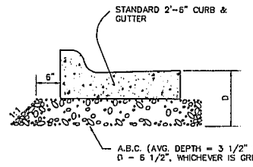
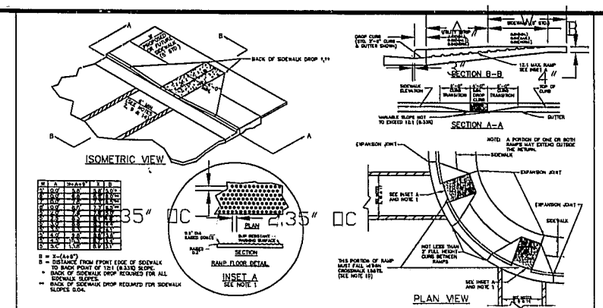


REVISIONS	
DATE	DESCRIPTION

A.B.C. UNDER 2'-6" CURB & GUTTER

STD. No. 3.02

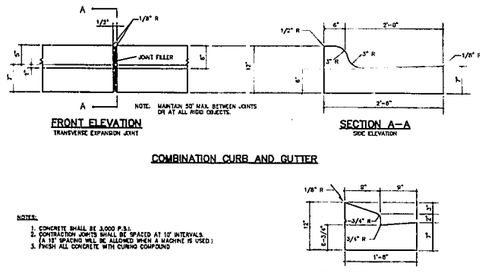


REVISIONS	
DATE	DESCRIPTION

SHEET 1 OF 2

STANDARD WHEELCHAIR RAMP

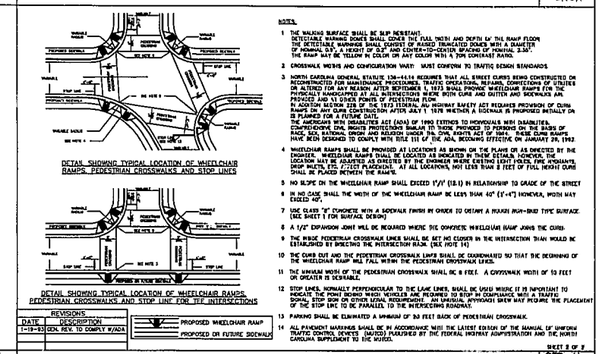
STD. No. 3.16R



REVISIONS	
DATE	DESCRIPTION
10/98	MEDIAN CURB & GUTTER ADD
10/98	RAISED VALLEY GUTTER ADD

STANDARD CONCRETE CURB AND GUTTER

STD. No. 3.11



NOTES:

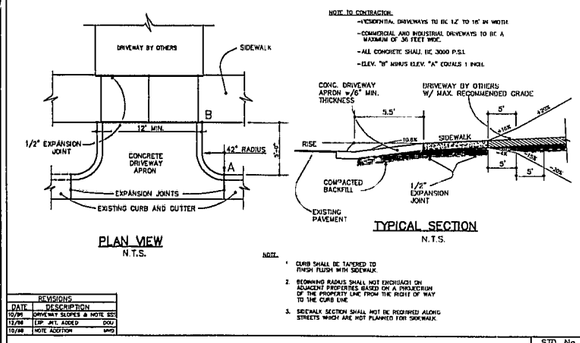
1. THE WALKING SURFACE SHALL BE SLIP RESISTANT. DETECTABLE WARNING DOMES SHALL COVER THE FULL WIDTH AND DEPTH OF THE RAMP FLOOR. THE DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9", A HEIGHT OF 0.2" AND CENTER-TO-CENTER SPACING OF NOMINAL 2.35". THE RAMP MAY BE YELLOW IN COLOR OR ANY COLOR WITH A 70% CONTRAST RATIO.
2. CROSSWALK WIDTHS AND CONFIGURATION MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. NORTH CAROLINA GENERAL STATUTE 136-44.14 REQUIRES THAT ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED SHALL BE CONSTRUCTED TO PERMIT WHEELCHAIR USERS ACCESS TO UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973. SIDEWALKS CONSTRUCTED AT INTERSECTIONS WHERE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER POINTS OF PEDESTRIAN FLOW.
IN ADDITION SECTION 228 OF THE 1973 FEDERAL AID HIGHWAY ACT REQUIRES PROVISION OF CURB RAMPS FOR ALL SIDEWALK CONSTRUCTION AFTER JULY 1 1976 WHETHER A SIDEWALK IS PROPOSED INITIALLY OR IS PLANNED FOR A FUTURE DATE.
THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 EXTENDS TO INDIVIDUALS WITH DISABILITIES, COMPREHENSIVE CIVIL RIGHTS PROTECTIONS SIMILAR TO THOSE PROVIDED TO PERSONS ON THE BASIS OF RACE, SEX, NATIONAL ORIGIN AND RELIGION UNDER PUB. LAW. CIVIL RIGHTS ACT OF 1964. THESE CURB RAMPS HAVE BEEN DESIGNED TO COMPLY WITH RULE 111 OF THE ADA, BECOMING EFFECTIVE ON JANUARY 26, 1992
4. WHEELCHAIR RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. WHEELCHAIR RAMPS SHALL BE LOCATED AS INDICATED IN THESE DETAILS. HOWEVER, THE LOCATION MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED. AT ALL LOCATIONS, NOT LESS THAN 2 FEET OF FULL HEIGHT CURB SHALL BE PLACED BETWEEN RAMPS.
5. NO SLOPE ON THE WHEELCHAIR RAMP SHALL EXCEED 1'/1' (18.1) IN RELATIONSHIP TO GRADE OF THE STREET
6. IN NO CASE SHALL THE WIDTH OF THE WHEELCHAIR RAMP BE LESS THAN 40" (3'-4") HOWEVER, WIDTH MAY EXCEED 48".
7. USE CLASS "A" CONCRETE WITH A BROOMED FINISH IN ORDER TO OBTAIN A MINIMUM HIGH-END TYPE SURFACE (SEE SHEET 1 FOR SURFACE DESIGN)
8. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB.
9. THE WIDE PEDESTRIAN CROSSWALK LINES SHALL BE SET NO CLOSER IN THE INTERSECTION THAN WOULD BE ESTABLISHED BY EXTENDING THE INTERSECTION RADII. (SEE NOTE 14)
10. THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SHALL BE COORDINATED SO THAT THE BEGINNING OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
11. THE MINIMUM WIDTH OF THE PEDESTRIAN CROSSWALK SHALL BE 8 FEET. A CROSSWALK WIDTH OF 10 FEET OR GREATER IS DESIRABLE.
12. STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH WHERE MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTING ROADWAY.
13. PARKING SHALL BE ELIMINATED A MINIMUM OF 30 FEET BACK OF PEDESTRIAN CROSSWALK.
14. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO SAID MANUAL.

REVISIONS	
DATE	DESCRIPTION
1-19-93	GEN. REV. TO COMPLY W/ADA

SHEET 2 OF 2

STANDARD WHEELCHAIR RAMP

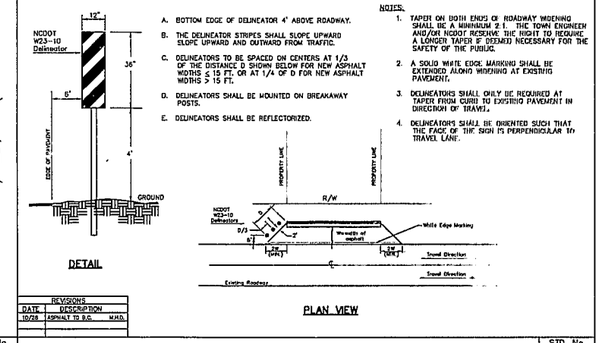
STD. No. 3.16



REVISIONS	
DATE	DESCRIPTION
10/95	DRIVEWAY SLOPES & NOTE ED
12/98	DIP JNT. ADDED DOU
12/98	NOTE ADDITION SMD

STANDARD DRIVEWAY APRON

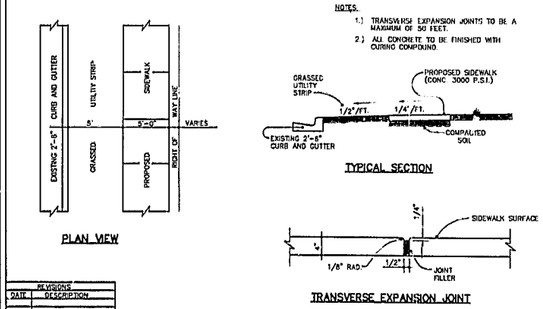
STD. No. 3.15



REVISIONS	
DATE	DESCRIPTION
10/98	ASPHALT TO B.C. MMD

STANDARD PAVEMENT WIDENING TAPER AND MARKINGS

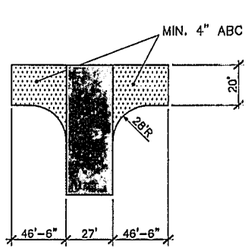
STD. No. 3.17



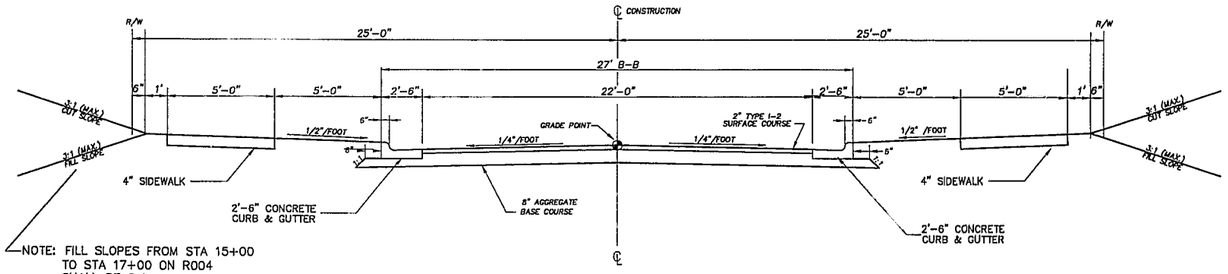
REVISIONS	
DATE	DESCRIPTION

STANDARD CONCRETE SIDEWALK

STD. No. 3.09



TEMPORARY FIRE DEPARTMENT TURNAROUND



TYPICAL ROADWAY SECTION

R004 & R005 NTS

NOTES: 1. THE OWNER MAY OPT TO LEAVE THE STREETS ONE INCH LOW UNTIL THE INFRASTRUCTURE IN THE SUBDIVISION IS COMPLETE. THIS OPTION WOULD REQUIRE THAT THE APPROVED PAVEMENT DESIGN BE INCREASED BY ONE-HALF INCH OF ASPHALT.

NORTH CAROLINA PROFESSIONAL SEAL 16499 ENGINEER JAMES E. CANFIELD
9/11/02

WITHERS & RAVENEL Engineering & Surveying, Inc.
111 MacKenan Drive · Cary, N.C. 27511
919-469-3340 FAX 919-467-6008

Revisions			
No.	Description	Date	By

CARY PARK PARCEL SF-8a
CARY PARK P.U.D.

ROADWAY DETAILS -- AS-BUILT

Designer W&R		Scale NTS	
Drawn By JRJ		Date 6/14/02	
Checked By JEC		Job No. 201135	

CAD File SHT7.DWG
Sheet No. 8 of .