

TOWN OF WEDDINGTON ROADWAY STANDARDS



**TOWN OF WEDDINGTON
NORTH CAROLINA**

SEPTEMBER 2014

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Streets and Storm Drainage Design Standards

1. Minimum street right-of-way and pavement widths, as well as other engineering design standards shall be in accordance with the minimum design criteria for subdivision roads as established by the NCDOT publication "Subdivision Roads Minimum Construction Standards", latest revision, except where modified herein or by the Town of Weddington Standard Details for Roadways.
2. A North Carolina Professional Engineer must stamp all roadway construction plans and revisions submitted for Town review. A P.L.S. may certify As-Built drawings verifying that the construction was completed according to plans.
3. Street Classifications
 - a. **Thoroughfare Streets** provide for movement of high volumes of traffic throughout the Town. In general, thoroughfare streets consist of numbered state roads and other major streets as described in the NCDOT, Union County, or Town of Weddington Thoroughfare plan. Design criteria for thoroughfare streets shall be determined by the NCDOT, and construction plans shall be reviewed and approved by the NCDOT District Engineer.
 - b. **Commercial Streets** provide direct access to commercial property and may be served by either thoroughfare or collector streets. Design shall be on a case by case basis.
 - c. **Residential Collector Streets** connect the residential and commercial streets to thoroughfare streets, and may supplement the thoroughfare system by providing a limited amount of through traffic. Collector streets are required when serving more than 100 residential units, when connecting adjoining residential areas, or as determined necessary by the Town. Design criteria for residential collector streets are found in the NCDOT Subdivision Roads Minimum Construction Standards.
 - d. **Residential Local Streets** provide a dual service of lot access and traffic movement between local residential streets and collector streets. Design criteria for residential local streets are found in the NCDOT Subdivision Roads Minimum Construction Standards.
 - e. **Private Streets** Private streets shall be designed to NCDOT public street standards or as otherwise directed by the Town.
4. Site triangles 35' x 35' shall be preserved for all intersections. Additional sight triangles of 10' x 70' shall be provided for access onto thoroughfare, commercial, and NCDOT streets. Site triangles shall be shown on preliminary and final plats, and shall be shown on the overall site drawings.
5. All drainage systems shall be designed according to the criteria found in the NCDOT publication "Guidelines for Hydraulic Design", latest edition.

Street and Storm Drainage Construction Standards

1. Street construction materials and construction standards shall meet N. C. Department of Transportation Standard Specifications for Roads and Structures, and Roadway Standard Drawings as revised January 2012 (and as subsequently amended), except where Town standards are more stringent, or as directed by the Town.

General Notes

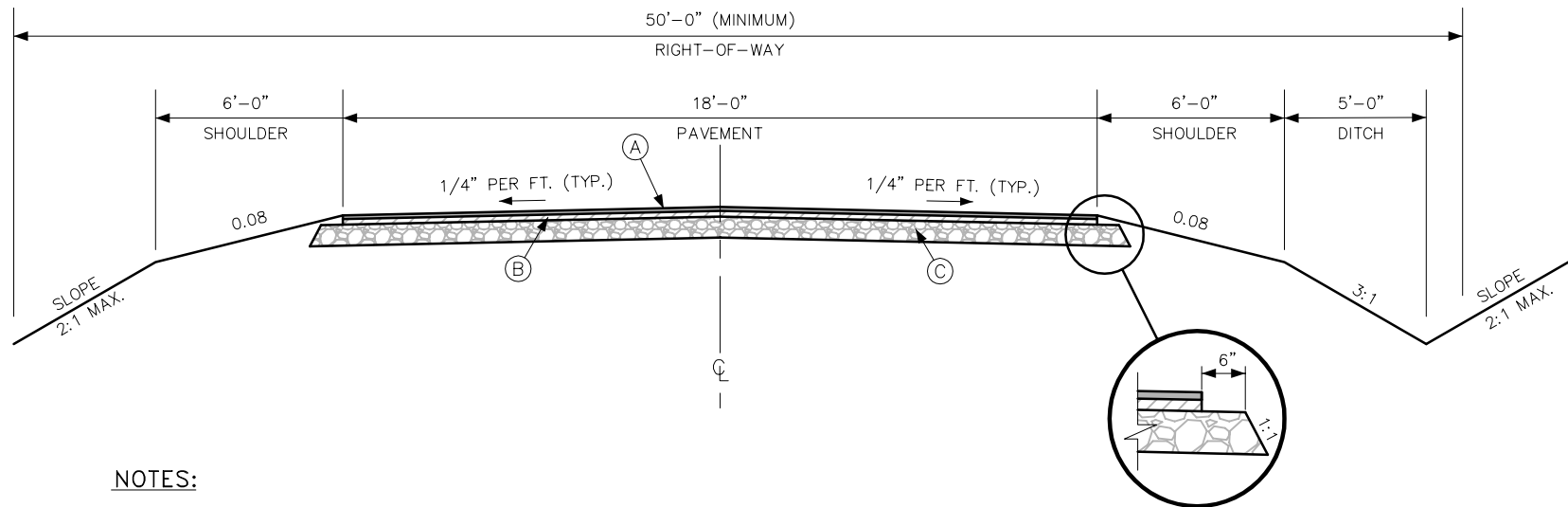
The following general notes shall appear at least once on all construction plans.

1. Street construction materials and construction standards shall meet N. C. Department of Transportation Standard Specifications for Roads and Structures, and Roadway Standard Drawings as revised January 2012 (and as subsequently amended), except where Town of Weddington standards are more stringent.
2. All erosion control devices shall be constructed and maintained in accordance with the most current NCDENR and Union County standards. Erosion control measures shall be removed at project completion when deemed no longer necessary by the Engineer. All graded areas not under pavement and within the right-of-way or easements shall be prepared, fertilized and limed, seeded, and mulched immediately upon completion of construction.
3. All drainage structures and pipe shall conform to NCDOT standards and specifications.
4. If required by the Town, compaction tests shall be made by an independent testing lab at owner's expense.
5. Proof rolling of street subgrade and aggregate base material shall be performed by the contractor in the presence of the owner's engineer using an over loaded (on-site) triaxle dump with 22-25 tons of stone, third axle lifted. If rain occurs before placing stone on subgrade that has been proofrolled, or if rain occurs prior to placing asphalt on stone base that has been proofrolled, the subgrade and stone base must be proofrolled again. The engineer shall provide written verification to the Town that the subgrade and aggregate base material meet the density requirements as specified. Failure to provide engineer's verification of the subgrade and stone base course compaction could result in delay of final acceptance of the development by the Town.
6. The final lift of asphalt pavement shall not be placed until after 80% of home sites are developed. The final lift of pavement shall not be placed for streets that will be used to access future phases until those phases reach 80% build-out.

7. For roads that are to be privately maintained, a representative of the Town must be present for all proofrolling and asphalt paving operations.
8. Prior to final acceptance, the developer shall be responsible for correcting all problems associated with the project, including those items not necessarily covered by the plans, to insure the satisfactory completion of the total project.

Town of Weddington Roadway Standard Details – September 2014

ROADWAY STANDARD DETAIL INDEX	
R-100	Typical Section - Residential Local Street with Shoulder and Ditch
R-101	Typical Section – Residential Collector Street with Shoulder and Ditch
R-102	Typical Section - Residential Local Street with Curb and Gutter
R-103	Typical Section - Residential Collector Street with Curb and Gutter
R-104	Typical Section – 2'-0" Valley Gutter (Rolled Type)



NOTES:

1. SUBGRADE SHALL BE COMPACTED TO A DENSITY OF 100% IN ACCORDANCE WITH AASHTO-T99 AND NCDOT SPECIFICATIONS SECTION 500.
2. AGGREGATE BASE COURSE SHALL BE COMPACTED TO A DENSITY OF 100%.
3. ASPHALT COMPACTION SHALL BE IN ACCORDANCE WITH NCDOT SECTION 610.
4. IF REQUIRED BY THE TOWN, TESTS SHALL BE CONDUCTED BY AN INDEPENDENT TESTING FIRM AT THE DEVELOPERS EXPENSE.
5. FINAL LIFT OF PAVEMENT SHALL NOT BE PLACED UNTIL AFTER 80% OF HOME SITES ARE DEVELOPED. THE FINAL LIFT OF PAVEMENT SHALL NOT BE PLACED FOR STREETS THAT WILL BE USED TO ACCESS FUTURE PHASES UNTIL THOSE PHASES REACH 80% BUILD-OUT.

- (A) 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE, S9.5B
- (B) 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE, S9.5B
- (C) 10" COMPACTED AGGREGATE BASE COURSE OR 5" BITUMINOUS CONCRETE BASE COURSE, B25.0C

DATE: SEPTEMBER 2014 | SCALE: NTS

REVISIONS

**TYPICAL SECTION
RESIDENTIAL LOCAL STREET WITH
SHOULDER AND DITCH**

**TOWN OF WEDDINGTON
STANDARD DETAILS**

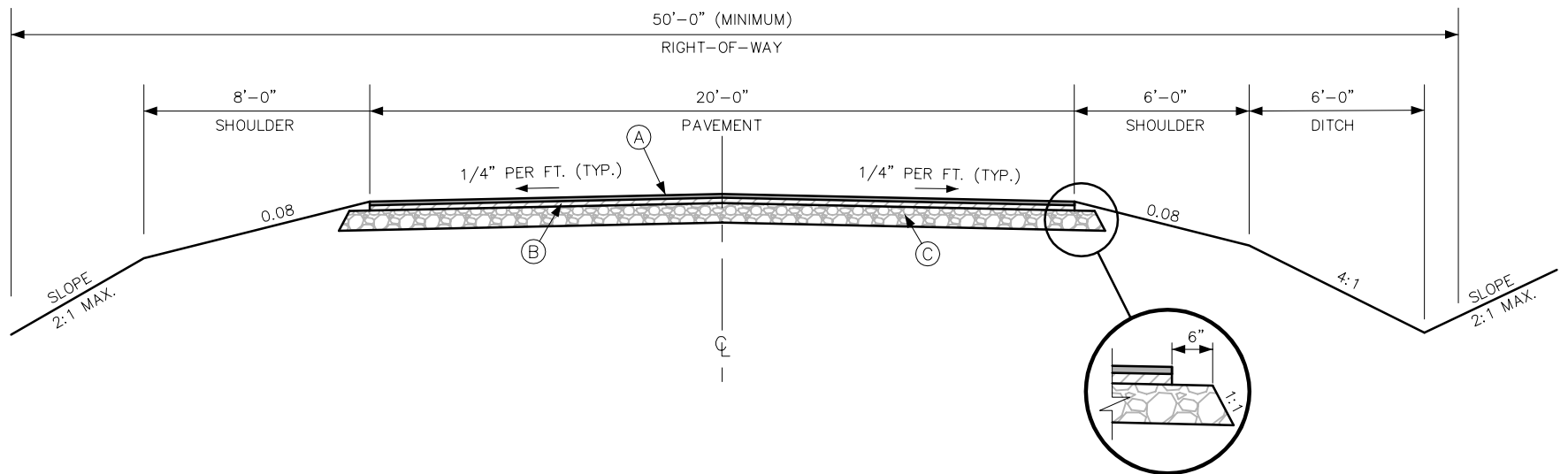
WEDDINGTON, N.C.

ROADWAY

R

STD. NO.

100



NOTES:

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REVISIONS

**TYPICAL SECTION
RESIDENTIAL COLLECTOR STREET
WITH SHOULDER AND DITCH**

**TOWN OF WEDDINGTON
STANDARD DETAILS**

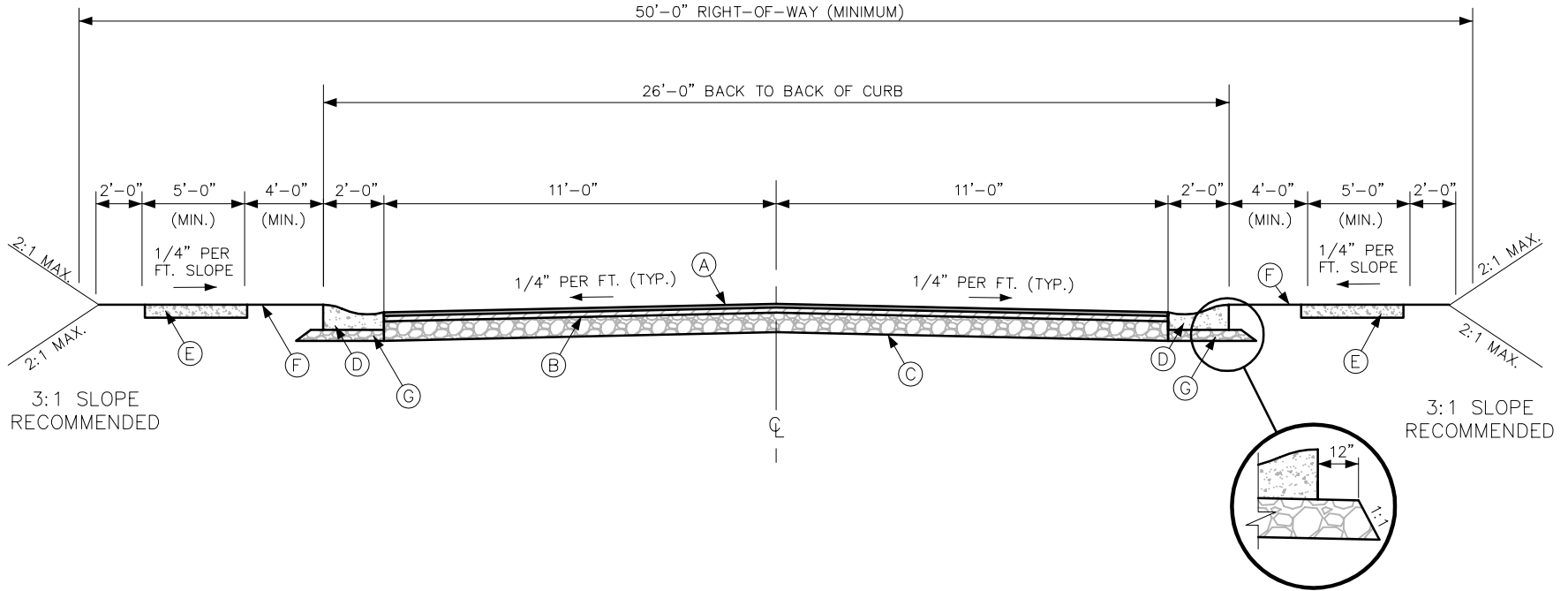
WEDDINGTON, N.C.

ROADWAY

R

STD. NO.

101



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- (C) 10" COMPACTED AGGREGATE BASE COURSE OR 5" BITUMINOUS CONCRETE BASE COURSE, B25.0C
- (D) 2'-0" VALLEY GUTTER
- (E) 4" CONCRETE SIDEWALK (OPTIONAL)
- (F) 4'-0" PLANTING STRIP
- (G) 6" MINIMUM COMPACTED AGGREGATE BASE COURSE

DATE: SEPTEMBER 2014 SCALE: NTS

REVISIONS

**TYPICAL SECTION
RESIDENTIAL LOCAL STREET
WITH CURB AND GUTTER**

**TOWN OF WEDDINGTON
STANDARD DETAILS**

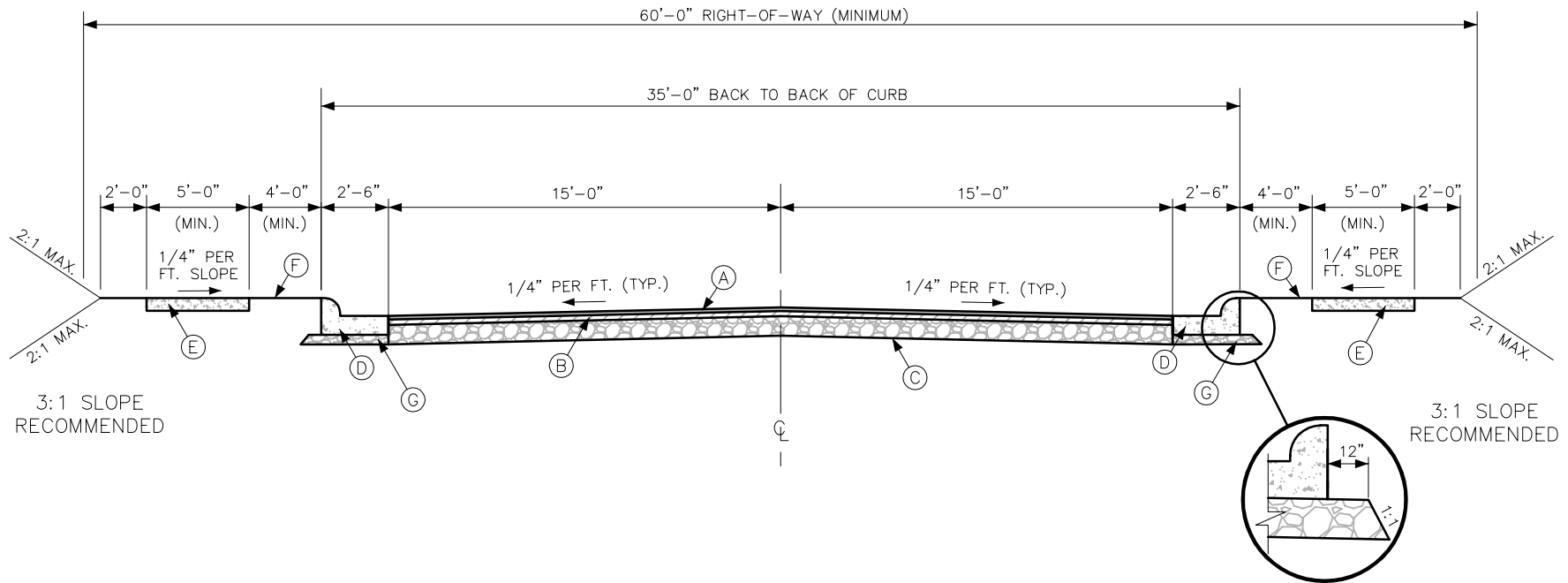
WEDDINGTON, N.C.

ROADWAY

R

STD. NO.

102



NOTES:

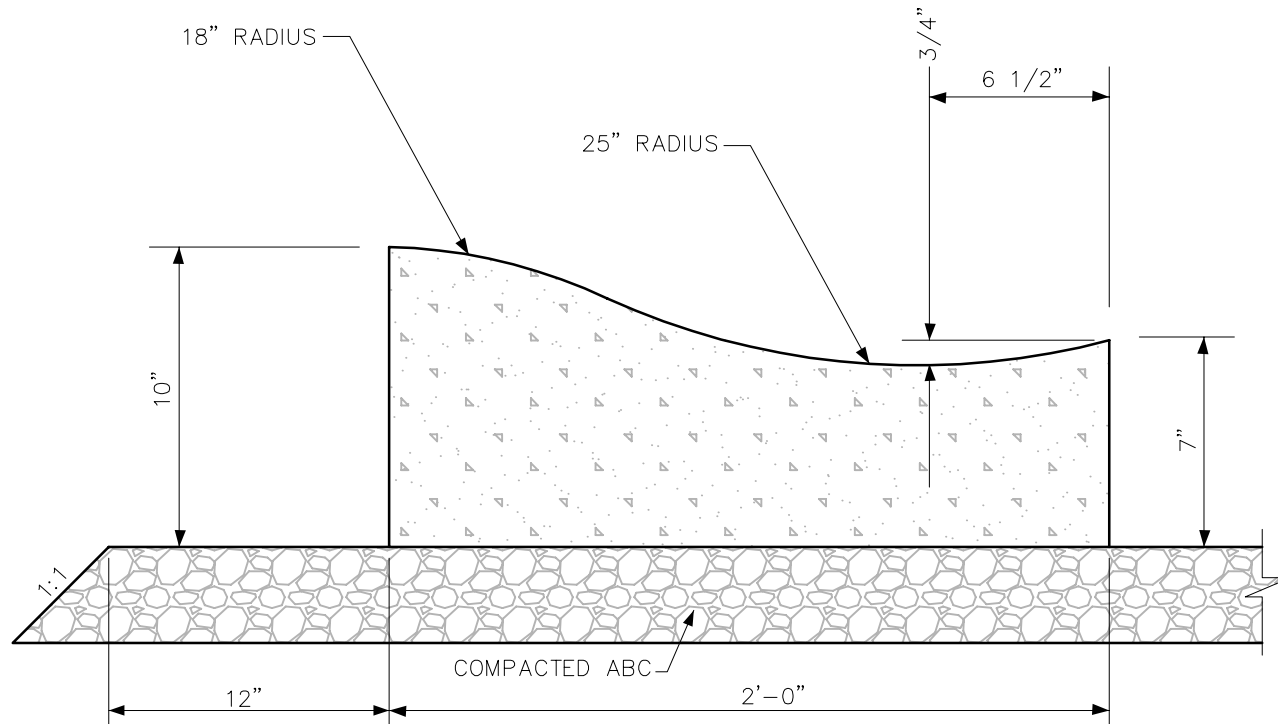
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- (C) 10" COMPACTED AGGREGATE BASE COURSE OR 5" BITUMINOUS CONCRETE BASE COURSE, B25.0C
- (D) 2'-6" CONCRETE CURB & GUTTER, NCDOT STD. DETAIL 846.01
- (E) 4" CONCRETE SIDEWALK (OPTIONAL)
- (F) 4'-0" PLANTING STRIP
- (G) 6" COMPACTED AGGREGATE BASE COURSE

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**TYPICAL SECTION
RESIDENTIAL COLLECTOR STREET
WITH CURB AND GUTTER**

TOWN OF WEDDINGTON STANDARD DETAILS	
WEDDINGTON, N.C.	
ROADWAY R	STD. NO. 103



NOTES:

1. CONTRACTION JOINTS SHALL BE PROVIDED AT 10' INTERVALS (15' FOR MACHINE INSTALLED CURB). JOINTS SHALL BE SAWCUT OF A MINIMUM OF 2" DEEP.
2. PROVIDE 1/2" EXPANSION JOINTS AT 90' INTERVALS AND AT ALL STRUCTURES.
3. 6" COMPACTED ABC IS REQUIRED UNDER ALL CURB AND GUTTER.

DATE: SEPTEMBER 2014 | SCALE: NTS

REVISIONS

**2'-0" VALLEY GUTTER
(ROLLED TYPE)**

**TOWN OF WEDDINGTON
STANDARD DETAILS**

WEDDINGTON, N.C.

ROADWAY

R

STD. NO.

104