

1400-73

RESOLUTION NO. 2005-09

**BOROUGH OF DUBLIN
BUCKS COUNTY, PENNSYLVANIA**

**A RESOLUTION SETTING STANDARDS FOR THE
SPECIFICATIONS OF SIDEWALKS, CURBS AND APRONS
WITHIN THE BOROUGH OF DUBLIN.**

**THE STANDARDS AND SPECIFICATIONS ARE ATTACHED
AND PROVIDED BY BOROUGH ENGINEER, CKS ENGINEERS.**

**DUBLIN BOROUGH
119 MAPLE AVENUE
PO BOX 52
DUBLIN, PENNSYLVANIA 18917-0052**

**CONCRETE CURB, DRIVEWAY APRON
AND SIDEWALK**

STANDARD CONSTRUCTION SPECIFICATIONS

**DUBLIN BOROUGH,
BUCKS COUNTY, PENNSYLVANIA**

APRIL 2005

**CKS ENGINEERS, INC.
88 SOUTH MAIN STREET
DOYLESTOWN, PA 18901**

REF. NO. : 1400-73

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SECTION I - PLAIN CEMENT CONCRETE CURB AND SIDEWALK

- 1.01 GENERAL. The Contractor shall furnish all labor, materials, equipment and incidentals necessary to perform all curb and sidewalk construction, including excavation, backfill and restoration. The contractor shall obtain all necessary Permits from Dublin Borough (hereinafter referred to as the "Borough"). Copies of all applicable Permits are to be on site at all times. All work is subject to Borough inspection. Inspections are to be scheduled through the Borough a minimum of 48 hours in advance.

All curb and sidewalk required to be removed shall be saw cut at the locations marked by the Borough Engineer (hereinafter referred to as the "Engineer") and disposed of by the Contractor.

After proper backfilling and compaction of all areas where existing curb and sidewalk were removed, excavate to required depth, then compact the material upon which the curb or sidewalk is to be constructed to a firm, even surface. All proposed curb or sidewalk is to match the line and grade of the existing curb or sidewalk as determined by the Engineer.

Following removal of the forms, backfill the voids in front and back of the curb and sidewalk as per the Construction Details. The front of the curb shall be backfilled and compacted to the pavement subgrade elevation. The back of the curb shall be backfilled and compacted to the top of the curb. All sidewalk in unimproved areas shall be backfilled with topsoil. All sidewalk abutting driveways shall be backfilled as per the details shown on Construction Detail CD-3.

- 1.02 MATERIAL. All materials for curb and sidewalk construction shall conform to the requirements of PennDOT Specifications Publication 408, Section 630.2 (latest edition).

- 1.03 CONSTRUCTION. All construction of concrete curb and sidewalk shall conform to the requirements of PennDOT Specifications Publication 408, Sections 630.3 and 676 (latest edition).

All concrete shall be Class A, air entrained mix (5 percent) with a maximum 4-inch slump. No water may be added to the mix or finish. Concrete tickets are to be provided for each pour.

All concrete shall be cure sealed in accordance with PennDOT Specifications Publication 408, latest edition. Aquaron 2000 "or equal" shall be used.

All concrete curb shall be 7" x 8" x 18" in size, except as otherwise directed by the Engineer, and shall be battered as shown on the Construction Details.

Two details are provided for curb construction. The optional "Wooden Form" method may only be used for driveway depression replacements and full curb sections measuring 10 feet or less.

All concrete sidewalk, including handicap ramps, shall be 4 inches thick with a 4-inch 2B clean stone insulation course. All concrete driveway aprons shall be 6 inches thick with 6 x 6 wire mesh with a 4-inch 2B clean stone insulation course.

Five-foot tapered end sections are required at the terminus of all curb.

Reinforcing rods (two No. 5 rods) are to be placed at all driveway depressions and at the connection to all inlets.

All restoration, including roadway, driveway and unimproved areas, shall be completed in accordance with Section II of these Specifications.

1.04

TESTING

The Engineer, at his option, may require the Contractor to perform testing of the concrete. Testing shall include slump, air-entrainment, and compressive strength. All testing shall be in accordance with PennDOT Specifications Publication 408 (latest edition). All testing shall be at Contractor's expense.

SECTION II - RESTORATION

2.01 GENERAL. This work shall include all roadway, driveway and yard restoration incidental to the concrete replacements.

2.02 ROADWAY AND DRIVEWAY RESTORATION. This work shall include all restoration work in roadways and driveways required as part of curb and sidewalk removal and replacement.

The 2A Material subbase and backfill is to be placed to the depths shown on the Construction Details. The stone base course shall be free from mud and all foreign material and shall be graded and compacted to the satisfaction of the Engineer.

The ID-2 binder course shall be placed to the dimensions and depths shown on the Construction Details and compacted. The compaction equipment must be sized to fit in the spaces shown on the Construction Details and be capable of meeting the PennDOT compaction requirements.

The ID-2 wearing surface for driveway repairs shall be applied to a compacted thickness of 1 inch. Prior to the application of the wearing surface, the binder paving is to be cleaned and tack coated to the satisfaction of the Engineer.

All pavement joints are to be saw cut prior to the excavation of the curb replacements and concrete driveway aprons. Any pavement sections damaged during the removal or replacement of the curb and concrete apron sections shall be re-cut to the satisfaction of the Engineer.

After completion of the wearing surface, the contractor shall seal all pavement joints (curb, roadway and driveway) with AC-20 Asphalt Cement, as per Section 705.4.c of PennDOT Publication 408 (latest edition) for Bituminous Materials. The width of all joint seals shall be 6 inches in driveways and 12 inches in roadways.

2.03 UNIMPROVED AREA RESTORATION.

a. GRADING, TOPSOILING AND SEEDING

Grading and topsoiling shall be accomplished over the entire unimproved area disturbed during construction. Topsoil shall be placed to a minimum depth of 4 inches over the subgrade surface of the disturbed area. Topsoil shall be of good quality, free from stones, clay or debris.

All work shall be in accordance with Sections 802 and 804 of PennDOT Specifications Publication 408, latest edition.

The Contractor must maintain all areas. Any areas which do not grow must be topsoiled and reseeded.

b. SEEDING SPECIFICATIONS

GROUND COVER	APPLICATION	MIX	RATE
FORMULA 'B'	LAWN AREAS	18% PERENNIAL RYE, PENNFINE 30% RED FESCUE, PENNLAWN 52% KENTUCKY BLUEGRASS	7 LBS/1,000 S.F.

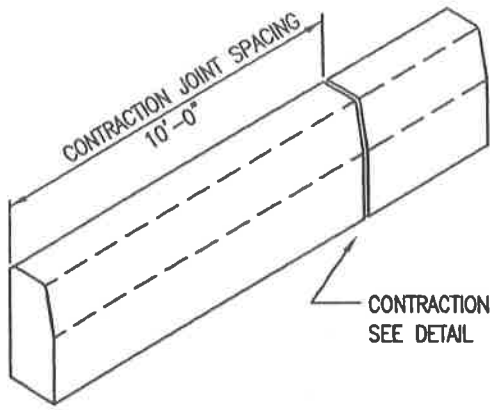
c. LIMESTONE AND FERTILIZER SPECIFICATIONS

1. Pulverized Agricultural Limestone, 800 lbs./1000 SY
2. 10-20-10 Analysis Commercial Fertilizer, 192 lbs./1000 SY

SECTION III

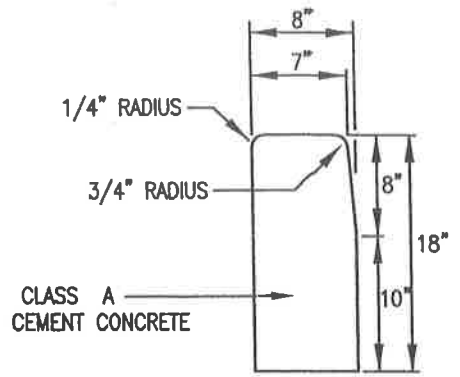
CONSTRUCTION DETAILS

1. STANDARD CURB DETAILS
2. OPTIONAL "WOODEN FORM" CURB DETAILS
3. CURB RESTORATION DETAILS
4. CONCRETE SIDEWALK DETAIL
5. CONCRETE DRIVEWAY APRON DETAIL
6. HANDICAP RAMP DETAIL



ELEVATION

CONTRACTION JOINT
SEE DETAIL A



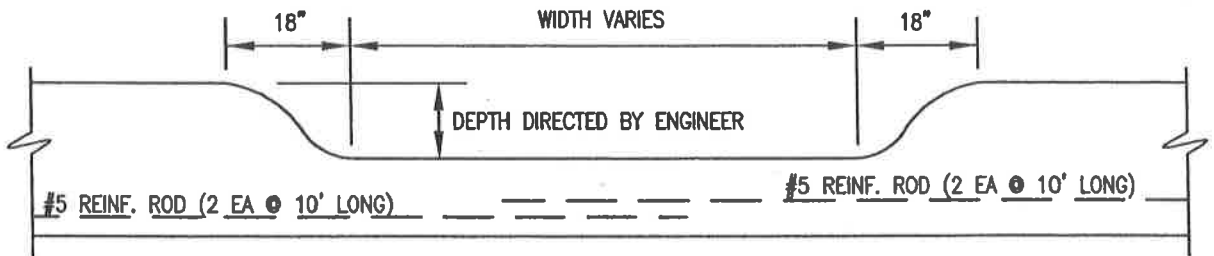
TYPICAL CROSS SECTION



DETAIL A
CONTRACTION JOINT

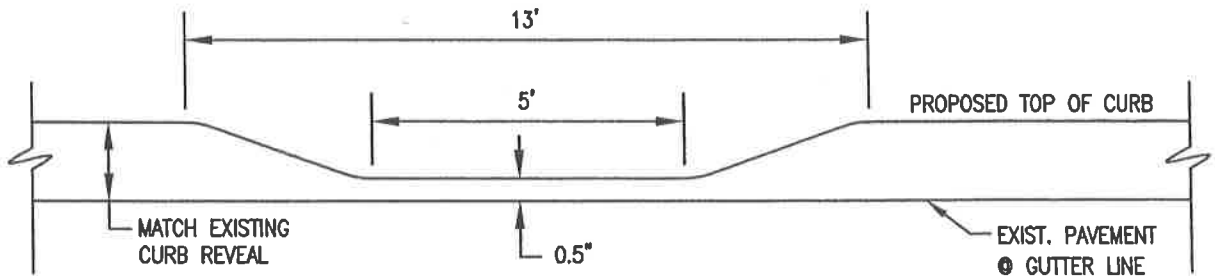
PLAIN CEMENT CONCRETE CURB

N.T.S.



DEPRESSED CURB

N.T.S.

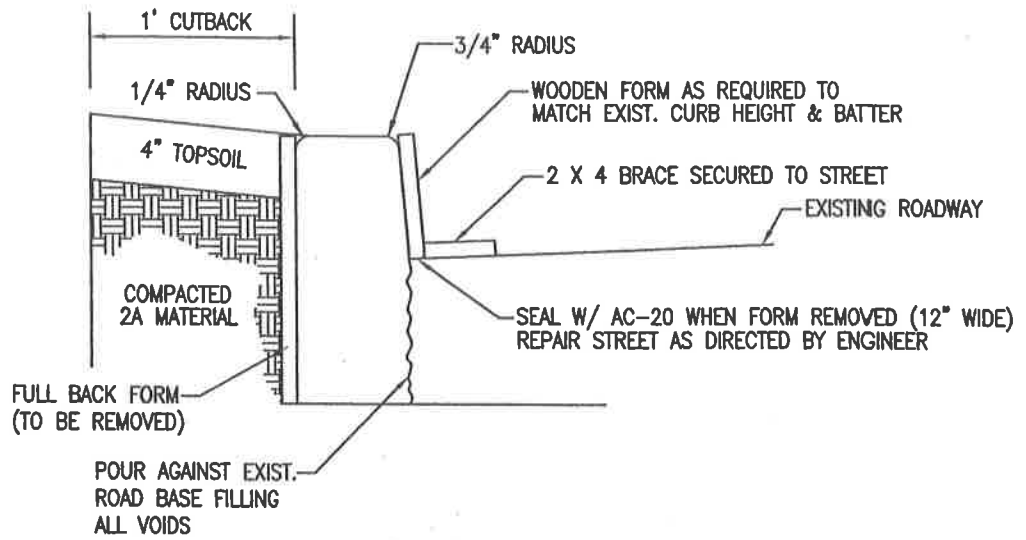


DEPRESSED CURB @ CROSS WALK
(HANDICAP RAMP)

N.T.S.

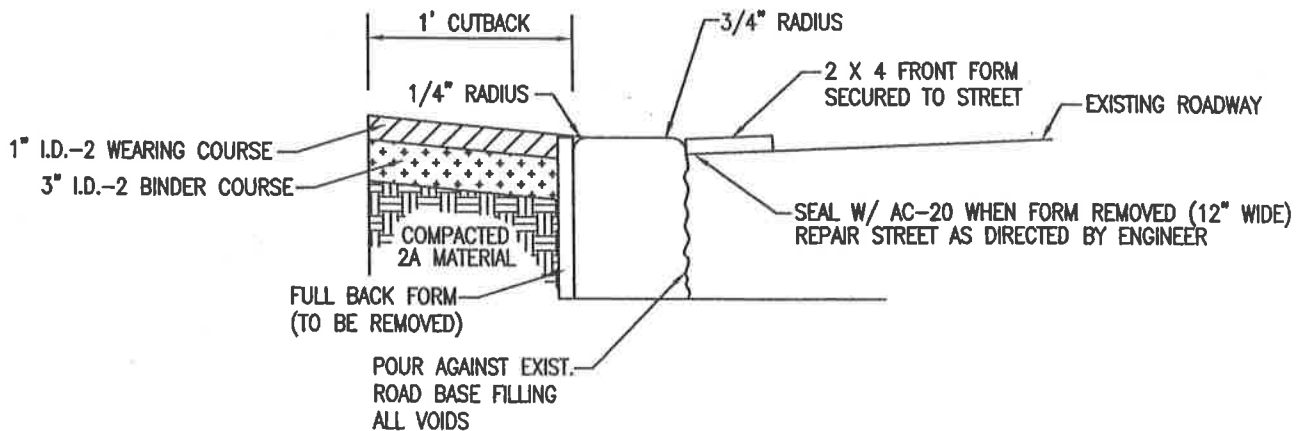
STANDARD CURB DETAILS

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CONCRETE CURB DETAIL – YARD AREA

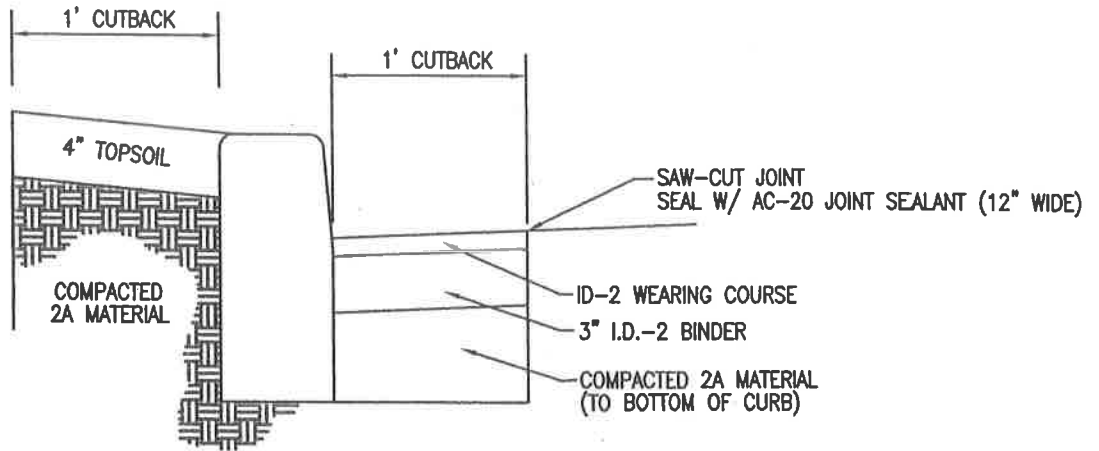
N.T.S.



CONCRETE CURB DETAIL – DRIVEWAY DEPRESSION

N.T.S.

OPTIONAL "WOODEN FORM" METHOD

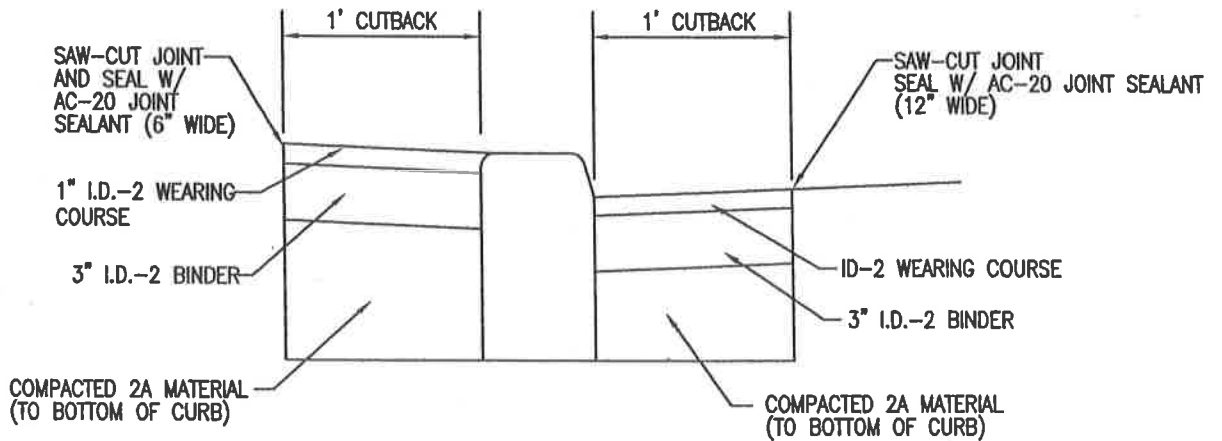


CONCRETE CURB RESTORATION DETAIL – YARD AREA

N.T.S.

NOTE:

- 1.) REFER TO CD-2 FOR OPTIONAL "WOODEN FORM" METHOD CURB RESTORATION REQUIREMENTS



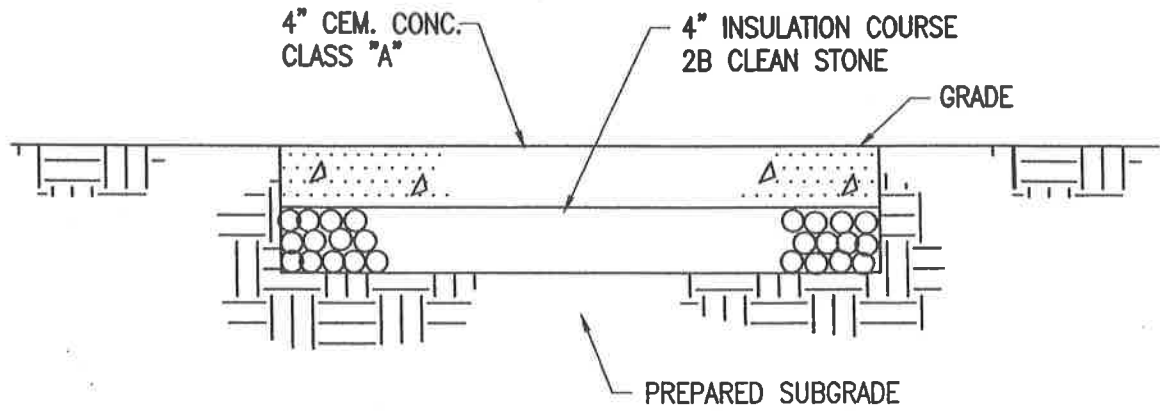
CONCRETE CURB RESTORATION DETAIL DRIVEWAY DEPRESSION

N.T.S.

NOTE:

- 1.) REFER TO CD-2 FOR OPTIONAL "WOODEN FORM" METHOD CURB RESTORATION REQUIREMENTS

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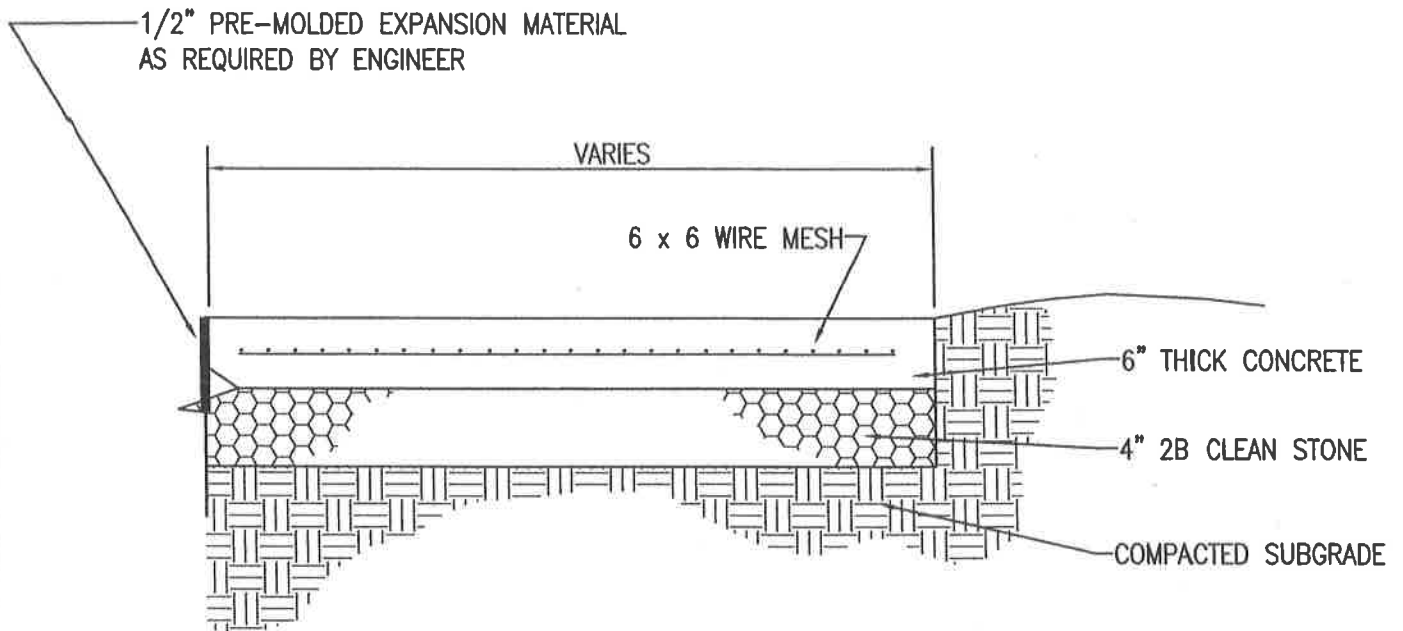


SIDEWALK DETAIL

N.T.S.

NOTES:

1. WIDTH AND CROSS SLOPE TO MATCH EXISTING. $1/4"$ PER FOOT CROSS-SLOPE AND 4'-0" MIN. SETBACK REQUIRED FOR NEW CONSTRUCTION.
2. ALL DISTURBED AREAS TO BE BACKFILLED WITH TOPSOIL.

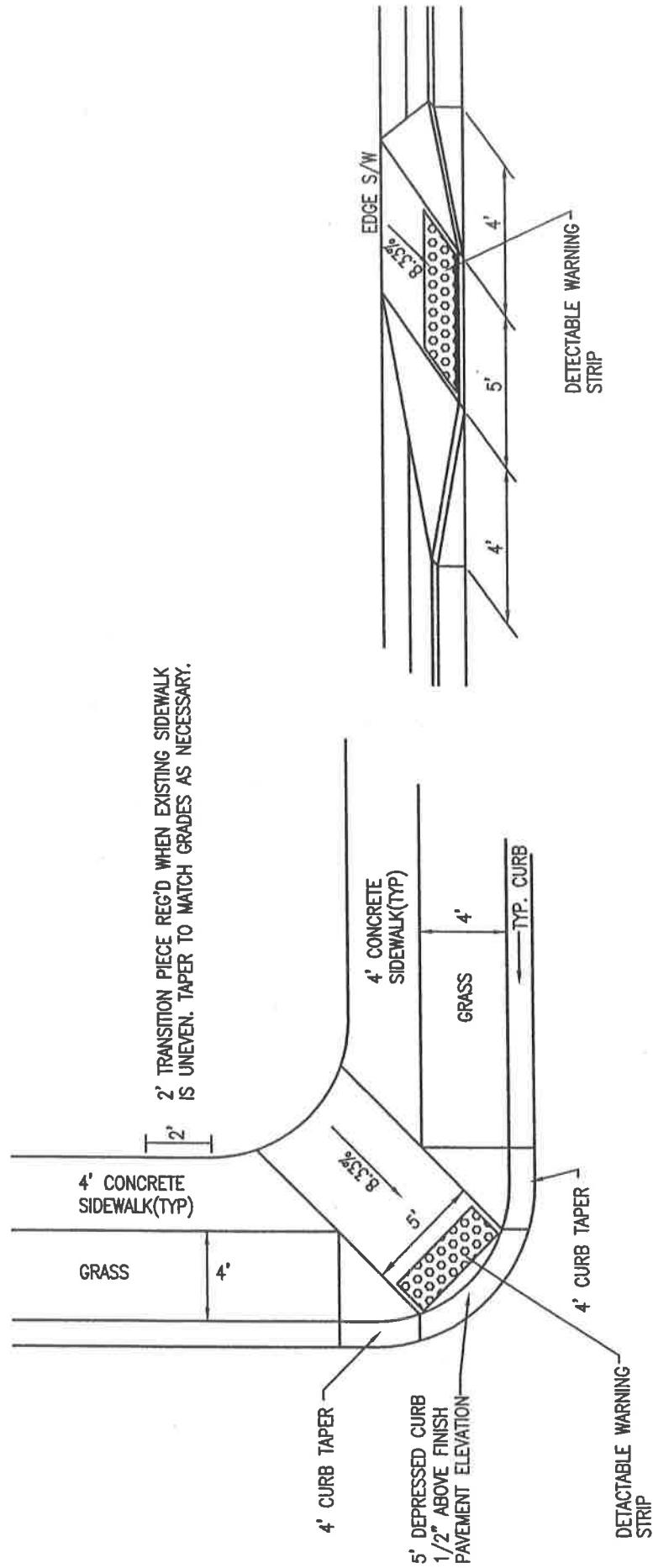


TYPICAL CONCRETE DRIVEWAY APRON

N.T.S.

NOTES:

- 1) WIDTH TO MATCH EXISTING APRON
- 2) SLOPE TO MATCH EXISTING DRIVEWAY AND NEW CURB ELEVATIONS AS DETERMINED BY THE ENGINEER. 1/4" PER FOOT CROSS-SLOPE AND 4'-0" MINIMUM SETBACK REQUIRED FOR NEW CONSTRUCTION.
- 3) RESTORE ALL PAVED DRIVEWAYS WITH SAME MATERIALS REQUIRED FOR CURB DRIVEWAY DEPRESSION REPLACEMENTS. (SEE CD-3).



2' TRANSITION PIECE REQ'D WHEN EXISTING SIDEWALK IS UNEVEN. TAPER TO MATCH GRADES AS NECESSARY.

DETAIL-- HANDICAP RAMP
N.T.S.


RESOLVED this 27th day of June, 2005



DUBLIN BOROUGH COUNCIL

By: 
Robert M. Pellegrino, President

Attested by:


Paul A. Williams, Secretary