

STANDARD SIDEWALK REPLACEMENT/INSTALLATION DETAIL

NOTES:

1. SIDEWALK WIDTH - 5'-0", REPLACE LENGTH JOINT TO JOINT
2. FORM OUTSIDE EDGES AND JOINTS WITH 1/4" RADIUS EDGING TOOL.
3. FORM TRANSVERSE DUMMY JOINTS @ 5 FOOT INTERVALS. APPROX. 1/8" WIDE AND AT LEAST 1 INCH DEEP
4. WHEN BUTTING INTO EXISTING CONCRETE, SAW CUT CONCRETE AND USE 1/2" PREMOLDED EXPANSION FILLER FULL DEPTH OF SIDEWALK.
5. EXPANSION JOINT @ 20'-11" MAX. SPACING. SEAL JOINTS WITH APPROVED CAULKING MATERIAL.
6. PROTECT WET/NEW CONCRETE FROM FREEZING
7. OPTIONAL: "FIBERME511" PARTICLE REINFORCEMENT
8. OPTIONAL: CONCRETE CURING COMPOUND
9. WHENEVER POSSIBLE, SIDEWALK SURFACE SHOULD BE SLOPED FROM BACK TO FRONT AT 1/4" per FOOT TO DRAIN TOWARDS STREET

BOROUGH OF AMBRIDGE

STANDARD SIDEWALK
REPLACEMENT/INSTALLATION
DETAIL

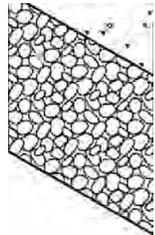
NIRA Consulting Engineers, Inc.

DR. E.E.B.

DATE: APRIL, 2004

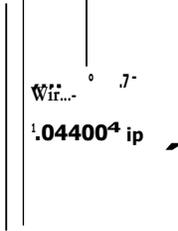
REVISED FEB, 2011 APPR: F.E.L.

DWG FILE: BASD-01



1/4" x 9"(W) x
MATURE DIA. OF TREE
CROWN (L) _____

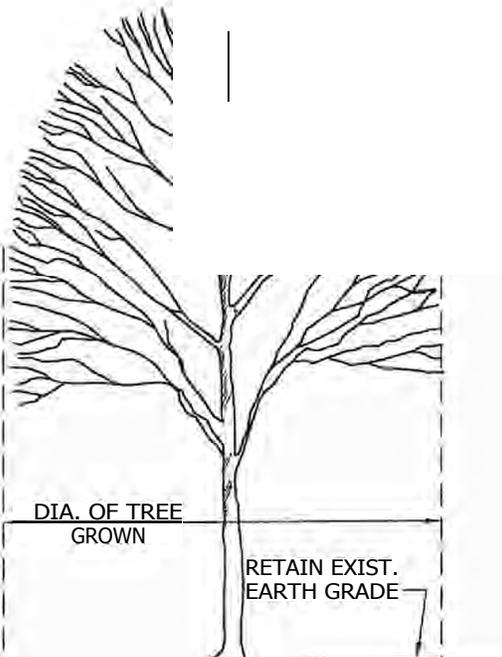
—1" BELOW EDGE OF
CONCRETE WALKWAY



Wire
#044004 ip

4" CLASS 'A' CEMENT
CONC. LIGHT BROOM
FINISH _____

6" NO. 57 COARSE
AGGREGATE. PENNDOT
SEC 676.3 (b)



DIA. OF TREE
GROWN

RETAIN EXIST.
EARTH GRADE

NOTE:
PLATE (E) IS TO BE USED WHERE AN
EXISTING OR PROPOSED TREE(S) ARE
CLOSER THAN THE MATURE DIA. OF THE
TREE CROWN TO THE EXISTING OR
PROPOSED SIDEWALK. CENTER THE PLATE
WITHIN THE TREE CROWN.

**BOROUGH OF AMBRIDGE
STANDARD SIDEWALK
REPLACEMENT/INSTALLATION
DETAIL**

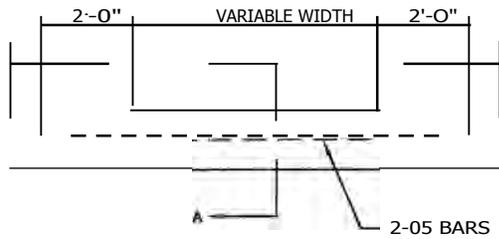
N1RA Consulting Engineers, Inc.

DR. E.E.B.

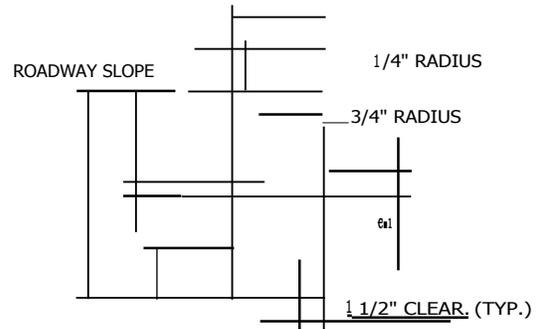
DATE: APRIL, 2004

APPR: F.E.L.

DWG FILE: BASD-02

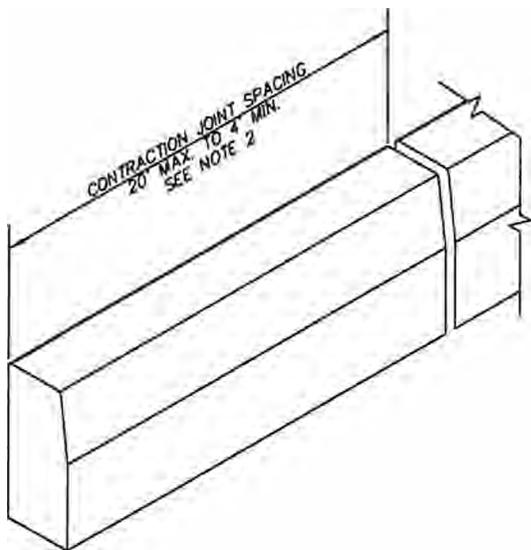


PLAN VIEW

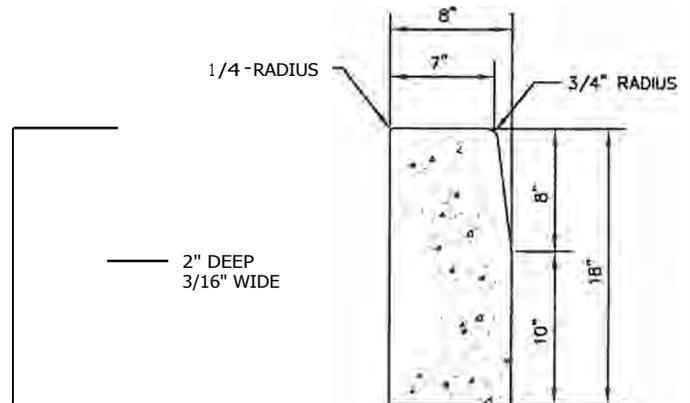


SECTION A—A

DEPRESSED CURB FOR DRIVEWAYS



PLAIN CONCRETE CURB



DETAIL A
CONTRACTION JOINT

TYPICAL
CROSS SECTION

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB. SECTION 640 FOR PLAIN CONCRETE CURBS.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. REPLACE LENGTH JOINT TO JOINT

BOROUGH OF AMBRIDGE

**STANDARD CURB
REPLACEMENT DETAIL**

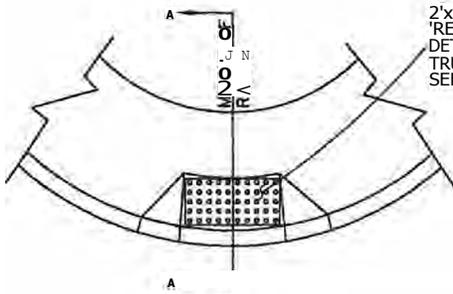
NIRA Consulting Engineers, Inc.

DR. E.E.B.

DATE: MARCH, 2004

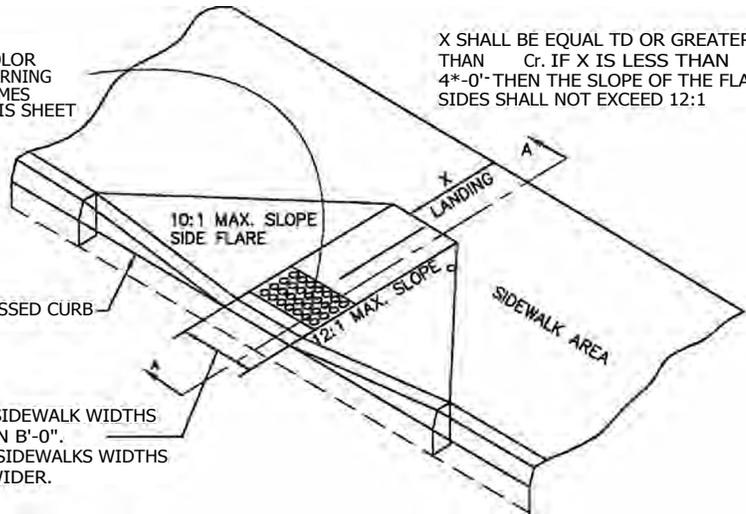
APPR: F.E.L.

DWG FILE: BASD-03



**TYPE 1 CURB RAMP
ON RADIUS**

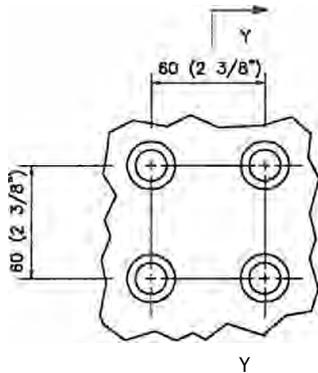
2'x3' MAT
'RED BRICK' COLOR
DETECTABLE WARNING
TRUNCATED DOMES
SEE DETAIL THIS SHEET



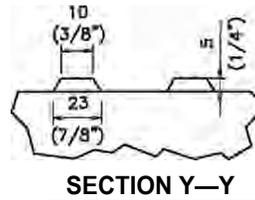
**TYPE 1 CURB RAMP
ON TANGENT**

3'-0" FOR SIDEWALK WIDTHS
LESS THAN B'-0".
4'-0" FOR SIDEWALKS WIDTHS
B'-0" OR WIDER.

STD. CURB CUT RAMP DETAILS



PLAN



SECTION Y—Y

DETECTABLE WARNING TRUNCATED DOME

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 405 SPECIFICATIONS, SECTIONS 630, 676, 420, 421, AND 4-22.
 2. PROVIDE 1/2" EXPANSION JOINT MATERIAL WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
 3. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL
 4. PROVIDE SUP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
 5. CONSTRUCTION DETAILS SHALL BE MODIFIED TO ADAPT DIMENSIONS TO EXISTING CURB ALTERATIONS WHERE THE CURB IS LESS THAN THE STANDARD 8-IN CH HEIGHT.
 6. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK PITCH. SEE TABLE A ON PG. 9 FOR TYPICAL RAMP DIMENSIONS.
 7. WHENEVER POSSIBLE, CONSTRUCT THE TRANSITION SLOPE FROM THE CURB RAMP AND FLARE SIDES TO ADJOINING SURFACES WITH A GRADUAL CURVE RATHER THAN AN ABRUPT ANGLE.
- B. REPLACE LENGTH JOINT TO JOINT**

REV. SEPTEMBER 2010

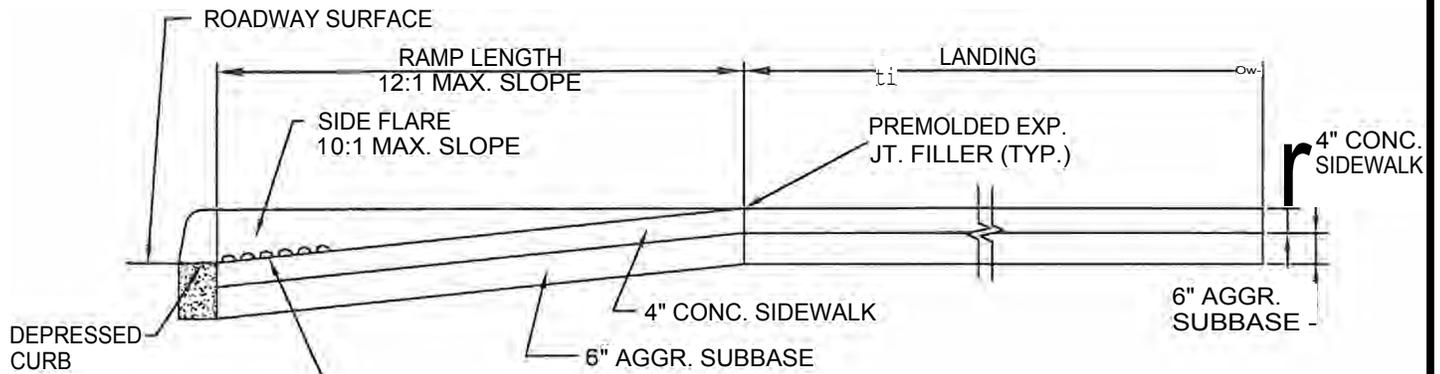
BOROUGH OF AMBRIDGE

CURB CUT RAMPS

NIRA Consulting Engineers, Inc.

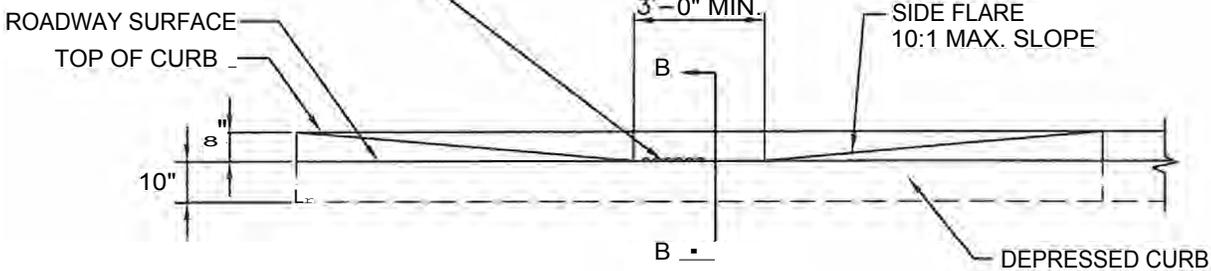
DR. cps _____ DATE: MARCH, 2010 _____

APPR: F.E.L. _____ DWG FILE: BASD-05 _____



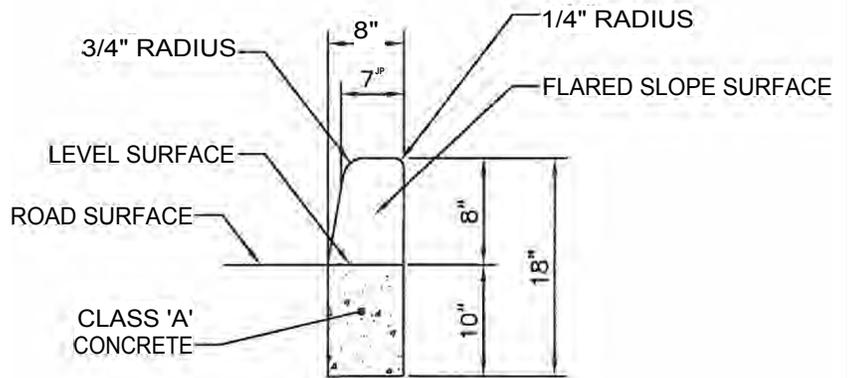
INSTALL 2'x3' MAT
'RED BRICK' COLOR
DETECTABLE WARNING
TRUNCATED DOMES
SEE STD. DETAIL BASD-05
(REVISED SEPT. 2010)

**SECTION A-A
TYPE 1**



**ELEVATION
TYPE 1**

CURB RAMP DIMENSIONS NEW CURB CONSTRUCTION				
RISE OF RAMP *	MAX. RAMP SLOPE	NOMINAL RAMP LENGTH(FT)	SIDE FLARE DIMENSION AT CURB	SIDE FLARE DIMENSION AT CURB
3"	12:1	3-0'	2.5'	3.0'
4"	12:1	4.0'	3.3'	4.0'
5"	12:1	5.0'	4.2'	5.0'
6"	12:1	6.0'	5.0'	6.0'
7"	12:1	7.0'	5.8'	7.0'
8"	12:1	8.0'	6.7'	8.0'
9"	12:1	9.0'	7.5'	9.0'
10"	12:1	10.0'	8.4'	10.0'
11"	12:1	11.0'	9.2'	11.0'
12"	12:1	12.0'	10.0'	12.0'



**DEPRESSED CURB
SECTION B-B**

CURB RAMP DIMENSIONS NEW CURB CONSTRUCTION [†]				
RISE OF RAMP	MAX. RAMP SLOPE	NOMINAL RAMP LENGTH(FT)	SIDE FLARE DIMENSION AT CURB	SIDE FLARE DIMENSION AT CURB
3"	8:1	2.0'	2.5'	3.0'
4"	10:1	3.3'	3.3'	4.0'
5"	10:1	4.2'	4.2'	5.0'
6"	10:1	5.0'	5.0'	6.0'

* USE ONLY WHEN SPACE LIMITATIONS PROHIBIT THE CONSTRUCTION OF 12:1 OR FLATTER SLOPES

† CURB HEIGHT PLUS RISE OF SIDEWALK CROSS SLOPE

NOTE:
REPLACE LENGTH JOINT TO JOINT

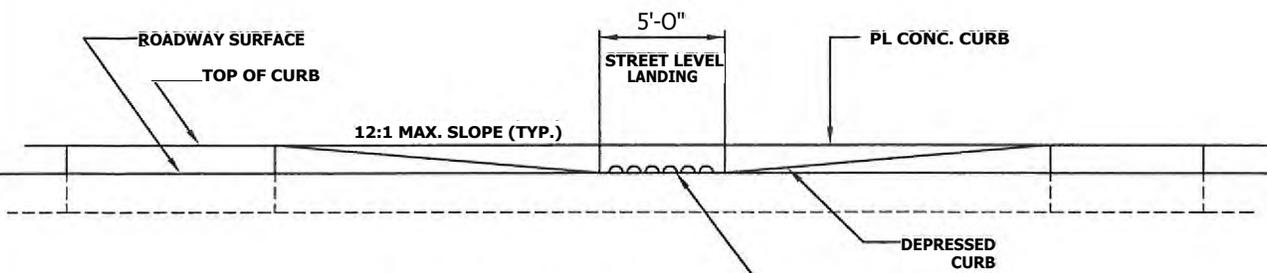
BOROUGH OF AMBRIDGE

**TYPE 1 CURB CUT
RAMP REPLACEMENT**

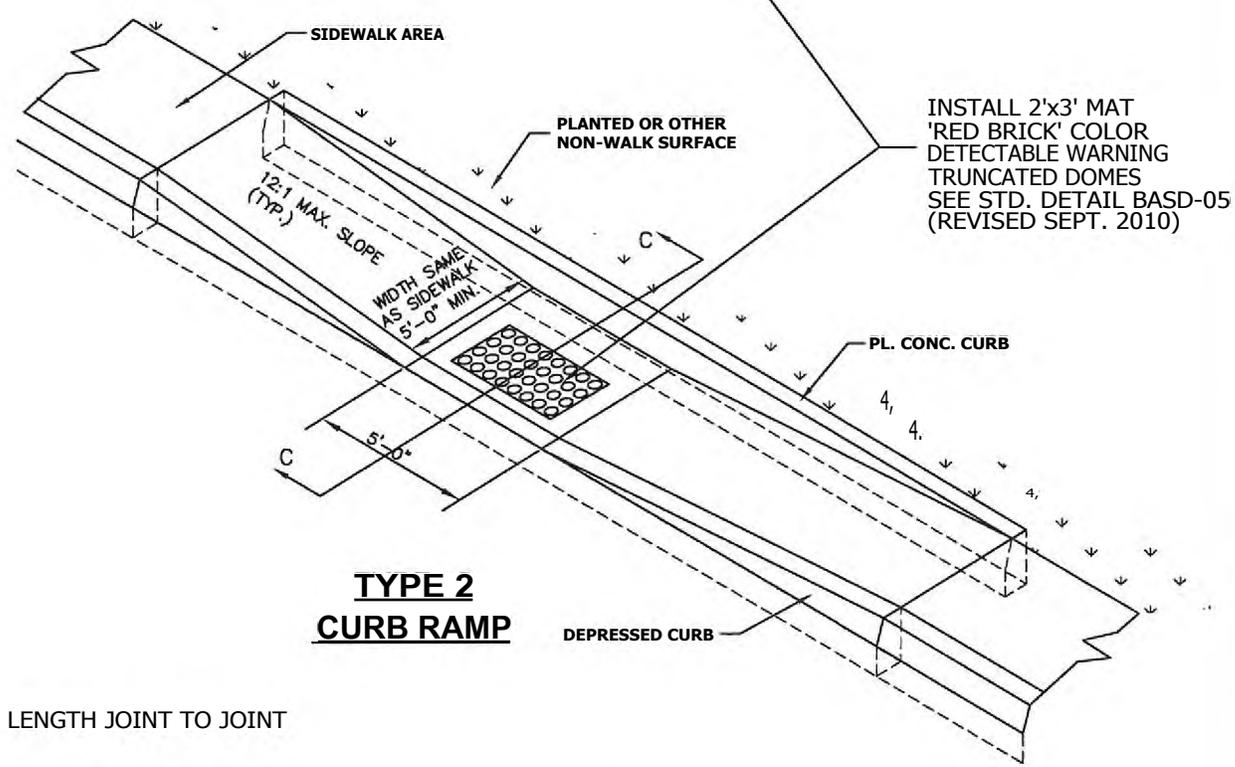
NIRA Consulting Engineers, Inc.

DR. E.E.B. DATE: MARCH, 2004

REV. SEPTEMBER 2010 APPR: F.E.L. DWG FILE: BASD- 06



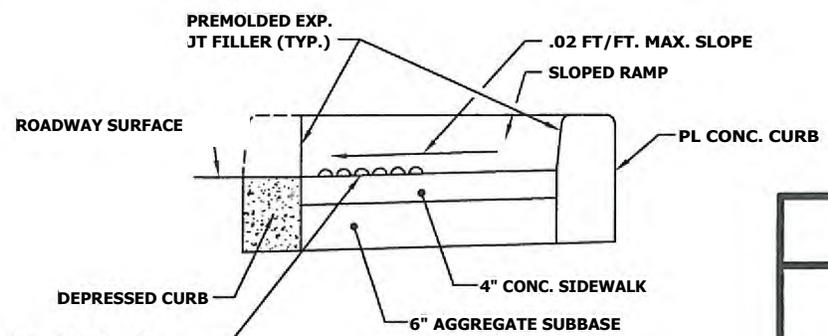
TYPE 2 CURB RAMP ELEVATION



INSTALL 2'x3' MAT 'RED BRICK' COLOR DETECTABLE WARNING TRUNCATED DOMES SEE STD. DETAIL BASD-05 (REVISED SEPT. 2010)

TYPE 2 CURB RAMP

NOTE:
REPLACE LENGTH JOINT TO JOINT

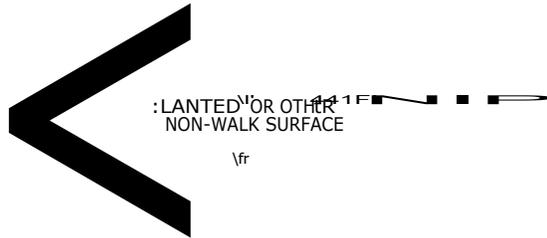


TYPE 2 CURB RAMP SECTION C-C

INSTALL 2'x3' MAT 'RED BRICK' COLOR DETECTABLE WARNING TRUNCATED DOMES SEE STD. DETAIL BASD-05 (REVISED SEPT. 2010)

BOROUGH OF AMBRIDGE	
TYPE 2 CURB CUT RAMP REPLACEMENT	
NIRA Consulting Engineers, Inc.	
DR. E.E.B.	DATE: MARCH, 2004
APPR: F.E.L.	DWG FILE: BASD-07

REV: SEPTEMBER 2010



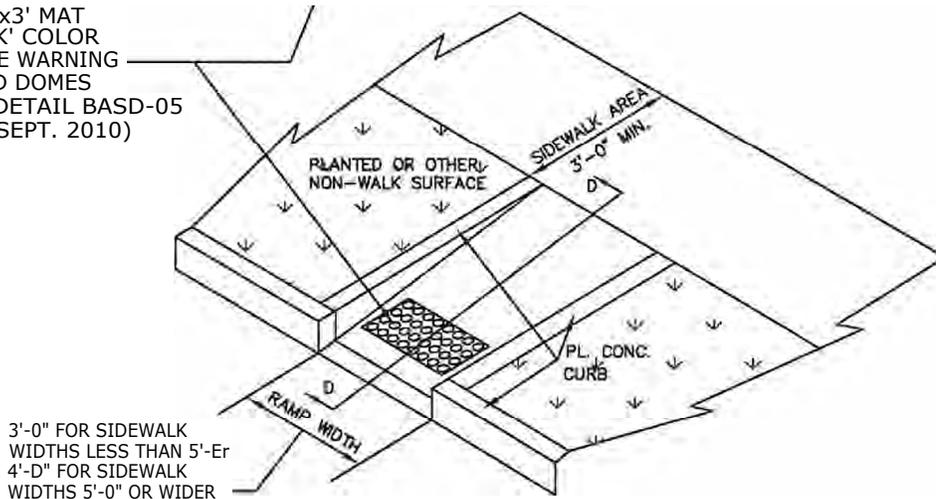
RADIUS VARIES

PL CONC. CURB

SAME AS SIDEWALK

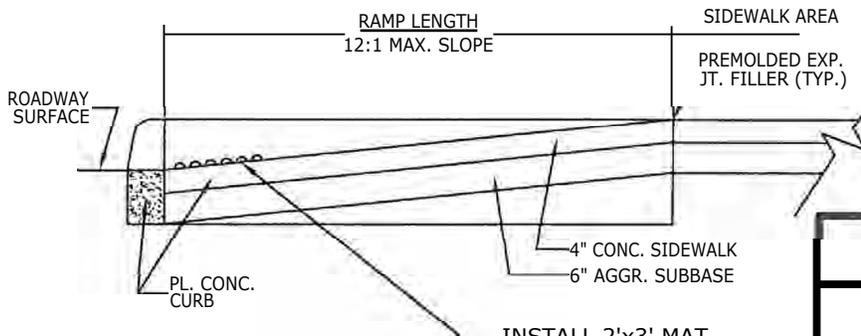
**TYPE 4A
CURB RAMP**

INSTALL 2'x3' MAT
'RED BRICK' COLOR
DETECTABLE WARNING
TRUNCATED DOMES
SEE STD. DETAIL BASD-05
(REVISED SEPT. 2010)



3'-0" FOR SIDEWALK
WIDTHS LESS THAN 5'-0"
4'-0" FOR SIDEWALK
WIDTHS 5'-0" OR WIDER

**TYPE 4
CURB RAMP**



**TYPE 4 AND 4A
SECTION D-D**

INSTALL 2'x3' MAT
'RED BRICK' COLOR
DETECTABLE WARNING
TRUNCATED DOMES
SEE STD. DETAIL BASD-05
(REVISED SEPT. 2010)

NOTE:
REPLACE LENGTH JOINT TO JOINT

REV: SEPTEMBER 2010

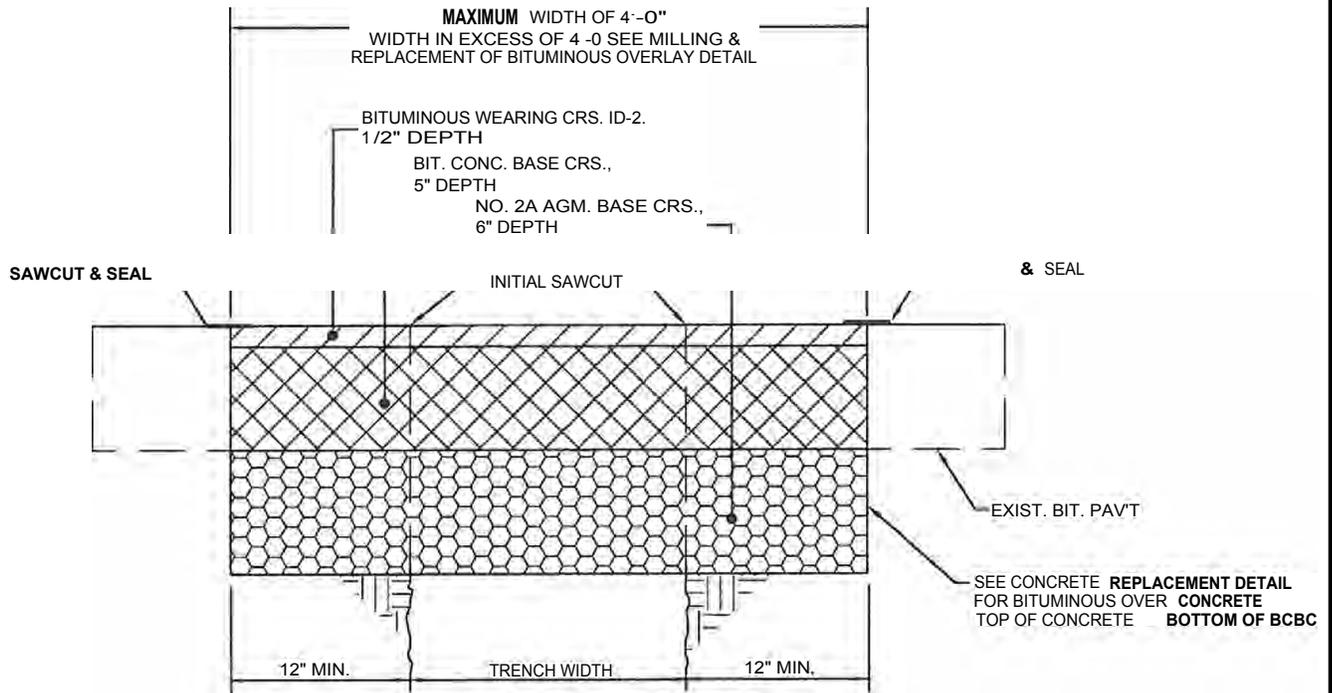
BOROUGH OF AMBRIDGE

TYPE 4 CURB CUT
RAMP REPLACEMENT

NIRA Consulting Engineers, Inc.

DR. E.E.B. DATE: MARCH, 2004

APPR: F.E.L. DWG FILE: BASD-08

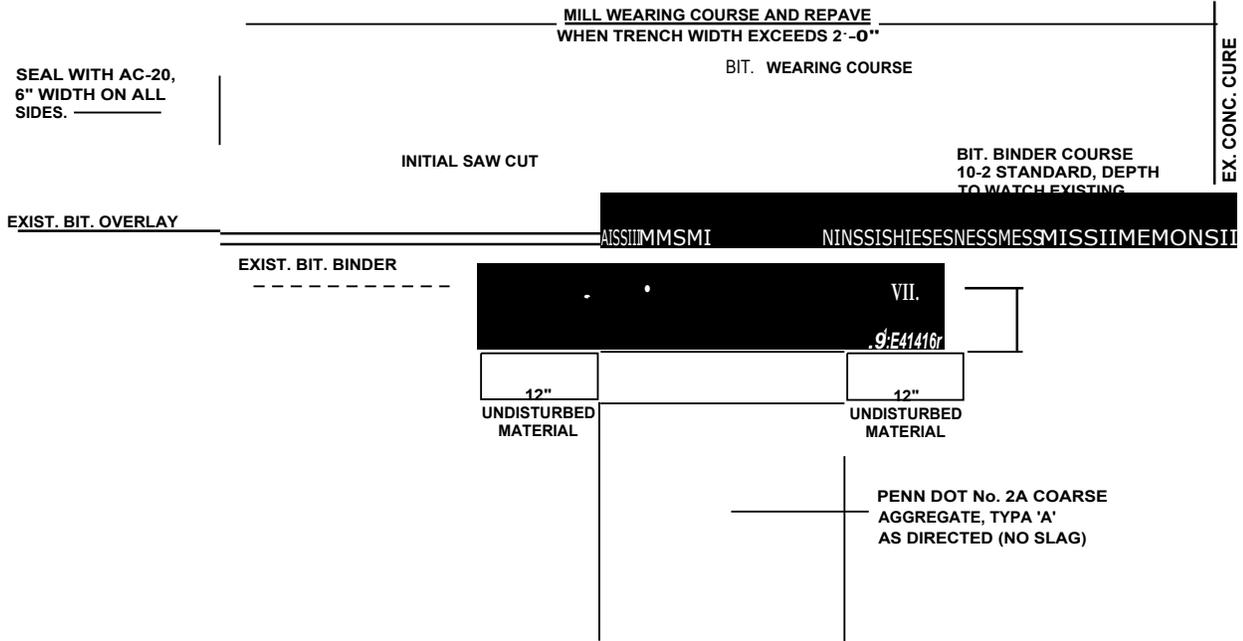


**BITUMINOUS PAVEMENT
RESTORATION DETAIL**

NOTES:

1. MULTIPLE LONGITUDINAL TRENCHES WITH LESS THAN C-0" FINISHED SEPARATION BETWEEN EDGES OF TRENCH RESTORATION WILL REQUIRE MILLING AND RESURFACING, AS SHOWN ON BASD- 09.
2. WHEN THE EDGE OF TRENCH RESTORATION IS WITHIN 1.5' FROM THE FACE OF CURB OR ROADWAY EDGE OF THE CURB GUTTER, REMOVE THE EXISTING WEARING AND BINDER COURSES AND REPLACE SIMULTANEOUS WITH TRENCH BITUMINOUS COURSES.
3. WHEN THE EDGE OF TRENCH RESTORATION IS WITHIN 3' FROM THE FACE OF CURB OR ROADWAY EDGE OF THE CURB GUTTER, MILL OFF THE EXISTING WEARING COURSE AND REPLACE SIMULTANEOUS WITH THE TRENCH BITUMINOUS WEARING COURSE.
4. NOTES 1, 2 & 3 ALSO APPLY TO BITUMINOUS COURSES OVER BRICK AND CONCRETE ROADWAYS SEE BASD-11 FOR CONCRETE ROADWAYS.

BOROUGH OF AMBRIDGE	
BITUMINOUS PAVEMENT TRENCH RESTORATION	
NIRA Consulting Engineers, Inc.	
DR. E.E.B.	DATE: MAY, 2004
APPR:	DWG FILE: BASD-09



**MILLING AND REPLACEMENT
OF BITUMINOUS OVERLAY**

NOTE

1. ALL BACKFILL SHALL BE COMPACTED IN 6" LAYERS. MECHANICALLY TAMPED.
2. TEMPORARY BITUMINOUS COLD PATCH SHALL BE USED IN ALL AREAS WHERE EXISTING FLEXIBLE-BASE PAVEMENT HAS BEEN REMOVED.

— 1 1/2" 1D-2 BITUMINOUS WEARING COURSE.
— j PENN DOT SECT. 420

1222 BITUMINOUS BINDER TO BE REPLACED TO PRE-EXCAVATION THICKNESS

— 6 No. 2A SUBBASE.
— PENN DOT SECT. 350

BOROUGH OF AMBRIDGE

MILLING & REPLACEMENT
OF BITUMINOUS OVERLAY

NIRA Consulting Engineers, Inc.

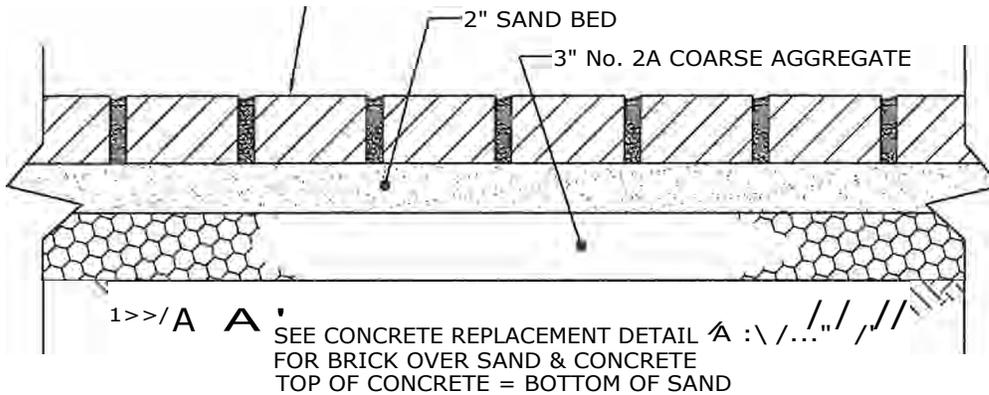
DR. E. E. B.

DATE: MARCH, 2004

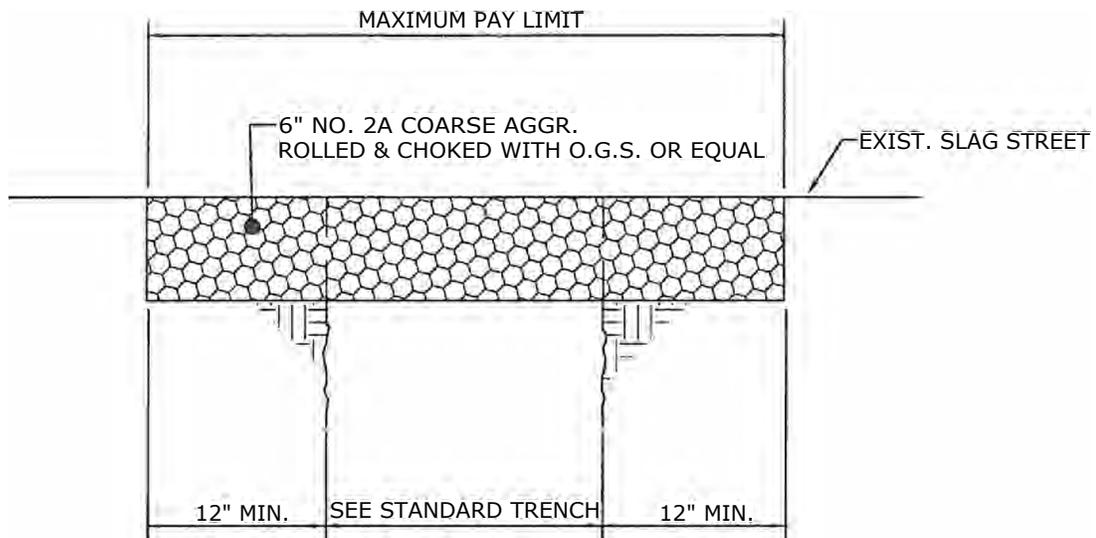
APPR: F. E. L.

DWG FILE: BASD-10

RELAY EXIST. BRICK (TOOTH-IN)
BRUSH SAND AND CEMENT MIX
IN JOINTS (4:1)



BRICK PAVEMENT RESTORATION



SLAG PAVEMENT RESTORATION

NOTE:

1. WHEN THE EDGE OF TRENCH RESTORATION IS WITHIN 3' FROM THE FACE OF CURB OR ROADWAY EDGE OF CURB GUTTER, REMOVE BRICK AND CONCRETE LEVELING COURSE. REPLACE CONCRETE SIMULTANEOUS WITH CONCRETE TRENCH RESTORATION.

BOROUGH OF AMBRIDGE

**BRICK & SLAG PAVEMENT
TRENCH RESTORATION**

NIRA Consulting Engineers, Inc.

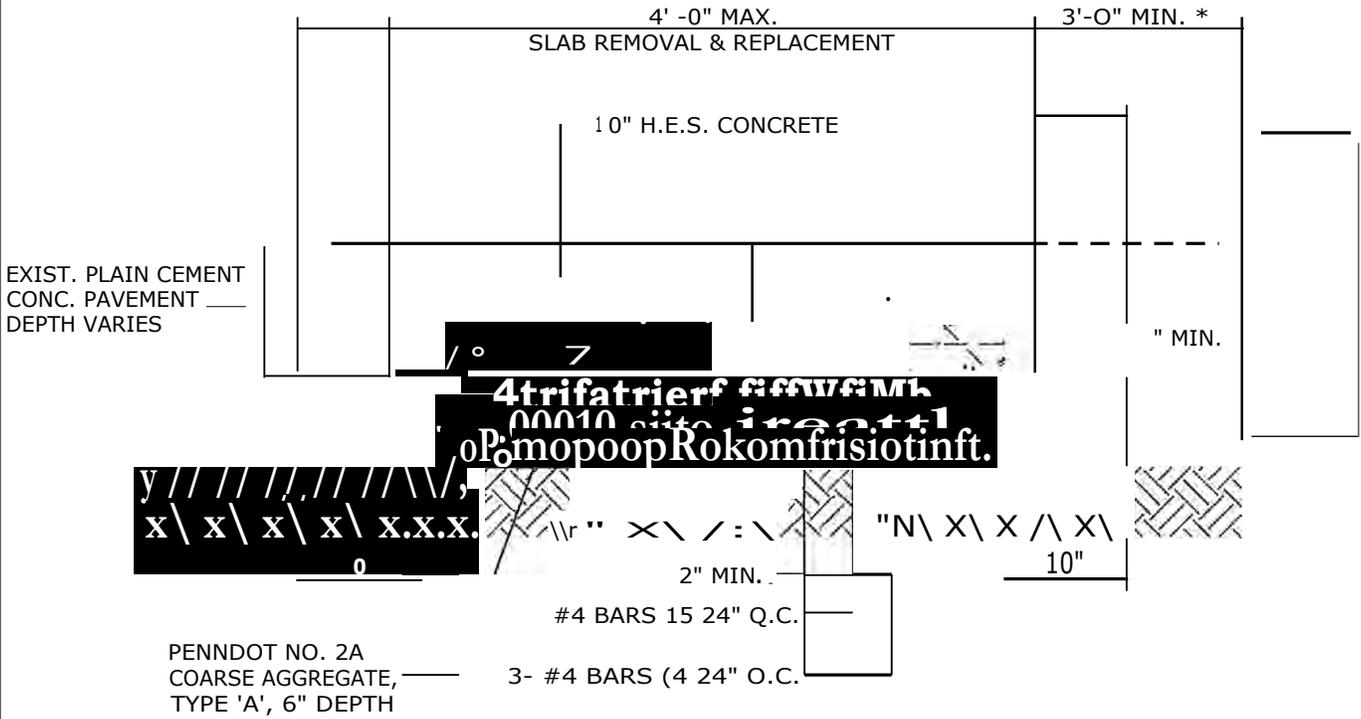
DR. E. E.B.

DATE: MAY, 2004

APPR: F. E.L.

DWG FILE: BASD-11

EXIST. CONC. CURB
OR CURB GUTTER _____



CONCRETE TRENCH REPLACEMENT DETAIL

NOTE:
WHEN EDGE OF PROPOSED CONCRETE TRENCH
PAVING IS WITHIN THREE FEET (3') OF ANY EXIST.
LONGITUDINAL JOINT OR CURB, THE EXISTING
CONCRETE PAVEMENT MUST BE REMOVED AND
REPLACED TO THE EXISTING CENTERLINE JOINT OR
CURB

BOROUGH OF AMBRIDGE

CONCRETE TRENCH
REPLACEMENT DETAIL

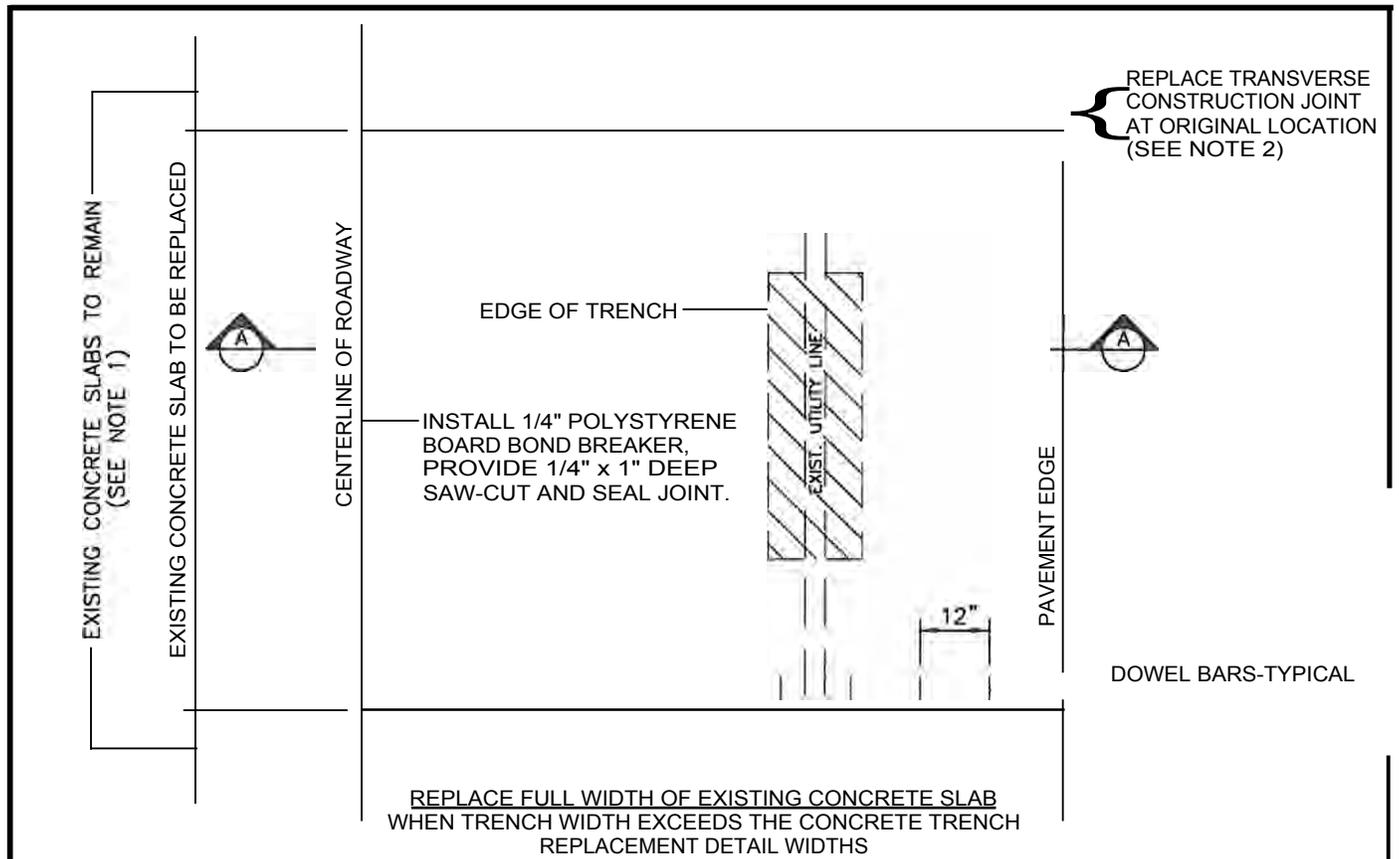
NIRA Consulting Engineers, Inc.

DR. E.E.B.

DATE: MARCH, 2004

,APPR: F.E.L.

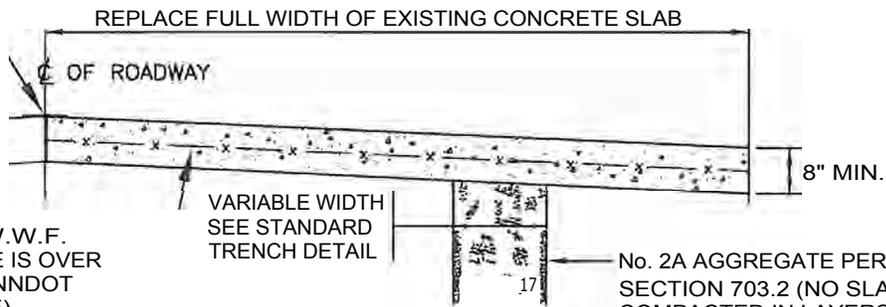
DWG FILE: BASD-12



PLAN — PAVEMENT RESTORATION

SAW-CUT AND SEAL JOINT. —

EXIST. CONCRETE PAVEMENT



6"x6" - W1.4 x W1.4 W.W.F.
(IF EXISTING CONCRETE IS OVER 8" THICK REFER TO PENNDOT RC-21 FOR MESH SIZE)

No. 2A AGGREGATE PER PENNDOT SECTION 703.2 (NO SLAG) COMPACTED IN LAYERS TO 90% OF THE MAXIMUM DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT PER AASHTO-T-99.

NOTE:

SECTION A—A

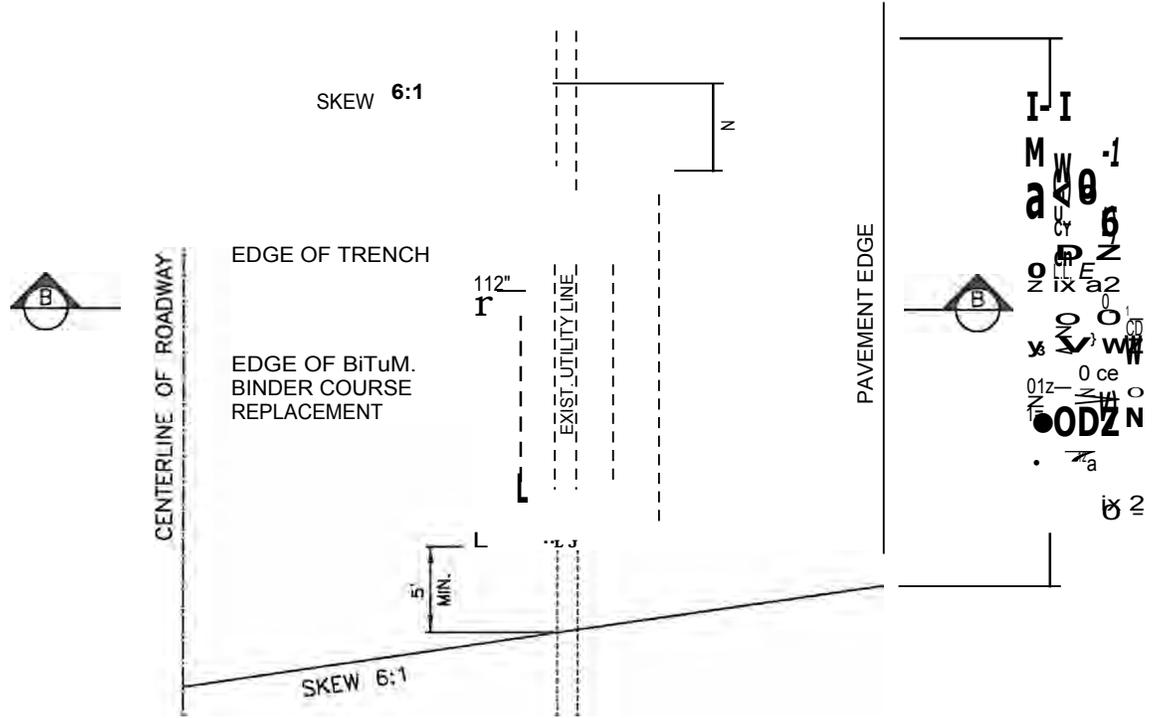
1. IF EXCAVATION EXTENDS INTO OR IF THE APPLICANTS OPERATIONS CAUSE DAMAGE TO AN ADJACENT SLAB THE FULL WIDTH OF THE SLAB SHALL BE REPLACED.
2. TRANSVERSE JOINTS MAY BE RELOCATED WHEN LESS THAN ONE-HALF OF THE LENGTH OF A SLAB IS AFFECTED BY THE OPENING. IN NO CASE SHALL A RELOCATED TRANSVERSE JOINT RESULT IN A SLAB LENGTH LESS THAN 6 FEET.
3. WHEN MORE THAN ONE SLAB LENGTH IS REPLACED THE NEW TRANSVERSE JOINTS SHALL CONFORM WITH PENNDOT RC-20 (TYPE E) WHERE REPLACEMENT SLABS ABUT EXISTING SLABS, IN THE SAME LANE, THE TRANSVERSE JOINTS SHALL CONFORM TO THE PATCHING JOINT DETAILS 'A' AND 'B' PER PENNDOT RC-26, SHEET 1 OF 5.

 8" MINIMUM "AA" CEMENT CONCRETE OR MATCH EXISTING THICKNESS

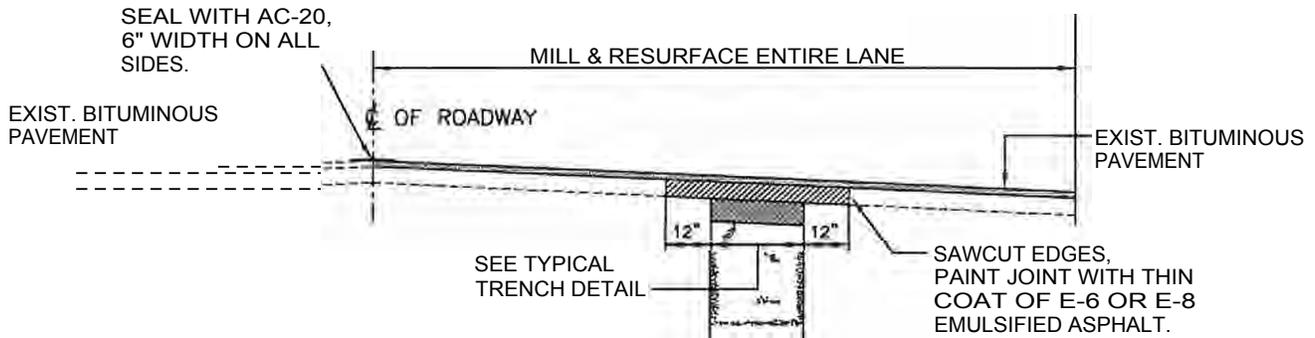
 NO. 2A AGGREGATE PER PENNDOT SECTION 703.2 (NO SLAG)

BOROUGH OF AMBRIDGE	
CONCRETE PAVEMENT RESTORATION	
NIRA Consulting Engineers, Inc.	
DR. E.E.B.	DATE: MARCH, 2004
APPR: F.E.L.	IDWG FILE: BASD-13

(APPLICABLE ONLY TO ROADS RESURFACED IN THE LAST FIVE (5) YEARS.)



PLAN — PAVEMENT RESTORATION DETAIL '13'



SECTION B—B

NOTE:

1. 2" MINIMUM BITUMINOUS COLD PATCH (TEMPORARY SURFACE) REQUIRED IN TRENCH AREA PRIOR TO FINAL SURFACING.
2. IF UTILITY OPENING EXTENDS INTO OR INVOLVES BOTH LANES THE ENTIRE CARTWAY SHALL BE MILLED AND RESURFACED.
3. THE MINIMUM LENGTH OF THE MILLED AND RESURFACED AREA SHALL BE 20 FEET.

- 1 1/2" ID-2 BITUMINOUS WEARING COURSE,
• PENNDOT SECT. 420
- E 5" BITUMINOUS CONCRETE BASE COURSE,
PENNDOT SECT. 305
- 6" No. 2A SUBBASE,
PENNDOT SECT. 350

BOROUGH OF AMBRIDGE

**STANDARD BITUMINOUS
PAVEMENT REPLACEMENT DETAIL**

NIRA Consulting Engineers, Inc.

DR. E.E.B. DATE: MARCH, 2004
APPR: F.E.L. DWG FILE: BASD-14

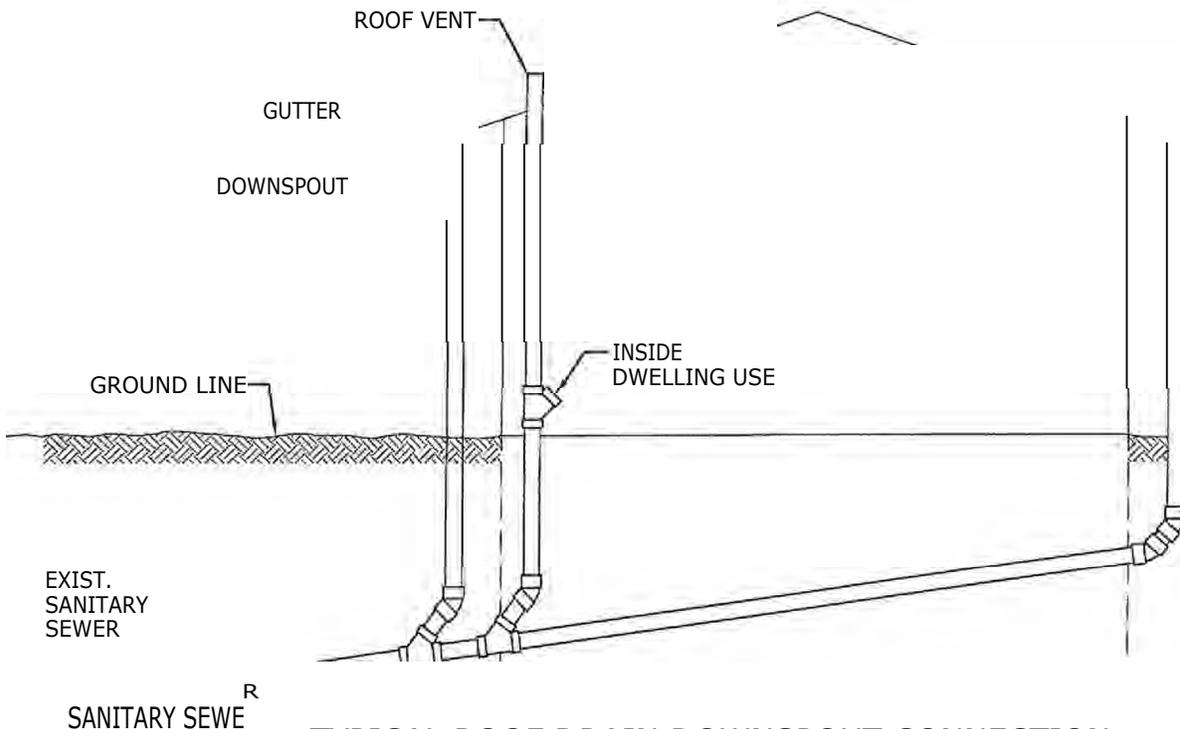
Borough of Ambridge

PROCEDURE

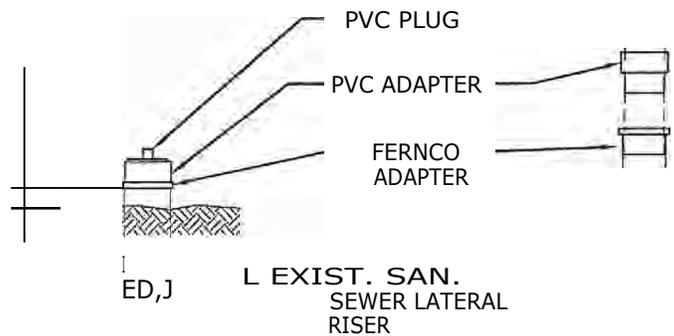
FOR

Roof Downspout **Removal from Sanitary Sewers**

- **Connection of roof downspouts to sanitary sewers is prohibited.**
- Disconnect roof down spouts from existing sanitary sewer lateral riser pipe/s.
- **Permanent plugging of roof downspout riser pipe/s is prohibited.**
- Sanitary sewer lateral riser pipe/s from roof downspouts are to be extended with a male by female Fernco Style Adapter; PVC male plain end by female threaded cleanout fitting; and a PVC removable threaded plug to be used for future maintenance. Other fitting combinations may be needed depending upon existing conditions (See Borough of Ambridge Downspout "Removal From Sanitary Sewers" Typical Section BASD-15).
- If an existing roof downspout is being used as the sanitary sewer lateral vent, extend the riser pipe up above the roof. Vent height above the roof varies depending on roof pitch. Generally, vents are installed a minimum of 2 feet above the finished roof line with a weather/ rodent proof cap. A plumber may be needed to determine whether or not a roof downspout is serving as a combination drain and vent.
- Roof down spouts are to be reconnected to existing storm sewers provided one exists on a Lot boundary, i.e., front, side or rear and is reasonably accessible. The Borough Code Enforcement Office will consider roof downspout storm sewer connections on a case-by-case basis.
- Ha storm sewer is not available for use, down spouts are to be installed utilizing splash blocks or flexible discharge connectors so as not to create a public nuisance to any neighboring property, sidewalk, street, road, alley or way.
- These procedures meet the requirements of the 2003 International Plumbing Code, Chapter 7 (Sanitary Drainage) and Chapter 11 (Storm Drainage); and the 2003 International Property Maintenance Code, Chapter 5 (Plumbing Facilities and Fixture Requirements) and Chapter 9 (Vents).



TYPICAL ROOF DRAIN DOWNSPOUT CONNECTION TO SANITARY SEWER (PROHIBITED)



TYPICAL SECTION **ASSEMBLY DETAIL**
ROOF DRAIN DOWNSPOUT REMOVAL
FROM SANITARY SEWERS

BOROUGH OF AMBRIDGE
ROOF DOWNSPOUT REMOVAL
FROM SANITARY SEWERS

NIRA Consulting Engineers, Inc.

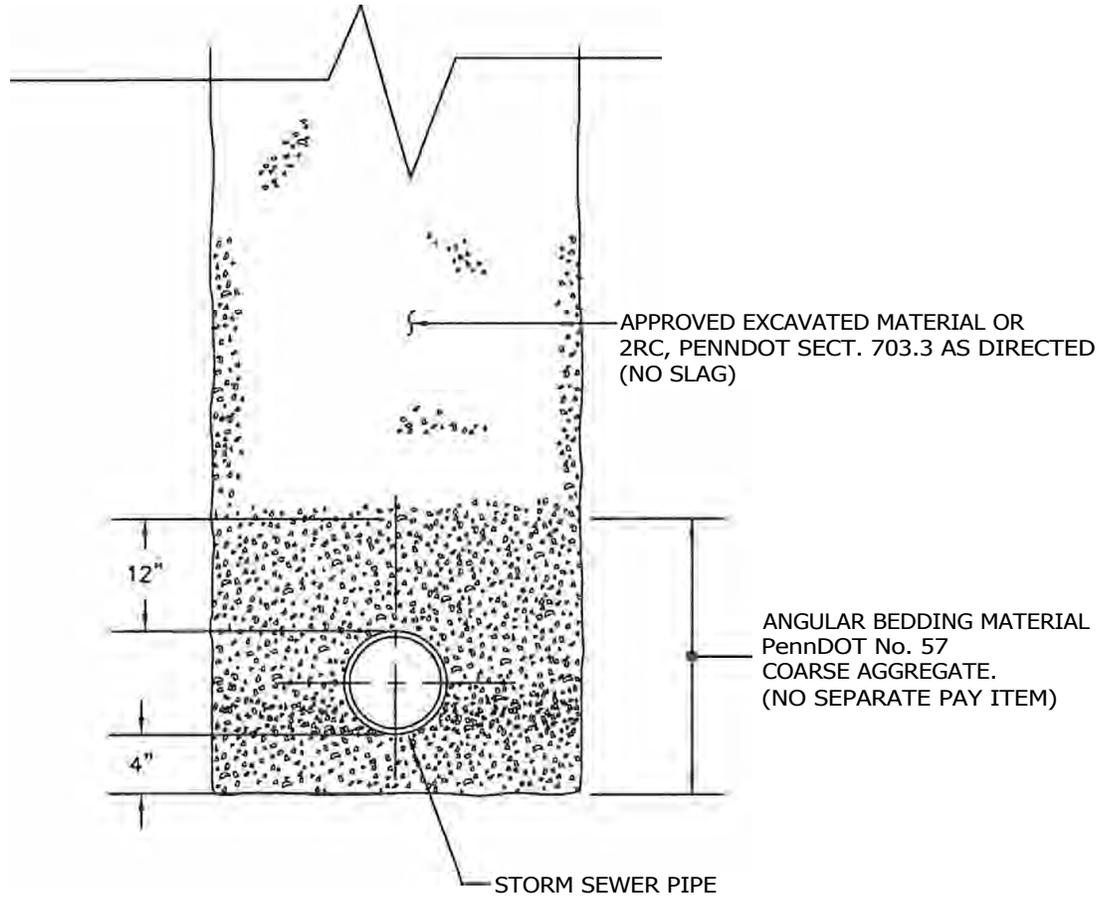
DATE: OCTOBER, 2006

ADOPTED 11/14/06 BOROUGH COUNCIL WORK SESSION

APPR: F.E.L.

DWG FILE: BASD- 15

SEE APPROPRIATE DETAIL FOR
VARIOUS SURFACE RESTORATION.



BOROUGH OF AMBRIDGE

STANDARD TRENCH DETAIL

NIRA Consulting Engineers, Inc.

DR. CPS

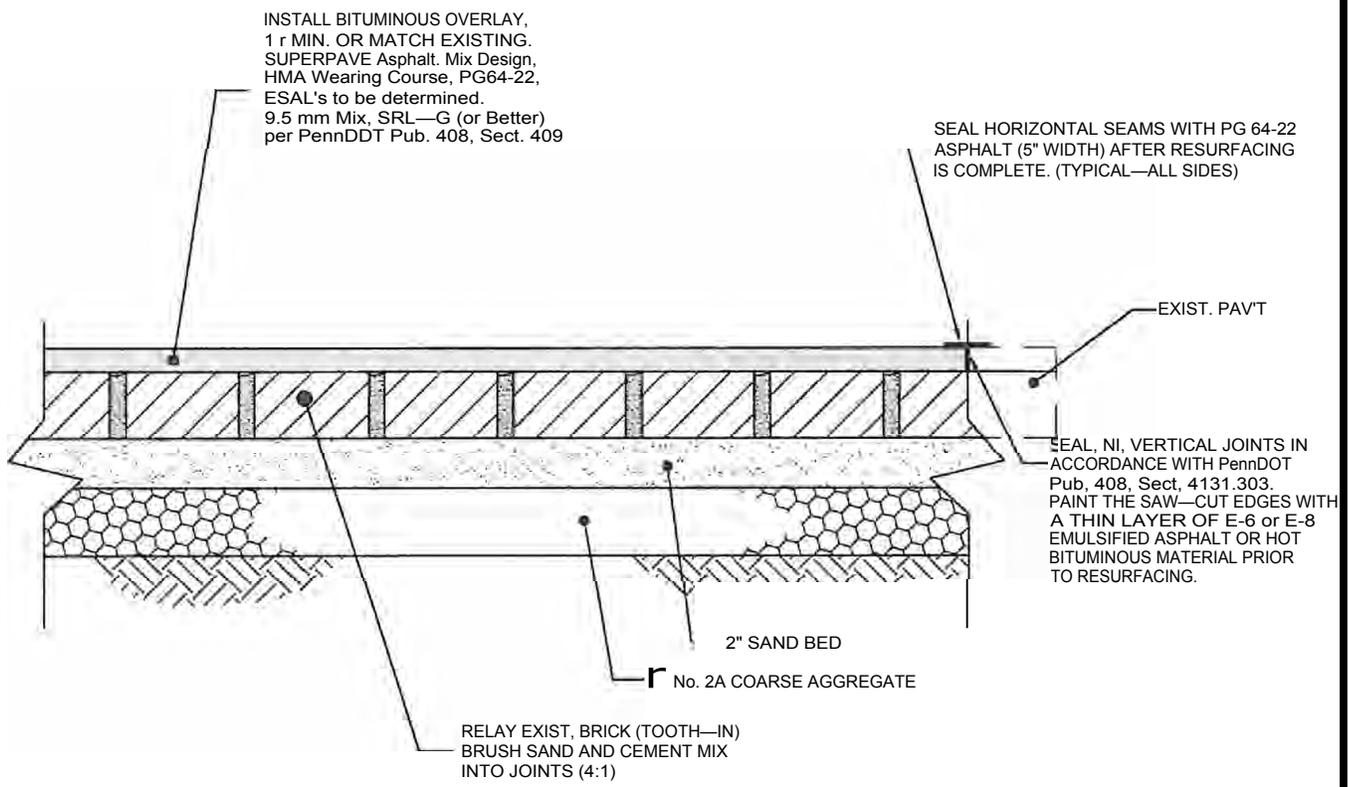
DATE: FEB, 2008

APPR: F.E.L.

DWG FILE: BASD-16

NOTES:

1. ALL BACKFILL SHALL BE COMPACTED IN 6" LAYERS.
MECHANICALLY TAMPED.

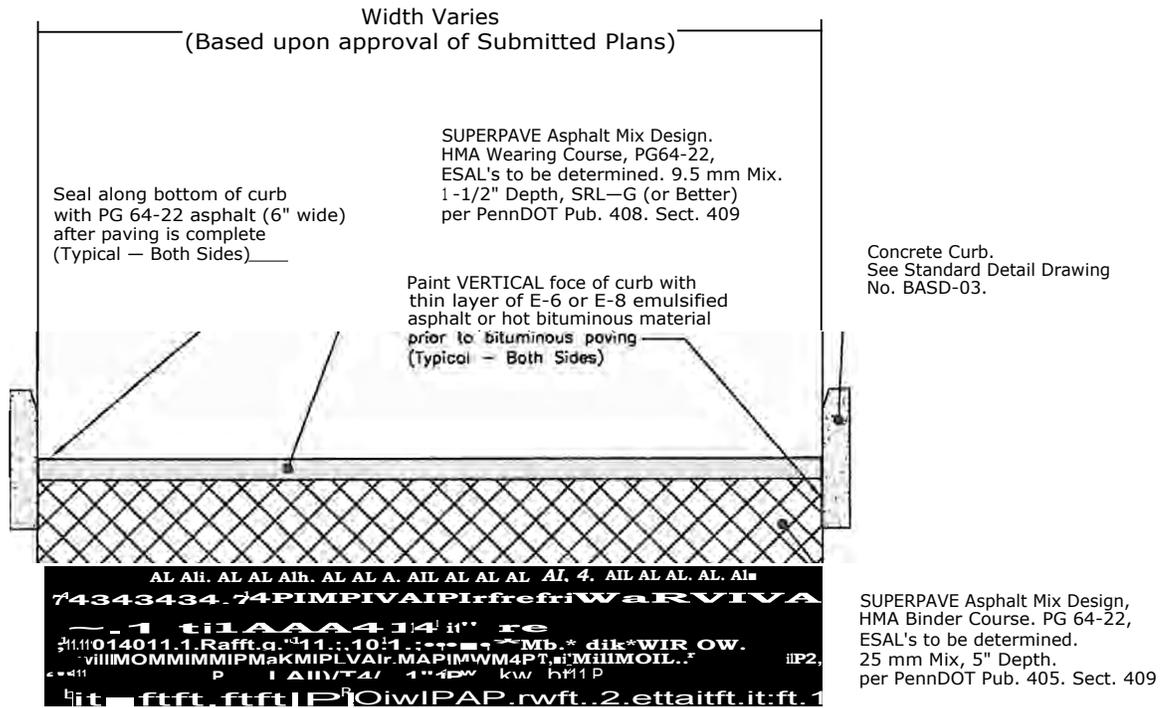


NOTES

1. IF BINDER COURSE OVERLAY IS PRESENT, REPLACE WITH 2 V MIN. (OR MATCH EXISTING) OF SUPERPAVE 19mm HMA,
2. MULTIPLE LONGITUDINAL TRENCHES WITH LESS THAN 6'-0" FINISHED SEPARATION BETWEEN EDGES OF TRENCH RESTORATION WILL REQUIRE MILLING AND RESURFACING, AS SHOWN ON BASD- 09.
3. WHEN THE EDGE OF TRENCH RESTORATION IS WITHIN 1.5' FROM THE FACE OF CURB OR ROADWAY EDGE OF THE CURB GUTTER, REMOVE THE EXISTING BITUMINOUS OVERLAY AND BRICK BASE COURSES AND REPLACE SIMULTANEOUS WITH TRENCH COURSES.
4. WHEN THE EDGE OF TRENCH RESTORATION IS WITHIN 3' FROM THE FACE OF CURB OR ROADWAY EDGE OF THE CURB GUTTER, MILL OFF THE EXISTING WEARING COURSE AND REPLACE SIMULTANEOUS WITH THE TRENCH BITUMINOUS WEARING COURSE.
5. NOTES 1, 2, 3, & 4 ALSO APPLY TO BITUMINOUS COURSES OVER CONCRETE ROADWAYS. SEE BASD-12 FOR CONCRETE ROADWAYS.

BOROUGH OF AMBRIDGE
BITUMINOUS OVER BRICK PAVEMENT RESTORATION
NIRA Consulting Engineers, Inc.

DR. E.E.B. _____	DATE: DECEMBER 2009 _____
APPR: F.E.L. _____	DWG FILE: BASD-17 _____



Prepared Subgrade per 11
PennDOT Pub. 408, Sect. 210

PennDOT No. 2A COARSE AGGREGATE
per PennDOT Pub. 408, Sect. 703.2 (No Slog).
SUBBASE (6" DEPTH) per PennDOT Pub. 408,
Sect. 350

BOROUGH OF AMBRIDGE	
BITUMINOUS PAVEMENT FOR NEW ROADWAYS	
NIRA Consulting Engineers, Inc.	
DR. CPS	DATE: OCTOBER 2010
APPR: F.E.L.	DWG FILE: BASD-18