APPENDIX J: Farmland Protection





APPENDIX J – FARMLAND – FEIS Preferred Alternative/Blue Alternative

US 380 MCKINNEY – Coit Road to FM 1827, Collin County CSJs 0135-02-065 and 0135-15-002; Dallas District

PURPOSE OF ADDENDUM:

Following the two public hearings conducted for the DEIS including recommendation of the Blue Alternative (A+E+C) as the Preferred Alternative in February 2023, modifications to the Preferred Alternative/Blue Alternative were made to address ongoing coordination with the City of McKinney, the Town of Prosper, NTMWD, and in consideration of public input. While the development of the 95% Geometric Design Schematic for the Blue Alternative resulted in minor modifications in some areas to accommodate drainage improvements and address utility conflicts, **Figure 1** illustrates areas where more substantial changes in the proposed ROW were made (requiring more or less ROW) as compared to the 60% Geometric Design Schematic for the Blue Alternative evaluated in the DEIS. The specific design changes made to the Blue Alternative are listed in Section 5.0 of the ROD, in the Summary of the Final Environmental Impact Statement (FEIS), and in Section 2.4 of the FEIS. The resulting changes in impacts are captured in the FEIS.

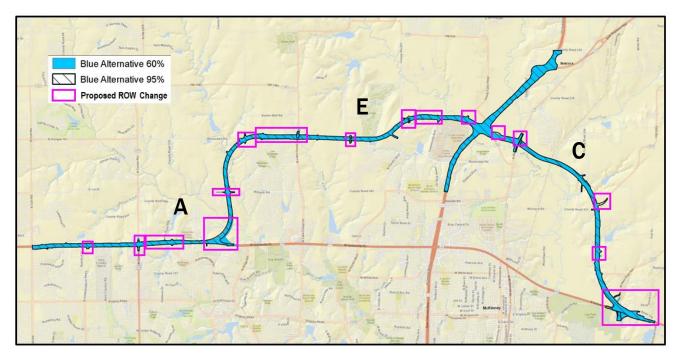


Figure 1 - Proposed ROW Changes Along the Blue Alternative

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OUR MISSION: Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

ADDITIONAL RESOURCES AND EFFECTS OF THE MODIFICATIONS MADE TO THE BLUE ALTERNATIVE FOLLOWING THE PUBLIC HEARINGS

Changes to the Blue Alternative (A+E+C) resulted in the following changes in the proposed ROW and farmland impacts (**Figure 2**).

BLUE ALTERNATIVE (A+E+C) W/SPUR								
Impacts	DEIS ¹	FEIS ²						
Number of Parcels to be Acquired	246	246						
Total Acres of ROW Needed (approx.)	1,098.9 acres	1,099.3 acres						
Existing ROW Affected by the Proposed ROW (approx.)	424.8 acres	424.8 acres						
New ROW to be Acquired (approx.)	674.1 acres	674.5acres						
FARMLAND IMPACTS	DEIS ¹	FEIS ²						
Total Area of Mapped Prime and Statewide Important Farmland Within the Proposed ROW	332.2 acres	330.5 acres						
Area of Mapped Prime Farmland	290.0 acres	290.3 acres						
Area of Mapped Farmland of Statewide Importance	42.1 acres	40.2 acres						
Total Acreage of Proposed ROW in Urbanized Areas (McKinney UA)	907.2 acres	907.2 acres						

Figure 2: Blue Alternative Changes in Proposed ROW Following the Public Hearings

1 Based on 60% Geometric Design Schematic, July 2022

2 Based on 95% Geometric Design Schematic, May 2023

All acreages have been rounded to the tenth of an acre and some figures or 'Totals' may reflect rounding error.

Because coordination under the FPPA was completed during the DEIS, the project may proceed as though either there is no protected farmland in the Project Area, or that the relative land values show the conversion of protected farmland does not result in an adverse effect, and no minimization is recommended. A new CPA-106 Form has not been prepared.





APPENDIX J - FARMLAND - Proposed ROW Change

US 380 McKinney EIS - Coit Road to FM 1827, Collin County CSJs 0135-02-065, 0135-03-053, and 0135-15-002; Dallas District

PURPOSE OF ADDENDUM:

Changes were made to the proposed right-of-way (ROW) limits for the US 380 McKinney project in the 60% Geometric Schematic Design submittal made on 1-JUL-2022. A copy of that submittal is included in Appendix B of this DEIS. This addendum describes where the changes occurred and summarizes how those changes affected the impacts and findings disclosed in the previously approved technical reports that make up the project appendices. The revised impacts to water features based on the proposed ROW changes are disclosed in the DEIS.

DESCRIPTION OF THE PROPOSED ROW CHANGE

To streamline and accelerate the NEPA process for this project, technical studies were initiated at an early stage in schematic development. Initial technical report submittals were based on the proposed ROW established in JUN-JUL-2021, with progressive modifications made through NOV-2021. The JUL-2022 Geometric Schematic Design submittal reflects the continued refinement of the alternatives and consideration of input received during the MAR-2022 public meeting and ongoing coordination with the City of McKinney, Collin County, and the North Texas Municipal Water District.

The JUL-2022 submittal made adjustments to the proposed ROW limits throughout the length of the proposed alignments to account for drainage, access, and geometric improvements. Areas connecting to existing and planned roadway projects, under the direction of the City of McKinney, have also been included on the schematics and will still be under refinement into the FEIS. A design decision at the crossing of SH 5 in proximity of the East Fork Trinity River also added improvements within the existing ROW extending farther along SH 5 than was previously reviewed.

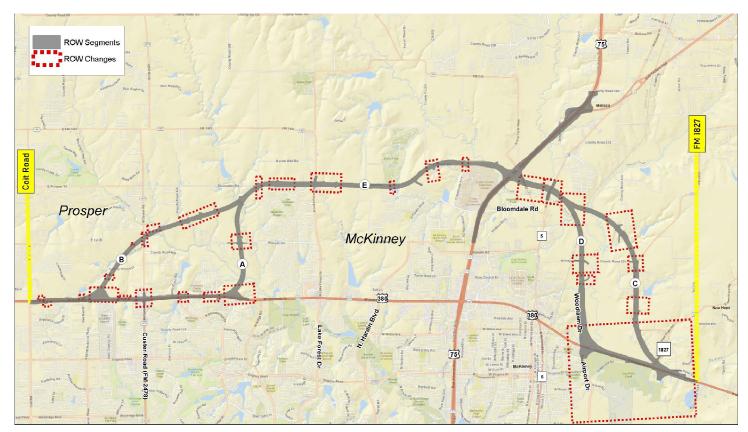
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Build Alternative	November 2021 Proposed ROW (Acres)	July 2022 Proposed ROW (Acres)	Change in Proposed ROW (Acres)	
PURPLE ALTERNATIVE W/O SPUR	1,047.7	1,113.9	66.2	
PURPLE ALTERNATIVE W/ SPUR	1,069.1	1,133.1	64.0	
BLUE ALTERNATIVE W/O SPUR	1,042.0	1,083.5	41.5	
BLUE ALTERNATIVE W/ SPUR	1,081.3	1,098.9	17.6	
BROWN ALTERNATIVE W/O SPUR	1,010.3	1,056.4	46.1	
BROWN ALTERNATIVE W/ SPUR	1,049.5	1,071.8	22.3	
GOLD ALTERNATIVE W/O SPUR	1,015.9	1,086.8	70.9	
GOLD ALTERNATIVE W/ SPUR	1,037.4	1,106.0	68.6	

Figure 1: Proposed ROW Change – November 2021 to July 2022

Illustration of the July 2022 Proposed ROW Changes



EFFECTS OF THE JULY ROW CHANGE ON FARMLAND IMPACTS AND FINDINGS

For all Build Alternatives, the proposed ROW changes increased the total area of proposed ROW used to calculate the impacts to farmlands on the CPA-106 Form submitted to coordinate with the NRCS in March 2022. Overall, the minor proposed ROW changes resulted in no substantial change in farmland impacts.

By Segment:

Total acres of farmland within the proposed ROW of Segment A, including prime farmland and farmland of statewide importance, increased by 5.1 acres due to adjustments in proposed ROW to extend slightly north and south along Custer Rd. at the intersection with existing US 380, and slight extension east where Segment A turns to the north.

Total acres of farmland within the proposed ROW of Segment B, including prime farmland and farmland of statewide importance, increased by 7.7 acres due to adjustments in proposed ROW where Segment B turns to the north, at the crossing of Sleepy Hollow Rd, and multiple minor adjustments along the northern extent of the segment.

Total acres of farmland within the proposed ROW of Segment E, including prime farmland and farmland of statewide importance, increased by 8.5 acres due to widening of the proposed ROW near the western end of the segment along Bloomdale Rd., extension of the proposed ROW north and south at SH 5, and multiple minor adjustments along the extent of the segment.

Total acres of farmland within the proposed ROW of Segment C, including prime farmland and farmland of statewide importance, decreased by 0.2 acres W/O Spur and 0.1 acres W/Spur, due to minor adjustments in proposed ROW along the extent of the segment.

Total acres of farmland within the proposed ROW of Segment D, including prime farmland and farmland of statewide importance, increased by 10.4 acres W/O Spur and 10.2 acres W/Spur due to extension of the proposed ROW east and west along McIntire Rd, extension north along Woodlawn Rd, and extension to the west along existing US 380 at the western end of the segment.

By Build Alternative:

For the Purple Alternative, total acres of prime farmland and farmland of statewide importance increased by 26.8 acres W/O Spur and by 26.7 acres W/Spur.

For the Blue Alternative, total acres of prime farmland and farmland of statewide importance increased by 16.2 acres W/O Spur and by 16.4 acres W/Spur.

For the Brown Alternative, total acres of prime farmland and farmland of statewide importance increased by 27.9 acres W/O Spur and by 43.7 acres W/Spur.

For the Gold Alternative, total acres of prime farmland and farmland of statewide importance increased by 38.5 acres W/O Spur and by 38.4 acres W/Spur.

Prime and Statewide Important	Purple A	Iternative	Blue Alternative		Brown Alternative		Gold Alternative	
Farmland	Acres (NOV- 2021)	V- Acres (JULY- 2022) Acres (NOV- 2021) Acres (JULY- 2022) Acres (JULY- 2022)		Acres (NOV- 2021)	Acres (JULY- 2022)	Acres (NOV- 2021)	Acres (JULY- 2022)	
Total Area within the Proposed ROW	1,047.7	1,113.9	1,042.0	1,083.5	1,010.3	1,056.4	1,016.0	1,086.8
Total Area of Mapped Prime and Statewide Important Farmland within Proposed ROW	321.1	347.9	315.8	332.0	304.8	332.7	310.1	348.6
Area of Mapped Prime Farmland	281.1	305.8	275.8	289.9	277.8	294.2	283.1	310.1
Area of Mapped Farmland of Statewide Importance	39.9	42.1	39.9	42.1	27.0	38.5	27.0	38.5
Total Acreage of Proposed ROW in Urbanized Areas (McKinney UA)	922.0	980.1	857.8	891.8	826.0	850.9	890.3	939.3

Figure 2: Comparison of Farmland Impacts By Build Alternative W/O Spur

Figure 3: Comparison of Farmland Impacts By Build Alternative W/Spur

Prime and Statewide Important Farmland	Purple Alternative		Blue Alternative		Brown Alternative		Gold Alternative	
	Acres (NOV- 2021)	Acres (JULY- 2022)						
Total Area within the Proposed ROW	1,069.1	1,133.1	1,081.3	1,098.9	1,049.5	1,106.0	1,037.4	1,106.0
Total Area of Mapped Prime and Statewide Important Farmland within Proposed ROW	321.1	347.8	315.8	332.2	304.8	348.5	310.1	348.5
Area of Mapped Prime Farmland	281.1	305.6	275.8	290.0	277.8	294.4	283.1	310.0
Area of Mapped Farmland of Statewide Importance	39.9	42.1	39.9	42.1	27.0	38.5	27.0	38.5
Total Acreage of Proposed ROW in Urbanized Areas (McKinney UA)	943.3	999.4	895.7	907.2	863.9	866.4	911.6	866.4

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency) 1. Name of Project			3. Date of Land Evaluation Request 4. Sheet 1 of .					1 of			
			5. Federal Agency Involved								
2. Type of Project			6. County and State								
PART II (To be completed by NRCS)			1. Date Request Received by NRCS 2. Person Completing Form								
 Does the corridor contain prime, (If no, the FPPA does not apply - 				res 🔲 no 🕻]	4. Acres	Irrigated Avera	age Farm Size			
5. Major Crop(s)		6. Farmable Land	d in Goverr	ment Jurisdiction		7. Amou	nt of Farmland A	s Defined in FPPA			
	Acres: %			% Acres:			es: %				
8. Name Of Land Evaluation System	m Used	9. Name of Loca	76					and Evaluation Returned by NRCS			
				Alternat	ive Corr	idors					
PART III (To be completed by	Federal Agency)			Purple	Brov		Blue	Gold			
A. Total Acres To Be Converted	Directly			•							
B. Total Acres To Be Converted I	ndirectly, Or To Receive	Services									
C. Total Acres In Corridor											
PART IV (To be completed by	NRCS) Land Evaluat	ion Information									
A. Total Acres Prime And Unique	e Farmland										
B. Total Acres Statewide And Lo	cal Important Farmland										
C. Percentage Of Farmland in C	ounty Or Local Govt. Uni	t To Be Converted	b								
D. Percentage Of Farmland in Go	ovt. Jurisdiction With Same	e Or Higher Relativ	ve Value								
PART V (To be completed by NR value of Farmland to Be Service			Relative								
PART VI (To be completed by F	Federal Agency) Corrido	or N	Maximum								
Assessment Criteria (These cri	iteria are explained in 7	CFR 658.5(c))	Points								
1. Area in Nonurban Use			15								
2. Perimeter in Nonurban Use	e		10								
3. Percent Of Corridor Being	Farmed		20								
4. Protection Provided By Sta	ate And Local Governmen	t	20								
5. Size of Present Farm Unit	Compared To Average		10								
6. Creation Of Nonfarmable F	Farmland		25								
7. Availablility Of Farm Suppo	ort Services		5								
8. On-Farm Investments			20								
9. Effects Of Conversion On	Farm Support Services		25								
10. Compatibility With Existing	g Agricultural Use		10								
TOTAL CORRIDOR ASSESS	SMENT POINTS		160								
PART VII (To be completed by	Federal Agency)										
Relative Value Of Farmland (Fi	rom Part V)		100								
Total Corridor Assessment (From Part VI above or a local site assessment)			160								
TOTAL POINTS (Total of ab	ove 2 lines)		260								
1. Corridor Selected:	2. Total Acres of Farr Converted by Proj		B. Date Of S	Selection:	4. Was	A Local S	ite Assessment I	Jsed?			

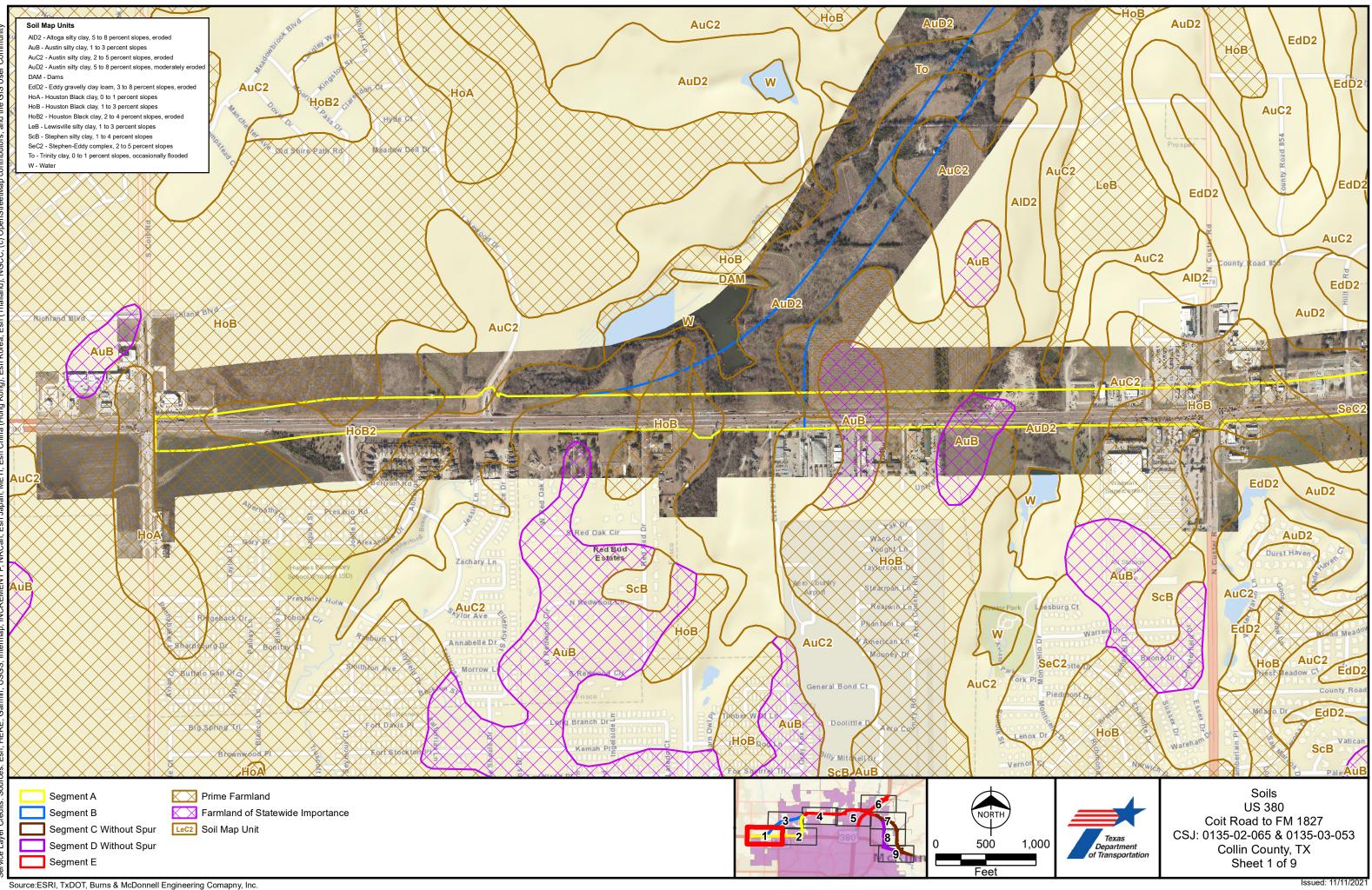
5. Reason For Selection:

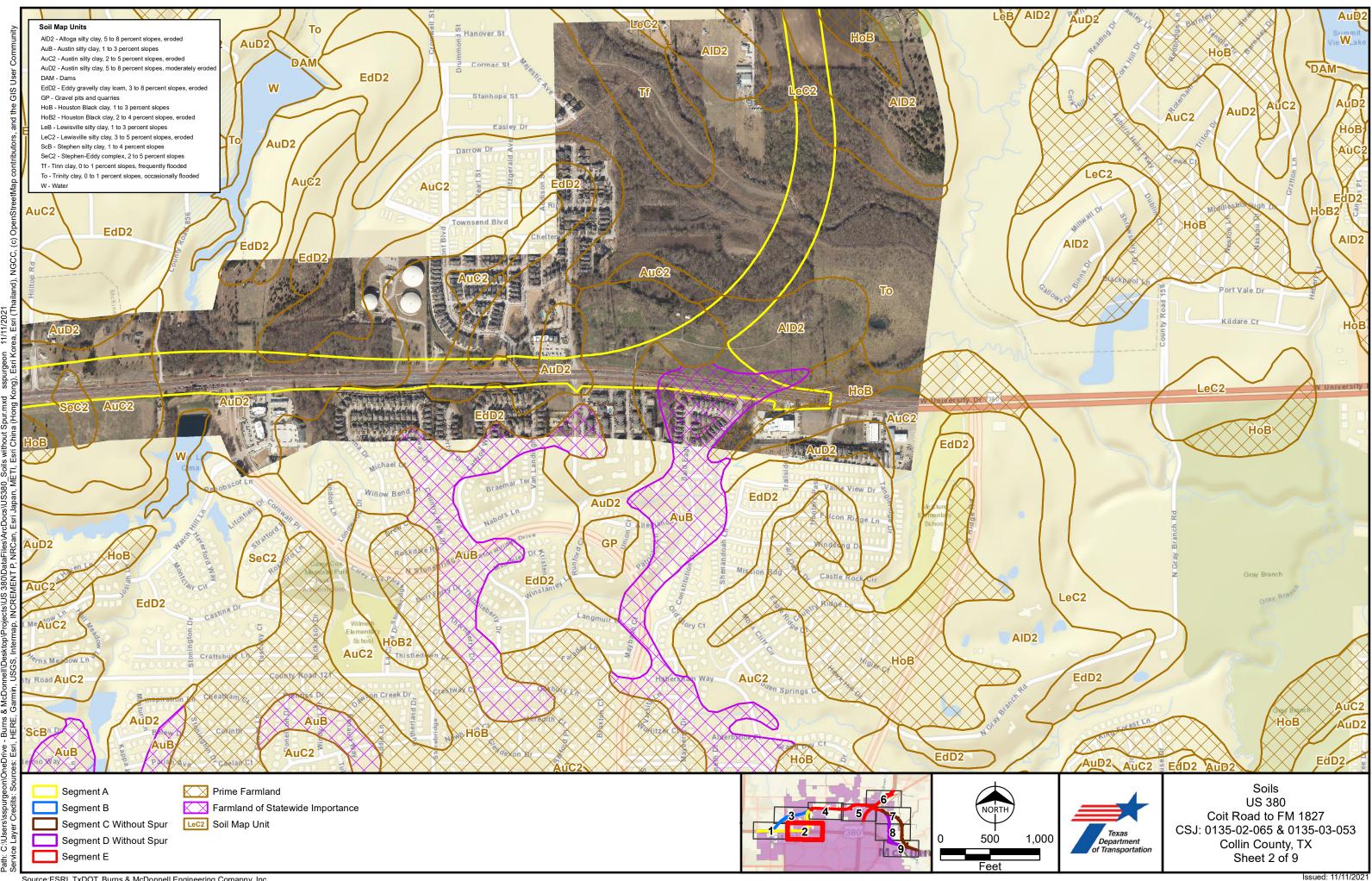
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Signature of Person Completing this Part:

DATE

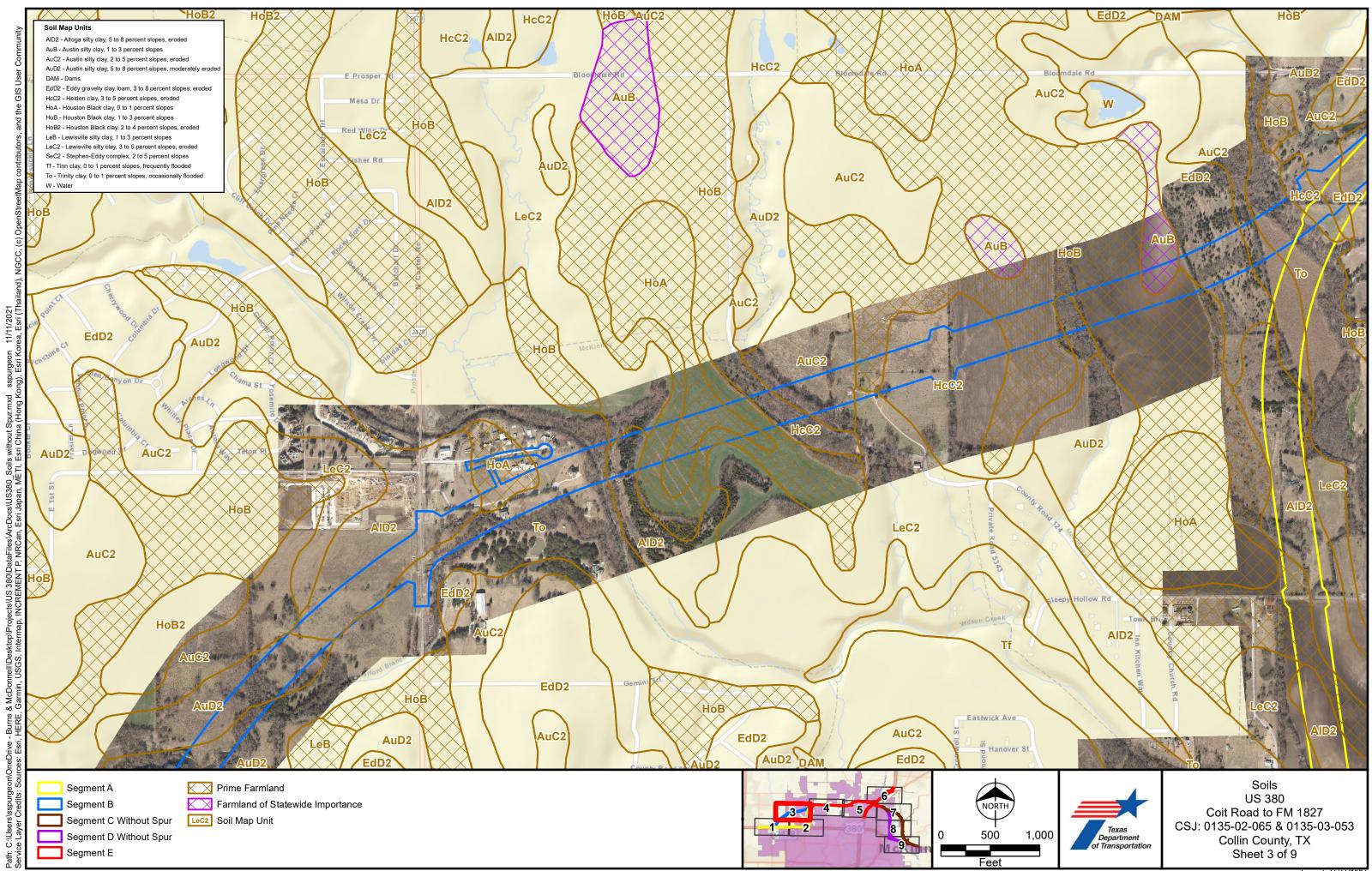
NOTE: Complete a form for each segment with more than one Alternate Corridor





Source:ESRI, TxDOT, Burns & McDonnell Engineering Comapny, Inc.

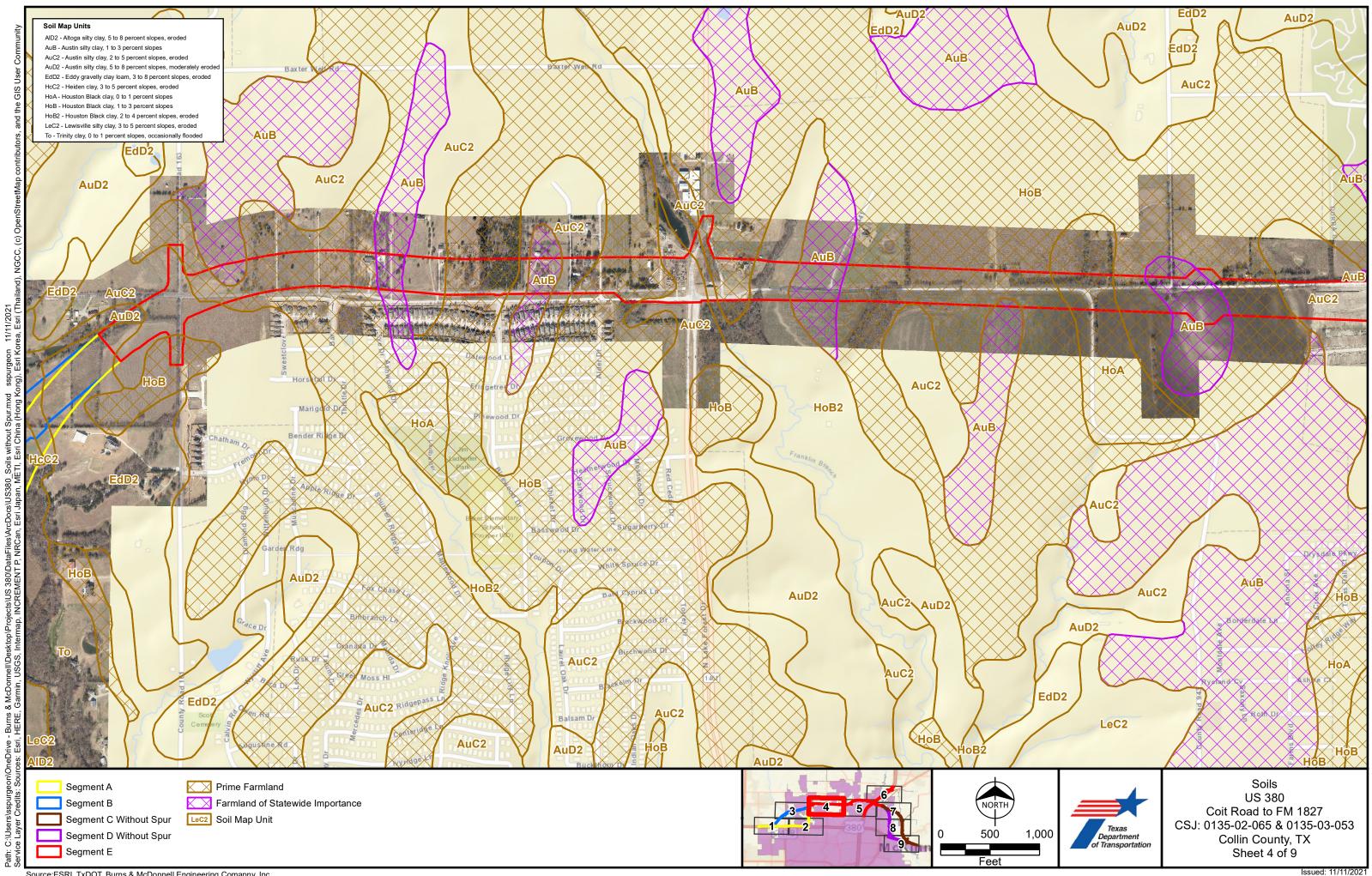
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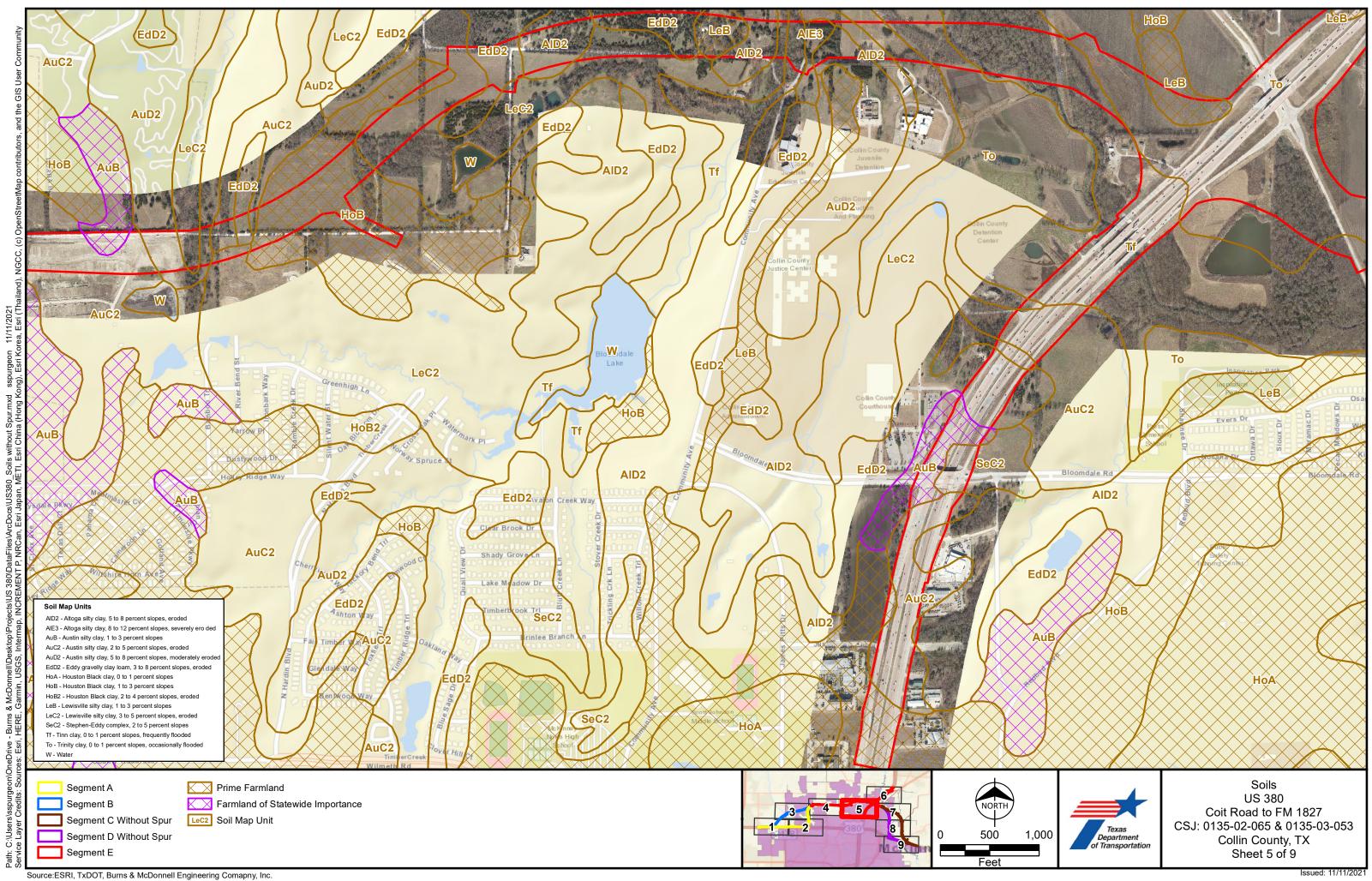
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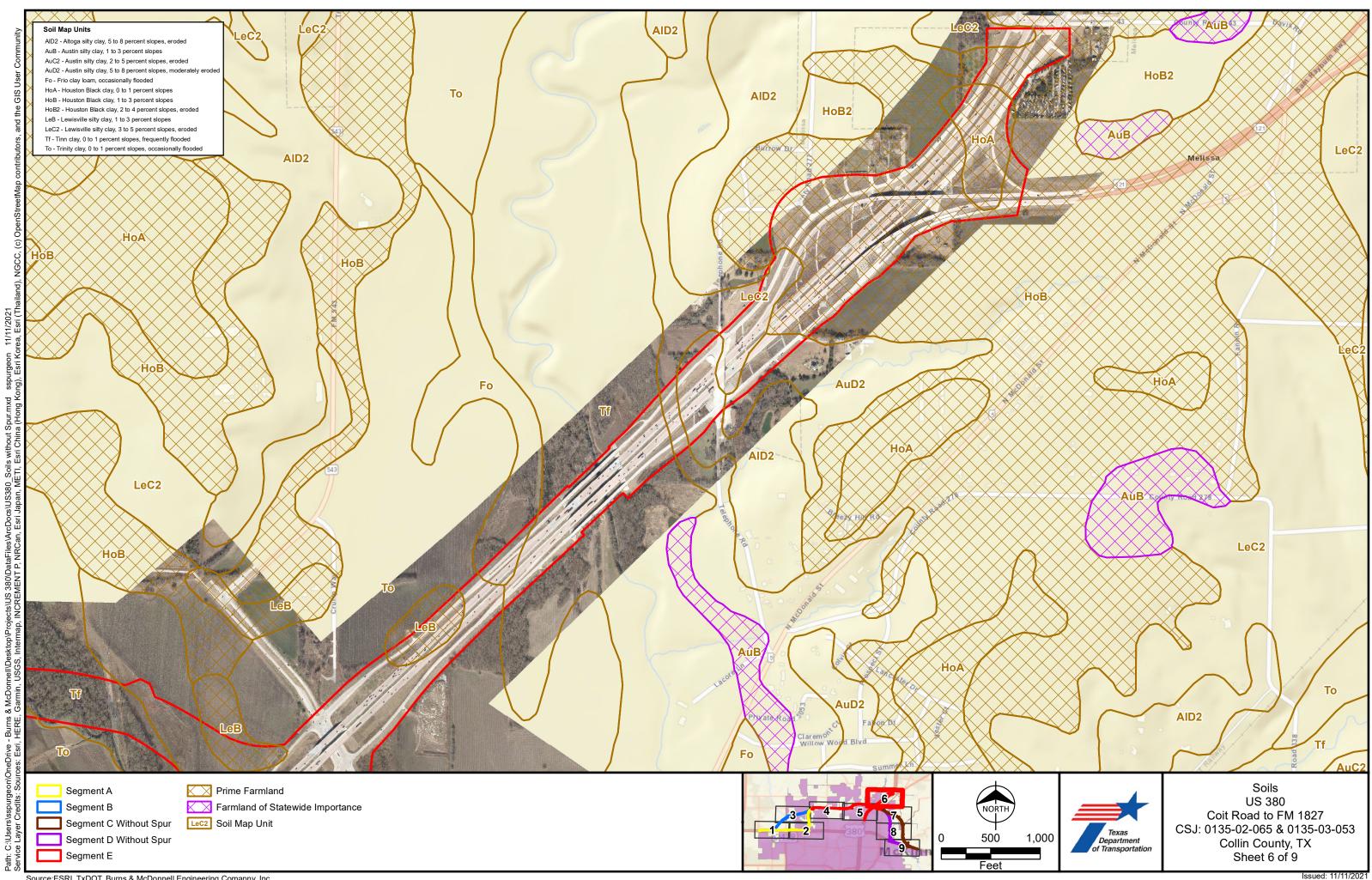
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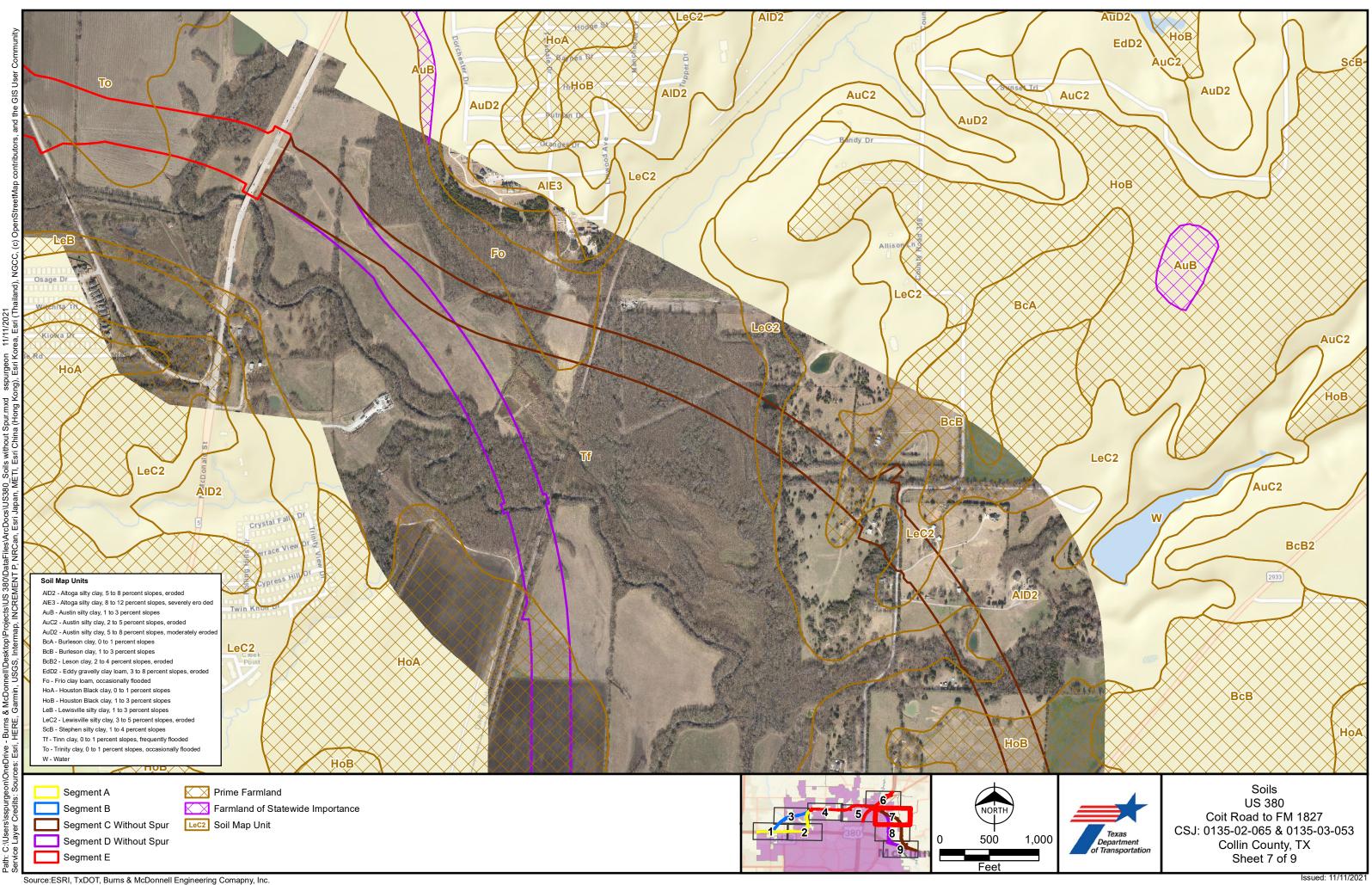
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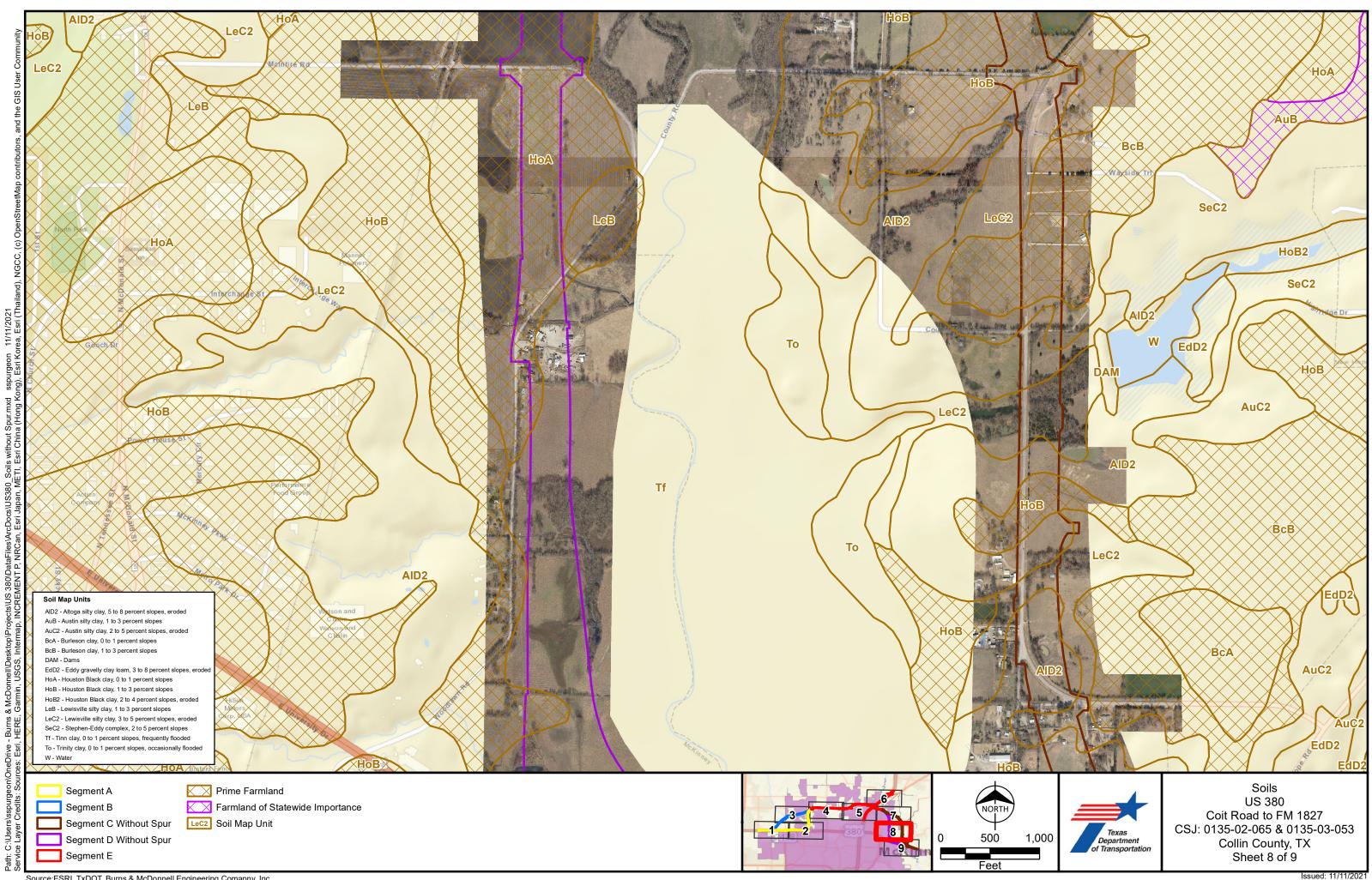
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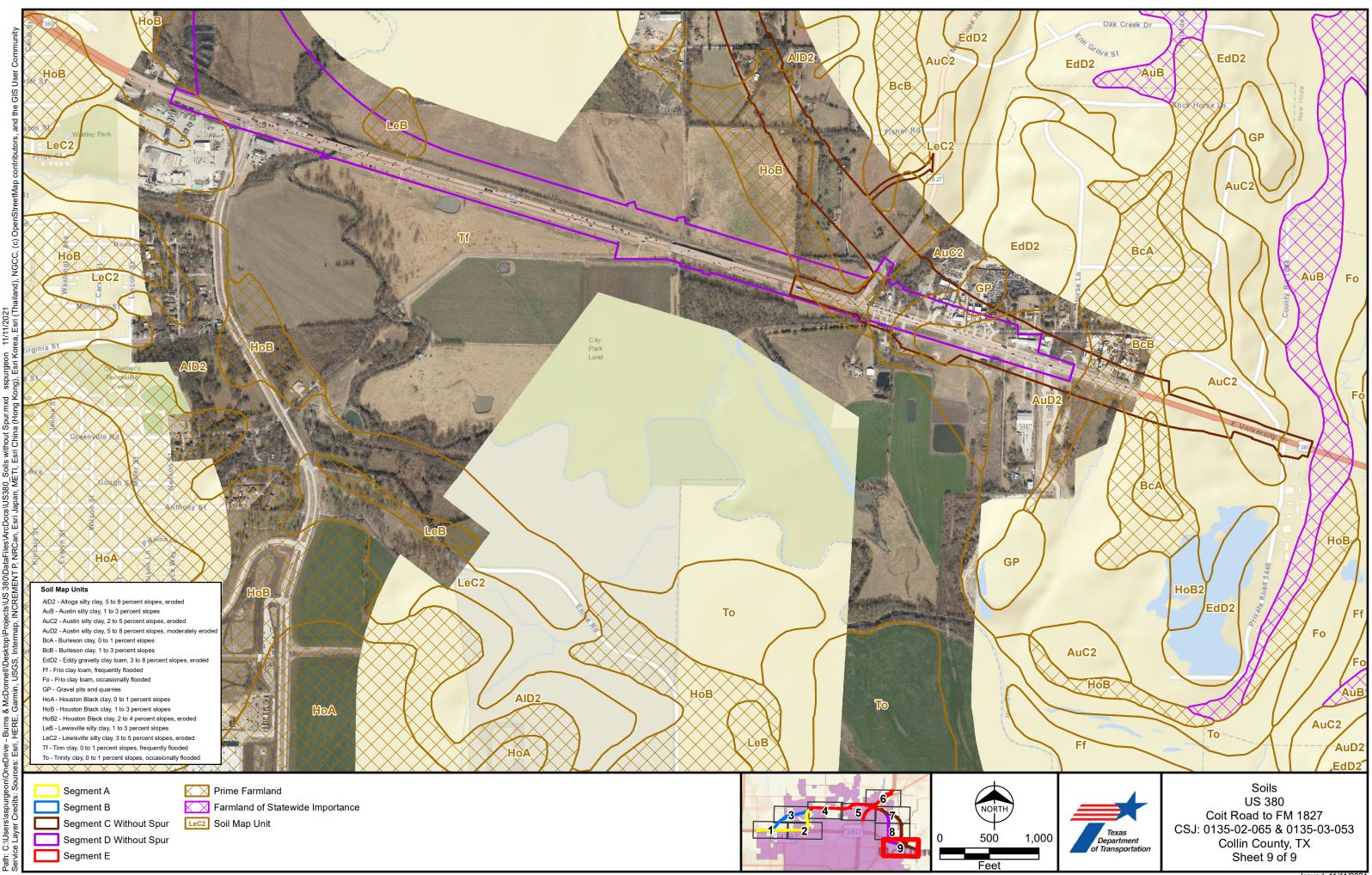


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Source:ESRI, TxDOT, Burns & McDonnell Engineering Comapny, Inc.

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CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
 More than 90 percent - 15 points
 90 to 20 percent - 14 to 1 point(s)
 Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
 More than 90 percent - 10 points
 90 to 20 percent - 9 to 1 point(s)
 Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points 90 to 20 percent - 19 to 1 point(s) Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points

Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.) As large or larger - 10 points

Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s) Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
 All required services are available - 5 points
 Some required services are available - 4 to 1 point(s)
 No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures? High amount of on-farm investment - 20 points Moderate amount of on-farm investment - 19 to 1 point(s) No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area? Substantial reduction in demand for support services if the site is converted - 25 points Some reduction in demand for support services if the site is converted - 1 to 24 point(s) No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use? Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s) Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

0135-02-065 etc. US 380 - Farmland Conversion (60% Schematic ROW)		Segment A	Segment B	Segment C W/Spur	Segment C W/O Spur	Segment D W/Spur	Segment D W/O Spur	Segment E	
Soil Symbol Unit Symbol	Soil Map Unit Name	Farmland Class	Acres	Acres	Acres	Acres	Acres	Acres	Acres
AID2	Altoga silty clay, 5 to 8 percent slopes, eroded	Not prime farmland	34.24	18.36	68.87	68.87	8.72	2.54	21.73
AIE3	Altoga silty clay, 8 to 12 percent slopes, severely ero ded	Not prime farmland	0.00	0.00	0.00	0.00	0.00	0.00	1.90
AuB	Austin silty clay, 1 to 3 percent slopes	Farmland of statewide importance	14.94	1.98	0.00	0.00	0.00	0.00	25.00
AuC2	Austin silty clay, 2 to 5 percent slopes, eroded	Not prime farmland	39.17	27.66	17.14	9.82	3.23	3.23	53.59
AuD2	Austin silty clay, 5 to 8 percent slopes, moderately eroded	Not prime farmland	53.95	55.14	23.27	23.19	11.68	9.47	12.28
BcA	Burleson clay, 0 to 1 percent slopes	All areas are prime farmland	0.00	0.00	0.22	0.22	0.00	0.00	0.00
BcB	Burleson clay, 1 to 3 percent slopes	All areas are prime farmland	0.00	0.00	24.38	24.38	0.00	0.00	0.00
EdD2	Eddy gravelly clay loam, 3 to 8 percent slopes, eroded	Not prime farmland	20.37	13.03	6.30	6.09	4.22	4.22	19.19
Fo	Frio clay loam, occasionally flooded	Not prime farmland	0.00	0.00	6.02	6.02	0.00	0.00	3.05
GP	Gravel pits and quarries	Not prime farmland	0.00	0.00	1.17	1.17	0.10	0.10	0.00
HcC2	Heiden clay, 3 to 5 percent slopes, eroded	Not prime farmland	1.87	18.24	0.00	0.00	0.00	0.00	0.00
HoA	Houston Black clay, 0 to 1 percent slopes	All areas are prime farmland	0.00	8.67	0.00	0.00	48.21	48.21	17.04
НоВ	Houston Black clay, 1 to 3 percent slopes	All areas are prime farmland	44.30	37.63	32.00	32.00	10.33	10.33	143.44
HoB2	Houston Black clay, 2 to 4 percent slopes, eroded	Not prime farmland	14.00	14.00	0.00	0.00	0.00	0.00	5.27
LeB	Lewisville silty clay, 1 to 3 percent slopes	All areas are prime farmland	0.00	0.00	0.00	0.00	3.36	3.36	14.45
LeC2	Lewisville silty clay, 3 to 5 percent slopes, eroded	Not prime farmland	5.15	0.57	33.80	33.80	0.00	0.00	38.66
SeC2	Stephen-Eddy complex, 2 to 5 percent slopes	Not prime farmland	1.79	0.00	0.00	0.00	0.00	0.00	3.33
Tf	Tinn clay, 0 to 1 percent slopes, frequently flooded	Not prime farmland	0.00	0.00	73.08	51.16	193.98	180.97	77.94
То	Trinity clay, 0 to 1 percent slopes, occasionally flooded	Not prime farmland	23.86	24.74	9.73	0.00	0.00	0.00	94.78
W	Water	Not prime farmland	0.00	1.89	0.00	0.00	0.00	0.00	0.00
		Total acres in Corridor	253.65	221.90	295.98	256.71	283.83	262.44	531.66
		Total Acres w/in McKinney Urbanized Area	253.65	221.90	227.28	189.39	274.92	253.62	414.75
		Total Acres of Prime Farmland	44.30	46.30	56.59	56.59	61.90	61.90	174.93
		Total Acres of Statewide Important Farmland	14.94	1.98	0.00	0.00	0.00	0.00	25.00

	Purple Alternative A+E+D	Blue Alternative A+E+C	Brown Alternative B+E+C	Gold Alternative B+E+D
prime farmland w/Spur	281.13 ac	275.82 ac	277.82 ac	283.13 ac
prime farmland w/o Spur	281.13 ac	275.82 ac	277.82 ac	283.13 ac
statewide important w/Spur	39.94 ac	39.94 ac	26.98 ac	26.98 ac
statewide important w/o Spur	39.94 ac	39.94 ac	26.98 ac	26.98 ac