ADDENDUM NO. 1
February 5, 2025

TO: Plans and Specifications for:
TOLL 49 Segment 3B North Overlay
North East Texas Regional Mobility Authority
BID DATE: Friday, February 14, 2025
BID TIME: 2:00 p.m.

BY: Lochner
5767 Eagles Nest Blvd
Tyler, TX 75703
Phone: 903-581-7844

This Addendum is hereby made a part of the Contract Documents to the same extent as if it were originally included therein. The following modifications, clarifications, additions, or deletions shall be made to the appropriate sections of the plans and specifications and shall become a part of, and attached to, the Contract Documents.

Plan Additions:

1) Add Sheet 102 – EPIC (Environmental Permits, Issues and Commitments)
2) Add Sheets 103, 104 – SWP3 Summary Sheets (1 acre or more)

Plan Revisions:

3) Plan Sheet 2 (Sheet Index) – Add Sheets 102-104
4) Plan Sheets 5 & 6 (Proposed Typical Sections) – Revise backfill edge limits from 6' to 4'
5) Plan Sheet 7 (Basis of Estimate) – Add Items 166, 168, and 314
6) Plan Sheet 9 (Quantity Summary) – Add Item 164-7001, Remove Item 164-7073, Revise Quantity for Item 168-7001, Add Item 314-7008

Proposal Revisions:

7) Price Proposal Sheet (replaced entirely) – Add Item 164-7001, Remove Item 164-7073, Revise Quantity for Item 168-7001, Add Item 314-7008
8) General Notes (replaced entirely);
- Revise Item 134 – Revise "Backfill material will be RAP generated for planning operations on this project stockpiled at the NETRMA maintenance yard located on the NW corner of Toll 49 and SH 64."
- Add Item 166 and 168
- Revise Item 354 – "All RAP generated from this project belongs to the NETRMA. Unless otherwise approved, Contractor will be required to deliver the RAP to the maintenance yard located on the NW corner of Toll 49 and SH 64."
- Add to Item 354 – "The NET RMA has established a corrected PGL for the bridge approaches to improve the ride quality on this project that will be included in the planned milling. The contractor will be required to run a wire line for grade control the length of the milled area. The NET RMA will provide the adjusted profile prior to the activity and it will be the responsibility of the contractor to set up the grade control system at the points provided and provide verification to field staff of the correctness of any offset and height adjustments made to accommodate operations."

Clarifications:

9) Addendum Acknowledgement Form (attached) is required to be submitted with the bid.

END OF ADDENDUM NO. 1

TO: Plans and Specifications for:
TOLL 49 Segment 3B North Overlay
North East Texas Regional Mobility Authority
BID DATE: Friday, February 14, 2025
BID TIME: 2:00 p.m.

BY: Lochner
5767 Eagles Nest Blvd
Tyler, TX 75703
Phone: 903-581-7844

ADDENDUM ACKNOWLEDGMENT

Each bidder is required to acknowledge receipt of an addendum issued for a specific project. This page is provided for the purpose of acknowledging an addendum.

FAILURE TO ACKNOWLEDGE RECEIPT OF AN ADDENDUM WILL RESULT IN THE BID NOT BEING READ.

In order to properly acknowledge an addendum place a mark in the box next to the respective addendum.

ADDENDUM NO. 1 ☐

In addition, the bidder by affixing their signature to the signature page of the bid is acknowledging that they have taken the addendum(s) into consideration when preparing their bid and that the information contained in the addendum will be included in the contract, if awarded by the NETRMA.

SHEET NO.		DESCRIPTION
GENERAL		
1		TITLE SHEET
2		SUPPLEMENTAL INDEX OF SHEETS
3 - 4		PROJECT LAYOUTS
5 - 6		TYPICAL SECTION AND DETAILS
7		BASIS OF ESTIMATE
8 - 12		SUMMARY OF QUANTITIES
13 - 20		GENERAL NOTES
TRAFFIC CONTROL PLAN		
21		TRAFFIC CONTROL PLAN NARRATIVE
22		TRAFFIC CONTROL PLAN COMPLETE TOLL 49 CLOSURE
23		TRAFFIC CONTROL PLAN AT IH 20 ENTRANCE RAMP
24		TRAFFIC CONTROL PLAN AT SH 64 ENTRANCE RAMP
25		JOINT LAYOUT AND STRIPING DETAILS
26		TREATMENT FOR VARIOUS EDGE CONDITIONS
TRAFFIC CONTROL PLAN STANDARDS		
27 - 38	#	BC(1)-21 TO BC(12)-21
39 - 43	#	TCP(1-1)-18 TO TCP(1-5)-18
44	#	TCP(3-1)-13
44	#	TCP(3-3)-14
45	#	TCP(5-1)-18
47	#	TCP(6-1)-12
48	#	TCP(6-3)-12
49	#	TCP(6-6)-12
50	#	WZ(STPM)-23
51	#	WZ(UL)-13
52	#	WZ(RS)-22
ROADWAY		
53 - 54		HORIZONTAL ALIGNMENT DATA
55 - 78		SEGMENT 3B NORTH PAVING & STRIPING
79		TAPERED JOINT DETAILS
ROADWAY STANDARDS		
80	#	GF(31)-19
81	#	GF(MS)-19
82	#	SGT(12S)31-18
83	#	SGT(15)31-20
84	#	TE(HMAC)-11
PAVEMENT MARKING STANDARD DETAILS		
85 - 87	#	PM(1)-22 TO PM(3)-22
88 - 89	#	FPM(1)-22-FPM(2)-22
90	#	CLB(1)-23
91	#	CLB(2)-23
92	#	TS2(PL-1)-23
93 - 96	#	RS(1)-23 TO RS(4)-23
97	#	D & OM(1)-20
98	#	D & OM(2)-20
99	#	D & OM(5)-20
100	#	D & OM(6)-20
101	#	D & OM(VIA)-20
ENVIRONMENTAL		
102		EPIC
103 - 104		SWP3

1 REVISED 2/04/2025
FOR ADDENDUM NO. 1

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

STATE OF TEXAS
COREY D. HOGUE
107396
LICENSED
PROFESSIONAL ENGINEER
02/05/2025

Lochner
TBPE Firm Reg. No. 10488

NEXTRMA
North East Texas Regional Mobility Authority

INDEX OF SHEETS

SHEET 1 OF 1

SEGMENT		HIGHWAY
SEGMENT 3B NORTH		TOLL 49
DIST	COUNTY	SHEET NO.
TYL	SMITH	2

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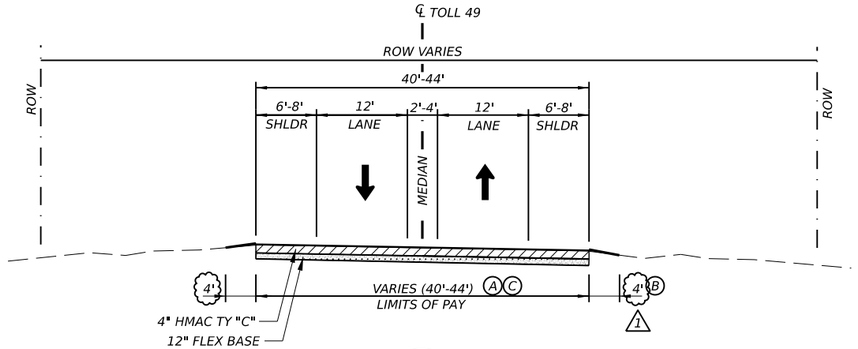

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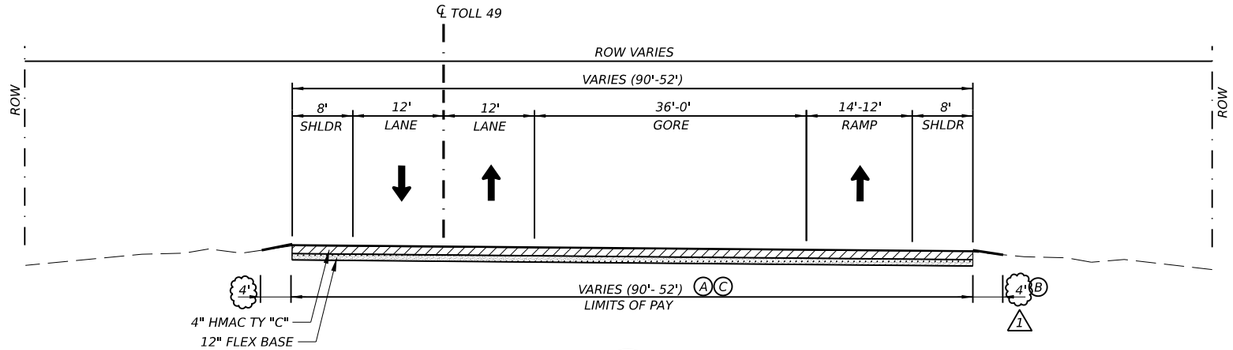
TOLL 49 SECTION

STA. 458+12.79 TO STA. 467+14.40
STA. 615+77.88 TO STA. 715+84.26

TRANSITION FROM SECTION 1 TO SECTION 5
STA. 715+84.26 TO STA. 724+24.26



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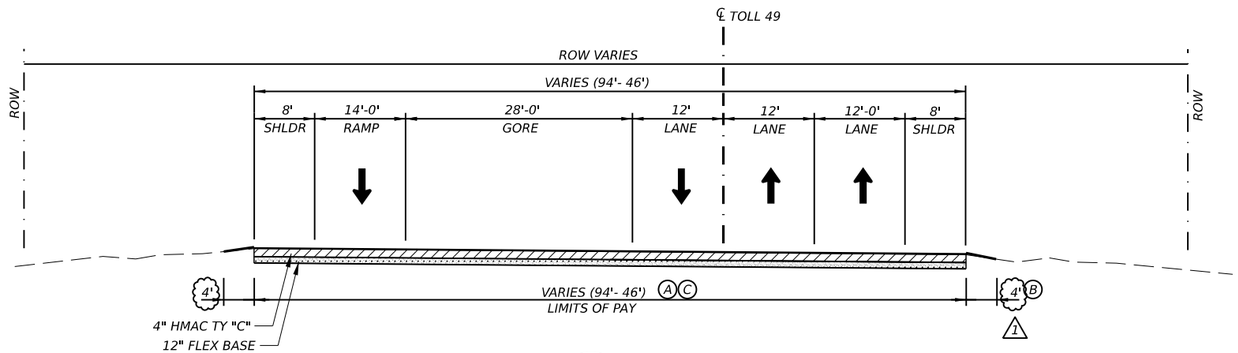
TOLL 49 SECTION

STA. 467+14.40 TO STA. 474+00.00



3

TOLL 49 SECTION

STA. 474+00.00 TO STA. 484+82.90

LEGEND

- (A) 2.5" OVERLAY (SP-C SAC A PG 76-22)
- (B) BACKFILL EDGES (TY B)
- (C) MEMBRANE UNDERSEAL

NOTES:

1. MATCH EXISTING CROSS SLOPES.
2. ALL OVERLAY CONSTRUCTION JOINTS SHALL BE OUTSIDE WHEEL PATHS AND EDGE LINES.
3. REFER TO LAYOUTS FOR SPECIFIC WIDTHS AND LANE CONFIGURATIONS.
4. SEE JOINT LAYOUT AND STRIPING DETAIL SHEET FOR LOCATION OF PAVEMENT JOINTS AND PAVEMENT MARKING INFORMATION.
5. ALL MBGF REPLACED WITHIN THE PROJECT LIMITS ARE TO BE REPLACED WITH THE SAME LENGTH AS EXISTING CONDITIONS.
6. RUMBLE STRIPS ARE TO BE INSTALLED IN THE CENTERLINE AND EDGE OF SHOULDER.
7. ALL STRIPING NOT IDENTIFIED IN THE JOINT LAYOUT AND STRIPING DETAIL SHEET ARE TO BE PLACED IN THE SAME LOCATION AS THE EXISTING STRIPE.
8. FOR CONTRACTOR INFORMATION ONLY, THE PAVEMENT BACKFILL EDGES ARE ESTIMATED AS 3'.

1 REVISED 02/04/2025
FOR ADDENDUM NO. 1

0 10 20 FT
HORIZONTAL SCALE: 1" = 20"

STATE OF TEXAS
COREY D. HOGUE
107396
PROFESSIONAL LICENSED ENGINEER
02/05/2025

Lochner
TBPE Firm Reg. No. 10488

NETRMA
North East Texas Regional Mobility Authority

PROPOSED TYPICAL SECTIONS

SHEET 1 OF 2

SEGMENT	HIGHWAY
SEGMENT 3B NORTH	TOLL 49

DIST	COUNTY	SHEET NO.
TYL	SMITH	5

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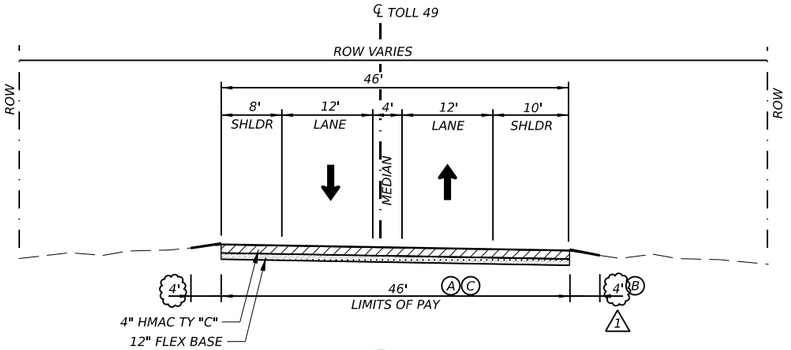

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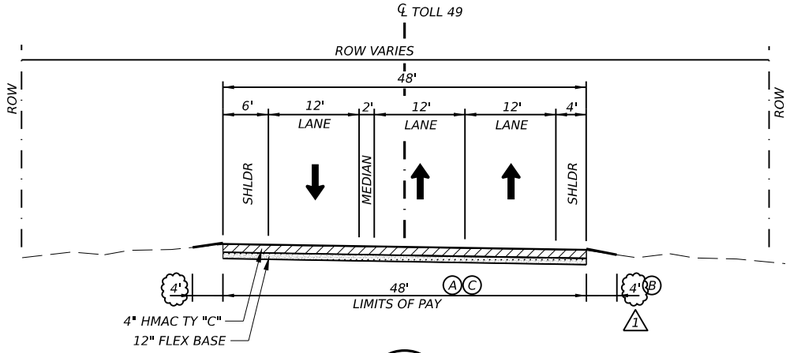
TOLL 49 SECTION

STA. 484+82.90 TO STA. 523+27.88
TRANSITION FROM SECTION 4 TO SECTION 5
STA. 523+27.88 TO STA. 527+77.88

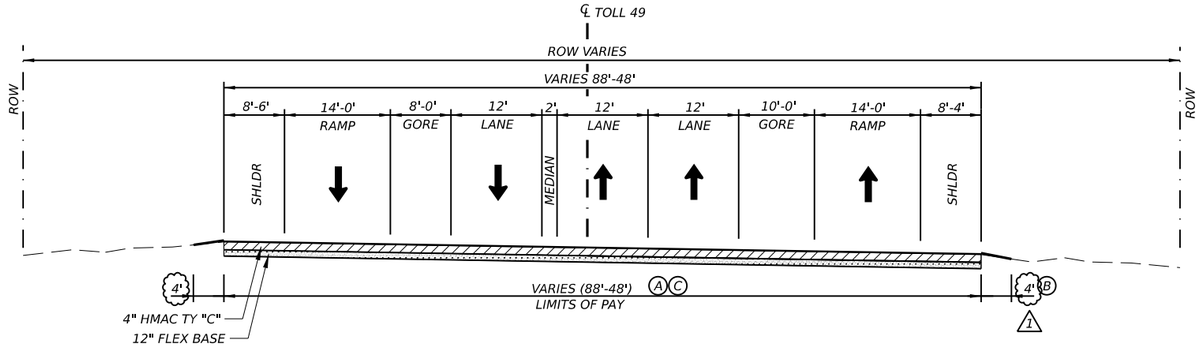


5

TOLL 49 SECTION

STA. 527+77.88 TO STA. 535+96.89
STA. 548+37.68 TO STA. 607+42.88
STA. 724+24.26 TO STA. 724+35.34

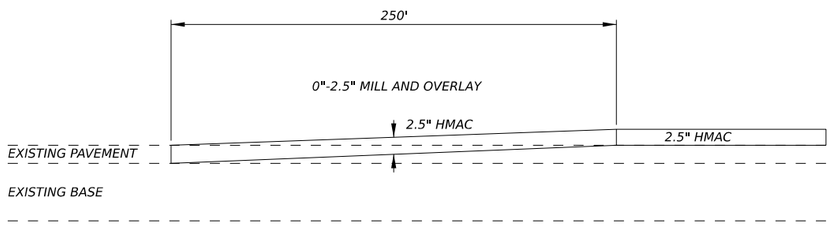
TRANSITION FROM SECTION 5 TO SECTION 1
STA. 607+42.88 TO STA. 615+77.88



6

TOLL 49 SECTION

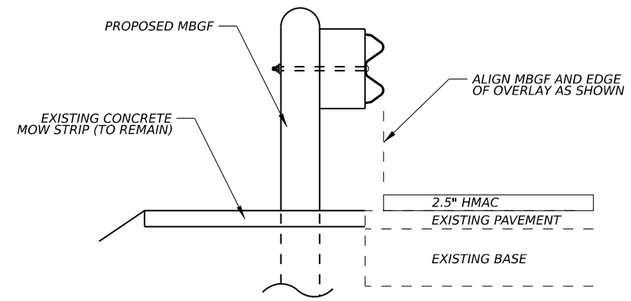
STA. 535+96.89 TO STA. 548+37.68



250' PAVEMENT TRANSITION DETAIL

NTS

SEE ROADWAY PLAN SHEETS FOR LOCATIONS



TYPICAL CROSS SECTION AT MBGF REPLACEMENT

NTS

SEE ROADWAY PLAN SHEETS FOR LOCATIONS

LEGEND

- (A) 2.5" OVERLAY (SP-C SAC A PG 76-22)
- (B) BACKFILL EDGES (TY B)
- (C) MEMBRANE UNDERSEAL

NOTES:

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8. FOR CONTRACTOR INFORMATION ONLY, THE PAVEMENT BACKFILL EDGES ARE ESTIMATED AS 3'.

1 REVISED 02/04/2025
FOR ADDENDUM NO. 1

0 10 20 FT
HORIZONTAL SCALE: 1" = 20"

STATE OF TEXAS
COREY D. HOGUE
107396
LICENSED
PROFESSIONAL ENGINEER
02/05/2025

Lochner
TBPE Firm Reg. No. 10488

NETRMA
North East Texas Regional Mobility Authority

PROPOSED TYPICAL SECTIONS

SHEET 2 OF 2

SEGMENT	HIGHWAY
SEGMENT 3B NORTH	TOLL 49

DIST	COUNTY	SHEET NO.
TYL	SMITH	6

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BASIS OF ESTIMATE

	ITEM		DESCRIPTION	RATE	AMOUNT	UNIT	QUANTITY	PAY UNIT
	500	7001	MOBILIZATION			LS	1	LS
	502	7001	BARRICADES, SIGNS AND TRAFFIC HANDLING			MO	2	MO
[2]	166		FERTILIZER	1 LB/9 SY	17,808	SY	1	TON
	168	7001	VEGETATIVE WATERING	11 GAL/SY	17,808	SY	198	TGL
	314	7008	EMULS ASPH (EROSN CONT)(SS-1)	0.3 GAL/SY	17,808	SY	5,342	GAL
	344	7030	SP MIXES SP-C SAC-A PG76-22	110 LBS/IN/SY	126,453	SY	17,387	TON
[1]	344	7044	SP MIXES SP-B PG64-22 (BASE REPAIR)	110 LBS/IN/SY	11,572	SY	3,819	TON
	3005	7001	MEMBRANE UNDERSEAL	0.1 GAL/SY	126,453	SY	12,645	GAL

[1] FOR CONTRACTOR INFORMATION, SUBSIDIARY TO ITEM 351. LOCATIONS SHALL BE FINALIZED AT TIME OF CONSTRUCTION.

[2] FOR CONTRACTOR INFORMATION ONLY

1

1 REVISED 2/04/2025
FOR ADDENDUM NO. 1

Lochner
TBPE Firm Reg. No. 10488

NET RMA
North East Texas Regional Mobility Authority

BASIS OF ESTIMATE

SHEET 1 OF 1

SEGMENT		HIGHWAY
SEGMENT 3B NORTH		TOLL 49
DIST	COUNTY	SHEET NO.
TYL	SMITH	7

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SUMMARY OF ROADWAY ITEMS

LOCATION	FROM	TO	LENGTH	ITEM 134	ITEM 164	ITEM 164	ITEM 168	ITEM 314	ITEM 351	ITEM 354		ITEM 540	ITEM 542	ITEM 544
				7002	7001	7073	7001	7008	7005			7001	7001	7002
				BACKFILL (TY B)	BROADCAST SEED (PERM RURAL SAND)	BOND FBR MTRX SEED (PERM) (RURAL) (SAND)	VEGETATIVE WATERING	EMULS ASPH (EROSN CONT) (SS-1)	FLEXIBLE PAVEMENT STRUCTURE REPAIR (6")	[1] PLANE ASPH CONC PAV (0" TO 2.5")	[1] PLANE ASPH CONC PAV (2.5")	MTL W-BEAM GD FEN (TIM POST)	REMOVE METAL BEAM GUARD FENCE	GUARDRAIL END TREATMENT (MOVE & RESET)
	STA	STA	FT	STA	SY	SY	TGL	SY	SY	SY	SY	LF	LF	EA
TOLL 49														
PLAN SHEET 1	458+12.79	460+00.00	187.21								832			
PLAN SHEET 2	460+00.00	472+00.00	1,200.00	14.3	1,271		14	1,271		2,347	334			
PLAN SHEET 3	472+00.00	484+00.00	1,200.00	14.0	1,244		14	1,244		539				
PLAN SHEET 4	484+00.00	496+00.00	1,200.00	12.0	1,067		12	1,067	652					
PLAN SHEET 5	496+00.00	508+00.00	1,200.00	12.0	1,067		12	1,067				227	227	1
PLAN SHEET 6	508+00.00	520+00.00	1,200.00	12.0	1,067		12	1,067				48	48	1
PLAN SHEET 7	520+00.00	532+00.00	1,200.00	10.8	960		11	960	289	2,593	620			
PLAN SHEET 8	532+00.00	544+00.00	1,200.00	14.5	1,289		14	1,289	311	1,335				
PLAN SHEET 9	544+00.00	556+00.00	1,200.00	12.0	1,067		12	1,067	5,061					
PLAN SHEET 10	556+00.00	568+00.00	1,200.00	12.0	1,067		12	1,067	1,439					
PLAN SHEET 11	568+00.00	580+00.00	1,200.00	12.0	1,067		12	1,067						
PLAN SHEET 12	580+00.00	592+00.00	1,200.00	12.0	1,067		12	1,067	1,156					
PLAN SHEET 13	592+00.00	604+00.00	1,200.00	12.0	1,067		12	1,067	434					
PLAN SHEET 14	604+00.00	616+00.00	1,200.00	8.3	738		8	738	144	1,236	1,690			
PLAN SHEET 15	616+00.00	617+05.02	105.02								467			
PLAN SHEET 15	622+06.96	628+00.00	593.04	1.2	107		1	107		549	2,095			
PLAN SHEET 16	628+00.00	640+00.00	1,200.00	12.0	1,067		12	1,067		627				
PLAN SHEET 17	640+00.00	652+00.00	1,200.00	12.0	1,067		12	1,067	144			404	404	2
PLAN SHEET 18	652+00.00	663+02.22	1,102.22	5.3	471		5	471	144	1,111	2,086	96	96	2
PLAN SHEET 19	666+00.00	678+00.00	1,200.00											
PLAN SHEET 20	679+95.98	688+00.00	804.02	3.4	302		3	302	1,798	1,210	2,064			
PLAN SHEET 21	688+00.00	700+00.00	1,200.00	8.5	756		8	756		1,222	1,699			
PLAN SHEET 22	700+00.00	704+15.84	415.84								1,885			
PLAN SHEET 23	712+85.84	724+00.00	1,114.16								5,525			
PLAN SHEET 24	724+00.00	724+35.34	35.34								188			
PROJECT TOTALS				200.3	17,808	0	198	17,808	11,572	12,769	19,485	775	775	6

[1] LOCATIONS SHALL BE FINALIZED AT TIME OF CONSTRUCTION

1

SUMMARY OF PCMS AND TRUCK MOUNTED ATTENUATORS

	ITEM		DESCRIPTION	UNIT	QUANTITY
[1]	503	7001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	572
[2]	503	7002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	3
	505	7001	TMA (STATIONARY)	DAY	60
[3]	505	7003	TMA (MOBILE OPERATION)	DAY	60

[1] - 11 SIGNS FOR 52 DAYS EACH (INCLUDING 7 DAYS PRIOR TO CONSTRUCTION)
[2] - 3 SIGNS (PCMS WILL BECOME NETRMA PROPERTY UPON CONSTRUCTION COMPLETION)
[3] - 2 TMA'S FOR 30 DAYS EACH

1 REVISED 2/04/2025
FOR ADDENDUM NO. 1

Lochner
TBPE Firm Reg. No. 10488

NETRMA North East Texas Regional Mobility Authority

QUANTITY SUMMARY

SHEET 2 OF 5

SEGMENT	HIGHWAY
SEGMENT 3B NORTH	TOLL 49
DIST	COUNTY	SHEET NO.
TYL	SMITH	9

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DATE: 2/5/2025
FILE: c:\pw_working\lochner-pw-01\d0193193\EPIC.dgn

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

1.

2.

☐ No Action Required ☒ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000

2. Comply with the SW3P and revise when necessary to control pollution or required by the Engineer.

3. Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.

4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☒ No Permit Required

☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)

☐ Individual 404 Permit Required

☐ Other Nationwide Permit Required: NWP• _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.

2.

3.

4.

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☐ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☐ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☐ Grassy Swales

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☐ No Action Required ☒ Required Action

Action No.

1. *Disturbed areas will be re-seeded with native vegatation where possible.*
2.
3.
4.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SW3P:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
FHWA:	Federal Highway Administration	PSL:	Project Specific Location
MOA:	Memorandum of Agreement	TCEQ:	Texas Commission on Environmental Quality
MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
MS4:	Municipal Separate Stormwater Sewer System	TPWD:	Texas Parks and Wildlife Department
MBTA:	Migratory Bird Treaty Act	TxDOT:	Texas Department of Transportation
NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corps of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Points, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:
- Dead or distressed vegetation (not identified as normal)
- Trash piles, drums, canister, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☒ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

STATE OF TEXAS
COREY D. HOGUE
107396
PROFESSIONAL ENGINEER
LICENSED

02/05/2025

Texas Department of Transportation — Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR	
© TxDOT: February 2015	CONT	SECT	JOB	HIGHWAY	
REVISIONS				TOLL 49	
12-12-2011 (DS)	DIST	COUNTY		SHEET NO.	
05-07-14 ADDED NOTE SECTION IV. 01-23-2015 SECTION I CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.		SMITH		102	

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

This SWP3 has been developed in accordance with the TPDES Construction General Permit TXR150000 (CGP). The Texas Department of Transportation (TxDOT) ensures that project specifications include adequate best management practices (BMPs) for this project.

For all projects with soil disturbing activity and for projects that have Environmental, Permits, Issues, and Commitments (EPICs) dependent on stormwater controls and water quality measures TxDOT will maintain a SWP3 with all pertinent records, correspondence, environmental documents, etc. at the project field office, Area Office, or electronically.

This SWP3 is consistent with requirements specified in applicable stormwater plans and the projects environmental permits, issues, and commitments (EPICs). A copy of the CGP is included in Attachment 2.12 of the SWP3 binder.

1.0 SITE/PROJECT DESCRIPTION

1.1 PROJECT CONTROL SECTION JOB (CSJ):
TOLL 49 (SEGMENT 3B NORTH)

1.2 PROJECT LIMITS:

From: **IH 20**

To: **CR 1150**

1.3 PROJECT COORDINATES:

BEGIN: (Lat) **32.468877º** ,(Long) **-095.436767º**

END: (Lat) **32.393993º** ,(Long) **-095.427354º**

1.4 TOTAL PROJECT AREA (Acres): 359.5

1.5 TOTAL AREA TO BE DISTURBED (Acres): 3.7

1.6 NATURE OF CONSTRUCTION ACTIVITY:
ASPHALT CONCRETE OVERLAY, MILLING, BASE REPAIR, AND PAVEMENT MARKINGS

1.7 MAJOR SOIL TYPES:

Soil Type	Description
CUTHBERT FINE SANDY LOAM (CfE)	WELL-DRAINED, MODERATELY DEEP PROFILE WITH SANDY TEXTURE, FOUND ON MODERATE TO STEEP INCLINES
MATTEX LOAM (Ma)	POORLY DRAINED, LOW RUNOFF AND SLOWLY PERMEABLE DARK BROWN, DARK GRAY, OR GRAYISH BROWN SOIL
OAKWOOD FINE SANDY LOAM (OkB)	VERY DEEP, MODERATELY WELL DRAINED, MODERATELY SLOWLY PERMEABLE SOIL THAT FORMED IN LOAMY COSTAL PLAIN SEDIMENT

1.8 PROJECT SPECIFIC LOCATIONS (PSLs):

PSLs must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. PSLs may be identified during preconstruction meetings or during the construction process. Please choose from the options below:

- ☐ PSLs determined during preconstruction meeting
- ☒ PSLs determined during construction
- ☐ No PSLs planned for construction

Type	Sheet #s

All off-ROW PSLs required by the Contractor are the Contractor's responsibility. The Contractor shall secure all permits required by local, state, federal laws for off-ROW PSLs. The contractor shall provide diagrams, areas of disturbance, acreage, and BMPs for all off-ROW PSLs within one mile of the project.

1.9 CONSTRUCTION ACTIVITIES:

(Use the following list as a starting point when developing the Construction Activity Schedule and Ceasing Record in Attachment 2.5.)

- ☒ Mobilization
- ☐ Install sediment and erosion controls
- ☐ Blade existing topsoil into windrows, prep ROW, clear and grub
- ☒ Remove existing pavement
- ☐ Grading operations, excavation, and embankment
- ☐ Excavate and prepare subgrade for proposed pavement widening
- ☐ Remove existing culverts, safety end treatments (SETs)
- ☒ Remove existing metal beam guard fence (MBGF), bridge rail
- ☒ Install proposed pavement per plans
- ☐ Install culverts, culvert extensions, SETs
- ☒ Install mow strip, MBGF, bridge rail
- ☐ Place flex base
- ☐ Rework slopes, grade ditches
- ☐ Blade windrowed material back across slopes
- ☒ Revegetation of unpaved areas
- ☐ Achieve site stabilization and remove sediment and erosion control measures
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.10 POTENTIAL POLLUTANTS AND SOURCES:

- ☒ Sediment laden stormwater from stormwater conveyance over disturbed area
- ☒ Fuels, oils, and lubricants from construction vehicles, equipment, and storage
- ☒ Solvents, paints, adhesives, etc. from various construction activities
- ☒ Transported soils from offsite vehicle tracking
- ☒ Construction debris and waste from various construction activities
- ☒ Contaminated water from excavation or dewatering pump-out water
- ☒ Sanitary waste from onsite restroom facilities
- ☒ Trash from various construction activities/receptacles
- ☒ Long-term stockpiles of material and waste
- ☒
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.11 RECEIVING WATERS:

Receiving waters must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. Include Segment # for receiving waters.

Tributaries	Classified Waterbody
CANEY CREEK	0606 NECHES RIVER
0606A PRAIRIE CREEK	
0606D BLACK FORK CREEK	

* Add (*) for impaired waterbodies with pollutant in ().

1.12 ROLES AND RESPONSIBILITIES: TxDOT

- ☐ Development of plans and specifications
- ☐ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☐ Post Construction Site Notice
- ☐ Submit NOI/CSN to local MS4
- ☐ Perform SWP3 inspections
- ☐ Maintain SWP3 records and update to reflect daily operations
- ☐ Complete and submit Notice of Termination to TCEQ
- ☐ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.13 ROLES AND RESPONSIBILITIES: CONTRACTOR

- ☒ Day To Day Operational Control
- ☐ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☒ Post Construction Site Notice
- ☒ Submit NOI/CSN to local MS4
- ☒ Maintain schedule of major construction activities
- ☐ Install, maintain and modify BMPs
- ☐ Complete and submit Notice of Termination to TCEQ
- ☒ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.14 LOCAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OPERATOR COORDINATION:

MS4 Entity

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

 July 2023 Sheet 1 of 2

Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
			103
STATE	STATE DIST.	COUNTY	
TEXAS	TYL	SMITH	
CONT.	SECT.	JOB	HIGHWAY NO.
			TOLL 49

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

2.0 BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS, INSPECTION, AND MAINTENANCE

The Contractor shall be the responsible party for implementing the BMPs described herein and for complying with the SWP3 for control of erosion and sedimentation during day-to-day operations. The Contractor shall implement changes to this SWP3 approved by TxDOT within the times specified in this SWP3 or the CGP.

2.1 EROSION CONTROL AND SOIL STABILIZATION BMPs:

T / P

- [X] [ ] Protection of Existing Vegetation
- [X] [ ] Vegetated Buffer Zones
- [ ] [ ] Soil Retention Blankets
- [ ] [ ] Geotextiles
- [ ] [ ] Mulching/ Hydromulching
- [ ] [ ] Soil Surface Treatments
- [ ] [ ] Temporary Seeding
- [ ] [ ] Permanent Planting, Sodding or Seeding
- [ ] [ ] Biodegradable Erosion Control Logs
- [ ] [ ] Rock Filter Dams/ Rock Check Dams
- [ ] [ ] Vertical Tracking
- [ ] [ ] Interceptor Swale
- [ ] [ ] Riprap
- [ ] [ ] Diversion Dike
- [ ] [ ] Temporary Pipe Slope Drain
- [ ] [ ] Embankment for Erosion Control
- [ ] [ ] Paved Flumes
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____

2.2 SEDIMENT CONTROL BMPs:

T / P

- [ ] [ ] Biodegradable Erosion Control Logs
- [ ] [ ] Dewatering Controls
- [ ] [ ] Inlet Protection
- [ ] [ ] Rock Filter Dams/ Rock Check Dams
- [ ] [ ] Sandbag Berms
- [ ] [ ] Sediment Control Fence
- [ ] [ ] Stabilized Construction Exit
- [ ] [ ] Floating Turbidity Barrier
- [ ] [ ] Vegetated Buffer Zones
- [ ] [ ] Vegetated Filter Strips
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

Sediment control BMPs requiring design capacity calculations (See SWP3 Attachment 1.3.):

T / P

- [ ] [ ] Sediment Trap
  - [ ] Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
  - [ ] 3,600 cubic feet of storage per acre drained
- [ ] [ ] Sedimentation Basin
  - [ ] Not required (<10 acres disturbed)
  - [ ] Required (>10 acres) and implemented.
    - [ ] Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
    - [ ] 3,600 cubic feet of storage per acre drained
  - [ ] Required (>10 acres), but not feasible due to:
    - [ ] Available area/Site geometry
    - [ ] Site slope/Drainage patterns
    - [ ] Site soils/Geotechnical factors
    - [ ] Public safety
    - [ ] Other: _____

2.3 PERMANENT CONTROLS:

(Coordinate post-construction BMPs with appropriate TxDOT maintenance sections.)

BMPs To Be Left In Place Post Construction:

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.4 OFFSITE VEHICLE TRACKING CONTROLS:

- [X] Excess dirt/mud on road removed daily
- [ ] Haul roads dampened for dust control
- [X] Loaded haul trucks to be covered with tarpaulin
- [ ] Stabilized construction exit
- [ ] Daily street sweeping
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

2.5 POLLUTION PREVENTION MEASURES:

- [ ] Chemical Management
- [X] Concrete and Materials Waste Management
- [X] Debris and Trash Management
- [X] Dust Control
- [X] Sanitary Facilities
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

2.6 VEGETATED BUFFER ZONES:

Natural vegetated buffers shall be maintained as feasible to protect adjacent surface waters. If vegetated natural buffer zones are not feasible due to site geometry, the appropriate additional sediment control measures have been incorporated into this SWP3.

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.7 ALLOWABLE NON-STORMWATER DISCHARGES:

- [X] Fire hydrant flushings
- [X] Irrigation drainage
- [X] Pavement washwater (where spills or leaks have not occurred, and detergents are not used)
- [X] Potable water sources
- [X] Springs
- [X] Uncontaminated groundwater
- [X] Water used to wash vehicles or control dust
- [X] Other allowable non-stormwater discharges as allowed by TPDES GP TXR150000.

2.8 DEWATERING:

Dewatering discharges of accumulated stormwater, groundwater, and surface water including discharges from dewatering of trenches, excavations, foundations, vaults, and other points of accumulation are prohibited unless managed by appropriate controls to prevent and minimize the offsite discharge of sediment and other pollutants.

2.9 INSPECTIONS:

All disturbed areas and erosion and sediment control devices shall be inspected at least once every seven (7) days. Inspections shall be performed by TxDOT as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

When dewatering activities are present, a daily inspection will be conducted once per day during those activities and documented in accordance with CGP and TxDOT requirements.

2.10 MAINTENANCE:

Control measures shall be properly installed according to specifications. If it is determined that a BMP or control measure is not operating effectively, maintenance must be accomplished as soon as possible and before the next anticipated rain event, but in no case later than 7 calendar days after being able to access the site. Maintenance shall be performed by the Contractor as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

July 2023 Sheet 2 of 2

Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
6			104
STATE	STATE DIST.	COUNTY	
TEXAS	TYL	SMITH	
CONT.	SECT.	JOB	HIGHWAY NO.
			TOLL 49

PRICE PROPOSAL SHEET

PROJECT: TOLL 49 SEGMENT 3B NORTH OVERLAY **PRICE PROPOSAL**

COUNTY: SMITH

From: IH 20

To: CR 1150

ITEM NO.	DESC CODE	DESCRIPTION	UNIT PRICE ONLY WRITTEN IN WORDS		UNITS	QUANTITY
			DOLLARS	CENTS		
134	7002	BACKFILL (TY B)			STA	200.3
164	7001	BROADCAST SEED (PERM_RURAL_SAND))			SY	17,808.0
164	7073	BOND FBR MTRX SEED (PERM)(RURAL)(SAND)			SY	0.0
168	7001	VEGETATIVE WATERING			TGL	198.0
314	7008	EMULS ASPH (EROSN CONT)(SS-1)			GAL	5,342.0
344	7030	SP MIXES SP-C SAC-A PG76-22			TON	17,387
351	7005	FLEXIBLE PAVEMENT STRUCTURE REPAIR (6")			SY	11,572
354	70XX	PLANE ASPH CONC PAV(0" TO 2.5")			SY	12,769
354	70XX	PLANE ASPH CONC PAV(2.5")			SY	19,485
502	7001	BARRICADES, SIGNS AND TRAFFIC HANDLING			MO	2
503	7001	PORTABLE CHANGEABLE MESSAGE SIGN			DAY	572
503	7002	PORTABLE CHANGEABLE MESSAGE SIGN			EA	3
505	7001	TMA (STATIONARY)			EA	2
505	7001	TMA			DAY	60
533	7001	MILL RUMBLE STRIPS (ASPHALT)(SHLDR)			LF	46,027
533	7002	MILL RUMBLE STRIPS (ASPHALT)(CENTERLINE)			LF	34,863
540	7001	MTL W-BEAM GD FEN (TIM POST)			LF	775
542	7001	REMOVE METAL BEAM GUARD FENCE			LF	775
544	7002	GUARDRAIL END TREATMENT (MOVE & RESET)			EA	6
658	7019	INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2(BI)			EA	15
658	7078	REMOVE DELIN & OBJECT MARKER ASSMS			EA	273
658	70XX	INSTL DEL ASSM (D-DY)SZ4(FLX)SRF(BI)			EA	273
662	7115	WK ZN PAV MRK SHT TERM RMV (W)(4")			LF	13,738.5
662	7116	WK ZN PAV MRK SHT TERM RMV (Y)(4")			LF	11,983.5
666	7009	REFL PAV MRK TY I (W)6"(DOT)(100MIL)			LF	367
666	7024	REFL PAV MRK TY I (W)8"(SLD)(100MIL)			LF	2,340
666	7030	REFL PAV MRK TY I (W)12"(SLD)(100MIL)			LF	560
666	7036	REFL PAV MRK TY I (W)24"(SLD)(100MIL)			LF	55
666	7060	REFL PAV MRK TY I (W)(LNDP ARROW)(100MIL)			EA	1
666	7171	RE PM TY II (W)4"(SLD)			LF	6,032
666	7213	RE PM TY II (Y)6"(SLD)			LF	6,032
666	7270	RE PROFILE PM TY I (Y)6"(SLD)(100MIL)			LF	53,245
666	7405	REFL PAV MRK TY I (W)4"(SLD)(100MIL)			LF	10
666	7408	REFL PAV MRK TY I (W)6"(BRK)(100MIL)			LF	21
666	7423	REFL PAV MRK TY I (Y)6"(SLD)(100MIL)			LF	12,820
672	7002	REFL PAV MRKR TY I-C			EA	17
672	7004	REFL PAV MRKR TY II-A-A			EA	3,000
672	7006	REFL PAV MRKR TY II-C-R			EA	233
677	7001	ELIM EXT PAV MRK & MRKS (4")			LF	23,897
677	7008	ELIM EXT PAV MRK & MRKS (24")			LF	55
678	7001	PAV SURF PREP FOR MRK (4")			LF	6,032
678	7002	PAV SURF PREP FOR MRK (6")			LF	6,032
3005	7001	MEMBRANE UNDERSEAL			GAL	12,645
500	7001	MOBILIZATION			LS	1

County: Smith

Highway: TOLL 49

GENERAL NOTES

GENERAL

Remove all vegetation from pavement edges, intersections, and driveways prior to planing operations, seal coat, or ACP operations. This work will not be paid for directly, but will be subsidiary to the bid items of the Contract.

Following completion of the overlay through the existing toll gantry (approximately Sta 651+00) the Contractor will cooperate with the Toll Operator "Sice, Inc." so that they can access the site to place the new treadles into the pavement.

Upon completion of the work and before final acceptance, remove all foreign material, stains, and marks from concrete surfaces. Sandblast clean concrete surfaces as directed. Clean existing concrete structures that are marked or stained by the Contractor's operations. This work will not be paid for directly, but will be subsidiary to the bid items of the Contract.

During final clean up, remove all foreign material that has accumulated at bridge abutments and bent caps as approved. All work and equipment involved in the removal of this material is subsidiary to the bid items of the Contract.

ITEM 8. PROSECUTION AND PROGRESS

Time shall be charged according to TxDOT's 2024 Standard Specifications Article 8.3.1.5, Calendar Day.

Work shall only occur between the hours of 9:00 p.m. and 6:30 a.m. During this time, full closures of Toll 49 are allowed from IH 20 to SH 64. Traffic control operations in preparation for full closures may begin each night at 8:00 p.m., but the full closure cannot go into effect until 9:00 p.m. A grace period exists to remove the full closure between 6:00 a.m. and 6:30 a.m. If the nighttime closure is not completely removed by 6:31 a.m., the contractor will incur a $1,000 late closure removal penalty that increases on $1,000 increments each ½-hour until the closure is completely removed.

Paving must occur such that the interior edge condition within an area remains for only one day. For example, if southbound lanes were paved during the nighttime full closure, the adjacent northbound lanes shall be paved during the next full closure to eliminate the edge condition.

Work can begin no earlier than Tuesday, May 27, 2025. Once work begins, time charges commence using the Calendar Day charging structure. The contractor has 48 calendar days to complete the project. The latest date on which the contractor may begin the project is Monday, August 4, 2025. The contractor may begin the project at anytime between May 27, 2025 and August 4, 2025. The contractor must provide the NETRMA with 2-weeks advanced notice prior to beginning work. Once work begins, time charges will begin and will not stop until completion of the project.

County: Smith

Highway: TOLL 49

Due to the constrained working hours, calendar days accrue between 8 p.m. on the day work begins and 6:30 a.m. the following morning. The project includes a progressively increasing incentive and disincentive structure to promote on-time completion of the project. The time-based incentive and disincentive structure uses the structure in the following tables. The incentive structure is limited to 10-days early and maximizes at $32,500 per day and a cumulative amount of $243,775. No cap exists on the disincentive. The maximum daily disincentive is $32,500 per day with no limit on the number days it can accrue.

Work may be performed on any calendar-day night except those noted below:

- Thursday, July 3, 2025 from 9:00 p.m. to 6:30 a.m.
- Friday, July 4, 2025 from 9:00 p.m. to 6:30 a.m.
- Saturday, July 5, 2025 from 9:00 p.m. to 6:30 a.m.
- Sunday, August 31, 2025 from 9:00 p.m. to 6:30 a.m.
- Monday, September 1, 2025 from 9:00 p.m. to 6:30 a.m.

For contract time determination, the engineers assumed a 48-calendar day schedule between the first closure on the night of Monday, June 2, 2025 and the targeted last full closure on the night of Tuesday, July 15, 2025. For activity duration, the engineers assumed:

- Contractors would not work at least one day per week (6 nonwork days),
- Contractors would not work on July 4th (3 nonwork days),
- And the contractor would lose 5 days to rain on anticipated work days within that span.

Portable changeable message boards (PCMBs) are required 7 calendar days prior to full closures beginning and must remain in place as part of the closure traffic control throughout the closure duration. Once construction begins, PCMBs shall display a message during daytime hours alerting motorists of the upcoming closure. During the nighttime closure, the message shall be modified alerting motorists of the full closure. The PCMB requirements for full closures are:

- 1 PCMB adjacent to Toll 49 southbound, 1-mile north of the IH 20 exit ramp
- 2 PCMB on IH 20, each placed a 1-mile from Toll 49 entrance ramps (east and west respectively),
- 2 PCMB on SH 110, each placed a 1-mile from Toll 49 (east and west respectively),
- 2 PCMB on SH 64, each placed a 1-mile from Toll 49 (east and west respectively),
- 1 PCMB adjacent to Toll 49 northbound, 1-mile south of the SH 64 exit ramp,
- 2 PCMB on SH 31, each placed a 1-mile from Toll 49 (east and west respectively),
- 2 PCMB on SH 155, each placed a 1-mile from Toll 49 (east and west respectively),
- 2 PCMB on US 69, each placed a 1-mile from Toll 49 (north and south respectively)

Payment for the 14 PCMBs described will be paid by the day for 11 PCMBs and by the each for 3 PCMBs. After construction completion, 3 PCMBs will become property of NETRMA.

Prepare the progress schedule as a bar chart. The bar chart schedule must clearly indicate workdays and non-workdays, including weather day estimations. This bar chart schedule must be

submitted at least 7-calendar days prior to the preconstruction meeting. The preconstruction meeting must be held at least two weeks prior to the first full closure.

Incentive Structure

Calendar Day	Days Early or Late	Daily Incentive / Disincentive	Cumulative Incentive / Disincentive Available
38	-10	$ 32,500	$ 243,775
39	-9	$ 32,500	$ 211,275
40	-8	$ 32,500	$ 178,775
41	-7	$ 32,500	$ 146,275
42	-6	$ 32,500	$ 113,775
43	-5	$ 27,085	$ 81,275
44	-4	$ 21,670	$ 54,190
45	-3	$ 16,255	$ 32,520
46	-2	$ 10,840	$ 16,265
47	-1	$ 5,425	$ 5,425
48	0	$ -	$ -

Disincentive Structure

Calendar Day	Days Early or Late	Daily Incentive / Disincentive	Cumulative Incentive / Disincentive Available
48	0	$ -	$ -
49	1	$ (5,425)	$ (5,425)
50	2	$ (5,425)	$ (10,850)
51	3	$ (5,425)	$ (16,275)
52	4	$ (5,425)	$ (21,700)
53	5	$ (5,425)	$ (27,125)
54	6	$ (10,840)	$ (37,965)
55	7	$ (10,840)	$ (48,805)
56	8	$ (16,255)	$ (65,060)
57	9	$ (16,255)	$ (81,315)
58	10	$ (21,670)	$ (102,985)
59	11	$ (21,670)	$ (124,655)
60	12	$ (27,085)	$ (151,740)
61	13	$ (27,085)	$ (178,825)
62	14	$ (27,085)	$ (205,910)
63	15	$ (32,500)	$ (238,410)

ITEM 9. MEASUREMENT & PAYMENT

In accordance with Article 9.1., "Measurement of Quantities," furnish the tare and maximum gross weights as well as the volume capacity of all vehicles, trucks, truck-tractors, trailers, semi-trailers, or combination of such vehicles used to deliver materials for this Contract. Also, furnish

calculations supporting these weights and capacities. Provide all measurements required for pay a minimum of 2 days before the trucks are used.

ITEM 134. BACKFILLING PAVEMENT EDGES

Compact the backfill adjacent to the pavement edge with approved equipment. This compaction will not be paid for directly, but will be subsidiary to Item 134.

After the application of fertilizer, apply an emulsified asphalt treatment, consisting of SS-1 asphalt at a rate of 0.3 gal per sq. yd.

Backfill material will be RAP generated for planning operations on this project stockpiled at the NETRMA maintenance yard located on the NW corner of Toll 49 and SH 64.

ITEM 164. SEEDING FOR EROSION CONTROL

Provide a permanent seeding for erosion control as shown in the plans or as directed.

ITEM 166. FERTILIZER

Place fertilizer at the rate of 1 lb. per 9 sq. yd. on areas prepared for seeding.

ITEM 168. VEGETATIVE WATERING

Apply water to all newly placed seeded areas the same day of installation. Maintain the seeded areas in a sufficiently watered condition. Do not allow seeded areas to dry out so that water stress is evident.

ITEM 310. PRIME COAT

Provide emulsion with a dilution rate of 50%.

ITEM 344. SUPERPAVE MIXTURES

Paving and trucking operations shall be sequenced so that delivery trucks enter the workzone in the direction of paving and exit the workzone in the direction of paving. U-turns within the workzone to reach the paver or return to the plant are not allowed.

Source changes are not allowed without written approval by the Engineer.
Reclaimed Asphalt Pavement (RAP) is not allowed in the surface course. Reclaimed Asphalt Shingles (RAS) are not allowed in any course.

The mainlane surface course requires 100% Surface Aggregate Classification (SAC) Class A aggregate. Blending aggregates to meet Class A requirements is not allowed. Provide Class A coarse aggregate for the surface as listed in the TxDOT's *Bituminous Rate Source Quality Catalog* (BRSQC).

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PG76-22 asphalt binder is required in the surface course. Lower performance-grade substitute binders are not permitted in the surface course.

The surface course shall be placed using a spray paver application. This paver must be capable of constructing a spray paver applied tack coat. The tack coat shall be an emulsified membrane placed directly on the existing surface treatment at a residual asphalt rate of between 0.08 gal/SY and 0.10 gal/SY.

Mineral Filler, Additives, and Compaction Aids require the Engineer's approval before use. The need and benefits of using these materials should be clearly articulated in the bidder's response or during the interview phase.

The surface course must have a minimum asphalt content at 50 gyrations of 5.0%. Certificates of Delivery for asphalt binder must be provided to the engineer to confirm asphalt content.
A Material Transfer Device (MTD) is required for surface paving operations. Windrow operations are not allowed.

The surface course shall be constructed with in-place air voids between 3.0% and 7.0%. Table 20 in TxDOT's 2024 Standard Specifications is modified as shown below:

In-Place Air Voids	Placement Payment Adjustment Factor	In-Place Air Voids	Placement Payment Adjustment Factor	In-Place Air Voids	Placement Payment Adjustment Factor
< 1.0	Remove and Replace	3.8	1.025	6.6	1.015
1.1	0.440	3.9	1.050	6.7	1.010
1.2	0.470	4.0	1.075	6.8	1.050
1.3	0.500	4.1	1.075	6.9	1.000
1.4	0.530	4.2	1.075	7	1.000
1.5	0.560	4.3	1.075	7.1	0.097
1.6	0.590	4.4	1.075	7.2	0.094
1.7	0.620	4.5	1.075	7.3	0.091
1.8	0.650	4.6	1.075	7.4	0.088
1.9	0.680	4.7	1.075	7.5	0.085
2.0	0.710	4.8	1.075	7.6	0.082
2.1	0.740	4.9	1.075	7.7	0.079
2.2	0.770	5.0	1.075	7.8	0.076
2.3	0.800	5.1	1.072	7.9	0.073
2.4	0.830	5.2	1.069	8	0.070
2.5	0.860	5.3	1.066	8.1	0.067
2.6	0.890	5.4	1.063	8.2	0.064
2.7	0.920	5.5	1.060	8.3	0.061
2.8	0.950	5.6	1.057	8.4	0.058
2.9	0.980	5.7	1.054	8.5	0.055
3.0	1.000	5.8	1.051	8.6	0.052
3.1	1.000	5.9	1.048	8.7	0.049

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In-Place Air Voids	Placement Payment Adjustment Factor	In-Place Air Voids	Placement Payment Adjustment Factor	In-Place Air Voids	Placement Payment Adjustment Factor
3.2	1.000	6.0	1.045	8.8	0.046
3.3	1.000	6.1	1.040	8.9	0.043
3.4	1.000	6.2	1.035	9	0.040
3.5	1.000	6.3	1.030	>9.0	Remove and Replace
3.6	1.000	6.4	1.025		
3.7	1.000	6.5	1.020		

Give the owner's inspector at the spreading and finishing machine one weight ticket for each load of material. When directed, weigh asphaltic concrete loads on public scales to ensure the proper weight of material.

For materials paid for by the ton, provide a summary spreadsheet in accordance with Article 520.2, "Equipment," in TxDOT's 2024 Standard Specifications.

Use an electrical impedance (non-nuclear) measurement gauge to determine mat segregation and joint density for Part V and Part VIII of test procedure tex-207-F.

ITEM 351. FLEXIBLE PAVEMENT STRUCTURE REPAIR

Replace the unstable pavement structure with 6 in. of asphaltic concrete pavement base (SP MIXES SP- B PG64-22, unless otherwise directed. The Project Manager will determine the exact locations and limits of pavement repair in the field prior to beginning this Item of work.

Furnish planing equipment to remove existing material in accordance with Item 354, as directed. The planing equipment will be subsidiary to Item 351.

Before placement of HMAC the limits of the structure repair shall be proof rolled in accordance with Item 216.

Furnish an asphalt paver in accordance with Item 320 unless otherwise directed.

Material removed will be salvaged. Deliver and stockpile salvaged material at the NETRMA maintenance yard located on the NW corner of Toll 49 and SH 64.

ITEM 354. PLANING AND TEXTURING PAVEMENT

Overlay all planed areas by the end of each day unless otherwise approved.

If unsuitable weather or other unexpected conditions do not allow planed areas to be overlaid, provide and maintain warning signs for overnight lane closures in accordance with the traffic control plan sheets until overlay operations are complete.

Any damage to concrete mow strip during planning operations will be repaired at the contractor's expense.

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All RAP generated from this project belongs to the NETRMA. Unless otherwise approved, Contractor will be required to deliver the RAP to the maintenance yard located on the NW corner of Toll 49 and SH 64. This work will not be paid for directly, but will be subsidiary to this item.

The NET RMA has established a corrected PGL for the bridge approaches to improve the ride quality on this project that will be included in the planned milling. The contractor will be required to run a wire line for grade control the length of the milled area. The NET RMA will provide the adjusted profile prior to the activity and it will be the responsibility of the contractor to set up the grade control system at the points provided and provide verification to field staff of the correctness of any offset and height adjustments made to accommodate operations.

ITEM 502. BARRICADES, SIGNS, AND TRAFFIC HANDLING

The traffic control plan for this Contract consists of: the installation and maintenance of warning signs and other traffic control devices shown on the plans; specification data, which may be included in the general notes; applicable provisions of the Texas Manual on Uniform Traffic Control Devices (TMUTCD); traffic control plan sheets included on the plans; standard BC sheets; Compliant Work Zone Traffic Control Device List, and Item 502 of the standard specifications.

Use ground-mounted sign mounts with two posts for all temporary work zone signs unless otherwise directed.

Inspect and correct deficiencies each day throughout the duration of the Contract. In accordance with Article 502.4., "Payment," no payment will be made for the month if the Contractor fails to provide or properly maintain signs and devices in compliance with Contract requirements. Temporary warning signs that are visible when conditions do not apply will be considered improper maintenance of signs.

Provide at least one employee on call nights and weekends (or any other time that work is not in progress) for maintenance of signs and traffic control devices. This employee must have an address and telephone number near the project, as approved. Notify the Engineer in writing of the name, address, and telephone number of this employee. The Engineer will furnish this information to local law enforcement officials.

In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 30 minutes.

Sign all roads intersecting the project in accordance with current BC standards.

Refer to the traffic control plan sheets for traffic handling through the work area. Contractor may vary the signing arrangement and spacing as necessary to fit field conditions; however, any proposed changes in the traffic control plan must be approved before implementation.

When the sequence of work is shown on the plans, the Contractor may submit an alternate proposal for approval. Submit in writing all proposed variations and revisions.

High-visibility safety apparel is required for workers in accordance with the General Notes on current BC standards.

Place and maintain signs, channelizing devices, and flaggers to direct and route traffic at any location and for any period of time as may be required or directed.

Maintain existing roadside signs within this project's limits during this Contract. In order to accommodate the grading or other operations, temporarily relocate these signs in accordance with the TMUTCD as directed. Use ground-mounted sign mounts with two posts for all relocated signs unless otherwise directed. This work will not be paid for directly, but will be subsidiary to Item 502.

Provide truck-mounted attenuators (TMA) as shown on the appropriate traffic control plan sheets. Provide a letter certifying that all TMA used on this project meet NCHRP 350 or AASHTO Manual for Assessing Safety Hardware (MASH) requirements.
Regulate all construction activities and equipment to minimize inconvenience to the traveling public. At points where it is necessary for trucks to stop, load, or unload, provide warning signs and flaggers to protect the traveling public.

U-turns on Toll 49 for trucks delivering any type of construction material (e.g., HMA, embankment, backfill) is not allowed.

Prior to beginning work, the Contractor and Engineer must agree on the allowable length of lane closure.

All work required by these general notes, except as provided for by Item 502, will not be paid for directly, but will be subsidiary to Item 502 unless otherwise shown on the plans.

ITEM 503. PORTABLE CHANGEABLE MESSAGE SIGN

All Portable Changeable Message Sign (PCMS) will be "SMC 2000 Full Matrix Solar Message Center" or approved equal. The LED display shall have the capability of Full-matrix display that can provide graphic messages and arrows. The controller shall be WIFI compatible with features including secure password protection, calendar day programming and include a minimum of 250 preprogrammed messages and the capability for an additional 100 user-created messages.

After construction completion, 3 PCMS will become property of NETRMA. The Project Manager will approve the 3 PCMS and label them so they are identifiable and cannot be removed from the project without the NETRMAs permission. The communication plan shall be transferable to the NETRMA.

Provide a non-erodible, stable surface to place the PCMS units adjacent to the roadway as directed. Payment for this surface is incidental to Item 503.

ITEM 505. TRUCK-MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)

Shadow vehicles with truck mounted attenuator (TMA) are required on the traffic control plan and TCP standards for this project. The Contractor will be responsible for determining if one or more of these traffic control operations will be ongoing at the same time to determine the total number of TMAs needed for the project. Additional truck mounted attenuators (TMAs) may be required as deemed necessary by the Engineer.

ITEM 506. TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS

Provide the following Items for the SWP3 for this Contract as directed on a force account basis:

Temporary sediment control fence, seeding for erosion control, earthwork for erosion control, and vegetative watering

ITEM 533. RUMBLE STRIPS

Provide traffic control for roadways with other lane configurations as directed.

Provide a sweeper that meets the requirements of Section 354.2.3.

One set of centerline rumble strips is required when the median width is between 24 inches and 36 inches. Two sets of centerline rumble strips are required when the median width is between 36 inches and 48 inches.

ITEM 540. METAL BEAM GUARD FENCE

All work involved in placement of timber posts in soil cement riprap must be included in the price bid for Item 540

Do not paint treated timber posts.

Prior to removal of existing MBGF and associated appurtenances, submit to the Engineer for approval a work plan, including a detailed timeline, outlining removal and reinstallation of safety features. It is the intent that the Contractor has the necessary materials and labor force available to reinstall the safety features prior to beginning the removal process.

Regardless of when the Contractor installs proposed MBGF, set the rail height to account for any subsequent surfacing work in order to be in accordance with standard MBGF upon completion of the Contract.

When replacing guard rail, ensure that all segments of guard rail removed are replaced the same workday before opening to traffic.

The existing concrete mowstrip shall be re-used. Repair to the concrete mowstrip due to MBGF removal and replacement operations will not be paid for directly by will be subsidiary to Item 540.

ITEM 542. REMOVING METAL BEAM GUARD FENCE

All metal beam guard fence and associated hardware will be salvaged and delivered to the NETRMA maintenance yard located on the NW corner of Toll 49 and SH 64.

ITEM 585. RIDE QUALITY FOR PAVEMENT SURFACES

Unless otherwise noted below, TxDOT Item 585, "Ride Quality for Pavement Surfaces," from the 2024 Standard Specifications applies.

Preconstruction ride quality data were collected on November 6, 2024.

provides the lane descriptions for the data collection. *Table 2, Table 3,* and *Table 4* provide the preconstruction IRI values averaged on 0.1-mi increments. These tables also provide notes on leave-outs.

Bridges shall not be overlaid and will be considered leave-outs in the post-construction ride quality analysis. 100 ft. lead-in and lead-out lengths are permissible on all bridge ends. These areas shall be tested using a 10 ft. straight-edge as outlined in Test Type A of Item 585. 100 ft. lead-in and lead-out lengths are permissible at each end of the project. These areas shall be tested using a 10 ft. straight-edge as outlined in Test Type A of Item 585. Preconstruction .pro files are available upon request.

Table 1. Toll 49 Segment 3B Ride Quality Lane Descriptions

SB Outside Lane:	K2	Includes right (slow) lane in Super 2 locations
SB Mainlane:	K1	Includes single lane and left (passing) lane in Super 2 locations
NB Mainlane:	K6	Includes single lane

Table 2. Lane K2 Preconstruction Ride Quality

Toll 49 Segment 3B North (K2) Southbound Outside Lane

Distance	Begin	End	IRI(L)	IRI(R)	Avg IRI
0.1	527+34	532+62	54.55	70.56	63
0.2	532+62	537+90	69.96	61.2	66
0.3	537+90	543+18	53.44	46.97	50
0.4	543+18	548+46	68.83	61.32	65
0.5	548+46	553+74	124.74	124.51	125
0.6	553+74	559+02	90.5	89.69	90
0.7	559+02	564+30	108.66	103.51	106
0.8	564+30	569+58	73.23	79.79	77
0.9	569+58	574+86	58.23	52.23	55
1	574+86	580+14	65.27	73.76	70
1.1	580+14	585+42	59.74	74.4	67

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1.2	585+42	590+70	64.33	64.66	64
1.3	590+70	595+98	51.22	46.93	49
1.4	595+98	601+26	57.51	73.51	66
1.5	601+26	606+54	90.58	94.54	93

Table 3. Lane K1 Preconstruction Ride Quality Data
Toll 49 Segment 3B North (K1) Southbound Mainlane and Passing Lane

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Distance	Begin	End	IRI(L)	IRI(R)	Avg IRI
0.1	458+78	464+06	38	41.57	40
0.2	464+06	469+34	67.37	67.17	67
0.3	469+34	474+62	50.48	53.52	52
0.4	474+62	479+90	47.58	42.97	45
0.5	479+90	485+18	62.26	83.21	73
0.6	485+18	490+46	67.92	80.73	74
0.7	490+46	495+74	49.27	58.61	54
0.8	495+74	501+02	50.02	52.6	51
0.9	501+02	506+30	69.25	70.27	70
1	506+30	511+58	73.06	79.54	76
1.1	511+58	516+86	52.23	53.05	53
1.2	516+86	522+14	54.46	57.15	56
1.3	522+14	527+42	69.12	74.06	72
1.4	527+42	532+70	60.75	67.8	64
1.5	532+70	537+98	59.62	65.64	63
1.6	537+98	543+26	44.59	41.23	43
1.7	543+26	548+54	61.02	59.54	60
1.8	548+54	553+82	104.88	123.37	114
1.9	553+82	559+10	108.33	98.08	103
2	559+10	564+38	121.93	125.69	124
2.1	564+38	569+66	89.82	98.52	94
2.2	569+66	574+94	63.35	79.59	71
2.3	574+94	580+22	70.64	71.25	71
2.4	580+22	585+50	78.1	72.85	75
2.5	585+50	590+78	108.29	97.6	103
2.6	590+78	596+06	68	73.67	71
2.7	596+06	601+34	67.29	68.1	68
2.8	601+34	606+62	77.33	75.45	76
2.9	606+62	611+90	64.57	64.96	65
2.9713	611+90	615+66.5	115.54	102.59	109
3.0972	615+66.5	622+31.3	Caney Creek Bridge Leave-out (664.8 ft)		
3.1	622+31.3	622+46	131.97	109	120
3.2	622+46	627+74	101.56	79.79	91
3.3	627+74	633+02	65.15	63.89	65
3.4	633+02	638+30	84.96	68.2	77
3.5	638+30	643+58	52.77	57.04	55
3.6	643+58	648+86	61.29	80.76	71
3.7	648+86	654+14	109.39	117.77	114
3.8	654+14	659+42	65.42	66.89	66
3.8506	659+42	662+09.2	79.75	93.86	87
4.2041	662+09.2	680+75.3	Prairie Creek Bridge Leave-out (1,866.1 ft)		
4.3	680+75.3	685+81.7	80.47	94.49	87
4.4	685+81.7	691+09.7	82.83	77.95	80

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4.5	691+09.7	696+37.7	83.81	78.44	81
4.6	696+37.7	701+65.7	64.13	80.23	72
4.6319	701+65.7	703+34.1	85.51	92.75	89
4.8107	703+34.1	712+78.2	Black Fork Creek Bridge Leave-out (944.1 ft)		
4.9	712+78.2	717+49.7	76.93	79.18	78
5	717+49.7	722+77.7	65.01	61.61	63
5.0143	722+77.7	723+53.2	69.04	63.83	66

Table 4. Lane K6 Preconstruction Ride Quality Data
Toll 49 Segment 3B North (K*6*) *North*bound Mainlane

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Distance	Begin	End	IRI(L)	IRI(R)	Avg IRI
0.1	724+08.	718+80.	84.89	80.73	83
0.2	718+80.	713+52.	87.12	84.74	86
0.201	713+52.	713+46.7	-	-	-
0.3795	713+46.7	704+04.4	Black Fork Creek Bridge Leave-out (942.3 ft)		
0.4	704+04.4	702+96.2	119.57	85.29	102
0.5	702+96.2	697+68.2	88.48	75.81	82
0.6	697+68.2	692+40.2	66.28	78.56	72
0.7	692+40.2	687+12.2	57.95	50.36	54
0.8	687+12.2	681+84.2	92.44	149.06	121
0.8179	681+84.2	680+89.7	80.79	137.61	109
1.1658	680+89.7	662+52.5	Prairie Creek Bridge Leave-out (1,837.2 ft)		
1.2	662+52.5	660+71.9	155.96	127.61	142
1.3	660+71.9	655+43.9	77.33	73.82	76
1.4	655+43.9	650+15.9	122.44	102.61	113
1.5	650+15.9	644+87.9	78.94	52.91	66
1.6	644+87.9	639+59.9	60.7	63.45	62
1.7	639+59.9	634+31.9	103.32	86.08	95
1.8	634+31.9	629+03.9	56.84	63.28	60
1.9	629+03.9	623+75.9	100.33	93.09	97
1.9158	623+75.9	622+92.5	102.09	92	97
2.0316	622+92.5	616+80.8	Caney Creek Bridge Leave-out (611.7 ft)		
2.1	616+80.8	613+19.6	81.46	84.34	83
2.2	613+19.6	607+91.6	72.16	74.07	73
2.3	607+91.6	602+63.6	95.29	101.03	98
2.4	602+63.6	597+35.6	63.66	70.83	67
2.5	597+35.6	592+07.6	60.94	61.24	61
2.6	592+07.6	586+79.6	82.82	94.79	89
2.7	586+79.6	581+51.6	88.46	78.54	83
2.8	581+51.6	576+23.6	61.92	74.69	68
2.9	576+23.6	570+95.6	57.05	62.31	60
3	570+95.6	565+67.6	72.34	80.91	77
3.1	565+67.6	560+39.6	95.75	105.22	100
3.2	560+39.6	555+11.6	102.25	131.99	117
3.3	555+11.6	549+83.6	85.39	104.89	95
3.4	549+83.6	544+55.6	55.79	67.69	62
3.5	544+55.6	539+27.6	45.78	55.75	51
3.6	539+27.6	533+99.6	49.73	49.31	50
3.7	533+99.6	528+71.6	61.19	79.63	70
3.8	528+71.6	523+43.6	72.07	68.09	70
3.9	523+43.6	518+15.6	63.19	59.72	61
4	518+15.6	512+87.6	80.27	74.28	77
4.1	512+87.6	507+59.6	77.3	77.08	77

4.2	507+59.6	502+31.6	95.55	90.31	93
4.3	502+31.6	497+03.6	65.93	62.52	64
4.4	497+03.6	491+75.6	50.63	51.78	51
4.5	491+75.6	486+47.6	95.39	67.9	82
4.6	486+47.6	481+19.6	104.85	92.77	99
4.7	481+19.6	475+91.6	61.77	66	64
4.8	475+91.6	470+63.6	50.8	53.93	52
4.9	470+63.6	465+35.6	79.09	67	73
5	465+35.6	460+07.6	56.81	52.02	54
5.0122	460+07.6	459+43.2	54.15	48.09	51

Use Surface Test TY B to evaluate the smoothness of all travel lanes.

Ride quality bonus/penalty payment for all travel lanes shall use the formulas shown in *Table 4*.

Table 4. Travel Lane Ride Quality Bonus/Penalty Structure

Average IRI Range for 0.1-mi. section (in./mi.)	Pay Adjustment ($/0.1-mi Section)
IRI < 25	3000
25 ≤ IRI < 35	-250*(IRI)+9250
35 ≤ IRI < 45	-50*(IRI)+2250
45 ≤ IRI < 55	0
55 ≤ IRI < 65	-50*(IRI)+2700
65 ≤ IRI < 80	-160*(IRI)+9740
80 ≤ IRI	*Deficient

*All deficient sections require corrective work to bring the average IRI value below the deficient threshold (i.e., 80 in./mi.) unless the engineer decides to impose a $6,000 per deficient section penalty. After performing corrective work, deficient sections shall be reprofiled to ensure ride quality is no longer deficient. Each adjacent 0.1-mi section must also be reprofiled to ensure corrective work did not impact the ride quality of adjacent sections. If the ride quality changes by more than +6 in./mi in the adjacent sections, the new ride quality will be used or corrective work required if indicated by the new measurements. The appropriate bonus/penalty shall be applied to the corrected surface. Corrective work shall be done at night and the appropriate liquidated damages shall be applied if the contract time has been exhausted.

ITEM 658. DELINEATOR AND OBJECT MARKER ASSEMBLIES

Accept ownership of unsalvageable delineator and object marker assemblies and remove from the right of way.

ITEM 662. WORK ZONE PAVEMENT MARKINGS

Furnish and place work zone pavement markings (short term)(tape) on center lines and lane lines in accordance with WZ(STPM), and provide warning signs in accordance with TCP (7-1). Place tape within 1 in. of the proper alignment as established by the Contractor and approved by the Engineer. Remove tape after placement of permanent markings. Tape removal will be subsidiary to Item 662. Tabs are not allowed.

Multiple Move-ins will be required to maintain adequate striping.

ITEM 666. RETROREFLECTORIZED PAVEMENT MARKINGS

Place Type II Pavement Markings as a sealer for Type I Pavement Markings on bridge and concrete surfaces only. Place Type I Markings a minimum of seven (7) calendar days after placing Type II Markings.

Use the spray method for application of the thermoplastic compound for lane lines, barrier lines, edge lines and channelizing lines.

Extrude hot to the pavement surface thermoplastic compound for arrows, stop lines, yield triangles, transverse lines, crosswalk lines, words and symbols.

For lengths greater than 300-ft, provide guide markings that will not leave a permanent mark on the roadway. Have the guide marking material and equipment used for placement approved prior to use. Provide adequate notification for approval of the guide markings prior to placement of the permanent pavement markings.

Pilot guideline markings are required. Must provide a crew experienced in the work of installing pilot guideline markings and in the necessary traffic control. Supply all the equipment, personnel, traffic control, and materials necessary for the placement of pilot guideline markings as directed. All work will be in conformance with Part 6 of the TMUTCD.

Correct deficiencies in the alignment of pavement markings at Contractor’s expense, as directed. Use a strip seal with aggregate and asphalt types and rates as directed to eliminate the deficient pavement markings.

ITEM 672. RAISED PAVEMENT MARKERS

Provide dispensing equipment such that the bituminous material can be directly applied from the melting pot to the pavement surface without secondary handling. Dispensing material from the melting pot into a separate container and then to the pavement surface will not be permitted. Intermittent agitation of the bituminous material will be by a method approved by the Engineer to ensure even heat distribution and must be such that the adhesive is agitated at approved and consistent intervals.

ITEM 677. ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS

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Furnish a high-pressure water blasting system for removing paint, thermoplastic, epoxy and preformed tape material from the following surfaces without causing any grooves or trenching of the surface: asphalt, concrete, permeable friction course, grooved asphalt and grooved concrete.

Use a high-pressure water blasting system that consists of a vacuum recovery system that must provide for a nearly dry surface eliminating the possibility of uncontained run-off blasting water or debris, or the need for any secondary clean-up vehicles or operations.

All components required for the complete operation of the water blasting system (ultra-high-pressure pump, vacuum system, clean water supply, vacuum recovery storage, primary truck-mounted and optional secondary tractor-mounted blasting components) must be mounted and transported on a single, fully self-contained and supporting single truck chassis, thereby eliminating the need for any additional water, vacuum or other transport vehicles.

Multiple Move-ins will be required to maintain adequate striping.