

Volume 2015

Article 75

2015

Hero Way Relocation Project Archaeological Monitoring Report

Casey Hanson

Follow this and additional works at: https://scholarworks.sfasu.edu/ita

Part of the American Material Culture Commons, Archaeological Anthropology Commons, Environmental Studies Commons, Other American Studies Commons, Other Arts and Humanities Commons, Other History of Art, Architecture, and Archaeology Commons, and the United States History Commons

Tell us how this article helped you.

This Article is brought to you for free and open access by the Center for Regional Heritage Research at SFA ScholarWorks. It has been accepted for inclusion in Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State by an authorized editor of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

Hero Way Relocation Project Archaeological Monitoring Report

Creative Commons License



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License



Hero Way Relocation Project Archaeological Monitoring Report



Atmos Energy Corporation Dallas, Texas

Hero Way Relocation Project Archaeological Monitoring Report Project No. 60593

November 2015



Hero Way Relocation Project Archaeological Monitoring Report

prepared for

Atmos Energy Corporation Dallas, Texas Hero Way Relocation Project Archaeological Monitoring Report Leander, Texas

Project No. 60593

November 2015

prepared by

Principal Investigator and Report Author: Casey Hanson

Burns & McDonnell Engineering Company, Inc. Austin, Texas

COPYRIGHT \circledast 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC

ABSTRACT

Atmos Energy Corporation (Atmos) contracted Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to perform a records review and archaeological monitoring for the Hero Way Relocation Project (Project), a natural gas pipeline relocation and replacement project in the city of Leander, Williamson County, Texas (Appendix A: Figure A-1). The following report provides information regarding the proposed Project and includes the results of the cultural resources background review and the results of the archaeological monitoring. The report is presented in the short report format developed by the Council of Texas Archaeologists (CTA) for small projects with no findings (CTA, 2015).

Atmos Energy Corporation (Atmos) is proposing to replace and relocate 10 segments, totaling approximately 0.25 miles (0.40 kilometers [km]) of an existing 1.25 mile (2 km)-long natural gas distribution line in northern Leander, Texas (Project Area; Appendix A: Figure A-2). The proposed right-of-way (ROW) for the Project is 25 feet wide (7.62 m) and the expected impact area totals 0.77 acres. Construction activities will include the installation of 8-inch poly main line and other related improvements that will require both open-cut and boring methods with expected disturbances to reach a maximum depth of 8 feet (2.43 m) below surface.

No Federal funding, licensing, or permitting is required for the Project; therefore, Section 106 of the National Historic Preservation Act does not currently apply to the project. However, the Project impacts are located within publicly owned ROW paralleling Hero Way (Old Farm to Market 2243), and because the ROW is owned by a political subdivision of the State (the city of Leander), the Antiquities Code of Texas applies for this Project. Additionally, six of the ten proposed relocation segments, totaling approximately 900 ft (274 m), are located within the boundaries of 41WM269, a National Register of Historic Places (NRHP)-eligible archaeological site also known as the historic settlement of Bagdad. Furthermore, four of these six proposed relocation segments (approximately 132 ft [40 m]) are within 25 ft (7.62 m) of the Bagdad Cemetery (also a part of 41WM269; Figure A-3 and A-4). Consultation with the Texas Historical Commission (THC) determined that the majority of the Project has been subject to previous investigations, and as such, the THC recommended that only the four proposed impact areas adjacent to the Bagdad Cemetery required archaeological monitoring to decrease the potential for disturbing unmarked burials that may be located outside of present day cemetery boundaries.

Burns & McDonnell archaeologists performed a background review for the entire Project Area prior to initiating fieldwork. Burns & McDonnell archaeologists monitored excavations in the four proposed impact areas adjacent to the Bagdad Cemetery between September 16, 2015, and October 12, 2015, under

TAC Permit 7399 (Appendix B). No unmarked burials or additional cultural resources were located adjacent to Bagdad Cemetery within the Project ROW. The following report provides the results of the background review and archaeological monitoring for this section of the Project.

TABLE OF CONTENTS

ABSTRACT

Page No.

1.0	INTR	INTRODUCTION				
	1.1	Project Description				
	1.2	Project History and Personnel				
2.0	RES	SEARCH DESIGN	2-1			
	2.1	Background Review Methods				
	2.2	Archaeological Monitoring Methods				
		2.2.1 Unanticipated Discoveries Plan				
3.0	RES	SULTS OF RECORDS REVIEW	3-1			
4.0	RES	SULTS OF THE ARCHAEOLOGICAL MONITORING	4-1			
	4.1	Location 1	4-1			
	4.2	Location 2				
	4.3	Location 3				
	4.4	Location 4				
5.0	CON	NCLUSIONS AND RECOMMENDATIONS	5-1			
6.0	REF	ERENCES	6-1			
APPE	ENDIX	(A - FIGURES (B - ANTIQUITIES PERMIT (C - THC COORDINATION				

LIST OF FIGURES

Page No.

Figure 4-1:	View of Unmarked Burial Located in 2001	
Figure 4-2:	View of Old Cemetery Fence	
Figure 4-3:	Location 1 Bore Hole, Facing South (Bagdad Cemetery in Background)	
Figure 4-4:	Location 2 Profile, Facing South	
Figure 4-5:	Location 3 Profile, Facing South (Existing Telecommunication Line in	
	Foreground)	
Figure 4-6:	View of an Intact Profile at Location 4, Facing East	
Figure 4-7:	View of Buried Telecommunication Lines (Project ROW, Location 4)	

LIST OF TABLES

Page No.

Table 3-1:	Previous Cultural Resources Surveys Within 1 Mile of the Project	3-2
Table 3-2:	Previously Recorded Archaeological Sites Within 1 Mile of the Project	3-3
Table 3-3:	Non-archaeological Historic-Age Resources Within 1 Mile of the Project	3-4

LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
Atmos	Atmos Energy Corporation
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
cm	Centimeter(s)
СТА	Council of Texas Archaeologists
in	Inch(es)
m	Meter(s)
NRHP	National Register of Historic Places
OTHM	Official State of Texas Historical Marker
ROW	Right-of-way
RTHL	Recorded Texas Historic Landmark
SAL	State Antiquities Landmark
SHPO	State Historic Preservation Officer
TASA	Texas Archaeological Sites Atlas
THC	Texas Historical Commission
TPWD	Texas Parks and Wildlife Division
TxDOT	Texas Department of Transportation
U.S.	United States
USACE	U.S. Army Corps of Engineers

1.0 INTRODUCTION

Atmos Energy Corporation (Atmos) contracted Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to perform a records review and archaeological monitoring for the Hero Way Relocation Project (Project), a natural gas pipeline relocation and replacement project in the city of Leander, Williamson County, Texas (Appendix A: Figure A-1; A2). The following report provides information regarding the proposed Project and includes the results of the cultural resources background review and the results of the archaeological monitoring. The report is presented in the short report format developed by the Council of Texas Archaeologists (CTA) for small projects with no findings (CTA, 2015).

1.1 **Project Description**

Atmos proposes the relocation and replacement of 10 segments, totaling approximately 0.25 miles (0.4 kilometers [km]) of an existing 1.25 mile (2.0 km)-long natural gas distribution line in northern Leander, Texas (Appendix A: Figure A-2). The proposed right-of-way (ROW) for the Project is 25 feet wide (7.62 meters [m]) and the expected impact area totals 0.77 acres. Construction activities will include the installation of 8-inch poly main line and other related improvements at the 10 proposed segments that will require both open-cut and boring methods with expected disturbances to reach a maximum depth of 8 feet (2.43 m) below surface.

No Federal funding, licensing, or permitting is required for the Project; therefore, Section 106 does not currently apply. However, the Project impacts are located within publicly owned ROW paralleling Hero Way (Old Farm to Market Road 2243/County Road 269), and because the ROW is owned by a political subdivision of the State (the city of Leander), the Antiquities Code of Texas applies for this Project.

Six of the ten proposed relocation segments, totaling approximately 900 ft (275 m), are located within the boundaries of 41WM269, a National Register of Historic Places (NRHP)-eligible archaeological site also known as the historic settlement of Bagdad. Furthermore, four of these six proposed relocation segments (approximately 132 ft [40 m]) are within 25 ft (7.62 m) of the Bagdad Cemetery, a contributing component of 41WM269 (Appendix A: Figure A-3). As part of an effort to decrease the potential for disturbing unmarked burials that may be located outside of present day cemetery boundaries, the Texas Historical Commission (THC) currently requires archaeological monitoring for natural gas pipeline replacement projects that occur within 25 ft of a known historic-age cemetery.

Because the majority of the Project has been subject to previous archaeological investigations, Burns & McDonnell archaeologists submitted a State Historic Preservation Officer (SHPO) Consultation Form on July 20, 2015, requesting guidance from the THC on which portions of the Project require additional

cultural resources survey. The THC issued comments on August 13, 2015, and recommended that only the proposed Project ROW adjacent to the Bagdad Cemetery required archaeological monitoring in an effort to decrease the potential for disturbing unmarked burials that may be located outside of present day cemetery boundaries (Appendix B).

1.2 Project History and Personnel

Burns & McDonnell archaeologists performed a background review for the entire Project Area prior to initiating fieldwork, and conducted the archaeological monitoring of the four proposed impact areas adjacent to the Bagdad Cemetery as needed between September 16, 2015, and October 12, 2015, under TAC Permit 7399 (Appendix B). Casey Hanson served as Principal Investigator and he and Shelly Fischbeck performed the archaeological monitoring.

2.0 RESEARCH DESIGN

The overall objectives of the background review and the archaeological monitoring were to locate and assess any historic-age (50 years of age or older) properties or archaeological sites listed or eligible for listing as State Antiquities Landmarks (SALs) within or in close proximity to the Project Area that could potentially be affected by Project construction. Additionally, there were specific concerns that this Project may have the potential to impact unmarked graves due to its proximity to the historic Bagdad Cemetery. The following chapter provides information regarding the sources consulted during the initial background review, which took place before the start of fieldwork, as well as the methods used during the archaeological construction monitoring of the Project ROW adjacent to the Bagdad Cemetery.

2.1 Background Review Methods

The background records review included an examination of the Texas Archaeological Sites Atlas (TASA) to identify previously recorded archaeological sites and other recorded historic-age resources. This includes Official State of Texas Historical Markers (OTHMs), such as Recorded Texas Historic Landmarks (RTHLs), NRHP-listed sites and districts, SALs, and historic-age cemeteries within an area extending 1 mile from the Project Area (Study Area). Burns & McDonnell archaeologists also used the TASA to identify previous cultural resources surveys performed within or near the Project.

2.2 Archaeological Monitoring Methods

Typically, projects with impacts located adjacent to cemeteries require archaeological survey with mechanical scraping prior to construction to determine the presence or absence of burials within the Project ROW. However, backhoe trenching prior to construction was inadvisable for this Project due to the presence of an existing pipeline within the Project ROW. Therefore, the methodology for the Hero Way Relocation project was construction monitoring by a qualified professional archaeologist of all ground-disturbing activities that occurred within 25 feet of Bagdad Cemetery during the relocation and replacement of the existing pipeline.

In addition to visual monitoring of the construction excavation, selected samples of the excavated clay soils were hand sorted in order to identify any materials suggestive of the presence of human remains, including bone, coffin hardware, and other materials that could potentially be associated with a burial. Additionally, the excavations were photo-documented and daily journals noting construction progress and ground surface impacts were maintained.

2.2.1 Unanticipated Discoveries Plan

Due to the possibility that human burials could be encountered during Project construction, Burns & McDonnell developed a procedure for when human remains or possible human remains are observed. The intentional disturbance of human remains is a misdemeanor under the Texas Penal Code, and the theft of property associated with a burial is a felony. Atmos agreed to advise construction crew, equipment operators, and other contractor personnel involved about required compliance with the following procedures during construction activities in this area:

If any bones or other physical materials are found that could possibly be human remains, or funerary objects indicative of human remains, Atmos or its representatives will:

- Immediately halt all construction and excavation activities within a 50-foot radius of the discovery point.
- Consult with a professional archaeologist or osteologist to verify whether the bones or other materials are human remains or funerary objects.
- If the materials are human remains or appear to be funerary objects potentially associated with human remains, implement measures to protect the discovery from looting and vandalism until state law requirements have been completed.
- Notify the City of Leander and the THC of the discovery.
- Comply with the Texas Administrative Code (Title 13, Part 2, Chapter 22, Rule 22.4 and Rule 22.5), the Texas Health and Safety Code (Title 8, Subtitle C, Chapter 711), and the Texas Penal Code (Title 7, Chapter 31; Title 9, Chapter 42, Section 42.08). In addition, treatment of the discovery must be in accordance with Texas Administrative Code, Title 13, Part 2, Chapter 26.
- Construction crews and all personnel present in the field should be advised to treat burial sites, human remains, and funerary objects with dignity and respect.

In the event that human remains or funerary objects were encountered, Atmos agreed to work with the THC and all concerned parties to develop an appropriate plan of action. It was also advised that human remains may not be removed without a Disinterment Permit from the State Registrar after the Registrar has determined that all the necessary legal requirements for disinterment have been met, and the THC may consider alternatives to disinterment in the event that human remains are encountered.

3.0 RESULTS OF RECORDS REVIEW

Based on a review of TASA, four cultural resource surveys have been performed within the immediate Project ROW, and 17 additional surveys have been completed within 1 mile of the Project (THC 2015; Appendix A: Figure A-4; Table 3-1).

Five previous investigations overlap with portions of the current Project ROW including:

- A 1974 investigation by John Clark that resulted in recording the historic town and cemetery of Bagdad (41WM269)
- A 2001 survey by Horizon Environmental Services for the widening of the north and south alignments of Ranch-to-Market Road 2243 (present-day Hero Way)
- A 2007 survey by PBS&J for an Atmos pipeline relocation project along the east side of Bagdad road that began at its intersection with Hero Way
- A 2008 survey by SWCA for the reconstruction of Bagdad Road that included the intersection of Bagdad Road and Hero Way
- A 2015 survey by HDR for Hero Way road improvements that investigated a large portion of the current Project ROW

The 2001, 2008, and 2015 surveys determined that previous improvement projects had disturbed the portions of ROW along Hero Way investigated during each respective survey, with the exception of the area surrounding Bagdad Cemetery. The 2007, 2008, and 2015 projects had no proposed impacts in the ROW adjacent to Bagdad cemetery, and as such, the respective archaeological surveys did not investigate the area. Conversely, Horizon's 2001 investigation included mechanical scraping within the ROW adjacent to the cemetery's north fence that resulted in exposing a burial shaft of an unmarked grave located approximately 1000 ft (300 m) east of the intersection of Hero Way and Bagdad Road. Horizon mapped the location of the burial shaft, but completed no further work at this location and the area was avoided by construction activities.

Date	Consultant	Planner	Agency	Intersects ROW
1974 ^a	John Clark	Unknown	unknown	Yes
1977	unknown	Unknown	SDHPT	No
1982	unknown	Unknown	EPA TDWR	No
1985	unknown	Unknown	EPA	No
1998	unknown	Unknown	Leander ISD	No
2001 ^a	Horizon Environmental Services, Inc.	Unknown	Texas Department of Transportation (TxDOT)	Yes
2003	PBS&J	Unknown	Leander ISD	No
2004	PBS&J	Unknown	Leander ISD	No
2004	Lopez Garcia Group	Capital Metro Transportation Authority	FTA	No
2005	American Archaeology Group LLC	Unknown	City of Leander	No
2006	Hicks and Company	Unknown	TxDOT	No
2006	Horizon Environmental Services, Inc.	Texas Parks and Wildlife Division (TPWD), Texas X Park	U.S. Army Corps of Engineers (USACE), Ft. Worth	No
2007 ^a	PBS&J	Atmos Energy	Unknown	Yes
2008	SWCA	Bucher, Willis & Ratliff Corporation	City of Leander	Yes
2009	HPA Gray & Pape	Berg-Oliver Associates, Inc.	City of Leander	No
2009	Cox/McLain Environmental	Klotz Associates, Inc.	TxDOT/City of Leander	No
2012	SWCA	Unknown	County of Williamson	No
2013	Goshawk	Austin Capital Concrete	USACE, Ft. Worth	No
2014	HDR	Unknown	City of Leander	Yes
2014	Atkins	Unknown	Leander ISD	No
2014	Horizon Environmental Services, Inc.	Unknown	Mason Joseph Company, Inc.	No

Table 3-1: Previous Cultural Resources Surveys Within 1 Mile of the Project

(a) Project area shape file does not appear on the TASA website.

There are 14 previously recorded archaeological sites within 1 mile of the Project, one of which (41WM269) is located within the immediate Project ROW (THC 2015; Appendix A: Figure A-4; Table 3-2). As mentioned, 41WM269 is composed of the historic settlement of Bagdad and the town's cemetery. John Clark originally recorded the site in 1974, and it was determined eligible for inclusion on

the NRHP in 2004. However, previous investigations have largely determined that, with exception of the Bagdad Cemetery, 41WM269 is disturbed within the ROW along Hero Way and Bagdad Road.

Trinomial	Site Type	NRHP Eligibility	Intersects Project ROW
41WM269	Historic Settlement and Cemetery	Eligible	Yes
41WM693	Prehistoric Lithic Quarry	Ineligible	No
41WM694	Historic Scatter	Ineligible	No
41WM695	Historic Structure	Ineligible	No
41WM697	Prehistoric Lithic Quarry/Scatter	Ineligible	No
41WM698	Prehistoric Lithic Scatter	Ineligible	No
41WM699	Prehistoric Isolated Find	Ineligible	No
41WM717	Historic Alpheus S. Mason Barn	Undetermined	No
41WM1003	Historic Pickle-Mason House	Undetermined	No
41WM1004	Prehistoric Lithic Scatter	Ineligible	No
41WM1007	Historic Farmstead	Ineligible	No
41WM1099	Multicomponent Artifact Scatter	Ineligible	No
41WM1111	Historic Farmstead	Ineligible	No
41WM1246	Prehistoric Lithic Scatter	Ineligible	No

 Table 3-2:
 Previously Recorded Archaeological Sites Within 1 Mile of the Project

There are seven OTHMs located within 1 mile of the Project ROW, but none will be impacted by construction activities (THC 2015; Appendix A: Figure A-4; Table 3-3). One OTHM is near the Project ROW, a subject marker for the Bagdad Cemetery, which opened in 1857 with the burial of 3-year-old John Babcock, whose father, Charles Babcock, later donated the tract to community of Bagdad for its cemetery.

Resource Name	Quadrangle	Designation	Marker Type	Intersects Project ROW
Bagdad Cemetery	Leander	OTHM	Subject	Possibly
Heinatz Homestead	Leander	OTHM	RTHL	No
Pickle-Mason House	Leander	OTHM	RTHL	No
Leander United Methodist Church	Leander	OTHM	Subject	No
Leander Presbyterian Church	Leander	OTHM	Subject	No
Leander Schools	Leander	OTHM	Subject	No
Norton Moses Lodge No. 336, A.F. & A.M.	Leander	OTHM	Subject	No

4.0 RESULTS OF THE ARCHAEOLOGICAL MONITORING

The following chapter presents the results of the archaeological monitoring at four locations along Hero Way and adjacent to Bagdad Cemetery (Appendix A; Figures A-2 and A-3). No unmarked burials or additional buried cultural resources were located within the Project ROW, and the results of the archaeological monitoring at the four locations are described below.

4.1 Location 1

Excavation Location 1 was situated on the south side of the concrete-lined ditch on the south side of Hero Way approximately 200 ft (60 m) east of the eastern-most entrance to Bagdad Cemetery and near the unmarked burial located by Horizon in 2001 (Appendix A; Figures A-2, A3, and A-5). Prior to construction excavation, Burns & McDonnell archaeologists located the position of the unmarked burial exposed during Horizon's 2001 investigation and determined that the burial was situated approximately 20 ft (6 m) south of the current Project ROW. Additionally, it was determined that a new fence delineating the cemetery boundary was constructed since the 2001 investigation, located between 5 and 20 meters north of the chain-link fence depicted on Horizon's sketch map (Figure 4-1 and Figure 4-2).





Unmarked burial located in 2001 and new cemetery fence, facing east (previous chain link fence cement posthole in the foreground).



Figure 4-2: View of Old Cemetery Fence

Old cemetery fence alignment, facing west (see cement postholes in foreground) in relation to new cemetery fence.

Construction activities at Location 1 included the excavation of a bore hole that served to connect an existing natural gas line on the south side of Hero Way with an existing natural gas line on the north side of Hero Way. Construction activities at Location 1 also included the excavation of a trench measuring approximately 65 ft (20 m) for the purpose of dropping the existing natural gas line from approximately 4 ft (1.2 m) below surface to about 8 ft (2.43 m) below surface to accommodate future road improvements. While most of the Project ROW at Location 1 was disturbed by a buried telecommunications line and the existing gas line, excavation revealed a profile of approximately 20 cm of disturbed soils and gravels over approximately 5 cm of road base over 40 cm of intact very dark brown (10YR 2/2) clay above limestone bedrock (Figure 4-3). No unmarked burials or cultural features were observed at Location 1.



Figure 4-3: Location 1 Bore Hole, Facing South (Bagdad Cemetery in Background)

4.2 Location 2

Excavation Location 2 was situated at the bottom of a ditch on the south side of Hero Way approximately 32 ft (10 m) west of the easternmost entrance to the Bagdad Cemetery and 32 ft (10 m) north of the existing cemetery fence (Appendix A; Figures A-2 and A-3). Construction activities at Location 2 included the excavation of a trench measuring approximately 32 ft (10 m) for the purpose of dropping the existing line from approximately 4 ft (1.2 m) below surface to about 8 ft (2.43 m) below surface to accommodate future road improvements. Excavation revealed that the existing line was bored into place, leaving an intact profile composed of approximately 40 cm of very dark brown (10YR 2/2) clay and cobbles over limestone bedrock (Figure 4-4). No unmarked burials or cultural features were observed at Location 2.



Figure 4-4: Location 2 Profile, Facing South

4.3 Location 3

Excavation Location 3 was situated at the bottom of a ditch on the south side of Hero Way approximately 32 ft (10 m) west of the westernmost entrance to the Bagdad Cemetery and 16 ft (5 m)north of the existing cemetery fence (Appendix A; Figures A-2 and A-3). Construction activities at Location 3 included the excavation of a trench measuring approximately 32 ft (10 m) for the purpose of dropping the existing line from approximately 4 ft (1.2 m) below surface to about 8 ft (2.43 m) below surface to accommodate future road improvements. Excavation revealed that a trench was originally excavated for the installation of an existing telecommunications line, and as such, the overlaying soils at Location 3 were disturbed (Figure 4-5). No unmarked burials or cultural features were observed at Location 3.



Figure 4-5: Location 3 Profile, Facing South (Existing Telecommunication Line in Foreground)

4.4 Location 4

Excavation Location 4 was located at the southeast corner of Hero Way and Bagdad Road (Appendix A; Figure A-2 and A-3). The Project ROW was generally situated along the cemetery fence beginning about 16 ft (5 m) south of Hero Way and extended approximately 65 ft (20 m) to where it turned west and extended another 32 ft (10 m) to its termination point at the Bagdad Road curb line (Appendix A; Figure A-3). Construction activities at Location 4 included abandoning the existing natural gas line located closer to the Hero Way and Bagdad Road intersection and the installation of a new gas line in the footprint described above. Excavation revealed a few intact portions of the Project ROW with a similar profile to what was observed at Location 2: approximately 20-40 cm of very dark brown (10YR 2/2) clay and cobbles over limestone bedrock (Figure 4-6). However, portions of Location 4 also displayed a high level of disturbance associated with various buried telecommunication lines and an existing water main that runs parallel to Bagdad Road (Figure 4-7). No unmarked burials or cultural features were observed at Location 4.



Figure 4-6: View of an Intact Profile at Location 4, Facing East

Figure 4-7: View of Buried Telecommunication Lines (Project ROW, Location 4)



5.0 CONCLUSIONS AND RECOMMENDATIONS

The THC requested archaeological monitoring at the proposed Project ROW adjacent to the Bagdad Cemetery in an effort to decrease the potential for disturbing unmarked burials that may be located outside of present day cemetery boundaries. Burns & McDonnell archaeologists conducted the archaeological monitoring of the four proposed impact areas adjacent to the Bagdad Cemetery September 16, 2015, and October 12, 2015, under TAC Permit 7399 (Appendix B). One previously recorded eligible site, 41WM269, was identified in the Project ROW during the background review, but no evidence of the historic community of Bagdad or unmarked burials associated with the Bagdad Cemetery were located within the four excavation locations during archaeological monitoring. Burns & McDonnell recommends that no historic properties were affected by the relocation and replacement of the natural gas pipeline and recommends no further evaluation of the current Project ROW.

6.0 **REFERENCES**

Council of Texas Archaeologists (CTA)

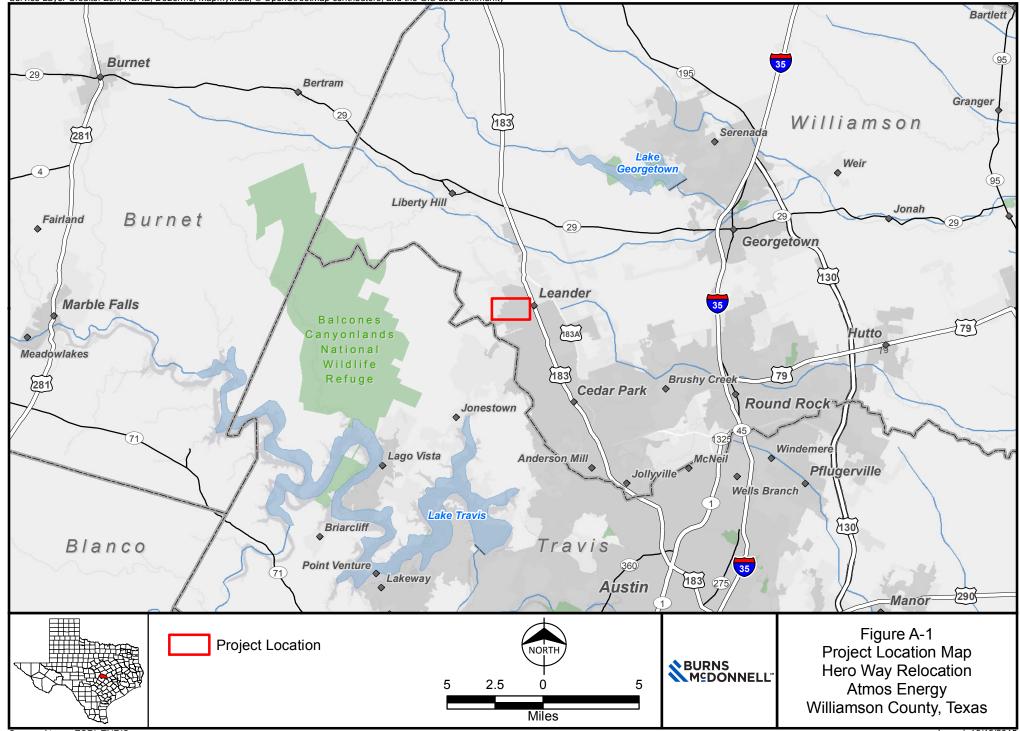
2015 Council of Texas Archeologists Guidelines for Cultural Resource Management Reports. Electronic document, http://counciloftexasarcheologists.org/wordpress/wpcontent/uploads/Guidelines-for-CRM-Reports.pdf, accessed February 11, 2015.

Texas Historical Commission (THC)

2015 *Texas Historical Sites Atlas.* Electronic document, http://atlas.thc.state.tx.us, accessed January 2015.

APPENDIX A - FIGURES

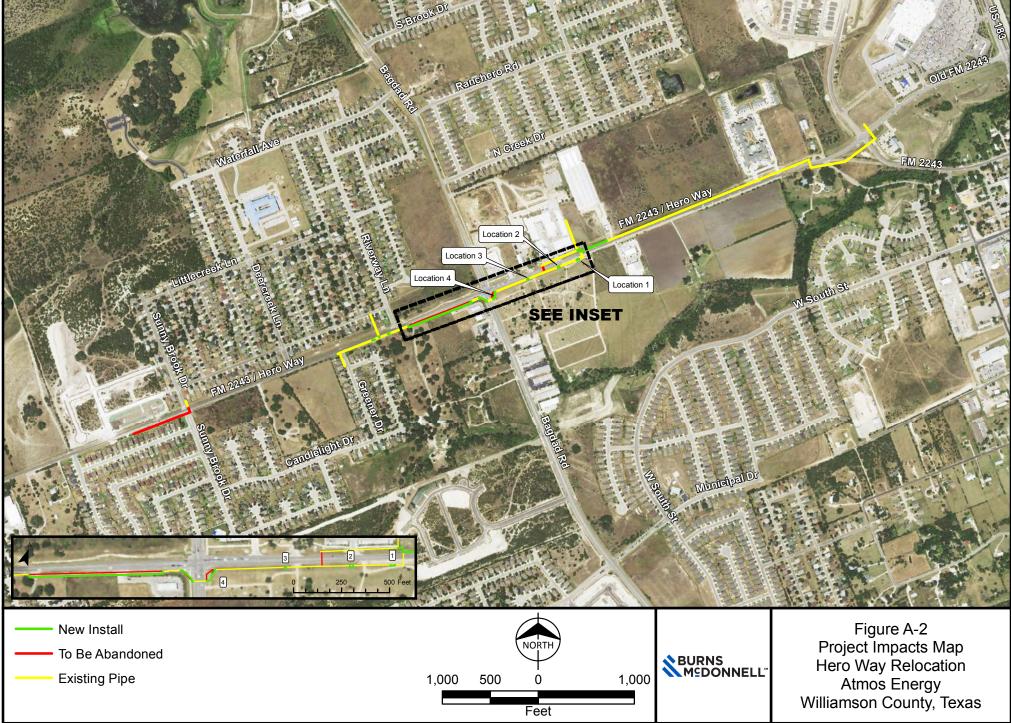
Path: T:\ESP\Atmos\Hero Way Relocation Project\GIS\DataFiles\ArcDocs\FigureA1_ProjectLocationMap.mxd gacox 10/19/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



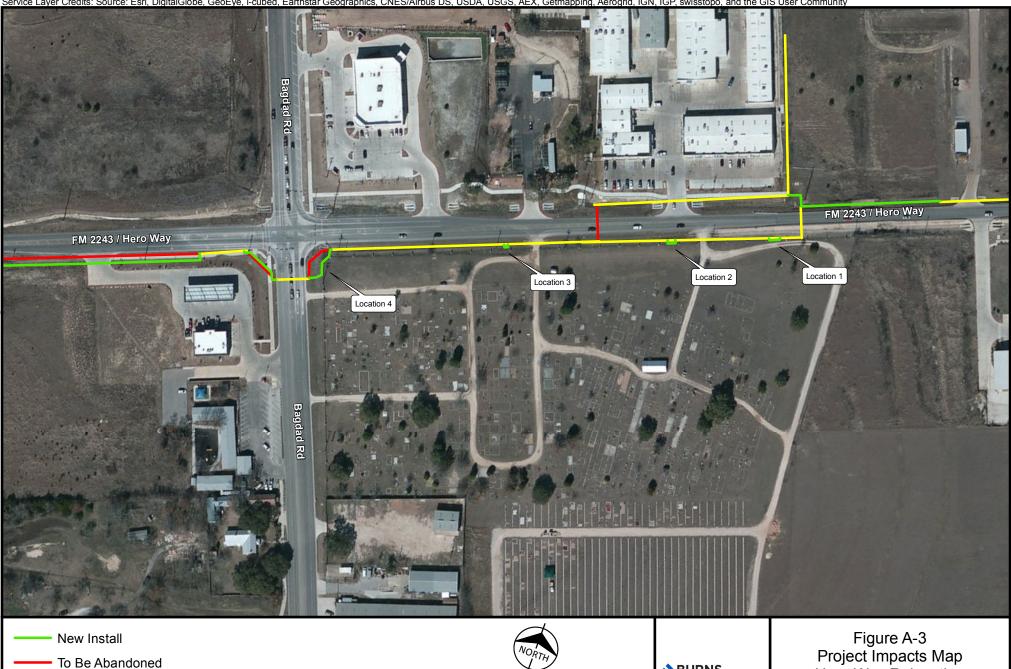
Source: Atmos; ESRI; TNRIS

Issued: 10/19/2015

Path: T:\ESP\Atmos\Hero Way Relocation Project\GIS\DataFiles\ArcDocs\FigureA2_ProjectImpactsMap.mxd gacox 10/19/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits:



Path: T:\ESP\Atmos\Hero Way Relocation Project\GIS\DataFiles\ArcDocs\FigureA3_ProjectImpactsMap.mxd gacox 10/19/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



200

Existing Pipe



Figure A-3 Project Impacts Map Hero Way Relocation Atmos Energy Williamson County, Texas

Source: Atmos; USDA NAIP 2014

APPENDIX B - ANTIQUITIES PERMIT

TEXAS HISTORICAL COMMISSION *real places telling real stories*

August 27, 2015

Casey Hanson Burns & McDonnell 8911 Capital of Texas Highway Building 4, Suite 4260 Austin, TX 78759

Re: Project review under the Antiquities Code of Texas Hero Way Relocation Project, Williamson County, Texas Texas Antiquities Permit Application **#7399**

Dear Colleague:

Thank you for your Antiquities Permit Application for the above referenced project. This letter presents the final copy of the permit from the Executive Director of the Texas Historical Commission (THC), the state agency responsible for administering the Antiquities Code of Texas.

Please keep this copy for your records. The Antiquities Permit investigations requires the production and submittal of one printed copy of the final report, a completed abstract form submitted via our online system, two copies of the tagged PDF final report on CD (one with site location information & one without), and verification that any artifacts recovered and records produced during the investigations are curated at the repository listed in the permit. The abstract form maybe submitted via the THC website (www.thc.state.tx.us) or use url: http://xapps.thc.state.tx.us/Abstract/login.aspx Additionally, you must send the THC shapefiles showing the boundaries of the project area *and* the areas actually surveyed via email to archeological_projects@thc.state.tx.us.

If you have any questions concerning this permit or if we can be of further assistance, please contact Lillie Thompson at 512/463-1858. The reviewer for this project is Rebecca Shelton, 512/463-6096.

Sincerely,

Willing the Ant

for Mark Wolfe Executive Director

MW/lft

Enclosures

Cc: Wayne Watts, City of Leander Jerry Garcia, Atmos Energy



State of Texas TEXAS ANTIQUITIES COMMITTEE

ARCHEOLOGY PERMIT # 7399

This permit is issued by the Texas Historical Commission, hereafter referred to as the Commission, represented herein by and through its duly authorized and empowered representatives. The Commission, under authority of the Texas Natural Resources Code, Title 9, Chapter 191, and subject to the conditions hereinafter set forth, grants this permit for:

Intensive Survey

To be performed on a potential or designated landmark or other public land known as:

Title:Hero Way Relocation ProjectCounty:WilliamsonLocation:Leander, TX

Owned or Controlled by: (hereafter known as the Permittee):

City of Leander City Hall, 200 West Willis Street Leander, TX

Sponsored by (hereafter known as the Sponsor

Atmos Energy 3110 | 35 North Round Rock, TX 78681

The Principal Investigator/Investigation Firm representing the Owner or Sponsor is:

Casey Hanson

Burns & McDonnell, Inc.

8911 Capital of Texas Highway, Building 4, Suite 4260

Austin, TX 78759

This permit is to be in effect for a period of:

2 Years and 0 Months

and Will Expire on:

08/24/2017

During the preservation, analysis, and preparation of a final report or until further notice by the Commission, artifacts, field notes, and other data gathered during the investigation will be kept temporarily at:

Burns & McDonnell Austin Office Lab

Upon completion of the final permit report, the same artifacts, field notes, and other data will be placed in a permanent curatorial repository at:

Texas Archeological Research Lab.

Scope of Work under this permit shall consist of:

An intensive pedestrian archaeological survey with shovel testing of high probability areas that meets or exceeds the State Archeological Survey Standards for Texas. This includes, subsurface shovel testing of pedestrian survey transects and mechanical testing in appropriate alluvial areas. For details, see scope of work letter submitted with permit application.



ARCHEOLOGY PERMIT # 7399

This permit is granted on the following terms and conditions:

1) This project must be carried out in such a manner that the maximum amount of historic, scientific, archeological, and educational information will be recovered and preserved and must include the scientific, techniques for recovery, recording, preservation and analysis commonly used in archeological investigations. All survey level investigations must follow the state survey standards and the THC survey requirements established with the projects sponsor(s).

2) The Principal Investigator/Investigation Firm, serving for the Owner/Permittee and/or the Project Sponsor, is responsible for insuring that specimens, samples, artifacts, materials and records that are collected as a result of this permit are appropriately cleaned, and cataloged for curation. These tasks will be accomplished at no charge to the Commission, and all specimens, artifacts, materials, samples, and original field notes, maps, drawings, and photographs resulting from the investigations remain the property of the State of Texas, or its political subdivision, and must be curated at a certified repository. Verification of curation by the repository is also required, and duplicate copies of any requested records shall be furnished to the Commission before any permit will be considered complete.

3) The Principal Investigator/Investigation Firm serving for the Owner/Permittee, and/or the Project Sponsor is responsible for the publication of results of the investigations in a thorough technical report containing relevant descriptions, maps, documents, drawings, and photographs. A draft copy of the report must be submitted to the Commission for review and approval. Any changes to the draft report requested by the Commission must be made or addressed in the report, or under separate written response to the Commission. Once a draft has been approved by the Commission, one (1) printed, unbound copy of the final report containing at least one map with the plotted location of any and all sites recorded and two copies of the report in tagged PDF format on an archival quality CD or DVD shall be furnished to the commission. One copy must include the plotted location of any and all sites recorded and an electronic copy of the completed Abstracts in Texas Contract Archeology Summary Form must also be submitted with the final report to the Commission. (Printed copies of forms are available from the Commission or also online at www.thc.state.tx.us.)

4) If the Owner/Permittee, Project Sponsor or Principal Investigator/Investigation Firm fails to comply with any of the Commission's Rules of Practice and Procedure or with any of the specific terms of this permit, or fails to properly conduct or complete this project within the allotted time, the permit will fall into default status. A notification of Default status shall be sent to the Principal Investigator/Investigation Firm, and the Principal Investigator will not be eligible to be issued any new permits until such time that the conditions of this permit are complete or, if applicable, extended.

5) The Owner/Permittee, Project Sponsor, and Principal Investigator/Investigation Firm, in the conduct of the activities hereby authorizes, must comply with all laws, ordinances and regulations of the State of Texas and of its political subdivisions including, but not limited to, the Antiquities Code of Texas; they must conduct the investigation in such a manner as to afford protection to the rights of any and all lessees or easement holders or other persons having an interest in the property and they must return the property to its original condition insofar as possible, to leave it in a state which will not create hazard to life nor contribute to the deterioration of the site or adjacent lands by natural forces.

6) Any duly authorized and empowered representative of the Commission may, at any time, visit the site to inspect the fieldwork as well as the field records, materials, and specimens being recovered.

7) For reasons of site security associated with historical resources, the Project Sponsor (if not the Owner/Permittee), Principal Investigator, Owner, and Investigation Firm shall not issue any press releases, or divulge to the news media, either directly or indirectly, information regarding the specific location of, or other information that might endanger those resources, or their associated artifacts without first consulting with the Commission, and the State agency or political subdivision of the State that owns or controls the land where the resource has been discovered.

8) This permit may not be assigned by the Principal Investigator/Investigation Firm, Owner/Permittee, or Project Sponsor in whole, or in part to any other individual, organization, or corporation not specifically mentioned in this permit without the written consent of the Commission. 9) Hold Harmless: The Owner/Permittee hereby expressly releases the State and agrees that Owner/Permittee will hold harmless, indemnify, and defend (including reasonable attorney's fees and cost of litigation) the State, its officers, agents, and employees in their official and/or individual capacities from every liability, loss, or claim for damages to persons or property, direct or indirect of whatsoever nature arising out of, or in any way connected with, any of the activities covered under this permit. The provisions of this paragraph are solely for the benefit of the State and the Texas Historical Commission and are not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

10) Addendum: The Owner/Permittee, Project Sponsor and Principal Investigator/Investigation Firm must abide by any addenda hereto attached.

Upon a finding that it is in the best interest of the State, this permit is issued on 08/24/2015.

t Mercado.

Pat Mercado-Allinger, for the Texas Historical Commission

APPENDIX C - THC COORDINATION



July 20, 2015

Becky Shelton Regional Archaeologist/ Project Reviewer Texas Historical Commission 108 W. 16th Street Austin, TX 78701

Re: Request for SHPO Consultation Hero Way Relocation Project Atmos Energy Corporation

Dear Ms. Shelton:

Enclosed is a Request for SHPO Consultation Form for the Hero Way Relocation Project in Williamson County, Texas proposed by Atmos Energy Corporation (Atmos) (Appendix A: Figures 1 and 2). Burns & McDonnell Engineering Inc. (Burns & McDonnell) was contracted by Atmos to perform a Cultural Resources Review for the proposed Project and to assist them with fulfilling their obligations to consider potential impacts to Cultural Resources under state and Federal laws.

The Project is under an accelerated schedule, and if possible, Atmos would greatly appreciate it if the Project Review period could be reduced to 15 days, as stipulated in the Antiquities Code of Texas for pipeline projects.

PROJECT DESCRIPTION

The Project includes the replacement and relocation of 10 segments, totaling approximately 0.25 miles (0.4 kilometers [km]) of an existing 1.25 mile (2.0 km)-long natural gas distribution line in northern Leander, Texas (Figure 2). The proposed ROW for the Project is 25 feet wide (7.62 m) and the expected impact area totals 0.77 acres. Construction activities will include the installation of 8-inch poly main line and other related improvements at the 10 proposed segments that will require both open-cut and boring methods with expected disturbances to reach a maximum depth of 42 inches (1.07 m) below surface.

No Federal funding, licensing, or permitting is required for the Project; therefore Section 106 does not currently apply. However, the Project impacts are located within publicly owned ROW paralleling paved County Roads 269 (Hero Way), and because the ROW is owned by a political subdivision of the State (the city of Leander), the Antiquities Code of Texas applies for this Project. Additionally, six of the ten proposed replacement segments, totaling approximately 900 ft (275 m) are located within the boundaries of 41WM269, a National Register of Historic Places (NRHP)-eligible archaeological site also known as the historic settlement of Bagdad. Furthermore, four of these six proposed replacement segments (approximately 132 ft [40 m]) are within 25 ft (7.6 m) of the Bagdad Cemetery (also a part of 41WM269; Figure 3).



Large portions of the current Project area have been the subject of at least five previous archaeological investigations, three of which determined that substantial portions of the current Project were disturbed by previous roadway and utility improvement projects. As a result, project activities were permitted to proceed and ground disturbing activities occurred within the direct vicinity of the current Project ROW (see below). However, a 2001 investigation by Horizon Environmental Services for the widening of the north and south alignments of Ranch-to Market Road 2243 (present-day Hero Way) exposed a burial shaft within the ROW adjacent to the Bagdad Cemetery's north fence. Therefore ground disturbing activities within the current Project ROW could disturb unmarked burials outside of the demarcated limits of Bagdad Cemetery.

BACKGROUND REVIEW

An initial desktop review was performed by Burns & McDonnell archaeologists and included an examination of the Texas Archaeological Sites Atlas (TASA) to identify previously recorded archaeological sites and other previously designated historic-age resources. This includes Official State of Texas Historical Markers (OTHMs), such as Recorded Texas Historic Landmarks (RTHLs), NRHP-listed sites and districts, SALs, and historic-age cemeteries within a Study Area extending 1 mile from the Project Area. The TASA was also used to identify previous cultural resources surveys performed within or near the Project.

Additionally, the Soil Web Survey supplied by the Natural Resources Conservation Service (NRCS) and historic maps and aerial photographs provided by Nationwide Environmental Title Research (NETR) were consulted. These resources were accessed in order to review available soils data and historic-age maps covering the Project Area.

Previously Recorded Archaeological Sites and Surveys

Based on a review of TASA, four cultural resource surveys have been performed with the immediate Project ROW, and 17 additional surveys have been completed within 1 mile of the Project (Appendix A: Figure 3; Table 1).

The four previous investigations that investigated portions of the current Project ROW include a 1974 investigation by John Clark that resulted in the recording of the historic town and cemetery of Bagdad, a 2001 survey by Horizon Environmental Services for the widening of the north and south alignments of Ranch-to Market Road 2243 (present-day Hero Way), a 2007 survey by PBS&J for an Atmos pipeline relocation project along the east side of Bagdad road that began at its intersection with Hero Way, a 2008 survey by SWCA for the reconstruction of Bagdad Road that included the intersection of Bagdad Road and Hero Way, and a 2015 survey by HDR for Hero Way road improvements that investigated a large portion of the current Project ROW



(Figure 3; Table 1). The 2001, 2008, and 2015 surveys determined that the portions of ROW along Hero Way investigated during each respective survey were disturbed by previous improvement projects, with the exception of the area surrounding Bagdad Cemetery. The 2007, 2008 and 2015 projects had no proposed impacts in the ROW adjacent to Bagdad cemetery, and as such, the respective archaeological surveys did not investigate the area. Conversely, Horizon's 2001 investigation included mechanical scraping within the ROW adjacent to the cemetery's north fence that resulted in exposing a burial shaft of an unmarked grave located approximately 1000 ft (300 m) east of the intersection of Hero Way and Bagdad Road. Horizon mapped the location of the burial shaft, but no further work was completed at this location and the area was avoided by construction activities.

Date	Consultant	Planner	Agency	Intersects ROW
1974*	John Clark	unknown	unknown	Yes
1977	unknown	unknown	SDHPT	No
1982	unknown	unknown	EPA TDWR	No
1985	unknown	unknown	EPA	No
1998	unknown	unknown	Leander ISD	No
	Horizon			
	Environmental			
2001*	Services, Inc.	unknown	TxDOT	Yes
2003	PBS&J	unknown	Leander ISD	No
2004	PBS&J	unknown	Leander ISD	No
		Capital Metro		
	Lopez Garcia	Transportation		
2004	Group	Authority	FTA	No
	American			
	Archaeology			
2005	Group LLC	unknown	City of Leander	No
	Hicks and			
2006	Company	unknown	TxDOT	No
	Horizon			
	Environmental	TPWD, Texas X	USACE, Ft.	
2006	Services, Inc.	Park	Worth	No
2007*	PBS&J	Atmos Energy	Unknown	Yes
		Bucher, Willis &		
		Ratliff		
2008	SWCA	Corporation	City of Leander	Yes
2009	HPA Gray &	Berg-Oliver	City of Leander	No

 Table 1: Previous Cultural Resources Surveys within 1 mile of the Project



	Pape	Associates, Inc.		
	Cox/McLain	Klotz Associates,	TxDOT/City of	
2009	Environmental	Inc.	Leander	No
			County of	
2012	SWCA	unknown	Williamson	No
		Austin Capital	USACE, Ft.	
2013	Goshawk	Concrete	Worth	No
2014	HDR	unknown	City of Leander	Yes
2014	Atkins	unknown	Leander ISD	No
	Horizon			
	Environmental		Mason Joseph	
2014	Services, Inc.	unknown	Company, Inc.	No

*Project area shape file does not appear on the TASA website.

There are 14 previously recorded archaeological sites within 1 mile of the Project, one of which (41WM269) is located within the immediate Project ROW (Appendix A: Figure 3). As mentioned, 41WM269 is composed of the historic settlement of Bagdad and the town's cemetery. The site was originally recorded by John Clark in 1974 and determined eligible for inclusion on the NRHP in 2004. However, previous investigations have largely determined that, with exception of the Bagdad Cemetery, 41WM269 is largely disturbed within the ROW along Hero Way and Bagdad Road.

Tuble 2. The fourier function of the first state of				
Trinomial	Site type	NRHP eligibility	Intersects Project ROW	
	Historic Settlement			
41WM269	and Cemetery	Eligible	Yes	
	Prehistoric Lithic			
41WM693	Quarry	Ineligible	No	
41WM694	Historic Scatter	Ineligible	No	
41WM695	Historic Structure	Ineligible	No	
	Prehistoric Lithic			
41WM697	Quarry/Scatter	Ineligible	No	
	Prehistoric Lithic			
41WM698	Scatter	Ineligible	No	
	Prehistoric Isolated			
41WM699	Find	Ineligible	No	
	Historic Alpheus S.	-		
41WM717	Mason Barn	Undetermined	No	

 Table 2:
 Previously Recorded Archaeological Sites within 1 mile of the Project



	Historic Pickle-Mason		
41WM1003	House	Undetermined	No
	Prehistoric Lithic		
41WM1004	Scatter	Ineligible	No
41WM1007	Historic Farmstead	Ineligible	No
	Multicomponent		
41WM1099	Artifact Scatter	Ineligible	No
41WM1111	Historic Farmstead	Ineligible	No
	Prehistoric Lithic		
41WM1246	Scatter	Ineligible	No

There is one OTHM in the direct vicinity of the Project ROW, a subject marker for the Bagdad Cemetery which opened in 1857 with the burial of 3-year-old John Babcock, whose father, Charles Babcock, later donated the tract to community of Bagdad for its cemetery. Six other OTHMs are located within 1 mile of the Project ROW and will not be impacted by constructions (Appendix A: Figure 3; Table 3).

Resource name	Quadrangle	Designation	Marker type	Intersects Project ROW
Bagdad Cemetery	Leander	OTHM	Subject	Possibly
Heinatz Homestead	Leander	OTHM	RTHL	No
Pickle-Mason House	Leander	OTHM	RTHL	No
Leander United Methodist Church	Leander	OTHM	Subject	No
Leander Presbyterian Church	Leander	OTHM	Subject	No
Leander Schools	Leander	OTHM	Subject	No
Norton Moses Lodge No. 336, A.F. & A.M.	Leander	ОТНМ	Subject	No

Table 3:	Non-Archaeologi	cal Historic-Age	Resources withi	n 1 mile of the Project
1 4 6 1 6 1		oui i ilotoi ilo 7 (go		



CONCLUSIONS

The proposed Hero Way Relocation Project will be constructed using no Federal lands, permitting, funding or assistance. Additionally, no waterways or wetlands under Federal jurisdiction will be affected; therefore Section 106 of the National Historic Preservation Act (NHPA) does not currently apply. However, the Project is located within publicly owned ROW (City of Leander), and as such, is subject to the Texas Antiquities Code (Appendix A: Figures 1 and 2).

Previous investigations have determined that large portions of the Project ROW have been disturbed by previous road and utility construction activities, including portions that are located within the boundaries of 41WM269. Similarly, as a replacement and relocation project associated with an existing line, the Project ROW should display some level of disturbance from the original construction of the line. However, previous investigations have determined that unmarked graves may exist outside of the demarcated limits of Bagdad Cemetery, and as a result, previous improvement projects have avoided impacts in this area.

Due to the well documented impacts in the Project ROW, Burns & McDonnell archaeologists recommend no archaeological survey for the Project ROW outside of the impact areas adjacent to the Bagdad Cemetery. In the proposed impact areas adjacent to Bagdad Cemetery Burns & McDonnell archaeologists recommend construction monitoring. Typically, Projects with impacts located adjacent to cemeteries require archaeological survey with mechanical scraping prior to construction to determine the presence or absence of burials within the Project ROW. However, backhoe trenching prior to construction is inadvisable for this Project due to the presence of an existing pipeline within the proposed ROW. Therefore, the proposed methodology for the Hero Way Relocation project is monitoring by a qualified professional archaeologist of all ground disturbing activities that occur within 25 feet of Bagdad Cemetery during the replacement of the existing pipeline.

We appreciate your guidance concerning the best way to proceed with moving this Project forward. If you have any questions, please feel free to contact us. Thank you for your time and assistance with this matter. We look forward to hearing from you.

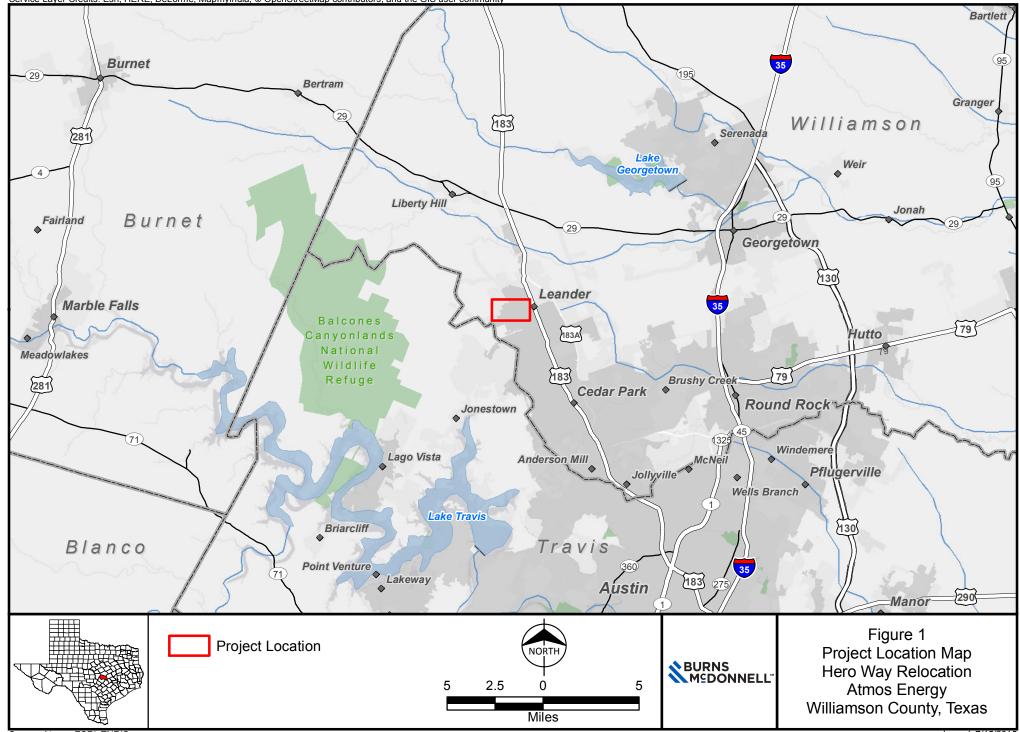
Sincerely,

Casey Hanson Archaeologist, Cultural Resources Specialist



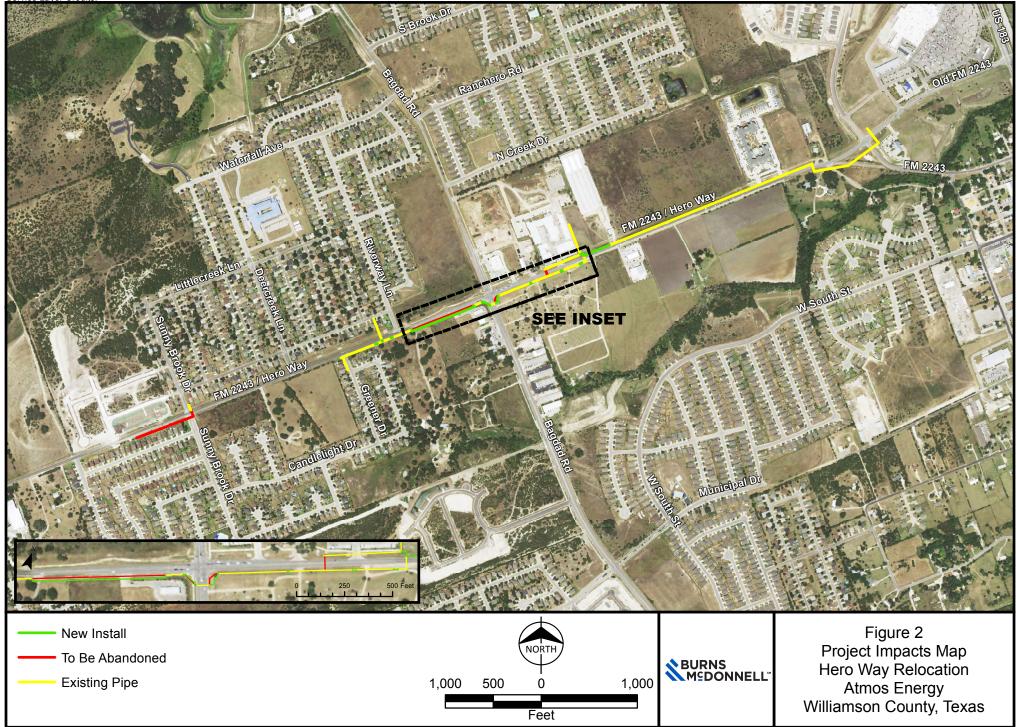
APPENDIX A - FIGURES

Path: T:\ESP\Atmos\Hero Way Relocation Project\GIS\DataFiles\ArcDocs\Figure1_ProjectLocationMap.mxd gacox 7/15/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



Source: Atmos; ESRI; TNRIS

Path: T:\ESP\Atmos\Hero Way Relocation Project\GIS\DataFiles\ArcDocs\Figure2_ProjectImpactsMap.mxd gacox 7/15/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Laver Credits:



TEXAS HISTORICAL COMMISSION *real places telling real stories*

August 13, 2015

Casey Hanson Burns & McDonnell Engineering Inc. 8911 Capital of Texas Highway Building 4, Suite 4260 Austin, Texas 78759

Re: Project review under the Antiquities Code of Texas, *Hero Way Relocation Project, Williamson County* (City of Leander)

Dear Mr. Hanson:

Thank you for your correspondence concerning the above referenced project. This letter presents the comments of the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas.

The review staff, led Rebecca Shelton, has examined our records. We concur that the majority of the proposed route overlaps with previously investigated areas. However, the proposed impact areas adjacent to the Bagdad Cemetery should be monitored.

For portions of the route that intersect site 41WM269, no monitoring is required at this time. However, if the project plans change, or if buried archeological deposits are discovered during the development phases of this project, work should be stopped in the immediate area of such finds and this office should be notified immediately.

The work should meet the minimum archeological survey standards posted on-line at <u>www.thc.state.tx.us</u>. A report of investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. You may obtain lists of most professional archeologists in Texas on-line at: <u>www.c-tx-arch.org</u> or <u>www.rpanet.org</u>. Please note that other potentially qualified archeologists not included on these lists may be used.

Since this work will be conducted on lands controlled by an entity of the state of Texas, an Antiquities Permit must be secured from our office before fieldwork may begin. Please ask prospective contractors if they are qualified to receive an Antiquities Permit.

Thank you for your cooperation in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please contact Rebecca Shelton at 512/463-6043.

Sincerely,

William a. Mart for

Mark Wolfe, State Historic Preservation Officer

MW/rls





CREATE AMAZING.



Burns & McDonnell 8911 North Capital of Texas Hwy., Suite 4260 Austin, TX 78759 O 512-872-7130 F 512-872-7127 www.burnsmcd.com