ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. M003340, Dooly County
CSNHS-M003-00(340)
I-75 Interstate Pavement Replacement

OFFICE Preconstruction

DATE August 25, 2008

FROM Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Brent Story
Paul Liles
Thomas Howell
David Millen
BOARD MEMBER

RECEIVED
JUL 23 2008
PRECONSTRUCTION

RECEIVED
JUL 8 2008
PRECONSTRUCTION

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE CSNHS-M003-00(340) Dooly County
I-75 Interstate Pavement Replacement
P.I.# M003340

OFFICE Road Design

DATE July 1, 2008

FROM Brent A. Story, P.E., State Road & Airport Design Engineer

TO Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT Revised Project Concept Report

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

A revised concept was approved on July 27, 2007 to remove the concrete median barrier and paved median. The proposed project will replace the center and outside lanes. The inside shoulder is to remain 10 feet wide. The outside shoulder is to be widened to 12 feet. Both shoulders are proposed to be full depth asphalt. The proposed full depth paved median and permanent concrete barrier is to be replaced with a depressed median. The revised concept report herein will change the typical section pavement type from CRCP to JDCP on the mainline and HMA/RCC alternates on the outside shoulder.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 7/22/08

State Transportation Planning Administrator

Distribution:

Brian Summers, Project Review Engineer
Glenn S. Bowman, State Environment/Location Engineer
Keith Golden, State Traffic Safety and Design Engineer
Angela Alexander, State Transportation Planning Administrator
Jamie Simpson, State Transportation Financial Management Administrator
Thomas Howell, District Engineer

RECEIVED

RECEIVED
JUL 10 2008
OFFICE OF PLANNING

REVISED PROJECT CONCEPT REPORT

Need and Purpose:

The proposed Project, CSNHS-M003-00(340), in Dooly and Houston Counties, would provide for concrete lane replacement on Interstate 75 (I-75) from C.R.323/Pinehurst-Hawkinsville Road to State Route 26 (S.R.26) for a distance of approximately 9.66 miles. The existing inside travel lanes in both directions were constructed in 1992 when Interstate 75 was widened, while the existing center and outside lanes were constructed in late 1961 along this section of I-75. Today, the center and outside lanes in both directions are deteriorating and require frequent maintenance. According to the Federal Highway Administration (FHWA), concrete pavements tend to deteriorate slowly in the first few years after construction, then at ever-increasing rates as they age. The FHWA has estimated that concrete pavements of the type found on the project corridor generally have an approximate 20 to 30-year life cycle, which has now passed. The current condition of the pavement suggests that I-75 will shortly require maintenance and repairs too frequently for cost effectiveness, maintenance of traffic flow, and safety. The Average Daily Traffic (ADT) along this section of the roadway for 2009, the projected year when the project will open to traffic, is 55,000 vehicles per day (VPD), and traffic levels are predicted to be at 81,800 VPD by 2029.

Further, the deteriorating pavement no longer meets current design standards for concrete roadways. The original concrete pavement is now 44 years old, and was constructed with a 10-inch surface layer of plain Portland cement concrete including an eight-inch granular sub-base and 12-inch Class IA or IB material base. Current pavement conditions preclude preservation or repair of the existing pavement, and reconstruction of the two lanes would correct several deficiencies currently found along the project corridor including:

1. Deteriorating pavement conditions that are unable to handle existing vehicular and truck traffic volumes;
2. Pavement that does not meet current design standards for the type and volume of traffic traveling the roadway;
3. Pavement that has passed its life-cycle; and increased wear-and-tear on vehicles, the comfort of travelers, and fuel consumption

Project location:

The project begins at C.R. 323/Pinehurst-Hawkinsville Road in Dooly County and ends at S.R. 26 in Houston County, for a total length of 9.66 miles.

Description of the approved concept:

PDP Classification: Major _____ Minor X

Federal Oversight: Full Oversight (X), Exempt ( ), State Funded ( ), or Other ( )

Functional Classification: Rural Interstate Principal Arterial

US Route Number(s): N/A **State Route Number(s):** 401

Traffic (AADT):

Current Year: (2009) 55,000 Design Year: (2029) 81,800

Proposed features to be revised:

The pavement type in the previous concept was CRCP on the mainline and shoulders. The length of the project in the previous concept was 10.3 miles. This is an incorrect length.

Describe the revised feature(s) to be approved:

The revised project will consist of JDCP on the mainline and HMA/RCC alternates on the outside shoulder. See typical section for structure details. The revised project length should be 9.66 miles.

Updated traffic data (AADT):

Current Year: (2009) 55,000 Design Year: (2029) 81,800

Programmed/Schedule:

P.E. ___ R/W: None Construction: ~~November 2008~~ January 2009

Revised cost estimates:

	HMA	RCC
1. Construction cost including ~~inflation and~~ E&C,	$70,327,000	$71,060,000
2. Right-of-Way, and	-0-	-0-
3. Utilities	-0-	-0-

Is the project located in a Non-attainment area?

No.

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

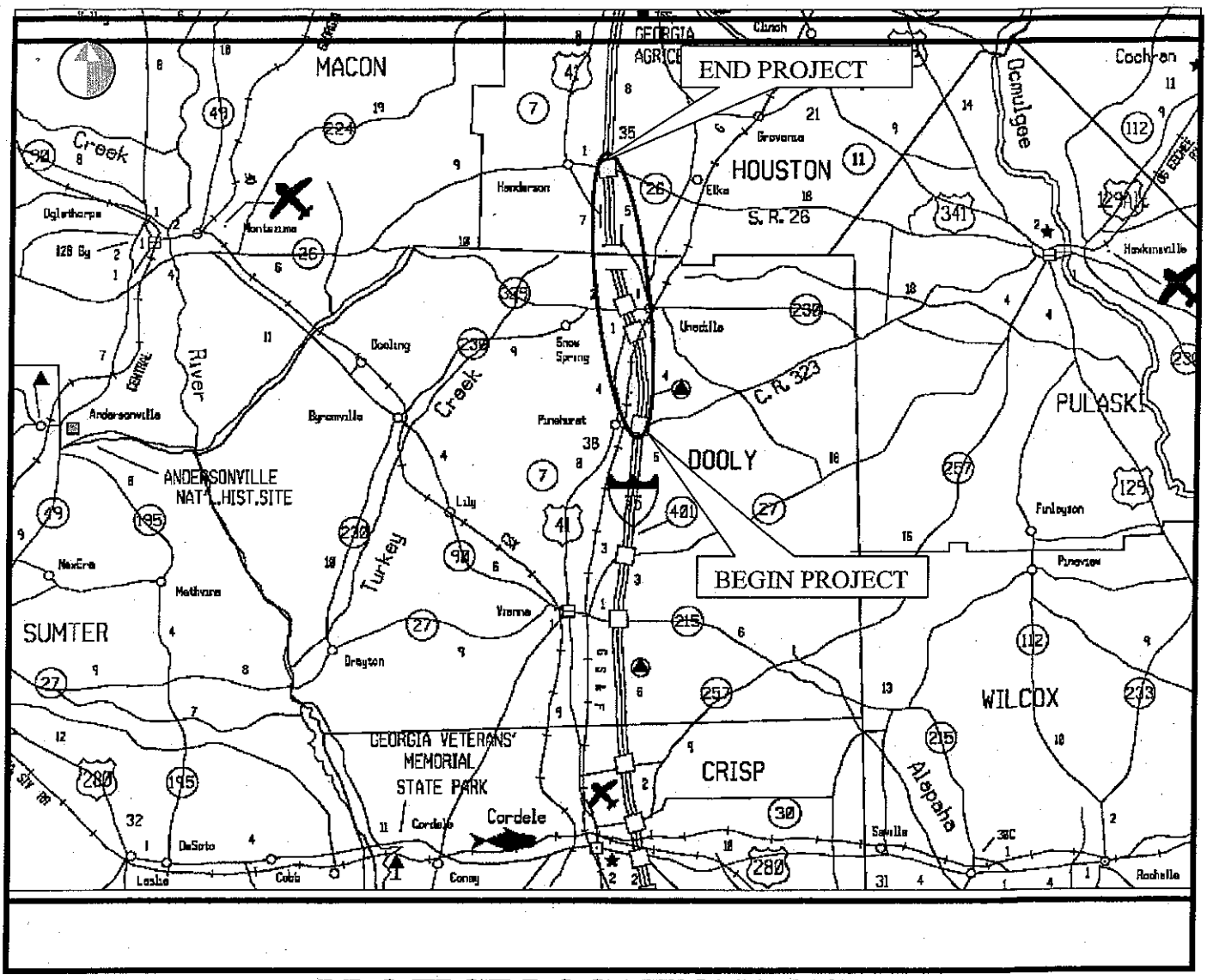
1. Sketch Map
2. Cost Estimate
3. Project Description
4. Typical Sections

Concur: Todd A. Long
Director of Preconstruction

* Approve: Richard Wayne Fedora
for Division Administrator, FHWA

Approve: Dale M. M
Chief Engineer

* During the design process, please evaluate using a 14-foot outside lane, striped at 12 feet, rather than the proposed 13-foot lane. The extra foot of width should distribute edge stresses better and result in improved service life of the pavement.
RWF



PROJECT LOCATION MAP

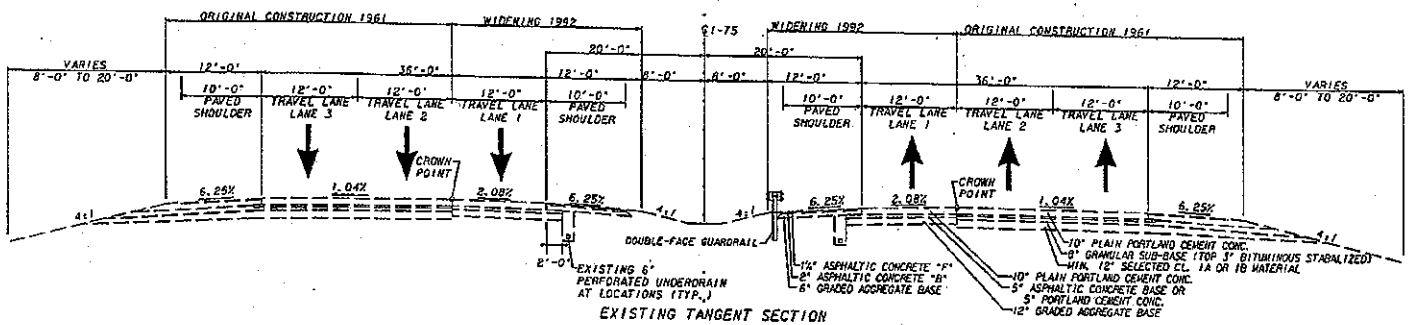
NOT TO SCALE

Project: CSNHS-M003-00(340), Dooly/Houston Counties **P.I. No.:** M003340
Description: I-75 Interstate Maintenance from C.R. 323/Pinehurst-Hawkinsville Road in Dooly County to S.R. 26 in Houston County

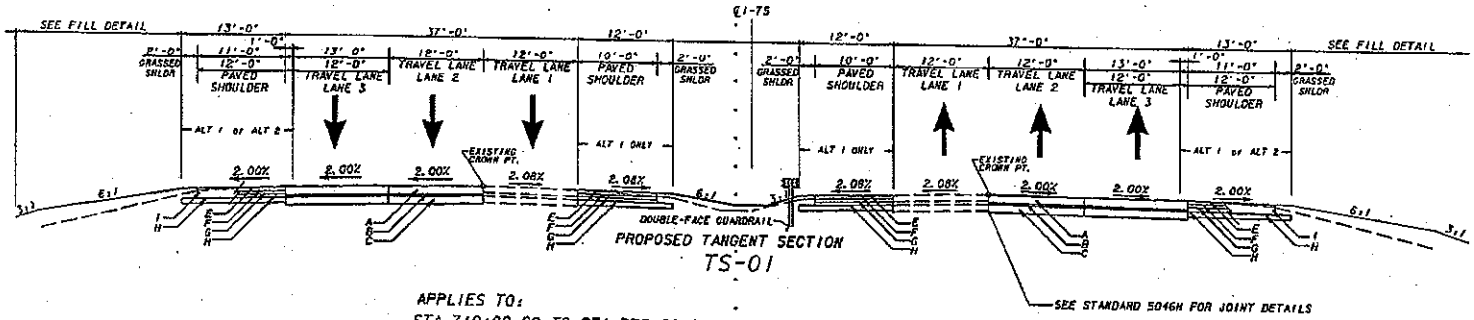
Project Description:

The proposed project involves the replacement of the existing concrete pavement along Interstate 75. The project begins at C.R. 323/Pinehurst-Hawkinsville Road in Dooly County and ends at S.R. 26 in Houston County, for a total length of 9.66 miles. Interstate 75 consists of 3 lanes in each direction throughout the project corridor. The existing inside lanes in both directions will remain, while the center lane and the outside lane in both directions will be replaced with JDCP concrete pavement. The existing 10 foot paved inside shoulder is to be replaced with HMA pavement. The outside shoulder will be replaced with HMA/RCC alternate pavement, as well as being widened from 10 feet to 12 feet. The existing median ditch will remain. Guardrails along the outside shoulders in the project corridor will be replaced. All work will be performed while maintaining minimum of 2 lanes of traffic in each direction at all times.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSNHS-M003-00(340)		



EXISTING TANGENT SECTION

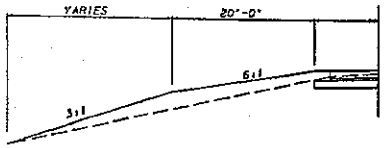


PROPOSED TANGENT SECTION

TS-01

APPLIES TO:

STA 710+00.00 TO STA 775+20.00
STA 888+66.00 TO STA 926+11.00
STA 939+93.00 TO STA 1077+19.00
STA 790+78.00 TO STA 860+98.00
STA 1092+57.00 TO STA 1219+18.48 (NB)
STA 1092+57.00 TO STA 1226+21.98 (SB)



FILL DETAIL

PROPOSED PAVEMENT MAINLINE
A. PLAIN PORTLAND CONCRETE PAVEMENT CLASS 1 CONC. -11"
B. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 330 LBS/SY
C. GRADED AGGREGATE BASE - 12"
D. NON WOVEN FILTER FABRIC

PROPOSED INSIDE SHOULDER PAVEMENT
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPHCONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"

PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 1
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"

PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 2
I. ROLLER COMPACTED CONCRETE (RCC) - 6"
H. GRADED AGGREGATE BASE, 8"

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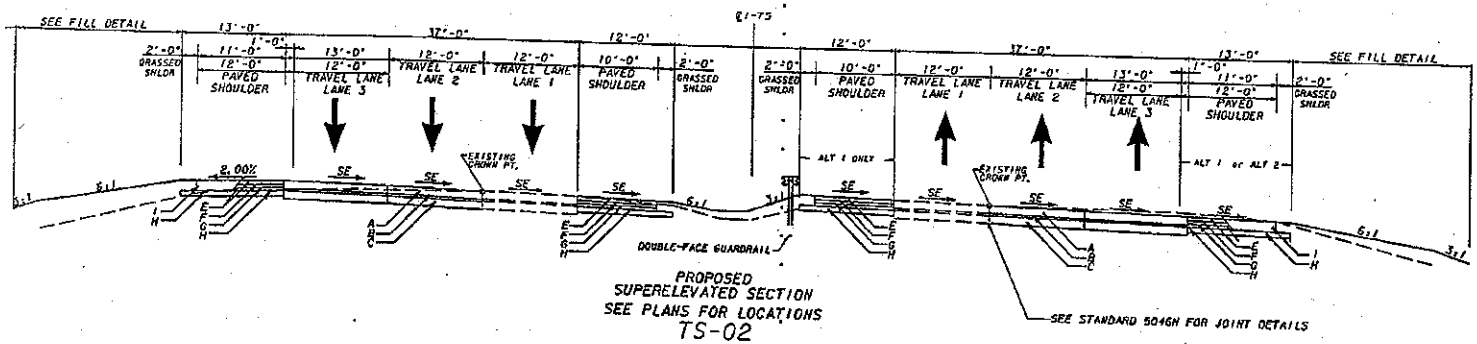
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROAD & AIRPORT DESIGN
TYPICAL SECTIONS

DRAWING No. 5-01

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSNHS-M003-00(340)		



PROPOSED
SUPERELEVATED SECTION
SEE PLANS FOR LOCATIONS

TS-02

APPLIES TO:

STA 775+20 TO STA 790+00.00
STA 865+00.00 TO STA 888+66.00
STA 926+11.00 TO STA 939+93.00
STA 1077+19.00 TO STA 1,092+57.00

SEE CROSS SECTIONS FOR SUPERELEVATION TRANSITION DETAILS

PROPOSED PAVEMENT MAINLINE
A. PLAIN PORTLAND CONCRETE PAVEMENT CLASS 1 CONC. -11"
B. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 330 LBS/SY
C. GRADED AGGREGATE BASE - 12"
D. NON WOVEN FILTER FABRIC

PROPOSED INSIDE SHOULDER PAVEMENT
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPHCONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"

PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 1
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"

PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 2
I. ROLLER COMPACTED CONCRETE (RCC) - 6"
H. GRADED AGGREGATE BASE, 8"

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STATE OF GEORGIA
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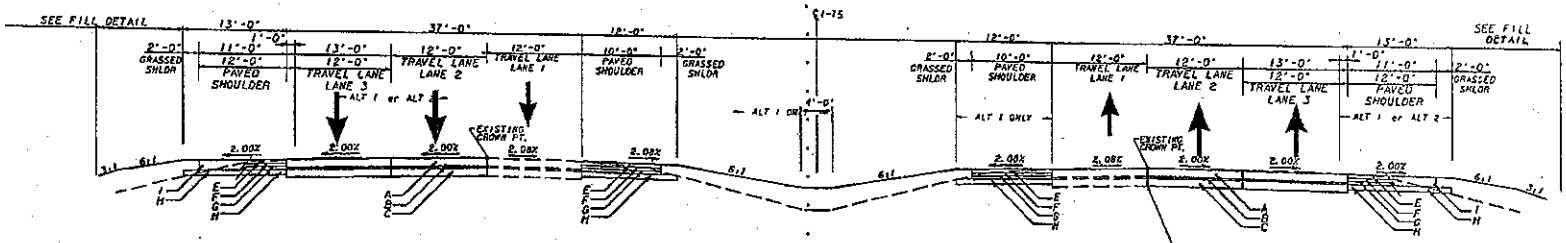
TYPICAL SECTIONS

DRAWING NO. 5-02

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSNHS-M003-0013(03)		



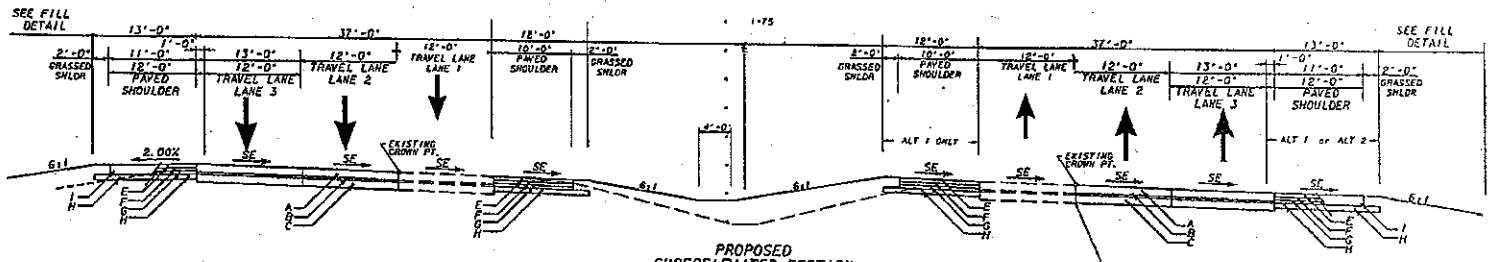
SEE STANDARD 5046H FOR JOINT DETAILS

PROPOSED TANGENT SECTION

TS-03

APPLIES TO:
STA 790+78.00 TO STA 860+98.00

PROPOSED PAVEMENT MAINLINE
A. PLAIN PORTLAND CONCRETE PAVEMENT CLASS I "CONC. -11"
B. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 330 LBS/SY
C. GRADED AGGREGATE BASE - 12"
D. NON WOVEN FILTER FABRIC
PROPOSED INSIDE SHOULDER PAVEMENT
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPHCONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"
PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 1
E. RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME, 165 LBS/SY
F. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LBS/SY
G. RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 275 LBS/SY
H. GRADED AGGREGATE BASE - 8"
PROPOSED OUTSIDE SHOULDER PAVEMENT - ALTERNATE 2
I. ROLLER COMPACTED CONCRETE (RCC) - 6"
H. GRADED AGGREGATE BASE, 8"



SEE STANDARD 5046H FOR JOINT DETAILS

PROPOSED
SUPERELEVATED SECTION

TS-04

APPLIES TO:
STA 790+00.00 TO STA 790+78.00
STA 860+98.00 TO STA 865+00.00

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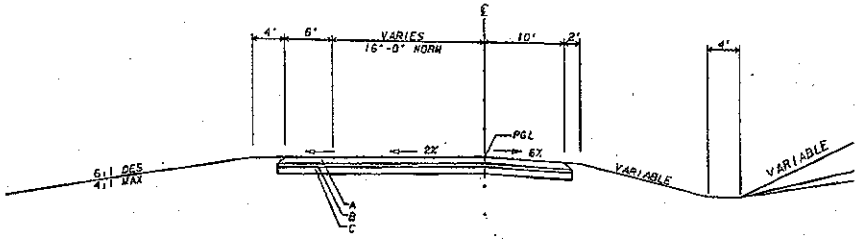
TYPICAL SECTIONS

DRAWING NO. 5-03

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSNHS-M003-00(340)		



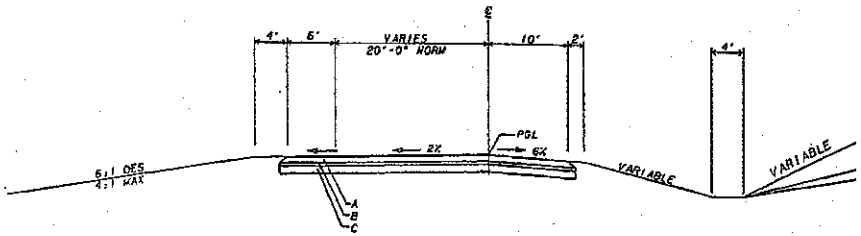
PROPOSED
RAMP SECTION
TS-05
APPLIES TO:

RAMP B STA 1907+50.00 TO STA 1913+00.00
RAMP D STA 2910+25.00 TO STA 2914+50.00
RAMP E STA 1947+00.00 TO STA 1953+00.00
RAMP F STA 1958+50.00 TO STA 1962+00.00
RAMP G STA 2946+50.00 TO STA 2949+00.00
RAMP H STA 2953+50.00 TO STA 2960+00.00

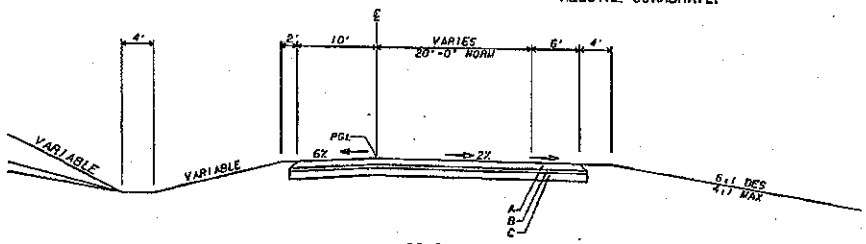
PROPOSED PAVEMENT RAMPS
A. PLAIN PORTLAND CONCRETE PAVEMENT CLASS I CONC, -11"
B. RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 330 LBS/SY
C. GRADED AGGREGATE BASE - 12"
D. NON WOVEN FILTER FABRIC

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1	OVER 10'	OVER 10'

NOTE: ALL FILL SLOPES GREATER THAN 4:1 WILL REQUIRE GUARDRAIL.



PROPOSED
RAMP SECTION
TS-06
APPLIES TO:
RAMP C STA 2908+00.00 TO STA 2910+00.00



PROPOSED
RAMP SECTION
TS-07
APPLIES TO:
RAMP A STA 1904+50.00 TO STA 1907+00.00

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DEPARTMENT OF TRANSPORTATION
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TYPICAL SECTIONS

DRAWING No.
5-04

Estimate Report for file "M003340 - 12ft outside shoulders" Asphalt.

Section Mainline and Ramp pavement

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-5120	304974	SY	21.73	GR AGGR BASE CRS, 12 INCH, INCL MATL	6627085.02
402-3190	50322	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	3774150.00
430-0220	304974	SY	55.00	PLAIN PC CONC PVMT, CL 1 CONC, 12 INCH THK	16773570.00
				Section Sub Total:	**$27,174,805.02**

Section Inside Shoulder

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-5060	112305	SY	11.88	GR AGGR BASE CRS, 6 INCH, INCL MATL	1334183.40
402-3121	15442	TN	74.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	1142708.00
402-3130	9266	TN	76.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	704216.00
402-3190	12354	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	926550.00
				Section Sub Total:	**$4,107,657.40**

Section Outside Shoulder

Item Number	Quantity	Units	Unit Price	Item Description	Cost
205-0001	51584	CY	3.84	UNCLASS EXCAV	198082.56
310-5080	123005	SY	16.12	GR AGGR BASE CRS, 9 INCH, INCL MATL	1982840.60
402-3121	16914	TN	74.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	1251636.00
402-3130	10148	TN	76.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	771248.00
402-3190	13531	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	1014825.00
				Section Sub Total:	**$5,218,632.16**

Section ROADWAY

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	3805000.00	TRAFFIC CONTROL - CSNHS-M003-00(340)	3805000.00
150-5010	4	EA	13397.20	TRAFFIC CONTROL, PORTABLE IMPACT ATTENUATOR	53588.80
150-9011	3000	HR	52.96	TRAFFIC CONTROL - WORKZONE LAW ENFORCEMENT (CONTRACTOR BIDS)	158880.00
153-1300	1	EA	71117.80	FIELD ENGINEERS OFFICE TP 3	71117.80
163-0300	6	EA	1773.05	CONSTRUCTION EXIT	10638.30
165-0101	6	EA	528.06	MAINTENANCE OF CONSTRUCTION EXIT	3168.36
210-0100	Lump	LS	10000000.00	GRADING COMPLETE - CSNHS-M003-00(340)	10000000.00
402-3113	5916	TN	78.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	461448.00
402-3190	7888	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM	591600.00
407-0020	52000	LF	0.87	ASPHALT-RUBBER JOINT AND CRACK SEAL, TP S	45240.00
413-1000	10372	GL	1.87	BITUM TACK COAT	19395.64
430-0630	1000	LF	79.00	REINFORCED CONCRETE LUG ANCHORS	79000.00
433-1300	3082	SY	22.05	REINF CONC APPROACH SLAB, INCL BARRIER	67958.10
436-1000	22464	LF	8.35	ASPHALTIC CONCRETE CURB - 6 INCH	187574.40
441-0004	350	SY	44.20	CONC SLOPE PAV, 4 IN	15470.00
441-0204	1000	SY	35.46	PLAIN CONC DITCH PAVING, 4 IN	35460.00
441-0301	5	EA	2237.24	CONC SPILLWAY, TP 1	11186.20
452-1000	2500	CY	380.00	FULL DEPTH SLAB REPLACEMENT	950000.00
456-2012	40	GLM	948.68	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	37947.20
500-0100	3082	SY	4.01	GROOVED CONCRETE	12358.82
500-3101	23	CY	407.98	CLASS A CONCRETE	9383.54
500-3200	5	CY	410.41	CLASS B CONCRETE	2052.05
500-3800	51	CY	775.30	CLASS A CONCRETE, INCL REINF STEEL	39540.30
550-1150	207	LF	47.65	STORM DRAIN PIPE, 15 IN, H 1-10	9863.55
550-1180	15050	LF	42.63	STORM DRAIN PIPE, 18 IN, H 1-10	641581.50

550-1240	1519	LF	46.51	STORM DRAIN PIPE, 24 IN, H 1-10	70648.69
550-1300	88	LF	65.20	STORM DRAIN PIPE, 30 IN, H 1-10	5737.60
550-1360	266	LF	81.70	STORM DRAIN PIPE, 36 IN, H 1-10	21732.20
550-1420	12	LF	106.89	STORM DRAIN PIPE, 42 IN, H 1-10	1282.68
550-1540	12	LF	164.80	STORM DRAIN PIPE, 54 IN, H 1-10	1977.60
550-3518	4	EA	908.46	SAFETY END SECTION 18 IN, STORM DRAIN, 6:1 SLOPE	3633.84
550-3524	2	EA	1007.03	SAFETY END SECTION 24 IN, STORM DRAIN, 6:1 SLOPE	2014.06
550-3615	14	EA	598.00	SAFETY END SECTION 15 IN, SIDE DRAIN, 6:1 SLOPE	8372.00
550-4215	20	EA	636.94	FLARED END SECTION 15 IN, STORM DRAIN	12738.80
550-4218	34	EA	644.87	FLARED END SECTION 18 IN, STORM DRAIN	21925.58
550-4224	17	EA	776.56	FLARED END SECTION 24 IN, STORM DRAIN	13201.52
550-4230	5	EA	948.68	FLARED END SECTION 30 IN, STORM DRAIN	4743.40
550-4236	4	EA	1221.96	FLARED END SECTION 36 IN, STORM DRAIN	4887.84
550-4242	1	EA	1533.99	FLARED END SECTION 42 IN, STORM DRAIN	1533.99
573-2006	15000	LF	13.38	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	200700.00
576-1018	1000	LF	34.93	SLOPE DRAIN PIPE, 18 IN	34930.00
610-1055	58400	LF	2.71	REM GUARDRAIL	158264.00
610-1075	92	EA	139.01	REM GUARDRAIL ANCH, ALL TYPES	12788.92
610-9001	10	EA	276.88	REM SIGN	2768.80
611-5551	10	EA	1648.75	RESET SIGN	16487.50
620-0100	102048	LF	28.30	TEMPORARY BARRIER, METHOD NO. 1	2887958.40
620-0200	568	LF	76.05	TEMPORARY BARRIER, METHOD NO. 2	43196.40
621-6003	1921	LF	223.38	CONCRETE BARRIER, TP S-3	429112.98
632-0003	10	EA	14317.47	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	143174.70
641-1100	294	LF	43.12	GUARDRAIL, TP T	12677.28
641-1200	22905	LF	15.31	GUARDRAIL, TP W	350675.55
641-2100	285	LF	79.73	DBL FACED GUARDRAIL, TP T	22723.05
641-5001	39	EA	620.25	GUARDRAIL ANCHORAGE, TP 1	24189.75
641-5012	42	EA	1821.59	GUARDRAIL ANCHORAGE, TP 12	76506.78
642-0100	49897	LF	14.52	CABLE BARRIER	724504.44
642-0300	9	EA	2825.36	CABLE TERMINAL (NCHRP 350 TL-3 COMPLIANT)	25428.24
668-1100	12	EA	2500.12	CATCH BASIN, GP 1	30001.44
668-2100	123	EA	2905.21	DROP INLET, GP 1	357340.83
668-2110	27	LF	354.91	DROP INLET, GP 1, ADDL DEPTH	9582.57
				Section Sub Total:	**$23,056,893.99**

Section EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	50	AC	778.51	TEMPORARY GRASSING	38925.50
163-0240	4025	TN	181.67	MULCH	731221.75
163-0520	1000	LF	17.01	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	17010.00
163-0522	100	EA	98.54	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE A SILT FENCE	9854.00
163-0530	2000	LF	4.28	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	8560.00
163-0550	130	EA	256.06	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	33287.80
165-0010	24803	LF	0.80	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	19842.40
165-0030	12375	LF	1.50	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	18562.50
165-0040	100	EA	104.09	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	10409.00
165-0070	1000	LF	1.84	MAINTENANCE OF BALED STRAW EROSION CHECK	1840.00
165-0105	130	EA	92.60	MAINTENANCE OF INLET SEDIMENT TRAP	12038.00
167-1000	2	EA	1081.77	WATER QUALITY MONITORING AND SAMPLING	2163.54
167-1500	24	MO	991.11	WATER QUALITY INSPECTIONS	23786.64
171-0010	49606	LF	1.62	TEMPORARY SILT FENCE, TYPE A	80361.72
171-0030	24750	LF	3.91	TEMPORARY SILT FENCE, TYPE C	96772.50
603-2180	5000	SY	37.72	STN DUMPED RIP RAP, TP 3, 12 IN	188600.00
603-7000	5000	SY	5.22	PLASTIC FILTER FABRIC	26100.00
643-8200	4187	LF	2.87	BARRIER FENCE (ORANGE), 4 FT	12016.69
700-6910	100	AC	1054.05	PERMANENT GRASSING	105405.00
700-7000	300	TN	60.44	AGRICULTURAL LIME	18132.00
700-7010	250	GL	21.65	LIQUID LIME	5412.50
700-8000	70	TN	289.61	FERTILIZER MIXED GRADE	20272.70
700-8100	5000	LB	2.55	FERTILIZER NITROGEN CONTENT	12750.00

716-2000	55955	SY	1.14	EROSION CONTROL MATS, SLOPES	63788.70
				Section Sub Total:	**$1,557,112.94**

Section SIGNING AND MARKING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
610-6515	32	EA	88.47	REM HIGHWAY SIGN, STD	2831.04
611-5360	26	EA	612.84	RESET HIGHWAY SIGN	15933.84
636-1020	390	SF	14.96	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	5834.40
636-1077	791	SF	22.79	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 9	18026.89
636-2080	560	LF	8.96	GALV STEEL POSTS, TP 8	5017.60
636-2090	42	LF	9.25	GALV STEEL POSTS, TP 9	388.50
636-3010	38	EA	483.09	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	18357.42
638-1001	Lump	LS	88703.69	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA - 881+80	88703.69
638-1001	Lump	LS	88703.69	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA - 987+55	88703.69
654-1003	2820	EA	3.76	RAISED PVMT MARKERS TP 3	10603.20
657-1104	6000	LF	6.69	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	40140.00
657-4085	41	GLM	15823.92	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	648780.72
657-5002	1834	SY	18.84	PREFORMED PLASTIC PAVEMENT MARKING, YELLOW, TP PB	34552.56
657-9210	21	LM	15495.66	WET REFLECTIVE PREFORMED SOLID PAVEMENT MARKINGS, 5 INCH WIDE, WHITE	325408.86
657-9211	21	LM	15377.90	WET REFLECTIVE PREFORMED SOLID PAVEMENT MARKINGS, 5 INCH WIDE, YELLOW	322935.90
682-6120	4400	LF	13.05	CONDUIT, RIGID, 2 IN	57420.00
682-6222	54400	LF	6.87	CONDUIT, NONMETL, TP 2, 2 IN	373728.00
682-9010	2	EA	2453.33	SVC POLE RISER	4906.66
682-9020	13	EA	701.71	ELECTRICAL JUNCTION BOX	9122.23
				Section Sub Total:	**$2,071,395.20**

Total Estimated Cost: $63,186,496.71

Subtotal Construction Cost	**$63,186,496.71**
E&C Rate 10.0 %	$6,318,649.67
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$69,505,146.38**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$69,505,146.38**

ENGINEERING @ 5% 3,159,325

CONTINGENCY @ 6% 3,980,749

TOTAL CONST. COST = $70,326,570

RIGHT-OF-WAY - -0-

REIMB UTILITIES - -0-

TOTAL PROJECT COST = $70,326,570

7/23/2008

Estimate Report for file "M003340 - 12 ft outside shoulders" CONCRETE

Section Mainline and Ramp pavement

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-5120	304974	SY	21.73	GR AGGR BASE CRS, 12 INCH, INCL MATL	6627085.02
402-3190	50322	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	3774150.00
430-0220	304974	SY	55.00	PLAIN PC CONC PVMT, CL 1 CONC, 12 INCH THK	16773570.00
				Section Sub Total:	**$27,174,805.02**

Section Inside Shoulder

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-5060	112305	SY	11.88	GR AGGR BASE CRS, 6 INCH, INCL MATL	1334183.40
402-3121	15442	TN	74.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	1142708.00
402-3130	9266	TN	76.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	704216.00
402-3190	12354	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	926550.00
				Section Sub Total:	**$4,107,657.40**

Section Outside Shoulder

Item Number	Quantity	Units	Unit Price	Item Description	Cost
205-0001	51584	CY	3.96	UNCLASS EXCAV	204272.64
310-5080	123001	SY	16.12	GR AGGR BASE CRS, 8 INCH, INCL MATL	1982776.12
442-0100	123001	SY	30.00	ROLLER COMPACTED CONCRETE PAVEMENT	3690030.00
				Section Sub Total:	**$5,877,078.76**

Section ROADWAY

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	3805000.00	TRAFFIC CONTROL - CSNHS-M003-00(340)	3805000.00
150-5010	4	EA	13397.20	TRAFFIC CONTROL, PORTABLE IMPACT ATTENUATOR	53588.80
150-9011	3000	HR	52.96	TRAFFIC CONTROL - WORKZONE LAW ENFORCEMENT (CONTRACTOR BIDS)	158880.00
153-1300	1	EA	71117.80	FIELD ENGINEERS OFFICE TP 3	71117.80
163-0300	6	EA	1773.05	CONSTRUCTION EXIT	10638.30
165-0101	6	EA	528.06	MAINTENANCE OF CONSTRUCTION EXIT	3168.36
210-0100	Lump	LS	10000000.00	GRADING COMPLETE - CSNHS-M003-00(340)	10000000.00
402-3113	5916	TN	78.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	461448.00
402-3190	7888	TN	75.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM	591600.00
407-0020	52000	LF	0.87	ASPHALT-RUBBER JOINT AND CRACK SEAL, TP S	45240.00
413-1000	10372	GL	1.87	BITUM TACK COAT	19395.64
430-0630	1000	LF	79.00	REINFORCED CONCRETE LUG ANCHORS	79000.00
433-1300	3082	SY	22.05	REINF CONC APPROACH SLAB, INCL BARRIER	67958.10
436-1000	22464	LF	8.35	ASPHALTIC CONCRETE CURB - 6 INCH	187574.40
441-0004	350	SY	44.20	CONC SLOPE PAV, 4 IN	15470.00
441-0204	1000	SY	35.46	PLAIN CONC DITCH PAVING, 4 IN	35460.00
441-0301	5	EA	2237.24	CONC SPILLWAY, TP 1	11186.20
452-1000	2500	CY	380.00	FULL DEPTH SLAB REPLACEMENT	950000.00
456-2012	40	GLM	948.68	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	37947.20
500-0100	3082	SY	4.01	GROOVED CONCRETE	12358.82
500-3101	23	CY	407.98	CLASS A CONCRETE	9383.54
500-3200	5	CY	410.41	CLASS B CONCRETE	2052.05
500-3800	51	CY	775.30	CLASS A CONCRETE, INCL REINF STEEL	39540.30
550-1150	207	LF	47.65	STORM DRAIN PIPE, 15 IN, H 1-10	9863.55
550-1180	15050	LF	42.63	STORM DRAIN PIPE, 18 IN, H 1-10	641581.50
550-1240	1519	LF	46.51	STORM DRAIN PIPE, 24 IN, H 1-10	70648.69
550-1300	88	LF	65.20	STORM DRAIN PIPE, 30 IN, H 1-10	5737.60
550-1360	266	LF	81.70	STORM DRAIN PIPE, 36 IN, H 1-10	21732.20
550-1420	12	LF	106.89	STORM DRAIN PIPE, 42 IN, H 1-10	1282.68

550-1540	12	LF	164.80	STORM DRAIN PIPE, 54 IN, H 1-10	1977.60
550-3518	4	EA	908.46	SAFETY END SECTION 18 IN, STORM DRAIN, 6:1 SLOPE	3633.84
550-3524	2	EA	1007.03	SAFETY END SECTION 24 IN, STORM DRAIN, 6:1 SLOPE	2014.06
550-3615	14	EA	598.00	SAFETY END SECTION 15 IN, SIDE DRAIN, 6:1 SLOPE	8372.00
550-4215	20	EA	636.94	FLARED END SECTION 15 IN, STORM DRAIN	12738.80
550-4218	34	EA	644.87	FLARED END SECTION 18 IN, STORM DRAIN	21925.58
550-4224	17	EA	776.56	FLARED END SECTION 24 IN, STORM DRAIN	13201.52
550-4230	5	EA	948.68	FLARED END SECTION 30 IN, STORM DRAIN	4743.40
550-4236	4	EA	1221.96	FLARED END SECTION 36 IN, STORM DRAIN	4887.84
550-4242	1	EA	1533.99	FLARED END SECTION 42 IN, STORM DRAIN	1533.99
573-2006	15000	LF	13.38	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	200700.00
576-1018	1000	LF	34.93	SLOPE DRAIN PIPE, 18 IN	34930.00
610-1055	58400	LF	2.71	REM GUARDRAIL	158264.00
610-1075	92	EA	139.01	REM GUARDRAIL ANCH, ALL TYPES	12788.92
610-9001	10	EA	276.88	REM SIGN	2768.80
611-5551	10	EA	1648.75	RESET SIGN	16487.50
620-0100	102048	LF	28.30	TEMPORARY BARRIER, METHOD NO. 1	2887958.40
620-0200	568	LF	76.05	TEMPORARY BARRIER, METHOD NO. 2	43196.40
621-6003	1921	LF	223.38	CONCRETE BARRIER, TP S-3	429112.98
632-0003	10	EA	14317.47	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	143174.70
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641-1200	22905	LF	15.31	GUARDRAIL, TP W	350675.55
641-2100	285	LF	79.73	DBL FACED GUARDRAIL, TP T	22723.05
641-5001	39	EA	620.25	GUARDRAIL ANCHORAGE, TP 1	24189.75
641-5012	42	EA	1821.59	GUARDRAIL ANCHORAGE, TP 12	76506.78
642-0100	49897	LF	14.52	CABLE BARRIER	724504.44
642-0300	9	EA	2825.36	CABLE TERMINAL (NCHRP 350 TL-3 COMPLIANT)	25428.24
668-1100	12	EA	2500.12	CATCH BASIN, GP 1	30001.44
668-2100	123	EA	2905.21	DROP INLET, GP 1	357340.83
668-2110	27	LF	354.91	DROP INLET, GP 1, ADDL DEPTH	9582.57
				Section Sub Total:	**$23,056,893.99**

Section EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	50	AC	778.51	TEMPORARY GRASSING	38925.50
163-0240	4025	TN	181.67	MULCH	731221.75
163-0520	1000	LF	17.01	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	17010.00
163-0522	100	EA	98.54	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE A SILT FENCE	9854.00
163-0530	2000	LF	4.28	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	8560.00
163-0550	130	EA	256.06	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	33287.80
165-0010	24803	LF	0.80	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	19842.40
165-0030	12375	LF	1.50	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	18562.50
165-0040	100	EA	104.09	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	10409.00
165-0070	1000	LF	1.84	MAINTENANCE OF BALED STRAW EROSION CHECK	1840.00
165-0105	130	EA	92.60	MAINTENANCE OF INLET SEDIMENT TRAP	12038.00
167-1000	2	EA	1081.77	WATER QUALITY MONITORING AND SAMPLING	2163.54
167-1500	24	MO	991.11	WATER QUALITY INSPECTIONS	23786.64
171-0010	49606	LF	1.62	TEMPORARY SILT FENCE, TYPE A	80361.72
171-0030	24750	LF	3.91	TEMPORARY SILT FENCE, TYPE C	96772.50
603-2180	5000	SY	37.72	STN DUMPED RIP RAP, TP 3, 12 IN	188600.00
603-7000	5000	SY	5.22	PLASTIC FILTER FABRIC	26100.00
643-8200	4187	LF	2.87	BARRIER FENCE (ORANGE), 4 FT	12016.69
700-6910	100	AC	1054.05	PERMANENT GRASSING	105405.00
700-7000	300	TN	60.44	AGRICULTURAL LIME	18132.00
700-7010	250	GL	21.65	LIQUID LIME	5412.50
700-8000	70	TN	289.61	FERTILIZER MIXED GRADE	20272.70
700-8100	5000	LB	2.55	FERTILIZER NITROGEN CONTENT	12750.00
716-2000	55955	SY	1.14	EROSION CONTROL MATS, SLOPES	63788.70
				Section Sub Total:	**$1,557,112.94**

Section SIGNING AND MARKING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
610-6515	32	EA	88.47	REM HIGHWAY SIGN, STD	2831.04
611-5360	26	EA	612.84	RESET HIGHWAY SIGN	15933.84
636-1020	390	SF	14.96	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	5834.40
636-1077	791	SF	22.79	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 9	18026.89
636-2080	560	LF	8.96	GALV STEEL POSTS, TP 8	5017.60
636-2090	42	LF	9.25	GALV STEEL POSTS, TP 9	388.50
636-3010	38	EA	483.09	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	18357.42
638-1001	Lump	LS	88703.69	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA - 881+80	88703.69
638-1001	Lump	LS	88703.69	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA - 987+55	88703.69
654-1003	2820	EA	3.76	RAISED PVMT MARKERS TP 3	10603.20
657-1104	6000	LF	6.69	PREFORMED PLASTIC SOLID PVMT MKG, 10 IN, WHITE, TP PB	40140.00
657-4085	41	GLM	15823.92	PREFORMED PLASTIC SKIP PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	648780.72
657-5002	1834	SY	18.84	PREFORMED PLASTIC PAVEMENT MARKING, YELLOW, TP PB	34552.56
657-9210	21	LM	15495.66	WET REFLECTIVE PREFORMED SOLID PAVEMENT MARKINGS, 5 INCH WIDE, WHITE	325408.86
657-9211	21	LM	15377.90	WET REFLECTIVE PREFORMED SOLID PAVEMENT MARKINGS, 5 INCH WIDE, YELLOW	322935.90
682-6120	4400	LF	13.05	CONDUIT, RIGID, 2 IN	57420.00
682-6222	54400	LF	6.87	CONDUIT, NONMETL, TP 2, 2 IN	373728.00
682-9010	2	EA	2453.33	SVC POLE RISER	4906.66
682-9020	13	EA	701.71	ELECTRICAL JUNCTION BOX	9122.23
				Section Sub Total:	**$2,071,395.20**

Total Estimated Cost: $63,844,943.31

Subtotal Construction Cost	**$63,844,943.31**
E&C Rate 10.0 %	$6,384,494.33
Inflation Rate 0.0 % @ 0 Years	$0.00
Total Construction Cost	**$70,229,437.64**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$70,229,437.64**

ENGINEERING @ 5% 3,192,247

CONTINGENCY @ 6% 4,022,231

TOTAL CONST COST $71,059,421

RIGHT-OF-WAY - -0-

REIMB UTILITIES - -0-

TOTAL PROJECT COST $71,059,421

7/23/2020