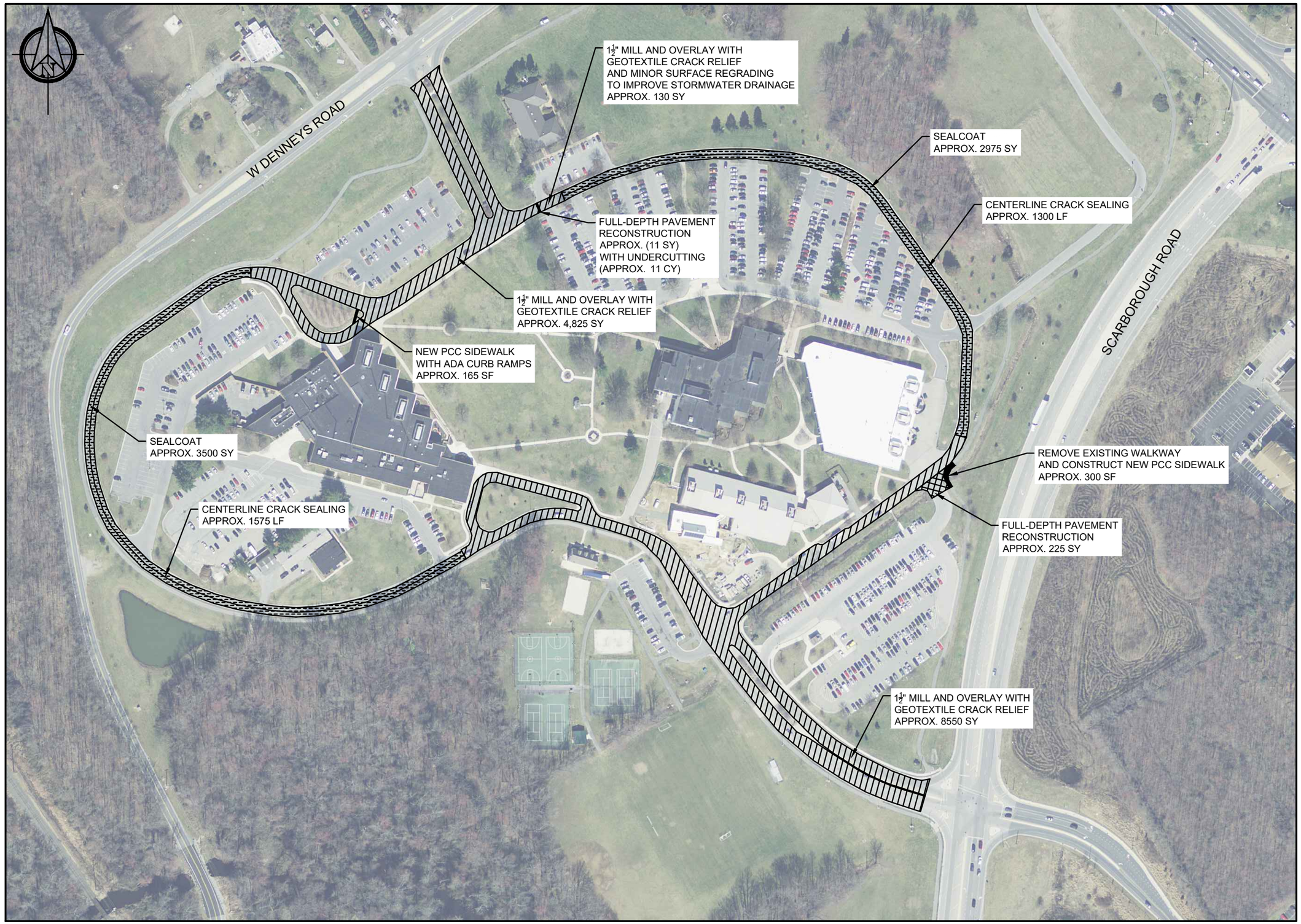


DUFFIELD ASSOCIATES
Soil, Water & the Environment
5400 LIMESTONE ROAD
WILMINGTON, DE 19808-1232
TEL 302.239.6634
FAX 302.239.8485
OFFICES IN DELAWARE, MARYLAND
PENNSYLVANIA AND NEW JERSEY
E-MAIL: DUFFIELD@DUFFNET.COM

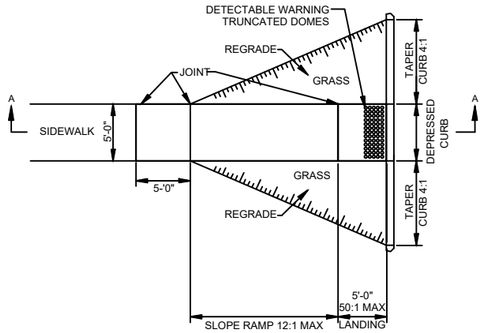
DESIGNED BY: APC
DRAWN BY: APC
CHECKED BY: JFC
FILE: 11807.GC-Pavement

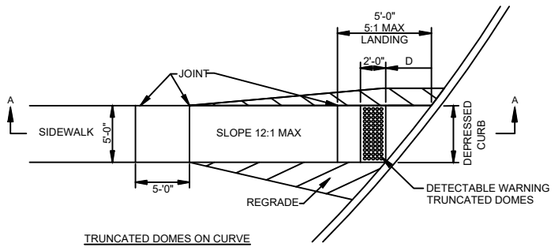
SITE PLAN
PAVEMENT IMPROVEMENTS

DELAWARE TECHNICAL COMMUNITY COLLEGE
CHARLES L. TERRY JR. CAMPUS

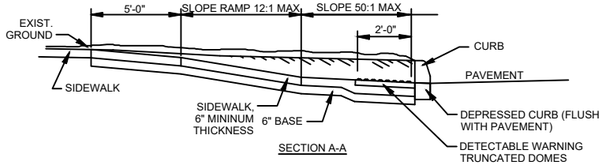
CITY OF DOVER ~ KENT COUNTY ~ DELAWARE

DATE: 06 MARCH 2020
SCALE: 1" = 200'
PROJECT NO. 11807.GC
SHEET: 1 OF 2

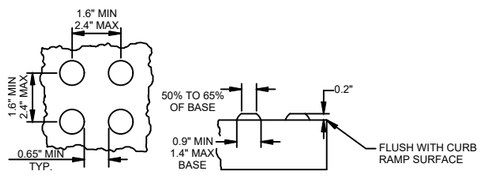




TRUNCATED DOMES ON CURVE



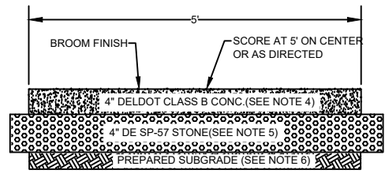
SECTION A-A



DETECTABLE WARNING TRUNCATED DOME DETAILS

DETAIL: ADA SIDEWALK CURB RAMP

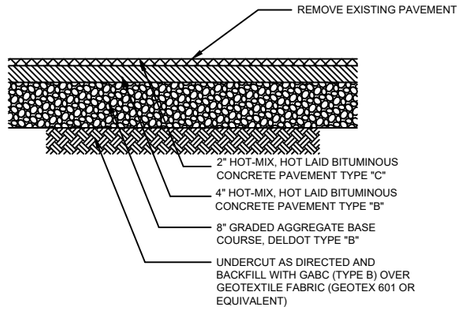
SCALE: NO SCALE



NOTES:
1. SCORE MARK IN 5-FOOT SQUARES, USE PREFORMED EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 15 FEET.
2. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER DELDOT SPECIFICATIONS.
3. MINIMUM SIDEWALK CROSS SLOPE = 1%
   MAXIMUM SIDEWALK CROSS SLOPE = 2%
4. PLACE DELAWARE SP-57 STONE AS NECESSARY TO ACHIEVE GRADE.
5. PROOF ROLL SUBGRADE, COMPACT TO 95% STANDARD PROCTOR

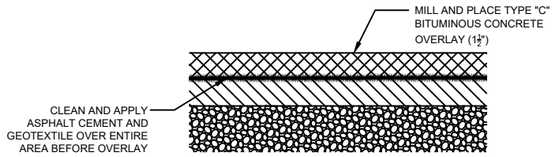
DETAIL: SIDEWALK SECTION

SCALE: NO SCALE



DETAIL: FULL-DEPTH RECONSTRUCTION

SCALE: NO SCALE



NOTE: GEOTEXTILE/ASPHALT CEMENT OVERLAY SYSTEM SHALL BE TENCATE MVP500 PAVING FABRIC OR EQUIVALENT. ASPHALT CEMENT SHALL BE AC-20 WITH RECOMMENDED ALUMINUM APPLICATION RATE OF 0.25 GAL/SY. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTALLATION GUIDELINES.

DETAIL: MILL AND PAVEMENT/GEOTEXTILE OVERLAY

SCALE: NO SCALE

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING AND LOCATION OF UTILITIES BEFORE COMMENCING WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISS UTILITY OF DELMARVA (TELEPHONE 1.800.282.8555) NO LESS THAN 72 HOURS PRIOR TO INITIATING INTRUSIVE WORK. THE CONTRACTOR SHALL CONTACT THE OWNERS OF UTILITIES AT RISK AS A RESULT OF CONDUCTING THE WORK HEREIN. THE CONTRACTOR SHALL CONSULT WITH UTILITY OWNERS TO OBTAIN THE MOST ACCURATE INFORMATION AVAILABLE WITH REGARD TO UTILITY ELEVATION AND LOCATION.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA GUIDELINES AND THE HEALTH AND SAFETY REQUIREMENTS OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXCAVATION SAFETY DURING THE PERIOD OF CONSTRUCTION. CONTROL OF GROUNDWATER SEEPAGE AND STORMWATER RUNOFF INTO EXCAVATIONS SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
3. EXCEPT AS MODIFIED BY THESE NOTES AND THE DETAILED DRAWINGS, ALL WORK SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (MOST RECENT VERSION).
4. ALL EXCESS EXCAVATED MATERIAL, INCLUDING ORGANIC MATERIAL, SOIL, DEBRIS, CONCRETE, ASPHALT AND ROCK SHALL BE DISPOSED OF BY THE CONTRACTOR OFF SITE AT NO ADDITIONAL COST TO THE OWNER.
5. ALL WORK SHALL BE PERFORMED AS COORDINATED WITH OWNER. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO DETERMINE THE SEQUENCE OF WORK.
6. THE COMPLETED PAVEMENT SURFACE SHALL BE GRADED TO MATCH THE SURROUNDING GRADES AND SHAPED TO PROVIDE FOR POSITIVE SURFACE DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH FINAL SITE GRADING THAT PROVIDES POSITIVE SITE DRAINAGE AT ALL AREAS ON THE FINISHED PAVEMENT SURFACE.
7. MATERIALS

   THE CONTRACTOR SHALL PROVIDE ALL PERMITS, TOOLS, EQUIPMENT, MATERIALS, LABOR AND WORK FOR THE IMPROVEMENT OF THE EXISTING PAVED AREAS AS INDICATED. ALL WORK DONE UNDER THIS ITEM SHALL BE PERFORMED IN A SAFE AND WORKMANLIKE MANNER. MATERIALS REQUIRED INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

   BITUMINOUS CONCRETE SURFACE COURSE AND STRUCTURAL OVERLAY: DELDOT TYPE 'C,' HOT MIXED, HOT LAID BITUMINOUS CONCRETE, 160 GYRATIONS, PG64-22 (DELDOT STANDARD SPECIFICATION SECTIONS 401 AND 1014)

   BITUMINOUS CONCRETE BINDER COURSE: DELDOT TYPE 'B,' HOT MIXED, HOT LAID BITUMINOUS CONCRETE, 160 GYRATIONS, PG 64-22 (DELDOT STANDARD SPECIFICATION SECTIONS 401 AND 1014)

   GRADED AGGREGATE BASE COURSE AND UNDERCUT BACKFILL: DELDOT TYPE 'B,' GRADED AGGREGATE (DELDOT STANDARD SPECIFICATION SECTION 1005)

   GEOTEXTILE FABRIC (UNDERCUT AREAS): MINIMUM 6 OUNCE NON-WOVEN GEOTEXTILE (GEOTEX 601 OR EQUIVALENT)

   TACK COAT: CSS-1-H (DELDOT STANDARD SPECIFICATION SECTION 1011)

   BITUMINOUS CONCRETE JOINT SEALANT: HOT POURED JOIN SEALANT (DELDOT STANDARD SPECIFICATION 1042)

   PORTLAND CEMENT CONCRETE: (DELDOT STANDARD SPECIFICATION SECTION 705 AND 1022) 4.0 - 7.0% REQUIRED AIR CONTENT; CLASS B - 3000 DESIGN COMPRESSIVE STRENGTH FOR CURB AND SIDEWALK. EXPANSION JOINT MATERIAL SHALL CONFORM TO ASSHTO M153, TYPE III.
8. CONSTRUCTION METHODS

   PRIOR TO THE PLACEMENT OF ANY BITUMINOUS CONCRETE, THE EXPOSED BUTT JOINT EDGES, ABUTTING CURBS, SIDEWALKS, AND EXISTING PAVEMENT SHALL BE CLEAN AND A TACK COAT APPLIED TO PROVIDE FULL COVERAGE

   THE INTERFACE BETWEEN NEW AND EXISTING PAVEMENT SHALL BE SAWCUT TO A DEPTH OF APPROXIMATELY ½ INCH AND BE FILLED WITH A HOT POURED JOIN SEALANT.

   BITUMINOUS CONCRETE FULL DEPTH RECONSTRUCTION

   ALL LOOSE MATERIAL AND SUBGRADE SHALL BE PROOFROLLED BY A MINIMUM 10-TON VIBRATORY ROLLER OR A FULLY LOADED TANDEM DUMP TRUCK (OR SMALLER MECHANICAL COMPACTOR SUCH AS A PLATE TAMP, JUMPING JACK OR WALK BEHIND ROLLER) IN THE PRESENCE OF A QUALIFIED GEOTECHNICAL ENGINEER ACTING AS THE OWNER'S REPRESENTATIVE IN THE FIELD AND COMPACTED TO 95% STANDARD PROCTOR. ANY SOFT, WET, OR YIELDING ARAS ENCOUNTERED WITHIN THE PAVEMENT AREAS SHALL BE UNDERCUT TO FIRM SUBGRADE AND BACKFILLED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. FOR AREAS WHERE UNDERCUTTING IS REQUIRED, THE SUBGRADE SHALL BE IMMEDIATELY COVERED BY THE GEOTEXTILE FABRIC, PULLED TIGHT, AND LAPPED A MINIMUM OF 12 INCHES. GRADED AGGREGATE BACKFILL FOR UNDERCUTS SHALL BE PLACED IN MAXIMUM 8 INCH LIFTS AND COMPACTED WITH A MINIMUM OF 3 PASSES WITH A 10-TON VIBRATORY ROLLER (OR SMALLER MECHANICAL COMPACTOR) IN THE PRESENCE OF A QUALIFIED GEOTECHNICAL ENGINEER PROVIDED BY THE OWNER.

   THE COMPACTED PAVEMENT SURFACE SHALL BE GRADED TO MATCH THE SURROUNDING GRADES AND SHAPED TO PROVIDE FOR POSITIVE DRAINAGE. THE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH FINAL SITE GRADING THAT PROVIDES POSITIVE SITE DRAINAGE AT ALL AREAS ON THE FINISHED PAVEMENT SURFACE. FOLLOWING ITS PLACEMENT, THE SURFACE AND BINDER COURSES SHALL BE COMPACTED IN ACCORDANCE WITH DELDOT STANDARD SPECIFICATION REQUIREMENTS (MINIMUM OF 92% COMPACTION OF THE THEORETICAL VOIDLESS DENSITY (TVD) FOR SURFACE COURSE AND MINIMUM OF 90% COMPACTION OF THE TVD FOR BINDER COURSE).

   PAVEMENT STRIPING AND MARKINGS SHALL MATCH EXISTING.

   SITE GRADING

   LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED TO INCLUDE 4" OF TOPSOIL, PERMANENT SEEDING (DNREC E&S CONTROL HANDBOOK MIX NO. 3), AND EROSION CONTROL MATTING (STRAW AND NETTING, LANDLOK S1 OR EQUIVALENT)
9. QUANTITIES INDICATED HEREIN ARE BASED ON FIELD MEASUREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RECONSTRUCTION OF THE ENTIRE AREA INDICATED ON THE DRAWINGS. QUANTITIES ARE APPROXIMATE. UNDERCUTTING WILL BE DELINEATED IN THE FIELD BY THE OWNER OR OWNER'S REPRESENTATIVE.
10. THESE DRAWINGS SHALL ONLY BE USED IN CONJUNCTION WITH THE PROJECT MANUAL TITLED "SPECIFICATIONS FOR PAVEMENT IMPROVEMENTS AT CHARLES L. TERRY JR. CAMPUS," CONTRACT NO. C900406 PAV, PREPARED BY DUFFIELD ASSOCIATES, INC., DATED MARCH 6, 2020.

SIDEWALK NOTES:

1. FOR ALTERATIONS WHERE THE EXISTING ROAD PROFILE IS STEEPER THAN 7% AND A 12:1 MAXIMUM SLOPE RAMP WILL NOT MEET THE SIDEWALK GRADE WITHIN A LENGTH OF 15'-0", THE RAMP LENGTH MAY BE LIMITED TO 15'-0" AT A CONSTANT SLOPE, AND ALLOWED TO EXCEED 12:1.
2. RAMP AND SIDEWALK CROSS SLOPE SHALL BE 50:1 (2%) MAXIMUM.
3. A 6:1 GRADE IS REQUIRED FOR A MINIMUM OF 2'-0" IMMEDIATELY ADJACENT TO RAMP. IF THAT IS NOT FEASIBLE, THEN A CURB OR RETAINING WALL SHOULD BE USED TO ELIMINATE THE NEED FOR THE STEEP SLOPE.
4. THE MAXIMUM DIFFERENCE IN GRADE BETWEEN THE CURB RAMP OR MODIFIED CURB AT THE FLOW LINE AND THE PAVEMENT SHALL BE 13%, HOWEVER 11% IS PREFERRED.
5. LANDING AREA SHALL BE DELINEATED WITH JOINTS.
6. CONSTRUCTION JOINTS ARE REQUIRED ON RAMPS AT THE INTERVAL NOT GREATER THAN 15 FEET. HOWEVER, EXPANSION MATERIAL SHALL NOT BE USED IN THE RAMP SECTION.
7. IF THE RUNNING SLOPE IS LESS THAN 20:1 (5%) THEN THE 50:1 (2%) LANDING CAN BE OMITTED. DETECTABLE WARNING SYSTEM MUST STILL BE PLACED.
8. FOR INSTALLATIONS ON A RADIUS AND WHEN DIMENSION D IS LESS THAN 5'-0", THE DETECTABLE WARNING TRUNCATED DOMES SYSTEM SHALL BE INSTALLED AT THE INTERSECTION OF THE BACK OF THE CURB AND THE BEGINNING OF THE FULL WIDTH OF THE PEDESTRIAN ACCESS ROUTE. THE DOMES SHALL BE INSTALLED PERPENDICULAR TO THE PATH OF THE PEDESTRIAN TRAVEL AND BE THE FULL WIDTH OF THE PEDESTRIAN ACCESS ROUTE.
9. ENTIRE DEPRESSED AREA OF CURB EXCLUDING THE TAMPERED CURBS SHALL HAVE DETECTABLE WARNING TRUNCATED DOMES.
10. THE DETECTABLE WARNING SYSTEM SHALL EXTENDED AT LEAS 2'-0" IN LENGTH, MEASURED IN THE DIRECTION OF TRAVEL, FROM THE BACK OF THE CURB ALONG THE PEDESTRIAN CONNECTION SURFACE.

DUFFIELD ASSOCIATES
Soil, Water & the Environment
5400 LIMESTONE ROAD
WILMINGTON, DE 19808-1232
TEL 302.239.6634
FAX 302.239.8485
OFFICES IN DELAWARE, MARYLAND
PENNSYLVANIA AND NEW JERSEY
E-MAIL: DUFFIELD@DUFFNET.COM

DESIGNED BY: APC
DRAWN BY: APC
CHECKED BY: JFC
FILE: 11807.GC-Pavement

DETAILS AND NOTES
PAVEMENT IMPROVEMENTS
DELAWARE TECHNICAL COMMUNITY COLLEGE
CHARLES L. TERRY JR. CAMPUS
CITY OF DOVER ~ KENT COUNTY ~ DELAWARE

DATE: 06 MARCH 2020
SCALE: N.T.S.
PROJECT NO. 11807.GC
SHEET: 2 OF 2