Archeological Background Study

Project Name: Proposed Improvements to SH 5 from South of FM 1378 to South of Melissa Road

Highway: State Highway 5

District(s): Dallas District

County(s): Collin County

CSJ Number(s): 0047-05-054, 0047-09-034, 0364-04-049, 0047-04-029, 0047-04-030 and 0549-03-031

Author and Affiliation: Adam K. Parker and Katherine Seikel, AmaTerra Environmental

Report Completion Date: 11/21/2019

Table of Contents

Introduction

This project may require compliance both with Section 106 of the National Historic Preservation Act and with the Texas Antiquities Code. The purpose of this document is to identify risks for archeological historic properties within the project's area of potential effects (APE). The document also considers whether any cemeteries may extend into the APE, requiring compliance with the state Health and Safety Code.

The following sections list the results of review of readily-available information for the APE's setting and adjacent areas. The report also evaluates adjacent areas (a buffer zone; see Recommendations Section for definition of the buffer zone). The buffer zone is evaluated in case a subsequent design change expands the APE. This report concludes with separate recommendations regarding project effects and the need for additional work within shallow deposits less than three feet in depth and within Holocene-age deposits of three feet or greater depth, if such deep deposits are present.

This background study is (check one):

☒ the initial study for this project

☐ a continuation of previous investigations due to design changes or other reasons

Identify previous investigation(s):

If this box is checked, then answer the questions below only for the area that is affected by the design change.

Area of Potential Effects

The APE is defined to encompass the limits of the existing right of way; proposed, new project right of way; permanent and temporary easements; and any project-specific locations and utility relocations designated by TxDOT. Note: the APE encompasses the entirety of the project area, regardless of the extent of prior archeological investigations, the particular locations subject to proposed field investigations, or the portion of a project added through a design change. If impacts are not known, worst-case impacts are assumed in defining the APE.

See Attachment 1 for a map of the APE, which is based on the project information attached as Attachment 2.

Information Source Checklist

(check each source of information that was consulted by the professional archeologist in preparing this background study—the number and type of sources are at the professional archeologist's discretion)

☒ Labelled USGS 7.5' topographic quadrangle project location map (or equivalent if a 7.5' quadrangle is unavailable) is attached and includes an inset map that depicts the county within Texas where the project occurs.

☐ Predictive Archeological Liability Map (PALM) is attached if available *(consult TxDOT's Environmental Compliance Toolkit).*

☐ Geologic Atlas of Texas map is attached *(PALM may be substituted for the GAT map, if it's available).*

☐ Soils map is attached *(PALM may be substituted for the soils map, if it's available)*.

☐ FEMA flood hazard map is attached.

☐ National Wetlands Inventory map is attached

☒ Texas Archeological Sites Atlas map is attached, depicting any sites within one kilometer of the APE or additional APE.

☒ Historic topographic map is attached.

☐ Historic soils map is attached.

☒ Historic road map is attached.

☐ As-built plans for roadway are attached.

☒ Other map of historic information is attached.

Specify Map: Historic Aerial Photographs

☒ Aerial images are attached.

☐ Project area photographs are attached.

Analysis of Project Setting

- **Previously-Identified Archeological Sites**

☐ No archeological sites have been identified within the APE or within 150 feet of the APE

☒ Archeological sites have been identified within the APE or within 150 feet of the APE

Nine archeological sites were identified within a kilometer of the APE. One of these sites, 41COL181, overlaps the project area. Site 41COL181 was recorded in 2006 and is a historic farmstead with an existing unoccupied house structure, outbuildings, and artifact scatters in the yard. The structure was identified as the Wilmeth-McKinney farmstead. The original house structure was demolished in the 1940s; however, the outbuilding and root cellar are original from the 1840s construction. Data for the location of the associated slave quarters at the farmstead are not available. The site overlaps with the APE immediately south of SH 5's intersection with Wilmeth Road. See Attachment 3.

- **Previously–Identified Cemeteries**

☐ No known cemetery sites occur within the APE or within 150 feet of the APE.

☒ Cemeteries occur within the APE or within 150 feet of the APE.

Two Cemeteries, the Ross Cemetery and Pecan Grove Memorial Park, are immediately adjacent to the project area. See Attachment 3.

- **Holocene-Age Deposits**

☐ No Holocene-age deposits occur within or adjacent to the APE.

☒ Holocene-age deposits occur within or adjacent to the APE.

Holocene alluvium deposits are found located along Wilson Creek, the East Fork of the Trinity River, and Clemons Creek.

- **Historically-Reliable Water Sources**

☐ No historically-reliable water sources occur within 500 feet of the APE.

☒ Historically-reliable water sources occur within 500 feet of the APE, or this question can't be answered confidently.

Both the East Fork of the Trinity River and Wilson Creek are depicted in historic aerial photographs.

- **Wetlands and Frequently-Flooded Areas**

☐ The APE and adjacent areas contain wetlands or frequently-flooded areas.

☒ The APE and adjacent areas do not contain wetlands or frequently-flooded areas, or this question cannot be answered confidently.

- **Preferred Landforms for Occupation**

☐ The Atlas map or other information shows that the APE does not contain landforms on which human settlement or occupation typically occurred.

☒ The Atlas map or other information shows that the APE does contain landforms on which human settlement or occupation typically occurred, or this issue was not resolved with the available information.

The USGS topographic maps and aerials photographs demonstrate areas of high potential for landforms where human settlement typically occurred. See Attachments 1 and 6-8.

- **Prior Disturbances**

Settings that are favorable for human occupation have been subject to the following previous disturbances *(check all that apply).*

☒ Previous road construction and maintenance.

☒ Installations of utilities.

☒ Modern land use practices like plowing, grade modifications, brush clearing, and tree removal,

☒ Industrial, commercial, urban and/or suburban development

☐ Erosion and scouring by natural causes.

☐ Other (identify)

The project area has largely developed throughout the twentieth century as the greater Dallas metropolitan area has expanded into Collin County. McKinney remained a center for processing agricultural products into the 1960s and other light industries entered the city (Minor 2010a). The southern portion of APE is marked by both commercial and residential

development. North of FM 543, development remains residential in nature, but it is less dense than it is elsewhere along the APE.

☐ NO PRIOR DISTURBANCES OR UNKNOWN (do not check any foregoing disturbances)

- **Previous Archeological Surveys**

☐ The majority of the settings with high potential for archeological sites within or adjacent to the APE have been previously surveyed.

☒ The majority of the settings with high potential for archeological sites within or adjacent to the APE have not been previously surveyed.

Conclusions

- **Results of Previous Investigations**

☐ Previous surveys have covered a sufficient proportion of the APE or adjacent areas to conclude that the APE and adjacent areas are unlikely to contain archeological sites or cemeteries.

☒ Previous surveys have not covered a sufficient proportion of the APE or adjacent areas to draw inferences regarding the presence of archeological sites and cemeteries, or previous surveys show that archeological sites and/or cemeteries are present within the APE.

- **APE Integrity (Prehistoric Sites)**

The APE contains no deposits with sufficient integrity that prehistoric archeological sites would have the potential to address important questions. Any such sites would lack integrity of *(check all that apply):*

☐ Location

☐ Design

☐ Materials

☐ Association

☐ Other (*identify*)

☒ THE APE HAS THE POTENTIAL TO PRESERVE SITES WITH SUFFICIENT INTEGRITY TO QUALIFY THOSE SITES FOR INCLUSION IN THE NATIONAL REGISTER OF HISTORIC PLACES *(if true, do not check any of the forgoing aspects of integrity)*

- **APE Integrity (Historic-Age Sites)**

The APE contains no deposits with sufficient integrity that historic-age archeological sites would have the potential to address important questions. Any such sites would lack integrity of *(check all that apply)*:

☐ Location

☐ Design

☐ Materials

☐ Association

☐ Other (*identify*)

☒ THE APE HAS THE POTENTIAL TO PRESERVE SITES WITH SUFFICIENT INTEGRITY TO QUALIFY THOSE SITES FOR INCLUSION IN THE NATIONAL REGISTER OF HISTORIC PLACES *(if true, do not check any of the forgoing aspects of integrity)*

- **Results of Historic Map Research (Historic Age Sites)**

☐ Historic map research shows that historic-era archeological deposits are not likely to occur within or adjacent to the APE

☒ Historic map research shows that historic-era archeological deposits could occur within or adjacent to the APE; this research was inconclusive; or this research was not completed because it was not necessary to reach justifiable conclusions.

- **Results of Map Research (Cemeteries)**

☐ Map research shows that cemeteries are not likely to occur within or adjacent to the APE.

☒ Map research shows that cemeteries could occur within or adjacent to the APE, or this research was inconclusive.

- **Results of Landform Study**

☐ The APE and adjacent areas occur in a setting that was not conducive to human occupation and activity

☒ The APE and adjacent areas occur in a setting that was conducive to human occupation and activity; research on this issue was inconclusive; or this research was not completed because it was not necessary to reach justifiable conclusions.

Recommendations

- **Shallow Deposits**

Evaluate the potential for shallow deposits (Holocene-age deposits less than three-feet in depth) within the APE to contain archeological historic properties and cemeteries. Make appropriate recommendations regarding the need for further work, including the need for shovel test pits, auger probes, or other methods for evaluating shallow deposits.

Numerous cultural resources, including NRHP districts and properties, have been identified within a kilometer of the APE, several of which are immediately adjacent to or overlap with the proposed project footprint. However, very little of the project footprint has been previously surveyed. Based on the presence of these cultural resources, it is recommended that intensive archeological survey including shovel testing be conducted throughout the APE.

- **Deep Deposits**

Evaluation of deep deposits (Holocene-age deposits of three feet or greater depth) may or may not be necessary, depending on the nature of the sediments within the APE and the depth of proposed impacts. If Holocene-age deposits extend to three feet or more within the APE and would be impacted by the project, make appropriate recommendations regarding the need for further work. If no deep, Holocene-age deposits occur within the APE note that they are absent and indicate that no additional work in needed. If the deep Holocene deposits are present but the project either would not affect them or they have been too extensively disturbed to hold intact archeological deposits, provide an appropriate justification that no additional work is needed.

The potential for intact prehistoric cultural deposits has the greatest potential on the terraces adjacent to the East Fork of the Trinity River and Wilson Creek, particularly in areas which have not been impacted by residential and commercial development. For this reason, backhoe trenching should be considered adjacent to the East Fork of the Trinity River, Wilson Creek and their associated drainages in locations where shovel testing uncovers the potential for deeply buried cultural deposits.

- **Recommendations Summary (select only one check box)**

☐ No further study needed ☒ Survey of entire APE ☐ Variable, see attached figure

- **Results Valid Within**

The purpose of considering adjacent areas is to define, when possible, a buffer zone around the APE to which findings of no effect and recommendations for no further work can be extended. No

additional investigation should be necessary if a subsequent design change expands the APE into the buffer zone. In some cases, however, no buffer zone may be reasonably defined for the project or portions of the project as expansion of the APE may warrant survey. In such cases, check the middle box and indicate that the results are valid within zero feet of the APE.

☐ 50 feet of APE ☒ 0 feet of APE ☐ Variable, see attached figure

- **The Definition and Evaluation of this Horizontal Buffer Zone is Based on One or More of the Following Considerations**

☐ The integrity of the areas within and adjacent to the setting is affected by prior development.

☐ Previous investigations show that archeological materials are unlikely to exist in this area.

☒ Adjacent areas have potential to preserve archeological sites with good integrity.

☐ Other (specify)

Findings of no effect to archeological historic properties and/or State Antiquities Landmarks and recommendations for no further work apply to all areas within the horizontal buffer zone, as specified in the previous section. Any design change within this study area would not require further action or review beyond those actions recommended in this study. Design changes that either extend beyond the buffer zone or result in potential impacts deeper than the impacts considered in this report would require additional review. Note that no buffer zone may be defined for some projects, based on local conditions.

References Cited

Bureau of Economic Geology
1991 Geologic Atlas of Texas, Sherman Sheet. Electronic document, http://www.twdb.state.tx.us/groundwater/aquifer/gat/, accessed June 2019.

Omernik, G.E., and J. M. Griffith
2009 Ecoregions of Texas (EPA) – The Encyclopedia of Earth. Electronic document, http://www.eoearth.org/view/article/152207/, accessed June 2019.

Minor, D.
2010a McKinney, Texas - The Handbook of Texas Online. Electronic document, https://tshaonline.org/handbook, accessed June 2019.

2010b Melissa, Texas - The Handbook of Texas Online. Electronic document, https://tshaonline.org/handbook, accessed June 2019.

2016a Collin County - The Handbook of Texas Online. Electronic document, https://tshaonline.org/handbook, accessed June 2019.

Stahl, C., and R. McElvaney
2012 Trees of Texas: An Easy Guide to Leaf Identification. Texas A&M University Press, College Station.

Texas Historical Commission
2019 Texas Archeological Sites Atlas Online. Electronic document, http://nueces.thc.state.tx.us/, accessed June 2019.

United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS)
2019 Collin County, Texas – Web Soil Survey. Electronic document, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.asp, accessed on June 2019.

Attachments -

Attachment 1: Project location maps.

Attachment 2: Project Description.

Attachment 3: THC Atlas Maps.

Attachment 4: Detailed Atlas maps showing NRHP Districts and Properties within a kilometer of the APE.

Attachment 5: Project location depicted on a 1939 Collin County Highway map.

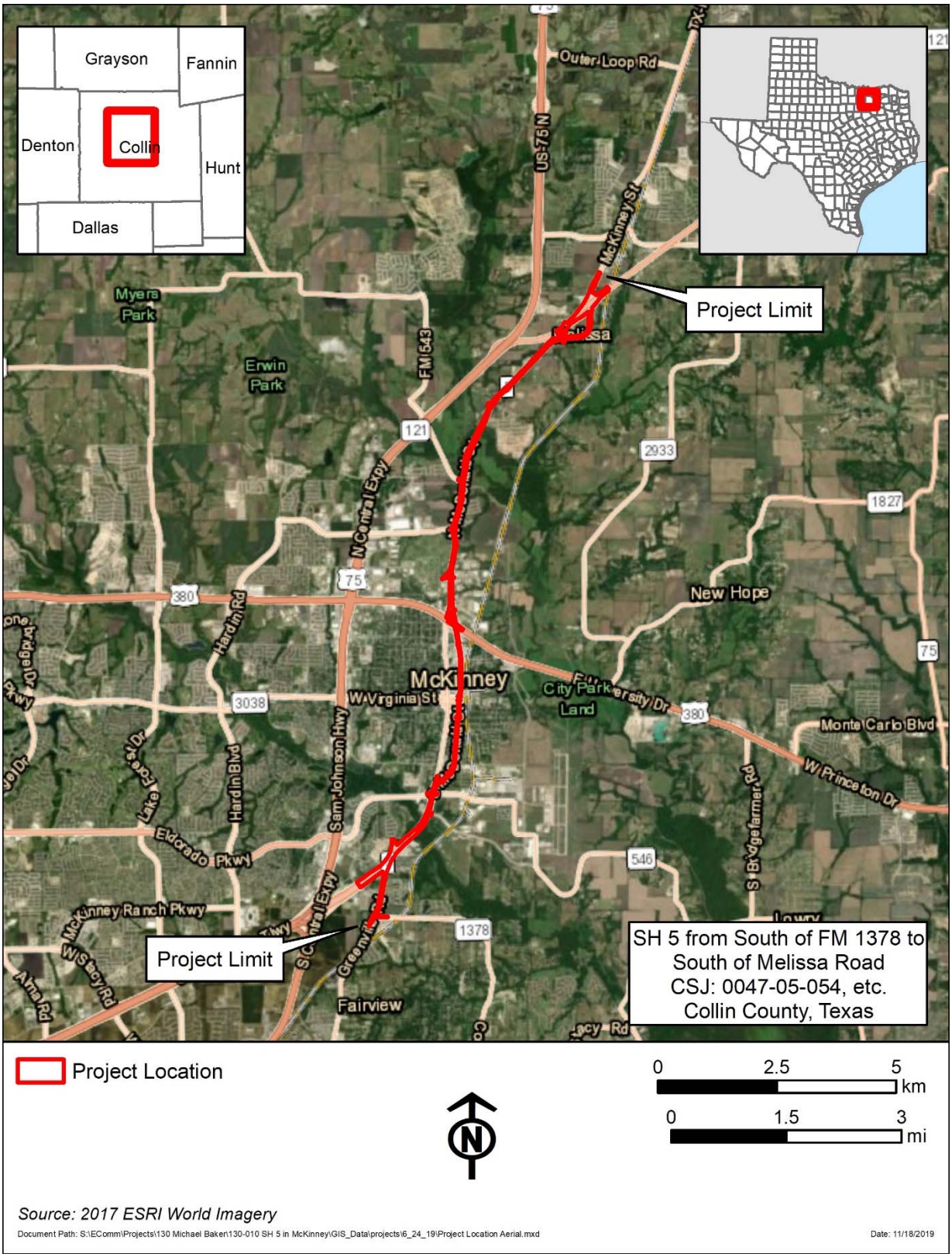
Attachment 6: Project location depicted on a 1952 aerial photograph.

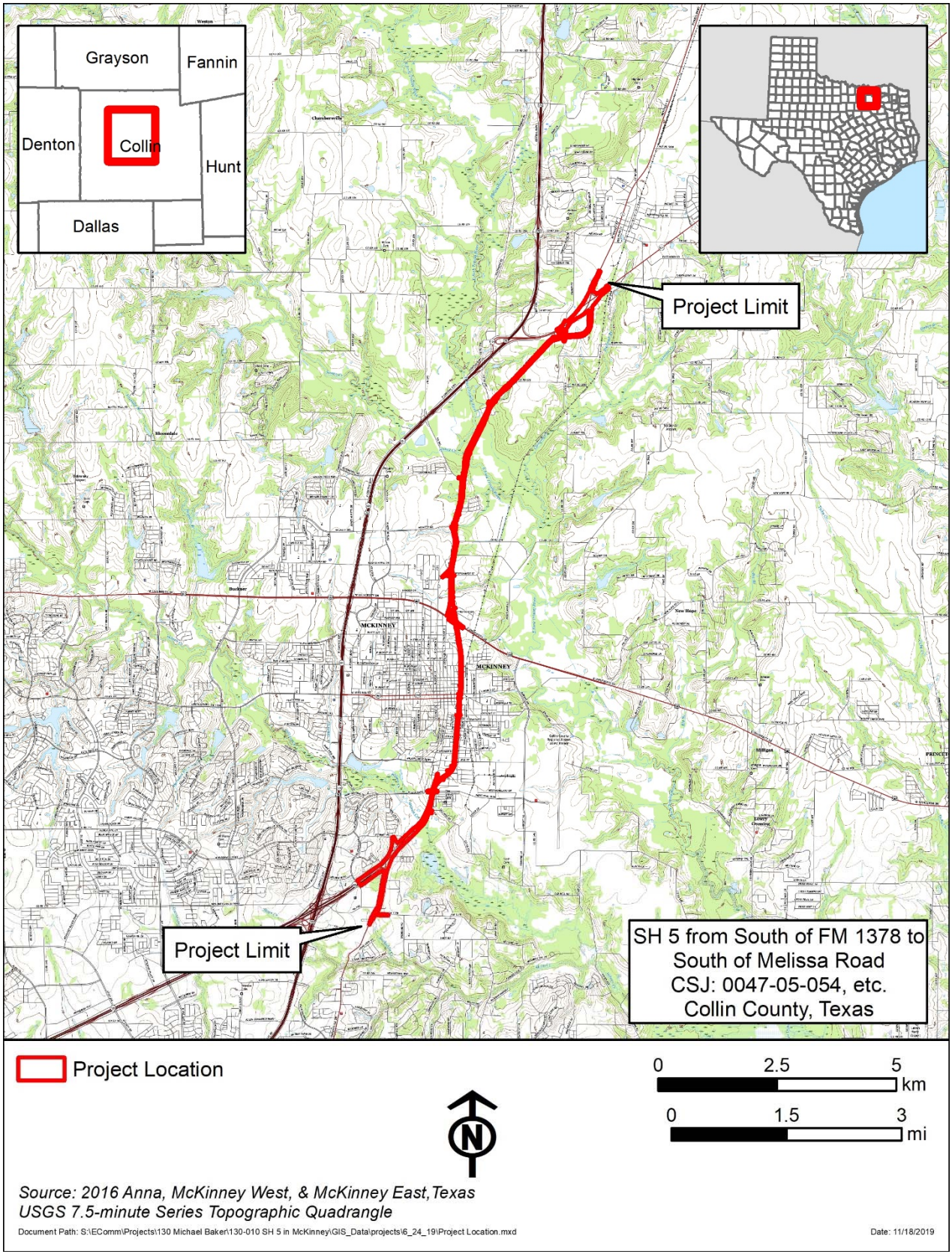
Attachment 7: Project location depicted on a 1961-1962 USGS topographic map.

Attachment 8: Project location depicted on a 1968 aerial photograph.

Attachment 9: Schematics.

Attachment 1: Project location maps.




Grayson
Fannin
Denton
Collin
Hunt
Dallas
Project Limit
Project Limit
SH 5 from South of FM 1378 to
South of Melissa Road
CSJ: 0047-05-054, etc.
Collin County, Texas
Project Location
0
2.5
5
km
0
1.5
3
mi
N
Source: 2016 Anna, McKinney West, & McKinney East,Texas
USGS 7.5-minute Series Topographic Quadrangle
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\Project Location.mxd
Date: 11/18/2019

Attachment 2: Project Description.

Please see ECOS screen capture in the following pages.

Back To List

- WPD Section I - Project Definition
- WPD Section II - Tool
- WPD Section III - Project Work Plan
- WPD Section IV - Findings

Archived WPD I | Print this Page

Project Definition

Project Name: 0047-05-054, etc. SH 5 Roadway Widening

CSJ: 0047 - 05 - 054

Anticipated Environmental Classification: EA

No — Is this an FHWA project that normally requires an EIS per 23 CFR 771.115(a)?

Project Association(s)

Auto Associate CSJ from DCIS

Manually Associate CSJ:

Add

CSJ	DCIS Funding	DCIS Number	Env Classification	DCIS Classification	Main or Associate	Doc Tracked In	Actions
CSJ:036404049	Federal,State	NH ( )	EA	INC	Associate	Main	
CSJ:004709034	Federal,State	NH ( )	EA	WNF	Associate	Main	
CSJ:004704029	Federal,State	NH ( )	EA	WNF	Associate	Main	
CSJ:004704030	Federal,State	NH ( )	EA	WNF	Associate	Main	
CSJ:054903031	Federal,State	NH ( )	EA	INC	Associate	Main	

DCIS Project Funding and Location

Funding

DCIS Funding Type:

☑ Federal ☑ Stat ☐ Local ☐ Private

Location

DCIS Project Number: NH ( )

Highway: SH 5

District: DALLAS

County: COLLIN

Project Limit -- From: SS 399

Project Limit -- To: SOUTH OF CR 275

Begin Latitude: + 33 . 180474

Begin Longitude: - 96 . 618586

End Latitude: + 33 . 251258

End Longitude: - 96 . 604853

DCIS & P6 Letting Dates

DCIS District: 12/22

DCIS Approved:

DCIS Actual:

P6 Ready To Let:

P6 Proposed Letting:

DCIS Project Description

Type of Work: Spell

Layman's Description:

CONSTRUCT NEW ROADWAY LANES

DCIS Project Classification: WNF - WIDEN NON-FREEWAY

Design Standard: 4R - New Location and Reconstruction

Roadway Functional Classification: 3 - Rural principal arterial

Jurisdiction

No — Does the project cross a state boundary, or require a new Presidential Permit or modification of an existing Presidential Permit?

Who is the lead agency responsible for the approval of the entire project?

☑ FHWA - Assigned to TxDOT ☐ TxDOT - No Federal Funding ☐ FHWA - Not Assigned to TxDOT

TXDOT — Who is the project sponsor as defined by 43 TAC 2.7?

No — Is a local government's or a private developer's own staff or consultant preparing the CE documentation, EA or EIS?

Yes — Does the project require any federal permit, license, or approval?

☑ USACE ☐ IBWC ☐ USCG ☐ NPS ☐ IAJR ☐ Other Stream crossings at Wilson Creek & East For

No — Does the project occur, in part or in total, on federal or tribal lands?

Environmental Clearance Project Description

Project Area

Typical Depth of Impacts:	4	(Feet)	Maximum Depth of Impacts:	30	(Feet)
New ROW Required:	50.713	(Acres)			
New Perm. Easement Required:	0	(Acres)	New Temp. Easement Required:	0	(Acres)

Project Description

Describe Limits of All Activities: Spell

The Project will extend for a total of approximately 9.7 miles along SH 5, from south of FM 1378 (Country Club Road) to south of Melissa Road located in unincorporated Collin County, Texas and the Cities of McKinney, Melissa, and Fairview. The project extends approximately 2,200 feet southwest along Spur 399 at the intersection of Spur 399 and SH 5 at the southern limits, extends approximately 1,600 feet north on SH 121, and includes approximately 4,000 feet of new location roadway at the SH 5/SH 121 interchange.

The project extends down cross streets throughout the project including approximately 850 feet to the east along County Club Road (FM 1378), approximately 400 feet east and west along El Dorado Parkway/Industrial Boulevard, approximately 1,300 feet north on S Tennessee Street, 25-100 feet east and west of SH 5 along all cross streets in downtown McKinney from Dorsey Street to Erwin Avenue, 600 feet east and west along E University Drive, and 900 feet south on Church Street. The total project footprint (and Area of Potential Effects for archeology) is approximately 289.60 acres, consisting of 238.89 acres of existing ROW, and 50.71 acres of proposed new ROW.

Approximately 13 acres of the total proposed ROW is new location for the redesigned interchange at SH 5 and SH 121. The remaining proposed ROW occurs east and west of SH 5 between Interchange Street and the SH 5/SH 121 interchange varying between 0 and 100 feet to allow for widening of SH 5, at the southern interchange with Spur 399, and small corner clips at cross streets throughout the project limits.

Describe Project Setting: Spell

The project is located in rural and urban areas of Collin County and the City of McKinney's downtown core. The project limits are surrounded by the City of Fairview to the south, Cities of Anna and Melissa to the north, US 75 to the west and Collin County Regional Airport and Union Pacific Rail Road to the east. Medical City McKinney, located near the southeast corner of Spur 399 and US 75, may be considered a major traffic generator. Other traffic generators surrounding the project area include Collin County Community College, Collin County Regional Airport, Collin County Courthouse and downtown commercial district, North Texas Job Corps, and other county offices in downtown McKinney.

The vegetation within and immediately adjacent to the project limits is classified as Urban, Agricultural, Disturbed Prairie, Riparian, Tallgrass Prairie, Grassland, and Open Water. The adjacent land use consists of a mix of agricultural, commercial and industrial development, as well as multi-family and single-family residential development. The project crosses 9 streams. Northern and southern portions of the project area surrounding Wilson Creek, East Fork Trinity River, and associated unnamed tributaries are within the 100-year floodplain.

The Pecan Grove Cemetery and Chestnut Square Historic Village are adjacent to the project area and the project is located within the McKinney Commercial Historic District. The Oak Hollow Golf Course is located south of Wilmeth Road on the west side of the project area and the municipal North Park is located south of the Oak Hollow Golf Course.

Describe Existing Facility:

The existing facility consists of a 2-lane rural roadway from Country Club Road to Spur 399, a 4-lane divided rural roadway with depressed median from Spur 399 to Old Mill Road, a 4-lane divided roadway with curbed median and 4-lane with a continuous two-way left turn lane urban segment from Old Mill Road to Power House Street, and a 2-lane rural roadway from Power House Street to SH 121 (Sam Rayburn Highway). Sidewalks along SH 5 are fragmented and there are no marked bike facilities or pedestrian trails existing along the corridor. The existing width varies by segment, but is between 100 and 250 feet. All existing intersections are at grade.

Describe Proposed Facility:

The proposed improvements would include of the reconstruction and widening of SH 5 within the project limits. From Country Club Road to Spur 399, the existing 2-lane rural roadway will be reconstructed to a 4-lane (6-lan ultimate) divided urban roadway with raised curbed and a variable-width median. From Spur 399 to Industrial Boulevard (FM 546), the existing 4-lane divided rural roadway with depressed median will be reconstructed to a 6-lane divided urban roadway with a 17-foot curbed median. From Industrial Boulevard (FM 546) to south of N Tennessee St, the existing 4-lane divided with curbed median and 4-lane divided with a continuous left turn lane urban segment will be reconstructed to a 4-lane divided urban roadway with 17-foot curbed median. From south of N Tennessee St south of Melissa Road, the existing 2-lane rural roadway will be reconstructed to a 4-lane divided urban roadway with curbed, 42-foot median. A wider median width from Power House Street to SH 121 is proposed to accommodate an ultimate 6-lane divided roadway.

The proposed project includes reconfiguration of the SH 399/SH 5 interchange near the southern project limits to include a flyover bridge from SS 399 South to SH 5 South. The project also includes realignment of SH 5 at the northern project limits and reconfiguration of the SH 121/SH 5 interchange to a diamond configuration with SH 121 going over SH 5.

Side streets within the project limits would be reconstructed to tie into the improved SH 5 generally within the existing right-of-way (ROW), but in cases where the side streets do not meet design standards additional ROW may be required.

Yes Would the project add capacity?

Transportation Planning

Yes Is the project within an MPO's boundaries?

No Does the project meet the definition for a grouped category for planning and programming purposes?

The project is located in Non-Attainment/Maintenance area.

This status applies to:

- ☐ CO - Carbon Monoxide
- ☑ O3 - Ozone
- ☐ NO2 - Nitrogen Dioxide
- ☐ PM10 - Particulate
- ☐ PM2.5 - Particulate

Environmental Clearance Information

Environmental Clearance Date:

Environmental LOA Date:

Closed Date:

Archived Date:

Approved Environmental Classification:

Project Contacts

Created By: Julia A Ragsdale

Date Created: 12/07/2017

Project Sponsor: ◉ TXDOT (Or) ○ Local Government

Sponsor Point Of Contact: Daniel Salazar - Environmental Specialist

ENV Core Team Member: Michelle Lueck - Project Manager

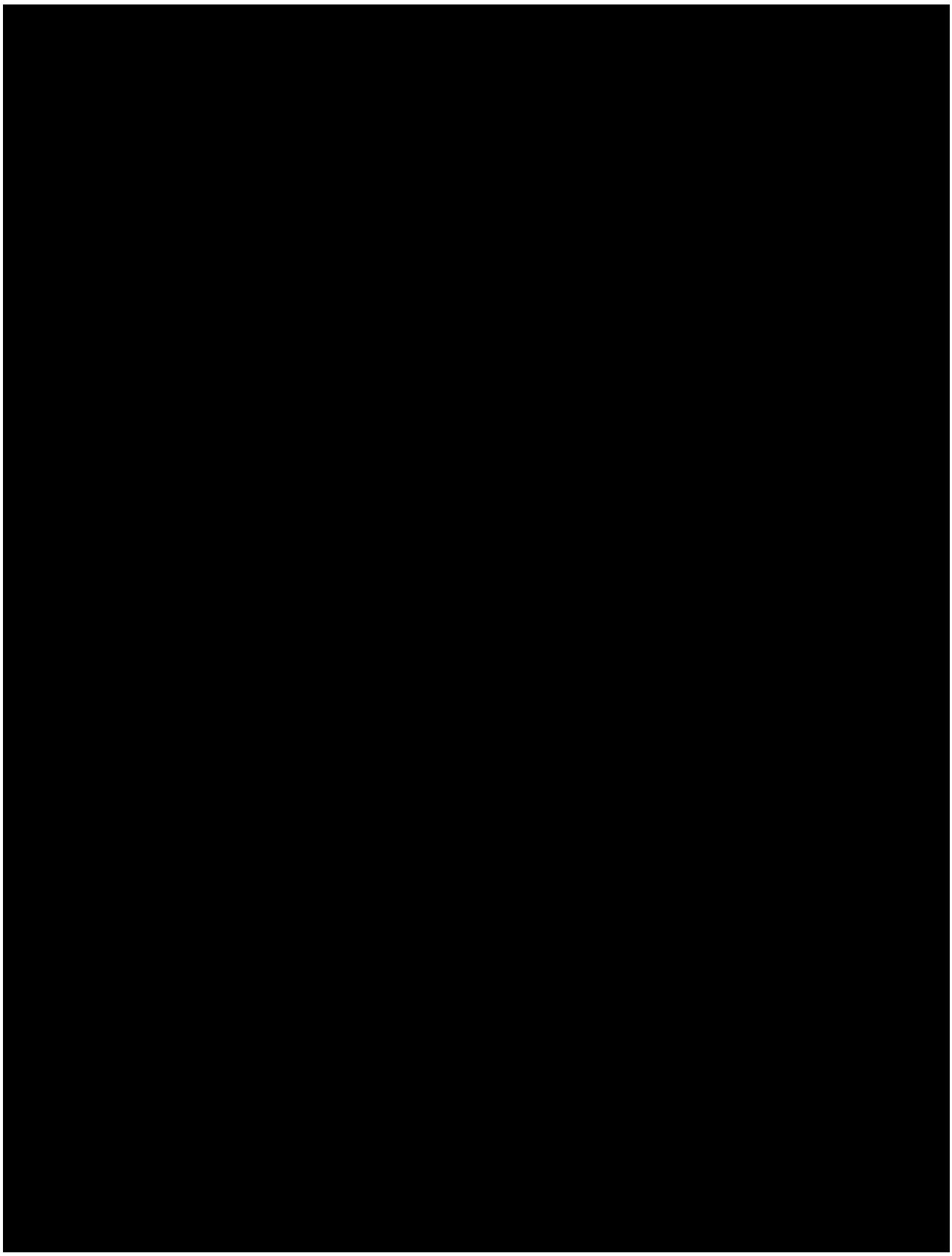
District Core Team Member: Daniel Salazar - Environmental Specialist

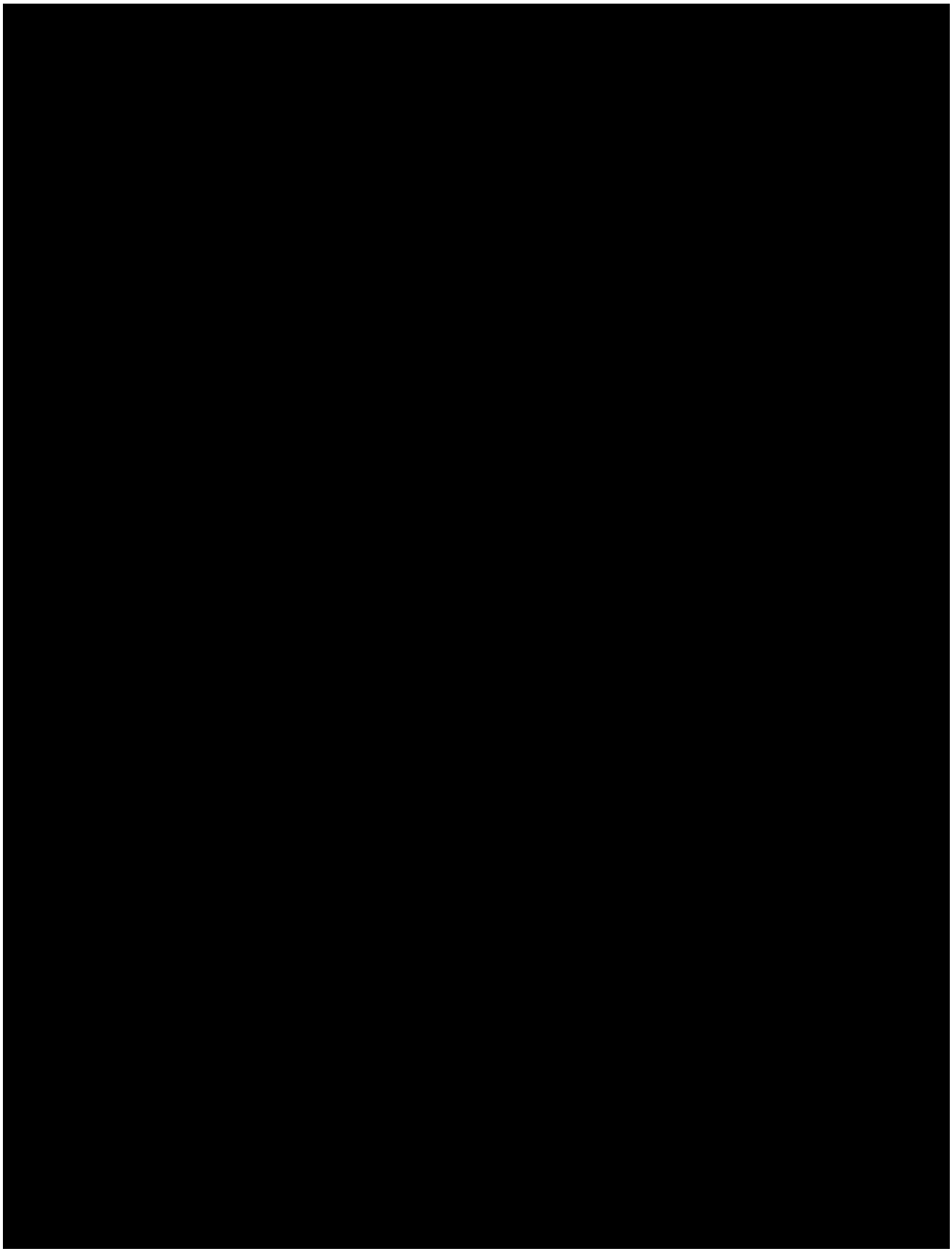
Other Point of Contact(s): Spell

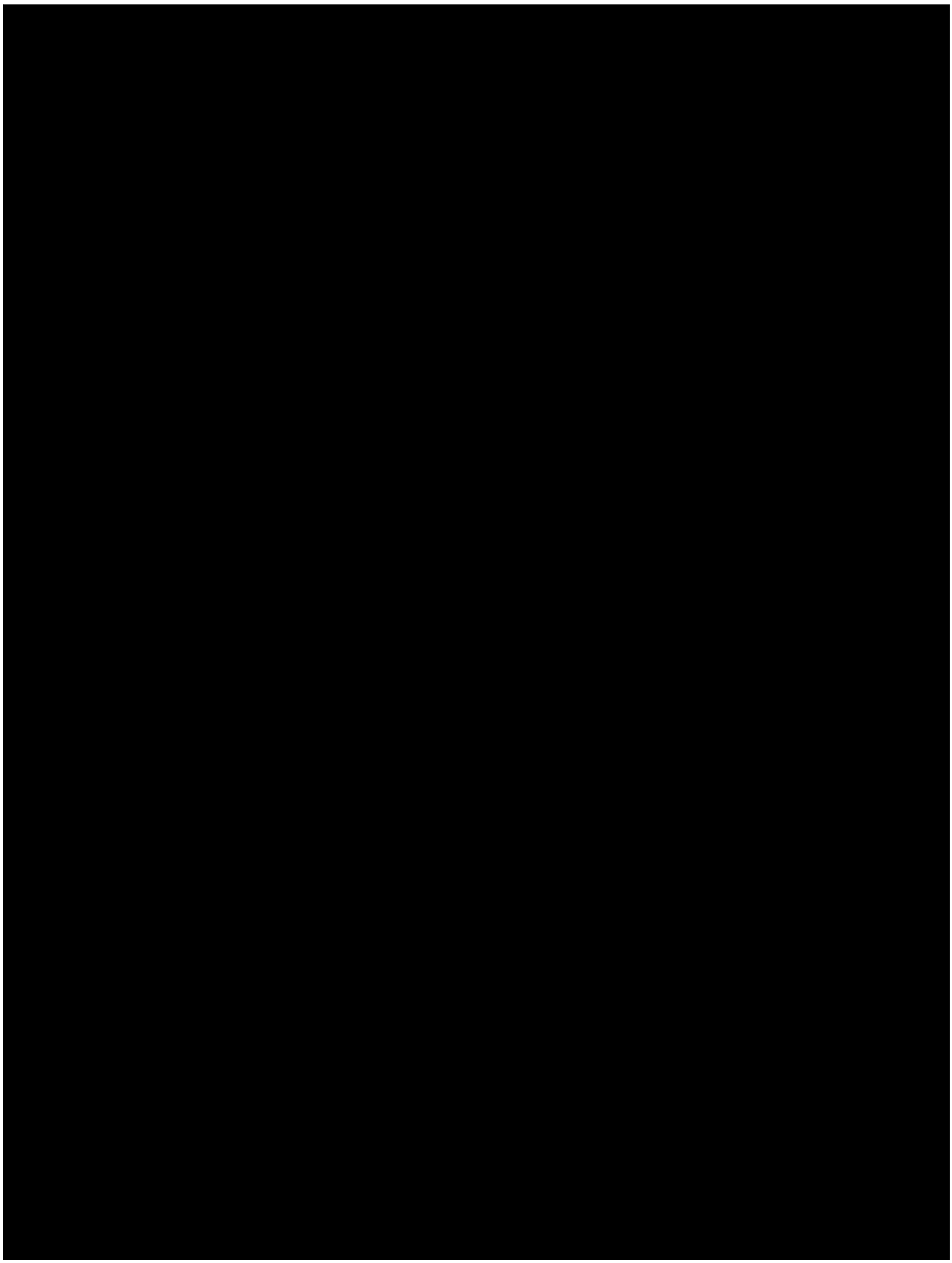
Last Updated By: Daniel Salazar

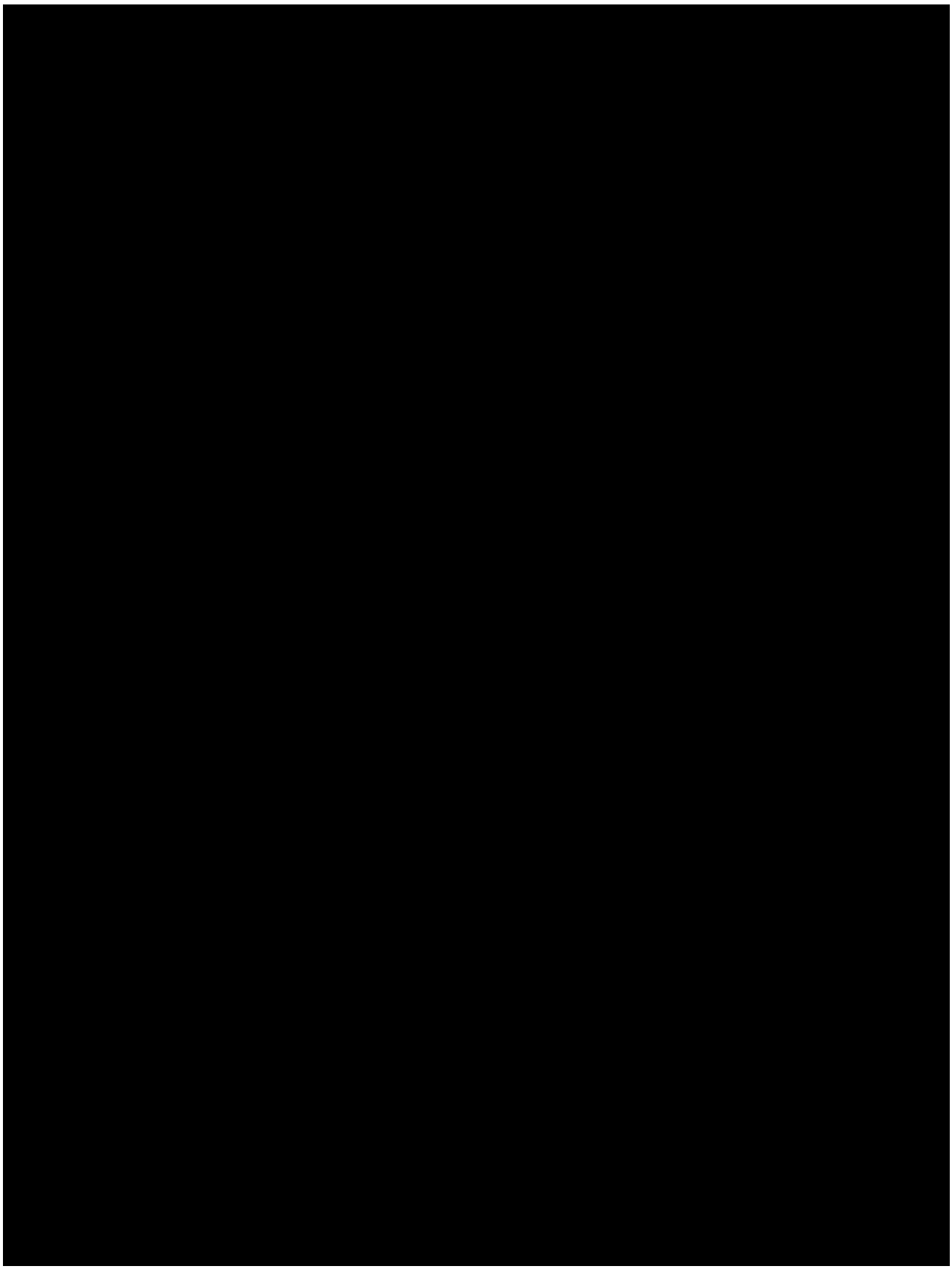
Last Updated Date: 12/12/2019 09:06:51

Attachment 3: THC Atlas Maps.

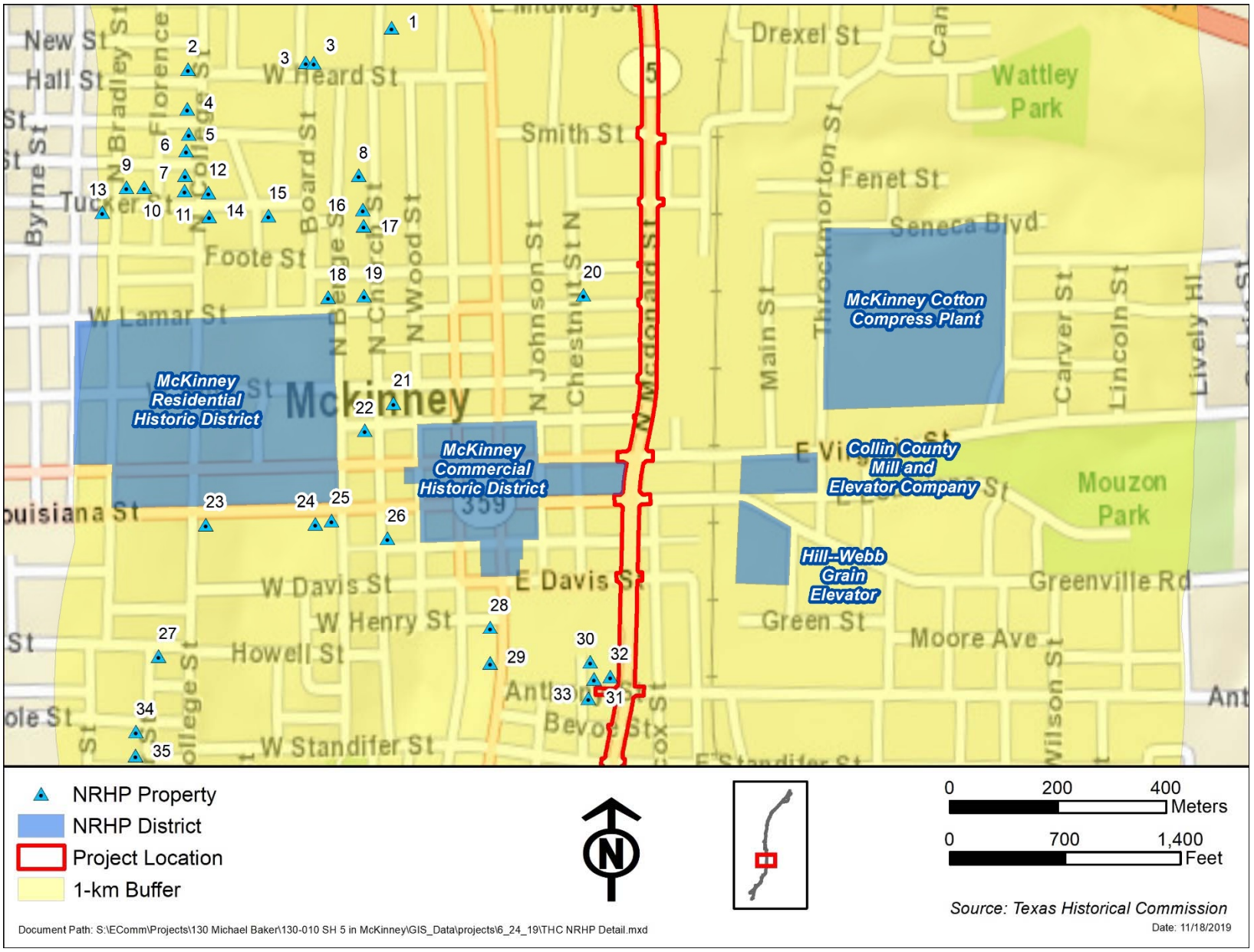








Attachment 4: Detailed Atlas maps showing NRHP Districts and Properties within a kilometer of the APE.



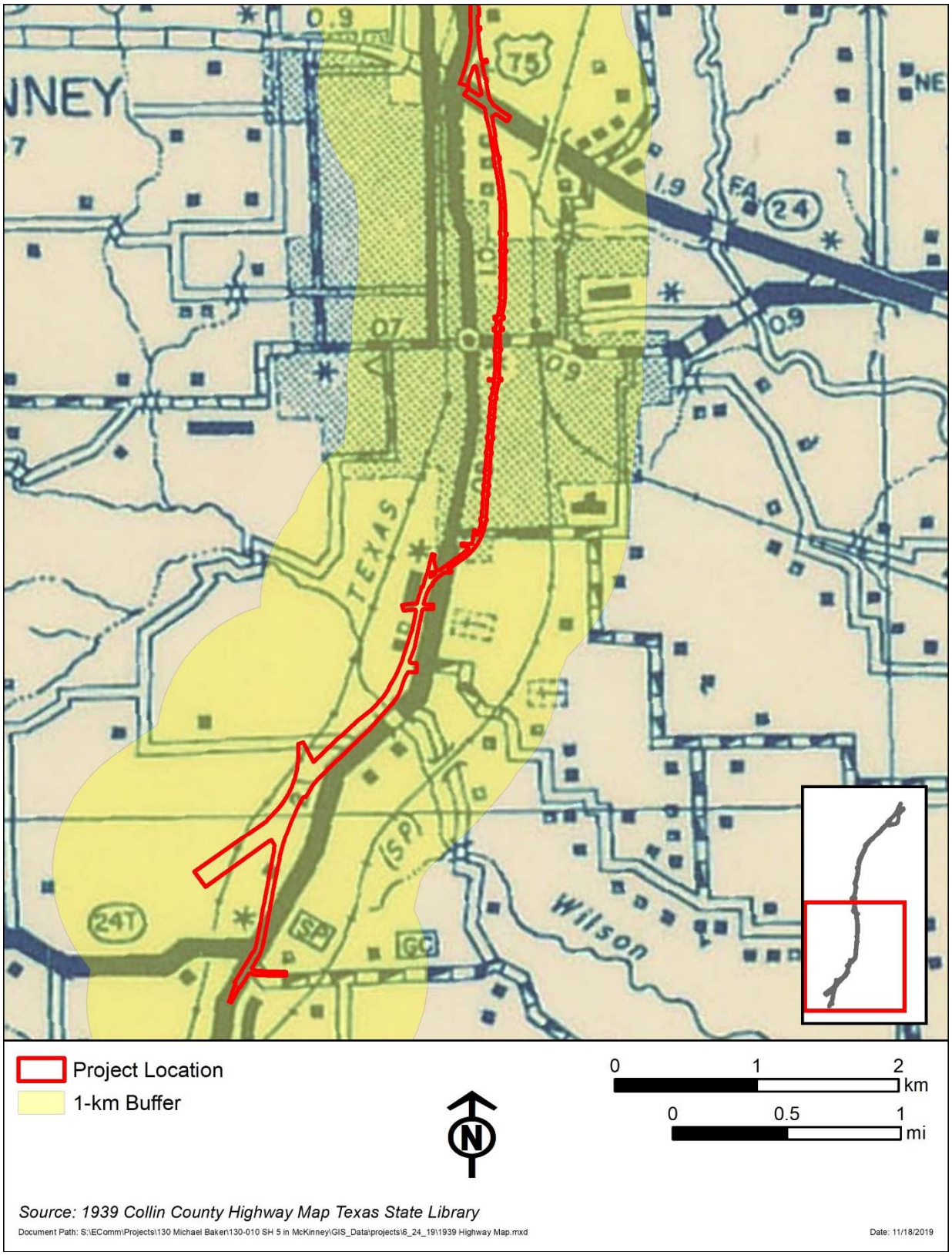

34
35
36
33
37
38
Cole St
W Standifer St
E Standifer St
Fitzhugh St
Ida St
Short St
Daniels Dr
S Murray St
Willie St
Finch Park
Park Cir
Jefferson St
W Graham St
Bridlegate Dr
Wilson Creek Pky
Rike St
Elm St
Clark St
Burrus St
S Tennessee St
S Chestnut St
S McDonald St
Amscott St
College St
Barnes St
Titus St
S Kentucky St
Wolfe St
Hamilton St
Rockwall St
Lindsey St
Healy St
Bumpas St
S Cedar St
McKinney Hospital, Old
Kirkpatrick, E. W., House and Barn
McKinney Cotton Mill Historic District
NRHP Property
NRHP District
Project Location
1-km Buffer
N
0 200 400 Meters
0 700 1,400 Feet
Source: Texas Historical Commission
Date: 11/18/2019
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\THC NRHP Detail.mxd

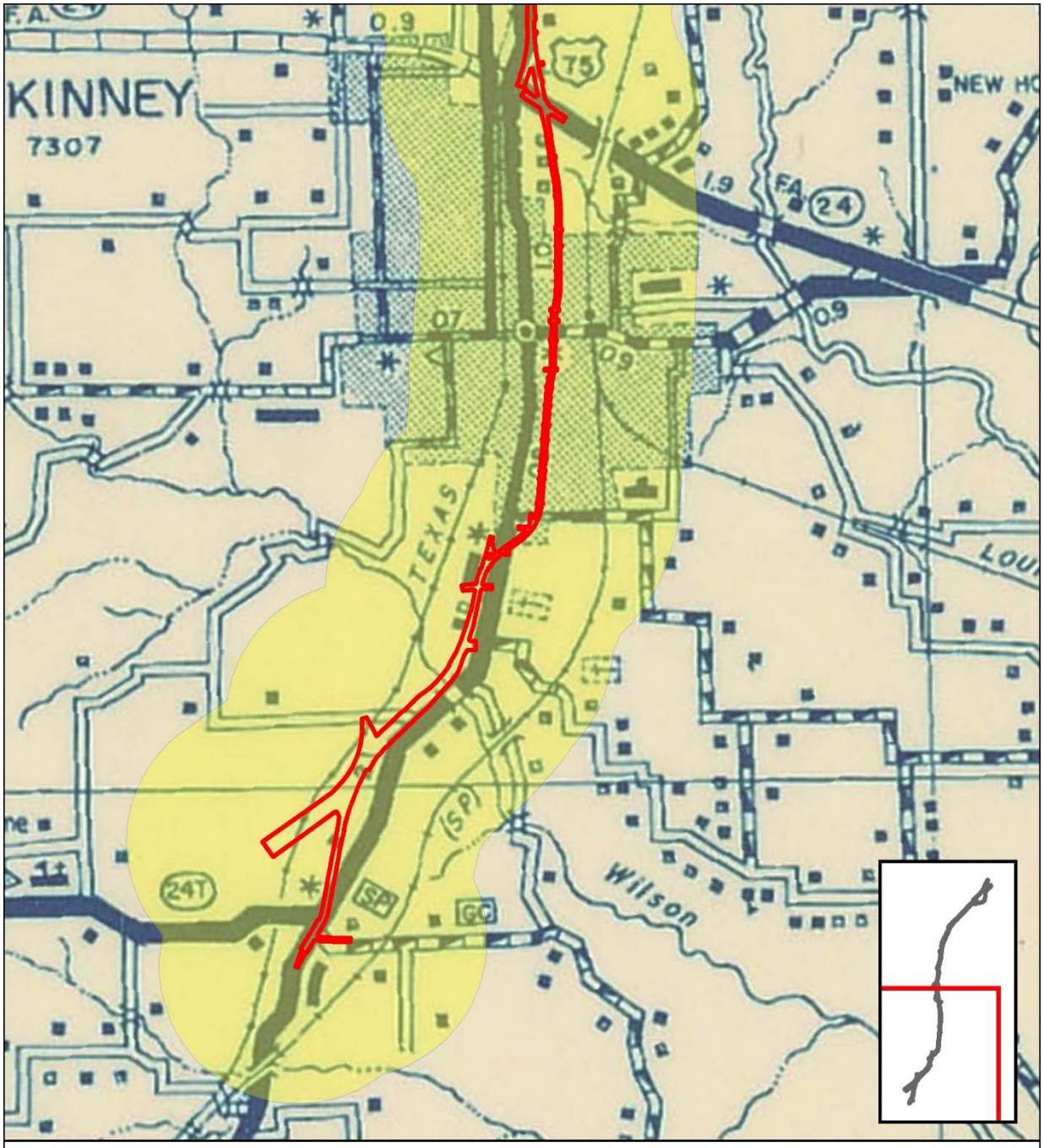
NRHP Properties within a kilometer of the APE.

Map ID	Resource Name	Overlap APE
1	Davis--Hill House	No
2	Estes House	No
3	Houses at 406 and 408 Heard	No
4	Rhea, John C., House	No
5	Davis, H. L., House	No
6	Smith, W. D., House	No
7	Hill, John B., House	No
8	Ferguson, John H., House	No
9	Fox, S. H., House	No
10	Cline--Bass House	No
11	Hill, W. R., House	No
12	House at 610 Tucker (Gone)	No
13	Board--Everett House	No
14	Newsome, R. F., House	No
15	Hill, Ben, House	No
16	Nenney, J. P., House	No
17	Brown, John R., House	No
18	Foote--Crouch House	No
19	Waddill, R. L., House	No
20	House at 301 E. Lamar (Gone)	No
21	Heard--Craig House	No
22	Crouch--Perkins House	No
23	Scott, L. A., House	No
24	King, Mrs. J. C., House	No
25	Newsome--King House	No
26	Wiley, Thomas W., House	No
27	Coggins, J. R., House	No
28	Goodner, Jim B., House	No
29	Johnson, Thomas, House	No
30	Dulaney, Joe E., House	No
31	Dulaney, Joseph Field, House	No
32	Faires--Bell House	No
33	Johnson, John, House	No

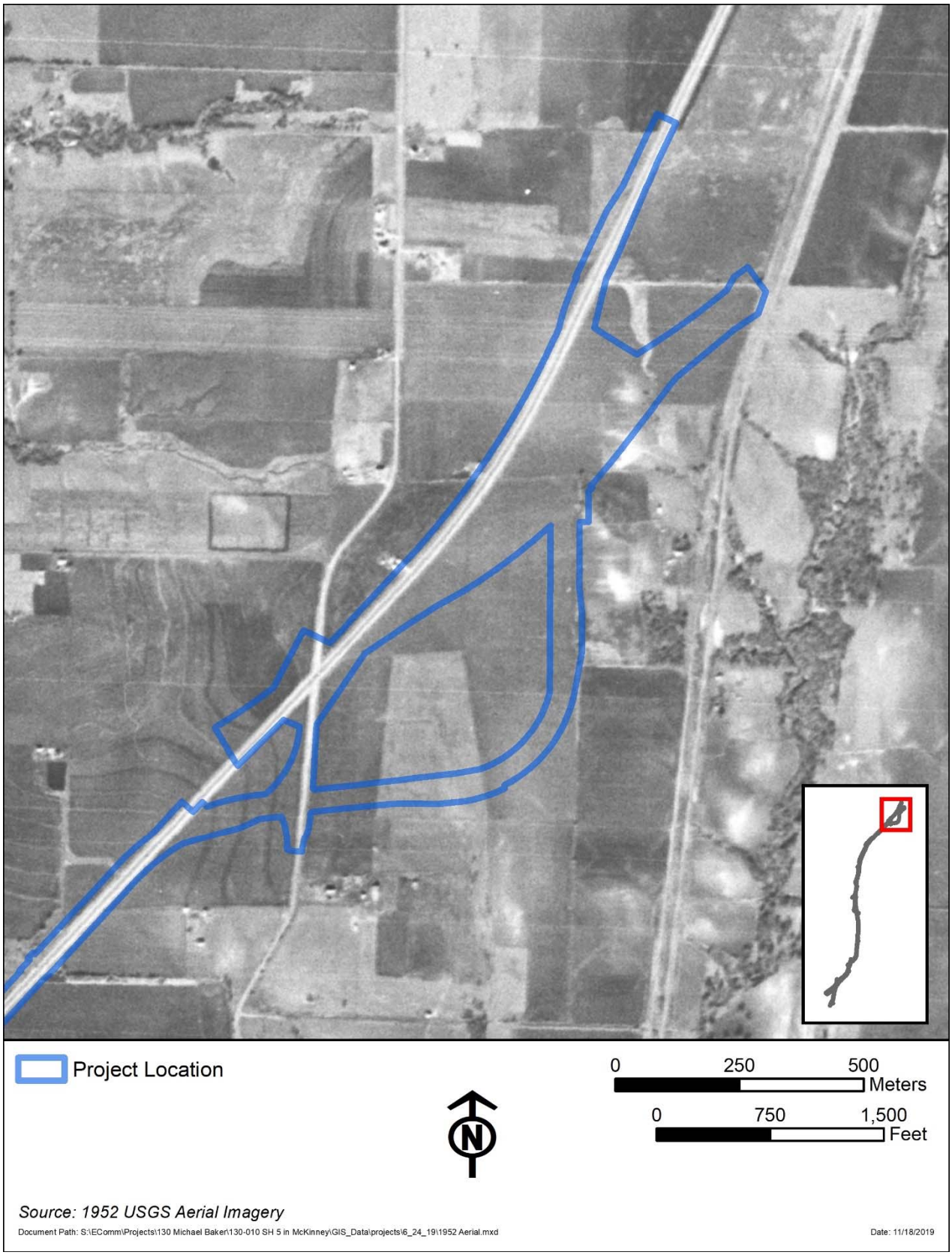
34	Beverly--Harris House	No
35	Dowell, J. S., House	No
36	House at 704 Parker	No
37	Faires, F. C., House	No
38	Bingham, John H., House	No

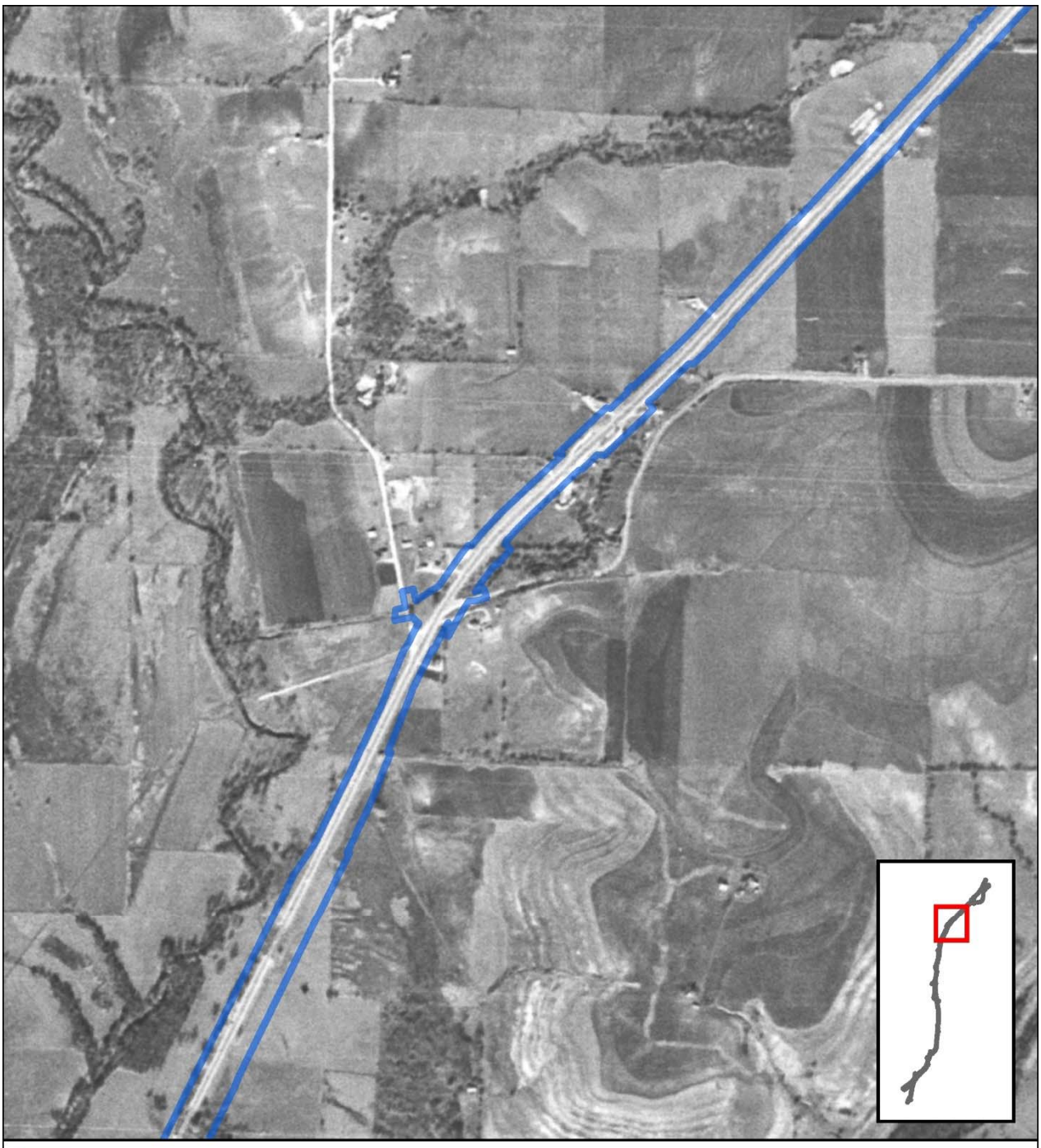
Attachment 5: Project location depicted on a 1939 Collin County Highway map.

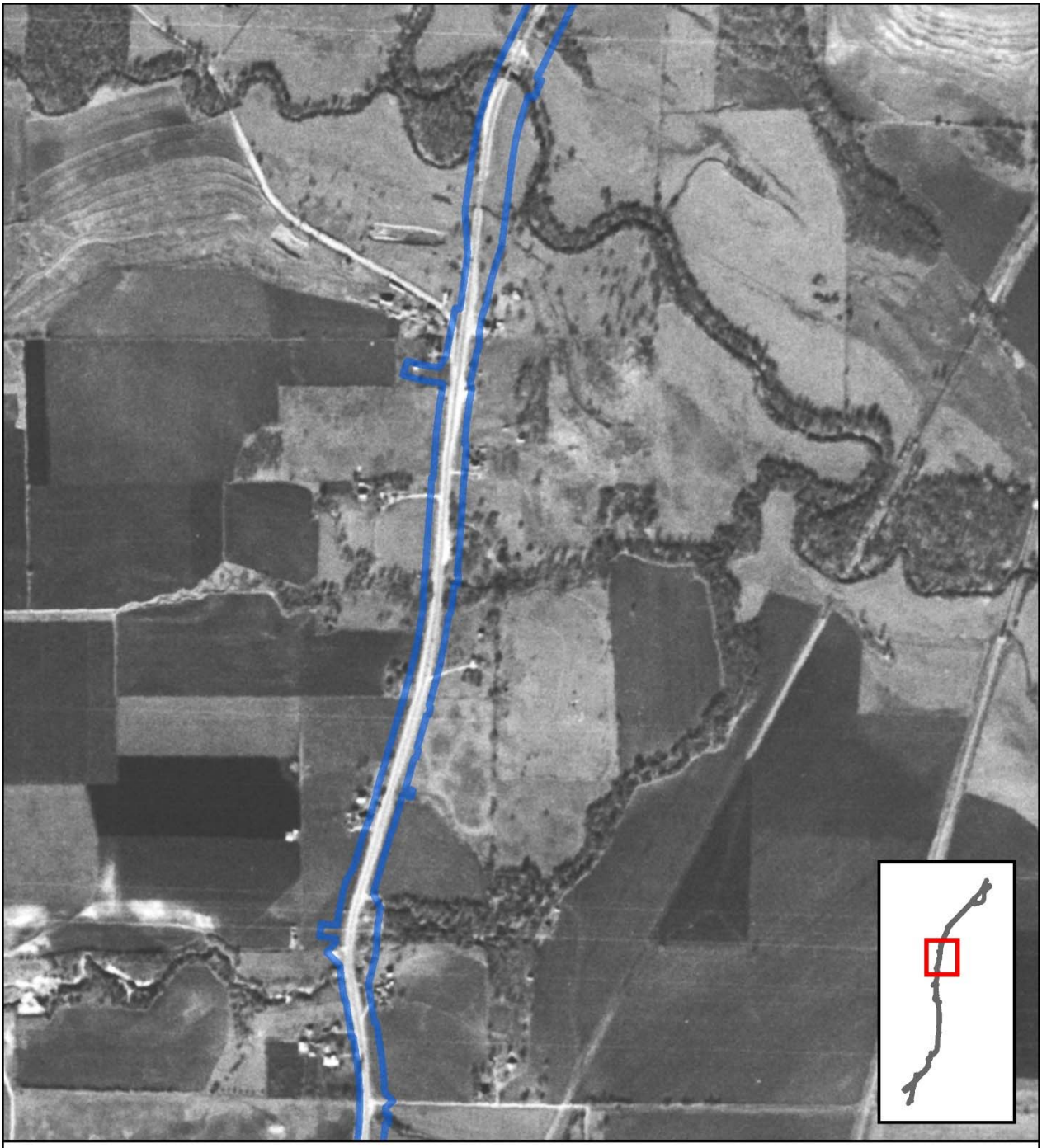


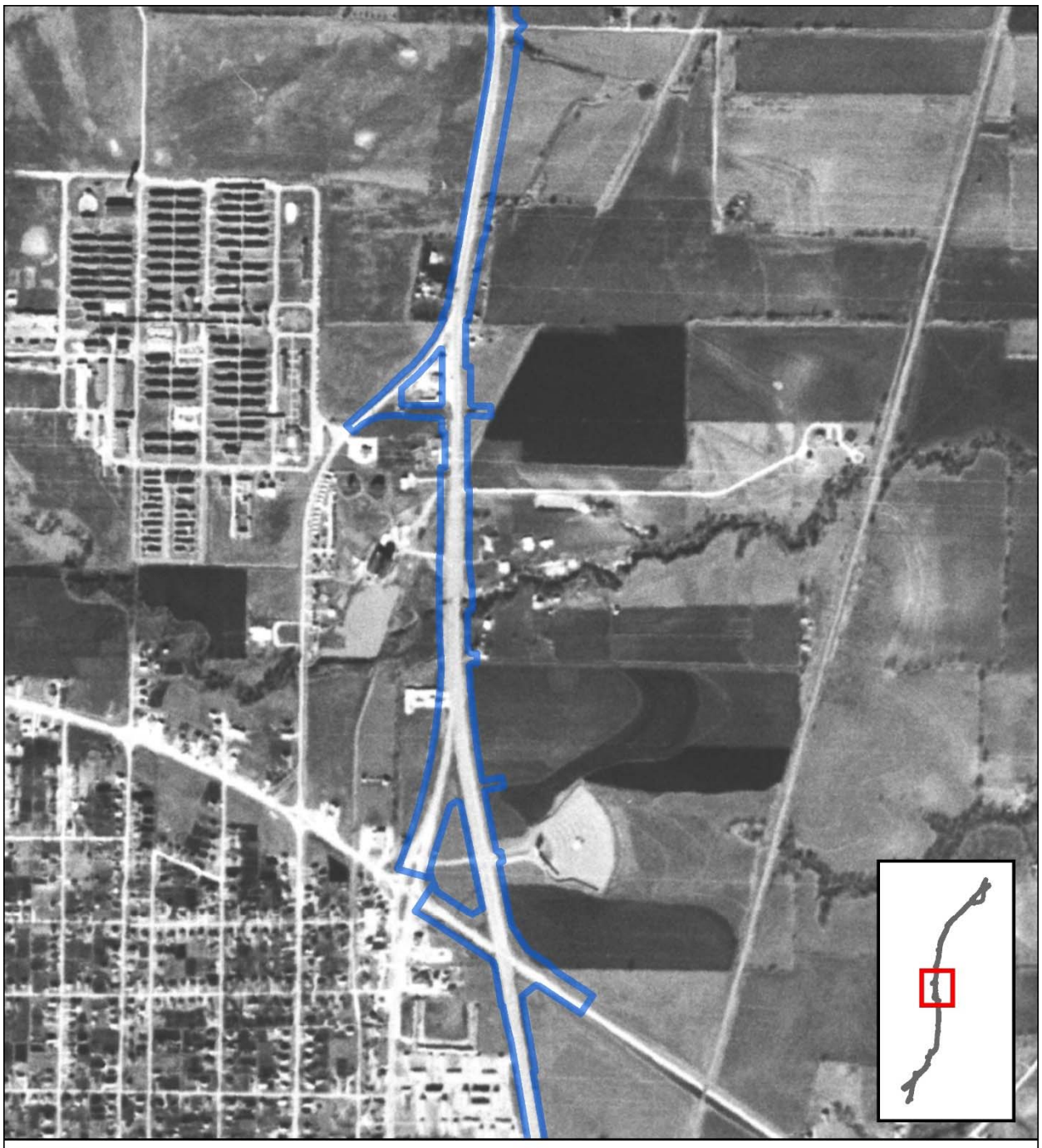

KINNEY
7307
NEW HO
TEXAS
Wilson
Project Location
1-km Buffer
0 1 2 km
0 0.5 1 mi
N
Source: 1939 Collin County Highway Map Texas State Library
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1939 Highway Map.mxd
Date: 11/18/2019

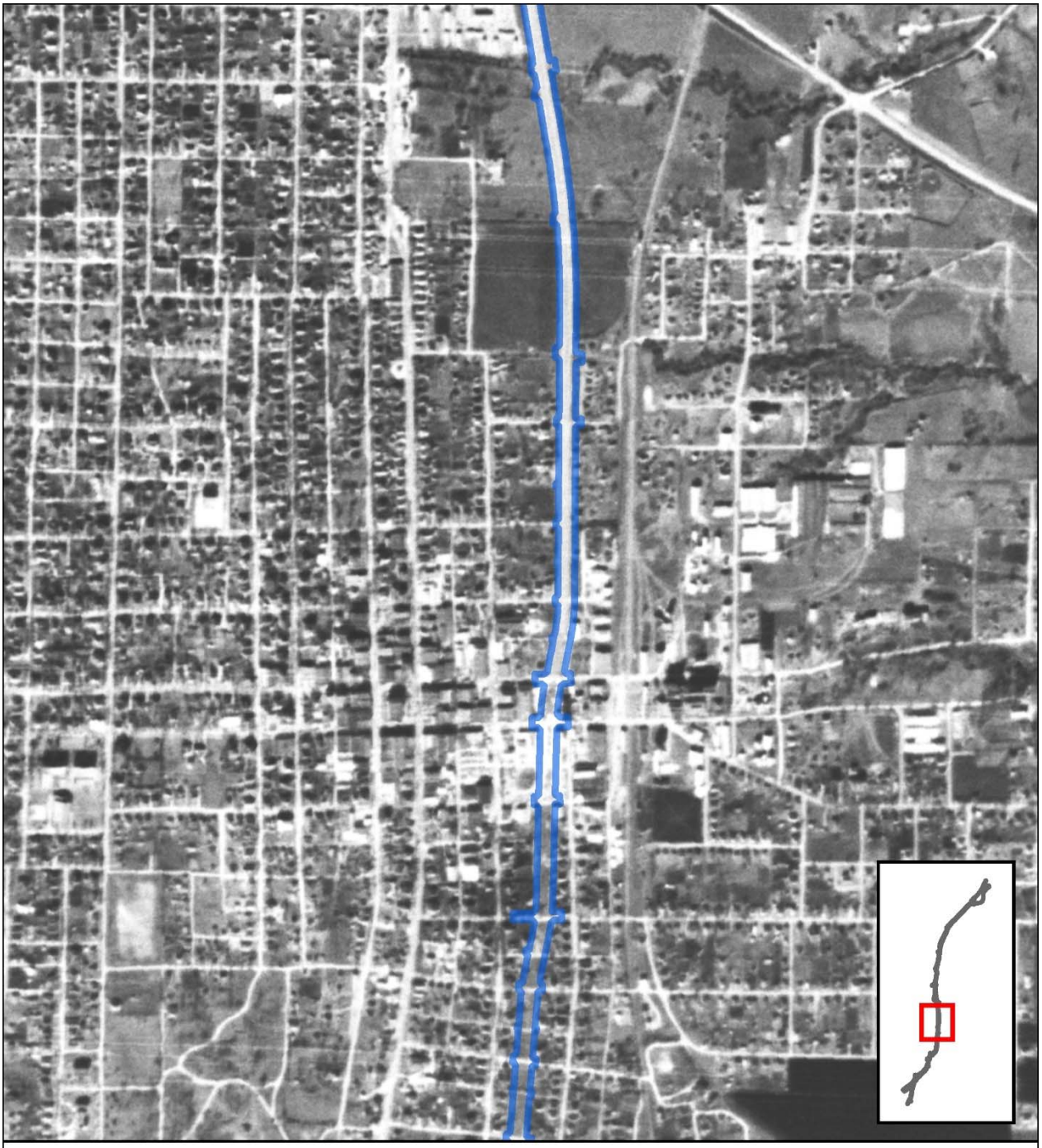
Attachment 6: Project location depicted on a 1952 aerial photograph.

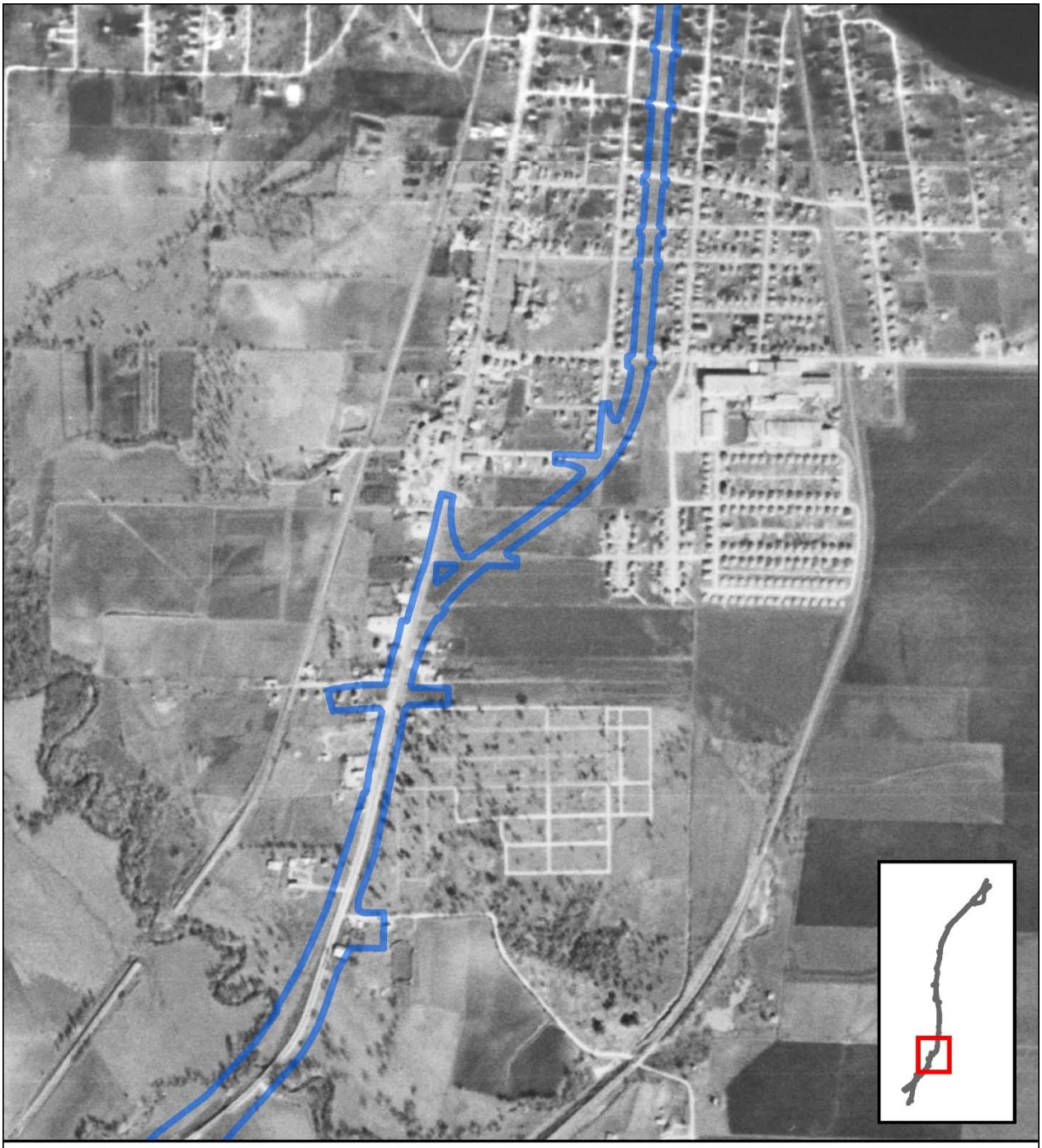


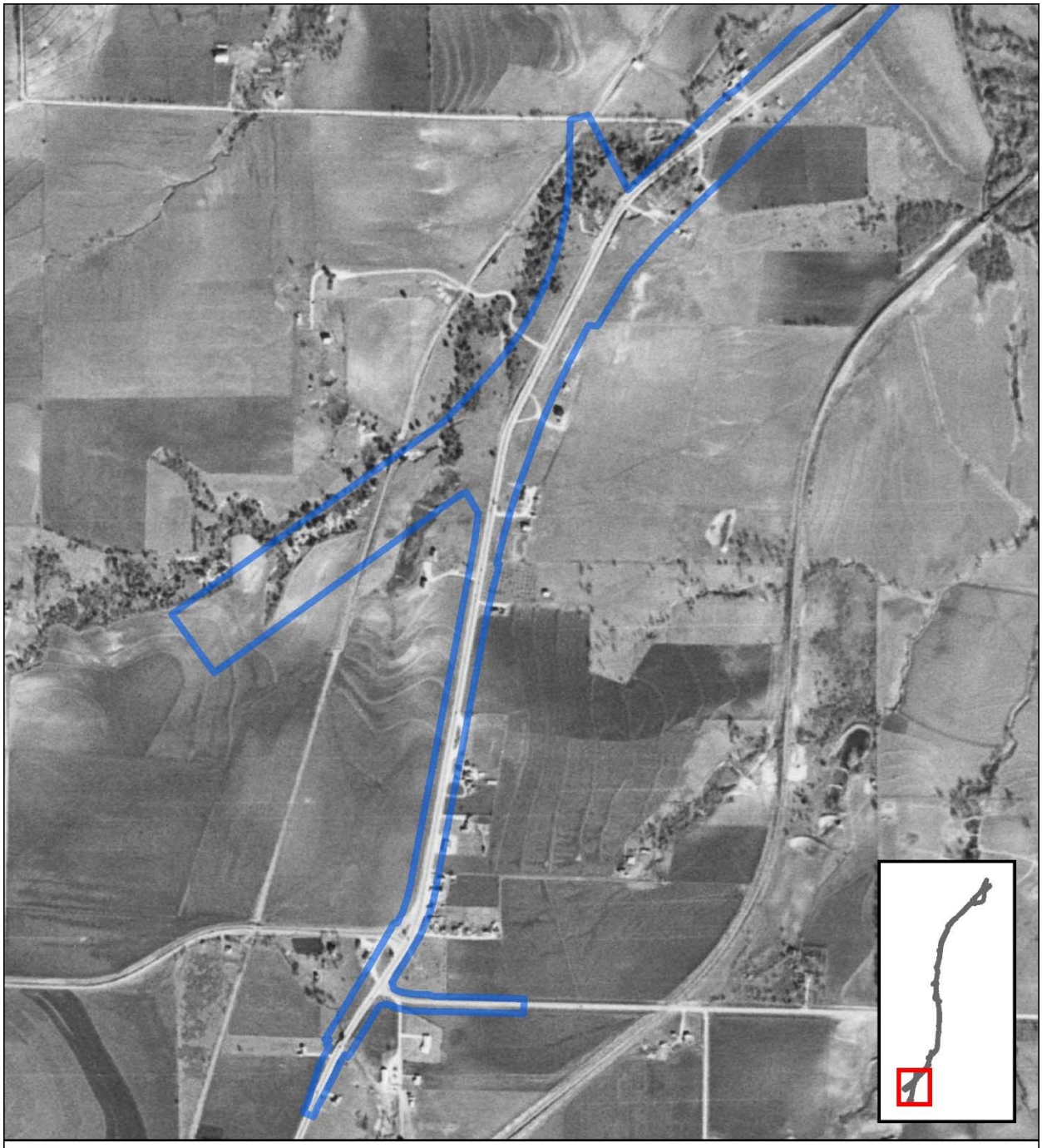

Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019


Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019

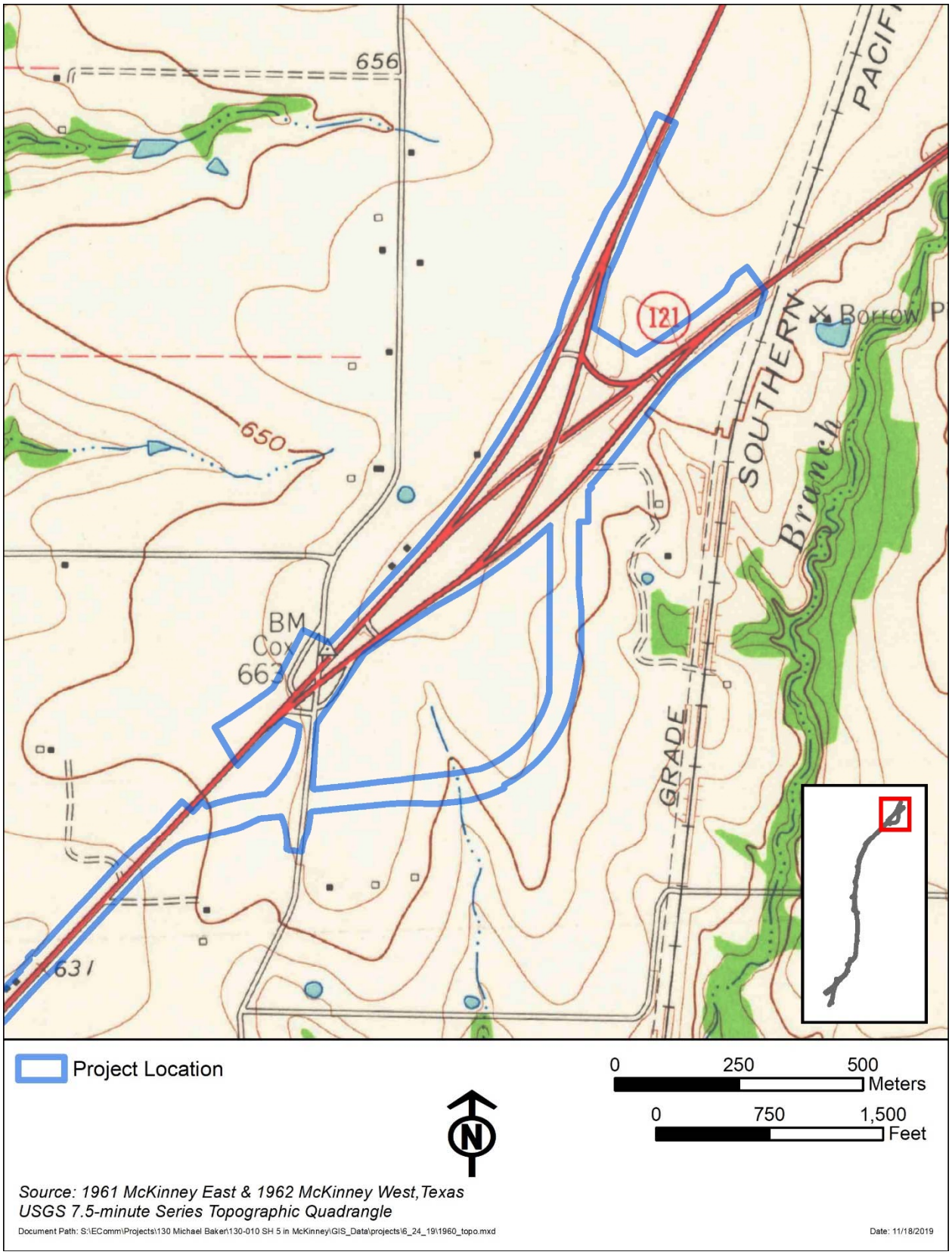

Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019

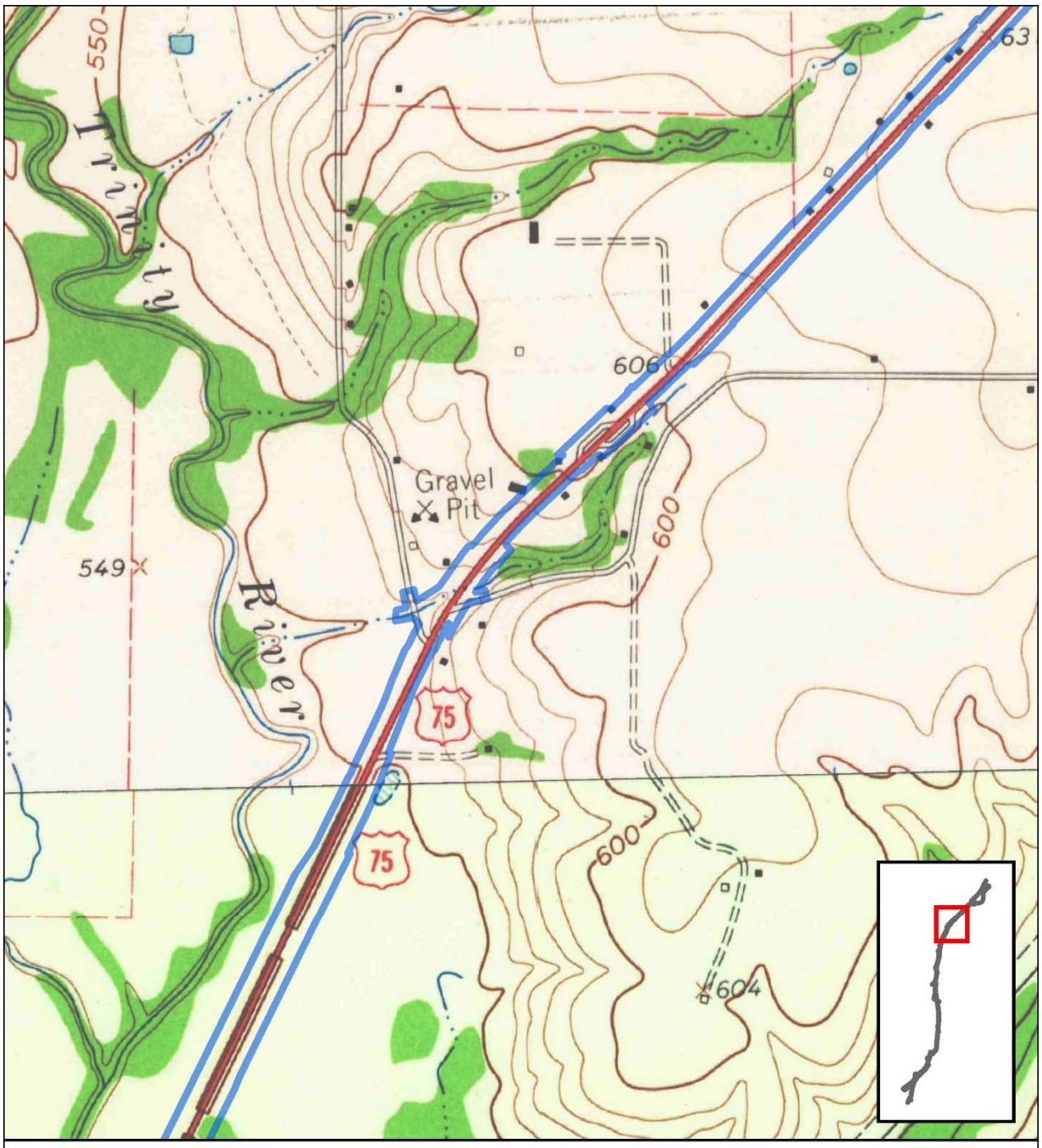

Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019


Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019


Project Location
0 250 500
Meters
0 750 1,500
Feet
N
Source: 1952 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1952 Aerial.mxd
Date: 11/18/2019

Attachment 7: Project location depicted on a 1961-1962 USGS topographic map.





Project Location

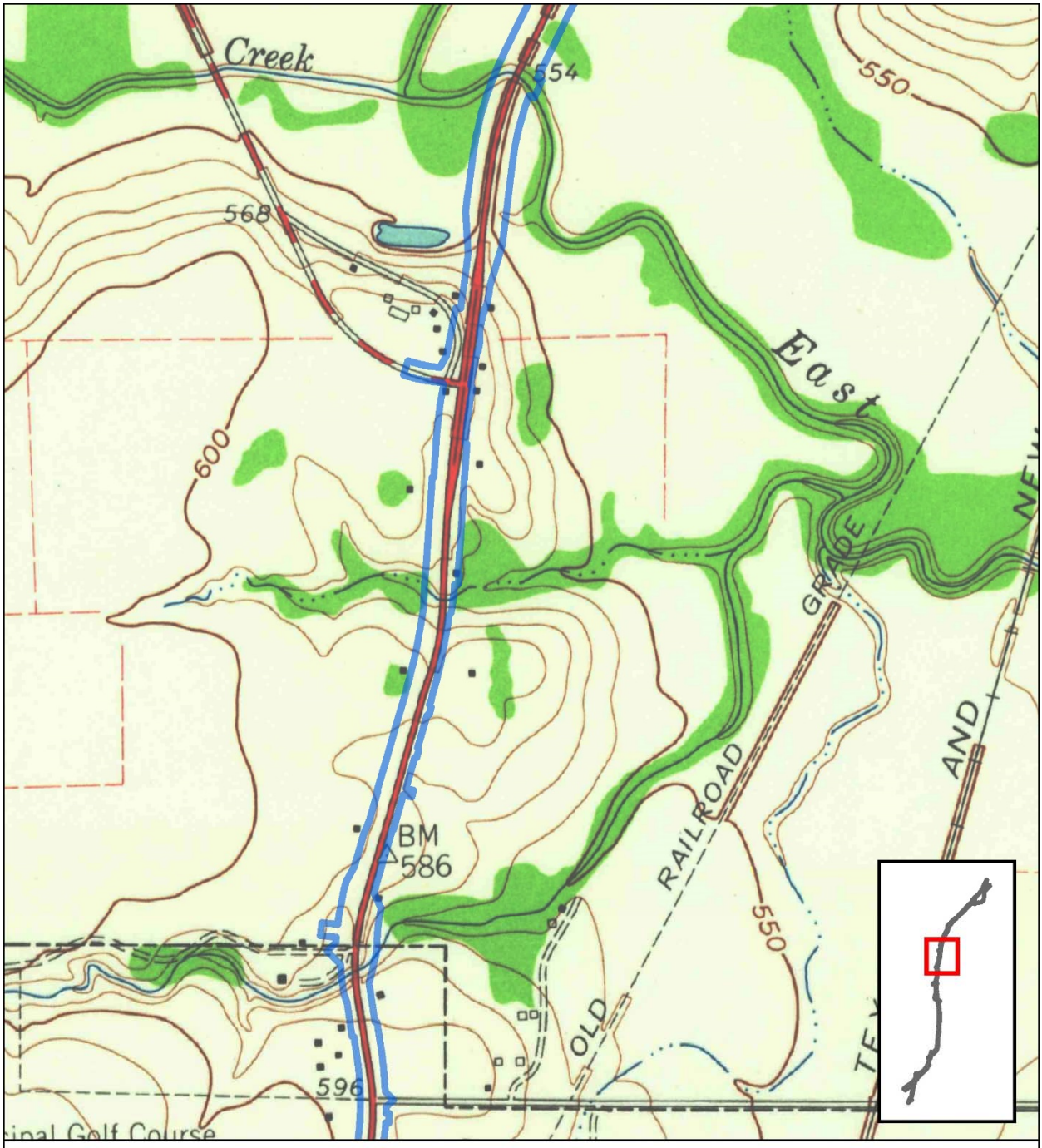
0 250 500 Meters

0 750 1,500 Feet

Source: 1961 McKinney East & 1962 McKinney West, Texas USGS 7.5-minute Series Topographic Quadrangle

Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd

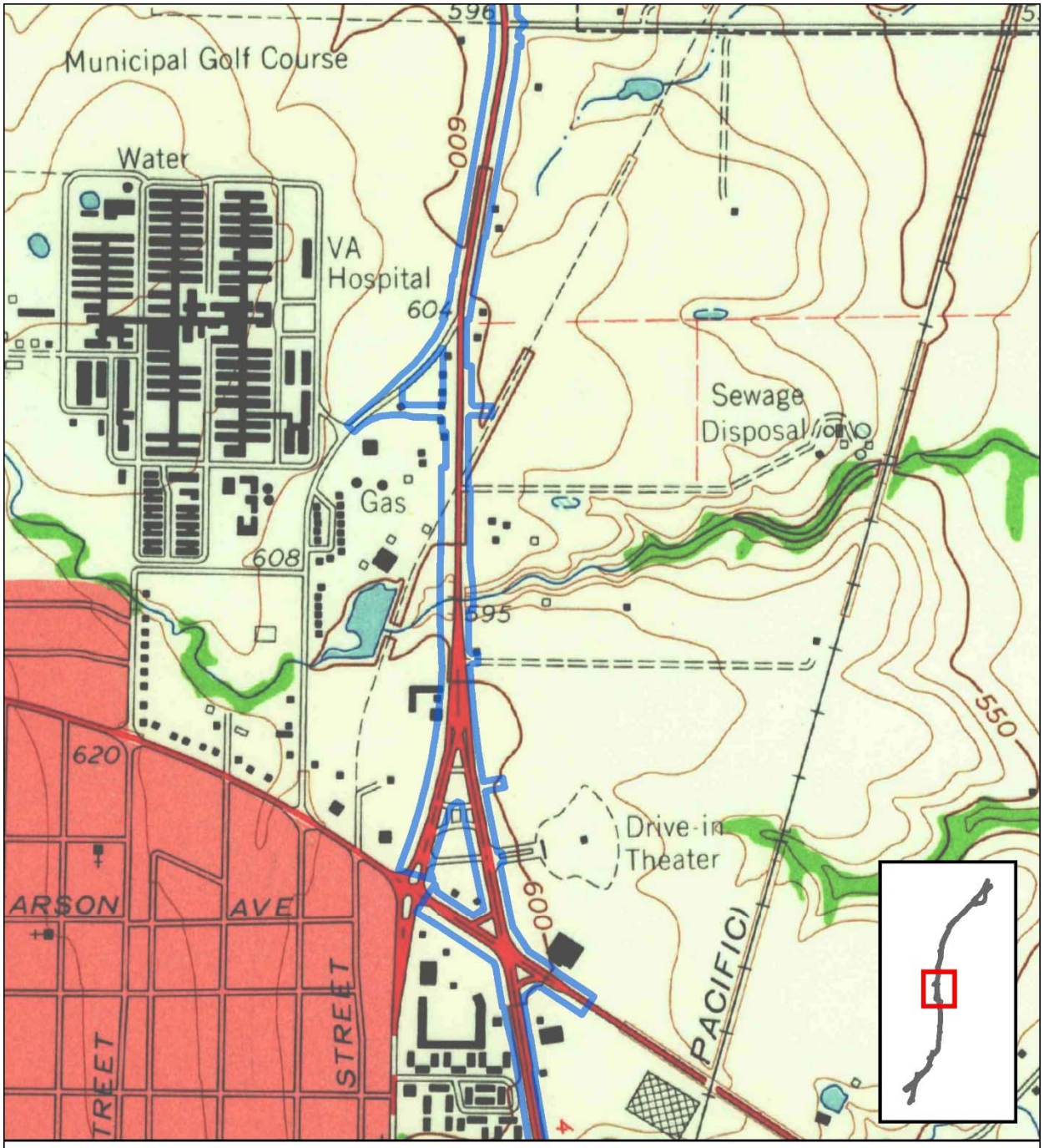
Date: 11/18/2019



Source: 1961 McKinney East & 1962 McKinney West, Texas
USGS 7.5-minute Series Topographic Quadrangle

Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd

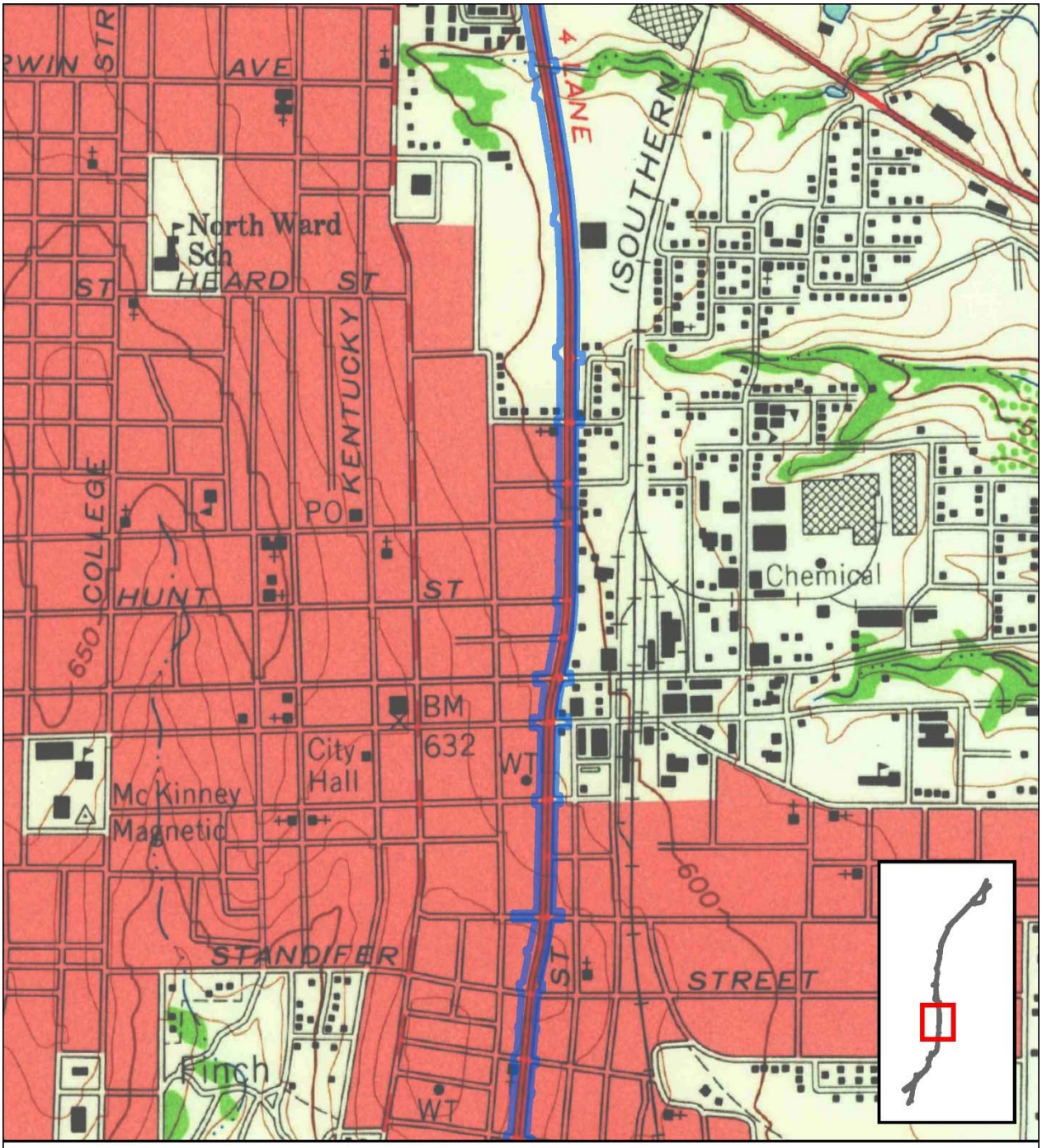
Date: 11/18/2019



Source: 1961 McKinney East & 1962 McKinney West,Texas
USGS 7.5-minute Series Topographic Quadrangle

Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd

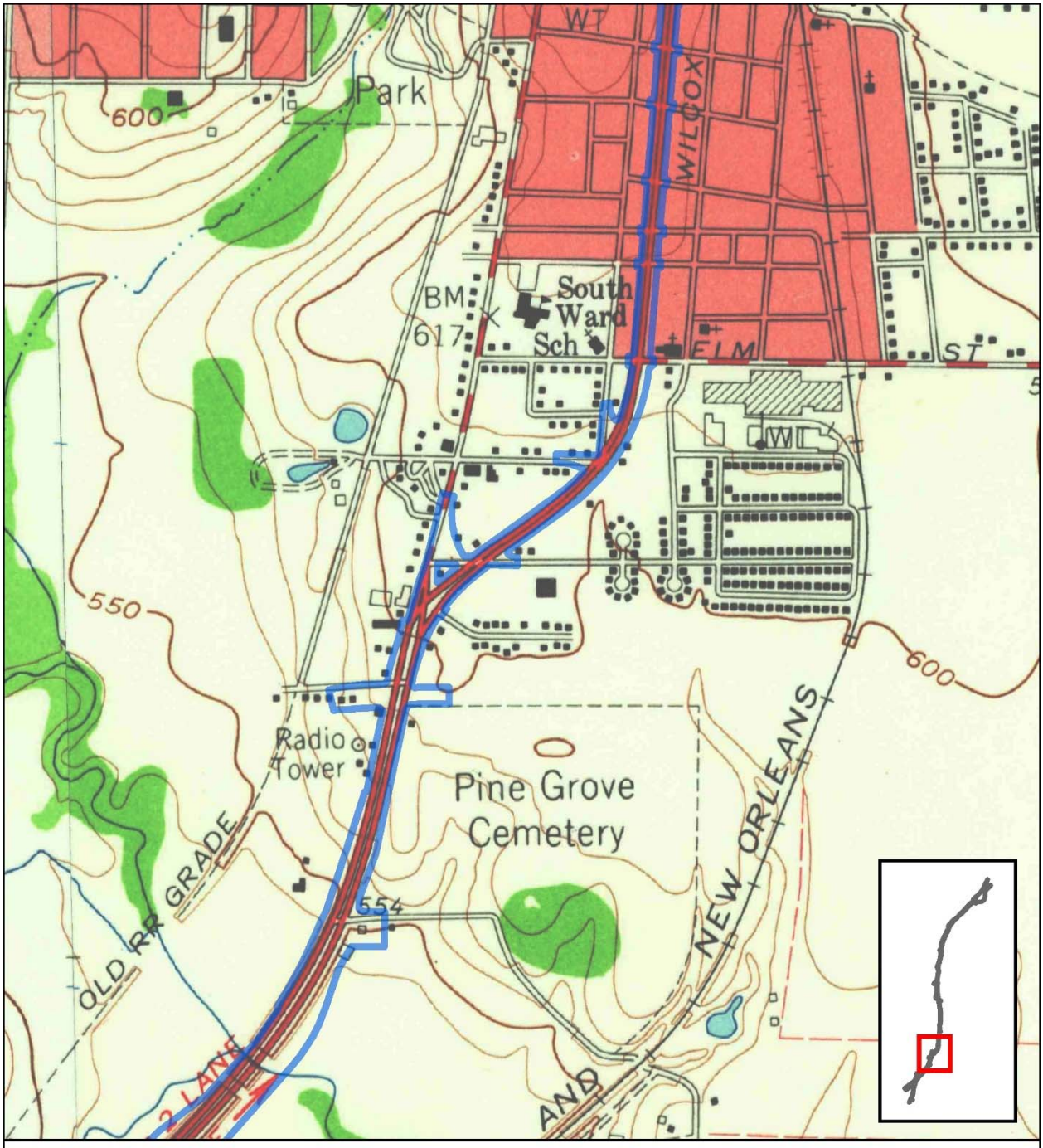
Date: 11/18/2019



Source: 1961 McKinney East & 1962 McKinney West, Texas USGS 7.5-minute Series Topographic Quadrangle

Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd

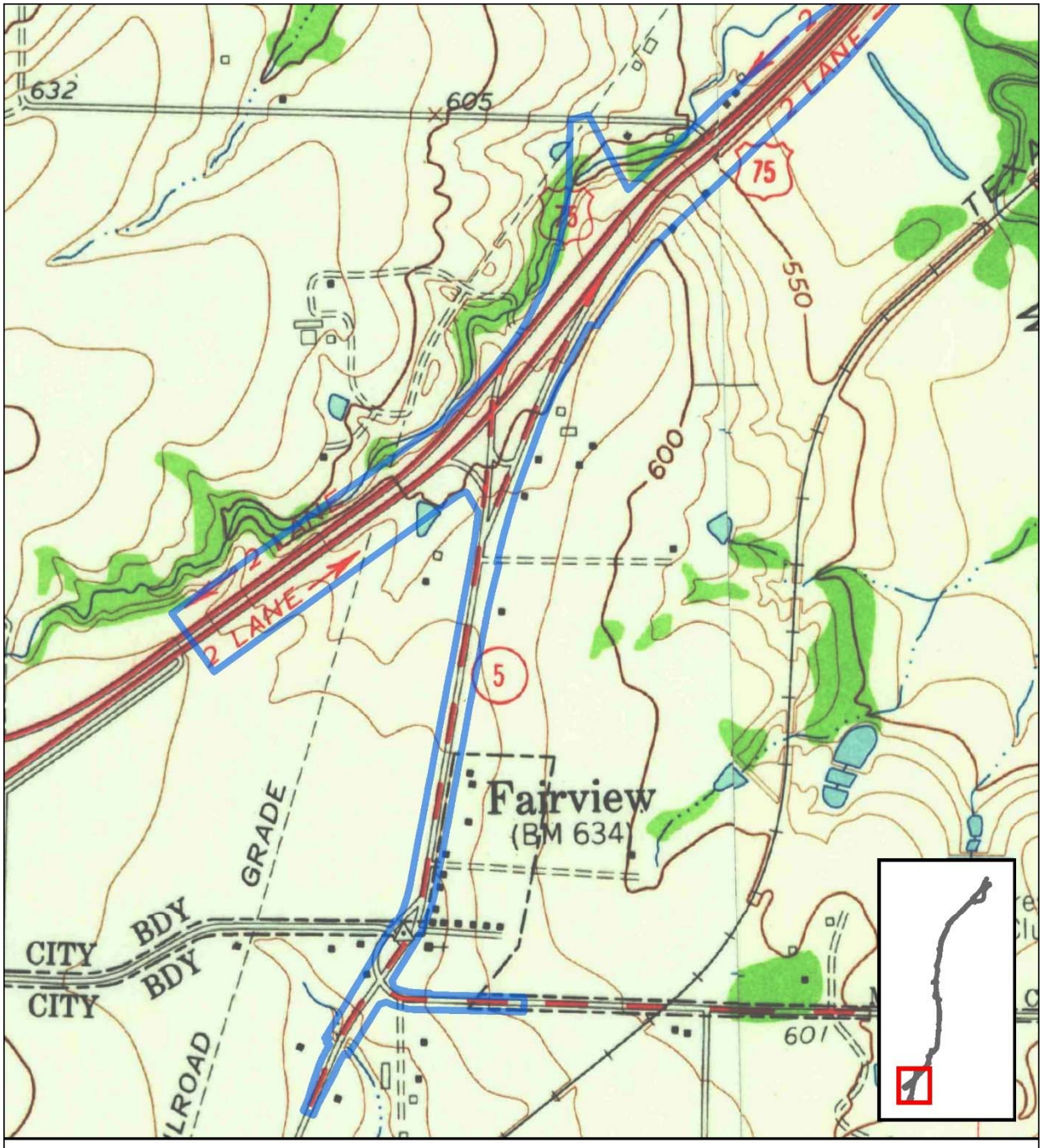
Date: 11/18/2019



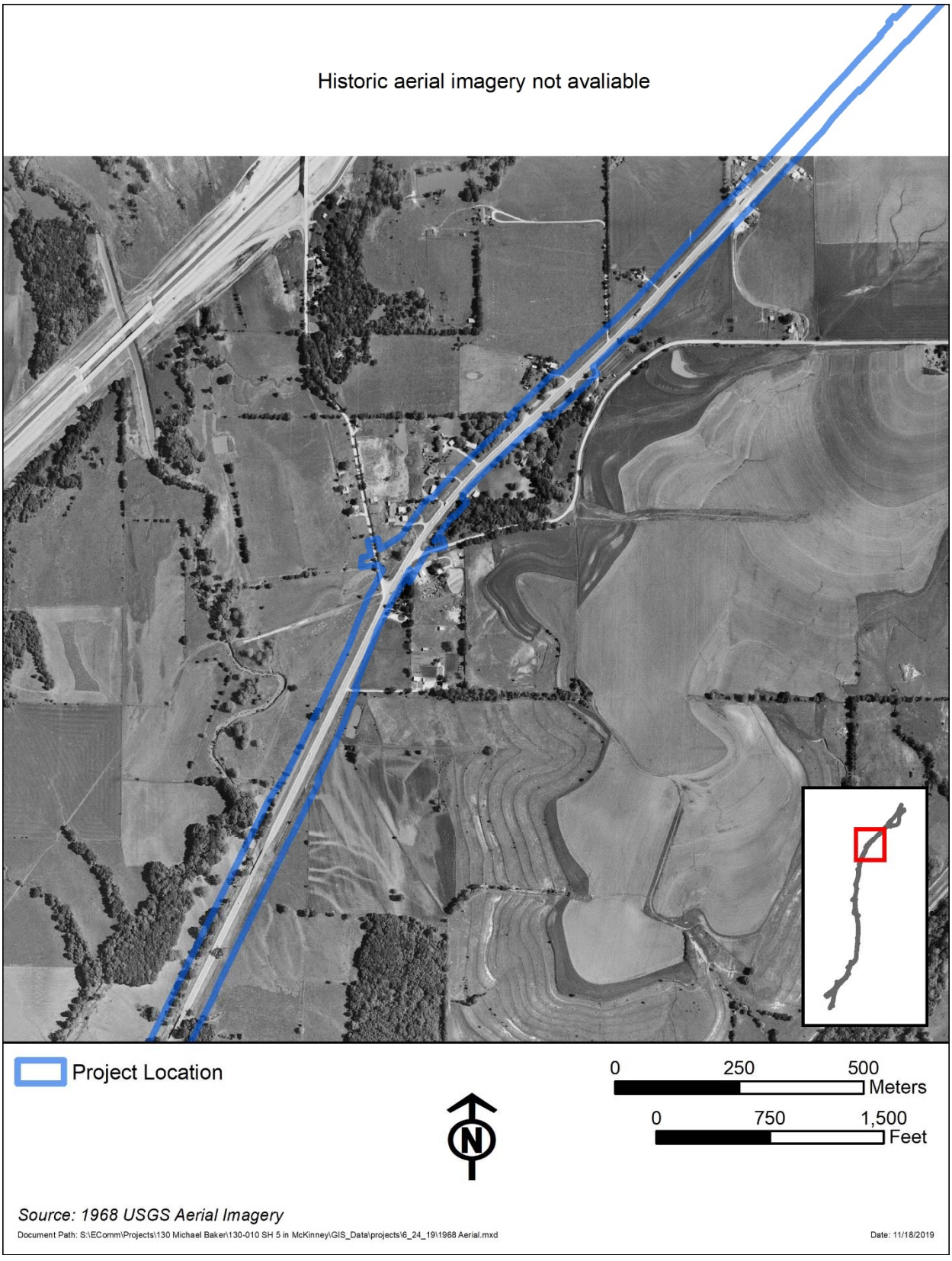
Source: 1961 McKinney East & 1962 McKinney West, Texas USGS 7.5-minute Series Topographic Quadrangle

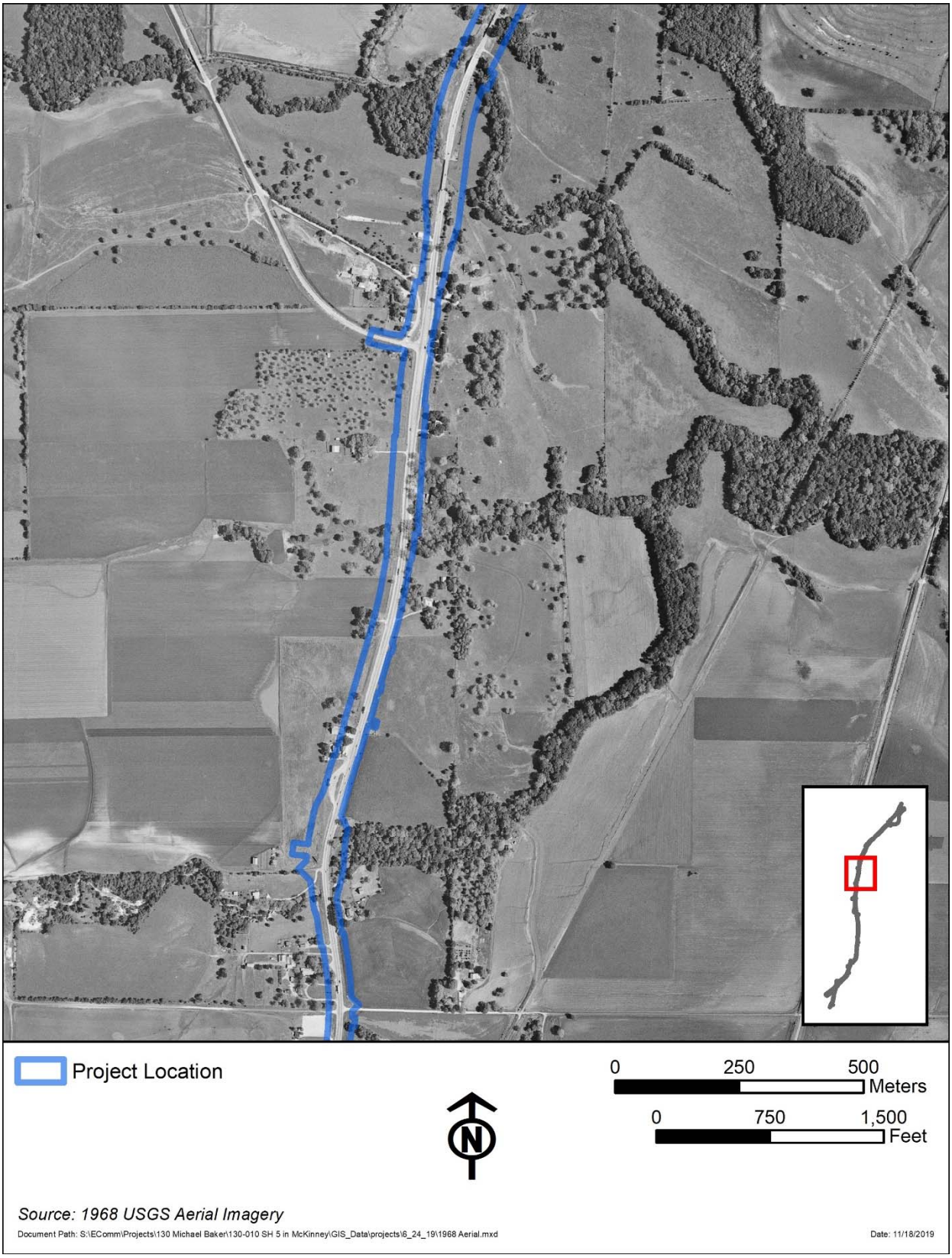
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd

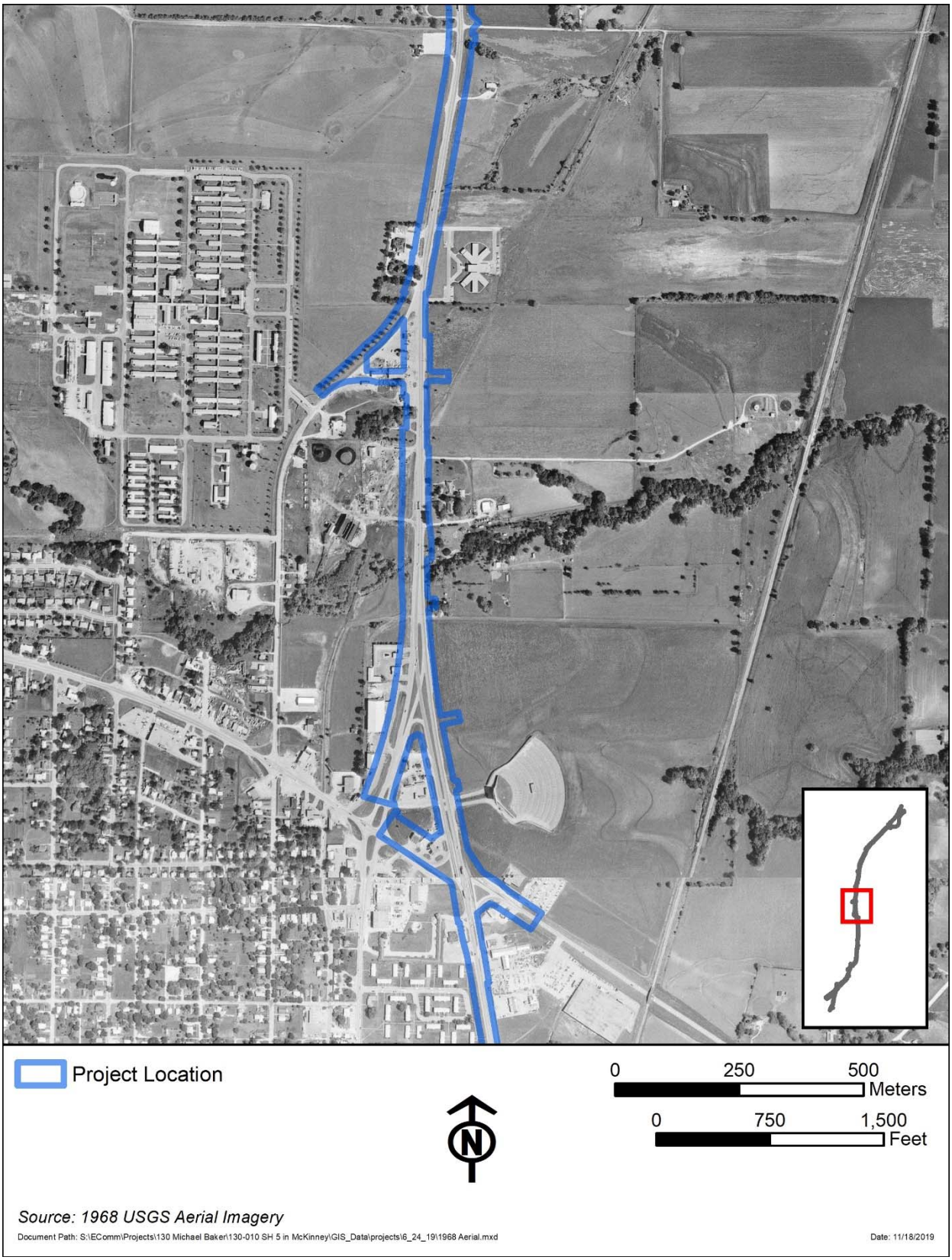
Date: 11/18/2019


632
605
75
550
600
2 LANE
2 LANE
5
Fairview
(BM 634)
GRADE
CITY BDY
CITY BDY
601
Project Location
0 250 500
Meters
0 750 1,500
Feet
N
Source: 1961 McKinney East & 1962 McKinney West, Texas
USGS 7.5-minute Series Topographic Quadrangle
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1960_topo.mxd
Date: 11/18/2019

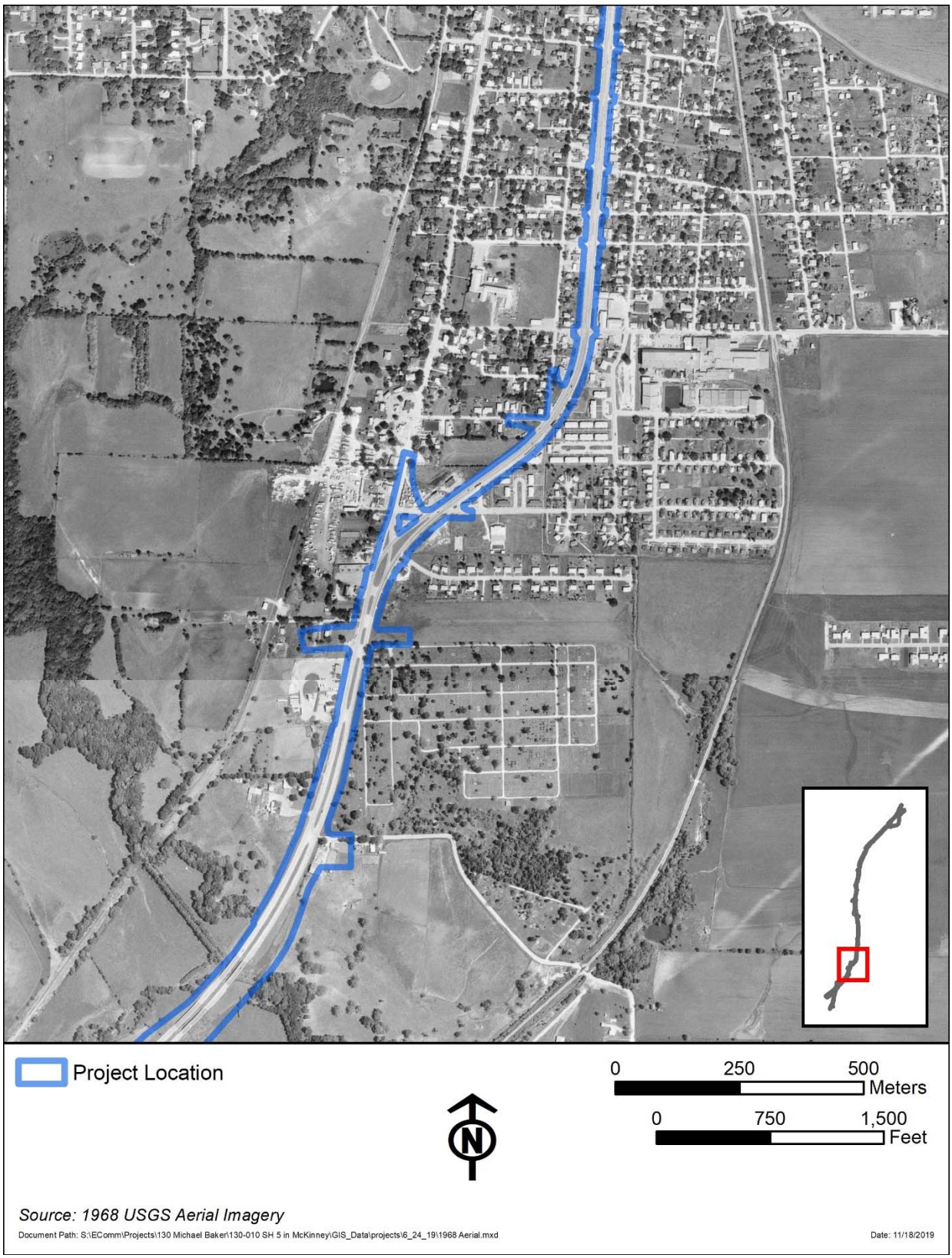
Attachment 8: Project location depicted on a 1968 aerial photograph.

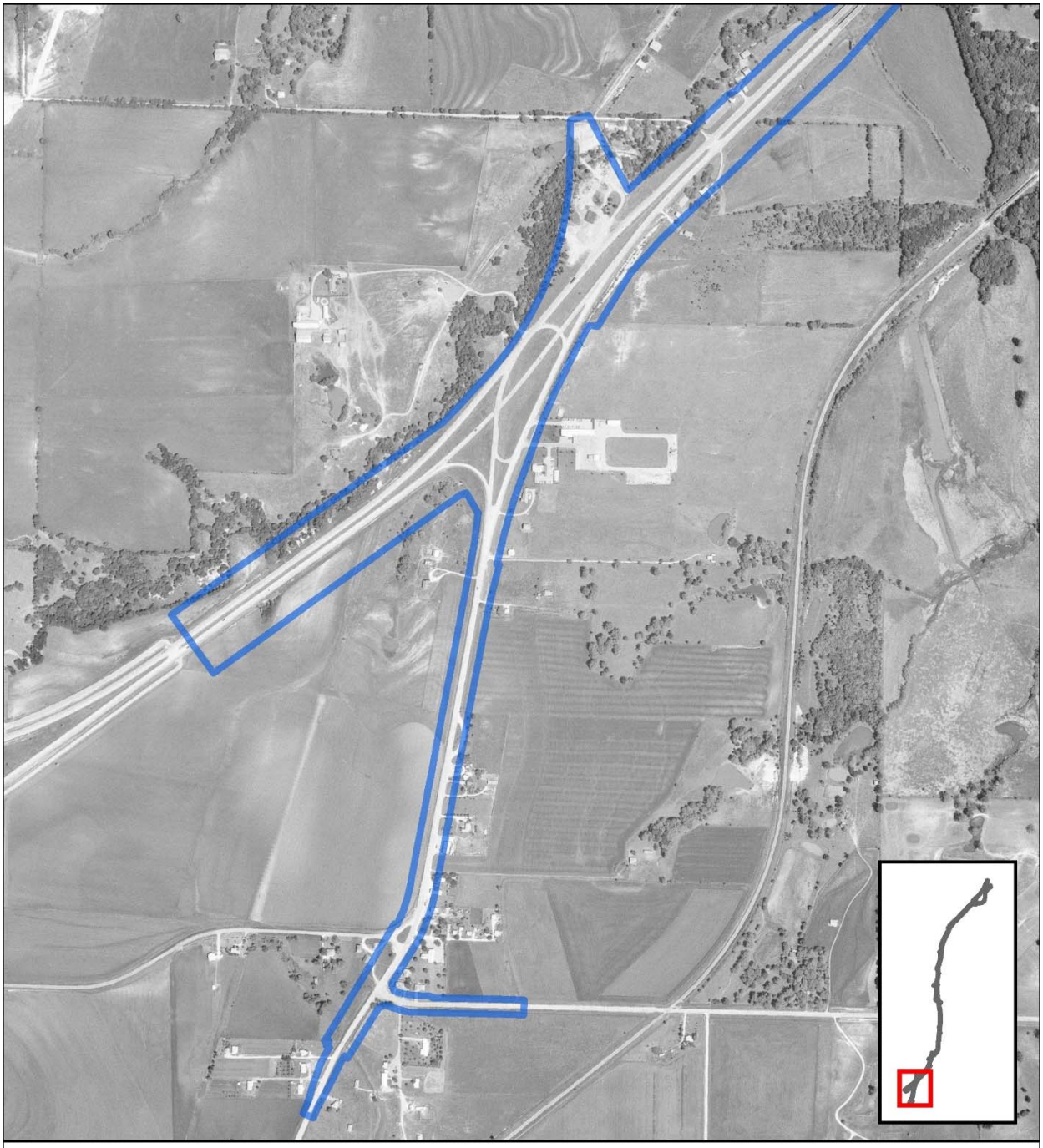



Project Location
0 250 500
Meters
0 750 1,500
Feet
N
Source: 1968 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1968 Aerial.mxd
Date: 11/18/2019


Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1968 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1968 Aerial.mxd
Date: 11/18/2019


Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1968 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1968 Aerial.mxd
Date: 11/18/2019


Project Location
0
250
500
Meters
0
750
1,500
Feet
N
Source: 1968 USGS Aerial Imagery
Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1968 Aerial.mxd
Date: 11/18/2019



Source: 1968 USGS Aerial Imagery

Document Path: S:\EComm\Projects\130 Michael Baker\130-010 SH 5 in McKinney\GIS_Data\projects\6_24_19\1968 Aerial.mxd

Date: 11/18/2019

Attachment 9: Schematics.

This report was written on behalf of the Texas Department of Transportation by:

AmaTerra® ENVIRONMENTAL, INC.
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Austin, Texas 78737