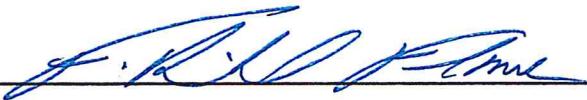

TOWN OF MARSHVILLE

est. 1877

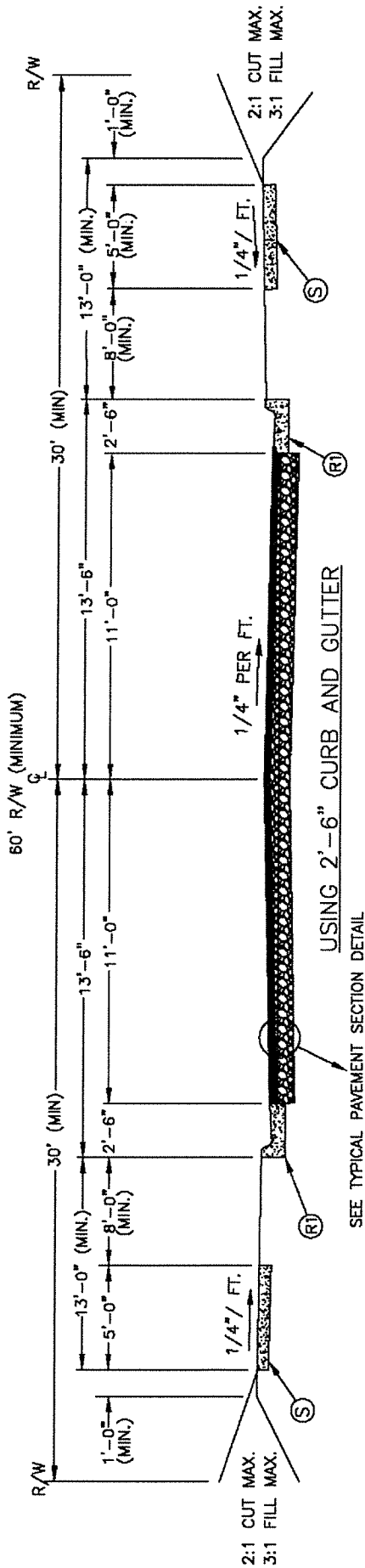
TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL

Marshville, North Carolina

Effective: February 2, 2016



F. Richard Flowe, AICP, CFM – Planning, Zoning, & Subdivision Administrator



NOTES:

1. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BASED ON SPECIFIC TRAFFIC PARAMETERS.
2. ALL DIMENSIONS NOTED AS MINIMUMS ARE SUBJECT TO STANDARDS REQUIRED BY TOWN OF MARSHVILLE DEVELOPMENT ORDINANCE.

KEY

- (R1) 2'-6" CURB AND GUTTER
- (S) 4" CONCRETE SIDEWALK

TACK COAT
(SEE SECTION 1.E.4)

SURFACE COURSE
1" SF9.5A

FINAL LIFT TO BE APPLIED AFTER 75% DEVELOPMENT OCCUPANCY OR
1 YEAR FROM INTERMEDIATE COURSE PLACEMENT (WHICHEVER OCCURS FIRST).

INTERMEDIATE COURSE
1 1/2" S9.5B, SF9.5A

BASE COURSE
8" COMPACTED AGGREGATE BASE COURSE, OR 4" BCRC TYPE B25.0B

SHOULD ENTIRE DEVELOPMENT HAVE A CBR OF 6 OR GREATER, THEN AN
ALTERNATIVE BASE COURSE PAVEMENT DESIGN MAY BE SUBMITTED TO THE
CITY ENGINEER FOR APPROVAL.

SUBGRADE
COMPACT SUBGRADE TO AASHTO STANDARDS AND SPECIFICATIONS

TYPICAL PAVEMENT SECTION (MINIMUM)

TOWN OF
MARSHVILLE, NC

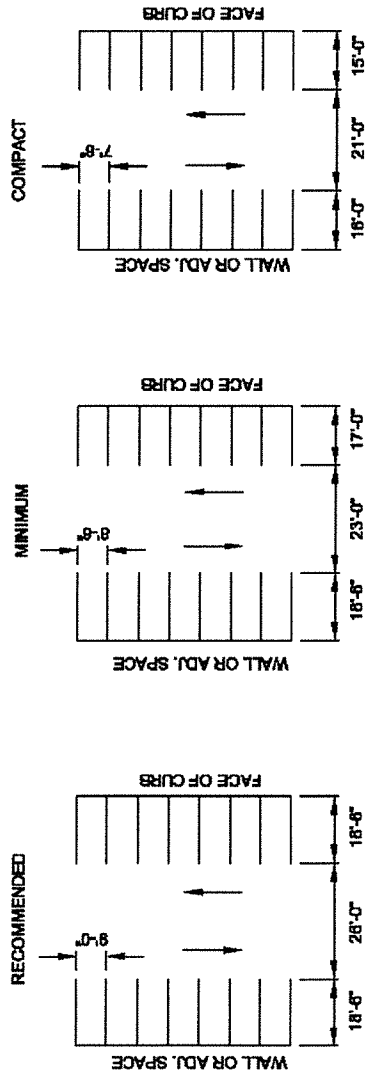
STREET SECTION
60' RIGHT-OF-WAY

STD.
1.01

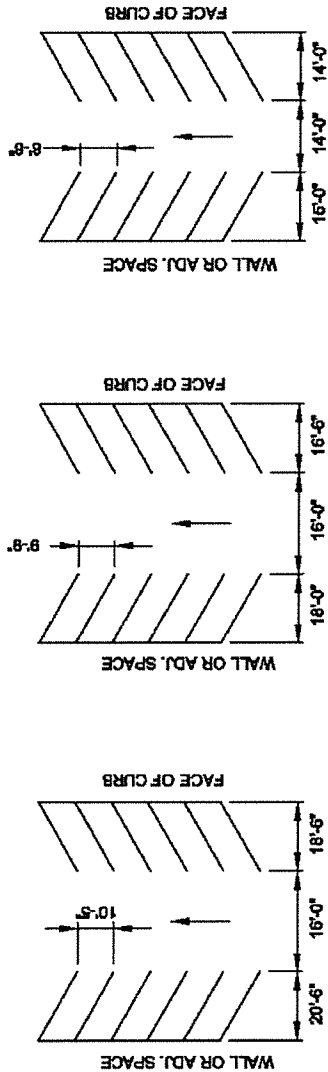
REVISIONS

NO	DATE	BY	COMMENT

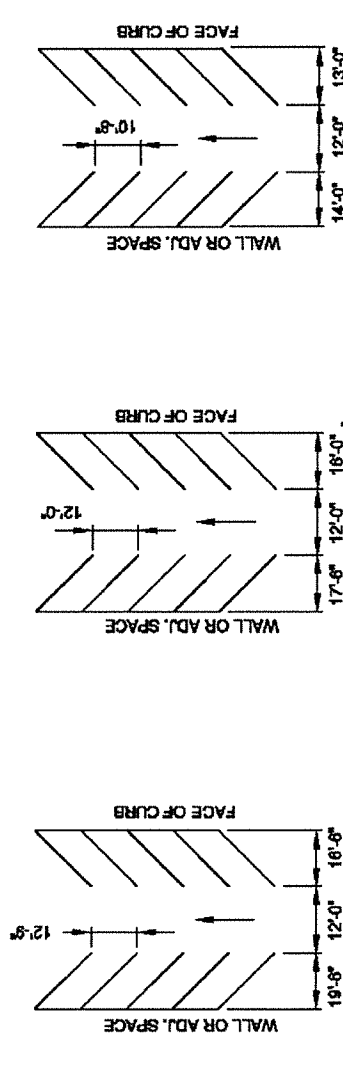
PARKING ANGLE 90°
(TWO WAY OPERATION ONLY)



PARKING ANGLE 60°
(ONE WAY OPERATION ONLY)



PARKING ANGLE 45°
(ONE WAY OPERATION ONLY)



NOTES:

1. FOR ACCESSIBLE PARKING STANDARDS/SIGNAGE SEE ADDITIONAL STANDARDS. PAVEMENT MARKINGS SHALL BE 4" WHITE PAINT.
2. ALTERNATIVE PARKING ANGLES, AISLE WIDTHS, AND OPERATION (TWO-WAY ANGLED PARKING OR REVERSE-ANGLE PARKING) WILL BE CONSIDERED ON A CASE-BY-CASE BASIS.
- 3.

TOWN OF
MARSHVILLE, NC

PARKING STANDARDS

STD.
2.01

REVISIONS			
NO	DATE	BY	COMMENT



1. CHAMFERS/REVERSE CURVES NOT NECESSARY IF ADEQUATE DRAINAGE CAN BE PROVIDED THAT WILL ENSURE THAT SEDIMENT, WATER, DEBRIS, ETC., DOES NOT COLLECT IN 90-DEGREE CORNERS.
2. PARALLEL ACCESSIBLE SPACES AND LOADING ZONES TO BE REVIEWED ON A CASE-BY-CASE BASIS.
3. FOR PARKING BAYS THAT ARE 8 FEET IN WIDTH OR GREATER, THE PAVEMENT MARKINGS SHALL BE SET AT ONE (1) FOOT LESS THAN THE STALL WIDTH.
4. SEPARATION FROM INTERVENING STREET DISTANCES SHALL BE REVIEWED AND APPROVED BY THE CITY.
5. POSITIVE DRAINAGE SHALL BE PROVIDED EITHER BY INSTALLATION OF APPROPRIATE DRAINAGE STRUCTURES OR SLOPE PARKING AREA TO STREET FLOW LINE.

TOWN OF MARSHVILLE, NC	PARALLEL PARKING STANDARDS	STD. 2.02	REVISIONS		
			NO	DATE	BY

ACCESSIBLE PARKING REQUIREMENTS

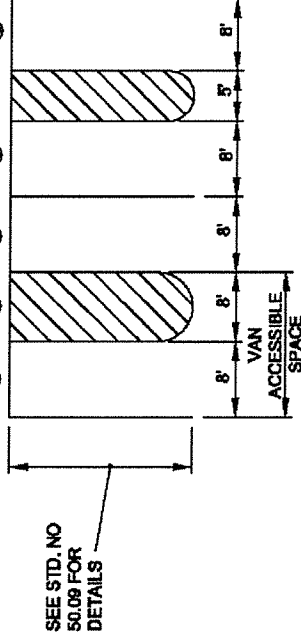
TOTAL PARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED TO BE VAN ACCESSIBLE
1 TO 25	1	1
26 TO 50	2	1
51 TO 75	3	1
76 TO 100	4	1
101 TO 150	5	1
151 TO 200	6	1
201 TO 300	7	1
301 TO 400	8	1
401 TO 600	9	2
501 TO 1000	2% OF TOTAL	1 IN EVERY 8 ACCESSIBLE SPACES
1001 AND OVER	20 PLUS 1 FOR EACH 100 OVER 1000	1 IN EVERY 8 ACCESSIBLE SPACES

SECTION 4.1.2 (b) OF THE AMERICANS WITH DISABILITIES ACT (ADA).
SEE 4.1.2.(d) (c) FOR MEDICAL CARE FACILITIES

NOTES:

- ALL 12"x18" ACCESSIBLE SIGNS (R7-8a & R7-1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
- REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
- IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.

SIGNAGE
SEE STD. NO 50.09 FOR DETAILS
ACCESSIBLE ROUTE
(SEE NOTE 3)



ONE OUT OF EVERY EIGHT (8) ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, IS REQUIRED TO BE VAN ACCESSIBLE.

PARKING SPACE PAVEMENT MARKINGS

A



R7-8a
12"x8"

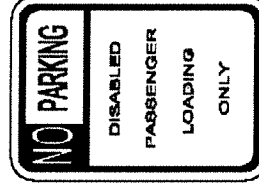


MUTCD
R7-8a
12"x18"



R7-8D
12"x8"

B



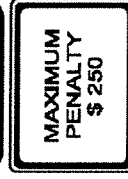
MUTCD
R7-1
12"x18"

REQUIRED ACCESSIBLE
RESERVED PARKING SIGN

C



MUTCD
R7-8a
12"x18"



R7-8D
12"x8"

TOWN OF
MARSHVILLE, NC

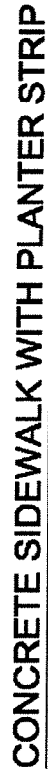
ACCESSIBLE PARKING
AND SIGNAGE

REVISIONS
NO DATE BY COMMENT

STD.
2.11

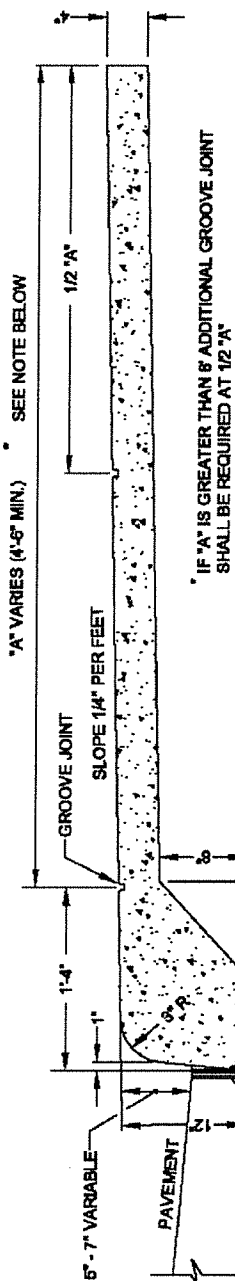


1. A GROOVE JOINT 1" DEEP WITH 1/8" RADI SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2. SIDEWALK AT DRIVEWAY ENTRANCES TO BE 8" THICK.
3. WIDTH OF SIDEWALK ON ALL STREETS SHALL BE A MINIMUM OF 5'.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI. IN 28 DAYS.
5. ZONING CONDITIONS MAY REQUIRE ADDITIONAL WIDTH SIDEWALKS WHICH SHALL SUPERSEDE THESE STANDARD DIMENSIONS SHOWN.



FOR CONCRETE SIDEWALK

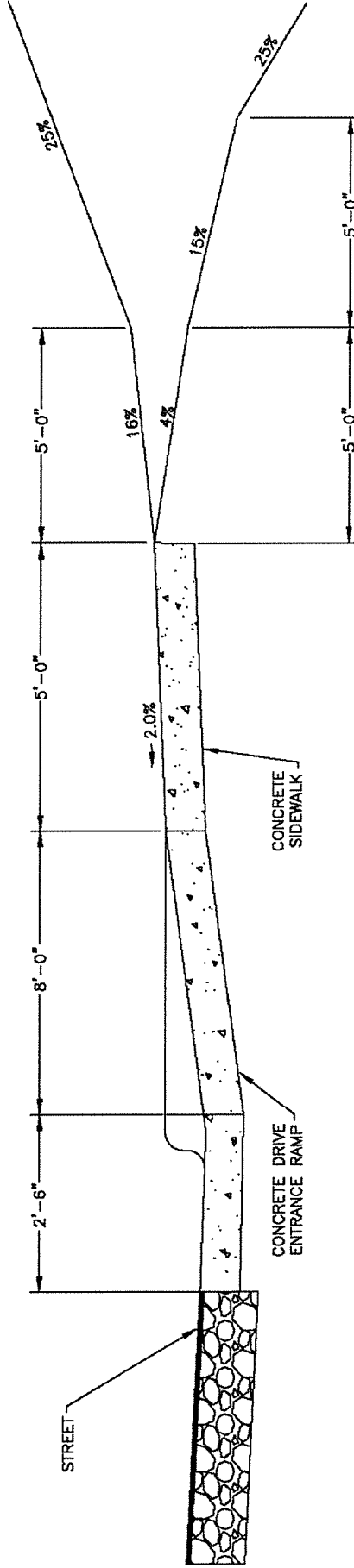
TOWN OF MARSHVILLE, NC	CONCRETE SIDEWALK	STD. 3.01	REVISIONS		
			NO	DATE	BY



**TWO 1/2" THICK PIECES BITUMINOUS FIBER REQUIRED
IF SUBBASE IS CONCRETE. MUST BE SEALED WITH
APPROVED JOINT SEALER.**

1. A GROOVE JOINT 1" DEEP WITH 1/8" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
3. SEE STANDARD FOR DETAIL OF EXPANSION JOINT AND GROOVE JOINT.
4. SEE STANDARD FOR DETAIL OF DRIVEWAY.
5. MONOLITHIC CURB AND SIDEWALK TO BE CONSTRUCTED ONLY WHEN APPROVED BY THE APPROPRIATE PUBLIC WORKS ENGINEER.

TOWN OF MARSHVILLE, NC	MONOLITHIC CURB AND SIDEWALK	STD. 3.02	REVISIONS			
			NO	DATE	BY	COMMENT

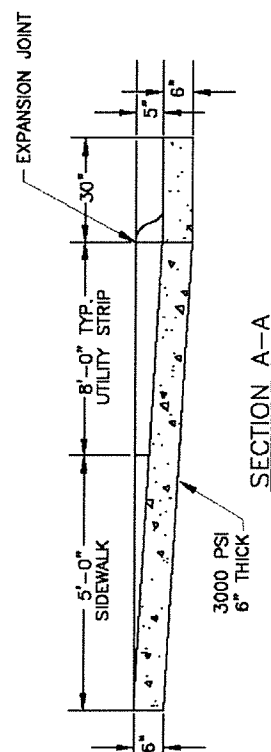


NOTE:

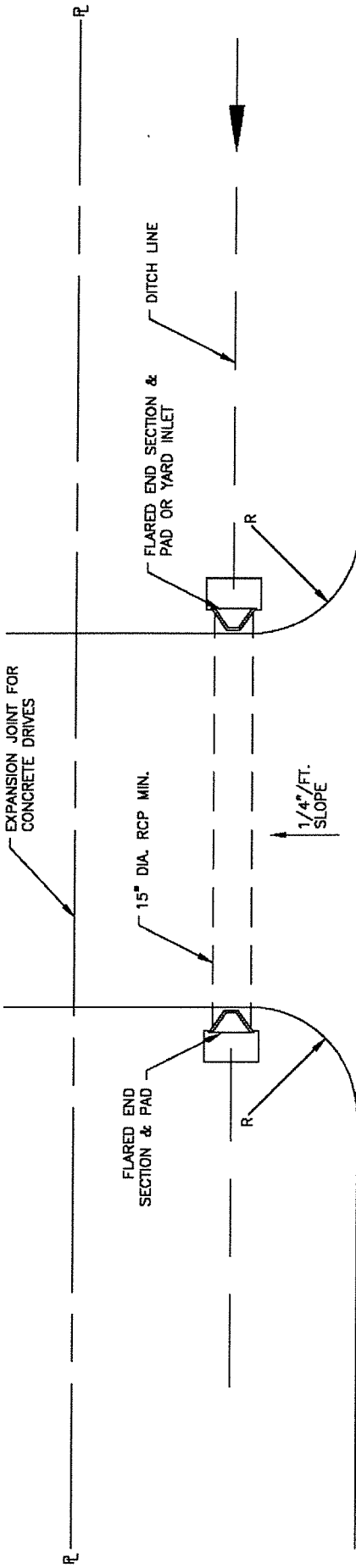
GRADES ARE SHOWN FOR SINGLE FAMILY & TWO FAMILY LOTS ONLY. COMMERCIAL TYPE USES MUST FLATTEN GRADES ACCORDINGLY FOR HIGHER VOLUMES OF TRAFFIC, ACCORDING TO THE TOWN ENGINEER'S DIRECTION.

NOT TO SCALE

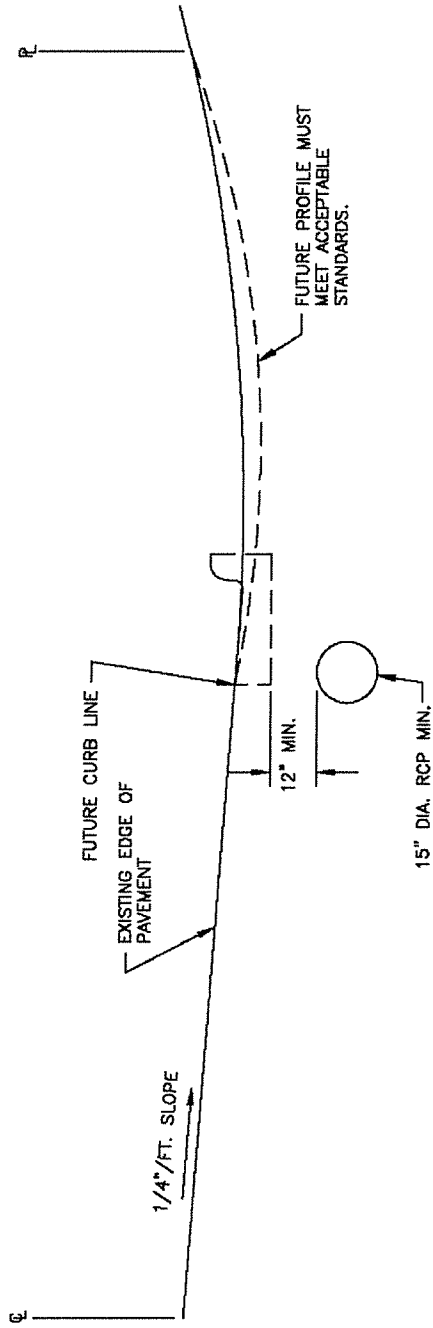
TOWN OF MARSHVILLE, NC	DRIVEWAY GRADES		STD. 4.01		REVISIONS			
					NO	DATE	BY	COMMENT



TOWN OF MARSHVILLE, NC	FAN TYPE DRIVEWAY ENTRANCE	STD. 4.02	REVISIONS			
			NO	DATE	BY	COMMENT



PLAN
NO CURB & GUTTER ON STREET

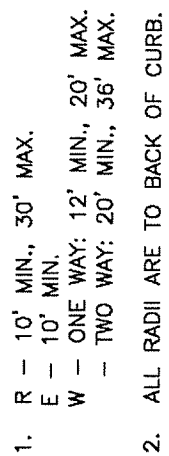


SECTION
NO SCALE

NOTES:

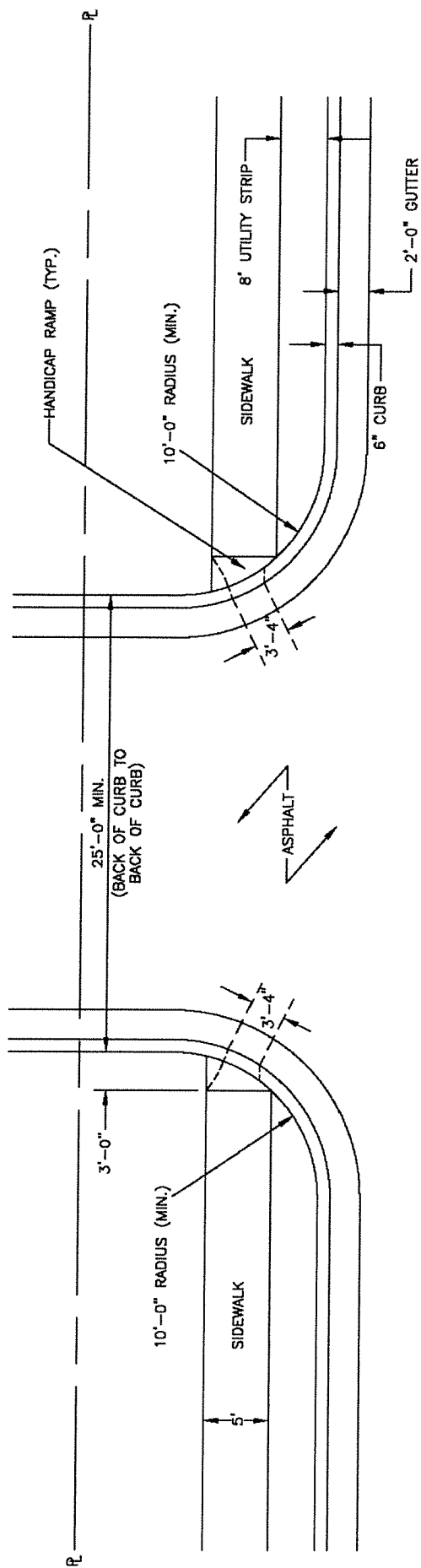
1. FOR SINGLE FAMILY OR TWO FAMILY USE ONLY.
2. ASPHALT DRIVES ARE PREFERRED, CONCRETE WILL BE ALLOWED. IF CONCRETE DRIVE IS USED, AN EXPANSION JOINT SHALL BE PROVIDED AT THE PROPERTY LINE OR BACK OF FUTURE SIDEWALK LINE - WHICHEVER IS FURTHER FROM THE STREET.
3. GRADE PROFILE SHALL BE DESIGNED TO PROPERLY TIE IN WITH THE ULTIMATE WIDENING OF THE STREET.
4. DRIVEWAY PROFILE SHALL FALL @ 1/4" PER FOOT FROM EDGE OF PAVEMENT TO ϕ OF ROADSIDE DITCH. PIPE SHALL BE PLACED TO HAVE 12" OF CLEARANCE BELOW FINISHED PAVEMENT AT THIS POINT.

TOWN OF MARSHVILLE, NC	DRIVEWAY DITCH SECTION STREET		STD. 4.03		REVISIONS	
					NO	DATE
					BY	COMMENT

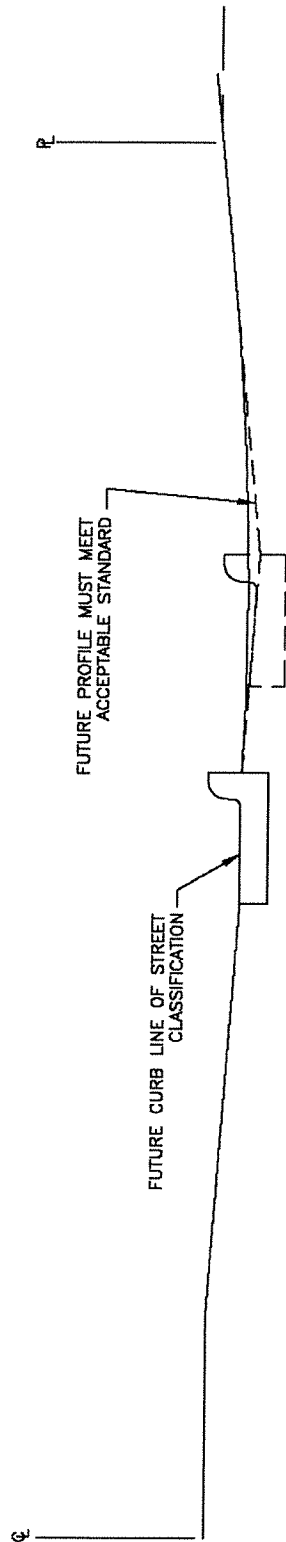


NOT TO SCALE

TOWN OF MARSHVILLE, NC	COMMERCIAL SINGLE DRIVEWAY DITCH SECTION	STD. 4.04	REVISIONS			
			NO	DATE	BY	COMMENT



PLAN
WITH CURB & GUTTER

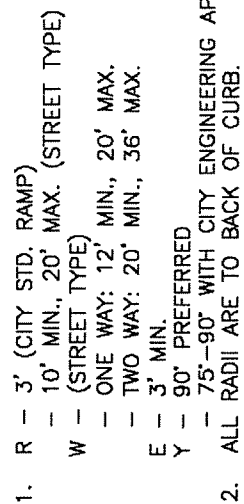


SECTION
NO SCALE

NOTES:

1. FOR COMMERCIAL & MULTI-FAMILY USES ONLY.
2. DRIVES TO BE GRADED TO DRAIN TOWARD STREET FROM PROPERTY LINE & AWAY FROM STREET FROM PROPERTY LINE UNLESS STORM DRAINAGE STRUCTURES ARE PROVIDED TO INTERCEPT STORM FLOWS.
3. DRIVE GRADE PROFILE SHALL BE DESIGNED TO TIE IN WITH ULTIMATE WIDENING OF STREET.

TOWN OF MARSHVILLE, NC	DRIVEWAY – STREET TYPE, CURB & GUTTER SECTION	STD. 4.05	REVISIONS		
			NO	DATE	BY COMMENT

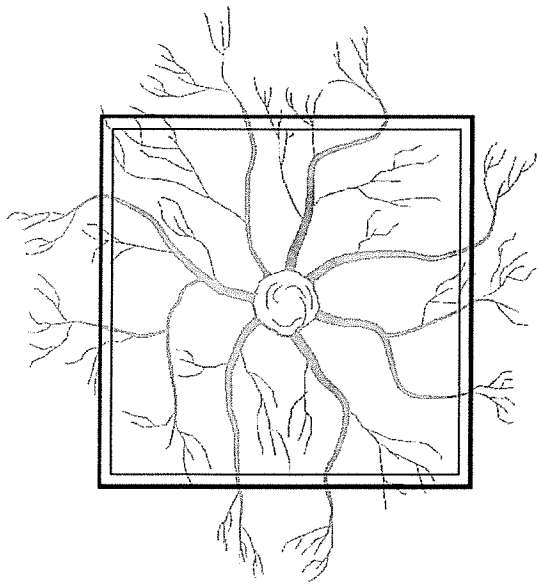


TOWN OF
MARSHVILLE, NC

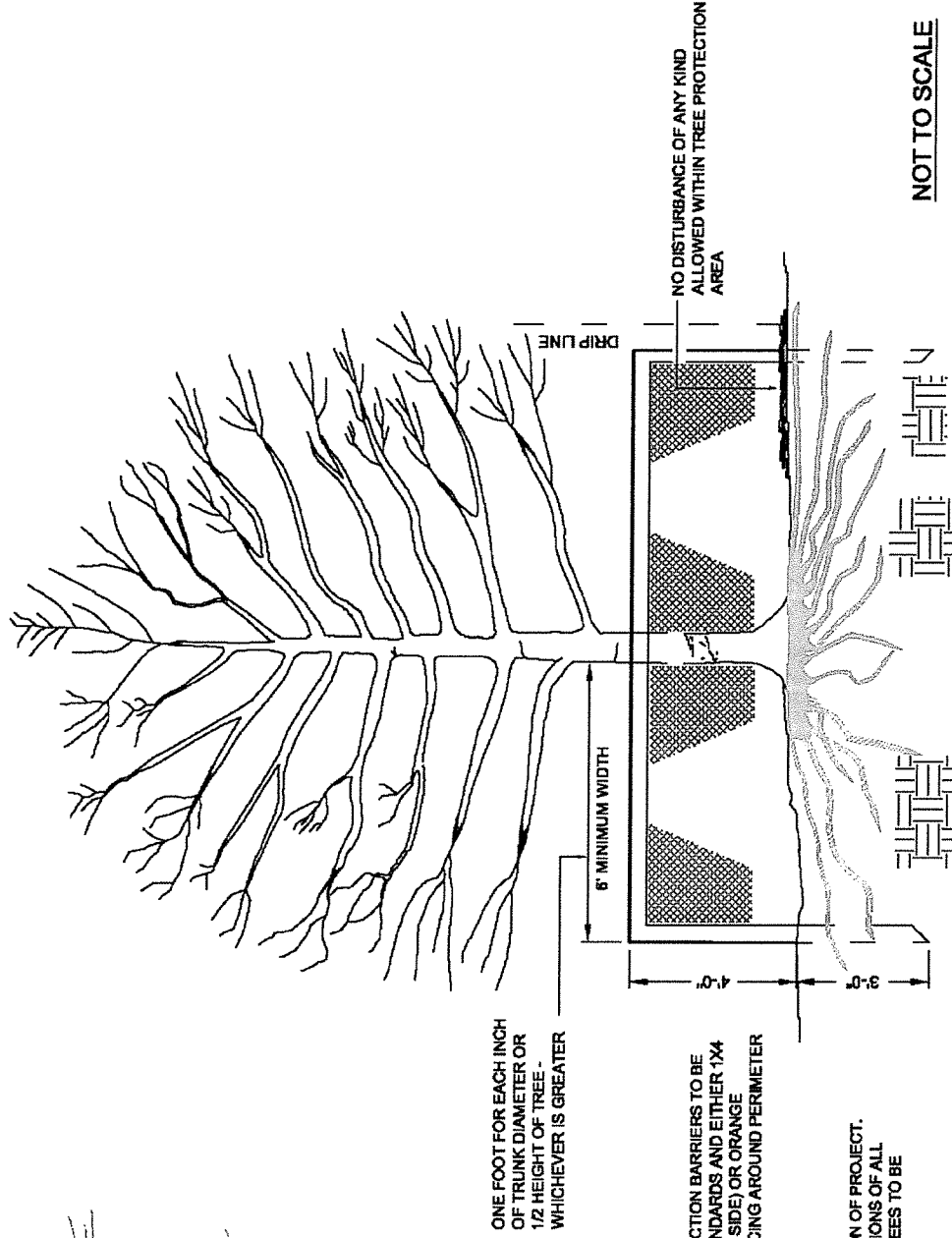
COMMERCIAL SINGLE DRIVEWAY CURB AND GUTTER

STD.
4.06

[illegible]



PLAN VIEW OF TREE PROTECTION



NOT TO SCALE

ONE FOOT FOR EACH INCH
OF TRUNK DIAMETER OR
1/2 HEIGHT OF TREE -
WHICHEVER IS GREATER

TREE PROTECTION BARRIERS TO BE
2X4 MIN. STANDARDS AND EITHER 1X4
RAILS (3 PER SIDE) OR ORANGE
SAFETY FENCING AROUND PERIMETER

- NOTES:**
1. REMOVE ALL TREE PROTECTION BARRIERS UPON COMPLETION OF PROJECT.
 2. PLANTING PLANS OR GRADING PLANS SHALL INDICATE LOCATIONS OF ALL TREE PROTECTION FOR INDIVIDUAL AND/OR CLUSTERS OF TREES TO BE PROTECTED.

TOWN OF MARSHVILLE, NC	TREE PROTECTION BARRIER		STD. 5.01		REVISIONS	
					NO	DATE
					BY	COMMENT

