

**EXHIBIT 2**

**DB CONTRACTOR'S PROPOSAL COMMITMENTS, ATCS AND SCHEMATICS**

**Appendix 1:**            **Proposal Commitments**

**Appendix 2:**            **ATCs**

**Appendix 3:**            **Schematics**

**APPENDIX 1 TO EXHIBIT 2**

**PROPOSAL COMMITMENTS**

**SUBSTANTIAL COMPLETION DEADLINE**

Substantial Completion will be achieved 644 days after NTP1.

**KEY PERSONNEL**

<b>Name of Key Personnel</b>	<b>Key Personnel Position</b>
Kurt Knebel	Project Manager
Jeff Billows, PMP	Construction Manager
Larry Zamora, PE	Design Manager
Robert Austin, PE	Professional Services Quality Control Manager
Floyd Martinez, PE	Design Quality Assurance Manager
Jerry Mayer, PE	Construction Quality Control Manager
Brandy Leighton, PE	Construction Quality Acceptance Manager
Jason Maldonado, CFM	Environmental Compliance Manager
Bruce Fuller	Safety Manager

**OTHER PROPOSAL COMMITMENTS**

<b>ID #</b>	<b>Proposal Location</b>	<b>Proposal Commitment</b>
2	Section D, 4.1.1.1 (b), pg 2	All existing traffic movements to SH130 and FM973 will be maintained and access to all adjoining properties will be maintained at all times.
3	Section D, 4.1.1.1 (c), pg 2	Prior to a shift of traffic for every phase, the DB Contractor will make repairs to the pavement that will be under traffic in the subsequent phase. If a pavement requires repair after a traffic shift the DB Contractor will be perform the repair during off-peak hours and in accordance with standard TCP or a TCP approved by the Engineer.
4	Section D, 4.1.1.4 (d), pg 4	No additional drainage easements.
5	Section D, 4.1.3 (b), pg 6	In addition to the existing requirements of <u>Section 6.2.2.2</u> , the Utility Owners will be given access to a ProjectWise portal allowing them to share documents and access current design files and schedules.

ID #	Proposal Location	Proposal Commitment
6	Section D, 4.1.3 (c), pg 6	In addition to the existing requirements of <u>Section 6.2.2.2</u> during the Utility Coordination process, the DB Contractor will implement a conflict resolution protocol, including a conflict resolution matrix outlining items such as schedule, cost and feasibility of alternatives.
7	Section D, 4.2.1 (a), pg 7	In addition to the existing co-location requirements of <u>Section 2.10</u> , the DB Contractor will establish a single project office to house design, preconstruction and TxDOT staff. The project office will serve as a preconstruction office during design, as well as the overall project management administration office throughout construction.
8	Section D, 4.2.1 (a), pg 7	In addition to the existing requirements of <u>Section 2.1.2</u> , the DB Contractor will provide a full-time document control manager for the project.
9	Section D, 4.2.1 (c) pg 8-9	In addition to the existing requirements of <u>Section 5.4</u> , after NTP all third-party stake holders will be invited to a Preconstruction Conference.
10	Section D, 4.2.1 (c) pg 9	In addition to the existing requirements of <u>Sections 2.3 &amp; 5.4</u> prior to any construction activity, the affected third party and stake holders will be invited to participate in our preparatory and work plan meetings to ensure everyone is aware of what is planned and when it will occur.
11	Section D, 4.2.1 (c) pg 9	In addition to the existing requirements of <u>Sections 2.3 &amp; 5.4</u> , meetings will be held with third-party property owners (such as ABIA) to ensure traffic control and construction traffic has minimal impact to their operations.
12	Section D, 4.2.1 (c) pg 9	Meetings will be held with adjacent property owners prior to any construction activities that may affect the access or operations of the property.
13	Section D, 4.2.1 (d) pg 9	"Task forces" will be developed for specific disciplines, and consist of both design and construction personnel. Weekly task force meetings will be held and attendees will include management, schedulers, and estimators as necessary. During the Project, these meetings will be expanded to include subcontractors, suppliers, the City of Austin, stakeholders, utilities, ABIA, and TxDOT.

ID #	Proposal Location	Proposal Commitment
14	Section D, 4.2.1 (e) pg 9	TxDOT and DB Contractor will meet immediately upon award of the contract for a half day partnering session to establish the “Design-Build Project Charter” outlining agreed upon expectations of both parties (i.e.. Meeting participation, packaging of submittals, review times, communication methods, team goals, and other specific areas of concern).
15	Section D, 4.2.1 (e) pg 10	An Executive Oversight Committee, consisting of TxDOT and DB Contractor, will meet quarterly throughout the project to evaluate the project performance against the Charter objective and to address any issues that are negatively affecting the project team.
16	Section D, 4.2.2 (b), pg 13-14	<p>In addition to the existing Key Personnel requirements in <u>Section 7.4</u>, Key Personnel commitments include the following:</p> <ul style="list-style-type: none"> <li>• Project Manager (100% committed to ensuring success of the project and will spend time on site as needed)</li> <li>• Construction Manager (100%)</li> <li>• Design Manager (100% during the design phase)</li> <li>• DQAM (100% during the design phase)</li> <li>• CQAM (100% during construction)</li> <li>• Safety Manager (100% during construction)</li> </ul>
17	Section D, 4.2.4 (c), pg 16	<p>In addition to the existing requirements in <u>Section 19</u>, the DB Contractor’s daily inspections of the corridor will include access to adjacent properties to verify that access is being properly maintained. Daily inspections by the DB Contractor will be completed to ensure the roadway is being properly maintained and to identify and repair any damage.</p> <p>Dust/Erosion crews will circulate the project on a daily basis to ensure compliance with dust control/erosion control policies.</p>
18	Section D, 4.2.4 (d), pg 16	DB Contractor will meet with management of adjacent projects on a monthly basis to coordinate schedules/resolve issues.
19	Section D, 4.2.4 (e), pg 16	In addition to the existing requirements of <u>Section 18.2.1(n)</u> , the message signs will broadcast upcoming traffic switches at least 30 days in advance.
20	Section D, 4.2.4 (e), pg 16	In addition to the existing requirements of <u>Section 3.2.7</u> , information for the project website will be provided to TxDOT and will include updated weekly project traffic updates.

<b>ID #</b>	<b>Proposal Location</b>	<b>Proposal Commitment</b>
21	Section D, 4.2.5 (c ) pg 18	In addition to the existing monthly Project Status Schedule Updates, DB Contractor’s reporting will include a Schedule Performance Index and a Cost Performance Index based on planned costs
22	Section D, 4.2.8 (c), pg 21	In addition to the comprehensive Safety Plan, all subcontractors must submit a Site-Specific Safety Plan.
23	Section D, 4.2.8 (c), pg 21	Additional commitments to the Project Specific Safety Plan will include the following: <ul style="list-style-type: none"> <li>• Comprehensive job site safety inspections will occur on a regular basis including daily inspections by foremen and safety monitors;</li> <li>• Weekly inspections with written reports by the superintendent and a labor representative;</li> <li>• Unannounced inspections by the Safety Manager at least bi-weekly; and</li> <li>• Monthly Project Director’s monthly safety inspection.</li> </ul>
24	Section D, 4.2.8 (c), pg 21	All employees, both McCarthy and any subcontractors, will fill out a Task Hazard Analysis for the specific task they are working on that day.
25	Section D, 4.2.8 (e), pg 22	Any work in close proximity to live traffic will be suspended during extremely high traffic periods (such as COTA events) to ensure safety.
26	Section D, 4.2.9, pg 23	DB Contractor will establish a “Heavy Highway Mentoring Program” with the goal of growing DBE firms on the Project. A survey will be conducted/distributed to DBE firms in the region to determine specific needs prior to implementation.
27	Section D, 4.2.9, pg 23	Mentoring Program: Workshop Training- annual 1-day training workshops (two training series) located at the Hilton Hotel at ABIA (three one-hour workshops in the morning and three in the afternoon).
28	Section D, 4.2.10 (a), pg 24	Work that requires a lane closure on Presidential Blvd and Spirit of Texas will be done under single lane closures.
29	Section D, 4.2.10 (a), pg 24	The Presidential Blvd widening will be completed in three months.
30	Section D, 4.2.12 (a), pg 26	DB Contractor’s Maintenance Group will travel the corridor on a weekly basis and videotape the condition of traffic control measures and general condition of the corridor. Maintenance group will review and assess tapes on a monthly basis and recommend improvements. All inspections and video tapes will be saved to the web-based document control system.

ID #	Proposal Location	Proposal Commitment
31	Section D, 4.2.12 (b), pg 26	Maintenance Group will spend the final month of the Project working with the Authority's maintenance group to facilitate the transition of maintenance responsibilities.
32	Section D, 4.3.1 (a) 3, pg 27	In addition to the existing requirements of <u>Section 2.1.2.1</u> , TxDOT will have access to all documents within Document Control 24/7.
33	Section D, 4.3.1 (a) 4, pg 27-28	DB Contractor will conduct an internal quality audit within two months from commencement and quarterly thereafter of the Team's processes to identify corrective and preventative actions, non-compliance, repeat non-compliance safety issues, risks, and improvement opportunities.
34	Section D, 4.3.1 (e), pg 28-29	<p>The Quality Management Plan will outline the documentation of construction deficiencies and non-compliance issues on a Non-Compliance Report (NCR). The NCR will be forwarded to the Project Manager for action. The NCR will include at least the following information:</p> <ol style="list-style-type: none"> <li>1. A unique NCR# will be assigned from the NCR log</li> <li>2. Definition and identification of non-conforming condition</li> <li>3. Classification for required action</li> <li>4. The person responsible for resolution (assigned by the PM)</li> <li>5. A description of the resolution</li> <li>6. The date of resolution (signed &amp; dated by person responsible for resolution)</li> <li>7. QCM's concurrence (prior to implementation of correction action)</li> <li>8. QCM will provide follow-up inspections, verification and NCR closure</li> </ol> <p>A detailed NCR log will be kept up to date with the status of all NCRs.</p>

**APPENDIX 2 TO EXHIBIT 2**

The following table contains the DB Contractor’s approved alternative technical concepts (ATCs), as well as approved ATCs of unsuccessful Proposers, that the DB Contractor has committed to incorporate into the Project. The Deviations set forth in the ATC submittals are approved by TxDOT subject to satisfaction of any conditions set forth in the letters from TxDOT to DB Contractor or the unsuccessful Proposer. Such Deviations, subject to satisfaction of any listed “conditions,” expressly supersede any conflicting provisions in the Technical Provisions, as provided in Section 1.2.2 of the Design-Build Agreement. The ATCs shall otherwise meet all requirements of the Technical Provisions.

**ATCs**

<b>ID #</b>	<b>Proposal Location</b>	<b>Proposal Commitment</b>
ATC #2	Section D, 4.1, pg 1	Commit to implementing this ATC (Reduce FM973 structure costs)
ATC #3	Section D, 4.1, pg 1	Commit to implementing this ATC (Reduce FM973 structure costs)
ATC #4	Section D, 4.1, pg 1	Commit to implementing this ATC (Reduce FM973 structure costs)
ATC #6	Section D, 4.1, pg 1	Commit to implementing this ATC (Reduce Presidential Blvd. architectural pylon costs)
ATC #7	Section D, 4.1, pg 1	Commit to implementing this ATC (Reduce Presidential Blvd. architectural pylon costs)
Supp ATC#1		Commit to implementing supplemental ATC (MSE wall staggered horizontal joint and aligned vertical joint pattern)
Supp ATC#3		Commit to implementing supplemental ATC (1" TOM for new flexible pavement sections)
Supp ATC#4		Commit to implementing supplemental ATC (Prime coat underseal in lieu of one course surface treatment)
Supp ATC#11		Commit to implementing supplemental ATC (1" TOM for mill and overlay sections)

**APPENDIX 3 TO EXHIBIT 2**

**SCHEMATICS**

The attached CD contains DB Contractor's Schematics, which formed the basis of DB Contractor's Proposal.

SH71  
Express  
Project



TECHNICAL DRAWINGS,  
GRAPHS, AND DATA

**MCCARTHY**

5/16/2014 11:14:33 AM

T:\Engdata\Standards\Title\TITLESHT.dgn

LEVELS DISPLAYED
1

PROJECT TITLE AND NAME  
c:\projects\travis\travis\travis.dwg

COUNTY \_\_\_\_\_ PROJ. NO. \_\_\_\_\_  
HWY. NO. \_\_\_\_\_ LETTING DATE \_\_\_\_\_  
DATE ACCEPTED \_\_\_\_\_

### INDEX OF SHEETS

SHEET NO.	DESCRIPTION
<b>GENERAL</b>	
1	TITLE SHEET AND INDEX OF SHEETS
2 - 9	TYPICAL SECTIONS
<b>TRAFFIC CONTROL PLAN</b>	
10 - 26	TCP TYPICAL SECTIONS
27 - 29	PHASE 1 TCP LAYOUT
30 - 32	PHASE 2 TCP LAYOUT
33 - 35	PHASE 3 TCP LAYOUT
36 - 38	PHASE 4 TCP LAYOUT
39 - 41	PHASE 5 TCP LAYOUT
<b>ROADWAY DETAILS</b>	
42 - 48	HORIZONTAL ALIGNMENT DATA
49	SUPER ELEVATION TABLE
50 - 58	SH 71 PLAN & PROFILE
59 - 61	FM 973 PLAN
62 - 63	SH 71 EB PROFILE
64 - 65	SH 71 WB PROFILE
66 - 67	FM 973 NB PROFILE
68 - 69	FM 973 SB PROFILE
70	SH 71 FRONTAGE ROAD PROFILES
71	SH 71 TURNAROUND PROFILES
72 - 74	SH 71 RAMP PROFILES
<b>DRAINAGE DETAILS</b>	
75	DRAINAGE AREA MAP
76 - 93	SH 71 DRAINAGE PLAN
94 - 98	FM 973 DRAINAGE PLAN
<b>BRIDGES</b>	
99 - 100	SH 71 SPIRIT OF TEXAS DRIVE - BRIDGE LAYOUT
101	SH 71 PRESIDENTIAL BLVD - BRIDGE WIDENING
102	SH 71 PRESIDENTIAL BLVD - ESTIMATED QUANTITIES
103	SH 71 PRESIDENTIAL BLVD - SOIL NAIL WALL DETAILS
104 - 105	SH 71 FM 973 - BRIDGE LAYOUT
106 - 108	SH 130 FLYOVER - BRIDGE LAYOUT
109	SH 130 FLYOVER - ESTIMATED QUANTITIES
110	SH 130 FLYOVER - AESTHETIC DETAILS
111 - 112	SH 71 ONION CREEK - BRIDGE LAYOUT

### RETAINING WALL

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, JUNE 1, 2004 AND THE SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000--007)

# STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

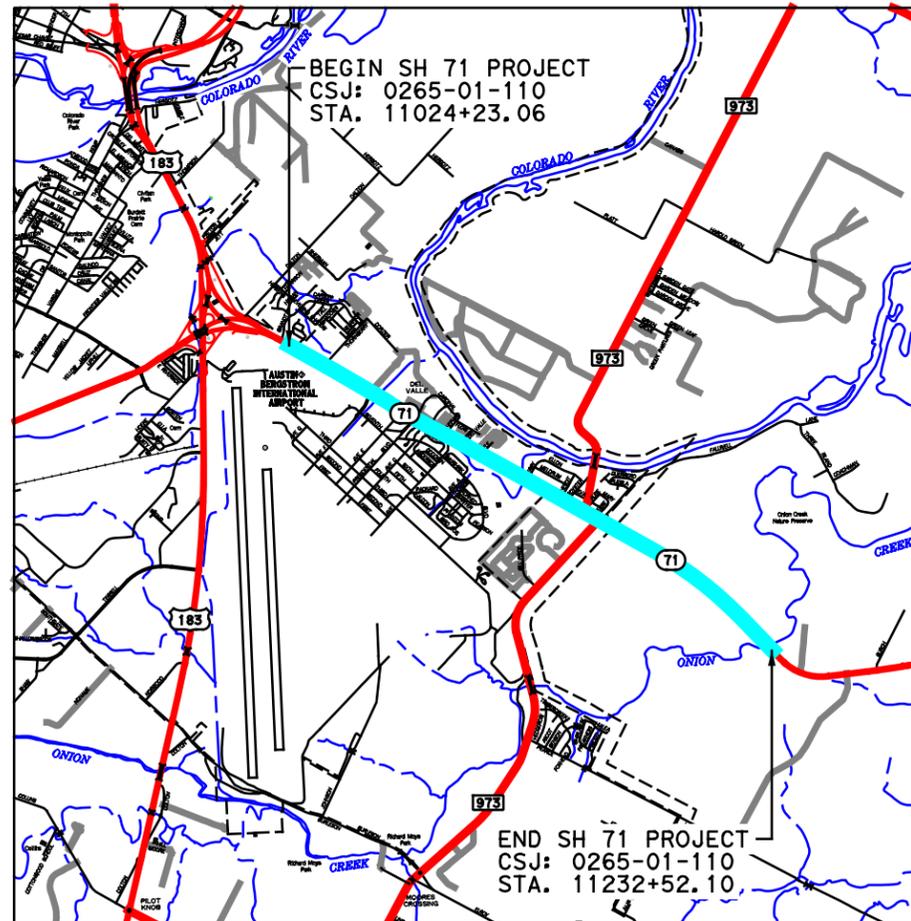
## PLANS OF PROPOSED STATE HIGHWAY 71

### TRAVIS COUNTY

LIMITS  
FROM: PRESIDENTIAL BLVD  
TO: EAST OF SH 130

LENGTH  
ROADWAY 16444.51 FT = 3.114 MI  
BRIDGE 4384.53 FT = 0.830 MI  
TOTAL 20829.04 FT = 3.944 MI

FOR THE CONSTRUCTION OF:  
TOLL LANES, GENERAL PURPOSE LANES, AT-GRADE RAMPS, AND INTERSECTION IMPROVEMENTS.



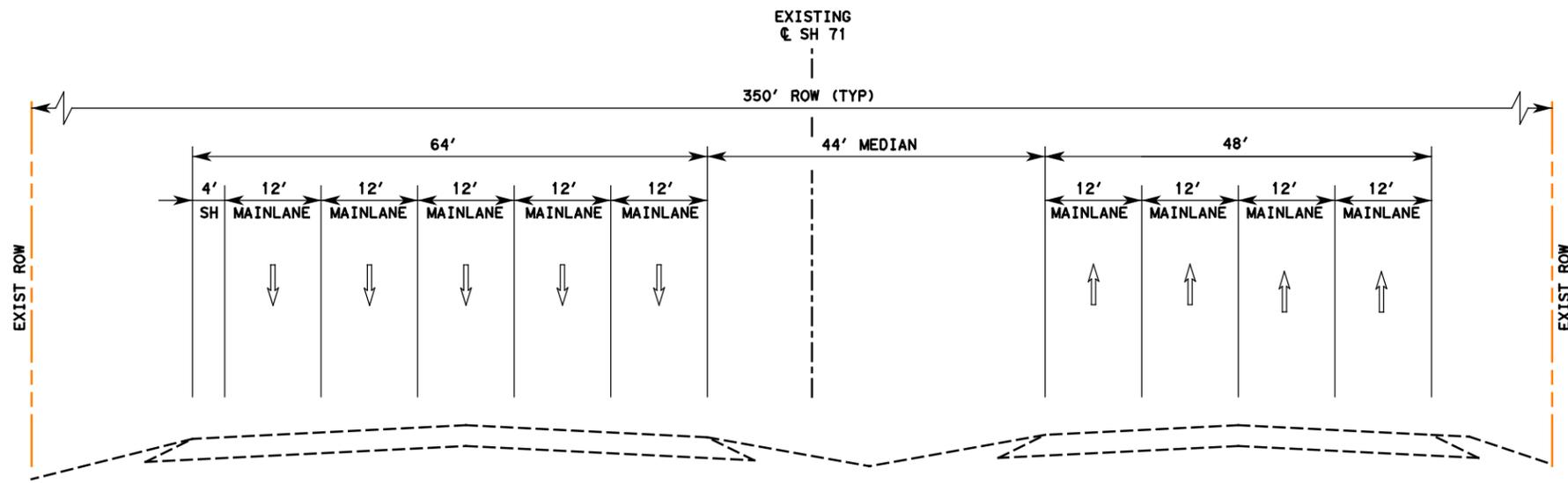
EXCEPTIONS:  
EQUATIONS:  
RR X-ING'S:

FED. RD. DIV. NO.	PROJECT NO.	SHEET NO.
6		1
STATE	STATE DIST.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

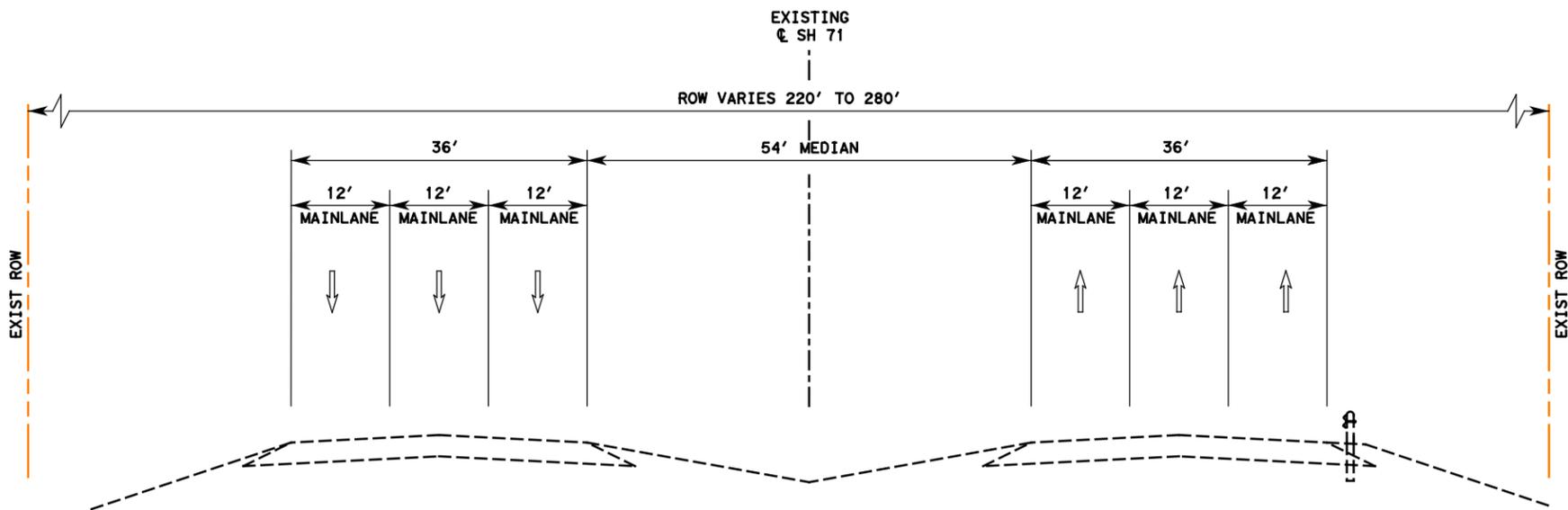
ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
SH 71 GENERAL PURPOSE LANES WEST OF SPIRIT OF TX BLVD. AND BETWEEN PRES. BLVD. AND FM 973	60 MPH <sup>1</sup>	PRINCIPAL ARTERIAL / SUBURBAN
SH 71 GENERAL PURPOSE LANES BETWEEN SPIRIT OF TX BLVD AND PRES. BLVD.	60 MPH <sup>1</sup>	URBAN PRINCIPAL ARTERIAL / FREEWAY
SH 71 GENERAL PURPOSE LANES WEST OF FM 973 TO EAST OF FM 973	50 MPH	URBAN MINOR ARTERIAL
SH 71 TOLL LANES FROM TERRY LANE TO EAST SH 130	60 MPH	URBAN PRINCIPAL ARTERIAL / FREEWAY
RAMPS	50 MPH <sup>2</sup>	
SH 71 TOLL LANES EAST TERMINUS TRANSITION	60 MPH	PRINCIPAL ARTERIAL / URBAN FREEWAY
SH 71 GENERAL PURPOSE LANES EAST TERMINUS TRANSITION	50 MPH	URBAN MINOR ARTERIAL
U-TURN PRESIDENTIAL BLVD	15 MPH	URBAN LOW SPEED
FM 973	50 MPH <sup>3</sup>	SUBURBAN MAJOR ARTERIAL

**NOTES:**

1. VERTICAL ALIGNMENT DESIGN SPEED OF 50 MPH IS ACCEPTABLE FROM STATION 11051+00 TO 11083+00
2. VERTICAL ALIGNMENT DESIGN SPEED OF 45 MPH IS ACCEPTABLE FOR WB PRESIDENTIAL ENTRANCE RAMP
3. 15 ON U-TURNS



EXISTING TYPICAL SECTION  
SH 71 BETWEEN BRANDT DR AND THORNBERRY RD



EXISTING TYPICAL SECTION  
SH 71 EAST OF PRESIDENTIAL BLVD

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SH 71  
TYPICAL  
SECTIONS

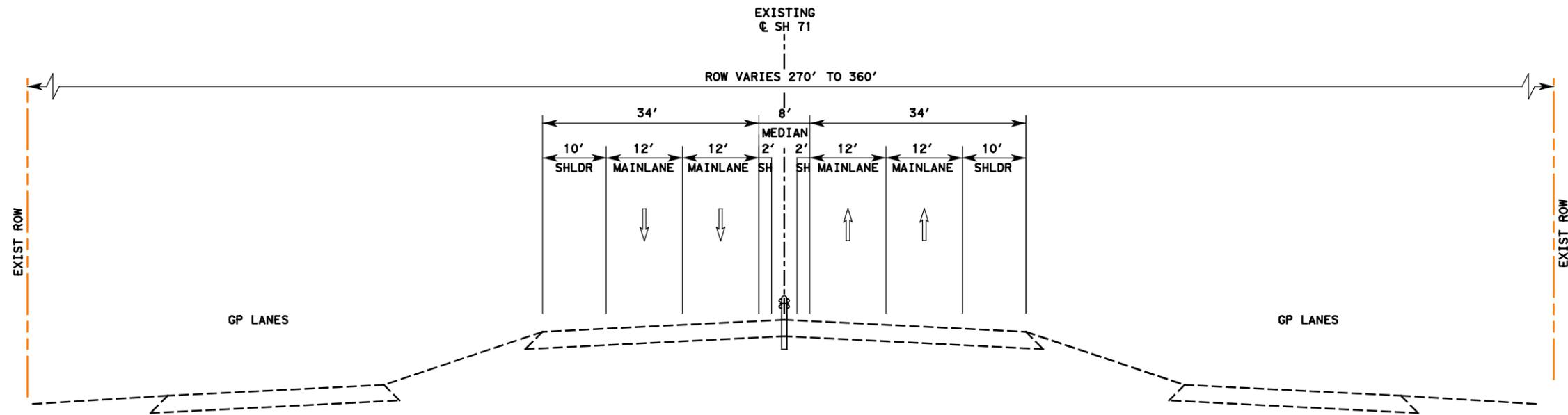


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TBPE Firm No. 2614

Texas Department of Transportation

SHEET 1 OF 5

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		2
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
COUNT.	DIST.	JOB
		HIGHWAY NO.
		SH 71



EXISTING TYPICAL SECTION  
SH 71 APPROACHING PRESIDENTIAL BLVD

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SH 71

TYPICAL SECTIONS

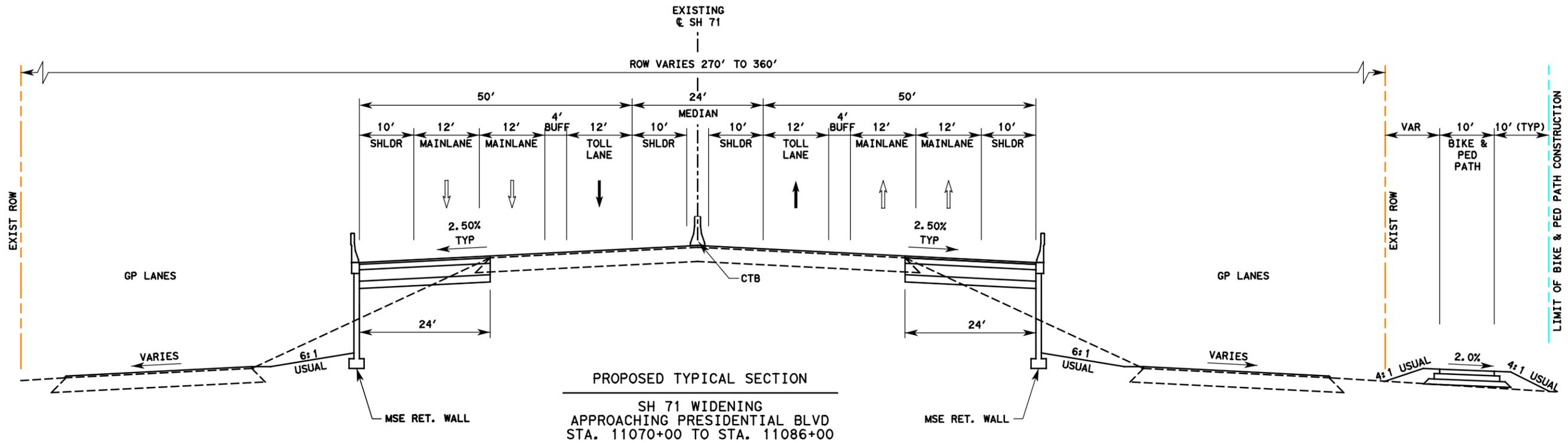


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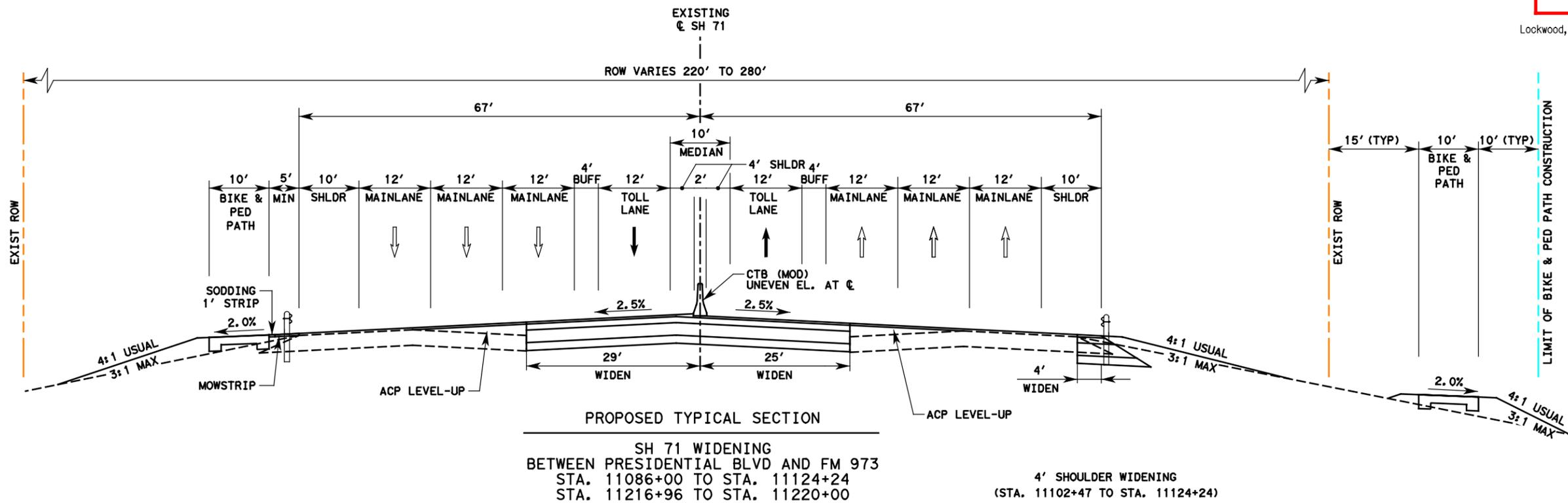
SHEET 2 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		3
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



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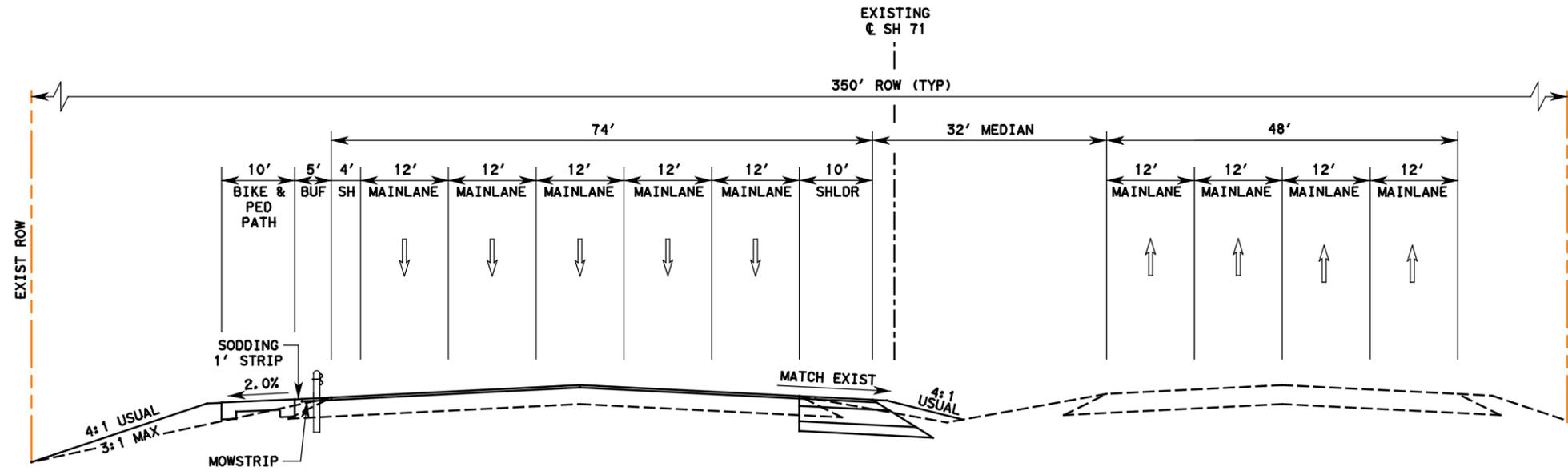
SH 71  
TYPICAL  
SECTIONS



Texas Department of Transportation

SHEET 3 OF 5

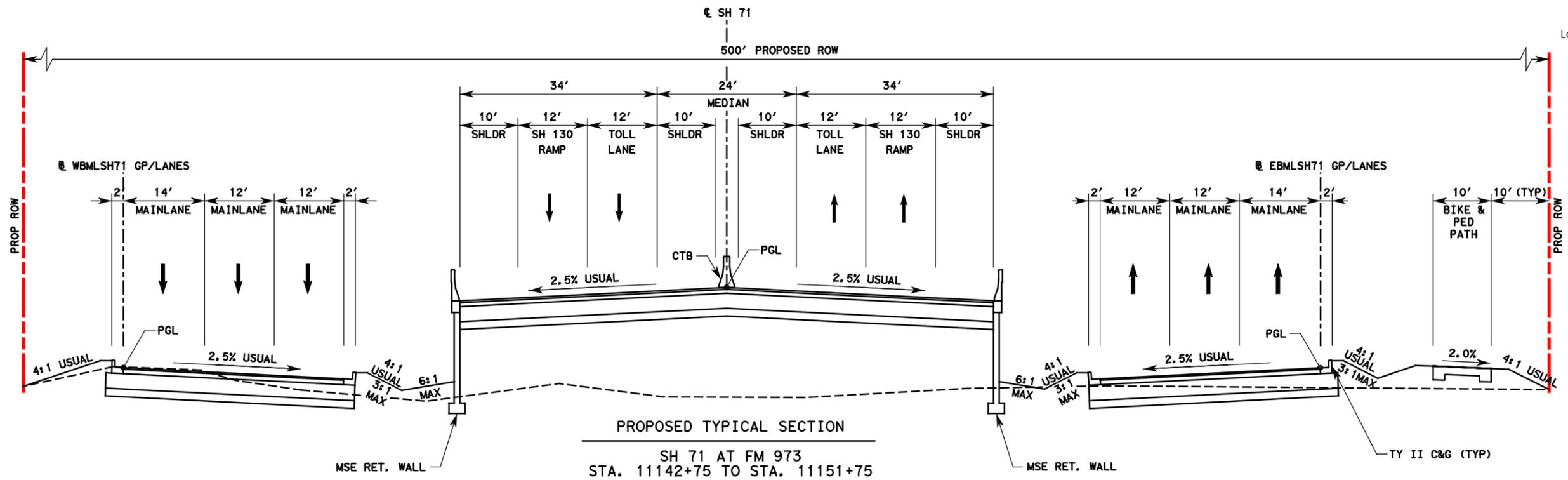
FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		4
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT	SECT.	JOB
		HIGHWAY NO.
		SH 71



PROPOSED TYPICAL SECTION  
 SH 71 WIDENING  
 BETWEEN BRANDT DR AND SPIRIT OF TEXAS  
 STA. 11024+23 TO STA. 11070+00

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PROPOSED TYPICAL SECTION  
 SH 71 AT FM 973  
 STA. 11142+75 TO STA. 11151+75

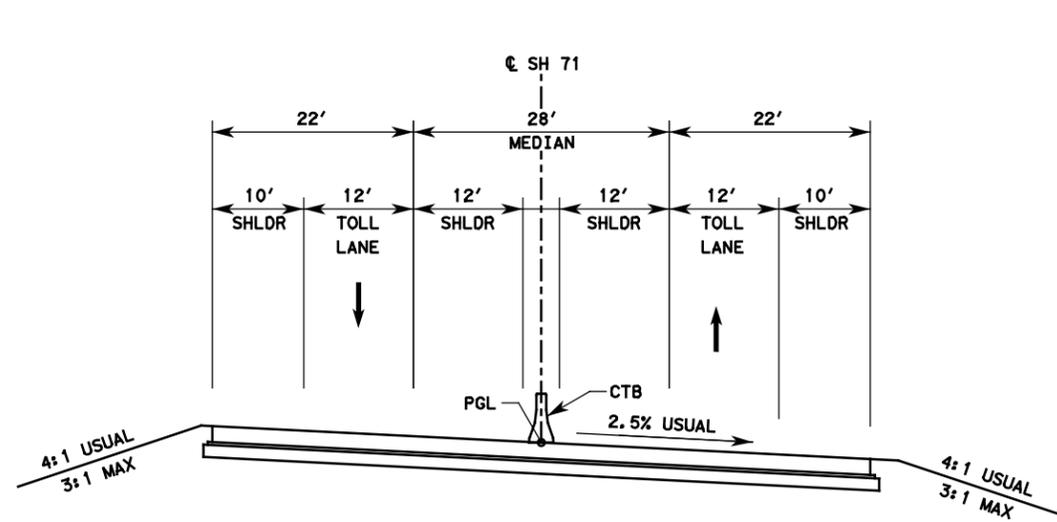
SH 71  
 TYPICAL SECTIONS



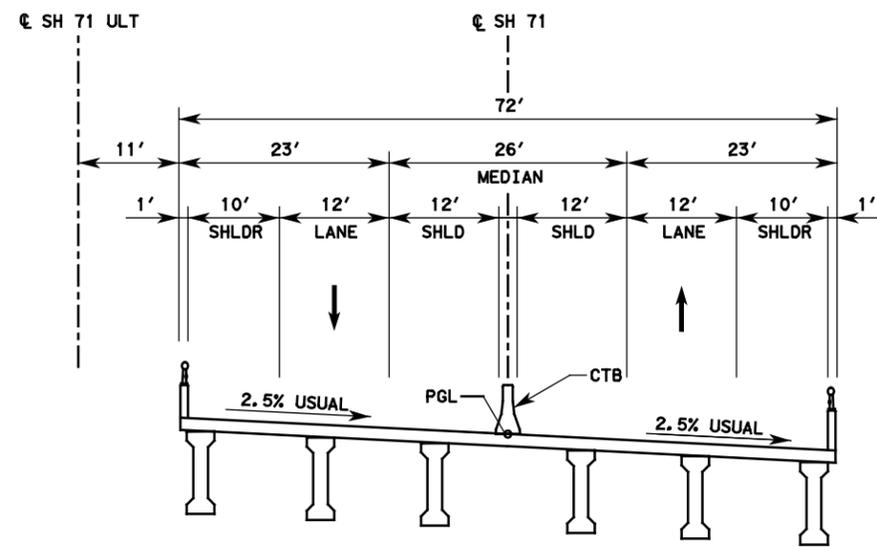
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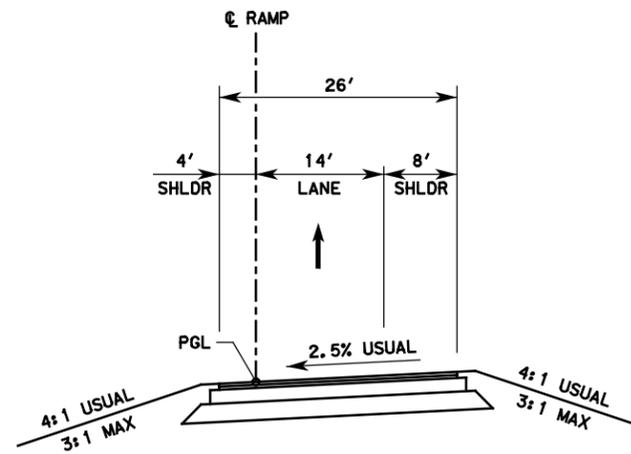
SHEET 4 OF 5			
FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.	
6		5	
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONTR.	SECT.	JOB	HIGHWAY NO.
			SH 71



PROPOSED TYPICAL SECTION  
 SH 71 EAST OF FM 973  
 STA. 11166+78 TO STA. 11187+97



PROPOSED TYPICAL SECTION  
 SH 71 AT SH 130  
 STA. 11187+94 TO STA. 11217+16



PROPOSED TYPICAL SECTION  
 SINGLE LANE RAMP

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SH 71

TYPICAL SECTIONS

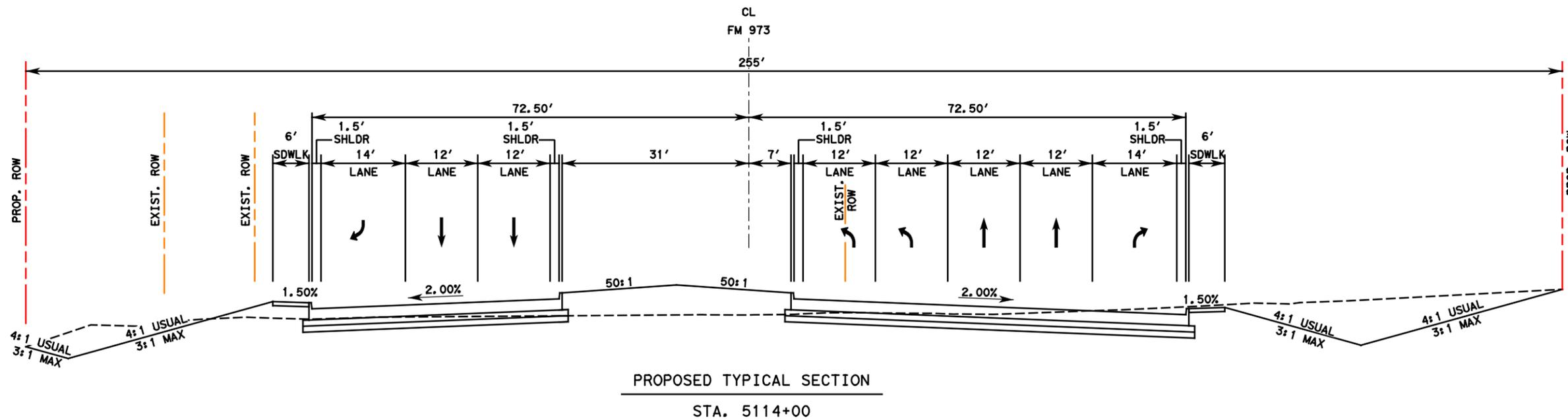
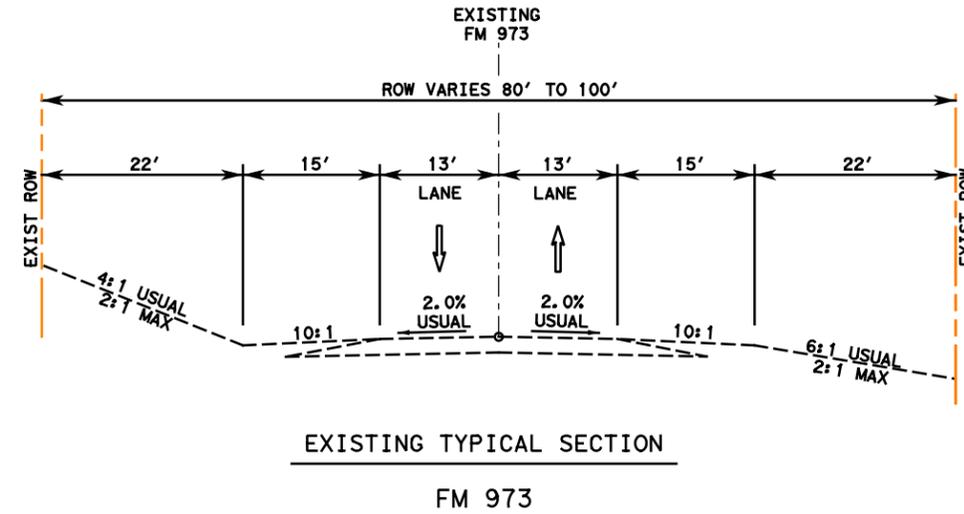


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Texas Department of Transportation

SHEET 5 OF 5

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		6
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



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FM 973  
TYPICAL SECTIONS

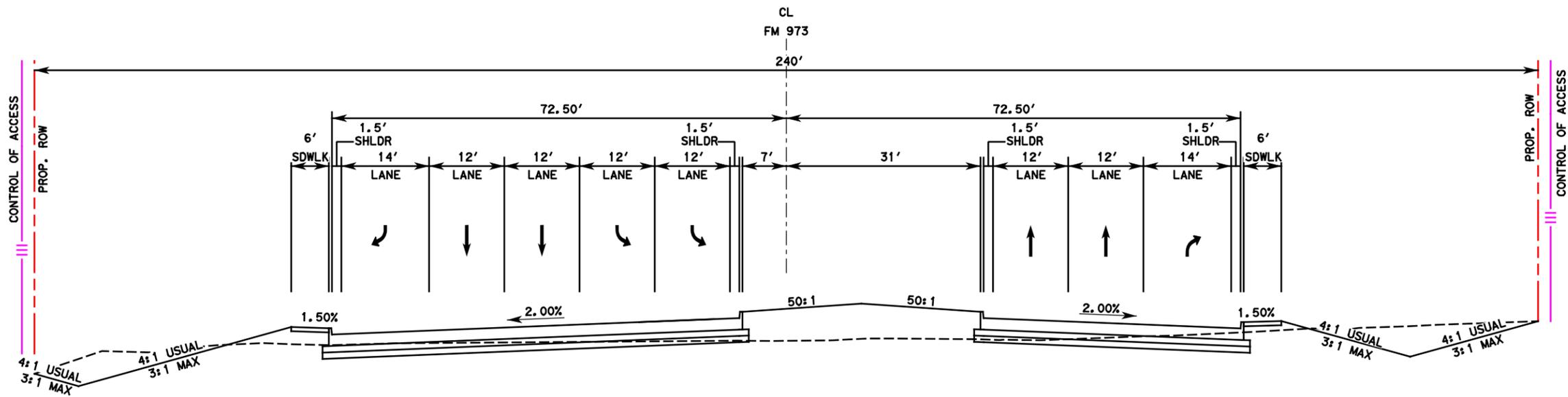


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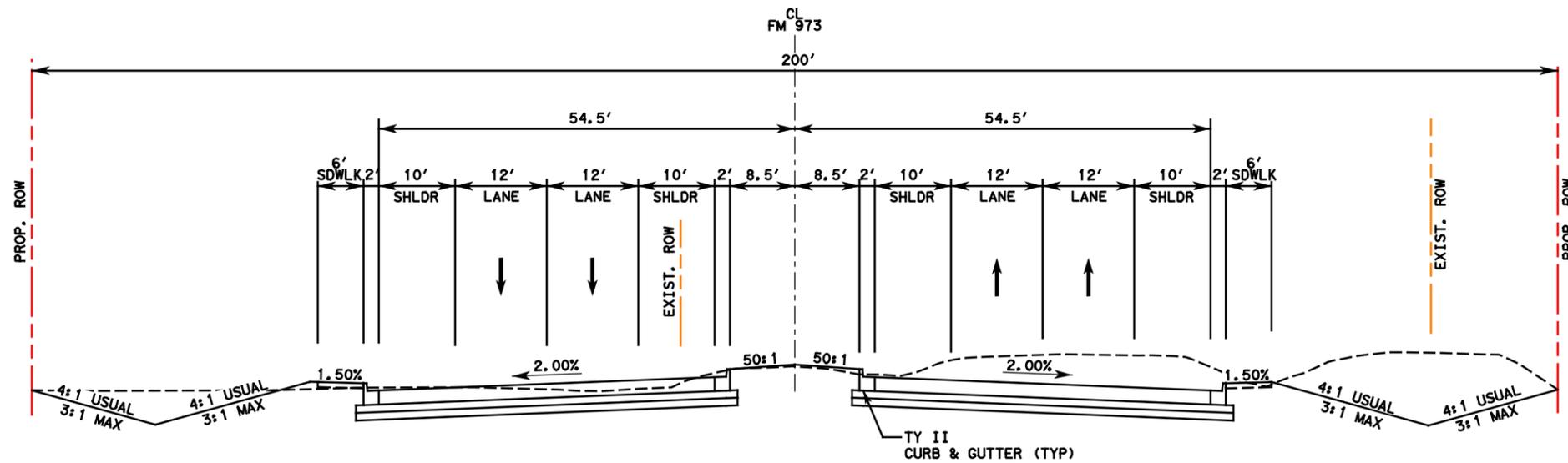
Texas Department of Transportation

SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		7
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTR.	SECT.	JOB
		HIGHWAY NO.
		SH 71



PROPOSED TYPICAL SECTION  
STA. 5121+00



PROPOSED TYPICAL SECTION  
STA. 5140+00

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FM 973

TYPICAL SECTIONS

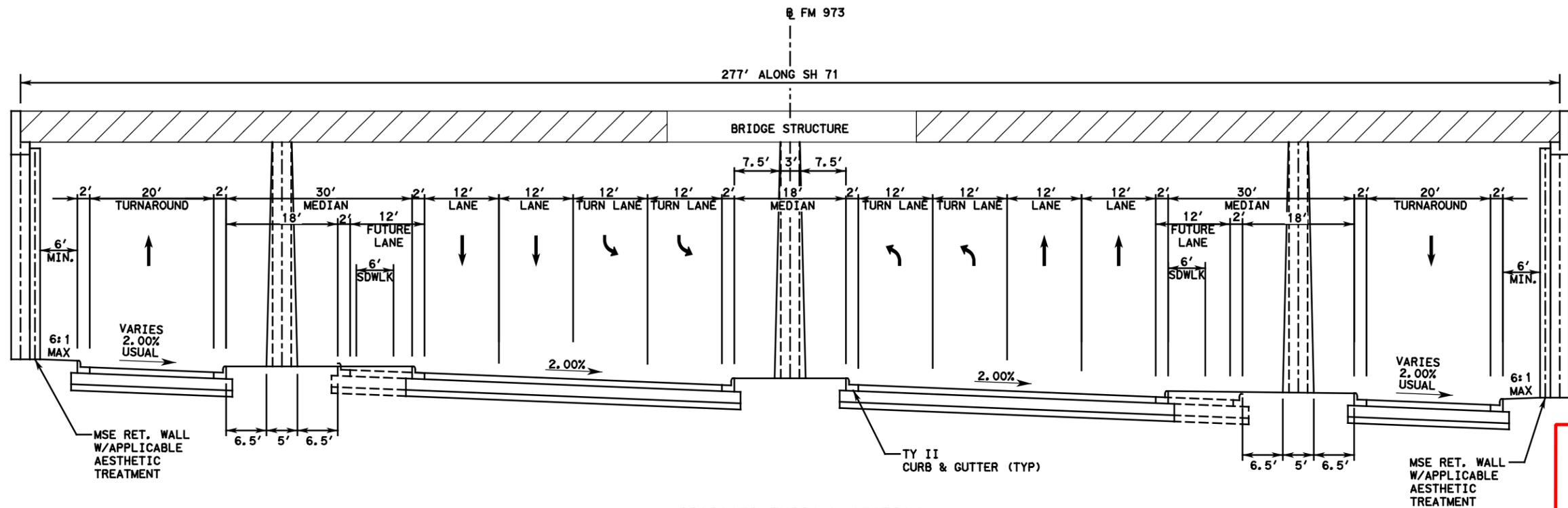


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SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		8
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTR.	DEPT.	JOB
		HIGHWAY NO.
		SH 71



PROPOSED TYPICAL SECTION  
FOR SH 71 UNDERPASS  
FM 973  
LOOKING UPSTATION

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FM 973

TYPICAL SECTIONS

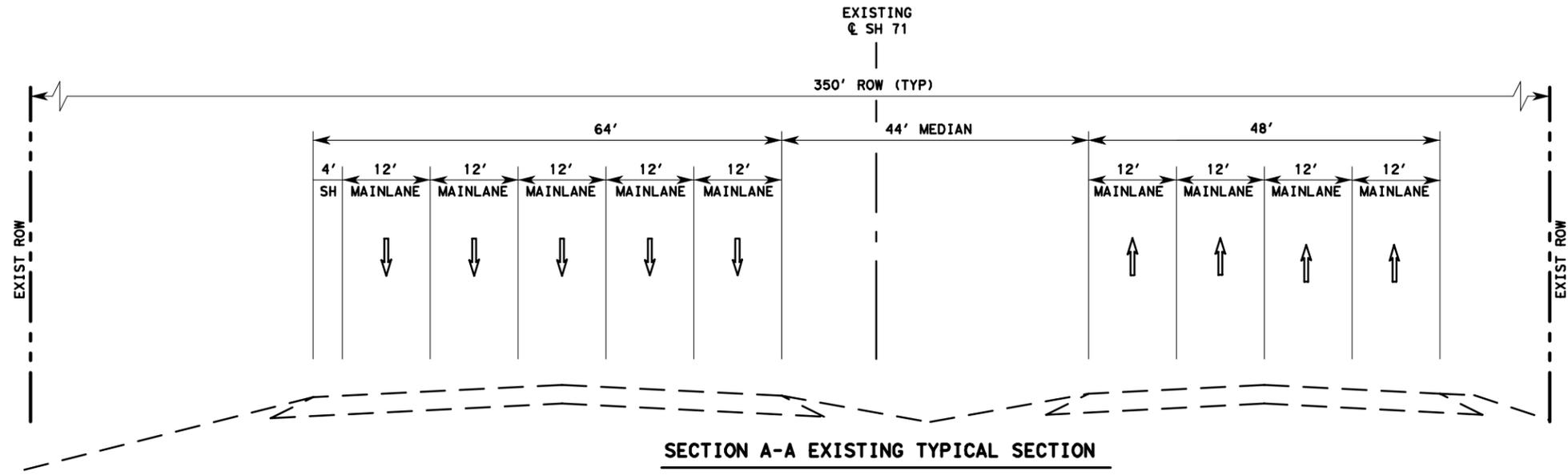


**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

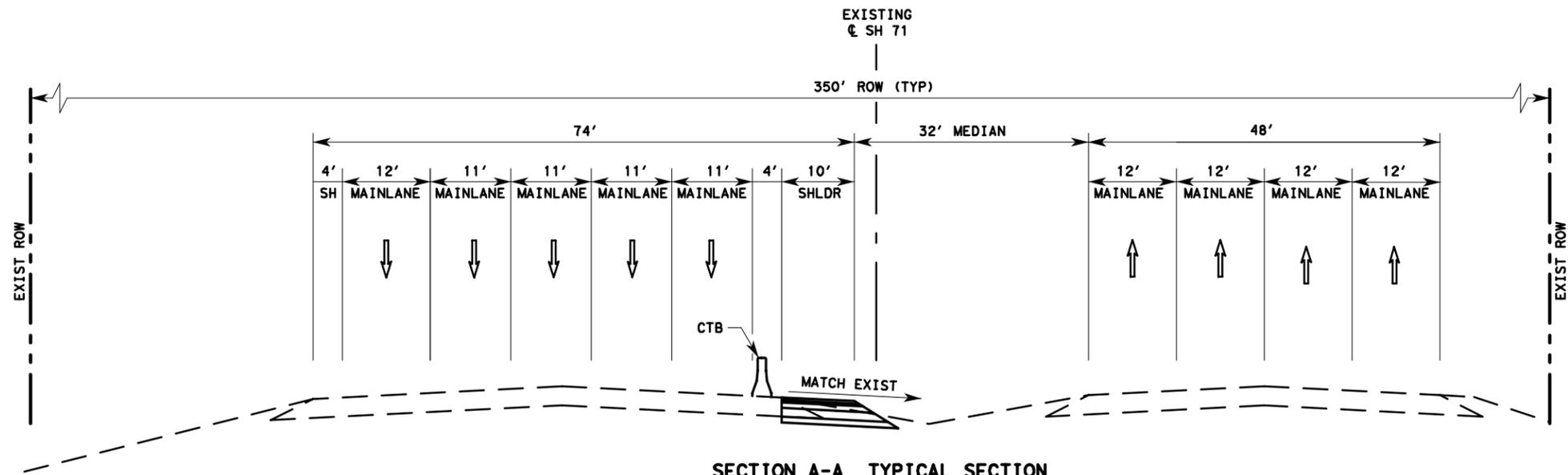
Texas Department of Transportation

SHEET 3 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		9
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTR.	SECT.	JOB
		HIGHWAY NO.
		SH 71



SECTION A-A EXISTING TYPICAL SECTION



SECTION A-A TYPICAL SECTION

**PRELIMINARY**

FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

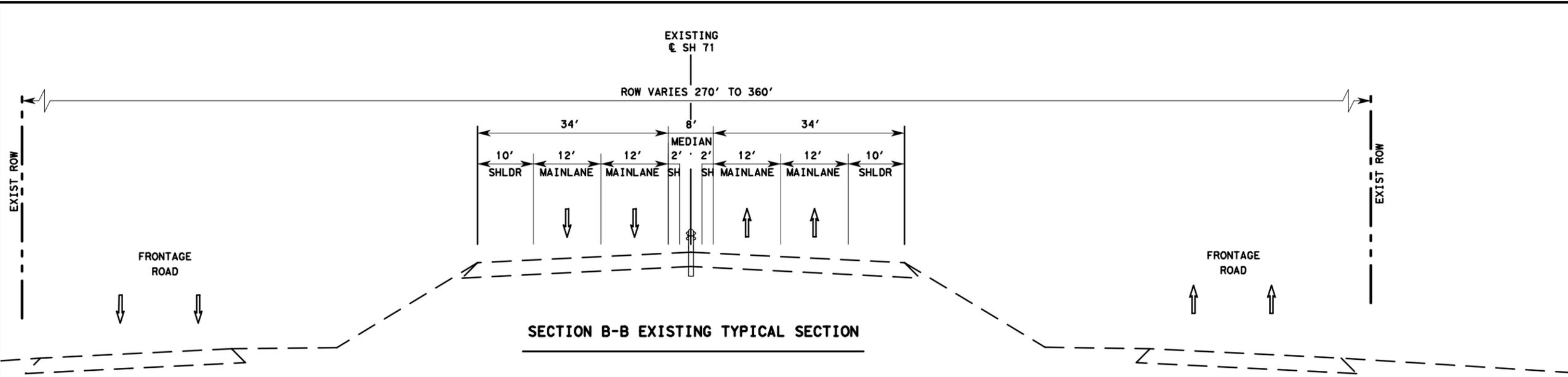


Texas Department of Transportation

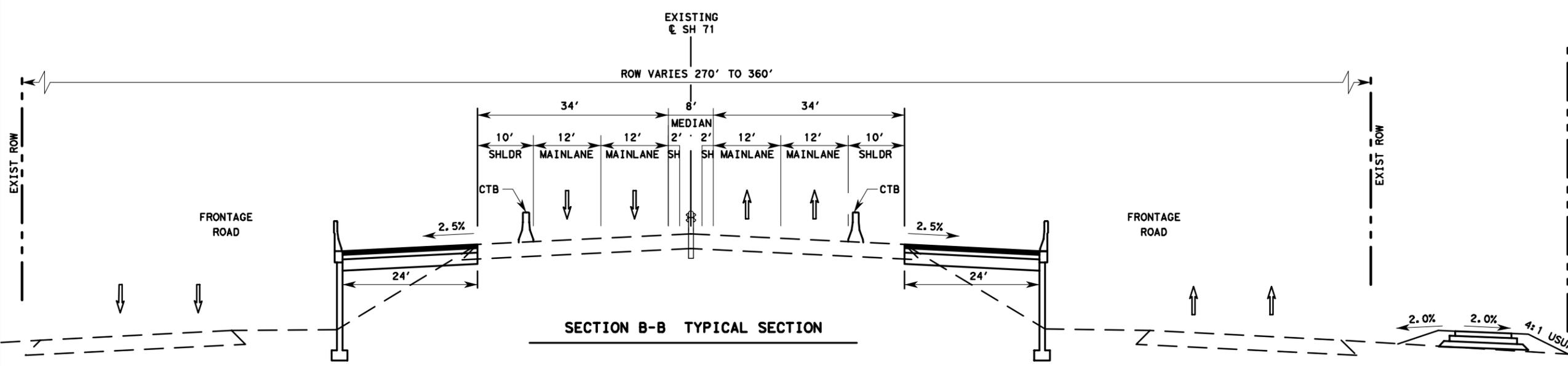
SHEET 1 OF 5

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STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

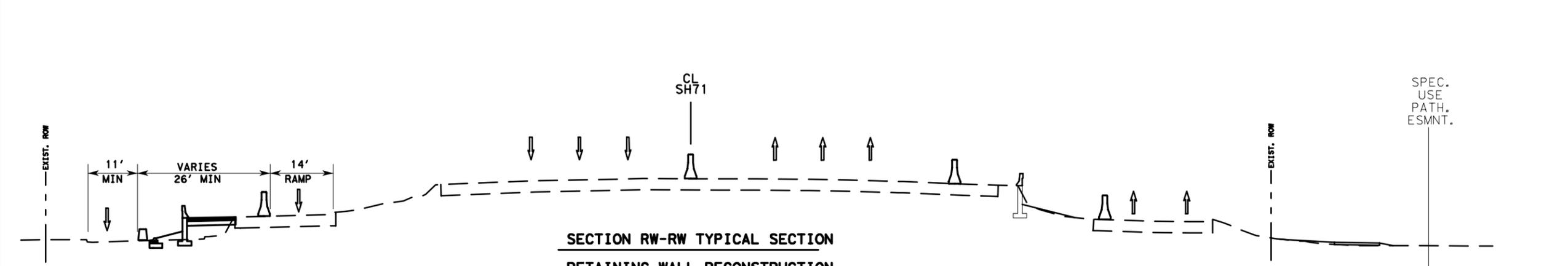
PHASE I



SECTION B-B EXISTING TYPICAL SECTION



SECTION B-B TYPICAL SECTION



SECTION RW-RW TYPICAL SECTION  
RETAINING WALL RECONSTRUCTION

PHASE I

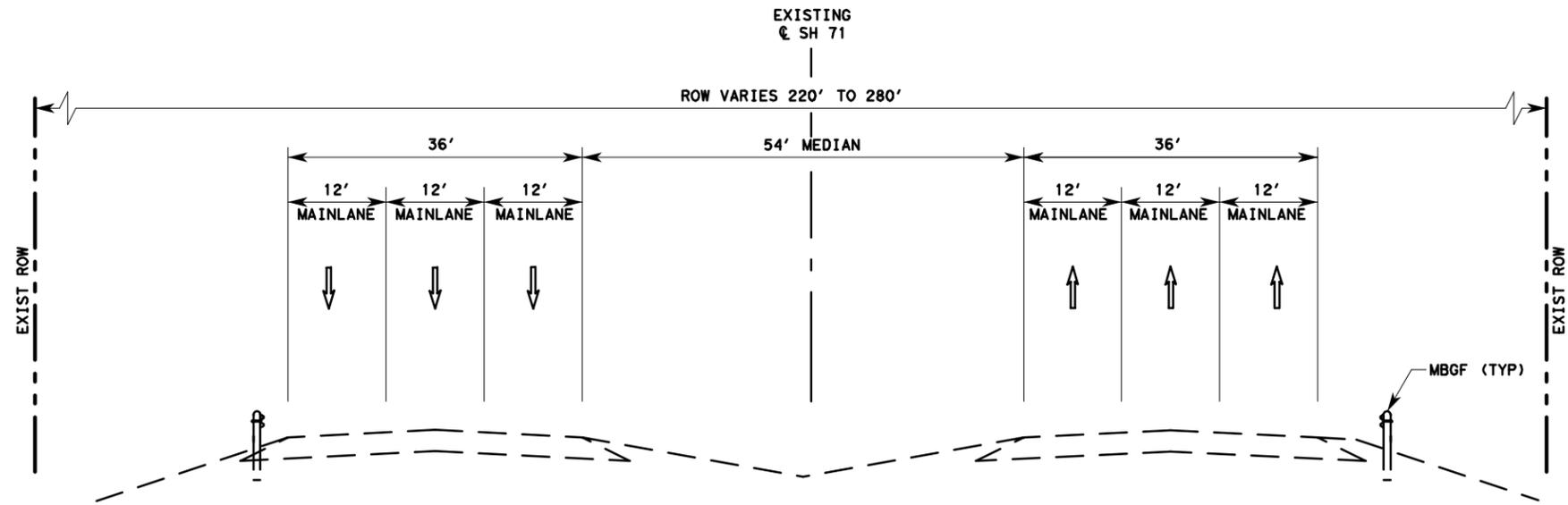
**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.  
Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

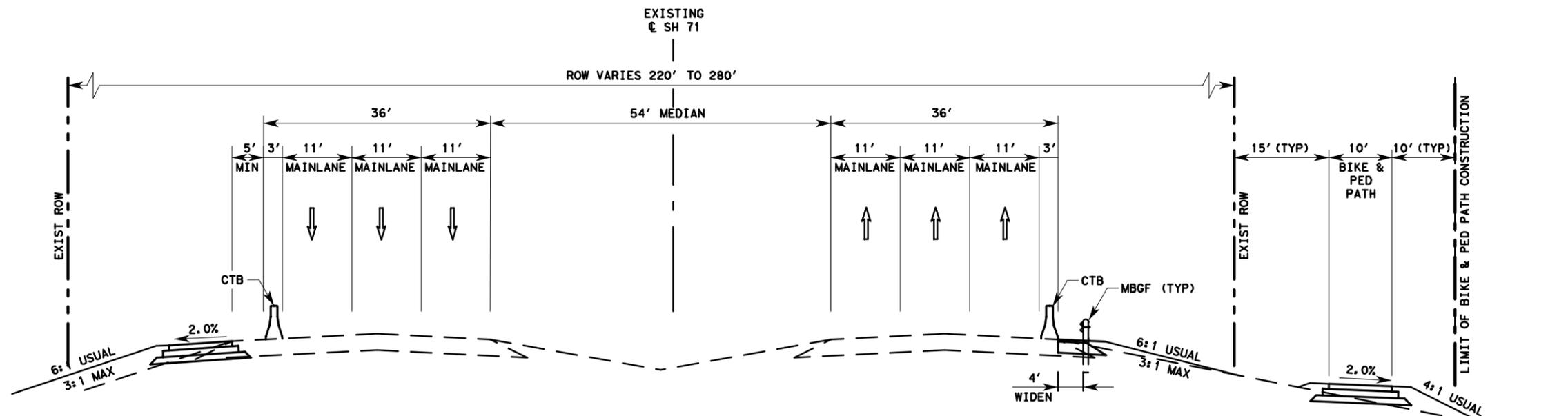


Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				11	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



**SECTION C-C EXISTING TYPICAL SECTION**



**SECTION C-C TYPICAL SECTION  
WIDEN TO OUTSIDE**

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.  
Eng/Insr: DENNIS K. SEAL  
P. E. No. 80287 Date 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

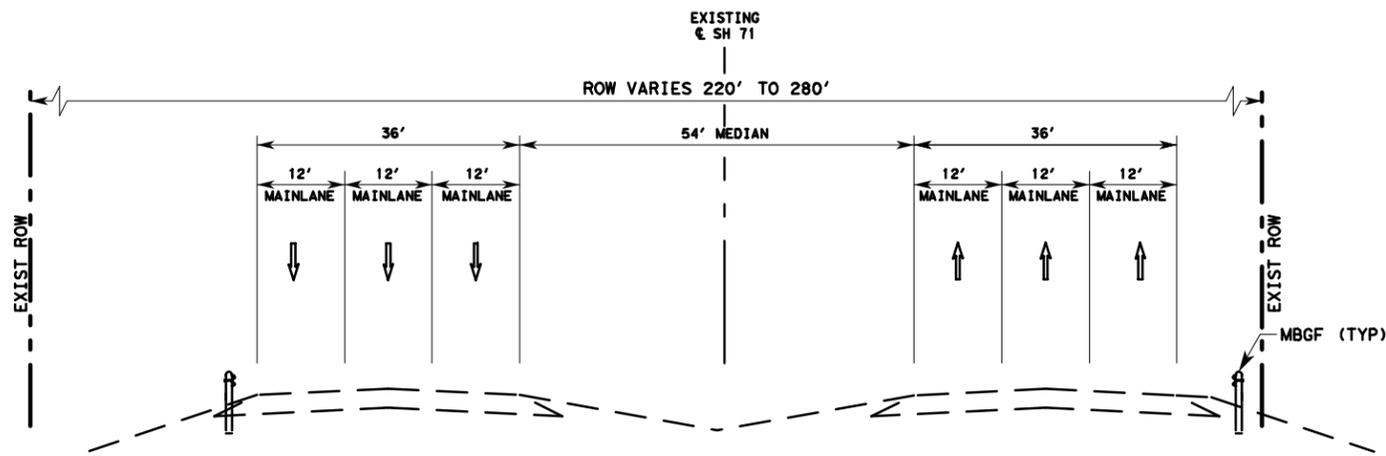


Texas Department of Transportation

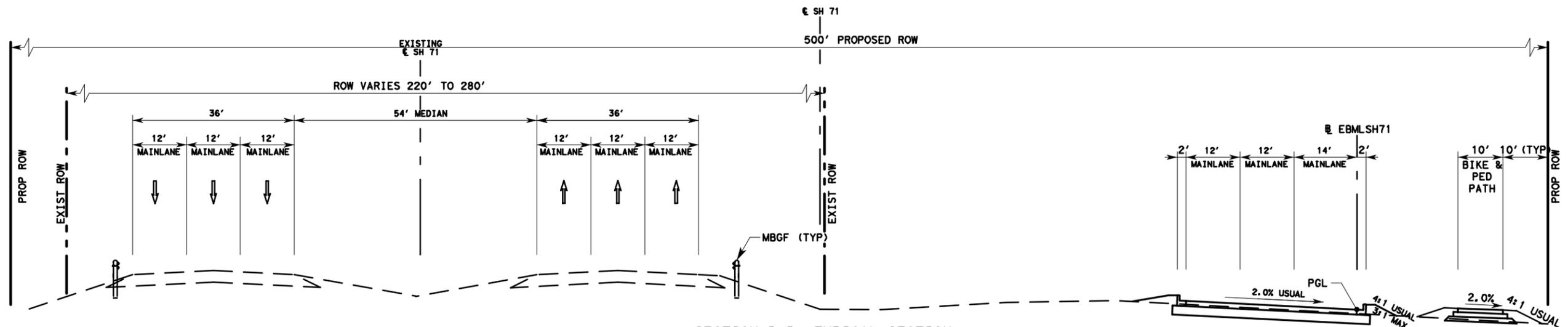
SHEET 3 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		12
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE I



SECTION D-D EXISTING TYPICAL SECTION



SECTION D-D TYPICAL SECTION  
CONSTRUCT EB FRONTAGE ROAD AND BIKE & PED PATH

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.  
Eng/Insr: DENNIS K. SEAL  
P. E. No. 80287 Date 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

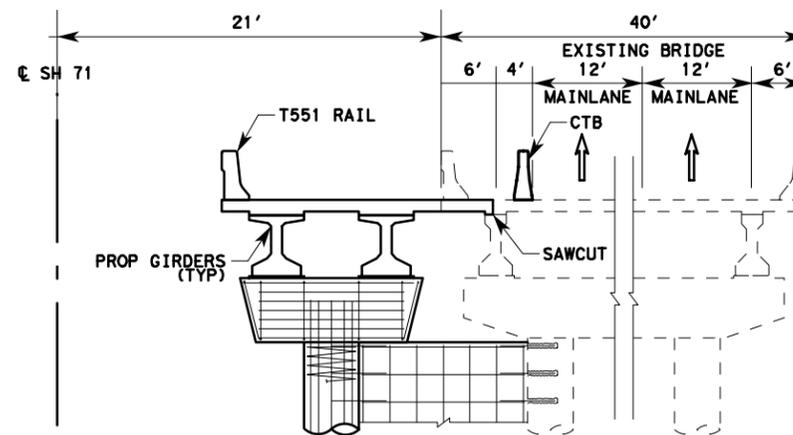
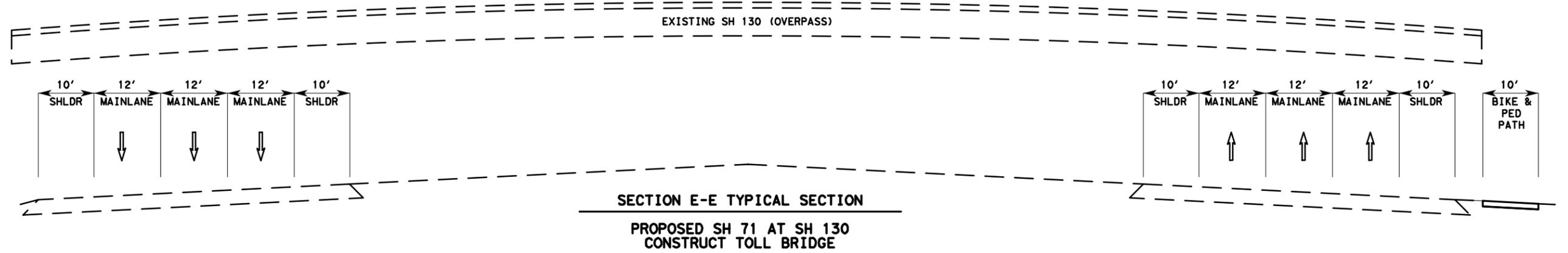
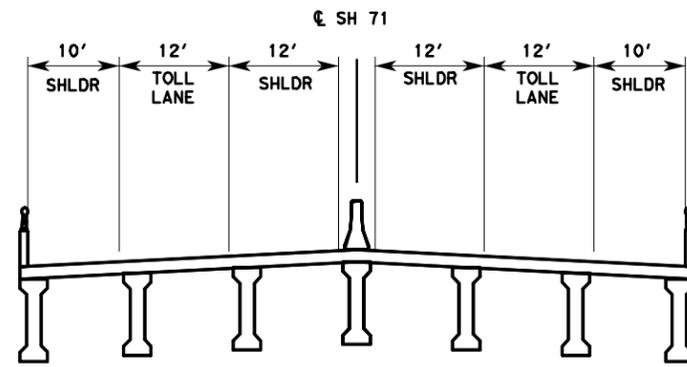


Texas Department of Transportation

SHEET 4 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		13
STATE	COUNTY	
TEXAS	TRAVIS	
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

PHASE I



SECTION F-F TYPICAL SECTION  
WIDEN ONION CREEK BRIDGE AND APPROACHES

**PRELIMINARY**

FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

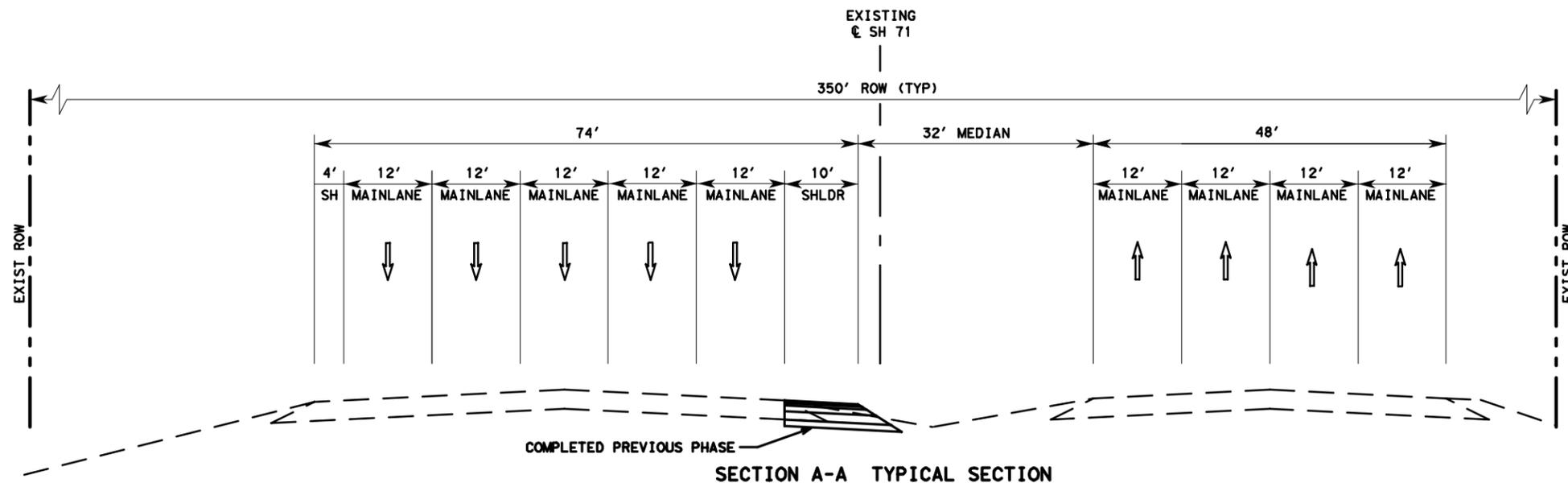


Texas Department of Transportation

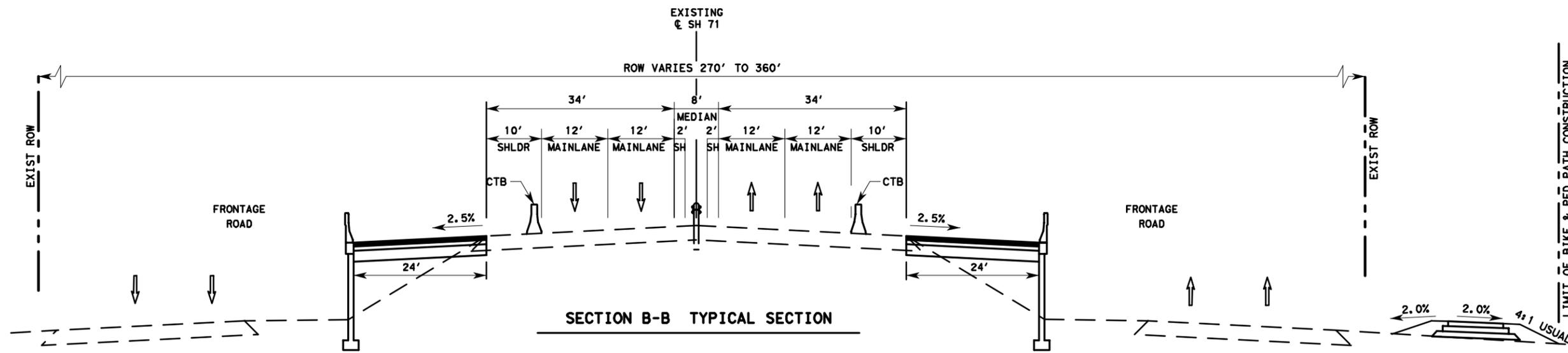
SHEET 5 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		14
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE I



SECTION A-A TYPICAL SECTION



SECTION B-B TYPICAL SECTION

**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date: 5/16/2014

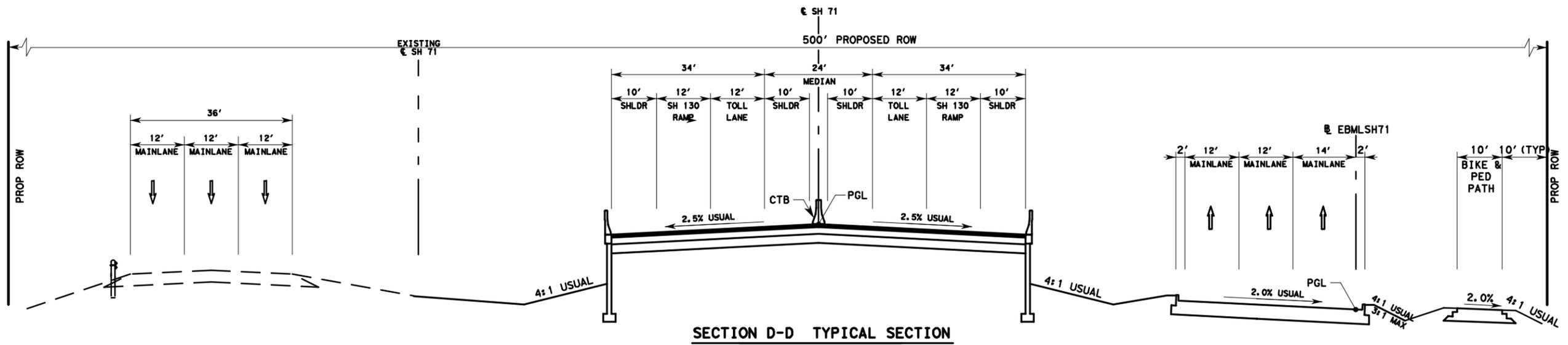
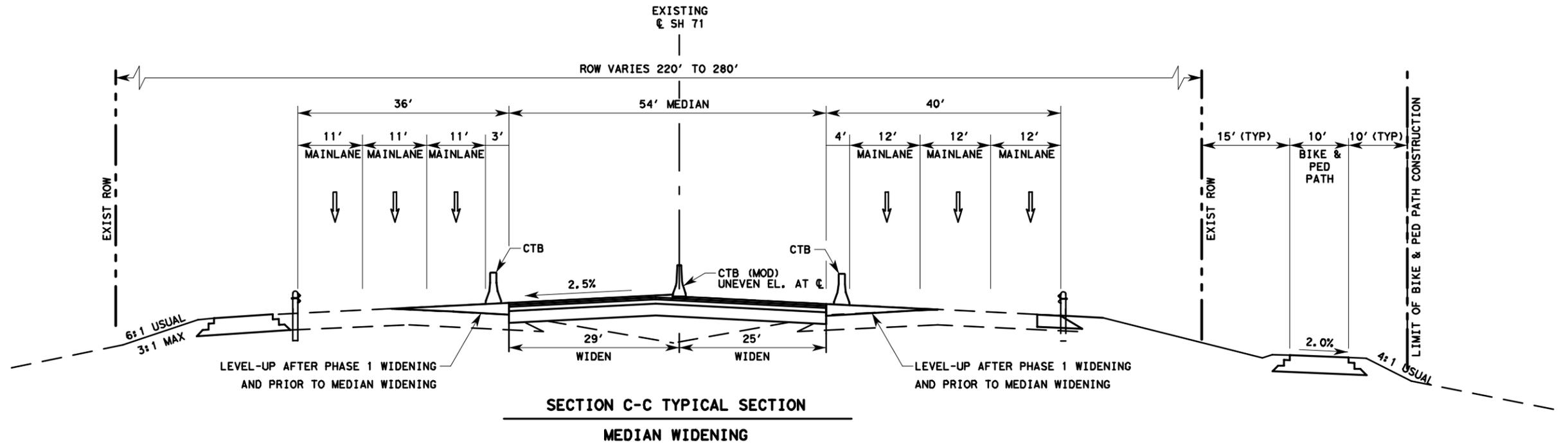
SH 71  
 TCP TYPICAL  
 SECTIONS



Texas Department of Transportation  
 SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		15
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 2



**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
 Eng/Insr: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

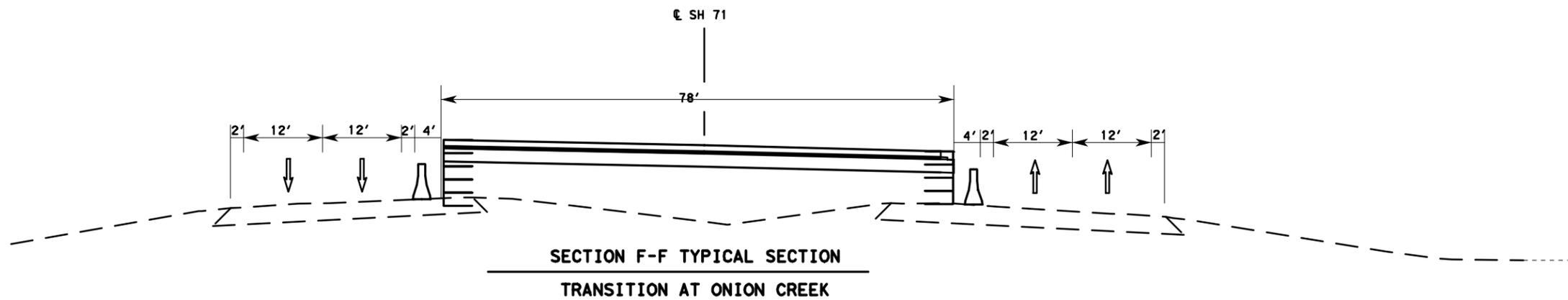
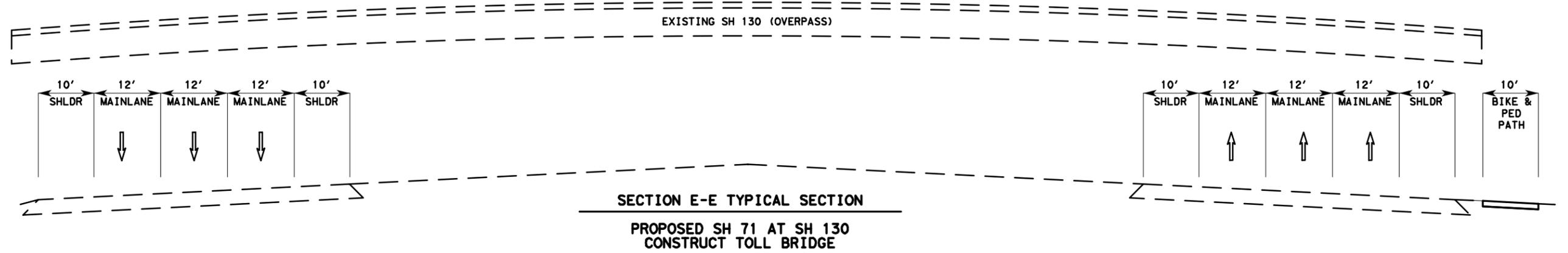
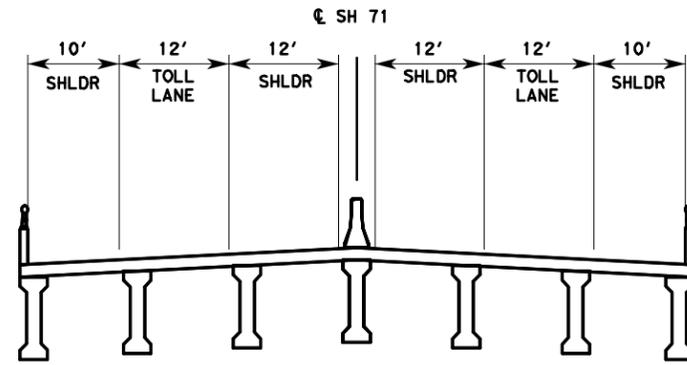
SH 71  
 TCP TYPICAL  
 SECTIONS



Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				16	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		

PHASE 2



**PRELIMINARY**

FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

F-928

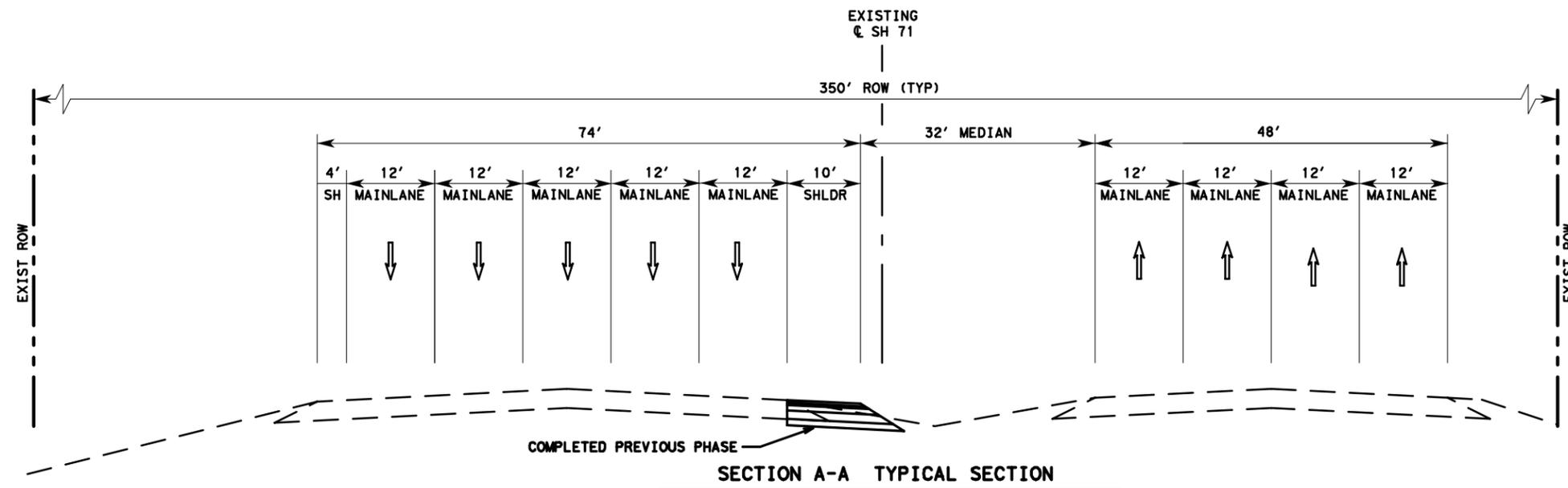


Texas Department of Transportation

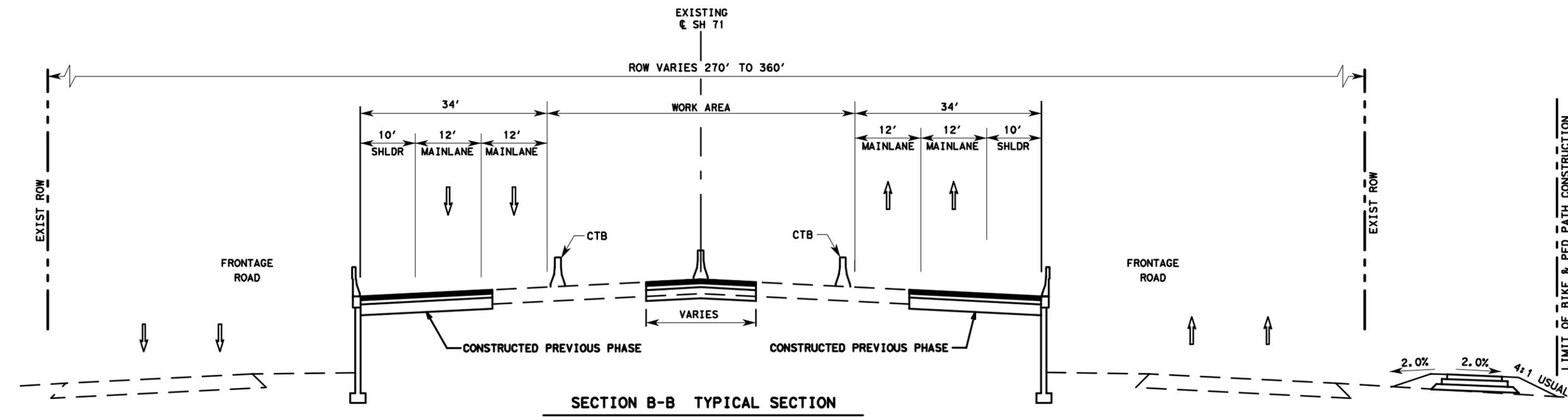
SHEET 3 OF 3

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6		17
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 2



SECTION A-A TYPICAL SECTION



SECTION B-B TYPICAL SECTION

PHASE 3

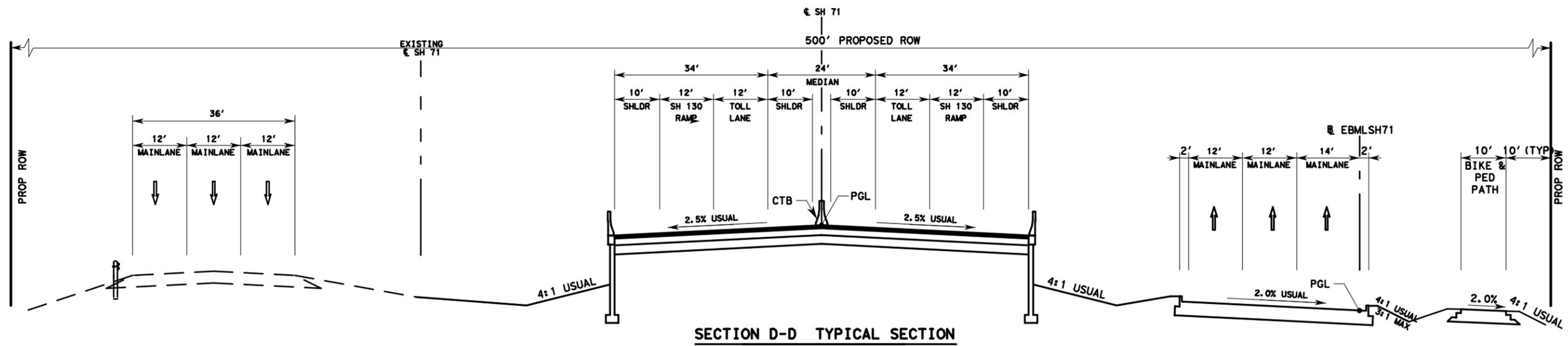
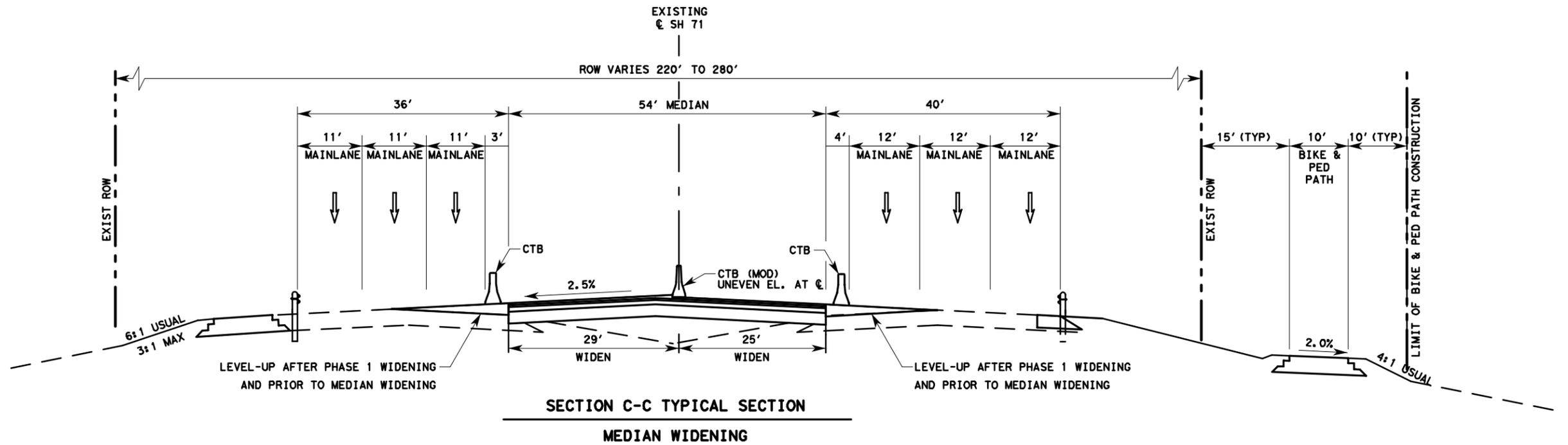
**PRELIMINARY**  
 FOR REVIEW ONLY  
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 or permit purposes.  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 TCP TYPICAL  
 SECTIONS



Texas Department of Transportation

SHEET 1 OF 3			
FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.	
6		18	
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONT.	SECT.	JOB	HIGHWAY NO.
			SH 71



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or permit purposes.

Eng/Insr: DENNIS K. SEAL  
P. E. No. 80287 Date 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

F-928

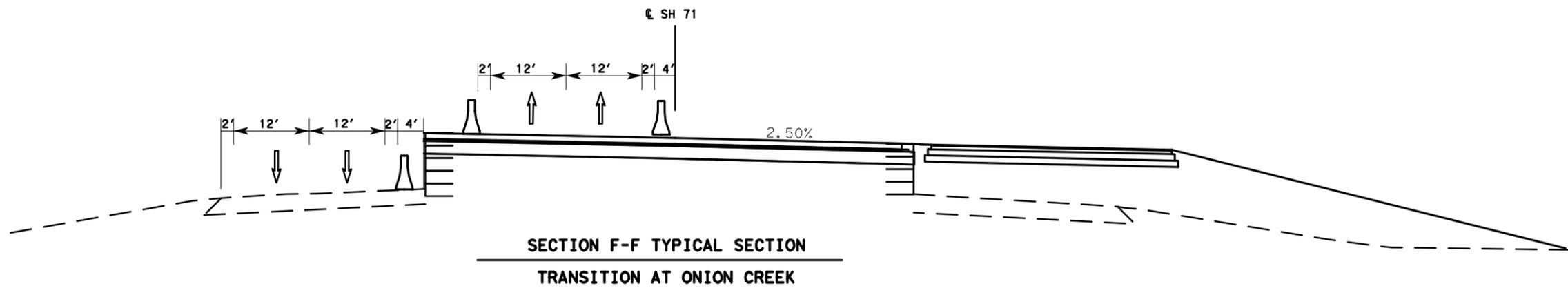
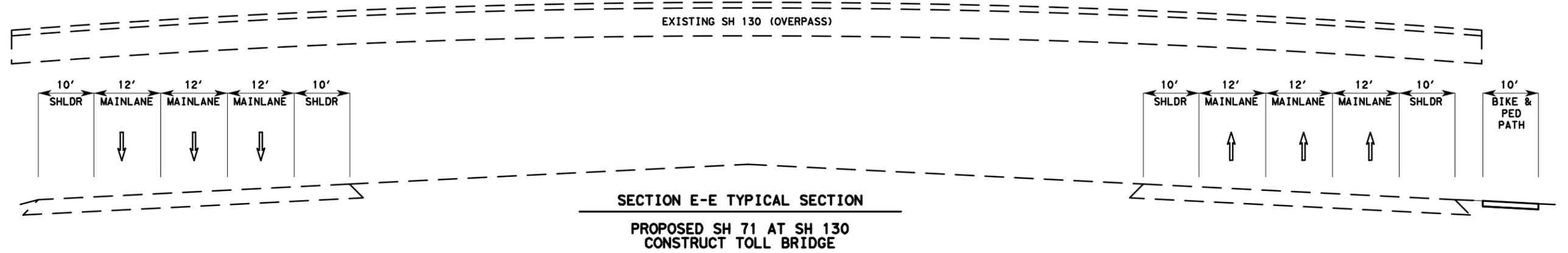
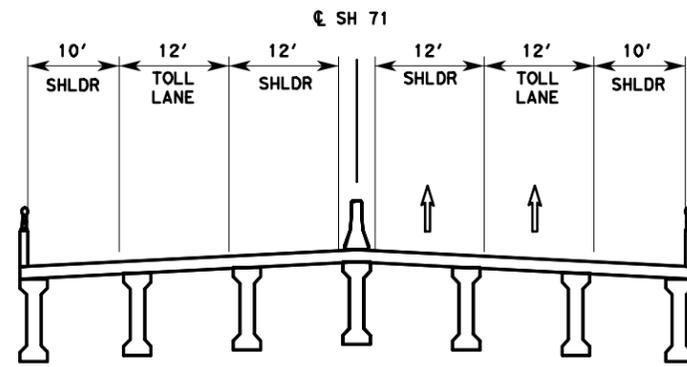


Texas Department of Transportation

SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		19
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 3



**PRELIMINARY**

FOR REVIEW ONLY  
Not for construction, bidding,  
or permit purposes.

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

F-928

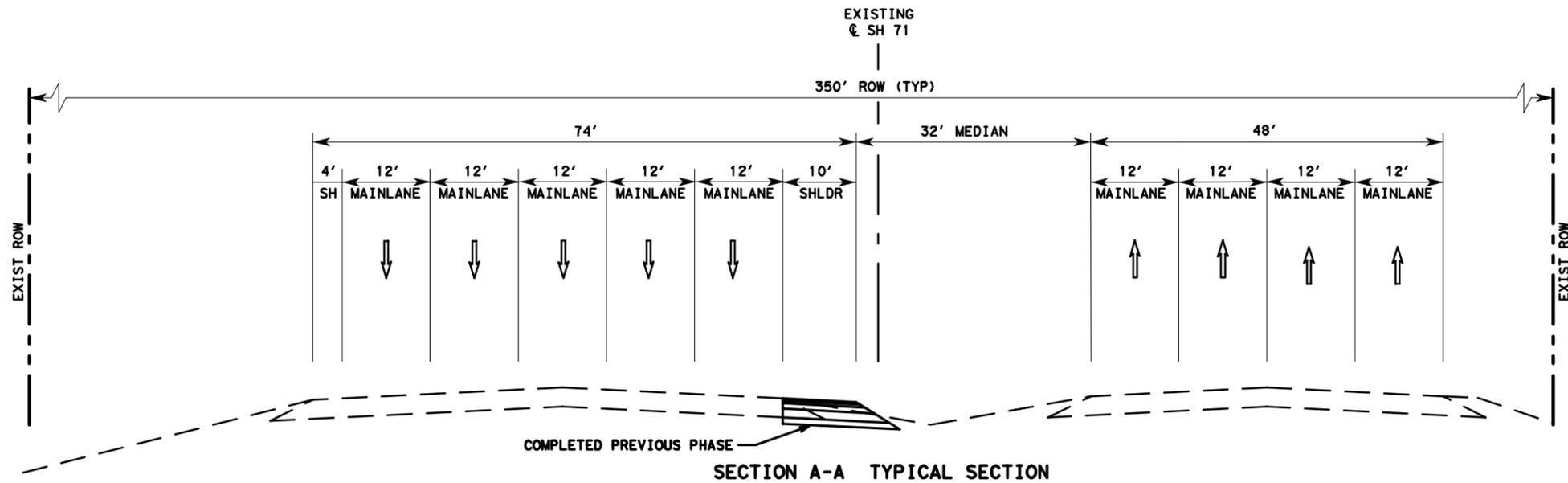


Texas Department of Transportation

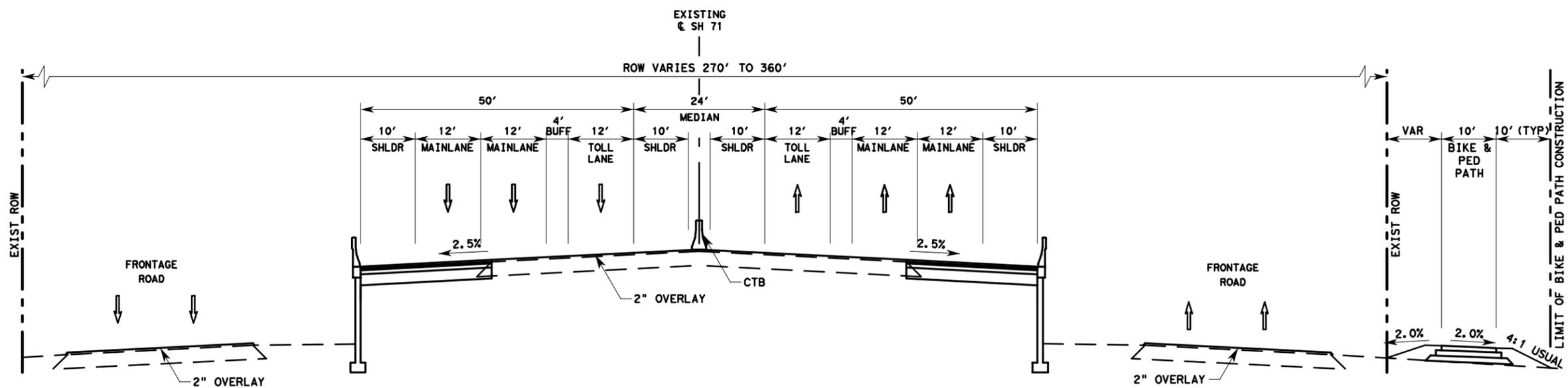
SHEET 3 OF 3

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6		20
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 3



SECTION A-A TYPICAL SECTION



SECTION B-B TYPICAL SECTION

PHASE 4

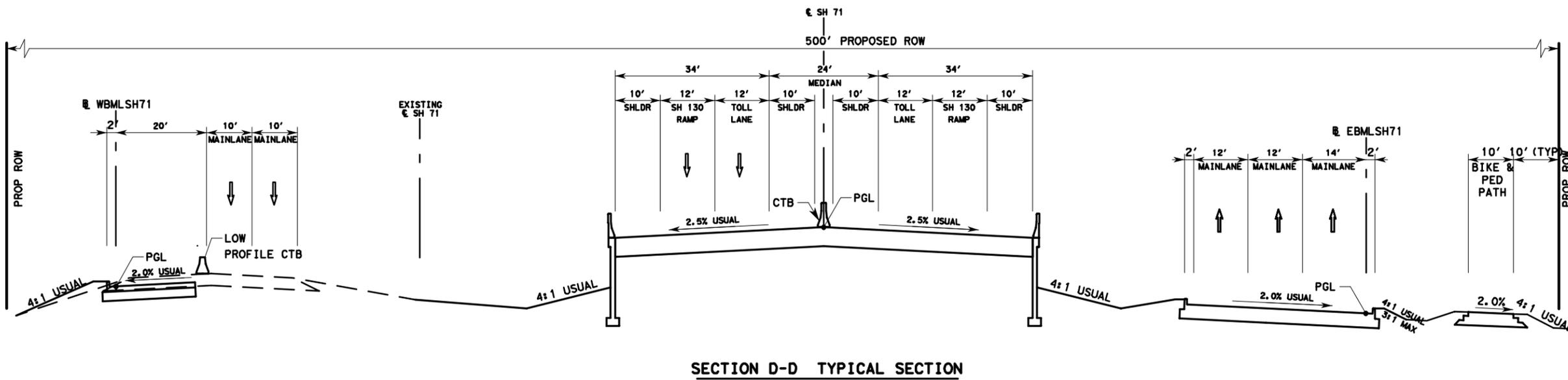
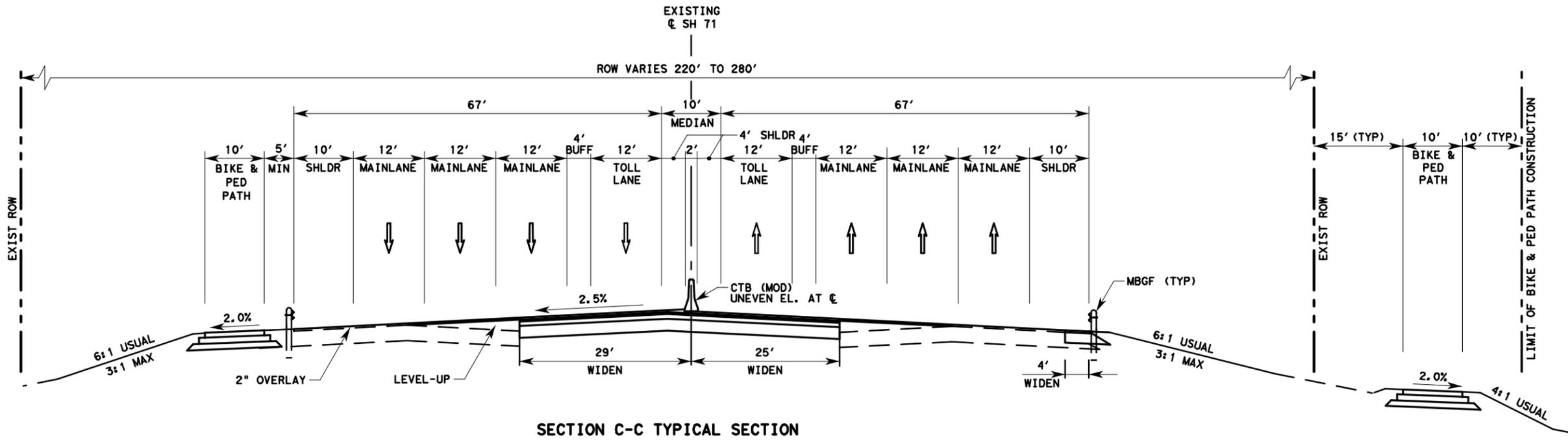
**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 TCP TYPICAL  
 SECTIONS



Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				21	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



**PRELIMINARY**

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 or permit purposes.

Eng/Insr: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 TCP TYPICAL  
 SECTIONS

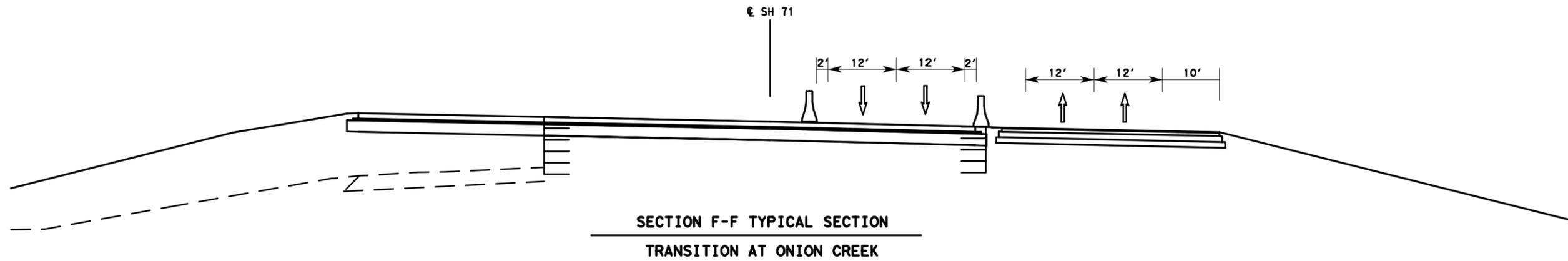
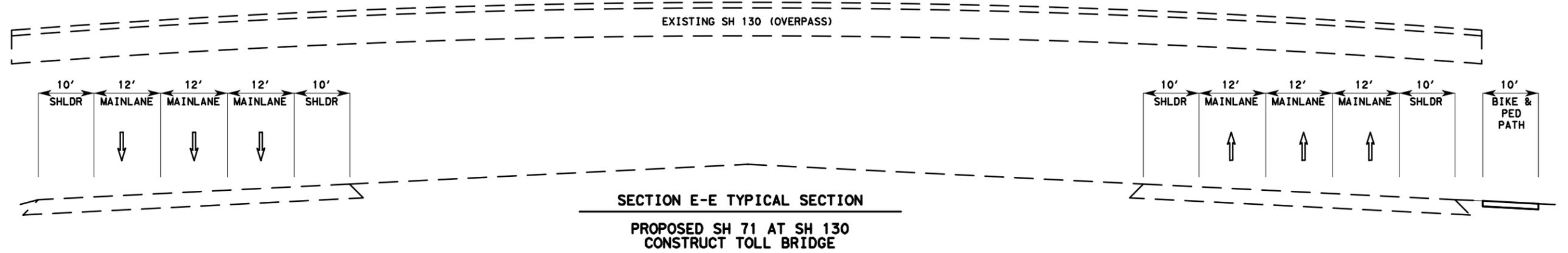
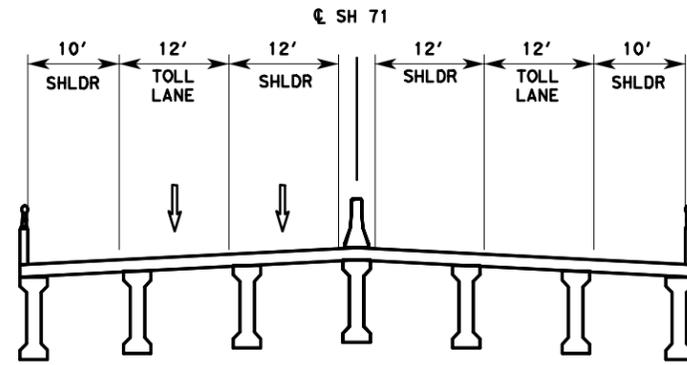


Texas Department of Transportation

SHEET 2 OF 3

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6		22
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 4



**PRELIMINARY**

FOR REVIEW ONLY  
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or permit purposes.

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 5/16/2014

SH 71  
TCP TYPICAL  
SECTIONS

F-928

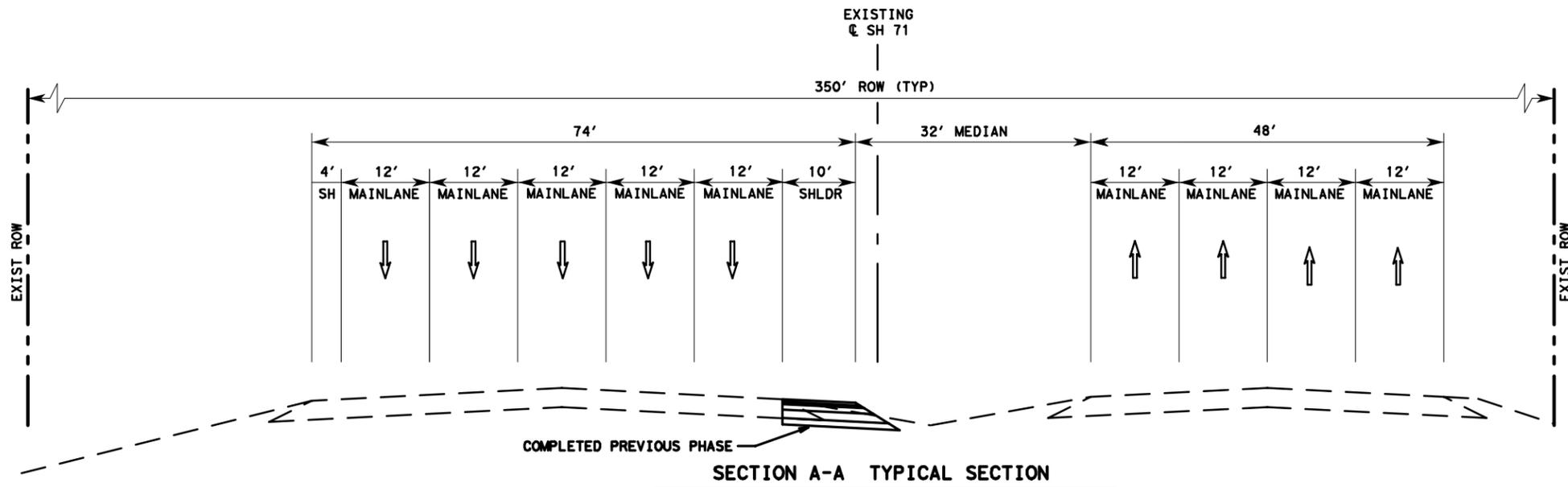


Texas Department of Transportation

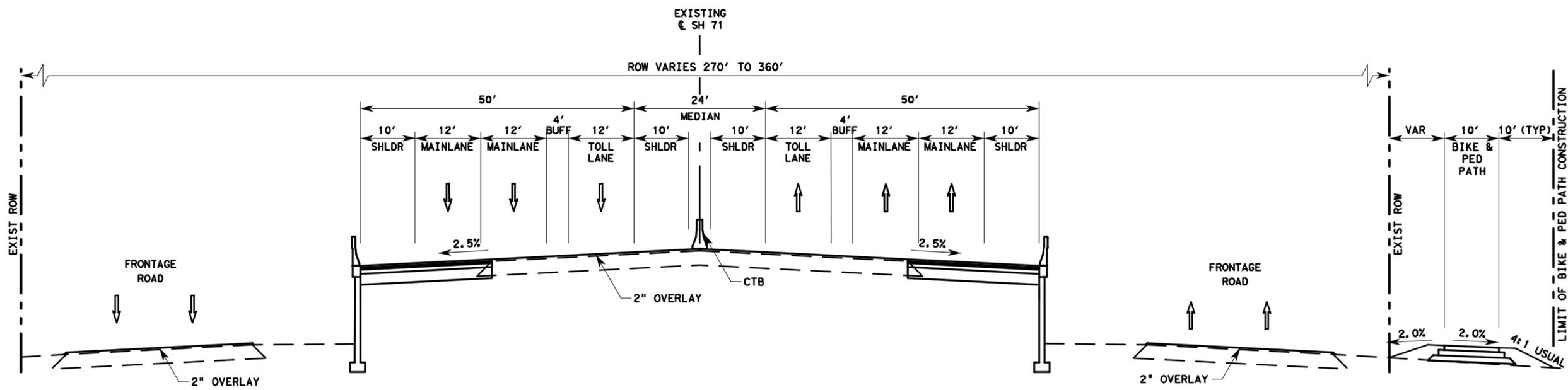
SHEET 3 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		23
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 4



SECTION A-A TYPICAL SECTION



SECTION B-B TYPICAL SECTION

**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

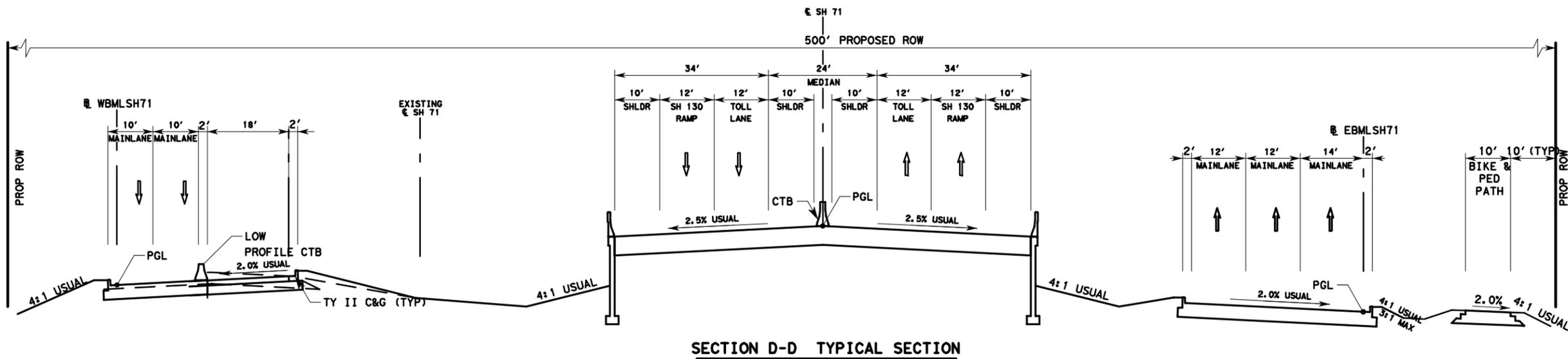
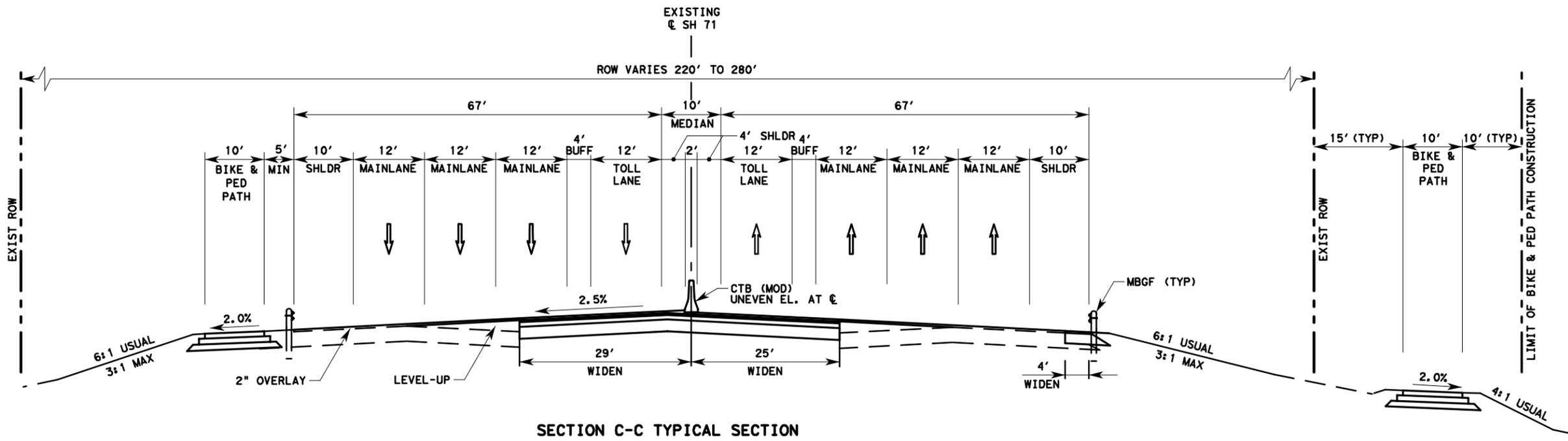
SH 71  
 TCP TYPICAL  
 SECTIONS



Texas Department of Transportation

SHEET 1 OF 3	
FED. RD. DIST. NO. 6	STATE AID PROJECT SHEET NO. 24
STATE TEXAS	COUNTY TRAVIS
CONT. SECT.	JOB HIGHWAY NO. SH 71

PHASE 5



**PRELIMINARY**

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 or permit purposes.

Eng/Insr: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 TCP TYPICAL  
 SECTIONS

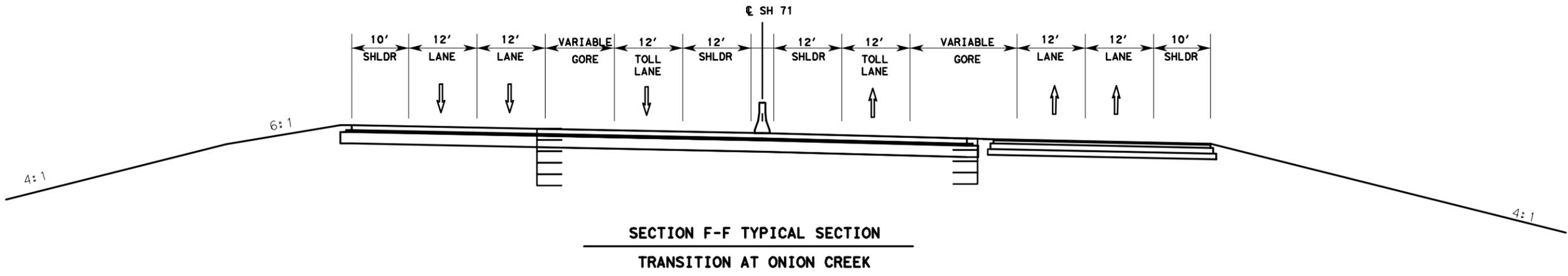
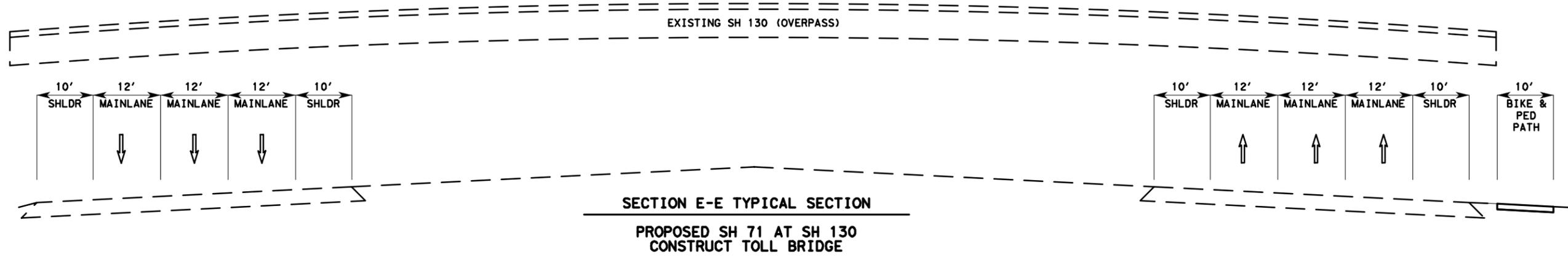
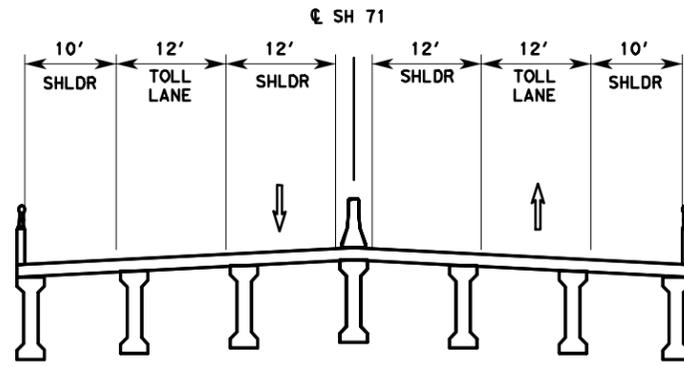


Texas Department of Transportation

SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		25
STATE	COUNTY	
TEXAS	TRAVIS	
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

PHASE 5



**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 TCP TYPICAL  
 SECTIONS

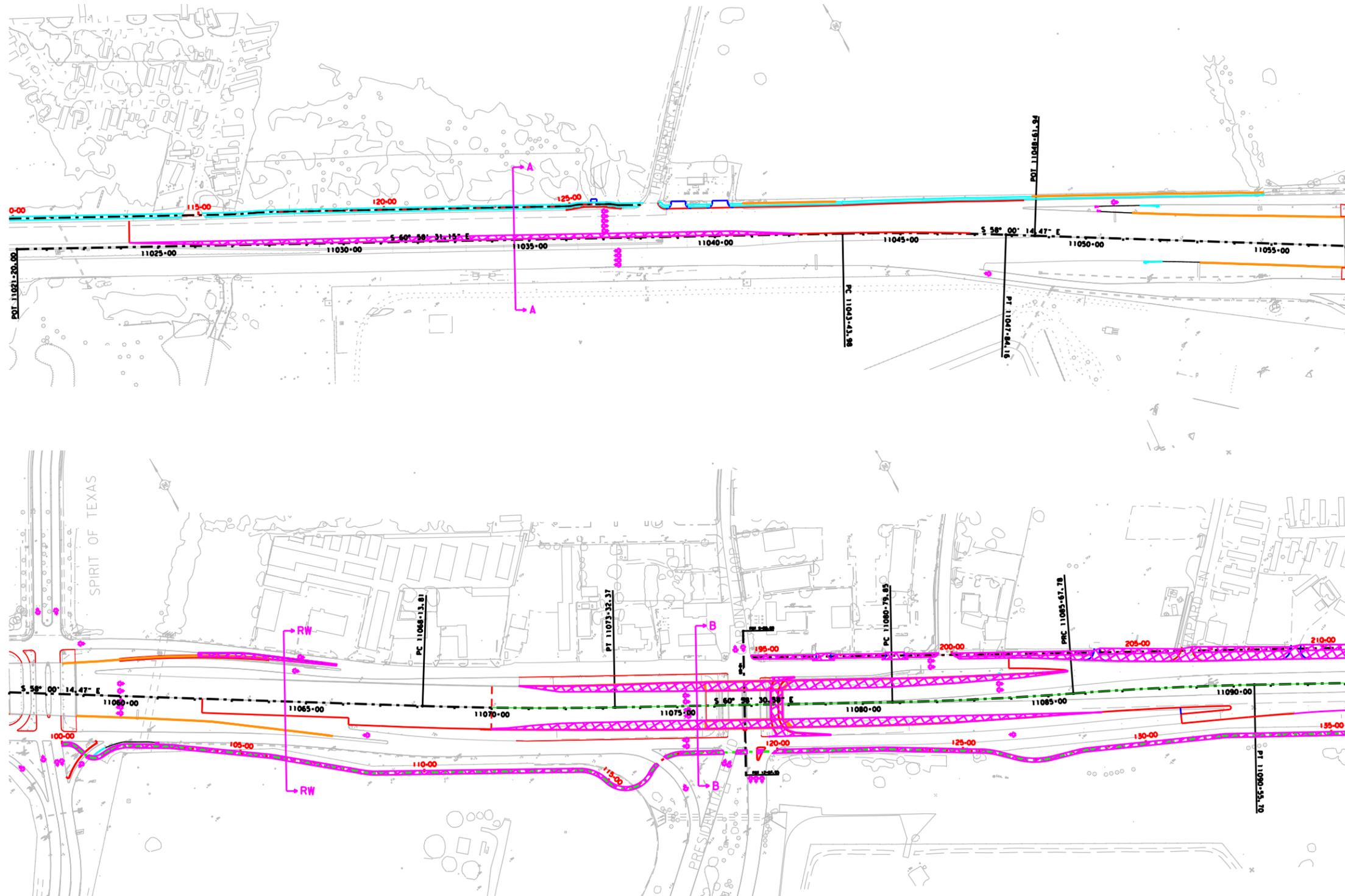


Texas Department of Transportation

SHEET 3 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		26
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

PHASE 5



PHASE 1 CONSTRUCTION 

**PRELIMINARY**  
 FOR REVIEW ONLY  
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 or permit purposes.  
**Kimley»Horn**  
 Engineer: DENNIS R. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 PHASE I TCP  
 LAYOUT  
**Kimley»Horn**  
 F-928  
**MCCARTHY**

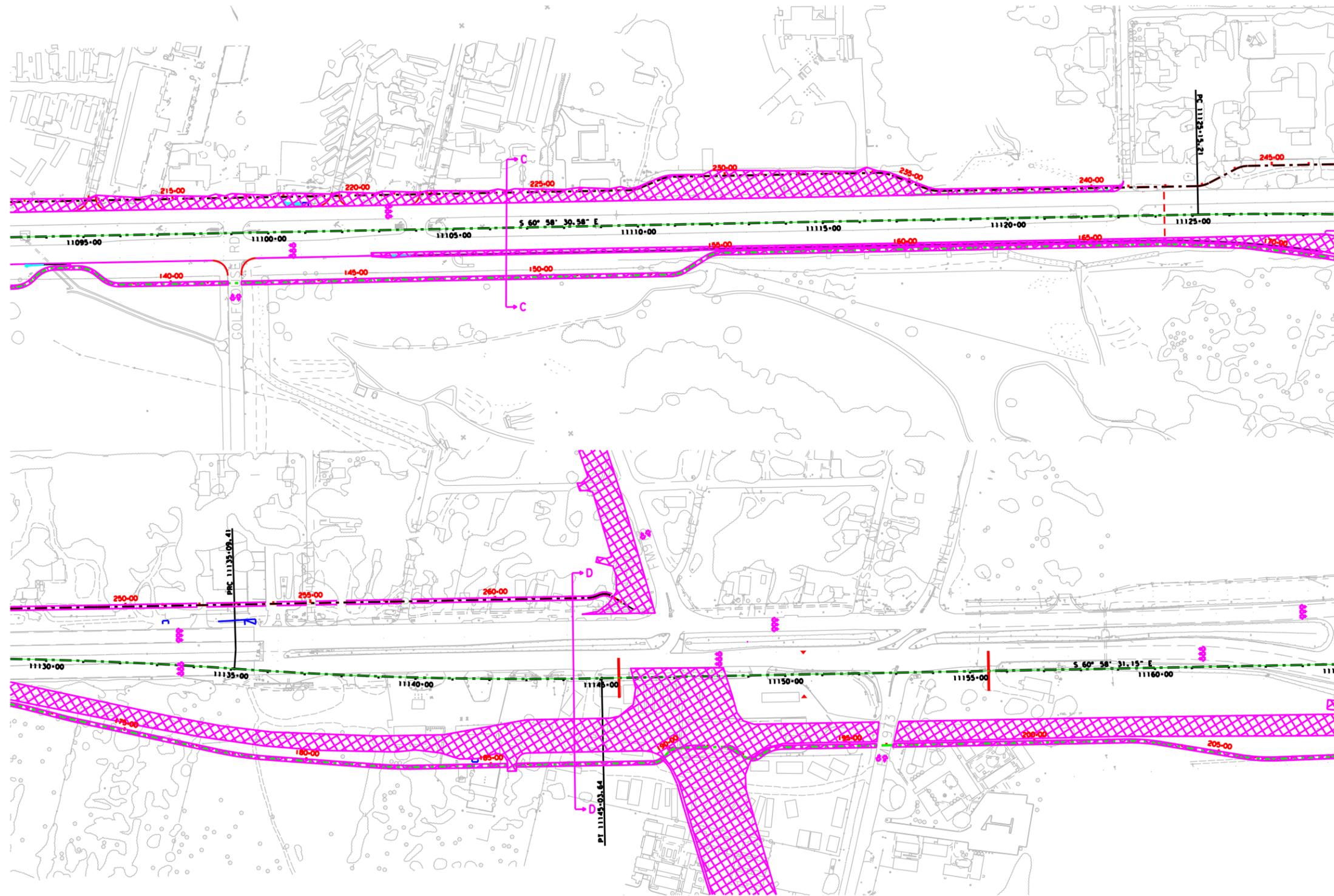
Texas Department of Transportation

SHEET 1 OF 3	
FED. RD. DIST. NO. 6	SHEET NO. 27
STATE TEXAS	COUNTY TRAVIS
CONTRACT NO.	HIGHWAY NO. SH 71

\$TIMES

\$DATE\$

\$FILES



PHASE I CONSTRUCTION 

**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
**Kimley»Horn**  
 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date: 08/24/2011

SH 71  
 PHASE I TCP  
 LAYOUT  
**Kimley»Horn**  
 F-928  
**MCCARTHY**

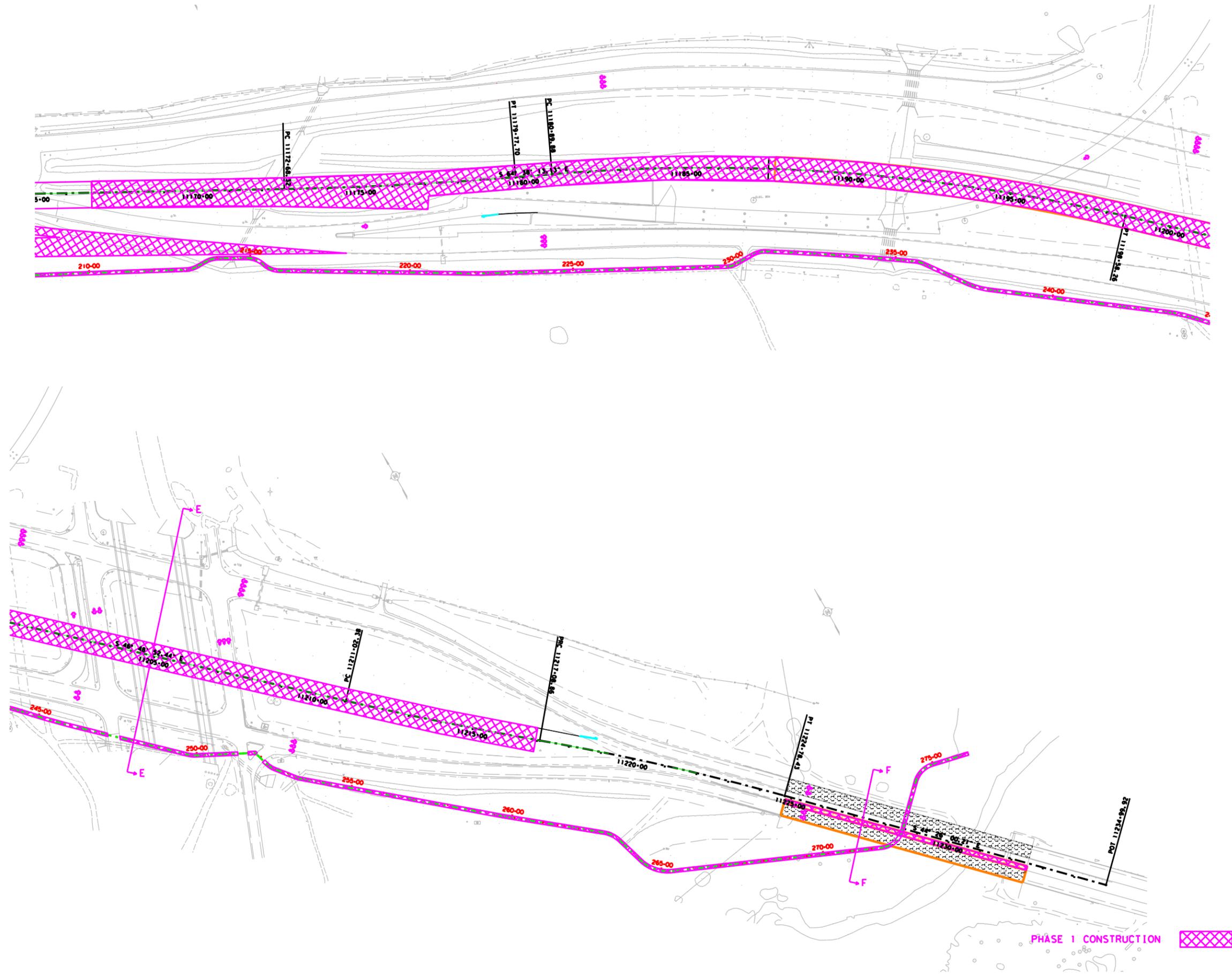
Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
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STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONTRACT NO.	SECTION	JOB	HIGHWAY NO.		
			SH 71		

\$TIMES

\$DATE\$

\$FILES



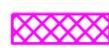
**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
**Kimley»Horn**  
 Engineer: **DEMMIS K. SEAL**  
 P. E. No. **80287** Date: **08/24/2011**

**SH 71**  
**PHASE 1 TCP**  
**LAYOUT**  
**Kimley»Horn**  
**MCCARTHY**

Texas Department of Transportation

SHEET 3 OF 3

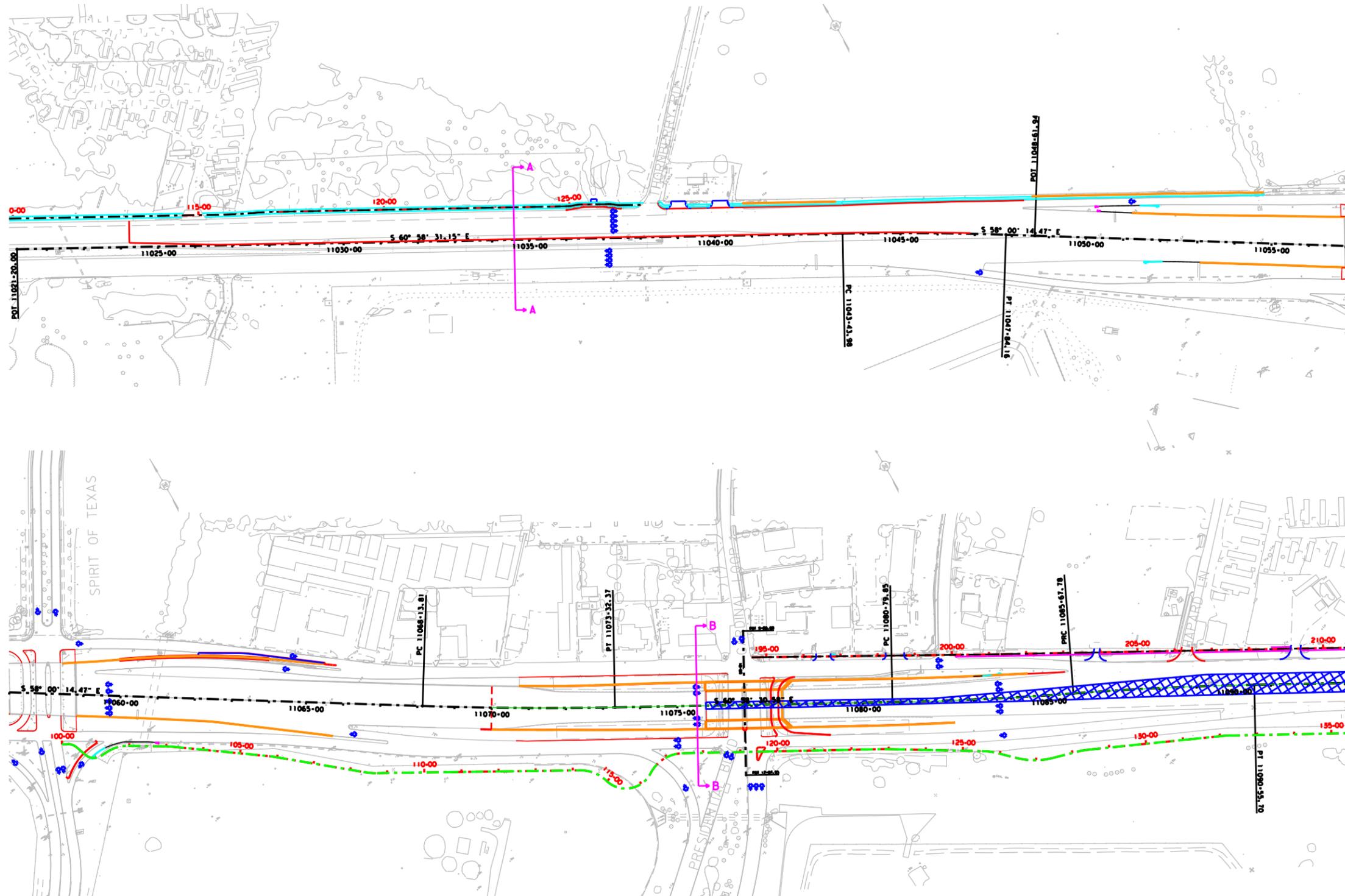
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6		29
STATE	COUNTY	
TEXAS	TRAVIS	
CONTRACT NO.	SECTION	JOB NO.
		SH 71

PHASE 1 CONSTRUCTION 

\$TIMES

\$DATE\$

\$FILES



PHASE 2 CONSTRUCTION



**PRELIMINARY**  
 FOR REVIEW ONLY  
 Not for construction, bidding,  
 or permit purposes.  
**Kimley»Horn**  
 Engineer: DENNIS R. SEAL  
 P. E. No. 80287 Date: 08/24/2011

SH 71  
 PHASE 2 TCP  
 LAYOUT  
**Kimley»Horn**



Texas Department of Transportation

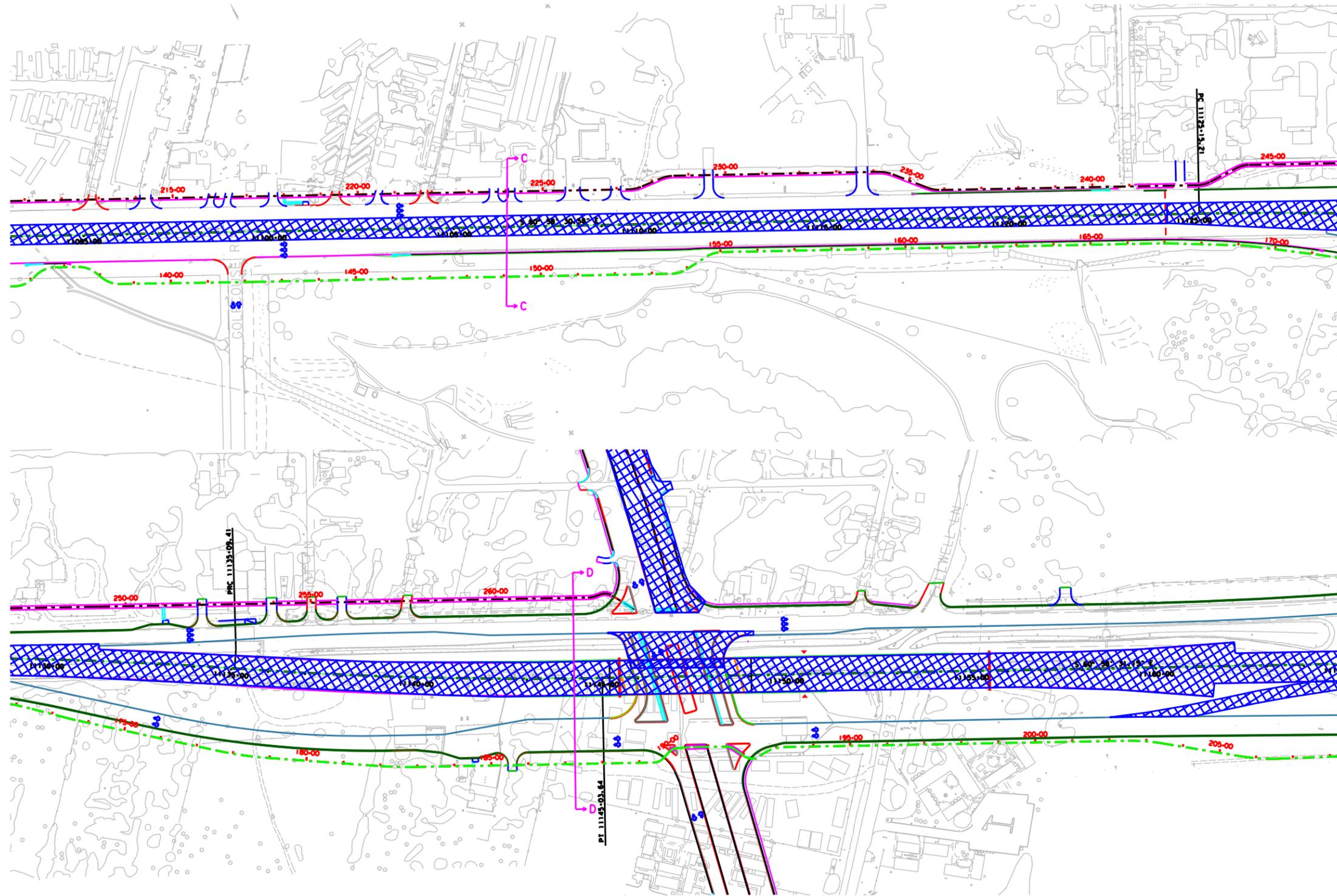
SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		30
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECT.	JOB NO.
		HIGHWAY NO.
		SH 71

\$TIMES

\$DATE\$

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PHASE 2 CONSTRUCTION



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**Kimley»Horn**

Engineer: DENNIS K. SEAL  
P. E. No. 80287 Date: 08/24/2008

SH 71  
PHASE 2 TCP  
LAYOUT  
**Kimley»Horn**

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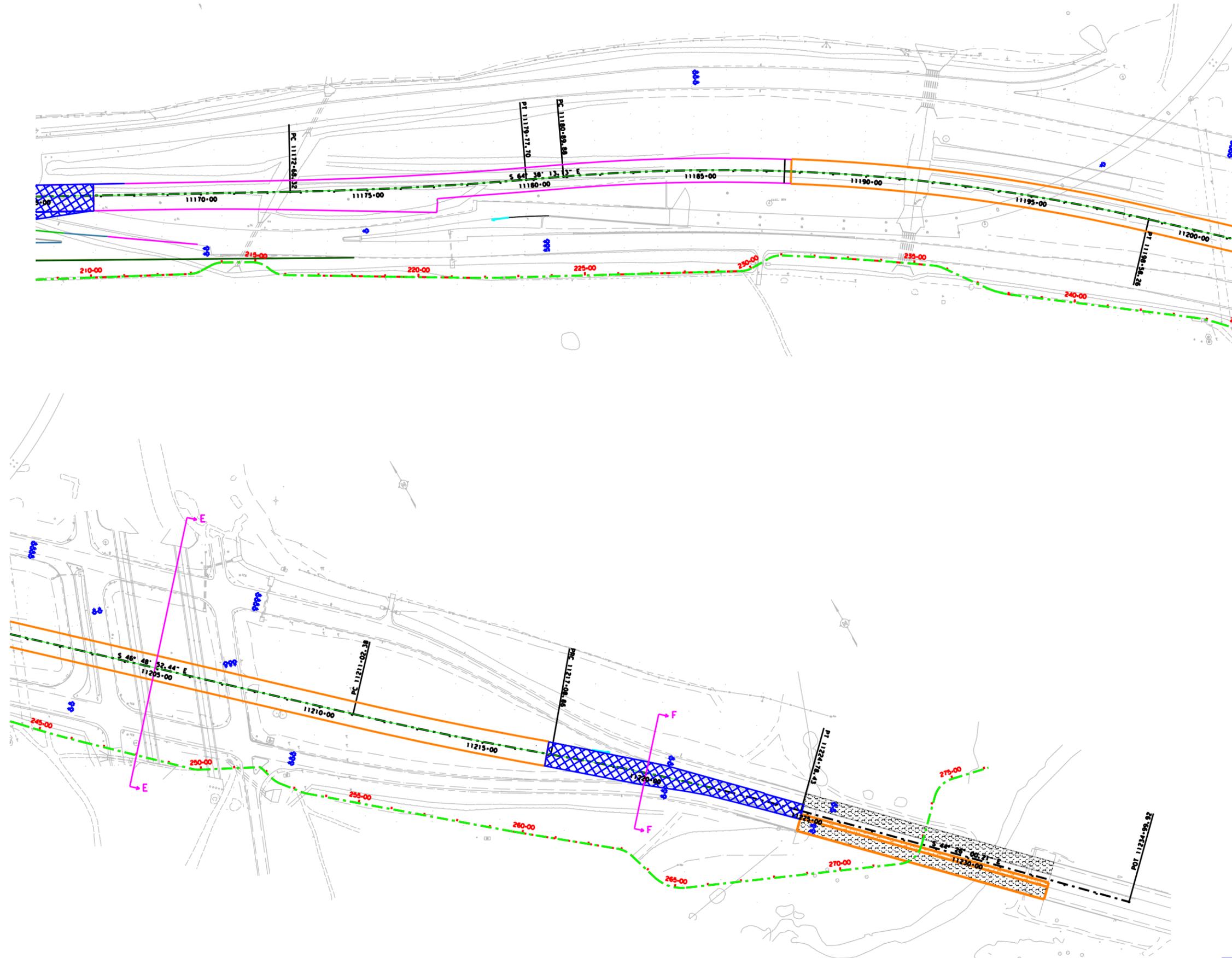
SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		31
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECTION	JOB
		HIGHWAY NO.
		SH 71

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 Engineer: **DEMMIS K. SEAL**  
 P. E. No. **80287** Date: **08/24/2017**

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**LAYOUT**  
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**SHEET 3 OF 3**

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		32
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT	SECT.	JOB
		HIGHWAY NO.
		SH 71

PHASE 2 CONSTRUCTION 

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 Engineer: **DEMMIS K. SEAL**  
 P. E. No. **80287** Date: **08DATE08**

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**PHASE 3 TCP**  
**LAYOUT**  
**Kimley»Horn**  
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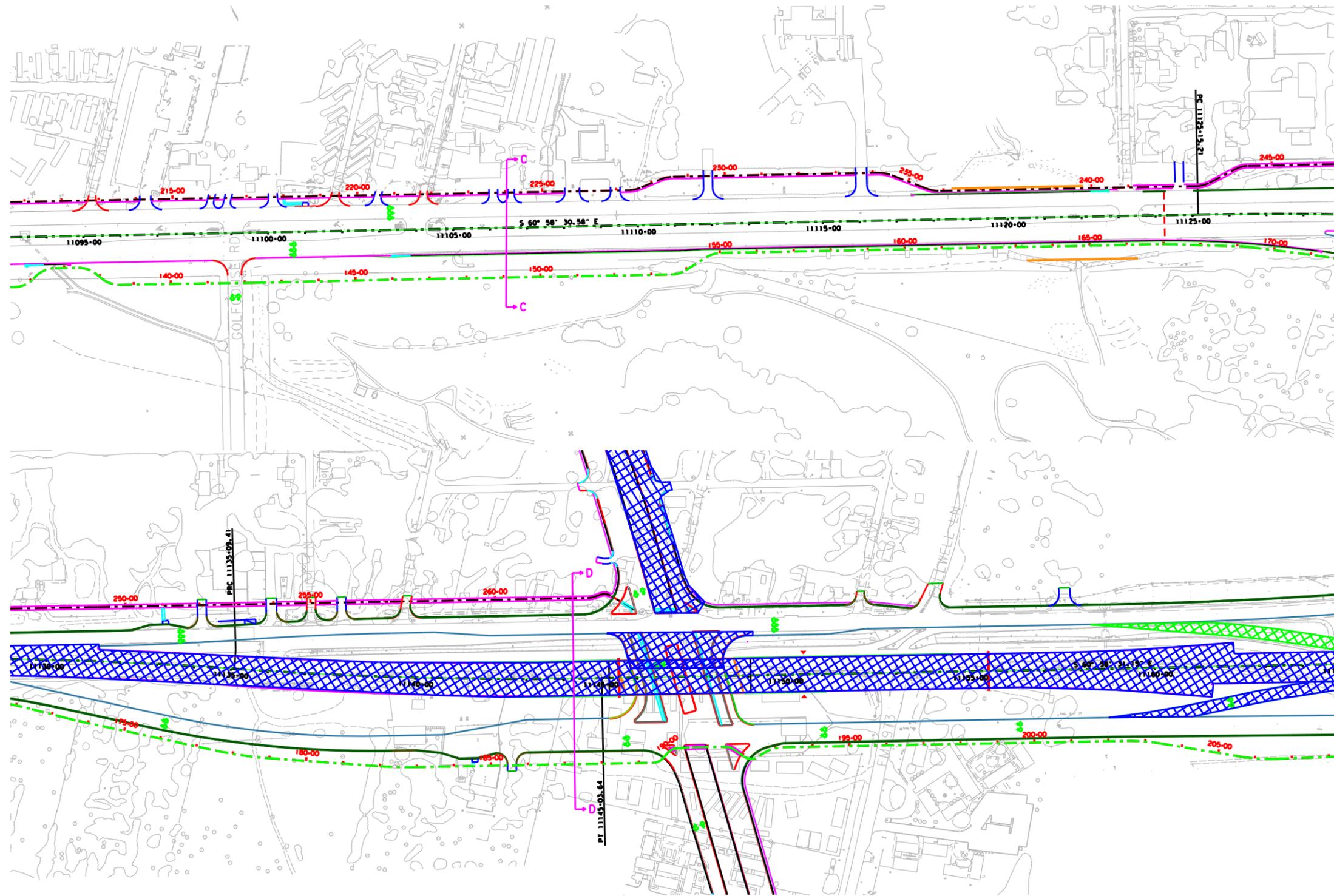
SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		33
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECT.	JOB NO.
		HIGHWAY NO.
		SH 71

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 Engineer: DENNIS K. SEAL  
 P. E. No. 80287 Date: 08/24/2008

SH 71  
 PHASE 3 TCP  
 LAYOUT  
**Kimley»Horn**  
 F-928



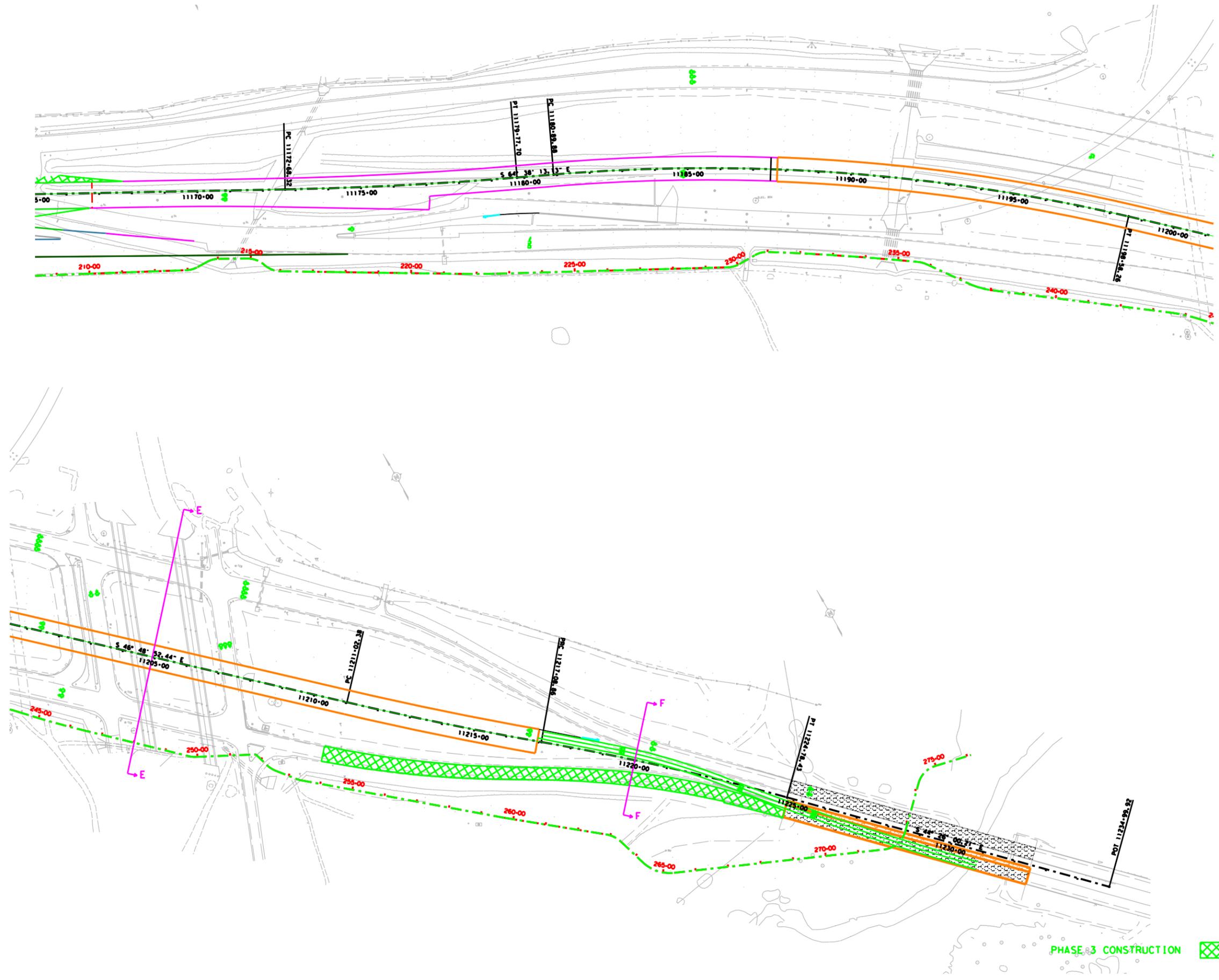
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SHEET 2 OF 3	
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STATE TEXAS	COUNTY TRAVIS
CONTRACT NO.	JOB NO.
SECTION NO.	HIGHWAY NO. SH 71

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 Engineer: **DEMMIS K. SEAL**  
 P. E. No. **80287** Date: **08/24/2011**

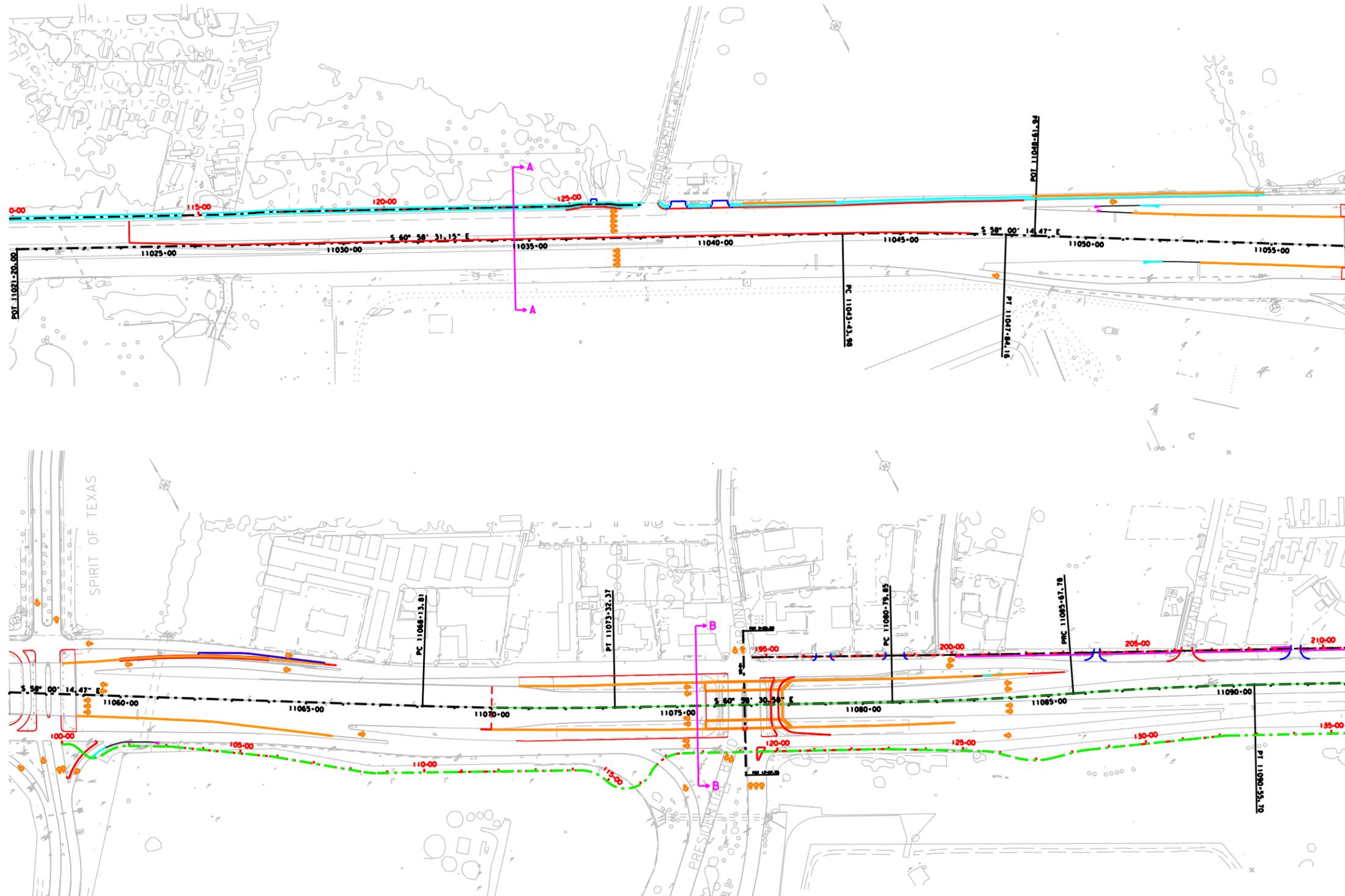
**SH 71  
 PHASE 3 TCP  
 LAYOUT**  
**Kimley»Horn**  
 F-928  
**MCCARTHY**

Texas Department of Transportation

SHEET 3 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		35
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECTION	JOB
		HIGHWAY NO.
		SH 71

PHASE 3 CONSTRUCTION 



PHASE 4 CONSTRUCTION 

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 Engineer: DENNIS R. SEAL  
 P. E. No. 80287 Date 5/16/2014

SH 71  
 PHASE 4 TCP  
 LAYOUT  
**Kimley»Horn**  
 F-928  
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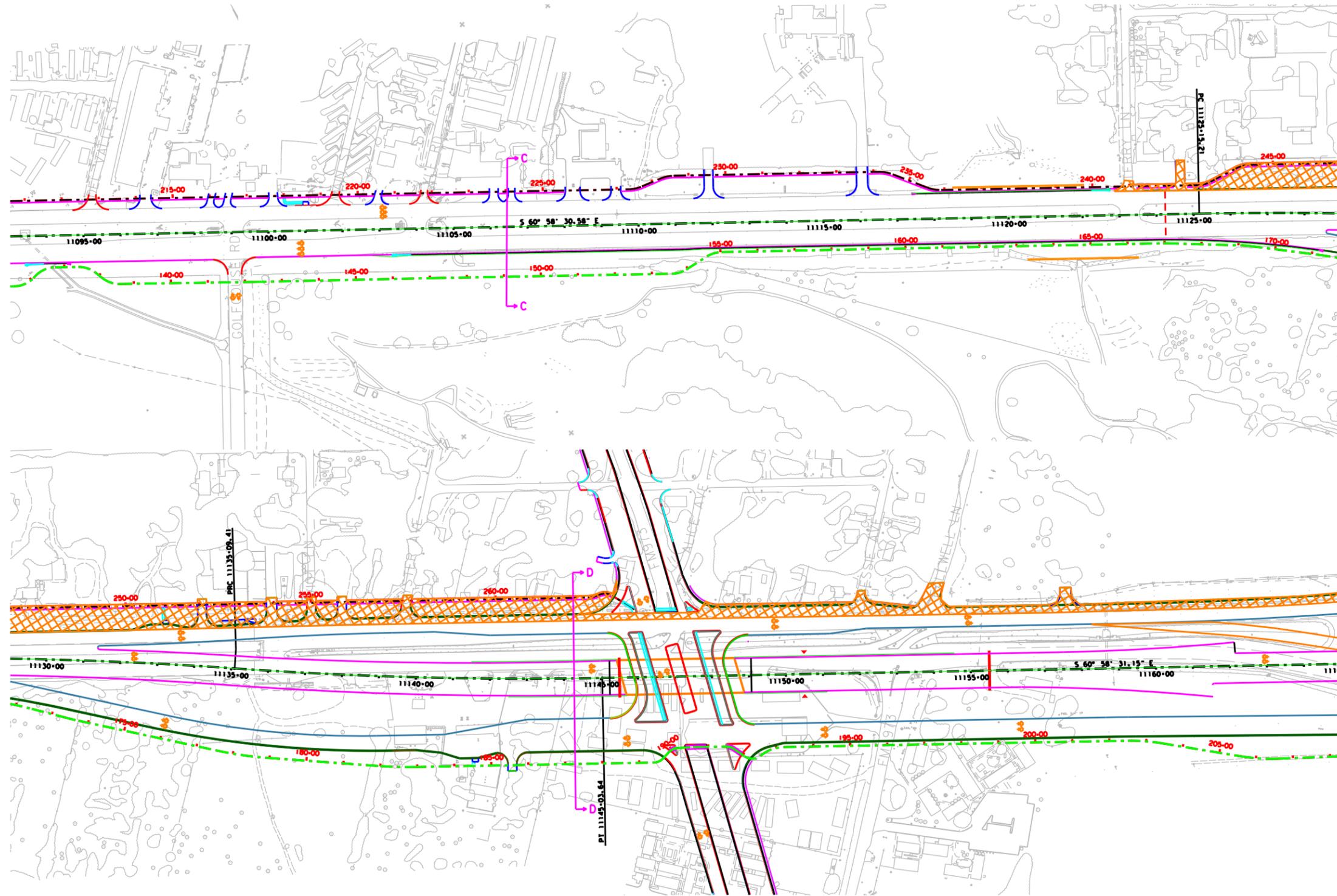
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SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		36
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECT.	JOB
		HIGHWAY NO.
		SH 71

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\$DATE\$



PHASE 4 CONSTRUCTION



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**Kimley»Horn**

Engineer: **DEMMIS K. SEAL**  
P. E. No. **80287** Date: **08/24/2011**

SH 71  
PHASE 4 TCP  
LAYOUT  
**Kimley»Horn**

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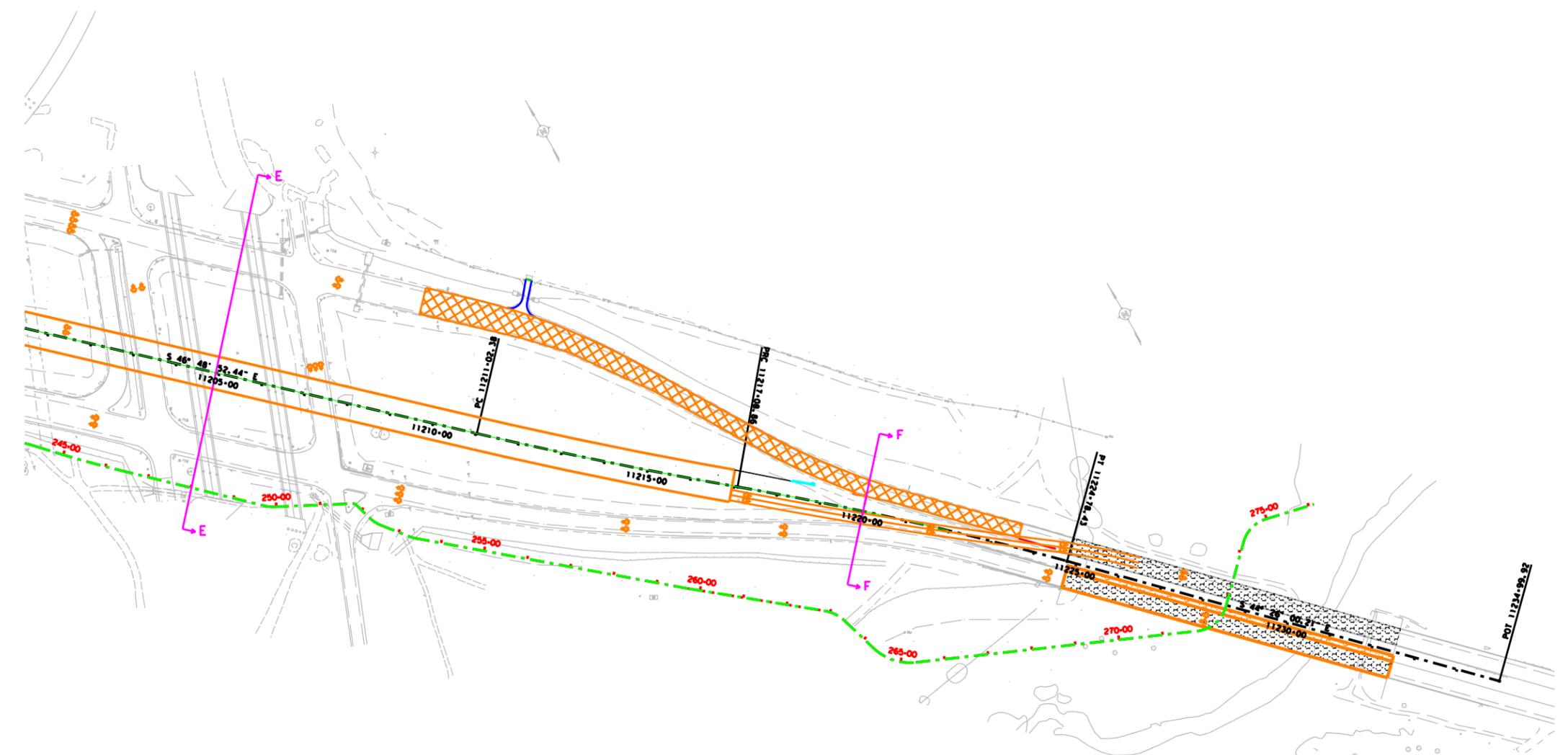
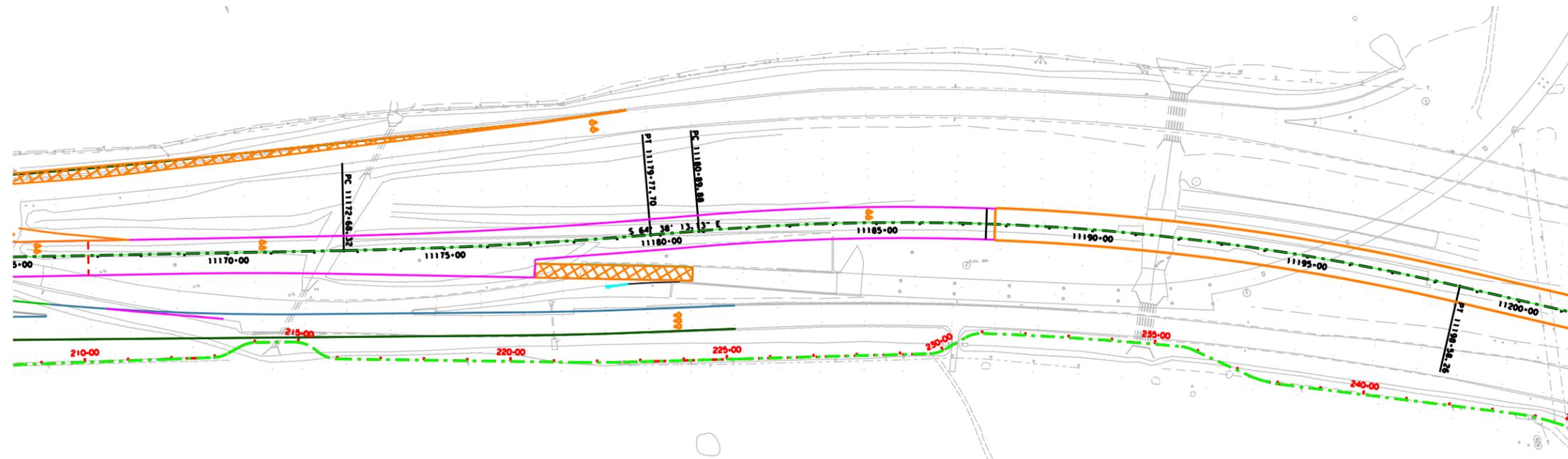
SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		37
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECTION	JOB
		HIGHWAY NO.
		SH 71

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 P. E. No. **80287** Date: **08/24/2017**

**SH 71**  
**PHASE 4 TCP**  
**LAYOUT**  
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SHEET 3 OF 3

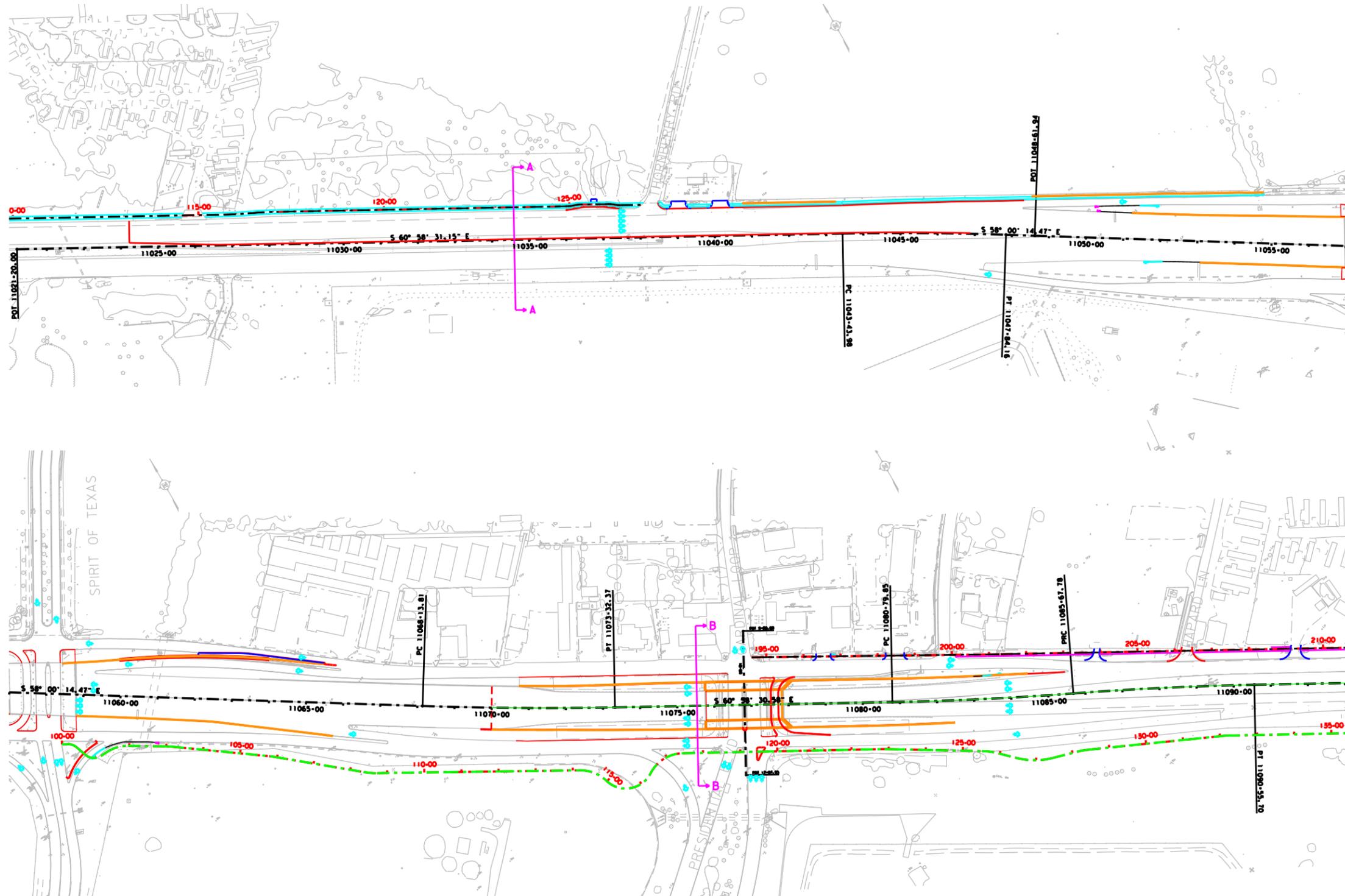
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6		38
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECT.	JOB
		HIGHWAY NO.
		SH 71

\$FILES

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\$FILES



PHASE 5 CONSTRUCTION 

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**Kimley»Horn**  
 Engineer: DENNIS R. SEAL  
 P. E. No. 80287 Date: 08/24/2011

SH 71  
 PHASE 5 TCP  
 LAYOUT  
**Kimley»Horn**  
 F-928  
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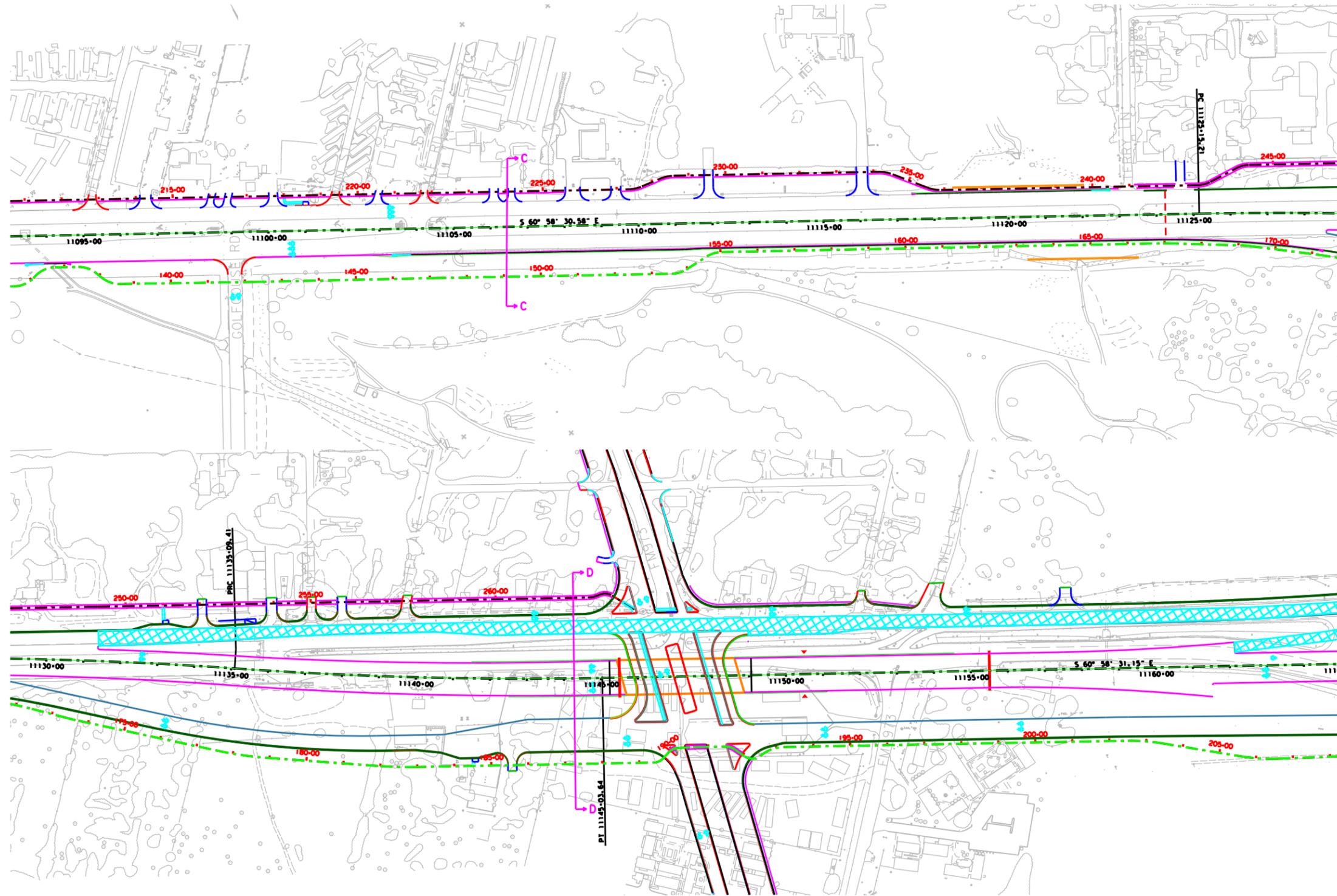
SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		39
STATE	COUNTY	
TEXAS	TRAVIS	
CONTRACT NO.	JOB NO.	HIGHWAY NO.
		SH 71

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PHASE 5 CONSTRUCTION



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**Kimley»Horn**

Engineer: **DEMMIS E. SEAL**  
P. E. No. **80287** Date: **08/24/2011**

SH 71  
PHASE 5 TCP  
LAYOUT  
**Kimley»Horn**

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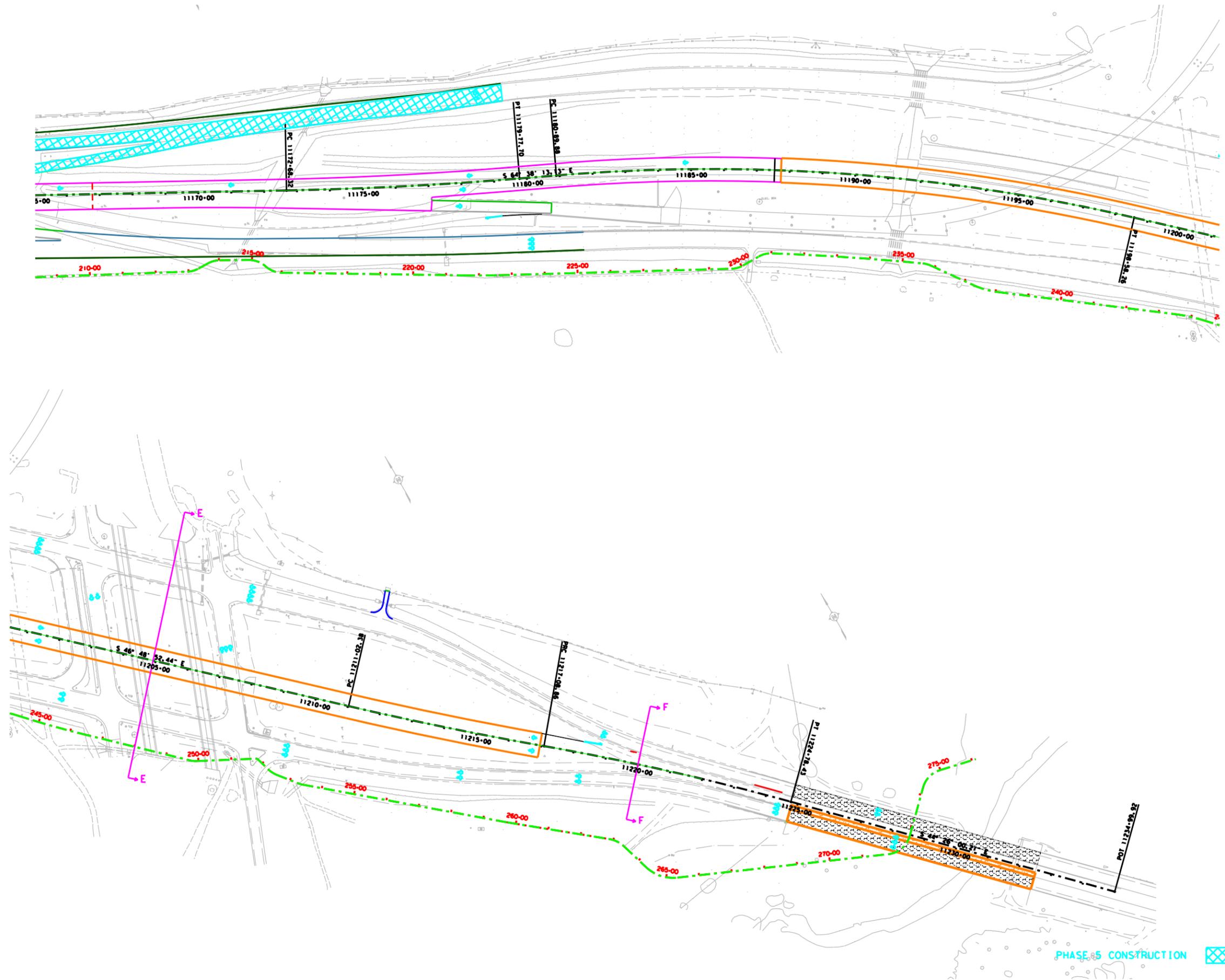
SHEET 2 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		40
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECTION	JOB
		HIGHWAY NO.
		SH 71

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 Engineer: **DEMMIS K. SEAL**  
 P. E. No. **80287** Date: **08/24/2011**

**SH 71**  
**PHASE 5 TCP**  
**LAYOUT**  
**Kimley»Horn**  
**MCCARTHY**

Texas Department of Transportation

**SHEET 3 OF 3**

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		41
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONTRACT NO.	SECT.	JOB
		HIGHWAY NO.
		SH 71

CL SH 71

<\* 1 Describe Chain SH71-BASE

Chain SH71-BASE contains:

SH7140 CUR SH71-BASE-1 CUR SH71-BASE-2 SH7141 CUR SH71-BASE-3 CUR SH71-BASE-4 - CUR SH71-BASE-5 CUR SH71-BASE-6 CUR SH71-BASE-7 CUR SH71-BASE-8 CUR SH71-BASE-9 - CUR SH71-BASE-10 CUR SH71-BASE-11 SH7142

Beginning chain SH71-BASE description

Point SH7140 N 10,055,627.7945 E 3,136,058.7698 Sta 11011+92.52

Course from SH7140 to PC SH71-BASE-1 S 68° 01' 41.78" E Dist 64.0299

Curve Data \*-----\*
Curve SH71-BASE-1
P.I. Station 11016+87.94 N 10,055,442.4354 E 3,136,518.2023
Delta = 7° 03' 10.63" (RT)
Degree = 0° 49' 06.64"
Tangent = 431.3852
Length = 861.6807
Radius = 7,000.0000
External = 13.2798
Long Chord = 861.1368
Mid. Ord. = 13.2546
P.C. Station 11012+56.55 N 10,055,603.8378 E 3,136,118.1492
P.T. Station 11021+18.23 N 10,055,233.1332 E 3,136,895.4101
C.C. Station 11012+56.55 N 10,049,112.2577 E 3,133,499.1058
Back = S 68° 01' 41.78" E
Ahead = S 60° 58' 31.15" E
Chord Bear = S 64° 30' 06.46" E

Course from PT SH71-BASE-1 to PC SH71-BASE-2 S 60° 58' 31.15" E Dist 2,225.7479

Curve Data \*-----\*
Curve SH71-BASE-2
P.I. Station 11045+64.12 N 10,054,046.4224 E 3,139,034.1198
Delta = 2° 58' 16.68" (RT)
Degree = 0° 40' 30.08"
Tangent = 220.1388
Length = 440.1788
Radius = 8,488.0000
External = 2.8542
Long Chord = 440.1295
Mid. Ord. = 2.8532
P.C. Station 11043+43.98 N 10,054,153.2307 E 3,138,841.6281
P.T. Station 11047+84.16 N 10,053,929.7798 E 3,139,220.8162
C.C. Station 11043+43.98 N 10,046,731.2320 E 3,134,723.3665
Back = S 60° 58' 31.15" E
Ahead = S 58° 00' 14.47" E
Chord Bear = S 59° 29' 22.81" E

Course from PT SH71-BASE-2 to SH7141 S 58° 00' 14.47" E Dist 77.7806

Point SH7141 N 10,053,888.5669 E 3,139,286.7808 Sta 11048+61.94

Course from SH7141 to PC SH71-BASE-3 S 58° 00' 14.47" E Dist 1,951.8718

Curve Data \*-----\*
Curve SH71-BASE-3
P.I. Station 11070+73.15 N 10,052,716.9351 E 3,141,162.0763
Delta = 2° 58' 16.11" (LT)
Degree = 0° 34' 22.65"
Tangent = 259.3392
Length = 518.5622
Radius = 10,000.0000
External = 3.3623
Long Chord = 518.5041
Mid. Ord. = 3.3611
P.C. Station 11068+13.81 N 10,052,854.3486 E 3,140,942.1345
P.T. Station 11073+32.37 N 10,052,591.1067 E 3,141,388.8450
C.C. Station 11068+13.81 N 10,061,335.2012 E 3,146,240.7323
Back = S 58° 00' 14.47" E
Ahead = S 60° 58' 30.58" E
Chord Bear = S 59° 29' 22.52" E

Course from PT SH71-BASE-3 to PC SH71-BASE-4 S 60° 58' 30.58" E Dist 747.4800

Curve Data \*-----\*
Curve SH71-BASE-4
P.I. Station 11083+23.88 N 10,052,110.0375 E 3,142,255.8301
Delta = 3° 17' 20.20" (LT)
Degree = 0° 40' 26.64"
Tangent = 244.0294
Length = 487.9247
Radius = 8,500.0000
External = 3.5022
Long Chord = 487.8577
Mid. Ord. = 3.5008
P.C. Station 11080+79.85 N 10,052,228.4378 E 3,142,042.4485
P.T. Station 11085+67.78 N 10,052,004.0742 E 3,142,475.6530
C.C. Station 11080+79.85 N 10,059,660.9182 E 3,146,166.5528
Back = S 60° 58' 30.58" E
Ahead = S 64° 15' 50.78" E
Chord Bear = S 62° 37' 10.68" E

CL SH 71 CONTINUED...

Curve Data \*-----\*
Curve SH71-BASE-5
P.I. Station 11088+11.81 N 10,051,898.1109 E 3,142,695.4759
Delta = 3° 17' 20.20" (RT)
Degree = 0° 40' 26.64"
Tangent = 244.0294
Length = 487.9247
Radius = 8,500.0000
External = 3.5022
Long Chord = 487.8577
Mid. Ord. = 3.5008
P.C. Station 11085+67.78 N 10,052,004.0742 E 3,142,475.6530
P.T. Station 11090+55.70 N 10,051,779.7106 E 3,142,908.8575
C.C. Station 11085+67.78 N 10,044,347.2303 E 3,138,784.7532
Back = S 64° 15' 50.78" E
Ahead = S 60° 58' 30.58" E
Chord Bear = S 62° 37' 10.68" E

Course from PT SH71-BASE-5 to PC SH71-BASE-6 S 60° 58' 30.58" E Dist 3,459.5037

Curve Data \*-----\*
Curve SH71-BASE-6
P.I. Station 11130+12.64 N 10,049,859.8491 E 3,146,368.8411
Delta = 5° 07' 54.68" (RT)
Degree = 0° 30' 58.24"
Tangent = 497.4338
Length = 994.2024
Radius = 11,100.0000
External = 11.1404
Long Chord = 993.8701
Mid. Ord. = 11.1292
P.C. Station 11125+15.21 N 10,050,101.1984 E 3,145,933.8802
P.T. Station 11135+09.41 N 10,049,580.5609 E 3,146,780.4701
C.C. Station 11125+15.21 N 10,040,395.2535 E 3,140,548.2853
Back = S 60° 58' 30.58" E
Ahead = S 55° 50' 35.90" E
Chord Bear = S 58° 24' 33.24" E

Curve Data \*-----\*
Curve SH71-BASE-7
P.I. Station 11140+06.86 N 10,049,301.2641 E 3,147,192.1118
Delta = 5° 07' 55.25" (LT)
Degree = 0° 30' 58.24"
Tangent = 497.4491
Length = 994.2329
Radius = 11,100.0000
External = 11.1411
Long Chord = 993.9006
Mid. Ord. = 11.1299
P.C. Station 11135+09.41 N 10,049,580.5609 E 3,146,780.4701
P.T. Station 11145+03.64 N 10,049,059.9086 E 3,147,627.0867
C.C. Station 11140+06.86 N 10,058,765.8683 E 3,153,012.6549
Back = S 55° 50' 35.90" E
Ahead = S 60° 58' 31.15" E
Chord Bear = S 58° 24' 33.52" E

Course from PT SH71-BASE-7 to PC SH71-BASE-8 S 60° 58' 31.15" E Dist 2,764.6804

Curve Data \*-----\*
Curve SH71-BASE-8
P.I. Station 11176+23.13 N 10,047,546.3742 E 3,150,354.8032
Delta = 3° 39' 41.99" (LT)
Degree = 0° 30' 58.24"
Tangent = 354.8106
Length = 709.3796
Radius = 11,100.0000
External = 5.6693
Long Chord = 709.2589
Mid. Ord. = 5.6664
P.C. Station 11172+68.32 N 10,047,718.5234 E 3,150,044.5530
P.T. Station 11179+77.70 N 10,047,394.3904 E 3,150,675.4143
C.C. Station 11176+23.13 N 10,057,424.4832 E 3,155,430.1213
Back = S 60° 58' 31.15" E
Ahead = S 64° 38' 13.13" E
Chord Bear = S 62° 48' 22.14" E

Course from PT SH71-BASE-8 to PC SH71-BASE-9 S 64° 38' 13.13" E Dist 112.1805

Curve Data \*-----\*
Curve SH71-BASE-9
P.I. Station 11189+81.27 N 10,046,964.5104 E 3,151,582.2495
Delta = 17° 49' 20.69" (RT)
Degree = 1° 00' 28.23"
Tangent = 891.3866
Length = 1,768.3751
Radius = 5,685.0000
External = 69.4587
Long Chord = 1,761.2543
Mid. Ord. = 68.2203
P.C. Station 11180+89.88 N 10,047,346.3376 E 3,150,776.7820
P.T. Station 11198+58.26 N 10,046,354.4796 E 3,152,232.1975
C.C. Station 11189+81.27 N 10,042,209.3036 E 3,148,341.6010
Back = S 64° 38' 13.13" E
Ahead = S 46° 48' 52.44" E
Chord Bear = S 55° 43' 32.79" E

Course from PT SH71-BASE-9 to PC SH71-BASE-10 S 46° 48' 52.44" E Dist 1,244.1183

CL SH 71 CONTINUED...

Curve Data \*-----\*
Curve SH71-BASE-10
P.I. Station 11214+05.69 N 10,045,295.4749 E 3,153,360.4976
Delta = 3° 07' 49.87" (LT)
Degree = 0° 30' 58.24"
Tangent = 303.3157
Length = 606.4805
Radius = 11,100.0000
External = 4.1434
Long Chord = 606.4050
Mid. Ord. = 4.1418
P.C. Station 11211+02.38 N 10,045,503.0526 E 3,153,139.3372
P.T. Station 11217+08.86 N 10,045,100.2847 E 3,153,592.6640
C.C. Station 11211+02.38 N 10,053,596.5359 E 3,160,735.7526
Back = S 46° 48' 52.44" E
Ahead = S 49° 56' 42.31" E
Chord Bear = S 48° 22' 47.38" E

Course from PT SH71-BASE-10 to SH7142 S 44° 26' 00.21" E Dist 1,021.4867

Curve Data \*-----\*
Curve SH71-BASE-11
P.I. Station 11220+93.94 N 10,044,852.4736 E 3,153,887.4196
Delta = 5° 30' 42.11" (RT)
Degree = 0° 42' 58.31"
Tangent = 385.0860
Length = 769.5780
Radius = 8,000.0000
External = 9.2628
Long Chord = 769.2813
Mid. Ord. = 9.2521
P.C. Station 11217+08.86 N 10,045,100.2847 E 3,153,592.6640
P.T. Station 11224+78.43 N 10,044,577.4972 E 3,154,157.0105
C.C. Station 11220+93.94 N 10,038,976.8604 E 3,148,444.4920
Back = S 49° 56' 42.31" E
Ahead = S 44° 26' 00.21" E
Chord Bear = S 47° 11' 21.26" E

Course from PT SH71-BASE-11 to SH7142 S 44° 26' 00.21" E Dist 1,021.4867

Point SH7142 N 10,043,848.0895 E 3,154,872.1324 Sta 11234+99.92

Ending chain SH71-BASE description

INTERIM REVIEW ONLY
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEO A DALY COMPANY TBPE Firm No. 2614

Texas Department of Transportation SHEET 1 OF 7

Table with columns: STATE, COUNTY, DISTRICT, JOB, HIGHWAY NO. Values: TEXAS, TRAVIS, DISTRICT, JOB, SH 71

BL-A WESTBOUND SH 71

<\* 1 Describe Chain WBSH71-BASE-A

Chain WBSH71-BASE-A contains:
WBSH50 CUR WBSH71-BASE-A-1 CUR WBSH71-BASE-A-2 CUR WBSH71-BASE-A-3 CUR WBSH71-BASE-A-4

Beginning chain WBSH71-BASE-A description

Point WBSH50 N 10,050,279.4872 E 3,145,742.4137 Sta 21128+79.09

Course from WBSH50 to PC WBSH71-BASE-A-1 S 60° 58' 30.58" E Dist 877.2532

Curve Data

Curve WBSH71-BASE-A-1
P.I. Station 21139+57.20 N 10,049,756.4022 E 3,146,685.1200
Delta 2° 52' 35.06" (LT)
Degree 0° 42' 58.31"
Tangent 200.8531
Length 401.6218
Radius 8,000.0000
External 2.5210
Long Chord 401.5796
Mid. Ord. 2.5202
P.C. Station 21137+56.34 N 10,049,853.8538 E 3,146,509.4922
P.T. Station 21141+57.96 N 10,049,667.8866 E 3,146,865.4169
C.C. N 10,056,849.1295 E 3,150,391.0021
Back S 60° 58' 30.58" E
Ahead S 63° 51' 05.64" E
Chord Bear S 62° 24' 48.11" E

Curve Data

Curve WBSH71-BASE-A-2
P.I. Station 21143+55.74 N 10,049,580.7253 E 3,147,042.9552
Delta 2° 52' 34.53" (RT)
Degree 0° 43' 38.24"
Tangent 197.7800
Length 395.4769
Radius 7,878.0000
External 2.4823
Long Chord 395.4354
Mid. Ord. 2.4815
P.C. Station 21141+57.96 N 10,049,667.8866 E 3,146,865.4169
P.T. Station 21145+53.44 N 10,049,484.7651 E 3,147,215.8961
C.C. N 10,042,596.1577 E 3,143,393.5968
Back S 63° 51' 05.64" E
Ahead S 60° 58' 31.11" E
Chord Bear S 62° 24' 48.37" E

Course from PT WBSH71-BASE-A-2 to PC WBSH71-BASE-A-3 S 60° 58' 31.11" E Dist 1,967.1205

Curve Data

Curve WBSH71-BASE-A-3
P.I. Station 21170+03.76 N 10,048,295.9015 E 3,149,358.4848
Delta 4° 49' 43.71" (LT)
Degree 0° 29' 59.87"
Tangent 483.2025
Length 965.8330
Radius 11,460.0000
External 10.1824
Long Chord 965.5472
Mid. Ord. 10.1734
P.C. Station 21165+20.56 N 10,048,530.3448 E 3,148,935.9673
P.T. Station 21174+86.40 N 10,048,097.8573 E 3,149,799.2378
C.C. N 10,058,551.0914 E 3,154,496.2046
Back S 60° 58' 31.11" E
Ahead S 65° 48' 14.82" E
Chord Bear S 63° 23' 22.97" E

Course from PT WBSH71-BASE-A-3 to PC WBSH71-BASE-A-4 S 65° 48' 14.82" E Dist 1,216.1521

Curve Data

Curve WBSH71-BASE-A-4
P.I. Station 21188+51.32 N 10,047,538.4340 E 3,151,044.2503
Delta 3° 16' 39.04" (RT)
Degree 1° 06' 06.63"
Tangent 148.7693
Length 297.4575
Radius 5,200.0000
External 2.1277
Long Chord 297.4169
Mid. Ord. 2.1268
P.C. Station 21187+02.55 N 10,047,599.4082 E 3,150,908.5504
P.T. Station 21190+00.01 N 10,047,469.8013 E 3,151,176.2421
C.C. N 10,042,856.2305 E 3,148,777.2915
Back S 65° 48' 14.82" E
Ahead S 62° 31' 35.78" E
Chord Bear S 64° 09' 55.30" E

Ending chain WBSH71-BASE-A description

BL-B WESTBOUND SH 71

<\* 1 Describe Chain WBSH71-BASE-B

Chain WBSH71-BASE-B contains:
WBSH100 CUR WBSH71-BASE-B-1 CUR WBSH71-BASE-B-2 WBSH101

Beginning chain WBSH71-BASE-B description

Point WBSH100 N 10,045,910.9544 E 3,153,124.3696 Sta 20+00.00

Course from WBSH100 to PC WBSH71-BASE-B-1 S 46° 29' 02.85" E Dist 208.4272

Curve Data

Curve WBSH71-BASE-B-1
P.I. Station 24+11.63 N 10,045,627.5224 E 3,153,422.8789
Delta 15° 25' 47.36" (RT)
Degree 3° 49' 10.99"
Tangent 203.2055
Length 403.9518
Radius 1,500.0000
External 13.7016
Long Chord 402.7322
Mid. Ord. 13.5776
P.C. Station 22+08.43 N 10,045,767.4407 E 3,153,275.5176
P.T. Station 26+12.38 N 10,045,453.4406 E 3,153,527.7025
C.C. N 10,044,679.6653 E 3,152,242.6843
Back S 46° 29' 02.85" E
Ahead S 31° 03' 15.49" E
Chord Bear S 38° 46' 09.17" E

Course from PT WBSH71-BASE-B-1 to PC WBSH71-BASE-B-2 S 31° 03' 15.49" E Dist 330.0174

Curve Data

Curve WBSH71-BASE-B-2
P.I. Station 31+30.28 N 10,045,009.7657 E 3,153,794.8619
Delta 13° 23' 41.43" (LT)
Degree 3° 34' 51.55"
Tangent 187.8838
Length 374.0545
Radius 1,600.0000
External 10.9936
Long Chord 373.2033
Mid. Ord. 10.9186
P.C. Station 29+42.40 N 10,045,170.7217 E 3,153,697.9420
P.T. Station 33+16.45 N 10,044,875.6406 E 3,153,926.4324
C.C. N 10,045,996.0821 E 3,155,068.6281
Back S 31° 03' 15.49" E
Ahead S 44° 26' 56.92" E
Chord Bear S 37° 45' 06.20" E

Course from PT WBSH71-BASE-B-2 to WBSH101 S 44° 26' 56.92" E Dist 528.9724

Point WBSH101 N 10,044,498.0219 E 3,154,296.8590 Sta 38+45.42

Ending chain WBSH71-BASE-B description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEAO A DALY COMPANY TBPE Firm No. 2614

Table with project details: TEXAS, TRAVIS, SHEET 2 OF 7, SH 71

BL-A EASTBOUND SH 71

<\* 1 Describe Chain EBSH71-BASE-A

Chain EBSH71-BASE-A contains:
EBSH50 CUR EBSH71-BASE-A-1 CUR EBSH71-BASE-A-2 CUR EBSH71-BASE-A-3 CUR EBSH71--
BASE-A-4 CUR EBSH71-BASE-A-5

Beginning chain EBSH71-BASE-A description

Point EBSH50 N 10,050,167.5628 E 3,145,680.3095 Sta 31123+22.20

Course from EBSH50 to PC EBSH71-BASE-A-1 S 60° 58' 30.58" E Dist 122.5132

Curve Data

Curve EBSH71-BASE-A-1
P.I. Station 31127+77.92 N 10,049,946.4528 E 3,146,078.7951
Delta 13° 16' 03.60" (RT)
Degree 1° 59' 59.47"
Tangent 333.2064
Length 663.4323
Radius 2,865.0000
External 19.3113
Long Chord 661.9510
Mid. Ord. 19.1820
P.C. Station 31124+44.71 N 10,050,108.1208 E 3,145,787.4362
P.T. Station 31131+08.15 N 10,049,722.2329 E 3,146,325.2742
C.C. Station 31127+77.92 N 10,047,602.9377 E 3,144,397.3705
Back S 60° 58' 30.58" E
Ahead S 47° 42' 26.98" E
Chord Bear S 54° 20' 28.78" E

Course from PT EBSH71-BASE-A-1 to PC EBSH71-BASE-A-2 S 47° 42' 26.98" E Dist 237.7800

Curve Data

Curve EBSH71-BASE-A-2
P.I. Station 31136+79.05 N 10,049,338.0608 E 3,146,747.5848
Delta 13° 16' 04.03" (LT)
Degree 2° 00' 01.26"
Tangent 333.1267
Length 663.2735
Radius 2,864.2890
External 19.3068
Long Chord 661.7925
Mid. Ord. 19.1776
P.C. Station 31133+45.93 N 10,049,562.2270 E 3,146,501.1646
P.T. Station 31140+09.20 N 10,049,176.4321 E 3,147,038.8743
C.C. Station 31136+79.05 N 10,051,680.9963 E 3,148,428.5899
Back S 47° 42' 26.98" E
Ahead S 60° 58' 31.00" E
Chord Bear S 54° 20' 28.99" E

Course from PT EBSH71-BASE-A-2 to PC EBSH71-BASE-A-3 S 60° 58' 31.00" E Dist 1,908.9150

Curve Data

Curve EBSH71-BASE-A-3
P.I. Station 31159+68.23 N 10,048,225.9337 E 3,148,751.8753
Delta 0° 34' 27.60" (RT)
Degree 0° 34' 22.65"
Tangent 50.1205
Length 100.2401
Radius 10,000.0000
External 0.1256
Long Chord 100.2397
Mid. Ord. 0.1256
P.C. Station 31159+18.11 N 10,048,250.2515 E 3,148,708.0494
P.T. Station 31160+18.35 N 10,048,201.1778 E 3,148,795.4553
C.C. Station 31159+68.23 N 10,039,506.1470 E 3,143,856.1800
Back S 60° 58' 31.00" E
Ahead S 60° 24' 03.40" E
Chord Bear S 60° 41' 17.20" E

Course from PT EBSH71-BASE-A-3 to PC EBSH71-BASE-A-4 S 60° 24' 03.40" E Dist 1,747.1887

Curve Data

Curve EBSH71-BASE-A-4
P.I. Station 31178+96.04 N 10,047,273.7364 E 3,150,428.1100
Delta 1° 53' 59.84" (LT)
Degree 0° 43' 40.90"
Tangent 130.4985
Length 260.9732
Radius 7,870.0000
External 1.0819
Long Chord 260.9612
Mid. Ord. 1.0817
P.C. Station 31177+65.54 N 10,047,338.1932 E 3,150,314.6412
P.T. Station 31180+26.52 N 10,047,213.0770 E 3,150,543.6536
C.C. Station 31178+96.04 N 10,054,181.1824 E 3,154,201.8508
Back S 60° 24' 03.40" E
Ahead S 62° 18' 03.25" E
Chord Bear S 61° 21' 03.32" E

Course from PT EBSH71-BASE-A-4 to PC EBSH71-BASE-A-5 S 62° 03' 28.40" E Dist 356.2791

BL-A EASTBOUND SH 71 CONTINUED...

Curve Data

Curve EBSH71-BASE-A-5
P.I. Station 31184+41.40 N 10,047,018.6713 E 3,150,910.1703
Delta 1° 01' 59.27" (RT)
Degree 0° 52' 53.30"
Tangent 58.6041
Length 117.2050
Radius 6,500.0000
External 0.2642
Long Chord 117.2034
Mid. Ord. 0.2642
P.C. Station 31183+82.79 N 10,047,046.1320 E 3,150,858.3982
P.T. Station 31185+00.00 N 10,046,990.2817 E 3,150,961.4389
C.C. Station 31184+41.40 N 10,041,303.8925 E 3,147,812.6330
Back S 62° 03' 28.40" E
Ahead S 61° 01' 29.12" E
Chord Bear S 61° 32' 28.76" E

Ending chain EBSH71-BASE-A description

BL-B EASTBOUND SH 71

<\* 1 Describe Chain EBSH71-BASE-B

Chain EBSH71-BASE-B contains:
EBSH100 CUR EBSH71-BASE-B-1 CUR EBSH71-BASE-B-2 EBSH101

Beginning chain EBSH71-BASE-B description

Point EBSH100 N 10,045,543.5699 E 3,152,820.2766 Sta 30+00.00

Course from EBSH100 to PC EBSH71-BASE-B-1 S 48° 16' 28.69" E Dist 191.1862

Curve Data

Curve EBSH71-BASE-B-1
P.I. Station 34+74.35 N 10,045,227.8580 E 3,153,174.3083
Delta 10° 47' 03.44" (LT)
Degree 1° 54' 35.49"
Tangent 283.1685
Length 566.3340
Radius 3,000.0000
External 13.3344
Long Chord 563.8309
Mid. Ord. 13.2754
P.C. Station 31+91.19 N 10,045,416.3238 E 3,152,962.9673
P.T. Station 37+55.85 N 10,045,082.2651 E 3,153,417.1809
C.C. Station 34+74.35 N 10,047,655.3547 E 3,154,959.6498
Back S 48° 16' 28.69" E
Ahead S 59° 03' 32.13" E
Chord Bear S 53° 40' 00.41" E

Course from PT EBSH71-BASE-B-1 to PC EBSH71-BASE-B-2 S 59° 03' 32.13" E Dist 109.6978

Curve Data

Curve EBSH71-BASE-B-2
P.I. Station 42+50.54 N 10,044,827.9191 E 3,153,841.4715
Delta 14° 37' 31.92" (RT)
Degree 1° 54' 35.49"
Tangent 384.9883
Length 765.7911
Radius 3,000.0000
External 24.6018
Long Chord 763.7137
Mid. Ord. 24.4017
P.C. Station 38+65.55 N 10,045,025.8633 E 3,153,511.2684
P.T. Station 46+31.34 N 10,044,553.0125 E 3,154,110.9940
C.C. Station 42+50.54 N 10,042,452.7737 E 3,151,968.7995
Back S 59° 03' 32.13" E
Ahead S 44° 26' 00.21" E
Chord Bear S 51° 44' 46.17" E

Course from PT EBSH71-BASE-B-2 to EBSH101 S 44° 26' 00.21" E Dist 169.4130

Point EBSH101 N 10,044,432.0406 E 3,154,229.5966 Sta 48+00.75

Ending chain EBSH71-BASE-B description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEO A DALY COMPANY TBPE Firm No. 2614

Table with project details including Texas Department of Transportation, State and County (Texas, Travis), and Sheet 3 of 7.

BL EB ENTRANCE RAMP AT PRESIDENTIAL

<\* 1 Describe Chain EBENPRES

Chain EBENPRES contains:  
EBENPRES01 CUR EBENPRES-1

Beginning chain EBENPRES description

Point EBENPRES01 N 10,051,910.7421 E 3,142,453.3727 Sta 10+00.00

Course from EBENPRES01 to PC EBENPRES-1 S 65° 22' 42.80" E Dist 489.5434

Table with Curve Data for EBENPRES-1, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Ending chain EBENPRES description

BL EB DIRECT CONNECT EXIT AT SH 130

<\* 1 Describe Chain EBEXDC130

Chain EBEXDC130 contains:  
CUR EBEXDC130-1 EBEXDC101 CUR EBEXDC130-2 EBEXDC102

Beginning chain EBEXDC130 description

Table with Curve Data for EBEXDC130-1, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT EBEXDC130-1 to EBEXDC101 S 58° 49' 43.89" E Dist 465.8362

Point EBEXDC101 N 10,047,450.8731 E 3,150,398.1631 Sta 18+40.76

Course from EBEXDC101 to PC EBEXDC130-2 S 58° 49' 43.89" E Dist 231.6191

Table with Curve Data for EBEXDC130-2, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT EBEXDC130-2 to EBEXDC102 S 57° 15' 18.13" E Dist 192.2562

Point EBEXDC102 N 10,047,081.6113 E 3,150,991.0907 Sta 25+39.32

Ending chain EBEXDC130 description

BL EB EXIT RAMP AT SH 130

<\* 1 Describe Chain EBEX130

Chain EBEX130 contains:  
CUR EBEX130-1 CUR EBEX130-2

Beginning chain EBEX130 description

Table with Curve Data for EBEX130-1, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Table with Curve Data for EBEX130-2, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Ending chain EBEX130 description

BL WB ENTRANCE RAMP AT SH 130

<\* 1 Describe Chain WBEN130

Chain WBEN130 contains:  
CUR WBEN130-1 CUR WBEN130-2

Beginning chain WBEN130 description

Table with Curve Data for WBEN130-1, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT WBEN130-1 to PC WBEN130-2 S 71° 19' 21.48" E Dist 97.0364

Table with Curve Data for WBEN130-2, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Ending chain WBEN130 description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEON DAILY COMPANY TBPE Firm No. 2614

Table with Texas Department of Transportation logo and project details including SHEET 4 OF 7, STATE, COUNTY, and JOB information.

BL NORTHBOUND FM 973

<\* 1 Describe Chain NBFM973

Chain NBFM973 contains:
NB97301 CUR NBFM973-1 CUR NBFM973-2 CUR NBFM973-3 CUR NBFM973-4 CUR NBFM973-5 -
CUR NBFM973-6 CUR NBFM973-7 CUR NBFM973-8 NB97302

Beginning chain NBFM973 description

Point NB97301 N 10,059,773.7801 E 3,151,386.5166 Sta 6000+06.73

Course from NB97301 to PC NBFM973-1 S 28° 14' 05.16" W Dist 187.5449

Curve Data
Curve NBFM973-1
P.I. Station 6002+60.03 N 10,059,550.6200 E 3,151,266.6848
Delta = 1° 14' 58.21" (RT)
Degree = 0° 57' 00.64"
Tangent = 65.7535
Length = 131.5018
Radius = 6,030.0000
External = 0.3585
Long Chord = 131.4992
Mid. Ord. = 0.3585
P.C. Station 6001+94.27 N 10,059,608.5499 E 3,151,297.7918
P.T. Station 6003+25.78 N 10,059,493.3822 E 3,151,234.3219
C.C. = N 10,062,461.2552 E 3,145,985.2621
Back = S 28° 14' 05.16" W
Ahead = S 29° 29' 03.37" W
Chord Bear = S 28° 51' 34.27" W

Course from PT NBFM973-1 to PC NBFM973-2 S 29° 29' 03.37" W Dist 875.7659

Curve Data
Curve NBFM973-2
P.I. Station 6013+16.35 N 10,058,631.0957 E 3,150,746.7762
Delta = 2° 10' 53.47" (LT)
Degree = 0° 57' 00.64"
Tangent = 114.8091
Length = 229.5905
Radius = 6,030.0000
External = 1.0929
Long Chord = 229.5767
Mid. Ord. = 1.0927
P.C. Station 6012+01.54 N 10,058,731.0360 E 3,150,803.2835
P.T. Station 6014+31.13 N 10,058,529.0768 E 3,150,694.1141
C.C. = N 10,055,763.1630 E 3,156,052.3434
Back = S 29° 29' 03.37" W
Ahead = S 27° 18' 09.90" W
Chord Bear = S 28° 23' 36.63" W

Course from PT NBFM973-2 to PC NBFM973-3 S 27° 18' 09.90" W Dist 5,703.0248

Curve Data
Curve NBFM973-3
P.I. Station 6075+91.96 N 10,053,054.5982 E 3,147,868.1924
Delta = 47° 18' 54.09" (LT)
Degree = 5° 28' 58.26"
Tangent = 457.7990
Length = 862.9641
Radius = 1,045.0000
External = 95.8790
Long Chord = 838.6515
Mid. Ord. = 87.8214
P.C. Station 6071+34.16 N 10,053,461.3962 E 3,148,078.1812
P.T. Station 6079+97.12 N 10,052,624.4414 E 3,148,024.8611
C.C. = N 10,052,982.0629 E 3,149,006.7632
Back = S 27° 18' 09.90" W
Ahead = S 20° 00' 44.20" E
Chord Bear = S 3° 38' 42.85" W

Course from PT NBFM973-3 to PC NBFM973-4 S 20° 00' 44.20" E Dist 621.3207

Curve Data
Curve NBFM973-4
P.I. Station 6088+97.54 N 10,051,778.3903 E 3,148,333.0038
Delta = 28° 51' 04.63" (RT)
Degree = 5° 16' 50.58"
Tangent = 279.0983
Length = 546.3517
Radius = 1,085.0000
External = 35.3218
Long Chord = 540.5977
Mid. Ord. = 34.2081
P.C. Station 6086+18.44 N 10,052,040.6365 E 3,148,237.4904
P.T. Station 6091+64.79 N 10,051,502.6066 E 3,148,290.1179
C.C. = N 10,051,669.3262 E 3,147,218.0034
Back = S 20° 00' 44.20" E
Ahead = S 8° 50' 20.43" W
Chord Bear = S 5° 35' 11.88" E

Course from PT NBFM973-4 to PC NBFM973-5 S 8° 50' 20.43" W Dist 1,684.2601

BL NORTHBOUND FM 973 CONTINUED...

Curve Data
Curve NBFM973-5
P.I. Station 6110+76.38 N 10,049,613.7188 E 3,147,996.3857
Delta = 5° 11' 08.57" (RT)
Degree = 1° 08' 28.86"
Tangent = 227.3297
Length = 454.3490
Radius = 5,020.0000
External = 5.1447
Long Chord = 454.1940
Mid. Ord. = 5.1394
P.C. Station 6108+49.05 N 10,049,838.3487 E 3,148,031.3169
P.T. Station 6113+03.40 N 10,049,393.1655 E 3,147,941.2945
C.C. = N 10,050,609.7150 E 3,143,070.9344
Back = S 8° 50' 20.43" W
Ahead = S 14° 01' 29.00" W
Chord Bear = S 11° 25' 54.71" W

Course from PT NBFM973-5 to PC NBFM973-6 S 14° 01' 29.00" W Dist 1,217.0530

Curve Data
Curve NBFM973-6
P.I. Station 6130+36.02 N 10,047,712.2006 E 3,147,521.4124
Delta = 28° 38' 07.96" (RT)
Degree = 2° 50' 11.13"
Tangent = 515.5589
Length = 1,009.5648
Radius = 2,020.0000
External = 64.7544
Long Chord = 999.0903
Mid. Ord. = 62.7431
P.C. Station 6125+20.46 N 10,048,212.3913 E 3,147,646.3532
P.T. Station 6135+30.02 N 10,047,333.0665 E 3,147,172.0440
C.C. = N 10,048,701.9192 E 3,145,686.5669
Back = S 14° 01' 29.00" W
Ahead = S 42° 39' 36.96" W
Chord Bear = S 28° 20' 32.98" W

Course from PT NBFM973-6 to PC NBFM973-7 S 42° 39' 36.96" W Dist 718.4184

Curve Data
Curve NBFM973-7
P.I. Station 6145+38.87 N 10,046,591.1773 E 3,146,488.4004
Delta = 5° 30' 53.57" (RT)
Degree = 0° 57' 00.64"
Tangent = 290.4266
Length = 580.4046
Radius = 6,030.0000
External = 6.9899
Long Chord = 580.1806
Mid. Ord. = 6.9819
P.C. Station 6142+48.44 N 10,046,804.7526 E 3,146,685.2079
P.T. Station 6148+28.84 N 10,046,397.5047 E 3,146,271.9783
C.C. = N 10,050,890.9813 E 3,142,250.8381
Back = S 42° 39' 36.96" W
Ahead = S 48° 10' 30.53" W
Chord Bear = S 45° 25' 03.75" W

Curve Data
Curve NBFM973-8
P.I. Station 6151+19.27 N 10,046,203.8318 E 3,146,055.5559
Delta = 5° 30' 53.61" (LT)
Degree = 0° 57' 00.64"
Tangent = 290.4270
Length = 580.4056
Radius = 6,030.0000
External = 6.9900
Long Chord = 580.1815
Mid. Ord. = 6.9819
P.C. Station 6148+28.84 N 10,046,397.5047 E 3,146,271.9783
P.T. Station 6154+09.25 N 10,045,990.2561 E 3,145,858.7481
C.C. = N 10,041,904.0281 E 3,150,293.1185
Back = S 48° 10' 30.53" W
Ahead = S 42° 39' 36.93" W
Chord Bear = S 45° 25' 03.73" W

Course from PT NBFM973-8 to NB97302 S 42° 39' 36.93" W Dist 188.9054

Point NB97302 N 10,045,851.3380 E 3,145,730.7364 Sta 6155+98.16

Ending chain NBFM973 description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEO A DALY COMPANY TBPE Firm No. 2614

Table with project details: TEXAS, TRAVIS, SHEET 5 OF 7, SH 71

BL SOUTHBOUND FM 973

<\* 1 Describe Chain SBFM973

Chain SBFM973 contains:
SB97301 CUR SBFM973-1 CUR SBFM973-2 CUR SBFM973-3 CUR SBFM973-4 CUR SBFM973-5 -
CUR SBFM973-6 CUR SBFM973-7 CUR SBFM973-8 SB97302

Beginning chain SBFM973 description

Point SB97301 N 10,059,774.5097 E 3,151,386.8946 Sta 3999+91.00

Course from SB97301 to PC SBFM973-1 S 27° 30' 10.87" W Dist 155.7488

Table with Curve Data for SBFM973-1, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-1 to PC SBFM973-2 S 31° 44' 12.15" W Dist 617.3751

Table with Curve Data for SBFM973-2, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-2 to PC SBFM973-3 S 27° 18' 09.89" W Dist 5,444.9273

Table with Curve Data for SBFM973-3, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-3 to PC SBFM973-4 S 20° 00' 44.19" E Dist 621.3208

Table with Curve Data for SBFM973-4, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-4 to PC SBFM973-5 S 8° 50' 20.44" W Dist 1,684.2603

BL SOUTHBOUND FM 973 CONTINUED...

Table with Curve Data for SBFM973-5, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-5 to PC SBFM973-6 S 14° 01' 28.99" W Dist 1,217.0531

Table with Curve Data for SBFM973-6, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-6 to PC SBFM973-7 S 42° 39' 36.96" W Dist 1,259.8708

Table with Curve Data for SBFM973-7, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Table with Curve Data for SBFM973-8, including P.I. Station, Delta, Degree, Tangent, Length, Radius, External, Long Chord, Mid. Ord., P.C. Station, P.T. Station, C.C., Back, Ahead, and Chord Bear.

Course from PT SBFM973-8 to SB97302 S 42° 39' 36.93" W Dist 188.9054

Point SB97302 N 10,045,851.3380 E 3,145,730.7364 Sta 4155+73.02

Ending chain SBFM973 description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEO A DALY COMPANY TBPE Firm No. 2614

Table with project details including Texas Department of Transportation logo, SHEET 6 OF 7, and project information like STATE, COUNTY, and HIGHWAY NO.

BL WB-EB TURNAROUND AT PRESIDENTIAL

<\* 1 Describe Chain UWEPRES

Chain UWEPRES contains: UWEPRES10 CUR UWEPRES-1 CUR UWEPRES-2 UWEPRES02

Beginning chain UWEPRES description

Point UWEPRES10 N 10,052,370.4742 E 3,141,936.1016 Sta 9+00.00

Course from UWEPRES10 to PC UWEPRES-1 N 60° 58' 31.15" W Dist 100.0000

Curve Data \*-----\* Curve UWEPRES-1 P.I. Station 10+46.04 N 10,052,441.3634 E 3,141,808.4229 Delta = 90° 02' 51.06" (LT) Degree = 124° 33' 21.75" Tangent = 46.0382 Length = 72.2948 Radius = 46.0000 External = 19.0808 Long Chord = 65.0808 Mid. Ord. = 13.4866 P.C. Station 10+00.00 N 10,052,418.9928 E 3,141,848.6606 P.T. Station 10+72.29 N 10,052,401.1072 E 3,141,786.0857 C.C. Station 10,052,378.7885 E 3,141,826.3085 Back = N 60° 55' 39.50" W Ahead = S 29° 01' 29.44" W Chord Bear = S 74° 02' 54.97" W

Course from PT UWEPRES-1 to PC UWEPRES-2 S 29° 01' 29.37" W Dist 55.0353

Curve Data \*-----\* Curve UWEPRES-2 P.I. Station 11+73.54 N 10,052,312.5798 E 3,141,736.9640 Delta = 85° 29' 05.20" (LT) Degree = 114° 35' 29.61" Tangent = 46.2072 Length = 74.5995 Radius = 50.0000 External = 18.0816 Long Chord = 67.8703 Mid. Ord. = 13.2794 P.C. Station 11+27.33 N 10,052,352.9838 E 3,141,759.3832 P.T. Station 12+01.93 N 10,052,287.0494 E 3,141,775.4777 C.C. Station 10,052,328.7244 E 3,141,803.1037 Back = S 29° 01' 29.40" W Ahead = S 56° 27' 35.80" E Chord Bear = S 13° 43' 03.20" E

Course from PT UWEPRES-2 to UWEPRES02 S 56° 27' 35.61" E Dist 94.4182

Point UWEPRES02 N 10,052,234.8814 E 3,141,854.1752 Sta 12+96.35

Ending chain UWEPRES description

BL EB-WB TURNAROUND AT FM 973

<\* 1 Describe Chain UEWF973

Chain UEWF973 contains: CUR UEWF973-1 CUR UEWF973-2

Beginning chain UEWF973 description

Curve Data \*-----\* Curve UEWF973-1 P.I. Station 10+95.79 N 10,048,905.9296 E 3,147,680.9571 Delta = 104° 59' 59.99" (LT) Degree = 77° 57' 12.39" Tangent = 95.7871 Length = 134.6958 Radius = 73.5000 External = 47.2370 Long Chord = 116.6229 Mid. Ord. = 28.7560 P.C. Station 10+00.00 N 10,048,952.4042 E 3,147,597.1999 P.T. Station 11+34.70 N 10,048,998.8613 E 3,147,704.1702 C.C. Station 10,049,016.6734 E 3,147,632.8612 Back = S 60° 58' 31.00" E Ahead = N 14° 01' 29.00" E Chord Bear = N 66° 31' 29.00" E

Course from PT UEWF973-1 to PC UEWF973-2 N 14° 01' 29.00" E Dist 104.0754

Curve Data \*-----\* Curve UEWF973-2 P.I. Station 12+75.99 N 10,049,135.9405 E 3,147,738.4107 Delta = 75° 00' 00.45" (LT) Degree = 118° 08' 08.26" Tangent = 37.2154 Length = 63.4865 Radius = 48.5000 External = 12.6330 Long Chord = 59.0499 Mid. Ord. = 10.0224 P.C. Station 12+38.77 N 10,049,099.8344 E 3,147,729.3919 P.T. Station 13+02.26 N 10,049,153.9968 E 3,147,705.8691 C.C. Station 10,049,111.5879 E 3,147,682.3376 Back = N 14° 01' 29.00" E Ahead = N 60° 58' 31.45" W Chord Bear = N 23° 28' 31.22" W

Ending chain UEWF973 description

BL WB-EB TURNAROUND AT FM 973

<\* 1 Describe Chain UEWF973

Chain UEWF973 contains: CUR UEWF973-1 CUR UEWF973-2

Beginning chain UEWF973 description

Curve Data \*-----\* Curve UEWF973-1 P.I. Station 10+89.27 N 10,049,008.3571 E 3,147,942.5781 Delta = 104° 59' 59.89" (LT) Degree = 83° 38' 36.51" Tangent = 89.2709 Length = 125.5328 Radius = 68.5000 External = 44.0235 Long Chord = 108.6894 Mid. Ord. = 26.7998 P.C. Station 10+00.00 N 10,048,965.0441 E 3,148,020.6375 P.T. Station 11+25.53 N 10,048,921.7472 E 3,147,920.9441 C.C. Station 10,048,905.1469 E 3,147,987.4022 Back = N 60° 58' 31.11" W Ahead = S 14° 01' 29.00" W Chord Bear = S 66° 31' 28.95" W

Course from PT UEWF973-1 to PC UEWF973-2 S 14° 01' 29.00" W Dist 121.9812

Curve Data \*-----\* Curve UEWF973-2 P.I. Station 12+84.73 N 10,048,767.2962 E 3,147,882.3644 Delta = 74° 59' 59.90" (LT) Degree = 118° 08' 08.26" Tangent = 37.2153 Length = 63.4863 Radius = 48.5000 External = 12.6329 Long Chord = 59.0498 Mid. Ord. = 10.0224 P.C. Station 12+47.51 N 10,048,803.4022 E 3,147,891.3831 P.T. Station 13+11.00 N 10,048,749.2398 E 3,147,914.9058 C.C. Station 10,048,791.6487 E 3,147,938.4374 Back = S 14° 01' 29.00" W Ahead = S 60° 58' 30.90" E Chord Bear = S 23° 28' 30.95" E

Ending chain UEWF973 description

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

HORIZONTAL ALIGNMENT DATA



Lockwood, Andrews & Newnam, Inc. A LEAD A DALY COMPANY TBPE Firm No. 2614

Table with project details: TEXAS, TRAVIS, SHEET 7 OF 7

WESTBOUND SH 71 MANAGED LANES SUPER ELEVATION DATA TABLE

PI STATION	RADIUS OF CURVE (FT)	(FT/FT)	SUPER ELEVATION %	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION STATION	BEGIN FULL SUPER ELEVATION STATION	END FULL SUPER ELEVATION STATION	END TRANSITION STATION	CURVE DIRECTION
11189+81.27	5,685.00	0.06	2.70	282.00	11179+02.00	11181+84.00	11197+65.00	11200+47.00	RT.
11220+93.94	8,000.00	0.06	2.00	240.00	11216+88.00	11219+28.00	11222+40.00	11224+80.58	RT.

EASTBOUND SH 71 MANAGED LANES SUPER ELEVATION DATA TABLE

PI STATION	RADIUS OF CURVE (FT)	(FT/FT)	SUPER ELEVATION %	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION STATION	BEGIN FULL SUPER ELEVATION STATION	END FULL SUPER ELEVATION STATION	END TRANSITION STATION	CURVE DIRECTION
11189+81.27	5,685.00	0.06	2.70	12.00	11180+85.00	11180+97.00	11198+54.00	11198+66.00	RT.

SH 71 WESTBOUND GENERAL PURPOSE LANES SUPER ELEVATION DATA TABLE

PI STATION	RADIUS OF CURVE (FT)	(FT/FT)	SUPER ELEVATION %	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION STATION	BEGIN FULL SUPER ELEVATION STATION	END FULL SUPER ELEVATION STATION	END TRANSITION STATION	CURVE DIRECTION
24+11.63	1,500.00	0.06	5.00	120.00	21+02.00	22+57.00	25+72.00	26+92.00	RT.

SH 71 EASTBOUND GENERAL PURPOSE LANES SUPER ELEVATION DATA TABLE

PI STATION	RADIUS OF CURVE (FT)	(FT/FT)	SUPER ELEVATION %	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION STATION	BEGIN FULL SUPER ELEVATION STATION	END FULL SUPER ELEVATION STATION	END TRANSITION STATION	CURVE DIRECTION
34+74.35	3,000.00	0.06	3.40	285.00	32+25.00	32+45.00	36+61.00	39+46.00	RT.

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SH 71  
 SUPER  
 ELEVATION DATA

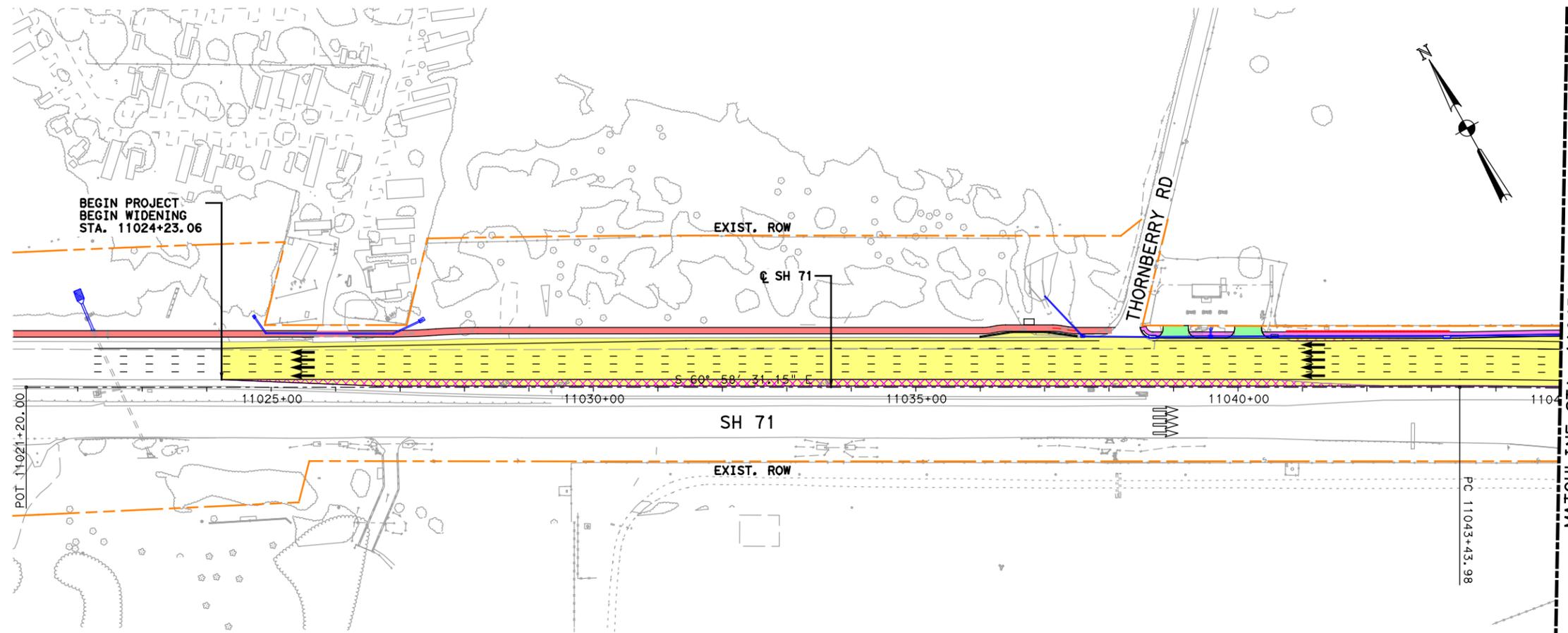


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 TBPE Firm No. 2614

Texas Department of Transportation

SHEET 1 OF 1

FED. RD. DIST. NO.	STATE AID PROJECT		SHEET NO.
6			49
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONTR.	SECT.	JOB	HIGHWAY NO.
			SH 71



**LEGEND**

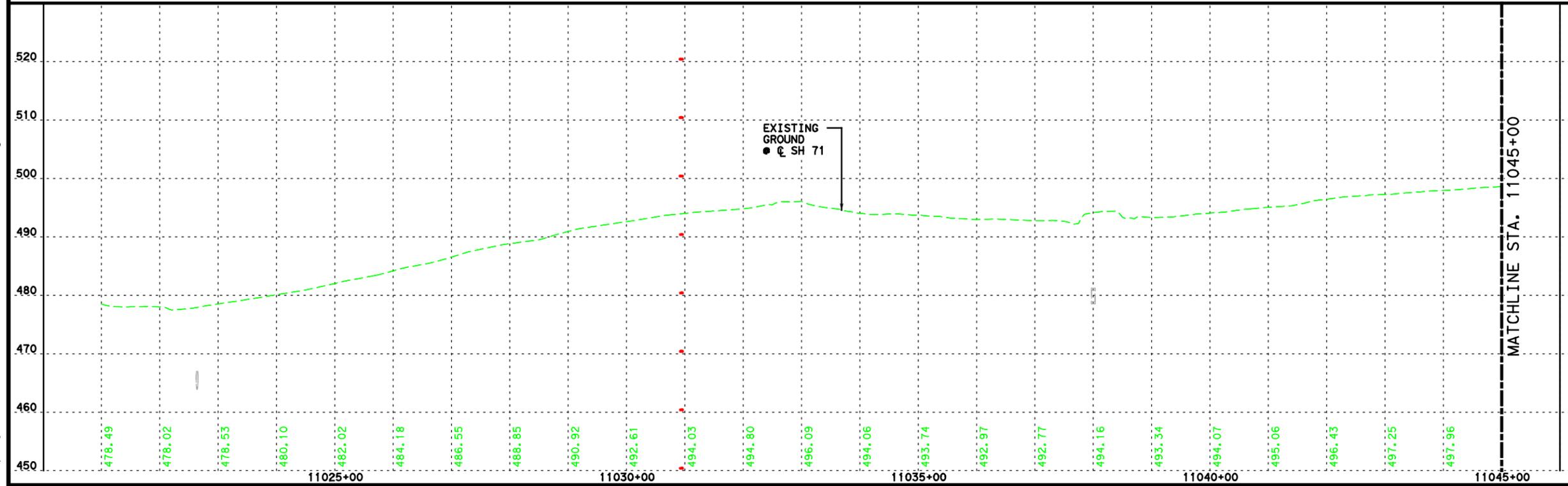
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- TOPO
- BRIDGE
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- BIKE & PED FACILITY
- PROP DRIVEWAY
- PROP TOLL
- PROP NON-TOLL
- PAVEMENT TO BE REMOVED
- PROP WIDENING
- DIRECTIONAL ARROW
- PROP DRAINAGE FEATURE
- RETAINING WALL

**NOTES:**

- EXISTING PAVEMENT TO REMAIN UNLESS OTHERWISE NOTED.
- OVERLAY LIMITS AS PER TECHNICAL PROVISIONS ATTACHMENT 11-3 ADDENDUM NO. 3.

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SH 71  
P&P

**MCCARTHY**

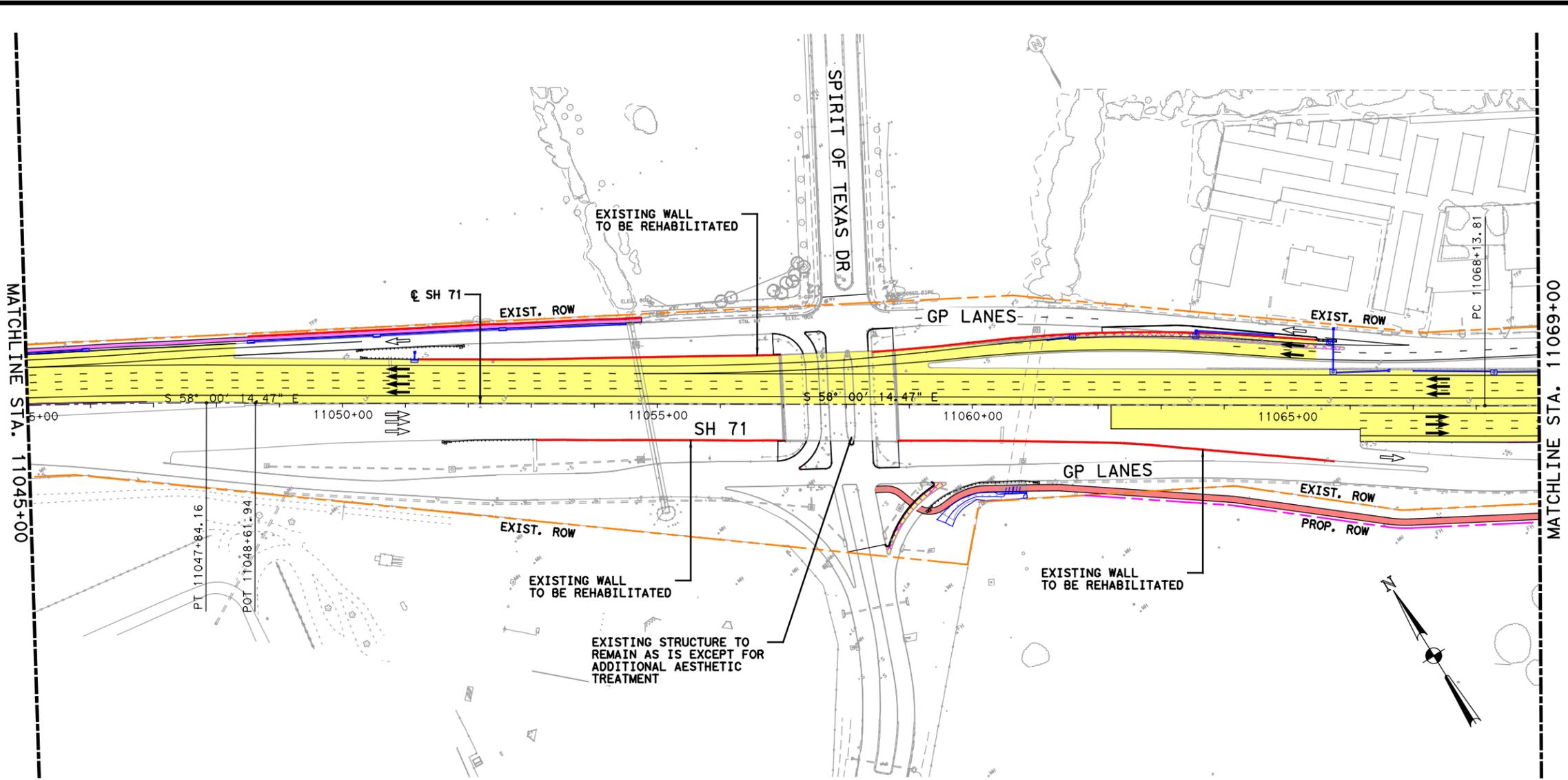
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		50
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		SH 71



**LEGEND**

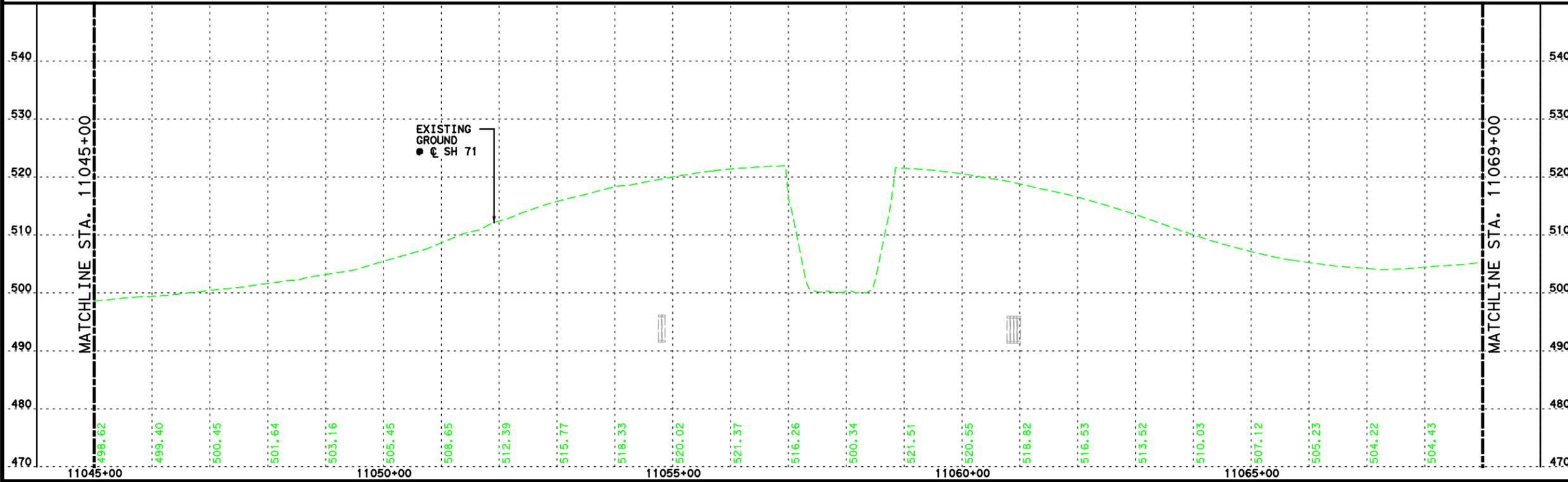
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- PROP TOLL
- PROP NON-TOLL
- PAVEMENT TO BE REMOVED
- PROP WIDENING
- DIRECTIONAL ARROW
- PROP DRAINAGE FEATURE
- RETAINING WALL

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SH 71  
P&P

**MCCARTHY**

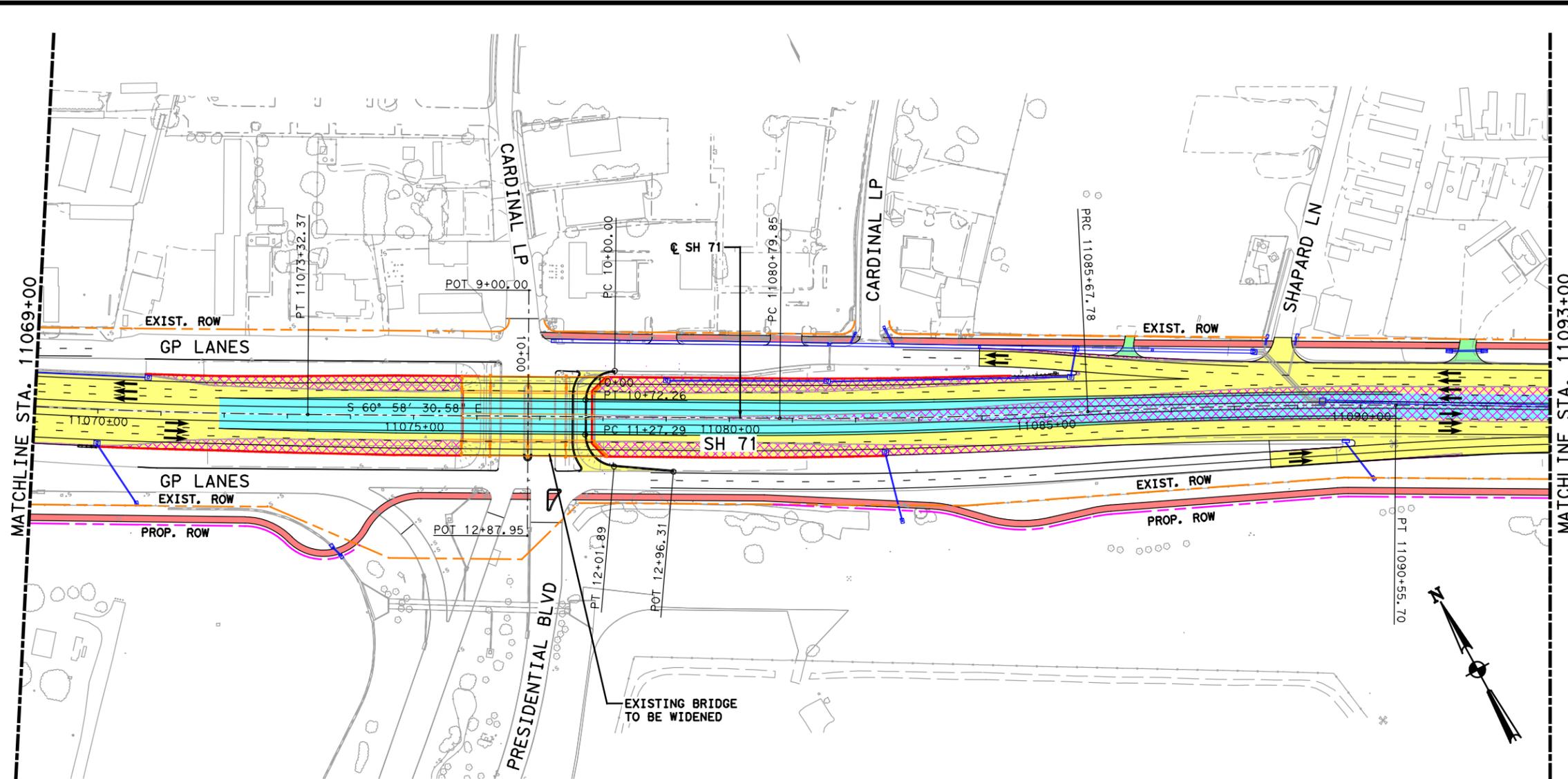
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 2 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		51
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	DEPT.	HIGHWAY NO.
		SH 71



**LEGEND**

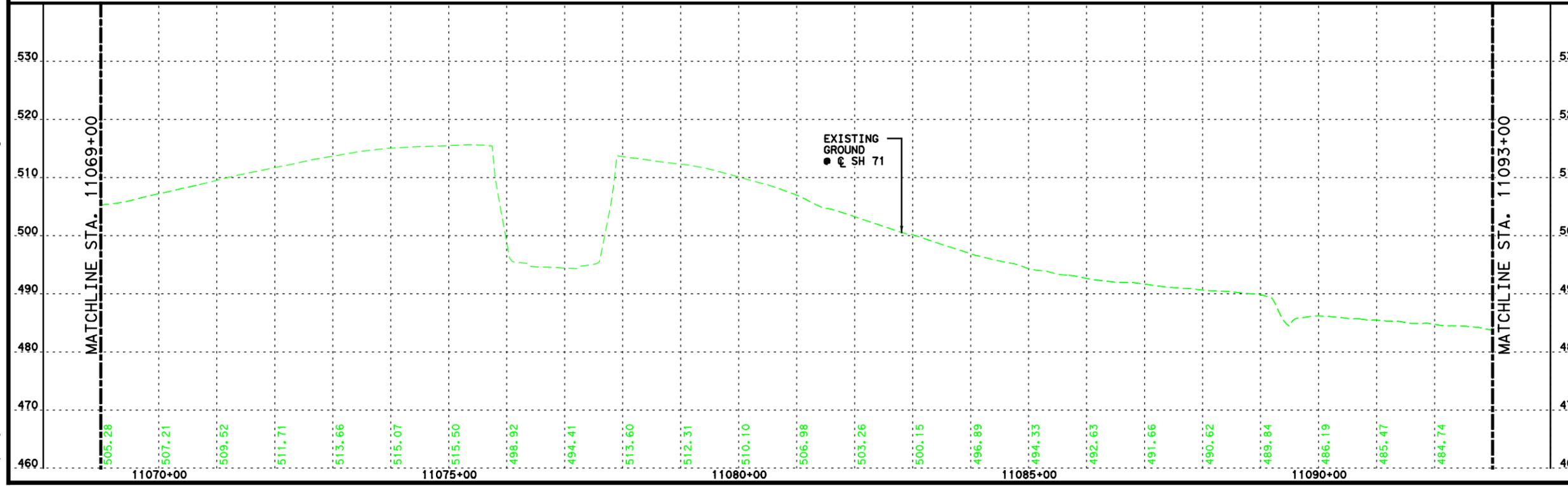
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- █ BIKE & PED FACILITY
- █ PROP DRIVEWAY
- █ PROP TOLL
- █ PROP NON-TOLL
- █ PAVEMENT TO BE REMOVED
- █ PROP WIDENING
- DIRECTIONAL ARROW
- █ PROP DRAINAGE FEATURE
- █ RETAINING WALL

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SH 71  
P&P

**MCCARTHY**

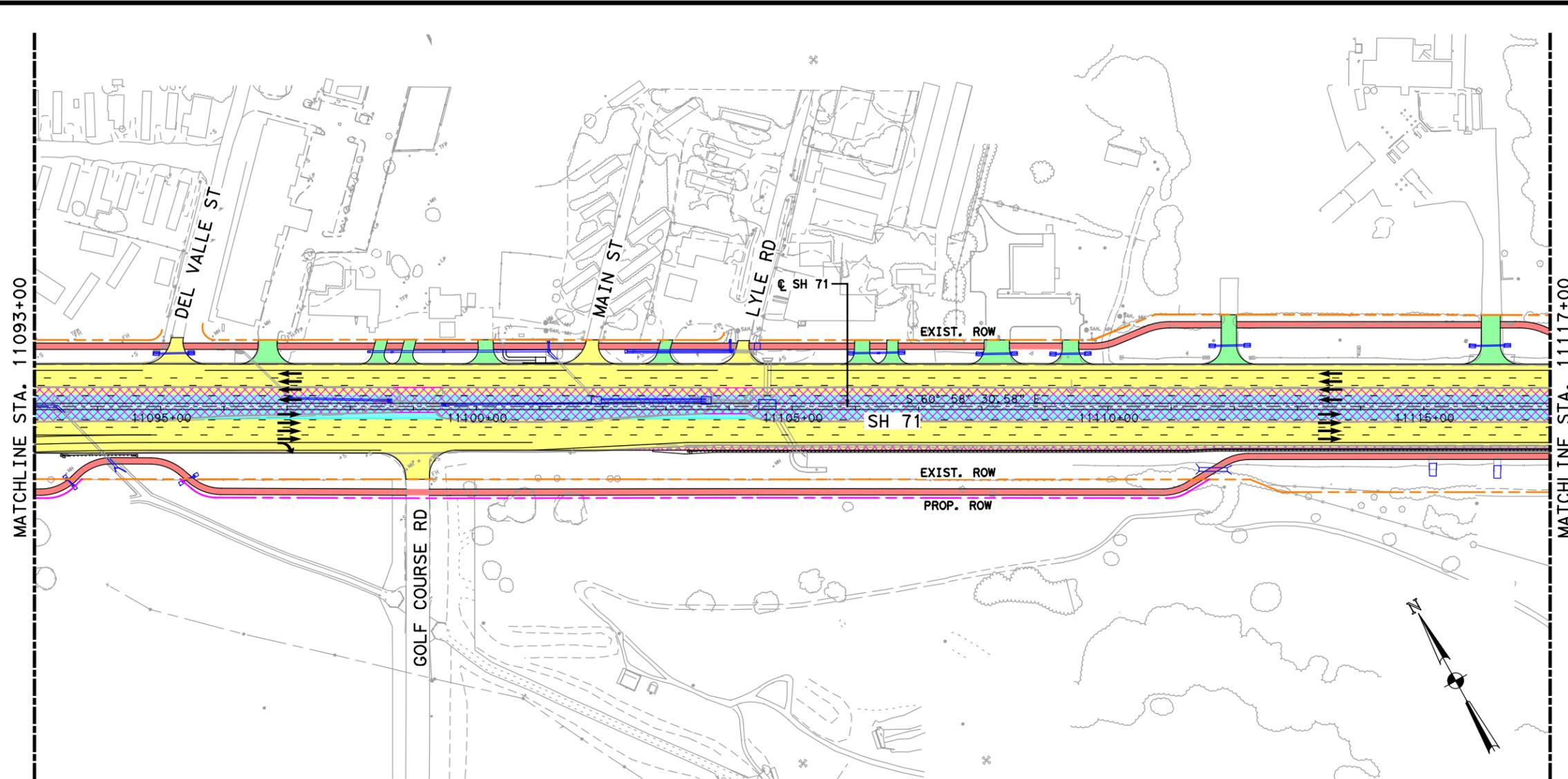
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 3 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		52
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	SECT.	JOB
		SH 71



**LEGEND**

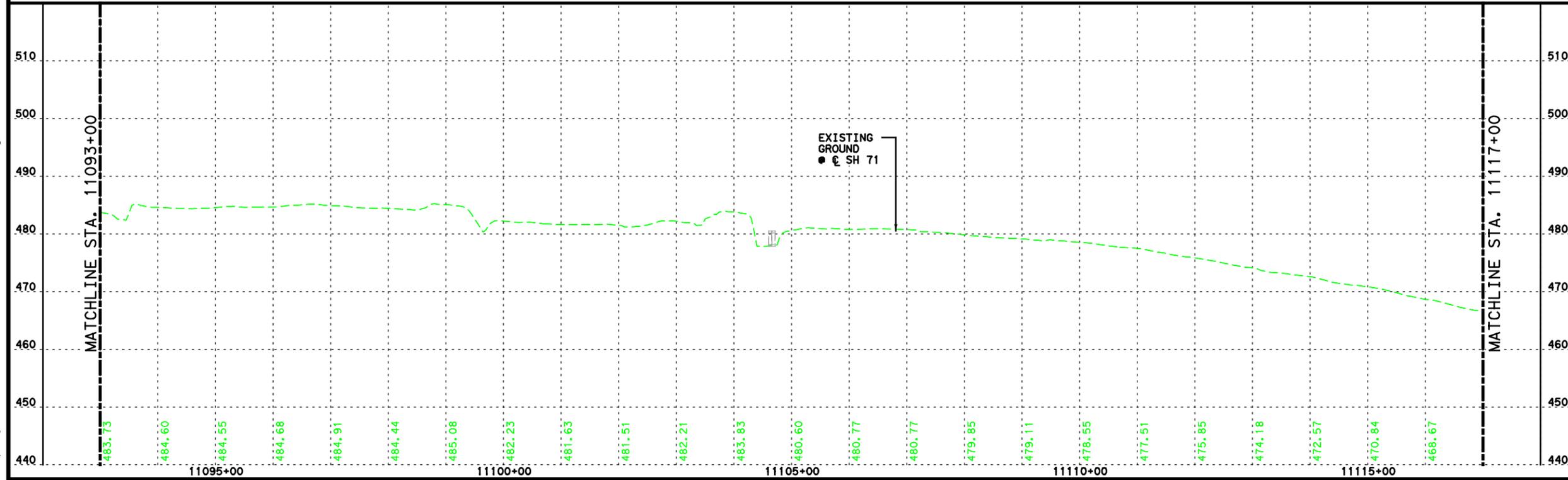
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- ||| FUTURE CONTROL OF ACCESS
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- BRIDGE
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- BIKE & PED FACILITY
- PROP DRIVEWAY
- PROP TOLL
- PROP NON-TOLL
- PAVEMENT TO BE REMOVED
- PROP WIDENING
- DIRECTIONAL ARROW
- PROP DRAINAGE FEATURE
- RETAINING WALL

**NOTES:**

1. EXISTING PAVEMENT TO REMAIN UNLESS OTHERWISE NOTED.
2. OVERLAY LIMITS AS PER TECHNICAL PROVISIONS ATTACHMENT 11-3 ADDENDUM NO. 3.

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P&P

**MCCARTHY**

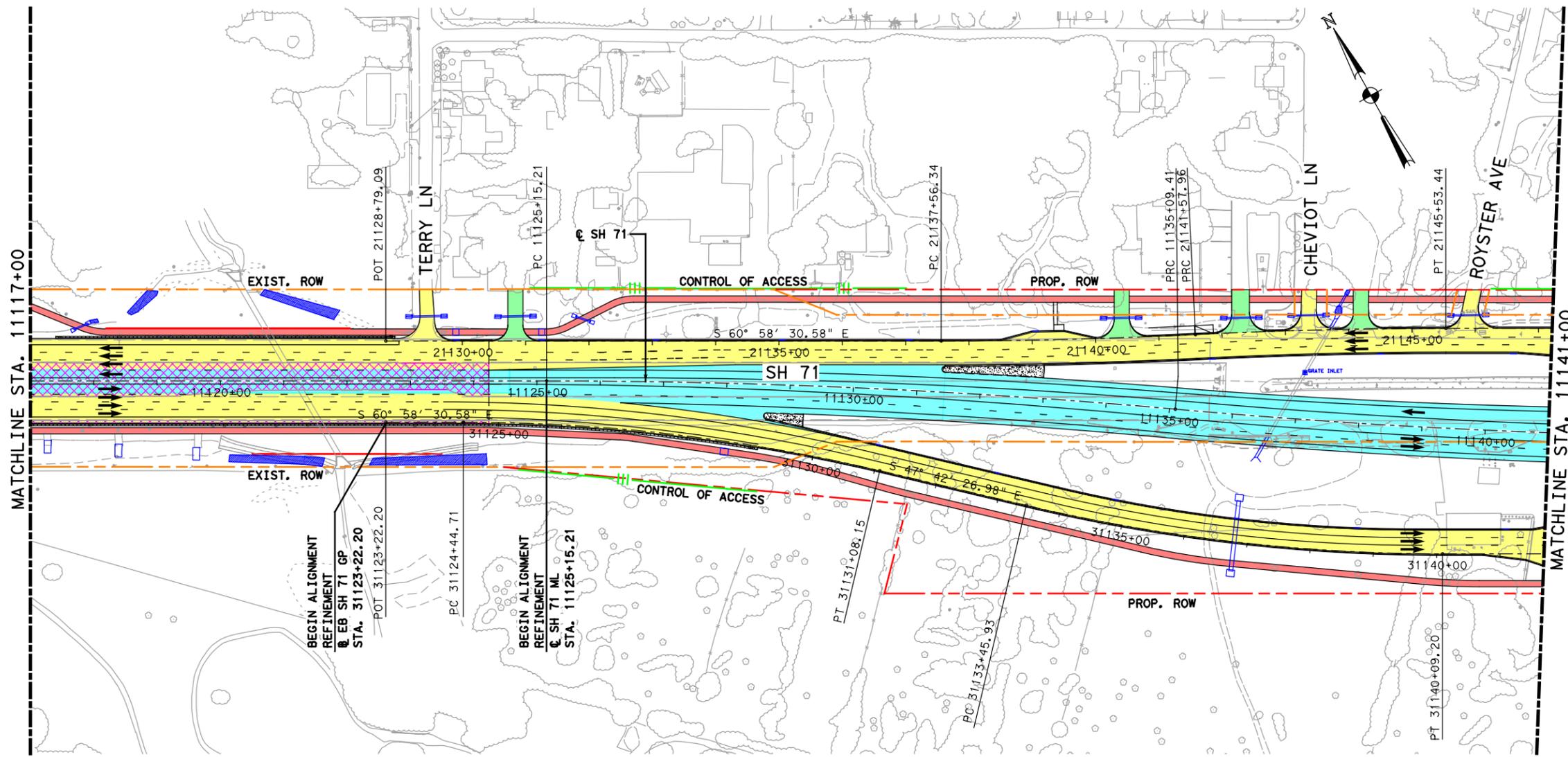
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A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 4 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		53
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB
		SH 71



**LEGEND**

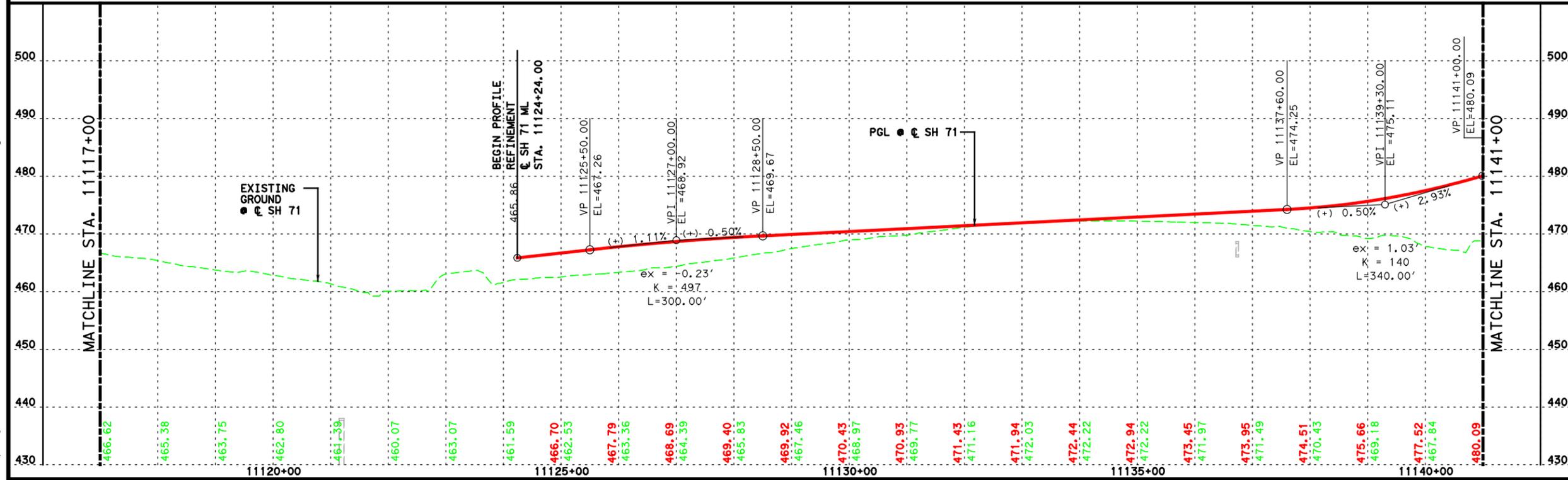
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- BRIDGE
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- BIKE & PED FACILITY
- PROP DRIVEWAY
- PROP TOLL
- PROP NON-TOLL
- PAVEMENT TO BE REMOVED
- PROP WIDENING
- DIRECTIONAL ARROW
- PROP DRAINAGE FEATURE
- RETAINING WALL

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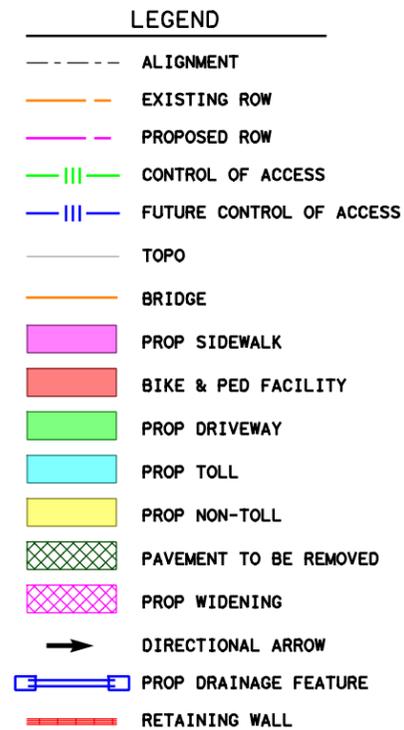
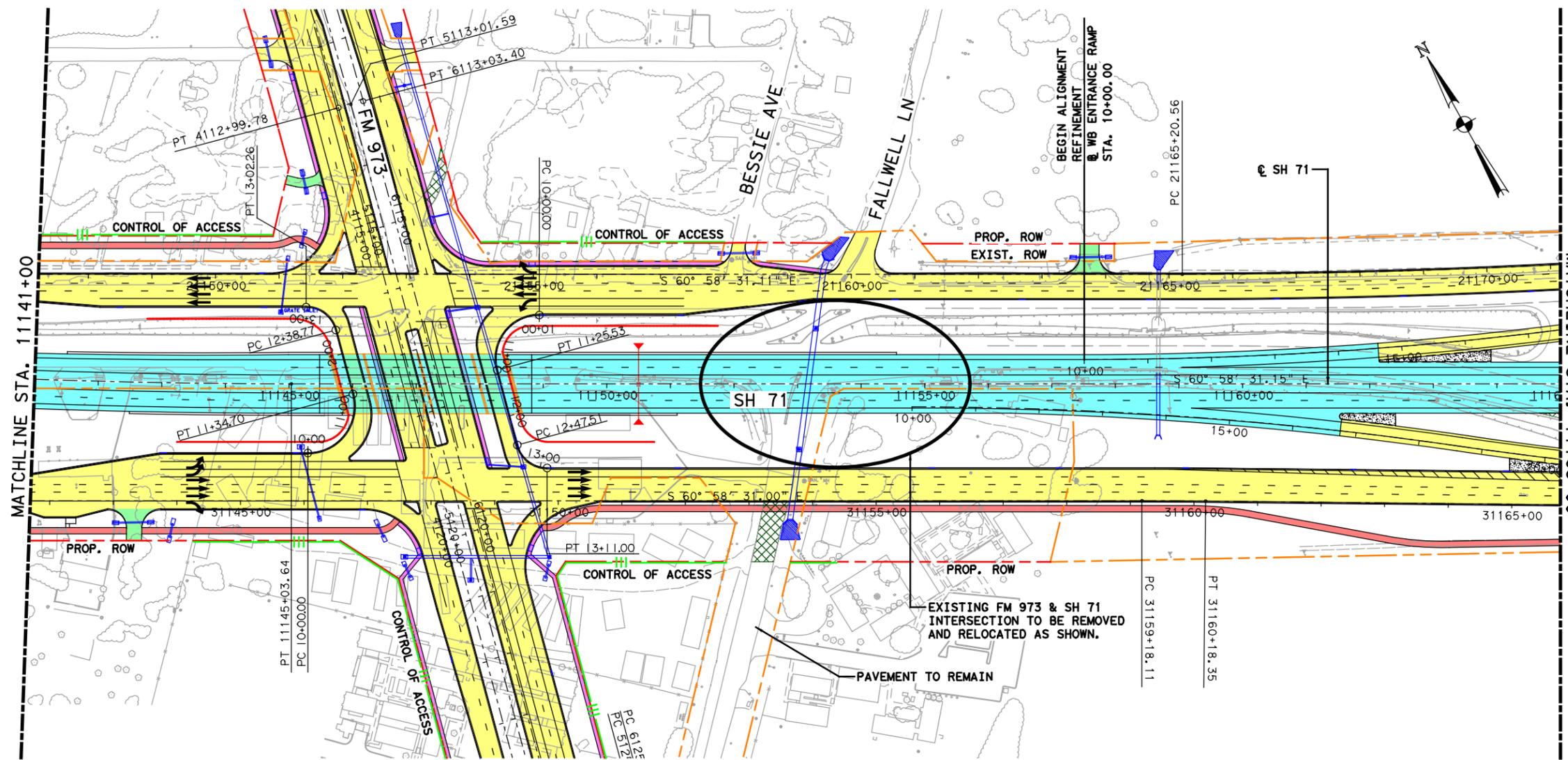
**Lockwood, Andrews & Newnam, Inc.**  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 5 OF 9

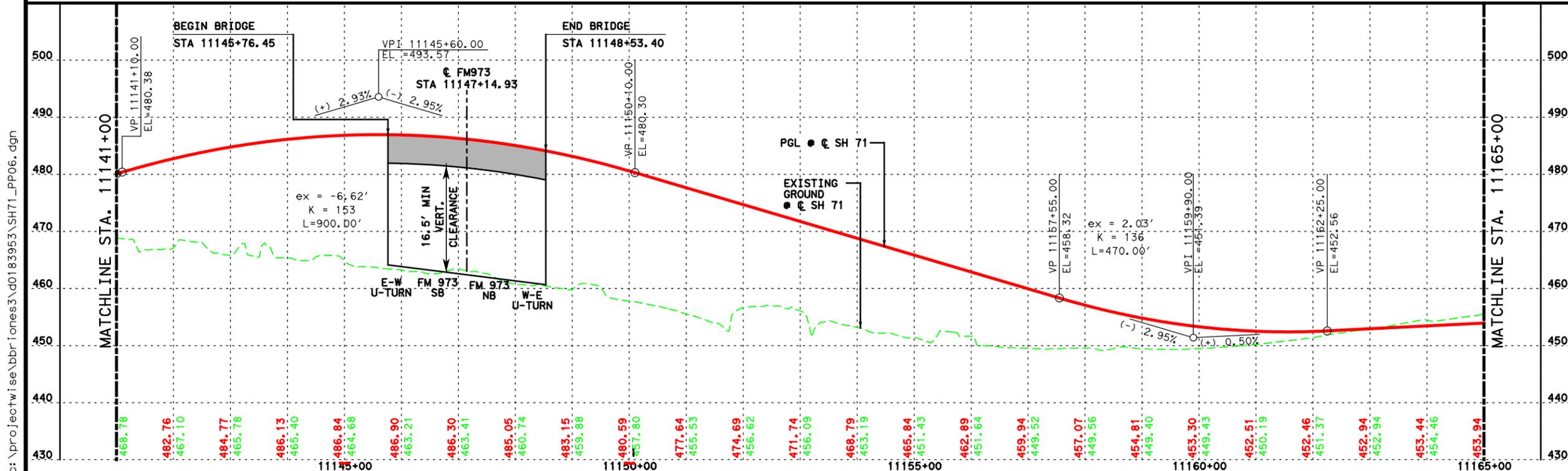
FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		54
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB HIGHWAY NO.
		SH 71



- NOTES:**
- EXISTING PAVEMENT TO REMAIN UNLESS OTHERWISE NOTED.
  - OVERLAY LIMITS AS PER TECHNICAL PROVISIONS ATTACHMENT 11-3 ADDENDUM NO. 3.

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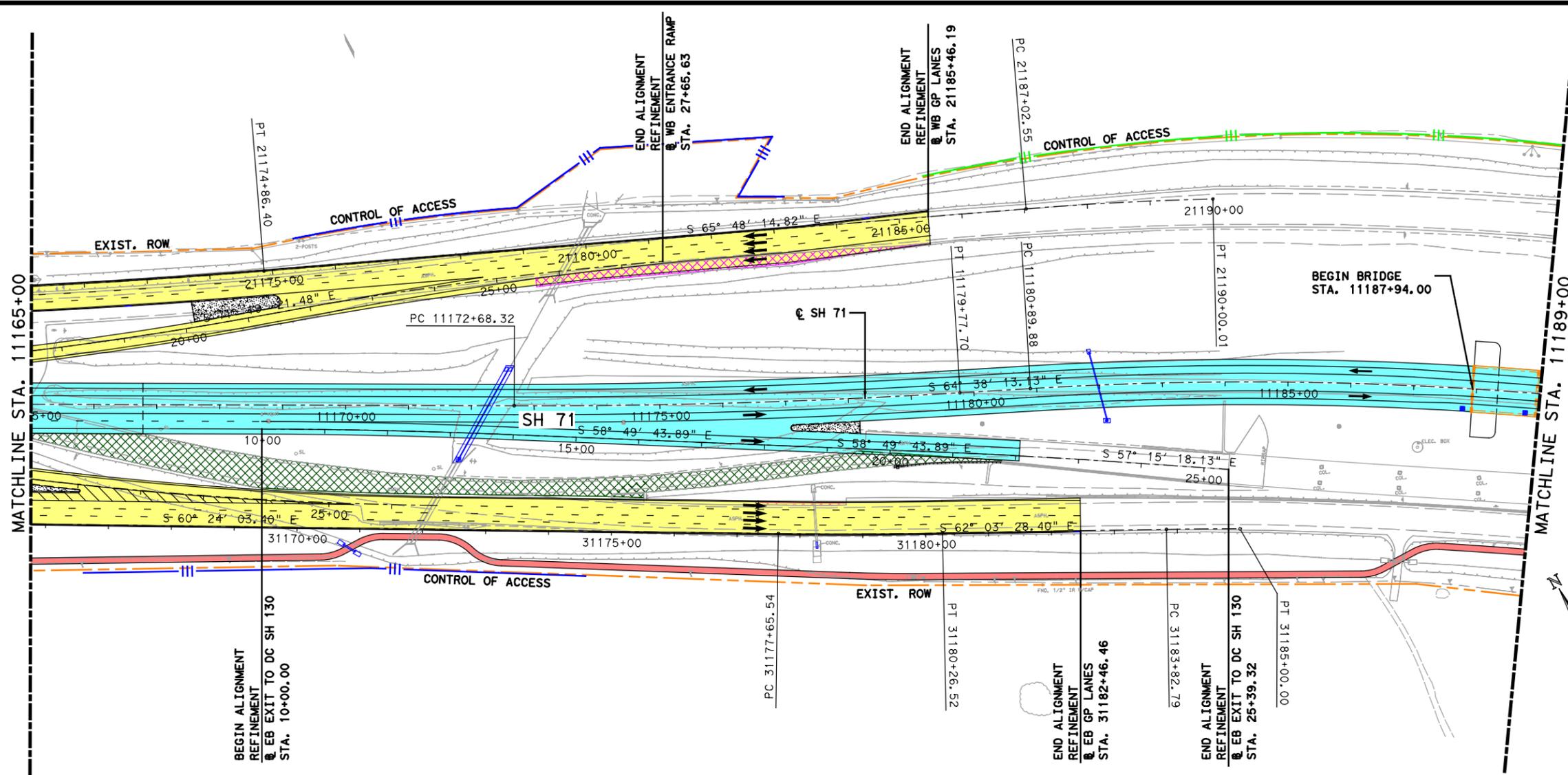
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 6 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		55
STATE	COUNTY	
TEXAS	TRAVIS	
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71



**LEGEND**

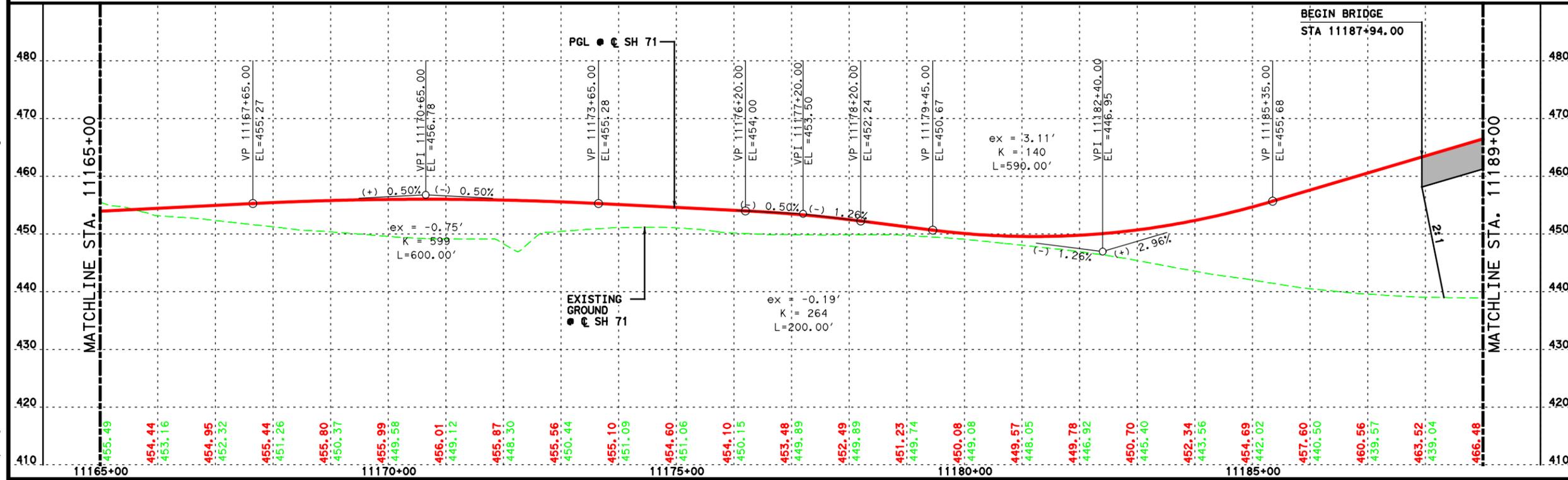
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- BRIDGE
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P&P

**MCCARTHY**

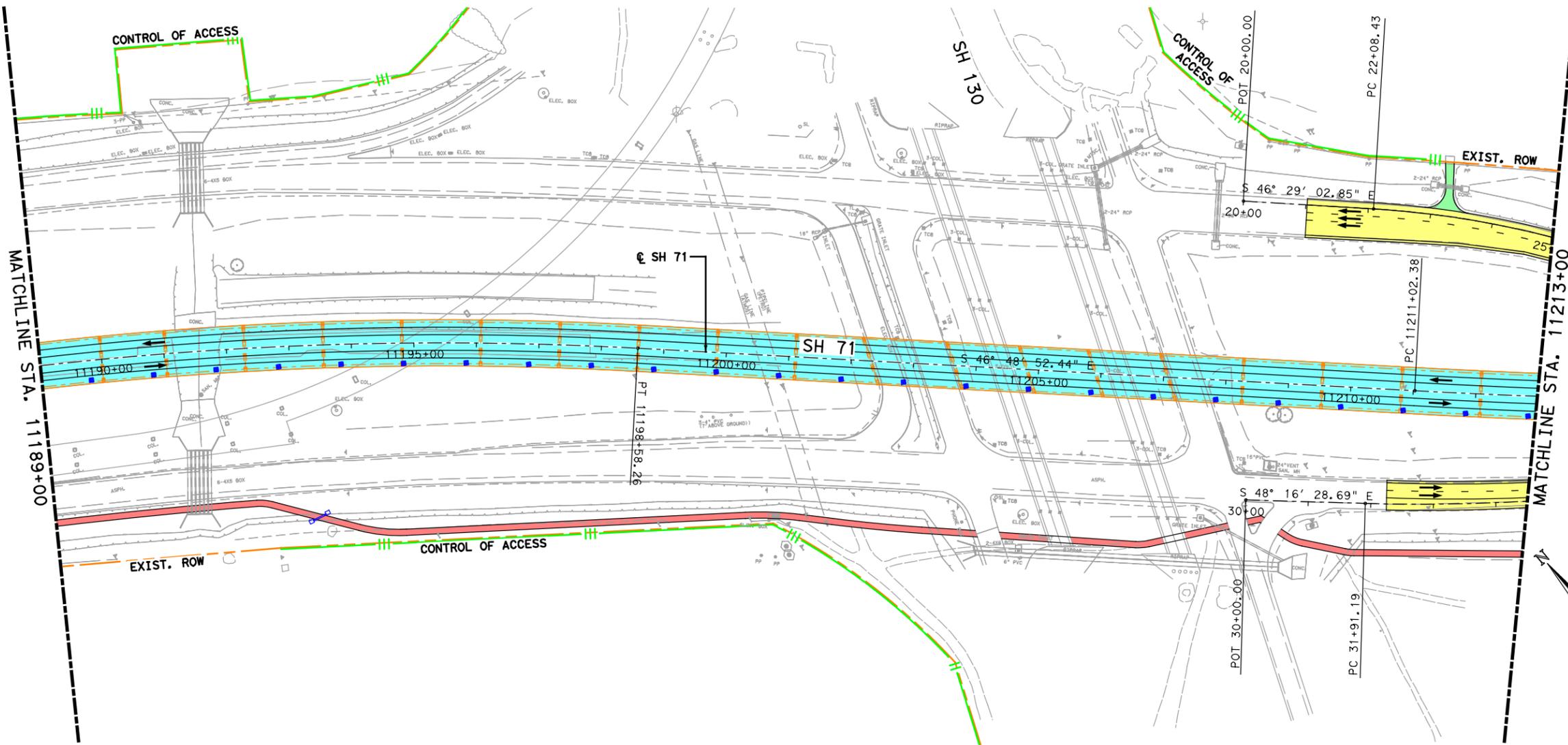
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 A LEAD A DAILY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 7 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		56
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	SECT.	JOB
		SH 71



**LEGEND**

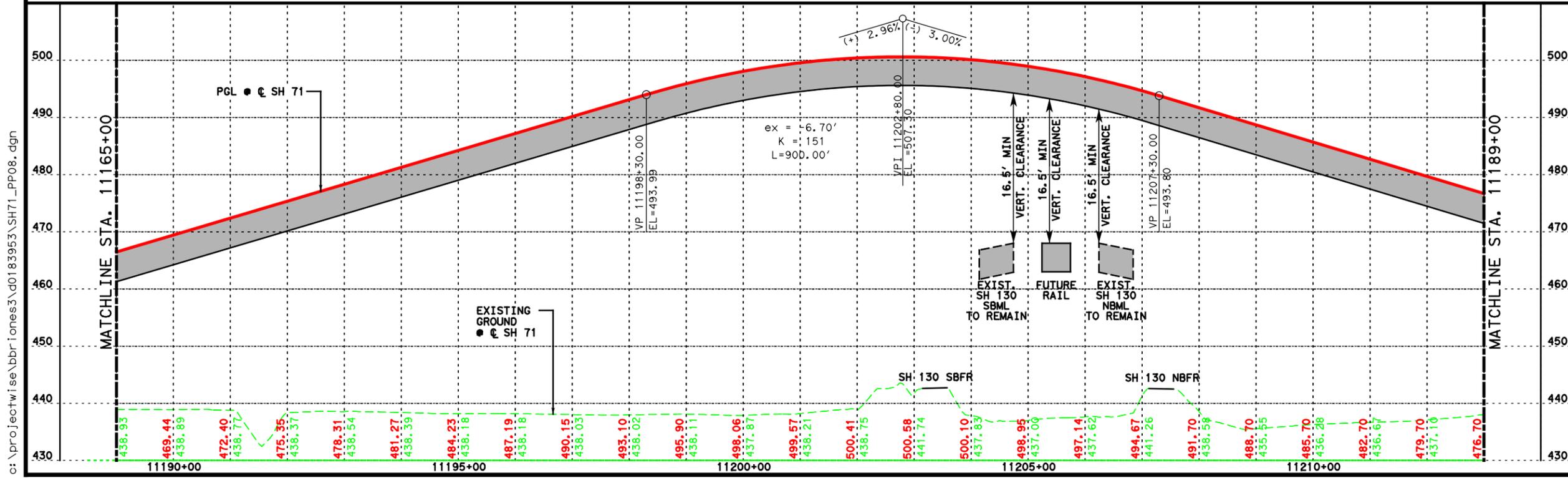
- ALIGNMENT
- EXISTING ROW
- PROPOSED ROW
- ||| CONTROL OF ACCESS
- ||| FUTURE CONTROL OF ACCESS
- TOPO
- BRIDGE
- PROP SIDEWALK
- BIKE & PED FACILITY
- PROP DRIVEWAY
- PROP TOLL
- PROP NON-TOLL
- PAVEMENT TO BE REMOVED
- PROP WIDENING
- DIRECTIONAL ARROW
- PROP DRAINAGE FEATURE
- RETAINING WALL

**NOTES:**

- EXISTING PAVEMENT TO REMAIN UNLESS OTHERWISE NOTED.
- OVERLAY LIMITS AS PER TECHNICAL PROVISIONS ATTACHMENT 11-3 ADDENDUM NO. 3.
- EXISTING INTERCHANGE TO REMAIN FULLY OPERATIONAL.

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Lockwood, Andrews & Newnam, Inc. ID No. 2614



SH 71  
P&P



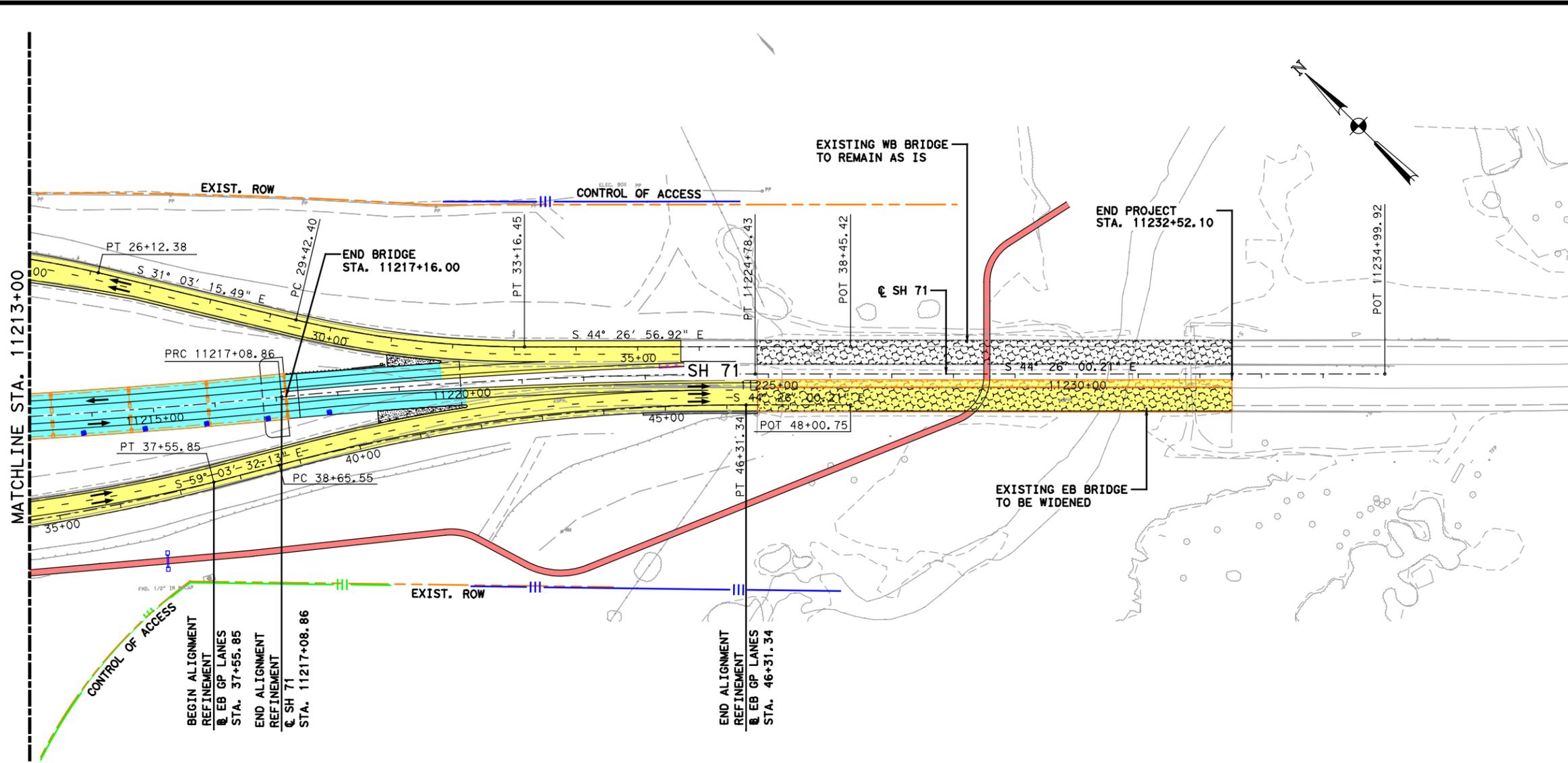
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEAD AGENCY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

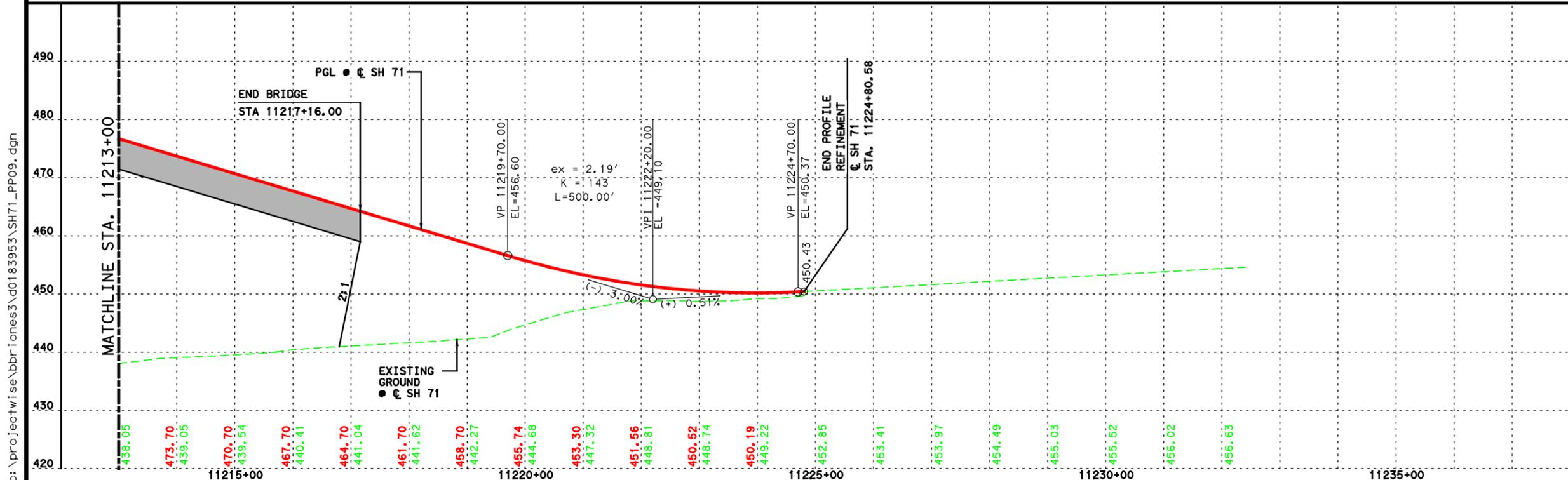
SHEET 8 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		57
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB HIGHWAY NO.
		SH 71



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SH 71  
P&P



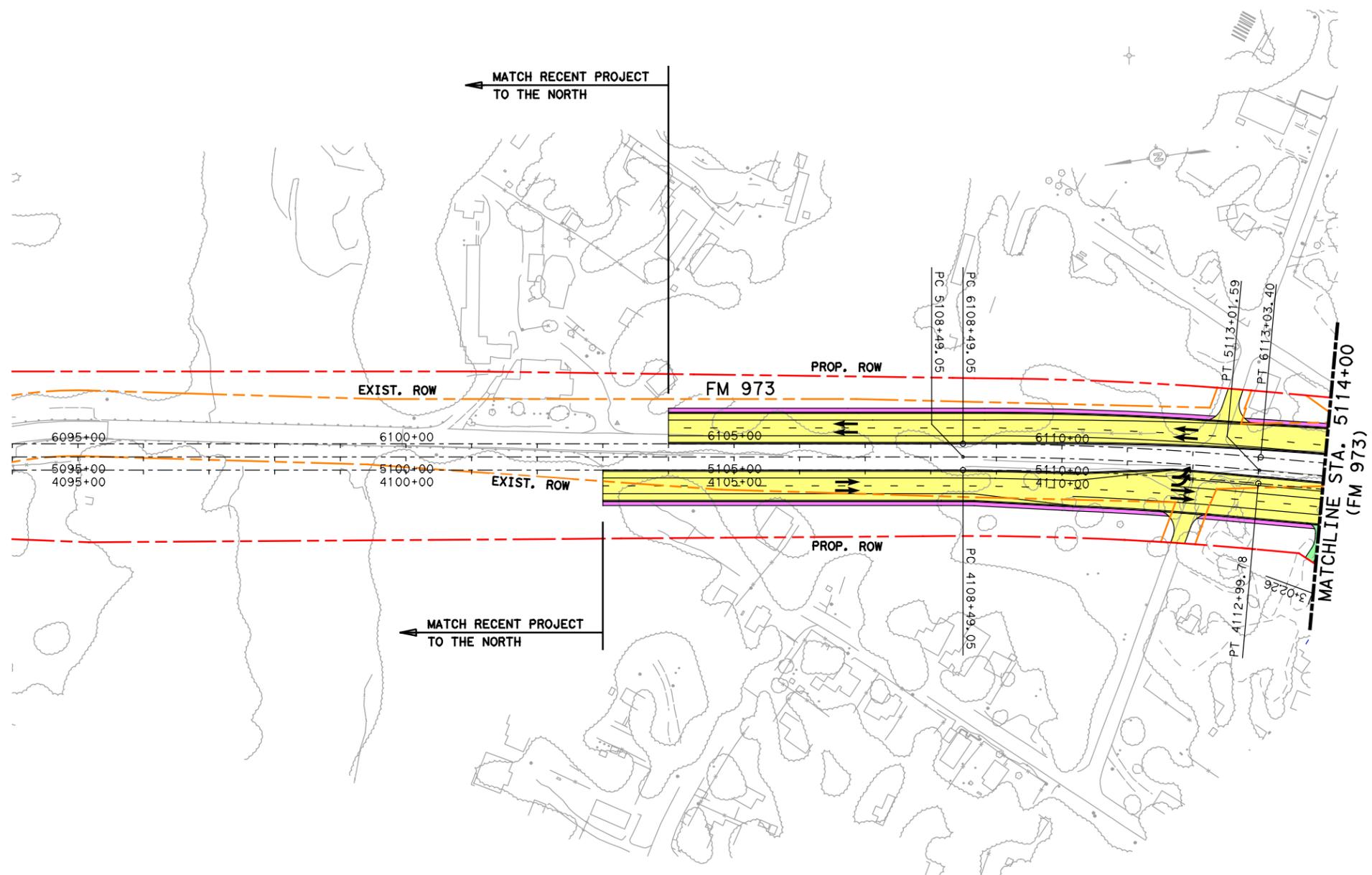
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

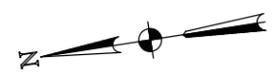
Texas Department of Transportation

SHEET 9 OF 9

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		58
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	SECT.	JOB
		SH 71



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - PROP DRAINAGE FEATURE
  - RETAINING WALL



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

PLAN



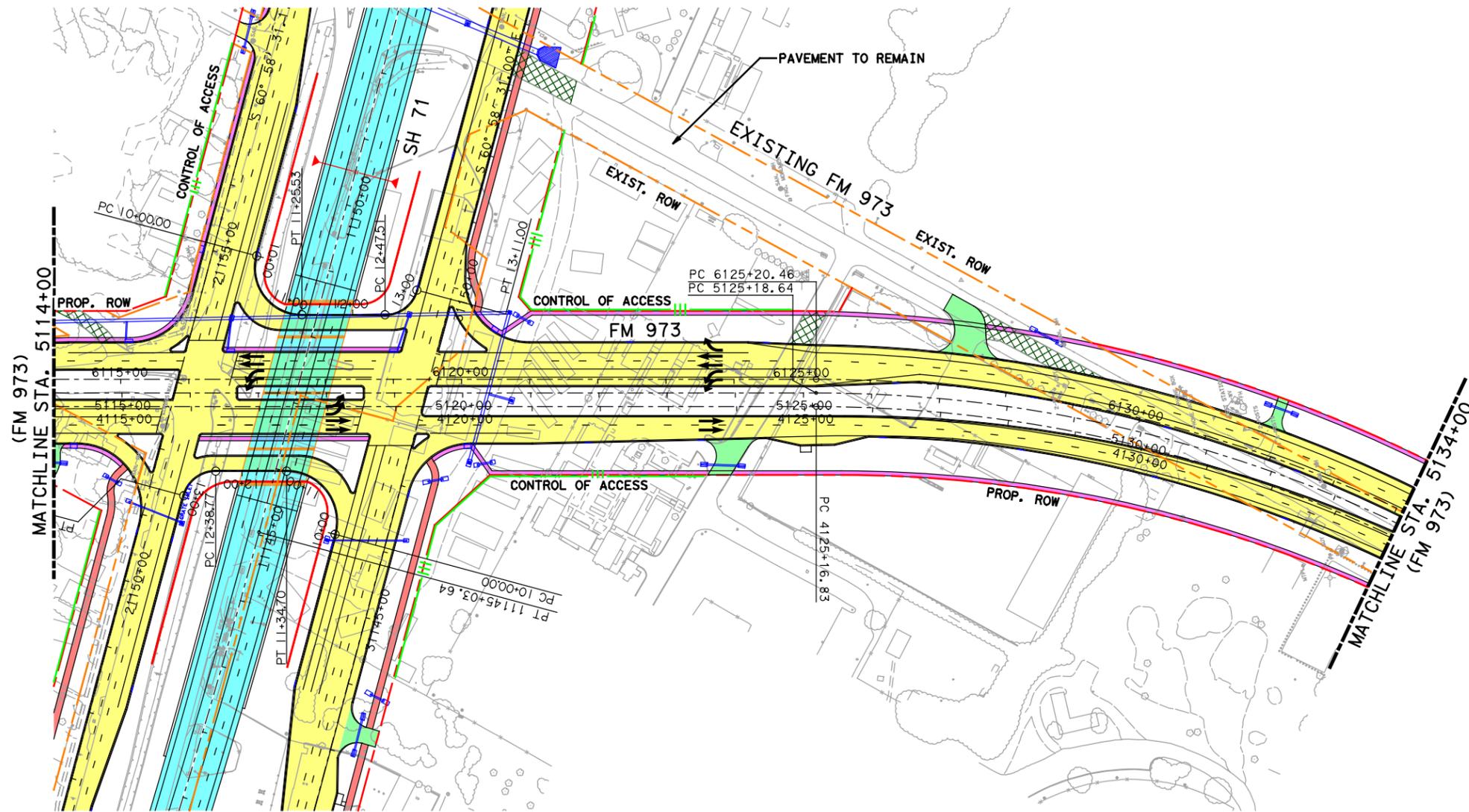
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

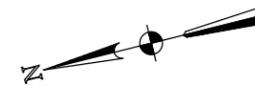
Texas Department of Transportation

SHEET 1 OF 3

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		59
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - PROP DRAINAGE FEATURE
  - RETAINING WALL



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

PLAN



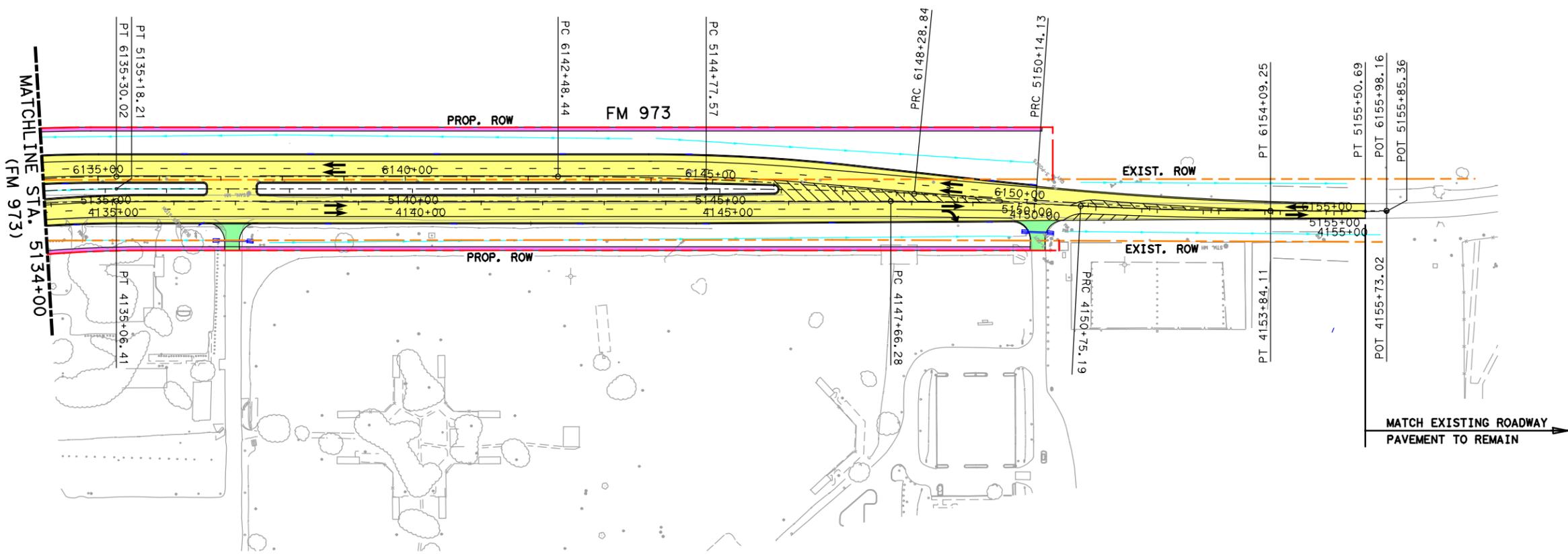
**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
VERTICAL 1"= 20'

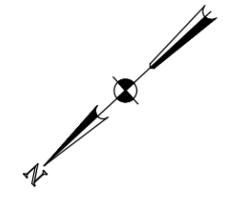
Texas Department of Transportation

SHEET 2 OF 3

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				60	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
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  - PROP WIDENING
  - DIRECTIONAL ARROW
  - PROP DRAINAGE FEATURE
  - RETAINING WALL



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MATCH EXISTING ROADWAY PAVEMENT TO REMAIN →

FM 973

PLAN



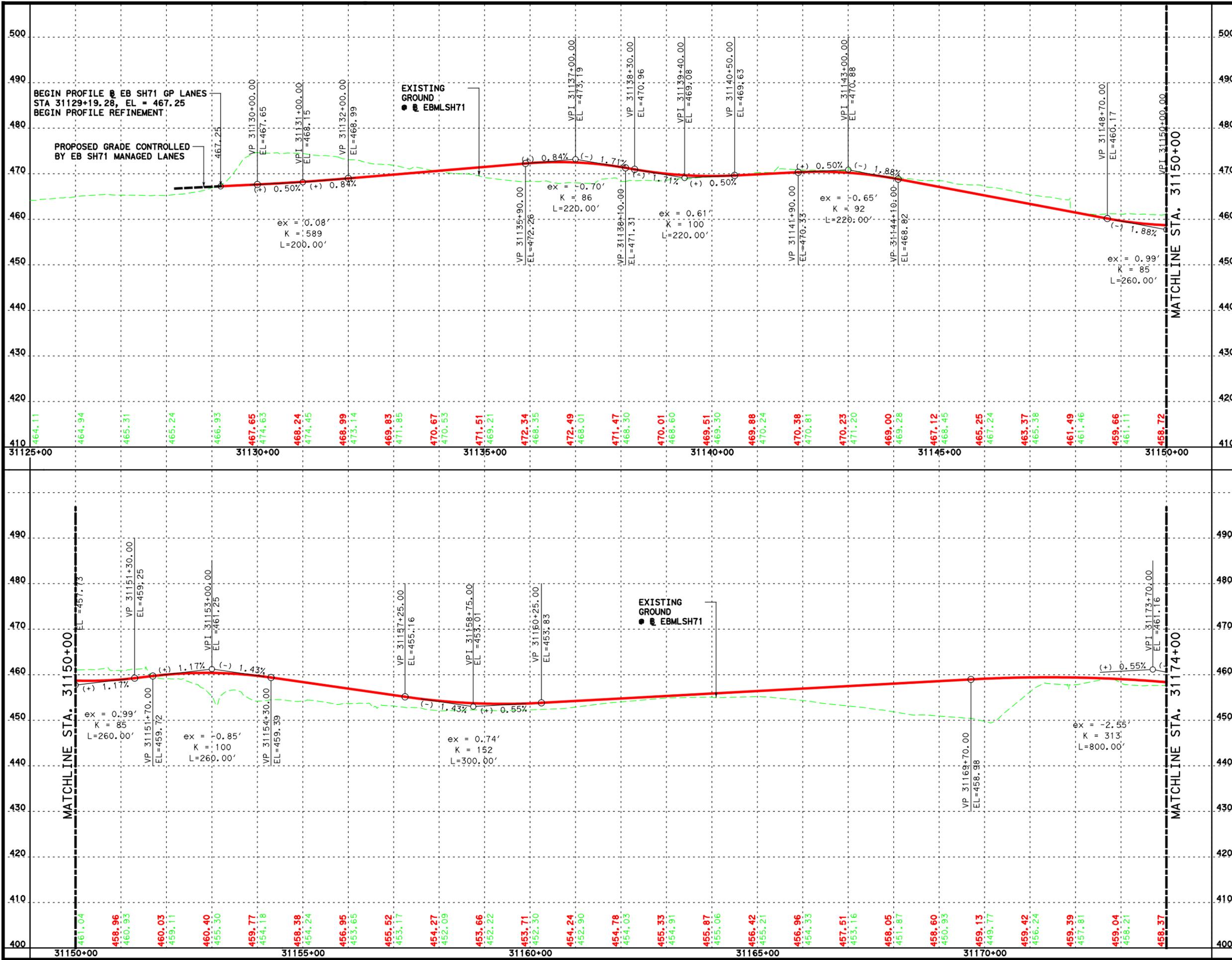
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.
6				61
STATE	STATE DIST. NO.	COUNTY		
TEXAS		TRAVIS		
CONT.	SECT.	JOB	HIGHWAY NO.	
			SH 71	

SHEET 3 OF 3



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**SH 71**  
**EB PROFILE**  
**GENERAL PURPOSE**



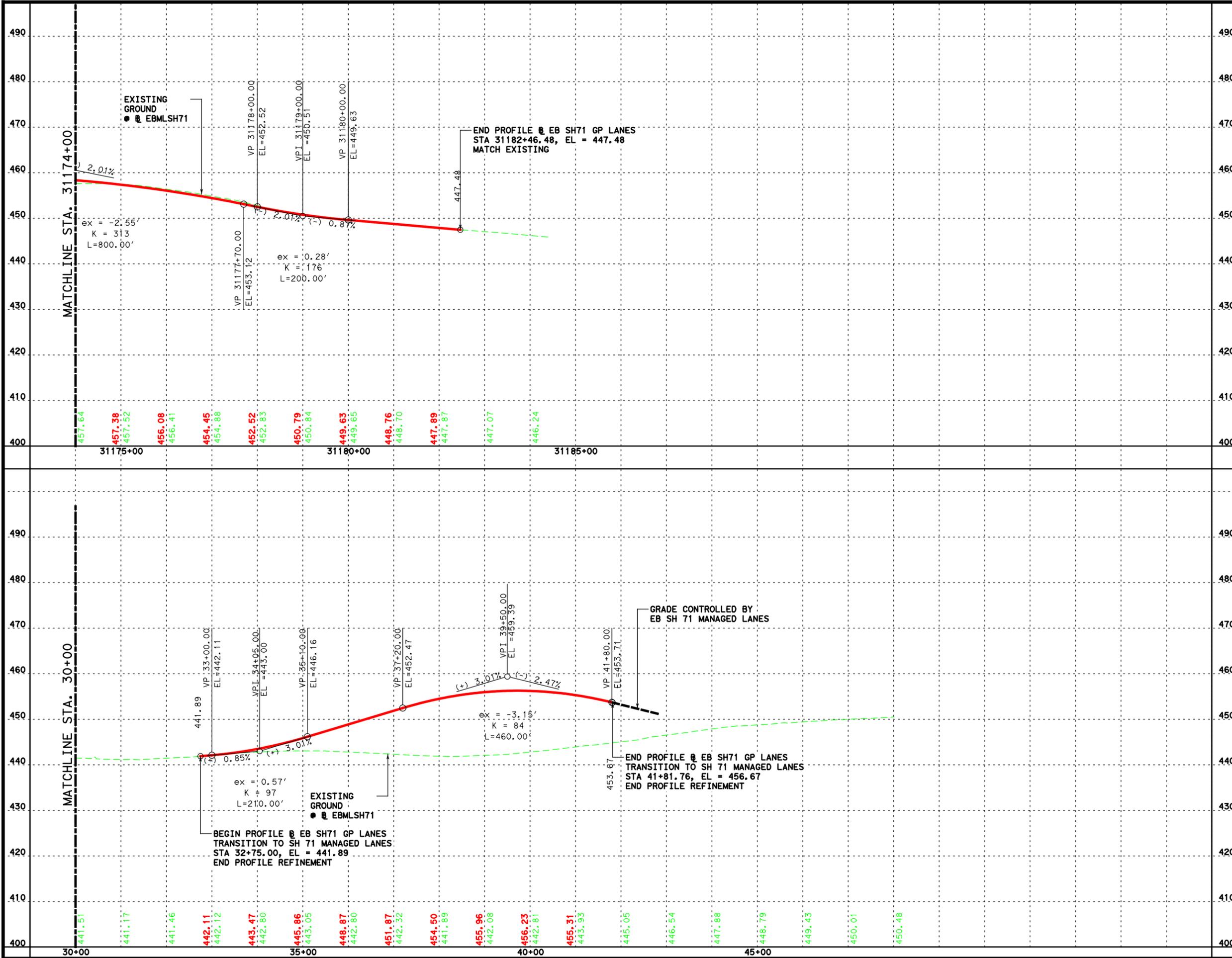
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		62
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB
		SH 71



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SH 71

EB PROFILE  
 GENERAL PURPOSE



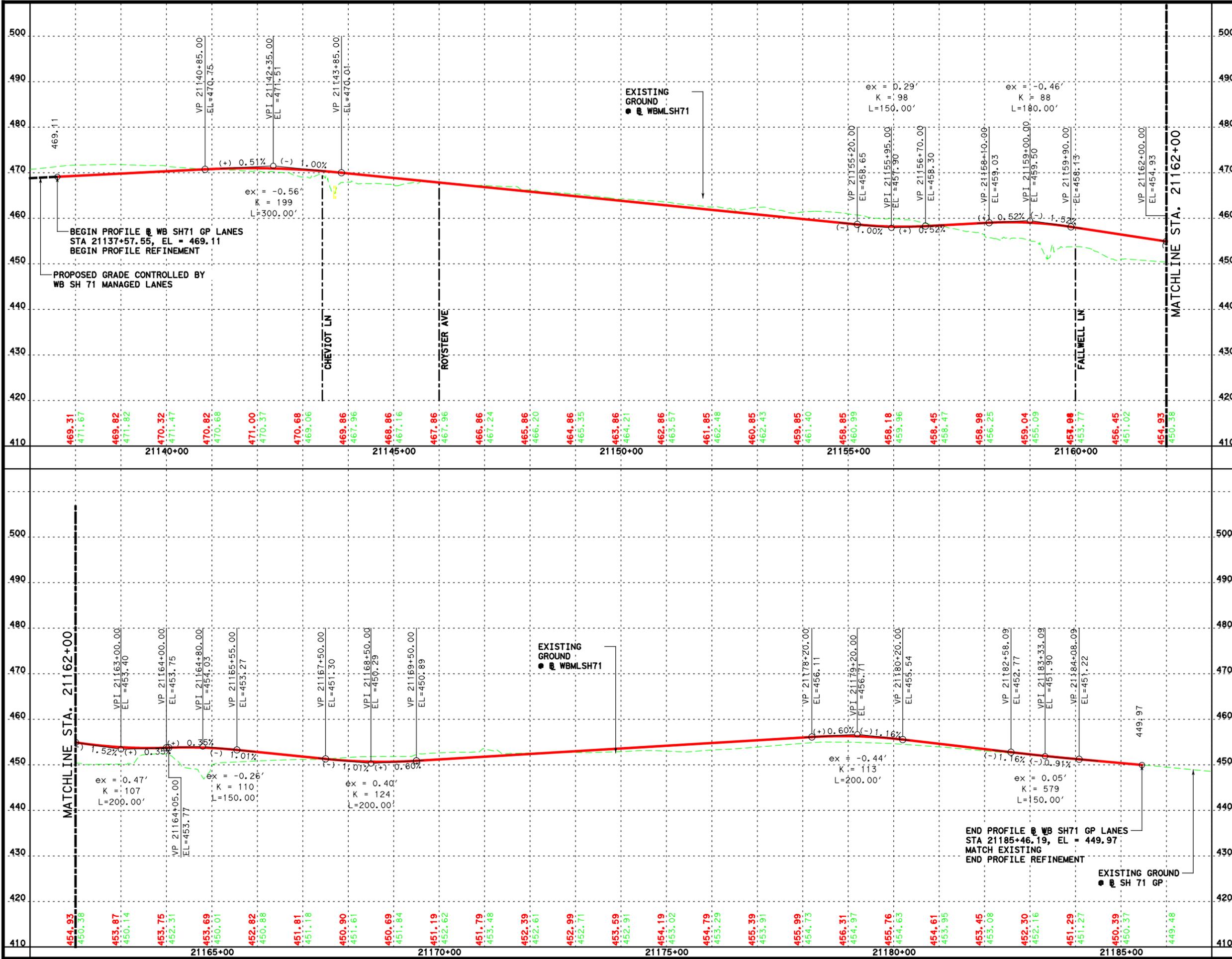
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 2 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		63
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB HIGHWAY NO.
		SH 71



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**SH 71**  
**WB PROFILE**  
**GENERAL PURPOSE**



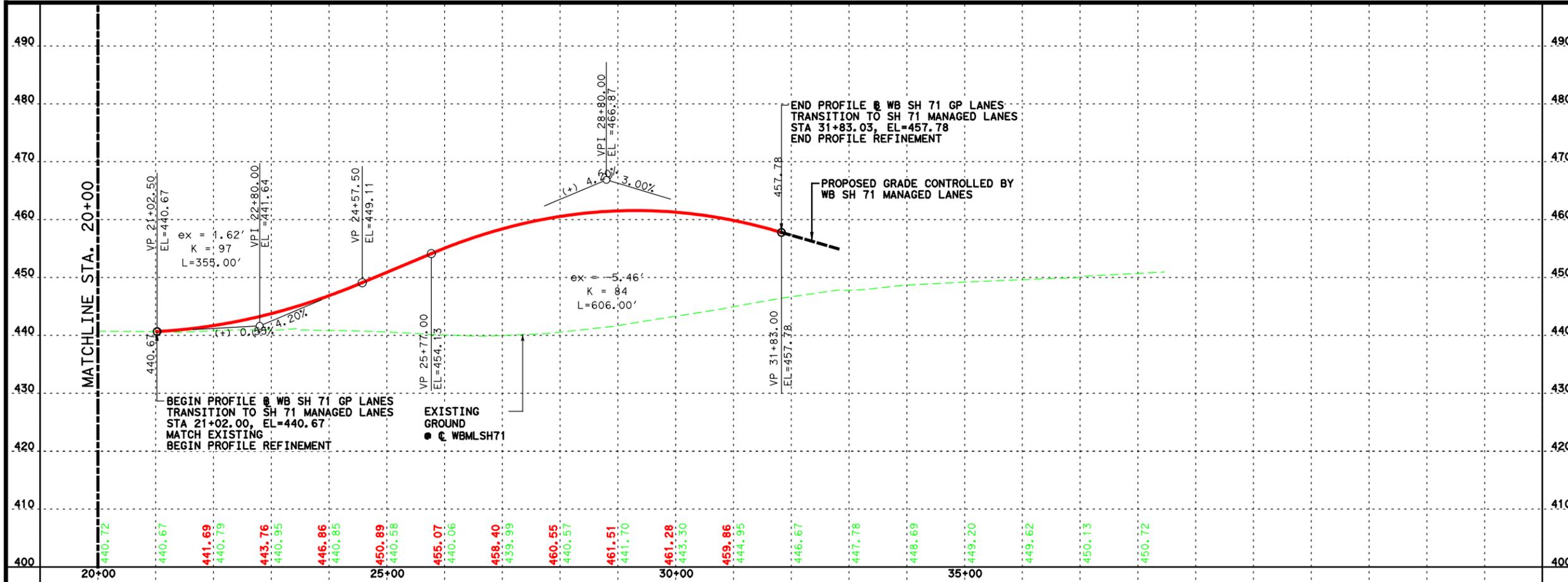
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		64
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB HIGHWAY NO.
		SH 71



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SH 71

WB PROFILE  
 GENERAL PURPOSE

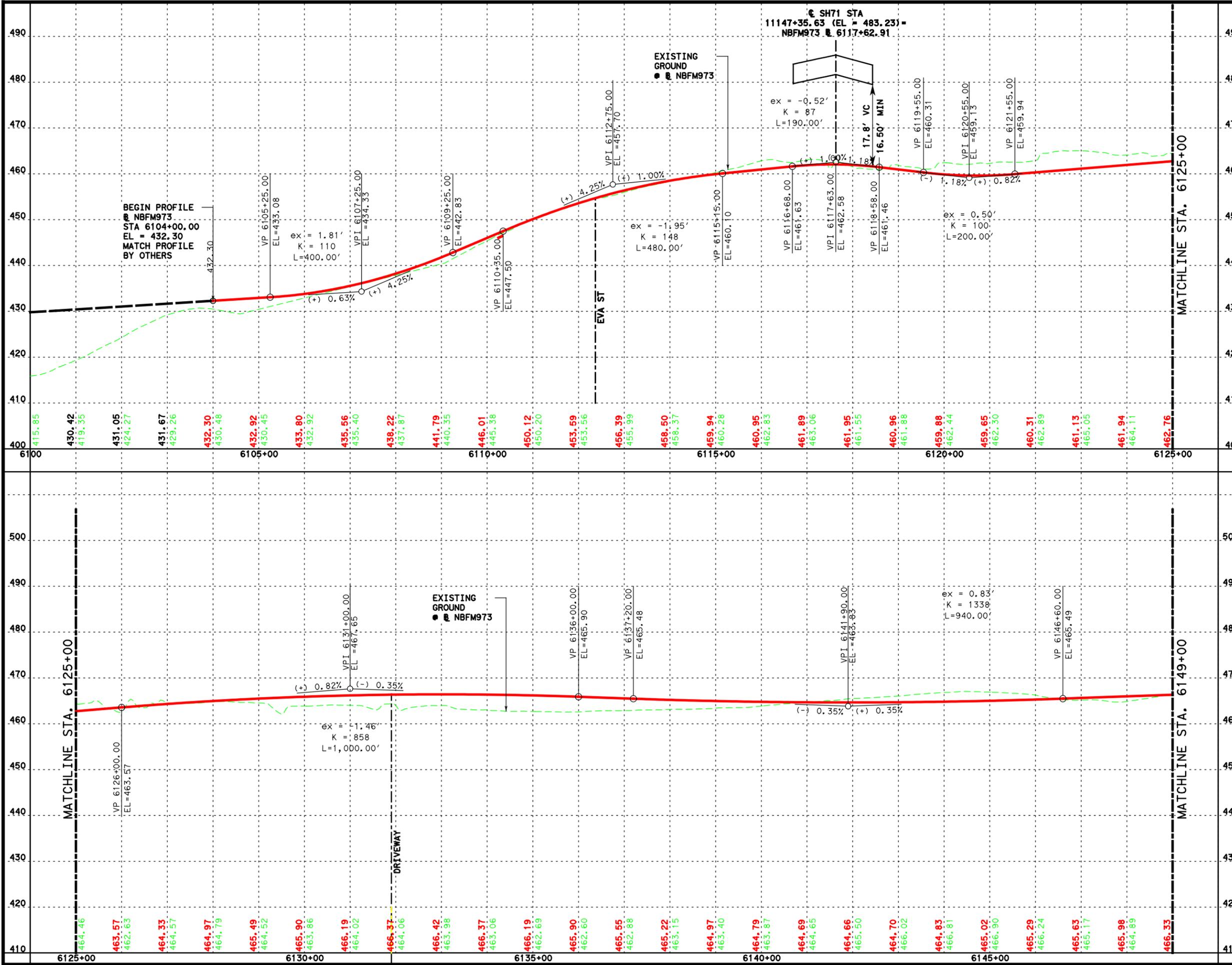


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				65	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



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NB PROFILE



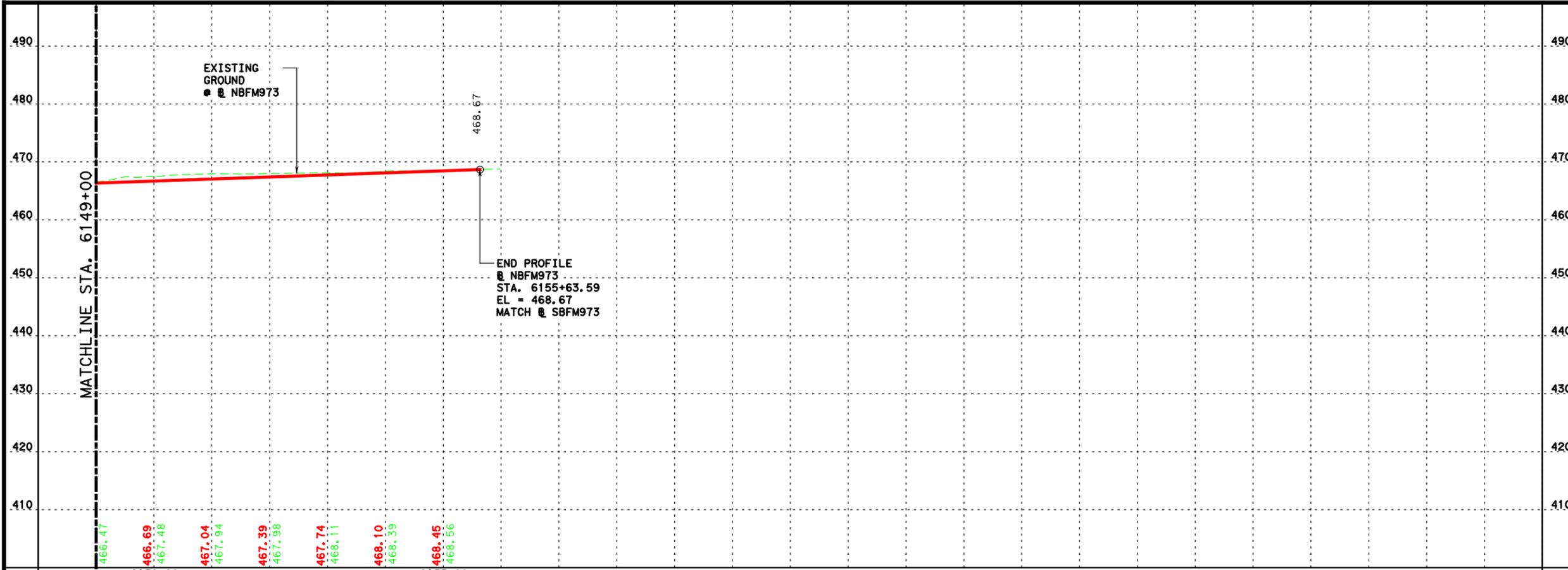
**L&N** Lockwood, Andrews & Newnam, Inc.  
 A LEAD A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		66
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB
		SH 71



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FM 973

NB PROFILE



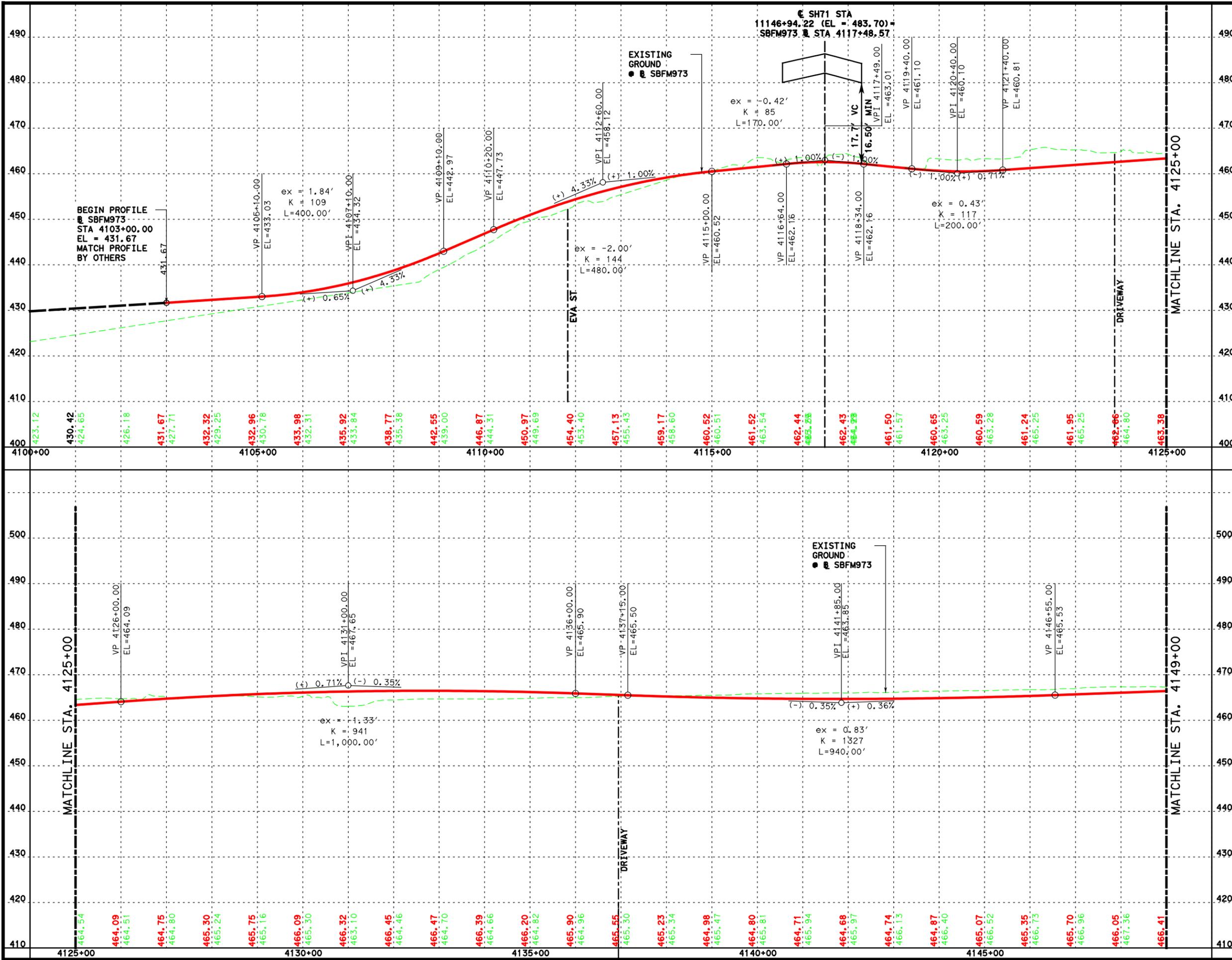
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 2 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT		SHEET NO.
6			67
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONTR.	SECT.	JOB	HIGHWAY NO.
			SH 71



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

SB PROFILE



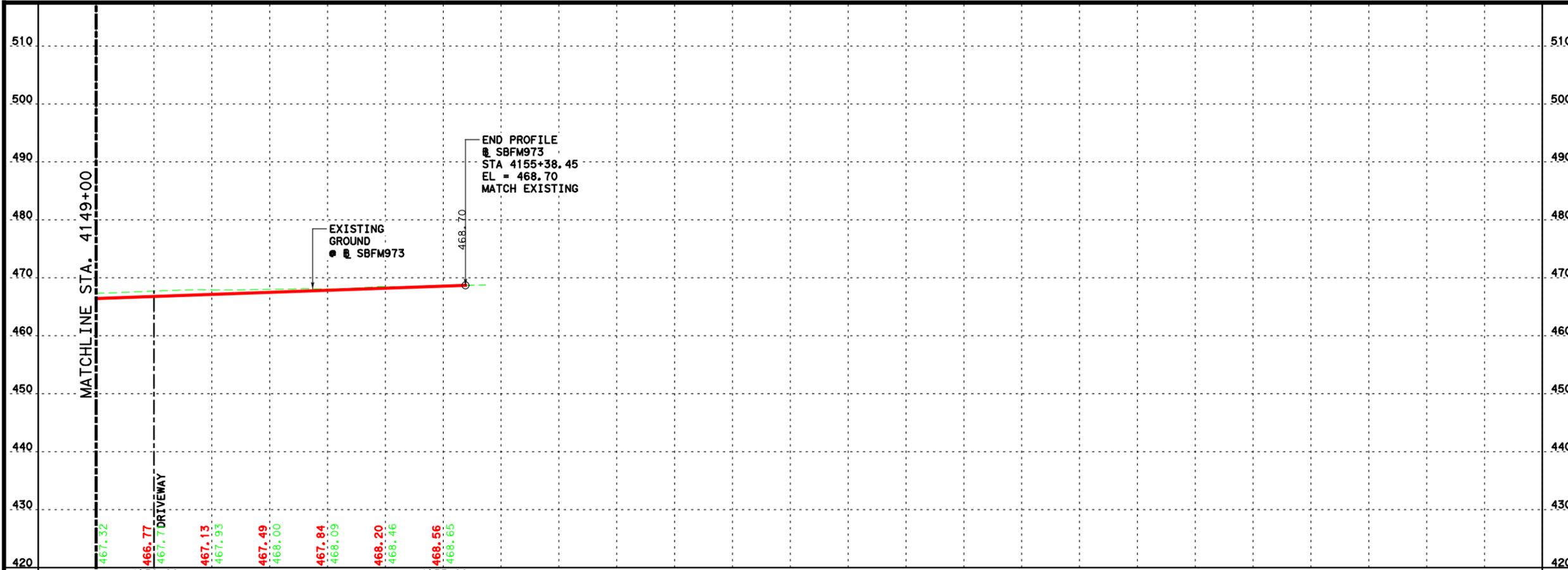
**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEAD A DALY COMPANY  
TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		68
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB HIGHWAY NO.
		SH 71



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FM 973

SB PROFILE



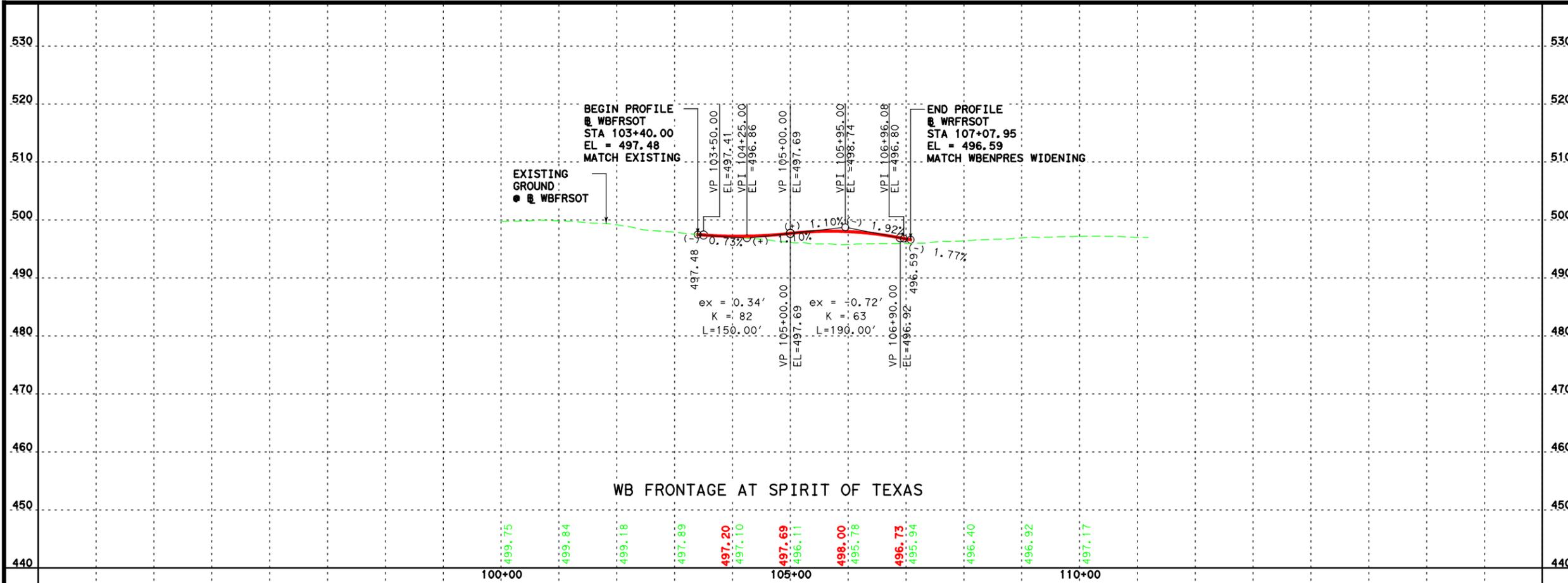
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 2 OF 2

FED. RD. DIST. NO.	STATE AID PROJECT		SHEET NO.
6			69
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONTR.	SECT.	JOB	HIGHWAY NO.
			SH 71



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SH 71

FRONTAGE ROAD PROFILES

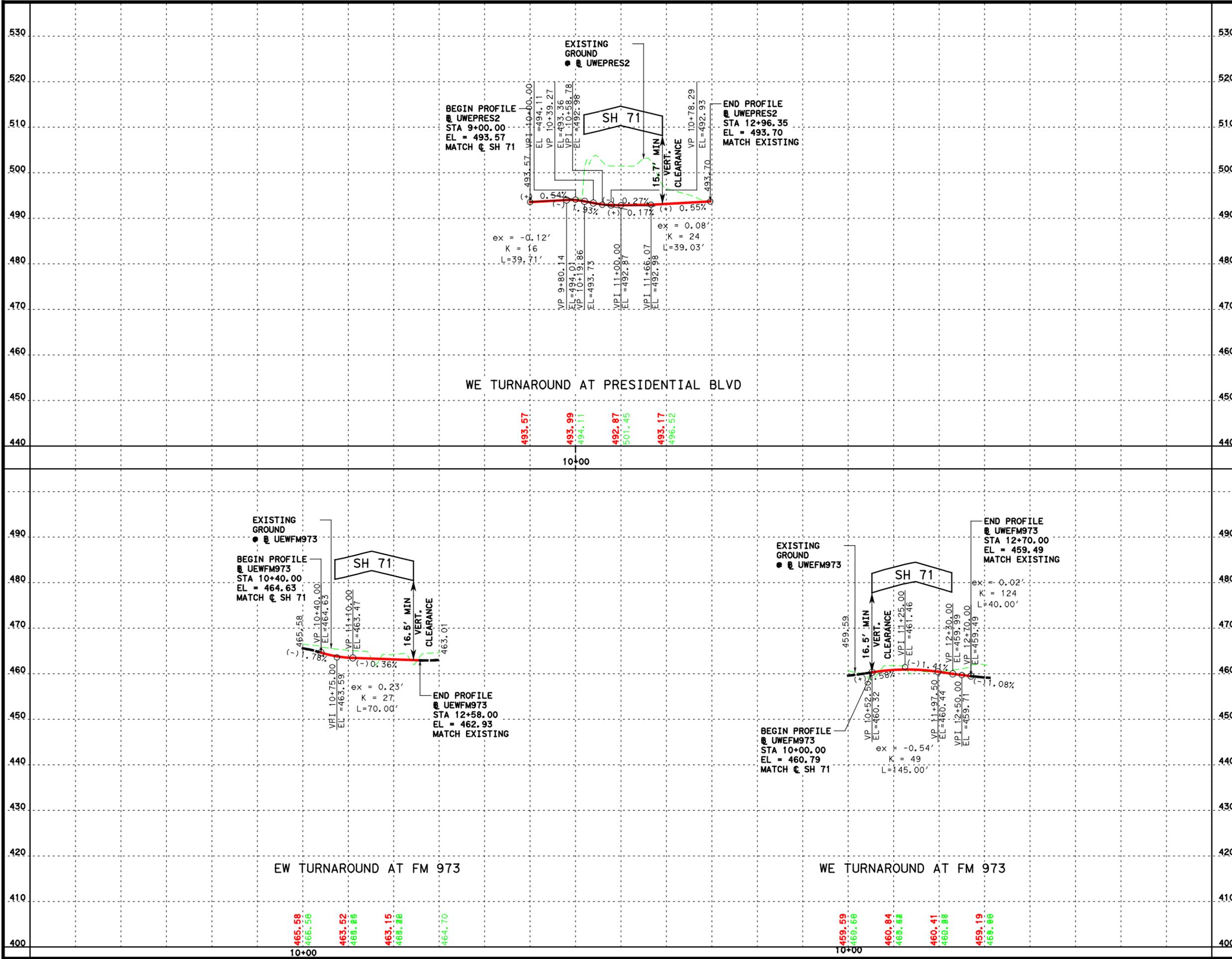


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				70	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

**SH 71**  
**TURNAROUND**  
**PROFILES**



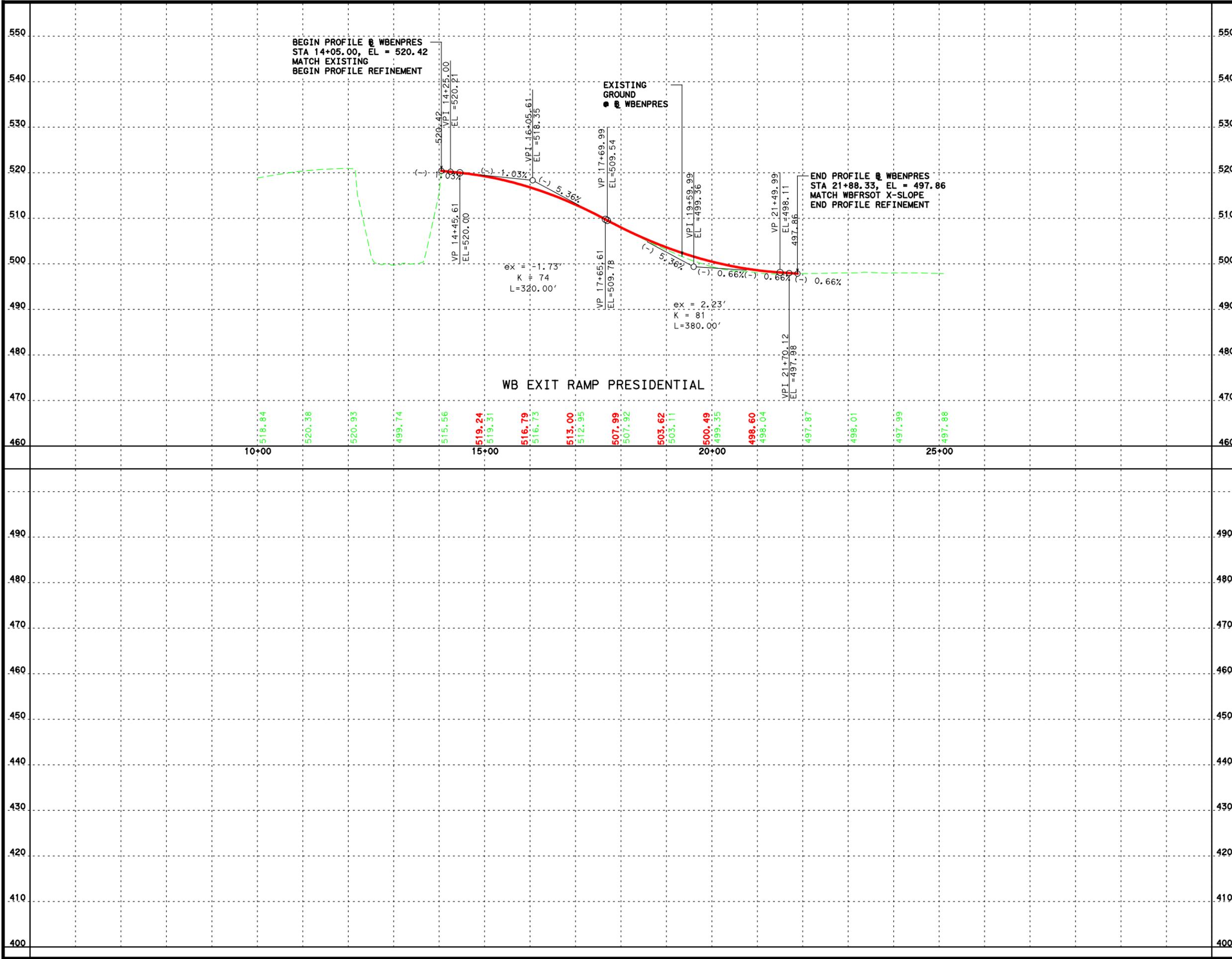
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 1

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		71
STATE	COUNTY	
TEXAS	TRAVIS	
CONF.	RECT.	JOB
		HIGHWAY NO.
		SH 71



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

RAMP PROFILES



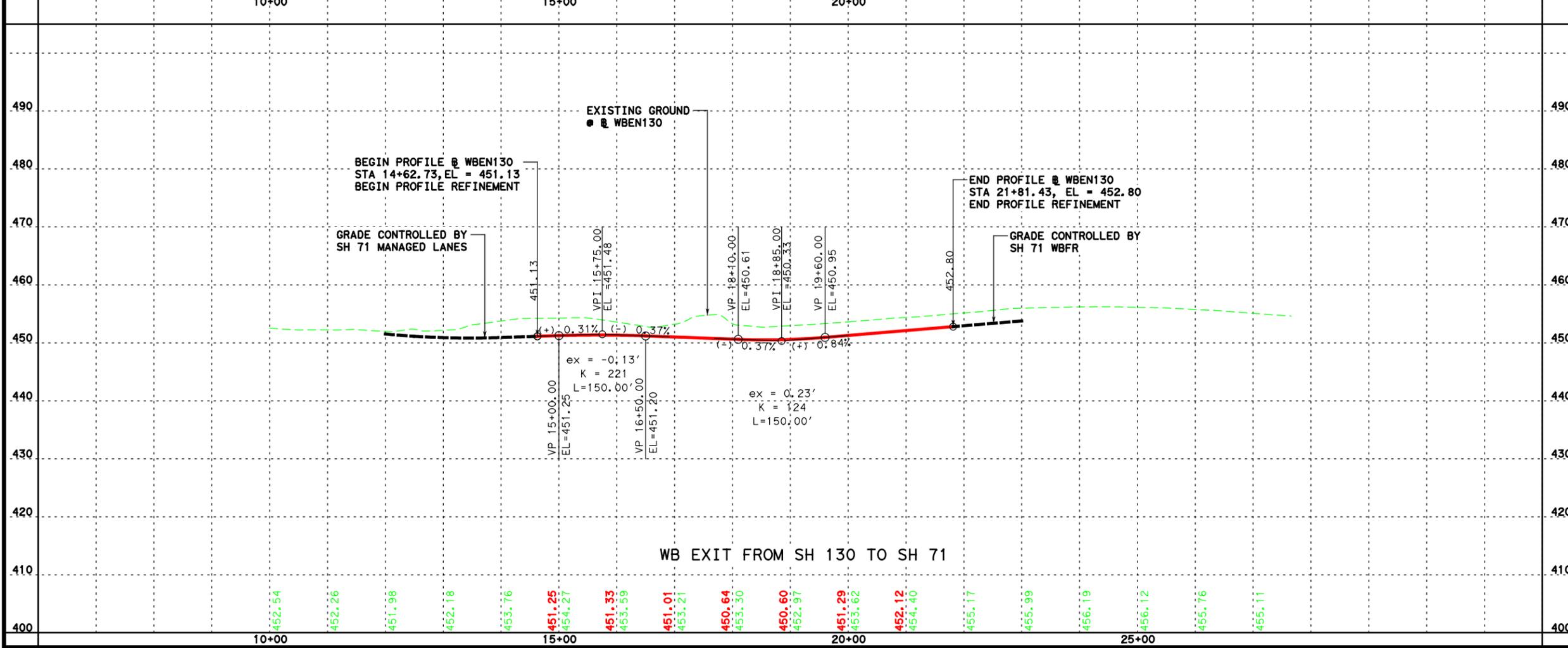
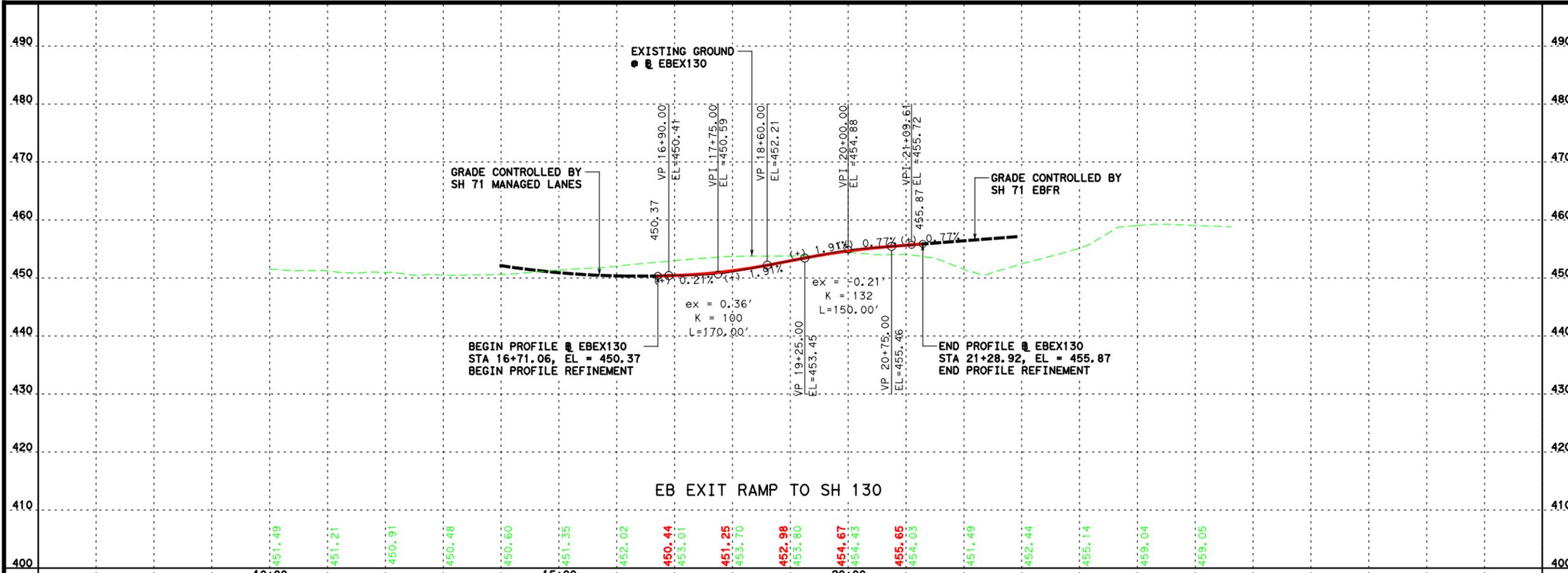
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

SHEET 1 OF 3

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		72
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



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SH 71

RAMP PROFILES

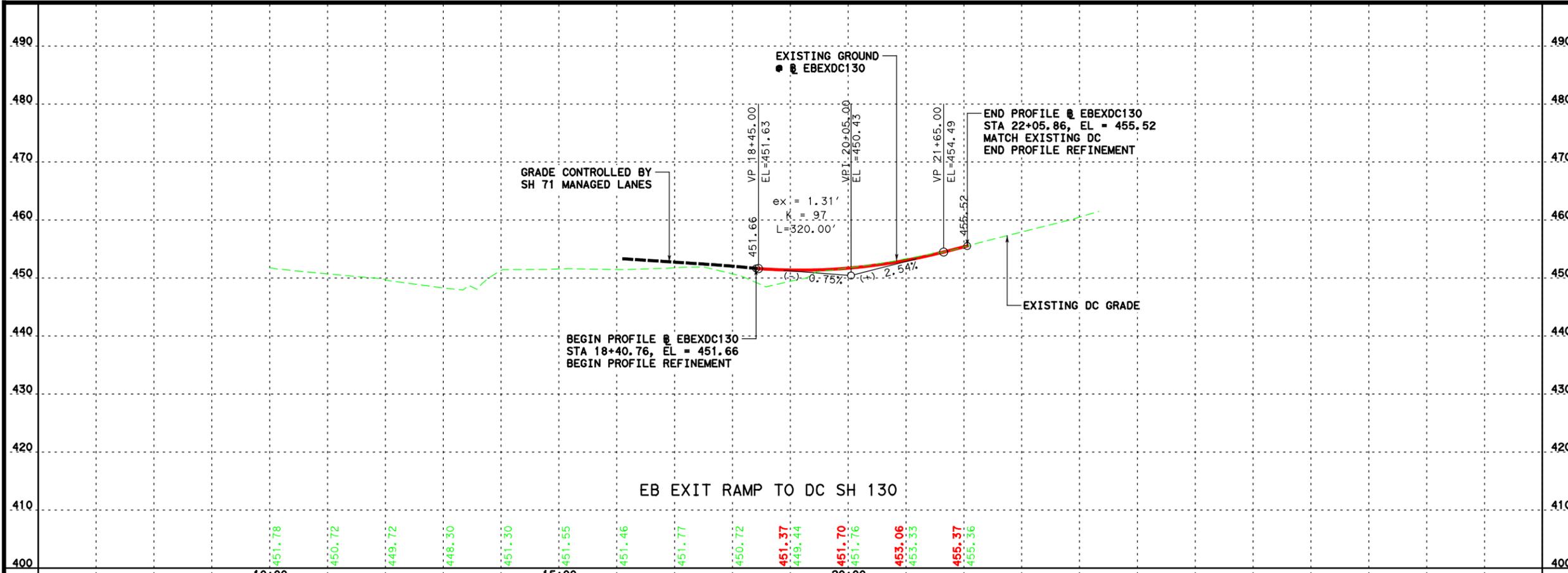


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				73	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

RAMP PROFILES



**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

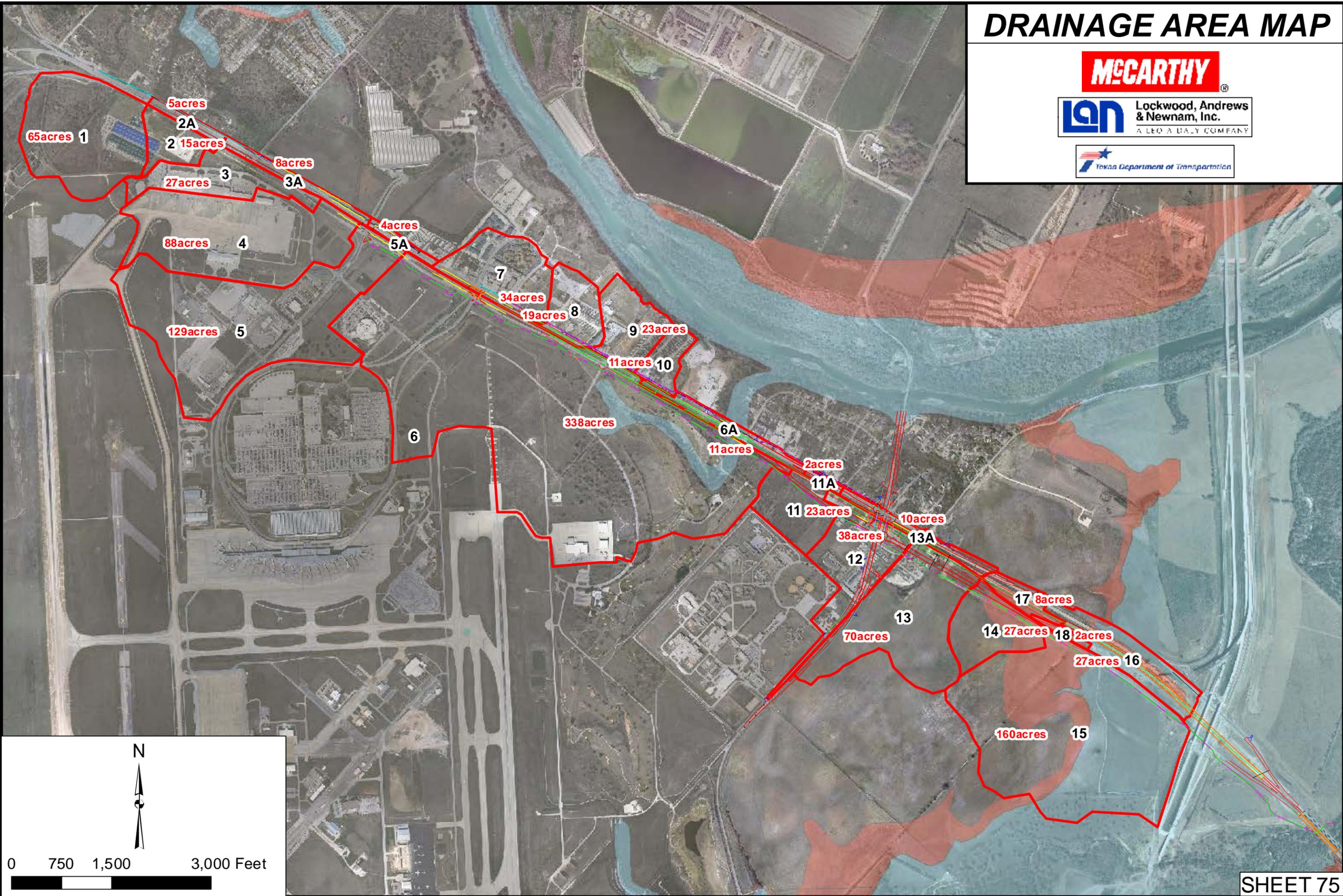
SCALE: HORIZONTAL 1"=200'  
 VERTICAL 1"= 20'

Texas Department of Transportation

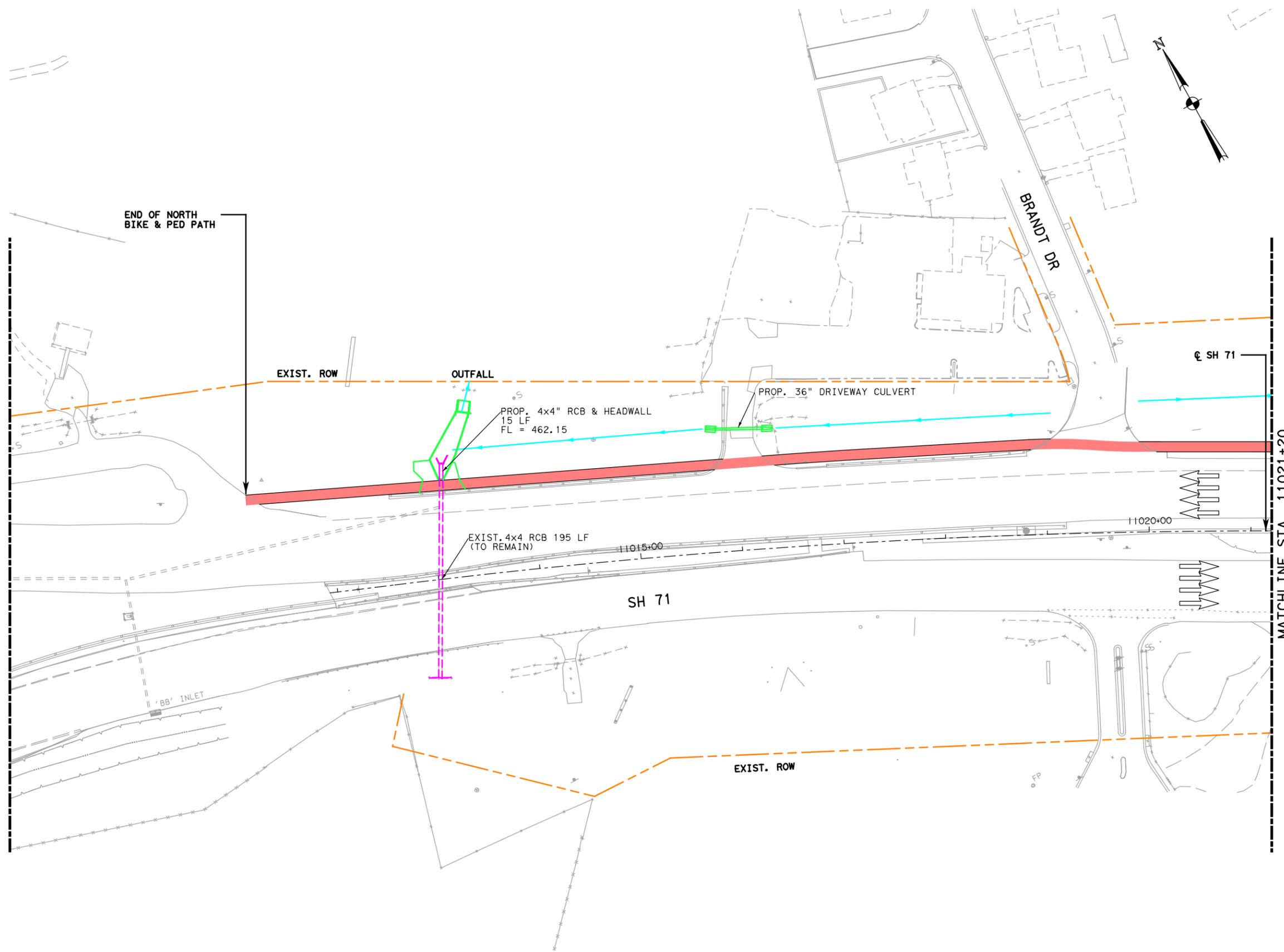
FED. RD. DIST. NO.		STATE AID PROJECT		SHEET NO.	
6				74	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		

SHEET 2 OF 3

# DRAINAGE AREA MAP



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- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
  - ACS - ARMOR CURB SLOT
  - PROP BRIDGE DECK DRAIN

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**SH 71**  
**DRAINAGE PLAN**

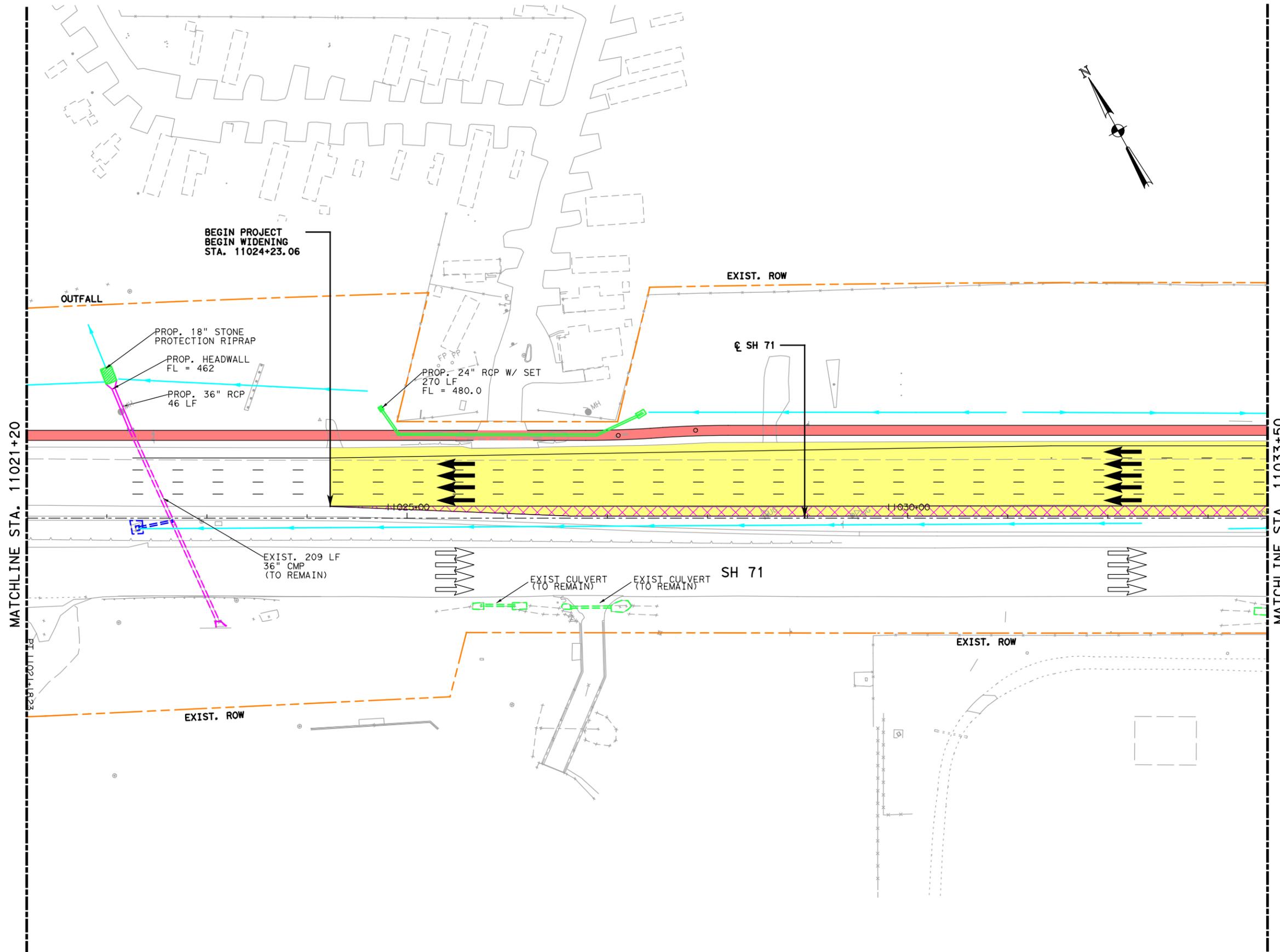


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 1 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		76
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - - - - EXISTING ROW
  - - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
  - ACS - ARMOR CURB SLOT
  - PROP BRIDGE DECK DRAIN

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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71  
 DRAINAGE PLAN

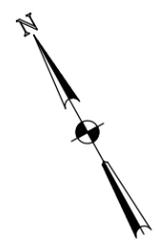
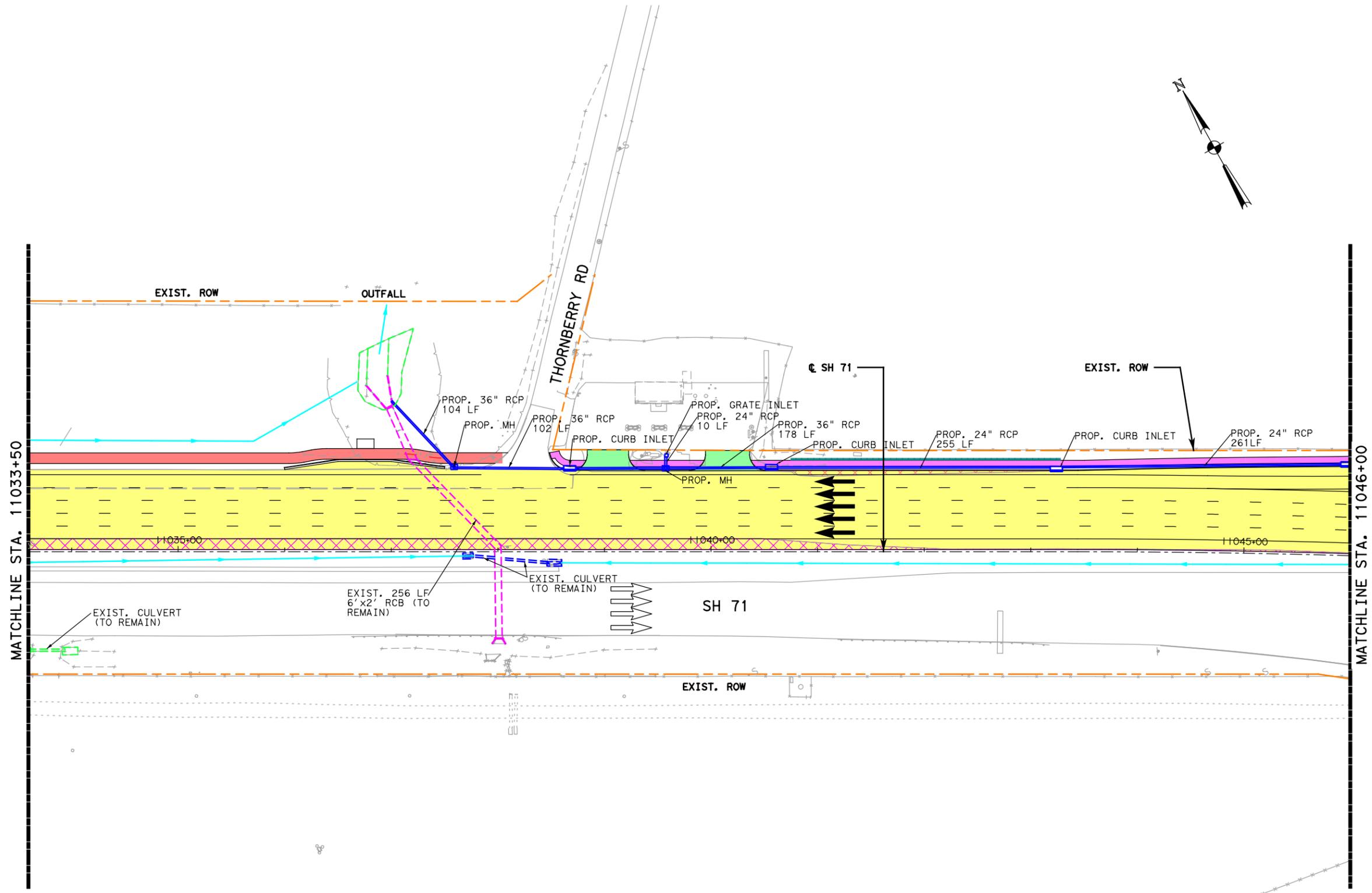


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 2 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		77
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

DRAINAGE PLAN

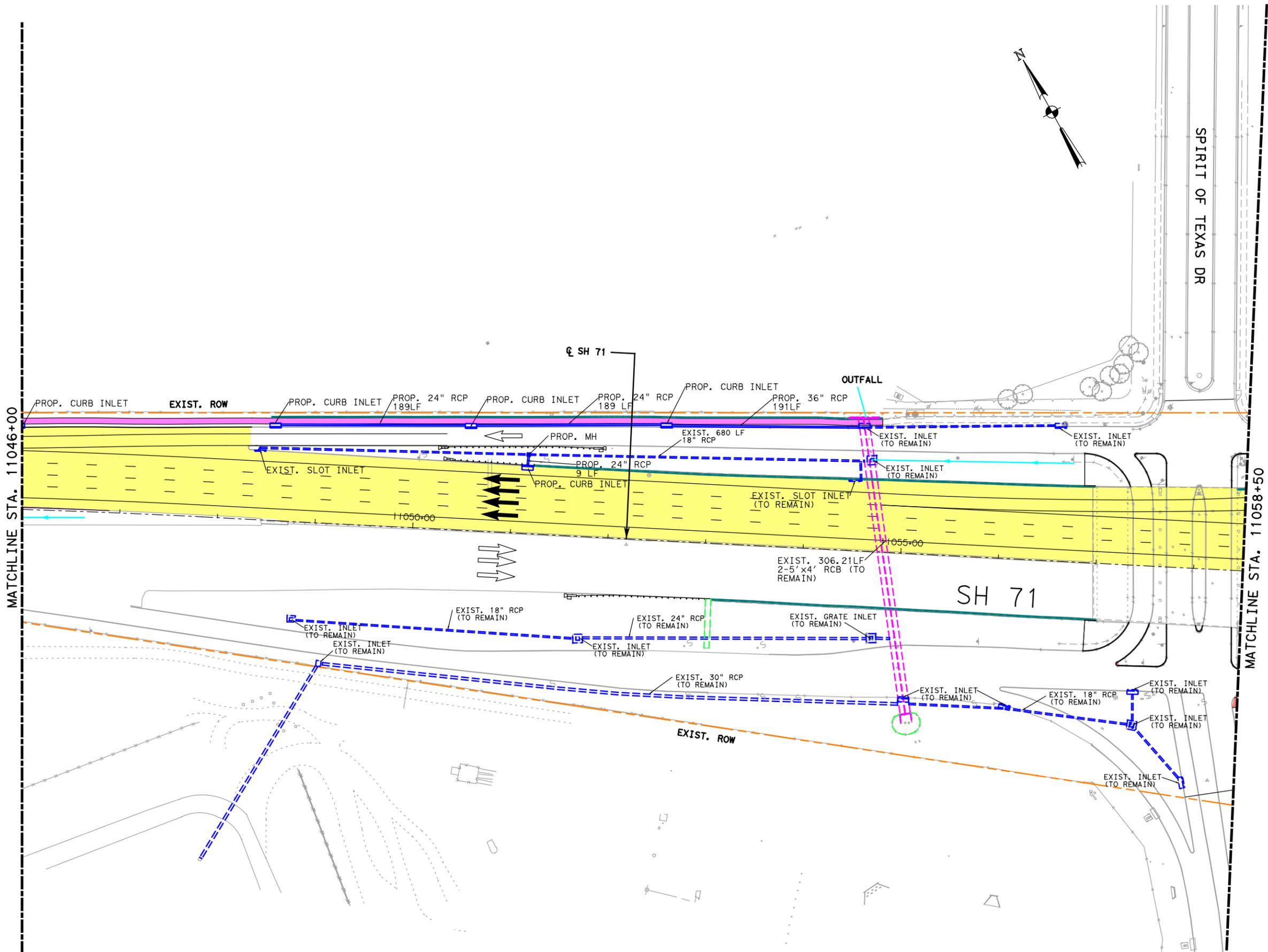


**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
SHEET 3 OF 18

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				78	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
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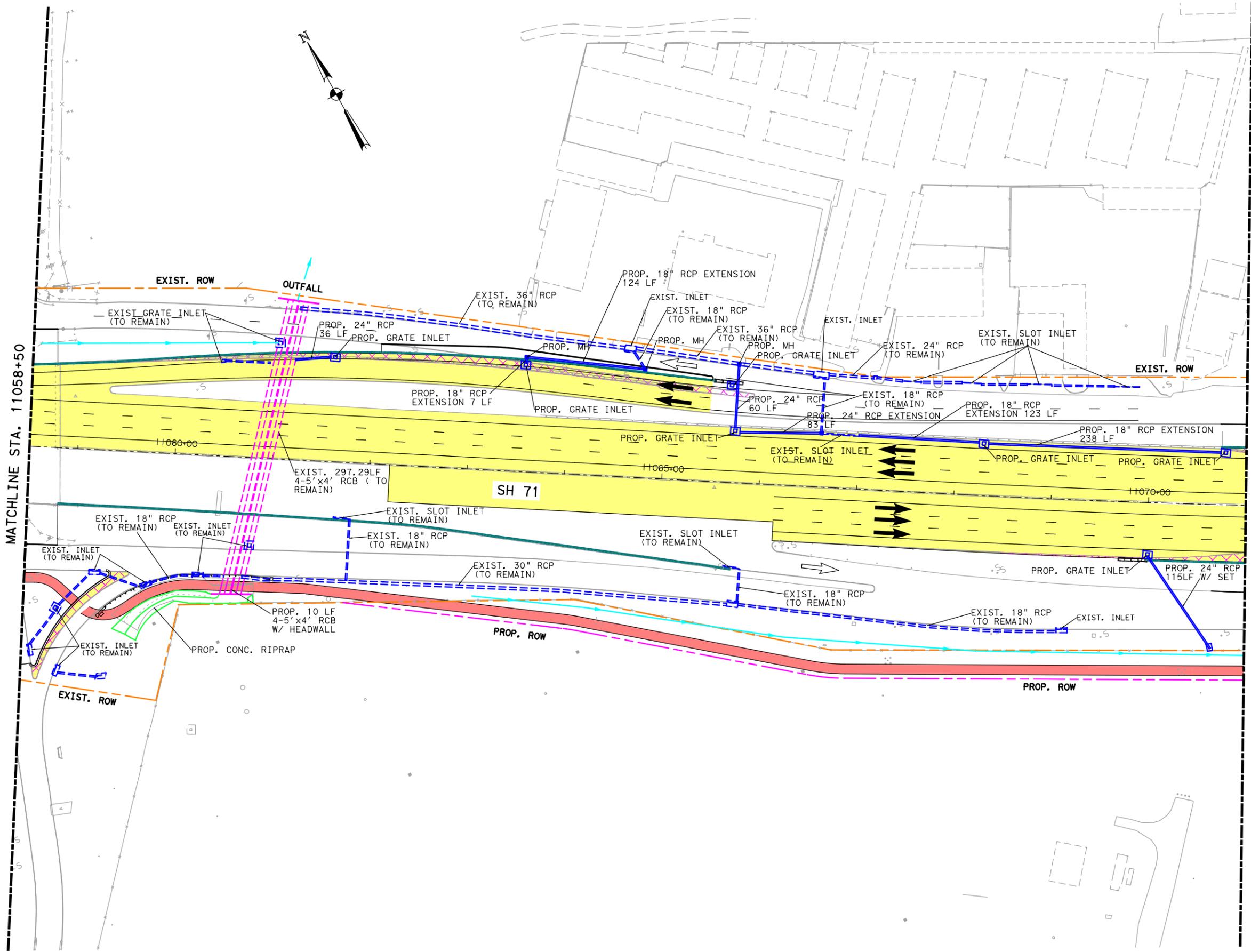
Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71  
DRAINAGE PLAN

**MCCARTHY**  
 Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'  
 Texas Department of Transportation  
 SHEET 4 OF 18

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.	
6		79	
STATE	STATE DIST. NO.	COUNTY	
TEXAS		TRAVIS	
CONF.	SECT.	JOB	HIGHWAY NO.
			SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
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SH 71  
 DRAINAGE PLAN

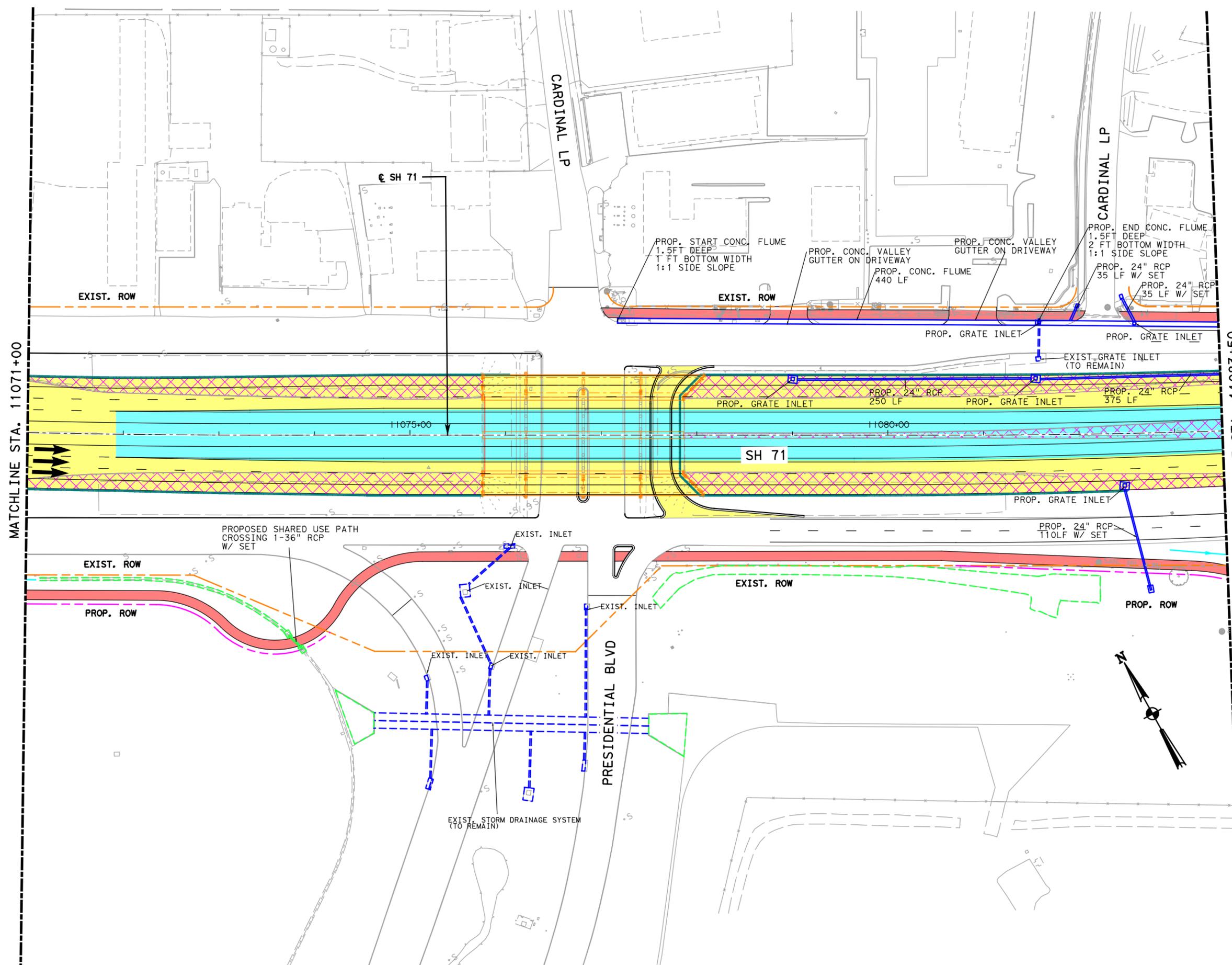


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 5 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		80
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - █ PROP SIDEWALK
  - █ BIKE & PED FACILITY
  - █ PROP DRIVEWAY
  - █ PROP TOLL
  - █ PROP NON-TOLL
  - █ PAVEMENT TO BE REMOVED
  - █ PROP WIDENING
  - DIRECTIONAL ARROW
  - █ RETAINING WALL
  - █ PROP DRAINAGE DITCH
  - █ PROP STORMSEWER SYSTEM
  - █ PROP CROSS CULVERTS
  - █ PROP DRAINAGE FEATURE
  - █ EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
  - █ ACS - ARMOR CURB SLOT
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

DRAINAGE PLAN

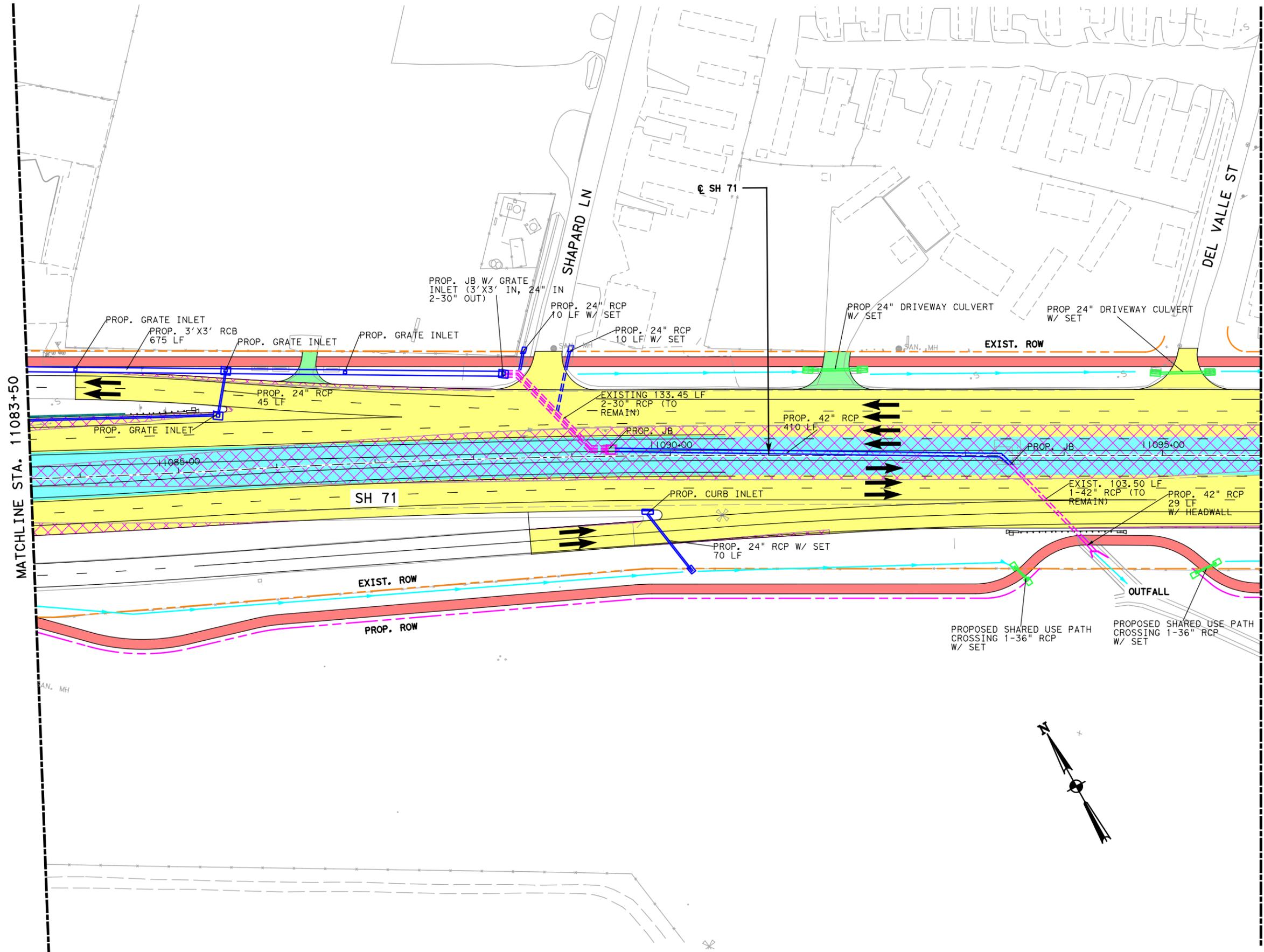


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 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 6 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		81
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
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SH 71

**DRAINAGE PLAN**

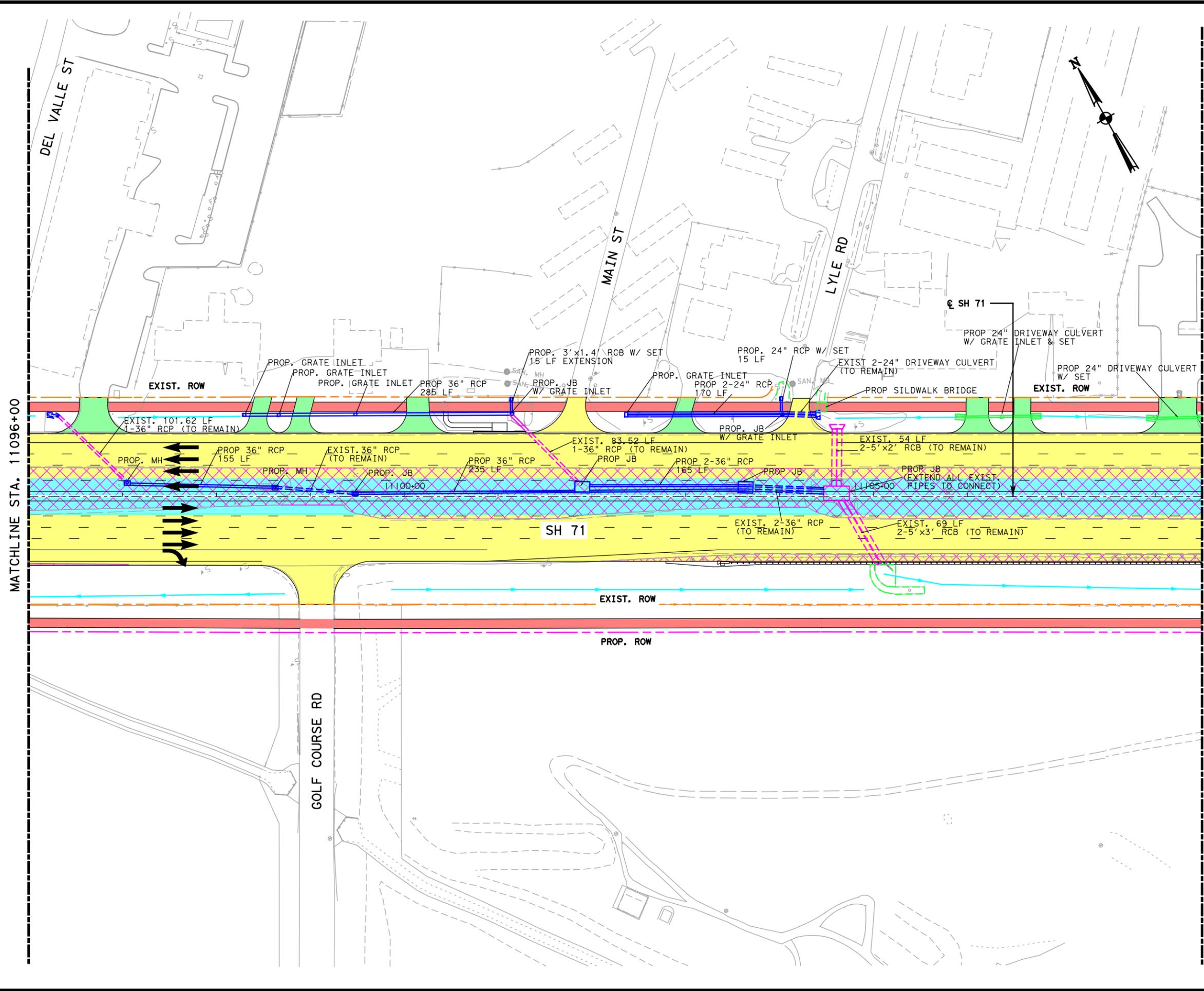


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 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 7 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		82
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
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  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
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SH 71  
 DRAINAGE PLAN

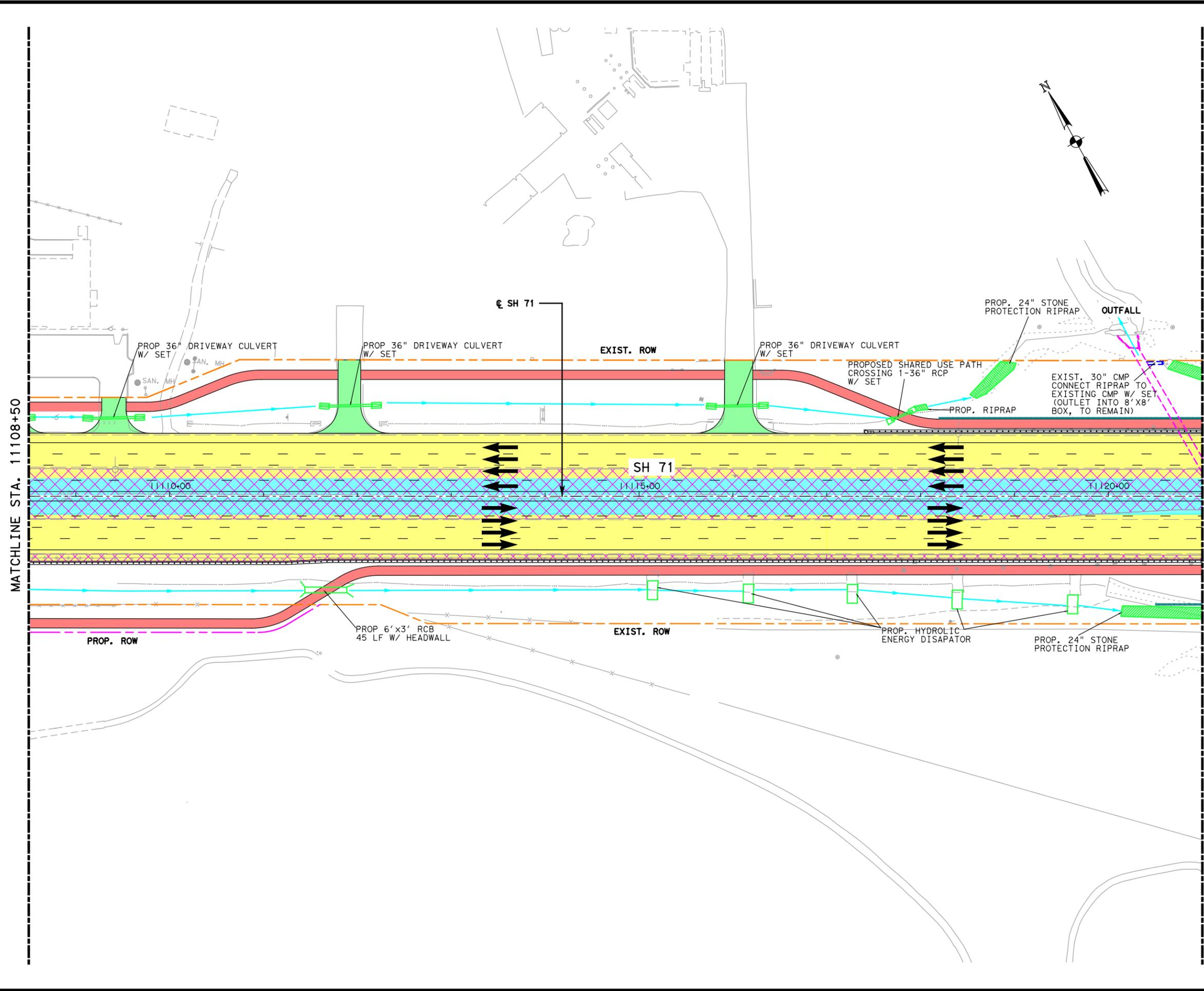


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 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 8 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		83
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
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SH 71  
 DRAINAGE PLAN

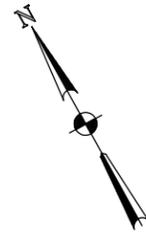
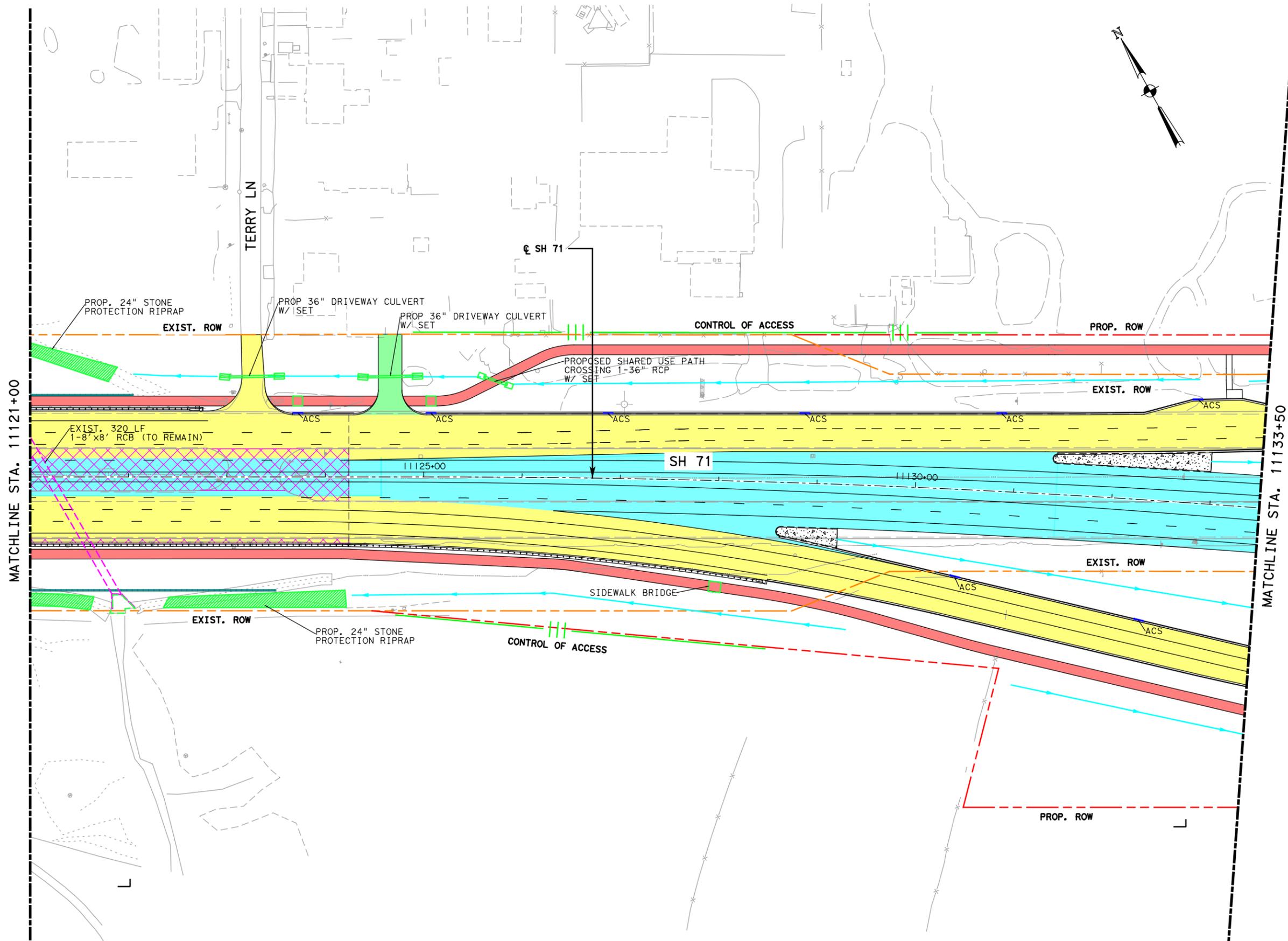


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 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 9 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		84
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
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  - PROP STORMSEWER SYSTEM
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71  
 DRAINAGE PLAN

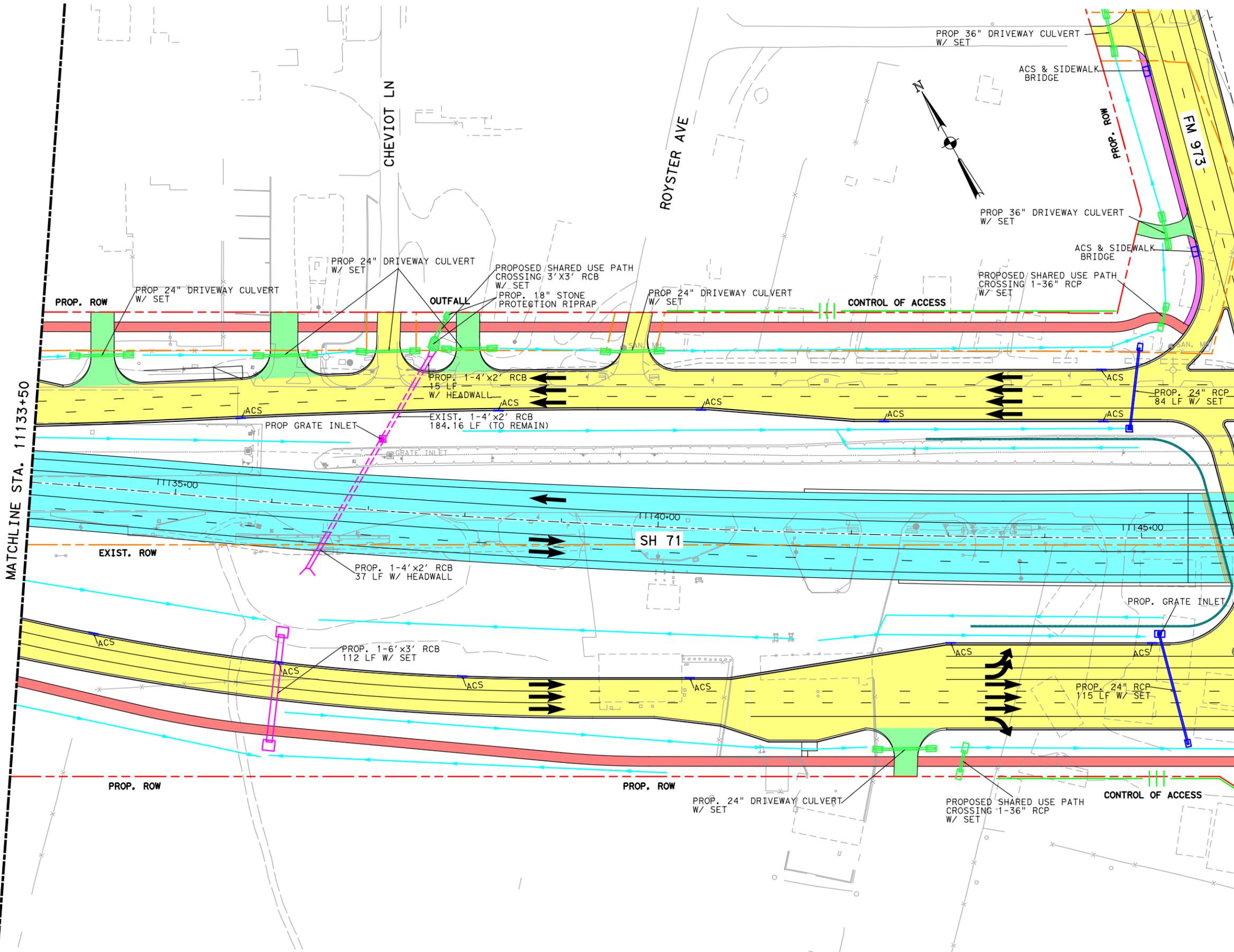


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 10 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		85
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - ▨ PAVEMENT TO BE REMOVED
  - ▨ PROP WIDENING
  - DIRECTIONAL ARROW
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SH 71

DRAINAGE PLAN



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A LEO A DALY COMPANY  
TBPE Firm No. 2614

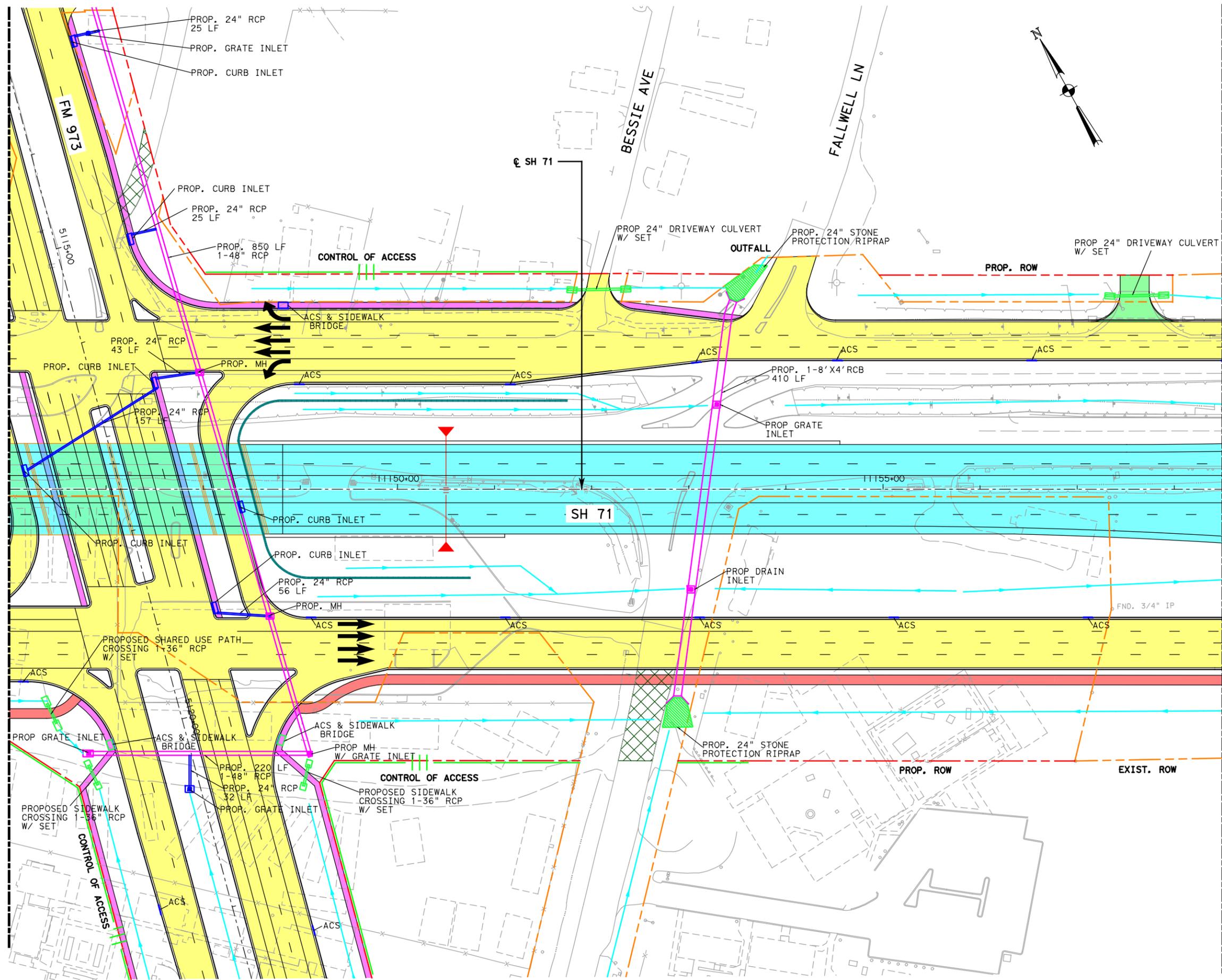
SCALE: 1"=100'

Texas Department of Transportation  
SHEET 11 OF 18

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				86	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		

MATCHLINE STA. 11146+00

MATCHLINE STA. 11158+50



**LEGEND**

- ALIGNMENT
- - - EXISTING ROW
- - - PROPOSED ROW
- ||| CONTROL OF ACCESS
- ||| FUTURE CONTROL OF ACCESS
- TOPO
- BRIDGE
- PROP SIDEWALK
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- PROP DRIVEWAY
- PROP TOLL
- PROP NON-TOLL
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

**DRAINAGE PLAN**

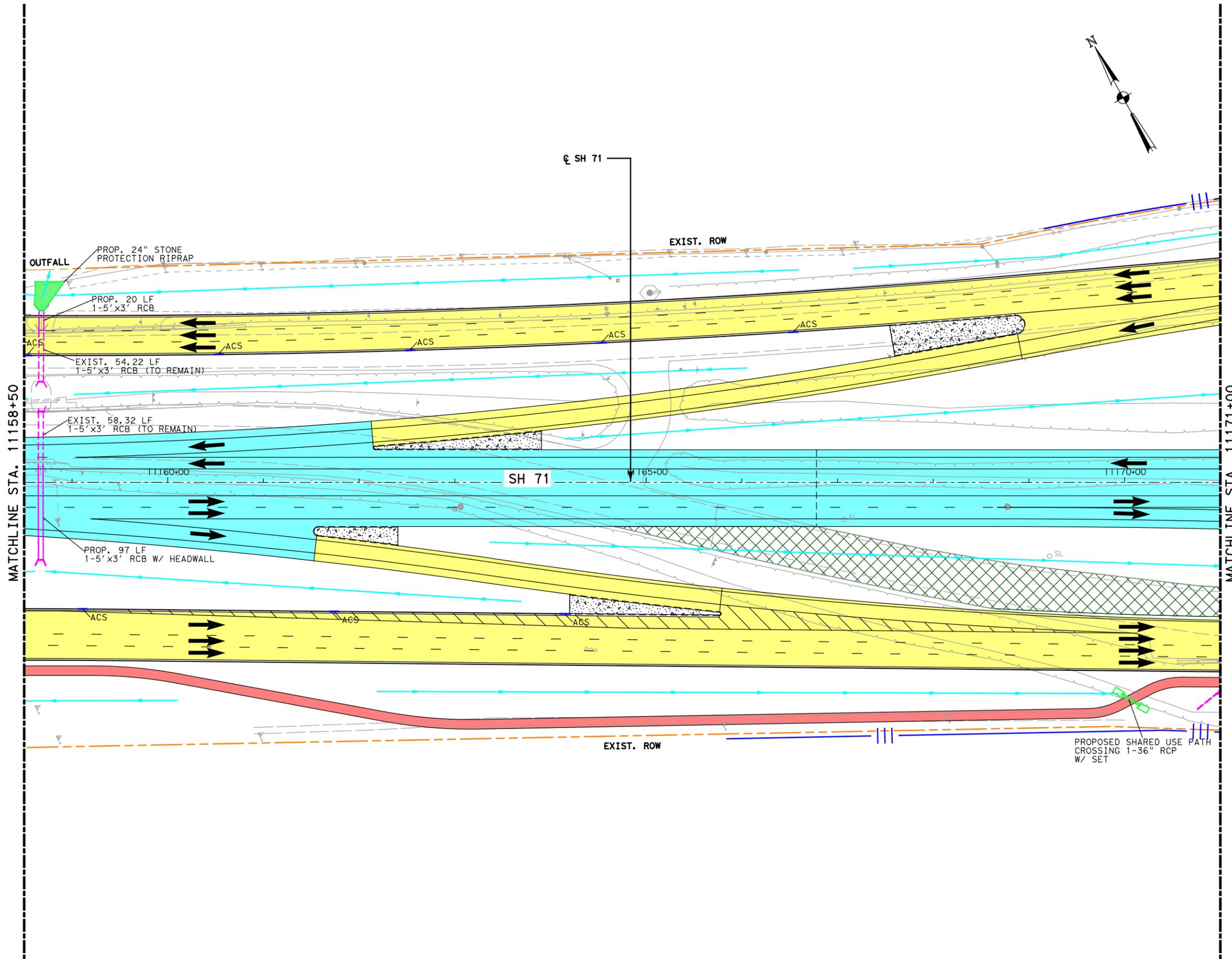


**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
SHEET 12 OF 18

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				87	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
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  - DIRECTIONAL ARROW
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SH 71

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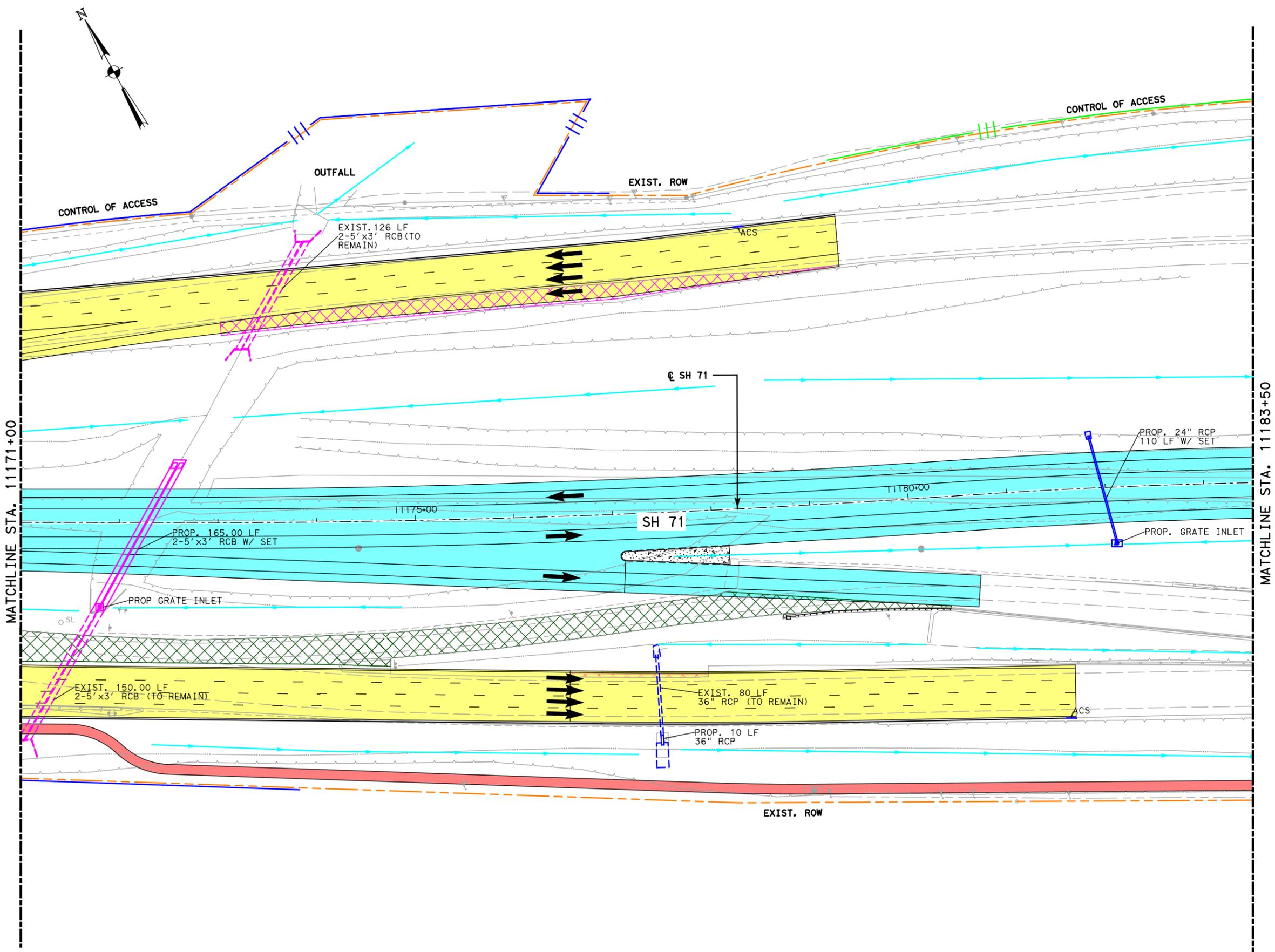


**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
**SHEET 13 OF 18**

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		88
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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DRAINAGE PLAN

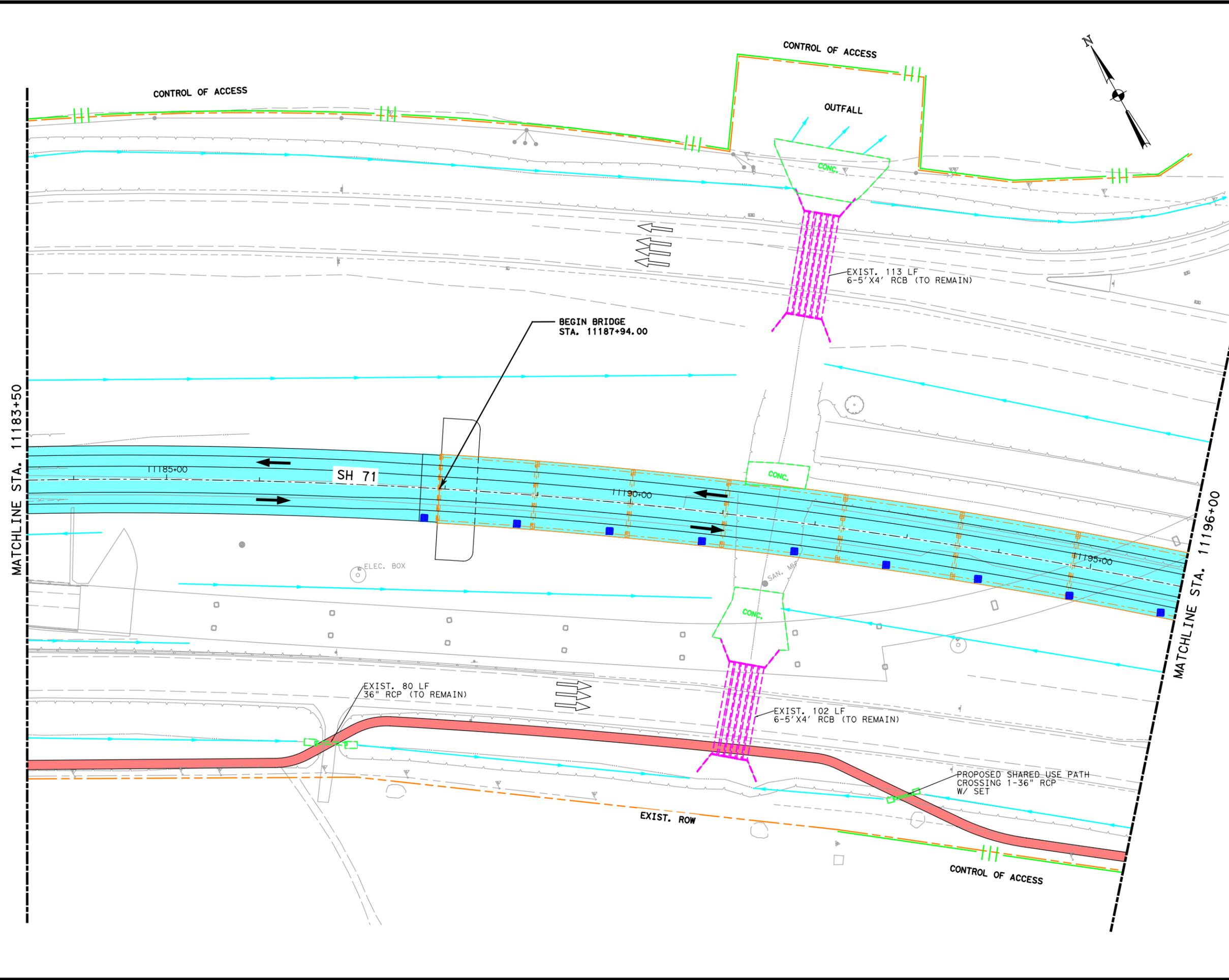


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 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation SHEET 14 OF 18

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		89
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

**SH 71**  
**DRAINAGE PLAN**



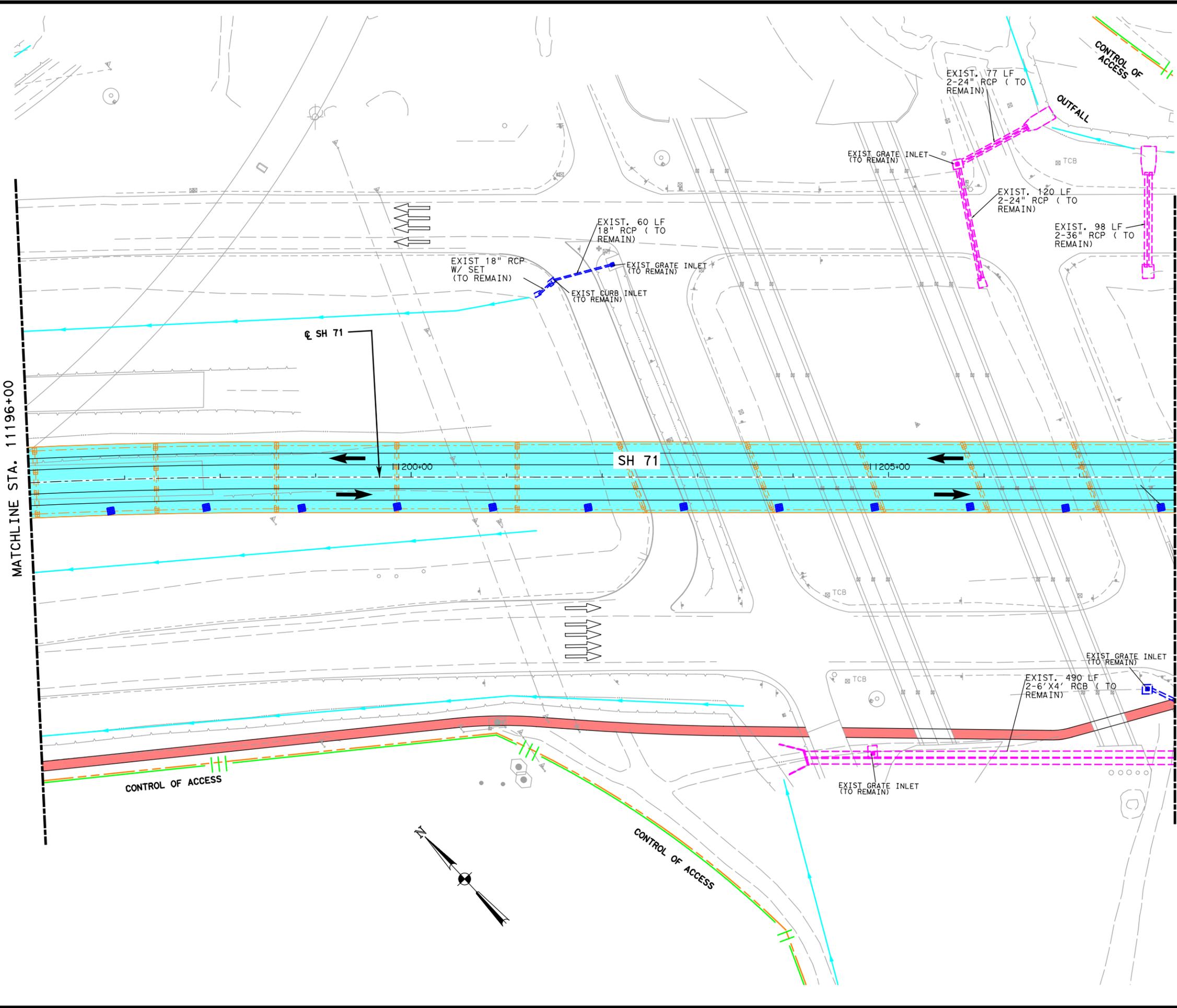
**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'



SHEET 15 OF 18

FED. RD. DEV. NO.	STATE AID PROJECT	SHEET NO.
6		90
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
  - DIRECTIONAL ARROW
  - RETAINING WALL
  - PROP DRAINAGE DITCH
  - PROP STORMSEWER SYSTEM
  - PROP CROSS CULVERTS
  - PROP DRAINAGE FEATURE
  - EXIST DRAINAGE FEATURE (SHOWN IN COLOR OF TYPE)
  - ACS - ARMOR CURB SLOT
  - PROP BRIDGE DECK DRAIN

INTERIM REVIEW ONLY

This document is released for the purpose of interim review under the authority of Gaurav Garg, P.E. 102055 on 5/16/2014. It is not to be used for permit, bidding or construction purposes.

Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

DRAINAGE PLAN

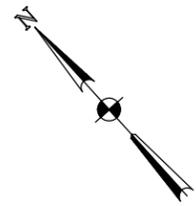
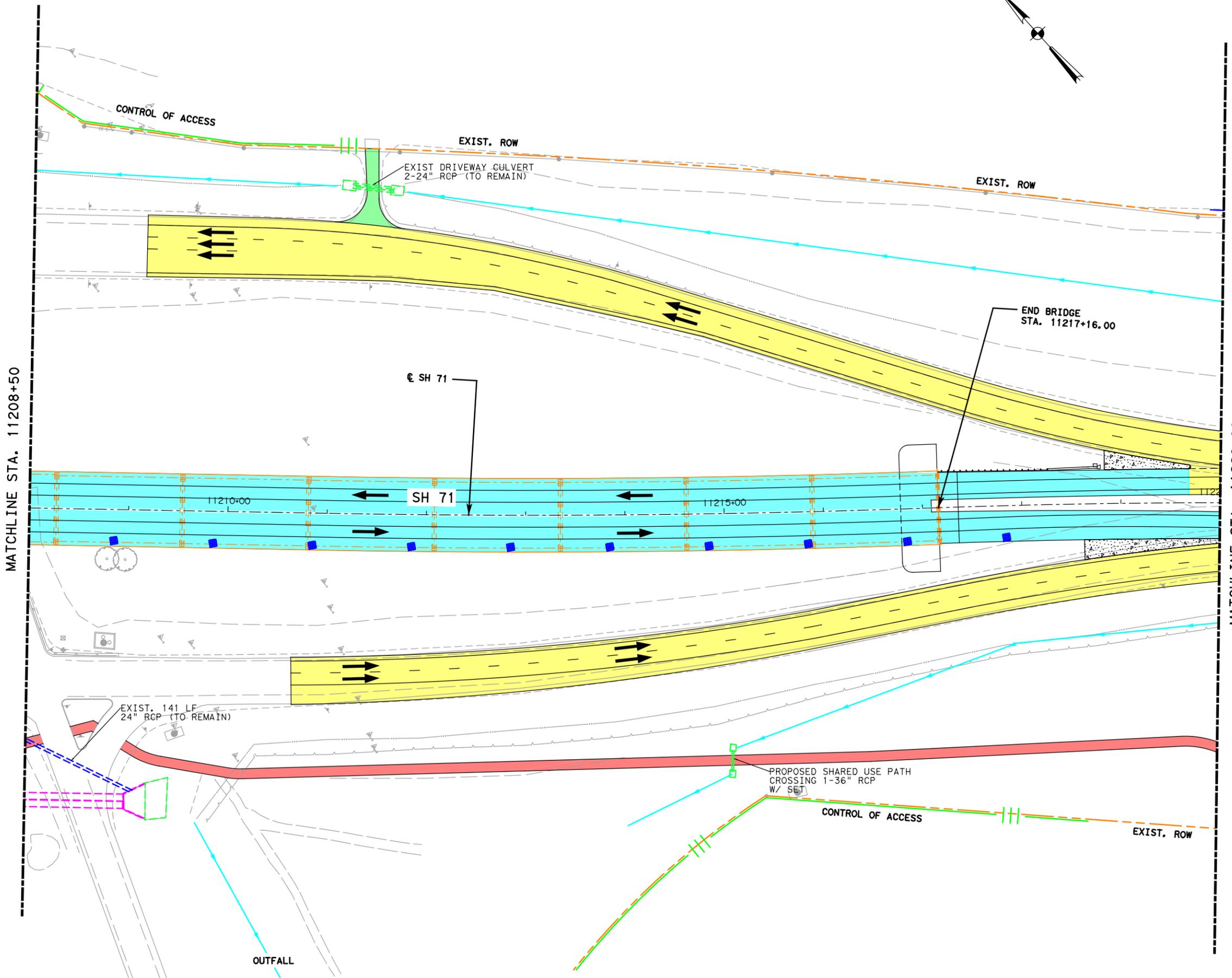


**lan** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
SHEET 16 OF 18

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				91	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
  - PROP SIDEWALK
  - BIKE & PED FACILITY
  - PROP DRIVEWAY
  - PROP TOLL
  - PROP NON-TOLL
  - PAVEMENT TO BE REMOVED
  - PROP WIDENING
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

**DRAINAGE PLAN**

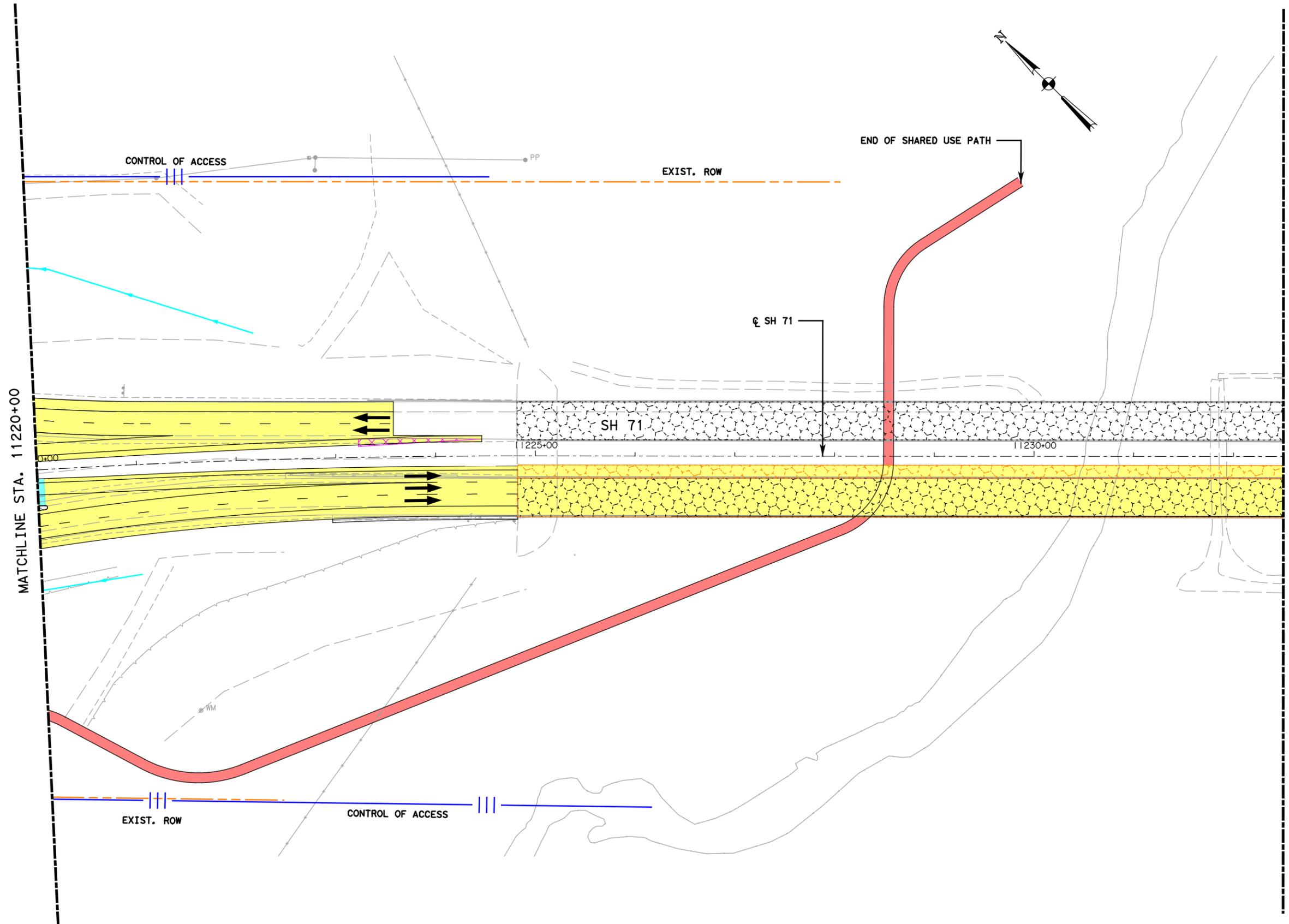


**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
SHEET 17 OF 18

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				92	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

SH 71

DRAINAGE PLAN

MCCARTHY

LAN

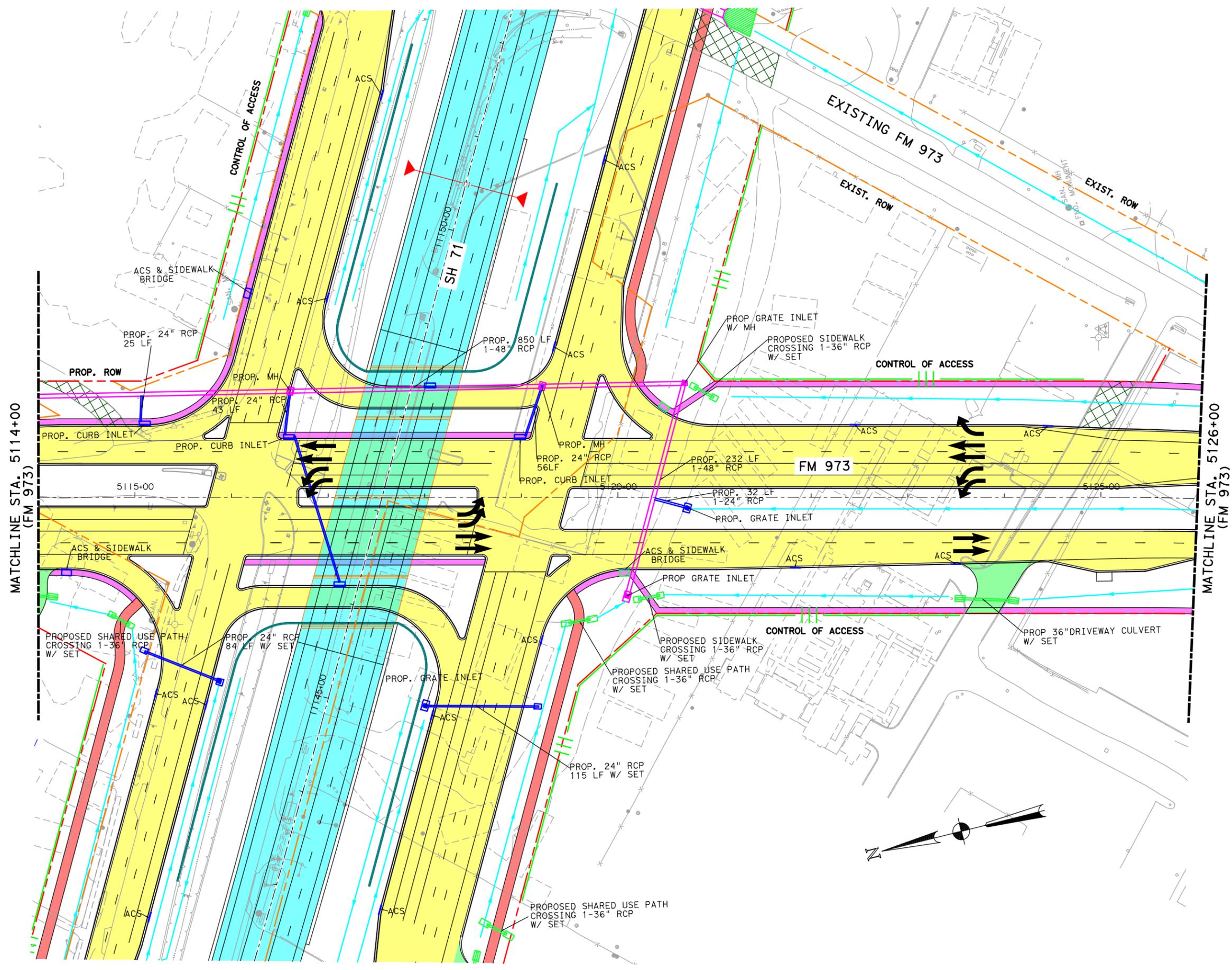
Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation

SHEET 18 OF 18	
FED. RD. DEV. NO.	STATE AID PROJECT
6	93
STATE	COUNTY
TEXAS	TRAVIS
CONTRACT	HIGHWAY NO.
	SH 71





- LEGEND**
- ALIGNMENT
  - - - EXISTING ROW
  - - - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

DRAINAGE PLAN

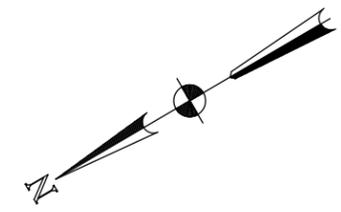
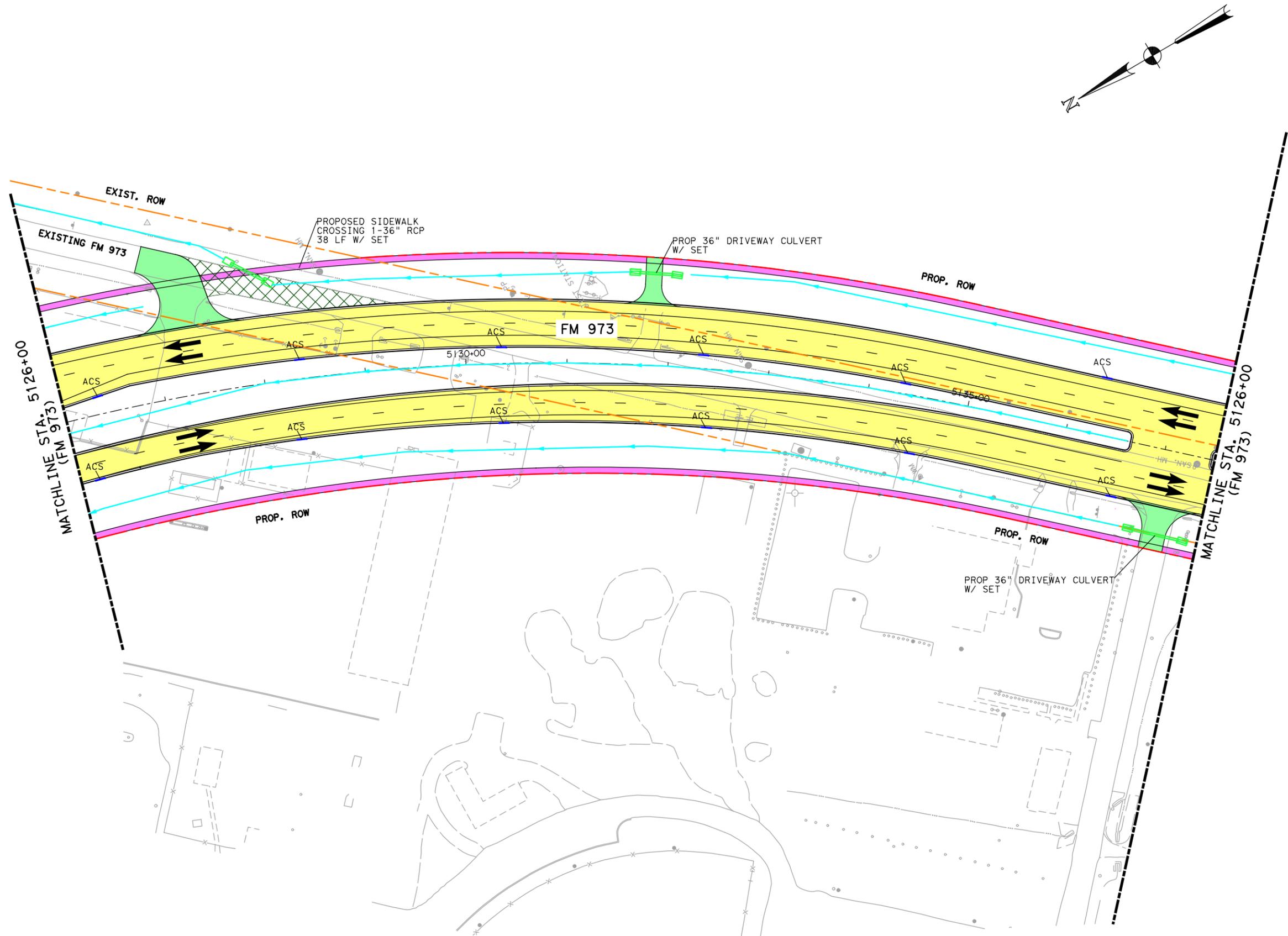


**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 2 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		95
STATE	COUNTY	
TEXAS	TRAVIS	
CONT.	RECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
  - BRIDGE
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

**FM 973**  
**DRAINAGE PLAN**

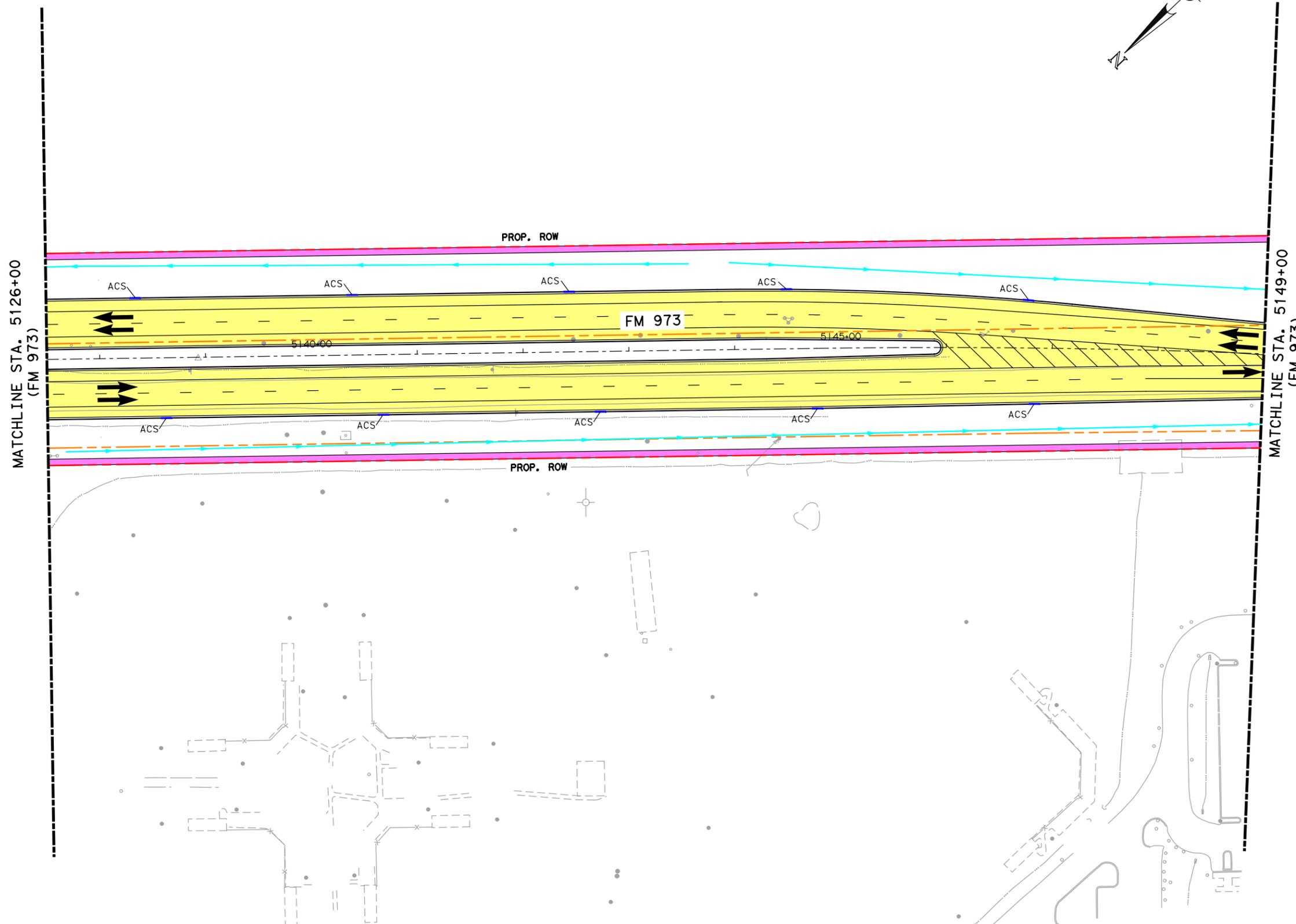


**lan** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
SHEET 3 OF 5

FED. RD. DEV. NO.		STATE AID PROJECT		SHEET NO.	
6				96	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONF.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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  - PROP SIDEWALK
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

DRAINAGE PLAN

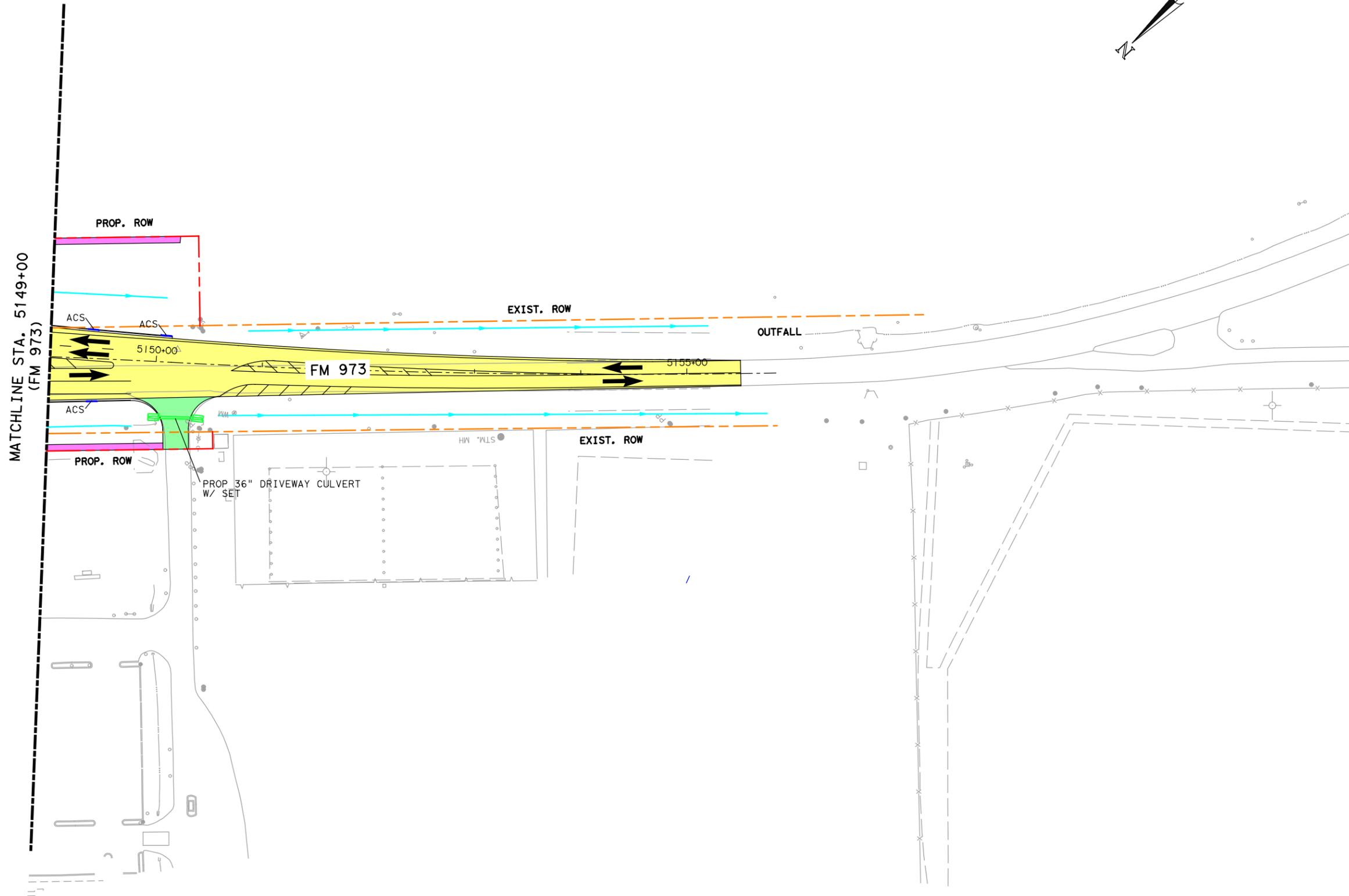


**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 4 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		97
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



- LEGEND**
- ALIGNMENT
  - EXISTING ROW
  - PROPOSED ROW
  - ||| CONTROL OF ACCESS
  - ||| FUTURE CONTROL OF ACCESS
  - TOPO
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Lockwood, Andrews & Newnam, Inc. ID No. 2614

FM 973

DRAINAGE PLAN

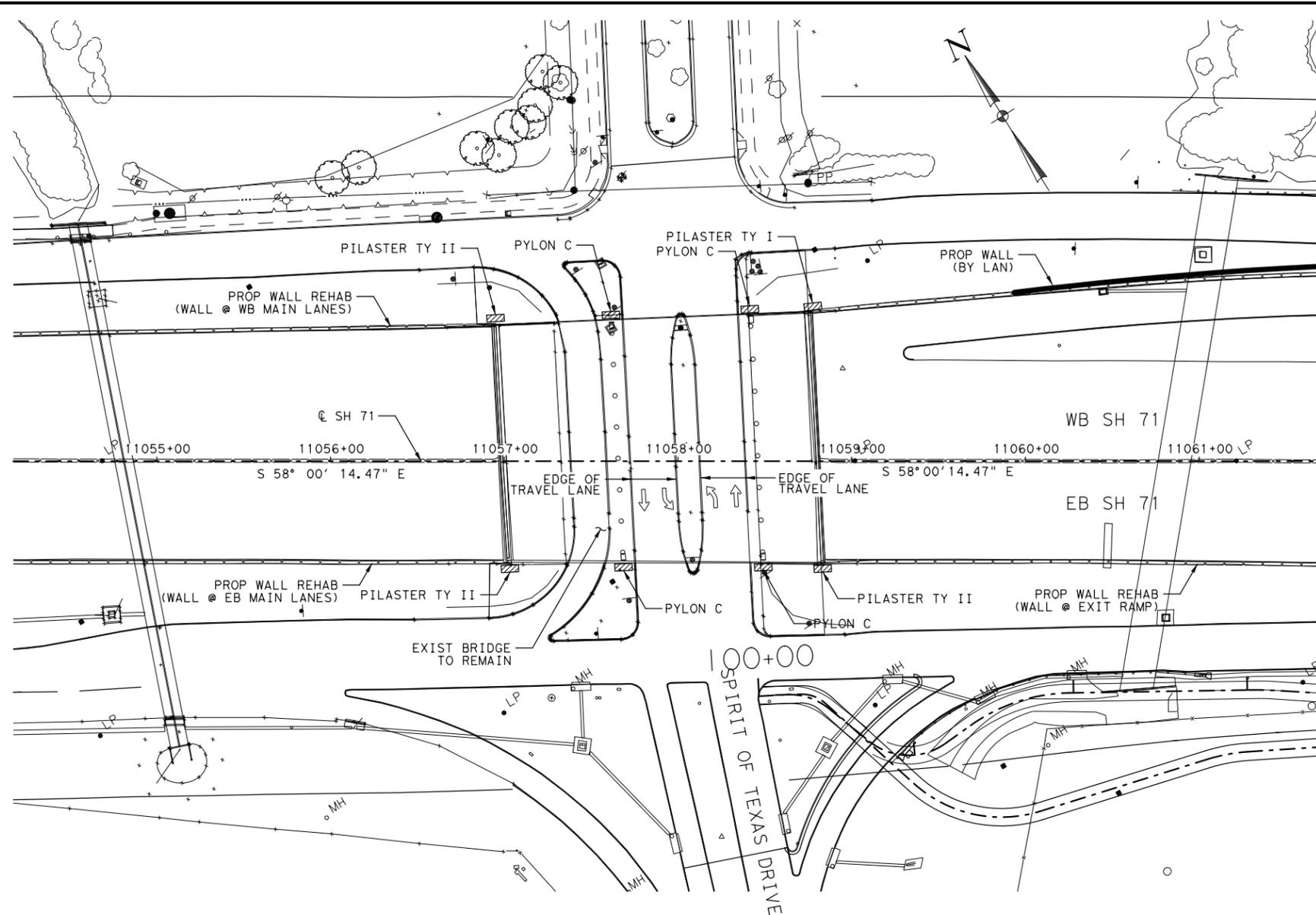


**lan** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

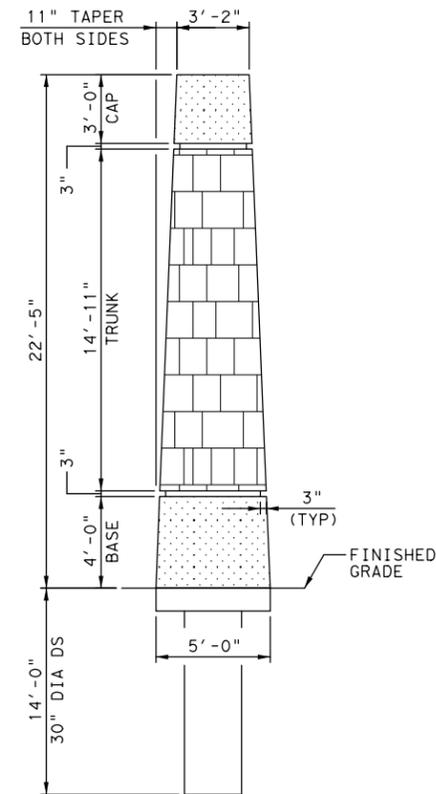
SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 5 OF 5

FED. RD. DIST. NO.	STATE AID PROJECT	SHEET NO.
6		98
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONF.	SECT.	JOB
		HIGHWAY NO.
		SH 71

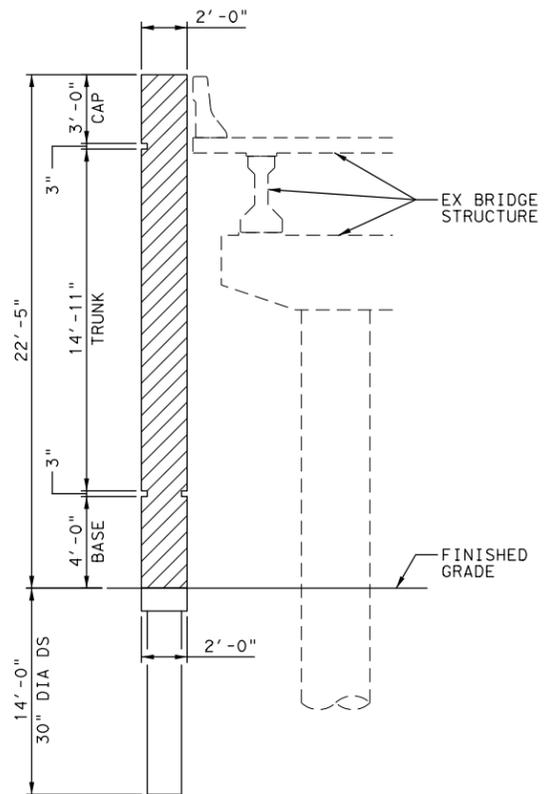


PLAN  
SCALE: 1" = 80'-0"



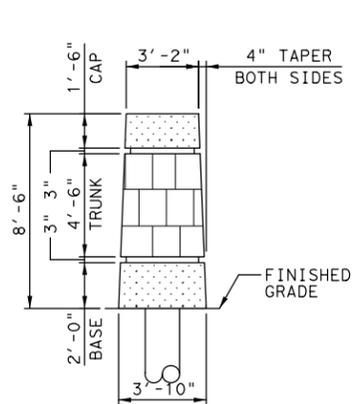
PYLON C ELEVATION

PYLON C QUANTITIES:  
NO. OF PYLON C = 4  
CONCRETE VOLUME = 6.8 CY/PYLON  
TOTAL CONCRETE VOLUME = 27.2 CY  
30" DIA SHAFT LENGTH = 56 LF  
SCALE: NTS



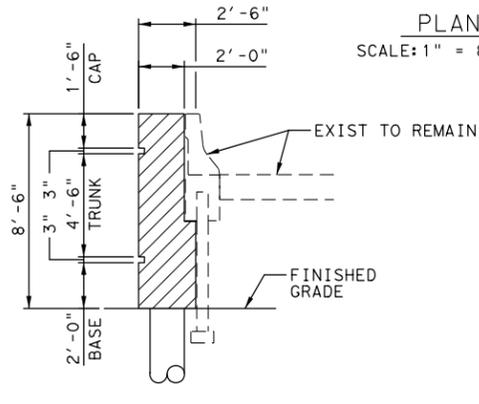
PYLON C SECTION

SCALE: NTS



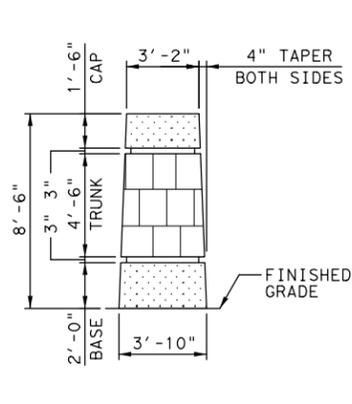
PILASTER TY I ELEVATION

PILASTER QUANTITIES:  
NO. OF PILASTERS = 1  
TOTAL CONCRETE VOLUME = 2.5 CY  
24" DIA SHAFT LENGTH = 20 LF  
SCALE: NTS



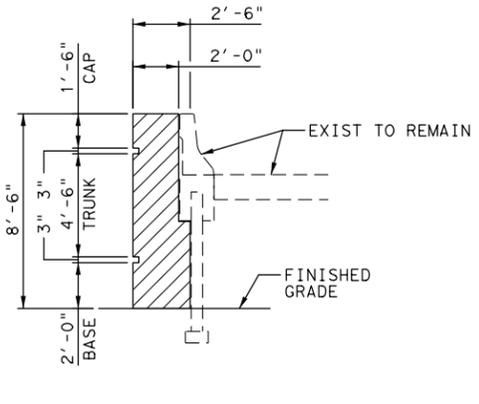
PILASTER TY I SECTION

SCALE: NTS



PILASTER TY II ELEVATION

NOTE: PILASTERS TO BE CONSTRUCTED AS PART OF WALL REHABILITATION.  
PILASTER QUANTITIES:  
NO. OF PILASTERS = 3  
CONCRETE VOLUME = 2.5 CY/PILASTER  
TOTAL CONCRETE VOLUME = 7.5 CY  
SCALE: NTS



PILASTER TY II SECTION

SCALE: NTS

**DESIGN LIFE CONSIDERATIONS:**  
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding, or permit purposes.  
Kimley-Horn and Associates, Inc.  
Engineer: JONATHAN D. SEDELMAYER  
P. E. No. 91651 Date 5/16/2014

SH 71  
BRIDGE LAYOUT

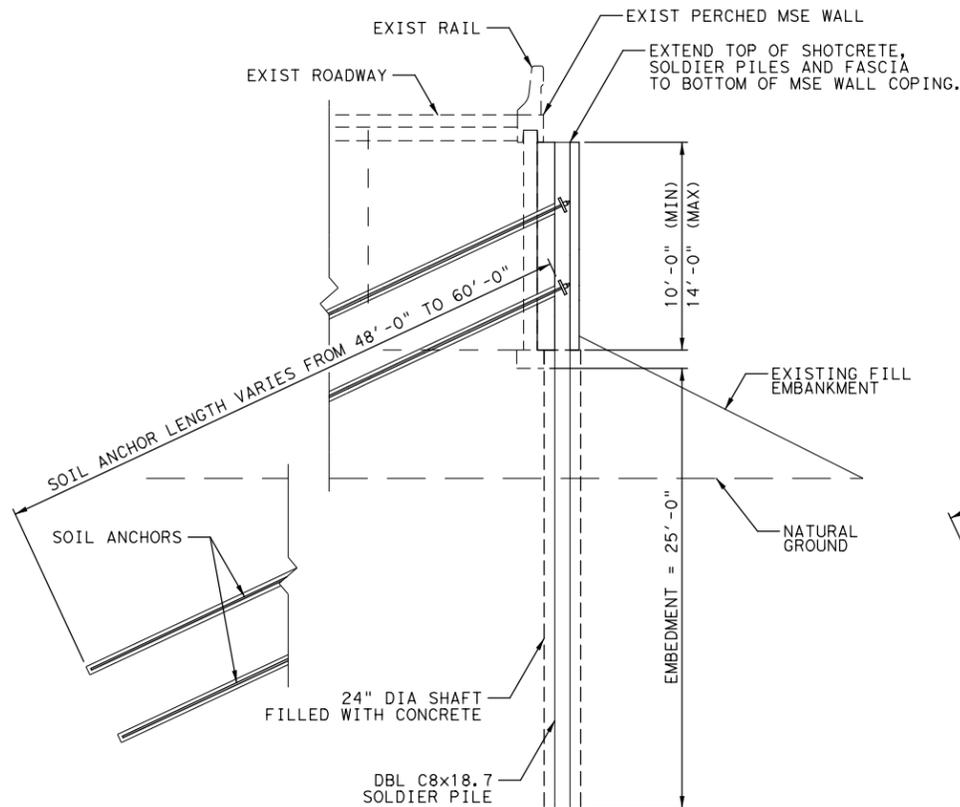
Kimley-Horn and Associates, Inc.  
TEXAS REGISTERED ENGINEERING FIRM F-928

**MCCARTHY**

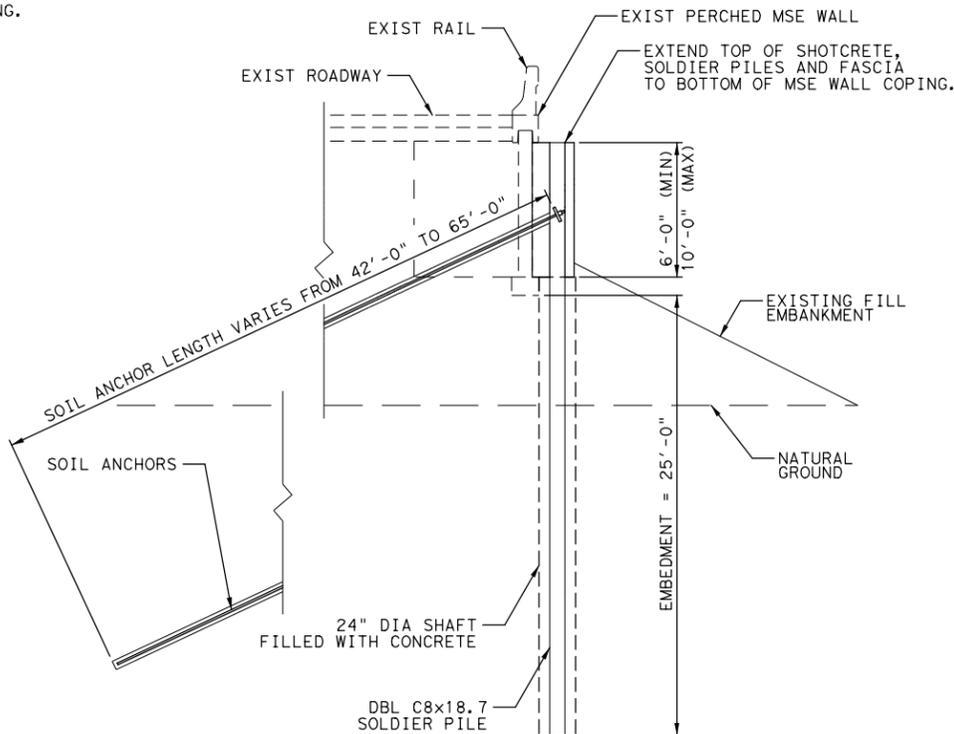
SPIRIT OF TEXAS DRIVE

Texas Department of Transportation

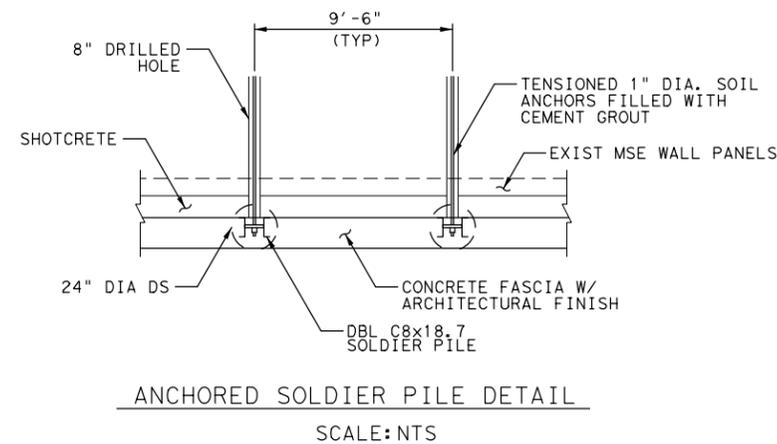
FED. RD. DIV. NO.		STATE AID PROJECT		SHEET NO.	
6				99	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		



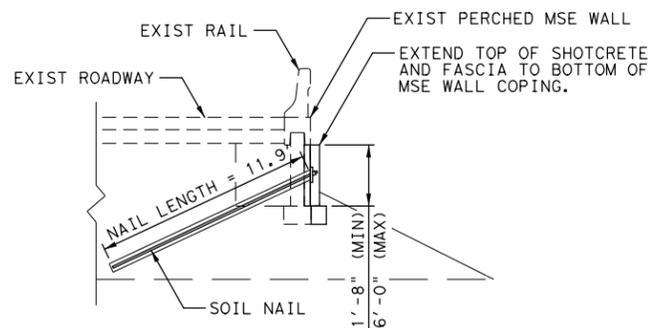
TYPICAL SECTION  
(WALL HEIGHT 10'-14')  
SCALE: NTS



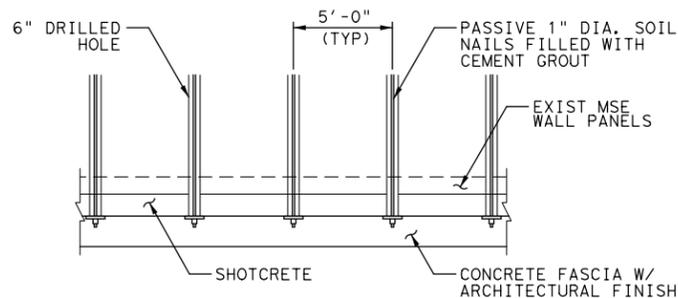
TYPICAL SECTION  
(WALL HEIGHT 6'-10')  
SCALE: NTS



- WALL REHABILITATION DESIGN CRITERIA
- LATERAL EARTH PRESSURE  
- ACTIVE WALL PRESSURE = 50 PCF  
- LIVE LOAD SURCHARGE = 2 FT
  - COHESION  
- ALLOWABLE STRESS = 400 PSF  
- NEGLECT FIRST 25 LF OF ANCHORS
  - DRILLED SHAFT  
- AVERAGE EMBEDMENT = 25 FT  
- ALLOWABLE COHESION = 400 PSF
  - WALLS REQUIRE EXTERNAL BRACING DURING SOIL NAIL INSTALLATION.



TYPICAL SECTION  
(WALL HEIGHT LESS THAN 6')  
SCALE: NTS



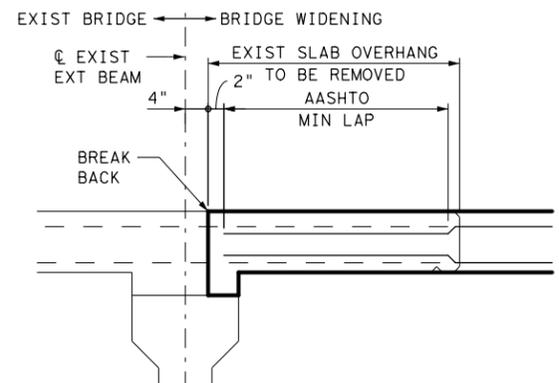
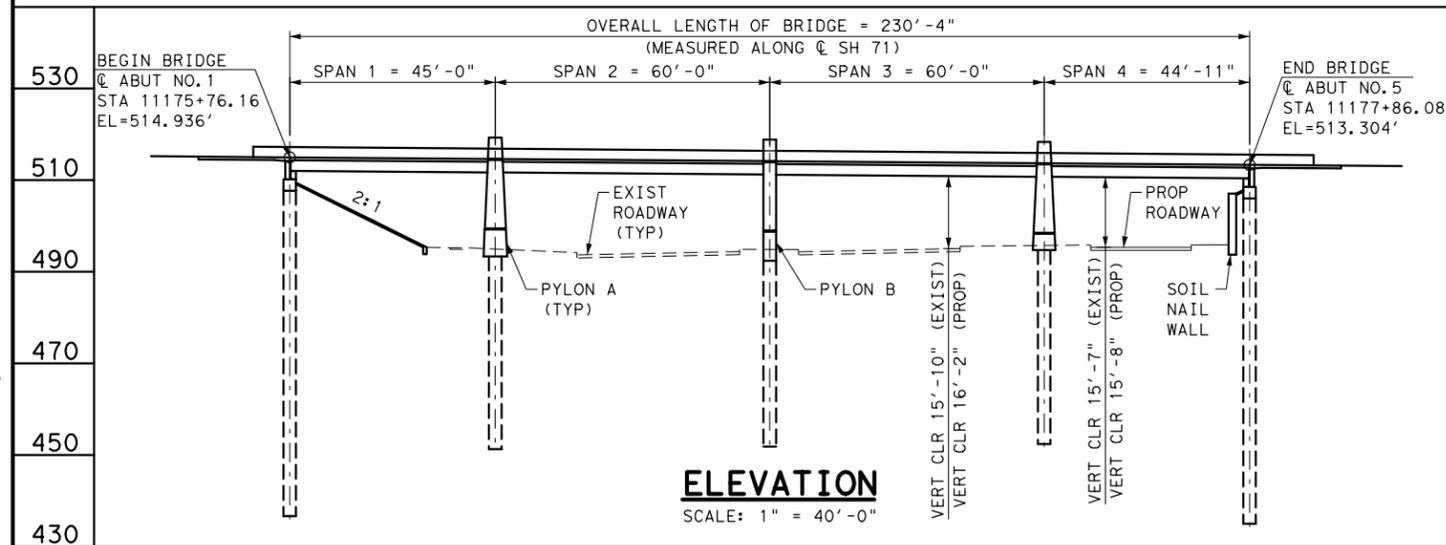
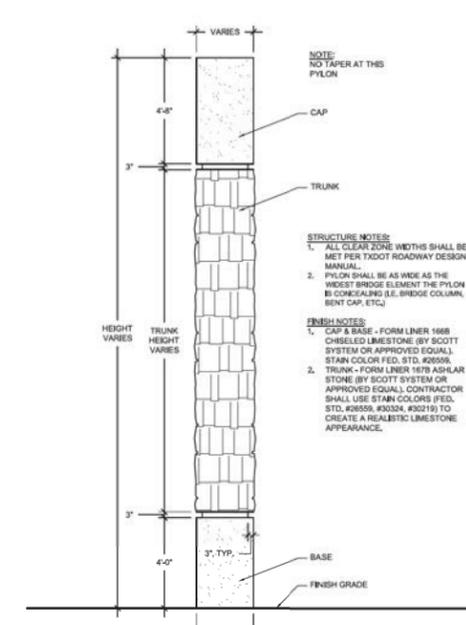
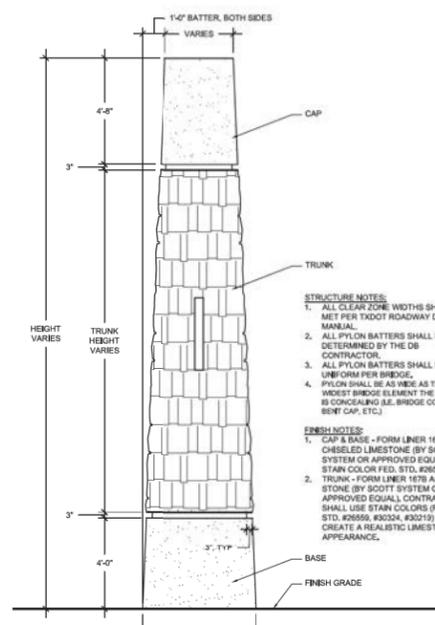
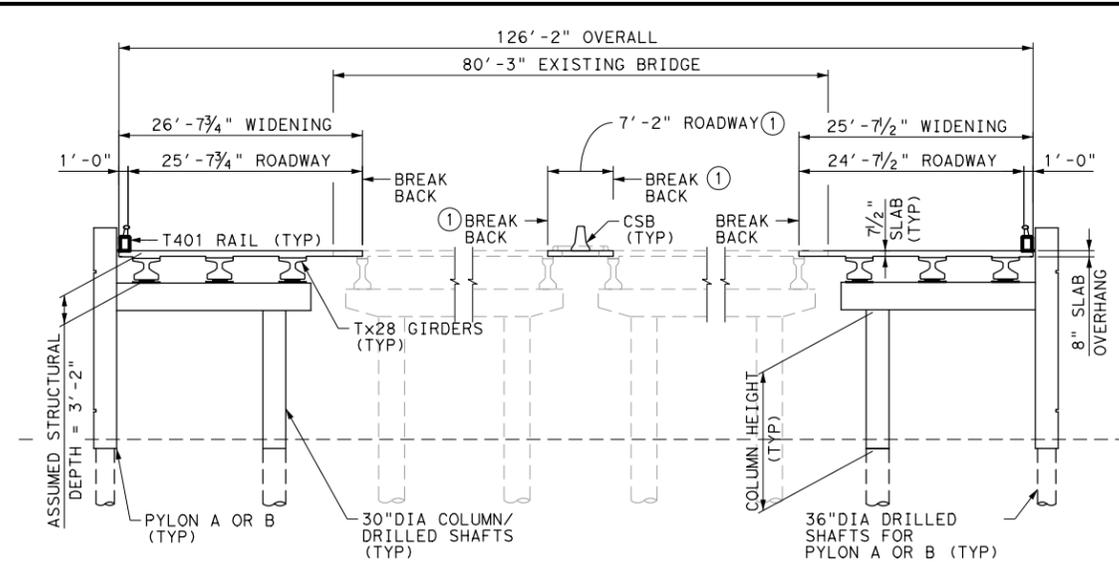
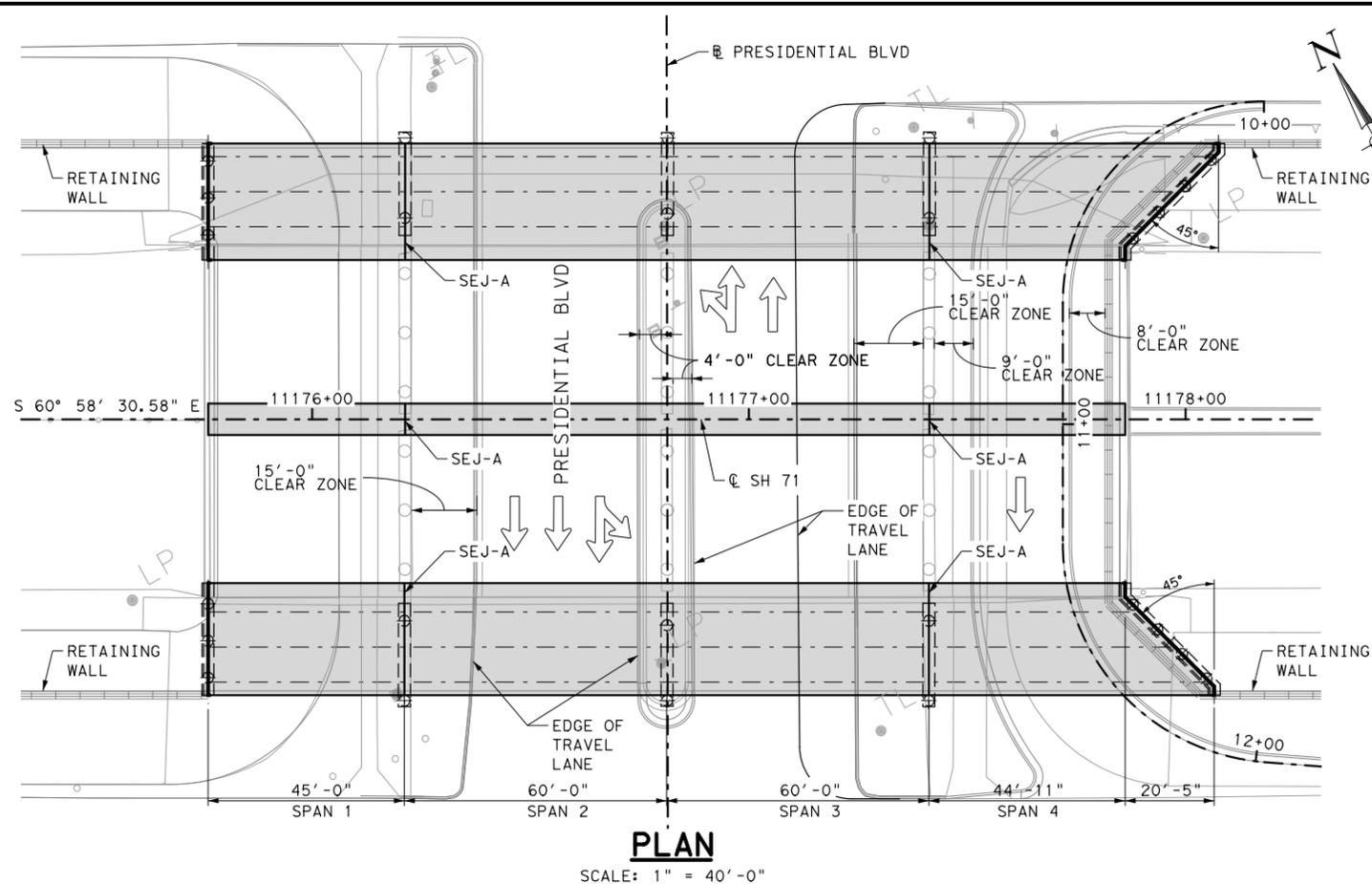
SOIL NAIL DETAIL  
SCALE: NTS

HL 93 LOADING

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding, or permit purposes.  
Kimley-Horn and Associates, Inc.  
Engineer: JONATHAN D. SEDELMAYER  
P. E. No. 91651 Date 5/16/2014

SH 71  
BRIDGE LAYOUT  
Kimley-Horn and Associates, Inc.  
TEXAS REGISTERED ENGINEERING FIRM F-928  
**MCCARTHY**  
SPIRIT OF TEXAS DRIVE

WALL LOCATION	BRIDGE REHABILITATION		SOLDIER PILE WALLS (HEIGHT > 6 FT)							SOIL NAIL WALLS (HEIGHT < 6 FT)				
	EPOXY INJECT LF	CONC REPAIR SF	WALL LENGTH FT	DRILL SHAFT (24") LF	SOLDIER PILES EA	PILE LENGTH FT	SOIL ANCHORS EA	ANCHOR LENGTH LF	FASCIA SF	WALL LENGTH FT	SOIL NAILS EA	NAIL LENGTH FT	FASCIA SF	
WBML			476.5	1326	51	1775	80	2388	4943	130.0	26	310	526	
EBML			363.5	1014	39	1395	65	2139	4164	60.0	12	143	198	
EB EXIT RAMP			500.0	1378	53	1795	68	1940	4546	225.5	46	537	1008	
TOTAL			1340.0	3718	143	4965	213	6467	13653	415.5	84	990	1732	



**INTERIM REVIEW ONLY**  
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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**PRESIDENTIAL BLVD WIDENING**



SCALE: 1" = 40'

Texas Department of Transportation

**DESIGN LIFE CONSIDERATIONS:**  
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TXDOT LRFD BRIDGE DESIGN MANUAL, TXDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

SHEET 1 OF 3	
FED. RD. DIV. NO.	STATE AID PROJECT
6	101
STATE	COUNTY
TEXAS	TRAVIS
CONT.	HIGHWAY NO.
	SH 71

Span/ Bent or -but	Span Data									Bent Cap/-but Data							
	-vg Span Length	New Bridge Deck Width	Slab Deck Area	# of Girders	Girder Type	Total Girder Length	SEJ-- Total Length	T401 Rail*	CSB Rail*	Length	Depth	Width	Volume	Total Primary Rebar	Total Skin Rebar	Stirrups	-but Rebar
-	FT	FT	SF	E-	-	FT	FT	FT	FT	FT	FT	FT	CY	-	-	-	#/CY
1	45.00	59.4	2,673	6	Tx28	267.0	0.0	90.0	45.0	52.2	2.50	2.75	18.6	-	-	-	220.0
2	60.00	59.4	3,564	6	Tx28	357.0	58.7	120.0	60.0	47.0	3.50	2.75	17.1	10 - #11	10 - #5	2 - #5 at 5"	-
3	60.00	59.4	3,564	6	Tx28	357.0	0.0	120.0	60.0	47.0	3.50	2.75	17.1	10 - #11	10 - #5	2 - #5 at 5"	-
4	56.34	59.4	3,347	6	Tx28	335.0	58.7	130.7	45.0	47.0	3.50	2.75	17.1	10 - #11	10 - #5	2 - #5 at 5"	-
5	-	-	-	-	-	-	-	-	-	69.6	2.50	2.75	24.6	-	-	-	220.0
<b>Total</b>	<b>221.34</b>	<b>-</b>	<b>13,148</b>	<b>-</b>	<b>-</b>	<b>1,316.0</b>	<b>117.4</b>	<b>460.7</b>	<b>210.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>94.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

\* Rail lengths measured from face of backwall to face of backwall.

Span/ Bent or -but	Column Data				Pylon Data				Foundation Data						
	# of 30 IN Dia. Columns	Height of 1 Column	Vert. Rebar (Per Col)	Spiral Rebar (Per Col)	Pylon - Volume**	Pylon B Volume**	Vert. Rebar (Per Col)	Transv. Rebar (Per Col)	# of Drilled Shafts		Length of 1 DS	Total Drilled Shaft Length (30 IN dia.)	Total Drilled Shaft Length (36 IN dia.)	Vert. Rebar (Per DS)	Spiral Rebar (Per DS)
-	E-	FT	-	-	CY	CY	-	-	30" (E-)	36" (E-)	FT	FT	FT	-	-
1	-	-	-	-	0.0	0	-	-	6	0	71	426	0	8 - #9	#3 at 6" Pch
2	2	15.5	10 - #10	#3 at 6" Pch	24.0	0.0	14 - #10	#4 at 12"	2	2	57	114	114	10 - #10	#3 at 6" Pch
3	2	15.5	10 - #10	#3 at 6" Pch	0.0	12.5	12 - #10	#3 at 12"	2	2	56	112	112	10 - #10	#3 at 6" Pch
4	2	15.5	10 - #10	#3 at 6" Pch	24.0	0.0	14 - #10	#4 at 12"	2	2	55	110	110	10 - #10	#3 at 6" Pch
5	-	-	-	-	0.0	0.0	-	-	8	0	71	568	0	8 - #9	#3 at 6" Pch
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>48.0</b>	<b>12.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,330</b>	<b>336</b>	<b>-</b>	<b>-</b>

\*\* -ssuming Pylon Height of 27 feet.

① SUBJECT TO CH-NGE WITH -PPROV-L OF -TC #7.

Soil Nail Wall Quantities		
Item	Unit	Quantity
Area	SF	2,270.0
Nails	EA	116.0
Total Nail Length	LF	1,300.0

NOTE: N-IL LENGTH -SSUMES - N-IL B-TTER -NGLE OF 10 DEGREES FROM THE HORIZONT-L.

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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**PRESIDENTIAL BLVD  
EST QTY'S**



**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

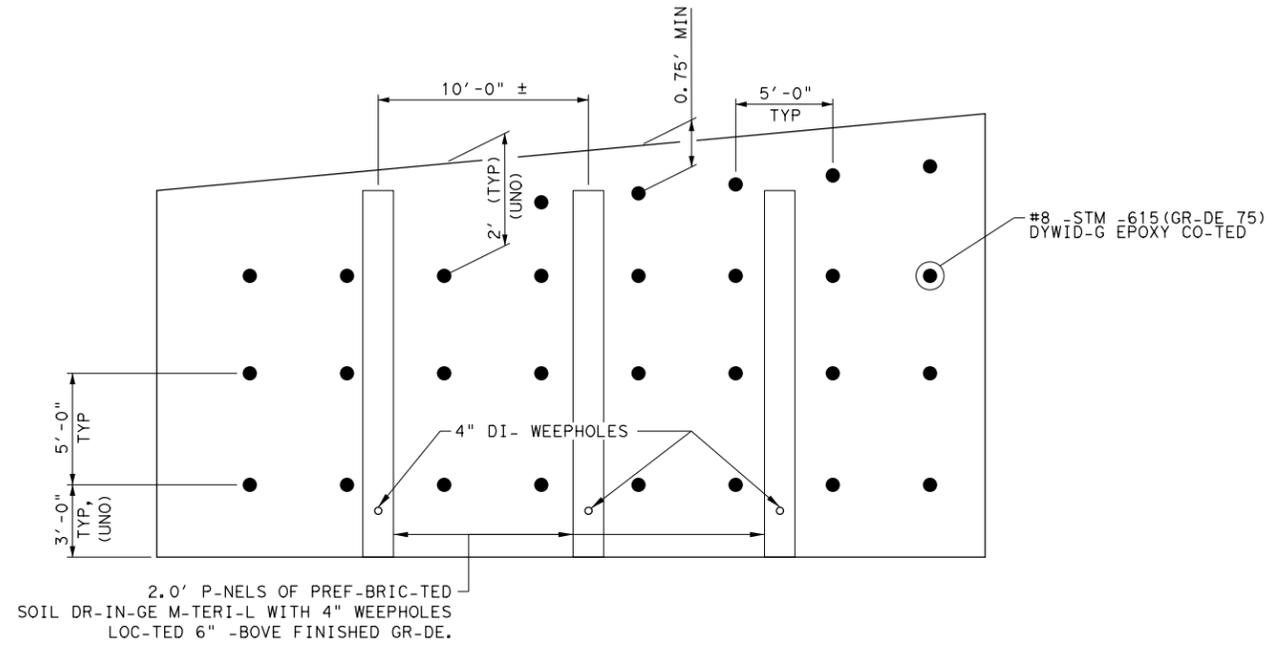
NOT TO SC-LE

SHEET 2 OF 3

**DESIGN LIFE CONSIDERATIONS:**

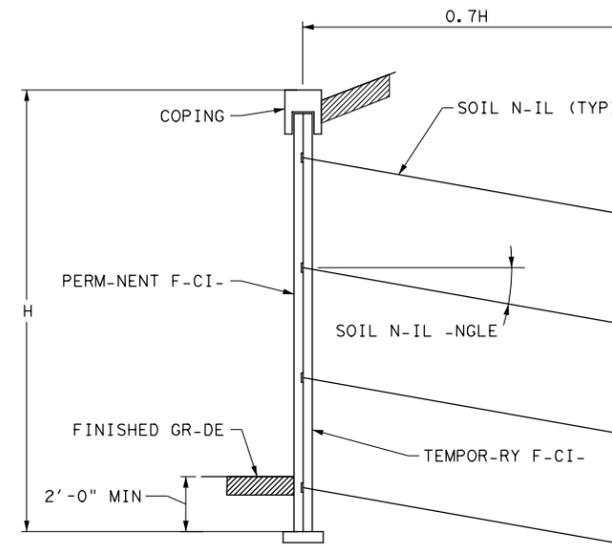
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

FED. RD. DIV. NO.	ST-TE -ID PROJECT	SHEET NO.
6		102
ST-TE	ST-TE DIST. NO.	COUNTY
TEX-S		TR-VIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71



**TYPIC-L SOIL N-IL SP-CING**

SC-LE: NTS



**TYPIC-L SOIL N-IL W-LL SECTION**

SC-LE: NTS

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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**PRESIDENTIAL BLVD SOIL NAIL WALL DETAILS**



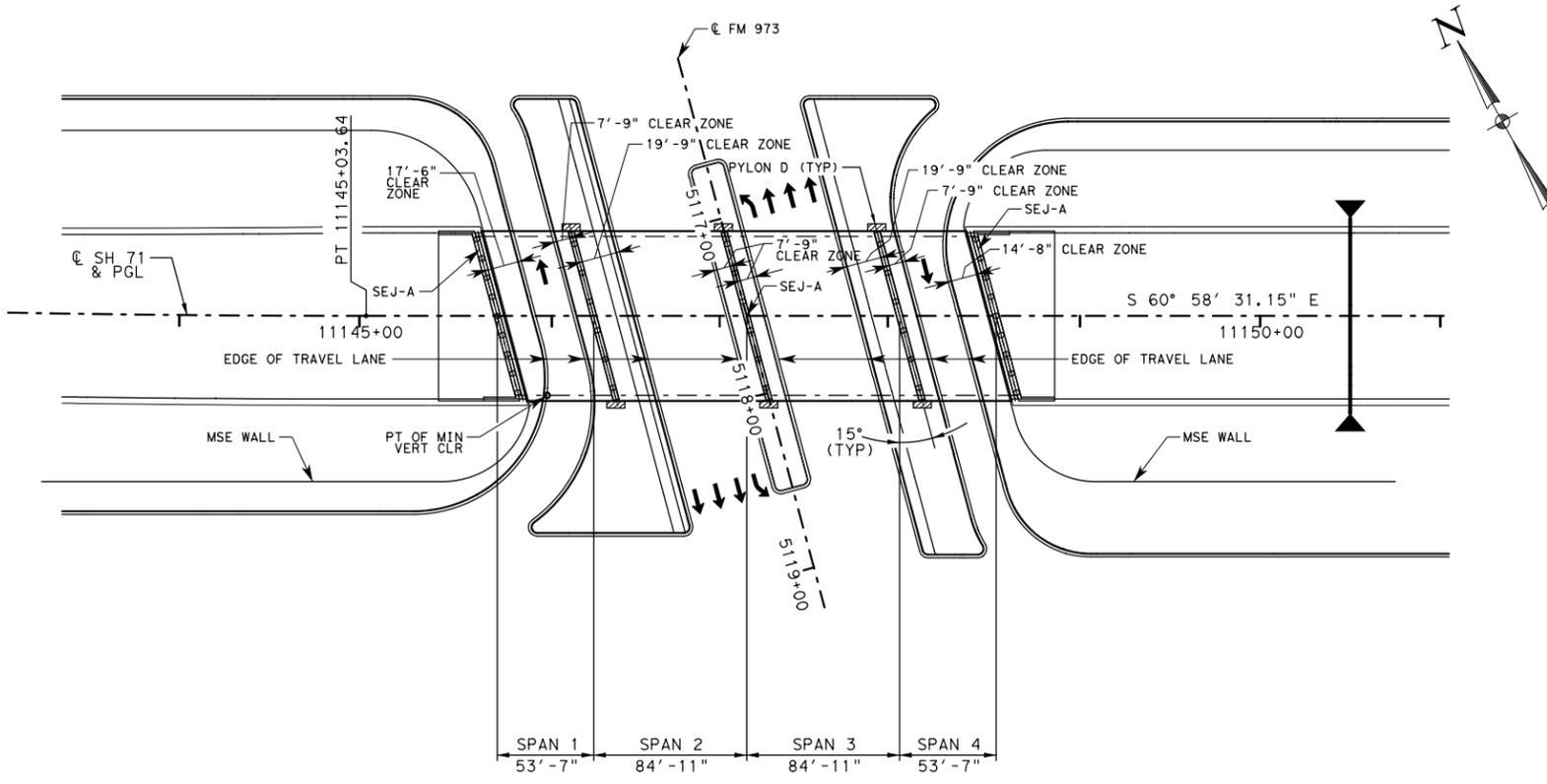
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

NOT TO SC-LE

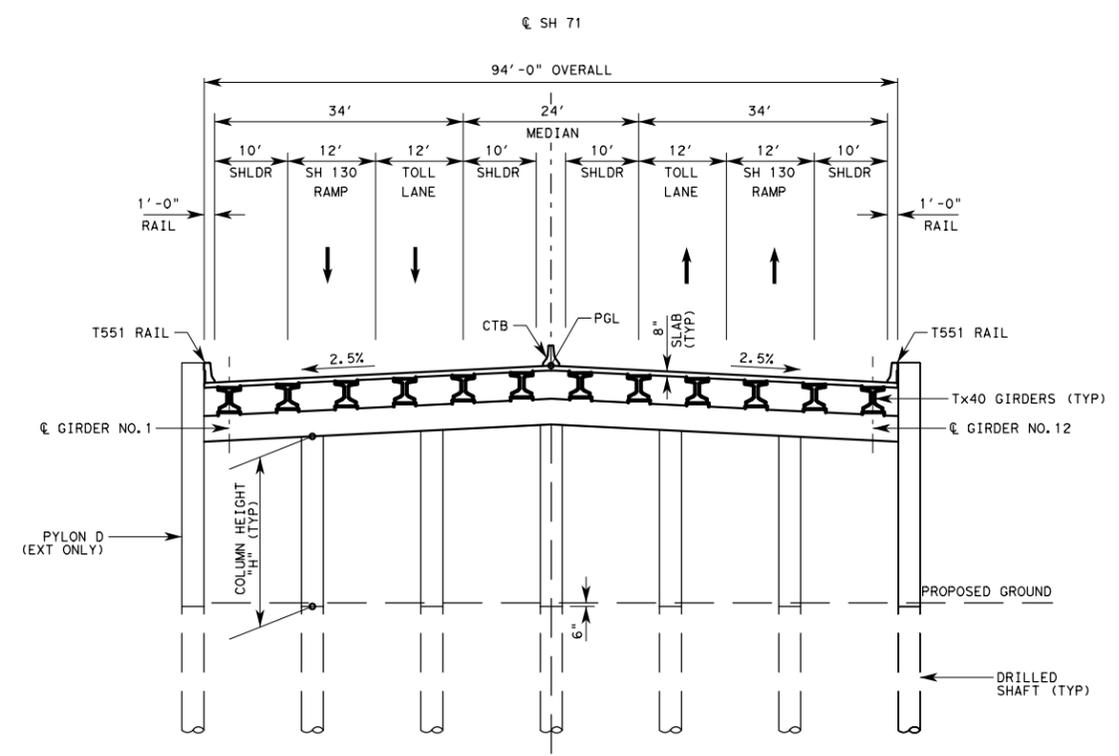
SHEET 3 OF 3

**DESIGN LIFE CONSIDER-TIONS:**  
 NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

FED. RD. DIV. NO.	ST-TE -ID PROJECT	SHEET NO.
6		103
ST-TE	ST-TE DIST. NO.	COUNTY
TEX-S		TR-VIS
CONT.	SECT.	JOB HIGHW-Y NO.
		SH 71

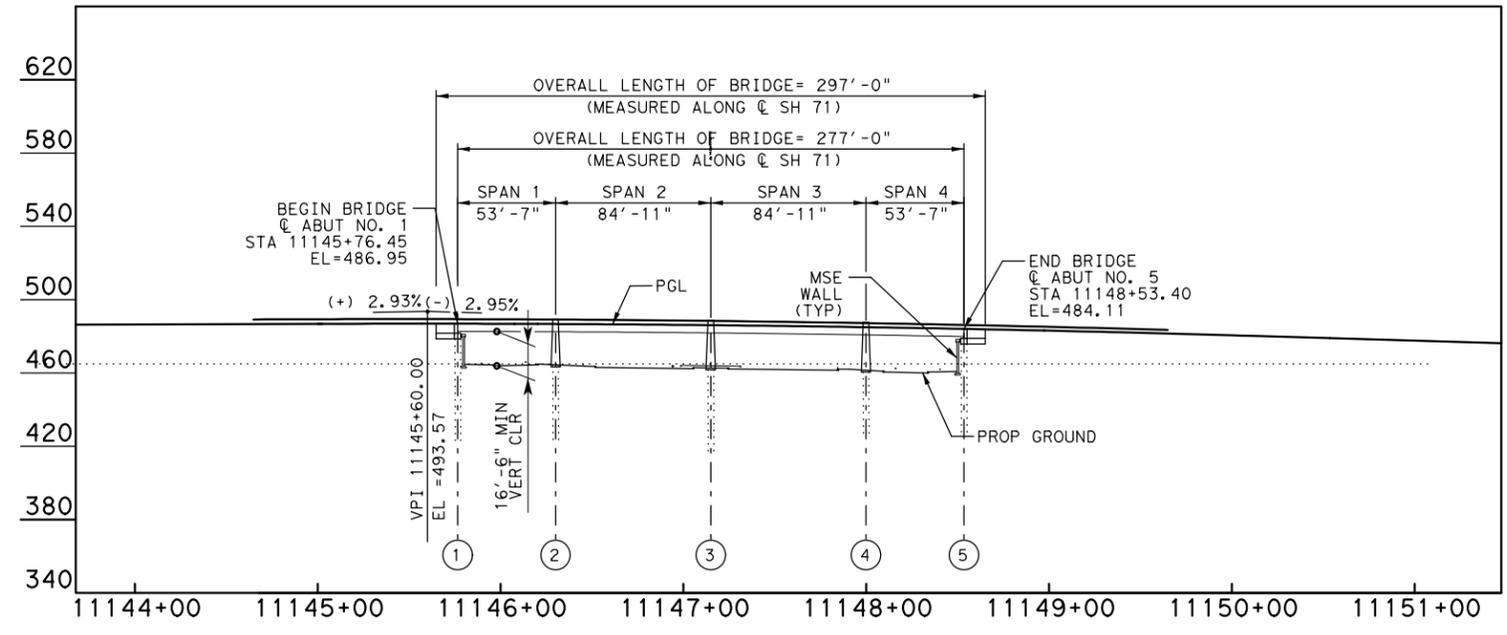


**PLAN**  
SCALE: 1" = 100'-0"

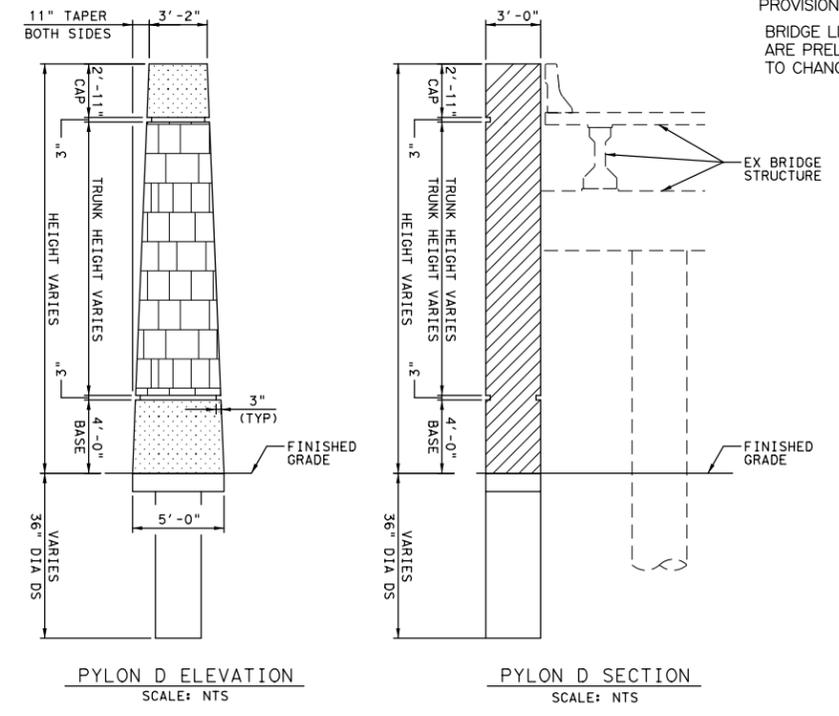


**TYPICAL SECTION**  
SCALE: NTS

**DESIGN LIFE CONSIDERATIONS:**  
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.  
BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.



**ELEVATION**  
SCALE: 1" = 100'-0"



**PYLON D ELEVATION**  
SCALE: NTS

**PYLON D SECTION**  
SCALE: NTS

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding, or permit purposes.  
Kimley-Horn and Associates, Inc.  
Engineer: JONATHAN D. SEIDELMEYER  
P.E. No. 91651 Date 5/16/2014

SH 71  
BRIDGE LAYOUT  
Kimley-Horn and Associates, Inc.  
TEXAS REGISTERED ENGINEERING FIRM F-928  
**MCCARTHY**  
SH 973 BRIDGE LAYOUT

Texas Department of Transportation

SHEET 1 OF 2	
FED. RD. DIV. NO. 6	STATE AID PROJECT NO. 104
STATE TEXAS	COUNTY TRAVIS
CONT. SECT.	JOB HIGHWAY NO. SH 71

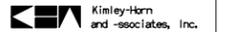
SP-N BENT OR -BUT	SP-N D-T-									BENT/-BUTMENT C-P D-T-							
	SP-N LENGTH	BRIDGE WIDTH	SL-B DECK -RE-	# OF GIRDERS	GIRDER TYPE	TOT-L GIRDER LENGTH	SEJ-- TOT-L LENGTH	T551 R-IL	CSB R-IL	LENGTH	DEPTH	WIDTH	VOLUME	PRIM-RY REB-R	SKIN REB-R	STIRRUP	-BUT REB-R
-	FT	FT	SF	E-	-	FT	FT	FT	FT	FT	FT	FT	CY	-	-	-	#/CY
1	53.58	94	5037	12	Tx40	637.0	96.5	107.2	53.6	97.3	2.5	3.5	49.9	10 - #11	2 - #11	#5 @ 6"	220.0
2	84.92	94	7982	12	Tx40	1013.0	0.0	169.8	84.9	96.0	3.5	3.5	43.6	12 - #11	10 - #5	#5 @ 8"	-
3	84.92	94	7982	12	Tx40	1013.0	96.5	169.8	84.9	96.0	3.5	3.5	43.6	12 - #11	10 - #5	#5 @ 8"	-
4	53.58	94	5037	12	Tx40	637.0	0.0	107.2	53.6	96.0	3.5	3.5	43.6	12 - #11	10 - #5	#5 @ 8"	-
5							96.5			97.3	2.5	3.5	49.9	10 - #11	2 - #11	#5 @ 6"	220.0
TOT-L	277.00	-	26038	-	-	3300.0	289.5	554.0	277.0	-	-	-	230.6	-	-	-	-

\*Rail lengths measured from face of backwall to face of backwall.

SP-N BENT OR -BUT	COLUMN D-T-				PYLON D-T-			FOUND-TION D-T-				
	# OF 36" DI- COLUMNS	HEIGHT OF 1 COLUMN	VERTIC-L REB-R	TR-NSV. REB-R	PYLON D VOLUME	VERTIC-L REB-R	TR-NSV. REB-R	# OF 36" DRILLED SH-FTS	LENGTH OF 1 DS	TOT-L DS LENGTH (36" DI-)	VERTIC-L REB-R	SPIR-L REB-R
-	E-	FT	-	-	CY	-	-	E-	FT	FT	-	-
1	-	-	-	-	-	-	-	10	70	700	10 - #9	#3 @ 6" PCH
2	5	16	10 - #9	#3 -T 6" PCH	24.3	18 - #10	#3 @ 12"	7	60	420	10 - #9	#3 @ 6" PCH
3	5	17	10 - #9	#3 -T 6" PCH	25.2	18 - #10	#3 @ 12"	7	60	420	10 - #9	#3 @ 6" PCH
4	5	17	10 - #9	#3 -T 6" PCH	25.2	18 - #10	#3 @ 12"	7	60	420	10 - #9	#3 @ 6" PCH
5	-	-	-	-	-	-	-	10	70	700	10 - #9	#3 @ 6" PCH
TOT-L	-	-	-	-	74.7	-	-	-	-	2660	-	-

**PRELIMINARY**

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or permit purposes.



Engineer: JON-THON D. SEDELMAYER  
P. E. No. 91651 Date 5/16/2014

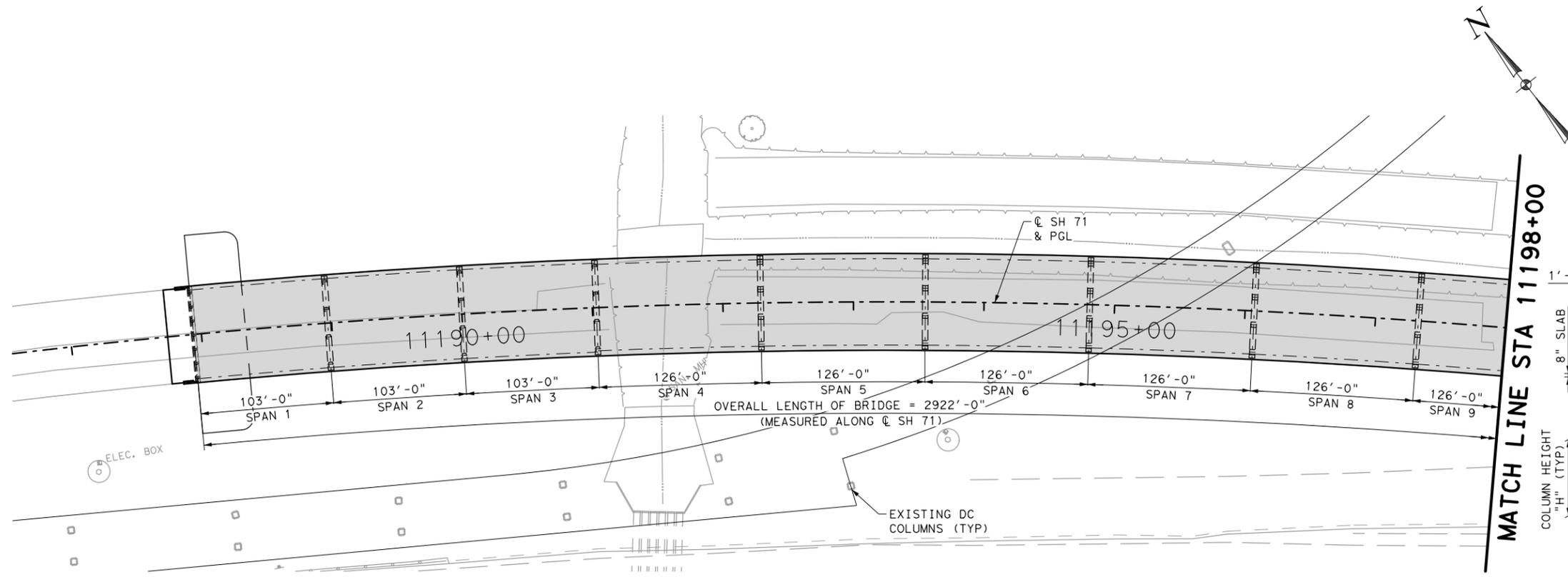
SH 71  
BRIDGE LAYOUT



SH 973

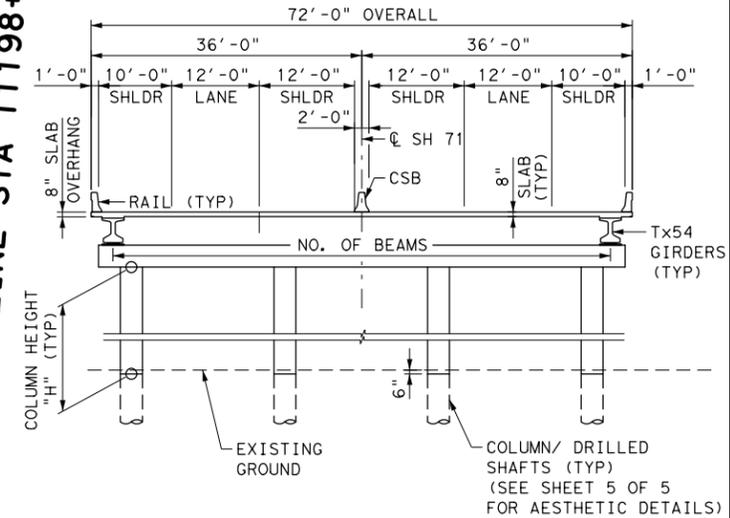


FED. RD. DIV. NO.		ST-TE -ID PROJECT		SHEET NO.	
6				105	
ST-TE	ST-TE DIST. NO.	COUNTY			
TEX-S		TR-VIS			
CONT.	SECT.	JOB	HIGHW-Y NO.		
			SH 71		



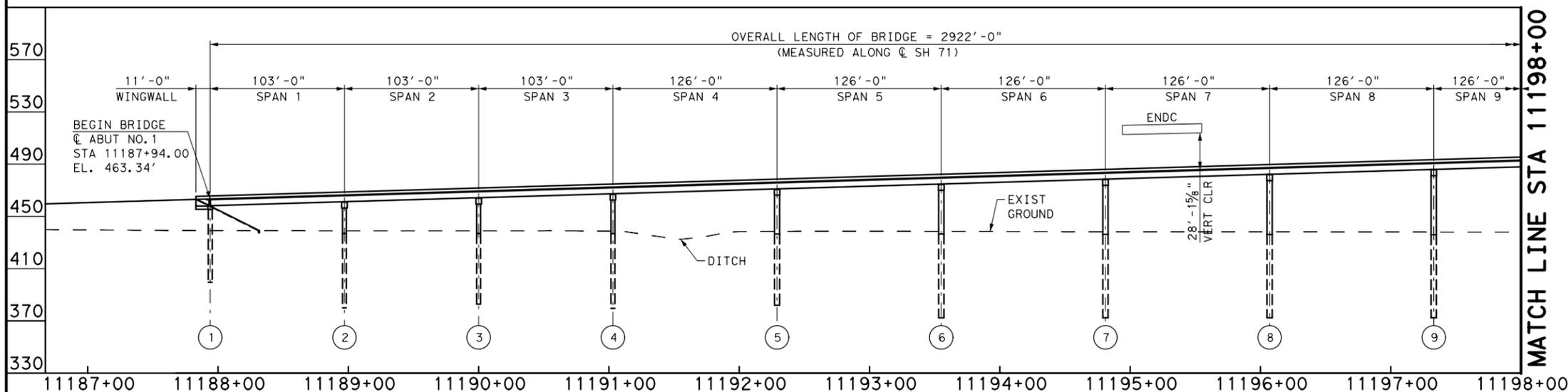
**PLAN**

SCALE: 1" = 100'-0"



**CROSS SECTION TYPICAL BENT**

SCALE: NTS



**ELEVATION**

SCALE: 1" = 100'-0"

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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**SH 130 FLYOVER**



**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1" = 100'

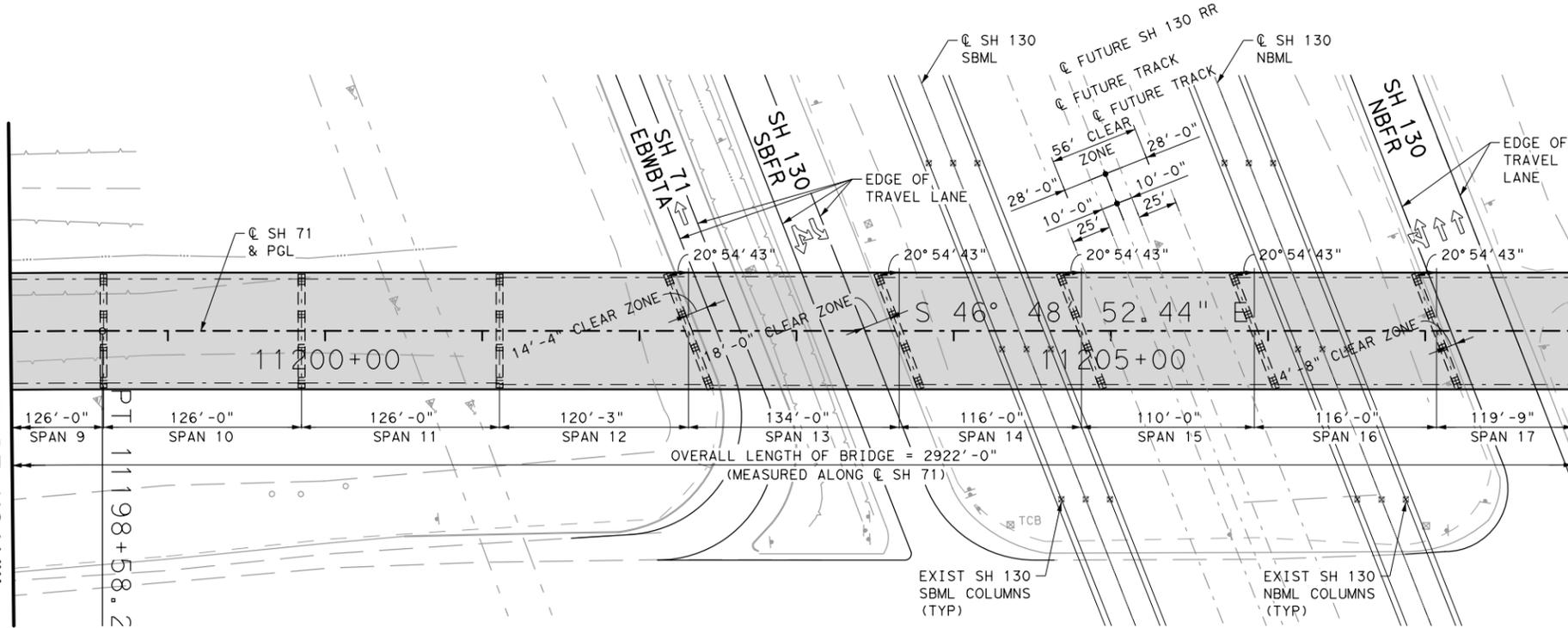
Texas Department of Transportation  
 SHEET 1 OF 5

FED. RD. DIV. NO.	STATE AID PROJECT	SHEET NO.
6		106
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

**DESIGN LIFE CONSIDERATIONS:**  
 NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

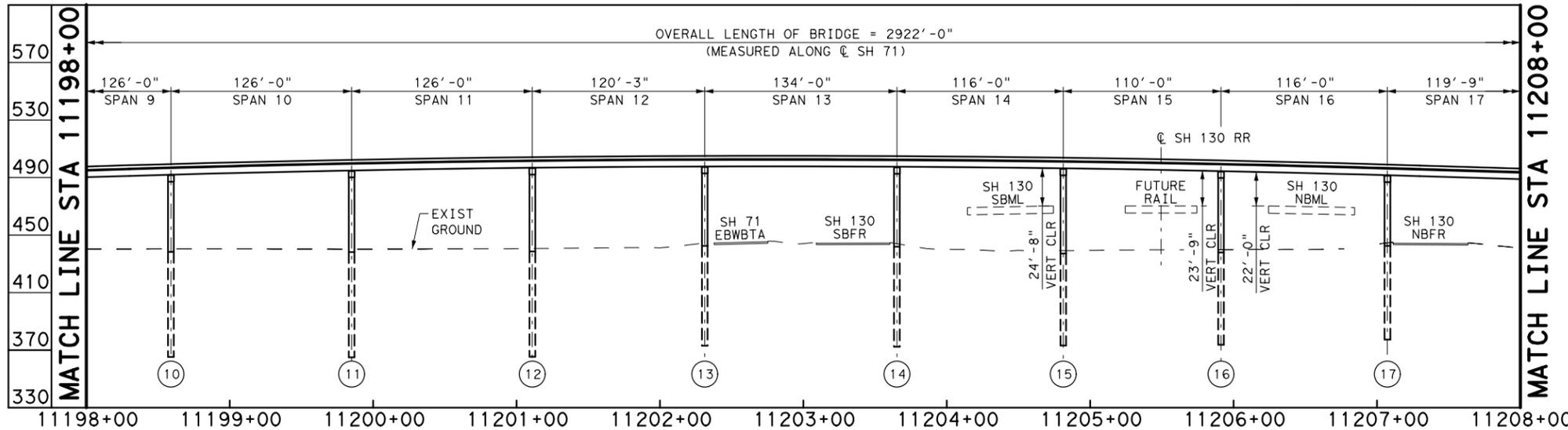
MATCH LINE STA 11198+00

MATCH LINE STA 11208+00



**PLAN**

SCALE: 1" = 100'-0"



**ELEVATION**

SCALE: 1" = 100'-0"

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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**SH 130 FLYOVER**



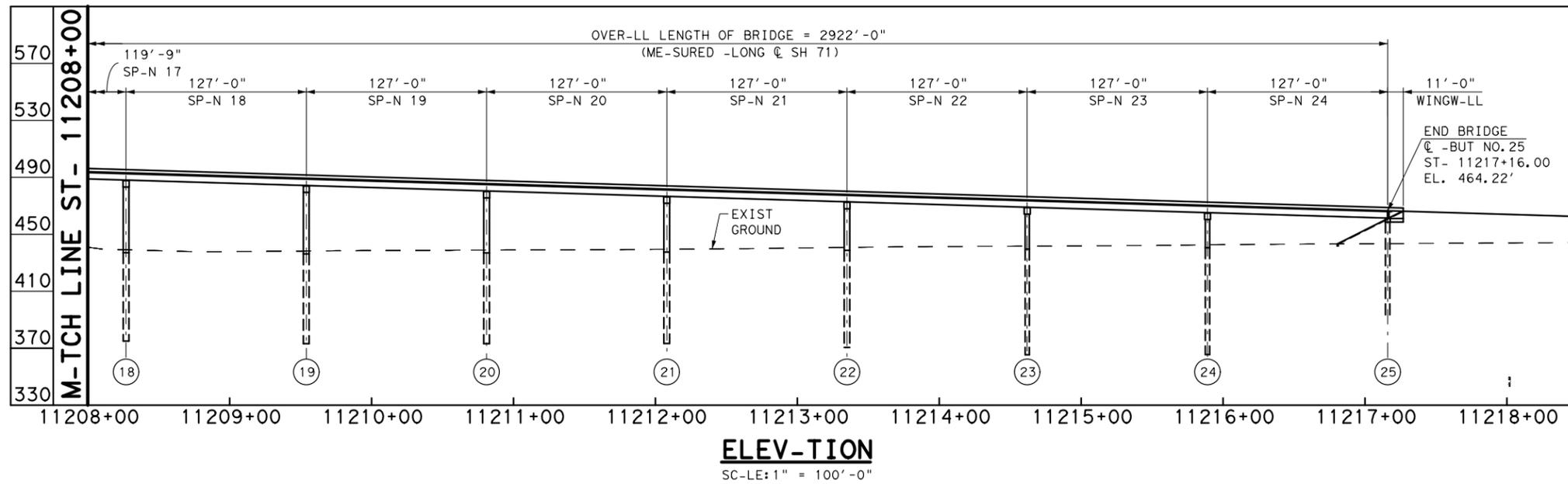
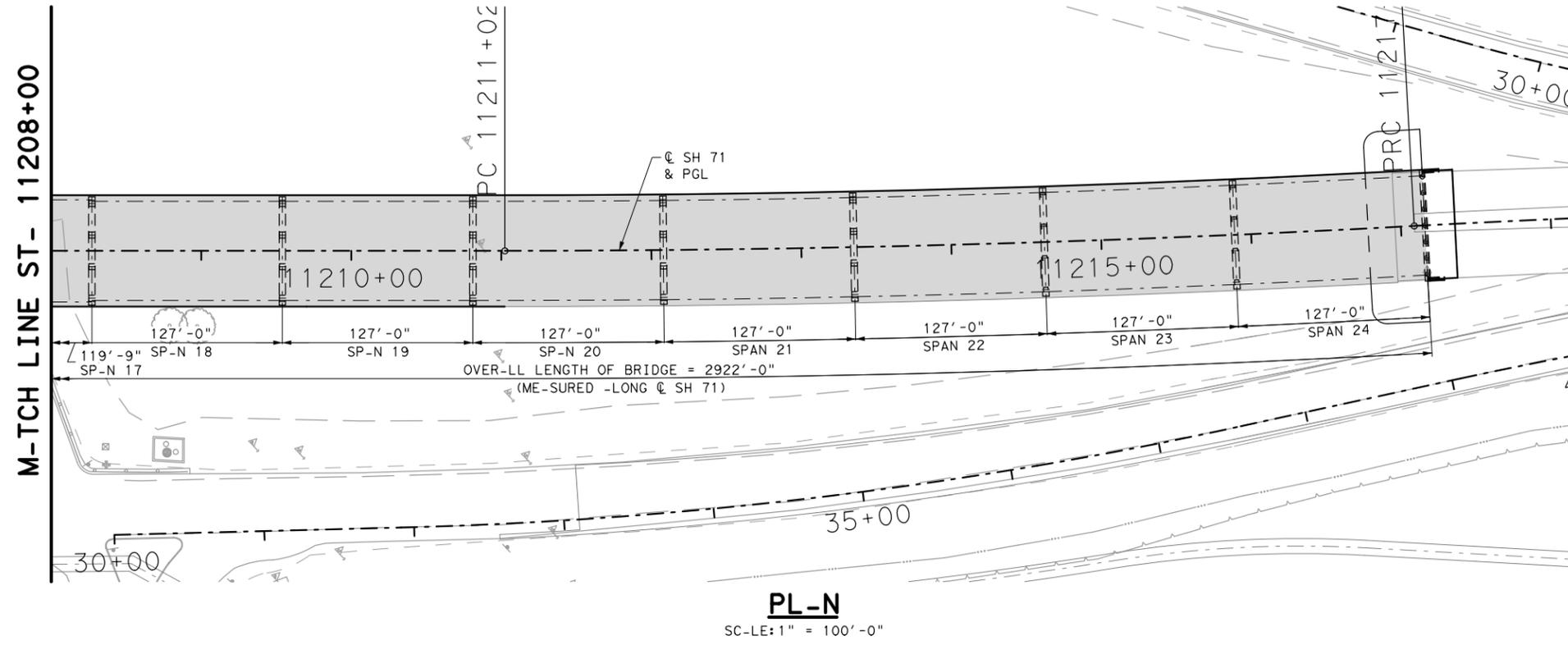
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1" = 100'

Texas Department of Transportation  
 SHEET 2 OF 5

**DESIGN LIFE CONSIDERATIONS:**  
 NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

FED. RD. DIV. NO.	STATE AID PROJECT	SHEET NO.
6		107
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71



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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**SH 130 FLYOVER**



**LAN** Lockwood, Andrews & Newnam, Inc.  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

SC-LE: 1" = 100'



SHEET 3 OF 5

**DESIGN LIFE CONSIDERATIONS:**  
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.

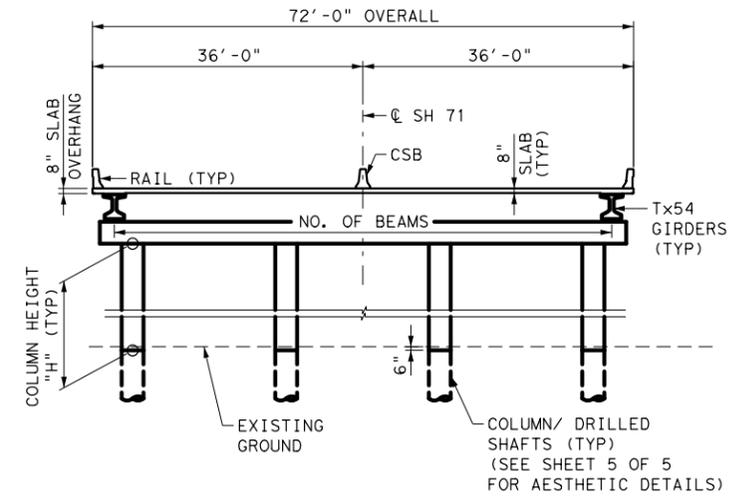
FED. RD. DIV. NO.	ST-TE -ID PROJECT	SHEET NO.
6		108
ST-TE	ST-TE DIST. NO.	COUNTY
TEX-S		TR-VIS
CONT.	SECT.	JOB HIGH-W. Y. NO.
		SH 71

## QUANTITIES FOR 72' BRIDGE WIDTH

Span/ Bent or Abut	Span Data										Bent Cap / Abut Data							
	Span Length	Bridge Width	Slab Deck Area	# of Girders	Slab Overhang	Girder Type	Total Girder Length	SEJ-A Total Length	T551 Rail*	CSB Rail**	Length	Depth	Width	Volume	Total Primary Rebar	Total Skin Rebar	Stirrups	Abutment Rebar
	FT	FT	SF	EA	FT	-	FT	FT	FT	FT	FT	FT	FT	CY	-	-	-	#/CY
1	103.00	72	7,416	7	3.0	Tx54	717.5	71.3	228.0	103.0	72	2.5	3.50	44.5	-	-	-	220.0
2	103.00	72	7,416	7	3.0	Tx54	717.5	0.0	206.0	103.0	70	4.5	4.25	50.0	12 - #11	12 - #5	#6 at 12"	-
3	103.00	72	7,416	7	3.0	Tx54	717.5	0.0	206.0	103.0	70	4.5	4.25	50.0	12 - #11	12 - #5	#6 at 12"	-
4	126.00	72	9,072	9	4.0	Tx54	1,129.5	71.3	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
5	126.00	72	9,072	9	4.0	Tx54	1,129.5	0.0	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
6	126.00	72	9,072	9	4.0	Tx54	1,129.5	71.3	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
7	126.00	72	9,072	9	4.0	Tx54	1,129.5	0.0	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
8	126.00	72	9,072	9	4.0	Tx54	1,129.5	71.3	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
9	126.00	72	9,072	9	4.0	Tx54	1,129.5	0.0	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
10	126.00	72	9,072	9	4.0	Tx54	1,129.5	71.3	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
11	126.00	72	9,072	9	4.0	Tx54	1,129.5	0.0	252.0	126.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
12	120.25	72	8,658	10	3.0	Tx54	1,197.5	71.3	240.5	120.3	70	4.5	4.25	50.2	17 - #11	12 - #5	#6 at 8"	-
13	134.00	72	9,648	12	2.5	Tx54	1,602.0	0.0	268.0	134.0	76	4.5	4.25	54.5	22 - #11	12 - #5	#6 at 5"	-
14	116.00	72	8,352	8	3.0	Tx54	924.0	76.3	232.0	116.0	76	4.5	4.25	54.4	22 - #11	12 - #5	#6 at 5"	-
15	110.00	72	7,920	7	3.0	Tx54	766.5	0.0	220.0	110.0	76	4.5	4.25	54.3	22 - #11	12 - #5	#6 at 5"	-
16	116.00	72	8,352	8	3.0	Tx54	924.0	76.3	232.0	116.0	76	4.5	4.25	54.3	22 - #11	12 - #5	#6 at 5"	-
17	119.75	72	8,622	10	3.0	Tx54	1,192.5	0.0	239.5	119.8	76	4.5	4.25	54.4	22 - #11	12 - #5	#6 at 5"	-
18	127.00	72	9,144	9	4.0	Tx54	1,138.5	71.3	254.0	127.0	70	4.5	4.25	50.2	17 - #11	12 - #5	#6 at 8"	-
19	127.00	72	9,144	9	4.0	Tx54	1,138.5	0.0	254.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
20	127.00	72	9,144	9	4.0	Tx54	1,138.5	71.3	254.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
21	127.00	72	9,144	9	4.0	Tx54	1,138.5	0.0	254.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
22	127.00	72	9,144	9	4.0	Tx54	1,138.5	71.3	254.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
23	127.00	72	9,144	9	4.0	Tx54	1,138.5	0.0	254.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
24	127.00	72	9,144	9	4.0	Tx54	1,138.5	71.3	276.0	127.0	70	4.5	4.25	50.1	17 - #11	12 - #5	#6 at 8"	-
25	-	-	-	-	-	-	-	71.3	-	-	72	2.5	3.50	44.5	-	-	-	220.0
<b>Total</b>	<b>2,922.00</b>	<b>-</b>	<b>210,384</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25,764.5</b>	<b>936.9</b>	<b>5,888.0</b>	<b>2,922.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,262.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

\* Rail lengths measured from face of end of wingwall to end of wingwall.

\*\* CSB Rail measured from face of backwall to face of backwall.



Span/ Bent or Abut	Column Data								Foundation Data							
	# of Columns	Height of 1 Column	Depth	Width	Volume	Vert. Rebar (Per Col)	Transv. Rebar (Per Col)	# of Drilled Shafts	Drilled Shaft Size	Length of 1 DS	Total Drilled Shaft Length (36 IN dia.)	Total Drilled Shaft Length (42 IN dia.)	Total Drilled Shaft Length (48 IN dia.)	Vert. Rebar (Per DS)	Spiral Rebar (Per DS)	Riprap (RR9)
	EA	FT	FT	FT	CY	-	-	EA	IN	FT	FT	FT	FT	-	-	CY
1	-	-	-	-	-	-	-	7	36	56	392	0	0	10 - #9	#3 at 6" Pch	92.6
2	4	17.1	3.0	3.0	22.8	16 - #9	#3 at 12"	4	36	53	212	0	0	10 - #9	#3 at 6" Pch	0.0
3	4	20.2	3.0	3.0	26.9	16 - #9	#3 at 12"	4	36	53	212	0	0	10 - #9	#3 at 6" Pch	0.0
4	4	23.2	3.0	3.0	30.9	16 - #9	#3 at 12"	4	36	57	228	0	0	10 - #9	#3 at 6" Pch	0.0
5	4	27.5	3.0	3.0	36.7	16 - #9	#3 at 12"	4	36	62	248	0	0	14 - #9	#3 at 6" Pch	0.0
6	4	31.1	3.0	3.0	41.5	16 - #9	#3 at 12"	4	36	62	248	0	0	14 - #9	#3 at 6" Pch	0.0
7	4	35.2	3.0	3.0	46.9	16 - #9	#3 at 12"	4	36	62	248	0	0	14 - #9	#3 at 6" Pch	0.0
8	4	38.9	4.0	4.0	92.2	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
9	4	42.3	4.0	4.0	100.3	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
10	4	46.5	4.0	4.0	110.2	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
11	4	49.7	4.0	4.0	117.8	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
12	4	51.7	4.0	4.0	122.5	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
13	4	54.9	4.0	4.0	130.1	20 - #10	#3 at 12"	4	48	56	0	0	224	22 - #10	#3 at 6" Pch	0.0
14	4	54.7	4.0	4.0	129.7	20 - #10	#3 at 12"	4	48	57	0	0	228	22 - #10	#3 at 6" Pch	0.0
15	4	52.3	4.0	4.0	124.0	20 - #10	#3 at 12"	4	48	54	0	0	216	22 - #10	#3 at 6" Pch	0.0
16	4	50.5	4.0	4.0	119.7	20 - #10	#3 at 12"	4	48	54	0	0	216	22 - #10	#3 at 6" Pch	0.0
17	4	47.3	4.0	4.0	112.1	20 - #10	#3 at 12"	4	48	54	0	0	216	22 - #10	#3 at 6" Pch	0.0
18	4	46.9	4.0	4.0	111.2	20 - #10	#3 at 12"	4	48	52	0	0	208	22 - #10	#3 at 6" Pch	0.0
19	4	42.2	4.0	4.0	100.0	20 - #10	#3 at 12"	4	48	53	0	0	212	22 - #10	#3 at 6" Pch	0.0
20	4	37.6	4.0	4.0	89.1	20 - #10	#3 at 12"	4	48	54	0	0	216	22 - #10	#3 at 6" Pch	0.0
21	4	33.5	3.0	3.0	44.7	16 - #9	#3 at 12"	4	36	63	252	0	0	14 - #9	#3 at 6" Pch	0.0
22	4	28.3	3.0	3.0	37.7	16 - #9	#3 at 12"	4	36	58	232	0	0	14 - #9	#3 at 6" Pch	0.0
23	4	23.5	3.0	3.0	31.3	16 - #9	#3 at 12"	4	36	56	224	0	0	10 - #9	#3 at 6" Pch	0.0
24	4	19.0	3.0	3.0	25.3	16 - #9	#3 at 12"	4	36	57	228	0	0	10 - #9	#3 at 6" Pch	0.0
25	-	-	-	-	-	-	-	7	36	66	462	0	0	10 - #9	#3 at 6" Pch	74.7
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,803.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,186</b>	<b>0</b>	<b>2,796</b>	<b>-</b>	<b>-</b>	<b>167.3</b>

**INTERIM REVIEW ONLY**  
 This document is released for the purpose of interim review under the authority of Johnathan Abel Terrazas, P.E. 104821 on 5/16/2014. It is not to be used for permit, bidding or construction purposes.

BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

SH 130 FLYOVER  
EST QTY'S

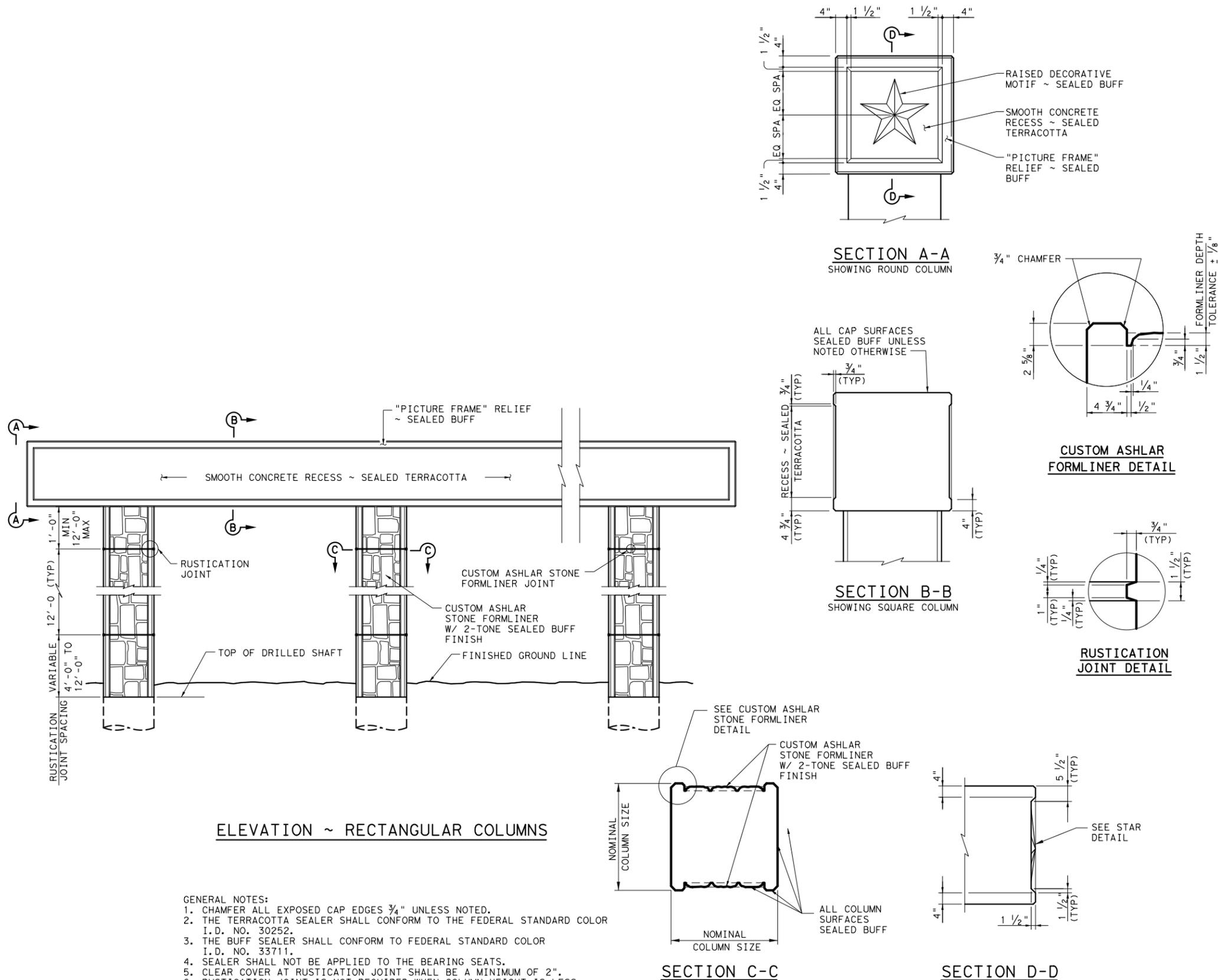


**Lockwood, Andrews & Newnam, Inc.**  
A LEO A DALY COMPANY  
TBPE Firm No. 2614

Texas Department of Transportation  
SHEET 4 OF 5

FED. RD. DIV. NO.	STATE AID PROJECT	SHEET NO.
6		109
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

**DESIGN LIFE CONSIDERATIONS:**  
 NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.



- GENERAL NOTES:**
1. CHAMFER ALL EXPOSED CAP EDGES  $\frac{3}{4}$ " UNLESS NOTED.
  2. THE TERRACOTTA SEALER SHALL CONFORM TO THE FEDERAL STANDARD COLOR I.D. NO. 30252.
  3. THE BUFF SEALER SHALL CONFORM TO FEDERAL STANDARD COLOR I.D. NO. 33711.
  4. SEALER SHALL NOT BE APPLIED TO THE BEARING SEATS.
  5. CLEAR COVER AT RUSTICATION JOINT SHALL BE A MINIMUM OF 2".
  6. RUSTICATION JOINT IS NOT REQUIRED WHEN COLUMN HEIGHT IS LESS THAN 12 FEET.

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BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**SH 130 FLYOVER AESTHETIC DETAILS**



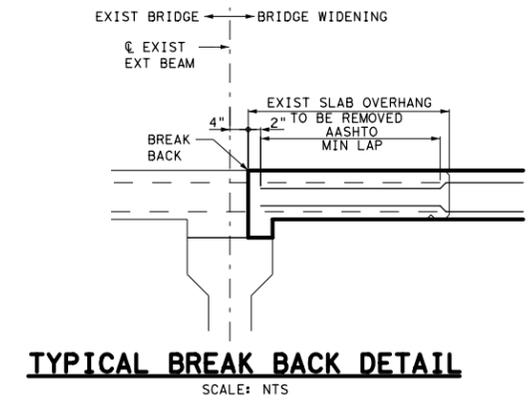
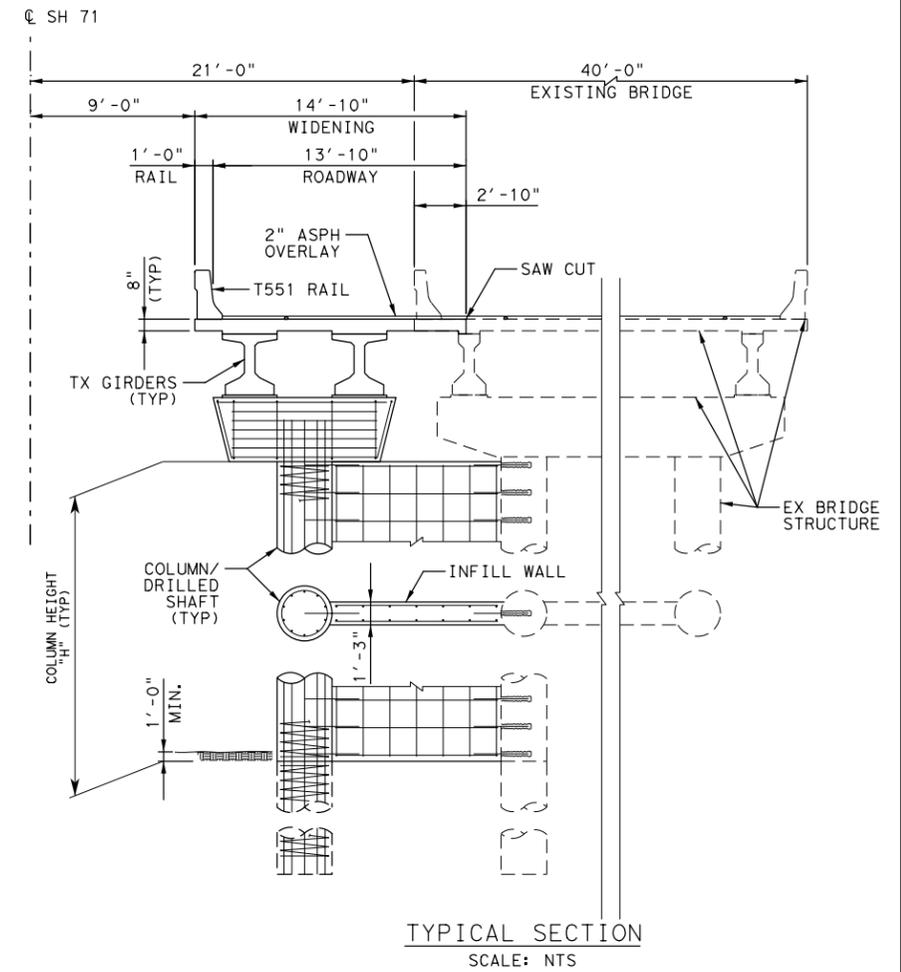
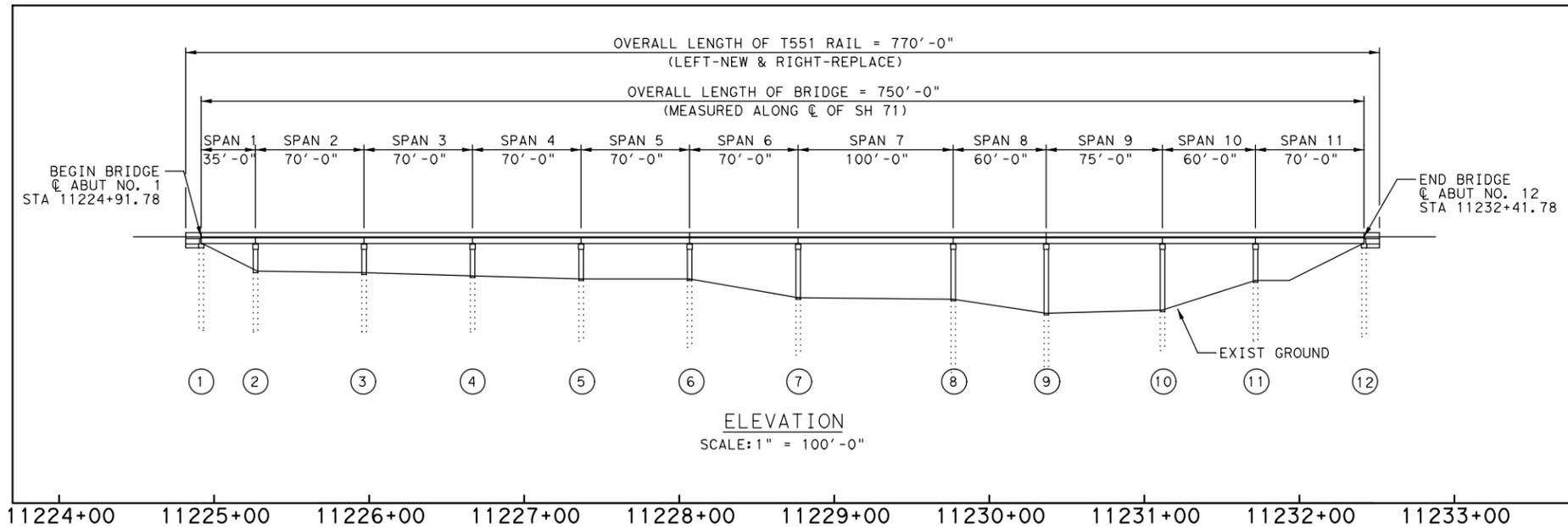
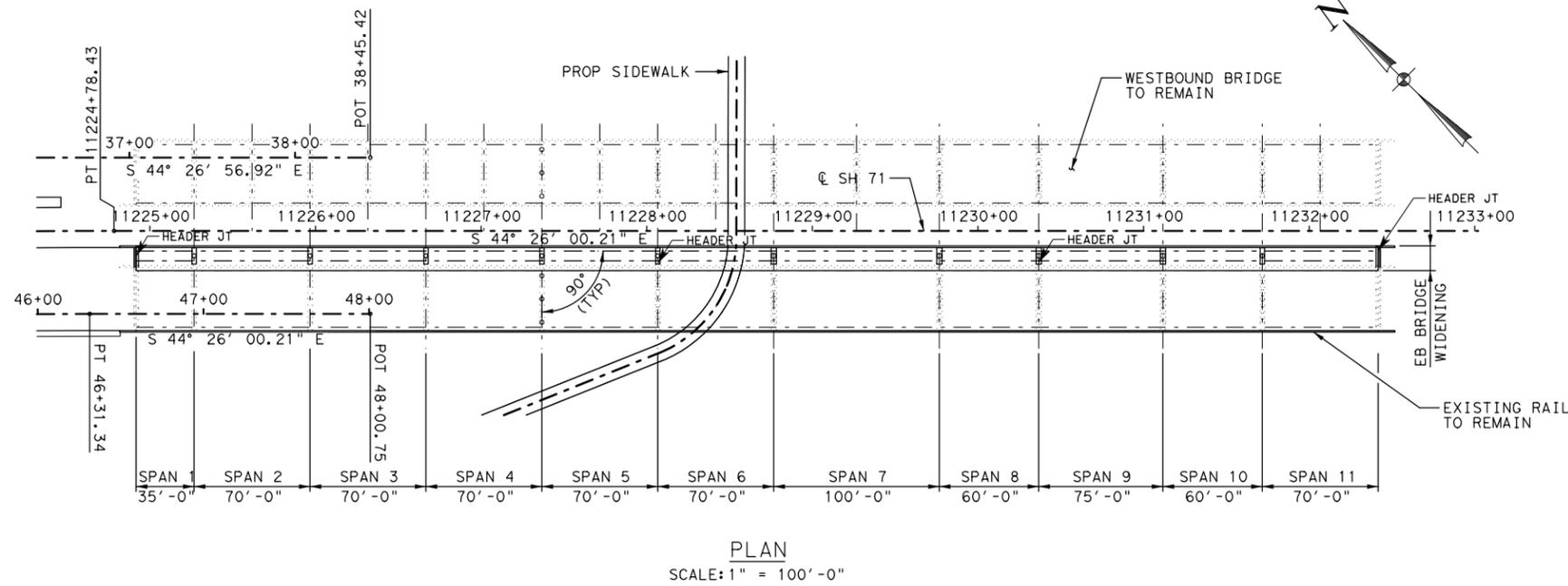
**LAN** Lockwood, Andrews & Newnam, Inc.  
 A LEO A DALY COMPANY  
 TBPE Firm No. 2614

SCALE: 1"=100'

Texas Department of Transportation  
 SHEET 5 OF 5

FED. RD. DIV. NO.	STATE AID PROJECT	SHEET NO.
6		110
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB
		HIGHWAY NO.
		SH 71

**DESIGN LIFE CONSIDERATIONS:**  
 NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.



**DESIGN LIFE CONSIDERATIONS:**  
NEW BRIDGE CONSTRUCTION DESIGNED FOR HL93 VEHICULAR LIVE LOAD UNDER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT WHERE DIRECTED OTHERWISE BY TxDOT LRFD BRIDGE DESIGN MANUAL, TxDOT GEOTECHNICAL MANUAL AND THE TECHNICAL PROVISION REQUIREMENTS.  
BRIDGE LIMITS AND SPAN TYPES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.

**PRELIMINARY**  
FOR REVIEW ONLY  
Not for construction, bidding, or permit purposes.  
Kimley-Horn and Associates, Inc.  
Engineer: JONATHAN D. SEDELMAYER  
P. E. No. 91651 Date 5/16/2014

SH 71  
BRIDGE LAYOUT

Kimley-Horn and Associates, Inc.  
TEXAS REGISTERED ENGINEERING FIRM F-928

**MCCARTHY**  
EB ONION CREEK WIDENING

Texas Department of Transportation  
SHEET 1 OF 2

FED. RD. DIV. NO.	STATE AID PROJECT	SHEET NO.
6		111
STATE	STATE DIST. NO.	COUNTY
TEXAS		TRAVIS
CONT.	SECT.	JOB HIGHWAY NO.
		SH 71

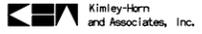
Abut, Bent, or Span	Span Data								Bent Cap/Abutment Data							
	Avg Span Length	New Bridge Deck Width	Slab Deck Area	# Girders	Girder Type	Total Girder Length	Header Exp Joint	T551 Rail	Length	Depth	Width	Volume	Primary Rebar	Skin Rebar	Stirrups	Abut Rebar
-	FT	FT	SF	EA	-	FT	-	FT	FT	FT	FT	CY	-	-	-	#/CY
1	35.0	14.8	520	2	Tx40	69.0	50.00	45.0	13.00	2.50	2.75	8.2	-	-	-	220
2	70.0	14.8	1039	2	Tx40	139.0	-	70.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
3	70.0	14.8	1039	2	Tx40	139.0	-	70.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
4	70.0	14.8	1039	2	Tx40	139.0	-	70.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
5	70.0	14.8	1039	2	Tx40	139.0	-	70.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
6	70.0	14.8	1039	2	Tx40	139.0	50.00	70.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
7	100.0	14.8	1484	2	Tx40	199.0	-	100.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
8	60.0	14.8	890	2	Tx40	119.0	-	60.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
9	75.0	14.8	1113	2	Tx40	149.0	50.00	75.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
10	60.0	14.8	890	2	Tx40	119.0	-	60.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
11	70.0	14.8	1039	2	Tx40	139.0	-	80.0	10.00	3.50	3.50	4.2	10-#11	10-#5	#5 at 6"	-
12	-	-	-	-	-	-	50.00	-	13.00	2.50	2.75	8.3	10-#11	10-#5	#5 at 6"	220
Total	750.0	-	11131	22	-	1489.0	200.00	770.0	-	-	-	58.5	-	-	-	-

Abut, Bent, or Span	Column Data						Foundation Data										
	Dia. Of 1 - Column	Column Height	Vertical Rebar	Spiral Rebar	Infill Wall		# Drilled Shafts			Length of 1 - Dr Shaft	Length of Dr Shafts			Vertical Rebar	Spiral Rebar	Rip Rap	
					Volume	Rebar #/CY	30"	36"	42"		30"	36"	42"				
-	IN	FT	-	-	CY	#/CY	EA	EA	EA	FT	-	-	-	-	-	CY	
1	-	-	-	-	-	-	2	-	-	53	106	-	-	8 - #9	#3 at 6" Pitch	2.0	
2	30	15	8 - #9	#3 at 6" Pitch	-	-	1	-	-	38	38	-	-	8 - #9	#3 at 6" Pitch	-	
3	30	16	8 - #9	#3 at 6" Pitch	-	-	1	-	-	37	37	-	-	8 - #9	#3 at 6" Pitch	1.5	
4	30	18	8 - #9	#3 at 6" Pitch	-	-	1	-	-	35	35	-	-	8 - #9	#3 at 6" Pitch	1.5	
5	30	20	8 - #9	#3 at 6" Pitch	-	-	1	-	-	39	39	-	-	8 - #9	#3 at 6" Pitch	1.5	
6	30	20	8 - #9	#3 at 6" Pitch	8.9	155	1	-	-	43	43	-	-	8 - #9	#3 at 6" Pitch	1.5	
7	36	32	10 - #9	#3 at 6" Pitch	14.2	155	-	1	-	36	-	36	-	10 - #9	#3 at 6" Pitch	1.5	
8	36	33	10 - #9	#3 at 6" Pitch	14.7	155	-	1	-	46	-	46	-	10 - #9	#3 at 6" Pitch	1.5	
9	42	42	14 - #9	#3 at 6" Pitch	18.7	155	-	-	1	35	-	-	35	14 - #9	#3 at 6" Pitch	-	
10	42	40	14 - #9	#3 at 6" Pitch	17.8	155	-	-	1	25	-	-	25	14 - #9	#3 at 6" Pitch	-	
11	30	21	8 - #9	#3 at 6" Pitch	9.3	155	1	-	-	38	38	-	-	8 - #9	#3 at 6" Pitch	-	
12	-	-	-	-	-	-	2	-	-	57	114	-	-	8 - #9	#3 at 6" Pitch	2.0	
Total	-	-	-	-	83.6	-	10	2	-	-	450	82	60	-	-	13.0	

NOTES:

1. COLUMN HEIGHT AND DRILLED SHAFTS LENGTH SHOWN PER AS-BUILTS OF EXISTING STRUCTURE.

Existing Bridge Rehabilitation Data						
Replace Bearing Pads	Clean & Blast Bearing Seats	Cap Debris Removal	Concrete Repair	Pln & Text Asph Conc Pav	Pav Jt Underseal	Asph Conc Overlay
EA	SF	LS	SF	SY	LF	CY
95	261.3			3014	304	232

**PRELIMINARY**  
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 Engineer: JONATHAN D. SEIDELMEYER  
 P. E. No. 91651 Date 5/16/2014

SH 71  
 BRIDGE LAYOUT

Kimley-Horn and Associates, Inc.  
 TEXAS REGISTERED ENGINEERING FIRM F-928



EB ONION CREEK WIDENING



FED. RD. DIV. NO.		STATE AID PROJECT		SHEET NO.	
6				112	
STATE	STATE DIST. NO.	COUNTY			
TEXAS		TRAVIS			
CONT.	SECT.	JOB	HIGHWAY NO.		
			SH 71		