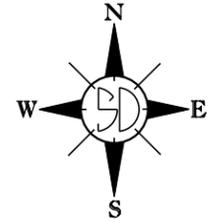


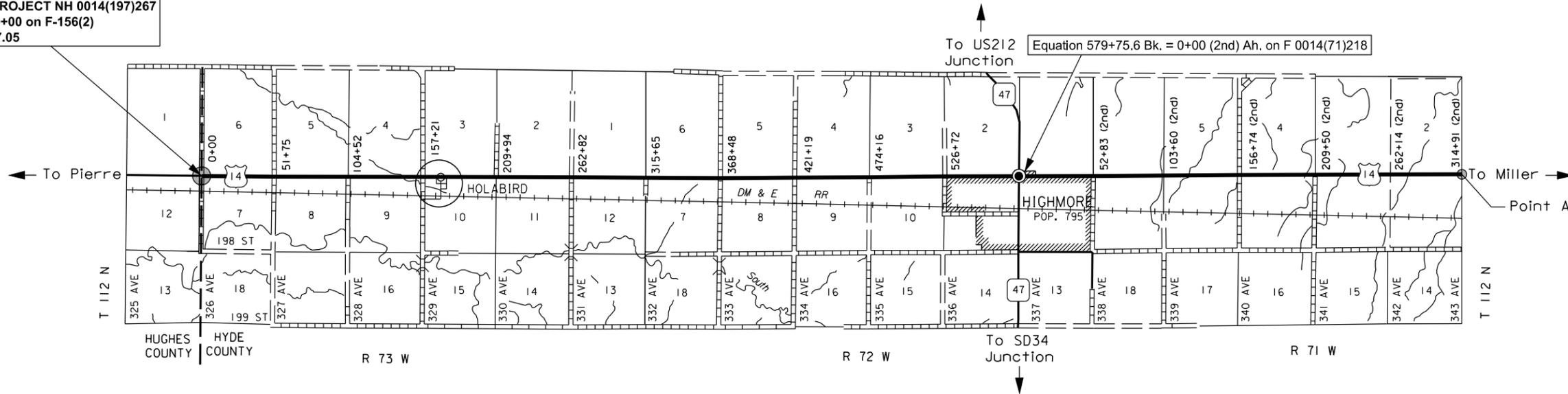
SECTION F: SURFACING PLANS

Plotting Date: 01/21/2015

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0014(197)267 & P 0045(53)111	F1	F55

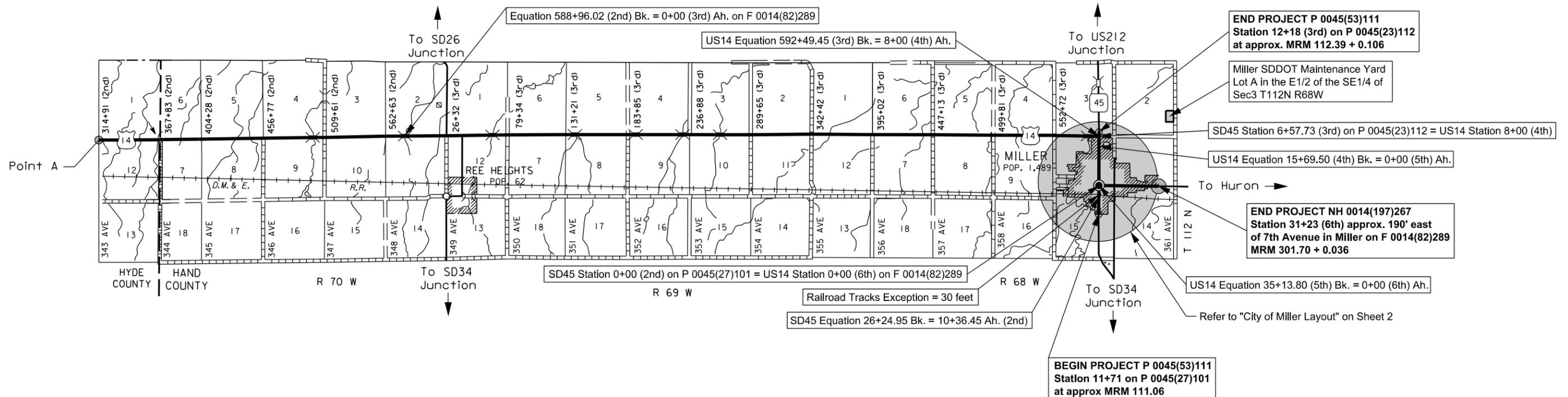


BEGIN PROJECT NH 0014(197)267
Station 0+00 on F-156(2)
MRM 267.05



INDEX OF SHEETS

Sheet F1	Layout Map and Index
Sheet F2	Estimate of Quantities
Sheets F3-F8	Plan Notes
Sheets F9-F23	US Hwy 14 Typical Sections
Sheets F24-F26	SD Hwy 45 Typical Sections
Sheets F27-F29	US Hwy 14 Rates of Materials
Sheet F30	SD Hwy 45 Rates of Materials
Sheet F31	Table of Project Stationing
Sheet F32	Table of Material Quantities
Sheets F33-F34	Table of Additional Quantities
Sheets F35-F42	Table of Approaches
Sheets F43-F44	Summary of Asphalt Concrete
Sheet F45	Highmore Turn Lane Layout
Sheet F46	Highmore Intersection Layout
Sheet F47	Miller Intersection Layout
Sheet F48	Safety Edge Detail
Sheets F49-F55	Standard Plates



END PROJECT P 0045(53)111
Station 12+18 (3rd) on P 0045(23)112
at approx. MRM 112.39 + 0.106

Miller SDDOT Maintenance Yard
Lot A in the E1/2 of the SE1/4 of
Sec3 T112N R68W

SD45 Station 6+57.73 (3rd) on P 0045(23)112 = US14 Station 8+00 (4th)

US14 Equation 15+69.50 (4th) Bk. = 0+00 (5th) Ah.

END PROJECT NH 0014(197)267
Station 31+23 (6th) approx. 190' east
of 7th Avenue in Miller on F 0014(82)289
MRM 301.70 + 0.036

US14 Equation 35+13.80 (5th) Bk. = 0+00 (6th) Ah.

BEGIN PROJECT P 0045(53)111
Station 11+71 on P 0045(27)101
at approx MRM 111.06

ESTIMATE OF QUANTITIES

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F2	F55

Revised on 1/22/2015 by VAM

NH 0014(197)267 – PCN 04E3

P 0045(53)111 – PCN 04WJ

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
110E0510	Remove Pipe End Section	9	Each
110E1693	Remove Erosion Control Wattle	263	Ft
110E1700	Remove Silt Fence	263	Ft
110E7510	Remove Pipe End Section for Reset	5	Each
120E0100	Unclassified Excavation, Digouts	1,738	CuYd
120E0600	Contractor Furnished Borrow	110	CuYd
120E4100	Reprofiling Ditch	19.0	Sta
120E6200	Water for Granular Material	156.7	MGal
* 250E0010	Incidental Work	Lump Sum	LS
260E1010	Base Course	5,756.1	Ton
260E1050	Base Course, Salvaged Asphalt Mix	10,577.5	Ton
* 260E6000	Granular Material, Furnish	6,610.9	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	16,527.3	Ton
320E0005	PG 58-34 Asphalt Binder	4,716.0	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	91,966.3	Ton
320E1800	Asphalt Concrete Blade Laid	5,544.0	Ton
320E4000	Hydrated Lime	979.3	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	63.4	Mile
330E0010	MC-70 Asphalt for Prime	122.1	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	306.9	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	157.4	Ton
330E2000	Sand for Flush Seal	1,960.7	Ton
332E0010	Cold Milling Asphalt Concrete	717,571	SqYd
450E2008	18" RCP Flared End, Furnish	3	Each
450E2009	18" RCP Flared End, Install	3	Each
450E5406	18" CMP Safety End, Furnish	5	Each
450E5407	18" CMP Safety End, Install	5	Each
450E6006	18" CMP Arch Safety End, Furnish	1	Each
450E6007	18" CMP Arch Safety End, Install	1	Each
450E9001	Reset Pipe End Section	5	Each
600E0300	Type III Field Laboratory	1	Each
734E0010	Erosion Control	Lump Sum	LS
734E0154	12" Diameter Erosion Control Wattle	1,050	Ft
734E0165	Remove and Reset Erosion Control Wattle	263	Ft
734E0602	Low Flow Silt Fence	1,050	Ft
734E0610	Mucking Silt Fence	73	CuYd
734E0620	Repair Silt Fence	263	Ft
900E0010	Refurbish Single Mailbox	7	Each
900E0012	Refurbish Double Mailbox	1	Each
900E1980	Storage Unit	1	Each

* - Denotes Non-Participating

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
120E0100	Unclassified Excavation, Digouts	28	CuYd
120E6200	Water for Granular Material	0.8	MGal
260E1010	Base Course	80.4	Ton
* 260E6000	Granular Material, Furnish	908.9	Ton
* 270E0200	Blend, Haul, and Stockpile Granular Material	2,272.4	Ton
320E0005	PG 58-34 Asphalt Binder	123.3	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	2,261.6	Ton
320E1800	Asphalt Concrete Blade Laid	169.9	Ton
320E4000	Hydrated Lime	24.1	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	8.8	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	3.6	Ton
330E2000	Sand for Flush Seal	65.5	Ton
332E0010	Cold Milling Asphalt Concrete	19,828	SqYd
998E0100	Railroad Protective Insurance	Lump Sum	LS

* - Denotes Non-Participating

Revised on 1/22/2015 by VAM

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F3	F55

GENERAL NOTES

The Contractor shall be required to mow the inslopes with a rotary mower to a height of 6 inches for a distance of 14 feet from the edge of the roadway (or shoulder) for the length of the project. This work will be completed to the satisfaction of the Engineer after all construction activities are completed. All costs associated with this work shall be incidental to the various contract items.

The Contractor shall note all broken water valve boxes and manhole frames, lids, and rings and contact the City for replacement prior to beginning work. All water valve boxes and manhole frames, lids, and rings that are cracked or broken due to the Contractors operation shall be replaced conforming to the Specifications, at the Contractors expense.

SHOULDER PREPARATION

Prior to mainline and shoulder paving, the shoulders shall be bladed and broomed of all vegetation and loose/accumulated material to the satisfaction of the Engineer. Shoulder preparation shall not be measured for payment, and no separate payment will be made for this work. All costs associated with shoulder preparation shall be incidental to the various contract items.

Vegetation and accumulated material adjacent to the existing surface edge shall be removed to the satisfaction of the Engineer prior to placement of mainline surfacing. Any remaining windrow of accumulated material shall be re-spread evenly on the inslope adjacent to the asphalt shoulder to the satisfaction of the Engineer prior to the application of the flush seal.

Any vegetation damaged outside of the asphalt concrete limits shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

This shoulder work shall be incidental to other contract items. Separate measurement and payment will not be made.

The Contractor shall notify the Huron Area (605) 353-7140 at least two weeks prior to beginning work on project so SDDOT personnel can mow or spray along the shoulder inslopes. The Department will not be responsible for the effectiveness of the mowing or spraying.

INTERSECTING ROADS AND ENTRANCES

Intersecting roads and entrances shall be satisfactorily cleared of vegetation, shaped, and compacted prior to placement of mainline surfacing. This work will be considered incidental to other contract items. Separate measurement and payment will not be made.

SURFACING THICKNESS DIMENSIONS

Material will be placed evenly, at the rates shown in the plans, even though the thickness may vary from that shown on the typical section. At those locations where material must be placed to achieve a required elevation, quantities may be varied to achieve the required elevations, as approved by the Engineer.

SAWING OF EXISTING ASPHALT CONCRETE

Where new asphalt concrete is placed adjacent to existing asphalt concrete, the existing asphalt shall be sawed full depth to a true line with a vertical face. There will not be a separate payment made for sawing. All costs associated with sawing existing asphalt concrete shall be incidental to the various contract items.

UTILITIES

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.

COLD MILLING ASPHALT CONCRETE

GENERAL:

Cold milling asphalt concrete shall be done according to the typical sections. The depth or width of milling may need to be adjusted due to rutting, maintenance patches, or roadway irregularities. Additional asphalt concrete shall be milled in these areas to provide a uniform typical section from centerline to the edge of the finished shoulder. These areas may also include farm & field entrances and intersecting roads. Any additional costs associated with this additional cold milling shall be incidental to the contract unit price per square yard for "Cold Milling Asphalt Concrete". No adjustments in quantity or price will be made.

The Contractor shall schedule the cold milling asphalt concrete operations so that there are no drop offs, uneven lanes, or windrows of milled material remaining on the roadway overnight. These areas may also include farm & field entrances and intersecting roads.

The Contractor shall use extreme care when milling around water valve boxes and manhole frames, lids, and rings.

The Contractor shall utilize some of the generated cold milled material to construct a 20:1 temporary on/off transition. This material shall be removed once paving commences. All costs associated constructing and removing the transitions shall be incidental to the contract unit price per square yard for "Cold Milling Asphalt Concrete".

Cold Milling Asphalt Concrete shall conform to Section 332.2 of the Specifications. Any material over the 1 1/2" size specification shall be subject to crushing.

The Contractor will be responsible for excessive material lost at plant site stockpile location, or intermediate stockpiling locations due to bad stockpile management practices as deemed by the Engineer and will be required to compensate the State by providing similar material.

All cold milled material generated and not utilized within this Contract shall be hauled, blended, and stockpiled at the Miller SDDOT Maintenance Yard, located at 1605 East 3rd Street, Miller, SD within Lot A in the E½ of the SW¼ of Sec3 T112N R68W.

All vertical cuts from cold milling operations left and right of centerline shall be daylighted to the outside edge of the road as directed by the Engineer to allow surface water to be drained off the roadway.

After completion of the milling operation, the Contractor shall clean up and dispose of any remaining debris to the satisfaction of the Engineer.

All costs associated with cold milling asphalt concrete shall be incidental to the contract unit price per square yard for "Cold Milling Asphalt Concrete".

Cold Milling Asphalt Concrete will be paid for at the contract unit price per square yard, inclusive of all costs for cold milling existing asphalt concrete (including areas that may require additional effort). Plans quantity will be the basis of payment for COLD MILLING ASPHALT CONCRETE and no further measurement will be made.

US14 NH 0014(197)267 PCN 04E3:

Section 1:

The Los Angeles Abrasion Loss value on the aggregate used for the in place asphalt concrete was 25 percent. This value was obtained from testing during construction of the in place asphalt concrete.

Cold Milling is estimated to produce 10,577.5 tons of salvaged asphalt concrete material. All of the material shall be used on the shoulders within Section 1 as detailed in the plans. The Contractor shall ensure, if stockpiling prior to placing on the shoulders, that the material is not placed in the same stockpile as the other cold milled material from the other sections.

Sections 2-15:

The Los Angeles Abrasion Loss value on the aggregate used for the in place asphalt concrete was 24 percent. These values were obtained from testing during construction of the in place asphalt concrete.

Cold Milling is estimated to produce 26,584.4 tons of salvaged asphalt concrete material. It has been estimated that 16,668.0 tons of salvaged asphalt concrete will be used in the Class Q3R Hot Mixed Asphalt Concrete Mix. An estimated 9,916.4 tons of salvaged asphalt concrete shall be blended and stockpiled. The Contractor is responsible to assure enough asphalt concrete salvage is available for the Class Q3R Hot Mixed Asphalt Concrete.

SD45 P 0045(53)111 PCN 04WJ:

The Los Angeles Abrasion Loss value on the aggregate used for the in place asphalt concrete was 24 percent. These values were obtained from testing during construction of the in place asphalt concrete.

Cold Milling is estimated to produce 1,779.7 tons of salvaged asphalt concrete material. It has been estimated that 416.2 tons of salvaged asphalt concrete will be used in the Class Q3R Hot Mixed Asphalt Concrete Mix. An estimated 1,363.4 tons of salvaged asphalt concrete shall be blended and stockpiled. The Contractor is responsible to assure enough asphalt concrete salvage is available for the Class Q3R Hot Mixed Asphalt Concrete.

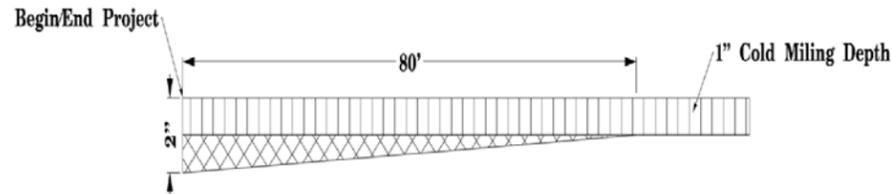
STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F4	F55

COLD MILLING ASPHALT CONCRETE TRANSITIONS

In order to construct the new surfacing flush with the existing Asphalt Concrete Pavement at begin/end project, it will be necessary to transition the depth of cold milling to the limits as shown in the layout below.

The surface shall be cold milled full roadway width.

All costs associated with this work shall be incidental to the contract unit price per square yard for "Cold Milling Asphalt Concrete".



EXCAVATION OF UNSTABLE MATERIAL

The locations and extent of digout areas will be determined in the field by the Engineer. The backfilling material for the digouts shall be Base Course.

Included in the Estimate of Quantities are 1738 cubic yards of Unclassified Excavation – Digouts for US14 and 28 cubic yards of Unclassified Excavation – Digouts for SD45 for the removal of unstable material throughout the projects.

BASE COURSE, SALVAGED ASPHALT MIX

Base Course Salvaged Asphalt Mix estimated at 10,577.5 tons will be produced on US14 from Section 1 of 15. All of the material obtained within Section 1 shall be placed on the Section 1 shoulders as detailed in the plans and may be used without further testing after meeting the Cold Milling specification.

Base Course Salvaged Asphalt Mix placed on the shoulders shall be compacted according to Section 260.3.B of the Specifications except that a pneumatic tired roller with an effective roller weight of at least 250 pounds per inch (4.5 kilograms per mm) of roller width will be required.

At the time of compaction, the material shall have approximately 4% moisture uniformly blended throughout the depth of material. The percent moisture may be adjusted by the Engineer. Included in the Estimate of Quantities is 101.5 M. Gal./per mile for "Water for Granular Material".

WATER FOR GRANULAR MATERIAL

The moisture content for compaction of the Base Course and Base Course, Salvaged Asphalt Mix shall be approximately optimum moisture for the material or as directed by the Engineer. The quantity for Water for Granular Material is based on 4% of the quantity of the aforementioned material. All costs for furnishing and placing the water shall be paid for at the contract unit price per MGal for "Water for Granular Material".

BASE COURSE

Base Course shall be furnished by the Contractor.

Base Course shall be needed for backfilling of digouts and approaches throughout the project areas as detailed in the plans.

Compaction shall be according to Section 260.3.A of the Specifications for constructing the aforementioned areas.

All costs associated with the aforementioned work shall be incidental to the contract unit price per ton for "Base Course".

BLEND, HAUL, & STOCKPILE GRANULAR MATERIAL

General:

Asphalt mix material shall be blended with Granular Material, Furnish at the rate of 60% salvaged asphalt mix material and 40% Granular Material, Furnish to obtain stockpile material. Prior to incorporation into the stockpile, cold milled asphalt material shall be run over a 1 1/2" screen to remove large chunks. Any material over the 1 1/2" size specification shall be subject to crushing and reincorporated back into the blending process. No further testing of the material will be required. The use of a pugmill to blend the materials will be accepted.

Equipment will not be allowed on the stockpile. Only material incorporated into the pile shall be accepted for payment.

Calibrated conveyor(s) shall be used to provide a uniform blending of the materials. Material shall be blended prior to incorporation into the pile.

A computerized scale along with a scale operator shall be provided by the Contractor at the stockpile site to weigh the salvaged material prior to blending.

All other costs for hauling, stockpiling, and blending asphalt mix material and Granular Material, Furnish shall be incidental to the contract unit price per ton for "Blend, Haul & Stockpile Granular Material".

The quantity is an estimate only (informational purposes) and the exact quantity shall be determined upon construction. BLEND, HAUL AND STOCKPILE GRANULAR MATERIAL quantities that vary from the estimated quantities in the contract, shall be paid at the original contract unit price per ton and no allowance will be made for loss of expected reimbursement or loss of anticipated profits.

US14 NH 0014(197)267 PCN 04E3:

Excess asphalt mix material estimated at 9,916.4 tons (for informational purposes only) shall be blended with 6,610.9 tons of Granular Material, Furnish and shall be hauled, blended and stockpiled at Miller SDDOT Yard located in Lot A in the E1/2 of the SE1/4 of Sec3 T112N R68W.

SD45 P 0045(53)111 PCN 04WJ:

Excess asphalt mix material estimated at 1,363.4 tons (for informational purposes only) shall be blended with 908.9 tons of Granular Material, Furnish and shall be hauled, blended and stockpiled at Miller SDDOT Yard located in Lot A in the E1/2 of the SE1/4 of Sec3 T112N R68W.

GRANULAR MATERIAL, FURNISH

Granular Material shall be furnished by the Contractor for use in blending with the salvaged asphalt mix material from this project for the stockpile at the Miller Maintenance Yard.

The Granular Material shall be Base Course meeting the requirements of Section 882.

CLASS Q3R HOT MIXED ASPHALT CONCRETE

Asphalt concrete aggregates shall consist of salvaged asphalt concrete mix material (RAP) and virgin aggregate.

Virgin mineral aggregate shall be furnished by the Contractor.

Virgin mineral aggregate for Class Q3R Hot Mixed Asphalt Concrete shall conform to the requirements of the Special Provision for Gyratory Controlled Quality Control/Quality Assurance Hot Mixed Asphalt Concrete Pavement for a Class Q3 except for the following:

Mix Design Criteria:

Gyratory Compactive Effort:

	N _{initial}	N _{design}	N _{maximum}
Class Q3R	6	50	75

Salvaged asphalt concrete material shall be obtained from the material produced by cold milling on this project and may be used without further testing. The salvaged asphalt concrete mix material shall be crushed so that the maximum particle size in the cold feed will not exceed 1 1/2" inches.

Screening or scalping of the RAP stockpile(s) will not be allowed.

The Class Q3R Asphalt Concrete shall include 20 percent salvaged asphalt concrete (RAP) in the mixture. Job mix formula tolerances for the RAP shall be ± 5 % from the target value.

All remaining requirements of the Special Provision for Class Q3 Hot Mixed Asphalt Concrete shall apply.

The asphalt concrete on the shoulders will not be compacted to a specified density. The shoulders shall be compacted using the same rolling pattern used on mainline.

SAFETY EDGE CONSTRUCTION WITH HOT MIX ASPHALT PAVEMENTS

See details for Safety Edge Configuration for Asphalt Pavements located on the "Safety Edge Detail" sheet for construction of the safety edge as shown in Section 1.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F5	F55

ASPHALT CONCRETE BLADE LAID

Included in the Estimate of Additional Quantities are 150 tons of Asphalt Concrete Blade Laid, 1.5 tons of Hydrated Lime, 11.3 tons of PG 58-34 Asphalt Binder, and 3.0 tons of SS-1h or CSS-1h Emulsified Asphalt for Tack per mile and shall be tight bladed on the existing surface 24 feet wide prior to the overlay. An additional amount of the aforementioned quantities has been added to the Estimate to account for tight blading all turn lanes and full width through Miller city limits. A sufficient amount of material shall be kept in front of the blade to fill and level all joints, cracks and other surface irregularities.

The blade used to tight blade the material shall be equipped with gates, wings or other devices approved by the Engineer to prevent the material from windrowing at the edges of the blade.

A paver may be used to place the material provided it is equipped with a solid screed bar plate measuring a minimum of 12" wide by 1 1/2" thick that forces the mixture into the joints and cracks to adequately level and fill them while not exceeding the application rate set up in the plans.

Mineral Aggregate for tight bladed material shall use only the fine aggregate components combined in the same proportions as the Class Q3R Hot Mixed Asphalt Concrete mix. No quality testing will be done on any of the coarse aggregate (+No. 4 sieve) in this mix.

The Asphalt Concrete Blade Laid Lift shall be designed using an N_{design} Gyratory Compactive Effort of 65. The asphalt binder content shall be determined so that the air voids of Asphalt Concrete Blade Laid Lift are between 3.0% and 5.0%.

The tight bladed material shall be compacted by at least 2 complete coverages with pneumatic tired rollers.

All loose existing joint material shall be removed and the surface shall be thoroughly swept at speeds not higher than 5 M.P.H. with a rotary broom to remove all loose asphalt concrete and joint material from cracks and spall areas prior to placing the Blade Laid Mix. Cost for removing the material and brooming shall be included in the contract unit price per ton for "Asphalt Concrete Blade Laid".

ADDITIONAL QUANTITIES

US14 NH 0014(197)267 PCN 04E3:

Included in the Table of Additional Quantities are 100 tons of Class Q3R Hot Mixed Asphalt Concrete, 5.0 tons of PG 58-34 Asphalt Binder, and 1.0 ton of Hydrated Lime per mile for spot leveling, strengthening and repair of the existing surface and shoulders throughout the project. Also included in the Table of Additional Quantities are 15.0 tons of SS-1h or CSS-1h Emulsified Asphalt for Tack for repair and leveling areas throughout the project. The aforementioned materials shall be placed as directed by the Engineer.

SD45 P 0045(53)111 PCN 04WJ:

Included in the Table of Additional Quantities are 100 tons of Class Q3R Hot Mixed Asphalt Concrete, 5.0 tons of PG 58-34 Asphalt Binder, and 1.0 ton of Hydrated Lime per mile for spot leveling, strengthening and repair of the existing surface and shoulders throughout the project. Also included in the Table of Additional Quantities are 1.2 tons of SS-1h or CSS-1h Emulsified Asphalt for Tack for repair and leveling areas throughout the project. The aforementioned materials shall be placed as directed by the Engineer.

STORAGE UNIT

The Contractor shall provide a storage unit such as a portable storage container or a semi-trailer meeting the minimum size requirements from the table below:

Project Total Asphalt Concrete Tonnage	Minimum Internal Size (Cu Ft)	Minimum External Size (L x W x H)
Less than 50,000 ton	1,166	20' x 8' x 8.6' std
More than 50,000 ton	2,360	40' x 8' x 8.6' std
All Gyratory Controlled QC/QA Projects	2,360	40' x 8' x 8.6' std

The storage unit is intended for use only by the Engineer for the duration of the project. The QC lab personnel or the Contractor will not be allowed to use the storage container while it is on the project, without permission of the Engineer.

The storage unit shall be on site and operational prior to asphalt concrete production. Upon completion of asphalt concrete production, the Engineer will notify the Contractor when the storage unit can be removed from the project. The storage unit use will not exceed 30 calendar days from the completion of asphalt concrete production. The storage unit will remain the property of the Contractor.

The storage unit shall be weather proof and shall be set in a level position. The storage unit shall be able to be locked with a padlock.

The storage unit shall be placed adjacent to the QA lab, as approved by the Engineer.

The following shall apply when the storage unit provided on the project is a portable storage container:

The portable storage container shall be constructed of steel. The portable storage container shall be set such that it is raised above the surrounding ground level to keep water from ponding under or around the storage container.

The following shall apply when the storage unit provided on the project is a semi-trailer:

A set of steps and hand railings shall be provided at the exterior door. If the floor of the semi-trailer is 18 inches or more above the ground, a landing shall be constructed at the exterior door. The minimum dimensions for the landing shall be 4 feet by 5 feet. The top of the landing shall be level with the threshold or opening of the doorway.

The semi-trailer may be connected to the QA lab by a stable elevated walkway. The walkway shall be a minimum of 48 inches wide and contain handrails installed at 32 inches above the deck of the walkway. The walkway shall be constructed such that it is stable and the deck does not deform during use and allows for proper door operation. Walkway construction shall be approved by the Engineer.

All cost for furnishing, maintaining, and removing the storage unit including labor, equipment, and materials including any necessary walkways, landings, stairways, and handrails shall be included in the contract unit price per each for "Storage Unit".

FLUSH SEAL

Application of Flush Seal shall be completed within 10 working days following completion of the asphalt concrete surfacing.

SAND FOR FLUSH SEAL

Sand for Flush Seal shall be furnished by the Contractor.

Sand for Flush Seal shall conform to the Specifications Section 879.1.B.

The spreading device placing the sand shall leave a gap of 6 inches each side of centerline, applicable lane lines and the edge-line to ensure a better bond between the pavement and the permanent pavement marking.

TYPE III FIELD LABORATORY

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 end of each month. 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".

RUMBLE STRIP ROADWAY CLEANING

The Contractor shall be required to remove loose material from the driving surface and/or asphalt shoulders of the roadway. Loose material may be swept to the edge of shoulders and it shall be the Contractor's responsibility to ensure the loose material does not enter any vegetated areas and/or waterways.

All costs associated with the work shall be incidental to the contract unit price per mile for installing Rumble Strips.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F6	F55

RUMBLE STRIPS

Rumble strips shall be installed in rural areas with posted speeds greater than 50 M.P.H. Rumble strips will not be required in urban areas or where there is development in close proximity to the highway. The Engineer shall provide the exact start and stop locations for the rumble strip installation.

The gaps for the rumble strip installation as detailed on the standard plates shall be included with the measurement and payment.

Rumble strips shall not be placed on any bridge deck or within 25 feet of the approach slab or within 50 feet of any railroad crossing.

The placement of rumble strips from the driving lane may vary depending on the existing typical section of the roadway as directed by the Engineer.

The Contractor shall install rumble strips as per standard plate shown in the plans. The rumble strips must be grooved into the asphalt concrete surfacing. Following installation, the rumble strips shall be flush sealed with SS-1h or CSS-1h Asphalt for Flush Seal.

Rumble Strip installation shall be completed prior to application of the Flush Seal and Permanent Pavement Markings.

In the event the Flush Seal is eliminated from the contract, the Contractor will still be required to apply a Flush Seal to the newly installed 12" Rumble Strip at a width of 1.5' and at the same rate as specified in this plan set. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be paid at the contract unit price per ton.

All costs for installing the rumble strips shall be paid for at the contract unit price per mile for "Grind 12" Rumble Strip or Stripe in Asphalt Concrete".

LOCATION OF MANHOLES AND LIDS

For Information only, the location of manholes has been provided.

SD45 P 0045(53)111 PCN 04WJ:

Station	Offset	L/R	Utility Type	Comments
12+07.19	13.17	R	Sanitary Sewer	
15+30.12	10.98	R	Sanitary Sewer	
19+61.58	12.29	R	Sanitary Sewer	
23+31.05	12.76	R	Sanitary Sewer	
4+19.73 (2nd)	38.78	L	Storm Sewer	
4+26.60 (2nd)	1.19	R	Sanitary Sewer	
4+32.47 (2nd)	20.14	R	Storm Sewer	
4+40.62 (2nd)	35.53	R	Storm Sewer	
9+01.73 (2nd)	0.49	R	Sanitary Sewer	
9+29.23 (2nd)	35.49	R	Underground Telephone	

NH 0014(197)267 PCN 04E3:

Station	Offset	L/R	Utility Type	Comments
18+91.38 (5th)	12.33	R	Sanitary Sewer	Encased In 4'x4' Concrete
22+62.13 (5th)	9.48	L	Sanitary Sewer	
22+81.46 (5th)	12.82	L	Storm Sewer	Encased In 4'x4' Concrete
25+91.19 (5th)	10.15	L	Sanitary Sewer	
26+63.01 (5th)	78.28	L	Sanitary Sewer	
30+80.88 (5th)	1.9	R	Sanitary Sewer	Encased In 4'x5' Concrete
35+13.80 (5th)	1.71	R	Sanitary Sewer	
4+34.32 (6th)	12.26	R	Sanitary Sewer	
4+62.85 (6th)	13.82	L	Sanitary Sewer	
6+59.89 (6th)	18.86	R	Storm Sewer	Encased In 4'x4' Concrete
8+53.76 (6th)	19.26	R	Storm Sewer	
8+69.96 (6th)	11.41	L	Sanitary Sewer	
8+97.92 (6th)	11.31	L	Sanitary Sewer	Encased In 4'x4' Concrete
13+18.40 (6th)	12.33	L	Storm Sewer	Encased In 4'x4' Concrete
15+00.46 (6th)	13.24	L	Sanitary Sewer	Encased In 4'x4' Concrete
16+87.02 (6th)	9.2	L	Sanitary Sewer	Encased In 4'x4' Concrete
19+88.41 (6th)	20.25	L	Sanitary Sewer	
20+49.19 (6th)	20.34	L	Sanitary Sewer	
20+75.21 (6th)	12.14	L	Sanitary Sewer	
24+11.02 (6th)	20.13	L	Sanitary Sewer	Encased In 4'x4' Concrete
26+42.58 (6th)	21.15	L	Sanitary Sewer	Encased In 4'x4' Concrete

LOCATION OF WATER VALVE BOXES

For Information only, the location of water valve boxes has been provided.

US14 NH 0014(197)267 PCN 04E3:

Station	Offset	L/R	Utility Type	Comments
18+91.82 (5th)	42.15	L	Water Valve	
19+02.02 (5th)	46.29	R	Water Valve	
19+15.01 (5th)	9.93	R	Water Valve	
26+39.50 (5th)	9.32	R	Water Valve	
26+49.95 (5th)	75.89	L	Water Valve	
30+91.97 (5th)	24.09	R	Water Valve	
2+35.40 (6th)	16.48	R	Water Valve	
4+29.01 (6th)	14.55	R	Water Valve	
8+37.57 (6th)	13.74	R	Water Valve	
8+82.52 (6th)	13.13	R	Water Valve	
13+41.40 (6th)	13.03	R	Water Valve	
16+76.22 (6th)	32.99	L	Water Valve	
16+78.54 (6th)	13.56	R	Water Valve	
16+79.21 (6th)	16.05	R	Water Valve	
20+37.00 (6th)	13.83	R	Water Valve	
20+62.80 (6th)	16.15	R	Water Valve	
20+62.82 (6th)	11.14	R	Water Valve	
20+65.30 (6th)	13.86	R	Water Valve	
24+22.46 (6th)	13.92	R	Water Valve	
26+32.58 (6th)	40.97	L	Water Valve	

P 0045(53)111 PCN 04WJ:

Station	Offset	L/R	Utility Type	Comments
9+20.64 (2nd)	45.72	L	Water Valve	
9+37.59 (2nd)	24.06	R	Water Valve	

REMOVING, STOCKPILING, AND REPLACING TOPSOIL

The Contractor will be required to remove and salvage 4 inches of the existing topsoil down a portion of the inslope throughout the entire length of the pipe/structure work areas and at areas where the Engineer determines to be necessary based on the amount of disturbance to the existing topsoil due to the Contractor's operation.

The Contractor shall stockpile the material at a site approved by the Engineer, and/or windrow the material near the disturbed areas to control potential sediment runoff as determined by the Engineer.

The replacement of topsoil shall be spread evenly throughout all disturbed areas upon completion of the work. Any clumps larger than 3 inches shall be broken up prior to seeding the areas.

All topsoil removal, stockpiling, salvaging, windrowing, and replacement shall be done as according to the plans and/or as directed by the Engineer.

All cost associated with removing, salvaging, stockpiling, windrowing, and replacing topsoil shall be incidental to the contract price for "Reprofiling Ditch".

CONTRACTOR FURNISHED BORROW

The Contractor shall provide a suitable site for Contractor Furnished Borrow material. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. Borrow material shall be utilized around pipe. The plans quantity for "Contractor Furnished Borrow" is estimated that each pipe shall require 10 cubic yards of material and will be the basis of payment for this item.

Water for Embankment is estimated at the rate of 10.0 gallons of water per cubic yard of Embankment. For informational purposes only, an estimated 1.1 MGal is required to complete the work. Payment for Water for Embankment shall be incidental to bid item "Contractor Furnished Borrow".

Restoration of the Contractor furnished borrow site shall be the responsibility of the Contractor.

EMBANKMENT ADJACENT TO CULVERTS

The earth embankment adjacent to the existing pipe ends shall be removed prior to removing the pipe end and upon completion of the pipe end installation, the earth embankment shall be replaced adjacent to the culvert.

Cost for removing and replacing the earth embankment shall be incidental to other contract items.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F7	F55

BOX CULVERT CLEANOUT

Material in existing mainline structures as listed in the Table for Culvert/Structures Work shall be cleaned out by water flushing or other approved methods. Each structure shall be cleaned such that the bottom of the box is visible throughout its length so as to re-establish the flow line.

It is the responsibility of the Contractor to visit the site to determine the extent of structure cleaning work required.

The Contractor shall implement appropriate sediment control measures prior to water flushing in order to prevent discharges beyond the project boundaries.

All costs for this work shall be included in the contract unit price for "Incidental Work".

TABLE OF CULVERTS/STRUCTURES WORK

HWY	MRM	Disp.	Dia. of Pipe (in)	Length of Pipe (ft)	Notes
14	270.28	0.698	30	58	RCP - Reset & Tie End Sections
14	274.00	0.540	18	62	RCP - Replace w/ Flared End Section & Tie Rt End Section
14	275.00	0.310	18	64	RCP - Lt side Replace w/ Flared End Section & Tie End Section
14	275.00	0.922	18	58	RCP - Reset Rt End Section, Lt Replace w/ Flared End Section, & Tie Both End Sections
14	276.00	0.877	18	56	RCP - Lt side Reset End Section & Tie End Section
14	277.00	0.236	24	58	RCP - Lt Side Reset & Tie End Section
14	287.00	0.49	Box	80	Cleanout Box Str. No. 30-028-250
14	288.00	0.200	18	62	CMP Approach Pipe Lt. side Both End Sections to be Replaced w/ Safety Ends
14	289.00	0.962	18	56	CMP Arch Approach Pipe Lt side. Replace End Section w/ Safety End Section on NE end
14	291.00	0.200	18	54	CMP Approach Pipe Lt. side Replace End Section w/ Safety End Section on NW end
14	292.00	0.680	Box	80	Cleanout Box Str. No. 30-081-250
14	293.00	0.64	Box	80	Cleanout Box Str. No. 30-089-250
14	295.00	0.800	18	68	CMP Approach Pipe Lt. side Replace End Section w/ Safety End Section on NE end
14	296.00	0.100	18	60	CMP Approach Pipe Lt. side Replace End Section w/ Safety End Section on NW end
14	300.00	0.22	Box	120	Cleanout Box Str. No. 30-155-250

REPROFILING DITCH

The Contractor shall reprofile the ditch to restore drainage profile into/out of the pipe. This work will require removing sedimentation along with placing the removed material where areas need borrow material. The quantities and locations of reprofiling may change depending on the degree of erosion/sedimentation that has taken place from time of the survey to the time of construction. All work shall be within the Right-of-Way. Pipe cleanout material may be used as borrow material for filling in erosion. Placement and location of the cleanout material shall be approved by the Engineer.

The Contractor shall also remove 4" of topsoil within the areas to be reprofiled. The Contractor shall stockpile the material at a site approved by the Engineer, and/or windrow the material near the disturbed areas to control potential sediment runoff as determined by the Engineer. The replacement of topsoil shall be spread evenly throughout all disturbed areas upon completion of the work. Any clumps larger than 3 inches shall be broken up prior to seeding the areas.

Ditch reprofiling shall extend from the end of the culvert to within 1 foot of the Right-of-Way (ROW) Line. The bottom of the ditch cleanout shall be a minimum of 20 feet wide and the side slopes on the channel shall be 20:1 or flatter in both directions from the 20' flat area. For those locations where there is no channel from the inlet/outlet of the culvert to the ROW Line ditch reprofiling shall be completed such that there is a flat area of 400 Square Feet created at the inlet/outlet and the sides slopes around the flat area shall be 20:1 or flatter.

All costs associated with clearing and reshaping of the existing ditch, including topsoil removal/replacement, labor, excavation, placing material, equipment, and incidentals shall be paid for at the contract unit price per station for "Reprofiling Ditch".

TABLE OF REPROFILING DITCH

MRM	Displacement	Reprofiling Ditch Stations
270.28	0.698	1.0
274.00	0.540	1.0
275.00	0.310	1.0
275.00	0.922	1.0
276.00	0.877	1.0
277.00	0.236	1.0
287.00	0.49	2.0
288.00	0.200	1.0
289.00	0.962	1.0
291.00	0.200	1.0
292.00	0.680	2.0
293.00	0.64	2.0
295.00	0.800	1.0
296.00	0.100	1.0
300.00	0.22	2.0
Total:		19.0

PIPE NOTES

The Contractor is responsible for verifying the size of each pipe prior to ordering any pipe end sections. The Contractor shall obtain the approval of the Engineer before ordering any pipe.

Pipe culverts and end sections that are removed and not reset shall become the property of the Contractor. Pipe culverts and end sections shall be disposed of as per the waste disposal site notes and shall not be in view from the project upon completion of the project.

There are five approach pipe ends that have collapsed. A list of culverts can be seen in the Table for Mainline Culverts/Structures Work. The Contractor shall cut the portion of the pipe that has collapsed to where the full diameter of the pipe has been restored. The end section shall be replaced or reset and earth embankment shall be sloped at a 6:1.

All costs for cutting and removing of CMP pipe will be incidental to the contract unit price for the corresponding "Remove Pipe End Section".

The excavation required to expose the existing pipe and ends will be incidental to the contract unit price for "Remove Pipe End Section for Reset".

TIE BOLTS FOR RCP

All RCP installed, both new and reset, will be tied together. This includes connection from existing culvert sections to new or reset sections.

For informational purposes: Field drilling will be required to install the tie bolts on reset culvert, on reset culvert ends and on existing culvert when installing a new/reset end section.

Cost for removing tie bolts, drilling tie bolt holes and furnishing and installing tie bolts shall be incidental to the contract unit prices for installing or resetting End Sections. Existing tie bolts may be salvaged and reused if condition is acceptable to the Engineer.

EROSION CONTROL WATTLE

Erosion control wattles for restraining the flow of runoff and sediment shall be installed at locations determined by the Engineer during construction. Refer to Standard Plate 734.06 for details.

The placement of the erosion control wattles will be determined by the Engineer.

The Contractor shall provide certification that the erosion control wattles do not contain noxious weed seeds.

Erosion control wattles shall remain on the project until vegetation has been established.

The erosion control wattle provided shall be from the approved product list. The approved product list for erosion control wattle may be viewed at the following internet site:

<http://sddot.com/business/certification/products/Default.aspx>

LOW FLOW SILT FENCE

The low flow silt fence fabric provided shall be from the approved product list. The approved product list for low flow silt fence may be viewed at the following internet site:

<http://sddot.com/business/certification/products/Default.aspx>

Low flow silt fence shall be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.04 for details.

TABLE OF LOW FLOW SILT FENCE

MRM	Displacement	Structure	Quantity (Ft)
270.28	0.698	-	50
274.00	0.540	-	50
275.00	0.310	-	50
275.00	0.922	-	50
276.00	0.877	-	50
277.00	0.236	-	50
287.00	0.49	30-028-250	100
288.00	0.200	-	50
289.00	0.962	-	50
291.00	0.200	-	50
292.00	0.680	30-081-250	100
293.00	0.64	30-089-250	100
295.00	0.800	-	50
296.00	0.100	-	50
300.00	0.22	30-155-250	100
		Additional Quantity:	100
		Total:	1,050

MUCKING SILT FENCE

Mucking silt fence shall consist of removing muck trapped by the silt fence and spreading the material evenly over the adjacent area to conform to the existing grade.

REMOVE SILT FENCE

Silt fence shall be removed when vegetation is established. Some or all of the silt fence may be left on the project until vegetation is established.

EROSION CONTROL

The areas disturbed as a result of work on this project shall be restored and/or reshaped to the satisfaction of the Engineer. All disturbed areas shall be seeded and mulched. Disturbed areas anticipated on the project include pipe end replacement, pipe cleanouts, reprofiling ditch, and all other areas disturbed as a result of the Contractor's operations.

All permanent seed shall be planted in the topsoil at a depth of 1/4" to 1/2". Hand seeding devices approved by the Engineer will be allowed. All seed broadcast must be raked or dragged in (incorporated) within the top 1/4" to 1/2" of topsoil when possible. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods.

The varieties listed for the seed mixture are preferred varieties. Native harvest seed will be allowed.

Type B Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Flintlock, Rodan, Rosana	7
Switchgrass	Dacotah, Forestburg, Nebraska 28, Pathfinder, Summer, Sunburst, Trailblazer	3
Indiangrass	Holt, Tomahawk	3
Big Bluestem	Bison, Bonilla, Champ, Pawnee, Sunnyview	3
Canada Wildrye	Mandan	2
Total:		18

It is estimated that 4.82 acres of disturbed area will require seeding and mulching. Limits of the work shall be determined by the Engineer at the time of Construction.

Bales with noxious weed contamination will be rejected and the Contractor will be required to remove the contaminated bales from the project.

Mulch shall be applied at a rate of 2 ton/acre.

Application of fertilizer will not be required on this project.

All costs associated with furnishing/placing the seed, mulch, and inoculum, along with all labor, equipment and incidental to the contract lump sum price for "Erosion Control".

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum shall consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier shall provide certification of the fungal species claimed and the live propagule count. The inoculum shall include the following fungal species:

Glomus intraradices	25%
Glomus aggregatu	25%
Glomus mosseae	25%
Glomus etunicatum	25%

All seed shall be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed shall be incidental to the contract lump sum price for "Erosion Control".

REFURBISH MAILBOXES

The Contractor shall reset the existing mailboxes on new posts with the necessary support hardware for single or double mailbox assemblies. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor shall coordinate with the Engineer on the proper postal representative to contact.

If large mailboxes are located at double mailbox installations, a single post may need to be used for the large mailbox.

Newspaper boxes that are attached to the existing mailbox posts will be re-installed on the new post. All cost for removing and re-installation will be incidental to the corresponding bid items "Refurbish Single Mailbox" or "Refurbish Double Mailbox".

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware shall be incidental to the contract unit price per each for "Refurbish Single Mailbox" or "Refurbish Double Mailbox".

TABLE OF REFURBISH MAILBOX

Station	L/R	Single (Each)	Double (Each)
0+00	R	1	-
316+00	L	1	-
8+60(5 th)	R	1	1
9+80(5 th)	R	1	-
9+94(5 th)	L	1	-
17+36(6 th)	L	1	-
31+02(6 th)	R	1	-
Totals:		7	1

TYPICAL SECTION

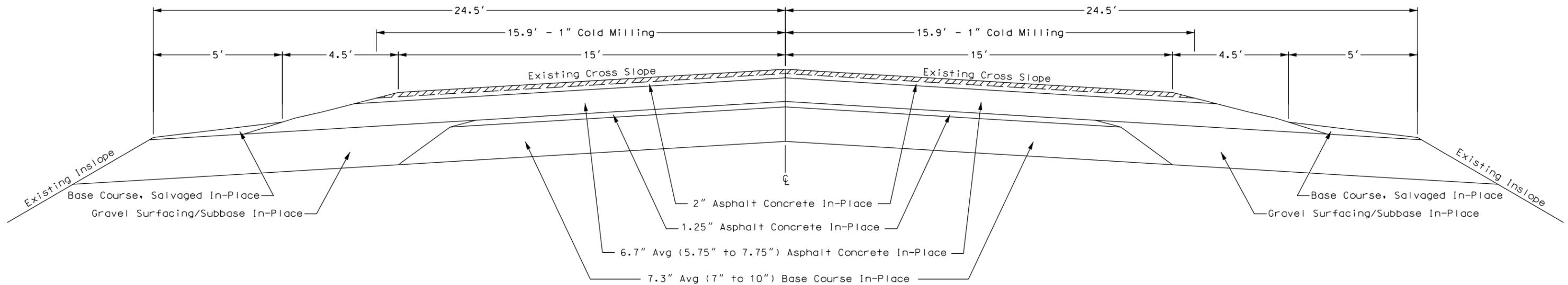
Section 1 (US Hwy 14)

Station 0+00 to Station 573+56

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATIONS ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:

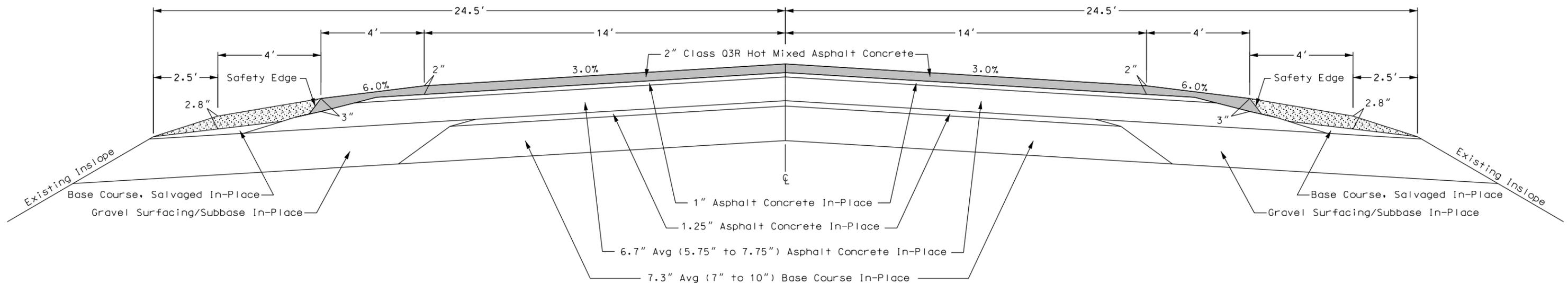
- Holabird Right Turn Lane Only: Station 166+77 to Station 178+67
- US14/SD47 Mainline/Center Turn Lane: Station 573+56 to Station 579+20
- Entire Roadway Thru US14/SD47 Highmore Intersection: Station 579+20 to Station 579+75.6

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



 Base Course, Salvaged Asphalt Mix

RESURFACING SECTION



TYPICAL SECTION

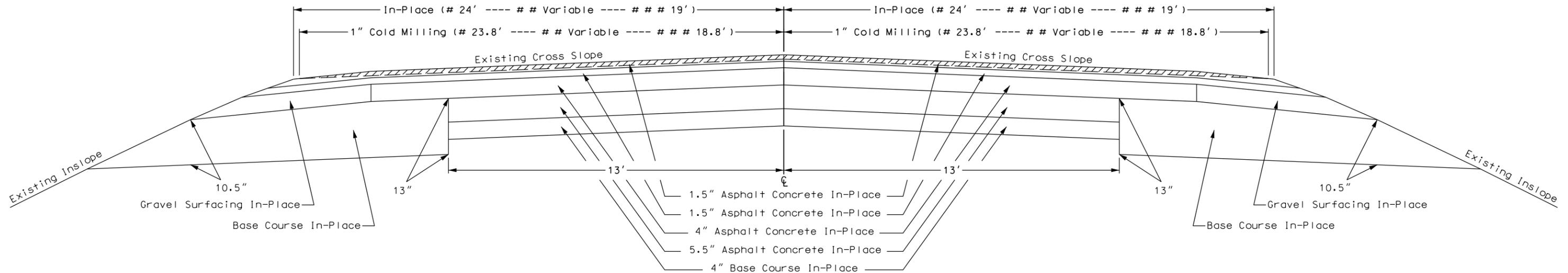
Section 2 (US Hwy 14)

- # Station 0+80 (2nd) to Station 1+80 (2nd)
- ## Station 1+80 (2nd) to Station 3+87 (2nd)
- ### Station 7+28 (2nd) to Station 17+50 (2nd)

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:

- Entire Roadway Thru US14/SD47 Highmore Intersection: Station 0+00 (2nd) to Station 0+80 (2nd)
- Station 0+80 (2nd) to Station 3+87 (2nd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section:

Varies from 24' at Station 1+80 (2nd) to 21' at Station 3+87 (2nd)

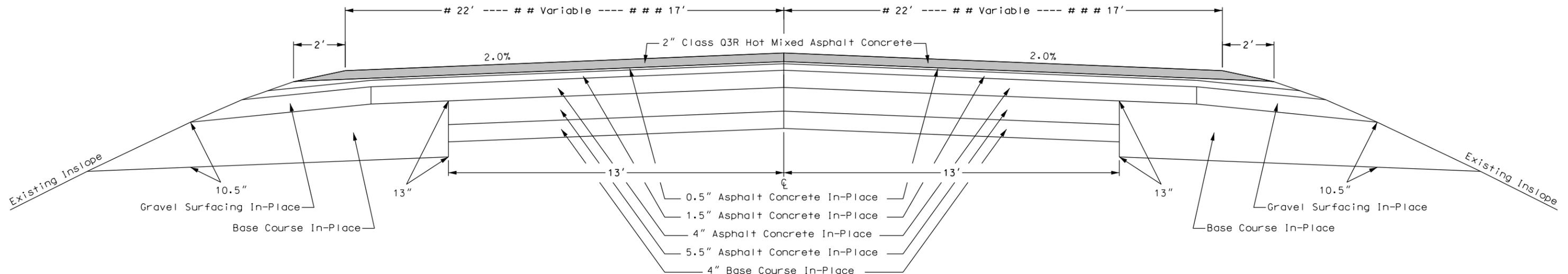
Cold Milling Asphalt Concrete Section:

Varies from 23.8' at Station 1+80 (2nd) to 20.8' at Station 3+87 (2nd)

Resurfacing Section:

Varies from 22' at Station 1+80 (2nd) to 19' at Station 3+87 (2nd)

RESURFACING SECTION



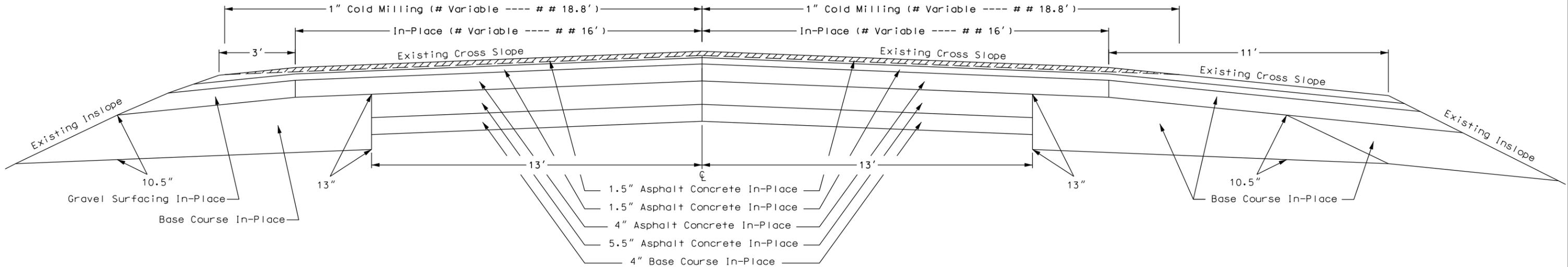
TYPICAL SECTION

Section 3 (US Hwy 14)

Station 3+87 (2nd) to Station 5+40 (2nd)
 ## Station 5+40 (2nd) to Station 7+28 (2nd)

NOTE: ALL QUANTITIES FOR THE TYPICAL SECTION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET.

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section:

Varies from 18' at Station 3+87 (2nd) to 16' at Station 5+40 (2nd)

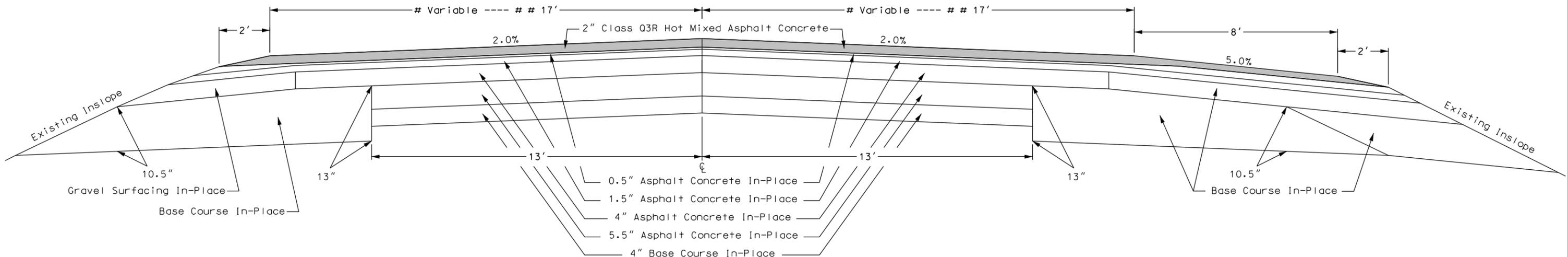
Cold Milling Asphalt Concrete Section:

Varies from 20.8' at Station 3+87 (2nd) to 18.8' at Station 5+40 (2nd)

Resurfacing Section:

Varies from 19' at Station 3+87 (2nd) to 17' at Station 5+40 (2nd)

RESURFACING SECTION



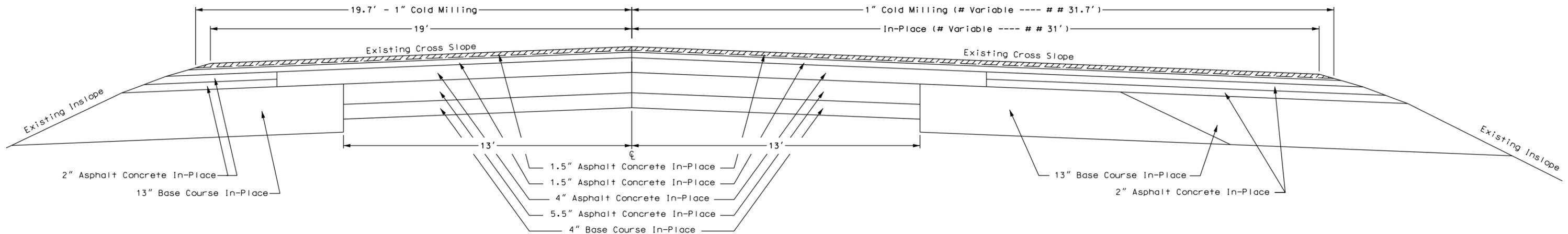
TYPICAL SECTION

Section 4 (US Hwy 14)

Station 17+50 (2nd) to Station 18+70 (2nd)
 ## Station 18+70 (2nd) to Station 26+85 (2nd)

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:
 - Station 17+50 (2nd) to 18+70 (2nd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION

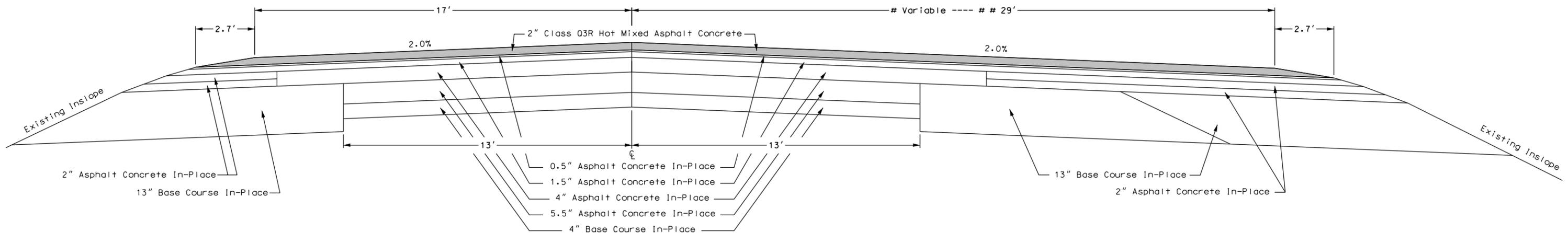


In-Place Section:
 # Varies from 19' at Station 17+50 (2nd) to 31' at Station 18+70 (2nd)

Cold Milling Asphalt Concrete Section:
 # Varies from 19.7' at Station 17+50 (2nd) to 31.7' at Station 18+70 (2nd)

Resurfacing Section:
 # Varies from 17' at Station 17+50 (2nd) to 29' at Station 18+70 (2nd)

RESURFACING SECTION

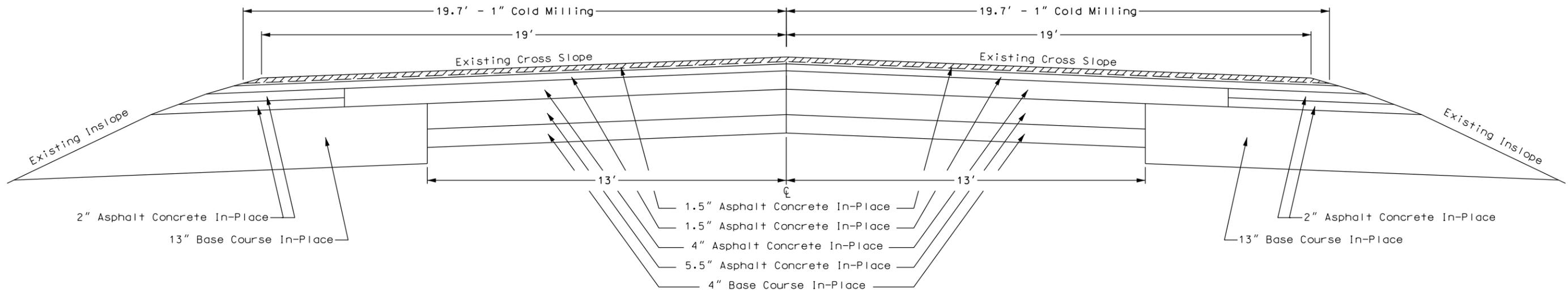


TYPICAL SECTION

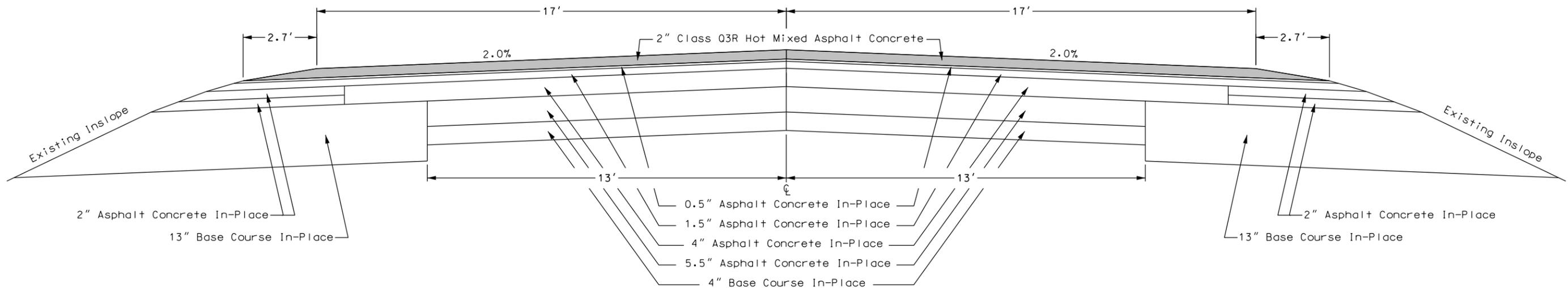
Section 5 (US Hwy 14)

Station 26+85 (2nd) to Station 46+00 (2nd)
Station 32+20 (3rd) to Station 56+40 (3rd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION

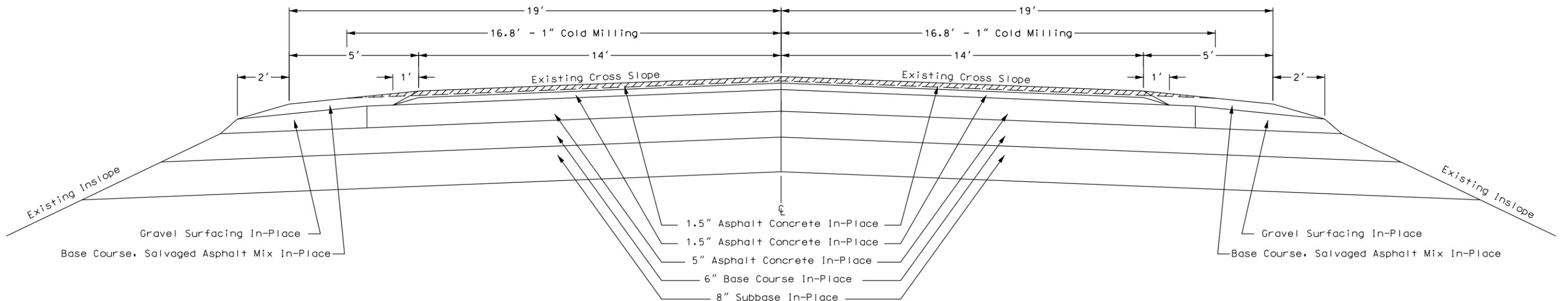


TYPICAL SECTION

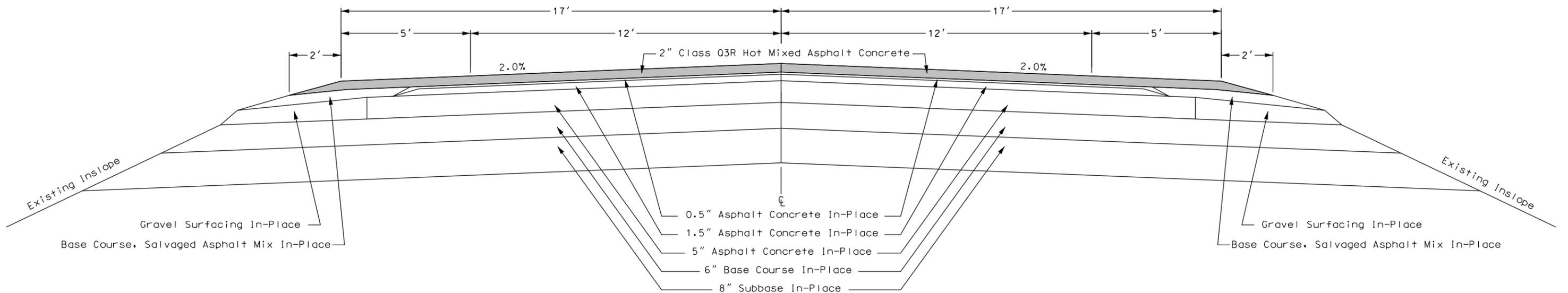
Section 6 (US Hwy 14)

Station 46+00 (2nd) to Station 65+00 (2nd)
 Station 277+00 (2nd) to Station 328+00 (2nd)
 Station 295+00 (3rd) to Station 312+00 (3rd)
 Station 515+63 (3rd) to Station 544+00 (3rd)
 Station 555+00 (3rd) to Station 565+00 (3rd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION

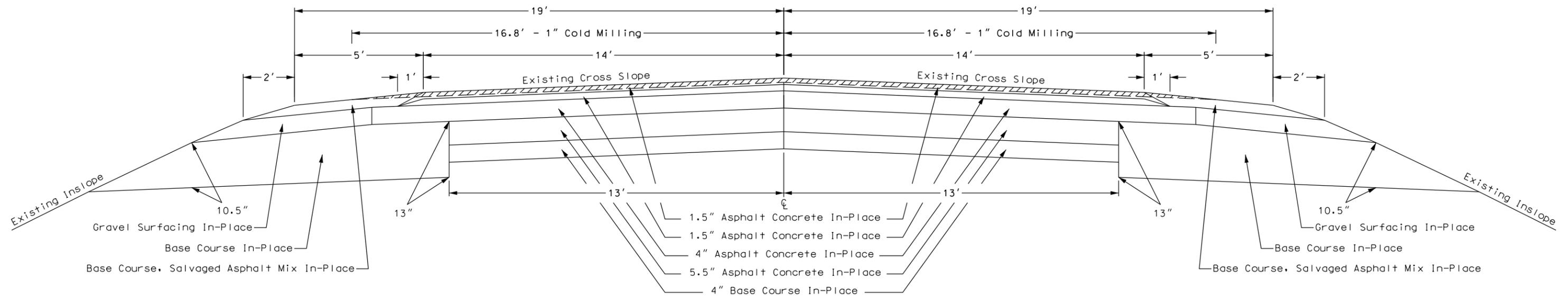


TYPICAL SECTION

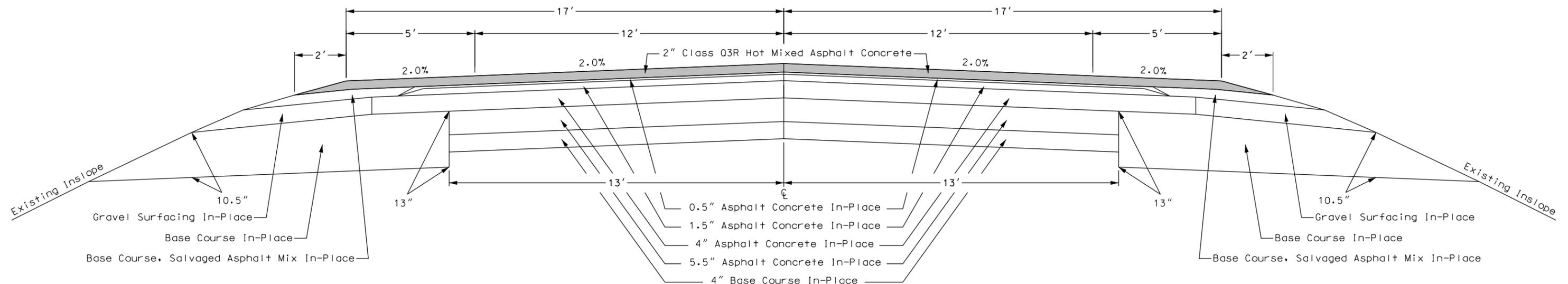
Section 7 (US Hwy 14)

Station 65+00 (2nd) to Station 277+00 (2nd)
 Station 328+00 (2nd) to Station 588+96.02 (2nd)
 Station 0+00 (3rd) to Station 32+20 (3rd)
 Station 56+40 (3rd) to Station 295+00 (3rd)
 Station 312+00 (3rd) to Station 490+15 (3rd)
 Station 544+00 (3rd) to Station 555+00 (3rd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION

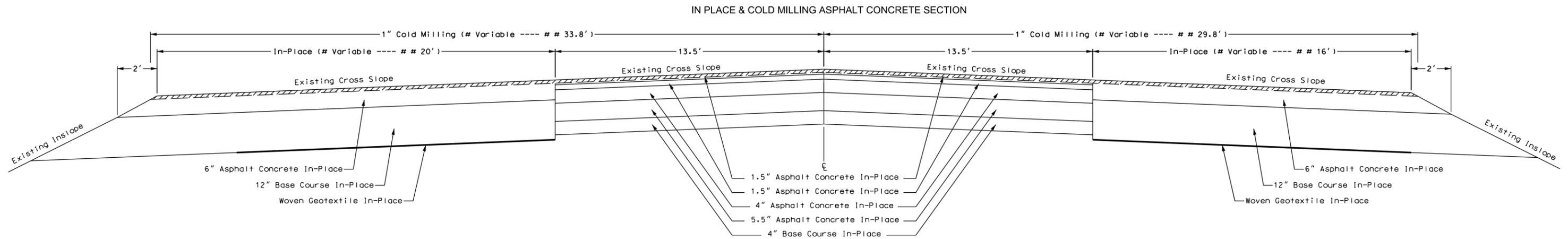


TYPICAL SECTION

Section 8 (US Hwy 14)

Station 490+15 (3rd) to Station 493+11 (3rd)
 ## Station 493+11 (3rd) to Station 499+57 (3rd)

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:
 - Station 490+15 (3rd) to 493+11 (3rd)



In-Place Section:

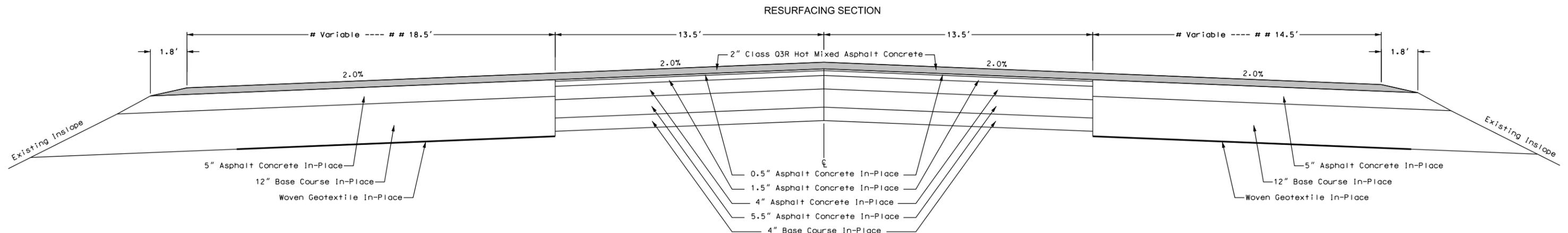
Left Side -- Varies from 5.5' at Station 490+15 (3rd) to 20' at Station 493+11 (3rd)
 # Right Side -- Varies from 5.5' at Station 490+15 (3rd) to 16' at Station 493+11 (3rd)

Cold Milling Asphalt Concrete Section:

Left Side -- Varies from 19.3' at Station 490+15 (3rd) to 33.8' at Station 493+11 (3rd)
 # Right Side -- Varies from 19.3' at Station 490+15 (3rd) to 29.8' at Station 493+11 (3rd)

Resurfacing Section:

Left Side -- Varies from 3.5' at Station 490+15 (3rd) to 18.5' at Station 493+11 (3rd)
 # Right Side -- Varies from 3.5' at Station 490+15 (3rd) to 14.5' at Station 493+11 (3rd)

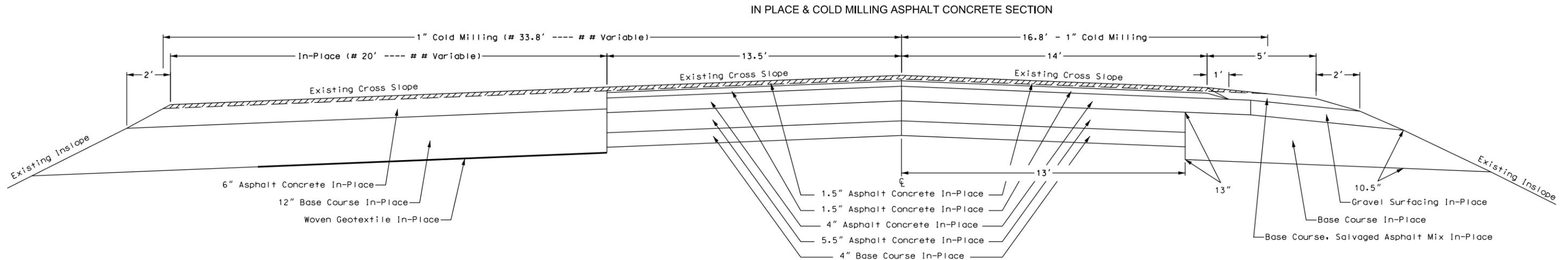


TYPICAL SECTION

Section 9 (US Hwy 14)

Station 499+57 (3rd) to Station 506+51 (3rd)
 ## Station 506+51 (3rd) to Station 515+63 (3rd)

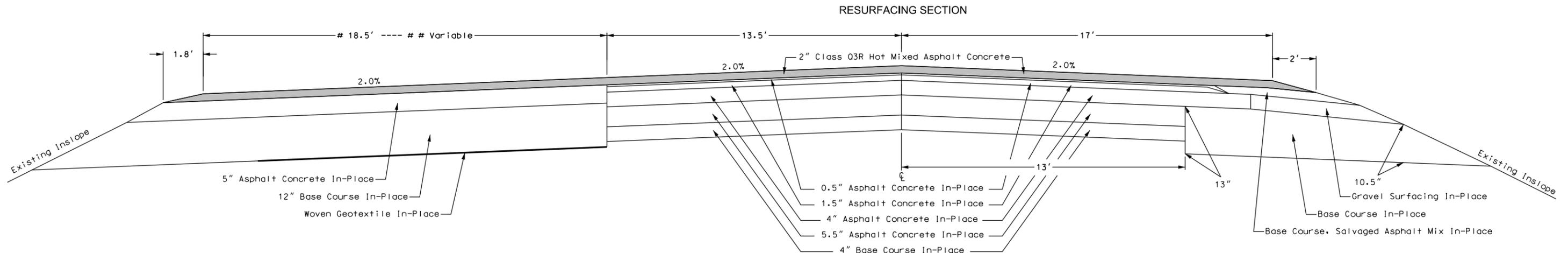
NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:
 - Station 506+51 (3rd) to 515+63 (3rd)



In-Place Section:
 ## Varies from 20' at Station 506+51 (3rd) to 5.5' at Station 515+63 (3rd)

Cold Milling Asphalt Concrete Section:
 ## Varies from 33.8' at Station 506+51 (3rd) to 19.3' at Station 515+63 (3rd)

Resurfacing Section:
 ## Varies from 18.5' at Station 506+51 (3rd) to 3' at Station 515+63 (3rd)



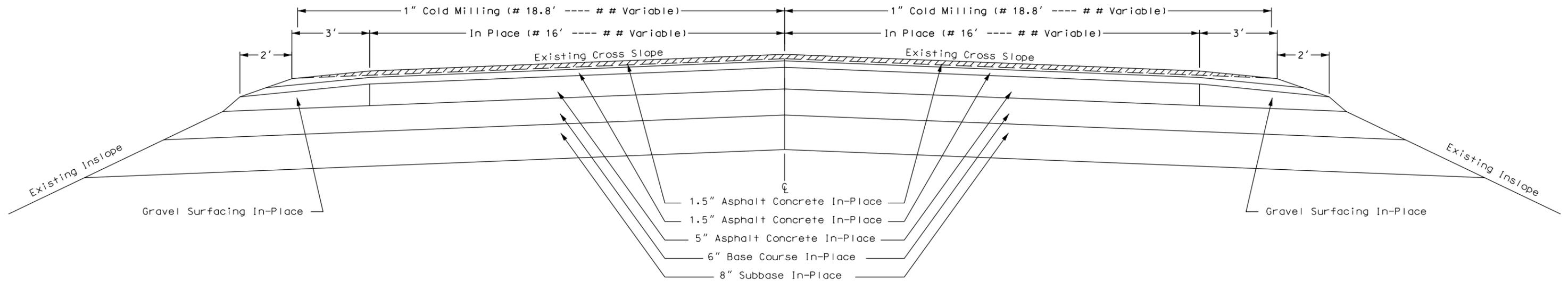
TYPICAL SECTION

Section 10 (US Hwy 14)

Station 565+00 (3rd) to Station 586+00 (3rd)
 ## Station 586+00 (3rd) to Station 589+25 (3rd)

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:
 - Station 586+00 (3rd) to 589+25 (3rd)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section:

Varies from 16' at Station 586+00 (3rd) to 25' at Station 589+25 (3rd)

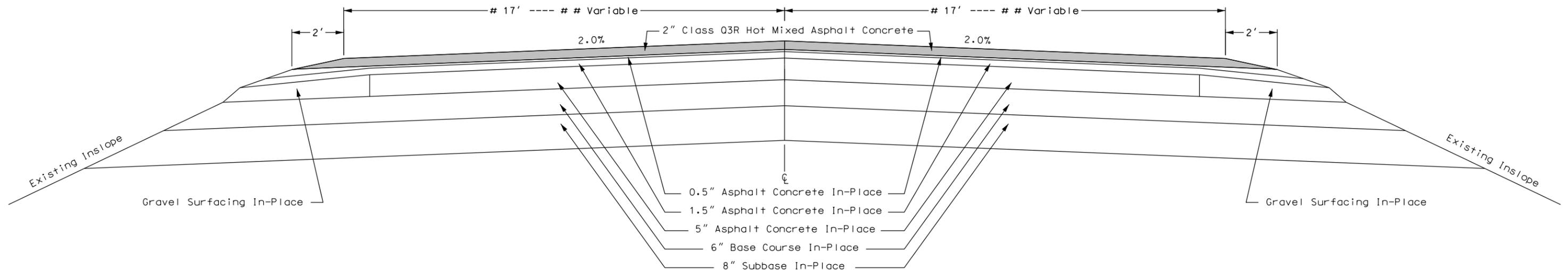
Cold Milling Asphalt Concrete Section:

Varies from 18.8' at Station 586+00 (3rd) to 27.8' at Station 589+25 (3rd)

Resurfacing:

Varies from 17' at Station 586+00 (3rd) to 26' at Station 589+25 (3rd)

RESURFACING SECTION



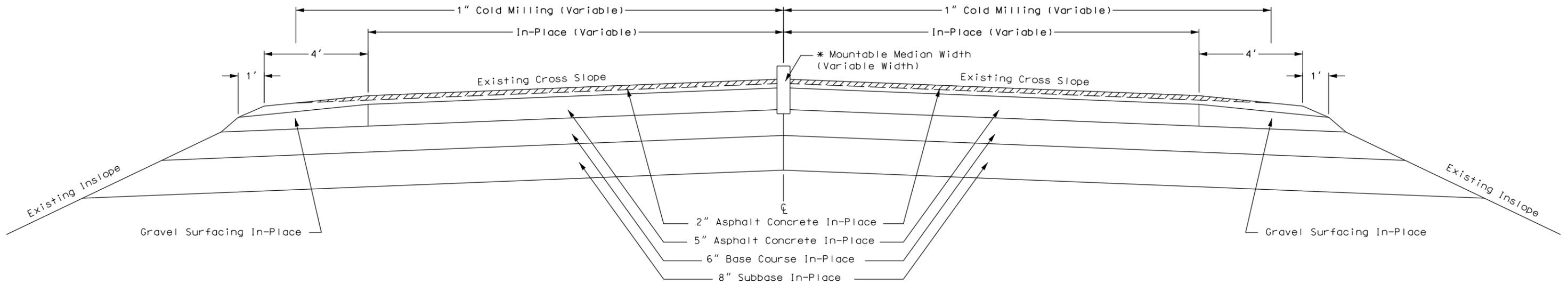
TYPICAL SECTION

Section 11 (US Hwy 14)

Station 589+25 (3rd) to Station 592+49.45 (3rd)

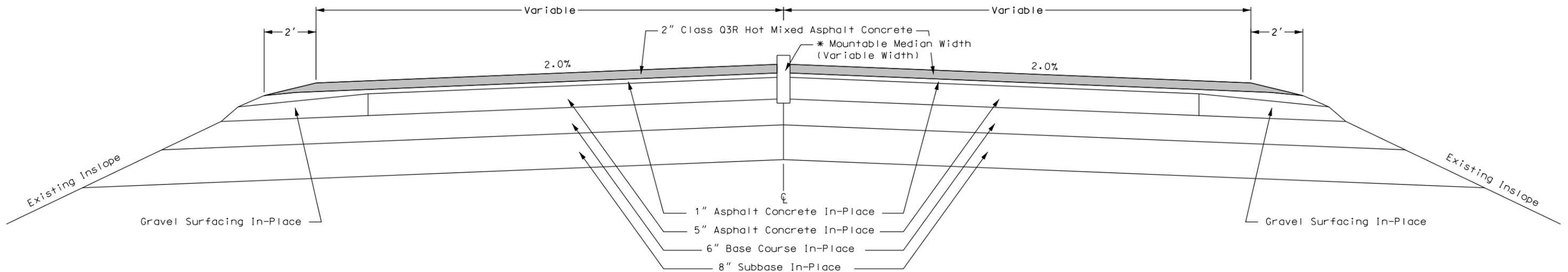
NOTE: ALL QUANTITIES FOR TYPICAL SECTION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET.

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



* Mountable Median Pavement also exists between mainline surfacing and surfacing on curves from Station 591+50 (3rd) to 592+25 (3rd).

RESURFACING SECTION



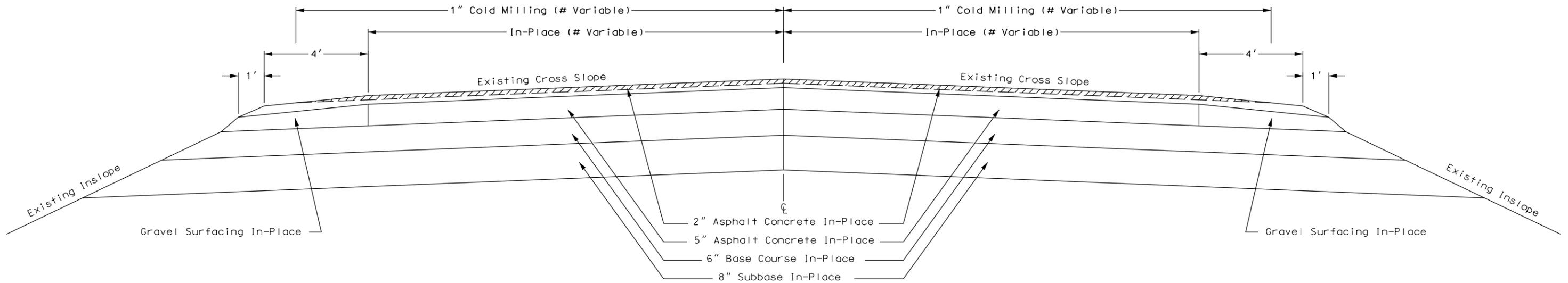
TYPICAL SECTION

Section 12 (US Hwy 14)

Station 8+00 (4th) to Station 9+85 (4th)

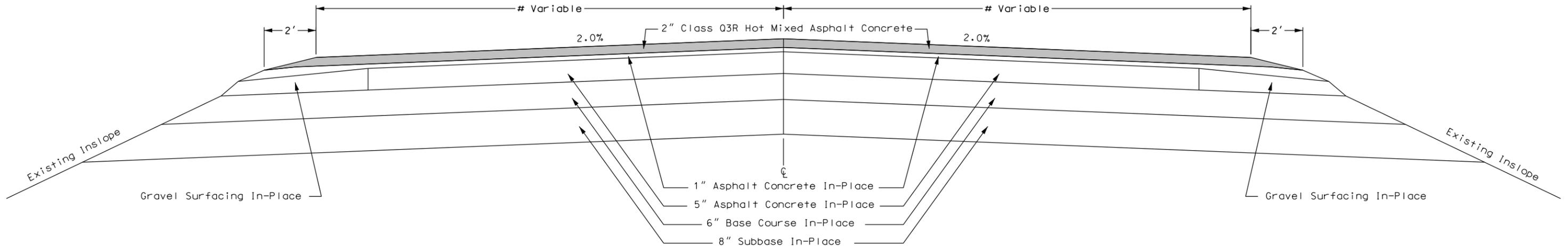
NOTE: ALL QUANTITIES FOR TYPICAL SECTION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET.

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section: # 21' Typically
 Cold Milling Asphalt Concrete Section: # 23.8' Typically
 Resurfacing Section: # 23' Typically

RESURFACING SECTION



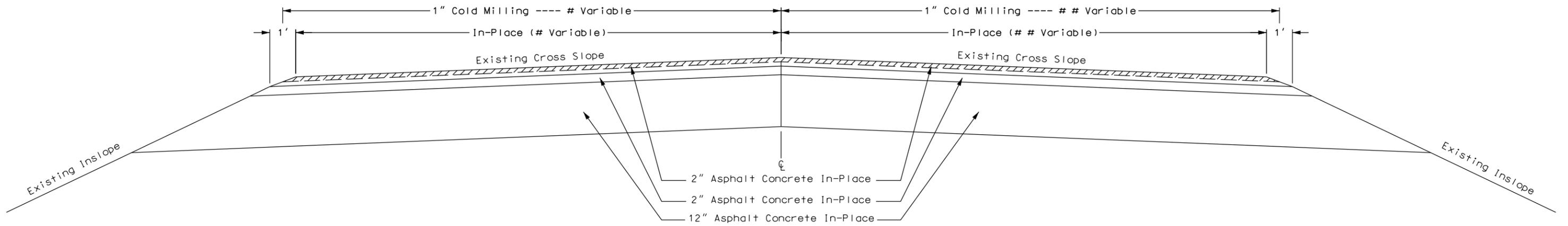
TYPICAL SECTION

Section 13 (US Hwy 14)

Station 9+85 (4th) to Station 15+69.5 (4th)
 Station 0+00 (5th) to Station 14+99.5 (5th)

NOTE: ALL QUANTITIES FOR TYPICAL SECTION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET.

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section:

Varies from 18.5' at Station 9+85 (4th) thru Equation to 20.5' at Station 14+99.5 (5th)
 ## Varies from 26.5' at Station 9+85 (4th) thru Equation to 20.5' at Station 14+99.5 (5th)

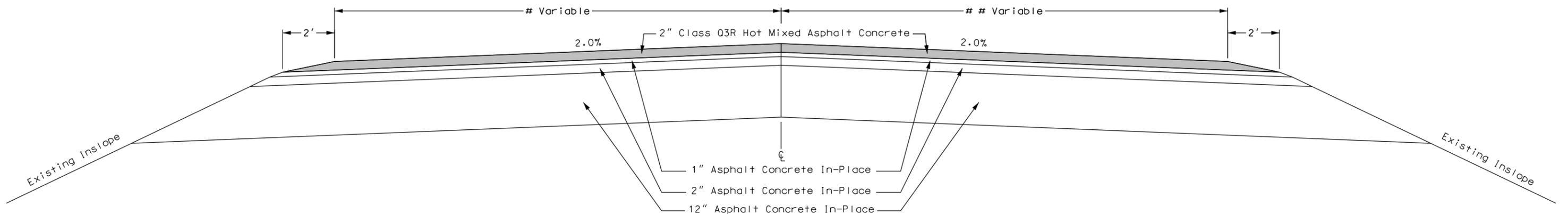
Cold Milling Asphalt Concrete Section:

Varies from 19' at Station 9+85 (4th) thru Equation to 21' at Station 14+99.5 (5th)
 ## Varies from 27' at Station 9+85 (4th) thru Equation to 21' at Station 14+99.5 (5th)

Resurfacing Section:

Varies from 17' at Station 9+85 (4th) thru Equation to 19' at Station 14+99.5 (5th)
 ## Varies from 25' at Station 9+85 (4th) thru Equation to 19' at Station 14+99.5 (5th)

RESURFACING SECTION

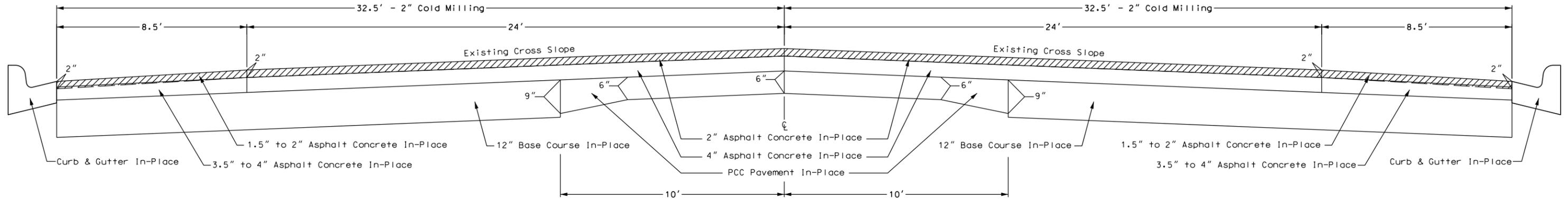


TYPICAL SECTION

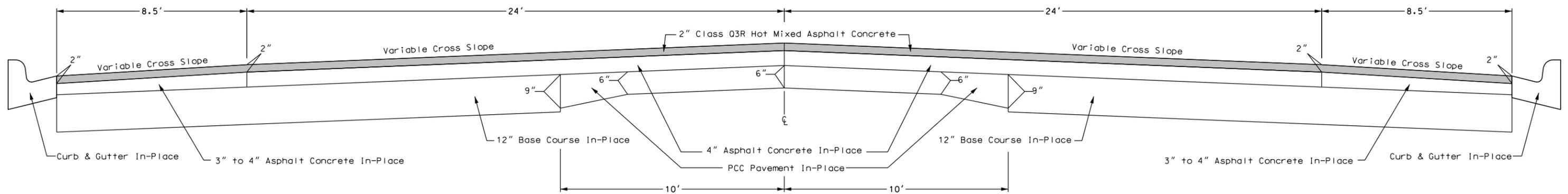
Section 14 (US Hwy 14)

Station 14+99.5 (5th) to Station 35+13.8 (5th)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION



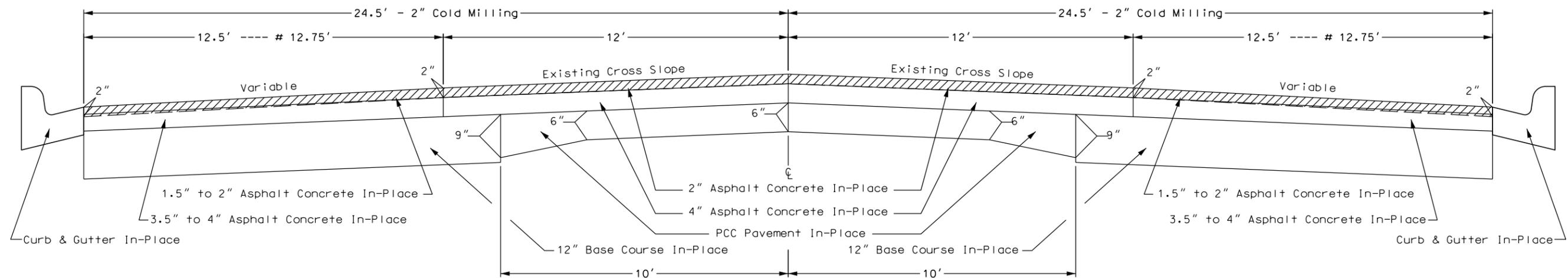
TYPICAL SECTION

Section 15 (US Hwy 14)

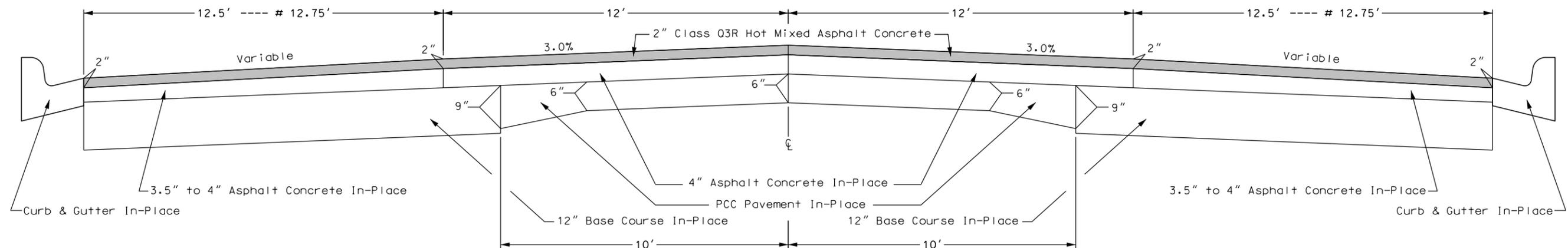
Station 0+00 (6th) to Station 26+64.7 (6th)
 # Station 26+64.7 (6th) to Station 31+23 (6th)

NOTE: ALL QUANTITIES FOR THE FOLLOWING LOCATION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET:
 - Station 26+64.7 (6th) to 31+23 (6th)

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION

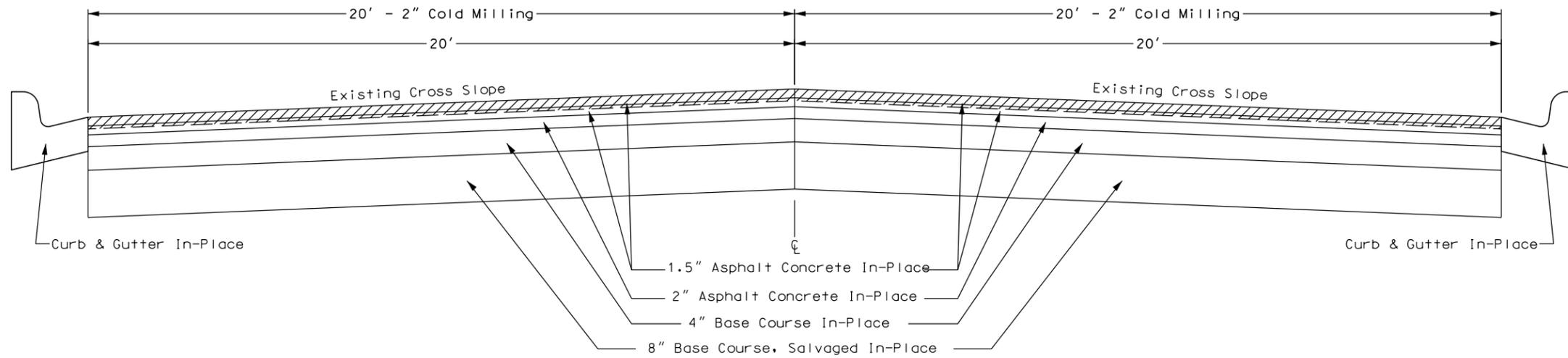


TYPICAL SECTION

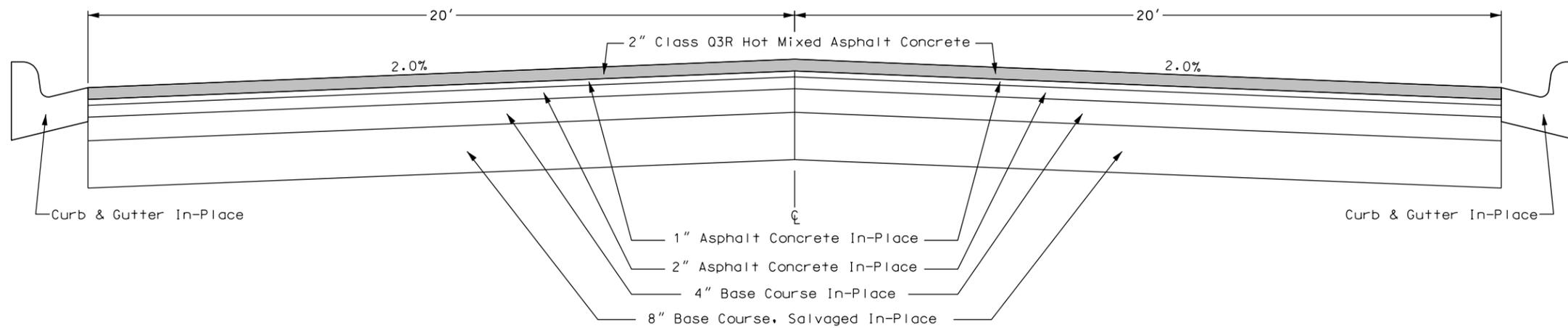
Section 1 (SD Hwy 45)

Station 11+71 to Station 26+24.95

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



RESURFACING SECTION

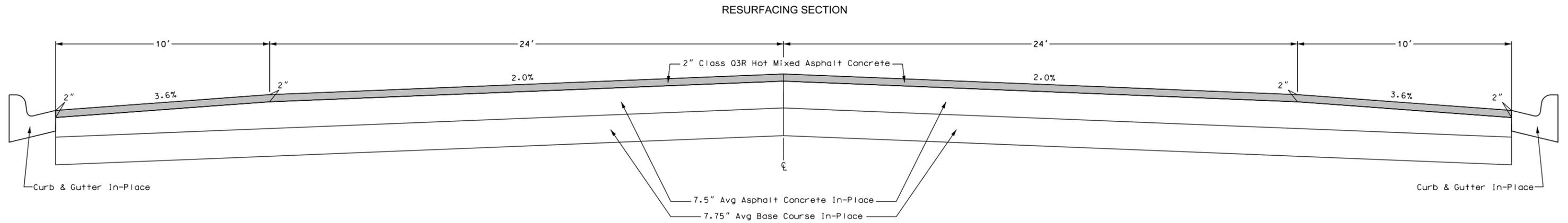
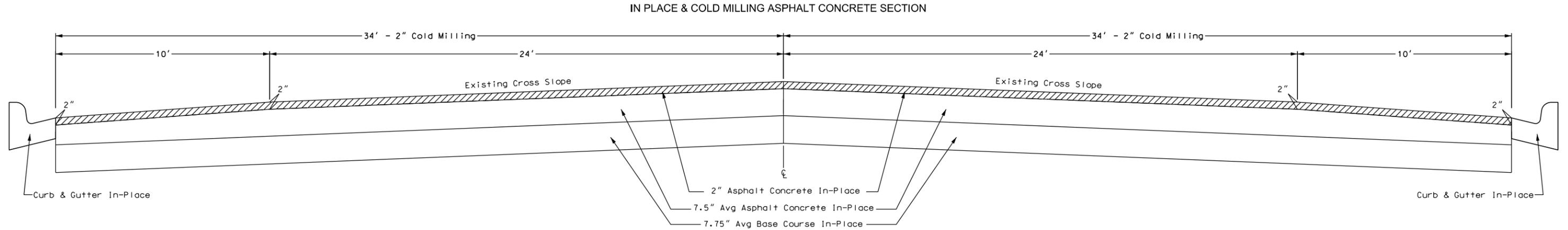


STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0014(197)267 & P 0045(53)1111	F25	F55

TYPICAL SECTION

Section 2 (SD Hwy 45)

Station 10+36.45 (2nd) to Station 0+00 (2nd)



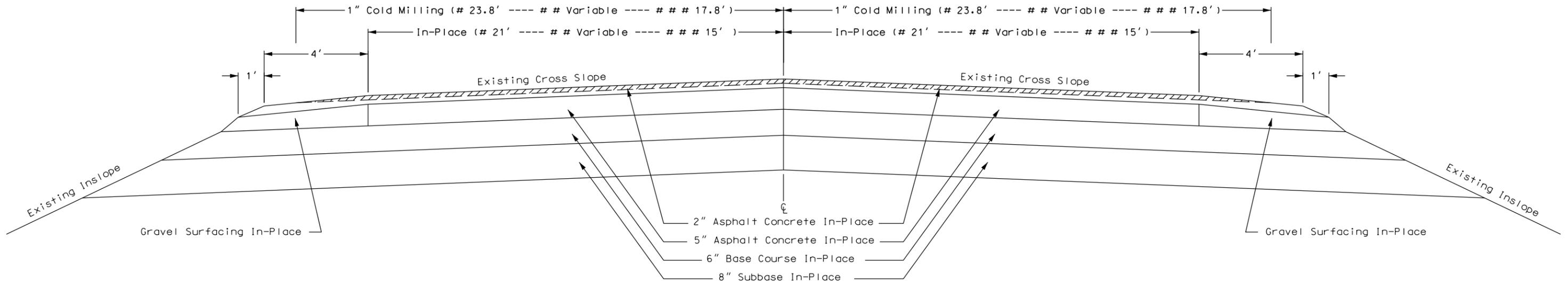
TYPICAL SECTION

Section 3 (SD Hwy 45)

- # Station 6+57.73 (3rd) to Station 7+58 (3rd)
- ## Station 7+58 (3rd) to 10+58 (3rd)
- ### Station 10+58 (3rd) to Station 12+18 (3rd)

NOTE: ALL QUANTITIES FOR TYPICAL SECTION ARE LOCATED IN THE "TABLE OF ADDITIONAL QUANTITIES" SHEET.

IN PLACE & COLD MILLING ASPHALT CONCRETE SECTION



In-Place Section:

Varies from 21' at Station 7+58 (3rd) to 15' at Station 10+58 (3rd)

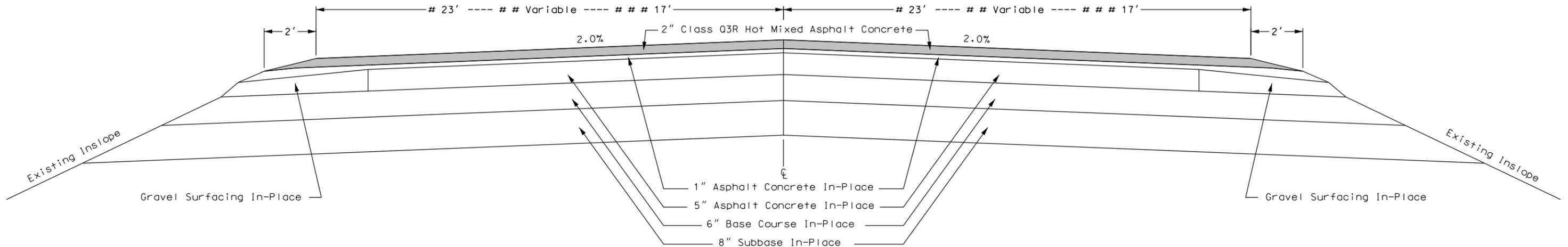
Cold Milling Asphalt Concrete Section:

Varies from 23.8' at Station 7+58 (3rd) to 17.8' at Station 10+58 (3rd)

Resurfacing:

Varies from 23' at Station 7+58 (3rd) to 17' at Station 10+58 (3rd)

RESURFACING SECTION



RATES OF MATERIALS

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F27	F55

US HWY 14

SECTION 1 ~ (per mile)

Station 0+00 to Station 573+56

Cold Milling Asphalt Concrete is computed at the rate of 18,656 Square Yards, applied 31.8 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	1,806 Tons
Salvaged Asphalt Concrete (20%)	451 Tons
PG 58-34 Asphalt Binder	111 Tons
TOTAL MIX	2,368 Tons
Hydrated Lime	24 Tons
TOTAL MIX WITH HYDRATED LIME	2,392 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 3.0 ton applied 24 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 4.9 ton applied 39 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 4.5 ton applied 36 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 52 ton applied 22 feet wide for (Rate = 8 pounds per square yard).

Shoulder Surfacing (Per Shoulder)

Provide MC-70 for Asphalt for Prime for Shoulders at the rate of 5.6 ton applied 8 feet wide after placement of Shoulder Surfacing material (Rate = 0.30 gallon per square yard).

Provide Base Course, Salvaged Asphalt Mix at the rate of 481.7 ton for a surfacing lift on the outer shoulder edge as detailed in the plans.

At the time of compaction, provide Water for Granular Material at the rate of 4.6 M.Gal to attain approximately 4% moisture uniformly blended throughout the depth of the material. The percent moisture may be adjusted by the Engineer.

SECTION 2, 6, 7, & 10 ~ (per station)

Station 7+28 (2nd) to Station 17+50 (2nd)
 Station 46+00 (2nd) to Station 65+00 (2nd)
 Station 277+00 (2nd) to Station 328+00 (2nd)
 Station 0+00 (3rd) to Station 32+20 (3rd)
 Station 295+00 (3rd) to Station 312+00 (3rd)
 Station 515+63 (3rd) to Station 544+00 (3rd)
 Station 544+00 (3rd) to Station 555+00 (3rd)
 Station 555+00 (3rd) to Station 565+00 (3rd)
 Station 565+00 (3rd) to Station 586+00 (3rd)

Cold Milling Asphalt Concrete is computed at the rate of 373 Square Yards, applied 33.6 feet wide throughout Sections 6 & 7 and at the rate of 418 Square Yards, applied 37.6 feet wide throughout Sections 2 & 10.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	33.94 Tons
Salvaged Asphalt Concrete (20%)	8.48 Tons
PG 58-34 Asphalt Binder	2.09 Tons
TOTAL MIX	44.51 Tons
Hydrated Lime	0.45 Tons
TOTAL MIX WITH HYDRATED LIME	44.96 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.06 ton applied 24 feet wide for Sections 6, 7 & 10 and at the rate of 0.08 ton applied 34 feet wide for Section 2, prior to application of Asphalt Concrete Blade Laid (Rate = 0.05 gallon per square yard).

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.09 ton applied 39 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.09 ton applied 38 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 0.98 ton applied 22 feet wide Sections 6, 7 & 10 and at the rate of 1.38 ton applied 31 feet wide for Section 2 (Rate = 8 pounds per square yard).

SECTION 4 ~ (per station)

Station 18+70 (2nd) to Station 26+85 (2nd)

Cold Milling Asphalt Concrete is computed at the rate of 571 Square Yards, applied 51.4 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	45.76 Tons
Salvaged Asphalt Concrete (20%)	11.44 Tons
PG 58-34 Asphalt Binder	2.82 Tons
TOTAL MIX	60.02 Tons
Hydrated Lime	0.60 Tons
TOTAL MIX WITH HYDRATED LIME	60.62 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.11 ton applied 46 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.13 ton applied 52.5 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.12 ton applied 51.5 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 1.82 ton applied 41 feet wide for (Rate = 8 pounds per square yard).

RATES OF MATERIALS

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F28	F55

US HWY 14

SECTION 5 ~ (per station)

Station 26+85 (2nd) to Station 46+00 (2nd)
Station 32+20 (3rd) to Station 56+40 (3rd)

Cold Milling Asphalt Concrete is computed at the rate of 438 Square Yards, applied 39.4 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	34.47 Tons
Salvaged Asphalt Concrete (20%)	8.62 Tons
PG 58-34 Asphalt Binder	2.13 Tons
TOTAL MIX	45.22 Tons
Hydrated Lime	0.45 Tons
TOTAL MIX WITH HYDRATED LIME	45.67 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.06 ton applied 24 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.10 ton applied 40.5 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.09 ton applied 34 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 0.98 ton applied 22 feet wide for (Rate = 8 pounds per square yard).

SECTION 7 (per mile)

Station 65+00 (2nd) to Station 277+00 (2nd)
Station 328+00 (2nd) to Station 588+96.02 (2nd)
Station 56+40 (3rd) to Station 295+00 (3rd)
Station 312+00 (3rd) to Station 490+15 (3rd)

Cold Milling Asphalt Concrete is computed at the rate of 19,712 Square Yards, applied 33.6 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	1,792 Tons
Salvaged Asphalt Concrete (20%)	448 Tons
PG 58-34 Asphalt Binder	110 Tons
TOTAL MIX	2,350 Tons
Hydrated Lime	24 Tons
TOTAL MIX WITH HYDRATED LIME	2,374 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 3.0 ton applied 24 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 4.9 ton applied 39 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 4.2 ton applied 34 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 52 ton applied 22 feet wide for (Rate = 8 pounds per square yard).

SECTION 8 ~ (per station)

Station 493+11 (3rd) to Station 499+57 (3rd)

Cold Milling Asphalt Concrete is computed at the rate of 707 Square Yards, applied 63.6 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	58.14 Tons
Salvaged Asphalt Concrete (20%)	14.54 Tons
PG 58-34 Asphalt Binder	3.58 Tons
TOTAL MIX	76.26 Tons
Hydrated Lime	0.76 Tons
TOTAL MIX WITH HYDRATED LIME	77.02 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.14 ton applied 60 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.16 ton applied 65 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.14 ton applied 60 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 2.49 ton applied 56 feet wide for (Rate = 8 pounds per square yard).

RATES OF MATERIALS

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F29	F55

US HWY 14

SECTION 9 ~ (per station)

Station 499+57 (3rd) to Station 506+51 (3rd)

Cold Milling Asphalt Concrete is computed at the rate of 562 Square Yards, applied 50.6 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	47.93 Tons
Salvaged Asphalt Concrete (20%)	11.98 Tons
PG 58-34 Asphalt Binder	2.95 Tons
TOTAL MIX	62.86 Tons
Hydrated Lime	0.63 Tons
TOTAL MIX WITH HYDRATED LIME	63.49 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.12 ton applied 49 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.13 ton applied 54 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.12 ton applied 49 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 2.00 ton applied 45 feet wide for (Rate = 8 pounds per square yard).

SECTION 14 ~ (per station)

Station 14+99.5 (5th) to Station 35+13.8 (5th)

Cold Milling Asphalt Concrete is computed at the rate of 722 Square Yards, applied 65 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	61.12 Tons
Salvaged Asphalt Concrete (20%)	15.28 Tons
PG 58-34 Asphalt Binder	3.77 Tons
TOTAL MIX	80.17 Tons
Hydrated Lime	0.80 Tons
TOTAL MIX WITH HYDRATED LIME	80.97 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.16 ton applied 65 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.16 ton applied 65 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.16 ton applied 65 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 2.89 ton applied 65 feet wide for (Rate = 8 pounds per square yard).

SECTION 15 ~ (per station)

Station 0+00 (6th) to Station 26+64.7 (6th)

Cold Milling Asphalt Concrete is computed at the rate of 544 Square Yards, applied 49 feet wide.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	46.08 Tons
Salvaged Asphalt Concrete (20%)	11.52 Tons
PG 58-34 Asphalt Binder	2.84 Tons
TOTAL MIX	60.44 Tons
Hydrated Lime	0.60 Tons
TOTAL MIX WITH HYDRATED LIME	61.04 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.12 ton applied 49 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.12 ton applied 49 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.12 ton applied 49 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 2.18 ton applied 49 feet wide for (Rate = 8 pounds per square yard).

RATES OF MATERIALS

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F30	F55

SD HWY 45

SECTION 1 ~ (per station)

Station 11+71 to Station 26+24.95

Cold Milling Asphalt Concrete is computed at the rate of 444 Square Yards, applied 40 feet wide throughout Section 1.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	37.62 Tons
Salvaged Asphalt Concrete (20%)	9.40 Tons
PG 58-34 Asphalt Binder	2.32 Tons
TOTAL MIX	49.34 Tons
Hydrated Lime	0.49 Tons
TOTAL MIX WITH HYDRATED LIME	49.83 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.10 ton applied 40 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.10 ton applied 40 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.10 ton applied 40 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 1.78 ton applied 40 feet wide for (Rate = 8 pounds per square yard).

SECTION 2 ~ (per station)

Station 10+06.45 (2nd) to Station 0+00 (2nd)

Cold Milling Asphalt Concrete is computed at the rate of 756 Square Yards, applied 68 feet wide throughout Section 2.

Class Q3R Hot Mixed Asphalt Concrete (2" Lift)

Aggregate (80% Contractor Furnished)	63.94 Tons
Salvaged Asphalt Concrete (20%)	15.98 Tons
PG 58-34 Asphalt Binder	3.94 Tons
TOTAL MIX	83.86 Tons
Hydrated Lime	0.84 Tons
TOTAL MIX WITH HYDRATED LIME	84.70 Tons

The exact proportions of these materials will be determined on construction.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.16 ton applied 68 feet wide (Rate = 0.05 gallon per square yard), prior to application of Asphalt Concrete Blade Laid.

Provide SS-1h or CSS-1h Asphalt for Tack at the rate of 0.16 ton applied 68 feet wide (Rate = 0.05 gallon per square yard), prior to application of 2" lift of Class Q3R Hot Mixed Asphalt Concrete.

Flush Seal

Provide SS-1h or CSS-1h Asphalt for Flush Seal at the rate of 0.16 ton applied 68 feet wide (Rate = 0.05 gallon per square yard).

Provide Sand for Flush Seal at the rate of 3.02 ton applied 68 feet wide for (Rate = 8 pounds per square yard).

TABLE OF PROJECT STATIONING

NH 0014(197)267 PCN 04E3

SECTION	STATION	TO	STATION	DESCRIPTION	PROJECT GROSS LENGTHS	EXCEPTION LENGTH	PROJECT NET LENGTHS
1	Begin Project 0+00.00	to	573+56.00	Rural 2 Lane	57356.00'	-	57356.00'
1	573+56.00	to	579+20.00	US14/SD47 Center Turn Lane	564.00'	-	564.00'
1	579+20.00	to	579+75.60	US14/SD47 Highmore Intersection	55.60'	-	55.60'
Equation	579+75.60 Bk	=	0+00.00 (2nd) Ah	-	-	-	-
2	0+00.00 (2nd)	to	0+80.00 (2nd)	US14/SD47 Highmore Intersection	80.00'	-	80.00'
2	0+80.00 (2nd)	to	3+87.00 (2nd)	2 Lane w/Center Turn Lane	307.00'	-	307.00'
3	3+87.00 (2nd)	to	7+28.00 (2nd)	2 Lane w/Center Turn Lane & wide Right Shoulder	341.00'	-	341.00'
2	7+28.00 (2nd)	to	17+50.00 (2nd)	2 Lane w/Center Turn Lane	1022.00'	-	1022.00'
4	17+50.00 (2nd)	to	26+85.00 (2nd)	2 Lane w/Center Turn Lane & Right Turn Lane	935.00'	-	935.00'
5	26+85.00 (2nd)	to	46+00.00 (2nd)	2 Lane w/Center Turn Lane	1915.00'	-	1915.00'
6	46+00.00 (2nd)	to	65+00.00 (2nd)	Rural 2 Lane	1900.00'	-	1900.00'
7	65+00.00 (2nd)	to	277+00.00 (2nd)	Rural 2 Lane	21200.00'	-	21200.00'
6	277+00.00 (2nd)	to	328+00.00 (2nd)	Rural 2 Lane	5100.00'	-	5100.00'
7	328+00.00 (2nd)	to	588+96.02 (2nd)	Rural 2 Lane	26096.02'	-	26096.02'
Equation	588+96.02 (2nd) Bk	=	0+00.00 (3rd) Ah	-	-	-	-
7	0+00.00 (3rd)	to	32+20.00 (3rd)	Rural 2 Lane	3220.00'	-	3220.00'
5	32+20.00 (3rd)	to	56+40.00 (3rd)	Rural 2 Lane	2420.00'	-	2420.00'
7	56+40.00 (3rd)	to	295+00.00 (3rd)	Rural 2 Lane	23860.00'	-	23860.00'
6	295+00.00 (3rd)	to	312+00.00 (3rd)	Rural 2 Lane	1700.00'	-	1700.00'
7	312+00.00 (3rd)	to	490+15.00 (3rd)	Rural 2 Lane	17815.00'	-	17815.00'
8	490+15.00 (3rd)	to	499+57.00 (3rd)	2 Lane w/Center Turn Lane & Right Lane	942.00'	-	942.00'
9	499+57.00 (3rd)	to	515+63.00 (3rd)	3 Lane w/Left Turn Lanes	1606.00'	-	1606.00'
6	515+63.00 (3rd)	to	544+00.00 (3rd)	Rural 2 Lane	2837.00'	-	2837.00'
7	544+00.00 (3rd)	to	555+00.00 (3rd)	Rural 2 Lane	1100.00'	-	1100.00'
6	555+00.00 (3rd)	to	565+00.00 (3rd)	Rural 2 Lane	1000.00'	-	1000.00'
10	565+00.00 (3rd)	to	589+25.00 (3rd)	Rural 2 Lane	2425.00'	-	2425.00'
11	589+25.00 (3rd)	to	592+49.45 (3rd)	Rural 2 Lane transitioning into Turn Lanes at North Miller Intersection	324.45'	-	324.45'
Equation	592+49.45 (3rd) Bk	=	8+00.00 (4th) Ah	-	-	-	-
12	8+00.00 (4th)	to	9+85.00 (4th)	fm North Miller Intersection heading south in Miller	185.00'	-	185.00'
13	9+85.00 (4th)	to	15+69.50 (4th)	thru Miller	584.50'	-	584.50'
Equation	15+69.50 (4th) Bk	=	0+00.00 (5th) Ah	-	-	-	-
13	0+00.00 (5th)	to	14+99.50 (5th)	thru Miller	1499.50'	-	1499.50'
14	14+99.50 (5th)	to	35+13.80 (5th)	thru Miller	2014.30'	-	2014.30'
Equation	35+13.80 (5th) Bk	=	0+00.00 (6th) Ah	-	-	-	-
15	0+00.00 (6th)	to	31+23.00 (6th) End Project	fm US14/SD45 Intersection in Miller east thru Miller	3123.00'	-	3123.00'
TOTALS =					183527.37'	0.00'	183527.37'
					34.759 Miles	0.000 Miles	34.759 Miles

P 0045(53)111 PCN 04WJ

SECTION	STATION	TO	STATION	DESCRIPTION	PROJECT GROSS LENGTHS	EXCEPTION LENGTH	PROJECT NET LENGTHS
1	Begin Project 11+71.00	to	26+24.95	south city limits in Miller heading north thru Miller	1453.95'	-	1453.95'
Equation	26+24.95 Bk	=	10+36.45 (2nd) Ah	-	-	-	-
Exception	10+36.45 (2nd)		10+06.45 (2nd)	Railroad Tracks	-	30.00'	-
2	10+06.45 (2nd)	to	0+00.00 (2nd)	thru Miller ending at US14/SD45 Intersection in Miller	1006.45'	-	1006.45'
3	6+57.73 (3rd)	to	12+18.00 (3rd) End Project	begin at US14/SD45 North Miller Intersection heading north	560.27'	-	560.27'
TOTALS =					3020.67'	30.00'	2990.67'
					0.572 Miles	0.006 Miles	0.566 Miles

TABLE OF MATERIAL QUANTITIES

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F32	F55

NH 0014(197)267 PCN 04E3 US HWY 14	Water For Granular Material (MGal)	Cold Milling Asphalt Concrete (SqYd)	Base Course, Salvaged Asphalt Mix (Ton)	Base Course (Ton)	Granular Material, Furnish (Ton)	Blend, Haul, And Stockpile Granular Material (Ton)	Asphalt Concrete Blade Laid (Ton)	Class Q3R Hot Mixed Asphalt Concrete (Ton)	PG 58-34 Asphalt Binder (Ton)	Hydrated Lime (Ton)	SS-1h or CSS-1h Asphalt For Tack (Ton)	SS-1h or CSS-1h Asphalt For Flush Seal (Ton)	Sand For Flush Seal (Ton)	MC-70 Asphalt For Prime (Ton)
Section 1	101.5	202,660	10577.5	-	-	-		25,984.3	1,205.8	260.7	53.2	48.9	564.9	122.1
Section 2	-	4,272	-	-				459.5	21.4	4.6	0.9	0.9	14.1	-
Section 4	-	4,654	-	-				494.1	23.0	4.9	1.1	1.0	14.8	-
Section 5	-	18,987	-	-				1,979.8	92.3	19.5	4.3	3.9	42.5	-
Section 6	-	46,763	-	-				5,636.6	262.0	56.4	11.3	11.3	122.9	-
Section 7	-	348,281	-	-				41,946.6	1,943.9	423.8	86.5	74.7	918.6	-
Section 8	-	4,567	-	-				497.5	23.1	4.9	1.0	0.9	16.1	-
Section 9	-	3,900	-	-				440.6	20.5	4.4	0.9	0.8	13.9	-
Section 10	-	8,778	-	-				944.2	43.9	9.5	1.9	1.9	20.6	-
Section 14	-	14,543	-	-				1,631.0	75.9	16.1	3.2	3.2	58.2	-
Section 15	-	14,496	-	-	↓	↓		1,626.5	75.7	16.0	3.2	3.2	58.1	-
Subtotal =	101.5	671,901	10,577.5	-	6,610.9	16,527.3	↓	81,640.7	3,787.5	820.8	167.5	150.7	1,844.7	122.1
Table of Additional Quantities Totals =	55.2	45,670	-	5,756.1	-	-	5,544.0	10,355.6	928.5	158.5	139.4	6.7	116.0	-
TOTALS =	156.7	717,571	10,577.5	5,756.1	6,610.9	16,527.3	5,544.0	91,996.3	4,716.0	979.3	306.9	157.4	1,960.7	122.1

P 0045(53)111 PCN 04WJ SD HWY 45	Water For Granular Material (MGal)	Cold Milling Asphalt Concrete (SqYd)	Base Course (Ton)	Granular Material, Furnish (Ton)	Blend, Haul, And Stockpile Granular Material (Ton)	Asphalt Concrete Blade Laid (Ton)	Class Q3R Hot Mixed Asphalt Concrete (Ton)	PG 58-34 Asphalt Binder (Ton)	Hydrated Lime (Ton)	SS-1h or CSS-1h Asphalt For Tack (Ton)	SS-1h or CSS-1h Asphalt For Flush Seal (Ton)	Sand For Flush Seal (Ton)
Section 1	-	6,456	-	↓	↓	↓	724.5	33.7	7.1	1.5	1.5	25.9
Section 2	-	7,609	-	↓	↓	↓	852.5	39.7	8.5	1.6	1.6	30.4
Subtotal =	-	14,065	-	908.9	2,272.4	↓	1,577.0	73.4	15.6	3.1	3.1	56.3
Table of Additional Quantities Totals =	0.8	5,763	80.4	-	-	169.9	684.6	49.9	8.5	5.7	0.5	9.2
TOTALS =	0.8	19,828	80.4	908.9	2,272.4	169.9	2,261.6	123.3	24.1	8.8	3.6	65.5

TABLE OF ADDITIONAL QUANTITIES

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F33	F55

NH 0014(197)267 ~ PCN 04E3 ~ US HWY 14	Water For Granular Material (MGal)	Cold Milling Asphalt Concrete (SqYd)	Base Course (Ton)	Asphalt Concrete Blade Laid (Ton)	Class Q3R Hot Mixed Asphalt Concrete (Ton)	PG 58-34 Asphalt Binder (Ton)	Hydrated Lime (Ton)	SS-1h or CSS-1h Asphalt For Tack (Ton)	SS-1h or CSS-1h Asphalt For Flush Seal (Ton)	Sand For Flush Seal (Ton)
Asphalt to ROW (Refer to "Table of Approaches" sheets for locations)										
38 Intersecting Road Entrances	-	9,314	-	-	986.4	45.9	9.8	1.5	-	-
10 Commercial Entrances	-	-	-	-	130.3	6.1	1.3	0.4	-	-
1 Residential Entrances	-	152	-	-	16.1	0.7	0.2	0.1	-	-
9 Farm & Field Entrances	-	-	-	-	117.3	5.5	1.2	0.1	-	-
Asphalt to Radius/Base Course (Refer to "Table of Approaches" sheets for locations)										
41 Intersecting Road Entrances	2.9	-	303.4	-	761.9	35.5	7.5	1.6	-	-
23 Commercial Entrances	1.6	-	170.2	-	427.4	19.9	4.2	0.9	-	-
12 Residential Entrances	0.4	-	44.4	-	149.1	6.9	1.5	0.5	-	-
3 Farm & Field Entrances	0.2	-	22.2	-	55.8	2.6	0.6	0.1	-	-
Asphalt to Sidewalk (Refer to "Table of Approaches" sheets for locations)										
18 Residential Driveways	-	-	-	-	38.2	1.8	0.4	0.1	-	-
Base Course (Refer to "Table of Approaches" sheets for locations)										
116 Farm & Field Entrances	16.7	-	1,740.0	-	-	-	-	-	-	-
Spot Leveling, Strengthening, & Repair										
	-	-	-	-	3,696.0	184.8	37.0	15.0	-	-
Asphalt Concrete Blade Laid										
	-	-	-	5544.0	-	417.7	55.4	110.9	-	-
** Typical Section 1										
Holabird Right Turn Lane Only (Sta 166+77 to Sta 178+67)	-	1,303	-	-	146.1	6.8	1.4	0.1	0.3	6.4
US14/SD47 Mainline/Center Turn Lane (Sta 573+56 to 579+20)	-	3,554	-	-	394.5	23.7	3.9	0.8	0.4	7.5
** US14/SD47 Highmore Intersection Layout (Sta 579+20 to Sta 0+80 (2nd))										
	-	1,308	-	-	145.2	8.7	1.5	0.3	0.2	3.5
** Typical Section 2 with Center Turn Lane										
Sta 0+80 (2nd) to Sta 1+80 (2nd)	-	528	-	-	57.2	2.7	0.6	0.1	0.1	1.4
Sta 1+80 (2nd) to Sta 3+87 (2nd)	-	1,025	-	-	110.9	5.2	1.1	0.2	0.2	2.9
** Typical Section 3 with Center Turn Lane & Additional Right Shoulder Width										
Sta 3+87 (2nd) to Sta 5+40 (2nd)	-	673	-	-	84.4	3.9	0.8	0.2	0.2	2.8
Sta 5+40 (2nd) to Sta 7+28 (2nd)	-	784	-	-	96.9	4.5	1.0	0.2	0.2	3.3
** Typical Section 4 with Center Turn Lane & Right Turn Lane Transition										
Sta 17+50 (2nd) to Sta 18+70 (2nd)	-	605	-	-	63.8	3.0	0.6	0.2	0.1	2.2
** Typical Section 8 Right & Left Turn Lane Transition										
Sta 490+15 (3rd) to Sta 493+11 (3rd)	-	1,681	-	-	179.0	8.3	1.8	0.5	0.4	7.4
** Typical Section 9 Right & Left Turn Lane Transition										
Sta 506+51 (3rd) to Sta 515+63 (3rd)	-	4,396	-	-	490.7	22.8	4.8	1.2	1.1	18.2
** Typical Section 10 Right & Left Turn Lane Transition										
Sta 586+00 (3rd) to Sta 589+25 (3rd)	-	1,684	-	-	182.0	8.5	1.8	0.3	0.3	4.8
** Typical Section 11 & 12 (US14/SD45 Miller Intersection Layout)										
Sta 589+25 (3rd) thru Equation to Sta 9+85 (4th)	-	3,554	-	-	387.2	23.2	3.9	0.7	0.6	11.4
** Typical Section 13										
Sta 9+85 (4th) thru Equation to Sta 14+99.5 (5th)	-	10,191	-	-	1,090.3	50.6	10.8	2.3	2.1	34.2
** Typical Section 15 Curb & Gutter Section										
Sta 26+64.7 (6th) to Sta 31+23 (6th)	-	2,493	-	-	279.7	13.0	2.7	0.5	0.5	10.0
** Weigh Scale at Miller Intersection										
	-	2,425	-	-	269.2	16.2	2.7	0.5	-	-
Backfill for Digouts										
	33.4	-	3,475.9	-	-	-	-	-	-	-
TOTALS =	55.2	45,670	5,756.1	5,544.0	10,355.6	928.5	158.5	139.4	6.7	116.0

** Entire quantity shall be to a Specified Density Compaction Effort.

Quantities for Base Course to be placed on farm & field entrances were calculated using 15 tons per entrance.

Tonnage shown in the tables above for Class Q3R Hot Mixed Asphalt Concrete is based on a compacted depth as detailed in the plans.

The quantities above are included in the Material Quantities table in the "Table of Material Quantities" sheet.

TABLE OF ADDITIONAL QUANTITIES

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P.0045(53)111	F34	F55

P 0045(53)111 ~ PCN 04WJ ~ SD HWY 45	Water For Granular Material (MGal)	Cold Milling Asphalt Concrete (SqYd)	Base Course (Ton)	Asphalt Concrete Blade Laid (Ton)	Class Q3R Hot Mixed Asphalt Concrete (Ton)	PG 58-34 Asphalt Binder (Ton)	Hydrated Lime (Ton)	SS-1h or CSS-1h Asphalt For Tack (Ton)	SS-1h or CSS-1h Asphalt For Flush Seal (Ton)	Sand For Flush Seal (Ton)
Asphalt to ROW (Refer to "Table of Approaches" sheets for locations)										
4 Intersecting Road Entrances	-	1,112	-	-	118.0	5.5	1.2	0.2	-	-
Asphalt to Radius/Base Course (Refer to "Table of Approaches" sheets for locations)										
5 Intersecting Road Entrances	0.2	895	18.0	-	94.9	4.4	0.9	0.2	-	-
2 Residential Entrances	0.1	312	5.8	-	32.9	1.5	0.3	0.1	-	-
Spot Leveling, Strengthening, & Repair	-	-	-	-	56.6	2.8	0.6	1.2	-	-
** Typical Section 3 (US14/SD45 Miller Intersection Layout)										
Sta 6+57.73 (3rd) thru Equation to Sta 12+18 (3rd)	-	3,444	-	-	382.2	22.9	3.8	0.7	0.5	9.2
Asphalt Concrete Blade Laid	-	-	-	169.9	-	12.8	1.7	3.4	-	-
Backfill for Digouts	0.5	-	56.6	-	-	-	-	-	-	-
TOTALS =	0.8	5,763	80.4	169.9	684.6	49.9	8.5	5.7	0.5	9.2
<p>** Entire quantity shall be to a Specified Density Compaction Effort.</p> <p>Tonnage shown in the tables above for Class Q3R Hot Mixed Asphalt Concrete is based on a compacted depth as detailed in the plans.</p> <p>The quantities above are included in the Material Quantities table in the "Table of Material Quantities" sheet.</p>										

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F35	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
1	14	0+00	Lt & Rt	25	Intersecting Road, Asphalt to Radius
2	14	33+45	Lt & Rt	22	Field Entrance, Gravel
3	14	51+75	Lt & Rt	20	Intersecting Road 326 Ave., Asphalt to Radius
4	14	67+91	Lt	15	Field Entrance, Gravel
5	14	80+09	Lt & Rt	20	Field Entrance, Gravel
6	14	104+52	Lt & Rt	20	Lt is Gravel Field Entrance, Rt is Intersecting Road Asphalt to Radius
7	14	157+21	Lt & Rt	30	Intersecting Road, Asphalt to R.O.W.
8	14	164+27	Lt	15	Field Entrance, Gravel
9	14	166+50	Rt	25	Farm Entrance, Asphalt to R.O.W.
10	14	168+34	Rt	25	Farm Entrance, Asphalt to R.O.W.
11	14	170+18	Lt	30	Farm Entrance, Asphalt to R.O.W.
12	14	170+30	Rt	20	Farm Entrance, Asphalt to R.O.W.
13	14	172+55	Lt	30	Farm Entrance, Asphalt to R.O.W.
14	14	174+08	Rt	15	Farm Entrance, Asphalt to R.O.W.
15	14	177+17	Rt	10	Field Entrance, Gravel
16	14	185+62	Lt	20	Field Entrance, Gravel
17	14	185+75	Rt	10	Field Entrance, Gravel
18	14	190+70	Lt & Rt	15	Field Entrance, Gravel
19	14	209+94	Lt & Rt	15	Intersecting Road, Asphalt to R.O.W.
20	14	242+71	Lt & Rt	10	Field Entrance, Gravel
21	14	262+82	Lt & Rt	20	Intersecting Road, Asphalt to R.O.W.
22	14	263+65	Rt	15	Field Entrance, Gravel
23	14	264+34	Lt	15	Field Entrance, Gravel
24	14	289+89	Rt	15	Field Entrance, Gravel
25	14	315+65	Lt & Rt	15	Lt is Gravel Field Entrance, Rt is Residential Entrance - Asphalt to Radius

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
26	14	325+15	Lt	15	Field Entrance, Gravel
27	14	337+51	Rt	20	Field Entrance, Gravel
28	14	361+15	Rt	15	Field Entrance, Gravel
29	14	368+48	Lt & Rt	25	Intersecting Road, Asphalt to the R.O.W.
30	14	394+37	Lt & Rt	15	Field Entrance, Gravel
31	14	421+19	Lt & Rt	25	Intersecting Road 334th Ave., Asphalt to the R.O.W.
32	14	439+90	Lt & Rt	15	Field Entrance, Gravel
33	14	445+86	Lt	30	Field Entrance, Gravel
34	14	450+60	Rt	25	Farm Entrance, Gravel
35	14	453+13	Rt	20	Farm Entrance, Asphalt to R.O.W.
36	14	474+16	Lt & Rt	15	Lt is Gravel Field Entrance, Rt is a Residential Entrance - Asphalt to R.O.W.
37	14	496+73	Rt	15	Field Entrance, Gravel
38	14	500+06	Lt	15	Field Entrance, Gravel
39	14	526+73	Lt & Rt	25	Lt is a Farm Entrance, Rt is 336th Ave. Both Asphalt to Radius
40	14	544+32	Rt	20	Farm Entrance, Asphalt to R.O.W.
41	14	549+11	Lt	20	Farm Entrance, Asphalt to Radius
42	14	554+13	Rt	15	Field Entrance, Gravel
43	14	565+00	Lt	25	SDDOT Highmore Shop, Asphalt to R.O.W.
44	14	566+54	Lt & Rt	Lt 25', Rt 30'	Lt is Commercial Entrance, Asphalt to R.O.W., Rt is Commercial Entrance, Gravel
45	14	572+55	Rt	25	Commercial Entrance, Asphalt to Radius
46	14	573+77	Lt	30	Commercial Entrance, Asphalt to Radius
47	14	576+00	Rt	30	Commercial Entrance, Asphalt to R.O.W.
48	14	577+73	Lt	40	Commercial Entrance, Asphalt to R.O.W.
49	14	577+98	Rt	80	Commercial Entrance, Asphalt to R.O.W.
50	14	578+98	Lt & Rt	Lt 30', Rt 40'	No Work

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F36	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
51	14	0+00(2)	Lt	30	Intersecting Road, SD Highway 47 - Asphalt to R.O.W.
52	14	0+00(2)	Rt	30	Intersecting Road, SD Highway 47 - Asphalt to R.O.W.
53	14	3+87(2)	Rt	50	Intersecting Road, Commercial Ave. - Asphalt to Radius
54	14	4+36(2)	Lt	36	Commercial Entrance, Asphalt to Radius
55	14	7+28(2)	Rt	36	Commercial Entrance, Asphalt to Radius
56	14	13+02(2)	Rt	36	Intersecting Road, Maple Ave., Asphalt to Radius
57	14	26+46(2)	Rt	22	Intersecting Road, King Ave., Asphalt to Radius
58	14	30+12(2)	Lt	30	Commercial Entrance, Asphalt to Radius
59	14	34+28(2)	Rt	Ditchblock	Ditchblock
60	14	36+45(2)	Lt	25	Commercial Entrance, Asphalt to Radius
61	14	52+83(2)	Lt	22	Intersecting Road, 338th Ave., Asphalt to Radius
62	14	52+83(2)	Rt	29	Intersecting Road, 338th Ave., Asphalt to Radius
63	14	53+98(2)	Lt	48	Commercial Entrance, Gravel
64	14	63+04(2)	Rt	Ditchblock	Ditchblock
65	14	71+10(2)	Rt	Ditchblock	Ditchblock
66	14	77+35(2)	Lt	34	Field Entrance, Gravel
67	14	77+40(2)	Rt	28	Residential Entrance, Asphalt to Radius
68	14	80+52(2)	Rt	25	Field Entrance, Gravel
69	14	94+23(2)	Rt	Ditchblock	Ditchblock
70	14	103+60(2)	Lt	32	Field Entrance, Gravel
71	14	103+60(2)	Rt	30	Field Entrance, Gravel
72	14	130+00(2)	Lt	24	Field Entrance, Gravel
73	14	130+00(2)	Rt	28	Field Entrance, Gravel
74	14	140+10(2)	Rt	Ditchblock	Ditchblock

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
75	14	156+74(2)	Lt	28	Intersecting Road, 340 Ave., Asphalt to Radius
76	14	156+74(2)	Rt	28	Intersecting Road, 340 Ave., Asphalt to Radius
77	14	159+95(2)	Lt	Ditchblock	Ditchblock
78	14	159+95(2)	Rt	Ditchblock	Ditchblock
79	14	182+83(2)	Rt	29	Field Entrance, Gravel
80	14	209+50(2)	Lt	29	Field Entrance, Gravel
81	14	209+50(2)	Rt	33	Intersecting Road, 341 Ave., Asphalt to Radius
82	14	235+91(2)	Lt	35	Field Entrance, Gravel
83	14	235+91(2)	Rt	28	Field Entrance, Gravel
84	14	262+14(2)	Lt	24	Intersecting Road, Asphalt to Radius
85	14	262+14(2)	Rt	29	Intersecting Road, Asphalt to Radius
86	14	281+52(2)	Lt	25	Field Entrance, Gravel
87	14	284+18(2)	Rt	Ditchblock	Ditchblock
88	14	285+08(2)	Lt	Ditchblock	Ditchblock
89	14	301+86(2)	Lt	26	Residential Entrance, Asphalt to Radius
90	14	301+86(2)	Rt	22	Field Entrance, Gravel
91	14	315+12(2)	Rt	24	Field Entrance, Gravel
92	14	315+50(2)	Lt	25	Field Entrance, Gravel
93	14	333+28(2)	Rt	Ditchblock	Ditchblock
94	14	358+26(2)	Lt	Ditchblock	Ditchblock
95	14	358+26(2)	Rt	Ditchblock	Ditchblock
96	14	367+83(2)	Lt	26	Field Entrance, Gravel
97	14	367+83(2)	Rt	34	Intersecting Road, 344 Ave., Asphalt to Radius
98	14	391+34(2)	Lt	18	Field Entrance, Gravel
99	14	391+34(2)	Rt	22	Field Entrance, Gravel

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F37	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
100	14	404+08(2)	Lt	28	Field Entrance, Gravel
101	14	404+08(2)	Rt	28	Field Entrance, Gravel
102	14	414+56(2)	Lt	Ditchblock	Ditchblock
103	14	414+56(2)	Rt	Ditchblock	Ditchblock
104	14	425+24(2)	Lt	27	Farm Entrance, Asphalt to R.O.W.
105	14	425+42(2)	Rt	24	Field Entrance, Gravel
106	14	435+84(2)	Lt	23	Field Entrance, Gravel
107	14	435+84(2)	Rt	25	Field Entrance, Gravel
108	14	456+77(2)	Rt	32	ntersecting Road, 346 Ave., Asphalt to Radiu
109	14	456+77(2)	Lt	24	Field Entrance, Gravel
110	14	474+60(2)	Lt	30	Field Entrance, Gravel
111	14	474+60(2)	Rt	31	Field Entrance, Gravel
112	14	483+62(2)	Rt	27	Field Entrance, Gravel
113	14	502+74(2)	Lt	31	Field Entrance, Gravel
114	14	509+61(2)	Lt	32	ntersecting Road, 347 Ave., Asphalt to Radiu
115	14	509+61(2)	Rt	32	ntersecting Road, 347 Ave., Asphalt to Radiu
116	14	536+18(2)	Lt	35	Field Entrance, Gravel
117	14	536+18(2)	Rt	26	Field Entrance, Gravel
118	14	552+18(2)	Lt	30	Field Entrance, Gravel
119	14	552+18(2)	Rt	27	Field Entrance, Gravel
120	14	562+63(2)	Lt	24	Field Entrance, Gravel
121	14	562+63(2)	Rt	24	Field Entrance, Gravel
122	14	575+61(2)	Lt	27	Field Entrance, Gravel
123	14	575+61(2)	Rt	27	Field Entrance, Gravel
124	14	588+88(2)	Lt	35	Field Entrance, Gravel

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
125	14	588+88(2)	Rt	27	Field Entrance, Gravel
126	14	7+40(3)	Lt	Ditchblock	Ditchblock
127	14	7+40(3)	Rt	Ditchblock	Ditchblock
128	14	23+52(3)	Lt	20	Field Entrance, Gravel
129	14	23+52(3)	Rt	24	Field Entrance, Gravel
130	14	26+32(3)	Lt	38	ntersecting Road, 349 Ave., Asphalt to Radiu
131	14	26+32(3)	Rt	28	ntersecting Road, 349 Ave., Asphalt to Radiu
132	14	32+00(3)	Lt	Ditchblock	Ditchblock
133	14	32+00(3)	Rt	Ditchblock	Ditchblock
134	14	40+56(3)	Lt	35	Field Entrance, Gravel
135	14	40+56(3)	Rt	75	secting Road, N. Dakota Ave., Asphalt to R.C
136	14	52+76(3)	Lt	24	Field Entrance, Gravel
137	14	52+94(3)	Rt	48	Field Entrance, Gravel
138	14	64+80(3)	Lt	20	Residential Enterance, Asphalt to Radius
139	14	66+52(3)	Rt	20	Field Entrance, Gravel
140	14	66+64(3)	Lt	24	Field Entrance, Gravel
141	14	69+92(3)	Rt	22	Field Entrance, Gravel
142	14	72+76(3)	Lt	26	Field Entrance, Gravel
143	14	76+56(3)	Rt	20	Field Entrance, Gravel
144	14	76+70(3)	Lt	24	Field Entrance, Gravel
145	14	79+34(3)	Lt	22	Field Entrance, Gravel
146	14	79+34(3)	Rt	28	Field Entrance, Gravel
147	14	89+84(3)	Lt	30	Field Entrance, Gravel
148	14	89+84(3)	Rt	32	Field Entrance, Gravel
149	14	104+96(3)	Lt	36	Field Entrance, Gravel

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F38	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
150	14	113+20(3)	Lt	30	Field Entrance, Gravel
151	14	116+20(3)	Rt	26	Field Entrance, Gravel
152	14	131+21(3)	Lt	32	Intersecting Road, 351 Ave., Gravel
153	14	131+21(3)	Rt	46	Field Entrance, Gravel
154	14	143+14(3)	Rt	Ditchblock	Ditchblock
155	14	157+83(3)	Rt	38	Field Entrance, Gravel
156	14	161+34(3)	Lt	32	Field Entrance, Gravel
157	14	168+36(3)	Rt	28	Field Entrance, Gravel
158	14	183+85(3)	Lt	28	Intersecting Road, 352 Ave., Gravel
159	14	183+85(3)	Rt	30	Intersecting Road, 352 Ave., Asphalt to Radius
160	14	189+36(3)	Rt	30	Field Entrance, Gravel
161	14	210+52(3)	Lt	26	Field Entrance, Gravel
162	14	232+34(3)	Lt	24	Field Entrance, Gravel
163	14	232+34(3)	Rt	30	Field Entrance, Gravel
164	14	236+88(3)	Lt	28	Intersecting Road, 353 Ave., Gravel
165	14	236+88(3)	Rt	32	Field Entrance, Gravel
166	14	259+42(3)	Lt	24	Field Entrance, Gravel
167	14	259+42(3)	Rt	24	Field Entrance, Gravel
168	14	274+76(3)	Lt	Ditchblock	Ditchblock
169	14	274+90(3)	Rt	24	Field Entrance, Gravel
170	14	277+48(3)	Lt	28	Residential Entrance, Asphalt to Radius
171	14	289+65(3)	Lt	28	Intersecting Road, 354 Ave., Gravel
172	14	289+65(3)	Rt	30	Intersecting Road, 354 Ave., Gravel
173	14	297+94(3)	Lt	Ditchblock	Ditchblock

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
174	14	297+94(3)	Rt	Ditchblock	Ditchblock
175	14	310+08(3)	Lt	Ditchblock	Ditchblock
176	14	310+08(3)	Rt	Ditchblock	Ditchblock
177	14	316+12(3)	Lt	38	Farm Entrance, Gravel
178	14	316+12(3)	Rt	35	Field Entrance, Gravel
179	14	321+92(3)	Lt	24	Field Entrance, Gravel
180	14	331+96(3)	Lt	Ditchblock	Ditchblock
181	14	331+96(3)	Rt	Ditchblock	Ditchblock
182	14	342+42(3)	Lt	38	Intersecting Road, 355 Ave., Asphalt to Radius
183	14	342+42(3)	Rt	29	Intersecting Road, 355 Ave., Asphalt to Radius
184	14	351+00(3)	Lt	48	Field Entrance, Gravel
185	14	351+00(3)	Rt	46	Field Entrance, Gravel
186	14	364+80(3)	Lt	38	Field Entrance, Gravel
187	14	364+80(3)	Rt	65	Field Entrance, Gravel
188	14	382+14(3)	Lt	32	Field Entrance, Gravel
189	14	382+14(3)	Rt	24	Field Entrance, Gravel
190	14	395+02(3)	Lt	34	Intersecting Road, 356 Ave., Asphalt to Radius
191	14	395+02(3)	Rt	33	Intersecting Road, 356 Ave., Asphalt to Radius
192	14	399+12(3)	Rt	26	Field Entrance, Gravel
193	14	420+84(3)	Lt	55	Field Entrance, Gravel
194	14	420+84(3)	Rt	48	Field Entrance, Gravel
195	14	447+13(3)	Lt	30	Intersecting Road, 357 Ave., Asphalt to Radius
196	14	447+13(3)	Rt	32	Intersecting Road, 357 Ave., Asphalt to Radius
197	14	464+20(3)	Lt	26	Field Entrance, Gravel

TABLE OF APPROACHES

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F39	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
198	14	464+34(3)	Rt	32	Field Entrance, Gravel
199	14	476+08(3)	Rt	Ditchblock	Ditchblock
200	14	485+38(3)	Lt	32	Field Entrance, Gravel
201	14	485+38(3)	Rt	24	Field Entrance, Gravel
202	14	499+81(3)	Lt	28	Intersecting Road, 358 Ave., Gravel
203	14	499+81(3)	Rt	28	Intersecting Road, 358 Ave., Asphalt to R.O.W.
204	14	518+40(3)	Lt	26	Field Entrance, Gravel
205	14	518+40(3)	Rt	25	Field Entrance, Gravel
206	14	530+34(3)	Lt	20	Field Entrance, Gravel
207	14	530+40(3)	Rt	24	Field Entrance, Gravel
208	14	549+20(3)	Lt	Ditchblock	Ditchblock
209	14	549+20(3)	Rt	Ditchblock	Ditchblock
210	14	552+72(3)	Lt	28	Intersecting Road, W. 14th Ave., Asphalt to Radius
211	14	552+72(3)	Rt	28	Intersecting Road, W. 14th Ave., Asphalt to Radius
212	14	558+06(3)	Lt	Ditchblock	Ditchblock
213	14	558+06(3)	Rt	Ditchblock	Ditchblock
214	14	561+22(3)	Lt	24	Commercial Entrance, Gravel
215	14	567+50(3)	Lt	34	Commercial Entrance, Asphalt to Radius
216	14	567+50(3)	Rt	56	Commercial Entrance, Asphalt to Radius
217	14	570+54(3)	Lt	32	Commercial Entrance, Asphalt to Radius
218	14	573+08(3)	Lt	44	Residential Entrance, Asphalt to Radius
219	14	573+86(3)	Rt	24	Commercial Entrance, Gravel
220	14	579+16(3)	Lt	38	Residential Entrance, Asphalt to Radius
221	14	580+16(3)	Rt	36	Field Entrance, Gravel
222	14	585+18(3)	Rt	32	Commercial Entrance, Asphalt to Radius

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
223	14	585+52(3)	Lt	27	Residential Entrance, Asphalt to Radius
224	14	587+14(3)	Rt	26	Commercial Entrance, Asphalt to Radius
225	14	587+64(3)	Lt	25	Commercial Entrance, Asphalt to Radius
226	14	589+04(3)	Lt	105	State Scale Entrance
227	14	8+00(4)	Lt	22	Asphalt to Radius, 14th Steet
228	14	10+76(4)	Lt	30	Asphalt to Radius, Commercial Entrance
229	14	12+35(4)	Lt	24	Asphalt to Radius, Commercial Entrance
230	14	13+72(4)	Rt	20	Asphalt to Radius, Residential Entrance
231	14	15+26(4)	Rt	55	Asphalt to R.O.W., Commercial Entrance
232	14	15+26(4) - 2+80(5)	Lt	320	Asphalt to Sidewalk, Commercial Entrance
233	14	1+44(5)	Rt	55	Asphalt to R.O.W., Commercial Entrance
234	14	3+56(5)	Rt	30	Asphalt to Radius, Commercial Entrance
235	14	3+97(5)	Lt	24	Asphalt to Radius, Commercial Entrance
236	14	7+42(5)	Rt	38	Asphalt to R.O.W., 10th Street
237	14	8+59(5)	Rt	43	Asphalt to Radius, Residential Entrance
238	14	9+68(5)	Rt	22	Asphalt to Radius, Residential Entrance
239	14	10+02(5)	Lt	17	Asphalt to Radius, Commercial Entrance
240	14	11+18(5)	Rt	36	Asphalt to R.O.W., 9th Street
241	14	11+31(5)	Lt	22	Asphalt to R.O.W., 9th Street
242	14	15+04(5)	Lt & Rt	36	Asphalt to R.O.W., 8th Street
243	14	15+46(5)	Lt	22	None, Concrete Commercial Entrance
244	14	15+66(5)	Rt	33	None, Concrete Commercial Entrance
245	14	16+67(5)	Rt	71	None, Concrete Commercial Entrance
246	14	16+71(5)	Lt	35	None, Concrete Commercial Entrance
247	14	17+17(5)	Rt	17	None, Concrete Commercial Entrance

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F40	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
248	14	17+21(5)	Lt	61	None, Concrete Commercial Entrance
249	14	18+29(5)	Lt	22	None, Concrete Commercial Entrance
250	14	18+90(5)	Lt & Rt	36	Asphalt to R.O.W., 7th Street
251	14	20+38(5)	Lt	15	Asphalt to Sidewalk, Residential Driveway
252	14	21+24(5)	Rt	15	Asphalt to Sidewalk, Residential Driveway
253	14	21+77(5)	Rt	10	Asphalt to Sidewalk, Residential Driveway
254	14	22+05(5)	Lt	10	Asphalt to Sidewalk, Residential Driveway
255	14	22+81(5)	Lt & Rt	36	Asphalt to R.O.W., 6th Street
256	14	23+77(5)	Rt	12	Asphalt to Sidewalk, Residential Driveway
257	14	24+00(5)	Rt	8	None, Concrete Residential Entrance
258	14	25+96(5)	Rt	20	None, Concrete Commercial Entrance
259	14	26+60(5)	Lt & Rt	36	Asphalt to R.O.W., 5th Street
260	14	27+35(5)	Rt	10	Asphalt to Sidewalk, Residential Driveway
261	14	28+11(5)	Rt	22	None, Concrete Residential Entrance
262	14	28+87(5)	Lt	13	None, Concrete Residential Entrance
263	14	29+17(5)	Rt	10	None, Concrete Residential Entrance
264	14	30+89(5)	Lt & Rt	36	Asphalt to R.O.W., 4th Street
265	14	31+38(5)	Rt	30	None, Concrete Commercial Entrance
266	14	31+86(5)	Rt	34	None, Concrete Commercial Entrance
267	14	33+11(5)	Rt	27	None, Concrete Commercial Entrance
268	14	33+75(5)	Lt	138	None, Concrete Commercial Entrance
269	14	0+78(6)	Rt	28	None, Concrete Commercial Entrance
270	14	1+14(6)	Lt	24	None, Concrete Commercial Entrance
271	14	1+69(6)	Rt	50	None, Concrete Commercial Entrance
272	14	1+90(6)	Lt	50	None, Concrete Commercial Entrance

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
273	14	2+33(6)	Lt & Rt	20	None, Concrete Commercial Entrance
274	14	3+00(6)	Lt & Rt	15	None, Concrete Residential Entrance
275	14	4+41(6)	Lt & Rt	36	Asphalt to R.O.W., 1st Avenue
276	14	5+30(6)	Lt	46	None, Concrete Commercial Entrance
277	14	5+52(6)	Rt	13	None, Concrete Residential Entrance
278	14	5+80(6)	Lt	40	None, Concrete Commercial Entrance
279	14	6+25(6)	Lt	33	None, Concrete Commercial Entrance
280	14	6+30(6)	Rt	24	None, Concrete Residential Entrance
281	14	6+56(6)	Rt	22	Asphalt to Sidewalk, Residential Entrance
282	14	6+78(6)	Lt	27	None, Concrete Residential Entrance
283	14	8+70(6)	Lt & Rt	36	Asphalt to R.O.W., 2nd Avenue
284	14	9+67(6)	Rt	24	None, Concrete Commercial Entrance
285	14	9+87(6)	Rt	50	Asphalt to Sidewalk, Residential Entrance
286	14	10+54(6)	Lt	14	None, Concrete Residential Entrance
287	14	10+85(6)	Rt	22	Asphalt to Sidewalk, Residential Entrance
288	14	11+52(6)	Rt	14	None, Concrete Residential Entrance
289	14	11+58(6)	Lt	15	None, Concrete Residential Entrance
290	14	13+25(6)	Lt & Rt	36	Asphalt to R.O.W., 3rd Avenue
291	14	15+06(6)	Lt	23	Asphalt to Sidewalk, Residential Entrance
292	14	15+75(6)	Rt	18	Asphalt to Sidewalk, Residential Entrance
293	14	16+87(6)	Lt & Rt	36	Asphalt to R.O.W., 4th Avenue
294	14	18+68(6)	Rt	24	Asphalt to Sidewalk, Residential Entrance
295	14	18+86(6)	Lt	14	None, Concrete Residential Entrance
296	14	20+43(6)	Lt & Rt	36	Asphalt to R.O.W., 5th Avenue
297	14	21+42(6)	Rt	13	None, Concrete Residential Entrance

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F41	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
298	14	22+11(6)	Lt	10	None, Concrete Residential Entrance
299	14	22+26(6)	Lt	10	Asphalt to Sidewalk, Residential Entrance
300	14	22+68(6)	Rt	15	None, Concrete Residential Entrance
301	14	24+03(6)	Lt & Rt	36	Asphalt to R.O.W., 6th Avenue
302	14	24+62(6)	Lt	26	Asphalt to R.O.W., High School Entrance
303	14	25+25(6)	Lt	27	Asphalt to R.O.W., High School Entrance
304	14	25+28(6)	Rt	15	None, Concrete Residential Entrance
305	14	25+48(6)	Rt	15	Asphalt to Sidewalk, Residential Entrance
306	14	25+87(6)	Lt	27	Asphalt to R.O.W., High School Entrance
307	14	25+95(6)	Rt	16	Asphalt to Sidewalk, Residential Entrance
308	14	26+42(6)	Lt	36	Asphalt to R.O.W., 7th Avenue
309	14	26+91(6)	Rt	22	Asphalt to Sidewalk, Residential Entrance
310	14	28+11(6)	Lt	20	None, Concrete Residential Entrance
311	14	28+20(6)	Rt	24	Asphalt to Radius, Intersecting Road
312	14	28+59(6)	Lt	26	None, Concrete Residential Entrance
313	14	30+52(6)	Rt	18	Asphalt to Sidewalk, Residential Entrance
314	14	30+23(6)	Lt	31	None, Concrete Residential Entrance
315	14	30+52(6)	Rt	18	None
316	14	31+32(6)	Rt	45	None, Concrete Commercial Entrance

TABLE OF APPROACHES

Revised by JJR on 1/22/15

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F42	F55

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
317	45	11+98	Rt	34	Asphalt to Radius, SE 4th Street
318	45	12+13	Lt	23	None, Concrete Residential Entrance
319	45	13+24	Rt	15	None, Concrete Residential Entrance
320	45	13+91	Lt	36	None, Concrete Residential Entrance
321	45	14+42	Rt	16	None, Concrete Residential Entrance
322	45	14+76	Lt	15	None, Concrete Residential Entrance
323	45	15+79	Rt	23	None, Concrete Residential Entrance
324	45	15+30 - 16+05	Lt	75	None, Concrete Residential Entrance
325	45	17+49	Rt	24	None, Concrete Residential Entrance
326	45	17+60	Lt	40	None, Concrete Commercial Entrance
327	45	19+55	Rt	30	Asphalt to Radius, 2nd Street
328	45	19+83	Lt	17	None, Concrete Residential Entrance
329	45	20+71	Rt	15	None, Concrete Residential Entrance
330	45	21+21	Rt	15	None, Concrete Residential Entrance
331	45	21+48	Lt	17	None, Concrete Residential Entrance
332	45	21+98	Rt	14	None, Concrete Residential Entrance
333	45	23+31	Lt & Rt	24	Asphalt to Radius, 1st Street
334	45	23+83	Rt	31	None, Concrete Commercial Entrance
335	45	24+50	Lt	24	None, Concrete Commercial Entrance
336	45	24+58	Rt	29	None, Concrete Commercial Entrance
337	45	24+90	Lt	38	None, Concrete Commercial Entrance
338	45	25+01	Rt	30	None, Concrete Commercial Entrance
339	45	0+66(2)	Lt	51	None, Concrete Commercial Entrance
340	45	3+52(2)	Lt	31	None, Concrete Commercial Entrance
341	45	4+30(2)	Lt & Rt	36	Asphalt to R.O.W., 2nd Street

APPROACH NUMBER	HIGHWAY	STATION	LEFT OR RIGHT	APPROACH WIDTH (Feet)	COMMENTS
342	45	5+74(2)	Rt	12	None, Concrete Commercial Entrance
343	45	6+21(2)	Lt	25	None, Concrete Commercial Entrance
344	45	7+11(2)	Lt	34	None, Concrete Commercial Entrance
345	45	7+75(2)	Lt	39	None, Concrete Commercial Entrance
346	45	9+00(2)	Lt & Rt	36	Asphalt to R.O.W., 1st Street
347	45	9+80(2)	Lt	17	None, Concrete Commercial Entrance
348	45	9+85(2)	Rt	37	None, Concrete Commercial Entrance
349	45	9+67(3)	Rt	36	Asphalt to Radius, 15th Street
350	45	10+27(3)	Lt	140	State Scale Entrance
351	45	11+13(3)	Rt	25	Asphalt to Radius, Residential Entrance
352	45	11+17(3)	Lt	50	Asphalt to Radius, Residential Entrance

SUMMARY OF ASPHALT CONCRETE

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F43	F55

NH 0014(197)267 ~ PCN 04E3 ~ US HWY 14	Class Q3R Hot Mixed Asphalt Concrete With Specified Density Compaction (Ton)	Class Q3R Hot Mixed Asphalt Concrete Without Specified Density Compaction (Ton)
Section 1 24' Finished Roadway Width 6' Shoulders w/Safety Edge Table of Additional Quantities	17,147.1 - 685.8	- 8,837.2
Section 1 Totals =	17,833.0	8,837.2
Section 2 34' Finished Roadway Width (w/2' Bevel) w/Center Turn Lane Table of Additional Quantities	459.5 168.1	- -
Section 2 Totals =	627.6	-
Section 4 46' Finished Roadway Width (w/2.7' Bevel) w/Center Turn Lane & Right Turn Lane Table of Additional Quantities	494.1 63.8	- -
Section 4 Totals =	557.9	-
Section 5 34' Finished Roadway Width (w/2.7' Bevel) w/Center Turn Lane	1,979.8	-
Section 5 Totals =	1,979.8	-
Section 6 24' Finished Roadway Width 5' Shoulders w/2' Bevel	3,748.1	- 1,888.5
Section 6 Totals =	3,748.1	1,888.5
Section 7 24' Finished Roadway Width 5' Shoulders w/2' Bevel	27,890.3 -	- 14,056.3
Section 7 Totals =	27,890.3	14,056.3
Section 8 60' Finished Roadway Width (w/1.8' Bevel) w/Center Turn Lane & Right Turn Lane Table of Additional Quantities	497.5 179.0	- -
Section 8 Totals =	676.5	-
Section 9 49' Finished Roadway Width (w/1.8' - 2' Bevel) w/Center Turn Lane & Right Turn Lane Table of Additional Quantities	440.6 490.7	- -
Section 9 Totals =	931.3	-
Section 10 24' Finished Roadway Width 5' Shoulders w/2' Bevel Table of Additional Quantities	627.8 182.0	- 316.4
Section 10 Totals =	809.8	316.4
Section 14 65' Finished Roadway Width within Miller City Limits (Curb & Gutter Section)	1,631.0	-
Section 14 Totals =	1,631.0	-
Section 15 49' Finished Roadway Width within Miller City Limits (Curb & Gutter Section) Table of Additional Quantities	1,626.5 279.7	- -
Section 15 Totals =	1,906.2	-
Subtotals =	58,591.4	25,098.4
Table of Additional Quantities Totals =	1,928.0	6,378.5
TOTALS =	60,519.4	31,476.9

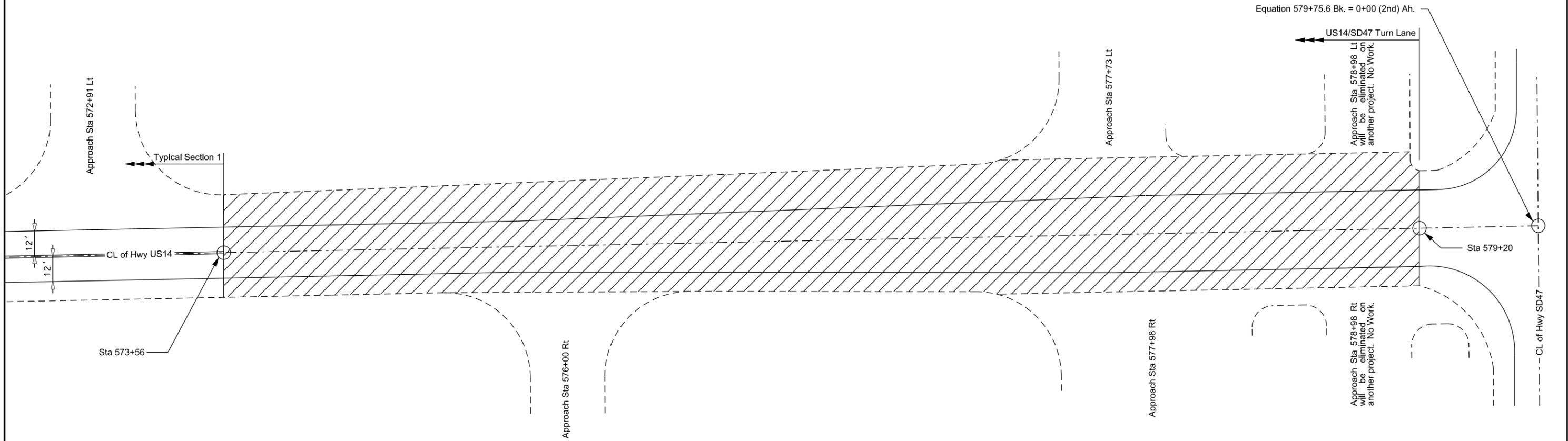
SUMMARY OF ASPHALT CONCRETE

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH 0014(197)267 & P 0045(53)111	F44	F55

P 0045(53)111 ~ PCN 04WJ ~ SD HWY 45	Class Q3R Hot Mixed Asphalt Concrete With Specified Density Compaction (Ton)	Class Q3R Hot Mixed Asphalt Concrete Without Specified Density Compaction (Ton)
Section 1		
40' Finished Roadway Width within the south Miller City Limits (Curb & Gutter Section)	724.5	-
Section 1 Totals =	724.5	-
Section 2		
68' Finished Roadway Width within Miller City Limits north of RR (Curb & Gutter Section)	852.5	-
Section 2 Totals =	852.5	-
Subtotals =	1,577.0	-
Table of Additional Quantities Totals =	382.2	302.4
TOTALS =	1,959.2	302.4

US14/SD47 HIGHMORE TURN LANE LAYOUT

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0014(197)267 P 0045(53)1111	F45	F55
Plotting Date: 01/21/2015			



Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities".

US14/SD47 HIGHMORE INTERSECTION LAYOUT

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0014(197)267 P 0045(53)111	F46	F55
Plotting Date: 01/21/2015			



Equation 579+75.6 Bk. = 0+00 (2nd) Ah.

End Work
Sta. 559+59.4 on P 0047(101)137

US14/SD47 Turn Lane

Typical Section 2

CL of Hwy US14

CL of Hwy SD47

Sta 579+20

Sta 0+80

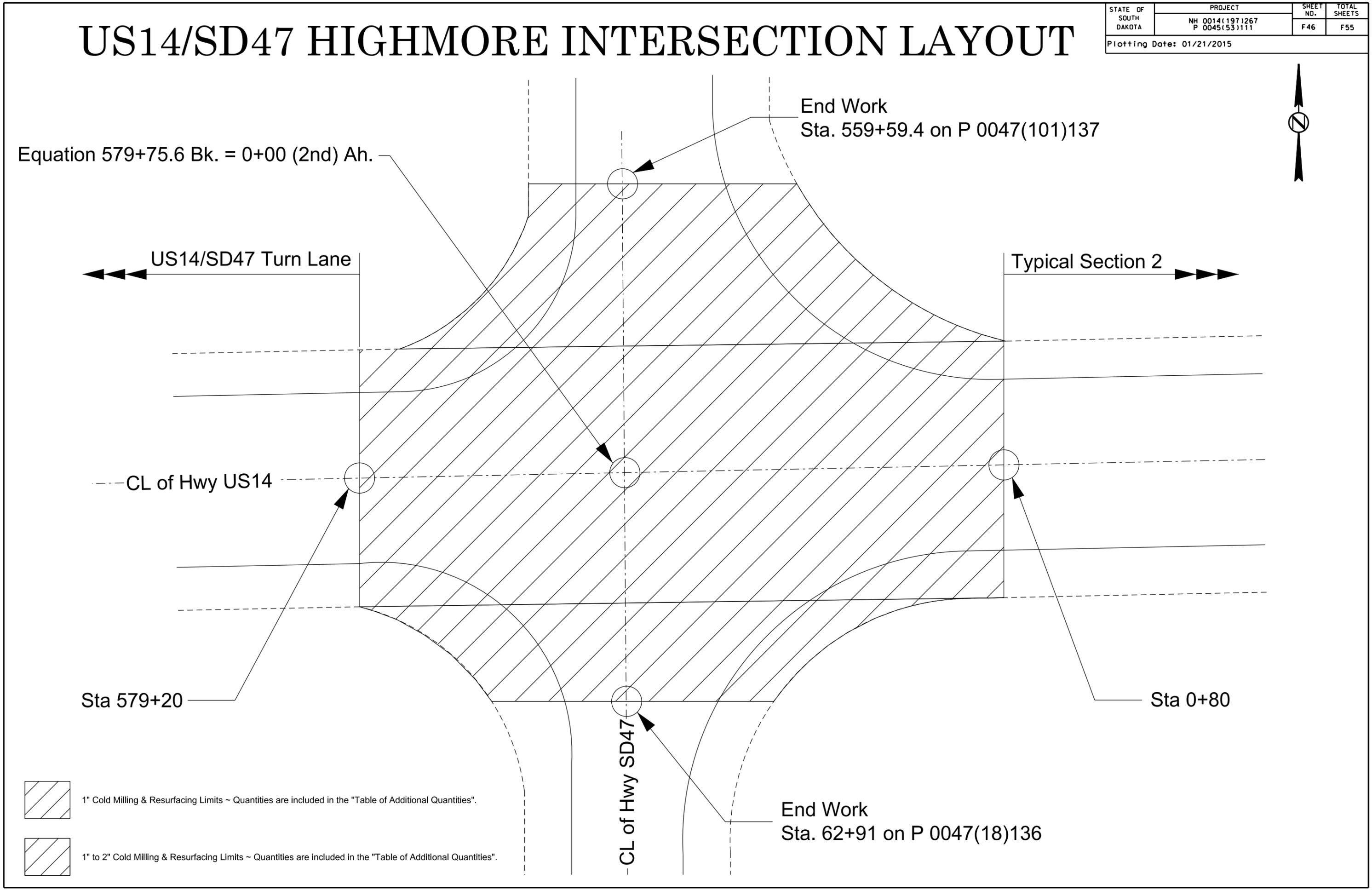


1" Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities".



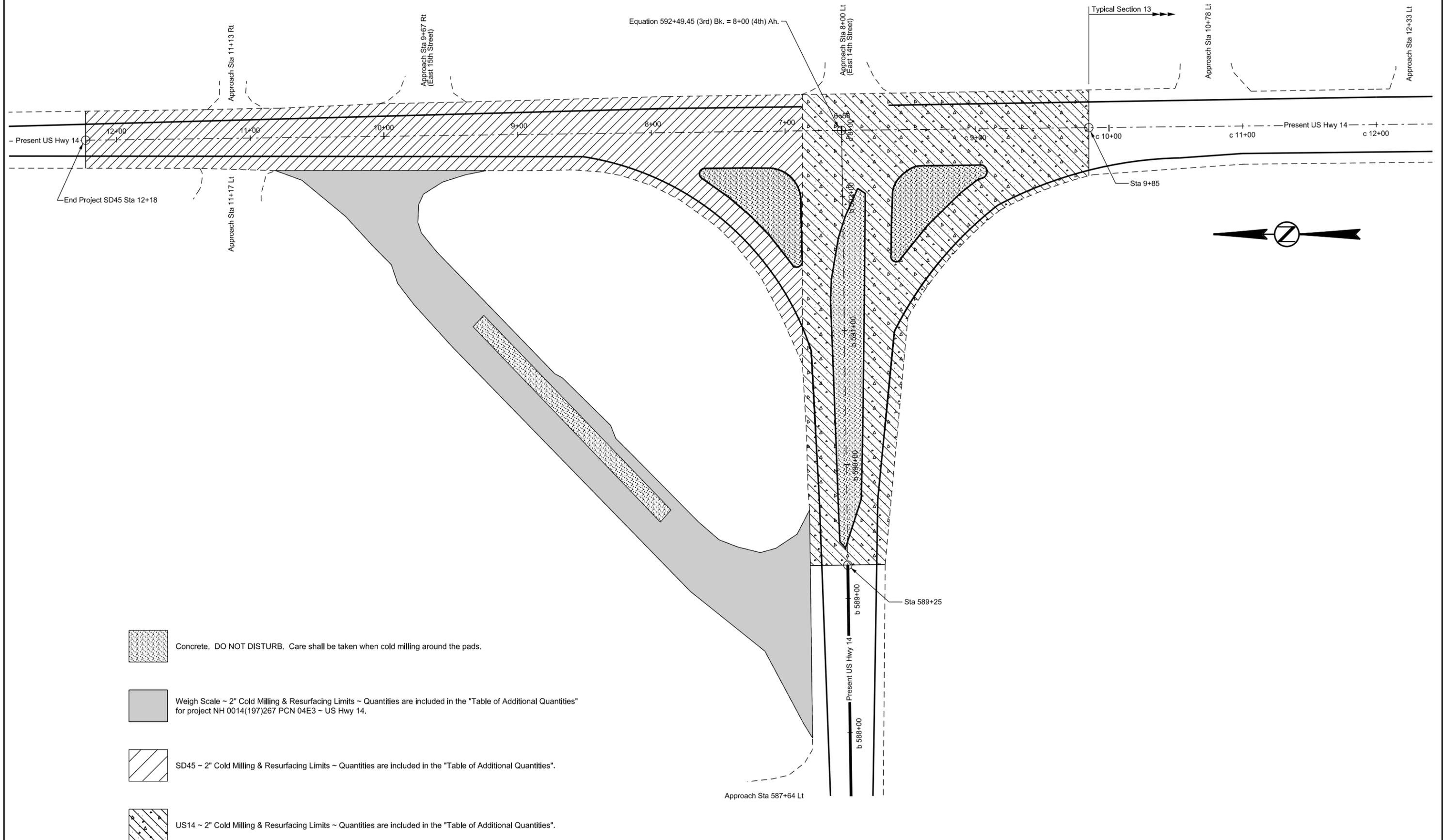
1" to 2" Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities".

End Work
Sta. 62+91 on P 0047(18)136



US14/SD45 MILLER INTERSECTION LAYOUT

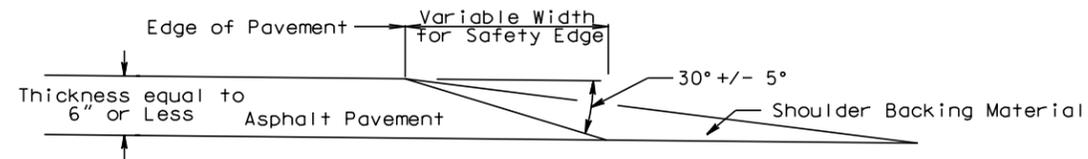
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0014(197)267 P 0045(53)111	F47	F55
Plotting Date: 01/21/2015			



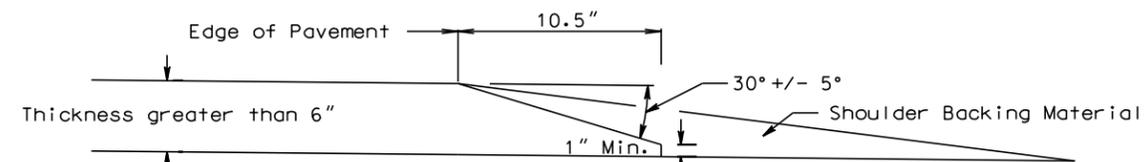
-  Concrete. DO NOT DISTURB. Care shall be taken when cold milling around the pads.
-  Weigh Scale ~ 2" Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities" for project NH 0014(197)267 PCN 04E3 ~ US Hwy 14.
-  SD45 ~ 2" Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities".
-  US14 ~ 2" Cold Milling & Resurfacing Limits ~ Quantities are included in the "Table of Additional Quantities".

SAFETY EDGE DETAIL

SAFETY EDGE CONFIGURATION FOR ASPHALT PAVEMENTS



Detail 1: Safety Edge Dimension For HMA Pavements (Thickness 6" or Less)



Detail 2: Safety Edge Dimension For HMA Pavements (Thickness greater than 6")

GUIDE SPECIFICATION FOR SAFETY EDGE CONSTRUCTION WITH HOT MIX ASPHALT PAVEMENTS

When specified in the plans an approved longitudinal paver wedge system shall be included to create a sloped safety edge along the outside edge of the asphalt concrete pavement. The wedge system shall be attached to the paver screed and shall compact the hot mixed asphalt pavement (HMA) to a density at least as dense as the compaction imparted to the rest of the HMA by the paving screed.

The system shall provide a sloped Safety Edge equal to 30° plus or minus 5° measured from the extended pavement surface cross slope. The safety edge must be constructed as an integral operation in the paving process and in accordance with the attached Detail.

The use of a single plate strike-off method to construct the safety edge will not be allowed.

The Engineer may allow the Contractor to use handwork for short sections or to saw cut the sloped safety edge after paving operations are complete in areas such as driveways, intersections, and interchanges.

The Contractor shall submit the proposed system for approval by the Engineer at the Preconstruction Meeting. The Engineer may require proof that the system has been used on previous projects with acceptable results or may require a test section to be constructed prior to the beginning of work to demonstrate that it can create an acceptable safety wedge and compaction. Paving shall not begin until the system is approved in writing by the Engineer. The safety edge shall be constructed on each lift of HMA specified in the plans.

The safety edge device shall be attached to the paving machine as recommended by the supplier. The device shall use a spring loaded shoe that constrains the asphalt head, thus increasing the density of the extruded profile. The shoe shall be capable of applying variable pressure to ensure some compaction of the edge during the paving operation. Currently there is a least four manufactures producing equipment that can create a Safety Edge (see list below). The Engineer may permit an approved equal.

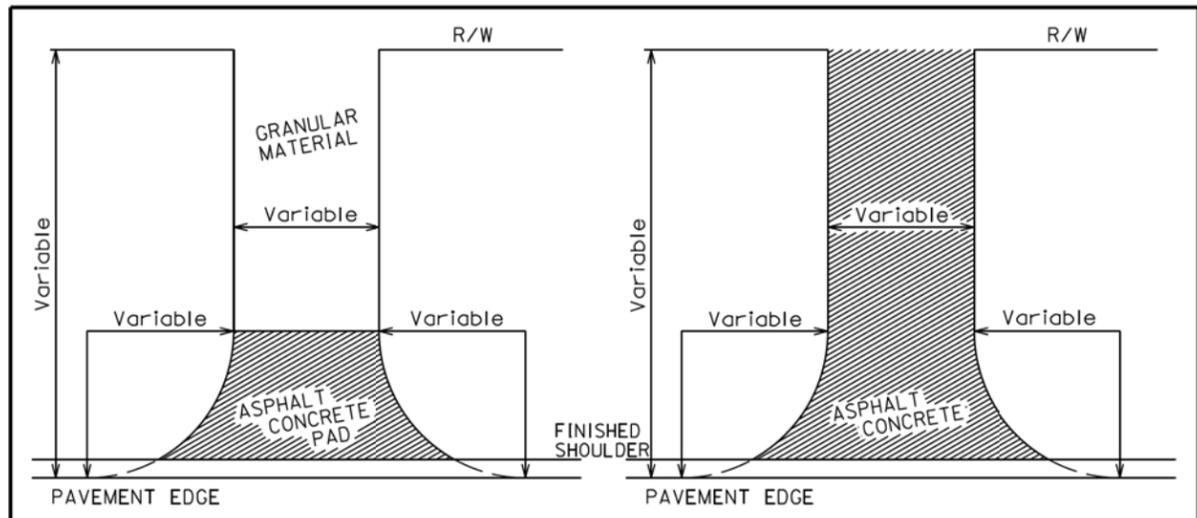
Transtech Systems, Inc.
1594 State Street
Schenectady, NY 12304
Phone: 1-800-724-6306 or 1-518-370-5558
www.transtechsys.com

Carlson Paving Products
18425 50th Ave. E
Tacoma WA 98446
Phone: 1-253-278-9426
<http://www.carlsonpavingproducts.com>

Advant-Edge Paving Equipment LLC
1197 Hillside Avenue, Suite B47
Niskayuria, NY 12309
Phone: 1-518-280-6090
www.advantagepaving.com

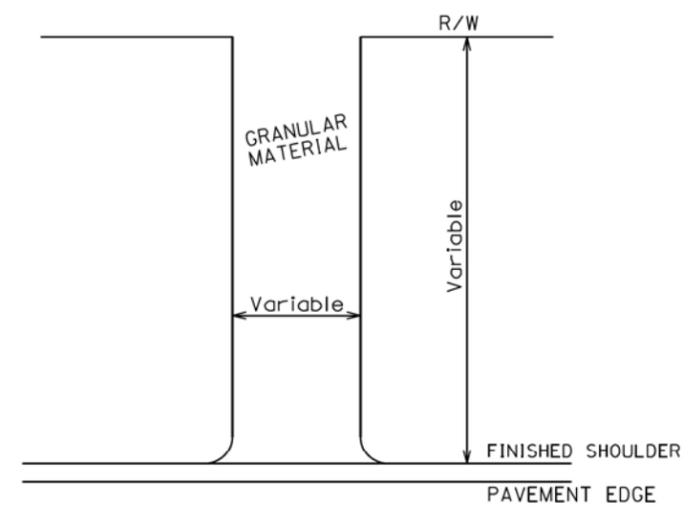
Troxler Electronic Laboratories, Inc.
3008 E. Cornwallis Rd. • PO Box 12057
Research Triangle Park, NC 27709
Phone: 1-877-876-9537
<http://www.troxlerlabs.com/products/paving.php>

Separate measurement and payment will not be made; all work associated with furnishing and constructing the safety edge shall be incidental to the Asphalt Concrete Placement Bid Item.



INTERSECTING ROAD
NO ASPHALT CONCRETE SURFACING
BEYOND R/W

INTERSECTING ROAD
ASPHALT CONCRETE SURFACING
BEYOND R/W



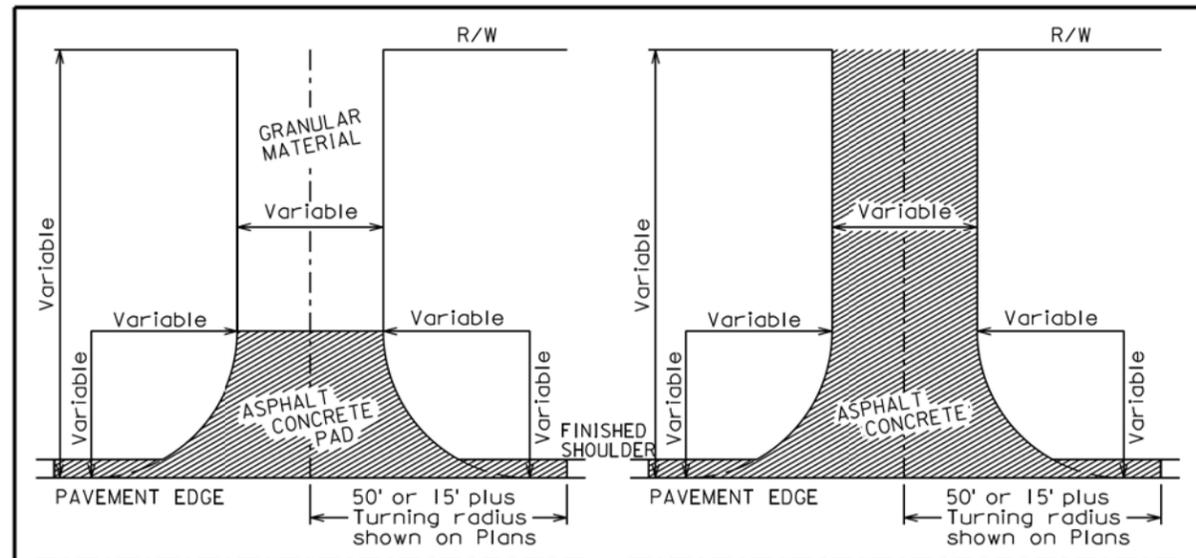
ENTRANCE

The surfacing details shown on this sheet are provided as a guide for surfacing these facilities. The precise construction limits for situations other than the standards shown will be determined by the Engineer, at the time of construction.

ROADWAY WITH SHOULDER

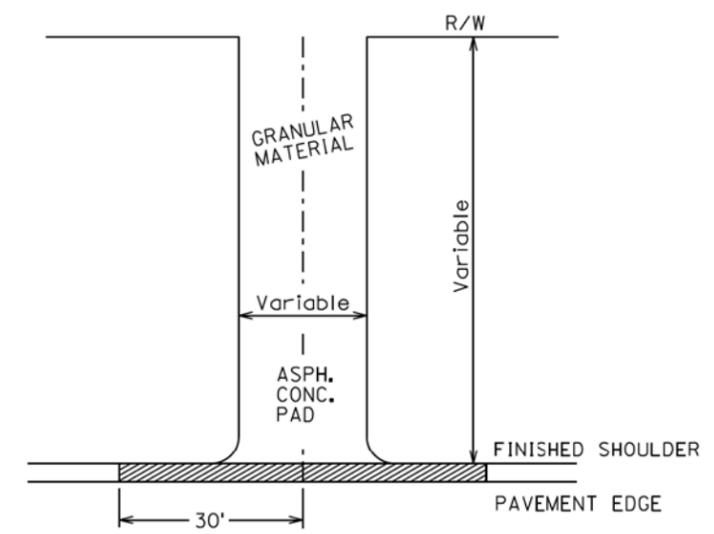
March 31, 2000

S D D O T	RESURFACING OF INTERSECTING ROADS AND ENTRANCES	PLATE NUMBER 320.11
		Sheet 1 of 1
		Published Date: 4th Qtr. 2014



INTERSECTING ROAD
NO ASPHALT CONCRETE SURFACING
BEYOND R/W

INTERSECTING ROAD
ASPHALT CONCRETE SURFACING
BEYOND R/W



ENTRANCE

The surfacing details shown on this sheet are provided as a guide for surfacing these facilities. The precise construction limits for situations other than the standards shown will be determined by the Engineer, at the time of construction.

ROADWAY WITH SHOULDER

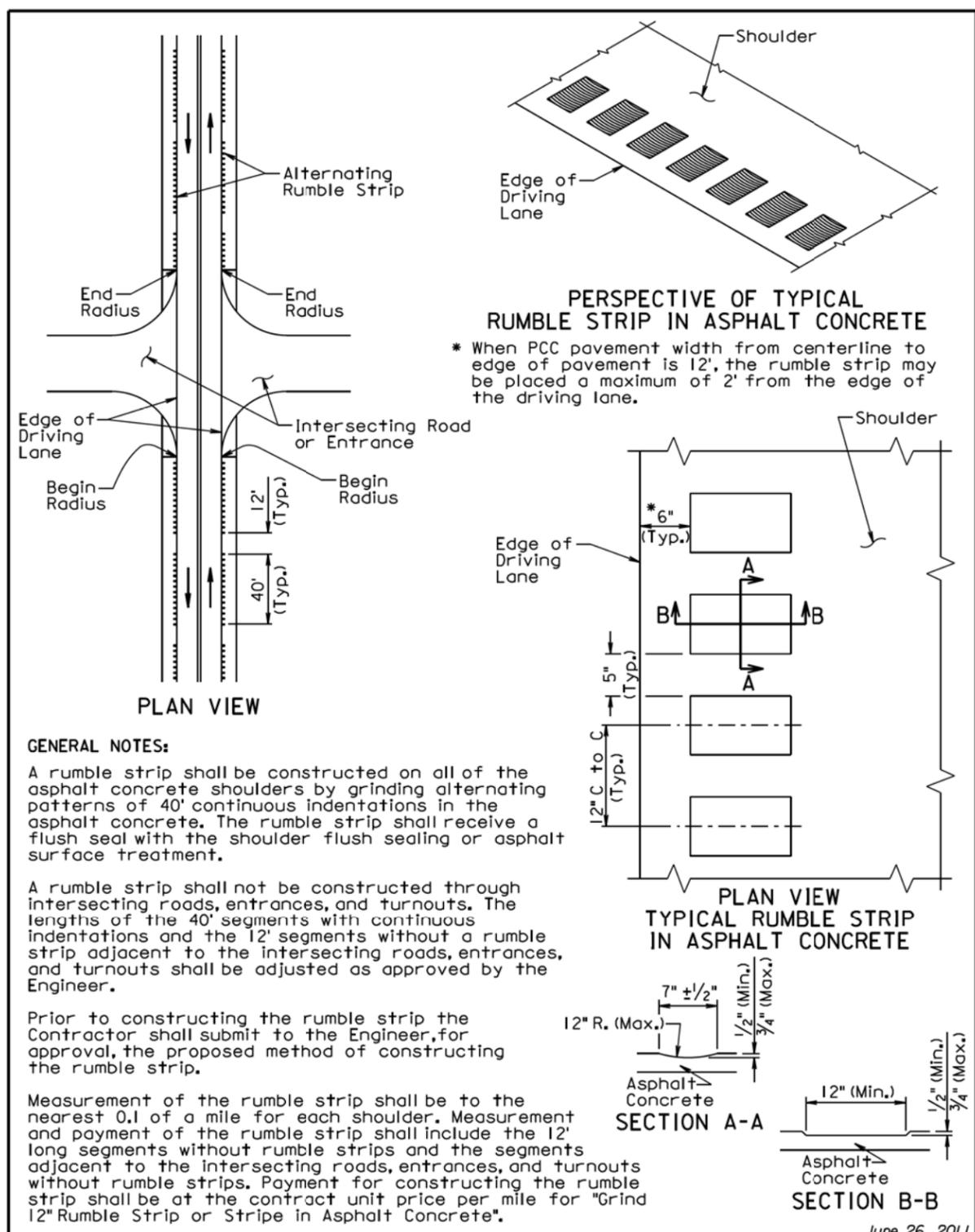
March 31, 2000

S D D O T	RESURFACING OF INTERSECTING ROADS AND ENTRANCES	PLATE NUMBER 320.12
		Sheet 1 of 1
		Published Date: 4th Qtr. 2014

Plot Scale - 1:200

Plotted From - tpr25299

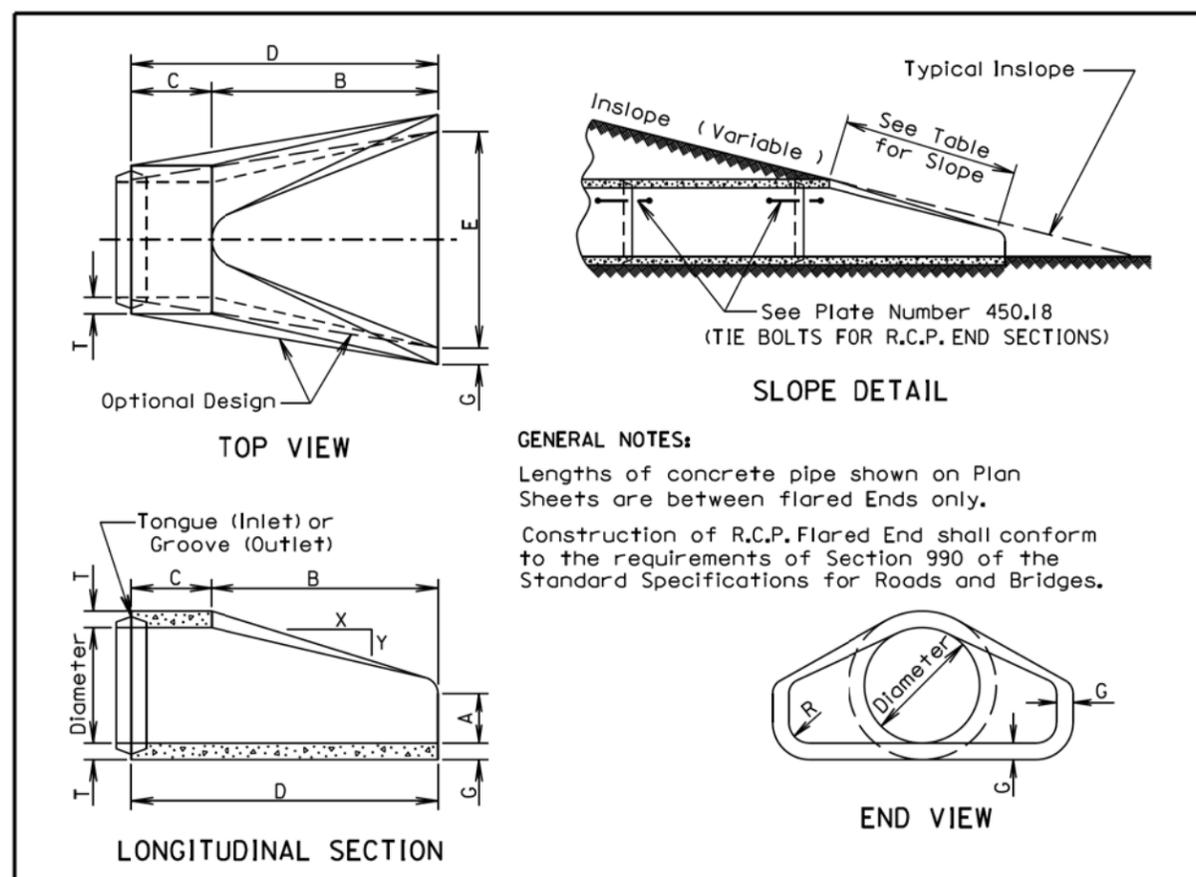
File - ...Section F:\Std\PlatePages.dgn

1:200
 Plotted From: trp25289


June 26, 2011

S D D O T	12" RUMBLE STRIP IN ASPHALT CONCRETE ON NONDIVIDED HIGHWAY SHOULDERS	PLATE NUMBER 320.24
		Sheet 1 of 1

Published Date: 4th Qtr. 2014



Dia. (in.)	Approx. Wt. of Section (lbs.)	Approx. Slope (X to Y)	T (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	G (in.)	R (in.)
12	530	2.4:1	2	4	24	48 1/8	72 7/8	24	2	1 1/2
15	740	2.4:1	2 1/4	6	27	46	73	30	2 1/4	1 1/2
18	990	2.3:1	2 1/2	9	27	46	73	36	2 1/2	1 1/2
21	1280	2.4:1	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	1 1/2
24	1520	2.5:1	3	9 1/2	43 1/2	30	73 1/2	48	3	1 1/2
27	1930	2.5:1	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	1 1/2
30	2190	2.5:1	3 1/2	12	54	19 3/4	73 3/4	60	3 1/2	1 1/2
36	4100	2.5:1	4	15	63	34 3/4	97 3/4	72	4	1 1/2
42	5380	2.5:1	4 1/2	21	63	35	98	78	4 1/2	1 1/2
48	6550	2.5:1	5	24	72	26	98	84	5	1 1/2
54	8240	2:1	5 1/2	27	65	33 1/4	98 1/4	90	5 1/2	1 1/2
60	8730	1.9:1	6	35	60	39	99	96	5	1 1/2
66	10710	1.7:1	6 1/2	30	72	27	99	102	5 1/2	1 1/2
72	12520	1.8:1	7	36	78	21	99	108	6	1 1/2
78	14770	1.8:1	7 1/2	36	90	21	111	114	6 1/2	1 1/2
84	18160	1.6:1	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2
90	20900	1.5:1	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	6

March 31, 2000

S D D O T	R. C. P. FLARED ENDS	PLATE NUMBER 450.10
		Sheet 1 of 1

Published Date: 4th Qtr. 2014

File: ...Section F50dPlatePages.dgn

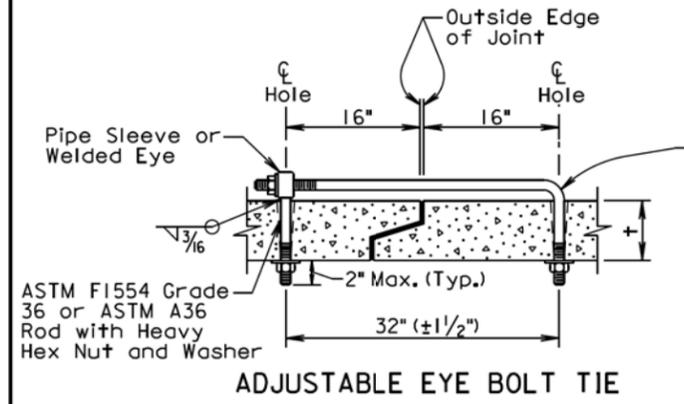
Wall "t" (in.)	Rod Dia. (in.)	Pipe Sleeve Dia. (nominal)
$\leq 3/4$	$5/8$	$3/4$
$3/2 - 6/2$	$3/4$	1
≥ 7	1	$1 1/4$

GENERAL NOTES:

Tie bolts shall conform to ASTM F1554 Grade 36 or ASTM A36. Nuts shall be heavy hex conforming to ASTM A563. Washers shall conform to ASTM F436.

Pipe Sleeve shall conform to ASTM A500 or A53, Grade B.

Galvanize adjustable eye bolt tie assembly in accordance with ASTM A153.



ADJUSTABLE EYE BOLT TIE

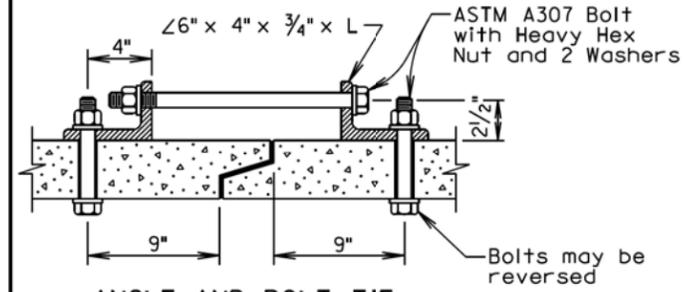
Pipe Dia. (in.)	"L" (in.)	Bolt Dia. (in.)
≤ 48	4	$3/4$
> 48	6	1

GENERAL NOTES:

Angles shall conform to ASTM A36.

Bolts shall conform to ASTM A307. Nuts shall be heavy hex conforming to ASTM A563. Washers shall conform to ASTM F436.

Galvanize angles, bolts, nuts, and washers in accordance with ASTM A153.



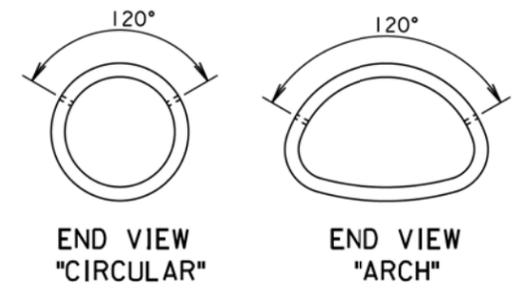
ANGLE AND BOLT TIE

GENERAL NOTES:

In lieu of the tie bolts detailed above other types of tie bolt connections may be installed as approved by the Office of Bridge Design.

All pipe sections of R.C.P. and R.C.P. Arch shall be tied with tie bolts except for pipe located between drop inlets, manholes, and junction boxes. All pipe sections of pipes that only enter or exit drop inlets, manhole, and junction boxes shall be tied with tie bolts.

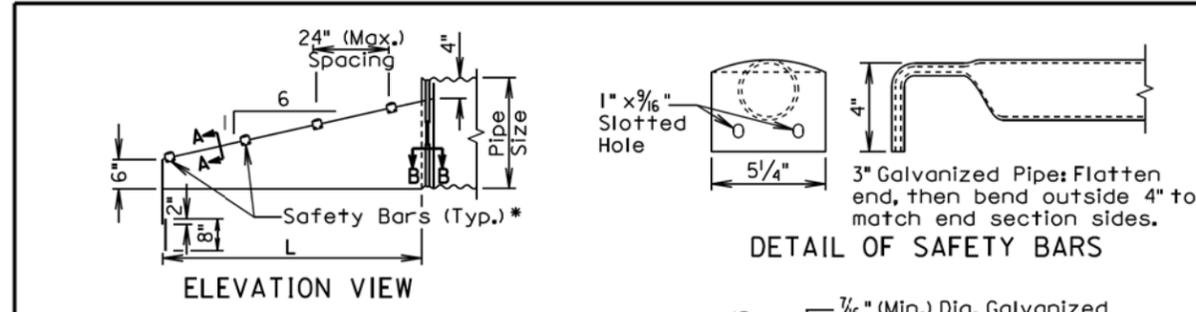
There will be no separate measurement or payment for the tie bolts. The cost for furnishing and installing the tie bolts shall be incidental to the contract unit price per foot for the corresponding bid item for R.C.P. or R.C.P. Arch.



END VIEW "CIRCULAR" END VIEW "ARCH"

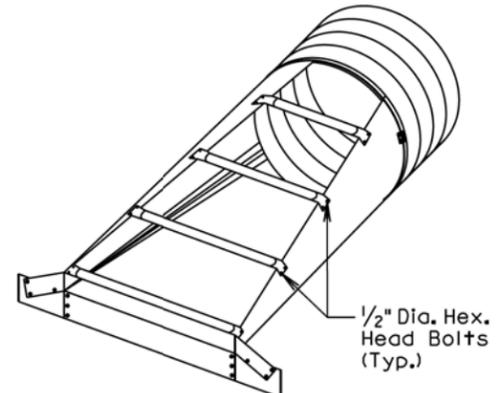
February 28, 2013

S D D O T	TIE BOLTS FOR R.C.P. AND R.C.P. ARCH	PLATE NUMBER 450.18
	Published Date: 4th Qtr. 2014	Sheet 1 of 1

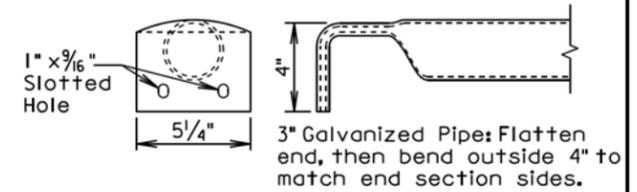


ELEVATION VIEW

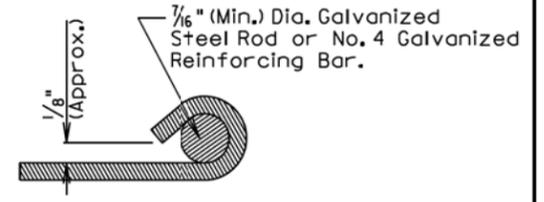
*Number of bars required will vary depending on the length of the end section.



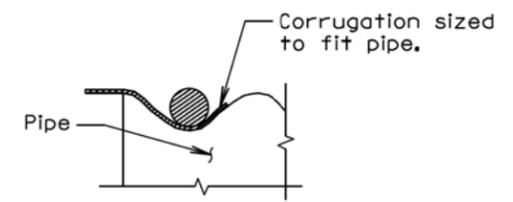
ISOMETRIC VIEW



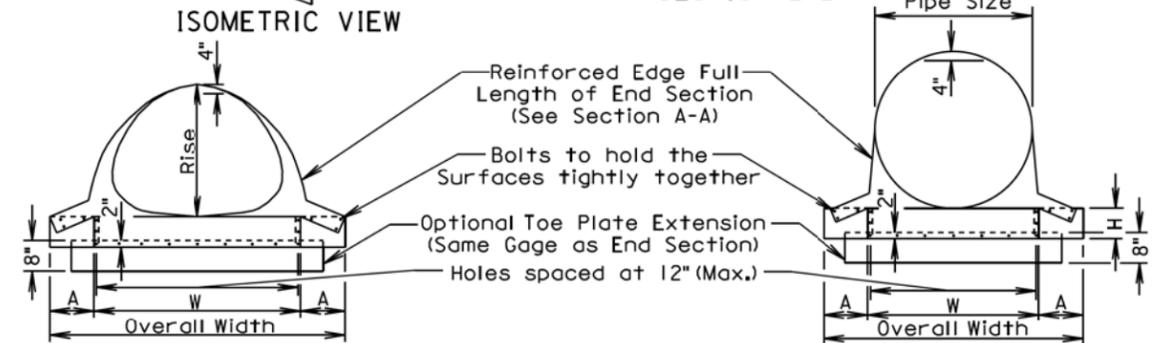
DETAIL OF SAFETY BARS



SECTION A-A



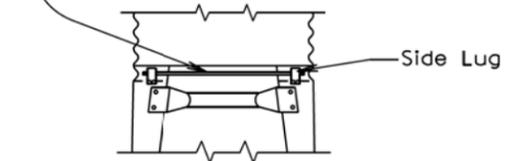
SECTION B-B



FRONT VIEW

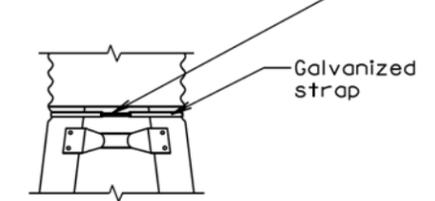
FRONT VIEW

1/2" Threaded rod with flanged nuts. Form over top of end section. Side lugs to be bolted to end section.



TYPE #2 CONNECTOR DETAIL
(For 30" and Larger)
(For 21" X 15" and Larger)

1/2" x 6" Culvert bolt with flanged nut.



TYPE #1 CONNECTOR DETAIL
(For 15" Through 24")

August 31, 2013

S D D O T	C. M. P. SAFETY ENDS	PLATE NUMBER 450.38
	Published Date: 4th Qtr. 2014	Sheet 1 of 2

ARCH C.M.P. SAFETY ENDS										
Equiv. Dia. (Inch)	(Inches)		Min. Thick. Inch	Dimensions (Inches)				L Dimensions		
	Span	Rise		A	H	W	Overall Width	Slope	Length (Inch)	
18	21	15	.064	16	8	6	27	43	6:1	30
21	24	18	.064	16	8	6	30	46	6:1	48
24	28	20	.064	16	8	6	34	50	6:1	60
30	35	24	.079	14	12	9	41	65	6:1	84
36	42	29	.109	12	12	9	48	72	6:1	114
42	49	33	.109	12	16	12	55	87	6:1	138
48	57	38	.109	12	16	12	63	95	6:1	168
54	64	43	.109	12	16	12	70	102	6:1	198
60	71	47	.109	12	16	12	77	109	6:1	222
72	83	57	.109	12	16	12	89	121	6:1	282

CIRCULAR C.M.P. SAFETY ENDS								
Pipe Dia. (Inch)	Min. Thick.		Dimensions (Inches)				L Dimensions	
	Inch	Gage	A	H	W	Overall Width	Slope	Length (Inch)
15	.064	16	8	6	21	37	6:1	30
18	.064	16	8	6	24	40	6:1	48
21	.064	16	8	6	27	43	6:1	66
24	.064	16	8	6	30	46	6:1	84
30	.109	12	12	9	36	60	6:1	120
36	.109	12	12	9	42	66	6:1	156
42	.109	12	16	12	48	80	6:1	192
48	.109	12	16	12	54	86	6:1	228
54	.109	12	16	12	60	92	6:1	264
60	.109	12	16	12	66	98	6:1	300

GENERAL NOTES:

Safety ends shall be fabricated from galvanized steel conforming to the requirements of the Standard Specifications.

Safety bars shall be fabricated from steel schedule 40 pipe in conformance with ASTM A53, grade B or HSS 3.5X.216 in conformance with ASTM A500, grade B.

Slotted holes for safety bar attachment shall be provided for all end sections.

Attachment to circular pipes 15" through 24" diameter shall be made with Type #1 straps. All other sizes shall be attached with Type #2 rods and lugs.

When stated in the plans, optional toe plate extension shall be punched and bolted to end section apron lip with 3/8" diameter galvanized bolts. Steel for toe plate extension shall be same gauge as end section. Dimensions shall be overall width less 6" by 8" high.

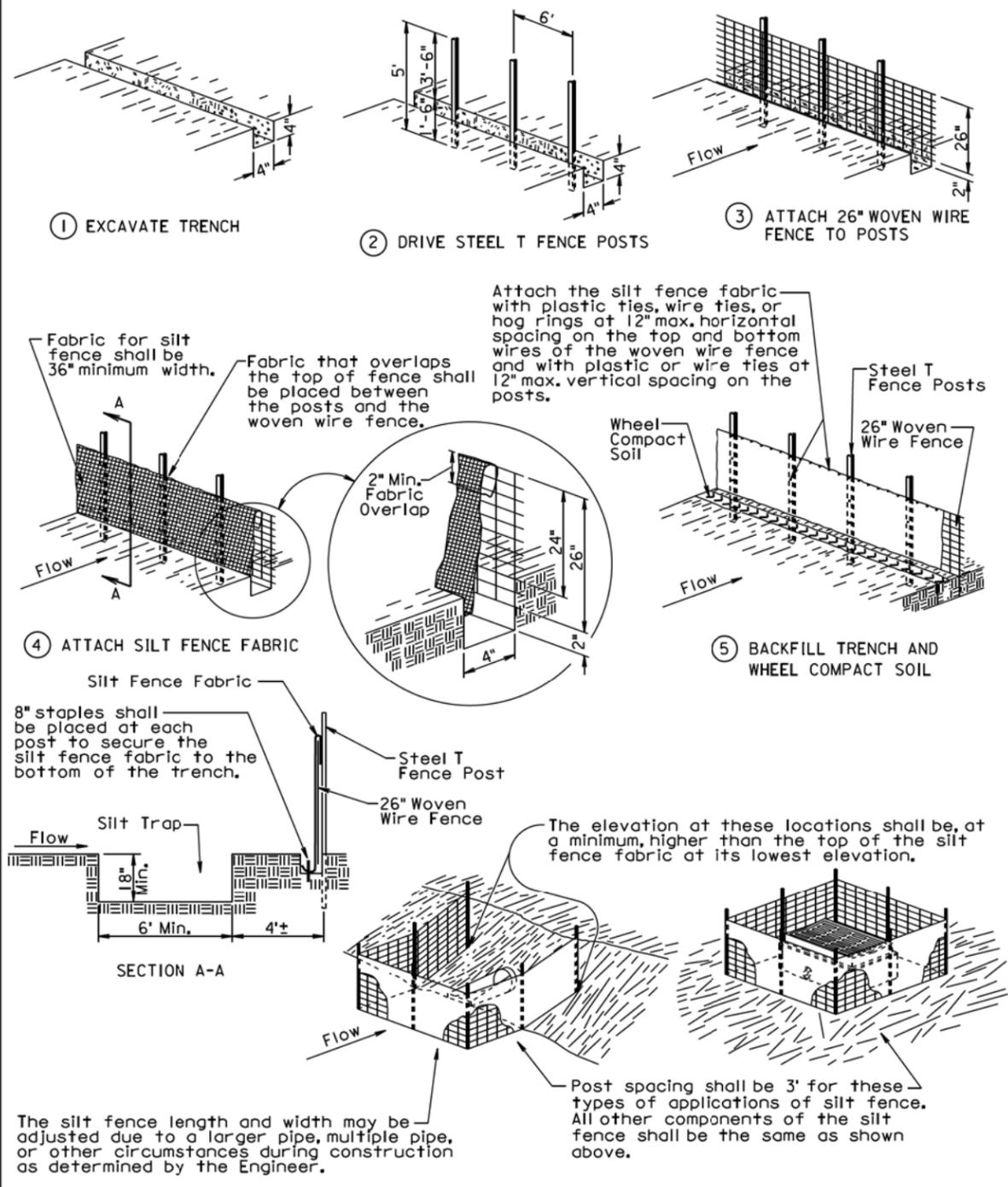
Installation shall be performed in accordance with the Standard Specifications.

Cost of all work and materials required for fabrication and installation of safety ends shall be incidental to the bid items for the various sizes of safety ends.

August 31, 2013

S D D O T	C. M. P. SAFETY ENDS	PLATE NUMBER 450.38
	Published Date: 4th Qtr. 2014	Sheet 2 of 2

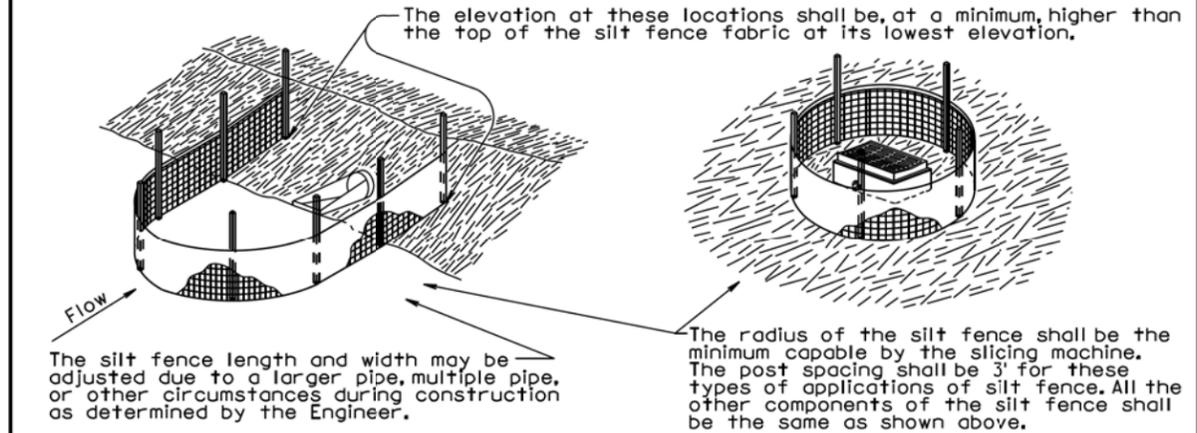
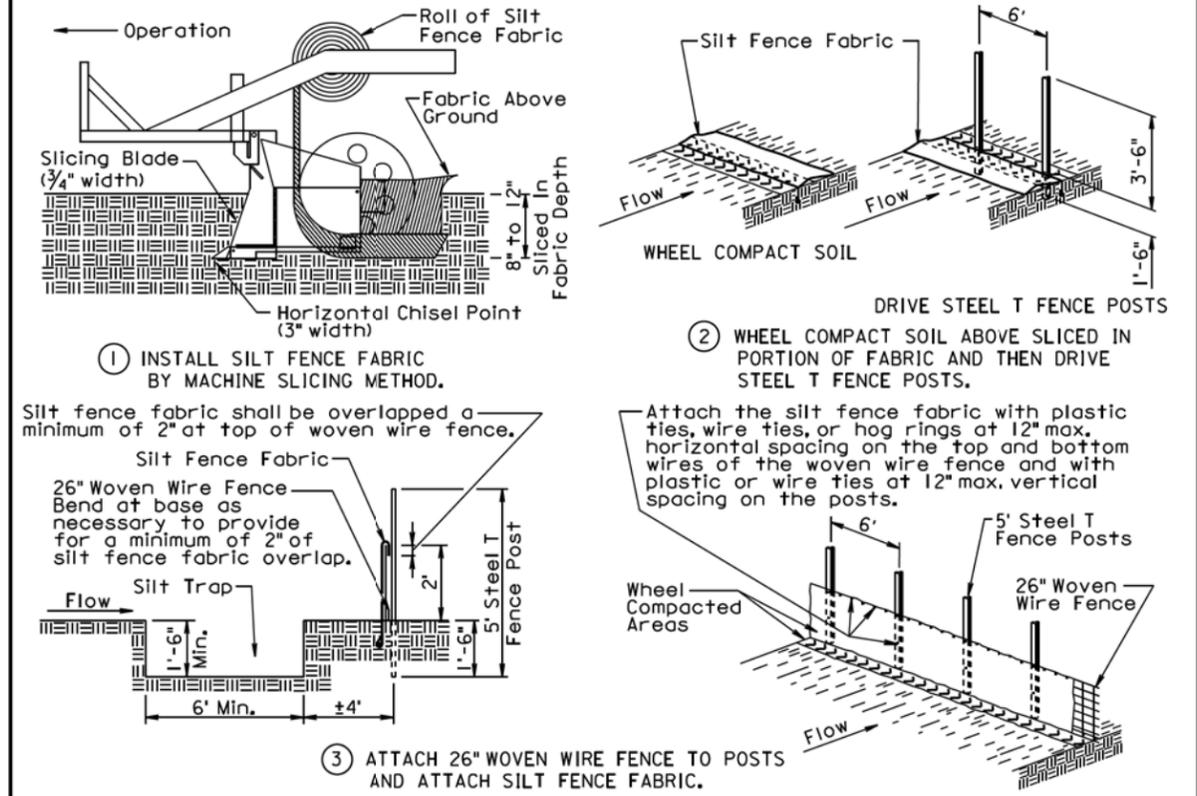
MANUAL LOW FLOW SILT FENCE INSTALLATION



December 23, 2003

S D D O T	LOW FLOW SILT FENCE AND SILT TRAP	PLATE NUMBER 734.04
	Published Date: 4th Qtr. 2014	Sheet 1 of 2

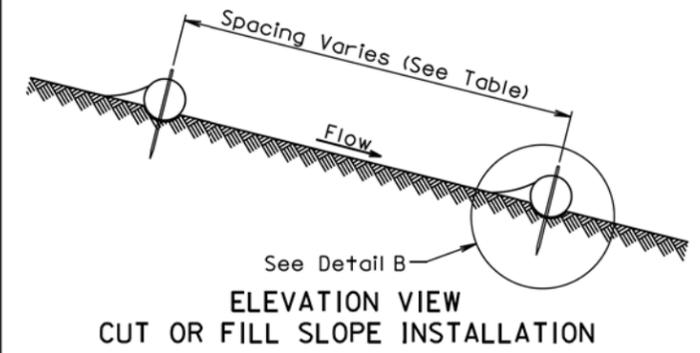
MACHINE SLICED LOW FLOW SILT FENCE INSTALLATION



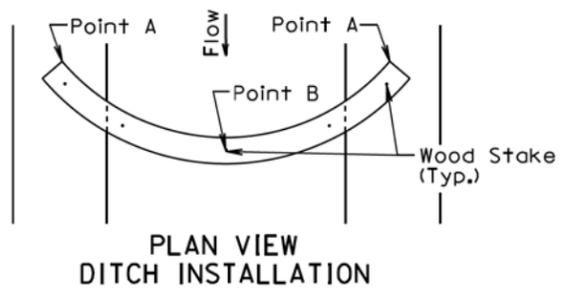
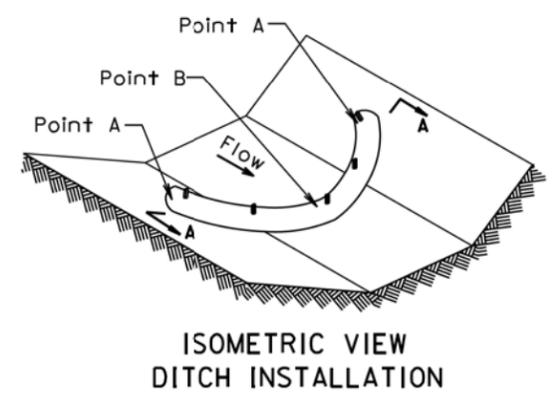
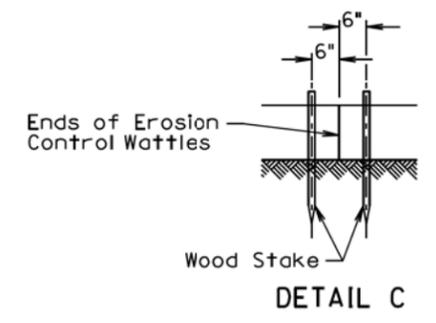
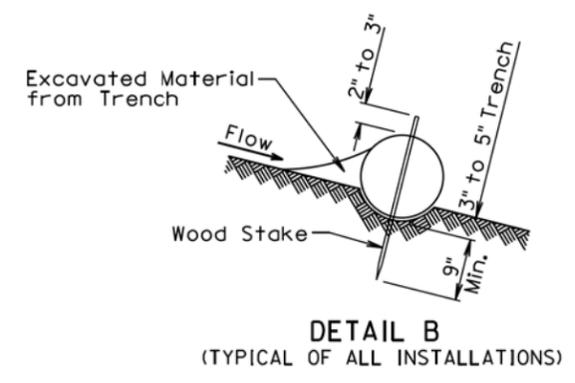
GENERAL NOTES:
A silt trap shall be provided when specified by a plan note. All costs for constructing the silt trap shall be incidental to the contract unit price per cubic yard for "Silt Trap".
If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end shall be provided on top of the extra length of silt fence fabric to prevent underflow.

December 23, 2003

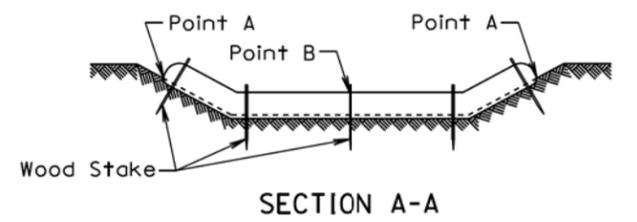
S D D O T	LOW FLOW SILT FENCE AND SILT TRAP	PLATE NUMBER 734.04
	Published Date: 4th Qtr. 2014	Sheet 2 of 2



CUT OR FILL SLOPE INSTALLATION	
Slope	Spacing (Ft)
1:1	10
2:1	20
3:1	30
4:1	40



DITCH INSTALLATION	
Grade	Spacing (Ft)
2%	150
3%	100
4%	75
5%	50



December 23, 2004

S D D O T	EROSION CONTROL WATTLE	PLATE NUMBER 734.06
	Published Date: 4th Qtr. 2014	Sheet 1 of 2

Plot Scale - 1:200

Plotted From - trp25299

File - ...Section F:\Std\PlatePages.dgn

GENERAL NOTES:

At cut or fill slope installations, wattles shall be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor shall dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes shall be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes shall be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles shall be 3' to 4'.

Where installing running lengths of wattles, the Contractor shall butt the second wattle tightly against the first and shall not overlap the ends. See Detail C.

The Contractor and Engineer shall inspect the erosion control wattles once every week and within 24 hours after every rainfall event greater than 1/2". The Contractor shall remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

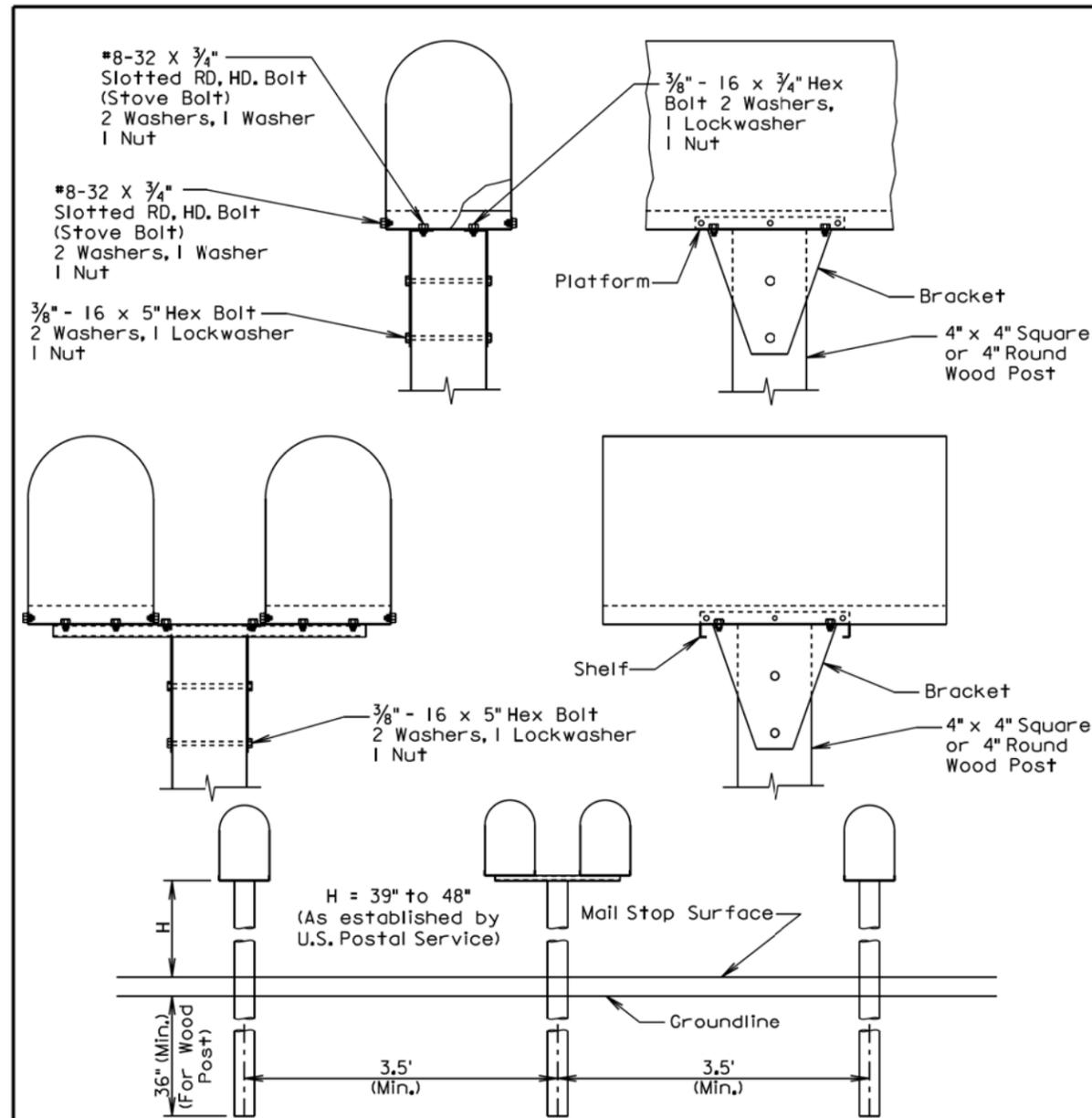
Sediment removal, disposal, or necessary shaping shall be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping shall be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials shall be incidental to the contract unit price per foot for the corresponding erosion control wattle bid item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials shall be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

December 23, 2004

S D D O T	EROSION CONTROL WATTLE	PLATE NUMBER 734.06
	Published Date: 4th Qtr. 2014	Sheet 2 of 2



GENERAL NOTES: SPACING FOR MULTIPLE POST INSTALLATION

The post support assemblies provided should be consistent throughout the project. Single and double mailboxes may be in any sequence.

Post support assemblies shall be one from the approved products list, a 4"x4" or 4" round wood post, or an alternate post support assembly that meets the test level 3 crash testing requirements of NCHRP 350 or MASH.

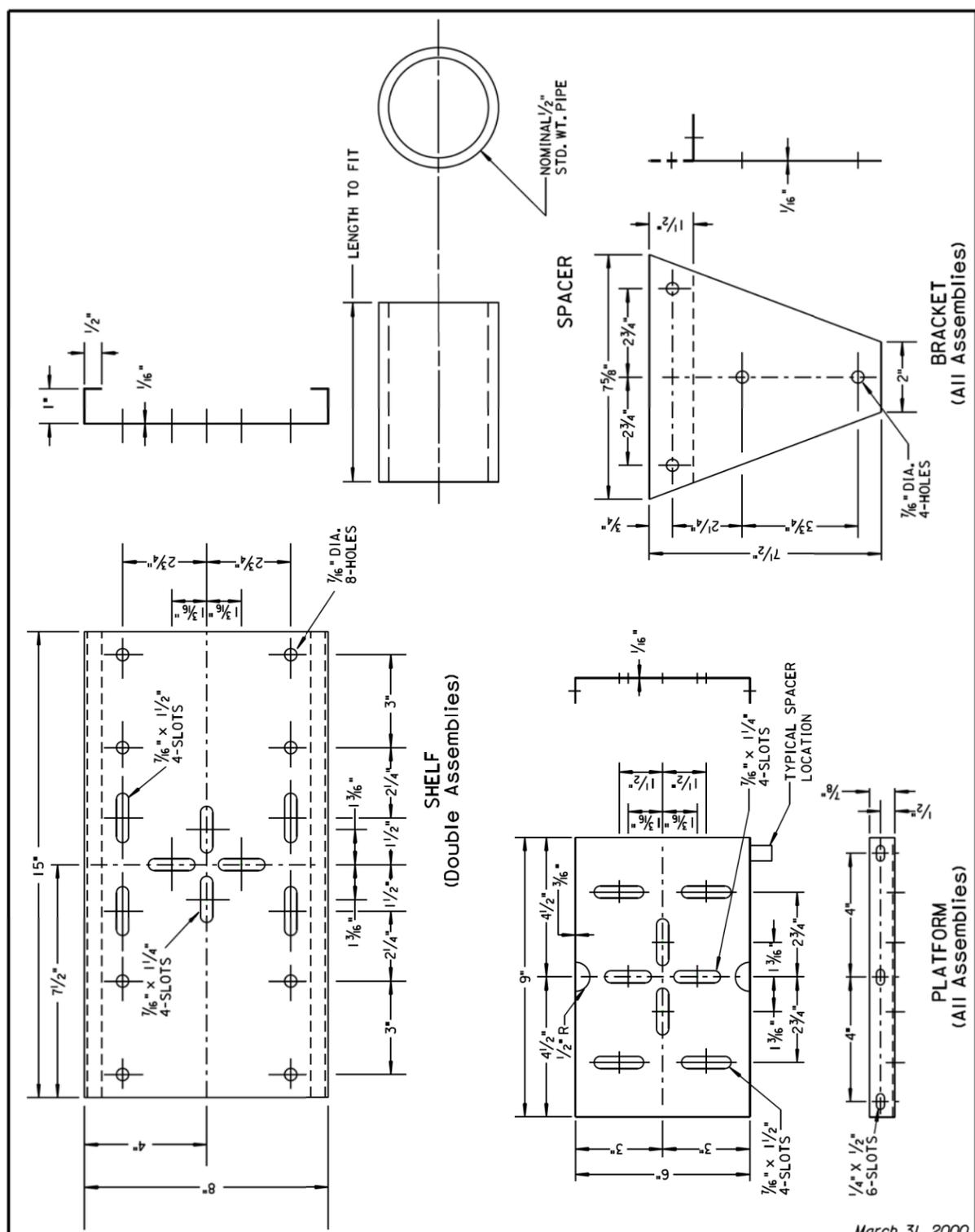
Alternate mailbox support assemblies shall be approved by the Engineer prior to installation. The Contractor shall provide the Engineer written certification that the mailbox support assembly has met the crash testing requirements and will be installed in accordance with the manufacturer's installation instructions.

September 6, 2013

S D D O T	SINGLE AND DOUBLE MAILBOX ASSEMBLIES	PLATE NUMBER 900.02
	Published Date: 4th Qtr. 2014	Sheet 1 of 1

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0014(197)267 & P 0045(53)111	F55	F55

Plotting Date: 01/21/2015



March 31, 2000

S D D O T Published Date: 4th Qtr. 2014	MAILBOX SUPPORT HARDWARE	PLATE NUMBER 900.03
		Sheet 1 of 1