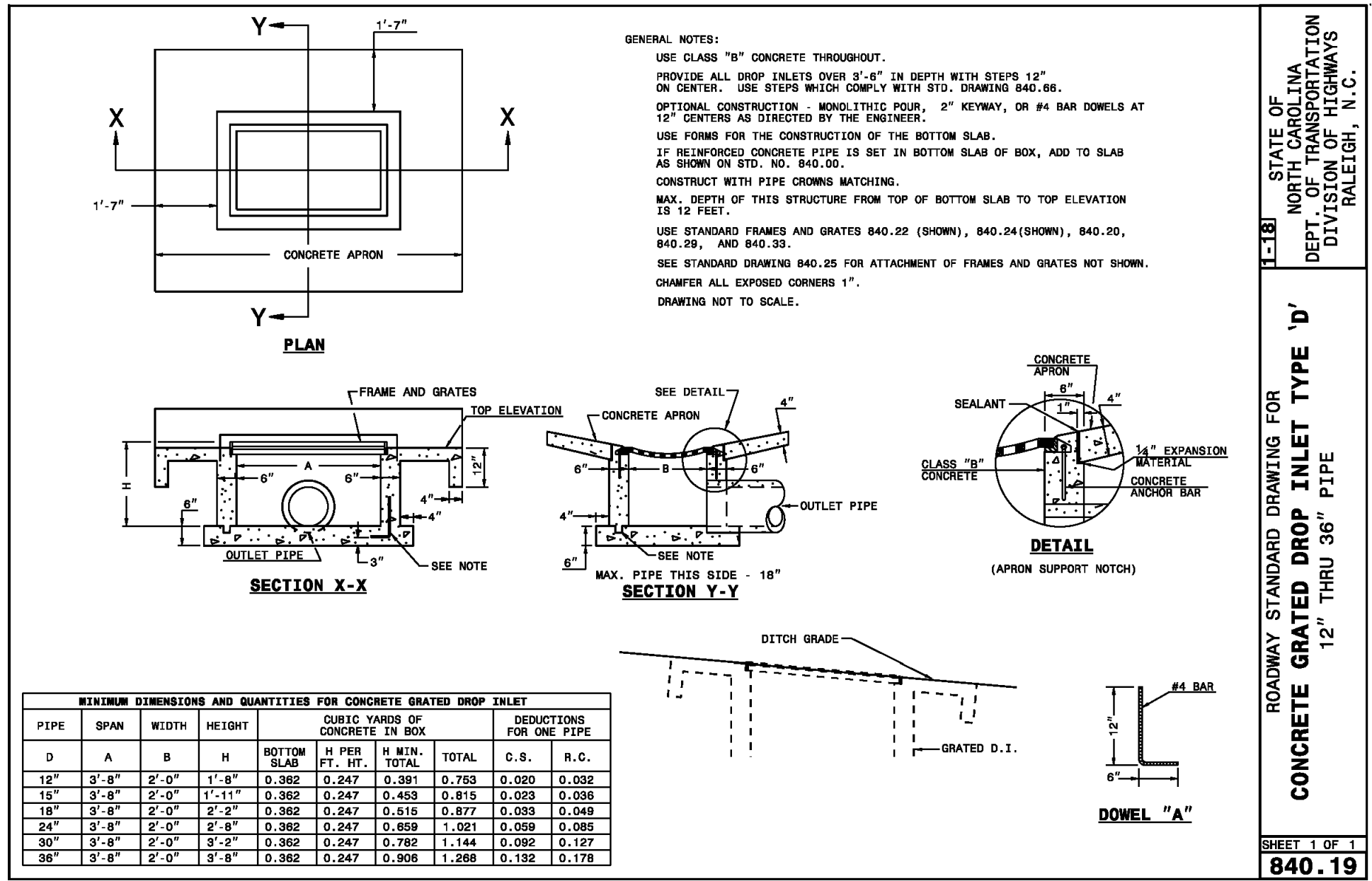
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DESIGNED: DCR		
CHECKED: GCA		
PROJ. MGR.: CHS		
STATUS: FINAL DRAWINGS RELEASED FOR CONSTRUCTION		



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**CONCRETE GRATES AND NARROW SLOT SAG GRATES**

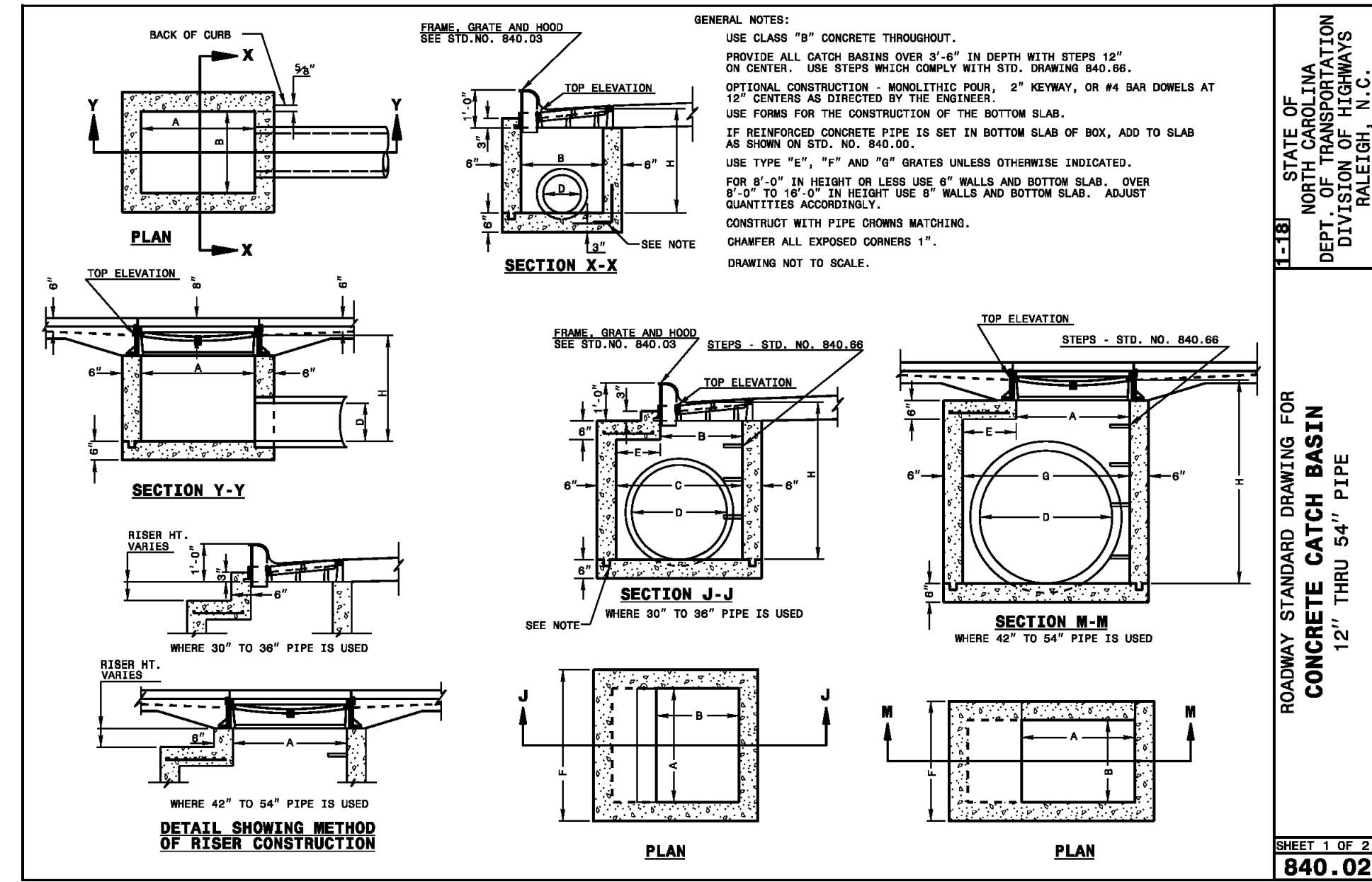
SHEET 1 OF 1  
**840.24**



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**CONCRETE GRATED DROP INLET TYPE 'D'**  
12" THRU 36" PIPE

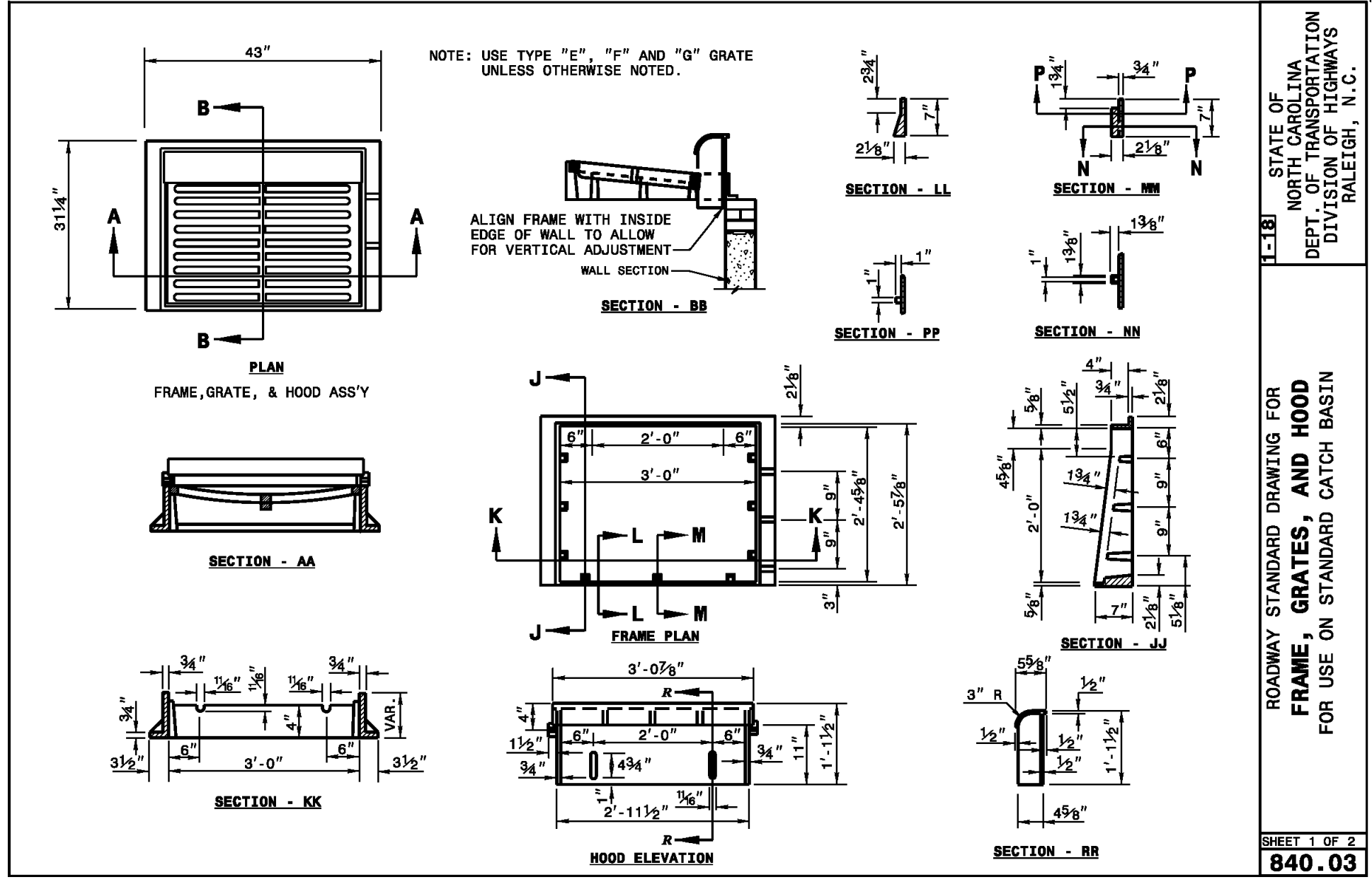
SHEET 1 OF 1  
**840.19**



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**CONCRETE CATCH BASIN**  
12" THRU 54" PIPE

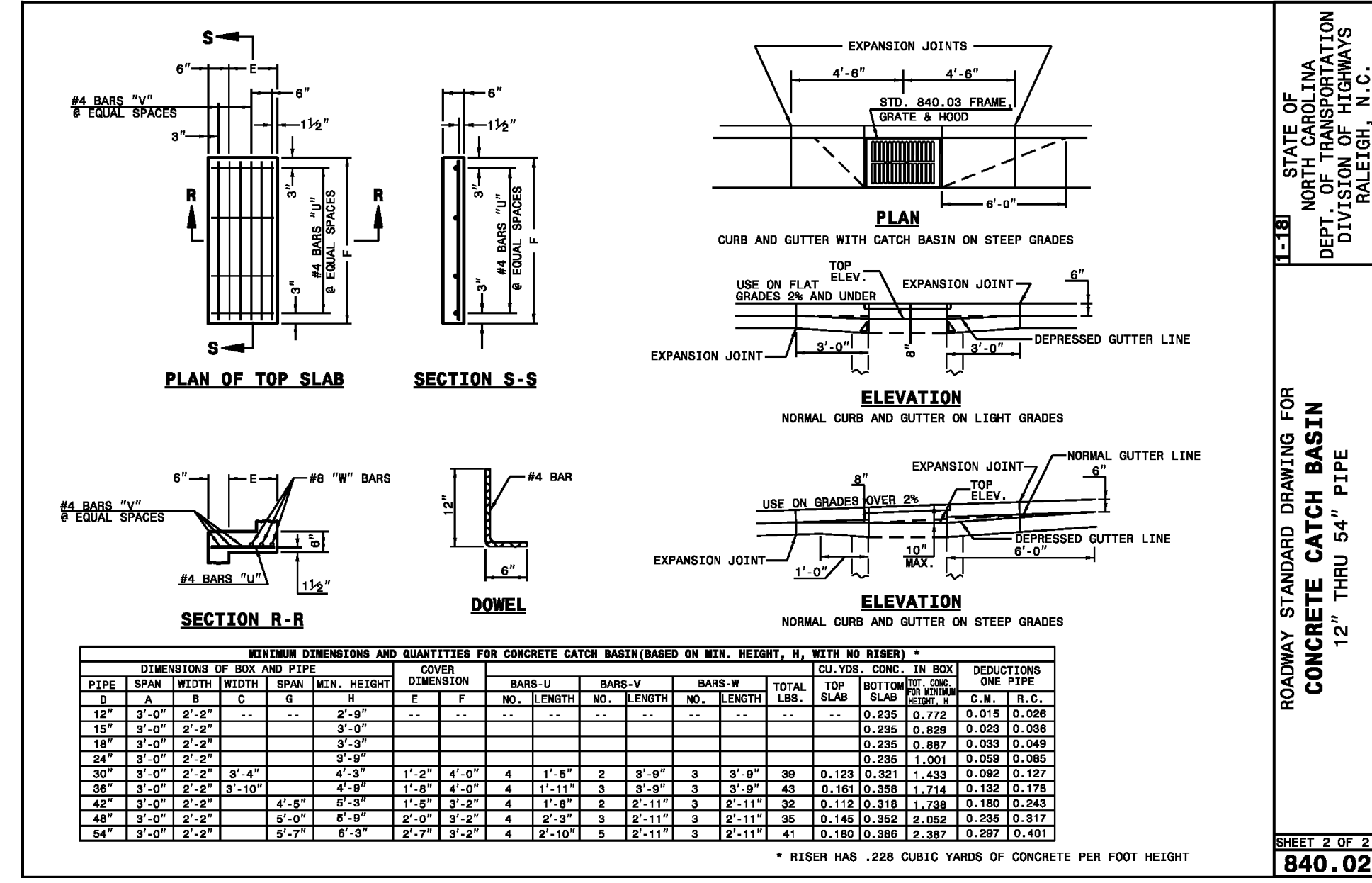
SHEET 1 OF 2  
**840.02**



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**FRAME, GRATES, AND HOOD**  
FOR USE ON STANDARD CATCH BASIN

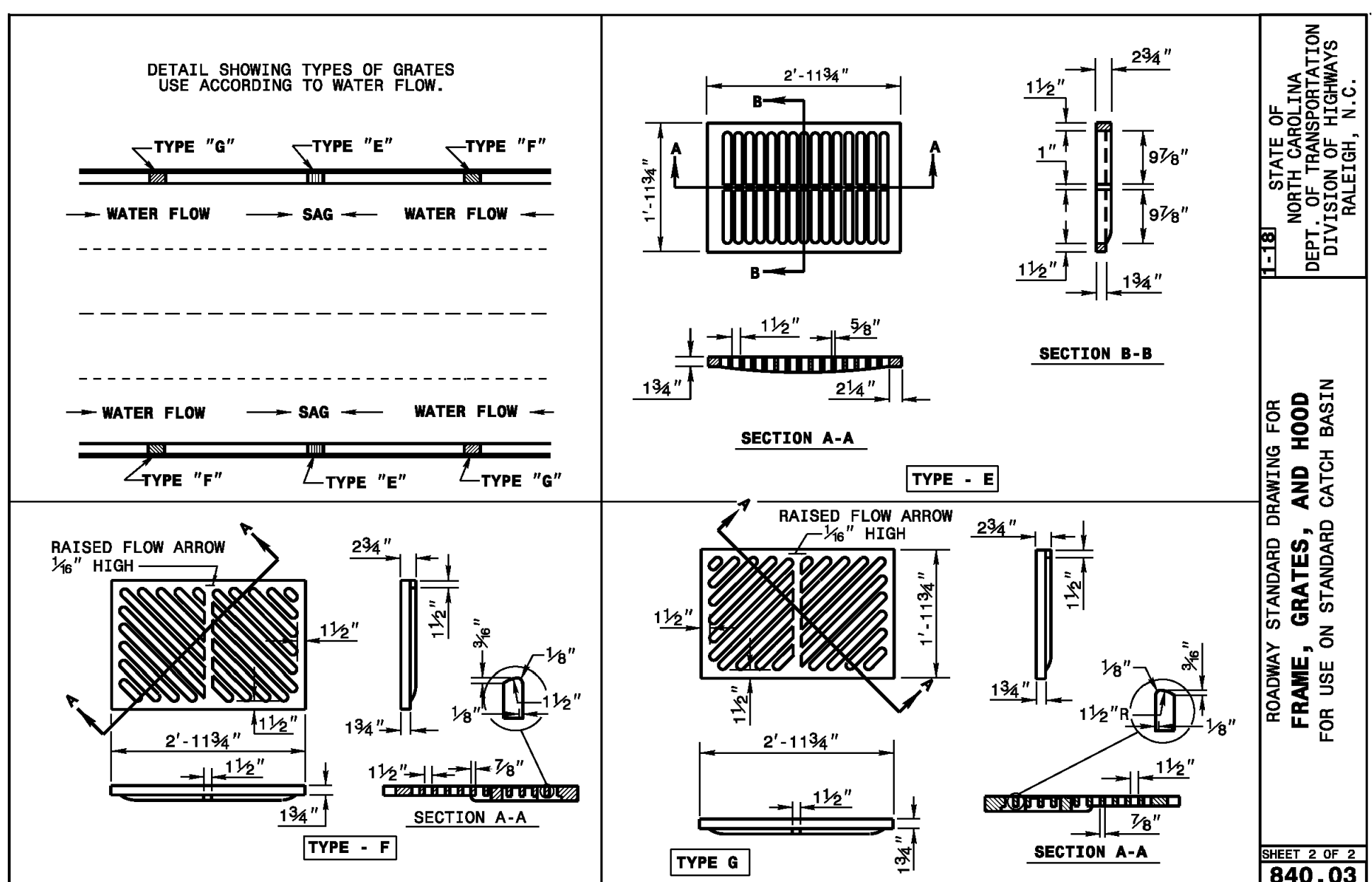
SHEET 1 OF 2  
**840.03**



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**CONCRETE CATCH BASIN**  
12" THRU 54" PIPE

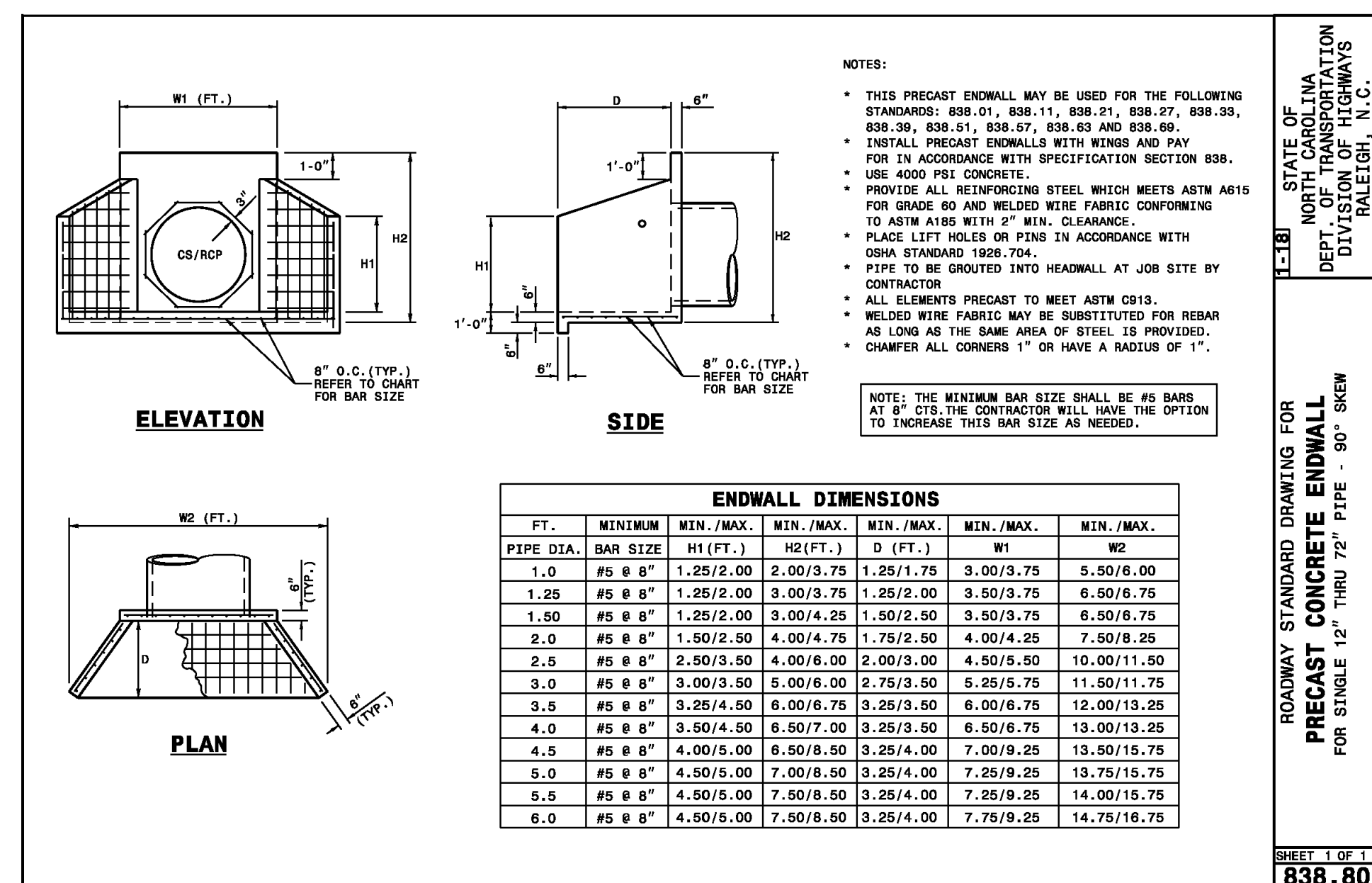
SHEET 2 OF 2  
**840.02**



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**FRAME, GRATES, AND HOOD**  
FOR USE ON STANDARD CATCH BASIN

SHEET 2 OF 2  
**840.03**

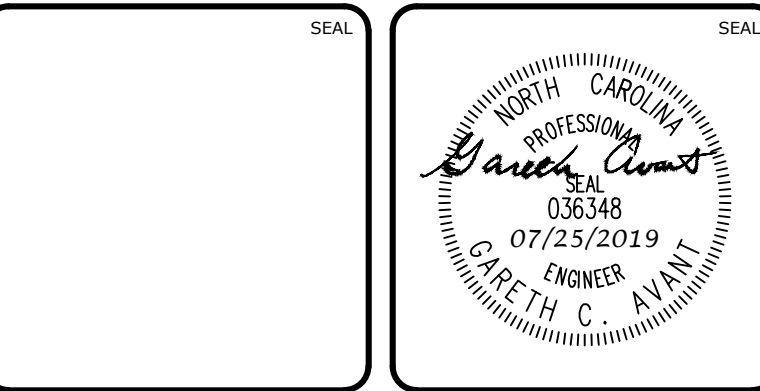


STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**PRECAST CONCRETE ENDWALL**  
FOR SINGLE 12" THRU 72" PIPE

SHEET 1 OF 1  
**838.80**

REV. NO.	DESCRIPTION	DATE
3	REVISIONS PER NCDOT COMMENTS	2019.07.25
2	REVISIONS PER CHATHAM COUNTY SOIL EROSION AND SEDIMENTATION CONTROL COMMENTS	2019.06.05
1	INITIAL SUBMITTAL	2019.05.09



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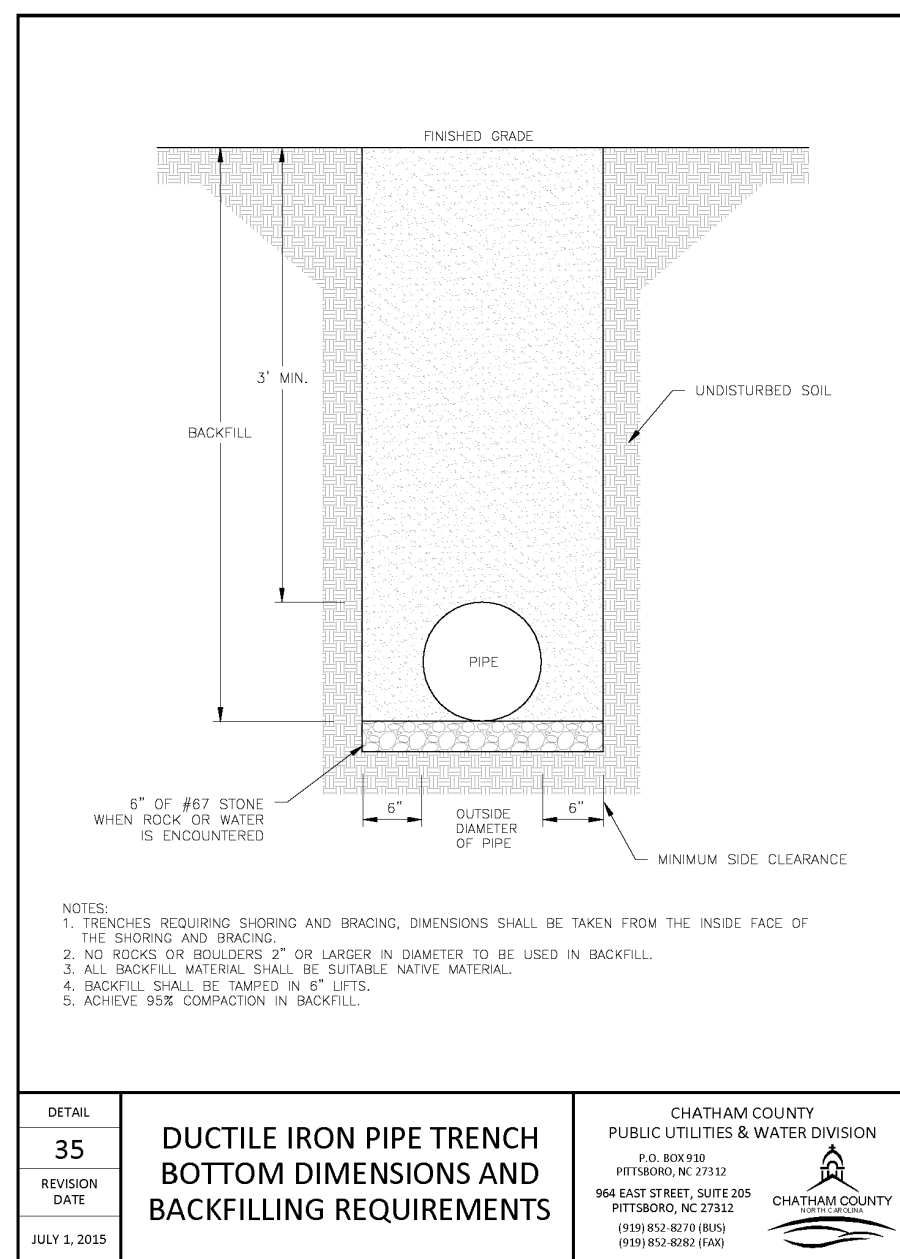
**BRIAR CHAPEL  
PHASE 14  
CHATHAM COUNTY, NORTH CAROLINA**

**NCDOT DRAINAGE DETAILS**

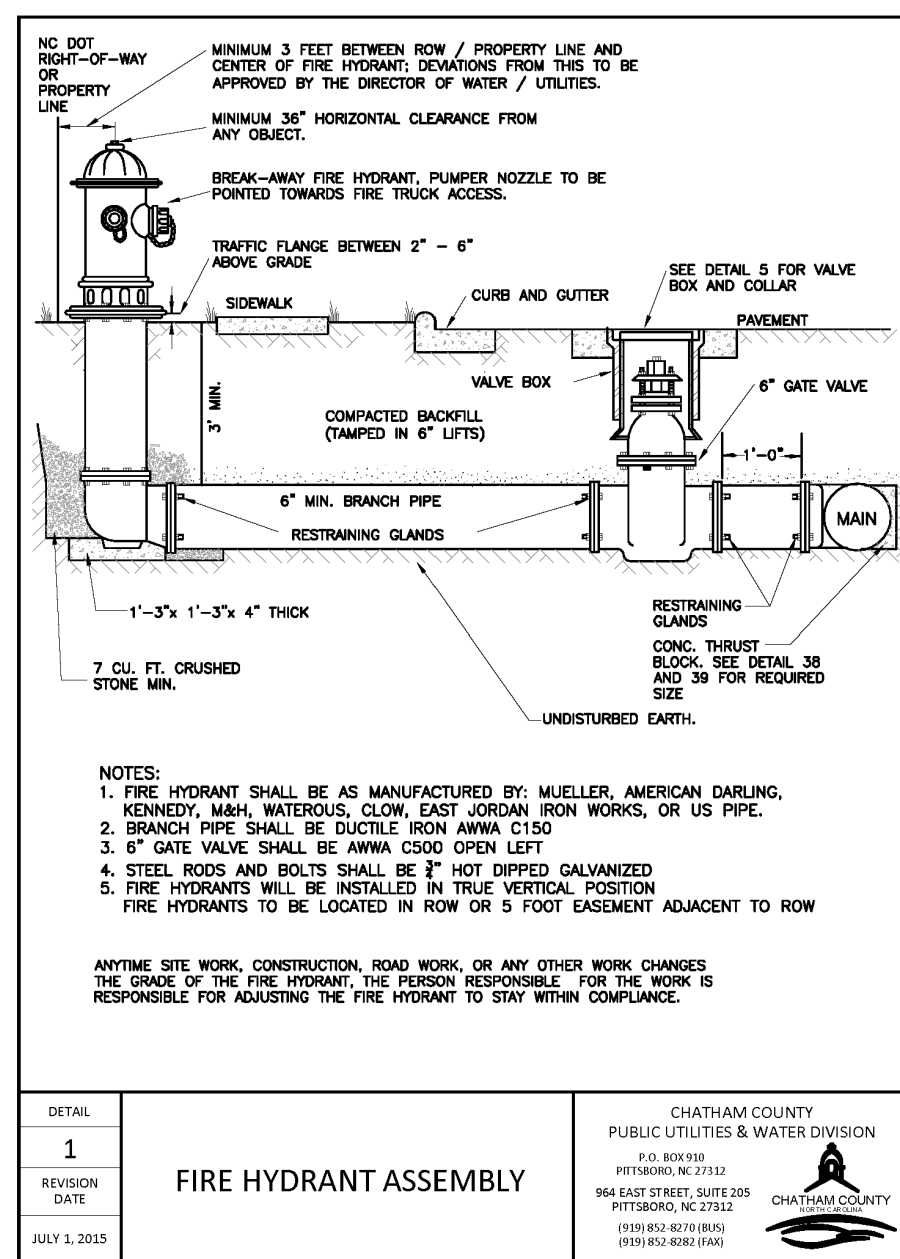
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DESIGNED	DCR	CHECKED	GCA	N/A	D2.2
PROJ. MGR.	CHS	STATUS:	FINAL DRAWINGS RELEASED FOR CONSTRUCTION		



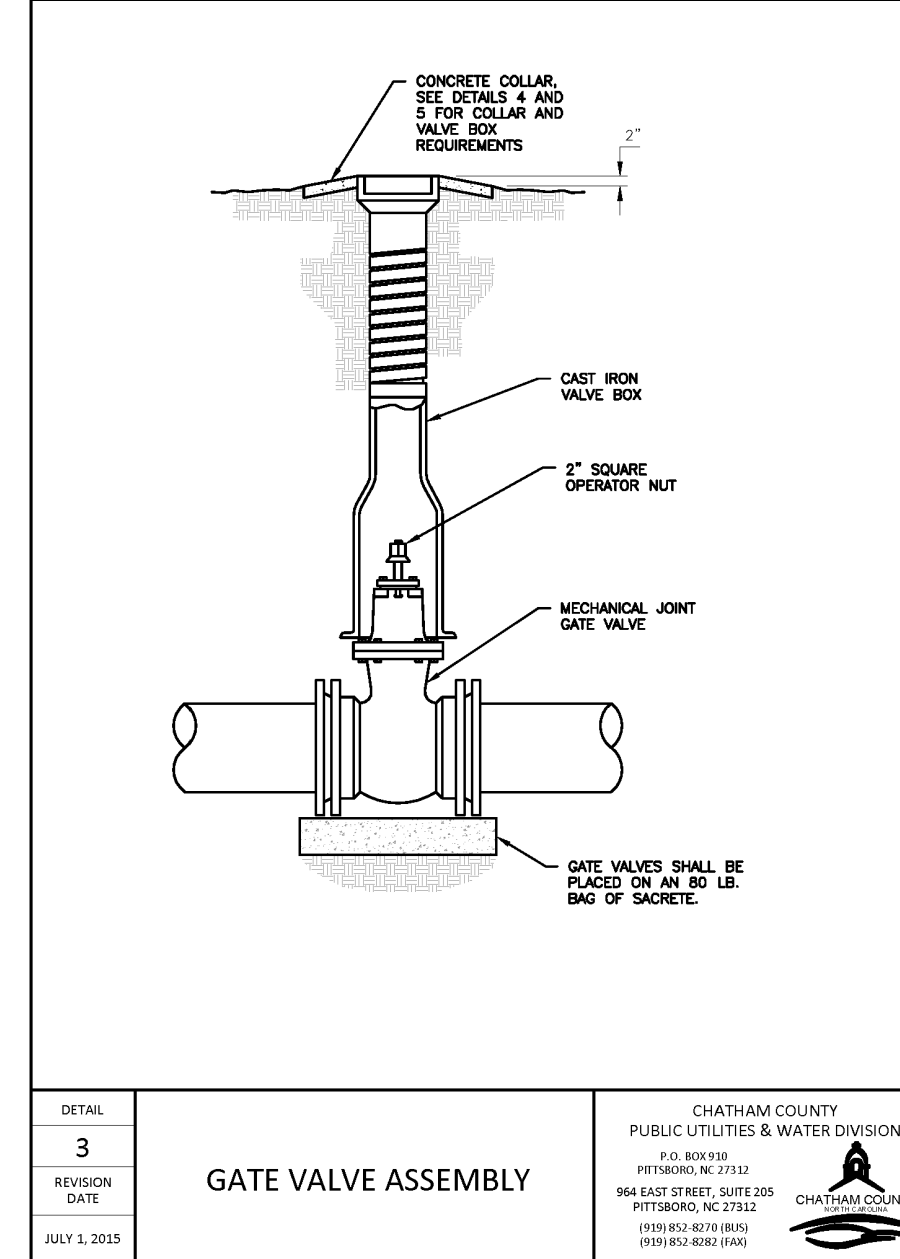




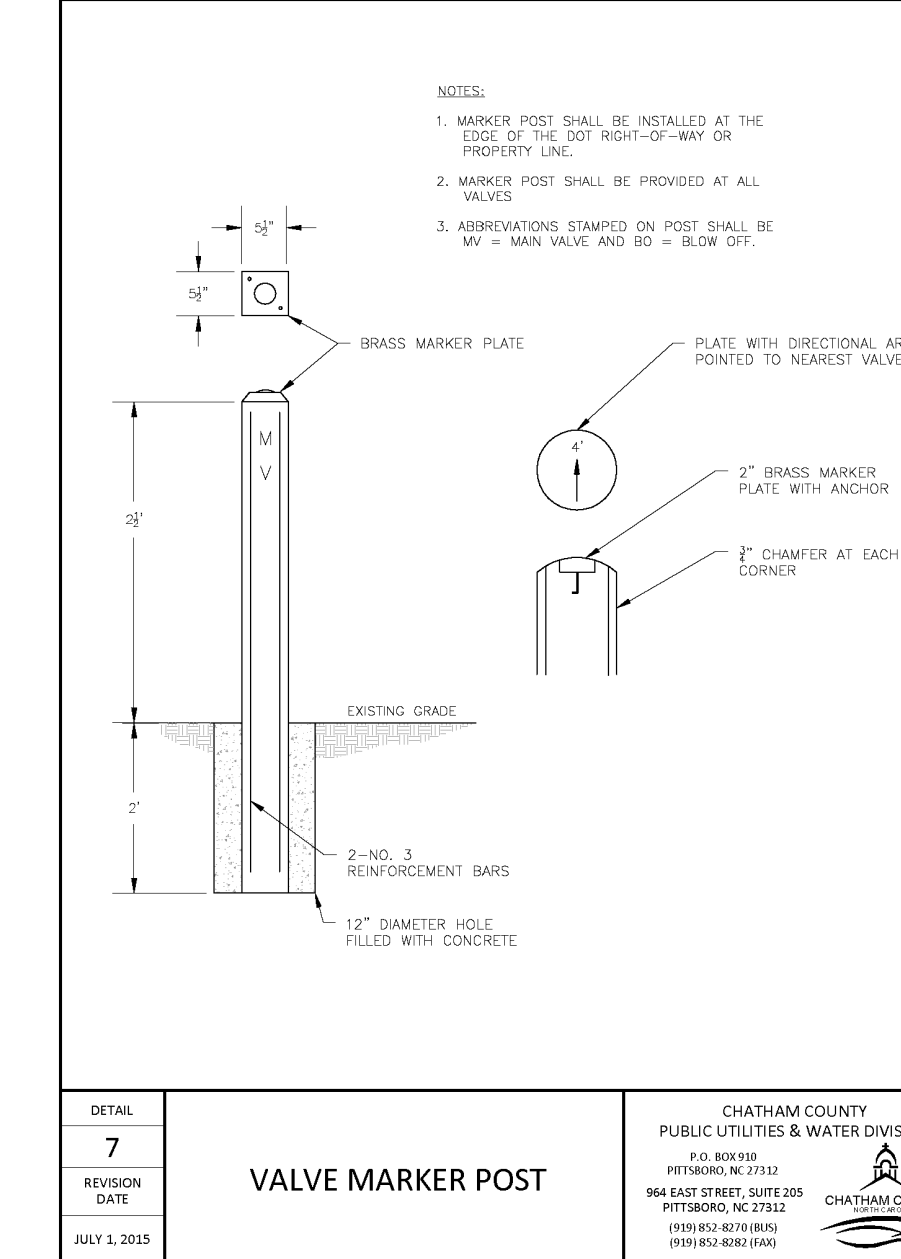
**35**  
**DUCTILE IRON PIPE TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



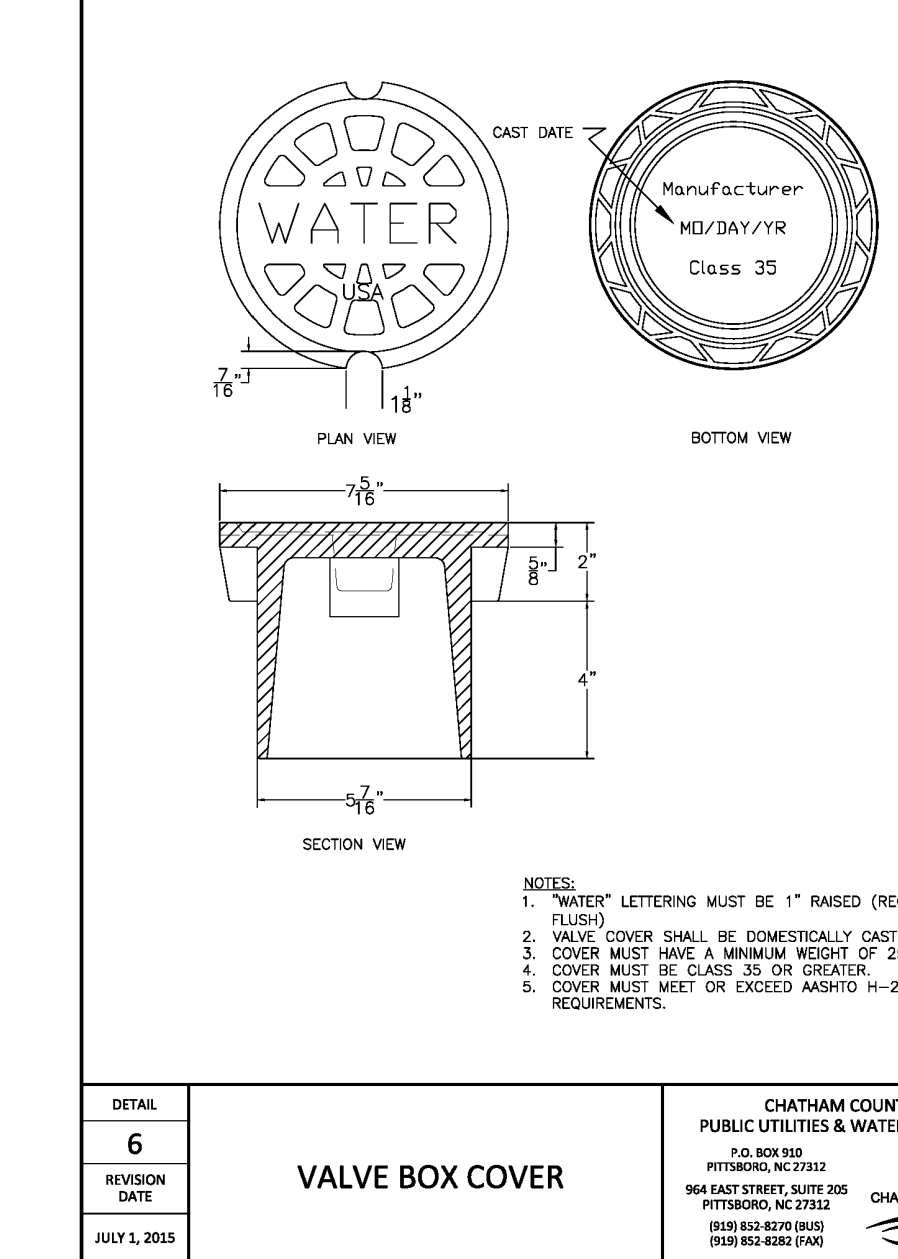
**1**  
**FIRE HYDRANT ASSEMBLY**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



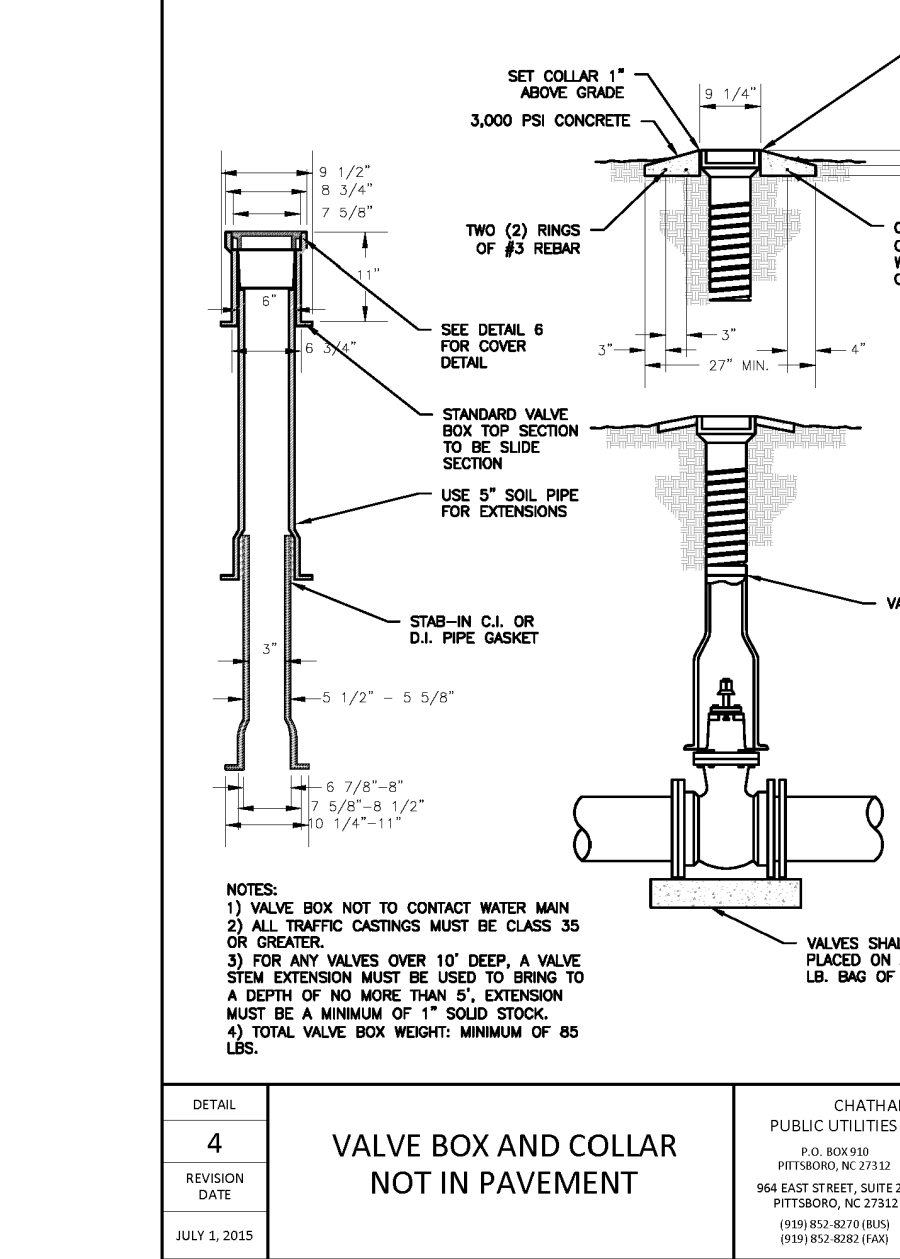
**3**  
**GATE VALVE ASSEMBLY**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



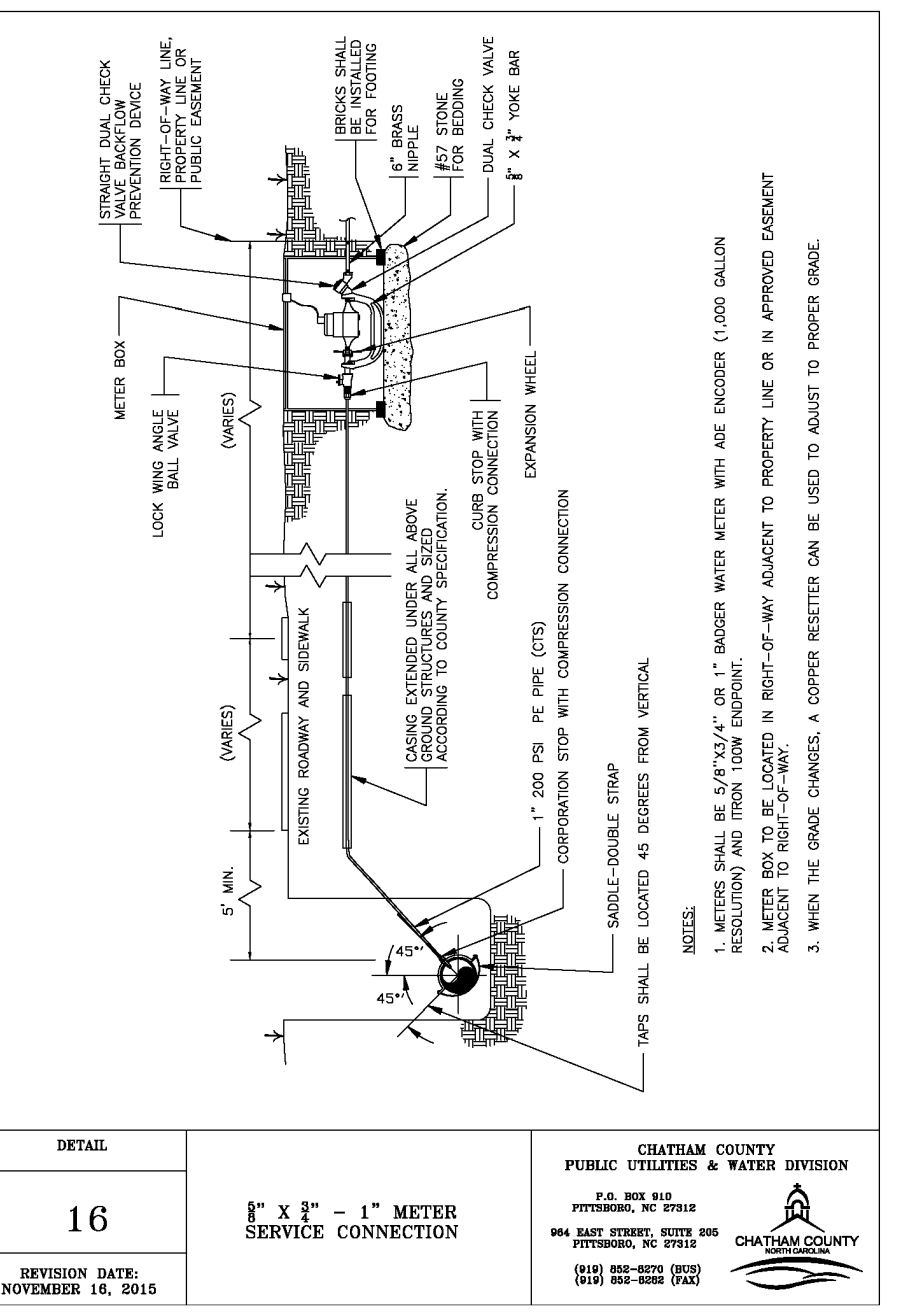
**7**  
**VALVE MARKER POST**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



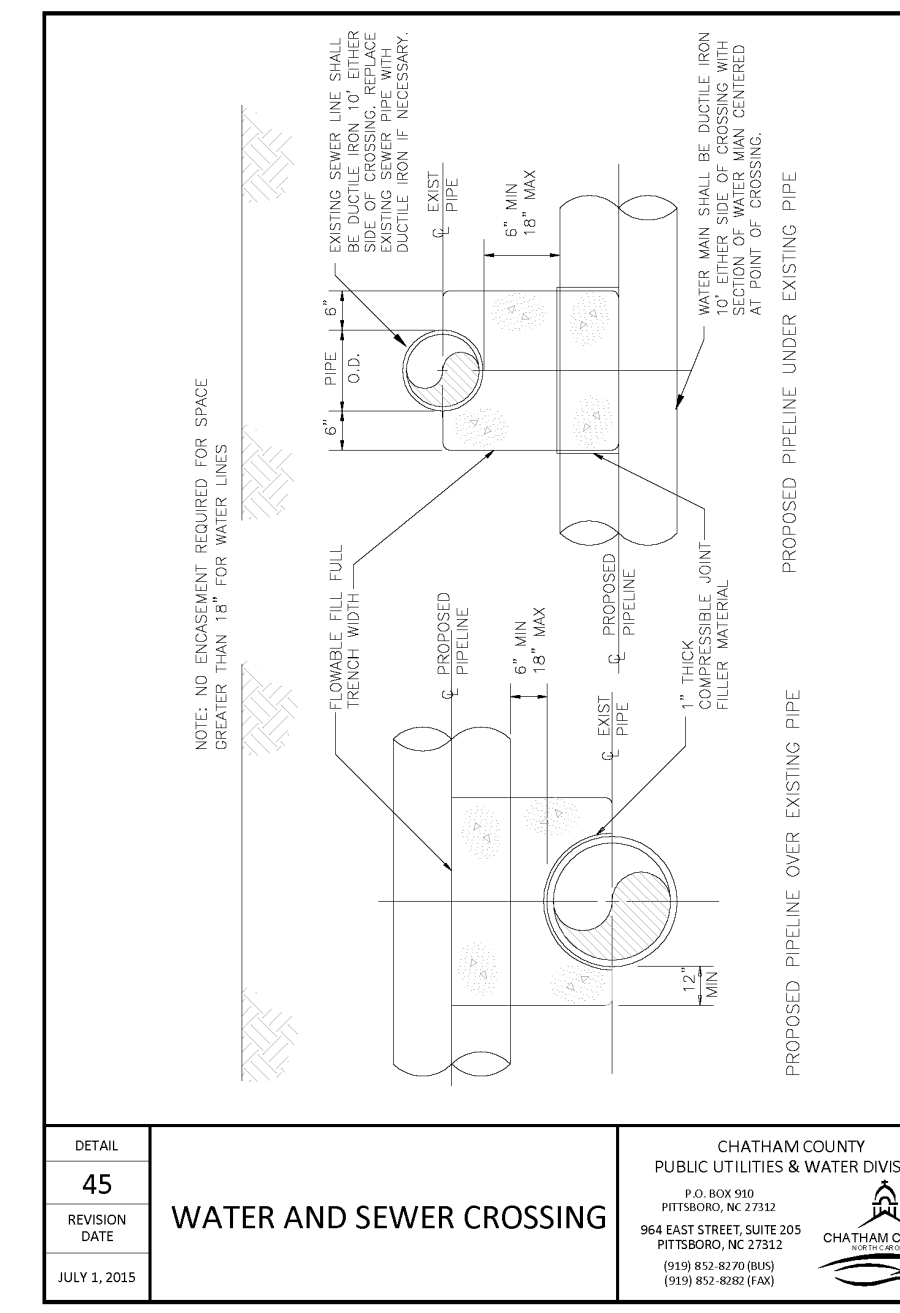
**6**  
**VALVE BOX COVER**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



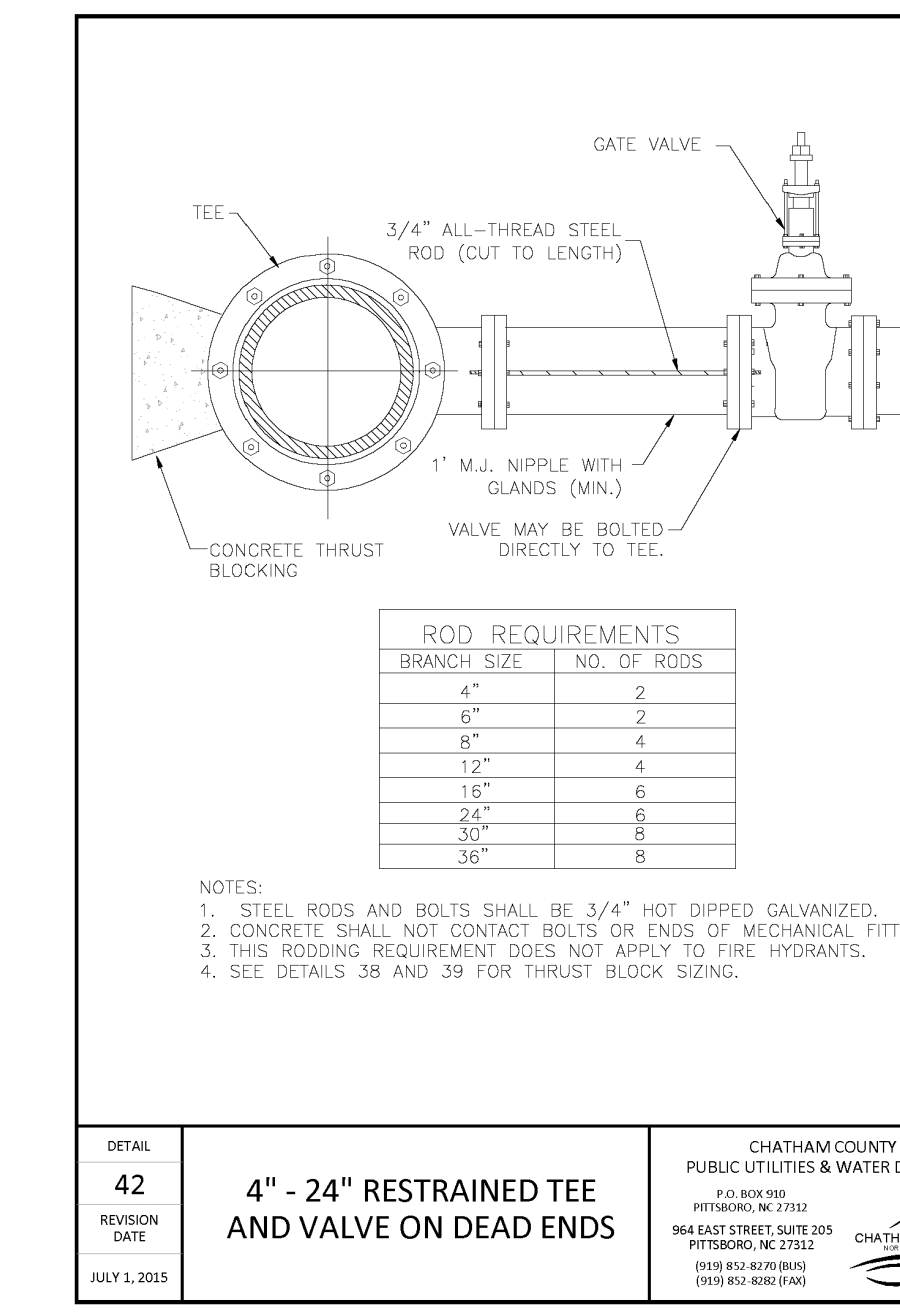
**4**  
**VALVE BOX AND COLLAR NOT IN PAVEMENT**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



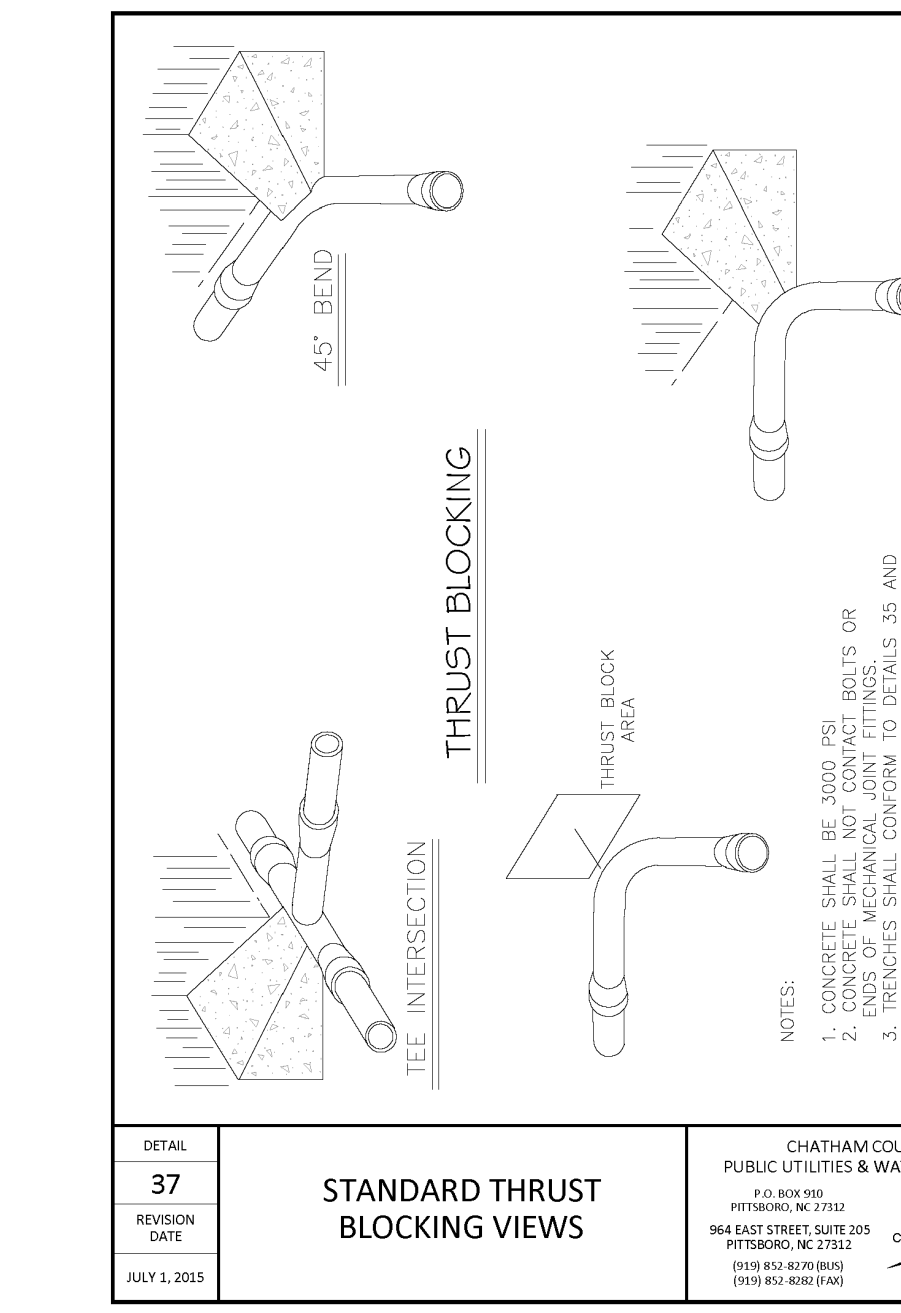
**16**  
**8" x 12" METER SERVICE CONNECTION**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



**45**  
**WATER AND SEWER CROSSING**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



**42**  
**4" - 24" RESTRAINED TEE AND VALVE ON DEAD ENDS**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)



**37**  
**STANDARD THRUST BLOCKING VIEWS**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)

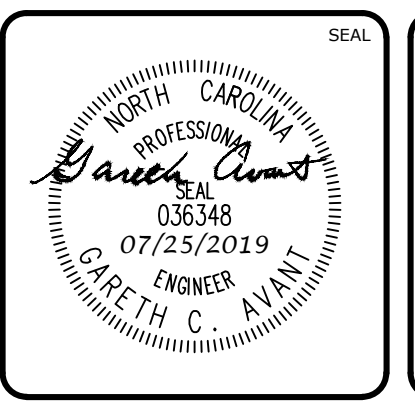
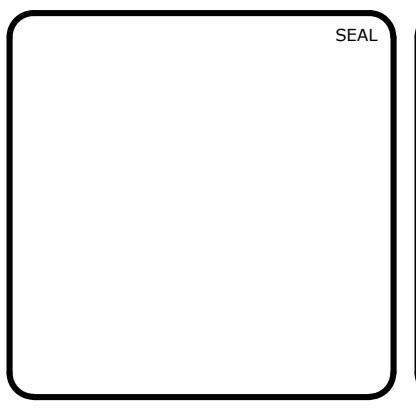
**38**  
**CONCRETE THRUST BLOCKING QUANTITY TABLE, 6" - 16" PIPE**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BONDS (BASED ON TEST PRESSURE OF 200 P.S.I.) ALL AREAS GIVEN IN SQUARE FEET.	REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BONDS (BASED ON TEST PRESSURE OF 200 P.S.I.) ALL AREAS GIVEN IN SQUARE FEET.
6"	8"
11 1/4" 1,108 1 1 1 1 1 1 2 1	11 1/4" 2,709 7 14 17 4 4 7 2 3
22 1/2" 2,207 1 2 2 1 1 1 3 1	22 1/2" 5,163 14 28 34 7 7 14 5 6 8
45" 4,326 2 3 3 1 1 2 5 1	45" 1,082 28 55 69 14 14 28 10 9 11
90" 7,996 2 4 5 1 1 2 8 1	90" 1,892 55 109 136 28 28 56 20 20 22
PLUG 5,655 2 3 4 1 1 2 6 1	PLUG 141,372 36 71 85 18 18 36 14 2 10
12"	16"
11 1/4" 1,970 1 1 2 1 1 1 2 1	11 1/4" 4,433 2 3 3 1 1 2 5 1
22 1/2" 3,922 1 2 3 1 1 1 4 1	22 1/2" 8,826 3 5 6 2 2 3 8 1
45" 7,694 2 4 5 1 1 2 8 1	45" 12,332 3 5 6 2 2 3 8 2
90" 14,218 4 8 9 2 2 4 15 2	90" 31,083 8 16 19 4 4 8 32 4
PLUG 10,553 3 5 6 2 2 3 10 1	PLUG 22,618 6 12 14 3 3 6 23 3
12"	16"
11 1/4" 4,433 2 3 3 1 1 2 5 1	11 1/4" 7,881 2 4 5 1 1 2 8 1
22 1/2" 8,826 3 5 6 2 2 3 8 1	22 1/2" 15,091 4 8 10 2 2 4 16 2
45" 17,652 8 16 19 4 4 8 32 4	45" 30,778 8 16 19 4 4 8 32 4
90" 35,304 15 29 35 8 8 16 57 6	90" 51,742 15 29 35 8 8 16 57 6
PLUG 40,212 10 21 25 5 5 10 41 5	PLUG 58,111 9 18 21 4 4 8 37 3

**39**  
**CONCRETE THRUST BLOCKING QUANTITY TABLE, 24" - 48" PIPE**  
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
 P.O. BOX 939 PITTSBORO, NC 27312  
 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312  
 (919) 437-8000 (FAX) (919) 437-8000 (EXT.)

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BONDS (BASED ON TEST PRESSURE OF 200 P.S.I.) ALL AREAS GIVEN IN SQUARE FEET.	REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BONDS (BASED ON TEST PRESSURE OF 200 P.S.I.) ALL AREAS GIVEN IN SQUARE FEET.
24"	36"
11 1/4" 17,234 5 9 11 3 3 5 18 2 4	11 1/4" 39,901 10 20 24 5 5 10 45 4
22 1/2" 35,305 8 18 22 5 5 9 36 4	22 1/2" 79,339 20 40 48 10 10 20 36 4
45" 69,262 18 36 42 9 9 18 70 7	45" 155,818 39 78 94 20 20 39 156 16
90" 127,936 32 64 77 18 18 32 128 13	90" 287,805 72 144 172 36 36 72 288 29
PLUG 90,478 23 46 55 12 12 23 91 10	PLUG 203,079 51 102 122 28 28 51 204 21
30"	48"
11 1/4" 27,709 7 14 17 4 4 7 2 3	11 1/4" 70,835 18 36 43 9 9 18 71 8
22 1/2" 55,163 14 28 34 7 7 14 5 6 8	22 1/2" 141,218 36 71 85 18 18 36 142 15
45" 1,082 28 55 69 14 14 28 10 9 11	45" 2,707 57 114 136 35 35 70 277 28
90" 1,892 55 109 136 28 28 56 20 20 22	90" 51,742 128 256 320 64 64 128 512 52
PLUG 141,372 36 71 85 18 18 36 142 15	PLUG 281,211 91 182 217 46 46 91 262 37

REV. NO.	DESCRIPTION	DATE
3	REVISIONS PER NCDOT COMMENTS	2019.07.25
2	REVISIONS PER CHATHAM COUNTY SOIL EROSION AND SEDIMENTATION CONTROL COMMENTS	2019.06.05
1	INITIAL SUBMITTAL	2019.05.09



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 Raleigh, North Carolina 27606  
 Phone: (919)233-8091, Fax: (919)233-8031  
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**BRIAR CHAPEL**  
 by **Newland COMMUNITIES**

**BRIAR CHAPEL PHASE 14**  
**CHATHAM COUNTY, NORTH CAROLINA**  
**UTILITY DETAILS**

DATE: MAY 9, 2019  
 MCE PROJ. # 02735-0239  
 DRAWN: DCR  
 DESIGNED: DCR  
 CHECKED: GCA  
 PROJ. MGR: CHS

SCALE: HORIZONTAL: N/A  
 VERTICAL: N/A

M&C FILE NUMBER: D3.X  
 DRAWING NUMBER: D3.1

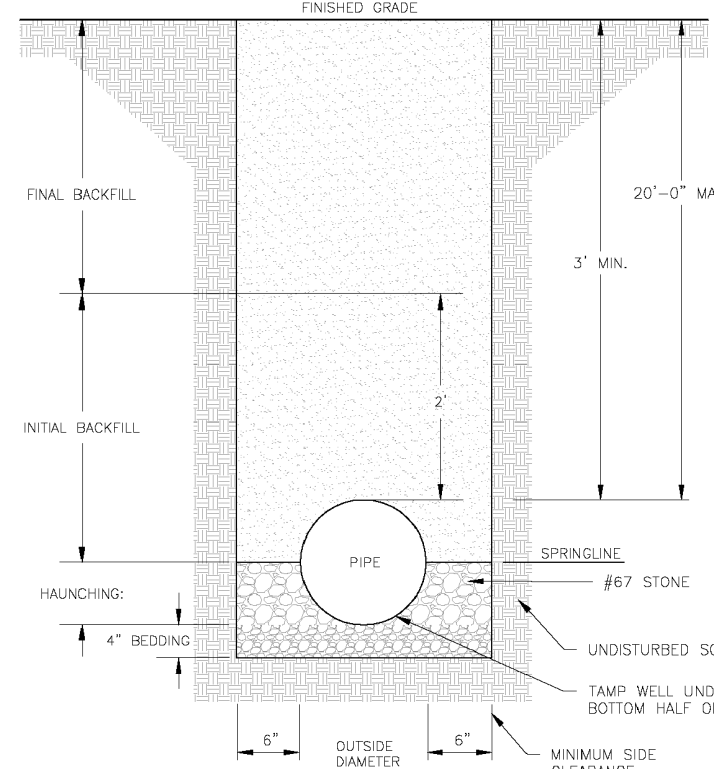
STATUS: FINAL DRAWINGS RELEASED FOR CONSTRUCTION  
 REVISION: 3

**DETECTABLE WARNING TAPE NOTES:**

1. THE TAPE SHALL BE AN INERT, BONDED LAYER PLASTIC WITH A METALIZED FOIL CORE AND SHALL BE HIGHLY RESISTANT TO ALKALIS, ACID, OR OTHER DESTRUCTIVE CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS.
2. THE TAPE SHALL BE BRIGHTLY COLORED TO CONTRAST WITH SOIL AND SHALL BEAR AN IMPRINT IDENTIFYING THE TYPE OF LINE BURIED BELOW. THE TAPE SHALL BE A MINIMUM OF 2" WIDE.
3. THE TAPE SHALL BE BURIED A MINIMUM OF 6" AND A MAXIMUM OF 12" BELOW THE GROUND SURFACE DIRECTLY ABOVE THE WATER LINE WITH PRINTED SIDE UP.

**TRACER WIRE NOTES:**

1. TRACER WIRE IS TO BE STANDARD NO. 12 GAUGE COATED COPPER WIRE.
2. LOCATION WIRE CONNECTIONS ARE TO BE A WATER TIGHT CONNECTION USING TWISTER DB PLUS WATERPROOF WIRE CONNECTORS OR AN APPROVED EQUAL.

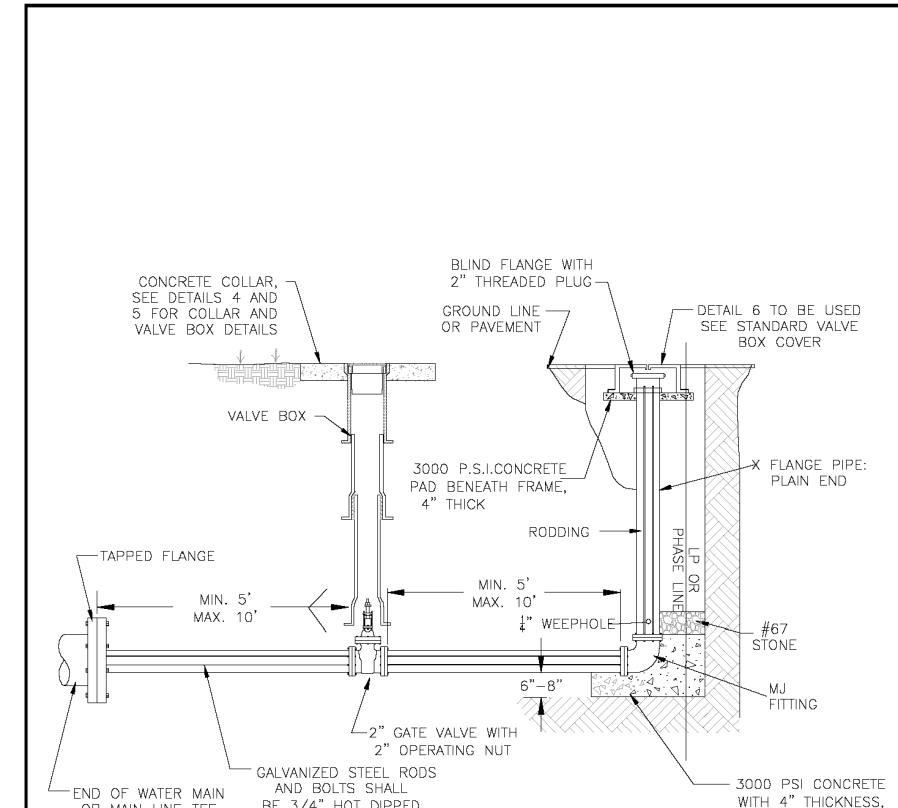


- NOTES:
1. TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
  2. NO ROCKS OR OBSTACLES 1" OR LARGER IN DIAMETER TO BE USED IN BACKFILL.
  3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
  4. BACKFILL SHALL BE TAMPED IN 4" LIFTS.
  5. ACHIEVE 95% COMPACTION IN BACKFILL.

DETAIL 36  
REVISION DATE  
JULY 1, 2015

**PVC PIPE TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS**

CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
P.O. BOX 350  
HYTSBORO, NC 27522  
919-853-8249 (PHONE)  
919-853-8248 (FAX)

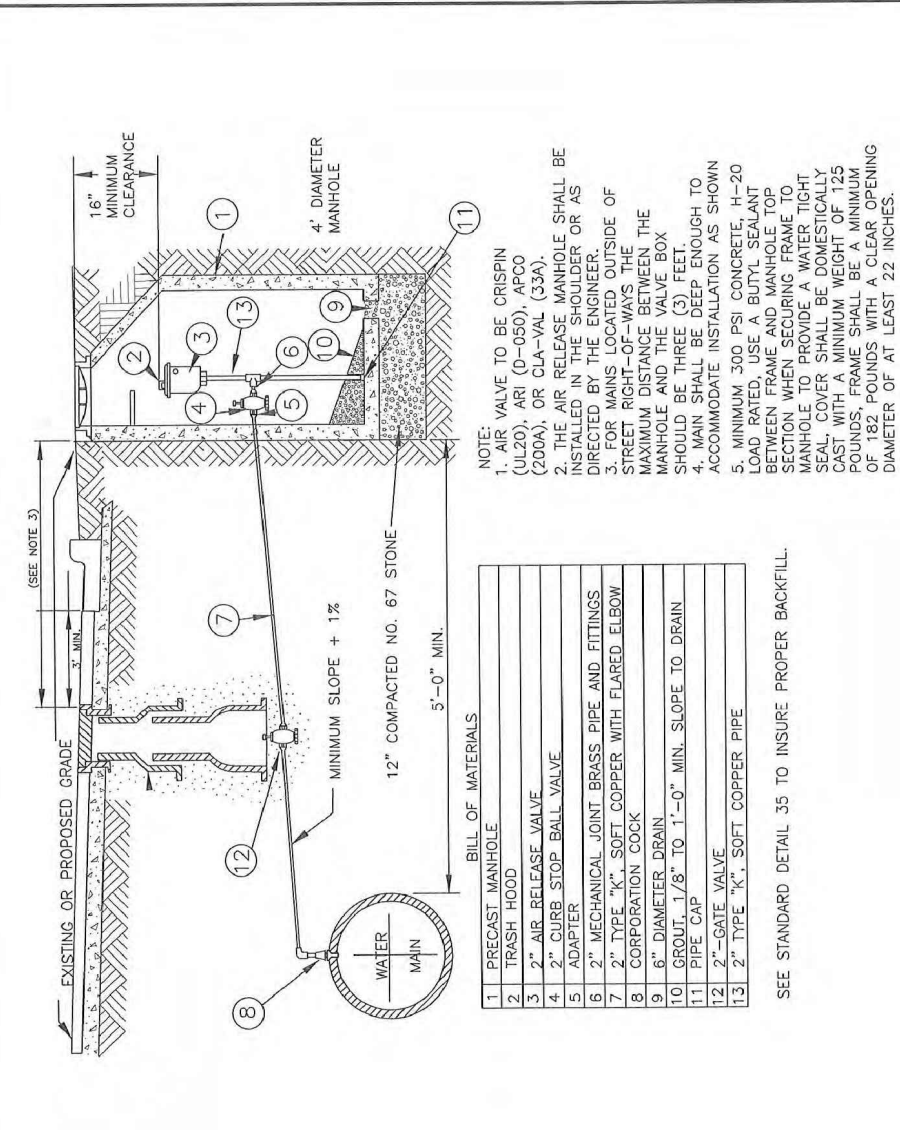


- NOTES:
1. NO ROD COUPLERS ALLOWED.

DETAIL 13  
REVISION DATE  
JULY 1, 2015

**2" BLOW-OFF ASSEMBLY AT END OF WATER MAIN**

CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
P.O. BOX 350  
HYTSBORO, NC 27522  
919-853-8249 (PHONE)  
919-853-8248 (FAX)



DETAIL 11  
REVISION DATE  
FEB. 23, 2016

**STANDARD WATER AIR RELEASE VALVE**

CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION  
P.O. BOX 350  
HYTSBORO, NC 27522  
919-853-8249 (PHONE)  
919-853-8248 (FAX)

REV. NO.	DESCRIPTION	DATE
3	REVISIONS PER NCDOT COMMENTS	2019-07-25
2	REVISIONS PER CHATHAM COUNTY SOIL EROSION AND SEDIMENTATION CONTROL COMMENTS	2019-06-05
1	INITIAL SUBMITTAL	2019-05-09

REV. NO.	DESCRIPTION	DATE
1	INITIAL SUBMITTAL	2019-05-09

SEAL

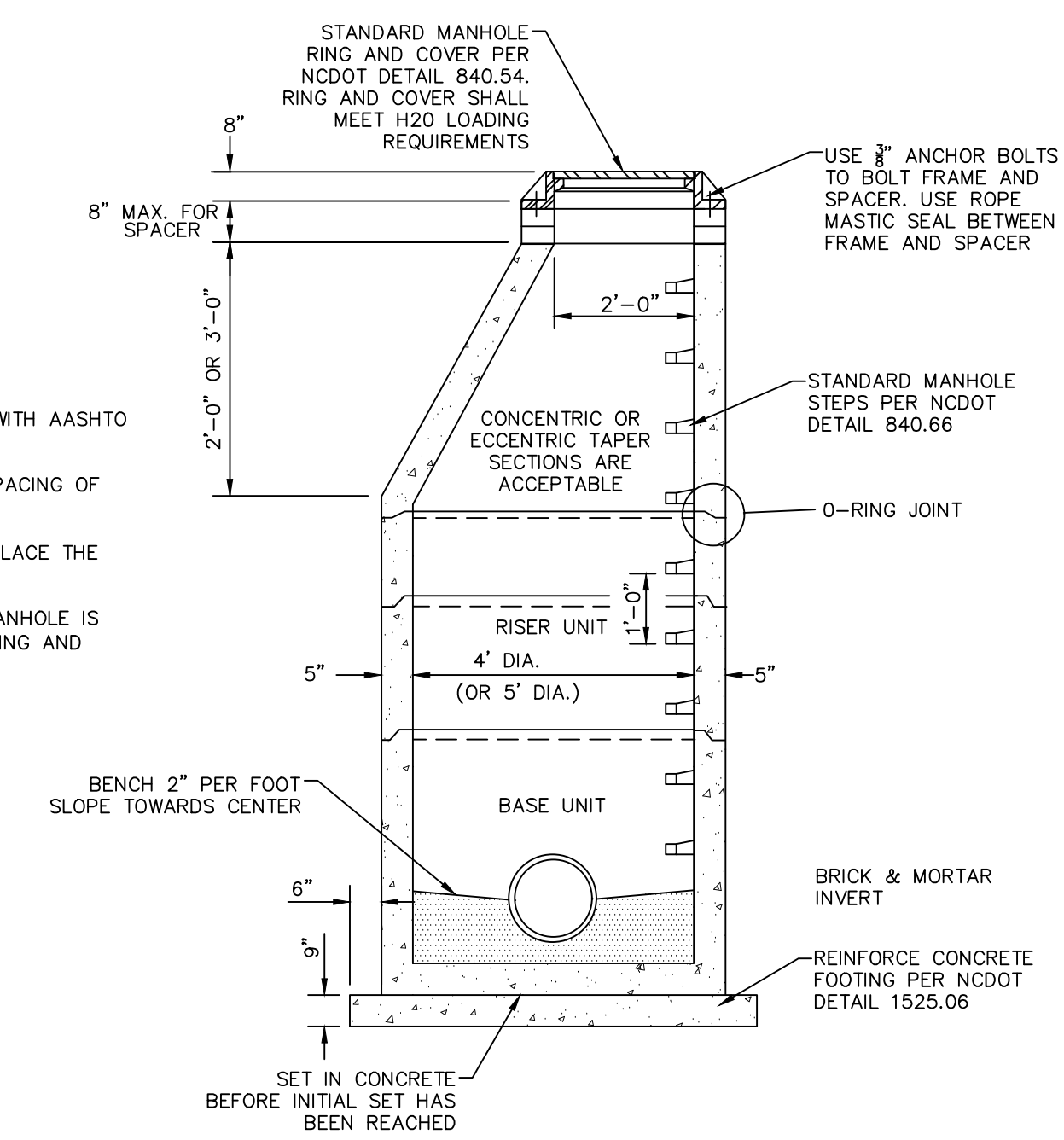
**PROFESSIONAL ENGINEER**  
NORTH CAROLINA  
036346  
07/25/2019  
CAREY H. C. AVANT

**MCKIM & CREED**

1730 Varsity Drive, Suite 500  
Raleigh, North Carolina 27606  
Phone: (919)233-8091, Fax: (919)233-8031  
F-1222

www.mckimcreed.com

**BRIAR CHAPEL™**  
by **Newland COMMUNITIES**



- NOTES:
1. PROVIDE PRECAST MANHOLE COMPONENTS WHICH COMPLY WITH AASHTO M199.
  2. ASSEMBLE RISERS AND GRADE RINGS SO STEPS HAVE A SPACING OF 12" FROM THE TOP TO THE BOTTOM OF THE MANHOLE.
  3. WHERE THE MANHOLE IS EXPOSED TO ROADWAY TRAFFIC, PLACE THE TOP OF THE MANHOLE FLUSH WITH THE GROUND.
  4. REINFORCED CONCRETE FOOTING IS REQUIRED WHEN THE MANHOLE IS OVER 12" IN DEPTH OR ON A POOR SOIL BASE. THE FOOTING AND BASE SECTION MAY BE PRECAST.

**STANDARD SANITARY SEWER PRECAST CONCRETE MANHOLE**  
NTS

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR  
**PRECAST CONCRETE SANITARY SEWER MANHOLE WITH CAST-IN-PLACE BOTTOM**

SHEET 2 OF 2  
1525.06

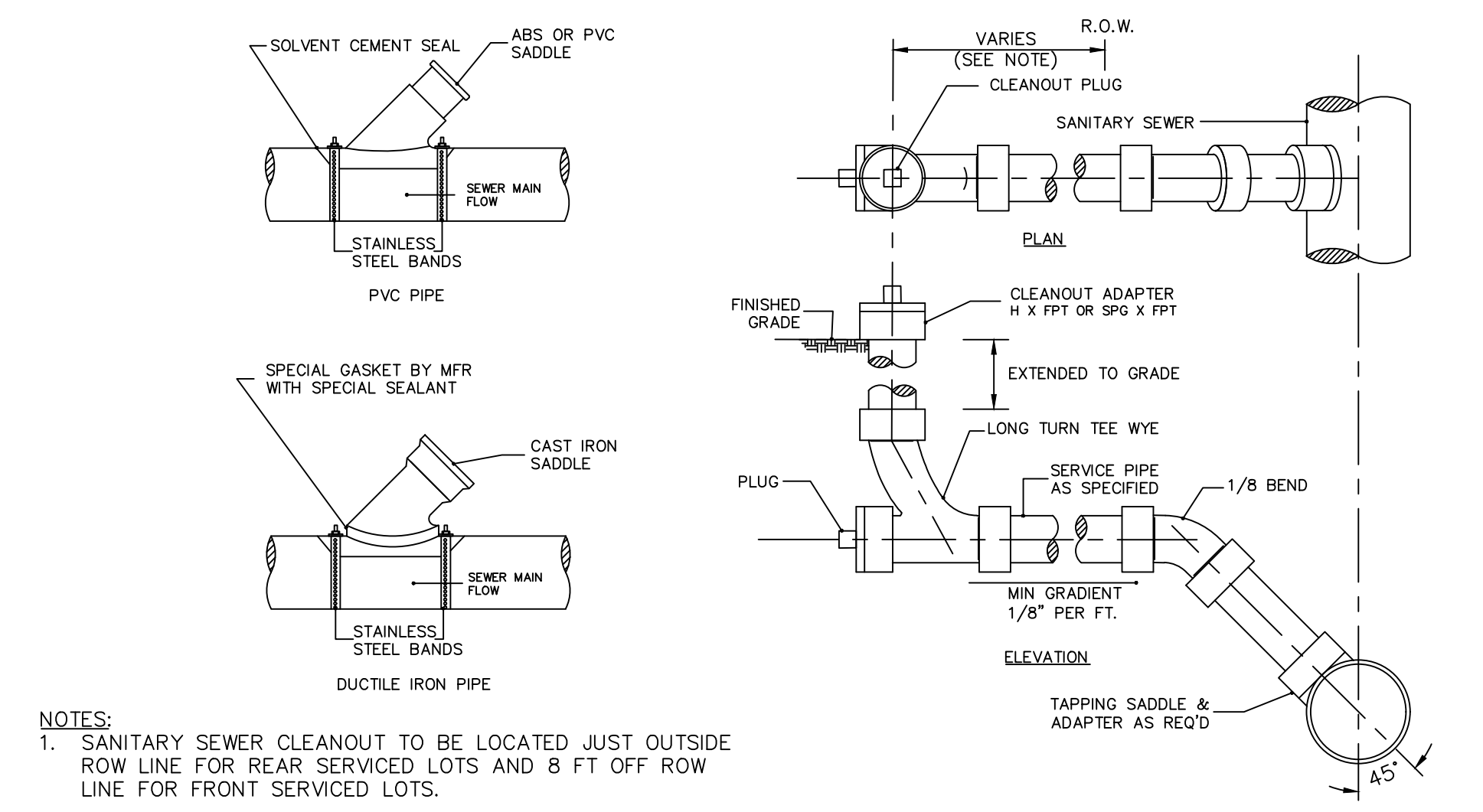
**REINFORCED CONCRETE FOOTING FOR 5' PRECAST MANHOLE OR 4' PRECAST MANHOLE**

BAR	SIZE	LENGTH	NO.	WT. lbs.
T1	#5	5'-6"	18	103
CLASS "A" CONC. YD <sup>3</sup> 9" THICK 1.00				

BAR	SIZE	LENGTH	NO.	WT. lbs.
T2	#5	6'-6"	20	136
CLASS "A" CONC. YD <sup>3</sup> 9" THICK 1.36				

BAR	SIZE	LENGTH	NO.	WT. lbs.
T3	#5	7'-6"	24	188
CLASS "A" CONC. YD <sup>3</sup> 12" THICK 2.37				

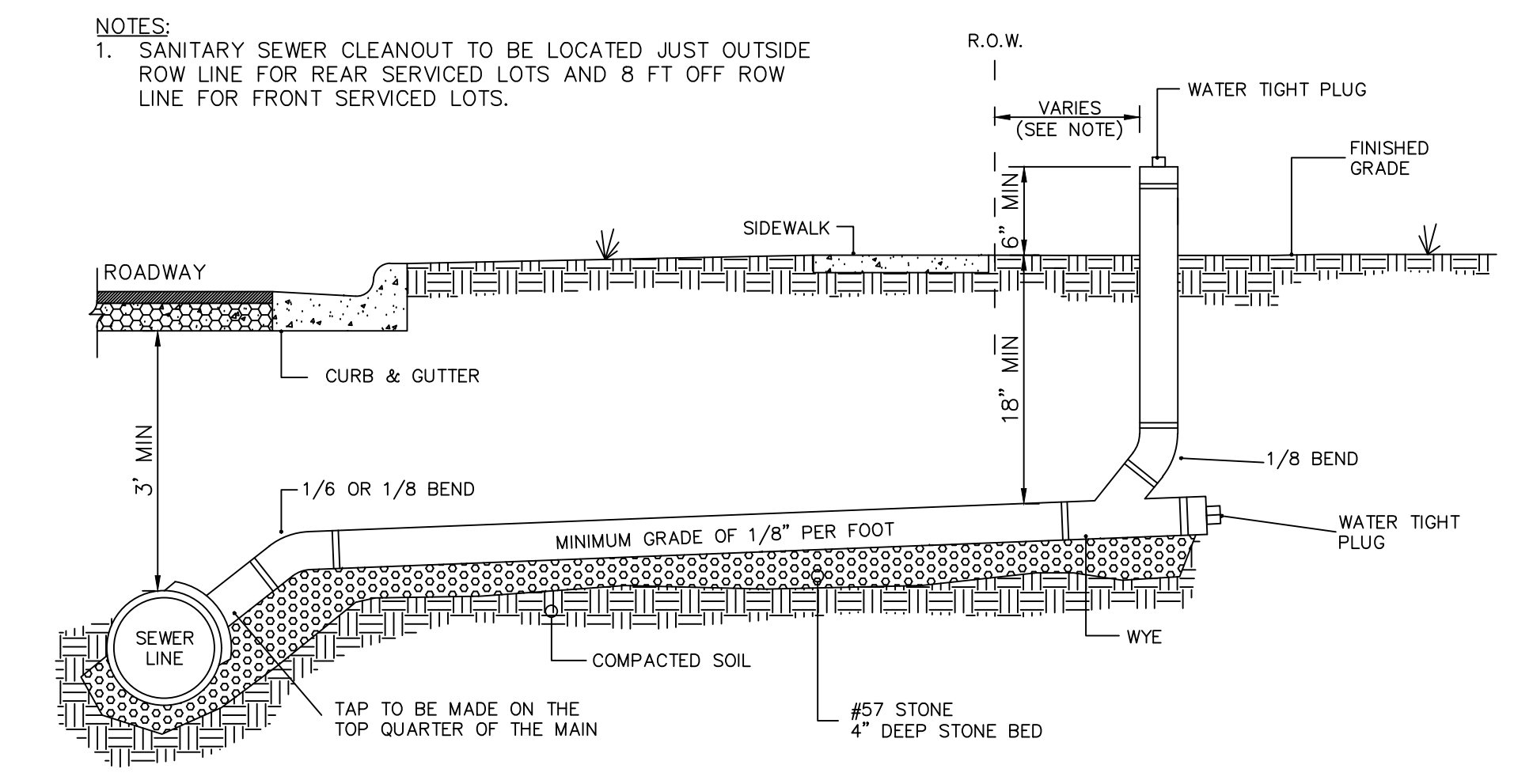
PLACE REINFORCING STEEL SO THAT STEEL IS PLACED A MIN. OF 2" AND A MAX. OF 4" FROM THE TOP OF THE SLAB.



**SANITARY SEWER SERVICE CONNECTIONS**  
NTS

NOTES:

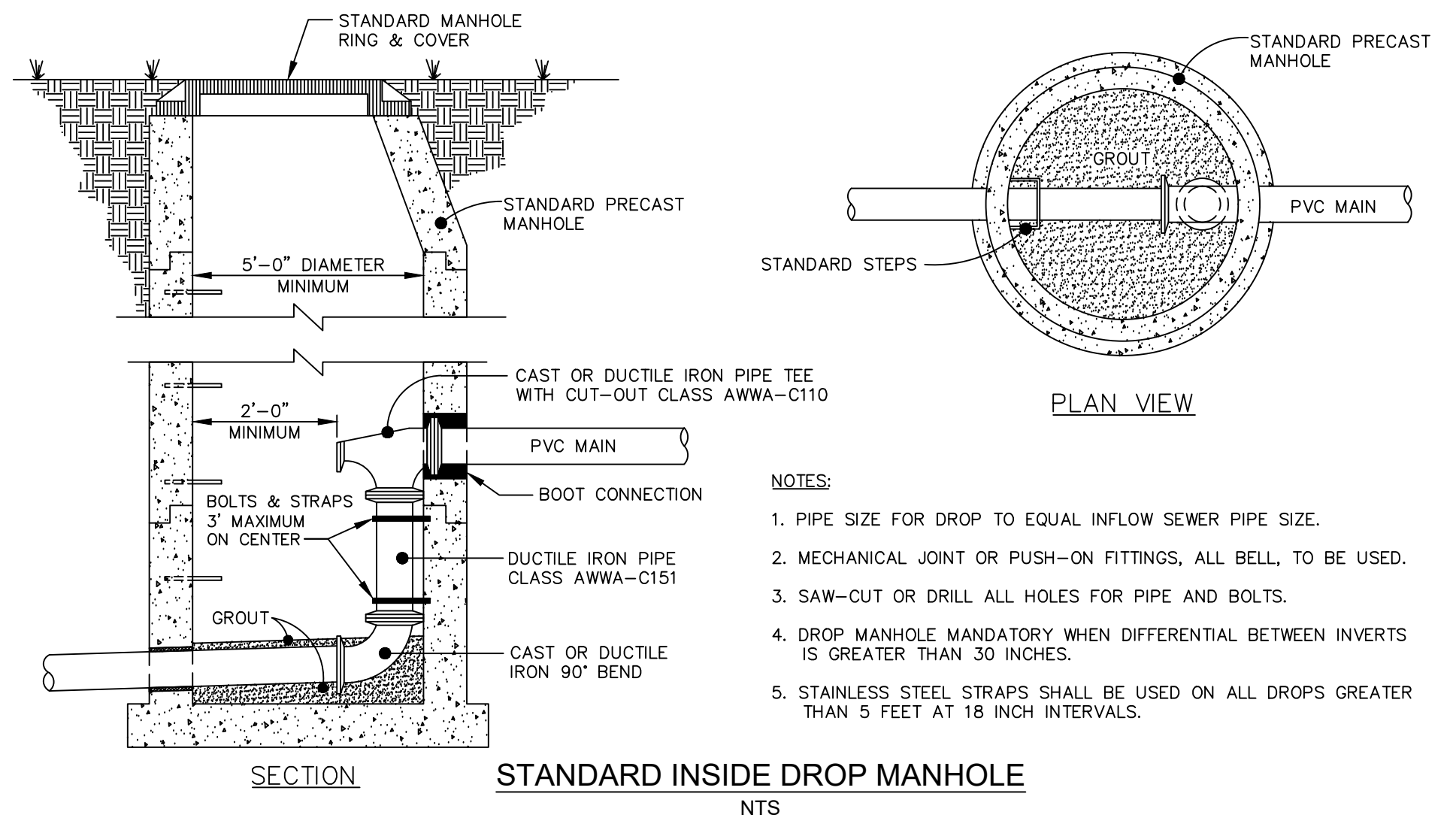
1. SANITARY SEWER CLEANOUT TO BE LOCATED JUST OUTSIDE ROW LINE FOR REAR SERVICED LOTS AND 8 FT OFF ROW LINE FOR FRONT SERVICED LOTS.



**STANDARD SANITARY SEWER TAP AND SERVICE**  
NTS

NOTES:

1. SANITARY SEWER CLEANOUT TO BE LOCATED JUST OUTSIDE ROW LINE FOR REAR SERVICED LOTS AND 8 FT OFF ROW LINE FOR FRONT SERVICED LOTS.



**STANDARD INSIDE DROP MANHOLE**  
NTS

NOTES:

1. PIPE SIZE FOR DROP TO EQUAL INFLOW SEWER PIPE SIZE.
2. MECHANICAL JOINT OR PUSH-ON FITTINGS, ALL BELL, TO BE USED.
3. SAW-CUT OR DRILL ALL HOLES FOR PIPE AND BOLTS.
4. DROP MANHOLE MANDATORY WHEN DIFFERENTIAL BETWEEN INVERTS IS GREATER THAN 30 INCHES.
5. STAINLESS STEEL STRAPS SHALL BE USED ON ALL DROPS GREATER THAN 5 FEET AT 18 INCH INTERVALS.

**BRIAR CHAPEL PHASE 14**  
CHATHAM COUNTY, NORTH CAROLINA

**UTILITY DETAILS**

DATE: MAY 9, 2019  
MCE PROJ. # 02735-0239  
DRAWN: DCR  
DESIGNED: DCR  
CHECKED: GCA  
PROJ. MGR: CHS

SCALE: HORIZONTAL: N/A  
VERTICAL: N/A

MFC FILE NUMBER: D3.X  
DRAWING NUMBER: D3.2

STATUS: FINAL DRAWINGS RELEASED FOR CONSTRUCTION  
REVISION: 3