



Department of Transportation

Office of Project Development

700 E Broadway Avenue

Pierre, South Dakota 57501-2586 605/773-3268

FAX: 605/773-2614

October 28, 2016

ADDENDUM NO. 1

RE: Item #1, November 2, 2016 Letting - NH 0050(108)385, PCN 023U, Yankton County - PCC Overlay, PCC Surfacing, Curb & Gutter, Crossover, Cutoff Drain, & Edge Drains

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

SPECIAL PROVISIONS: NO CHANGE

BID ITEM FILE: *Bidders must log in to retrieve the addendum bid item file that must be loaded into the SDEBS to incorporate the revisions listed here.*

Bid Items were added:

Bid Item 380E1600 "Fast Track Overlay, Furnish"

Bid Item 380E1610 "Fast Track Overlay, Placement"

Quantities for Bid Items were changed:

Bid Item 380E0070 "9" Nonreinforced PCC Pavement" changed from 9,646.4 to 10,212.6 SqYd

Bid Item 380E1500 "PCC Overlay, Furnish" changed from 36,895.9 to 36,088.7 CuYd

Bid Item 380E1570 "7" PCC Overlay, Placement" changed from 173,000.1 to 179,149.9 SqYd

Bid Item 831E1500 "Geotextile Bond Breaker Fabric" changed from 211,251 to 281,256 SqYd

Bid Items were removed:

Bid Item 380E5010 "Fast Track Concrete"

PLANS: Please destroy sheets A1, F2, F8, F9, F19, F20, and F22 and replace with the enclosed sheets, dated 10/28/16.

Sheets A1 and F2: **Bid Items were added:**

Bid Item 380E1600 "Fast Track Overlay, Furnish"

Bid Item 380E1610 "Fast Track Overlay, Placement"

Quantities for Bid Items were changed:

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Bid Items were removed:

Bid Item 380E5010 "Fast Track Concrete"

Sheet F8: FAST TRACK CONCRETE note and TABLE OF PCC PAVEMENT were replaced with FAST TRACK PCC OVERLAY note and TABLE OF FAST TRACK CONCRETE PAVEMENT.

Sheet F9: TABLE OF GEOTEXTILE BOND BREAKER FABRIC and TABLE OF PCC PAVEMENT were revised.

Sheets F19: Middle and Bottom TYPICAL SURFACING SECTIONS were revised.

Sheets F20: Both TYPICAL SURFACING SECTIONS were revised.

Sheets F22: Bottom TYPICAL SURFACING SECTIONS were revised.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Craig Smith, Mitchell Region Engineer
Rod Gall, Yankton Area Engineer

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0050(108)385	A1	A3

Revised: 28 Oct 16, RML

SECTION F Surfacing Plans

INDEX OF SHEETS

A1	Estimate of Quantities for Sections C, D, F, and M
A2 to A3	Environmental Commitments

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1305	Pavement Marking Paint, Yellow	169	Gal
634E0010	Flagging	200.0	Hour
634E0110	Traffic Control Signs	2,332.3	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0280	Type 3 Barricade, 8' Single Sided	46	Each
634E0285	Type 3 Barricade, 8' Double Sided	5	Each
634E0340	Temporary Raised Pavement Markers	37.4	Mile
634E0380	Tubular Marker	777	Each
634E0390	Replace Tubular Marker	150	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	850	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	1,008	Ft
634E0630	Temporary Pavement Marking	23.6	Mile
634E1002	Detour Signing	570.0	SqFt

Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1700	Remove Silt Fence	750	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0212	Type G Permanent Seed Mixture	780	Lb
731E0200	Fertilizing	15.00	Ton
732E0100	Mulching	60.0	Ton
734E0602	Low Flow Silt Fence	1,000	Ft
734E0604	High Flow Silt Fence	2,000	Ft
734E0610	Mucking Silt Fence	208	CuYd
734E0620	Repair Silt Fence	750	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	25.530	Mile
009E3240	Graded Centerline Staking	8.419	Mile
009E3250	Miscellaneous Staking	8.419	Mile
009E3280	Slope Staking	8.419	Mile
009E3300	Three Man Survey Crew	40.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	510	Ft
110E0415	Remove Edge Drains	Lump Sum	LS
110E0700	Remove 3 Cable Guardrail	478	Ft
110E0730	Remove Beam Guardrail	300.0	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	1	Each
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	2	Each
110E0770	Remove W Beam Guardrail Breakaway Cable Terminal	2	Each
110E0800	Remove W Beam Guardrail End Terminal	2	Each
110E1100	Remove Concrete Pavement	9,401.0	SqYd
120E0010	Unclassified Excavation	3,252	CuYd
120E0600	Contractor Furnished Borrow Excavation	16,666	CuYd
120E6100	Water for Embankment	214.9	MGal
120E6200	Water for Granular Material	529.8	MGal
120E9000	Pit Run	922.5	Ton
260E1010	Base Course	17,474.9	Ton
260E1030	Base Course, Salvaged	20,517.1	Ton
260E2010	Gravel Cushion	2,301.5	Ton
260E2030	Gravel Cushion, Salvaged	2,702.2	Ton
260E6000	Granular Material, Furnish	10,829.4	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	1,560.5	Ton
270E0220	Blend and Stockpile Granular Material	21,658.8	Ton
320E0004	PG 58-28 Asphalt Binder	716.0	Ton
320E1070	Class HR Asphalt Concrete	17,907.8	Ton
320E1200	Asphalt Concrete Composite	240.0	Ton
320E3000	Compaction Sample	3	Each
320E5010	Saw and Seal Shoulder Joint	87,666	Ft
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	5.3	Mile
330E0010	MC-70 Asphalt for Prime	115.0	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	30.9	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	20.3	Ton
330E2000	Sand for Flush Seal	104.4	Ton
332E4000	Micro-Milling Asphalt Concrete	134,619	SqYd
380E0070	9" Nonreinforced PCC Pavement	10,212.6	SqYd
380E1500	PCC Overlay, Furnish	36,088.7	CuYd
380E1570	7" PCC Overlay, Placement	179,149.9	SqYd

SECTION F Surfacing Plans (Continued)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
380E1600	Fast Track PCC Overlay, Furnish	807.2	CuYd
380E1610	Fast Track PCC Overlay, Placement	4,151.1	SqYd
380E3530	7" PCC Approach Pavement	82.2	SqYd
380E6000	Dowel Bar	108,806	Each
380E6110	Insert Steel Bar in PCC Pavement	617	Each
410E2600	Membrane Sealant Expansion Joint	52.0	Ft
430E0700	Precast Concrete Headwall for Drain	24	Each
600E0300	Type III Field Laboratory	1	Each
629E0100	3 Cable Guardrail	247	Ft
629E0300	3 Cable Guardrail Slip Base Anchor Assembly	1	Each
630E1010	Straight Class A W Beam Guardrail with Wood Posts	200.0	Ft
630E2020	W Beam Guardrail Tangent End Terminal	1	Each
630E2030	W Beam Guardrail Breakaway Cable Terminal	1	Each
650E0070	Type B67 Concrete Curb and Gutter	398	Ft
650E4670	Type P7 Concrete Gutter	112	Ft
650E6070	7" Concrete Valley Gutter	112	Ft
680E0010	Edge Drain	3,527	Ft
680E0015	Edge Drain Outlet	24	Each
680E0025	Adjust Edge Drain Outlet	145	Each
680E0100	Cutoff Drain	1	Each
831E0210	Non-woven Separator Fabric	1,202	SqYd
831E1500	Geotextile Bond Breaker Fabric	281,256	SqYd
900E0010	Refurbish Single Mailbox	24	Each
900E0012	Refurbish Double Mailbox	10	Each

Section M – Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1300	Pavement Marking Paint, White	282	Gal
633E1305	Pavement Marking Paint, Yellow	351	Gal

SECTION F ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	25.530	Mile
009E3240	Graded Centerline Staking	8.419	Mile
009E3250	Miscellaneous Staking	8.419	Mile
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009E3300	Three Man Survey Crew	40.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	510	Ft
110E0415	Remove Edge Drains	Lump Sum	LS
110E0700	Remove 3 Cable Guardrail	478	Ft
110E0730	Remove Beam Guardrail	300.0	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	1	Each
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110E0770	Remove W Beam Guardrail Breakaway Cable Terminal	2	Each
110E0800	Remove W Beam Guardrail End Terminal	2	Each
110E1100	Remove Concrete Pavement	9,401.0	SqYd
120E0010	Unclassified Excavation	3,252	CuYd
120E0600	Contractor Furnished Borrow Excavation	16,666	CuYd
120E6100	Water for Embankment	214.9	MGal
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380E1500	PCC Overlay, Furnish	36,088.7	CuYd
380E1570	7" PCC Overlay, Placement	179,149.9	SqYd

SECTION F ESTIMATE OF QUANTITIES (CONTINUED)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
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380E1610	Fast Track PCC Overlay, Placement	4,151.1	SqYd
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380E6000	Dowel Bar	108,806	Each
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629E0100	3 Cable Guardrail	247	Ft
629E0300	3 Cable Guardrail Slip Base Anchor Assembly	1	Each
630E1010	Straight Class A W Beam Guardrail with Wood Posts	200.0	Ft
630E2020	W Beam Guardrail Tangent End Terminal	1	Each
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900E0010	Refurbish Single Mailbox	24	Each
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Revised: 28 Oct 16, RML

SURFACING THICKNESS DIMENSIONS

Plans tonnage will be applied even though the thickness may vary from that shown on the plans.

At those locations where material must be placed to achieve a required elevation, plans tonnage may be varied to achieve the required elevation.

UTILITIES

The Contractor shall contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It shall be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the Contractor shall contact the Engineer to determine modifications that will be necessary to avoid utility impacts.

TYPE III FIELD LABORATORY

Substitution of a cellular telephone for the hard-wired touch-tone telephone is not allowed, as state personnel need the ability to download information over direct phone lines. The phone is intended for state personnel usage only. Contractor personnel are prohibited from using this phone unless pre-approved by the Project Engineer. It is the responsibility of the Contractor to contact Golden West Telecommunications prior to bidding to ensure the plant site area where the lab will be placed is able to have a hard wired phone connection.

The lab shall be equipped with an internet connection such as DSL, cable modem, or other approved service. The internet connection shall be provided with a multi-port wireless router. The internet connection shall be a minimum speed of 512 Kb unless limited by job location and approved by the DOT. Prior to installing the wireless router the Contractor shall submit the wireless router's technical data to the Area Office to check for compatibility with the state's computer equipment. The internet connection is intended for state personnel usage only. The Contractor's personnel are prohibited from using the internet connection unless pre-approved by the Project Engineer.

The Contractor shall submit a copy of each monthly bill for calls charged to this phone at the completion of the project. The Project Engineer will then audit the bills to ensure all calls are legitimate and then initiate a Construction Change Order (CCO) to reimburse the Contractor for the actual phone calls made, including local and long distance calls. Reimbursement will not be made for fees associated with the purchase, installation, disconnection, monthly line charges, and incidentals involved in the installation, maintenance, and disconnection of the phone (including attachments). These items shall be incidental to the contract unit price per each for TYPE III FIELD LABORATORY.

Revised: 28 Oct 16, RML

PAVEMENT SMOOTHNESS

The following locations shall be tested for smoothness in accordance with the Special Provision for PI PCC Pavement Smoothness:

SD50 – Sta. 398+73 to Sta. b 3+00 thru Equations

The following locations shall be tested for smoothness in accordance with the Special Provision for IRI PCC Pavement Smoothness:

SD50 – Sta. b 3+00 to Sta. b 83+00
SD50 WBL – Sta. b 83+00 to Sta. b 368+13.6

FAST TRACK PCC OVERLAY

At specific locations (intersecting streets, driveways, & blockouts) designated by the Engineer, Fast Tack PCC Overlay may be used. The intent of the Fast Track PCC Overlay is to insure the new pavement can be opened to traffic within 48 hours after placement.

An estimated 16 blockouts will be needed on the south side from Sta. 398+73 to Sta. b 70+61.3, 21 blockouts will be needed on the north side from Sta. 398+73 to Sta. b 368+13.6, and 4 blockouts will be needed for the center turn lane from Sta. 398+73 to Sta. b 70+61.3.

Fast Track PCC Overlay shall be constructed according to plan details and Specifications for the 7" PCC Overlay except as follows:

The Fast Track PCC Overlay shall be designed to achieve a minimum compressive strength of 3800 psi in 48 hours. Use of a water reducer, accelerator, or a high range water reducer may be required to achieve the desired early strength. If any of these additives are used, they shall be compatible with all other ingredients of the mix. The minimum pounds of cement shall be 600 pounds per cubic yard of Type I, II, III, or V cement. In addition to the cement a minimum of 105 pounds per cubic yard of Fly Ash will be used in the mix. The coarse aggregate shall be a minimum of 53% of total aggregate weight per cubic yard. Coarse aggregate shall be crushed ledge rock, Size No. 1 or 15. The water cement ratio shall be as low as practical to achieve the desired results. The slump requirement will be limited to 6.5 inches maximum and the entrained air content shall be 4.5% to 7.0% after all admixtures are added and the concrete. The Contractor is responsible for the mix design used. The Contractor shall submit a mix design and supporting documentation to the Engineer for approval at least 2 weeks prior to use. The Department of Transportation's Office of Materials & Surfacing shall review and comment on the proposed mix design prior to its use.

Fast Track PCC Overlay shall be cured with Curing Compound. In addition, the concrete shall be immediately covered with a suitable insulation blanket consisting of a layer of closed cell polystyrene foam protected by at least one layer of plastic. The insulation blanket shall have an R-value of at least 0.5, as rated by the manufacturer. The insulation blanket shall be left in place, except for initial joint sawing operations, until the 3800 psi is attained. The initial contraction joint sawing shall be performed as soon as practical after placement to avoid random cracking. The use of insulation blankets may be waived during periods of hot weather upon approval of the Engineer.

FAST TRACK PPC OVERLAY (CONTINUED)

The pavement may be opened to traffic, earlier than 48 hours, provided the compressive strength of 3800 psi has been attained. The final contraction joint sawing and sealing are not required at this time to open up pavement to traffic.

If more or less Fast Track PCC Overlay is used, an equal amount shall be subtracted from or added to the total for 7" PCC Overlay. All costs for Fast Track PCC Overlay shall be incidental to the contract unit price per cubic yard for FAST TRACK PCC OVERLAY, FURNISH and square yard for FAST TRACK PCC OVERLAY, PLACEMENT.

TABLE OF FAST TRACK CONCRETE PAVEMENT

	PCC Pavement, Furnish (cu.yds.)	PCC Pavement, Placement (sq.yds.)
Fast Track PCC Overlay	807.2	4,151.1
7" PCC Overlay	36,088.7	179,149.9
TOTAL	36,895.9	183,301.0

TABLE OF SUPERELEVATION

STATION TO STATION	REMARKS
SD50	
Sta. 398+73.0 to Sta. 403+47.4 Thru Equation	Normal Crown Section
Sta. 403+47.4 to Sta. 405+97.4	Superelevation Transition
Sta. 405+97.4 to Sta. 417+57.5	2° 28.2' Curve Rt. 0.048 Superelevation Rate.
Sta. 417+57.5 to Sta. a 420+11.5	Superelevation Transition
Sta. a 420+11.5 to Sta. b 83+00	Normal Crown Section
SD50 WBL	
Sta. b 83+00 to Sta. b 161+11.7	Normal Crown Section
Sta. b 161+11.7 to Sta. b 179+61.5	0° 18' Curve Lt. Normal Crown Section
Sta. b 179+61.5 to Sta. b 239+19.4	Normal Crown Section
Sta. b 239+19.4 to Sta. b 241+59.4	Superelevation Transition
Sta. b 241+59.4 to Sta. b 260+51.8	1° 00' Curve Rt. 0.034 Superelevation Rate.
Sta. b 260+51.8 to Sta. b 265+91.6	Superelevation Transition
Sta. b 265+91.6 to Sta. b 284+30.9	1° 00' Curve Lt. 0.034 Superelevation Rate.
Sta. b 284+30.9 to Sta. b 286+05.0	Superelevation Transition
Sta. b 286+05.0 to Sta. b 288+45.9	Normal Crown Section
Sta. b 288+45.9 to Sta. b 308+37.3	0° 18' Curve Rt. Normal Crown Section.
Sta. b 308+37.3 to Sta. b 368+13.6	Normal Crown Section

Revised: 28 Oct 16, RML

TABLE OF GEOTEXTILE BOND BREAKER FABRIC

Location	Geotextile Bond Breaker Fabric SqYd
SD50	
Sta. 400+17 to Sta. b 68+41.3	133,179.2
SD50 WBL	
Sta. b 86+08 to Sta. b 152+48.7	36,154.9
Sta. b 162+56.5 to Sta. b 368+13.6	111,922.0
TOTAL	281,256.1

Quantity shown is the actual square yardage required with no laps

TABLE OF PCC PAVEMENT

Location	PCC Overlay, Furnish Or Fast Track PCC Overlay, Furnish CuYd	7" PCC Overlay Placement Or Fast Track PCC Overlay, Placement SqYd	9" Nonreinforced PCC Pavement SqYd
SD50			
Sta. 398+73 to Sta. 400+17			1024.0
Sta. 400+17 to Sta. 404+00	529.6	2723.6	
Sta. 404+00 to Sta. a 419+62.6	2154.9	11082.7	
Sta. a 419+62.6 to Sta. a 429+70	1393.0	7164.4	
Sta. a 429+70 to Sta. a 435+58	813.3	4181.3	
Sta. a 435+58 to Sta. b 68+41.3	15,473.2	79,577.6	
Sta. b 68+41.3 to Sta. b 70+61.3			1564.4
Sta. b 70+61.3 to Sta. b 83+00			4954.8
SD50 WBL			
Sta. b 83+00 to Sta. b 86+08			889.8
Sta. b 86+08 to Sta. b 152+48.7	3780.2	19,184.2	
Sta. b 152+48.7 to Sta. b 155+56.7			889.8
Sta. b 159+48.5 to Sta. b 162+56.5			889.8
Sta. b 162+56.5 to Sta. b 368+13.6	12751.7	59,387.2	
TOTALS	36,895.9	183,301.0	10,212.6

TYPICAL SURFACING SECTIONS

STATE OF SOUTH DAKOTA	PROJECT NH 0050(108)385	SHEET F19	TOTAL SHEETS F102
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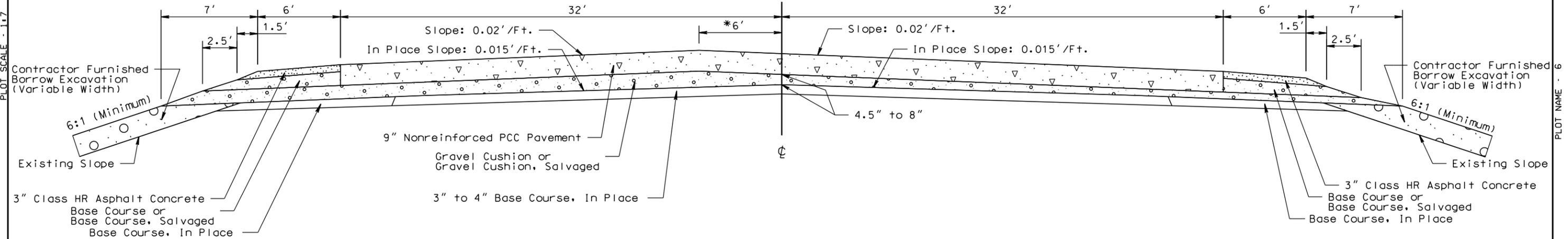
Plotting Date: 10/28/2016

Revised: 28 Oct 16, RML

Transitions:

Sta. 398+73 to Sta. 400+17
* Crown Point 6' Lt. to 0' Lt.

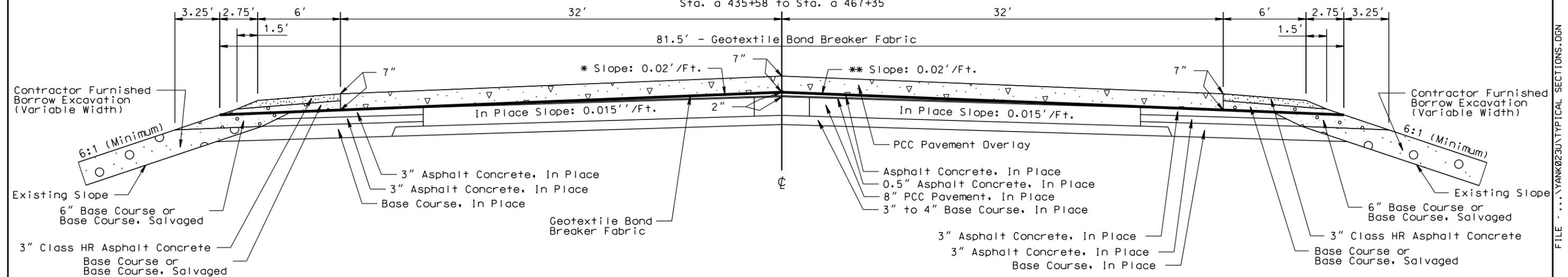
Sta. 398+73 to Sta. 400+17



Sta. 400+17 to Sta. a 429+70
Sta. a 435+58 to Sta. a 467+35

Transitions:

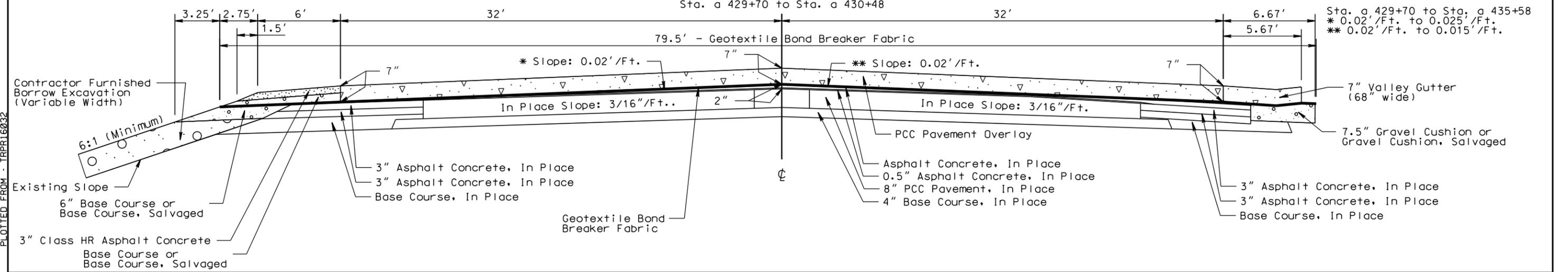
Sta. a 435+58 to Sta. a 436+38
* 0.025' / Ft. to 0.02' / Ft.
** 0.015' / Ft. to 0.02' / Ft.



Sta. a 429+70 to Sta. a 430+48

Transitions:

Sta. a 429+70 to Sta. a 435+58
* 0.02' / Ft. to 0.025' / Ft.
** 0.02' / Ft. to 0.015' / Ft.



PLOT SCALE - 1:7

PLOT NAME

PLOTTED FROM - TRPR16032

FILE - ... \YANK023\TYPICAL SECTIONS.DGN

\$\$\$ Precast concrete Headwall may require resetting. Outlet Pipe may require an extension or reduction in length due to slope flattening and the installation of the Standard Weight Black Steel Pipe.

TYPICAL SURFACING SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0050(108)385	F20	F102

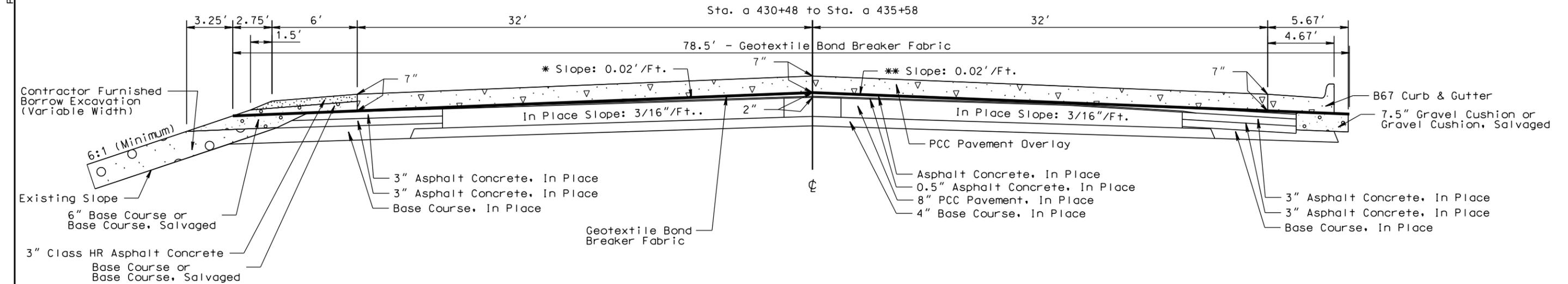
Plotting Date: 10/28/2016

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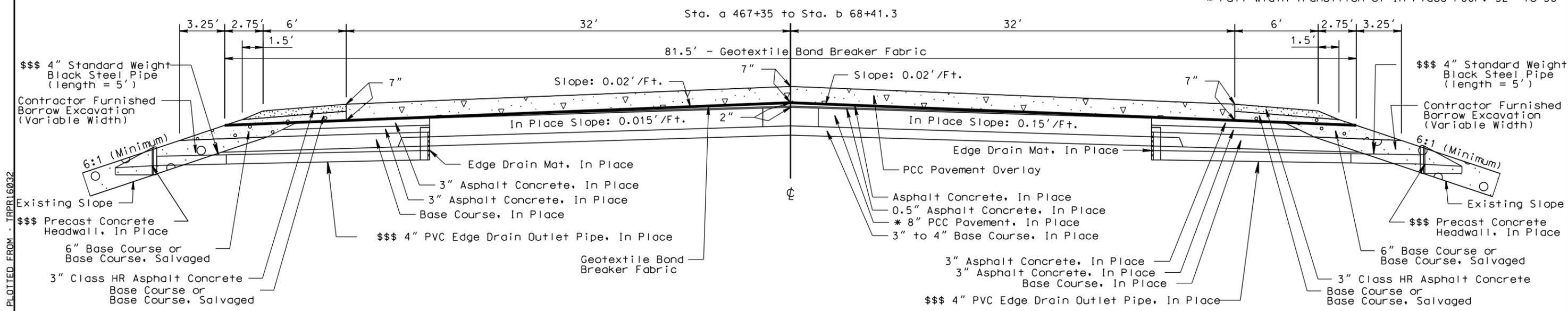
Transitions:
 Sta. a 429+70 to Sta. a 435+58
 * 0.02'/Ft. to 0.025'/Ft.
 ** 0.02'/Ft. to 0.015'/Ft.

PLOT SCALE - 1:7

PLOT NAME - 7



Transitions:
 Sta. b 66+26.4 to Sta. b 68+41.3
 * Full Width Transition of In Place PCCP: 52' to 56'



PLOTTED FROM - TRPR16032

FILE - ... \YANK023\TYPICAL SECTIONS.DGN

TYPICAL SURFACING SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0050(108)385	F22	F102

Plotting Date: 10/28/2016

Revised: 28 Oct 16. RML

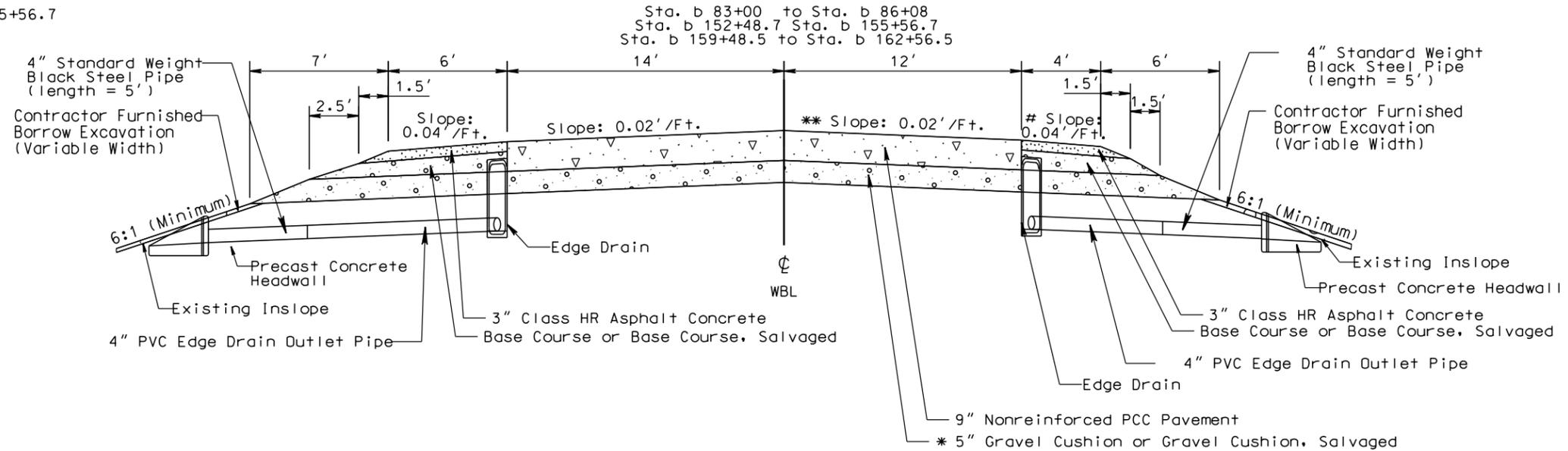
\$\$\$ Precast concrete Headwall may require resetting. Outlet Pipe may require an extension or reduction in length due to slope flattening and the installation of the Standard Weight Black Steel Pipe.

Transitions:

Sta. b 83+00.0 to Sta. b 86+08.0
 ** -0.02'/Ft. to 0.02'/Ft.
 # -0.02'/Ft. to 0.04'/Ft.

Sta. b 83+00.0 to Sta. b 86+08.0
 Sta. b 159+48.5 to Sta. b 162+56.5
 * 5" to 6.7"

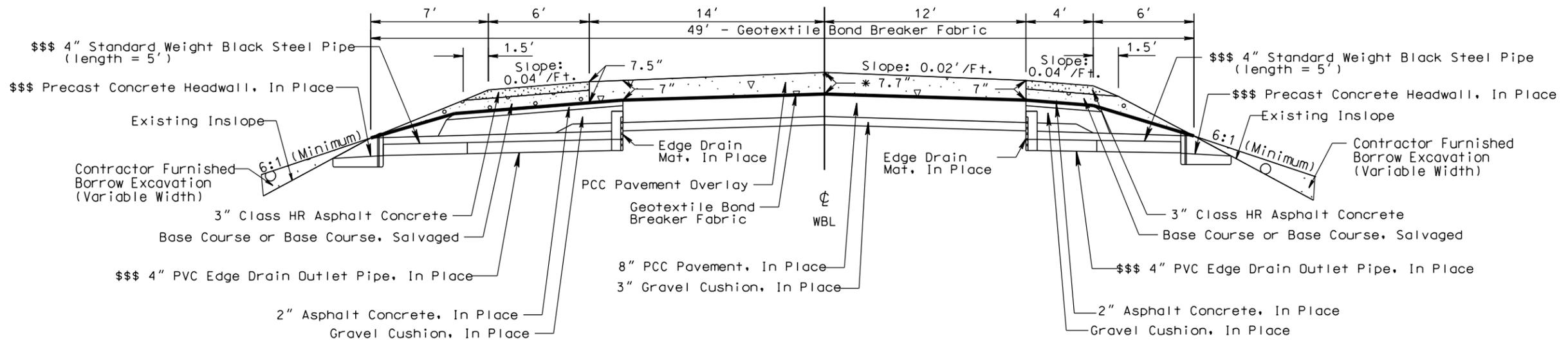
Sta. b 152+48.7 to Sta. b 155+56.7
 * 6.7" to 5"



Transitions:

Sta. b 365+49.6 to Sta. b 368+13.6
 * 7.7" to 7"

Sta. b 86+08 to Sta. b 152+48.7
 Sta. b 162+56.5 to Sta. b 368+13.6



PLOT SCALE - 1:7

PLOTTED FROM - TRPR16032

PLOT NAME - 9

FILE - ... \YANK023\TYPICAL SECTIONS.DGN