

STANDARD TRENCH INSTALLATION SOIL AND MINIMUM COMPACTION REQUIREMENTS			
INSTALLATION TYPE	BEDDING THICKNESS	HAUNCH AND OUTER BEDDING	LOWER SIDE
TYPE 1	Do/24 minimum, not less than 75 mm (3"). If rock foundation, use Do/12 minimum, not less than 150 mm (6").	95% Category 1	90% Category 1, 95% Category 2, or 100% Category 3
TYPE 2	Do/24 minimum, not less than 75 mm (3"). If rock foundation, use Do/12 minimum, not less than 150 mm (6").	90% Category 1, or 95% Category 2	85% Category 1, 90% Category 2, or 95% Category 3
TYPE 3	Do/24 minimum, not less than 75 mm (3"). If rock foundation, use Do/12 minimum, not less than 150 mm (6").	85% Category 1, 90% Category 2, or 95% Category 3	85% Category 1, 90% Category 2, or 95% Category 3
TYPE 4	No bedding required, except if rock foundation, use Do/12 minimum, not less than 150 mm (6").	No compaction required, except if Category 3, use 85% Category 3	No compaction required, except if Category 3, use 85% Category 3

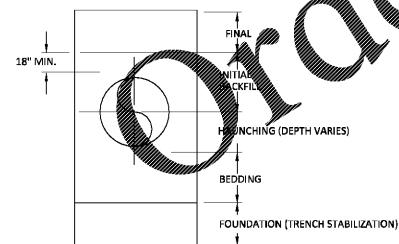
- REQUIRED COMPACTION AND TESTING
1. COMPACTION AND SOIL SYMBOLS - i.e., "95% Category 1" - REFERS TO CATEGORY 1 SOIL MATERIAL WITH MINIMUM STANDARD PROCTOR COMPACTION OF 95%.
  2. THE TRENCH TOP ELEVATION SHALL BE NO LOWER THAN 0.1H BELOW FINISHED GRADE OR, FOR ROADWAYS, ITS TOP SHALL BE NO LOWER THAN AN ELEVATION OF 0.3m (1') BELOW THE BOTTOM OF THE PAVEMENT BASE MATERIAL.
  3. SOIL IN BEDDING AND HAUNCH ZONES SHALL BE COMPACTIONED TO AT LEAST THE SAME COMPACTION AS SPECIFIED FOR THE MAJORITY OF THE SOIL IN THE BACKFILL ZONE.
  4. THE TRENCH WIDTH SHALL BE WIDER THAN SHOWN IF REQUIRED FOR ADEQUATE SPACE TO ATTAIN THE SPECIFIED COMPACTION IN THE HAUNCH AND BEDDING ZONES.
  5. FOR TRENCH WALLS THAT ARE WITHIN 10 DEGREES OF VERTICAL, THE COMPACTION OR FIRMNESS OF THE SOIL IN THE TRENCH WALLS AND LOWER SIDE ZONE NEED NOT BE CONSIDERED.
  6. FOR TRENCH WALLS WITH GREATER THAN 10 DEGREE SLOPES THAT CONSIST OF EMBANKMENT, THE LOWER SIDE SHALL BE COMPACTIONED TO AT LEAST THE SAME COMPACTION AS SPECIFIED FOR THE SOIL IN THE BACKFILL ZONE.

EQUIVALENT USCS AND AASHTO SOIL CLASSIFICATIONS FOR SIDD SOIL DESIGNATIONS				
SIDD SOIL	REPRESENTATIVE SOIL TYPES		PERCENT COMPACTION	
	USCS	STANDARD AASHTO	STANDARD PROCTOR	MODIFIED PROCTOR
GRAVELLY SAND (Category 1)	SW, SP, GW, GP	A1, A3	100, 95, 90, 85, 80, 61	95, 90, 85, 80, 75, 59
SANDY SILT (Category 2)	GM, SM, ML, Also GC, SC with less than 20% passing #200 sieve	A2, A4	100, 95, 90, 85, 80, 49	95, 90, 85, 80, 75, 46
SILTY CLAY (Category 3)	CL, MH, GC, SC	A5, A6	100, 95, 90, 85, 80, 45	90, 85, 80, 75, 70, 40

- REQUIRED COMPACTION AND TESTING
1. INSTALLATION SHALL BE BASED ON TYPE 1 FOR ROADWAY AND SIDEWALK AREAS (paved, dirt, gravel, etc.) AND TYPE 2 FOR OTHER AREAS.
  2. UNDERNEATH ROADWAY AND SIDEWALK AREAS, THE TOP 18" OF BACKFILL SHALL BE COMPACTIONED TO 98% OF THE MAXIMUM DRY DENSITY.
  3. ALL COMPACTION TESTING SHALL BE CONDUCTED BY AN APPROVED SOILS TESTING FIRM.
  4. IF MINIMUM HEIGHTS OF COVER ARE NOT AVAILABLE, CONTRACTOR SHALL TAMP BACKFILL TO THE FINISHED SURFACE.

### STORM SEWER BEDDING - RCP

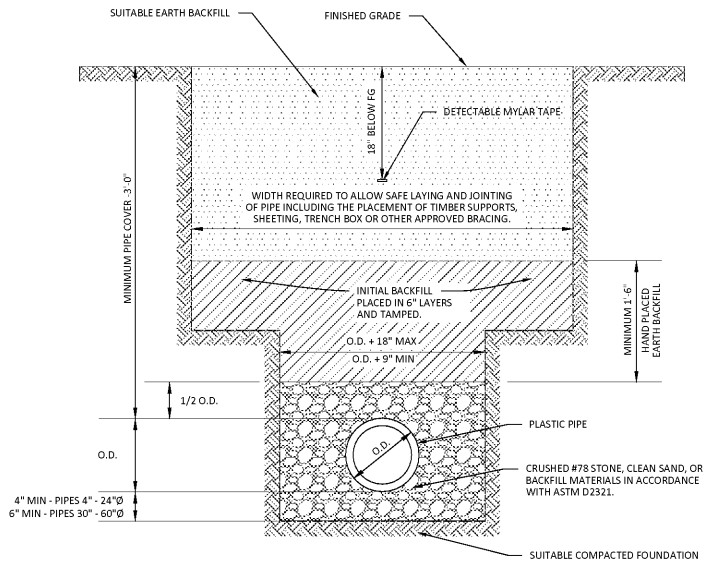
N.T.S.



NOTE:  
SEE SPECIFICATIONS AND PIPE BEDDING AND HAUNCHING DETAILS FOR DIMENSIONS AND MATERIALS

### TRENCH TERMINOLOGY DETAIL

N.T.S.

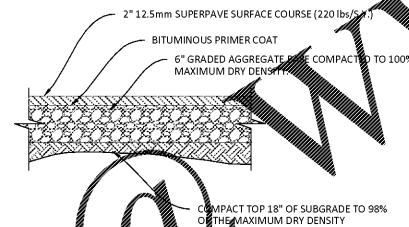


#### REQUIRED COMPACTION AND TESTING

1. BEDDING AND HAUNCHING MATERIALS SHALL BE COMPACTIONED TO 90% OF THE MAXIMUM DRY DENSITY.
2. INITIAL BACKFILL SHALL BE COMPACTIONED TO 90% OF THE MAXIMUM DRY DENSITY.
3. FINAL BACKFILL SHALL BE COMPACTIONED TO 90% OF THE MAXIMUM DRY DENSITY.
4. INITIAL AND FINAL BACKFILL UNDERLYING ROADS (PAVED, DIRT & GRAVEL) AND SIDEWALKS SHALL BE COMPACTIONED TO 95% OF THE MAXIMUM DRY DENSITY. THE TOP 18" OF BACKFILL SHALL BE COMPACTIONED TO 98% OF THE MAXIMUM DRY DENSITY.
5. ALL COMPACTION TESTING SHALL BE CONDUCTED BY AN APPROVED SOILS TESTING FIRM.
6. IF MINIMUM HEIGHTS OF COVER ARE NOT AVAILABLE, CONTRACTOR SHALL TAMP BACKFILL TO THE FINISHED SURFACE.
7. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.

### STORM SEWER BEDDING - HDPE & PVC

N.T.S.

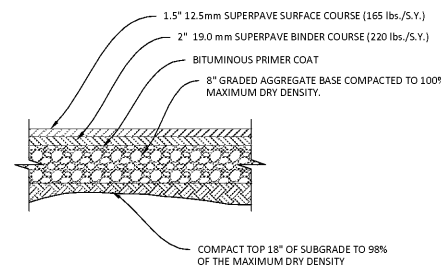


#### NOTE:

- ASPHALT PAVEMENT SHALL BE IN ACCORDANCE WITH GEORGIA DOT STANDARDS (SECTION 400 - HOT MIX ASPHALTIC CONCRETE CONSTRUCTION).
- GRADED AGGREGATE BASE SHALL BE IN ACCORDANCE WITH GEORGIA DOT SECTION 815 (Group 1 or 2).
- COMPACTIONED SUBGRADE SHALL BE IN ACCORDANCE WITH GEORGIA DOT STANDARD SPECIFICATION 209.
- THE PRIME COAT APPLICATION MAY BE EXEMPTED IF NEW ASPHALT PAVEMENT IS INSTALLED WITHIN 12 HOURS OF AN ACCEPTABLE GAB COMPACTION ANALYSIS, AND THE WEATHER CONDITIONS ARE FAVORABLE DURING THAT 12 HOUR SPAN.

### ASPHALT PAVEMENT - STANDARD DUTY

N.T.S.

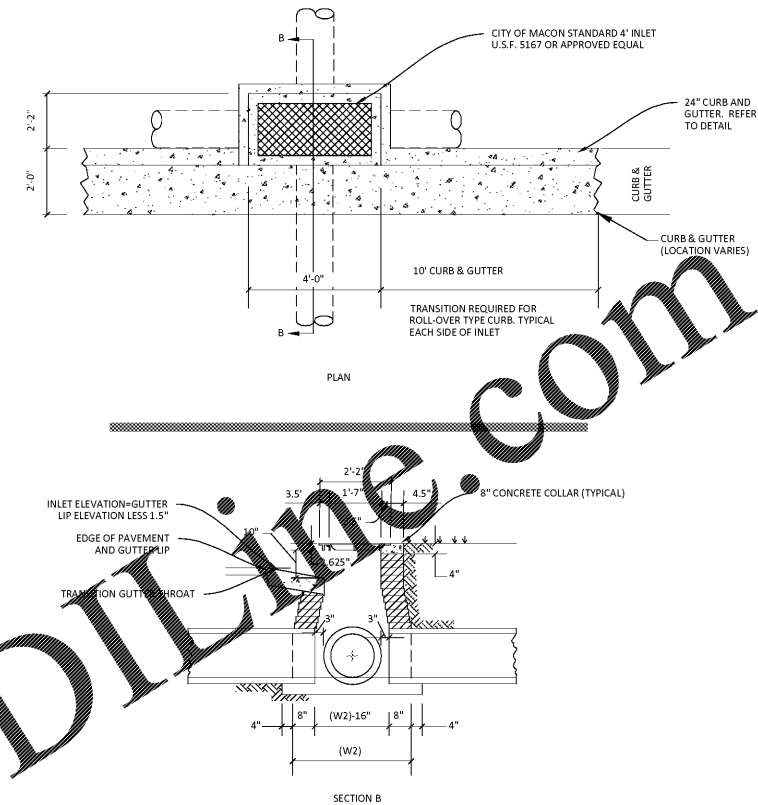


#### NOTE:

- ASPHALT PAVEMENT SHALL BE IN ACCORDANCE WITH GEORGIA DOT STANDARDS (SECTION 400 - HOT MIX ASPHALTIC CONCRETE CONSTRUCTION).
- GRADED AGGREGATE BASE SHALL BE IN ACCORDANCE WITH GEORGIA DOT SECTION 815 (Group 1 or 2).
- COMPACTIONED SUBGRADE SHALL BE IN ACCORDANCE WITH GEORGIA DOT STANDARD SPECIFICATION 209.
- THE PRIME COAT APPLICATION MAY BE EXEMPTED IF NEW ASPHALT PAVEMENT IS INSTALLED WITHIN 12 HOURS OF AN ACCEPTABLE GAB COMPACTION ANALYSIS, AND THE WEATHER CONDITIONS ARE FAVORABLE DURING THAT 12 HOUR SPAN.

### ASPHALT PAVEMENT - HEAVY DUTY

N.T.S.



### CURB INLET WITH PRECAST CONCRETE BOX DETAIL

N.T.S.

#### NOTE:

- DOUBLE CURB INLETS SHALL BE 2 SEPARATE BOXES WITH A SHORT SECTION OF 24" COATED CMP INTERCONNECTING EACH BOX. SLOPE PIPE 2% TO DRAIN FROM UPSTREAM MOST BOX TO DOWNSTREAM MOST BOX. 2' CONCRETE CURB SECTION.
- CONTRACTOR MAY OPT USE ROUND OR RECTANGULAR PRECAST UNITS MEETING REQUIREMENTS OF ASTM C-478 WITH BRICK FOR ADJUSTMENT OF FRAME TO GRADE.

**DUNWODY/BEELAND,**  
architects, inc.

3000  
Macon, Georgia 31204  
T 478-747-6772  
F 478-747-6772

Dunwoody/Beeland, Architects, Inc.  
This drawing may be utilized only for the purpose of constructing or installing the work shown thereon at the site of the work specified. Any other use of this drawing, including without limitation any reproduction or alteration of this drawing, without prior written approval of Dunwoody/Beeland, Architects, Inc. is prohibited.

**FACILITY IMPROVEMENTS  
AT TOBESOFKEE PARKS  
FOR MACON-BIBB COUNTY**

MOSLEY DIXON ROAD MACON, GEORGIA

Revisions:	

Sheet Title:

CONSTRUCTION DETAILS

**ISSUED FOR REVIEW**  
January 14, 2020

**REEVES DESIGN**  
Services, LLC • Consulting Engineers

4875 RIVERSIDE DRIVE / SUITE 107  
MACON, GEORGIA 31210  
478.747.6772  
www.reevesdesign.net

Project #: 1619 Date: 01/13/20

**C15**