



Illinois Environmental Protection Agency

Ali Trunzo

From: Erin Matthews
Sent: Friday, December 09, 2016 1:12 PM
To: Ali Trunzo
Subject: FW: Spire STL In-stream Work Restrictions

From: Twait, Scott [mailto:Scott.Twait@Illinois.gov]
Sent: Friday, December 09, 2016 1:09 PM
To: Erin Matthews <erin.matthews@gaiconsultants.com>
Cc: Lori Ferry <L.Ferry@gaiconsultants.com>
Subject: RE: Spire STL In-stream Work Restrictions

As you are aware, a 404 permit and 401 certification is required for stream crossings. Since there are not cold water species, Illinois does not have any restrictions as to the timing of the crossings. However, the consultation with IDNR and F&W may have restrictions based on the presence of T&E species.

Scott

Scott Twait
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217-558-2012
217-782-9891 (fax)

From: Erin Matthews [mailto:erin.matthews@gaiconsultants.com]
Sent: Friday, December 09, 2016 11:32 AM
To: Twait, Scott
Cc: Lori Ferry
Subject: [External] Spire STL In-stream Work Restrictions

Mr. Twait:

As mentioned on our earlier call, GAI on behalf of Spire previously coordinated with the IEPA regarding the Spire STL Pipeline Project (Project). GAI requests further clarification regarding seasonal in-stream work restrictions for stream crossings within Illinois. A preliminary list of streams proposed to be crossed by the Project in Illinois and a Project location map are attached. Proposed crossing methods for each waterbody are also included on this list.

Based on our review of Illinois regulations, GAI understands that there are no seasonal in-stream work restrictions associated with the waterbodies crossed by the Project. Based on previous correspondence with the IEPA, no cold water streams are located within the Project area and therefore the streams crossed by the Project do not have any seasonal restrictions associated with fisheries.

As part of our FERC application, FERC has requested that we obtain written permission from the IEPA that no seasonal in-stream work restrictions are associated with the waterbodies crossed by the Project and construction can occur at any time of year provided that applicable federal and state water crossing permits have been obtained. Spire will

continue to coordinate with the IDNR and USFWS and will abide by crossing restrictions related to threatened and endangered species, should any arise during future coordination.

GAI and Spire appreciate your assistance on this Project.

Thank you,

Erin M. Matthews
Project Environmental Specialist

GAI Consultants, Inc.
385 East Waterfront Drive, Homestead, PA 15120-5005

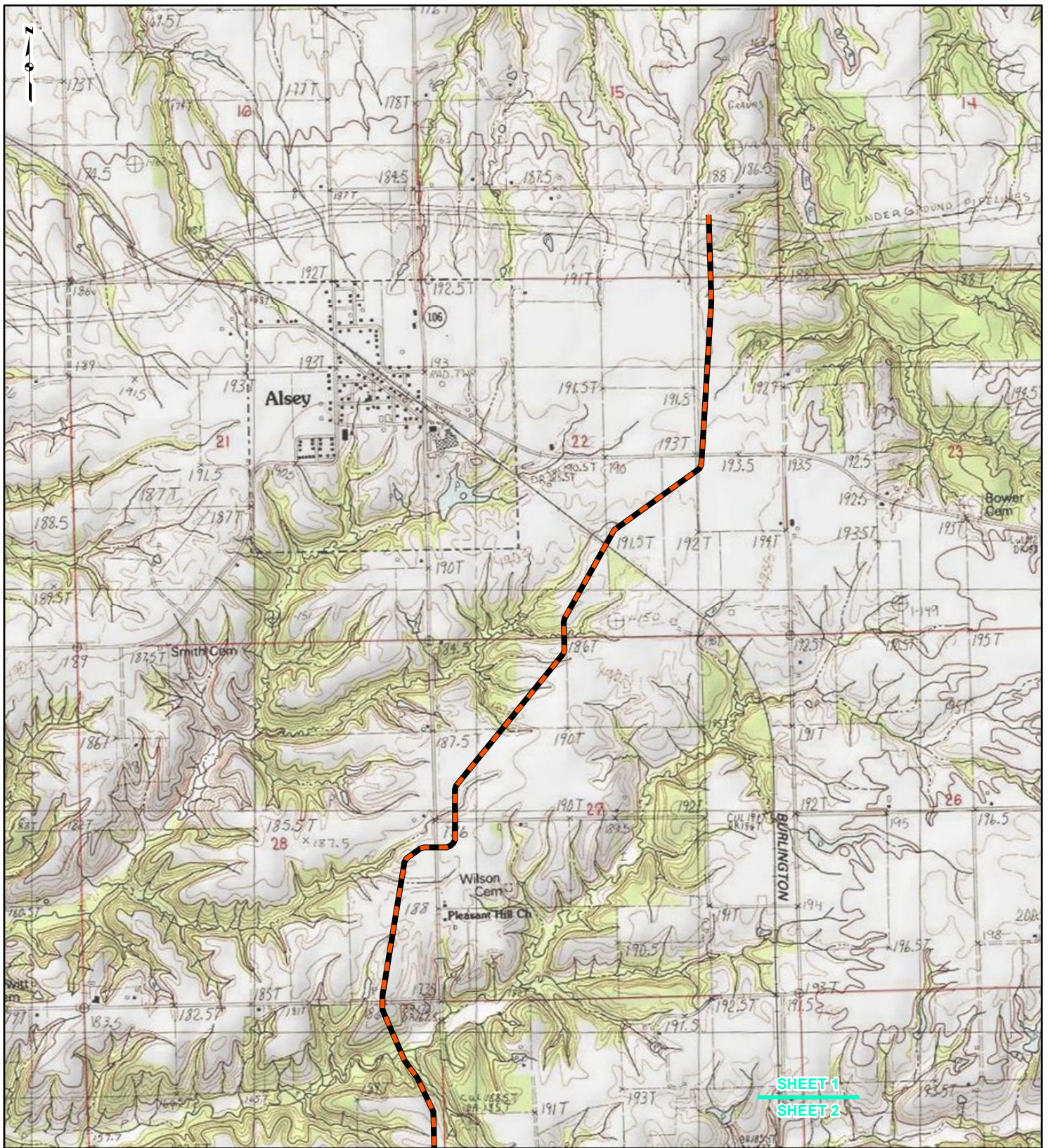
T 412.476.2000 | D 412.399.5251 | M 724.322.2731 | gaiconsultants.com |     

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SHEET 1
SHEET 2



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 1 OF 15

SPIRE STL
PIPELINE PROJECT

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 12/20/16. **DRAFT**



LEGEND

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- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 2 OF 15

SPiRE STL **PIPELINE PROJECT**

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SHEET 2
SHEET 3

SHEET 3
SHEET 4



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 3 OF 15

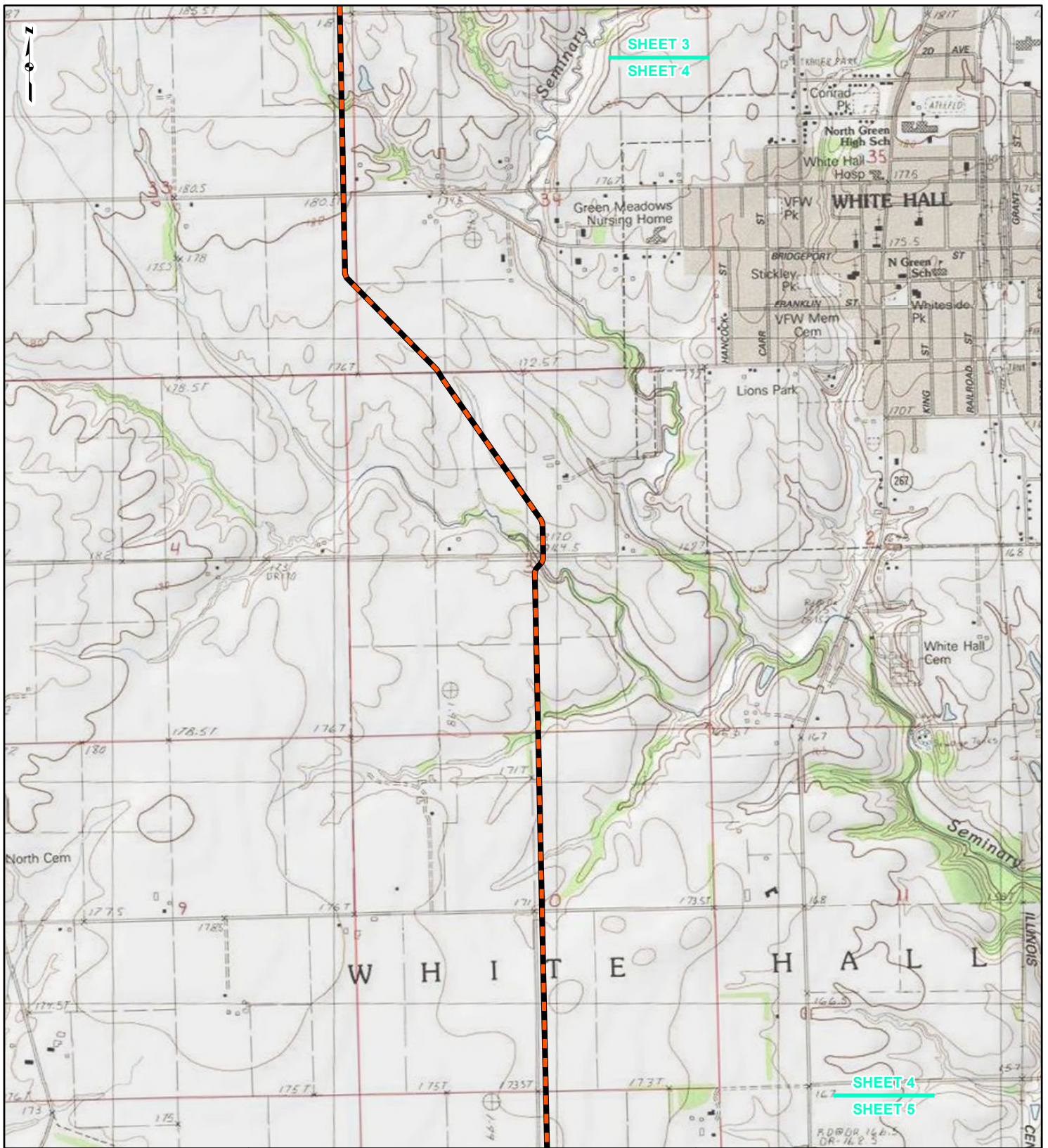
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- COUNTY BOUNDARY

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Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 4 OF 15

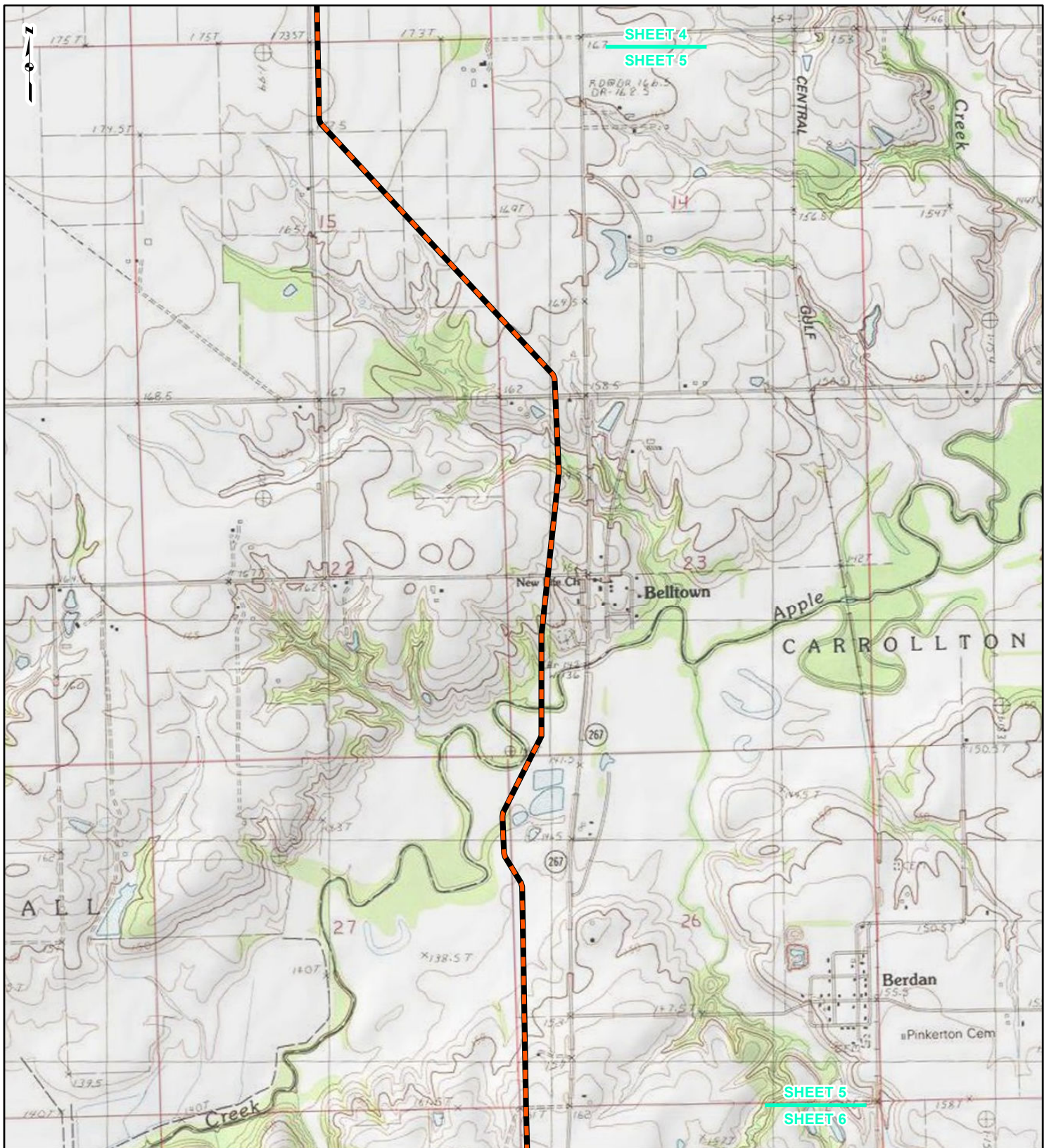
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- COUNTY BOUNDARY

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Feet

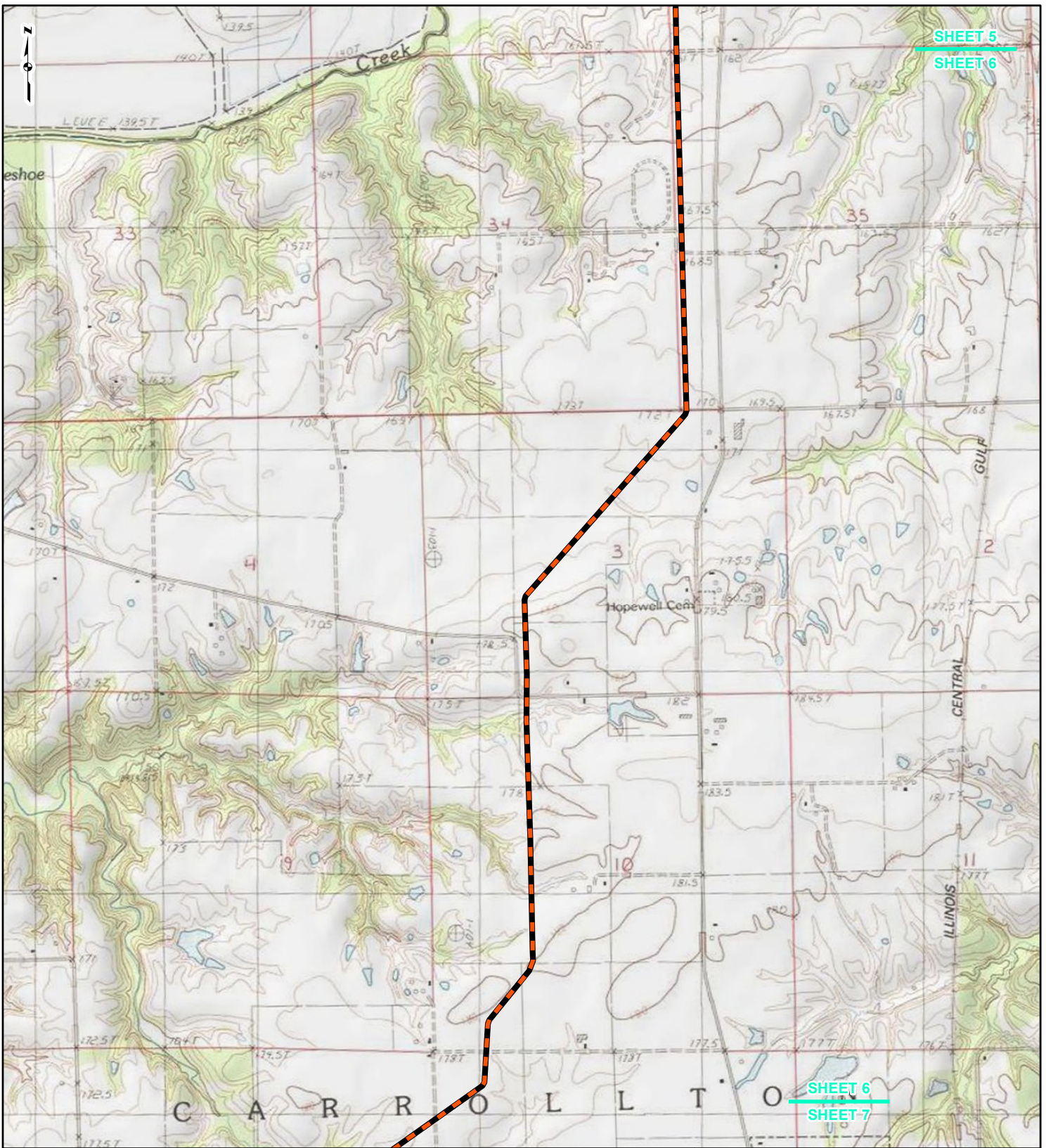
FIGURE 1
PROJECT LOCATION MAP
SHEET 5 OF 15

PIPELINE PROJECT

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- STATE BOUNDARY
- COUNTY BOUNDARY

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Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 6 OF 15

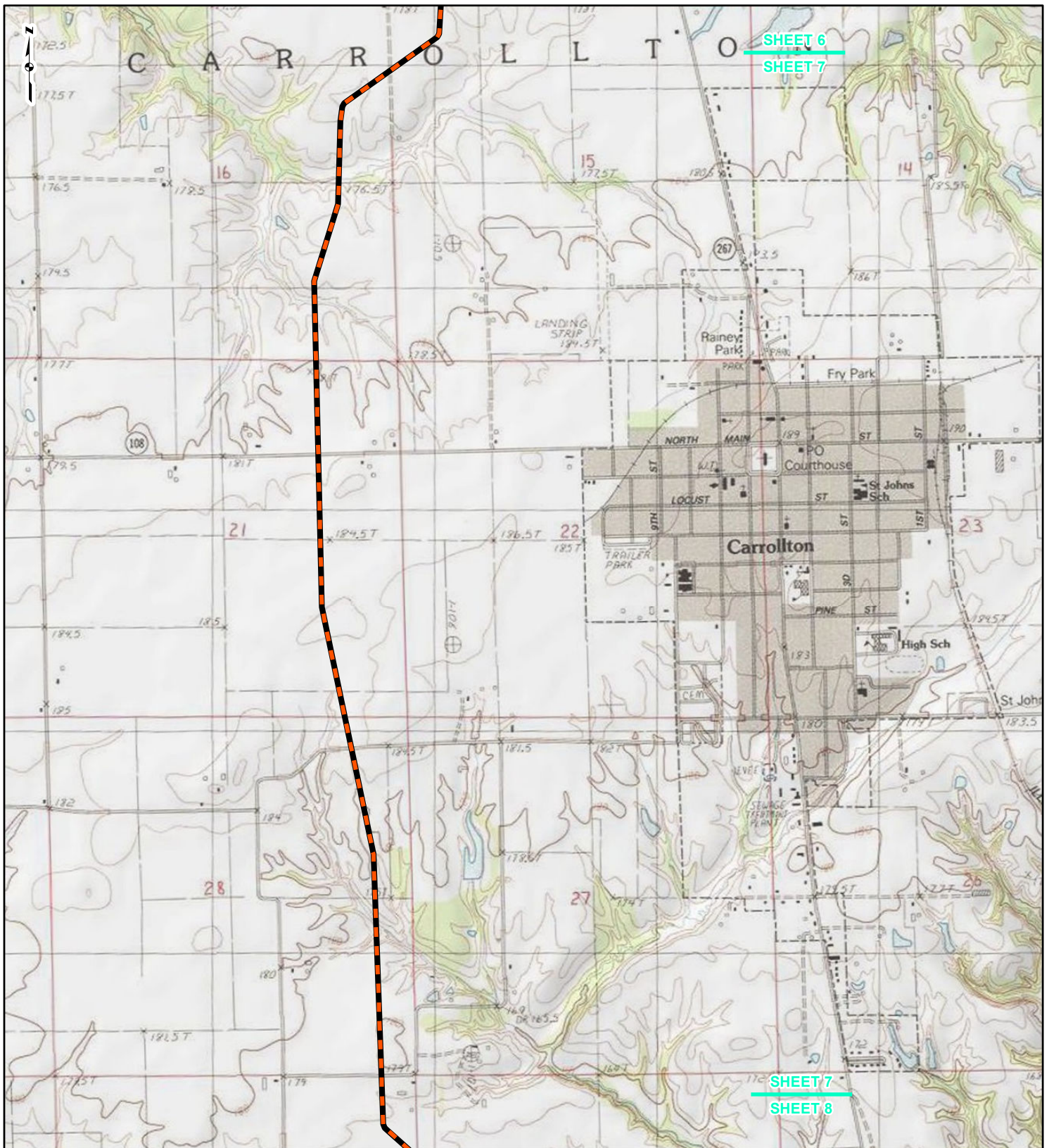
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- STATE BOUNDARY
- COUNTY BOUNDARY

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FIGURE 1
PROJECT LOCATION MAP
SHEET 7 OF 15

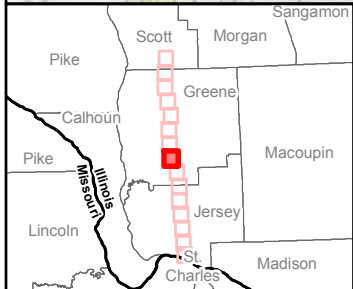
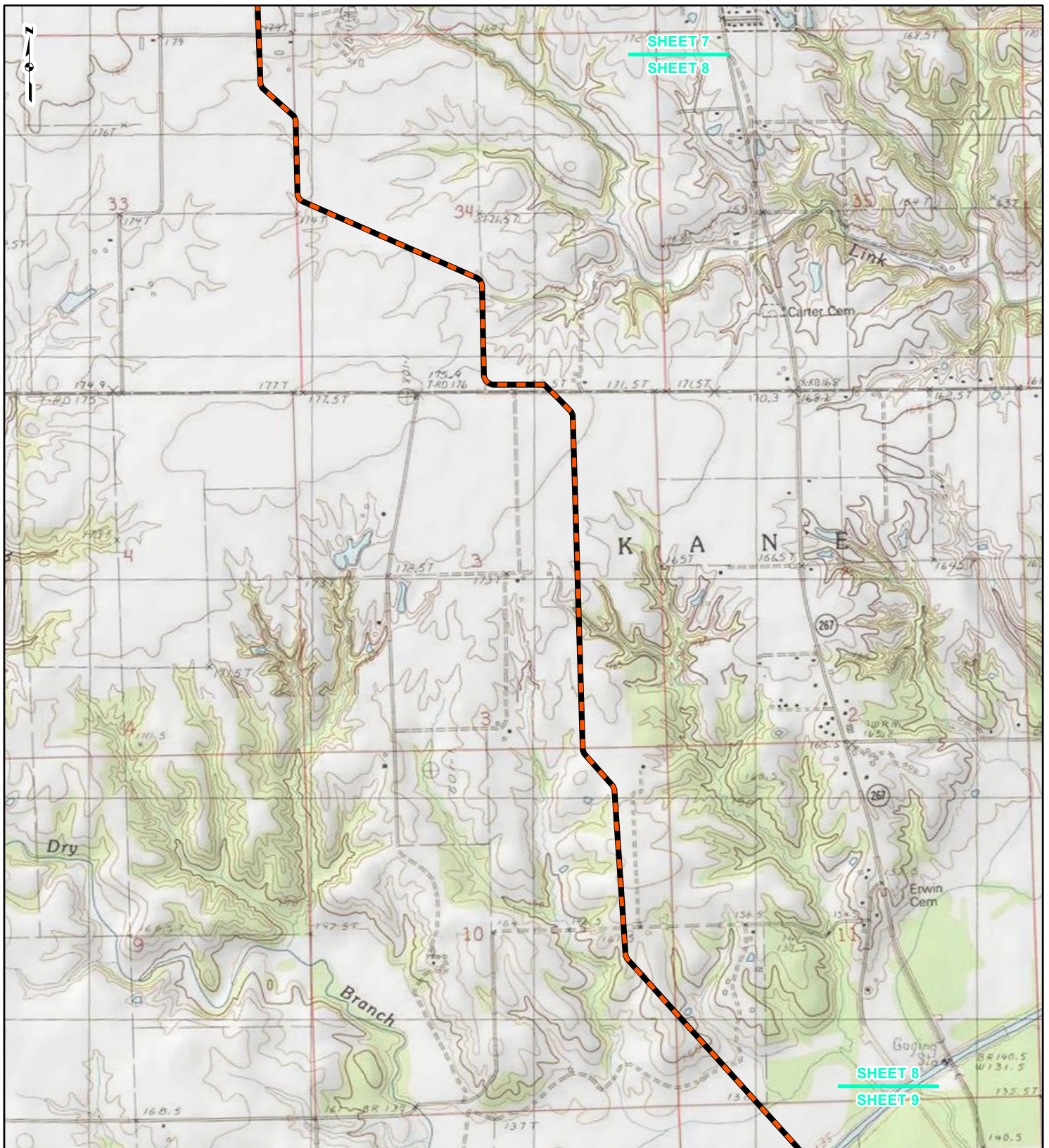
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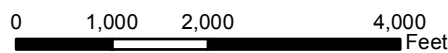
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- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY



**FIGURE 1
PROJECT LOCATION MAP
SHEET 8 OF 15**



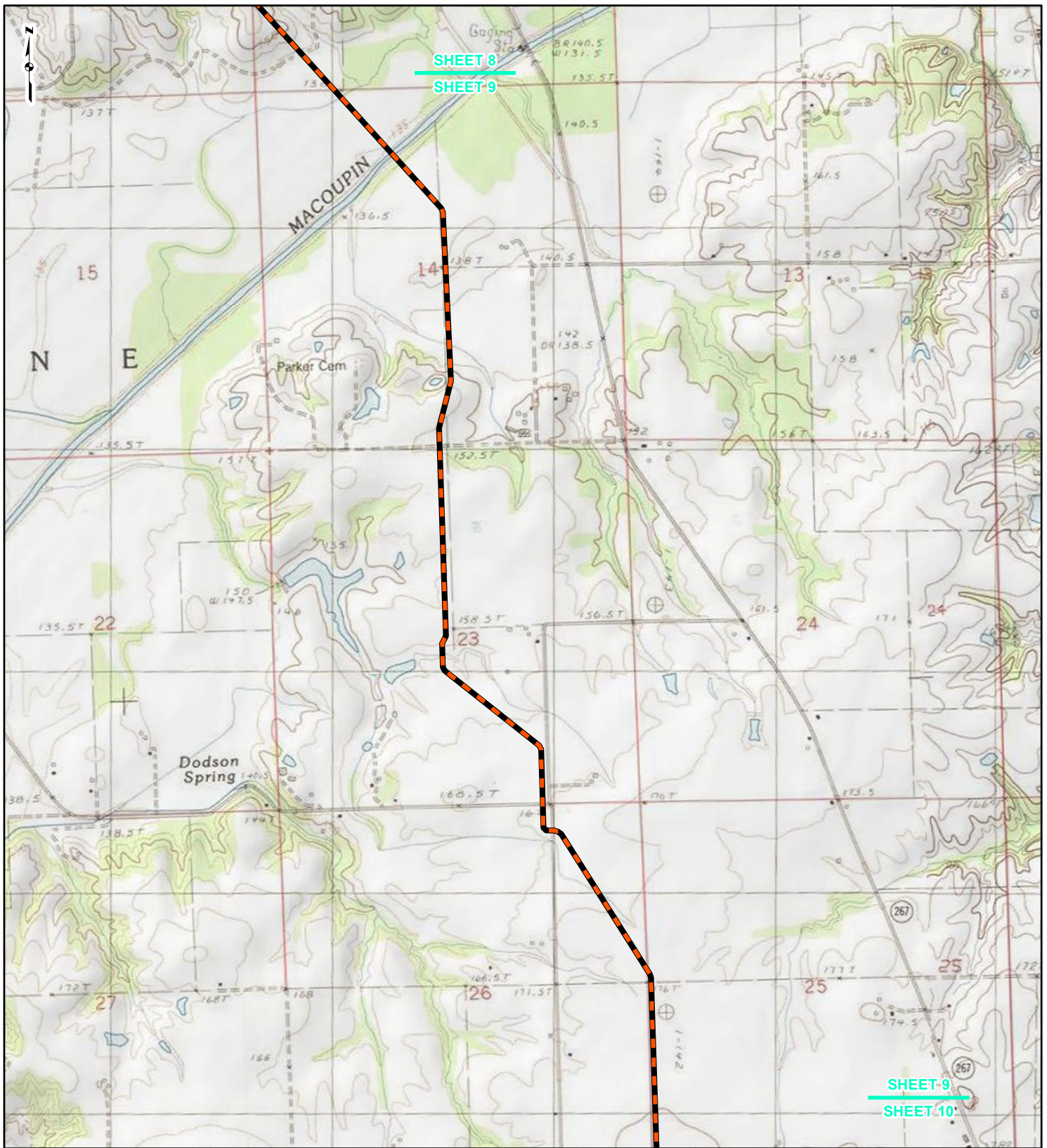
**SPIRE STL
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SHEET 8





SHEET 9

SHEET 9

SHEET 10



LEGEND

-  NEW BUILD 24-INCH-DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
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-  COUNTY BOUNDARY

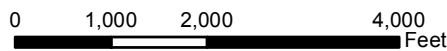


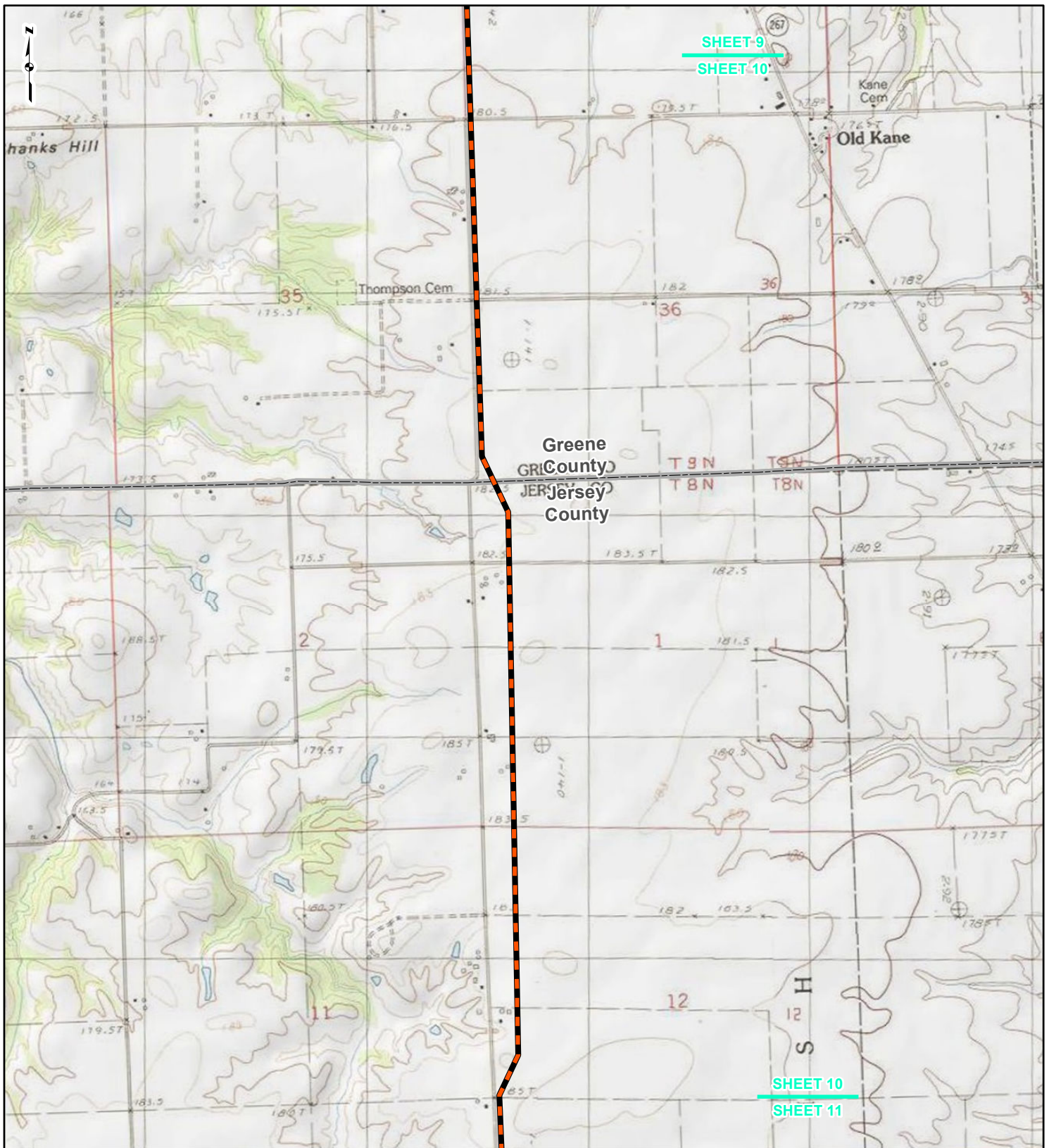
FIGURE 1
PROJECT LOCATION MAP
SHEET 9 OF 15

 **SPIRE STL PIPELINE PROJECT** 

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LEGEND

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- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 10 OF 15

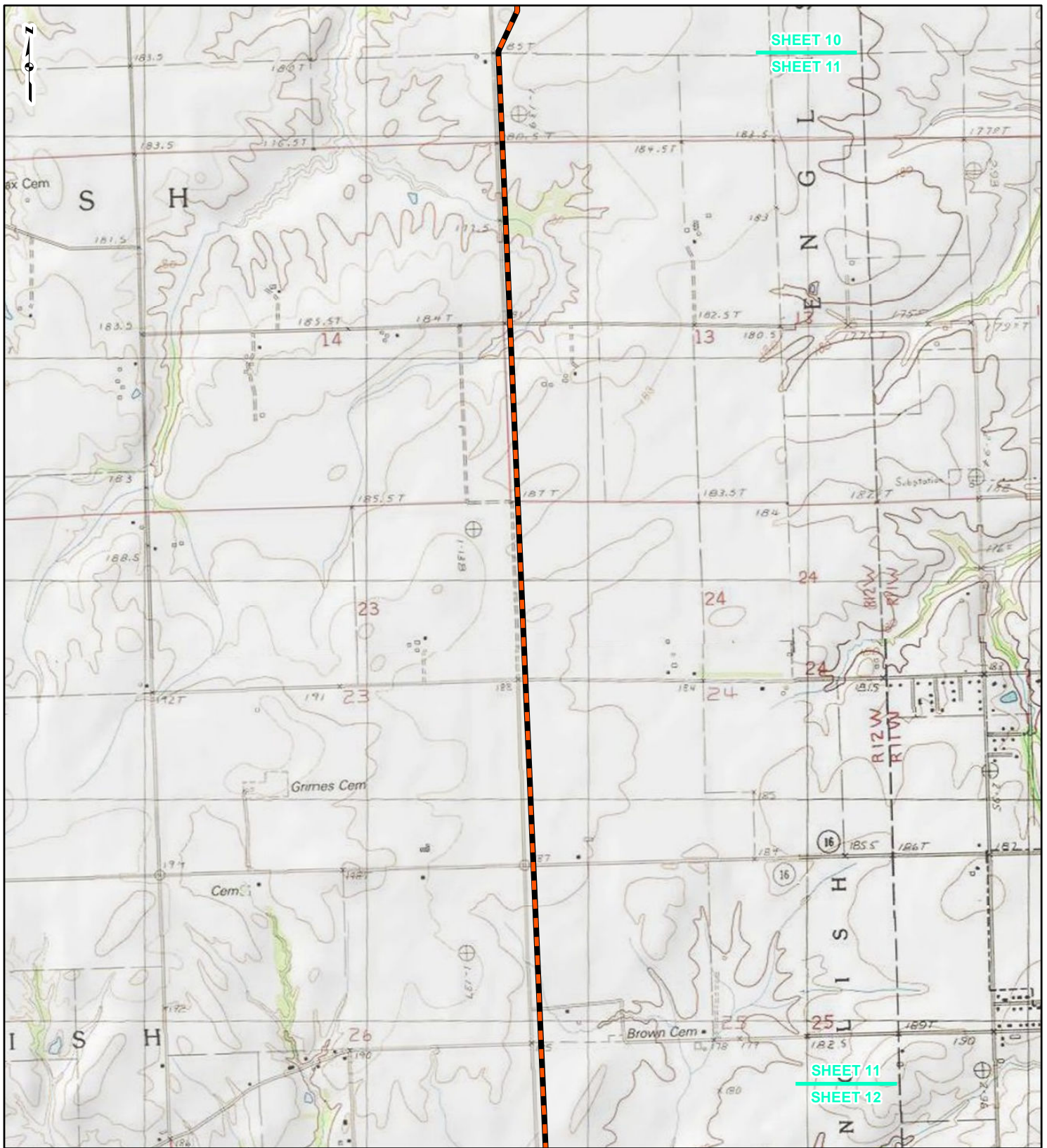
SPIRE STL **PIPELINE PROJECT**

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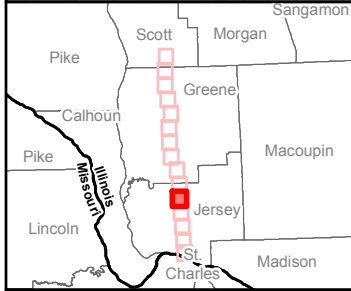
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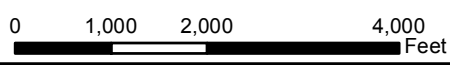
SHEET 10
SHEET 11

SHEET 11
SHEET 12



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY



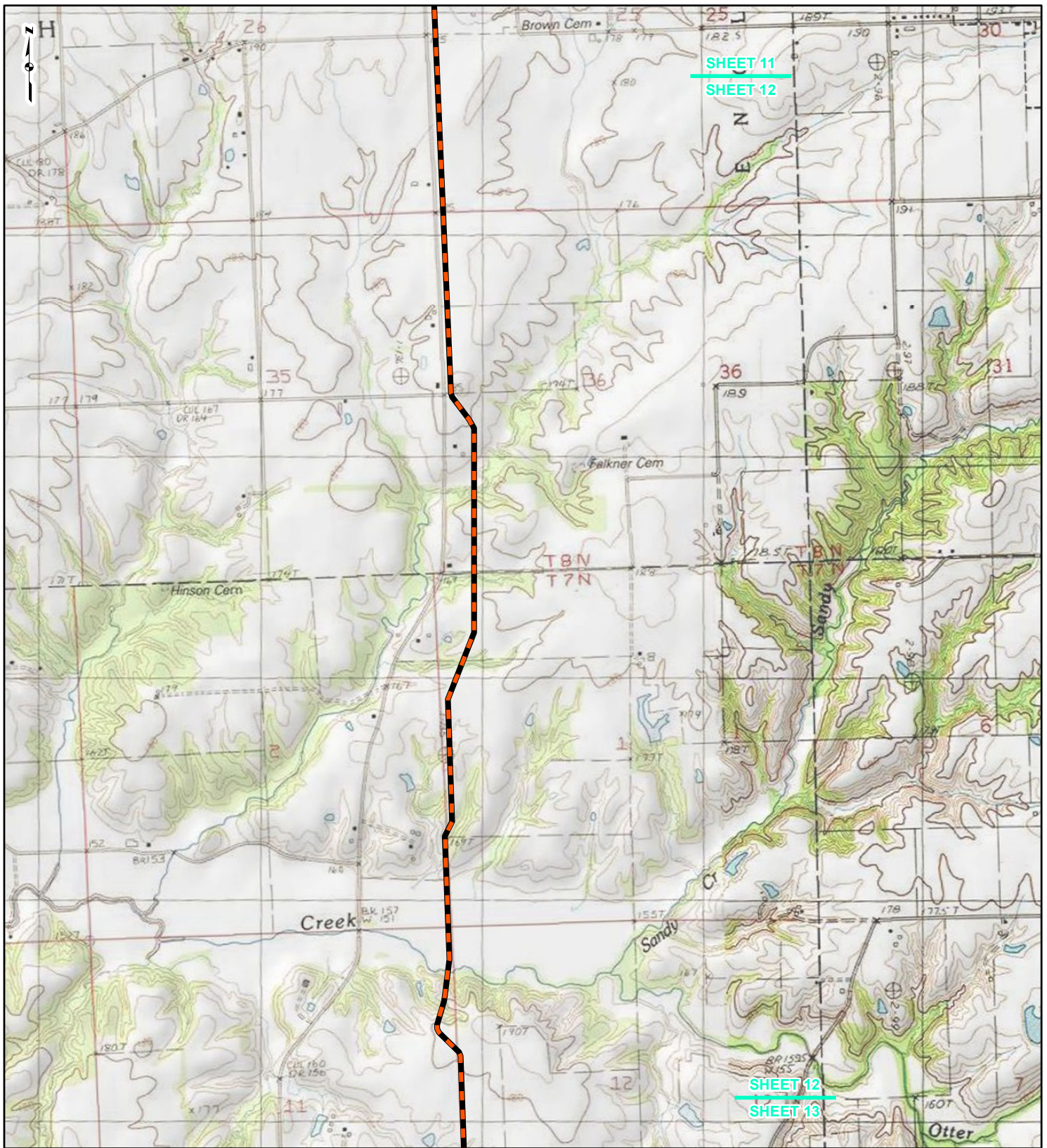
**FIGURE 1
PROJECT LOCATION MAP
SHEET 11 OF 15**



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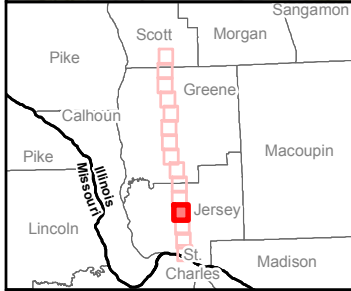
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SHEET 11
SHEET 12

SHEET 12
SHEET 13



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

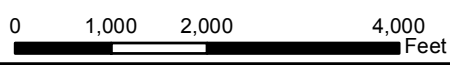


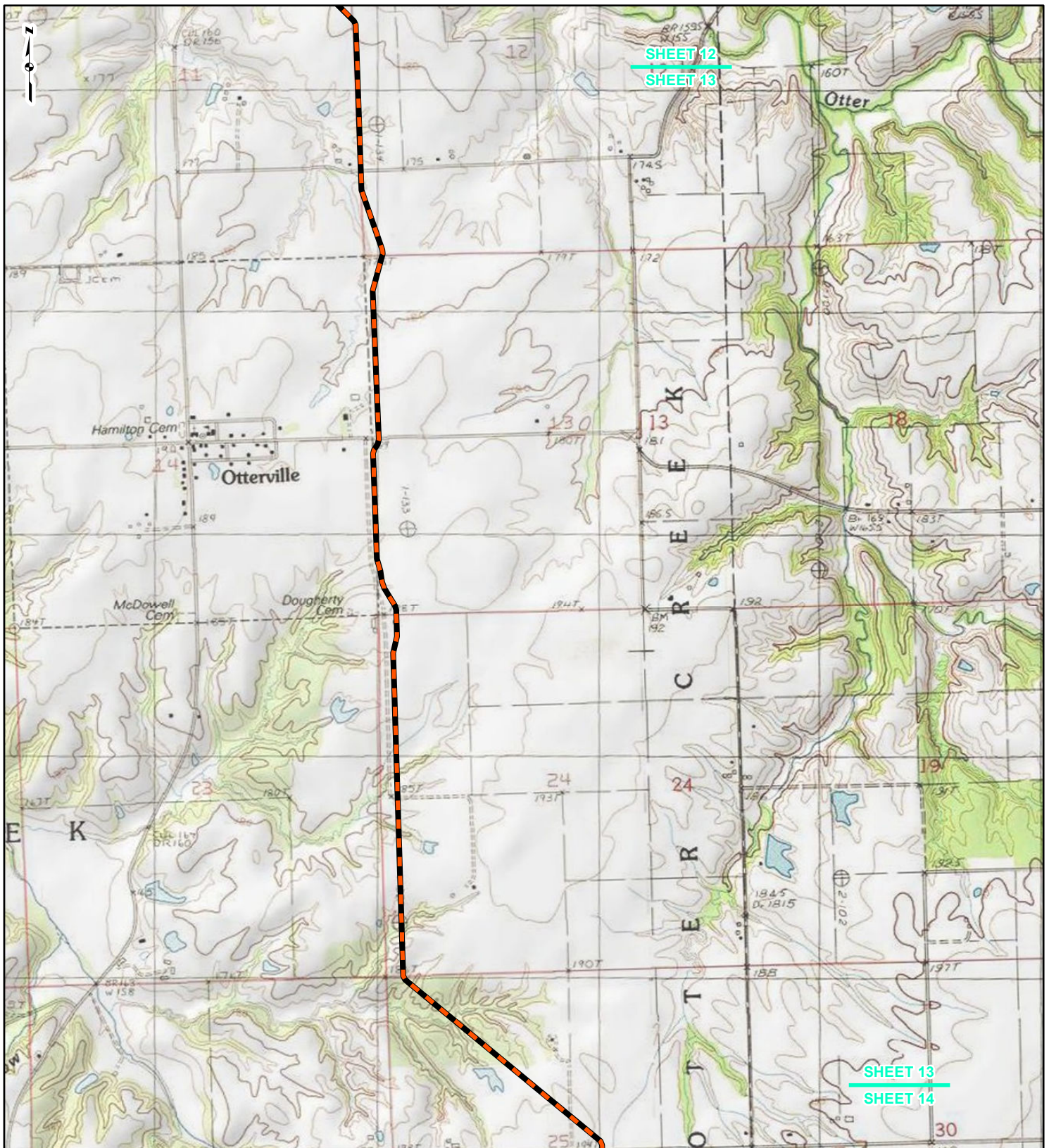
FIGURE 1
PROJECT LOCATION MAP
SHEET 12 OF 15



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SHEET 12
SHEET 13

SHEET 13
SHEET 14



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
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- COUNTY BOUNDARY

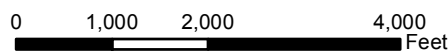


FIGURE 1
PROJECT LOCATION MAP
SHEET 13 OF 15



SPIRE STL **PIPELINE PROJECT**

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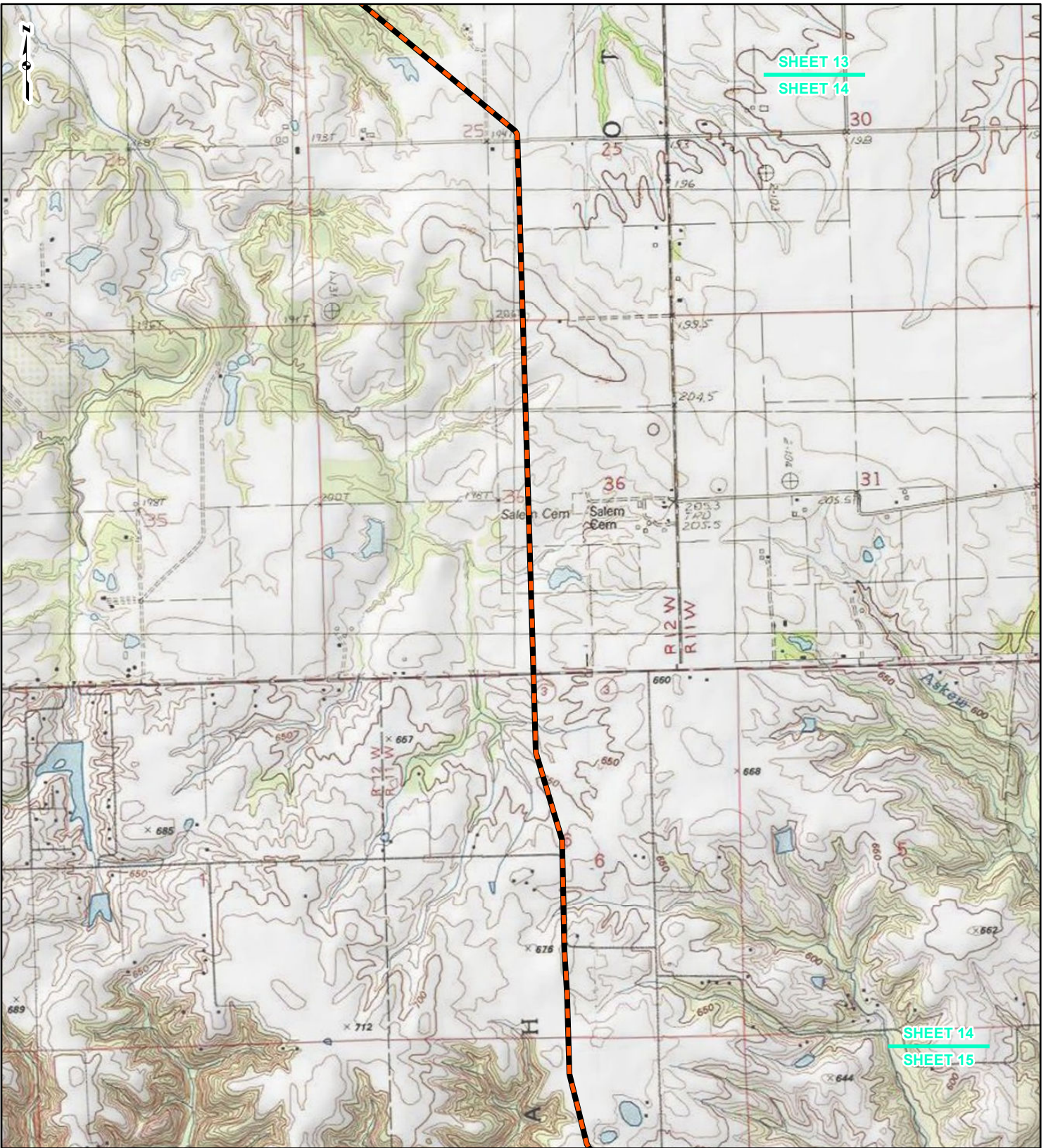
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SHEET 13

SHEET 14







SHEET 14

SHEET 15



LEGEND

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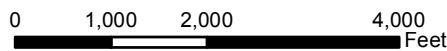


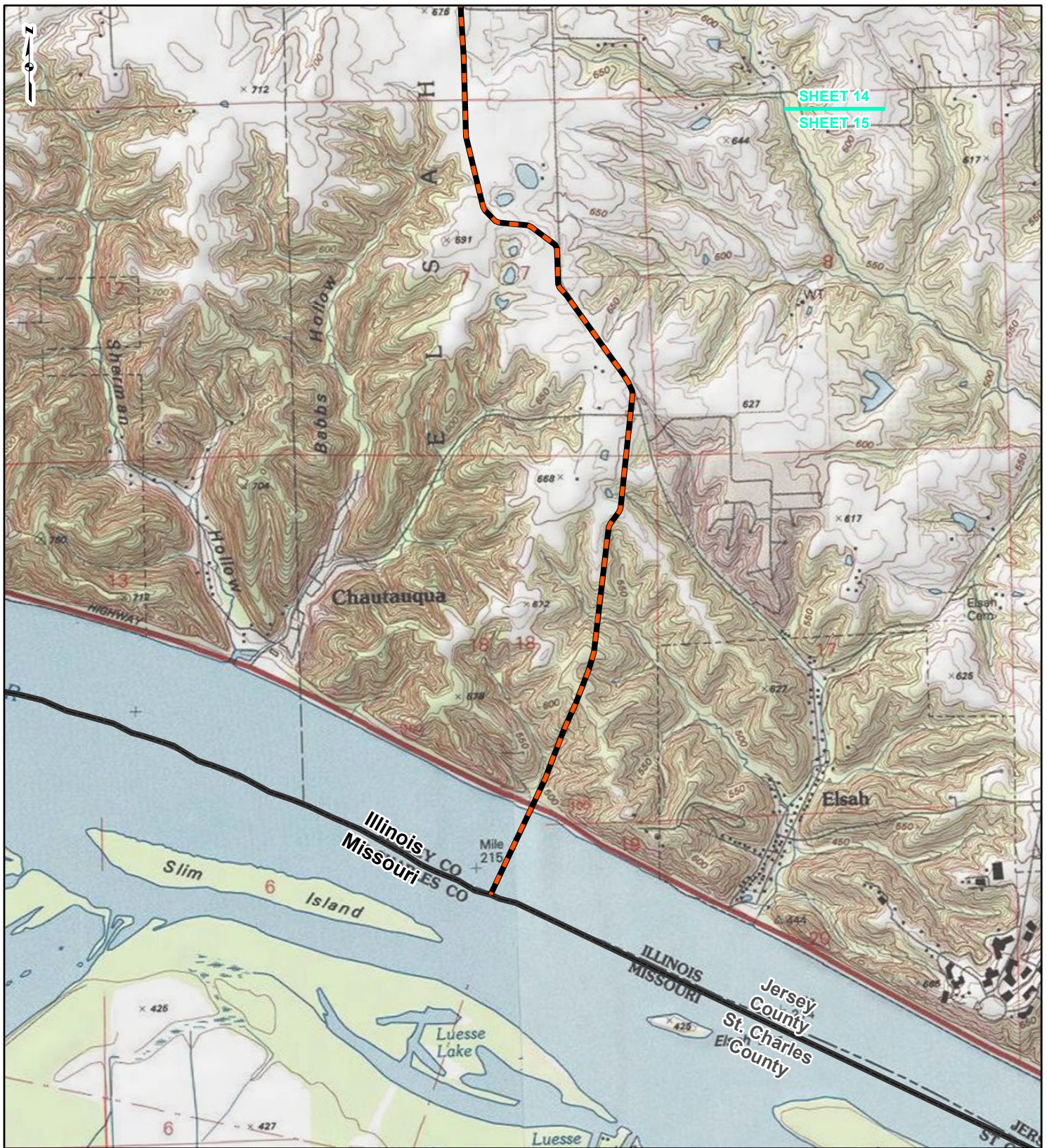
FIGURE 1 PROJECT LOCATION MAP SHEET 14 OF 15

 **SPIRE STL PIPELINE PROJECT** 

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SHEET 14
SHEET 15



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 15 OF 15

PIPELINE PROJECT

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Table 2.2-1. Waterbodies Crossed by the Project

Draft List based on 75' wide corridor on proposed route as of 11/30/2016.

Feature ID ¹	Waterbody Name	Flow Regime ²	Crossing Width (feet) ³	State Water Quality Classification ^{4,5}	County, State	Fishery Type ⁶	Impaired Designated Use (Identified Pollutant) ⁷	Crossing Method
24-Inch Pipeline								
SIL-JJP-003	UNT to Little Sandy Creek	IT	10	GEN, PFPWS	Scott, IL	WWF	No	Open Cut
SIL-JJP-004	UNT to Little Sandy Creek	IT	6	GEN, PFPWS	Scott, IL	WWF	No	Timber Mats
NHD-181	UNT to Little Sandy Creek	IT	N/A	GEN, PFPWS	Scott, IL	WWF	No	Open Cut
NHD-199	UNT to Little Sandy Creek	E	N/A	GEN, PFPWS	Scott, IL	WWF	No	Open Cut
NHD-256	UNT to Little Sandy Creek	P	N/A	GEN, PFPWS	Scott, IL	WWF	No	Open Cut
SIL-JJP-007	UNT to Little Sandy Creek	E	2.5	GEN, PFPWS	Scott, IL	WWF	No	Timber Mats
SIL-JJP-008	UNT to Little Sandy Creek	E	4	GEN, PFPWS	Scott, IL	WWF	No	Timber Mats
SIL-JJP-013	Little Sandy Creek	P	40	GEN, PFPWS	Scott, IL	WWF	No	Open Cut
SIL-TMA-010	UNT to Little Sandy Creek	E	6	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-011	UNT to Little Sandy Creek	IT	8	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-JJP-018	UNT to Little Sandy Creek	P	25	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-016	UNT to Little Sandy Creek	IT	8	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-TMA-018	UNT to Little Sandy Creek	P	9	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-054	UNT to Little Sandy Creek	E	8	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-JJP-024	UNT to Little Sandy Creek	E	5	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-JJP-026	UNT to Hurricane Creek	IT	2.5	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-JJP-027	UNT to Hurricane Creek	IT	4	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
NHD-599	Hurricane Creek	P	N/A	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-026	UNT to Seminary Creek	IT	7	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-JJP-031	UNT to Seminary Creek	E	4	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-TMA-021	UNT to Seminary Creek	P	30	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-022	UNT to Seminary Creek	E	4	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-024	UNT to Seminary Creek	E	4	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-031	UNT to Apple Creek	P	15	GEN, PFPWS	Greene, IL	WWF	No	Open Cut

SIL-TMA-033	Apple Creek	P	67	GEN, PFPWS	Greene, IL	WWF	Aquatic Life (Dissolved Oxygen), Primary Contact Recreation (Fecal Coliform)	Open Cut
SIL-TMA-035	UNT to Coates Creek	P	3	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-TMA-036	UNT to Coates Creek	P	5	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
NHD-687	Coates Creek	IT	N/A	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-042	UNT to Coates Creek	IT	6	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-JJP-100	UNT to Coates Creek	E	4	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-JJP-110	UNT to Link Branch	IT	7	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-JJP-111	UNT to Link Branch	E	5	GEN, PFPWS	Greene, IL	WWF	No	Timber Mats
SIL-TMA-051	UNT to Link Branch	IT	6	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-078	UNT to Link Branch	IT	2	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-CDK-016	UNT to Macoupin Creek	IT	9	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-040	UNT to Macoupin Creek	E	3	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-038	UNT to Macoupin Creek	IT	4	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
SIL-TMA-039	Macoupin Creek	P	100	GEN, PFPWS	Greene, IL	WWF	Primary Recreation (Fecal Coliform)	Open Cut
SIL-JJP-104	UNT to Macoupin Creek	IT	8	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
NHD-741	UNT to Macoupin Creek	IT	N/A	GEN, PFPWS	Greene, IL	WWF	No	Open Cut
NWI-138 (PUBGH)	Freshwater Pond	NA	NA	NA	Greene, IL	NA	NA	Timber Mats
SIL-DFW-002	UNT to Wines Branch	IT	3.5	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-DFW-001	Wines Branch	P	13	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-761	UNT to Otter Creek	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-012	UNT to Otter Creek	IT	23	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-118	UNT to Otter Creek	IT	3	GEN, PFPWS	Jersey, IL	WWF	No	Timber Mats
SIL-TMA-058	UNT to Otter Creek	P	8	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-120	UNT to Otter Creek	E	5	GEN, PFPWS	Jersey, IL	WWF	No	Timber Mats
SIL-TMA-060	UNT to Otter Creek	IT	8	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-TMA-061	UNT to Otter Creek	E	4	GEN, PFPWS	Jersey, IL	WWF	No	Timber Mats
SIL-JJP-121	UNT to Otter Creek	E	10	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-122	UNT to Otter Creek	P	4	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-022	Otter Creek	P	50	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-018	UNT to Otter Creek	E	4	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-136	UNT to South Fork Otter Creek	E	4	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-TMA-074	UNT to South Fork Otter Creek	P	5	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-TMA-073	UNT to South Fork Otter Creek	E	4	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-134	UNT to South Fork Otter Creek	P	8	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-JJP-130	UNT to South Fork Otter Creek	P	8	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut

SIL-TMA-072	UNT to South Fork Otter Creek	E	3	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-TMA-070	UNT to South Fork Otter Creek	E	5	GEN, PFPWS	Jersey, IL	WWF	No	Timber Mats
SIL-JJP-127	UNT to South Fork Otter Creek	E	4	GEN, PFPWS	Jersey, IL	WWF	No	Timber Mats
SIL-TMA-066	UNT to South Fork Otter Creek	P	12	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-849	UNT to South Fork Otter Creek	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-850	UNT to South Fork Otter Creek	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-001	UNT to South Fork Otter Creek	IT	25	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-002	UNT to South Fork Otter Creek	IT	4	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
SIL-CDK-003	UNT to South Fork Otter Creek	E	5	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-869	UNT to Otter Creek	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-874	UNT to Mill Creek	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-902	UNT to Mississippi River	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-908	UNT to Mississippi River	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-913	UNT to Mississippi River	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	Open Cut
NHD-915	UNT to Mississippi River	IT	N/A	GEN, PFPWS	Jersey, IL	WWF	No	HDD
Access Roads								
SIL-TMA-049	UNT to Macoupin Creek	IT	5	GEN, PFPWS	Greene, IL	WWF	No	TAR-012 - Timber Mats
SIL-TMA-044	UNT to Macoupin Creek	IT	7	GEN, PFPWS	Greene, IL	WWF	No	TAR-014 - Timber Mats

Notes:

- ¹ Map Designation - the unique code designated to the waterbodies identified during the field surveys. Field delineations are occurring concurrently with this filing. A unique identifier was also assigned to NHD that was used to supplement field delineations on properties that lack of access permission or in areas that are pending studies. Project facilities not listed do not impact streams. Impacts associated with the facilities will be refined in the FERC application.
- ² Flow regime based on USGS topographic mapping and onsite field review. IT - Intermittent; E - Ephemeral; and P - Perennial.
- ³ Crossing width is the bank-to-bank width of stream at the pipeline or access road centerline crossing unless noted otherwise. N/A-Not applicable indicates that these waterbodies that are desktop identified and therefore no crossing lengths are currently known.
- ⁴ Water quality standards are contained in 35 IAC Section 302. Water use designation and site-specific water quality standards are contained in 35 IAC Section 303. General Use Waters (GEN) - Except as otherwise specifically provided, all waters of the State [IL] must meet the general use standards of Subpart B of Part 302. The General Use standards will protect the State's [IL] water for aquatic life (except as provided in Section 302.213), wildlife, agricultural use, secondary contact use and most industrial uses and ensure the aesthetic quality of the State's [IL] aquatic environment. Public and Food Processing Water Supplies (PFPWS) - Except as otherwise specifically provided and in addition to the general use standards of Subpart B, Part 302, waters of the State shall meet the public and food processing water supply standards of Subpart C, Part 302, at any point at which water is withdrawn for treatment and distribution as potable supply for food processing.
- ⁵ Water quality classifications in MO are contained in 10 CSR 20-7.031. Last revised January 29, 2014 (MDNR, 2014). Codes for the designated uses are as follows: IRR - Irrigation, LWW - Livestock & Wildlife Watering, AQL - Protection of Warm Water Aquatic Life and Human Health-Fish Consumption, SCR - Secondary Contact Recreation, DWS - Drinking Water Supply, WBC - Whole Body Contact Recreation, IND - Industrial.

⁶ Initial consultation with the IEPA have indicated that all waters of Illinois are considered general use waters and no waters of the state are designated as cold water fisheries (IEPA, 2016d). Water Quality Standards Table C of Missouri 10CSR20.7 lists Waters Designated for Cold-Water Fisheries (MDNR, 2014). Luesse Lake is contained within the Mississippi River valley and was designated by the NWI layer as a L1UBHH - Lacustrine, Limnetic, Unconsolidated Bottom.

⁷ State impaired waters have been defined by the Section 303(d) lists for Illinois (IEPA, 2016c) and Missouri (MDNR, 2016d).

⁸ Also classified by the MDNR as a Metropolitan No-Discharge Stream, located in Chapter 7 10 CSR 20-7.031 of the Clean Water Commission created by the MDNR. Last revised January 29, 2014 (MDNR, 2014).

⁹ Spire is providing a preliminary list of features crossed by the project as of the end of November 30, 2016. Wetland and waterbody surveys were initiated in September 2016, but are ongoing due to survey permission. A desktop analysis was conducted utilizing National Wetland Inventory Maps and National Hydrography Datasets for areas lacking survey permission.

telephone log



gai consultants

Date: 12/09/2016

Project / Admin. No.: E160438.00

Call From: Erin Matthews

Company: GAI Consultants

Phone No.: 412.399.5251

Call To: Scott Twait

Company: IEPA

Phone No.: 217.558.2012

Subject: In-stream Work Restrictions

cc:

Summary of Discussion, Decisions, and Commitments:

I called Scott Twait of the IEPA to discuss if seasonal in-stream work restrictions would be associated with the waterbodies crossed by the Project and if construction can occur at any time of year provided that applicable federal and state water crossing permits have been obtained. Scott replied that he'd be willing to review the Project data and would respond with any concerns. I followed up our conversation with an email providing Scott with preliminary streams crossed by the project as well as a project location map for his review and comment.

Ali Trunzo

From: Konczyk, Joe <JOE.KONCZYK@Illinois.gov>
Sent: Thursday, October 20, 2016 4:54 PM
To: Pamela Hartwick
Subject: RE: Hartwick FOIA Sept 22
Attachments: FOIA.zip; Hartwick FOIA Sept 22.pdf

Pam.

I am going to list the numbers in the request and comment and/or attach some data.

- 1 Sole Source aquifer data should be requested from USEPA. We do have one in Illinois (the Mahomet Aquifer), and even though I have created this data for our agency, the "official data" is housed at USEPA. <https://www.epa.gov/dwssa>
- 2 There are no protected watersheds for any community water supply (CWS) wells in Illinois.
- 3 Monitoring well data are created as needed, there is no central dataset for this. Most monitoring wells are part of a site plan for the BOL.
- 4 Private wells need to be obtained from the ISGS. <http://www.isgs.illinois.edu/?q=ilwater>
- 5 I am attaching these data in the zip file.
- 6 These too will be in the zip file
- 7 Don't have this electronically, and again data from BOL
- 8 Not sure if this can be found in the 303d list of impacted water bodies. You can check the water quality [report](#), but my first guess would be "no". the listing for the impacted water bodies, may or may not be due to the sediments. I spoke with someone in that section and he stated that he could give you the tabular data and this would have the results from the sediment tests and the xy of the station that it was sampled from.

Feel free to call me with any questions Pam...and I am extremely sorry that I took so long, we are shorthanded here and I had a lot of field work to do.

-joe

Joseph Konczyk
Environmental Protection Geologist
Illinois EPA, Groundwater Section
Ph:217.785.2271 Fax:217.782.0075
email: joe.konczyk@illinois.gov

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telephone log



gai consultants

Date: 10-18-2016

Project / Admin. No.: E160438.00

Call From: Erin Matthews

Company: GAI Consultants

Phone No.: 412-399-5251

Call To: David Cook

Company: IEPA Public Water Supply Manager

Phone No.: 217-782-0078

Subject: Mississippi River

cc:

Summary of Discussion, Decisions, and Commitments:

Call with David Cook regarding the Mississippi River being designated as a public water supply according to Section 305b and as a “community water supply intake” according to the source water assessment program. Mr. Cook explained that there are no crossing restrictions related to this public water supply and the ‘community water supply intake’ buffer listed on the IEPA source water assessment interactive web-mapper is an informational buffer only and is not regulated. Should additional crossing restrictions outside of the Public Drinking Water Department arise, they would be called to attention during the 401/404 application process.

telephone log



gai consultants

Date: October 17, 2016

Project / Admin. No.: E160438.00

Call From: Erin Matthews

Company: GAI Consultants

Phone No.: 217-782-0610.

Call To: Scott Twait

Company: IEPA

Phone No.:

Subject: Public Drinking Waters

cc:

Summary of Discussion, Decisions, and Commitments:

I've asked Scott if he knew if there were any special construction restrictions for crossing the Mississippi River in the area designated as a public water supply intake buffer. He said that, if applicable, crossing restrictions would really be determined during the 401 application process but he does not see any special restrictions other than having a contingency plan in place should fluids get into the river.

Ali Trunzo

From: Erin Matthews
Sent: Monday, October 17, 2016 10:52 AM
To: Ali Trunzo
Subject: FW: Stream Crossings - Seasonal Restrictions

From: Twait, Scott [mailto:Scott.Twait@Illinois.gov]
Sent: Monday, October 17, 2016 10:24 AM
To: Erin Matthews <erin.matthews@gaiconsultants.com>
Subject: RE: Stream Crossings - Seasonal Restrictions

Erin,

As I mentioned, Illinois has no cold water streams and therefore do not have any seasonal restrictions associated with cold water fisheries.

This does not preclude IDNR from any restrictions related to threatened or endangered species.

If you have any questions, please let me know.

Scott

Scott Twait
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217-558-2012
217-782-9891 (fax)

From: Erin Matthews [mailto:erin.matthews@gaiconsultants.com]
Sent: Friday, October 07, 2016 4:19 PM
To: Twait, Scott
Subject: [External] Stream Crossings - Seasonal Restrictions

Hi Scott

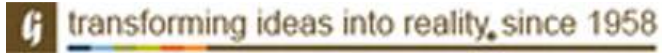
When we talked last week, we discussed the water quality classifications in Illinois. I understand that essentially all streams in Illinois are designated as warm water fisheries (cold water fisheries are mainly present outside of southcentral Illinois, around Lake Michigan). Since my proposed natural gas pipeline project is also a FERC project, FERC asks that the project abides to their WWF seasonal restriction of June 1- Nov. 30 unless otherwise noted by the state. Could I get concurrence from you that, there are no time of year restrictions on warmwater fisheries in Illinois?

Thank you for your help as I work through this process.

Erin M. Matthews
Project Environmental Specialist

GAI Consultants, Inc.
385 East Waterfront Drive, Homestead, PA 15120-5005

* Please update your records with my new direct telephone number



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telephone log



gai consultants

Date: September 28, 2016

Project / Admin. No.: E160438.00

Call From: Erin Matthews

Company: GAI Consultants

Phone No.: 217-782-0610.

Call To: Scott Twait

Company: IEPA

Phone No.: 217-558-2012

Subject: IL Water Quality Classifications

cc:

Summary of Discussion, Decisions, and Commitments:

All waters of Illinois are considered general use waters. Illinois does not have cold water streams. The 305b list is the only list that they use as far as water quality classifications, but high quality streams also depend on the stream and wetland studies. High quality wetlands associated with a stream, could designate the stream as high quality. High quality habitat could possibly designate crossing restrictions. Scott passed me on to Thad Faught (217-782-0610) with permitting to clarify how to classify a HQ wetland and what that means as far as construction restrictions, but it sounds like it's up to our field crew's judgement on functionality. I have a voicemail into Thad and will update everyone if he calls back.

Ali Trunzo

From: Konczyk, Joe <JOE.KONCZYK@Illinois.gov>
Sent: Thursday, September 22, 2016 3:39 PM
To: Pamela Hartwick
Subject: RE: GIS Groundwater Data Request

You will want to go to this website <http://www.epa.illinois.gov/foia/index>

I am commenting on your request below.

Feel free to call or email me on any of this, or after you receive your response from our FOIA officer.

-joe

Joseph Konczyk
Environmental Protection Geologist
Illinois EPA, Groundwater Section
Ph:217.785.2271 Fax:217.782.0075
email: joe.konczyk@illinois.gov

From: Pamela Hartwick [mailto:P.Hartwick@gaiconsultants.com]
Sent: Thursday, September 22, 2016 2:04 PM
To: Konczyk, Joe
Subject: [External] GIS Groundwater Data Request

Good afternoon Joe,

Thank you for the help! As discussed a few moments ago, below is the list my client provided to me.

We'll need data on Source Water Protection Areas including:

1. State or EPA designated sole source aquifers – from USEPA, but I may be able to get that for you
2. Protected watershed areas associated with a supply well – there are no regulated watersheds for water wells in the State, however, a well may have a delineated 5-year time of travel for unconfined wells and all wells have a 1,000 foot buffer around them, not regulated, as a Phase 1 Wellhead Protection Area (WHPA). Some of the 1,000-foot WHPAs may have local ordinances that may have some controls associated with them, but we do not regulate that...the local entity will. Those are call Maximum Setback Zones. I will send you this
3. Monitoring wells – from our Bureau of Land folks...not sure we have those electronically.
4. Private Wells – from the ISGS. You may start your search at [ILWATER](#).
5. Potable water sources/intakes I will send you all CWS and Non CWS Wells and CWS and nonCWS intakes (CWS stands for Community Water Supply)
6. Public water supply areas – see above WHPA info
7. Areas of contaminated soil or groundwater – Not sure this exists, may have FOIA check with BOL
8. Waterbodies that may have sediments contaminated with toxic chemicals – May have this in Surface Water Section in the form of 303d lakes and 303d streams see this [report](#). If the associate body is in there we would have either a lake or stream data set that would have it.

Thanks again!
Pam

Pamela M. Hartwick
Project GIS Specialist

GAI Consultants

385 East Waterfront Drive, Homestead, PA 15120-5005

412.399.5055 |    | gaiconsultants.com



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telephone log



gai consultants

Date: 9/21/2016

Project / Admin. No.: E160438.00

Call From: Pam Hartwick

Company: GAI Consultants

Phone No.: 412-399-5055

Call To: Mr. Joe Konczyk

Company: Illinois EPA

Phone No.: 217-785-2271

Subject: Illinois water resources

cc:

Summary of Discussion, Decisions, and Commitments:

Mr. Konczyk provided information on how to request drinking/well water spatial data from IEPA. A FOIA request must be submitted. Data may take 21 business days to arrive.



August 12, 2016

Mr. Alan Keller
Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

**Re: Project Permitting Coordination
Spire STL Pipeline LLC
Spire STL Pipeline
Scott, Greene, and Jersey Counties, Illinois**

Dear Mr. Keller:

GAI Consultants, Inc. ("GAI") is submitting this information request on behalf of Spire STL Pipeline LLC ("Spire"), for the portion of the Spire STL Pipeline ("Project") in Scott, Jersey and Greene Counties, Illinois. GAI is submitting information to coordinate anticipated reviews for the proposed Project.

Project Description

Spire is in the planning stages of the Project. As proposed, the Project will serve the energy needs of residential, commercial, and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project, as proposed, will consist of approximately 60 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC ("REX") pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri, until crossing the Missouri River and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri, that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880 from LGC and modify approximately nine miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri, that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("MRT") pipeline along the western bank of the Mississippi River, in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles and will include the construction of minor aboveground facilities. A pig launcher/receiver will also be installed at each portion of the Project. The overall design capacity of the new build portion of the pipeline is expected to be 400,000 Dth/d. No compression will be required.

Spire anticipates a typical 90-foot temporary construction right-of-way ("ROW") width, and a 50-foot permanent ROW. The construction ROW is anticipated to be reduced to 50-foot at streams and wetlands. An additional 25 feet of temporary work space will be required through agricultural areas, and additional temporary work space will be required to facilitate construction in certain areas, such as crossings of roads, railroads, streams, and wetlands.

Illinois

Approximately 45 miles of new build 24-inch diameter steel pipeline will be located in Illinois and traverse Scott, Greene, and Jersey Counties. One metering and regulating station and one pig launcher are proposed in Scott County, Illinois, at the interconnection location with the REX pipeline.

The pipeline facilities are shown on United States Geological Survey ("USGS") Topographic Map (Figure 1). In addition, Spire has assumed the use/development of new and/or existing access roads throughout the Project area. Temporary extra work spaces will be utilized to accommodate equipment staging and stockpiling of materials along the proposed corridor during construction. The locations of these facilities are still pending.

Site Description

The Illinois portion of the Project is located in Scott, Greene, and Jersey Counties, Illinois, and is depicted on the attached portions of the Alsey (1983), Roodhouse West (1983), Carrolton (1985), Boyer Creek (1983), Otterville (1983), Elsay (1979), and Grafton (1995), Illinois, United States Geological Survey (USGS) 7.5-minute series topographic maps (Figure 1).

The majority of the pipeline is greenfield and crosses a primarily agricultural landscape with some areas of forest. The Project is located within the North Little Sandy Creek [USGS Hydrologic Unit Code (HUC) #071300110503], Little Sandy Creek (HUC #071300110504), Hurricane Creek (HUC #071300110806), Whitaker Creek-Apple Creek (HUC #071300110702), Coates Creek-Apple Creek (HUC #071300110703), Link Branch-Lower Macoupin Creek (HUC #071300120602), Wines Branch-Lower Macoupin Creek (HUC #071300120603), De Arcy Branch-Phils Creek (HUC #071300120502), Sandy Creek-Otter Creek (HUC #071300110901), Shilow Hollow-South Fork Otter Creek (HUC #071300110902), Lower Piasa Creek (HUC #071100090204), and Marais Temps Clair-Mississippi River (HUC #071100090401) watersheds.

Spire anticipates the following permitting considerations on the Project:

- obtain coverage under the Nationwide Permit 12, thereby receiving automatic Clean Water Act Section 401 Water Quality Certification;
- cross listed 303d impaired waters, including Apple Creek, Macoupin Creek, and the Mississippi River;
- apply for hydrostatic test discharge permits (discharge methods and locations to be determined); and
- incorporate FERC Plan and Procedures and State best management practices into construction activities to be exempt from submitting National Pollutant Discharge Elimination System (NPDES) permit (coverage under General NPDES Permit No. ILR10).

GAI would appreciate information concerning the permits described above, particularly in regard to crossings of 303d listed waters and general waterbody crossing methods. In addition, GAI would appreciate the identification of permitting concerns within one-half-mile of the proposed Project centerline, as shown on Figure 1.

Please note the intent of this letter is solely for the purpose of formally initiating consultation and/or applicable Project reviews. An invitation for your agency to participate in the Federal Energy Regulatory Commission's National Environmental Policy Act Pre-Filing Process will be addressed to you under separate cover.

If you have any questions regarding this submission, please feel free to contact me at 234.203.0763, or by e-mail at J.Fuller@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

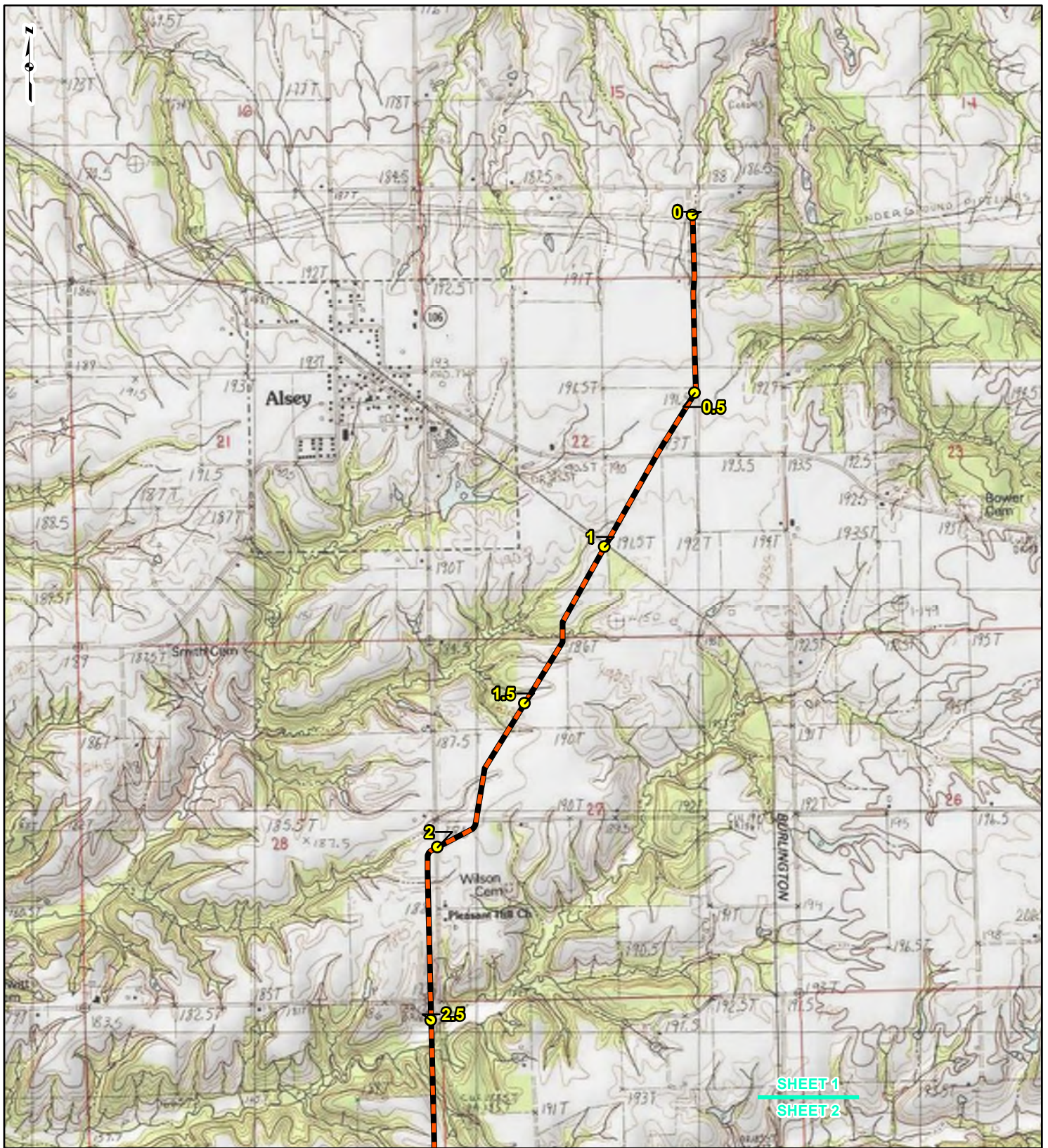
A handwritten signature in blue ink, appearing to read "Jayme L. Fuller". The signature is stylized and cursive.

Jayne L. Fuller
Environmental Manager

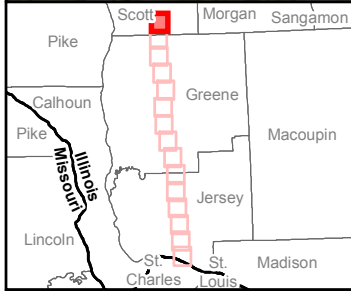
AMT/jbm

Attachment: USGS Topographic Map (Figure 1)





ATTACHMENT
USGS TOPOGRAPHIC MAP (FIGURE 1)



SHEET 1
SHEET 2




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 1 OF 15**





Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.



LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

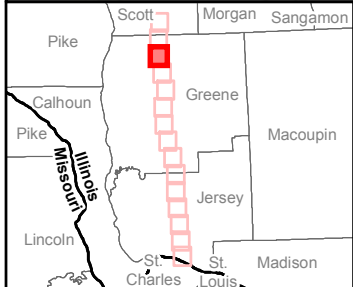
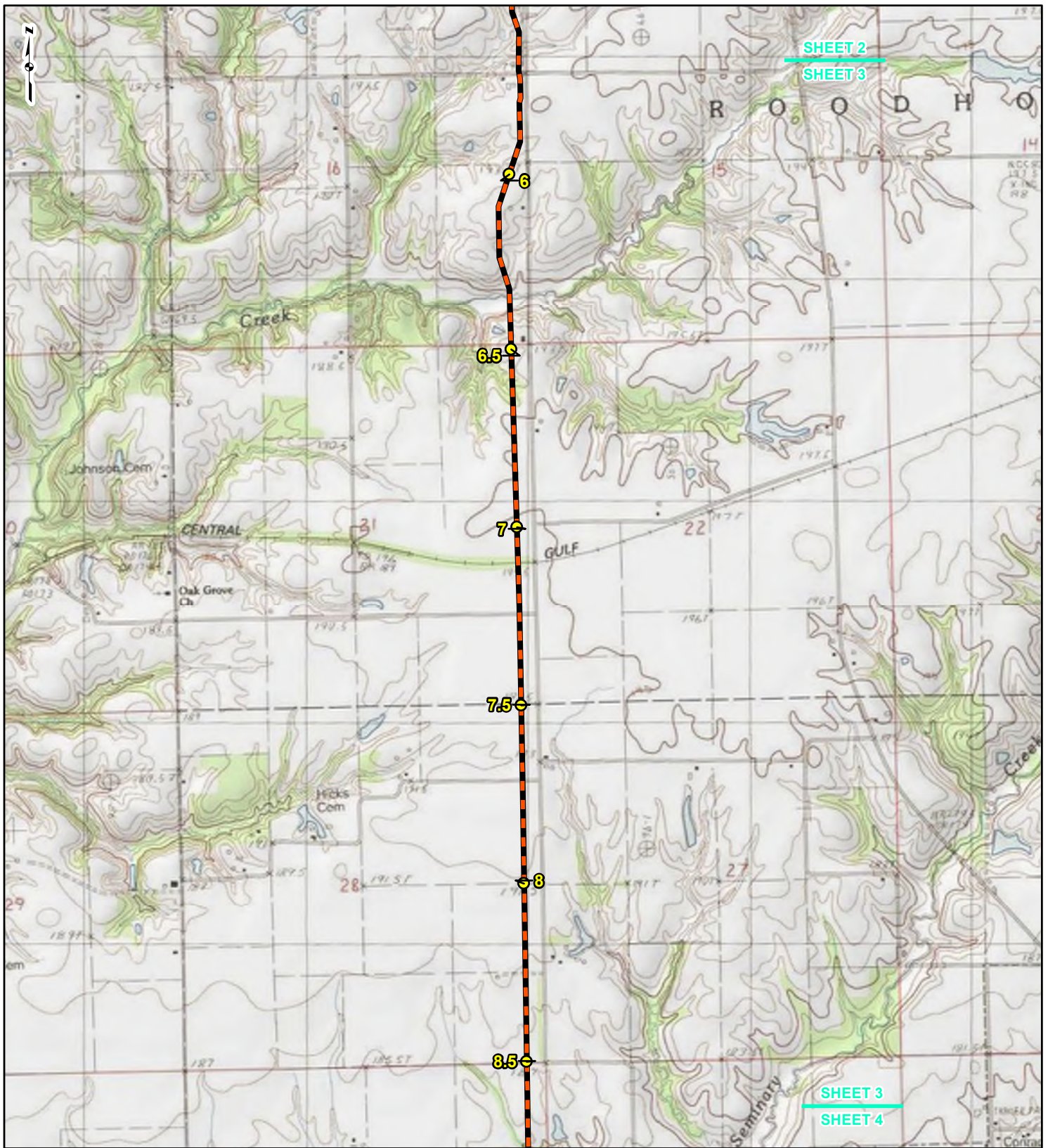
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 2 OF 15







DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

 NEW BUILD MILEPOST	 COUNTY BOUNDARY
 NEW BUILD 24-INCH DIAMETER PIPELINE	 STATE BOUNDARY

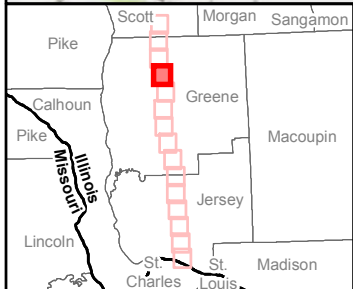
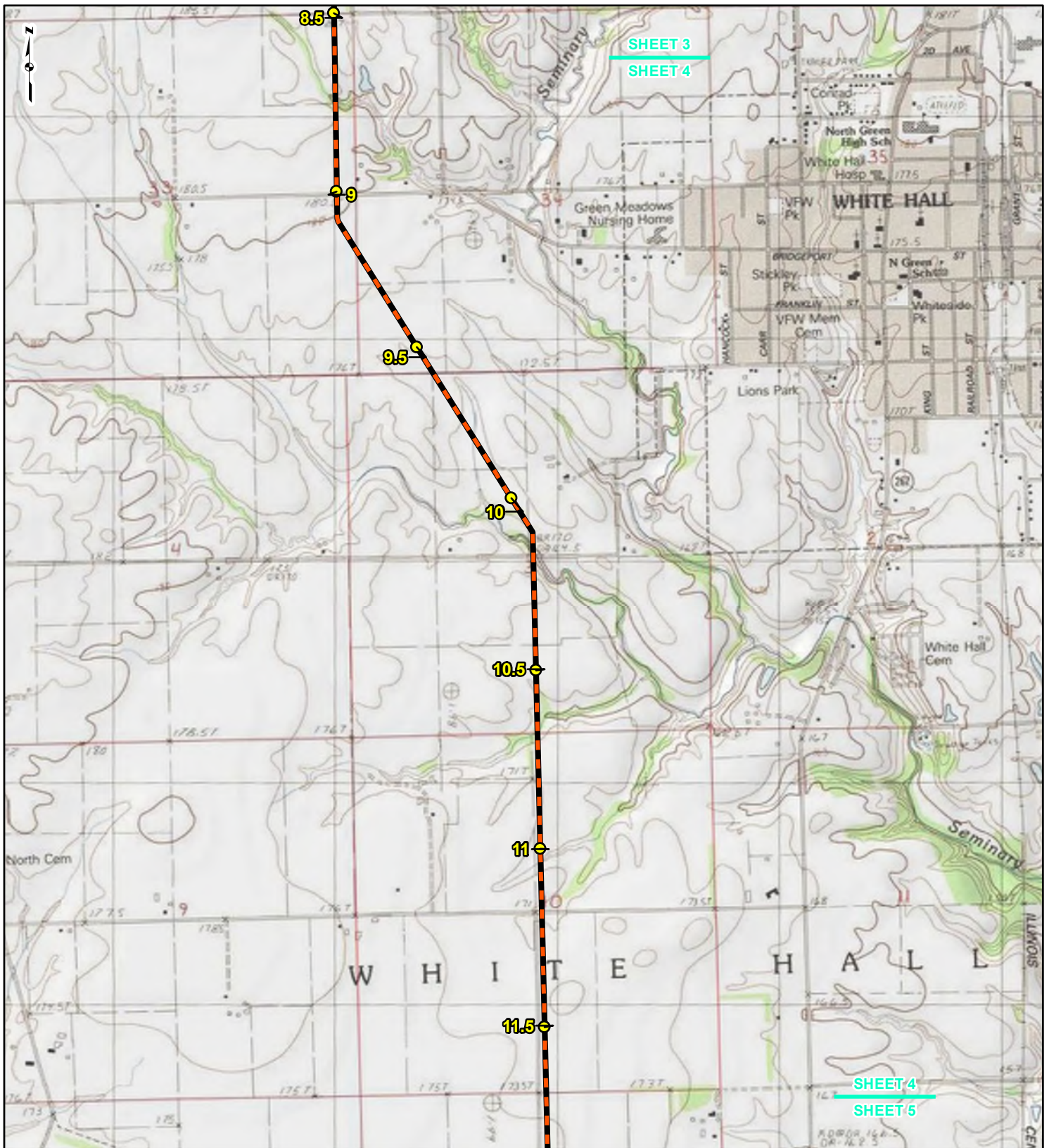
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 3 OF 15**





Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ELSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

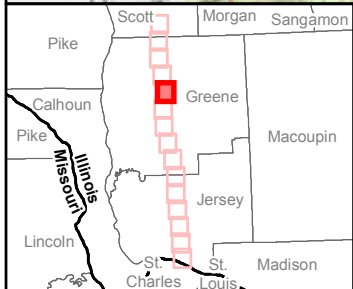
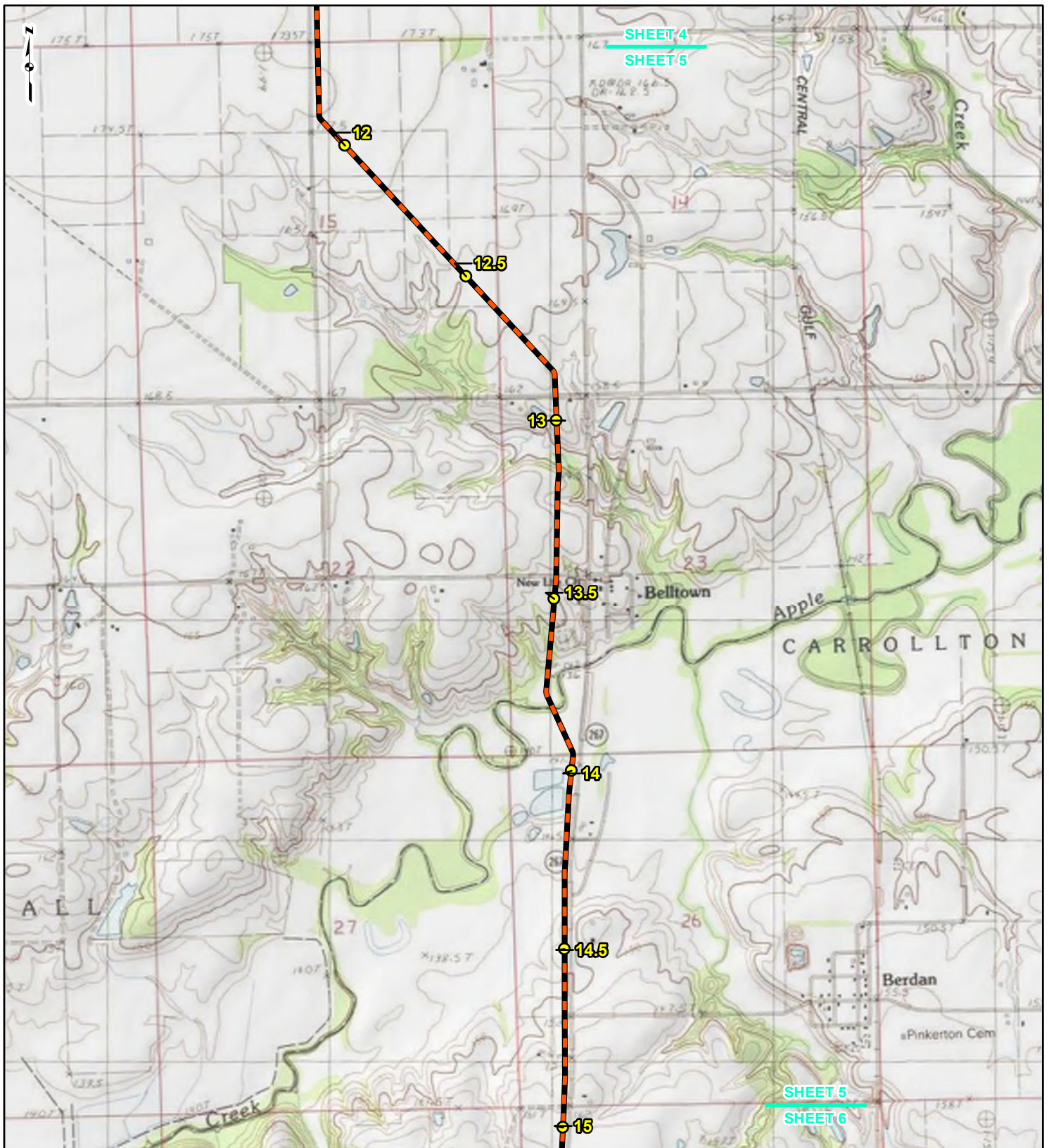
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 4 OF 15**





Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

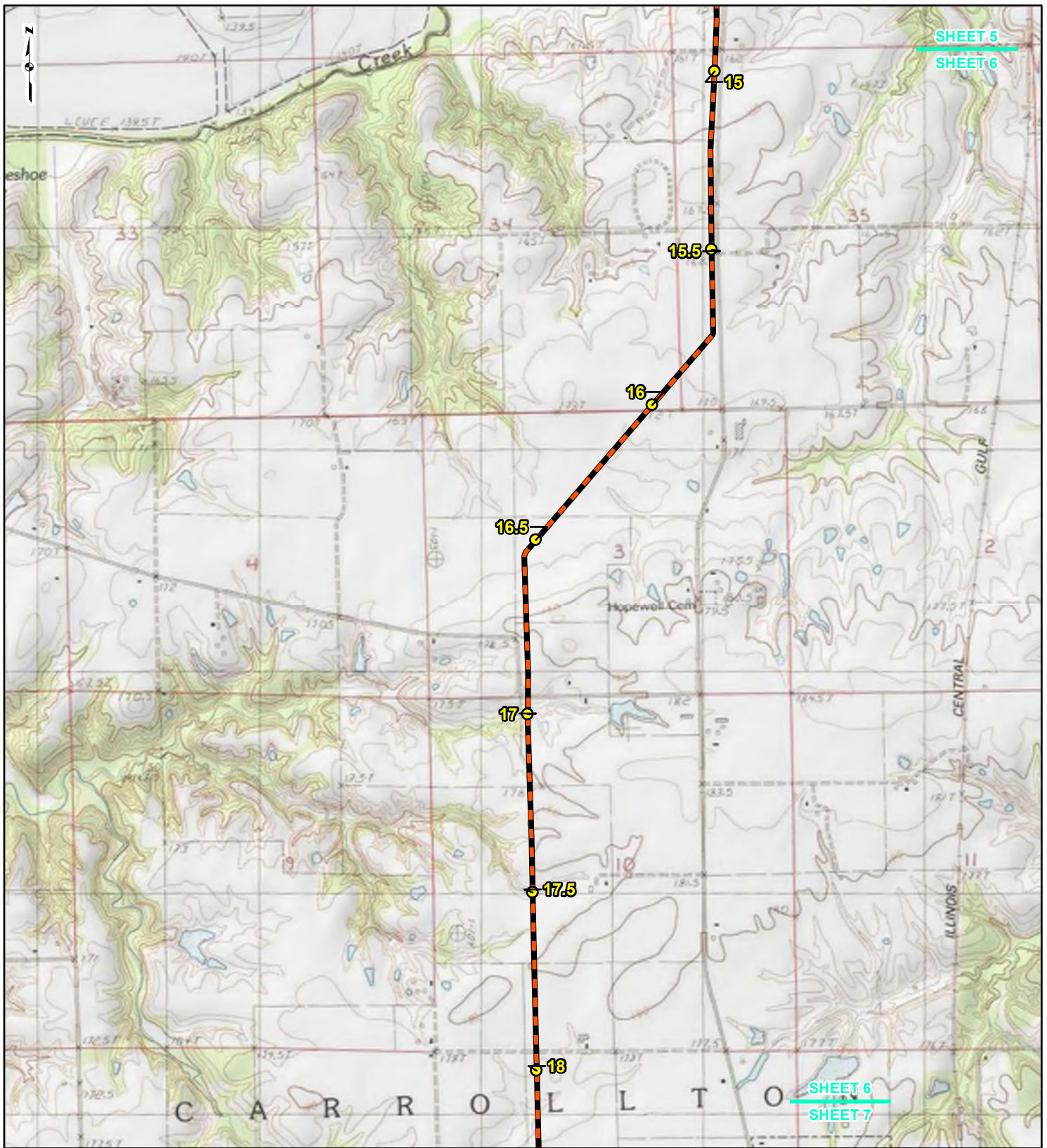
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 5 OF 15**

Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

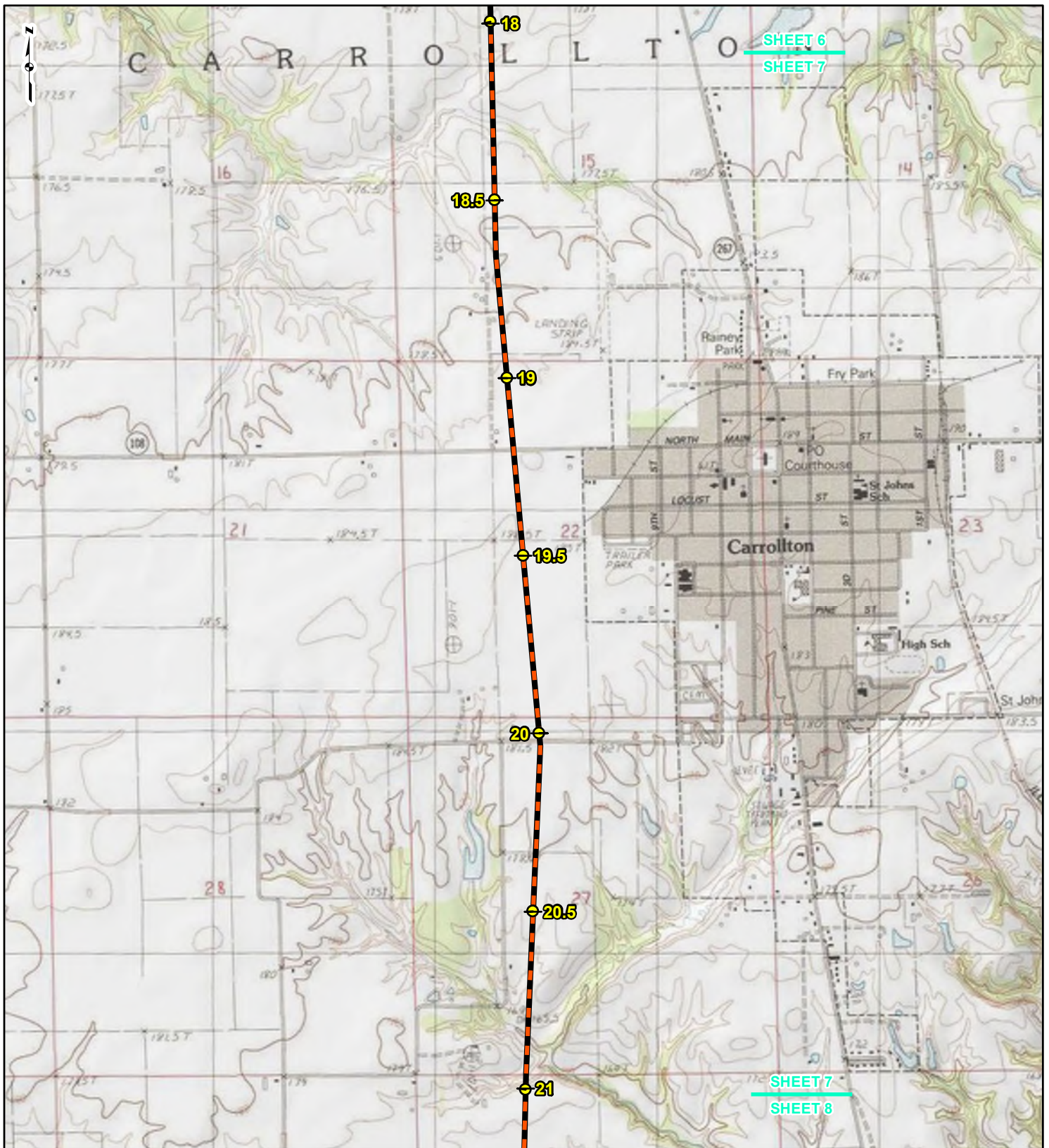
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Feet

**FIGURE 1
LOCATION MAP
SHEET 6 OF 15**

Spire STL Pipeline

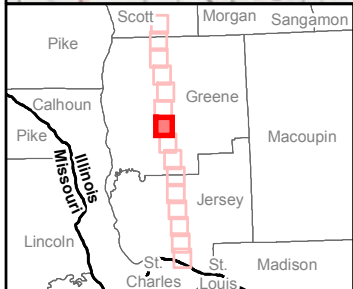
DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.







SHEET 6
SHEET 7

SHEET 7
SHEET 8




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

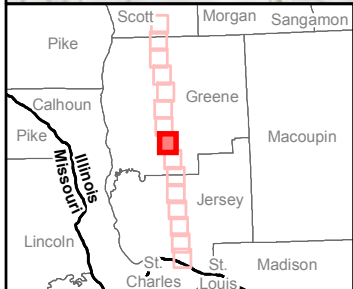
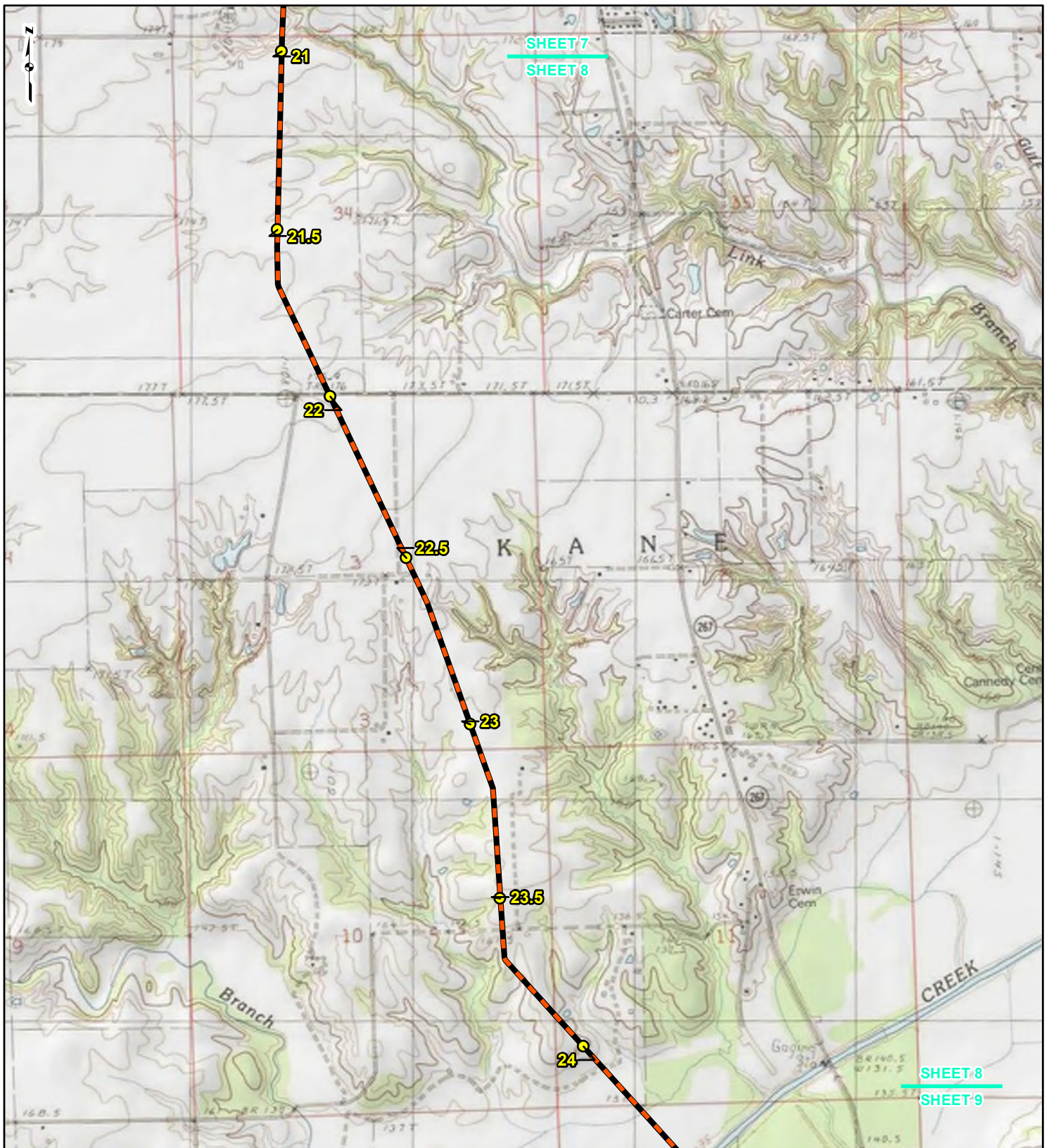
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 7 OF 15**





Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

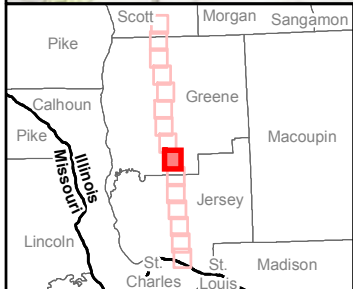
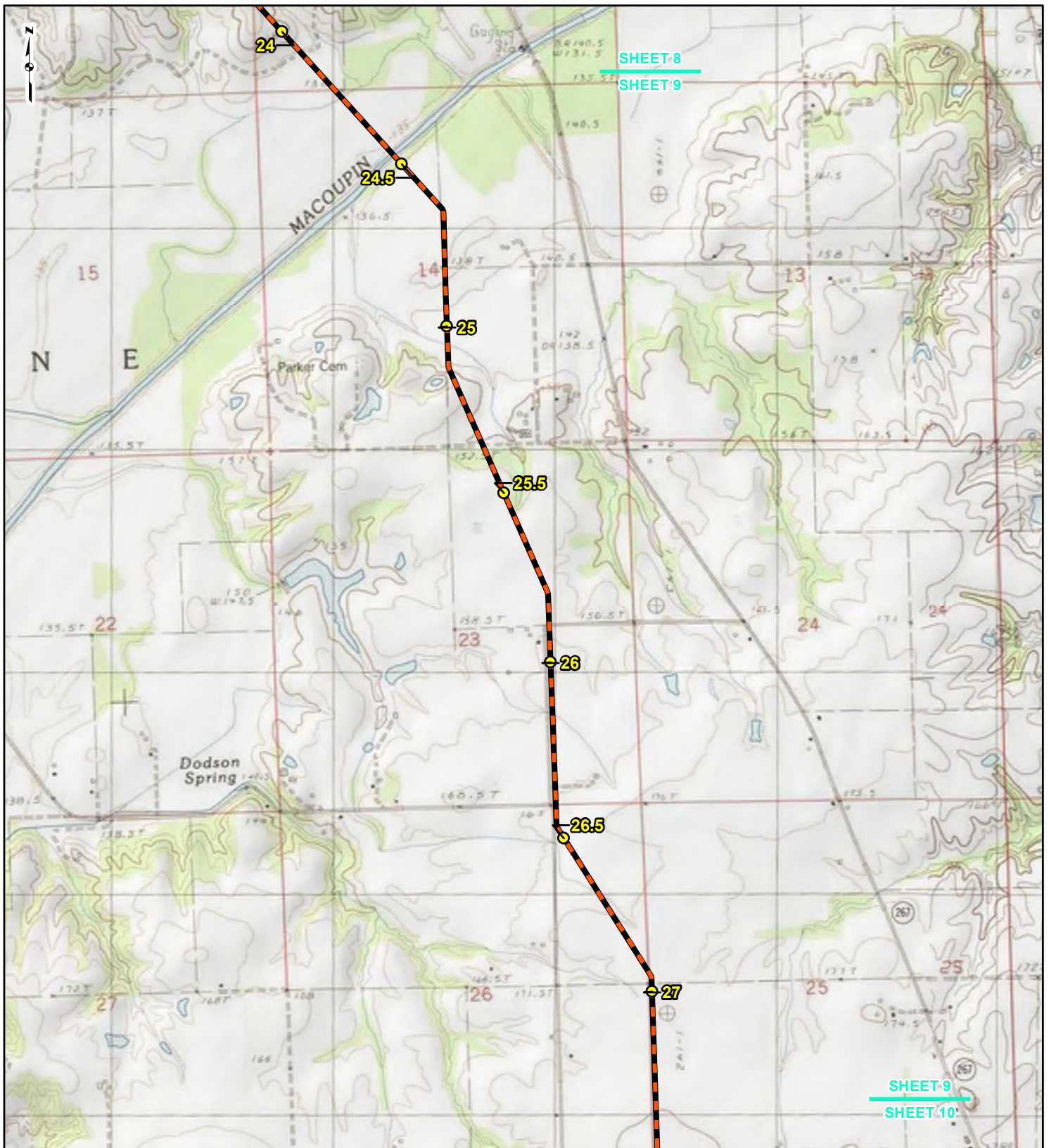
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 8 OF 15**





Spire STL Pipeline 

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

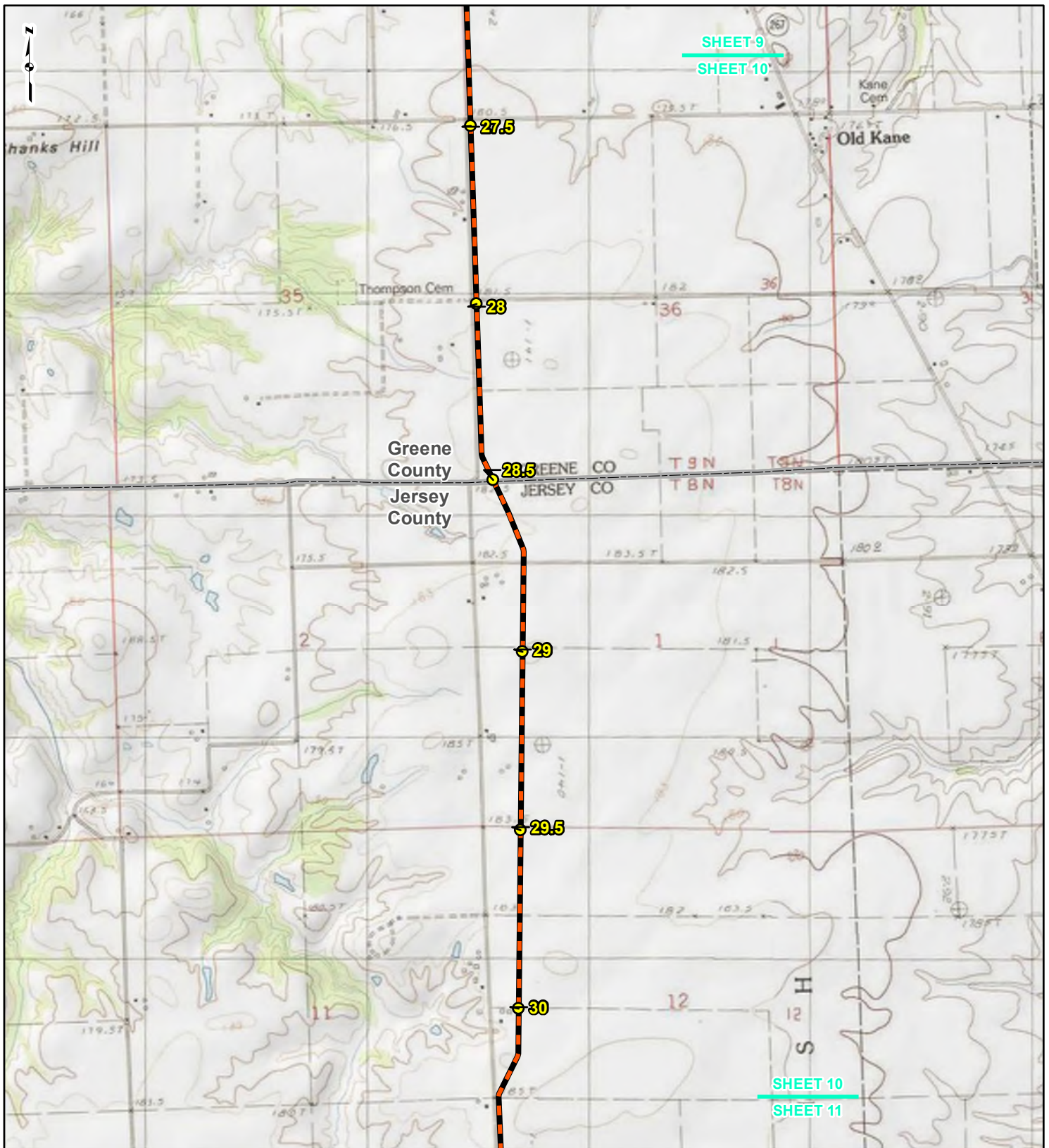
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Feet

**FIGURE 1
LOCATION MAP
SHEET 9 OF 15**

Spire STL Pipeline 

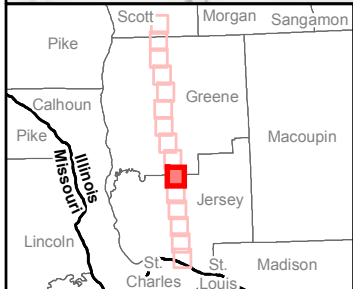
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CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.







SHEET 9
SHEET 10

SHEET 10
SHEET 11




LEGEND

 NEW BUILD MILEPOST	 COUNTY BOUNDARY
 NEW BUILD 24-INCH DIAMETER PIPELINE	 STATE BOUNDARY

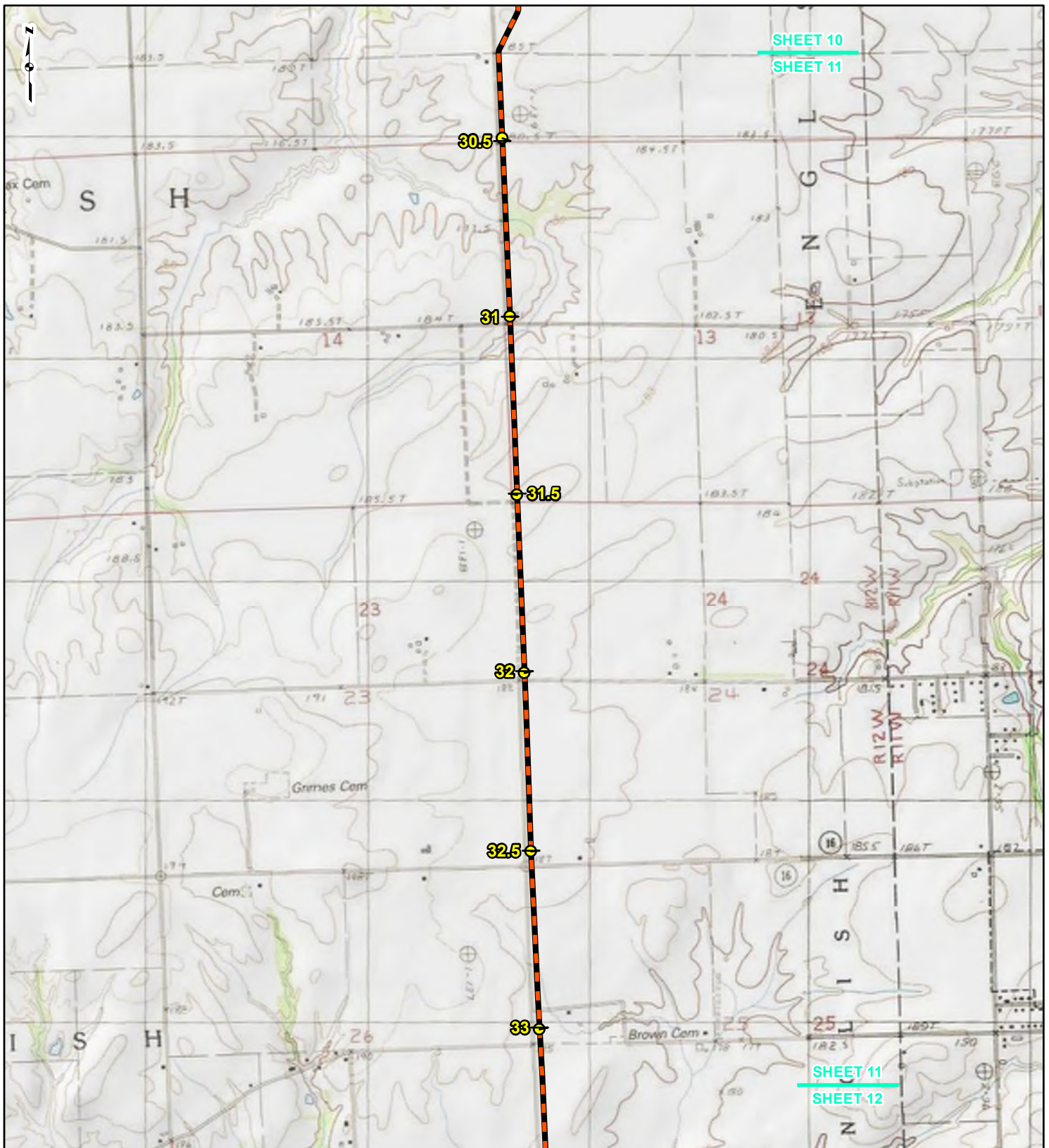
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 10 OF 15**

Spire STL Pipeline 

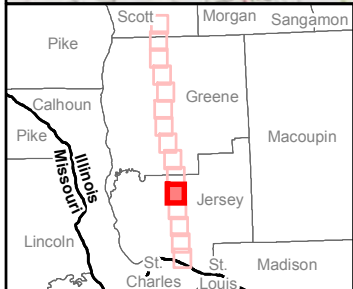
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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.



SHEET 10
SHEET 11

SHEET 11
SHEET 12



LEGEND

- NEW BUILD MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- COUNTY BOUNDARY
- STATE BOUNDARY

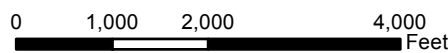


FIGURE 1
LOCATION MAP
SHEET 11 OF 15



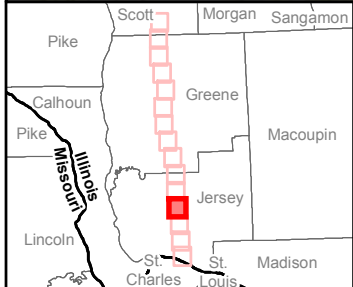
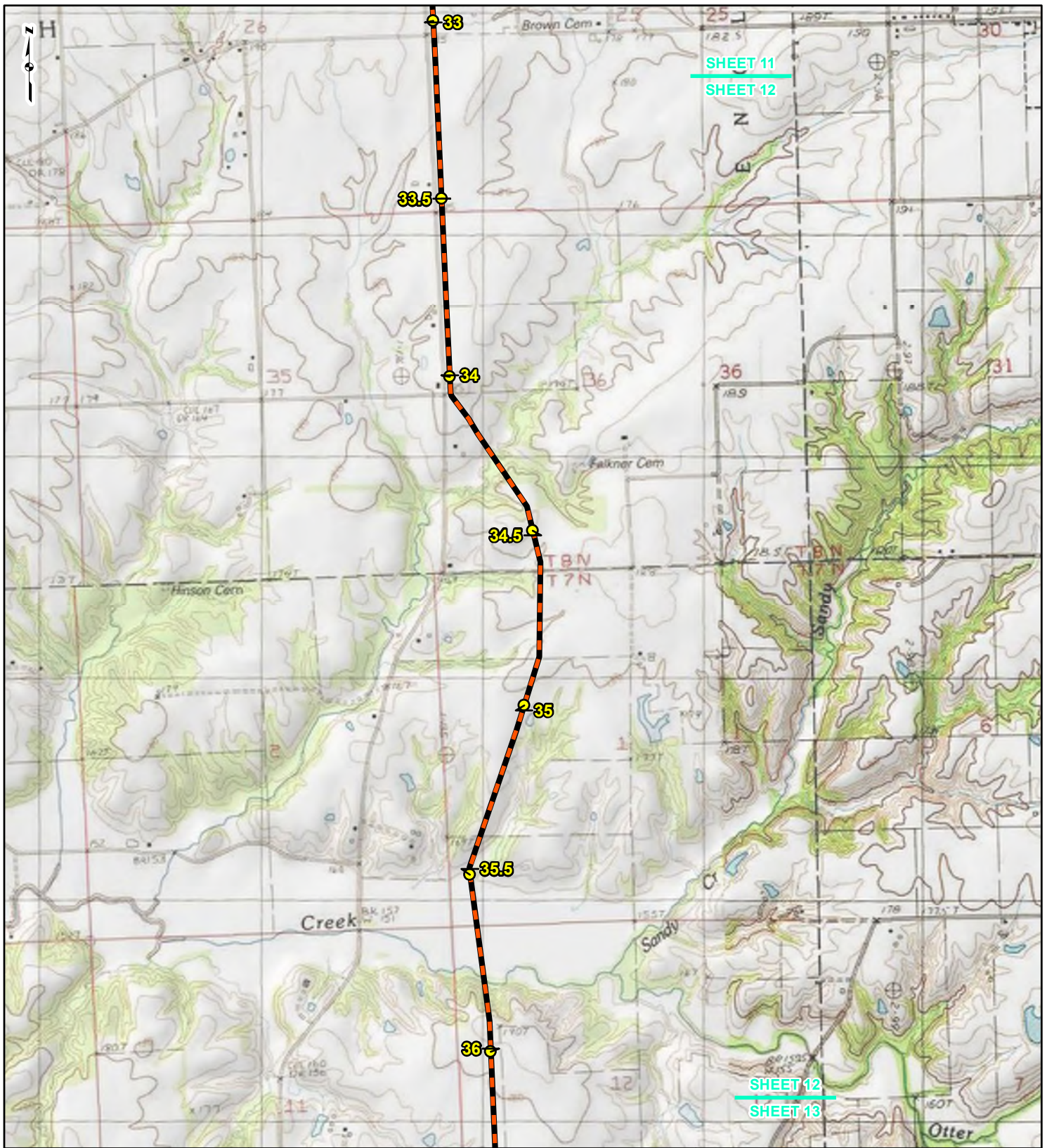
Spire STL Pipeline







DRAWN BY: PMH
CHECKED: SWW

DATE: 8/12/2016
APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.




LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

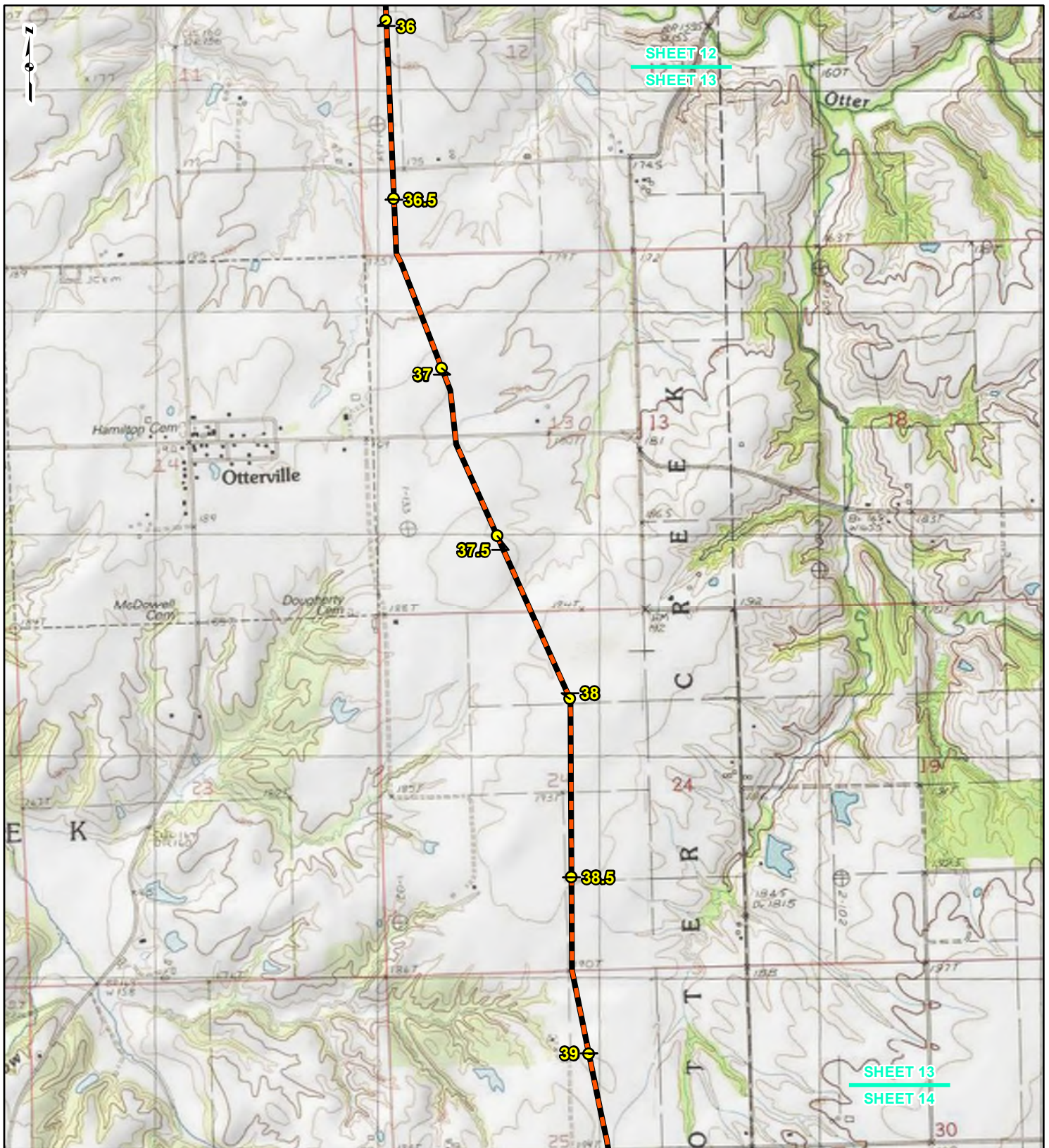
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 12 OF 15**

Spire STL Pipeline 

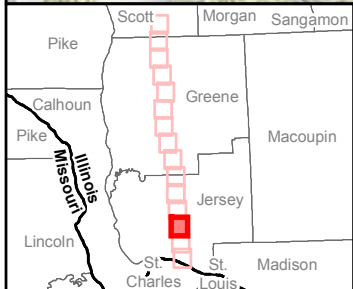
DRAWN BY: PMH DATE: 8/12/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.



SHEET 12
SHEET 13

SHEET 13
SHEET 14



LEGEND

- NEW BUILD MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- COUNTY BOUNDARY
- STATE BOUNDARY

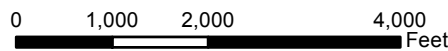


FIGURE 1
LOCATION MAP
SHEET 13 OF 15



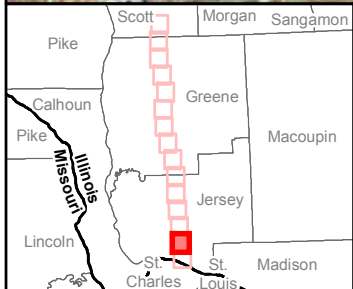
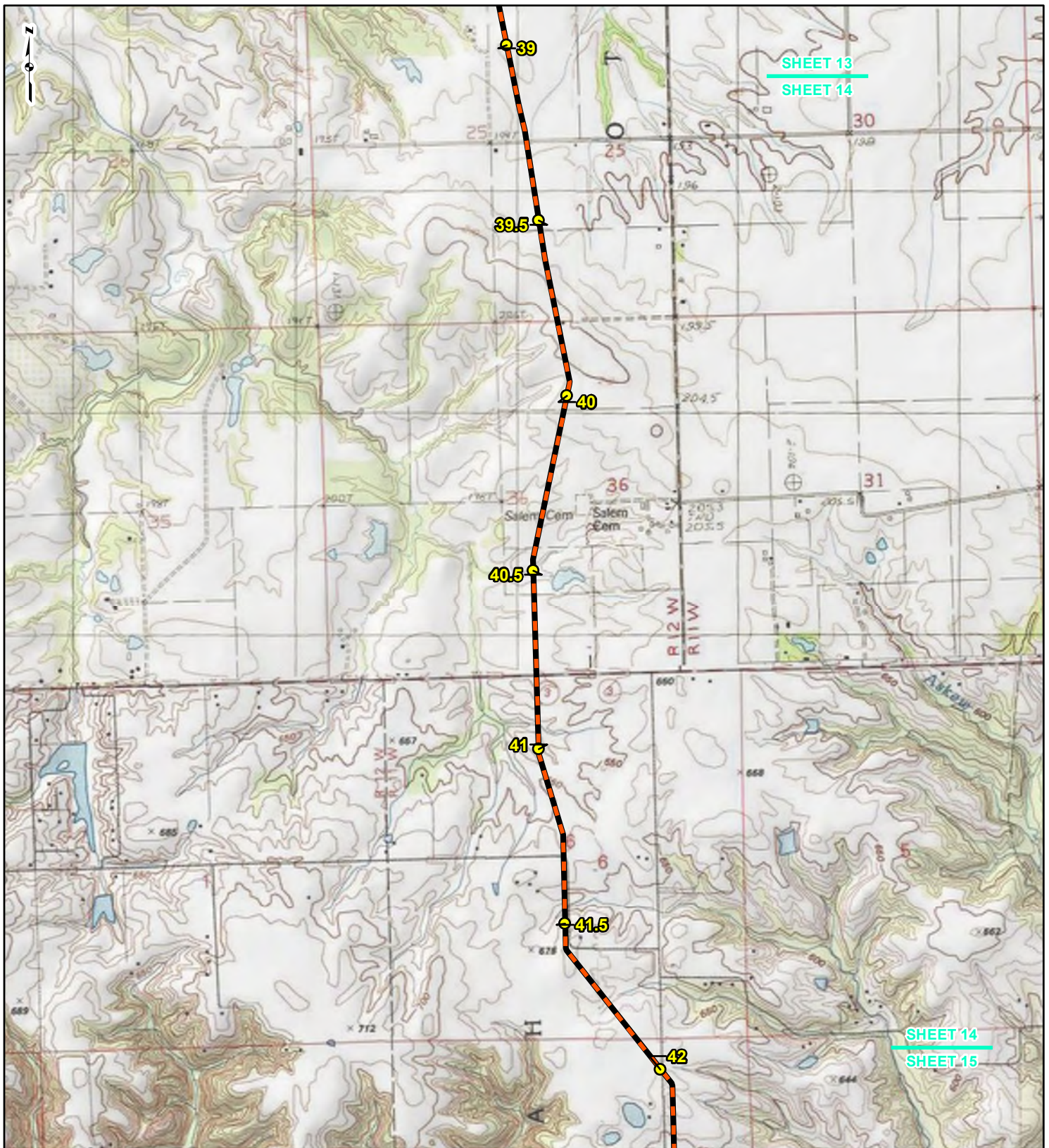
Spire STL Pipeline



DRAWN BY: PMH
CHECKED: SWW

DATE: 8/12/2016
APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.



LEGEND

	NEW BUILD MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

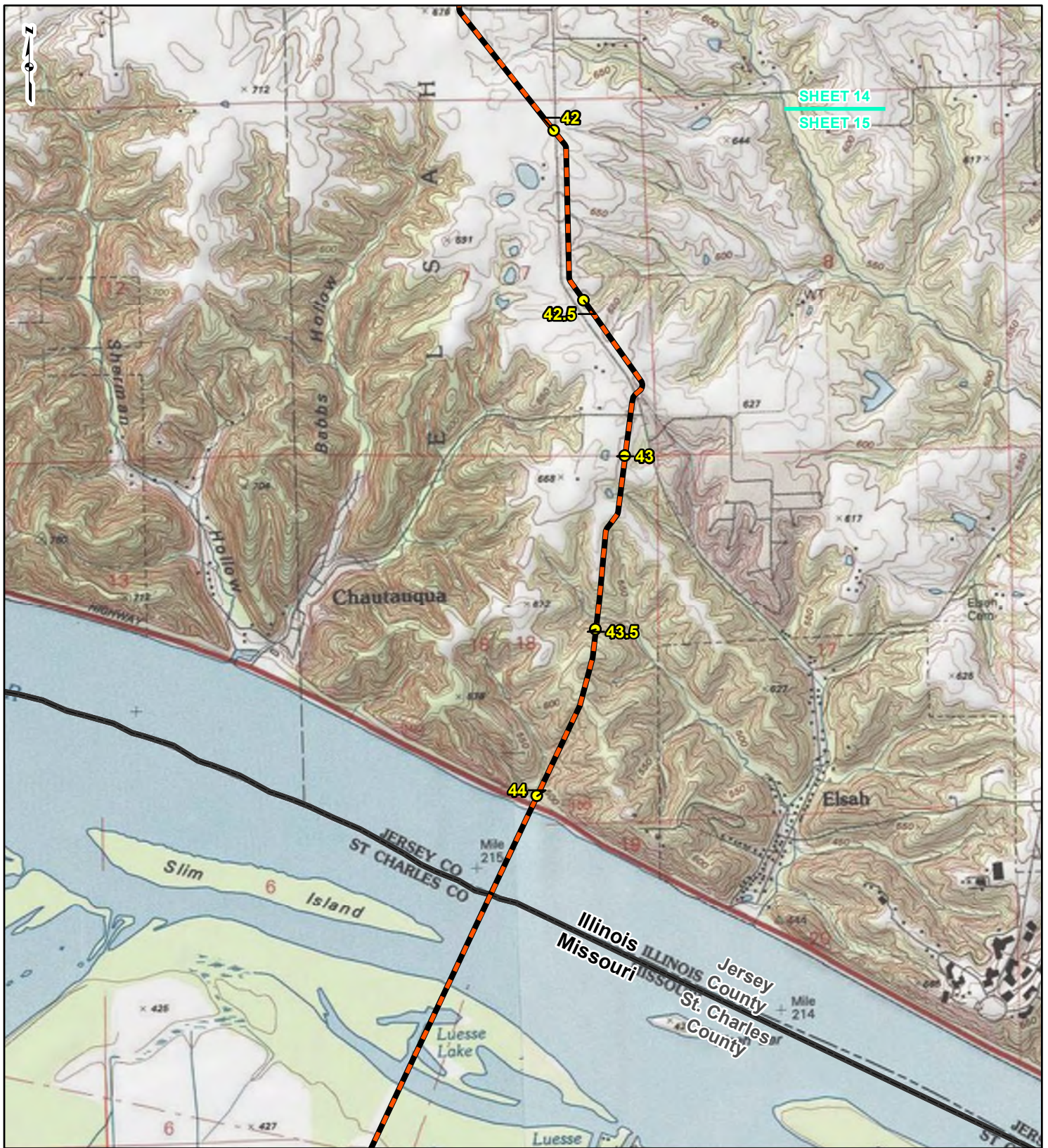
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 14 OF 15**

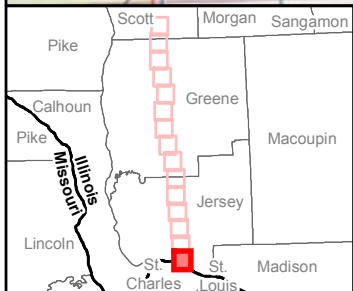
Spire STL Pipeline

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF





REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.

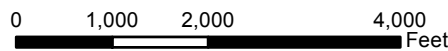


SHEET 14
SHEET 15



LEGEND

-  NEW BUILD MILEPOST
-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  COUNTY BOUNDARY
-  STATE BOUNDARY



**FIGURE 1
LOCATION MAP
SHEET 15 OF 15**



**Spire STL
Pipeline**



DRAWN BY: PMH
CHECKED: SWW

DATE: 8/12/2016
APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1984), BOYER CREEK (1985), CARROLLTON (1985), ELSAH (1979), GRAFTON (1979), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1985) AND ROODHOUSE WEST (1984), ILLINOIS, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/20/16.



Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Mr. Darin LeCrone
Industrial Unit Manager Illinois Environmental Protection Agency - Bureau of Water
PO Box 19276
Springfield, IL 62794

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Mr. LeCrone,

At Spire, formerly The Laclede Group, we never stop looking for better ways to provide energy now and for the future. That's why Spire STL Pipeline LLC, a wholly owned subsidiary of Spire Inc., is proposing to develop and construct a new interstate natural gas pipeline that will bring an efficient energy source to southwest Illinois and the St. Louis region. As a member of the community, we want you to be informed about our proposed project and we want you to hear from us first.

We are proposing to construct 60 miles of new build pipeline and upgrade nine miles of existing underground pipeline to further improve reliability and better serve homes and businesses across Illinois and Missouri. The planned route runs through Scott, Greene and Jersey counties in Illinois and St. Charles and St. Louis counties in Missouri.

You are receiving this letter because your property is located on or near our currently proposed route.

Spire STL Pipeline LLC has started the pre-filing application process for developing interstate natural gas pipelines by the Federal Energy Regulatory Commission ("FERC") pursuant to 18 C.F.R. § 157.21. FERC staff recently started a pre-filing environmental review process, which encourages early involvement by citizens, governmental entities and other interested parties. You can find more information about this pre-filing process at www.ferc.gov. You can see all the information about the Spire STL Pipeline using the docket number PF16-9.

Included with this letter, for your information, is a general overview map of the proposed pipeline route and a diagram illustrating the FERC process.

We believe that we can create a better project by hearing from you and listening to your feedback. That's why we are hosting open houses this month so you can learn more about the project and we can learn more about you.

At the open houses, more detailed maps will be available to show where the proposed pipeline may be located relative to your property. We want you to come, ask questions and provide feedback. Representatives of the Federal Energy Regulatory Commission (FERC) will also be there to answer questions about the FERC process for natural gas pipelines.

Spire STL Pipeline open house schedule

Tuesday August 16, 2016 5 p.m. – 7:30 p.m.	Wednesday August 17, 2016 5 p.m. – 7:30 p.m.	Thursday August 18, 2016 5 p.m.– 7:30 p.m.	Tuesday August 23, 2016 5 p.m.– 7:30 p.m.	Wednesday August 24, 2016 5 p.m. – 7:30 p.m.
Scott County, Illinois	Jersey County, Illinois	St. Louis County, Missouri	St. Charles County, Missouri	Greene County, Illinois
Scott County Fairgrounds 401 North Walnut Winchester, IL 62694	Jerseyville Recreation Center 401 Mound Street Jerseyville, IL 62052	Hazelwood Civic Center East 8969 Dunn Road Hazelwood, MO 63042	American Legion Post 312 2500 Raymond Drive St Charles, MO 63301	Knights of Columbus Hall U.S. HWY 67 Carrollton, IL 62016

Check out more information on our website at www.SpireSTLPipeline.com. If you have any questions, please do not hesitate to contact us toll-free at 1 844-885-7234 or at STLPipelineInfo@SpireEnergy.com.

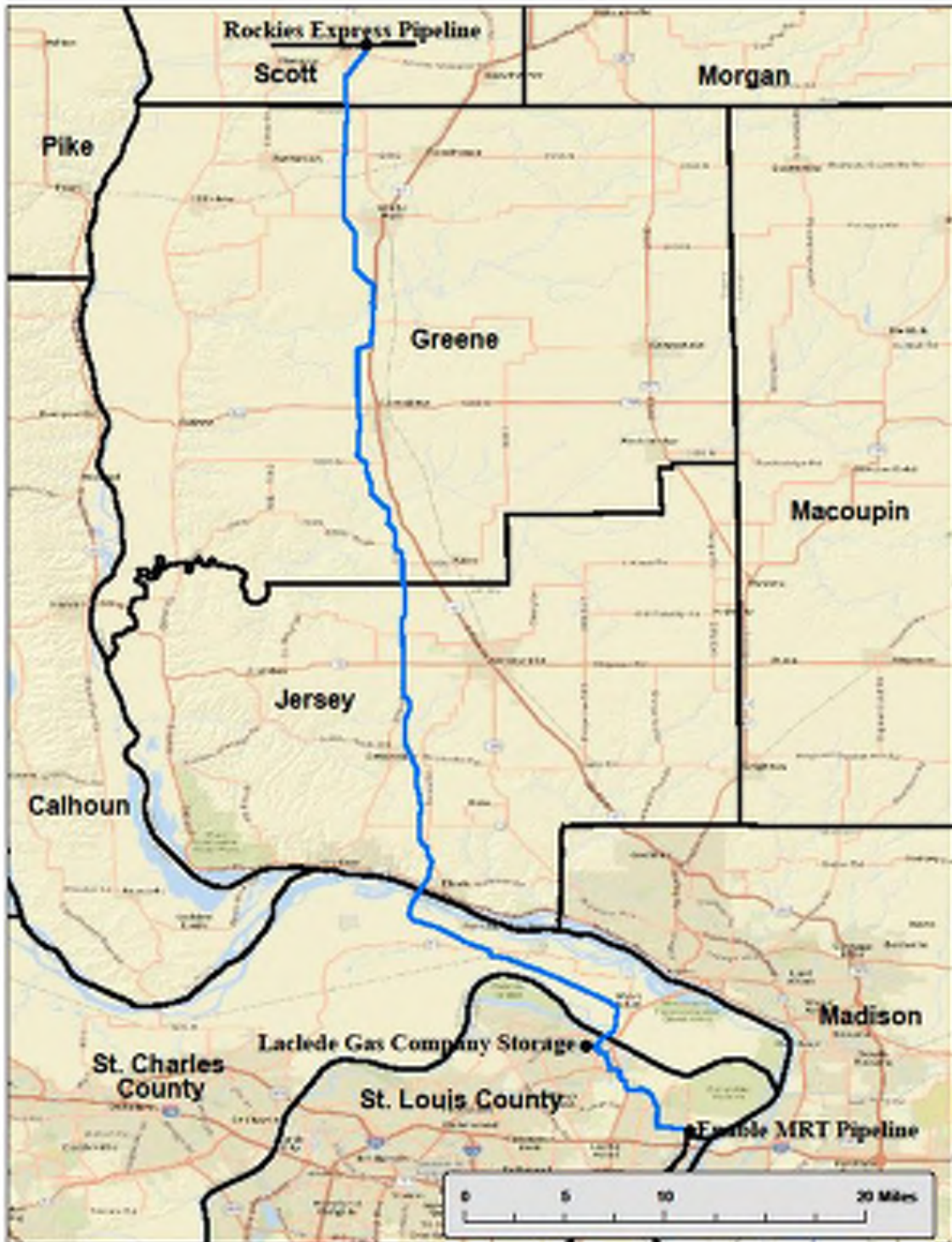
We look forward to working with you.

Sincerely,

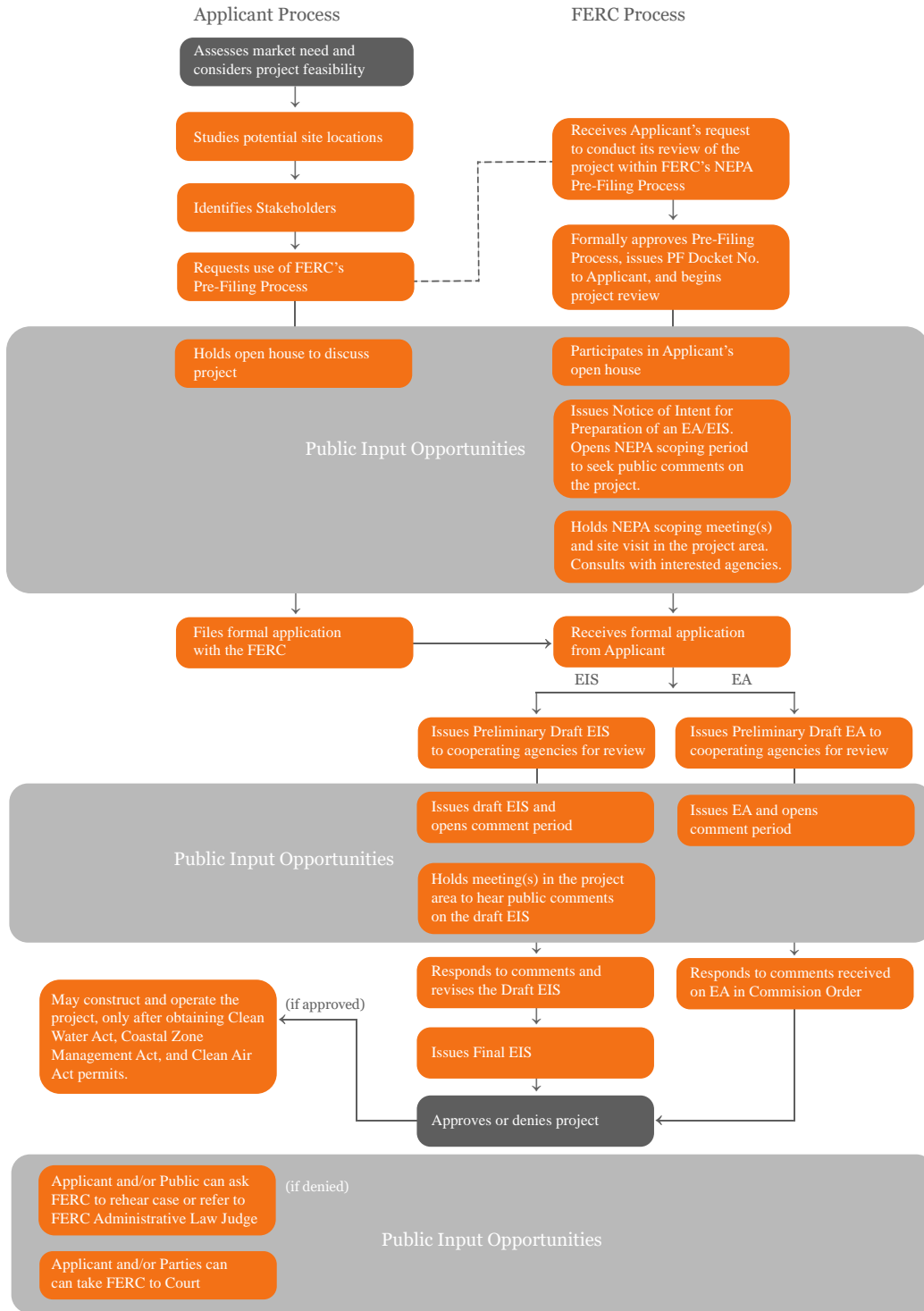


Scott Jaskowiak
Vice President
Spire STL Pipeline LLC

Project Map



FERC Pre-Filing Process





July 29, 2016

Mr. Darin LeCrone
Industrial Unit Manager
Illinois Environmental Protection
Agency, Bureau of Water
1021 North Grand Avenue East
Springfield, IL 62794-9276

**Re: Notice of Use of Pre-Filing Process
Spire STL Pipeline
Scott, Greene, and Jersey Counties, IL
St. Charles and St. Louis Counties, MO**

Dear Mr. LeCrone:

Spire STL Pipeline LLC ("Spire") is in the planning stages of the Spire STL Pipeline ("Project"). As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project as proposed will consist of approximately 60 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC ("REX") pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri until crossing the Missouri river and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880 from LGC and modify approximately nine miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("MRT") pipeline along the western bank of the Mississippi river in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles.

Construction and operation of the proposed Project will be regulated by the Federal Energy Regulatory Commission ("Commission") among other regulatory agencies. Spire intends to utilize the Commission's pre-filing process detailed in Section 157.21 of the Commission's regulations, which allows the Commission and other agencies to initiate National Environmental Policy Act ("NEPA") review prior to Spire filing an application to the Commission. The Commission would need to issue Spire a Certificate of Public Convenience and Necessity to enable construction and operation of the proposed pipeline. The preliminary Project schedule includes the following target dates:

- July 22, 2016 - Commission acceptance into pre-filing; commencement of the NEPA process (pre-filing docket no. PF16-9-000);
- August 2016 (Anticipated) - biological and cultural resource surveys;
- January 2017 (Anticipated) - file final application with Commission;
- August 2017 (Anticipated) - NEPA document published;
- November 2017 (Anticipated) - Commission decision on application; and
- February 2018 (Anticipated) - commence construction activities.

On behalf of Spire, GAI would like to take this opportunity to invite the Illinois Environmental Protection Agency - Bureau of Water to participate in the review of this Project as a cooperating agency during the Commission's pre-filing process. We look forward to your involvement in the review of this important Project and appreciate your cooperation.

Please note the intent of this letter is solely for the purpose of inviting you to participate in the Commission's NEPA pre-filing process. The Commission will also reach out to you requesting your agency to be a cooperating agency. Specific and necessary consultations and/or applicable permit applications will be addressed to you under separate cover.

If you have any questions or would like additional information, please feel free to contact me at 331.301.2002 or by e-mail at L.Ferry@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

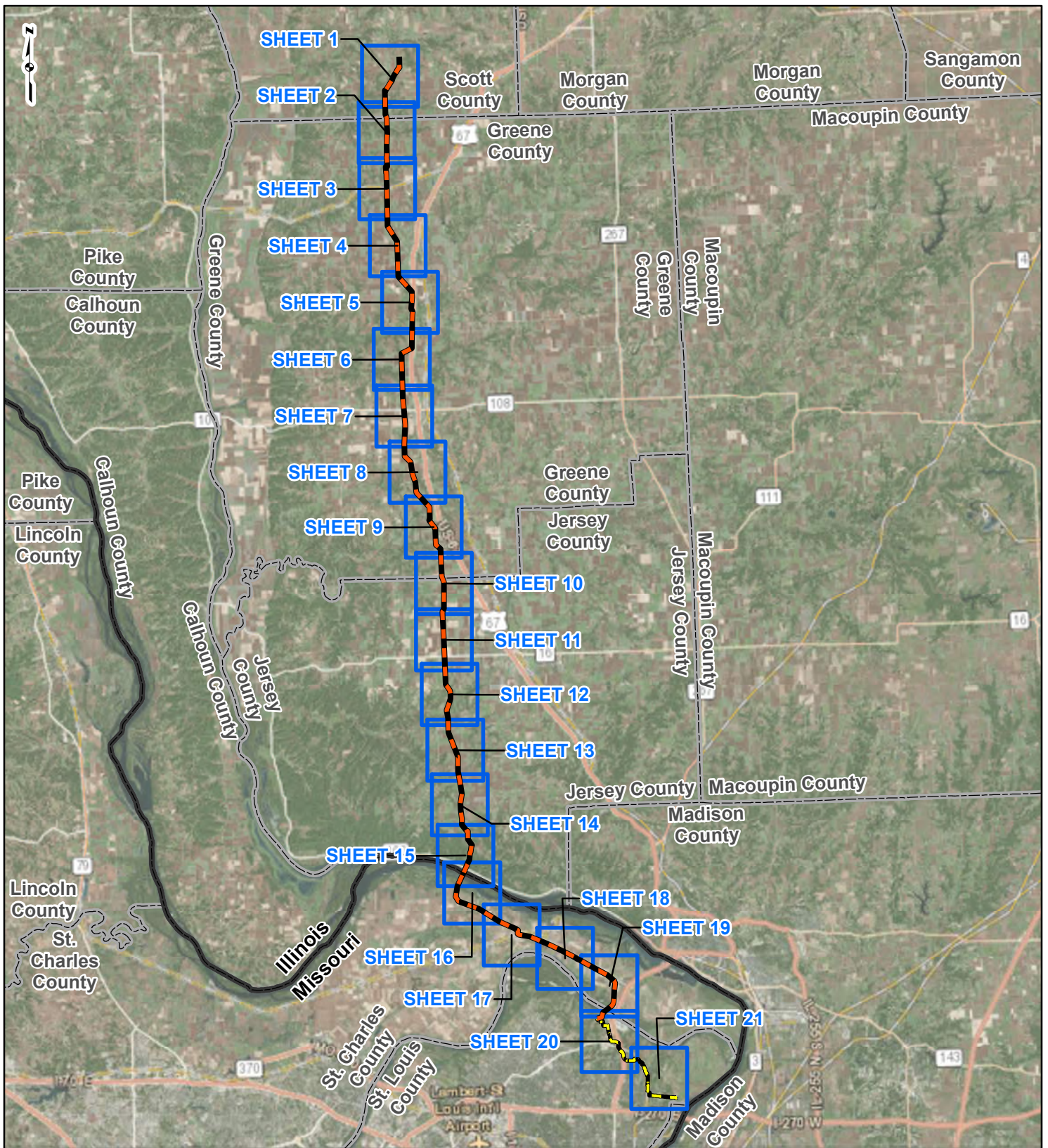
A handwritten signature in black ink that reads "Lori M. Ferry". The signature is written in a cursive, flowing style.

Lori M. Ferry
Environmental Project Manager

LMF/gmg

Attachment: United States Geological Survey (USGS) Topographic Map (Figure 1)

ATTACHMENT
USGS TOPOGRAPHIC MAP (FIGURE 1)



PROJECT LOCATION



SCOTT, GREENE
AND JERSEY
COUNTIES, ILLINOIS
AND ST. CHARLES AND
ST. LOUIS COUNTIES, MISSOURI

LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY
- SHEET INDEX



**FIGURE 1
LOCATION MAP
SHEET INDEX**



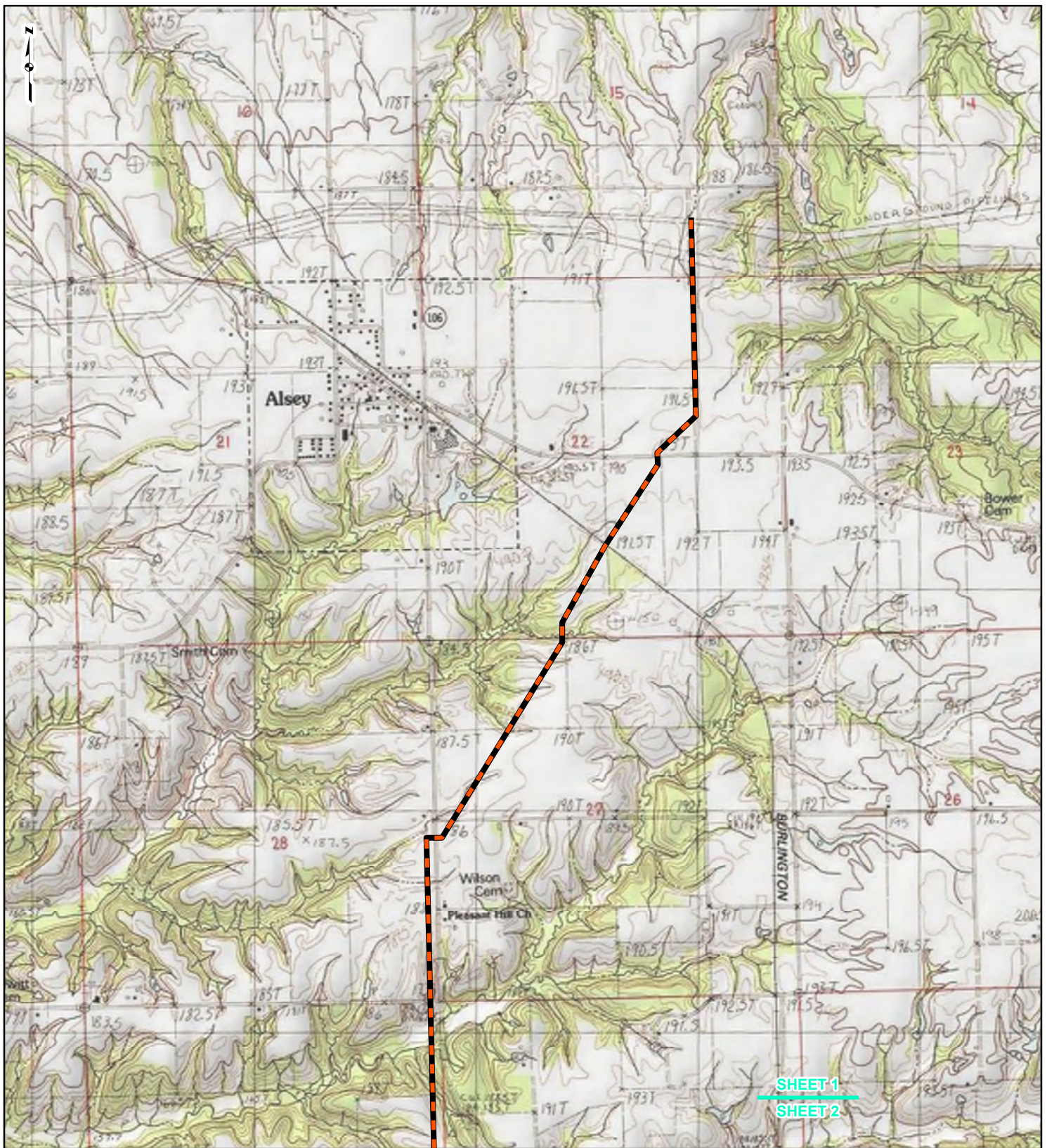
**Spire STL
Pipeline**



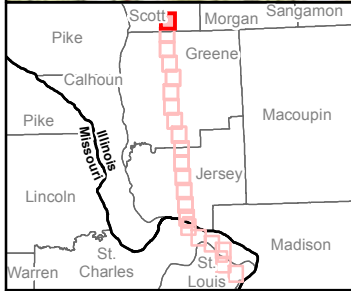
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CHECKED: SWW

DATE: 7/28/2016
APPROVED: LMF

REFERENCE: ESRI WORLD IMAGERY AND TRANSPORTATION, NAIP, USDA FSA, 2015, ACCESSED 07/2016.



SHEET 1
SHEET 2



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 1 OF 21**

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



SHEET 1
SHEET 2

SHEET 2
SHEET 3

Scott
County
Greene
County

R O O D H C

R O O D H C



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

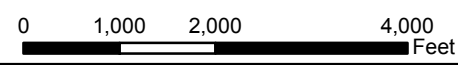
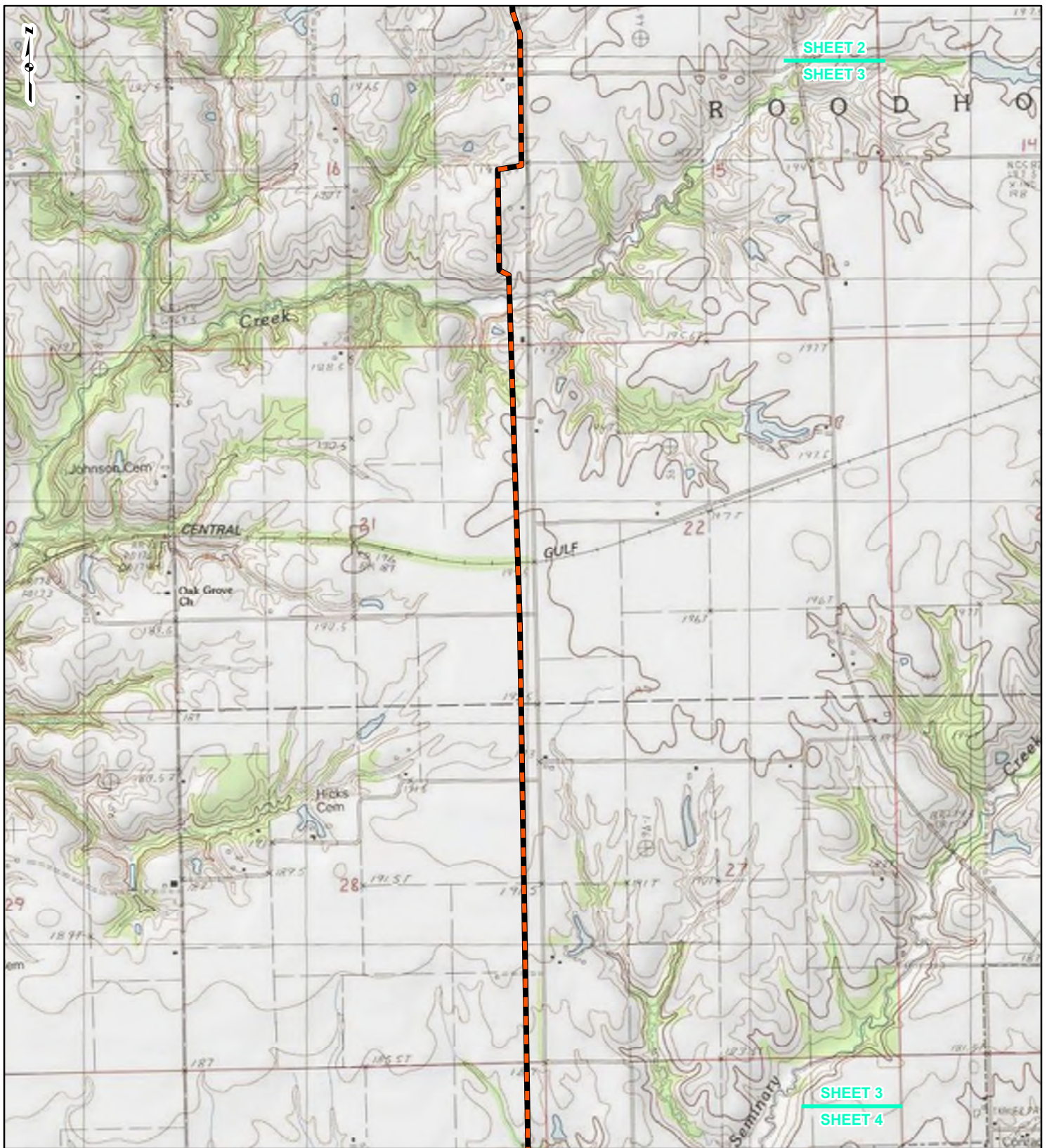


FIGURE 1
LOCATION MAP
SHEET 2 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 2





SHEET 3

SHEET 3

SHEET 4



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

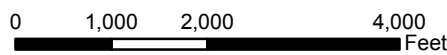
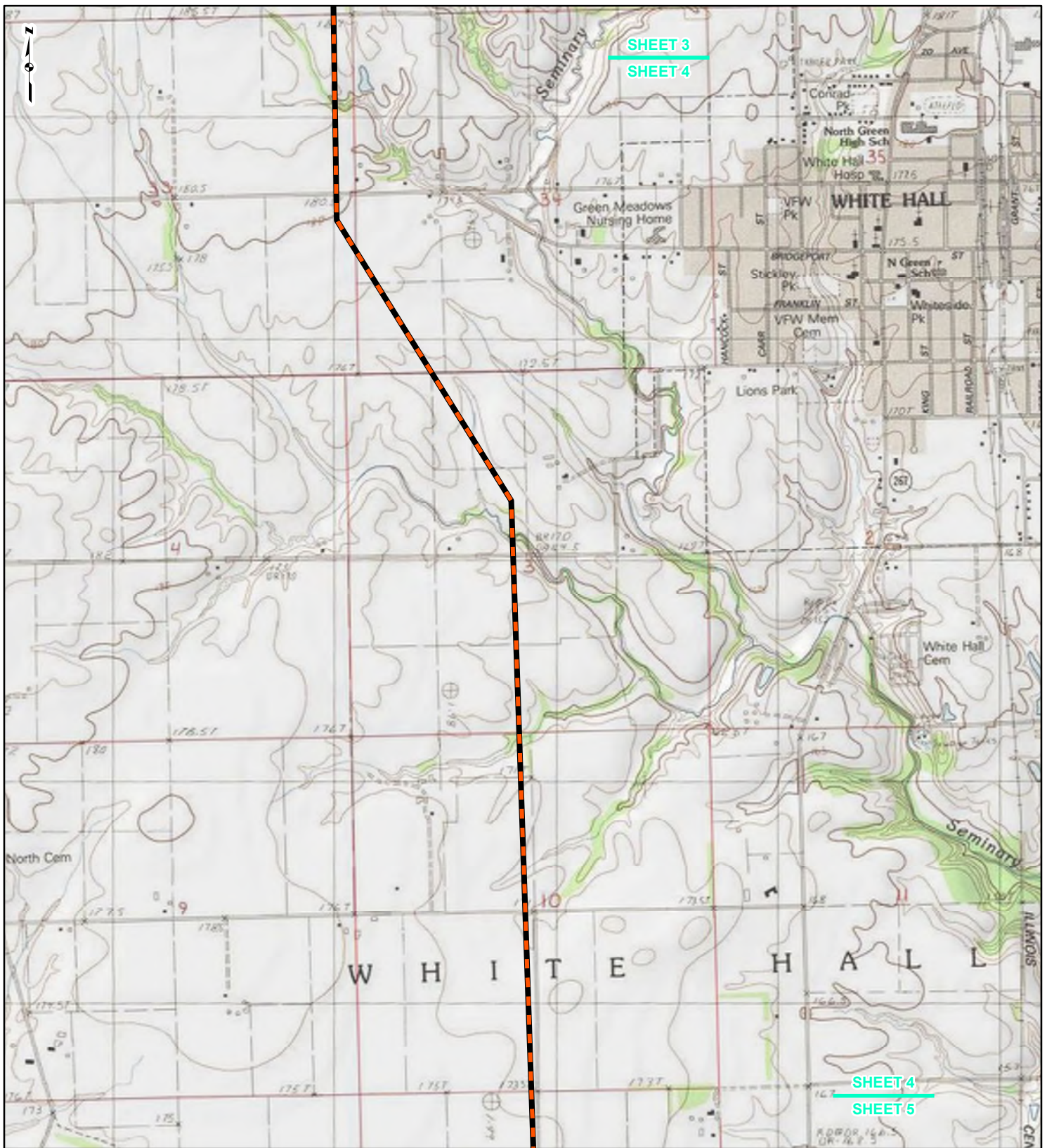


FIGURE 1
LOCATION MAP
SHEET 3 OF 21



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 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSLEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1995), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

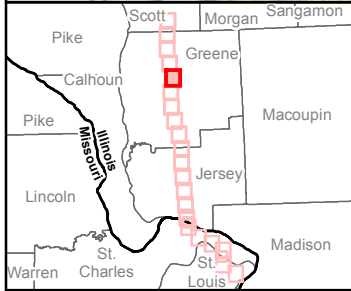
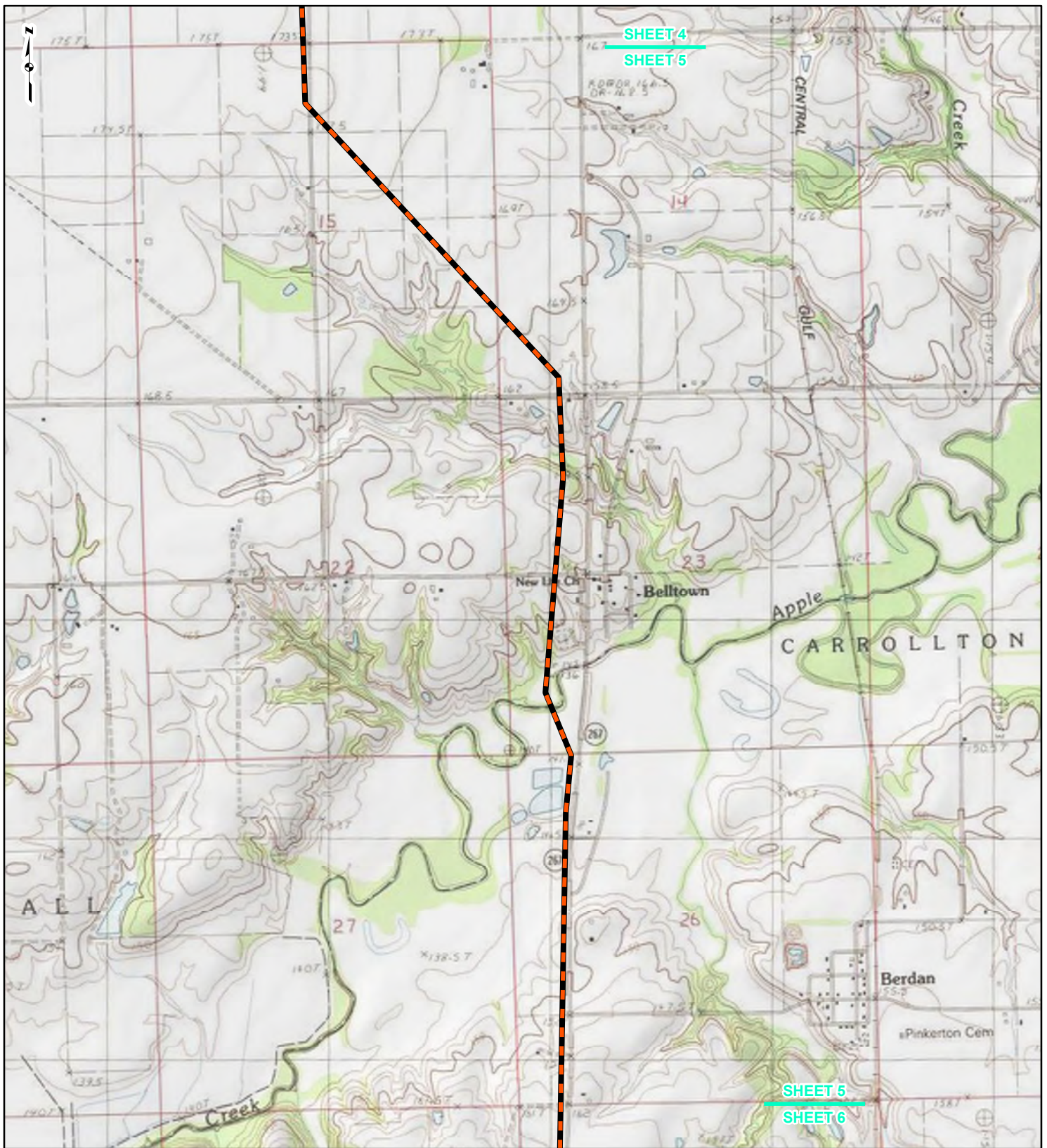
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Feet

FIGURE 1
LOCATION MAP
SHEET 4 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1995), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

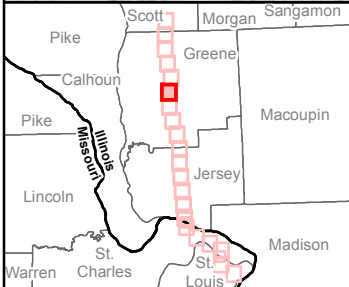
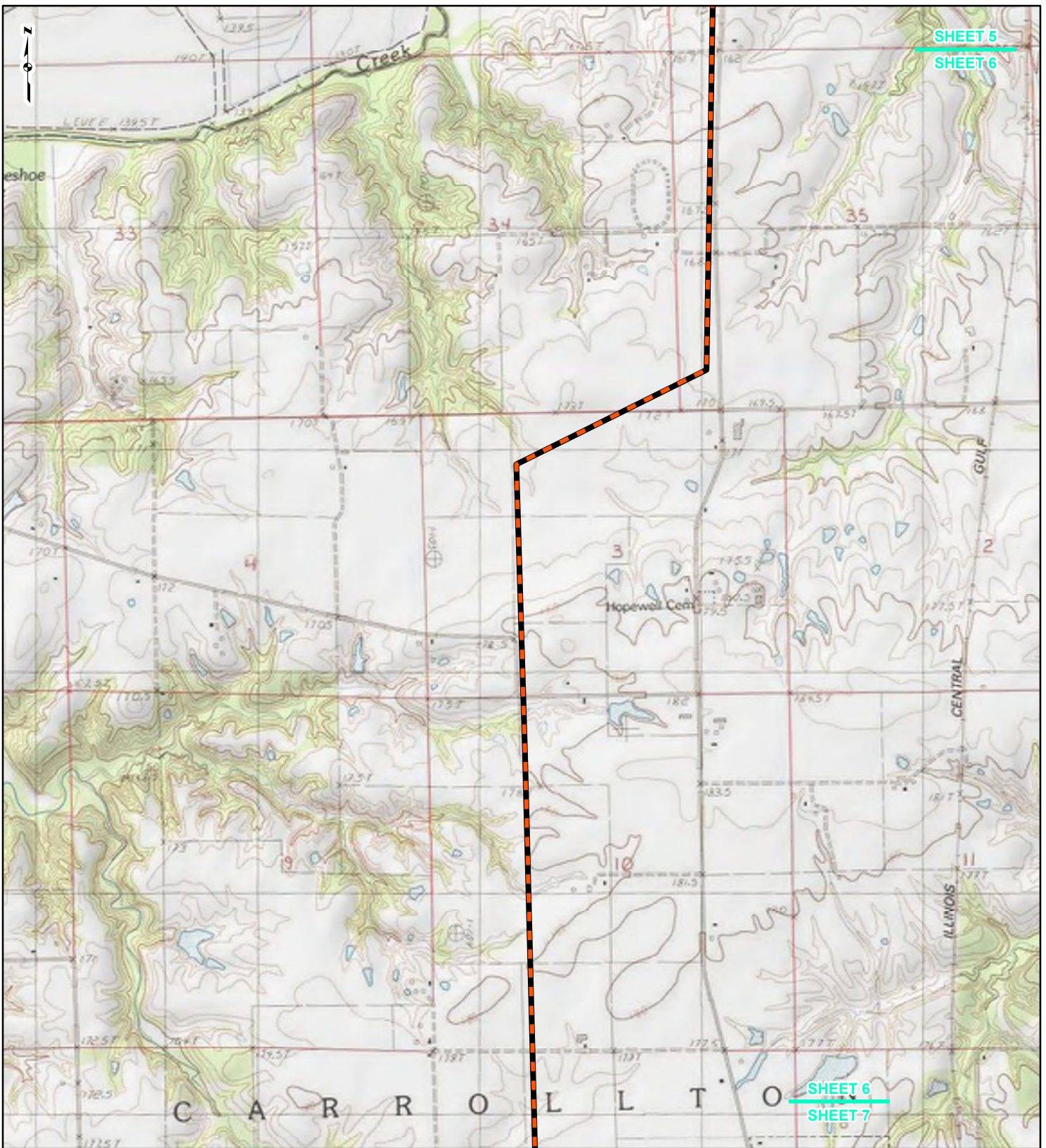
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Feet

FIGURE 1
LOCATION MAP
SHEET 5 OF 21





Spire STL Pipeline

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CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

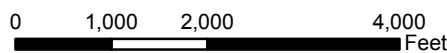


FIGURE 1
LOCATION MAP
SHEET 6 OF 21



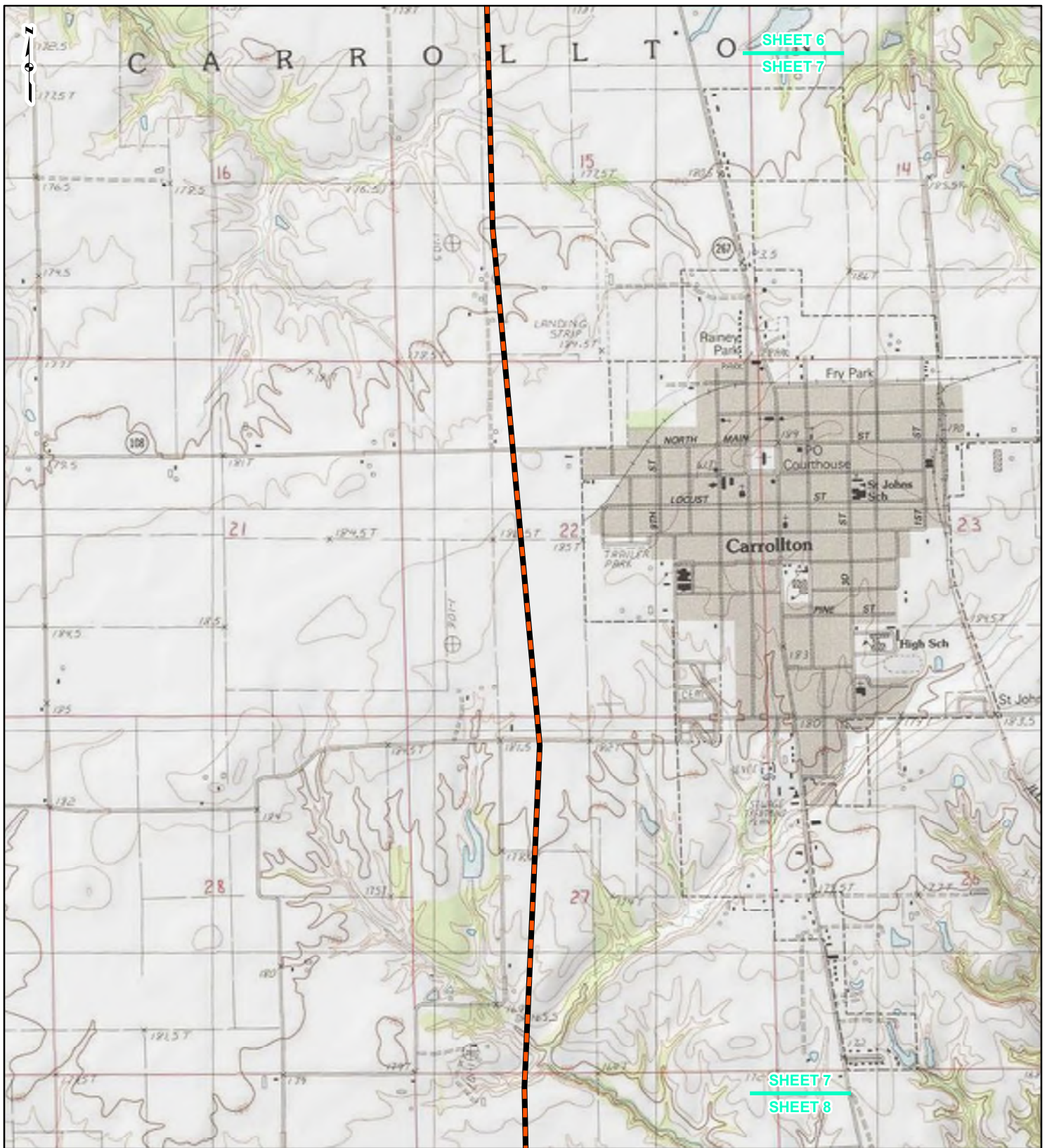
Spire STL Pipeline



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DATE: 7/28/2016
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SHEET 6
SHEET 7

SHEET 7
SHEET 8



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

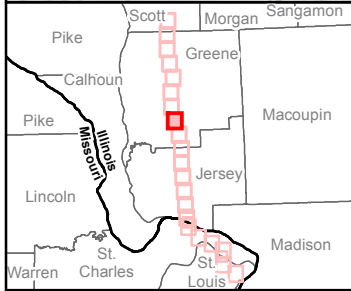
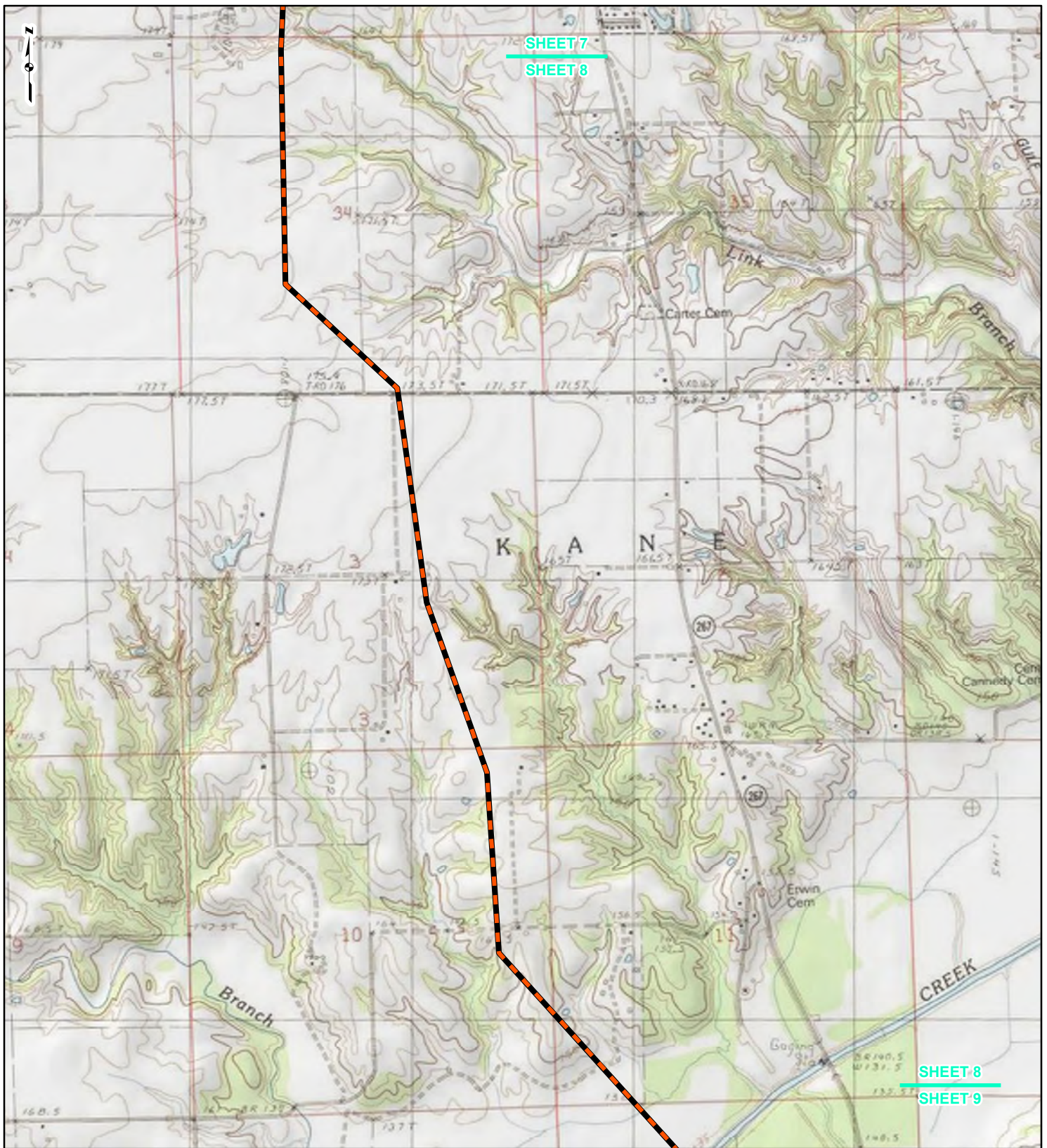
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FIGURE 1
LOCATION MAP
SHEET 7 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

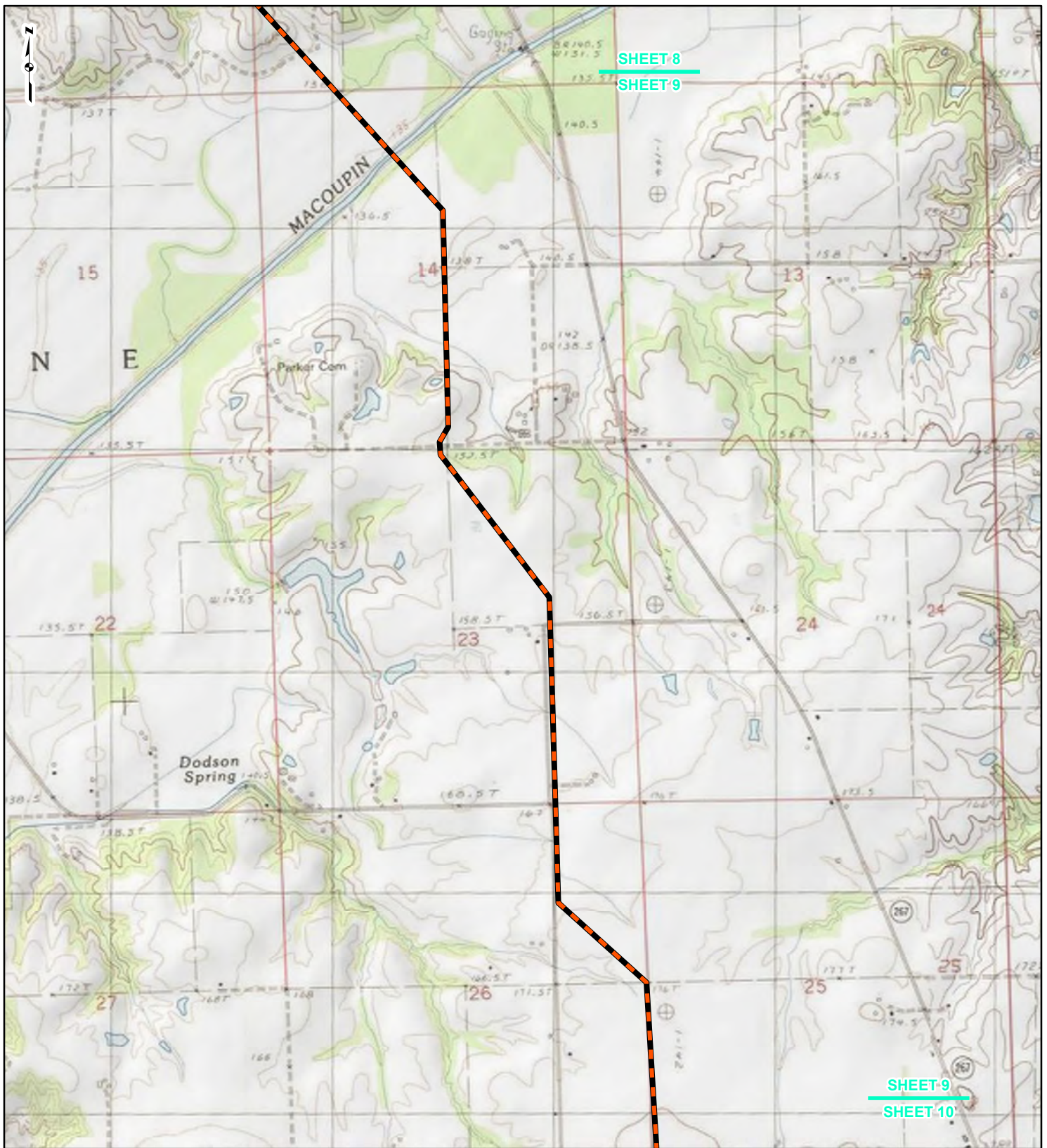
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**FIGURE 1
LOCATION MAP
SHEET 8 OF 21**

Spire STL Pipeline

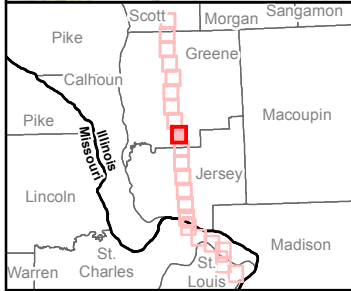
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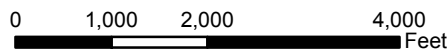
SHEET 8
SHEET 9

SHEET 9
SHEET 10



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

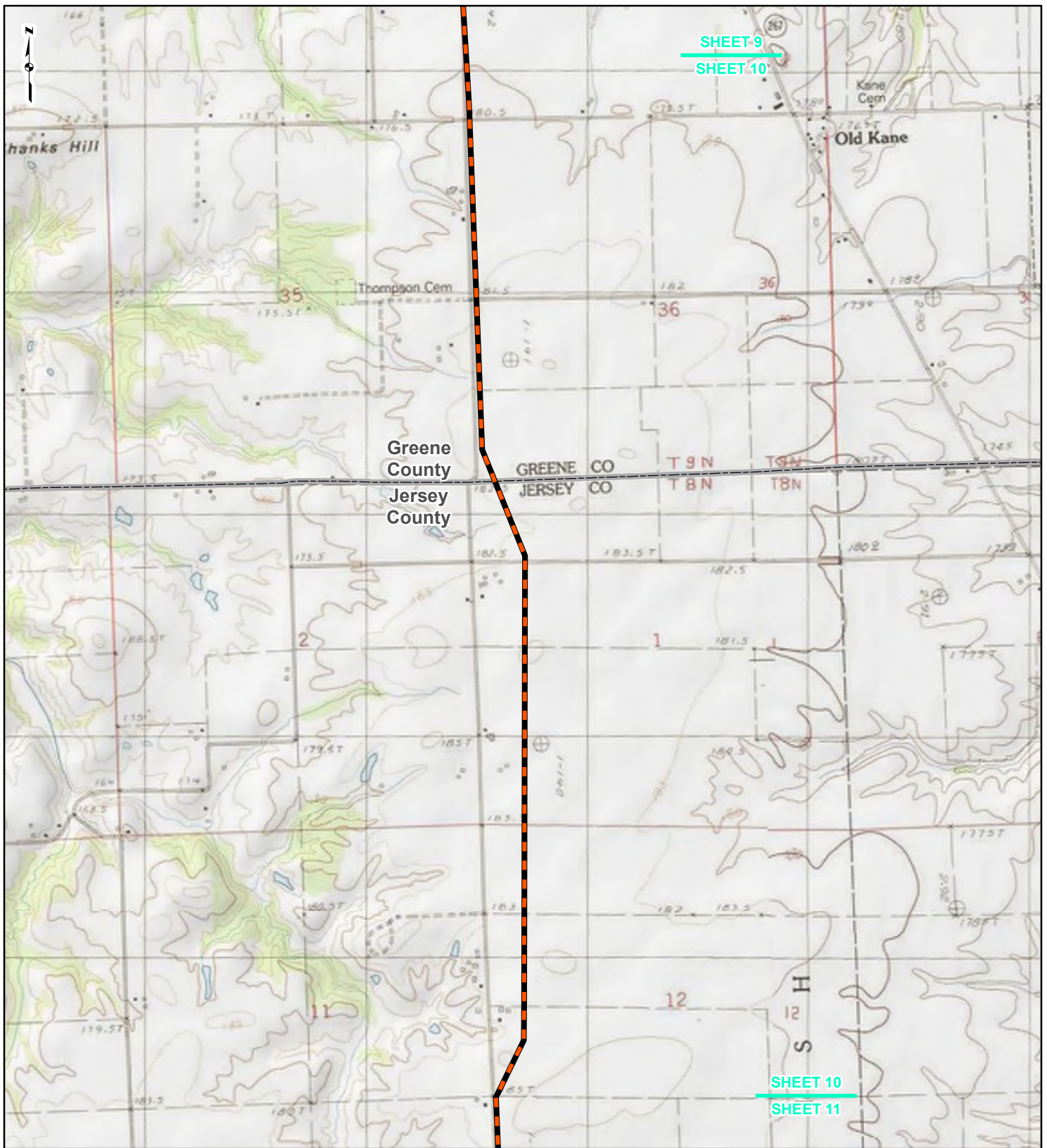


**FIGURE 1
LOCATION MAP
SHEET 9 OF 21**



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LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

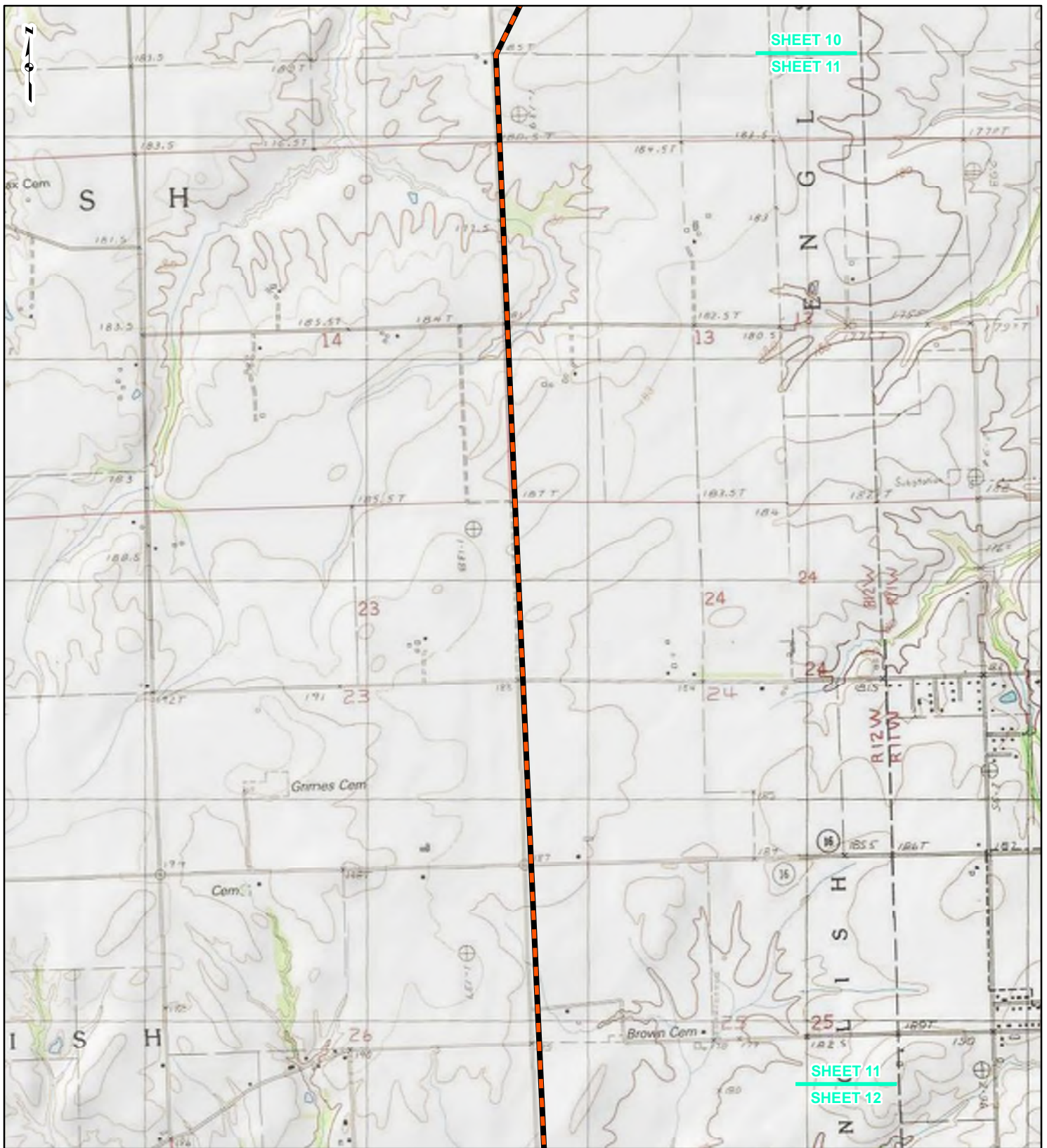
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FIGURE 1
LOCATION MAP
SHEET 10 OF 21

Spire STL Pipeline

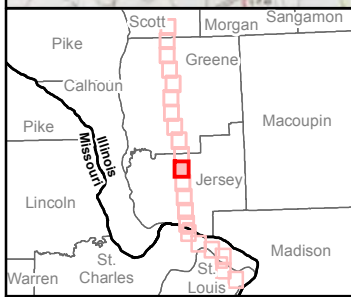
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SHEET 10
SHEET 11

SHEET 11
SHEET 12



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

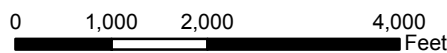


FIGURE 1
LOCATION MAP
SHEET 11 OF 21



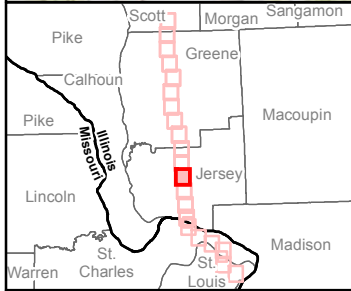
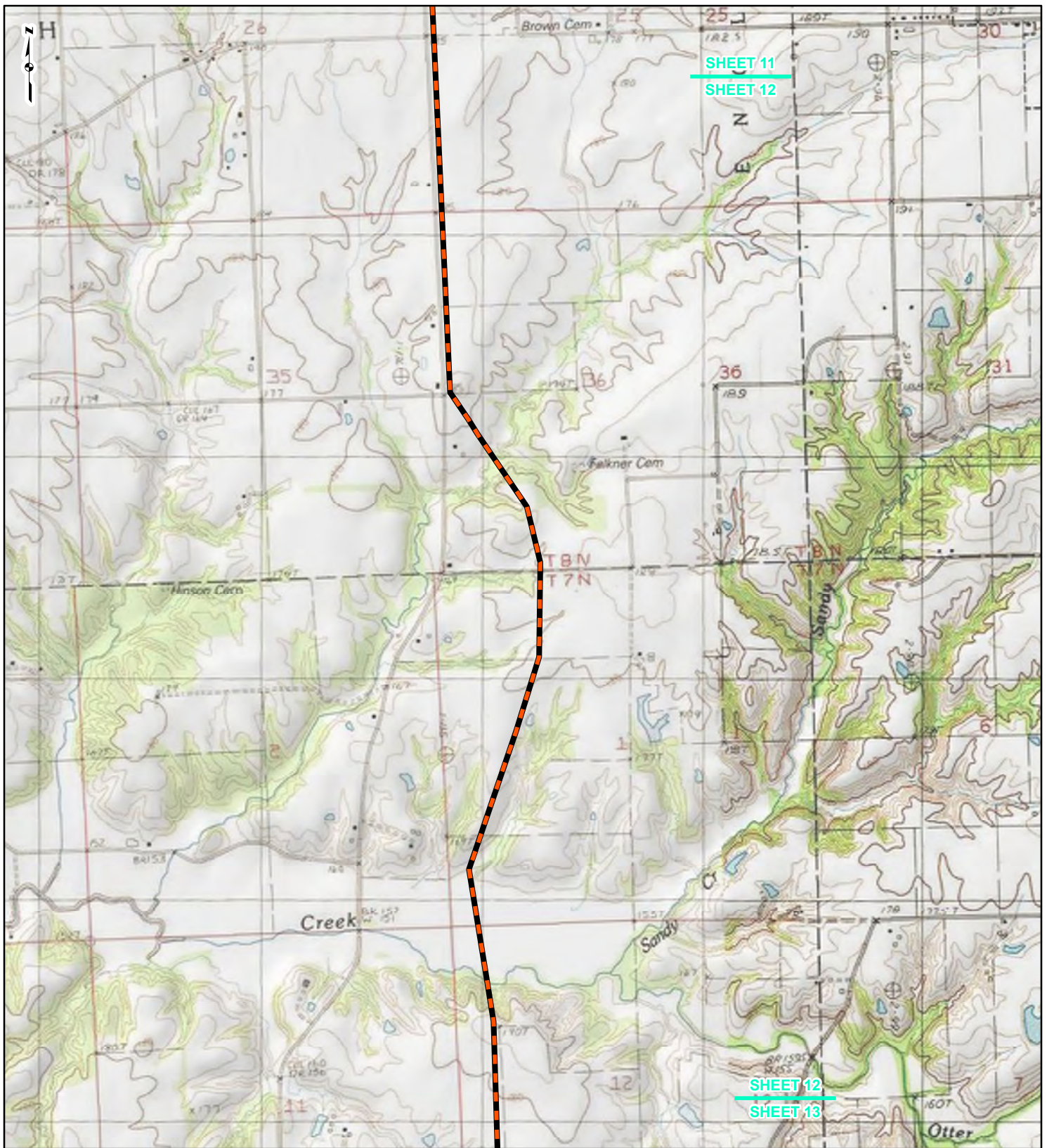
Spire STL Pipeline



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DATE: 7/28/2016
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LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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Feet

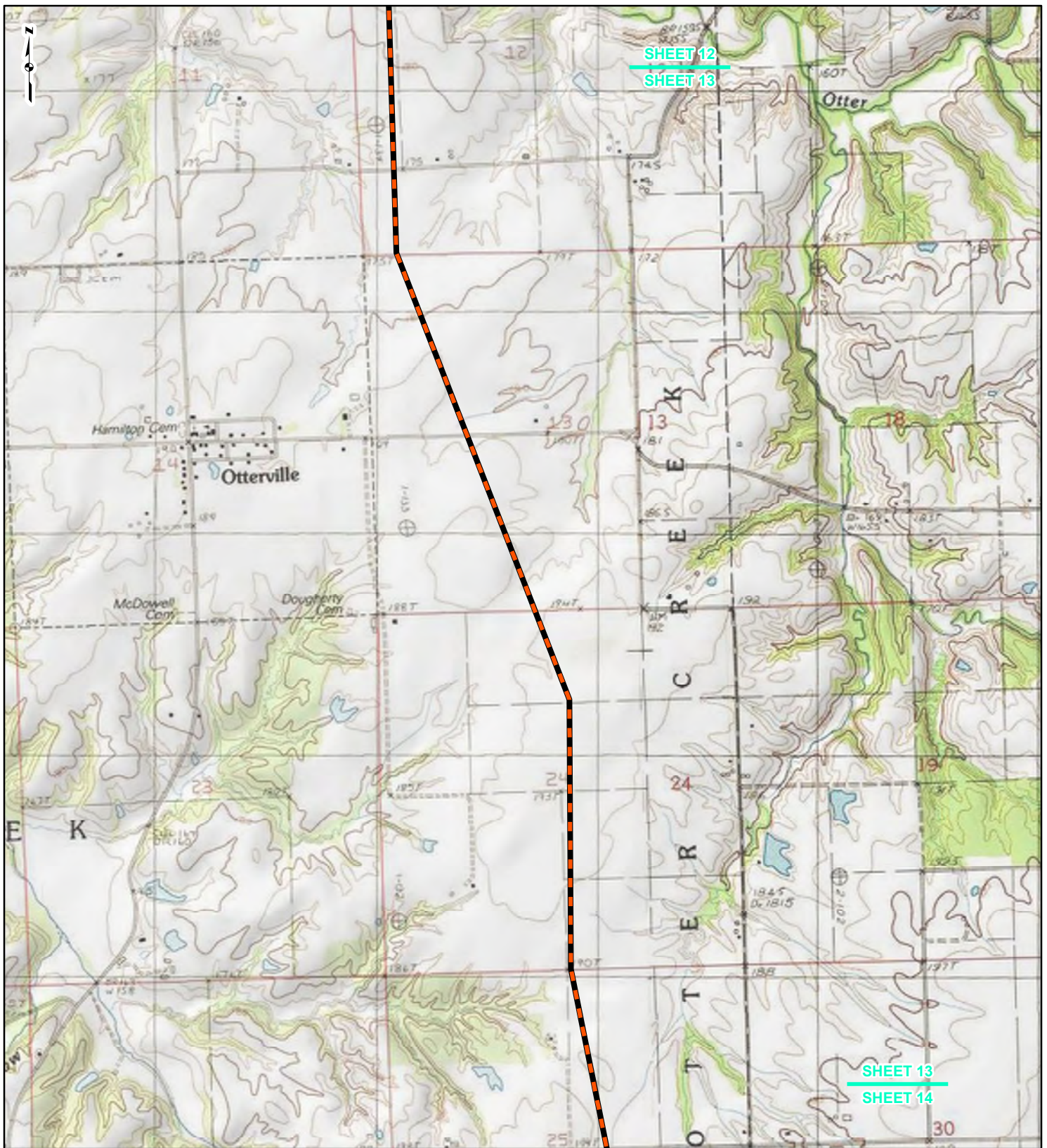
FIGURE 1
LOCATION MAP
SHEET 12 OF 21

Spire STL Pipeline

GSI CONSULTANTS

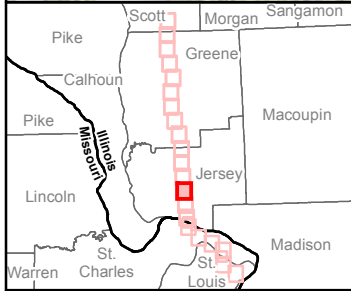
DRAWN BY: PMH DATE: 7/28/2016
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SHEET 12
SHEET 13

SHEET 13
SHEET 14



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

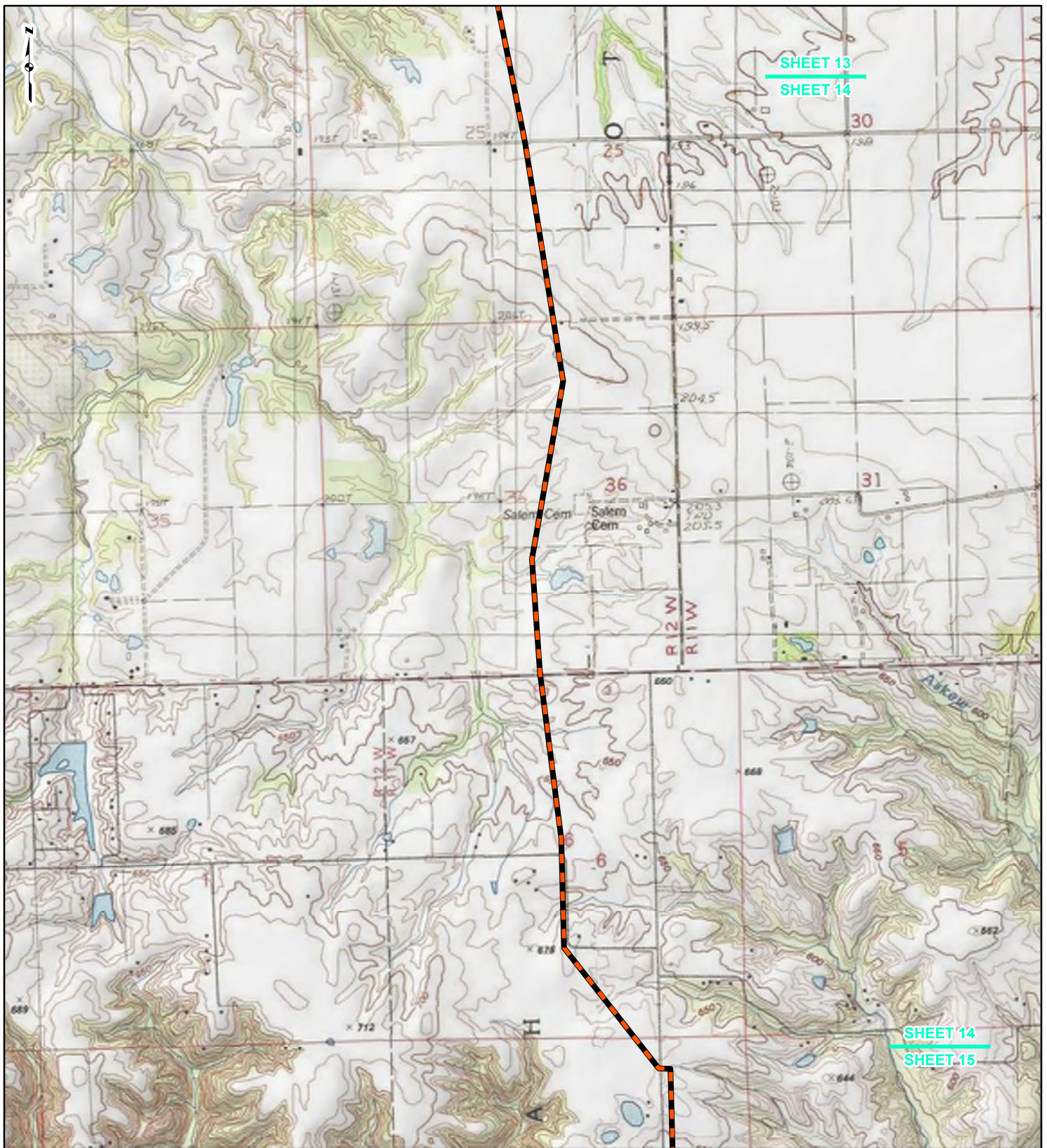
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Feet

**FIGURE 1
LOCATION MAP
SHEET 13 OF 21**

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

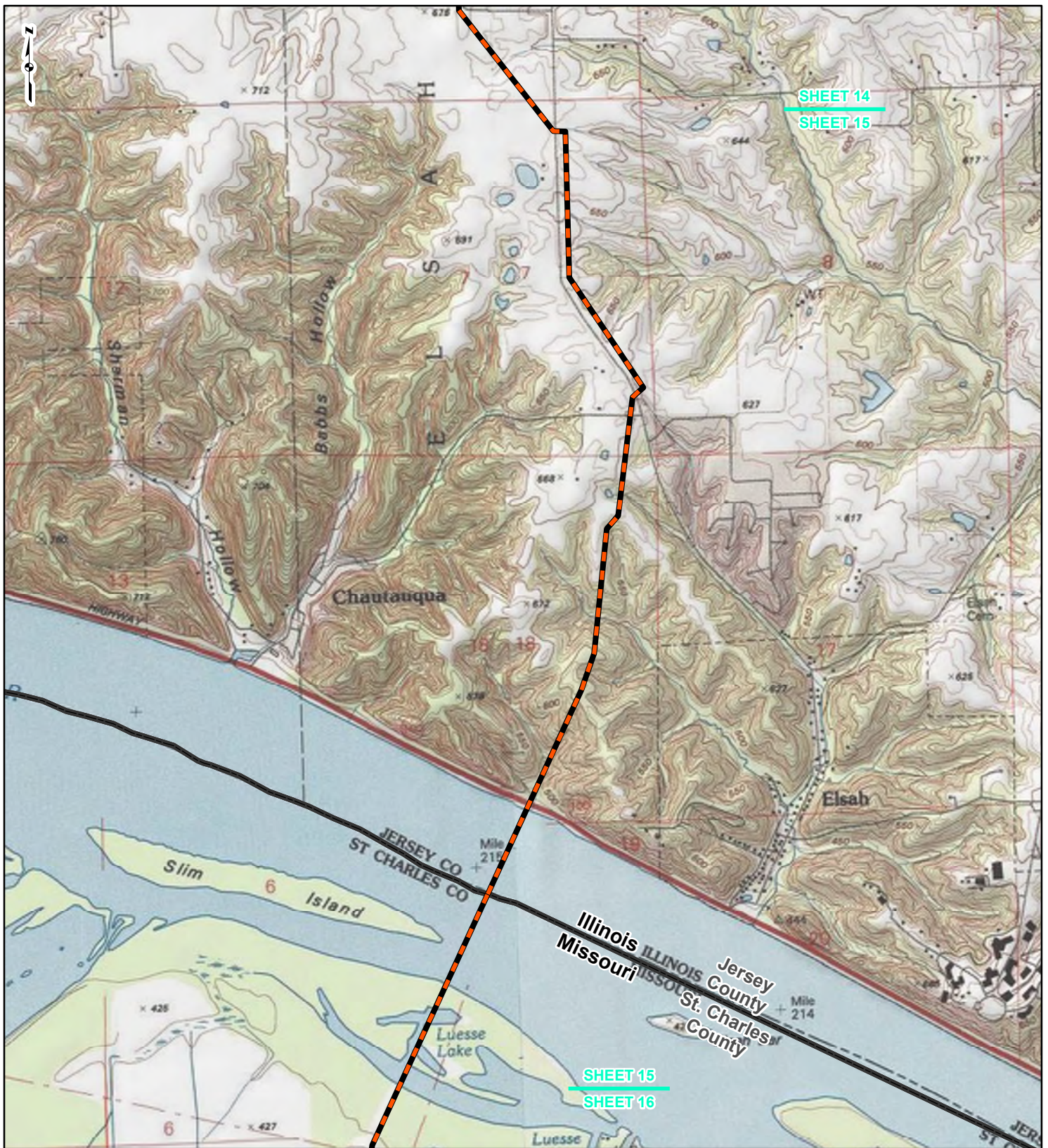
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Feet

FIGURE 1
LOCATION MAP
SHEET 14 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 14
SHEET 15

SHEET 15
SHEET 16



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

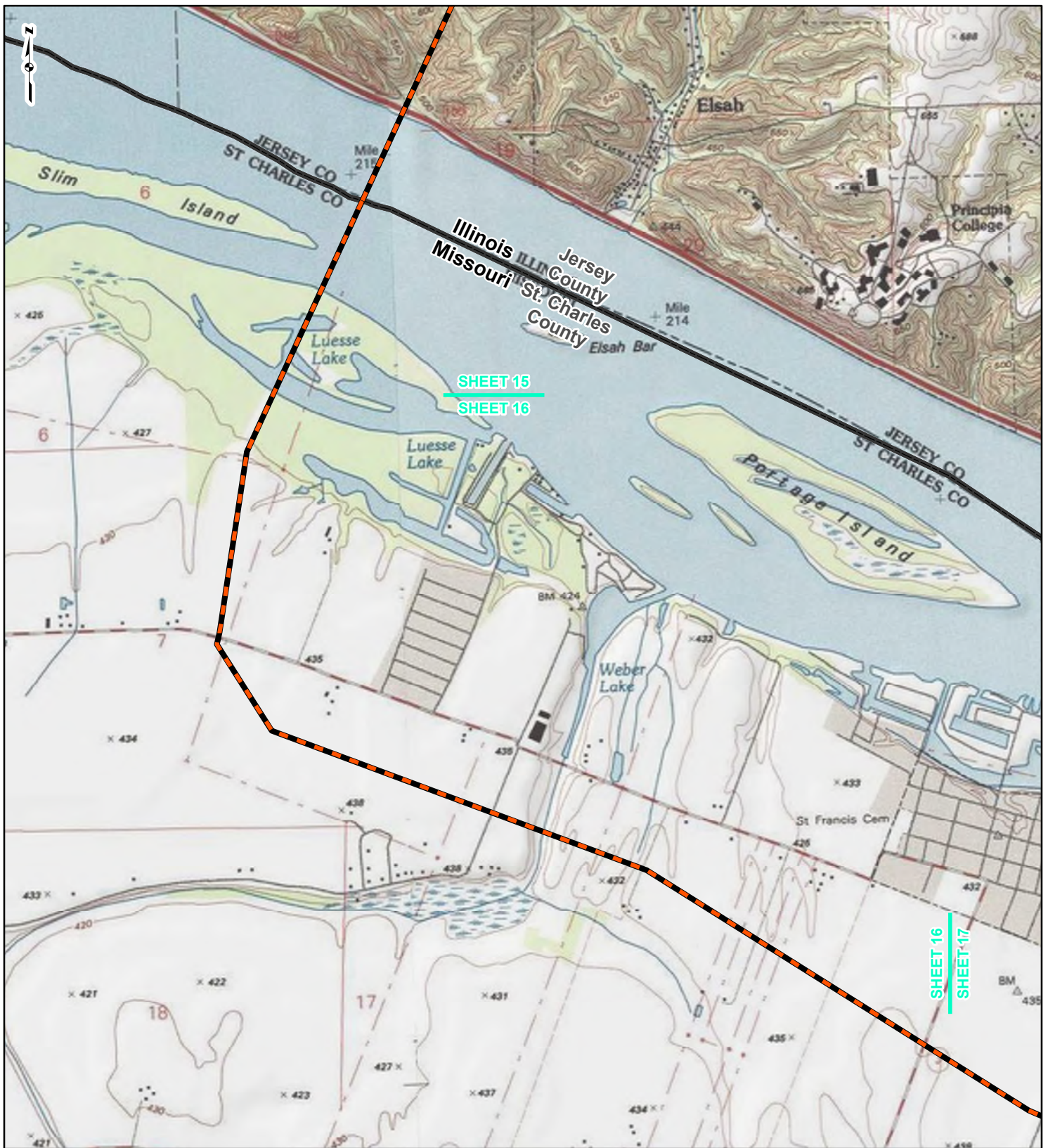
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 15 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

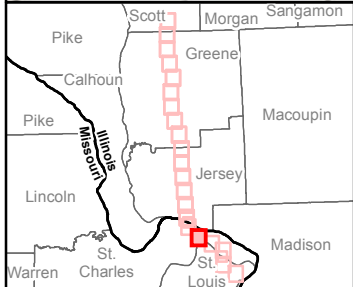
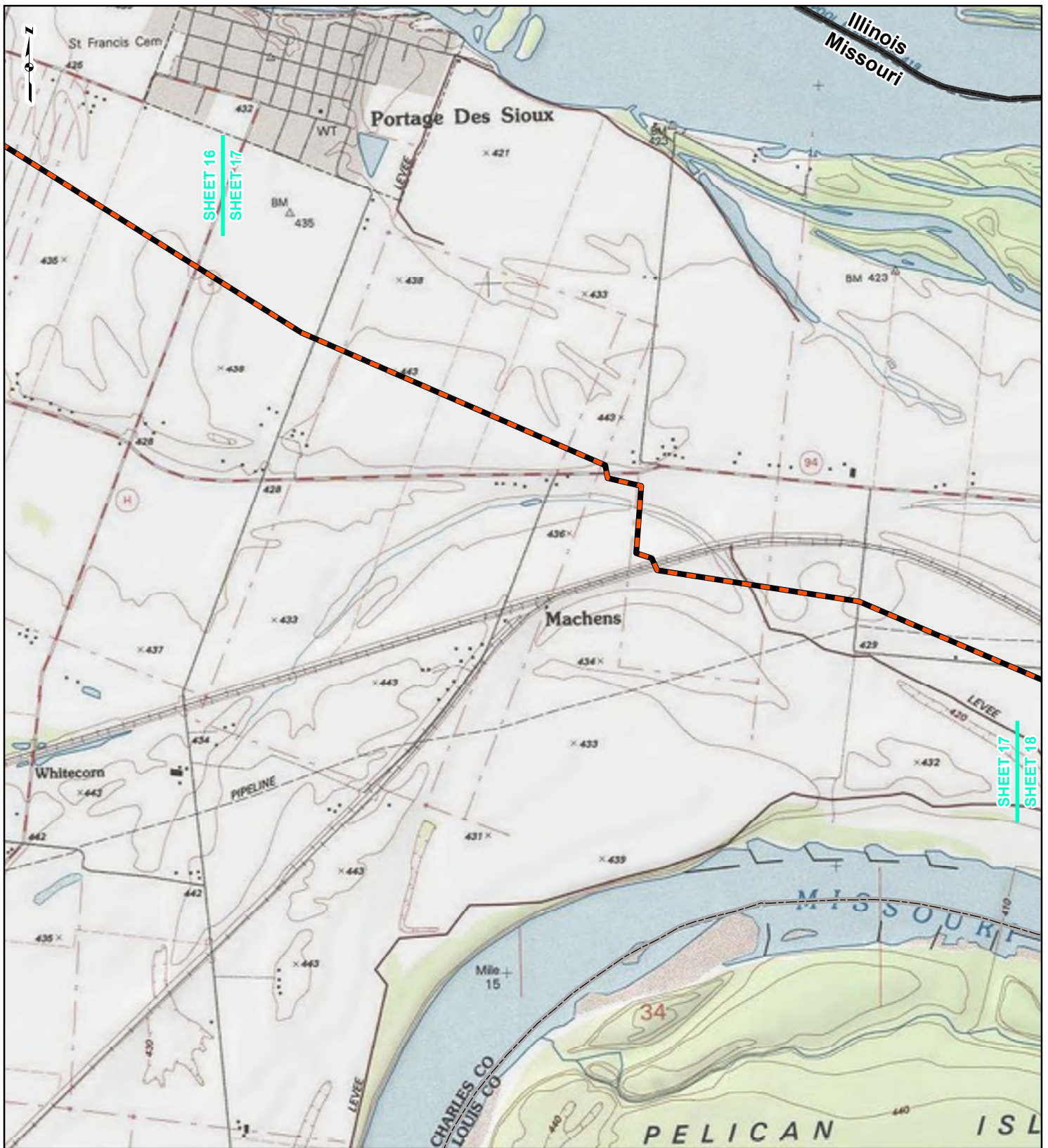
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 16 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



LEGEND

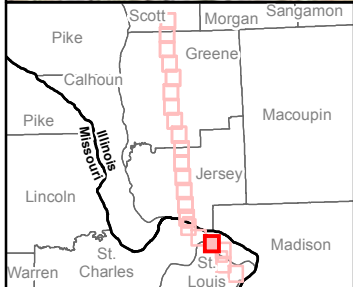
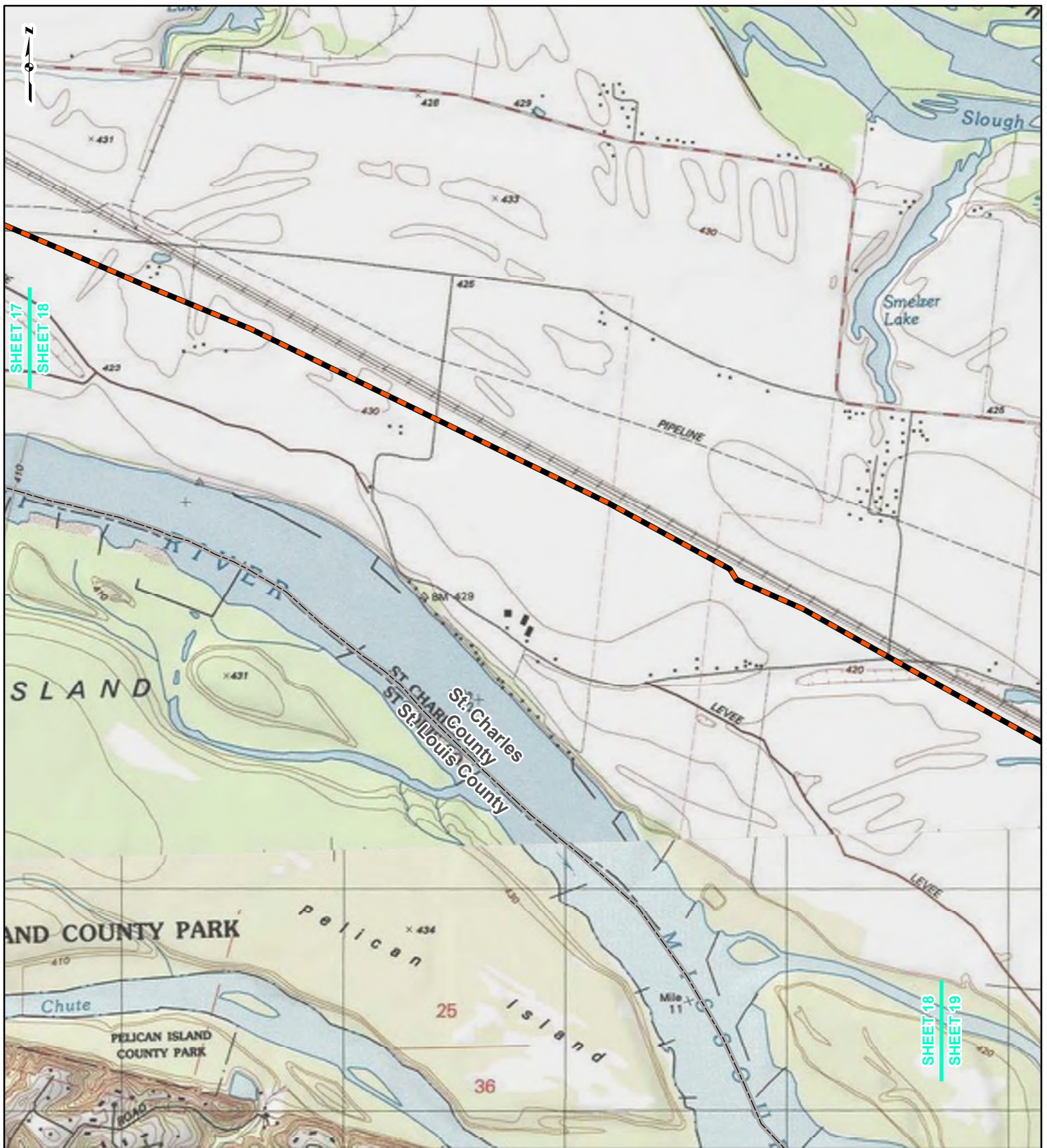
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 17 OF 21

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

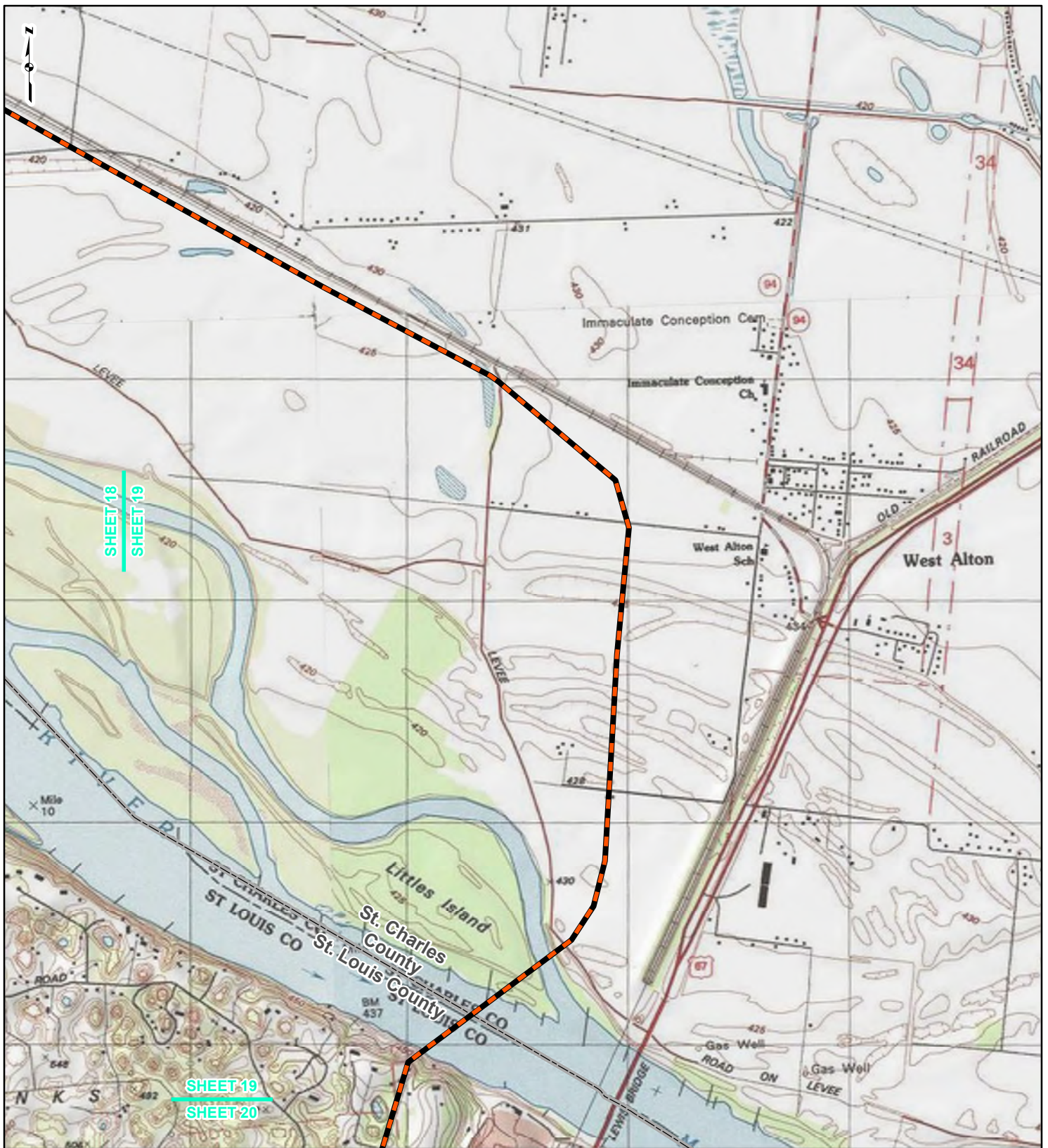
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 18 OF 21

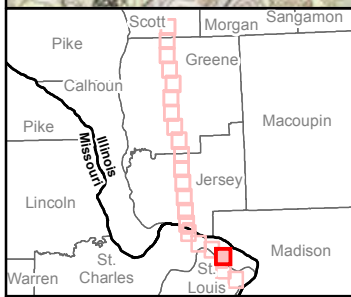
DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 18
SHEET 19

SHEET 19
SHEET 20



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

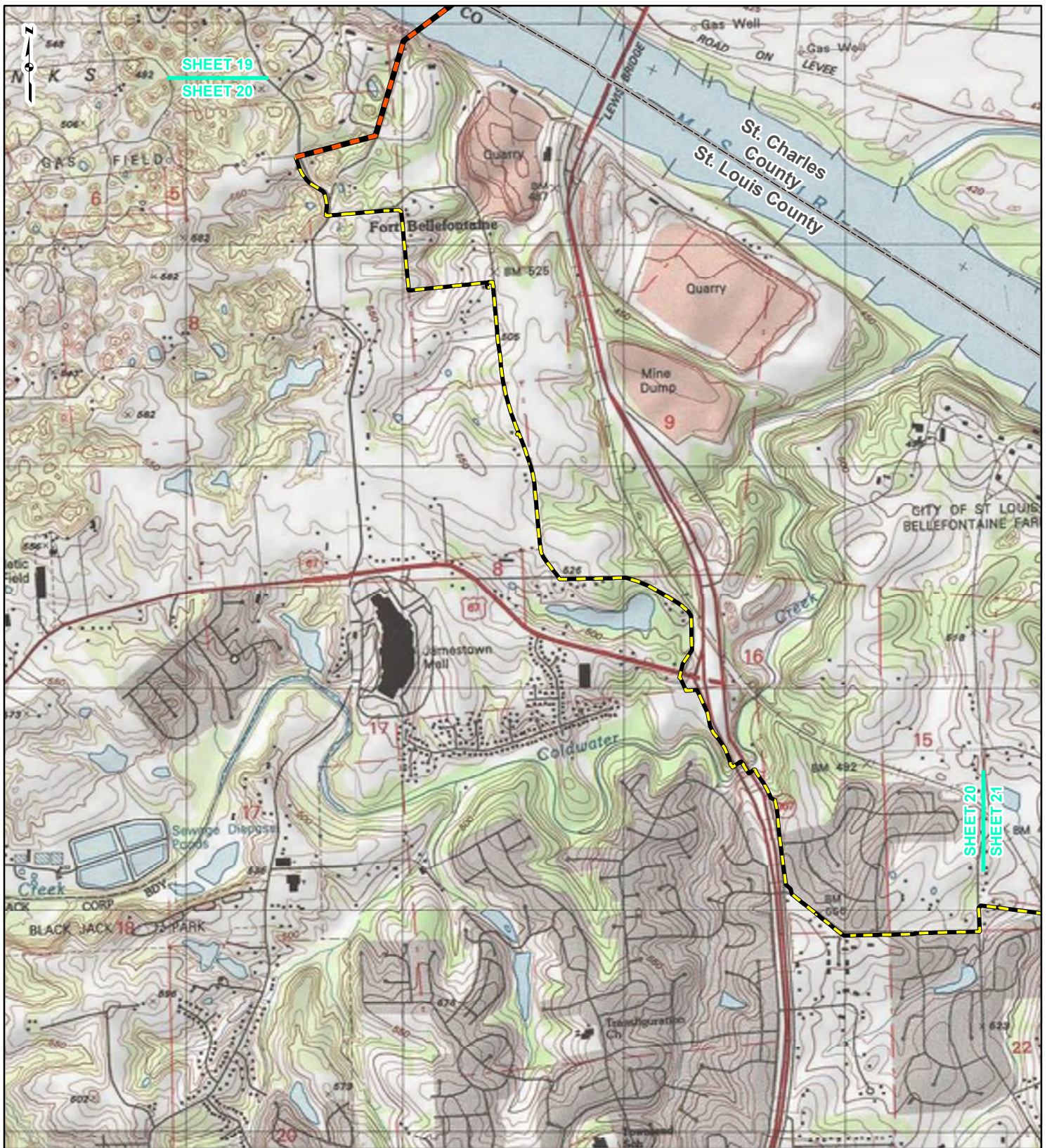
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Feet

FIGURE 1
LOCATION MAP
SHEET 19 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 19
SHEET 20

SHEET 20
SHEET 21



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

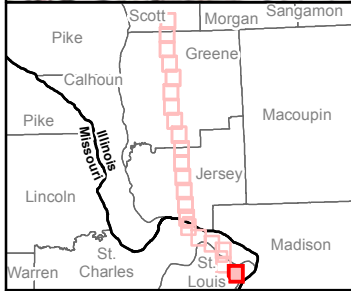
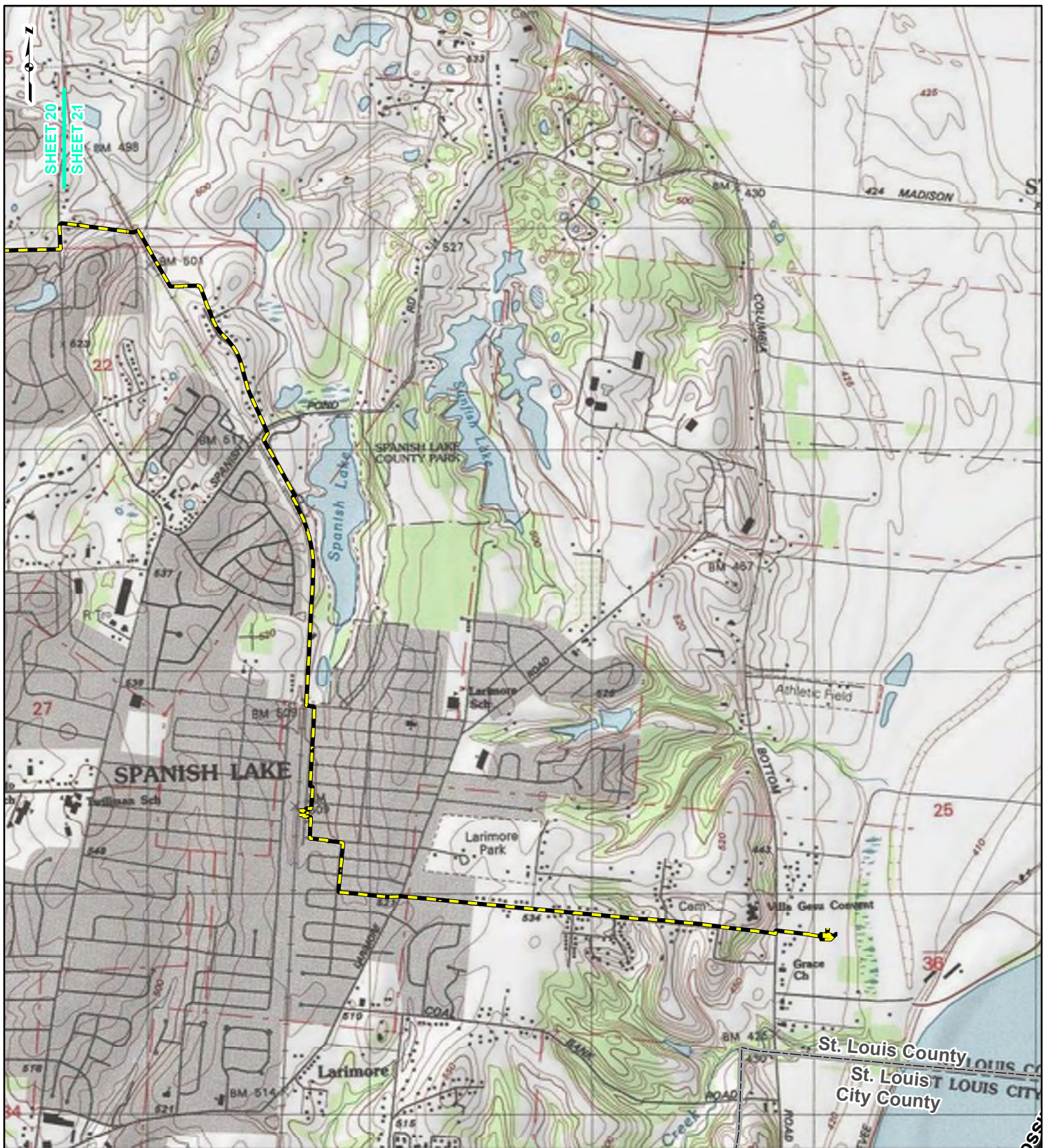
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 20 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- - - NEW BUILD 24-INCH DIAMETER PIPELINE
- - - LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 21 OF 21

Spire STL Pipeline **spire**

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.

telephone log



gai consultants

Date: 7/11/2016

Project / Admin. No.: E160438.00

Call From: Ali Trunzo

Company: GAI Consultants

Phone No.: 412-399-5096

Call To: Mr. Mark Liska

Company: IEPA Industrial Engineer on call

Phone No.: 217-782-0610

Subject: Hydrostatic Test Water Withdrawals – 303d waters

cc:

Summary of Discussion, Decisions, and Commitments:

I spoke to Mark Liska, the Industrial Engineer on call, regarding temporary water withdrawals for hydrostatic test from 303d listed waters. Water withdrawals from 303d waters are allowed, and he was not aware of any special permits/considerations for discharges to these areas, aside from the standard hydrostatic test discharge permit.

telephone log



gai consultants

Date: 6/9/2016

Project / Admin. No.: E160438.00

Call From:

Company: GAI Consultants

Phone No.:

Call To: Alan Keller

Company: IL IEPA

Phone No.: 217-782-0610

Subject: Project Introduction

cc:

Summary of Discussion, Decisions, and Commitments:

Called Mr. Keller to introduce the Project and understand the ILEPA requirements for water permitting, Mr. Keller indicated that Darren LeCrone could assist with hydrostatic test discharge permitting requirements. Additionally, if the Project was to require an Individual 401 Water Quality Certification, Dan Heacock would be out contact. ILEPA did not feel a meeting would be beneficial at this time.



Missouri Department of Natural Resources

Ali Trunzo

Subject: FW: Drinking Water Concerns - Natural Gas Pipeline Project
Attachments: 20170117_Proposed Crossings.pdf

From: Tiffany Anders
Sent: Tuesday, January 17, 2017 12:38 PM
To: Everett.Baker@dnr.mo.gov
Cc: maher.jaafari@dnr.mo.gov
Subject: RE: Drinking Water Concerns - Natural Gas Pipeline Project

Mr. Baker,

I am following up on my colleague's email and your response back in October regarding the proposed natural gas pipeline in St. Charles and St. Louis Counties. I also recently spoke with the Wellhead Protection Program's Kyle Rollins who said Ken Tomlin may be the local MDNR contact; I have reached out to Mr. Tomlin by phone and have been unable to reach him. In the meantime, I also wanted to circle back to you now that we have more information from the pipeline company, Spire.

The attached figure displays Spire's currently proposed pipeline location at the Mississippi River and Missouri River; these river crossings are planned to be constructed by horizontal directional drill (HDD) method. No water supply intakes were located within 3 miles downstream of the river HDD crossings. However, the Mississippi River HDD location is currently proposed 2.5 miles upstream of the Portage Des Sioux Water Plant. MDNR public data suggests this Water Plant includes an active water well. Additionally, as the proposed pipeline route heads east-southeast from the Mississippi River HDD crossing, pipeline construction methods will be a typical depth to cover of five feet in ag fields where the construction workspace passes about 1,450 feet south of the Water Plant. This is within the MDNR's standard 0.5-mile buffer zone of a public water source.

At this time, GAI on behalf of Spire, would like to know if there are any public water concerns with the locations of either HDD drill or the within the 0.5 mile buffer of the Water Plant. Based on our research at this time, MDNR information suggests alluvial recharge at the Mississippi River typically occurs with high flows stages of the river where groundwater moves from bedrock to the alluvium. Given the distance and depth (well below river bottom) of the HDDs and shallow construction at the 0.5 mile buffer of the Water Plant, are there any MDNR crossing restrictions for these areas as currently proposed?

Thank you for your time. I look forward to hearing back from and will be available by phone or email.


Best,
Tiffany

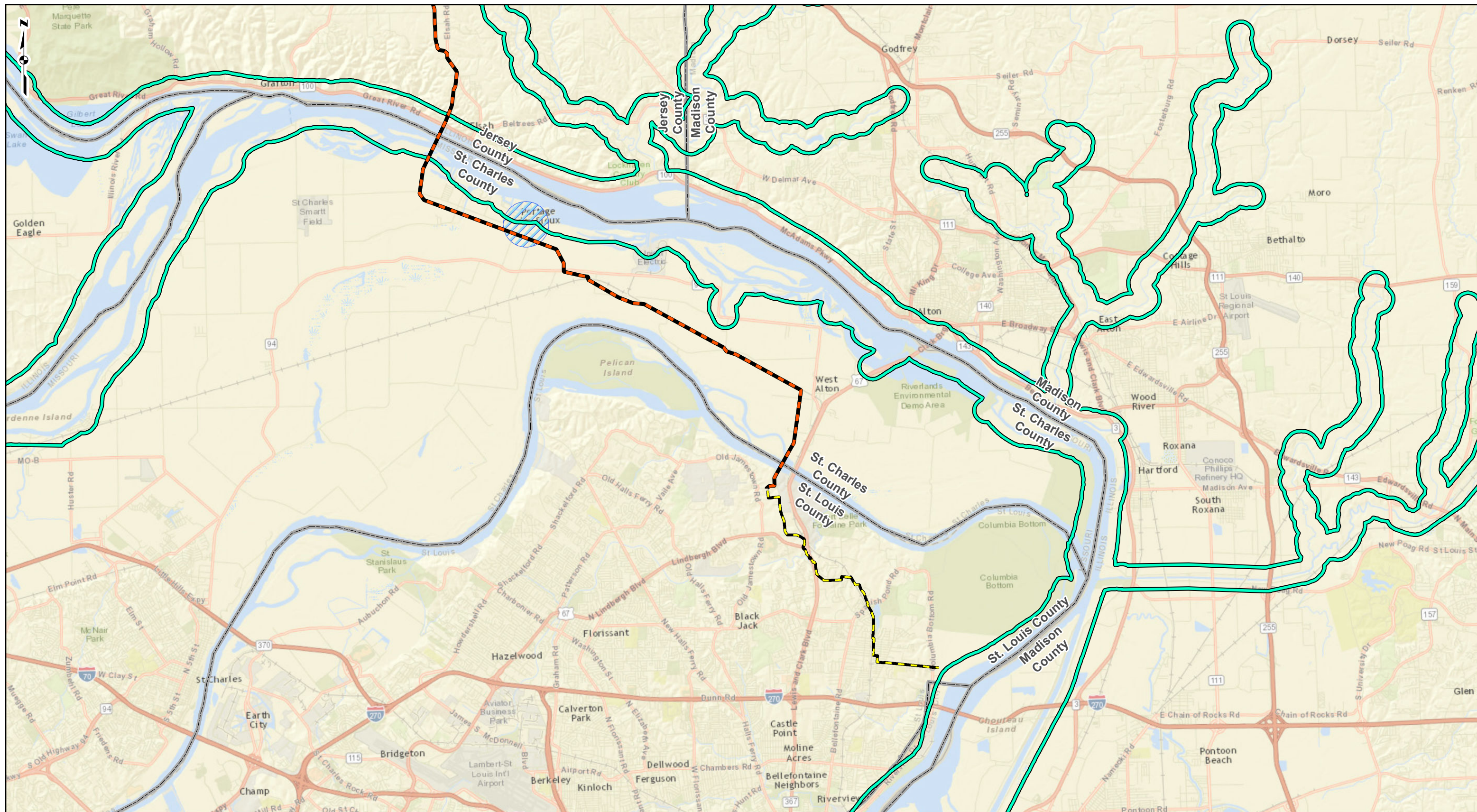
Tiffany Anders
Project Environmental Specialist

GAI Consultants

2800 Post Oak Boulevard, Suite 4100, Houston, TX 77056

D 346.231.7172 | M 281.382.0427 | gaiconsultants.com |     

 **transforming ideas into reality, since 1958**



PROJECT LOCATION

JERSEY COUNTY,
ILLINOIS AND
ST. CHARLES AND
ST. LOUIS
COUNTIES, MISSOURI

REFERENCE: WORLD STREET MAP, 2016, ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI (THAILAND), MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, ACCESSED 01/2017.

DRAFT

LEGEND

24-INCH PIPELINE	MISSISSIPPI RIVER WATER INTAKE PROTECTION AREA
LINE 880 MODIFICATIONS	PORTAGE DES SIOUX PUBLIC WATER PLANT 0.5 MILE BUFFER
COUNTY BOUNDARY	

0 1 2 4 Miles

**FIGURE 2.2-1
SOURCE WATER
PROTECTION AREAS MAP**

SPIRE STL
PIPELINE
PROJECT

gai consultants

spire

DRAWN BY: PMH DATE: 1/5/2017
 CHECKED: EFJ APPROVED: LMF



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

NOV 29 2016

Mr. Russ English
Spire
700 Market St.
St. Louis, MO 63101

RE: 2016-00582/CES002892, Nationwide Permit 12 in St. Louis County

Dear Mr. English:

The Missouri Department of Natural Resources' Water Protection Program has reviewed your request for Clean Water Act Section 401 Water Quality Certification (WQC) to accompany the U.S. Army Corps of Engineers' (USACE) Nationwide Permit (NWP) 12 for "Utility Line Activities." This WQC is specific to the singular crossing at Coldwater Creek as described. It does not include a review for impacts to other waters associated with the project as a whole.

The proposed work concerns temporary impacts associated with an open cut crossing of Coldwater Creek between the north and south bound lanes of US Highway 67 for the relocation of a 24-inch natural gas pipeline for the SPIRE STL Pipeline project. The pipeline is being relocated to minimize crossing of other utilities. The new crossing location has more favorable topography and will allow for an open cut stream crossing to be completed safely with little to no disruption to traffic. The original crossing will be removed and capped on either side of the creek.

The proposed project does not meet the State of Missouri's General Condition No. 7 for precertification; therefore, an individual WQC is being issued. This condition applies to projects occurring in a designated metropolitan no-discharge stream. Coldwater Creek is listed as a metropolitan no-discharge stream for its entire length.

Discharge to metropolitan no-discharge streams is prohibited, except as specifically permitted under the Water Quality Standards, 10 CSR 20-7.031, and non-contaminated stormwater flows. No water contaminant except uncontaminated cooling water, permitted stormwater discharges in compliance with permit conditions, and excess wet-weather bypass discharges not interfering with beneficial uses should be discharged to the watersheds of streams listed in Table F.

The proposed project is located between the northbound and southbound lanes of Lewis and Clark Boulevard in Section 16, Township 47 North, Range 7 East in St. Louis County, Missouri. Approximate geographic coordinates for the project are 38.81457°N and 90.22979°W.



Recycled paper

This WQC is being issued under Section 401 of Public Law 95-217, The Clean Water Act of 1977 and subsequent revisions. This office certifies the ongoing activities will not cause the general or numeric criteria to be exceeded nor impair beneficial uses established in Water Quality Standards, 10 CSR 20-7.031, provided the following conditions are met:

1. Antidegradation requirements dictate all appropriate and reasonable Best Management Practices related to erosion and sediment control, project stabilization and prevention of water quality degradation are applied and maintained; for example, preserving vegetation, streambank stability and basic drainage. Applicants will be responsible for ensuring permit requirements and relevant WQC conditions are met.
2. Best Management Practices shall be used during all phases of the project to limit the amount of discharge of water contaminants to waters of the state. The project shall not involve more than normal stormwater or incidental loading of sediment caused by construction disturbances. Strict adherence to Best Management Practices is required in metropolitan no-discharge streams.
3. For utility crossings that must disturb the streambed, work shall be conducted in such a manner as to seal off the work area from flow and minimize sediment transport.
4. Utility line crossings shall be placed as close to perpendicular as possible, and be limited to a maximum crossing length of no more than one and one-half times the width of the stream.
5. With the exception of invasive species, clearing of vegetation/trees shall be the minimum necessary to accomplish the activity.
6. Streambed gradient shall not be adversely altered during project construction.
7. No project shall accelerate bed or bank erosion.
8. Care shall be taken to keep machinery out of the water way as much as possible. Fuel, oil and other petroleum products, equipment, construction materials and any solid waste shall not be stored below the ordinary high water mark at any time or in adjacent flood prone areas beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation.
9. Petroleum products spilled into any water or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly. Any such spills of petroleum shall be reported as soon as possible, but no later than 24 hours after discovery to the Department of Natural Resources' Environmental Emergency Response number at 573-634-2436.
10. Only clean, nonpolluting fill shall be used. The following materials are not suitable for bank stabilization and shall not be used due to their potential to cause violations of the general criteria of the Water Quality Standards (10 CSR 20-7.031 (4)(A)-(H)):
 - a. Earthen fill, gravel, fragmented asphalt, broken concrete where the material does not meet the specifications stated in the "Missouri Nationwide Permit Regional Conditions"

- (www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/MORegCon.pdf), since these materials are usually not substantial enough to withstand erosive flows;
- b. Concrete with exposed rebar;
 - c. Tires, vehicles or vehicle bodies, construction or demolition debris are solid waste and are excluded from placement in the waters of the state;
 - d. Liquid concrete, including grouted riprap, if not placed as part of an engineered structure; and
 - e. Any material containing chemicals that would result in violation of Missouri's Water Quality Standards.
11. Conduct project activity at low flows and water levels to limit the amount of sediment disturbance caused by the heavy equipment. Limit the duration and extent that any heavy equipment is required to be instream.
 12. The riparian area, banks, etc., shall be restored to a stable condition to protect water quality as soon as possible. Seeding, mulching and needed fertilization should be within three days of final contouring. To ensure erosion and deposition of soil in waters of the state are not occurring from this project, onsite inspections of these areas should be conducted as necessary to ensure successful revegetation and stabilization.
 13. Acquisition of a WQC shall not be construed or interpreted to imply the requirements for other permits are replaced or superseded, including Clean Water Act Section 402 National Pollutant Discharge Elimination System Permits. Permits or any other requirements shall remain in effect. Land disturbance activities disturbing one or more acres of total area for the entire project may require a stormwater permit. Instructions on how to apply for and receive the online land disturbance permit are located at www.dnr.mo.gov/env/wpp/epermit/help.htm. Questions regarding permit requirements may be directed to the Department of Natural Resources' St. Louis Regional Office at 314-416-2960.
 14. The Metropolitan St. Louis Sewer District is covered under Municipal Separate Storm Sewer System Permit MO-R040005 with measures to control and possibly treat stormwater. You shall comply with all stormwater requirements of the Stormwater Management Plan and any related ordinances.
 15. Representatives from the Department of Natural Resources shall be allowed on the project property to inspect the authorized activity at any time deemed necessary by the Department of Natural Resources to ensure compliance with the above conditions.
 16. The WQC is based on the plans as submitted. Should any plan modifications occur, please contact the Department of Natural Resources to determine whether the WQC remains valid or needs to be amended or revoked.

Mr. Russ English
Page Four

Pursuant to Chapter 644, RSMo, commonly referred to as the Missouri Clean Water Law, and fee regulations under 10 CSR 20-6.011(2)(I), this WQC shall be valid only upon payment of a fee of \$150.00. The enclosed invoice contains the necessary information on how to submit your fee. Payment must be received within ten business days of receipt of this WQC. Upon receipt of the fee, the applicable office of the USACE will be informed the WQC is now in effect and final.

You may appeal to have the matter heard by the Administrative Hearing Commission (AHC). To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

This WQC is part of the USACE's permit. Water Quality Standards must be met during any operations authorized. If you have any questions, please contact Mr. Christopher Miller by phone at 573-526-3337, by e-mail at mike.irwin@dnr.mo.gov, or by mail at the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176. Thank you for working with the Department of Natural Resources to protect our environment.

Sincerely,

WATER PROTECTION PROGRAM


Chris Wieberg, Chief
Operating Permits Section

CW:mip

Enclosure

- c: Ms. Sherry Bell, Fiscal Management Section, Budget and Fees Unit
Mr. Buck Brooks, Missouri Department of Transportation
Mr. Steve Feeler, Department of Natural Resources
✓ Ms. Lori Ferry, GAI Consultants, Inc.
Mr. Jayme L. Fuller, GAI Consultants
Mr. Eric Gilstrap, St. Louis Regional Office
Ms. Kathy Harvey, Missouri Department of Transportation
Mr. John Hoke, Watershed Protection Section
Mr. David Meyer, USACE, St. Louis District
Ms. Ethel Myers, St. Louis Regional Office
Ms. Anna Nowack, Watershed Protection Section
Ms. Sandy Schoen, St. Louis Regional Office
Ms. Gayle Unruh, Missouri Department of Transportation
Ms. Sarah Wright-Aholt, St. Louis Regional Office

Ali Trunzo

From: Jayme Fuller
Sent: Thursday, December 22, 2016 3:44 PM
To: Tiffany Anders; Erin Matthews; Ali Trunzo
Subject: FW: Spire STL Pipeline- Cold Water Creek Crossing
Attachments: STLP-880D-010_NEW.PDF

Jayme L. Fuller, Environmental Manager

GAI Consultants, Inc.

Charleston Office | 300 Summers Street, Suite 1100, Charleston WV 25301

Indianapolis Office | 6420 Castleway West, Indianapolis, IN 46250

1-234-203-0763 | C 614.499.6258 |     

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From: Jayme Fuller
Sent: Wednesday, November 23, 2016 4:10 PM
To: Irwin, Mike <mike.irwin@dnr.mo.gov>
Cc: Lori Ferry <L.Ferry@gaiconsultants.com>; Goncalves, David G <David.Goncalves@mottmac.com>
Subject: Spire STL Pipeline- Cold Water Creek Crossing

Hi Mike,

Spire proposes to auger bore the northbound lane of US Hwy. 67 south of the existing pipeline crossing to minimize the foreign utilities crossed. This new location would allow for more workspace in the median south of Cold Water Creek. The northbound and southbound lanes are separated in this area far enough to allow for an open cut stream crossing to be completed safely with little to no disruption to traffic flow. The creek banks in the current pipeline location have steep side slopes and a vertical rock cliff not favorable to HDD or open cut. In the new proposed location (see attached drawing) the creek banks are not as steep and can be cut down to accommodate an open cut crossing more safely. The existing pipeline crossing will be removed and capped on either side of the creek.

Please let me know if you need further detail.

Thanks

Jayme L. Fuller, Environmental Manager

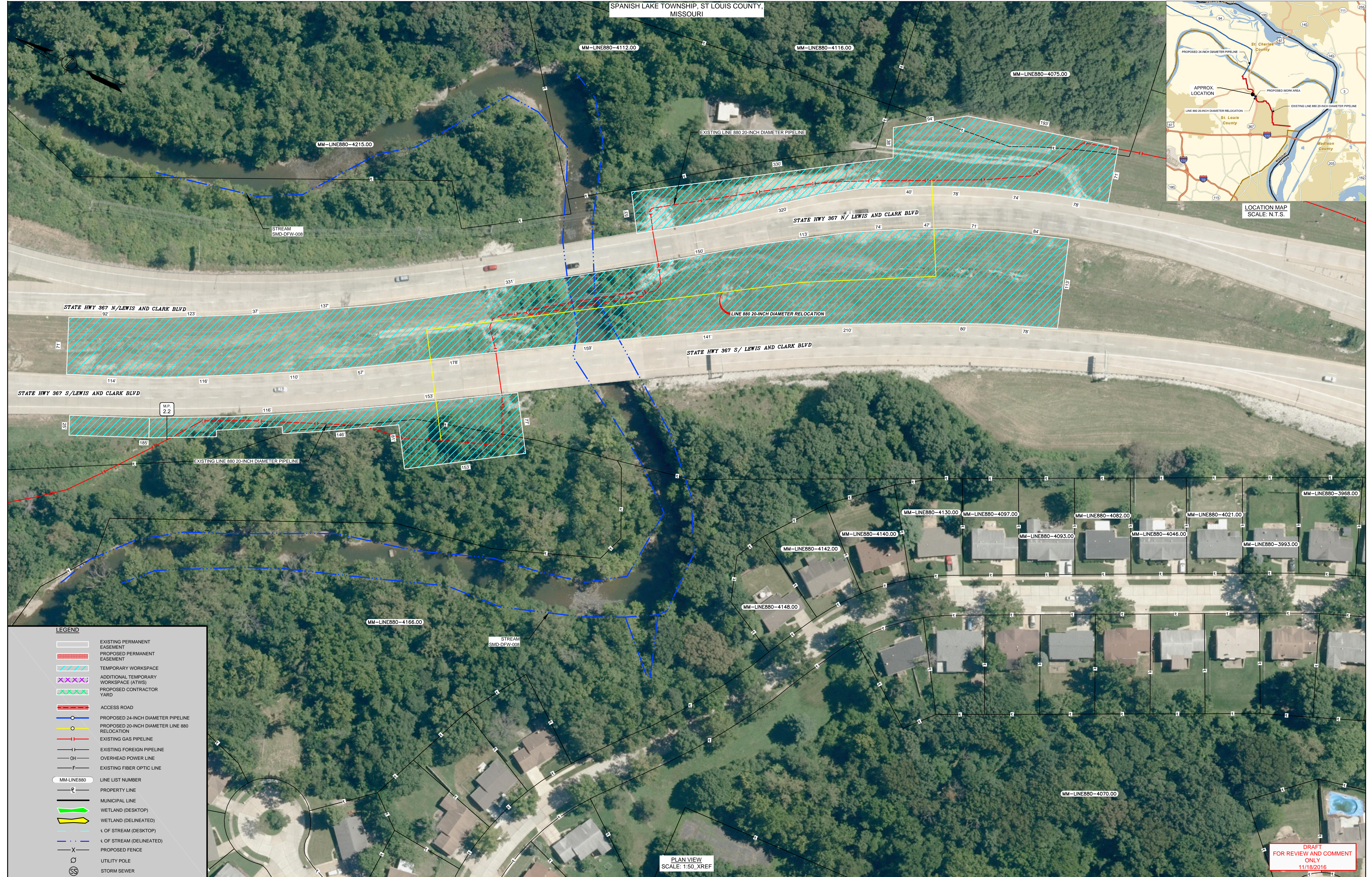
GAI Consultants, Inc.

Charleston Office | 300 Summers Street, Suite 1100, Charleston WV 25301

Indianapolis Office | 6420 Castleway West, Indianapolis, IN 46250

1-234-203-0763 | C 614.499.6258 |     

SPANISH LAKE TOWNSHIP, ST LOUIS COUNTY,
MISSOURI



PLAN VIEW
SCALE: 1:50_XREF

**DRAFT
FOR REVIEW AND COMMENT
ONLY
11/18/2016**

LEGEND

- EXISTING PERMANENT EASEMENT
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)
- PROPOSED CONTRACTOR YARD
- ACCESS ROAD
- PROPOSED 24-INCH DIAMETER PIPELINE
- PROPOSED 20-INCH DIAMETER LINE 880 RELOCATION
- EXISTING GAS PIPELINE
- EXISTING FOREIGN PIPELINE
- OVERHEAD POWER LINE
- EXISTING FIBER OPTIC LINE
- LINE LIST NUMBER
- PROPERTY LINE
- MUNICIPAL LINE
- WETLAND (DESKTOP)
- WETLAND (DELINEATED)
- C OF STREAM (DESKTOP)
- C OF STREAM (DELINEATED)
- PROPOSED FENCE
- UTILITY POLE
- STORM SEWER

REFERENCE DRAWINGS		REFERENCE DRAWINGS		REVISIONS					REVISIONS					APPROVALS								
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE	ENG. APPROVAL	DATE	CLIENT APPROVAL	DATE	
																JC		DGG				
																EB		P.M. APPROVAL		SCALE:		
																	STLP-880D-010 ACAD.					

<p>PREPARED FOR</p>	<p>PREPARED BY</p>	<p>SPIRE STL PIPELINE PROJECT</p> <p>COLDWATER CREEK CROSSING</p> <p>PROPOSED JANUARY FERC SUBMISSION LOCATION</p> <p>ST LOUIS COUNTY, MISSOURI</p>
---------------------	--------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

telephone log



gai consultants

Date: 12/22/2016

Project / Admin. No.: E160438.00

Call From: Tiffany Anders

Company: GAI Consultants

Phone No.: 346.231.7172

Call To: Kyle Rollins, Section Chief, Wellhead Protection Program

Company: Missouri Department of Natural Resources

Phone No.: 573.368.2171

Subject: Portage Des Sioux Water Plant

cc: Lori Ferry

Summary of Discussion, Decisions, and Commitments:

Ms. Anders of GAI spoke with Mr. Rollins, Section Chief, Wellhead Protection Program, who confirmed the information provided earlier this morning by his colleague, Ms. Steele. He also provide the specific contact Spire should follow up with at the Public Drinking Water Branch division: Ken Tomlin at 573.526.0269.

telephone log



gai consultants

Date: 12/22/2016

Project / Admin. No.: E160438.00

Call From: Tiffany Anders

Company: GAI Consultants

Phone No.: 346.231.7172

Call To: Amber Steele, Compliance and Enforcement, Wellhead Protection Program

Company: Missouri Department of Natural Resources

Phone No.: 573.368.2115

Subject: Portage Des Sioux Water Plant

cc: Lori Ferry

Summary of Discussion, Decisions, and Commitments:

Ms. Anders of GAI spoke with Ms. Steele, Environmental Specialist of MDNR Wellhead Protection Program, regarding Spire's current proposed pipeline construction crossing within a 0.5-mile radius source protection area identified in MDNR data for the Portage des Sioux Water Plant in St. Charles County. Ms. Steele stated that the Wellhead Protection Program handles domestic wells, new well drilling, and typically projects at depths greater than 10 feet deep. She stated the Wellhead Protection Program would not regulate a pipeline project in regards to the Portage Des Sioux Water Plant and that the MDNR Public Water Drinking Branch is the appropriate department to given that it is a public water well/source. Ms. Steele provided the MDNR Public Water Drinking Branch phone number: 573.751.1300; GAI will follow up with the Public Water Drinking Branch.

Ali Trunzo

Subject: RE: Spire STL In-stream Work Restrictions

From: Irwin, Mike [<mailto:mike.irwin@dnr.mo.gov>]

Sent: Thursday, December 15, 2016 11:04 AM

To: Erin Matthews <erin.matthews@gaiconsultants.com>

Cc: Bax, Stacia <stacia.bax@dnr.mo.gov>; Audrey Beres (Audrey.Beres@mdc.mo.gov) <Audrey.Beres@mdc.mo.gov>;
Lori Ferry <L.Ferry@gaiconsultants.com>

Subject: FW: Spire STL In-stream Work Restrictions

Hello Erin,

After an initial review of your request, I don't believe Missouri DNR would be the appropriate agency to provide permission/clearance documentation regarding seasonal in-stream work restrictions. Although there is a list of streams with seasonal restrictions within the regional conditions of the department's Clean Water Act Section 401 Water Quality Certification, this list and associated restrictions were developed by the Missouri Department of Conservation. Therefore, I believe it is more appropriate for you to contact that agency. Audrey Beres would be your best contact regarding this request. I have spoken with Audrey, copied her on this email, and attached your original email/documentation.

Please let me know if you have any additional questions, comments, or concerns.

Thank you,

Mike Irwin, Environmental Scientist

Clean Water Act Section 401 Water Quality Certification, Operating Permits Section, Water Protection Program

Missouri Department of Natural Resources

PO BOX 176, 1101 Riverside Dr., Jefferson City, MO 65102

573-522-1131 (Office) 573-522-9920 (FAX)

mike.irwin@dnr.mo.gov

Promoting, Protecting and Enjoying our Natural Resources. Learn more at dnr.mo.gov.

From: Erin Matthews [<mailto:erin.matthews@gaiconsultants.com>]

Sent: Friday, December 09, 2016 11:25 AM

To: Irwin, Mike

Cc: Lori Ferry

Subject: Spire STL In-stream Work Restrictions

Mr. Irwin

As mentioned in my voicemail, Spire initiated coordination with the MDNR in August 2016 regarding the Spire STL Pipeline Project (Project). GAI, on behalf of Spire, requests further clarification regarding seasonal in-stream work restrictions for stream crossings within Missouri. A preliminary list of streams proposed to be crossed by the Project in Missouri and a Project location map are attached. Proposed crossing methods for each waterbody are also included on this list.

Based on our review of Missouri regulations, GAI understands that there are no seasonal in-stream work restrictions associated with the waterbodies crossed by the Project. This includes a review of the spawning list in the Nationwide permit regional conditions for Missouri of which no waterbodies on this list are crossed by the Project.

As part of our FERC application, FERC has requested that we obtain written permission from the MDNR that no seasonal in-stream work restrictions are associated with the waterbodies crossed by the Project and construction may occur at any time of year provided that applicable federal and state water crossing permits have been obtained. Spire will continue to coordinate with MDNR and USFWS and will abide by crossing restrictions related to threatened and endangered species, should any arise during future coordination.

GAI and Spire appreciate your assistance on this Project.

Thank you,

Erin M. Matthews
Project Environmental Specialist

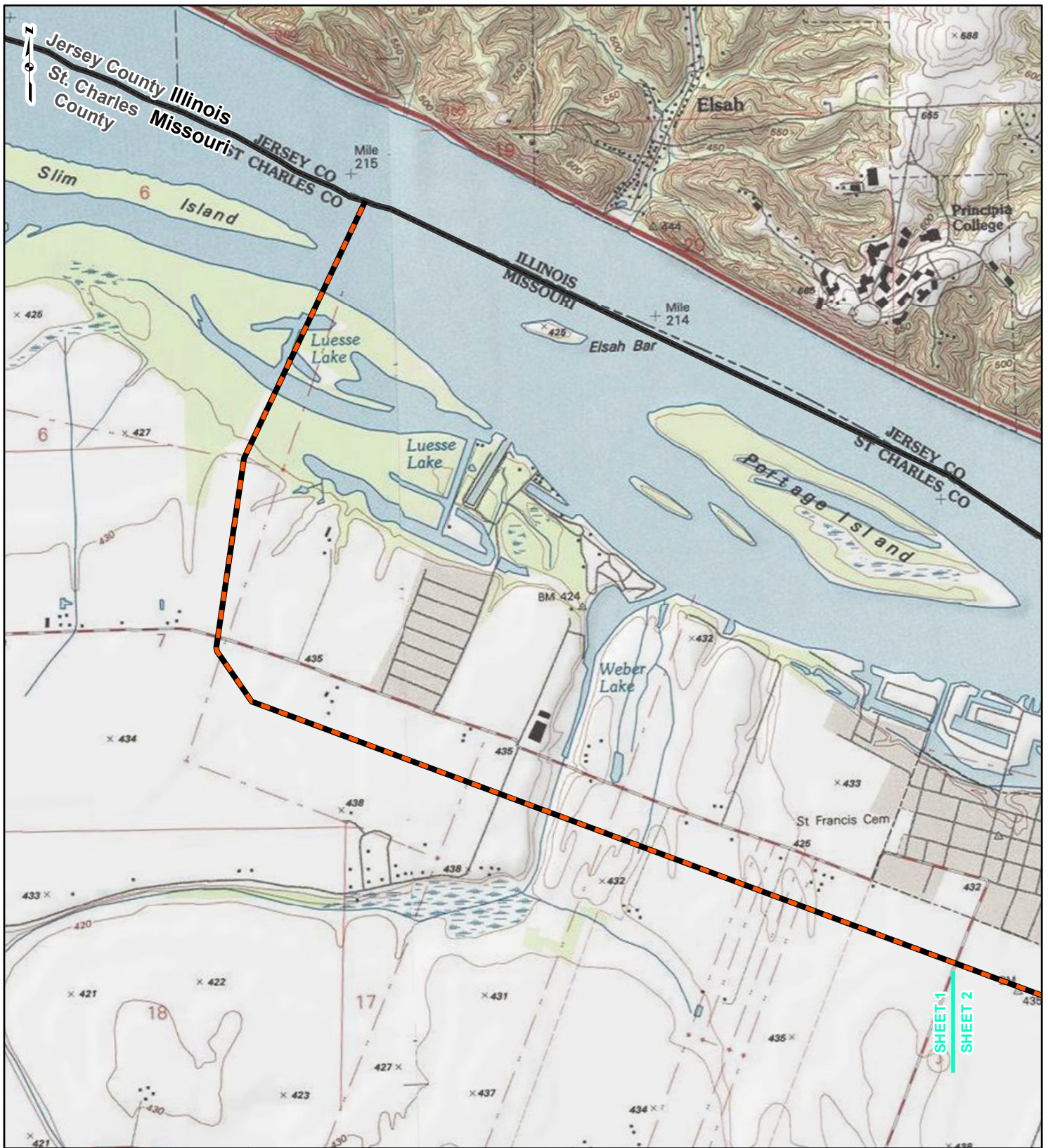
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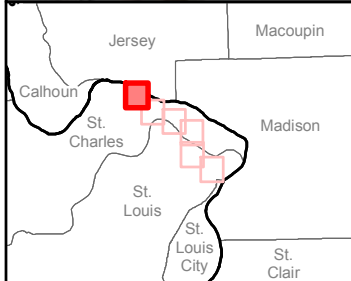
* Please update your records with my new direct telephone number



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SHEET 1
SHEET 2



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 1 OF 6

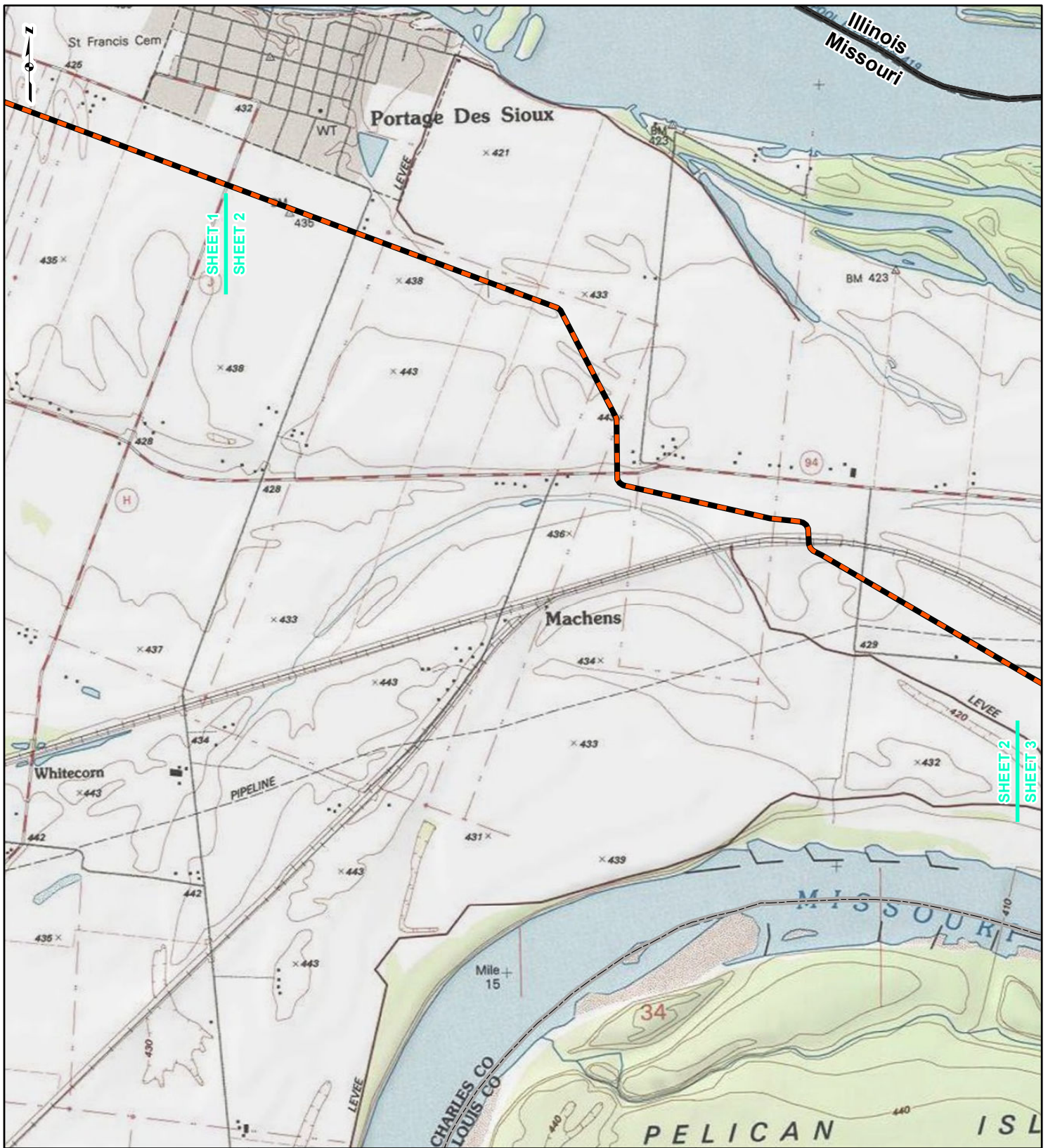
SPIRE STL **PIPELINE PROJECT**

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
CHECKED: SWW APPROVED:

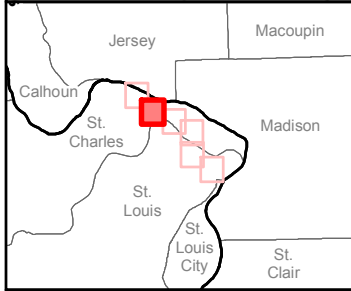
REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 12/2/2016.

DRAFT



SHEET 1
SHEET 2

SHEET 2
SHEET 3



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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FIGURE 1
PROJECT LOCATION MAP
SHEET 2 OF 6

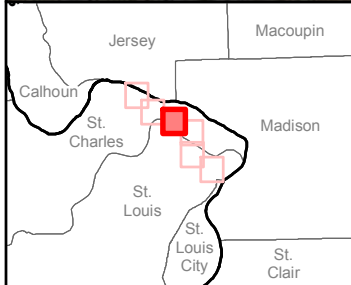
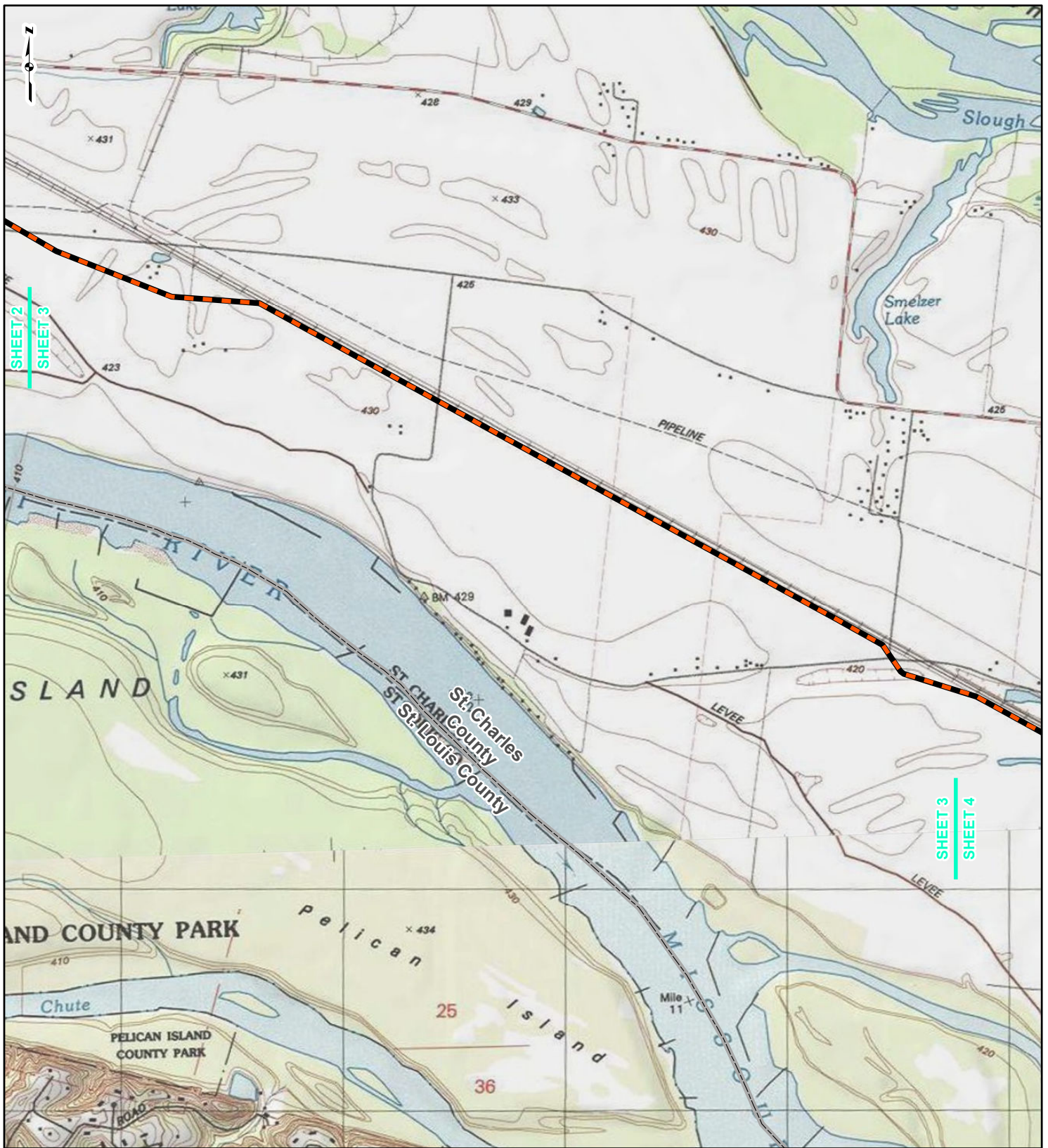
PIPELINE PROJECT

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
CHECKED: SWW APPROVED:

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 12/2016.

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LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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FIGURE 1
PROJECT LOCATION MAP
SHEET 3 OF 6

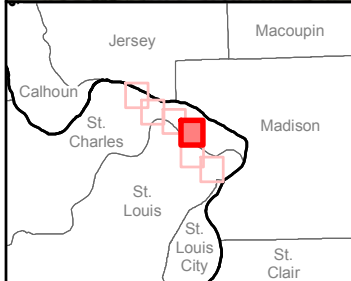
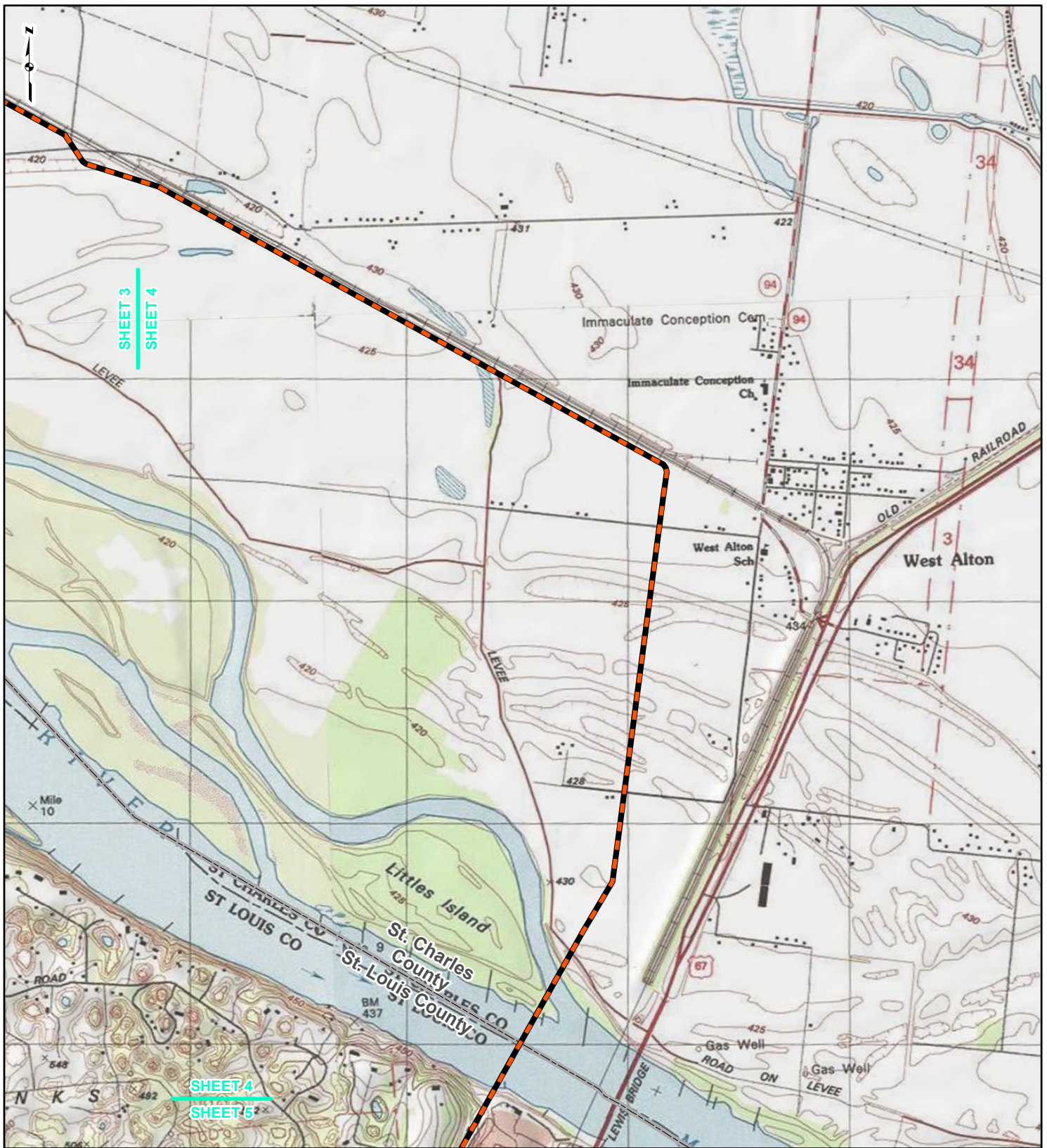
SPiRE STL
PIPELINE PROJECT

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
CHECKED: SWW APPROVED:

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LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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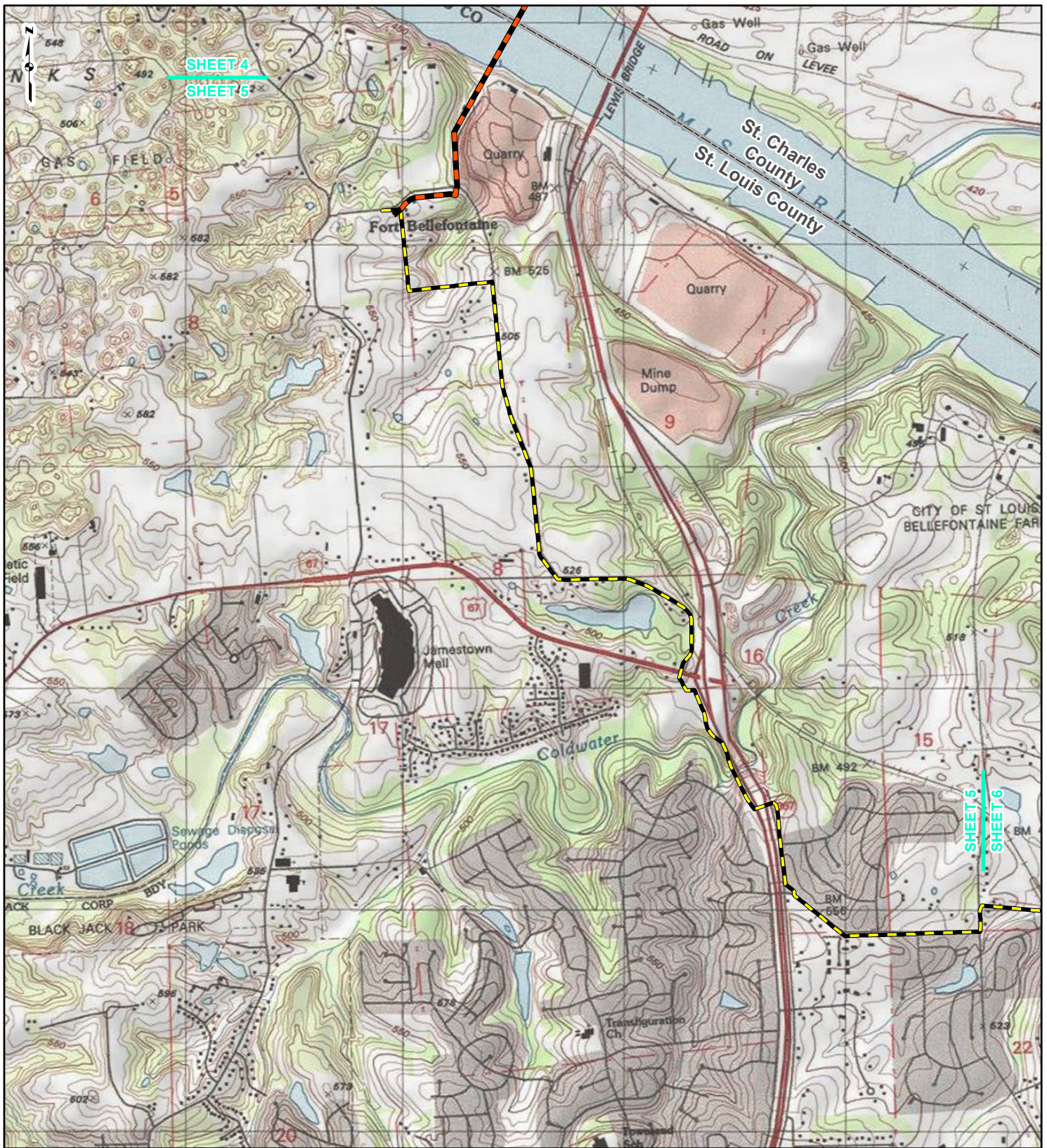
FIGURE 1
PROJECT LOCATION MAP
SHEET 4 OF 6

SPIRE STL PIPELINE PROJECT

DRAWN BY: PMH DATE: 12/8/2016
 CHECKED: SWW APPROVED:

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 12/2/2016.

DRAFT



LEGEND

- NEW BUILD 24-INCH-DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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Feet

FIGURE 1
PROJECT LOCATION MAP
SHEET 5 OF 6

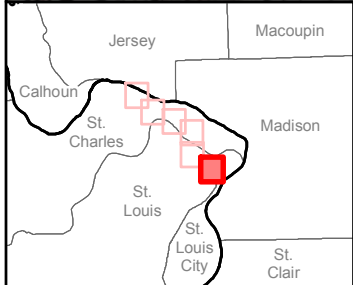
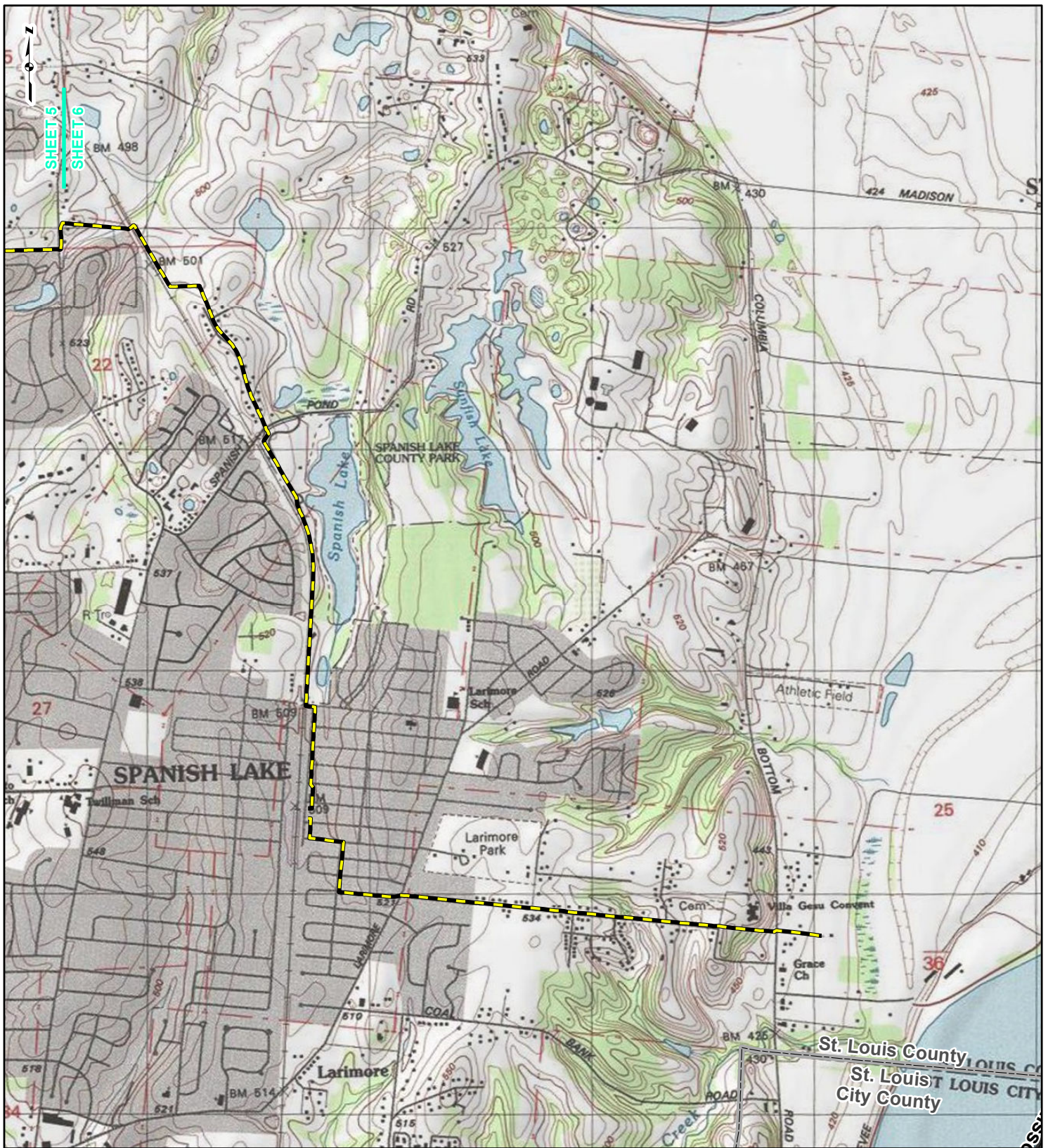
SPiRE STL **PIPELINE PROJECT**

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
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FIGURE 1
PROJECT LOCATION MAP
SHEET 6 OF 6

PIPELINE PROJECT

gai consultants

DRAWN BY: PMH DATE: 12/8/2016
CHECKED BY: SWW APPROVED:

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 12/2/16.

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Table 2.2-1. Waterbodies Crossed by the Project

Draft List based on 75' wide corridor on proposed route as of 11/30/2016.

Feature ID ¹	Waterbody Name	Flow Regime ²	Crossing Width (feet) ³	State Water Quality Classification ⁴	County, State	Fishery Type ⁵	Impaired Designated Use (Identified Pollutant) ⁶	Crossing Method
24-Inch Pipeline								
NHD-921	Mississippi River	P	5,600	Illinois: GEN, PFPWS	Jersey, IL	WWF	Illinois: Fish Consumption (Polychlorinated Biphenyls and Mercury), Primary Contact Recreation (Fecal Coliform)	HDD
				Missouri: LWW, AQL, WBC-Category A, SCR, DWS, IND	St. Charles, MO		Missouri: Category B (<i>E. coli</i>)	
NHD-924/NWI-505 (SMO-WJW-001)	Luesse Lake	N/A	N/A	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	NA	NA	HDD
SMO-TMA-008	UNT to Mississippi River	E	2	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-JJP-004	UNT to Mississippi River	E	2	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-JJP-003	UNT to Mississippi River	E	4	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-006	UNT to Mississippi River	P	60	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-JJP-001	UNT to Mississippi River	E	4	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-009	UNT to Mississippi River	E	6	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-005	UNT to Mississippi River	E	4	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-004	UNT to Mississippi River	E	3	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-003	UNT to Mississippi River	E	3	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
SMO-TMA-002	UNT to Mississippi River	E	2	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	Open Cut
PMO-TMA-001	N/A	Pond			St. Charles, MO	N/A	No	Open Cut
SMO-TMA-001	UNT to Missouri River	P	175	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	HDD
SMO-CDK-001	Missouri River	P	2,300	IRR, LWW, AQL, WBC - Category B, SCR, DWS, IND	St. Charles, MO, St. Louis, MO	WWF	WBC-Category B (<i>E. coli</i>)	HDD
Line 880 Modifications								
SMO-DFW-002	UNT to Missouri River	E	6		St. Louis, MO	WWF	No	Open Cut
SMO-DFW-001	UNT to Missouri River	E	5	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Open Cut
PMO-DFW-001		N/A	N/A		St. Louis, MO	WWF	No	Timber Mats
SMO-DFW-004	UNT to Missouri River	E	5	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Timber Mats
SMO-DFW-008 ⁷	Coldwater Creek	P	48	LWW, AQL, WBC - Category B, IND ⁸	St. Louis, MO	WWF	AQL (Chloride) and WBC - Category B, SCR (<i>E. coli</i>)	Open Cut
SMO-CDK-004	UNT to Coldwater Creek	IT	5	LWW, AQL, WBC - Category B, IND ⁸	St. Louis, MO	WWF	No	Open Cut

**Spire STL Pipeline Project
PF16-9-000**

SMO-DFW-010	UNT to Missouri River	P	20	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Open Cut
SMO-DFW-011	UNT to Missouri River	IT	7	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Open Cut
SMO-DFW-013	UNT to Missouri River	P	5	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Timber Mats
SMO-DFW-014	UNT to Watkins Creek	P	5	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Timber Mats
SMO-DFW-015	UNT to Watkins Creek	P	4	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Open Cut
SMO-DFW-016	UNT to Watkins Creek	IT	2	AQL, WBC - Category B, SCR, LWW, IRR	St. Louis, MO	WWF	No	Timber Mats
Access Roads								
SIL-TMA-049	UNT to Macoupin Creek	IT	5	GEN, PFPWS	Greene, IL	WWF	No	TAR-012 - Timber Mats
SIL-TMA-044	UNT to Macoupin Creek	IT	7	GEN, PFPWS	Greene, IL	WWF	No	TAR-014 - Timber Mats
SMO-TMA-008	UNT to Mississippi River	E	2	AQL, WBC - Category B, SCR, LWW, IRR	St. Charles, MO	WWF	No	TAR-018 - Timber Mats

Notes:

- ¹ Map Designation - the unique code designated to the waterbodies identified during the field surveys. Field delineations are occurring concurrently with this filing. A unique identifier was also assigned to NHD that was used to supplement field delineations on properties that lack of access permission or in areas that are pending studies. Project facilities not listed do not impact streams. Impacts associated with the facilities will be refined in the FERC application.
- ² Flow regime based on USGS topographic mapping and onsite field review. IT - Intermittent; E - Ephemeral; and P - Perennial.
- ³ Crossing width is the bank-to-bank width of stream at the pipeline or access road centerline crossing unless noted otherwise. N/A-Not applicable indicates that these waterbodies that are desktop identified and therefore no crossing lengths are currently known.
- ⁴ Water quality classifications in MO are contained in 10 CSR 20-7.031. Last revised January 29, 2014 (MDNR, 2014). Codes for the designated uses are as follows: IRR - Irrigation, LWW - Livestock & Wildlife Watering, AQL - Protection of Warm Water Aquatic Life and Human Health-Fish Consumption, SCR - Secondary Contact Recreation, DWS - Drinking Water Supply, WBC - Whole Body Contact Recreation, IND - Industrial.
- ⁵ Water Quality Standards Table C of Missouri 10CSR20.7 lists Waters Designated for Cold-Water Fisheries (MDNR, 2014). Luesse Lake is contained within the Mississippi River valley and was designated by the NWI layer as a L1UBHH - Lacustrine, Limnetic, Unconsolidated Bottom.
- ⁶ State impaired waters have been defined by the Section 303(d) lists for Missouri (MDNR, 2016d).
- ⁷ Also classified by the MDNR as a Metropolitan No-Discharge Stream, located in Chapter 7 10 CSR 20-7.031 of the Clean Water Commission created by the MDNR. Last revised January 29, 2014 (MDNR, 2014).
- ⁸ Spire is providing a preliminary list of features crossed by the project as of the end of November 30, 2016. Wetland and waterbody surveys were initiated in September 2016, but are ongoing due to survey permission. A desktop analysis was conducted utilizing National Wetland Inventory Maps and National Hydrography Datasets for areas lacking survey permission.

telephone log



gai consultants

Date: December 14, 2016

Project / Admin. No.: E160438.00

Call From: Rich Ruffolo, P.G.

Company: GAI Consultants

Phone No.: 412.855.2432

Call To: Pat Mulvany, Unit Chief, Geologist IV

Company: Missouri Geologic Resources Section

Phone No.: 573-368-2370

Subject: Mine information

cc: Andrea Halfhill, Ali Trunzo, Lori Ferry

Summary of Discussion, Decisions, and Commitments:

Contacted the Missouri DNR Industrials Minerals Unit and spoke to Pat Mulvany, the Unit Chief, for the Industrials Minerals Unit. Called to clarify the definition of the terms “producer” and “past producer”, terms utilized in a GIS database from the Missouri DNR Inventory of Mines, Occurrences, and Prospects in Missouri (IMOP). Mr. Mulvany said the terms producer refers to an active mine and past producer refers to mine no longer in operation or abandoned. However, Mr. Mulvany said the database should be used with caution because it is not continuously updated and that each location should be individually researched to find out if the mine is still producing, reopened, or a past producer. Mr. Mulvany then referred me to the MODNR Land Reclamation Program branch (<http://dnr.mo.gov/geology/lrp/index.html>) where more recent mining information can be found.

telephone log



gai consultants

Date: 12/09/2016

Project / Admin. No.: E160438.00

Call From: Erin Matthews

Company: GAI Consultants

Phone No.: 412.399.5251

Call To: Mike Irwin

Company: MDNR

Phone No.: 573.522.1131

Subject: In-stream Work Restrictions

cc:

Summary of Discussion, Decisions, and Commitments:

Mr. Irwin called in response to the request (voicemail and email) to confirm that no seasonal in-stream work restrictions are required for the Project. Mr. Irwin requested shapefiles to assist him with his review. He anticipates reviewing the Project submittals in January. Based on the preliminary Project location map, he commented that he didn't see anything concerning as the Project crosses urbanized areas through Missouri. He explained that most of Missouri's stream restrictions are associated with T&E species, but small tributaries could be associated with those species. Mr. Irwin will review the shapefiles once received and provide further comment.

Ali Trunzo

To: Erin Matthews; Lori Ferry
Subject: RE: Drinking Water Concerns - Natural Gas Pipeline Project

From: Baker, Everett [<mailto:Everett.Baker@dnr.mo.gov>]
Sent: Monday, October 24, 2016 11:17 AM
To: Jaafari, Maher <maher.jaafari@dnr.mo.gov>; Erin Matthews <erin.matthews@gaiconsultants.com>
Subject: RE: Drinking Water Concerns - Natural Gas Pipeline Project

I can only speak to the concerns the department may have concerning public drinking water systems. Other environmental concerns about the pipe line and crossings must be answered by other programs within the department. As with any construction project our biggest concern is its proximity to water supply sources and facilities. The city of St. Charles has wells in the Missouri/Mississippi River alluvium in the general vicinity of where the pipe line seems to be crossing the Missouri River. A water supply line from St. Louis to St. Charles crosses the Missouri River near St. Charles and provides over half of the water used by St. Charles. For exact locations you should talk to the city of St. Charles. St. Charles County PWSD #2 also has wells in the Missouri River Alluvium. The wells are located south of St. Charles on the west side of the river near the Weldon Springs Conservation Area. Again for more exact location you should contact the water district.

We do not have specific concerns about horizontal directional drilling of river crossings other than the holes dug to drill or access the new crossing. If HDD is used to construct part of the pipeline the mud used during drilling can plug portions of the alluvial aquifer and affect well yield. Again this depends on proximity.

From: Jaafari, Maher
Sent: Wednesday, October 19, 2016 11:50 AM
To: 'Erin Matthews'
Cc: Baker, Everett; Jaafari, Maher
Subject: RE: Drinking Water Concerns - Natural Gas Pipeline Project

Erin,

I'm reviewing your request and I'll let you know as soon as possible. However, I'll be out of the office for a week. Therefore, I copied Mr. Everett Baker who can provide you with an answer while I'm out of the office. Please let me know if you have more question.

Thank you

Maher Jaafari, P.E., Chief
Infrastructure Permits and Engineering Section
Public Drinking Water Branch
Water Protection Program
Missouri Department of Natural Resources
(573) 751-1127

From: Erin Matthews [<mailto:erin.matthews@gaiconsultants.com>]
Sent: Tuesday, October 18, 2016 12:04 PM
To: Jaafari, Maher
Subject: Drinking Water Concerns - Natural Gas Pipeline Project

Hello,

I am working on a FERC filing for a proposed natural gas pipeline project that is anticipated to cross the Mississippi River in St. Charles County and the Missouri River in St. Louis County via horizontal directional drills (HDD). I've noticed that the Mississippi and Missouri Rivers are designated as drinking water supply streams and I've located one water well for the Portage Des Sioux Public Water Treatment Facility 2.5-miles downstream of the Project's crossing of the Mississippi River. No public source water areas were located downstream of the Project's crossing of the Missouri River. The HDD contingency plan is currently being drafted and we are continuing our coordination for applicable state and federal permits for the Project, however does the public water supply department typically have additional concerns with the HDDs under the rivers?

Thanks for your assistance,

Erin M. Matthews

Project Environmental Specialist

GAI Consultants, Inc.

385 East Waterfront Drive, Homestead, PA 15120-5005

T 412.476.2000 | D 412.399.5251 | M 724.322.2731 | gaiconsultants.com |     

* Please update your records with my new direct telephone number



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Jonathan Glenn

From: Elizabeth Williams
Sent: Monday, October 03, 2016 1:18 PM
To: Jonathan Glenn
Subject: FW: Katy Trail
Attachments: RE: Background Research questions

From: Dillon, Kim [mailto:kim.dillon@dnr.mo.gov]
Sent: Monday, October 03, 2016 1:16 PM
To: Elizabeth Williams <E.Williams@gaiconsultants.com>
Subject: RE: Katy Trail

Elizabeth,

Please see the attached email. It seems someone from your office may have requested similar information recently.

Please let us know if you need more information.

Thanks,





Kim Dillon
Cultural Resource Management Section Chief
Missouri State Parks
Phone: (573) 526-0976
Fax: (573) 751-8656
kim.dillon@dnr.mo.gov
www.mostateparks.com

From: Elizabeth Williams [mailto:E.Williams@gaiconsultants.com]
Sent: Monday, October 03, 2016 10:01 AM
To: Dillon, Kim
Subject: Katy Trail

Good Morning Kim,

I am trying to track down information on the Katy Trail. I am currently working on a natural gas pipeline project in St. Charles County, and am trying to find information regarding where the trail ends in or near Machens. I have corresponded with Heather Gibb from the SHPO to see if there was any documentation of the NRHP eligibility of the trail, as we were given information suggesting the trail had been determined eligible. I recently traveled to Jefferson City to conduct background research, however I was not able to collect any information on the trail. Any information you have would be helpful, specifically where the trail ends. Thank you!

Elizabeth H. Williams
Senior Architectural Historian

GAI Consultants
385 East Waterfront Drive, Homestead, PA 15120-5005
T 412.476.2000 | D 412.399.5060 | M 412.477.3196 | gaiconsultants.com |    

telephone log



gai consultants

Date: 9/21/216

Project / Admin. No.: E160438.00

Call From: Pam Hartwick

Company: GAI Consultants

Phone No.: 412-399-5055

Call To: Mr. David Erickson

Company: Missouri DNR

Phone No.: 573-368-2322

Subject: MDNR spatial data for water resources

cc:

Summary of Discussion, Decisions, and Commitments:

Called to obtain access to drinking water resource data for Missouri. Mr. Erickson provided a user name and password to download source water assessment data for use in the FERC Environmental Report.



September 8, 2016

Ms. Lorisa Smith
Missouri Department of Natural Resources
PO Box 176
Jefferson City, Missouri 65102

**Re: Project Permitting Coordination
Spire STL Pipeline LLC
Spire STL Pipeline Project
St. Charles and St. Louis Counties, Missouri**

Dear Ms. Smith:

GAI Consultants, Inc. ("GAI") is submitting this information request on behalf of Spire STL Pipeline LLC ("Spire"), for the portion of the Spire STL Pipeline Project ("Project") in St. Charles and St. Louis Counties, Missouri. Representatives from GAI and Spire met with your office on August 3, 2016 to introduce the Project. GAI is submitting information to coordinate anticipated reviews for the proposed Project. Consultation with the State Historic Preservation Office will be completed under separate cover.

Project Description

Spire is in the planning stages of the Project. As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project, as proposed, will consist of approximately 57.4 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri, until crossing the Missouri River and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri, that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880, including its appurtenant and ancillary facilities, from LGC and modify approximately 7.6 miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri, that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("Enable MRT") pipeline along the western bank of the Mississippi River, in St. Louis County, Missouri. The total length of the entire Project will be approximately 65.0 miles and will include the construction of minor aboveground facilities. A pig launcher/receiver will also be installed at each portion of the Project. The overall design capacity of the new build portion of the pipeline is expected to be 400,000 dekatherms per day. No compression will be required.

Spire anticipates a 90-foot temporary construction right-of-way width and a 50-foot permanent easement. The construction right-of way is anticipated to be reduced to 75-foot at streams and wetlands. An additional 25 feet of temporary work space will be required through agricultural areas, and additional temporary work space will be required to facilitate construction in certain areas, such as crossings of roads, railroads, streams, and wetlands.

Missouri

Approximately 13 miles of new build 24-inch-diameter steel pipeline will be located in Missouri and traverse St. Charles and St. Louis Counties. Approximately 7.6 miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri will be modified. Three meter and regulating stations are proposed in St. Louis County, Missouri, including at the interconnection location between the new build and pipeline modifications, and the interconnection location with Enable MRT. Spire has assumed the use/development of new and/or existing access roads throughout the Project area. Temporary extra work spaces will be utilized to accommodate equipment staging and stockpiling of materials along the proposed corridor during construction. The locations of these facilities are still pending.

Site Description

The Missouri portion of the Project is located in St. Charles and St. Louis Counties, Missouri, and is depicted on the attached portions of the Grafton (1979), Elsah (1979), Alton (1979), Florissant (1979), and Columbia Bottom (1979), Missouri, United States Geological Survey (USGS) 7.5-minute series topographic maps (Figure 1).

The majority of the new build 24-inch pipeline is greenfield and crosses a primarily agricultural landscape. The existing pipeline to be modified is located primarily within existing right-of-way, which traverses residential, agricultural, and some wooded areas. The Project is located within the Marais Temps Clair-Mississippi River [USGS Hydrologic Unit Code (HUC) #071100090401], Outlet Missouri River (HUC #103002000804), Coldwater Creek (HUC #103002000803), and Maline Creek-Mississippi River (HUC #071401010401) watersheds.

As discussed at the meeting, Spire anticipates applying for coverage under several permits, including the National Pollutant Discharge Elimination System General Permit for Construction Activities, Hydrostatic Discharge General Permit, and Nationwide Permit. After completion of field studies, Spire will evaluate the Project impacts and coordinate with MDNR if mitigation is required for stream or wetland impacts.

Spire understands that Individual 401 Water Quality Certification would be required for Metropolitan no-discharge streams, Metropolitan no-discharge watersheds, and 305b impaired waters. At present, Spire intends to cross one stream (Coldwater Creek) under these classifications. As this crossing is proposed as a conventional bore, no individual 401 water quality certificates would be required. Should the Project scope change and Individual 401 Water Quality Certification is required, the appropriate application will be provided. Spire understands that the permitting requirements may change upon re-issuance of the Nationwide Permits in March 2017, and, should permitting be ongoing for this Project, will coordinate with the agencies as necessary.

Spire is also evaluating the proposed geotechnical bore locations for the Project, as well as potential water sources for the hydrostatic testing of the pipelines. Once determined, Spire will register and apply for the appropriate permits.

GAI would appreciate your continued assistance on this Project to address the permits described above. In addition, GAI would appreciate the identification of any additional concerns based on the current Project route, as shown on the attached Figure 1.

Please note the intent of this letter is solely for the purpose of formally initiating consultations and/or applicable Project reviews. An invitation for you to participate in the Federal Energy Regulatory Commission's National Environmental Policy Act Pre-Filing Process has been addressed to you under separate cover.

If you have any questions regarding this submission, please feel free to contact me at 234.203.0763, or by e-mail at J.Fuller@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

A handwritten signature in blue ink, appearing to read 'Jayme Fuller', is positioned above the printed name.

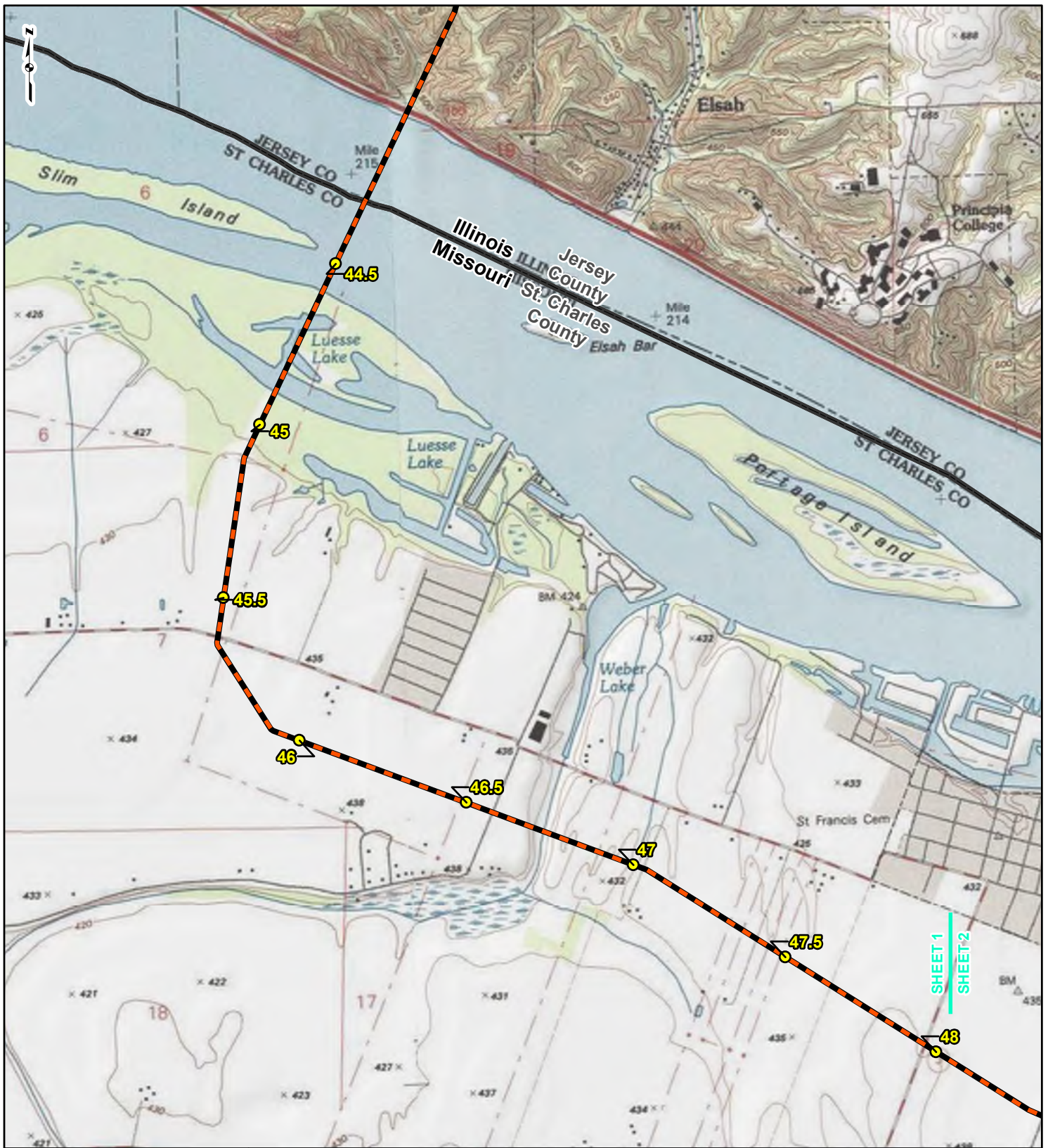
Jayne Fuller
Environmental Manager

JF/gmg

Attachment: USGS Topographic Map (Figure 1)

September 8, 2016
Project E160438.00, Task 002.001

ATTACHMENT
USGS TOPOGRAPHIC MAP (FIGURE 1)



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

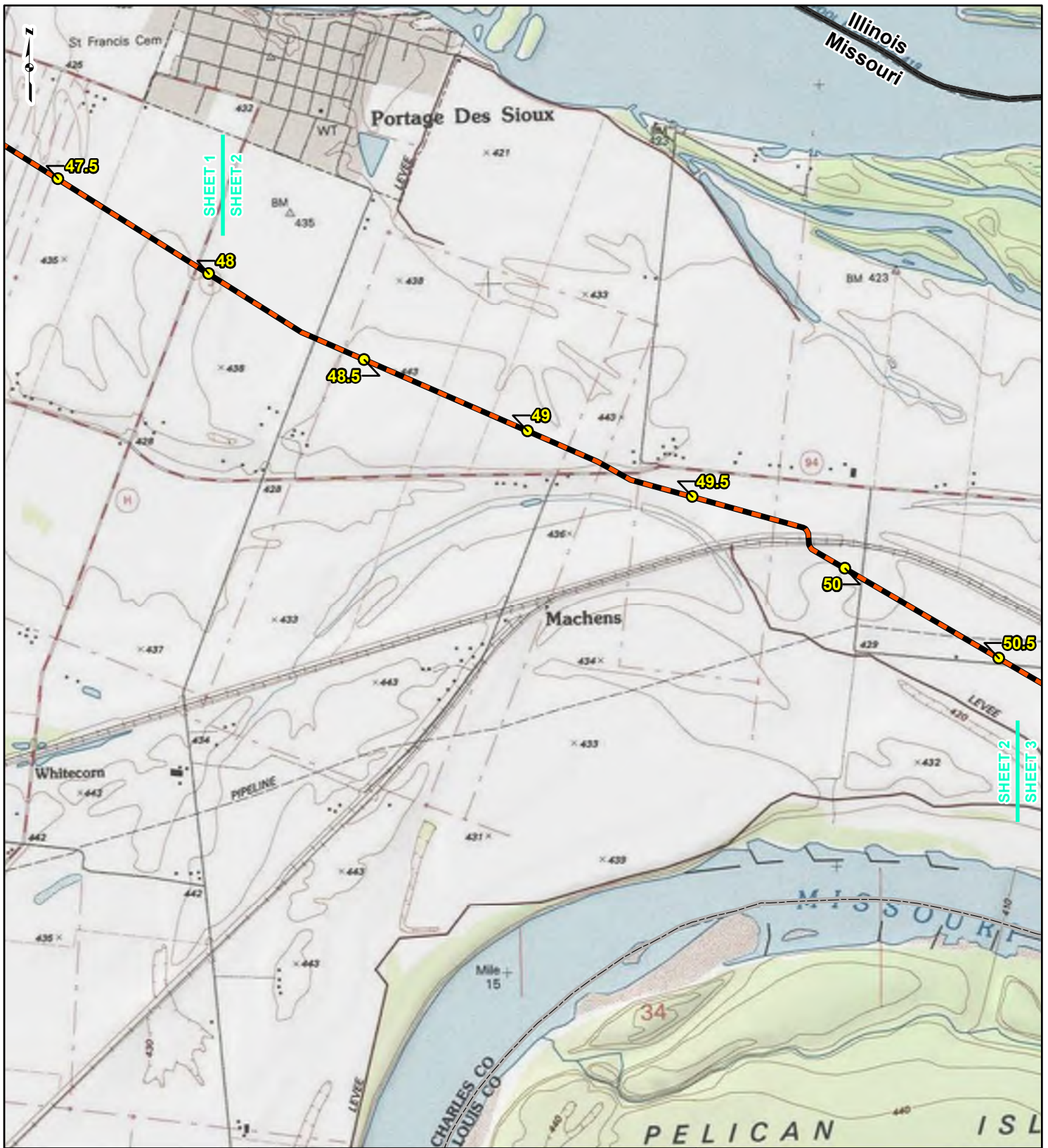
**FIGURE 1
LOCATION MAP
SHEET 1 OF 6**

Spire STL Pipeline **spire**

g | geosolutions

DRAWN BY: PMH DATE: 8/12/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000
Feet

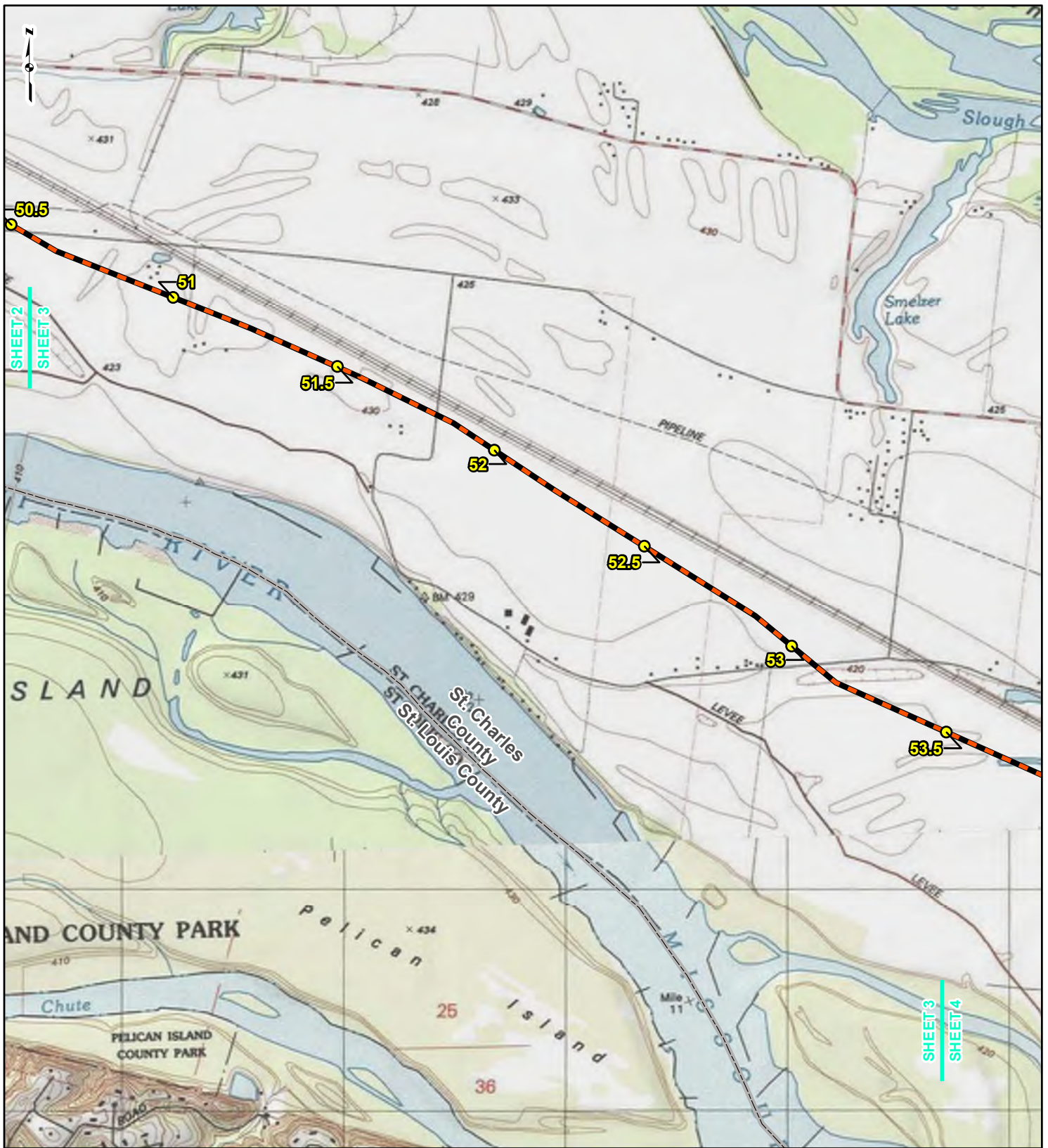
**FIGURE 1
LOCATION MAP
SHEET 2 OF 6**

Spire STL Pipeline

gimconsultants

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

NEW BUILD MILEPOST	LINE 880 MODIFICATIONS
LINE 880 MILEPOST	COUNTY BOUNDARY
NEW BUILD 24-INCH DIAMETER PIPELINE	STATE BOUNDARY

0 1,000 2,000 4,000
Feet

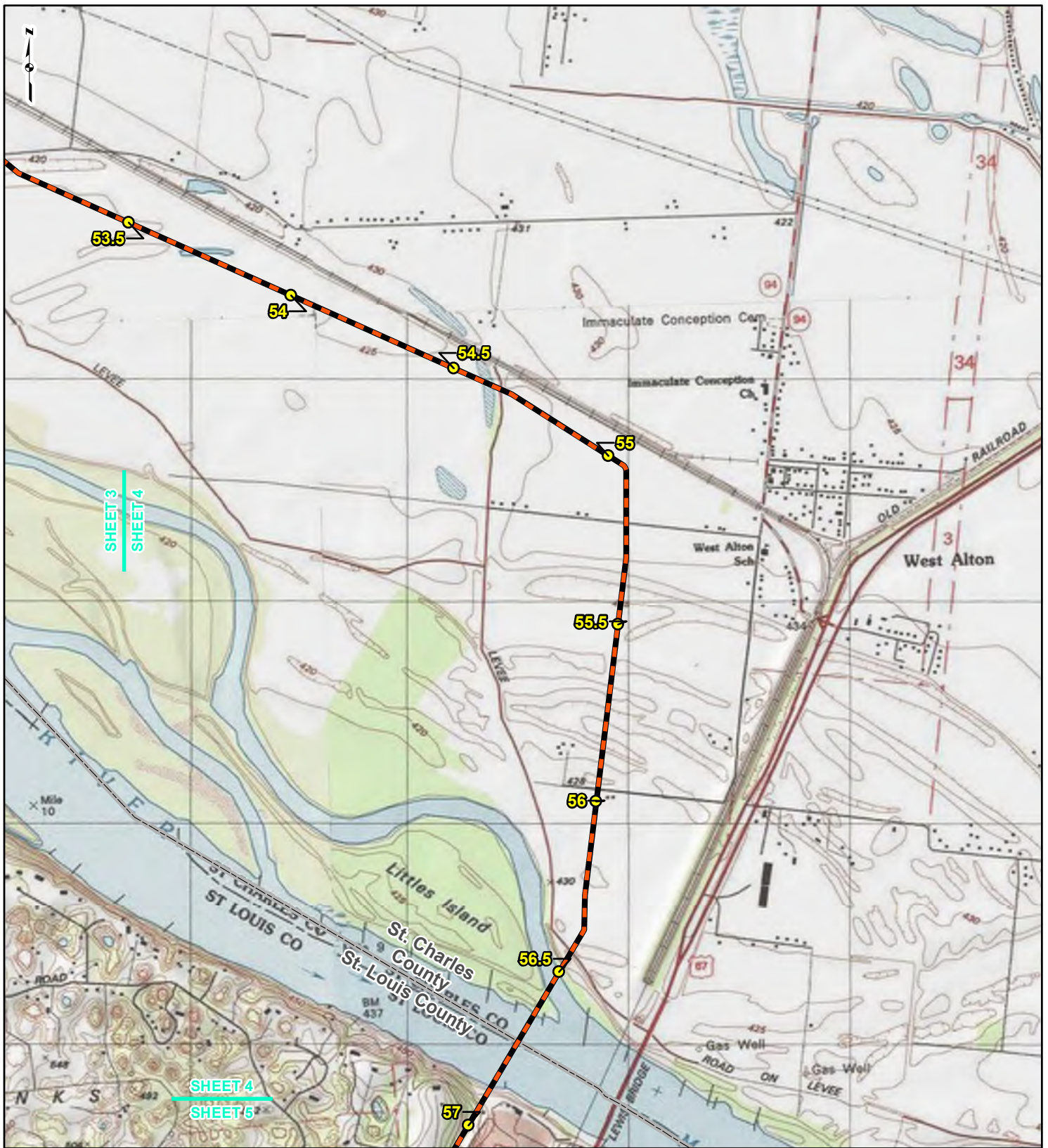
**FIGURE 1
LOCATION MAP
SHEET 3 OF 6**

Spire STL Pipeline

ginnconsultants

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

	NEW BUILD MILEPOST		LINE 880 MODIFICATIONS
	LINE 880 MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

0 1,000 2,000 4,000
Feet

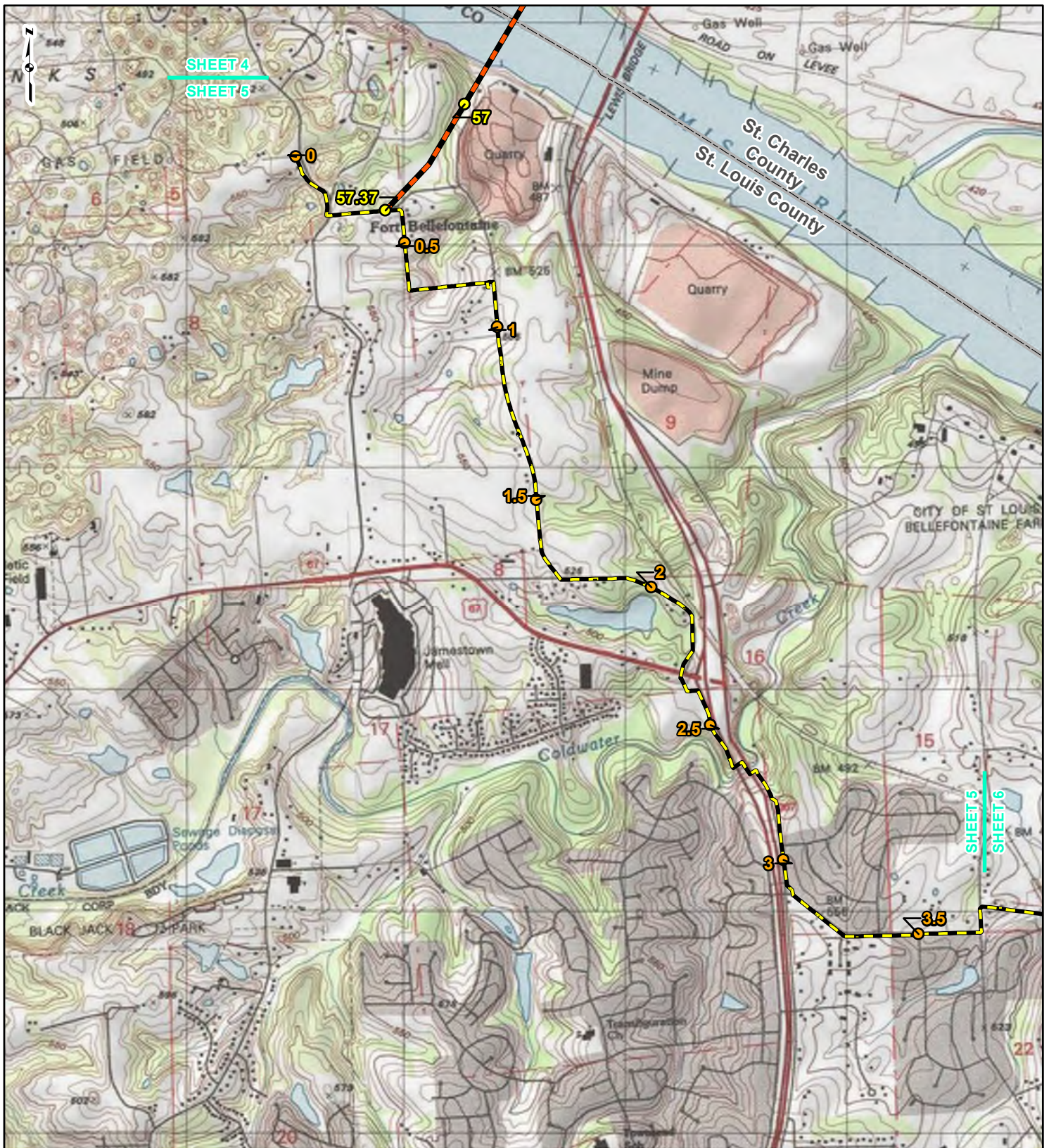
**FIGURE 1
LOCATION MAP
SHEET 4 OF 6**

Spire STL Pipeline

ginnconsultants

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



SHEET 4
SHEET 5

SHEET 5
SHEET 6



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

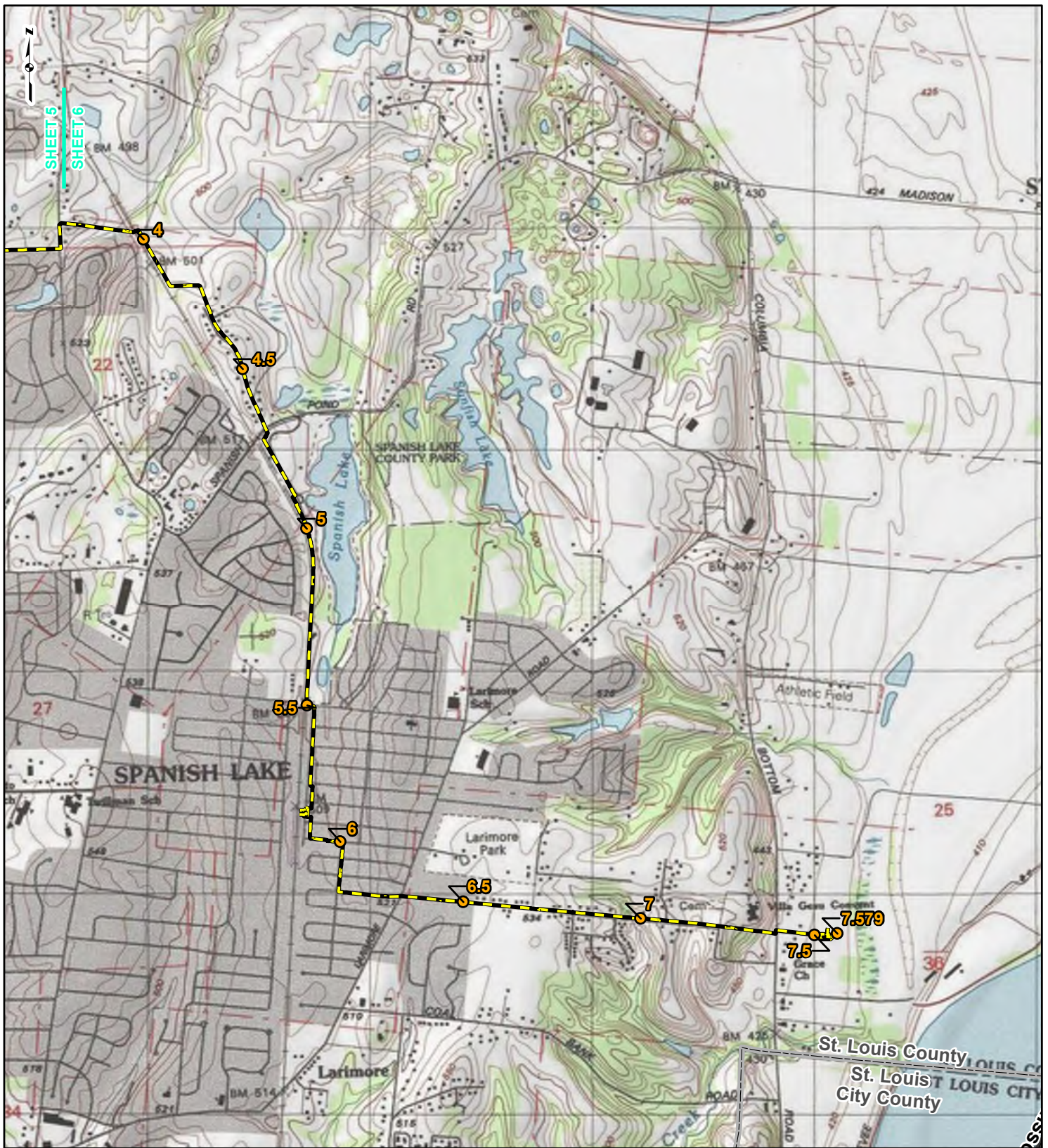
**FIGURE 1
LOCATION MAP
SHEET 5 OF 6**

Spire STL Pipeline

gimconsultants

DRAWN BY: PMH DATE: 8/12/2016
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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

**FIGURE 1
LOCATION MAP
SHEET 6 OF 6**

Spire STL Pipeline

ginnconsultants

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Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Mr. Mike Irwin
Water Protection Program Section 401 Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Mr. Irwin,

At Spire, formerly The Laclede Group, we never stop looking for better ways to provide energy now and for the future. That's why Spire STL Pipeline LLC, a wholly owned subsidiary of Spire Inc., is proposing to develop and construct a new interstate natural gas pipeline that will bring an efficient energy source to southwest Illinois and the St. Louis region. As a member of the community, we want you to be informed about our proposed project and we want you to hear from us first.

We are proposing to construct 60 miles of new build pipeline and upgrade nine miles of existing underground pipeline to further improve reliability and better serve homes and businesses across Illinois and Missouri. The planned route runs through Scott, Greene and Jersey counties in Illinois and St. Charles and St. Louis counties in Missouri.

You are receiving this letter because your property is located on or near our currently proposed route.

Spire STL Pipeline LLC has started the pre-filing application process for developing interstate natural gas pipelines by the Federal Energy Regulatory Commission ("FERC") pursuant to 18 C.F.R. § 157.21. FERC staff recently started a pre-filing environmental review process, which encourages early involvement by citizens, governmental entities and other interested parties. You can find more information about this pre-filing process at www.ferc.gov. You can see all the information about the Spire STL Pipeline using the docket number PF16-9.

Included with this letter, for your information, is a general overview map of the proposed pipeline route and a diagram illustrating the FERC process.

We believe that we can create a better project by hearing from you and listening to your feedback. That's why we are hosting open houses this month so you can learn more about the project and we can learn more about you.

At the open houses, more detailed maps will be available to show where the proposed pipeline may be located relative to your property. We want you to come, ask questions and provide feedback. Representatives of the Federal Energy Regulatory Commission (FERC) will also be there to answer questions about the FERC process for natural gas pipelines.

Spire STL Pipeline open house schedule

Tuesday August 16, 2016 5 p.m. – 7:30 p.m.	Wednesday August 17, 2016 5 p.m. – 7:30 p.m.	Thursday August 18, 2016 5 p.m.– 7:30 p.m.	Tuesday August 23, 2016 5 p.m.– 7:30 p.m.	Wednesday August 24, 2016 5 p.m. – 7:30 p.m.
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Check out more information on our website at www.SpireSTLPipeline.com. If you have any questions, please do not hesitate to contact us toll-free at 1 844-885-7234 or at STLPipelineInfo@SpireEnergy.com.

We look forward to working with you.

Sincerely,

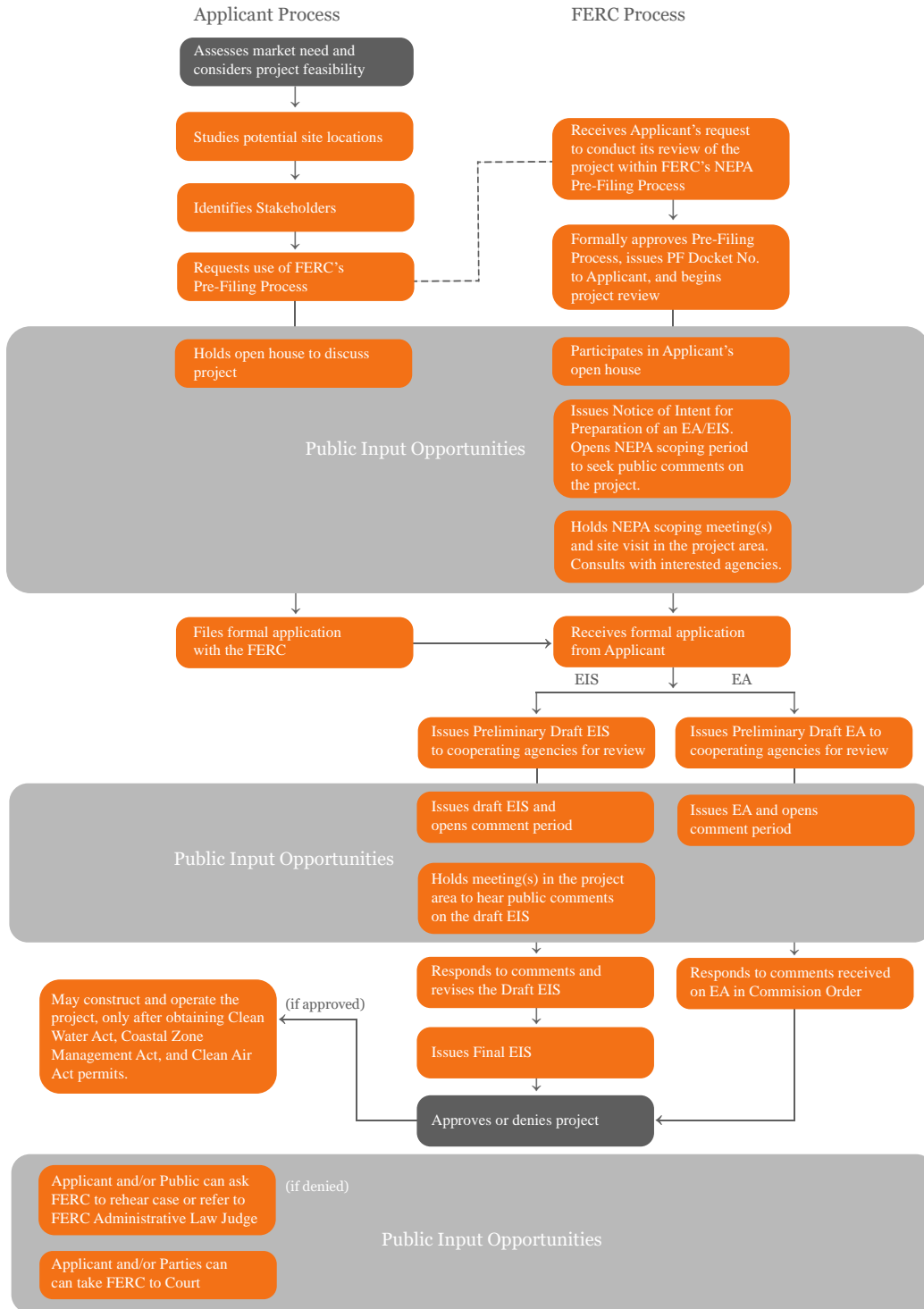


Scott Jaskowiak
Vice President
Spire STL Pipeline LLC

Project Map



FERC Pre-Filing Process





Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Mr. Paul Mueller
Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Mr. Mueller,

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We look forward to working with you.

Sincerely,



Scott Jaskowiak
Vice President
Spire STL Pipeline LLC



Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Ms. Sara Parker Pauley
Director Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Ms. Parker Pauley,

At Spire, formerly The Laclede Group, we never stop looking for better ways to provide energy now and for the future. That's why Spire STL Pipeline LLC, a wholly owned subsidiary of Spire Inc., is proposing to develop and construct a new interstate natural gas pipeline that will bring an efficient energy source to southwest Illinois and the St. Louis region. As a member of the community, we want you to be informed about our proposed project and we want you to hear from us first.

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We look forward to working with you.

Sincerely,



Scott Jaskowiak
Vice President
Spire STL Pipeline LLC



Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Ms. Lorisa Smith
Policy Coordinator Missouri Department of Natural Resources
PO Box 176
Jefferson City, MO 65102

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Ms. Smith,

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We look forward to working with you.

Sincerely,



Scott Jaskowiak
Vice President
Spire STL Pipeline LLC

Ali Trunzo

From: Irwin, Mike <mike.irwin@dnr.mo.gov>
Sent: Friday, August 05, 2016 11:06 AM
To: Jayme Fuller
Cc: Lori Ferry; Ali Trunzo; Smith, Lorisa; Bax, Stacia
Subject: RE: Spire STL Pipeline
Attachments: Spire.jpg

Hello Jayme,

It appears the existing 880 Line crosses Coldwater Creek, a metropolitan no-discharge stream. I have attached a rudimentary map showing the existing and proposed pipelines and metropolitan no-discharge streams. Neither section of pipeline crosses outstanding national or state resource waters or streams impaired for inorganic sediment, aquatic habitat alteration, or unknown reasons.

I hope this helps. Please let me know if you have any questions or need additional details.

Thank you,

Mike

573-522-1131 (Office) 573-522-9920 (FAX)

Promoting, Protecting and Enjoying our Natural Resources. Learn more at dnr.mo.gov.

From: Jayme Fuller [mailto:J.Fuller@gaiconsultants.com]
Sent: Thursday, August 04, 2016 3:48 PM
To: Irwin, Mike
Cc: Lori Ferry; Ali Trunzo; Smith, Lorisa; Bax, Stacia
Subject: RE: Spire STL Pipeline

Hi Mike,

Please see the attached kmz for the existing Line 880. Again for this line, we are just modifying the line for interstate service in certain locations and planning to bore Cold Water Creek.

Thanks

Jayme L. Fuller, Environmental Manager

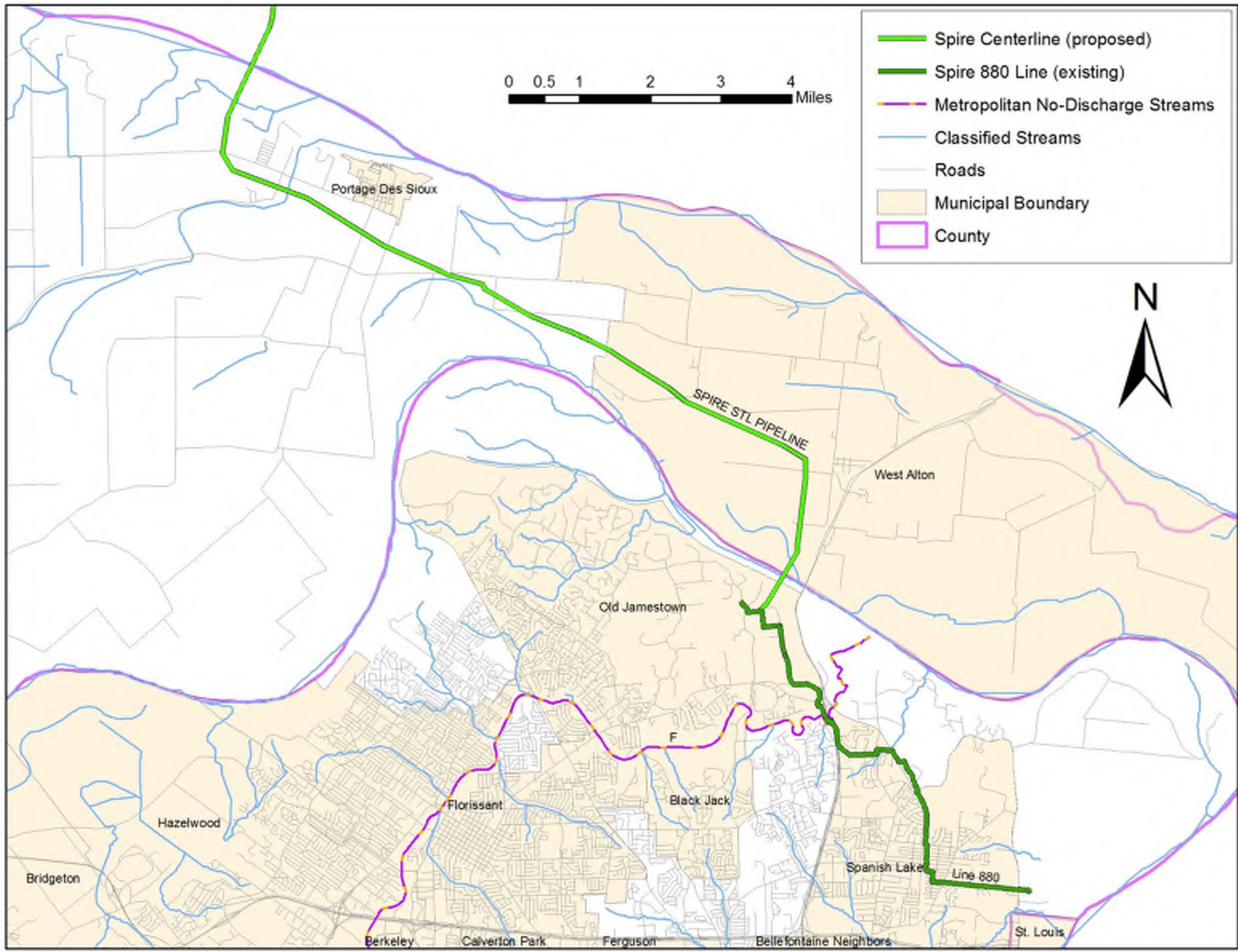
GAI Consultants, Inc.

6420 Castleway West, Indianapolis, IN 46250

1-234-203-0763 | C 614.499.6258 |     

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From: Irwin, Mike [mailto:mike.irwin@dnr.mo.gov]
Sent: Thursday, August 04, 2016 1:14 PM
To: Jayme Fuller <J.Fuller@gaiconsultants.com>
Cc: Lori Ferry <L.Ferry@gaiconsultants.com>; Ali Trunzo <A.Trunzo@gaiconsultants.com>; Smith, Lorisa



- Spire Centerline (proposed)
- Spire 880 Line (existing)
- Metropolitan No-Discharge Streams
- Classified Streams
- Roads
- Municipal Boundary
- County

0 0.5 1 2 3 4 Miles



Portage Des Sioux

SPIRE STL PIPELINE

West Alton

Old Jamestown

Hazelwood

Florissant

Black Jack

Spanish Lake

Line 880

Bridgeton

Berkeley

Calverton Park

Ferguson

Bellefontaine Neighbors

St. Louis

Ali Trunzo

From: Jayme Fuller
Sent: Thursday, August 04, 2016 4:48 PM
To: Irwin, Mike
Cc: Lori Ferry; Ali Trunzo; Smith, Lorisa; Bax, Stacia
Subject: RE: Spire STL Pipeline
Attachments: Line_880.kmz

Hi Mike,

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Thanks

Jayme L. Fuller, Environmental Manager

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6420 Castleway West, Indianapolis, IN 46250

1-234-203-0763 | C 614.499.6258 |     

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From: Irwin, Mike [mailto:mike.irwin@dnr.mo.gov]
Sent: Thursday, August 04, 2016 1:14 PM
To: Jayme Fuller <J.Fuller@gaiconsultants.com>
Cc: Lori Ferry <L.Ferry@gaiconsultants.com>; Ali Trunzo <A.Trunzo@gaiconsultants.com>; Smith, Lorisa <Lorisa.Smith@dnr.mo.gov>; Bax, Stacia <stacia.bax@dnr.mo.gov>
Subject: RE: Spire STL Pipeline

Hello Jayme,

Based on the provided KMZ file, it appears the new portions of the proposed pipeline do not cross any Metropolitan No-Discharge Streams or any streams that are impaired for inorganic sediment, aquatic habitat alteration, or unknown as impairment.

I could not locate the existing portion of the pipeline in the KMZ file, but as mentioned yesterday, it appears to cross Coldwater Creek, a Metropolitan No-Discharge Stream.

Please let me know if you have any additional questions, comments, or concerns.

Thank you,

Mike

573-522-1131 (Office) 573-522-9920 (FAX)

Promoting, Protecting and Enjoying our Natural Resources. Learn more at dnr.mo.gov.

From: Irwin, Mike
Sent: Thursday, August 04, 2016 10:06 AM

To: 'Jayme Fuller'
Cc: Lori Ferry; Ali Trunzo; Smith, Lorisa; Bax, Stacia
Subject: RE: Spire STL Pipeline

Hello Jayme,

Thank you for providing the KMZ file of the proposed pipeline centerline. You can search for and download shapefiles for Metro No Discharge Streams, Metro No Discharge Watersheds, and Missouri 2014 Section 305b Waters at the following link for the Missouri Spatial Data Information System (MSDIS):

<http://geoportal.missouri.edu/geoportal/catalog/search/search.page> Due to DNR file transfer protocols, direct download from MSDIS is likely an easier option, but let me know if you have any difficulties.

As requested, I have attached an MS Excel spreadsheet containing worksheets for adverse impacts (debits) and mitigation credit calculations. Here is a link to the Missouri Stream Mitigation Method document:

<http://www.mvs.usace.army.mil/Portals/54/docs/regulatory/mitigation/Amended%20Missouri%20Stream%20Mitigation%20Method%20April%202013.pdf>

It was a pleasure meeting you, and I look forward to working with you. Please let me know if you have any additional questions, comments, or concerns.

Respectfully,

Mike Irwin, Environmental Scientist
Clean Water Act Section 401 Water Quality Certification, Operating Permits Section, Water Protection Program
Missouri Department of Natural Resources
PO BOX 176, 1101 Riverside Dr., Jefferson City, MO 65102

573-522-1131 (Office) 573-522-9920 (FAX)
mike.irwin@dnr.mo.gov

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From: Jayme Fuller [<mailto:J.Fuller@gaiconsultants.com>]
Sent: Thursday, August 04, 2016 9:35 AM
To: Irwin, Mike; Smith, Lorisa
Cc: Lori Ferry; Ali Trunzo
Subject: Spire STL Pipeline

Hi Mike and Lorisa,

Thanks again for taking the time to meet with us yesterday to discuss the project. I wanted to follow up with you and provide you a google earth file of the proposed pipeline centerline.

Also Mike I wanted to check to see if you could send me the mitigation spreadsheet for credit calculation. I would like to familiarize myself with your spreadsheet early in the process.

Thanks and look forward to working with you.

Jayme L. Fuller, Environmental Manager

GAI Consultants, Inc.

6420 Castleway West, Indianapolis, IN 46250

Ali Trunzo

From: Jayme Fuller
Sent: Thursday, August 04, 2016 10:35 AM
To: mike.irwin@dnr.mo.gov; Smith, Lorisa
Cc: Lori Ferry; Ali Trunzo
Subject: Spire STL Pipeline
Attachments: MM_Spire_STL_Proposed_Centerline_KMZ.KMZ

Hi Mike and Lorisa,

Thanks again for taking the time to meet with us yesterday to discuss the project. I wanted to follow up with you and provide you a google earth file of the proposed pipeline centerline.

Also Mike I wanted to check to see if you could send me the mitigation spreadsheet for credit calculation. I would like to familiarize myself with your spreadsheet early in the process.

Thanks and look forward to working with you.

Jayme L. Fuller, Environmental Manager

GAI Consultants, Inc.

6420 Castleway West, Indianapolis, IN 46250

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July 29, 2016

Ms. Sara Parker Pauley
Director
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

**Re: Notice of Use of Pre-Filing Process
Spire STL Pipeline
Scott, Greene, and Jersey Counties, IL
St. Charles and St. Louis Counties, MO**

Dear Ms. Pauley:

Spire STL Pipeline LLC ("Spire") is in the planning stages of the Spire STL Pipeline ("Project"). As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project as proposed will consist of approximately 60 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC ("REX") pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri until crossing the Missouri river and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880 from LGC and modify approximately nine miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("MRT") pipeline along the western bank of the Mississippi river in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles.

Construction and operation of the proposed Project will be regulated by the Federal Energy Regulatory Commission ("Commission") among other regulatory agencies. Spire intends to utilize the Commission's pre-filing process detailed in Section 157.21 of the Commission's regulations, which allows the Commission and other agencies to initiate National Environmental Policy Act ("NEPA") review prior to Spire filing an application to the Commission. The Commission would need to issue Spire a Certificate of Public Convenience and Necessity to enable construction and operation of the proposed pipeline. The preliminary Project schedule includes the following target dates:

- July 22, 2016 - Commission acceptance into pre-filing; commencement of the NEPA process (pre-filing docket no. PF16-9-000);
- August 2016 (Anticipated) - biological and cultural resource surveys;
- January 2017 (Anticipated) - file final application with Commission;
- August 2017 (Anticipated) - NEPA document published;
- November 2017 (Anticipated) - Commission decision on application; and
- February 2018 (Anticipated) - commence construction activities.

On behalf of Spire, GAI would like to take this opportunity to invite the Missouri Department of Natural Resources to participate in the review of this Project as a cooperating agency during the Commission's pre-filing process. We look forward to your involvement in the review of this important Project and appreciate your cooperation.

Please note the intent of this letter is solely for the purpose of inviting you to participate in the Commission's NEPA pre-filing process. The Commission will also reach out to you requesting your agency to be a cooperating agency. Specific and necessary consultations and/or applicable permit applications will be addressed to you under separate cover.

If you have any questions or would like additional information, please feel free to contact me at 331.301.2002 or by e-mail at L.Ferry@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

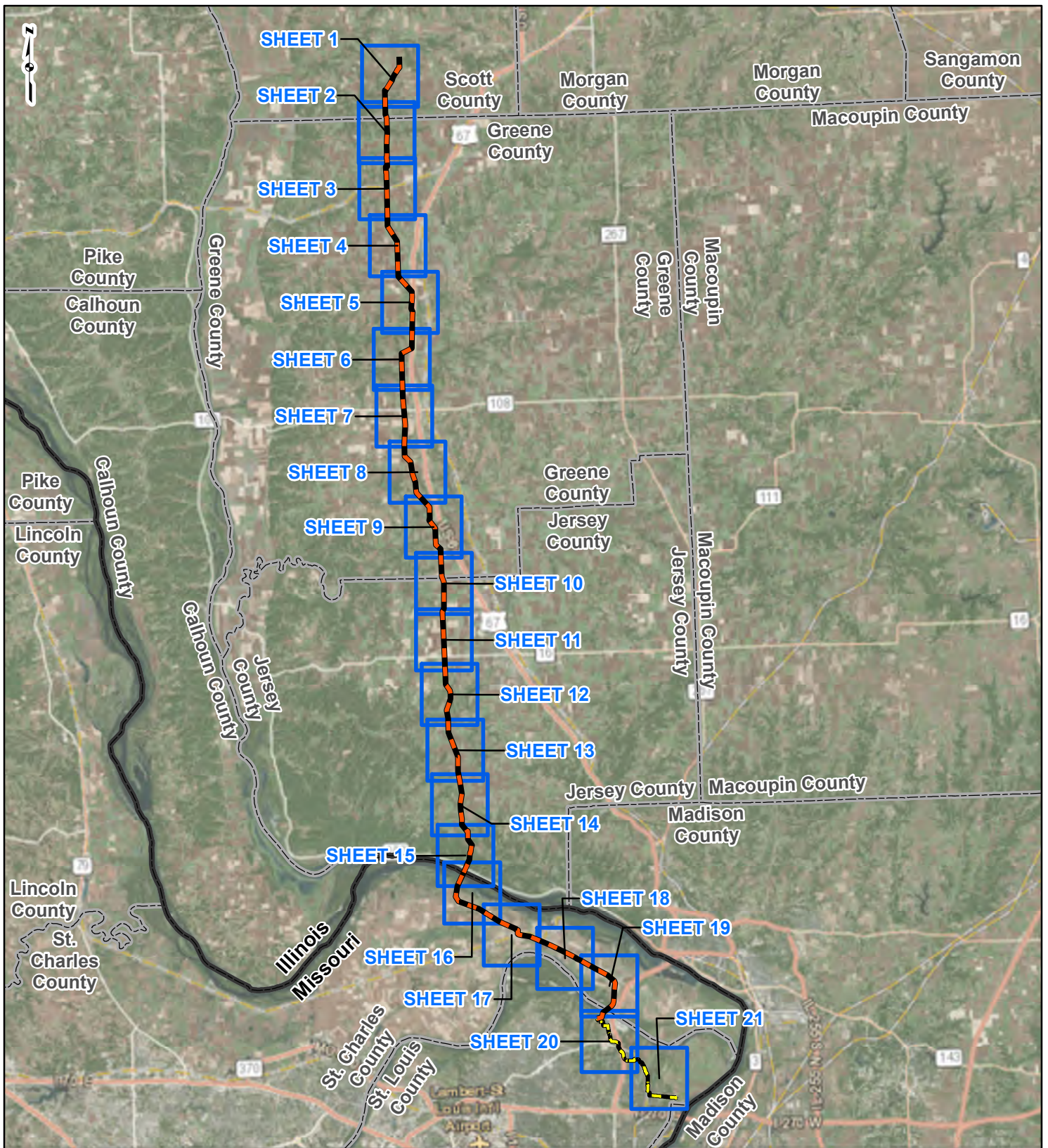
A handwritten signature in black ink that reads "Lori M. Ferry". The signature is written in a cursive, flowing style.

Lori M. Ferry
Environmental Project Manager

LMF/gmg

Attachment: United States Geological Survey (USGS) Topographic Map (Figure 1)

ATTACHMENT
USGS TOPOGRAPHIC MAP (FIGURE 1)



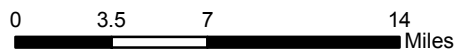
PROJECT LOCATION



SCOTT, GREENE AND JERSEY COUNTIES, ILLINOIS AND ST. CHARLES AND ST. LOUIS COUNTIES, MISSOURI

LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY
- SHEET INDEX

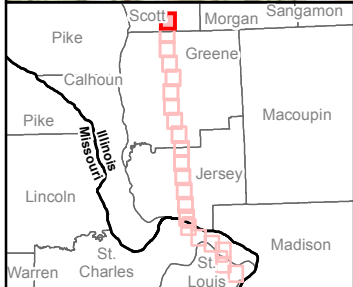
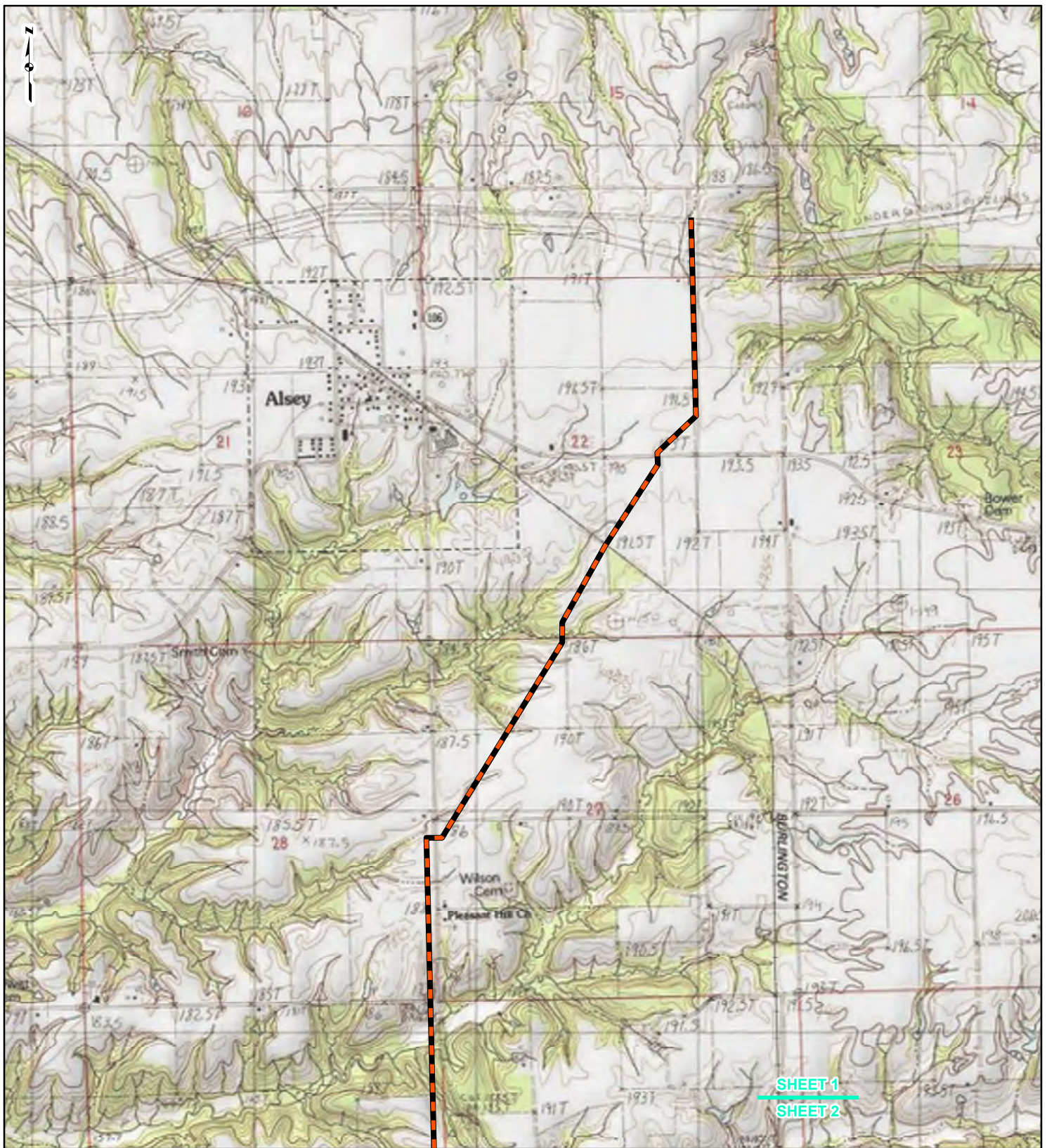


**FIGURE 1
LOCATION MAP
SHEET INDEX**



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: ESRI WORLD IMAGERY AND TRANSPORTATION, NAIP, USDA FSA, 2015, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 1 OF 21

DRAWN BY: PMH DATE: 7/28/2016
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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.

SHEET 1
SHEET 2



SHEET 2
SHEET 3



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

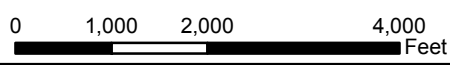
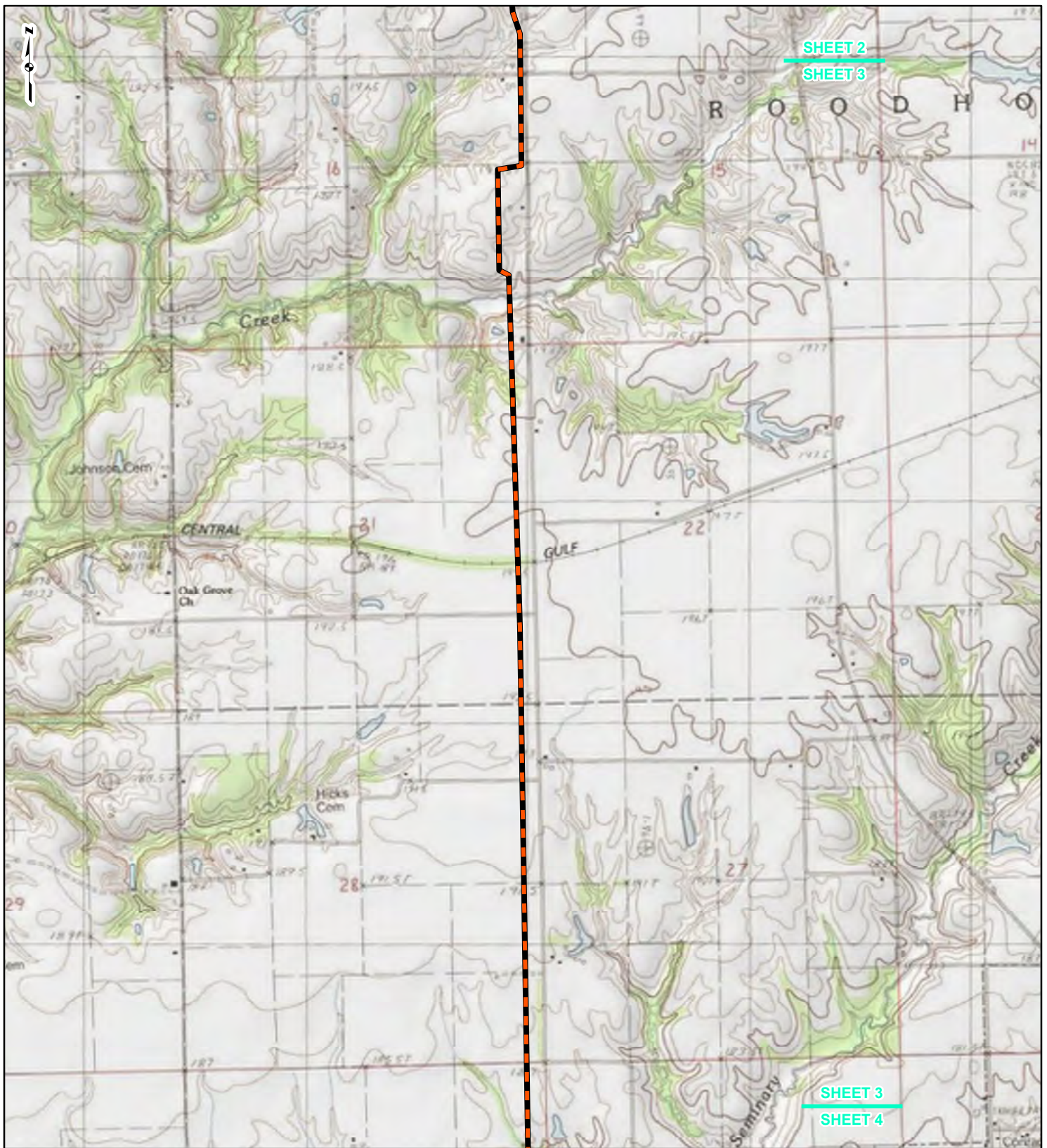


FIGURE 1 LOCATION MAP SHEET 2 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.

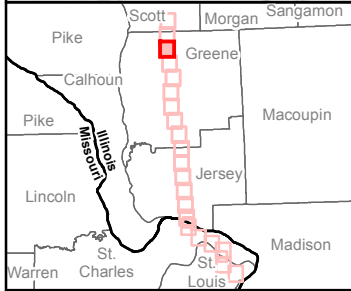


SHEET 2





SHEET 3

SHEET 3

SHEET 4



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

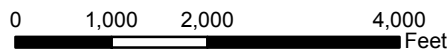
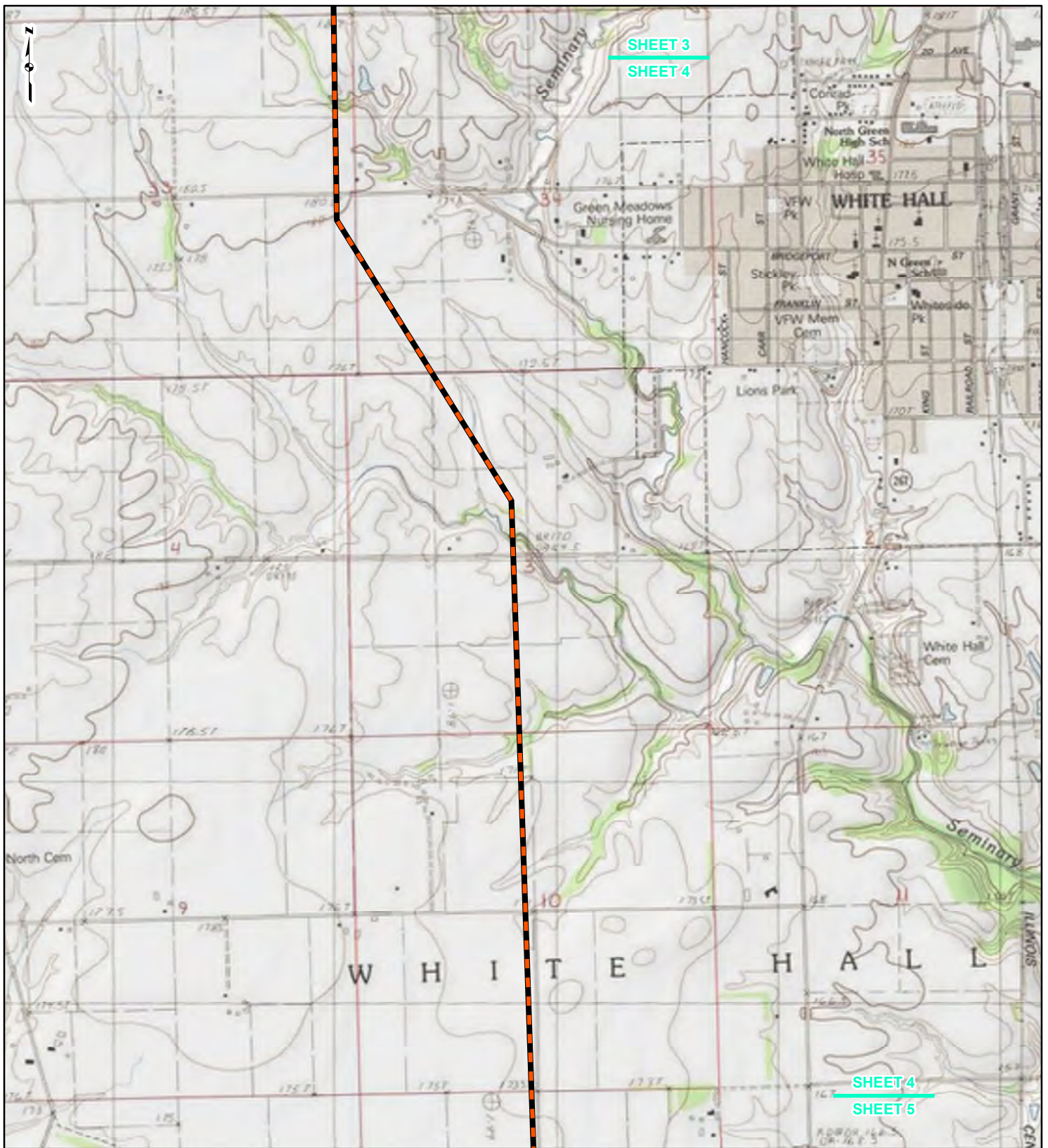


FIGURE 1
LOCATION MAP
SHEET 3 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

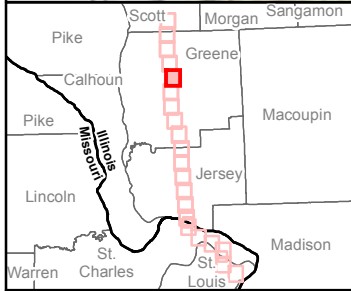
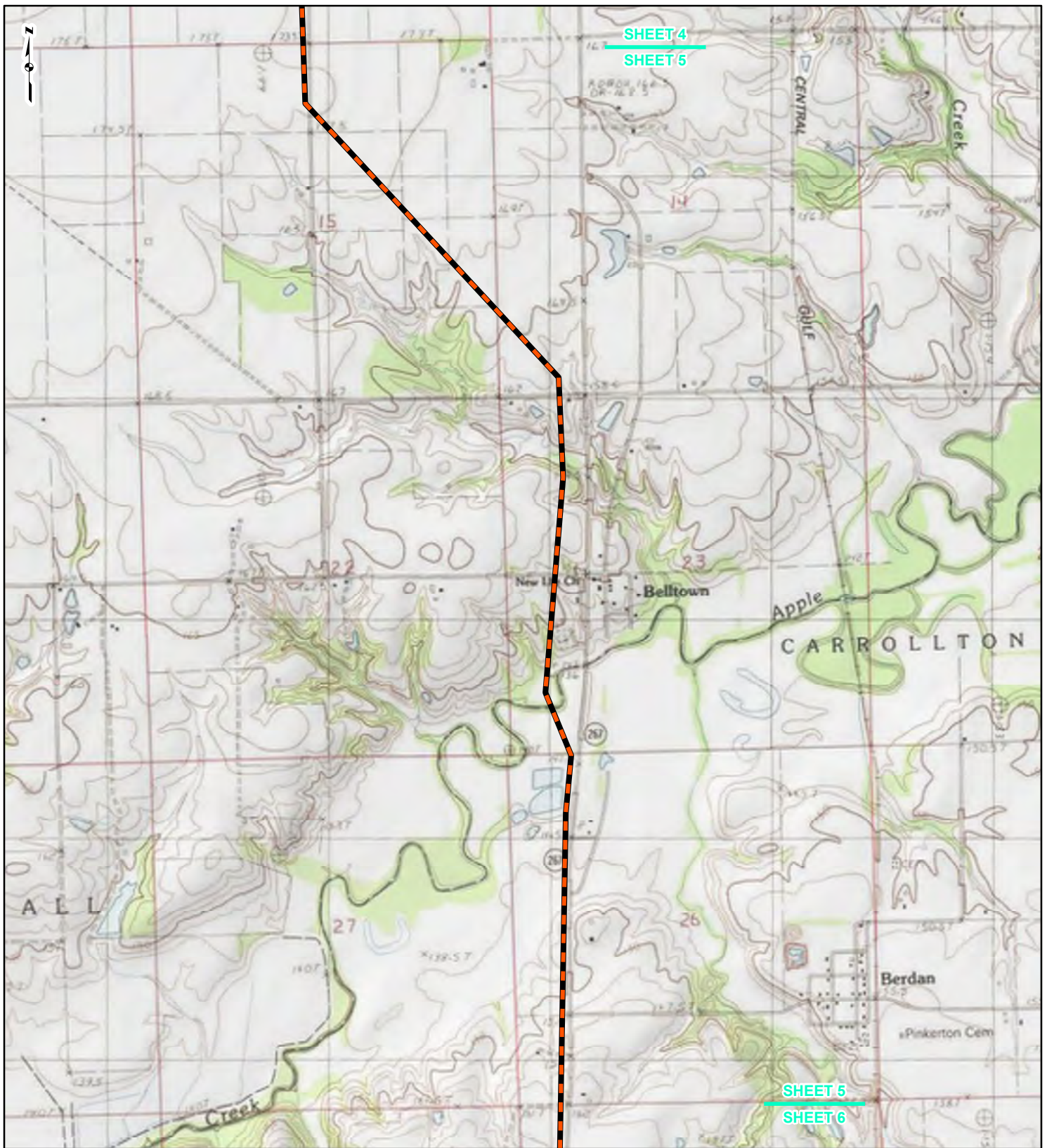
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Feet

FIGURE 1
LOCATION MAP
SHEET 4 OF 21

Spire STL Pipeline

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LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

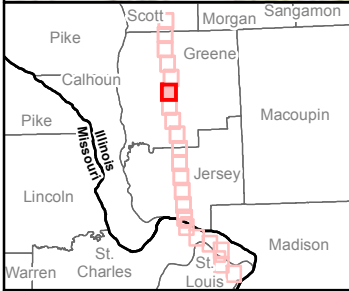
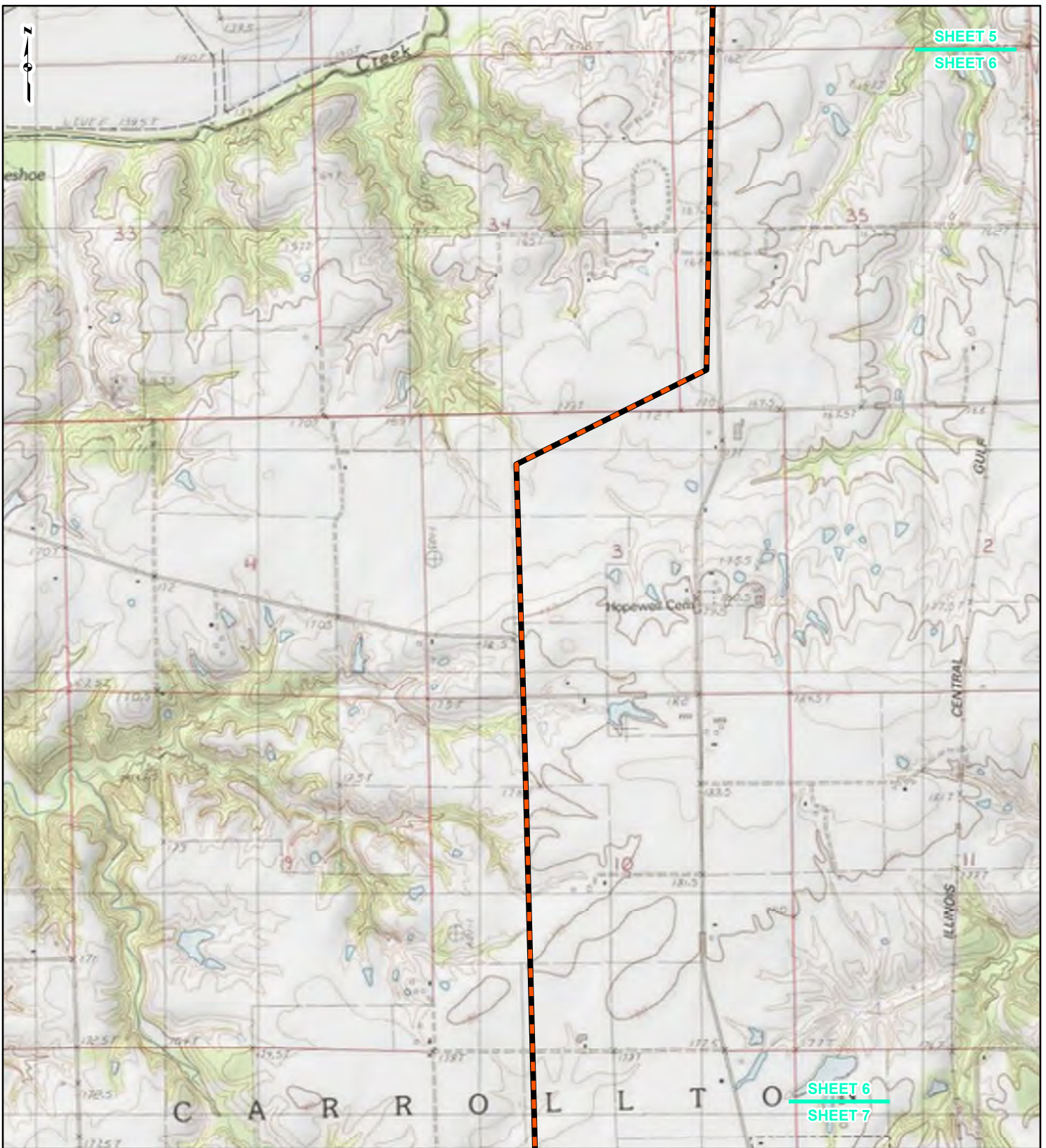
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FIGURE 1
LOCATION MAP
SHEET 5 OF 21







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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

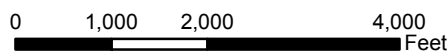
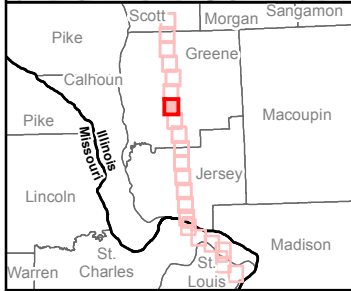
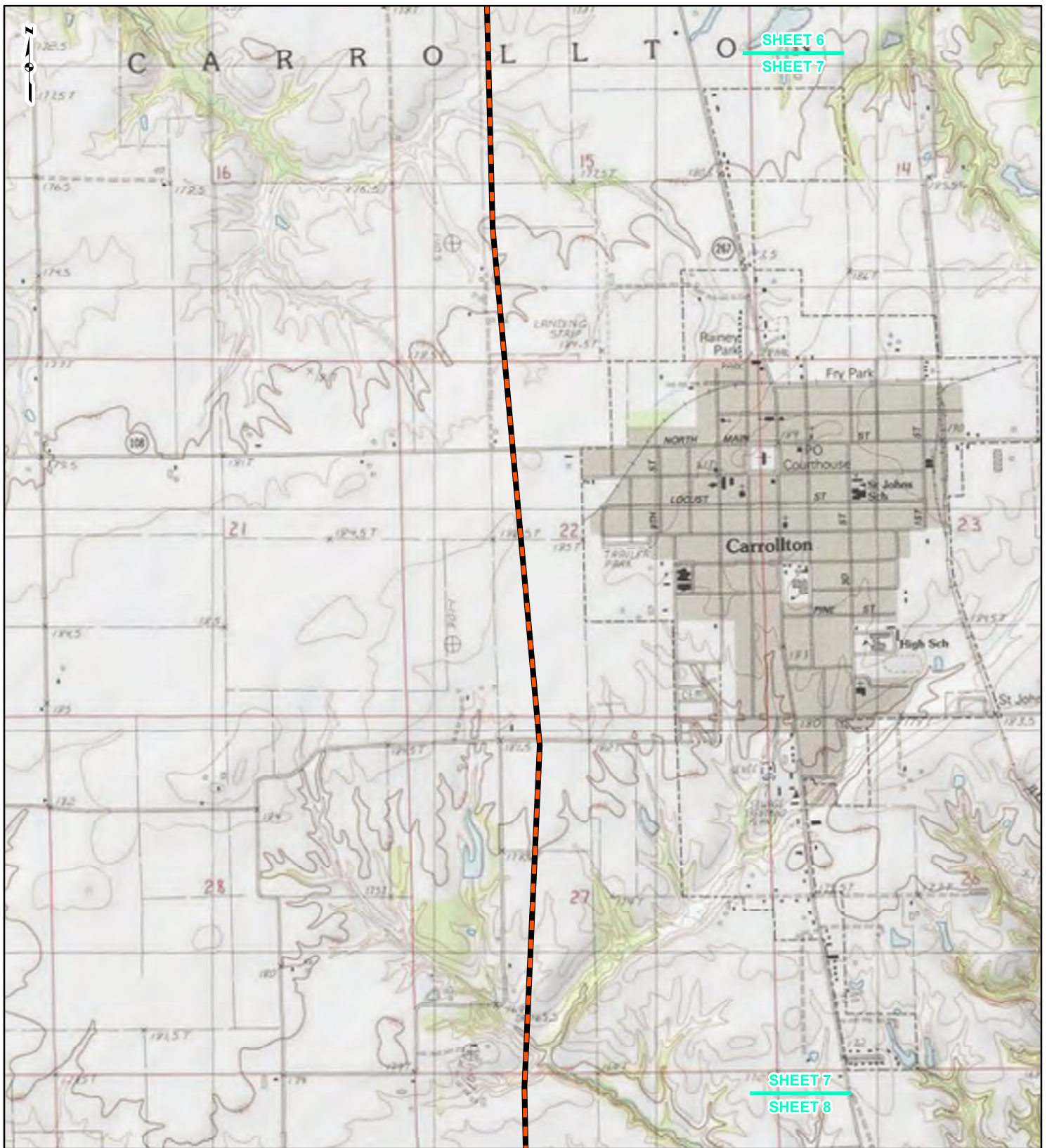


FIGURE 1
LOCATION MAP
SHEET 6 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

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FIGURE 1
LOCATION MAP
SHEET 7 OF 21

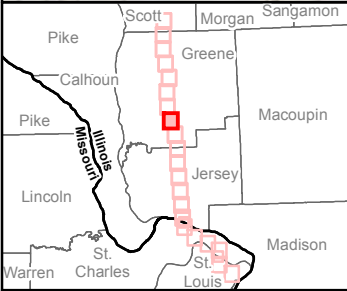
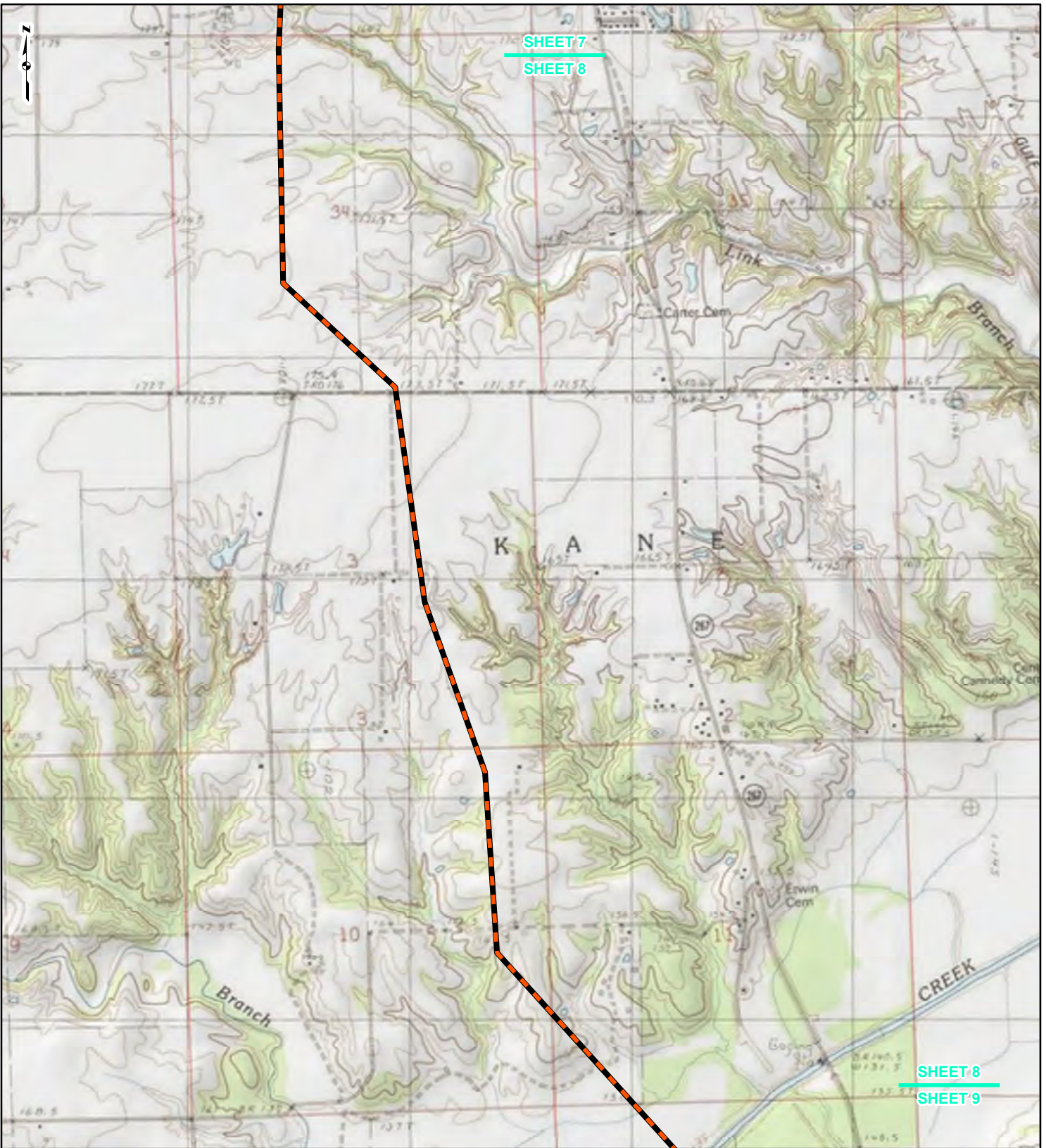
Spire STL Pipeline

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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.

SHEET 7
SHEET 8

SHEET 8
SHEET 9



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

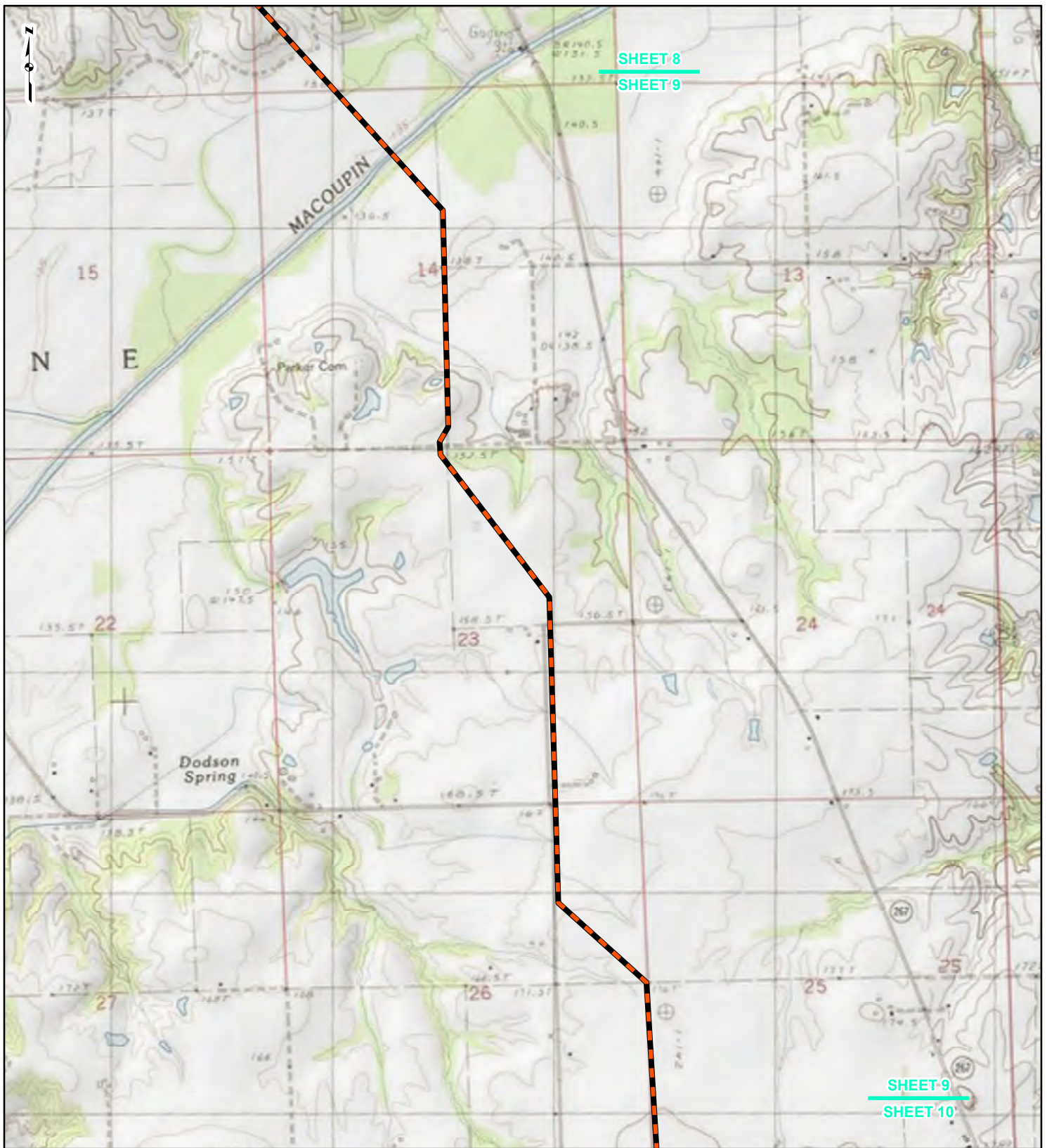
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FIGURE 1
LOCATION MAP
SHEET 8 OF 21

Spire STL Pipeline

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LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

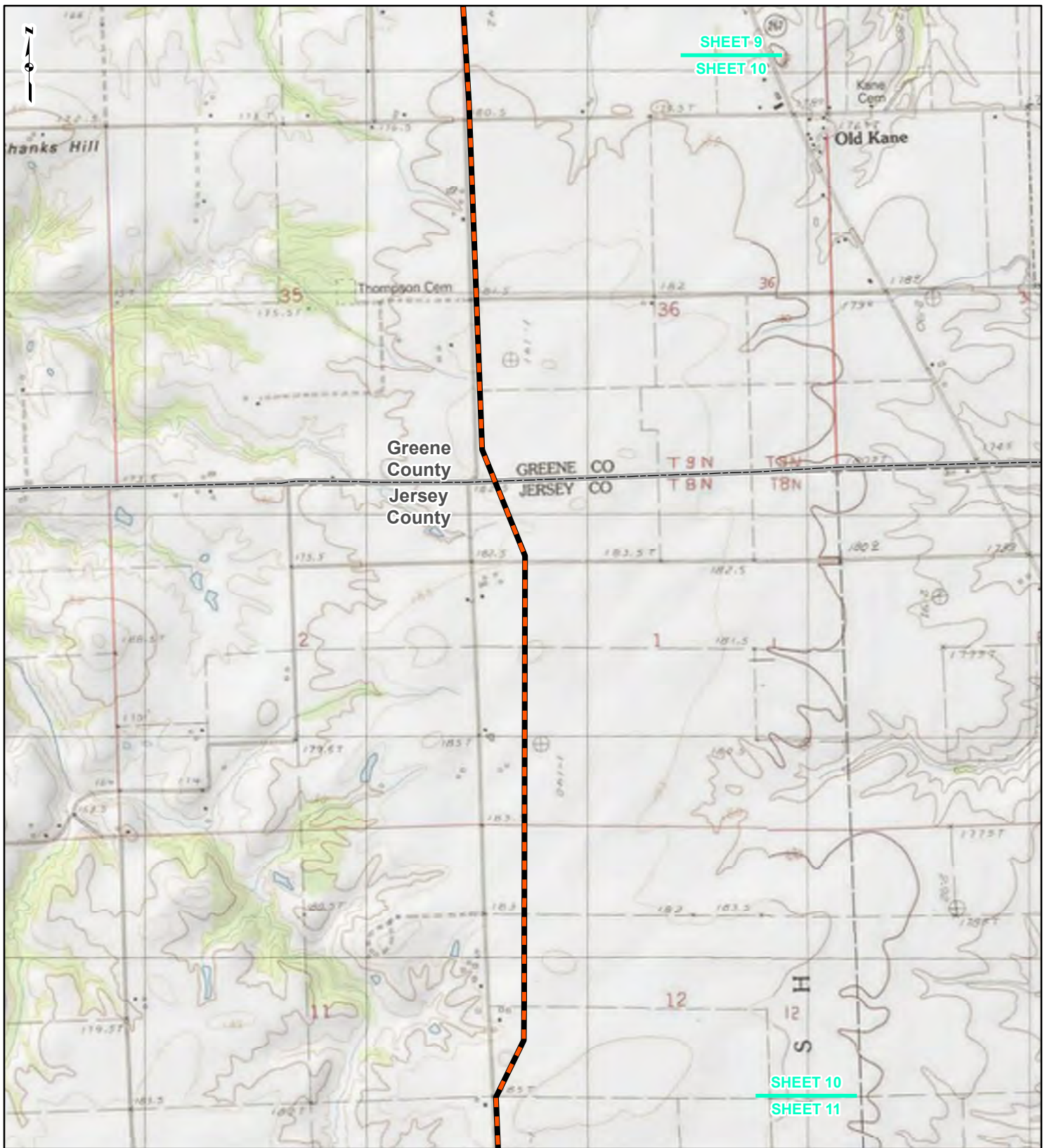
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FIGURE 1
LOCATION MAP
SHEET 9 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.

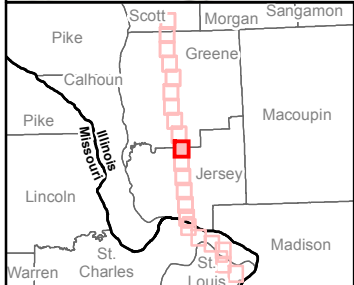


SHEET 9
SHEET 10

SHEET 10
SHEET 11

Greene
County
Jersey
County

GREENE CO T 9 N T 8 N
JERSEY CO T 8 N T 8 N



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

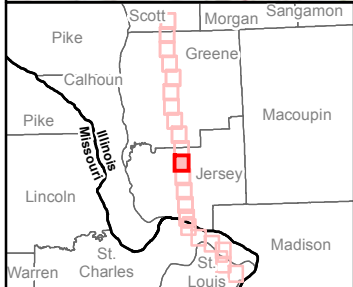
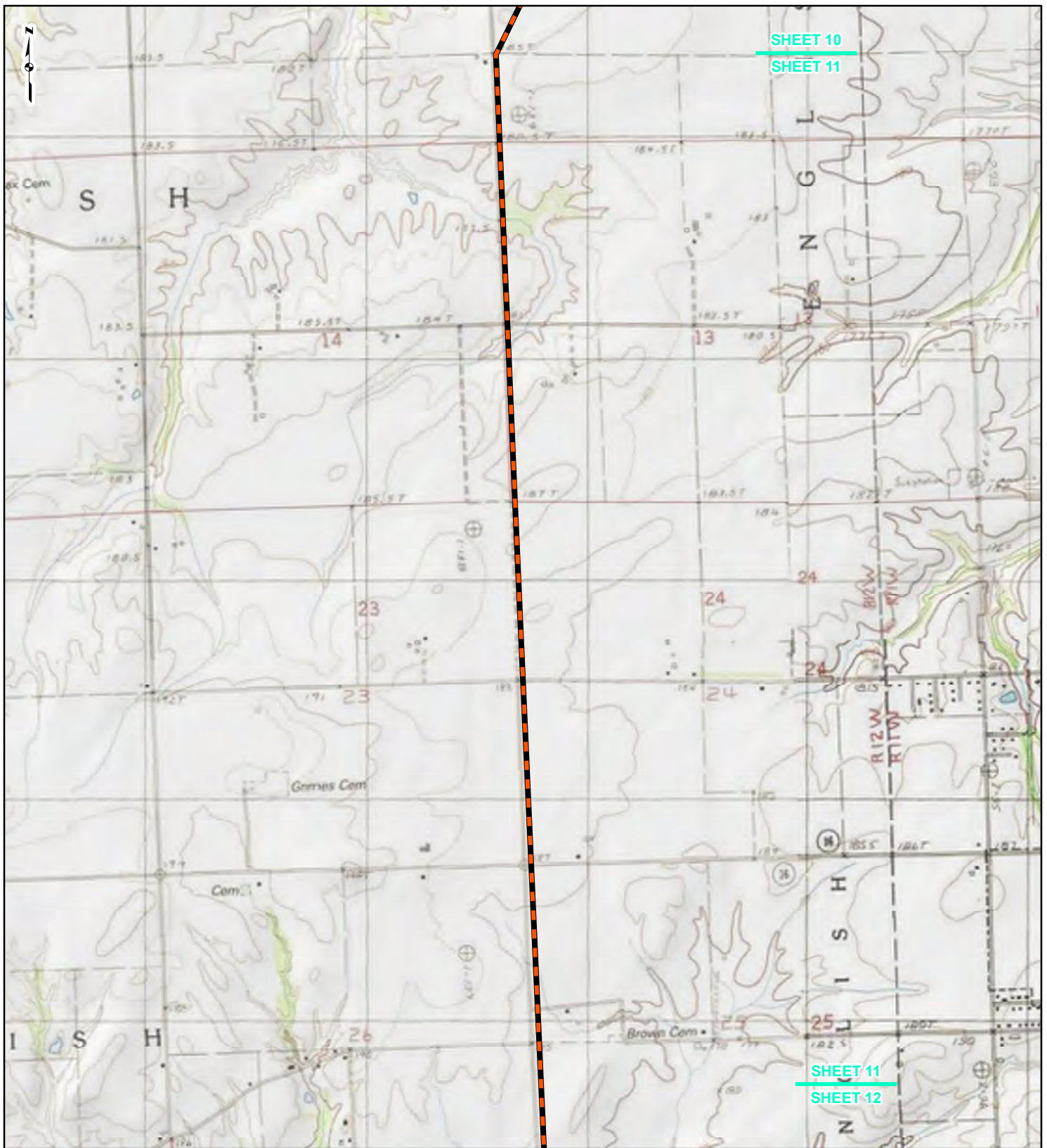
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Feet

FIGURE 1
LOCATION MAP
SHEET 10 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

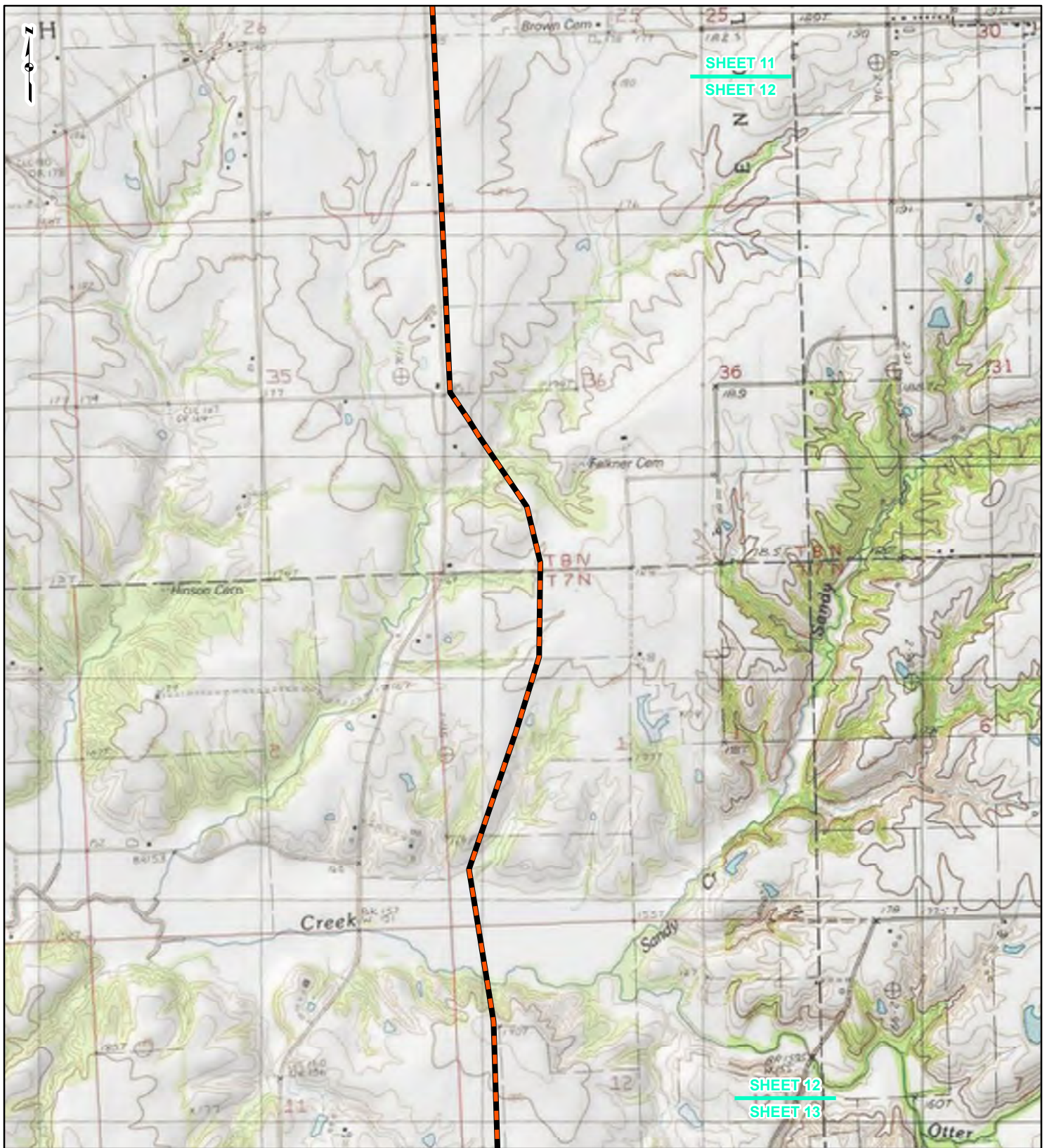
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FIGURE 1
LOCATION MAP
SHEET 11 OF 21



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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.

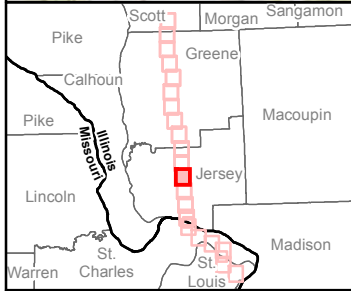


SHEET 11

SHEET 12

SHEET 12

SHEET 13



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

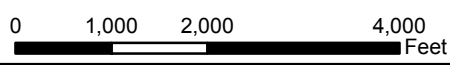
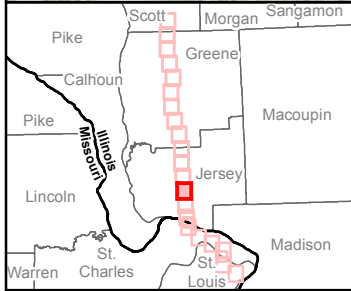
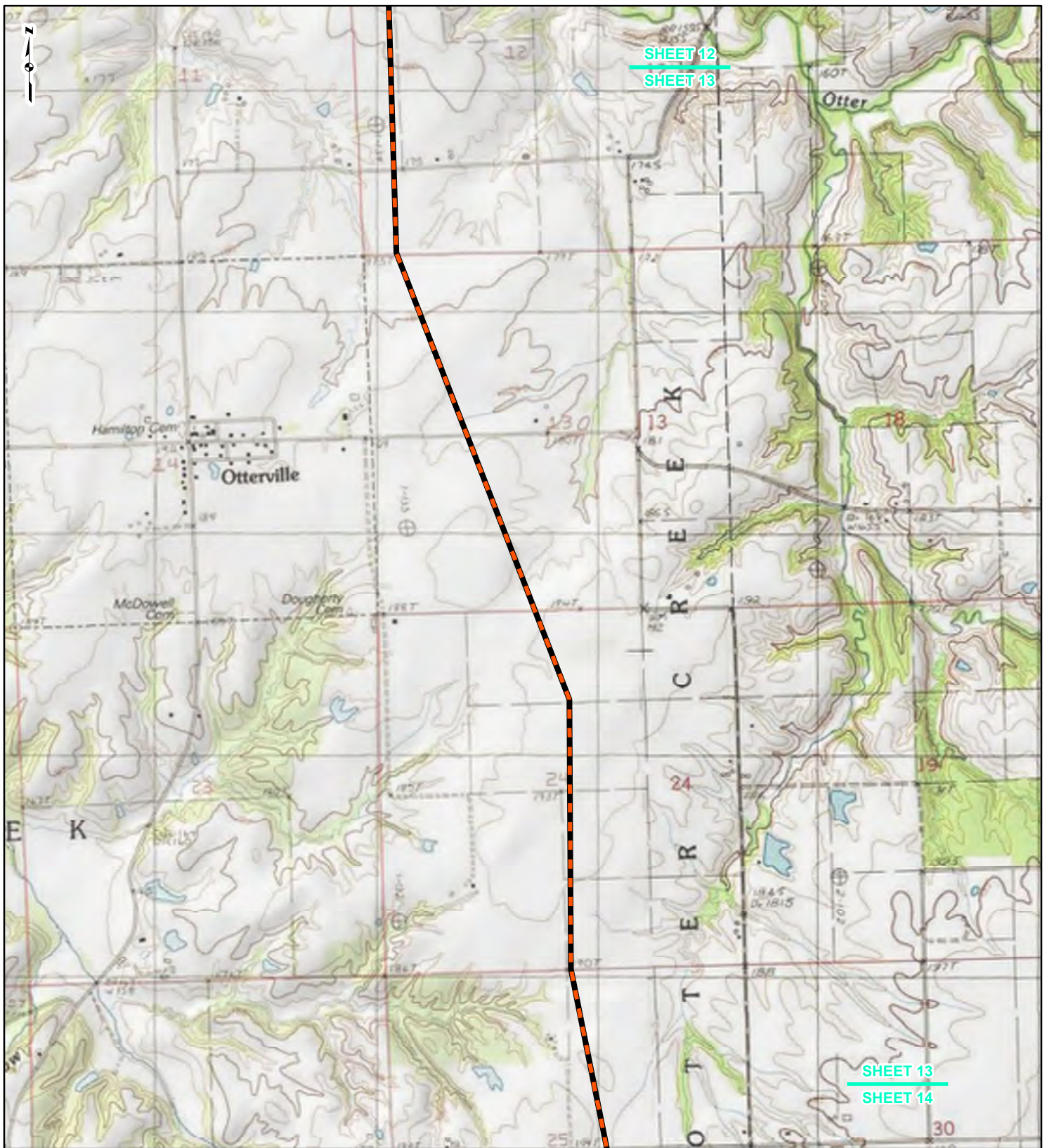


FIGURE 1
LOCATION MAP
SHEET 12 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

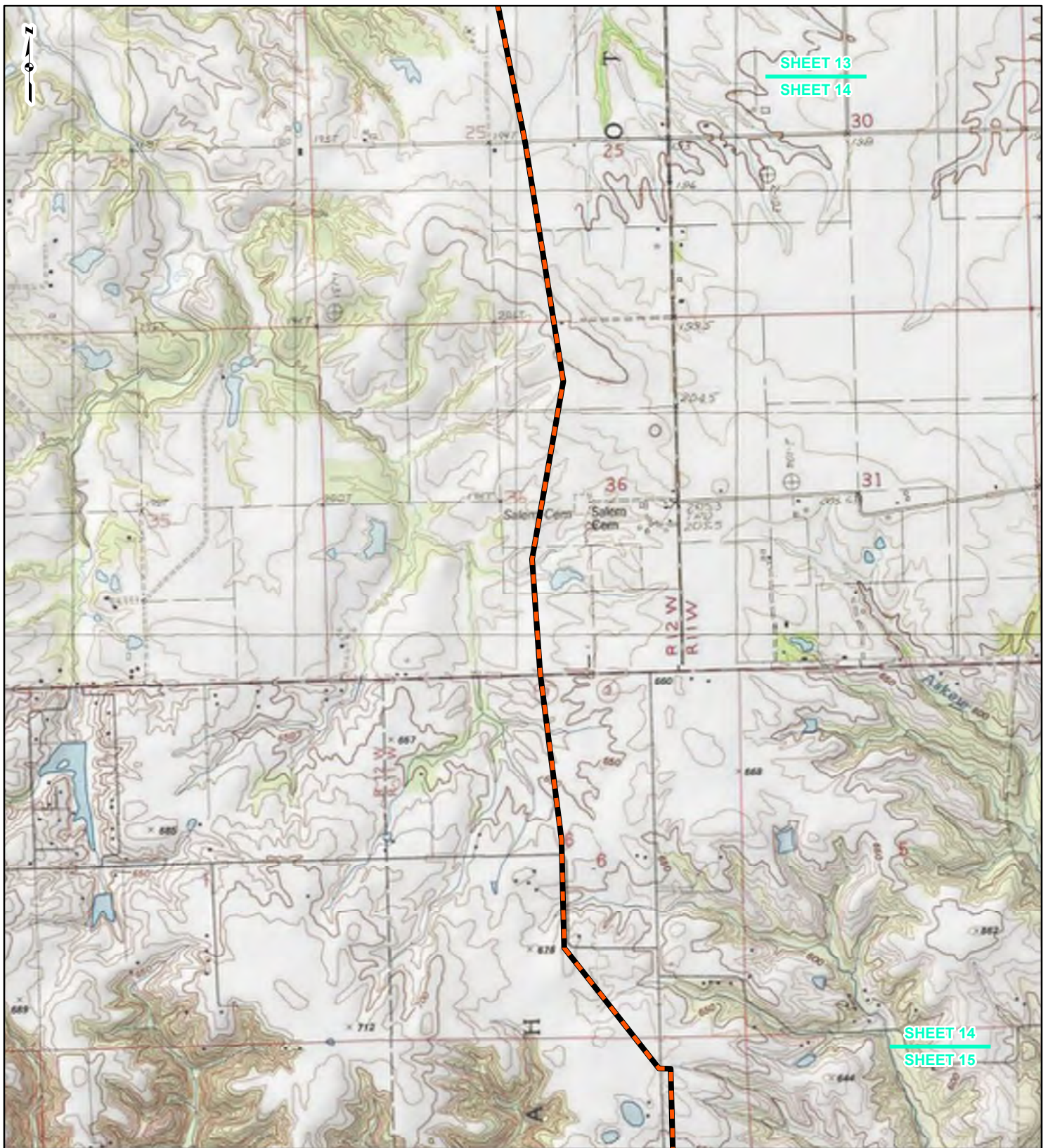
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FIGURE 1
LOCATION MAP
SHEET 13 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



SHEET 13





SHEET 14

SHEET 14

SHEET 15



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

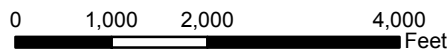


FIGURE 1
LOCATION MAP
SHEET 14 OF 21



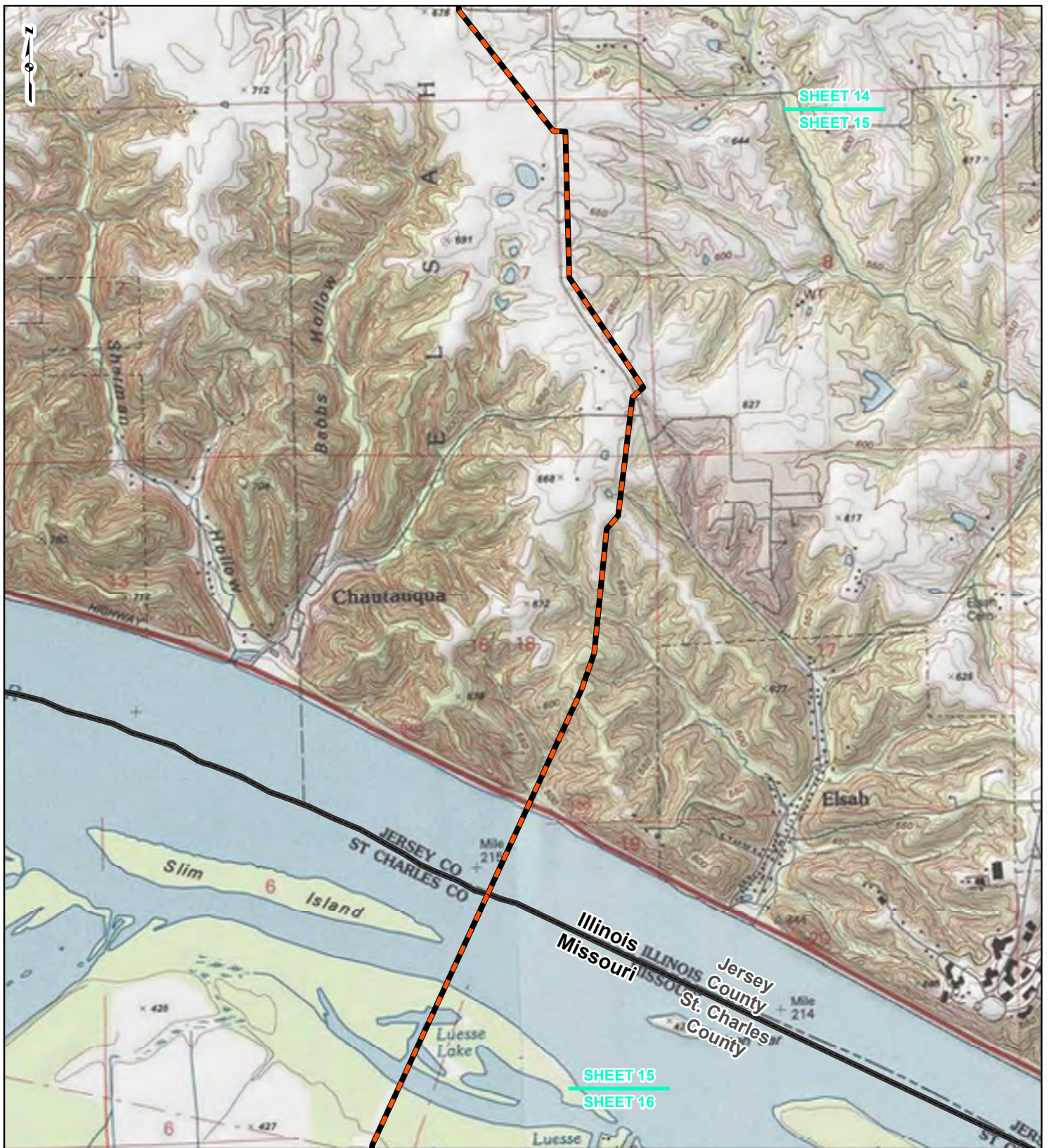
Spire STL Pipeline



DRAWN BY: PMH
CHECKED: SWW

DATE: 7/28/2016
APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 14
SHEET 15

SHEET 15
SHEET 16



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

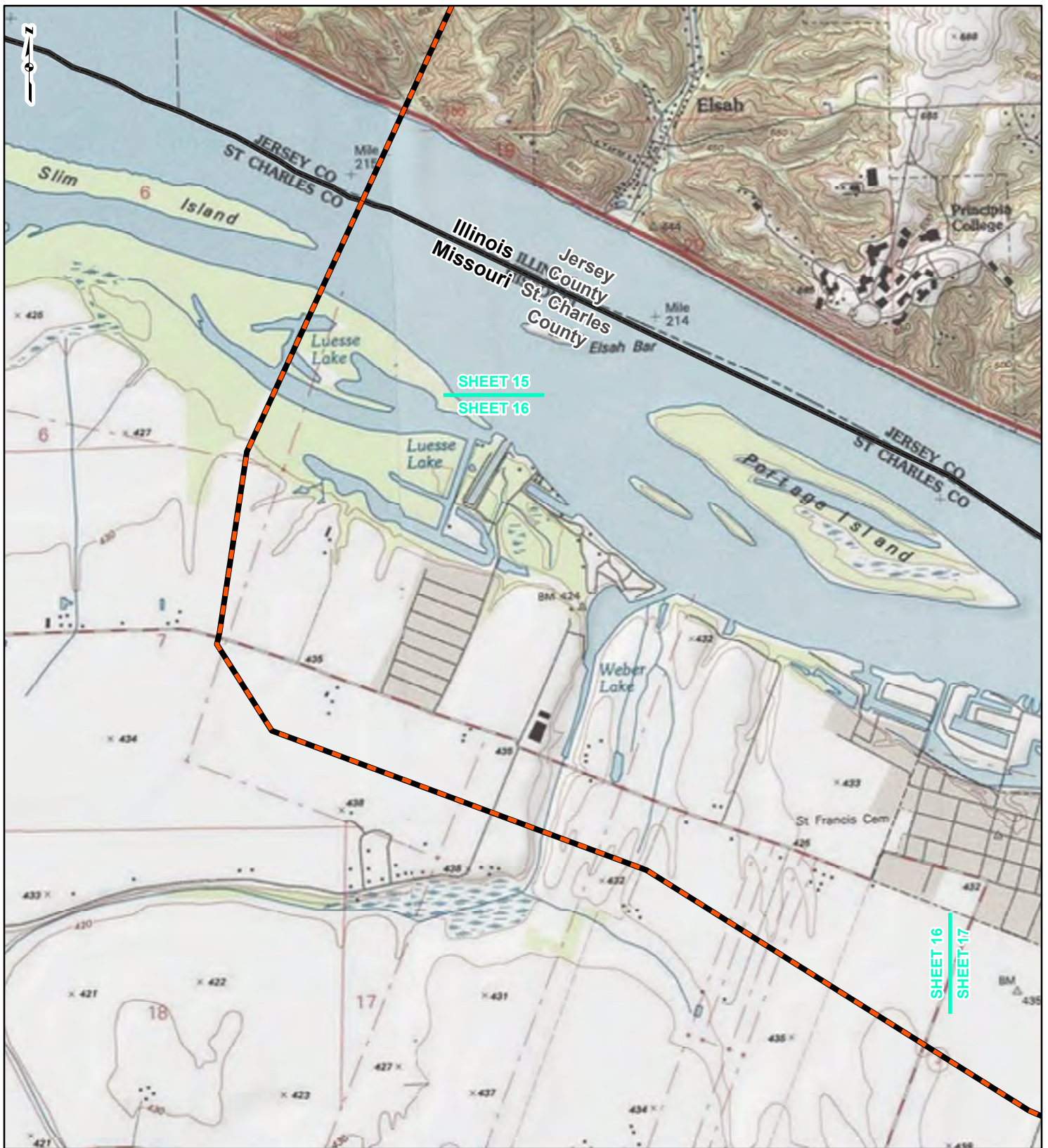
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FIGURE 1
LOCATION MAP
SHEET 15 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



SHEET 15
SHEET 16

SHEET 16
SHEET 17



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

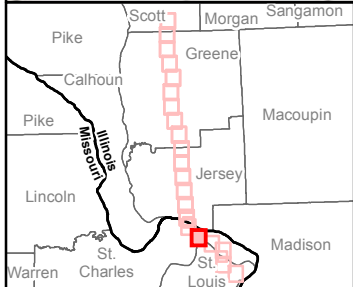
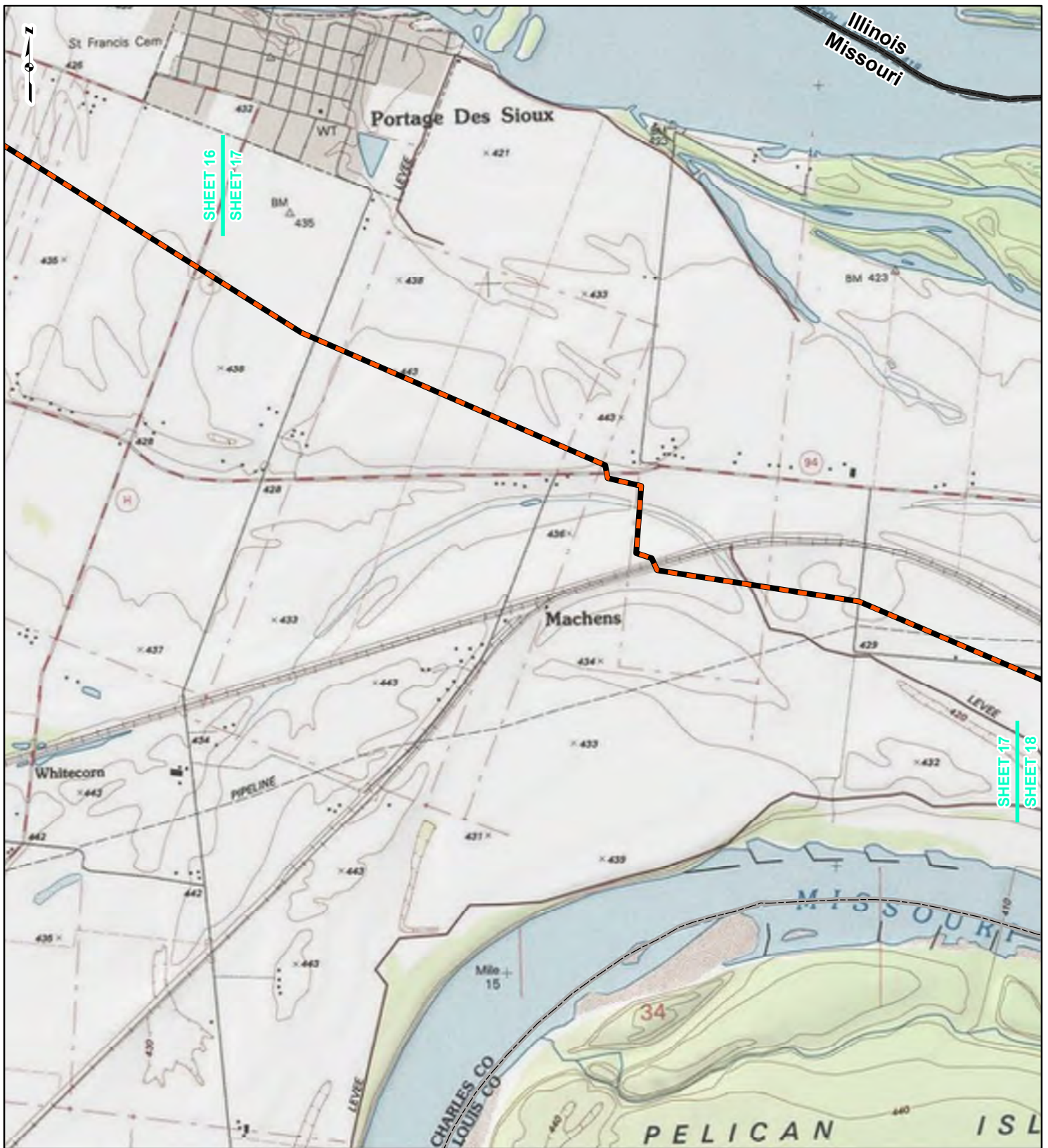
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FIGURE 1
LOCATION MAP
SHEET 16 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

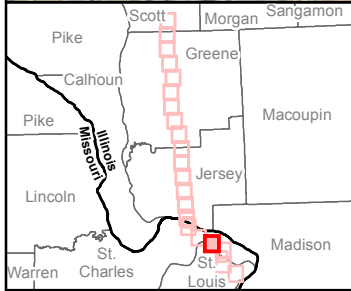
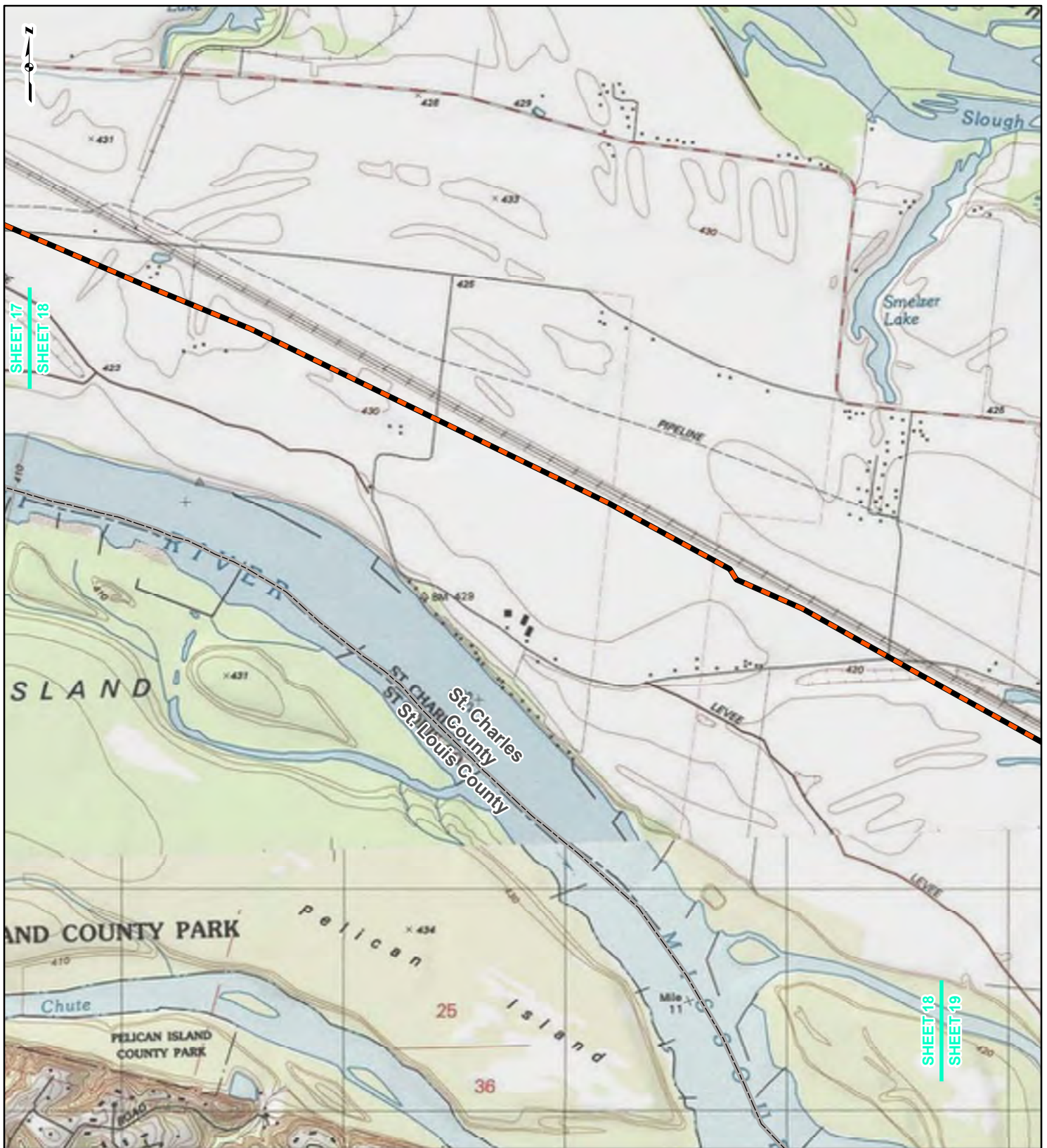
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Feet

FIGURE 1
LOCATION MAP
SHEET 17 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

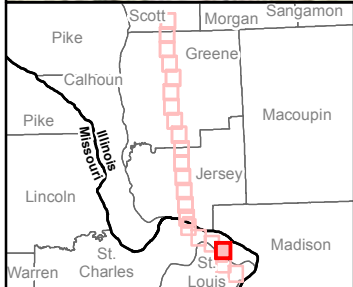
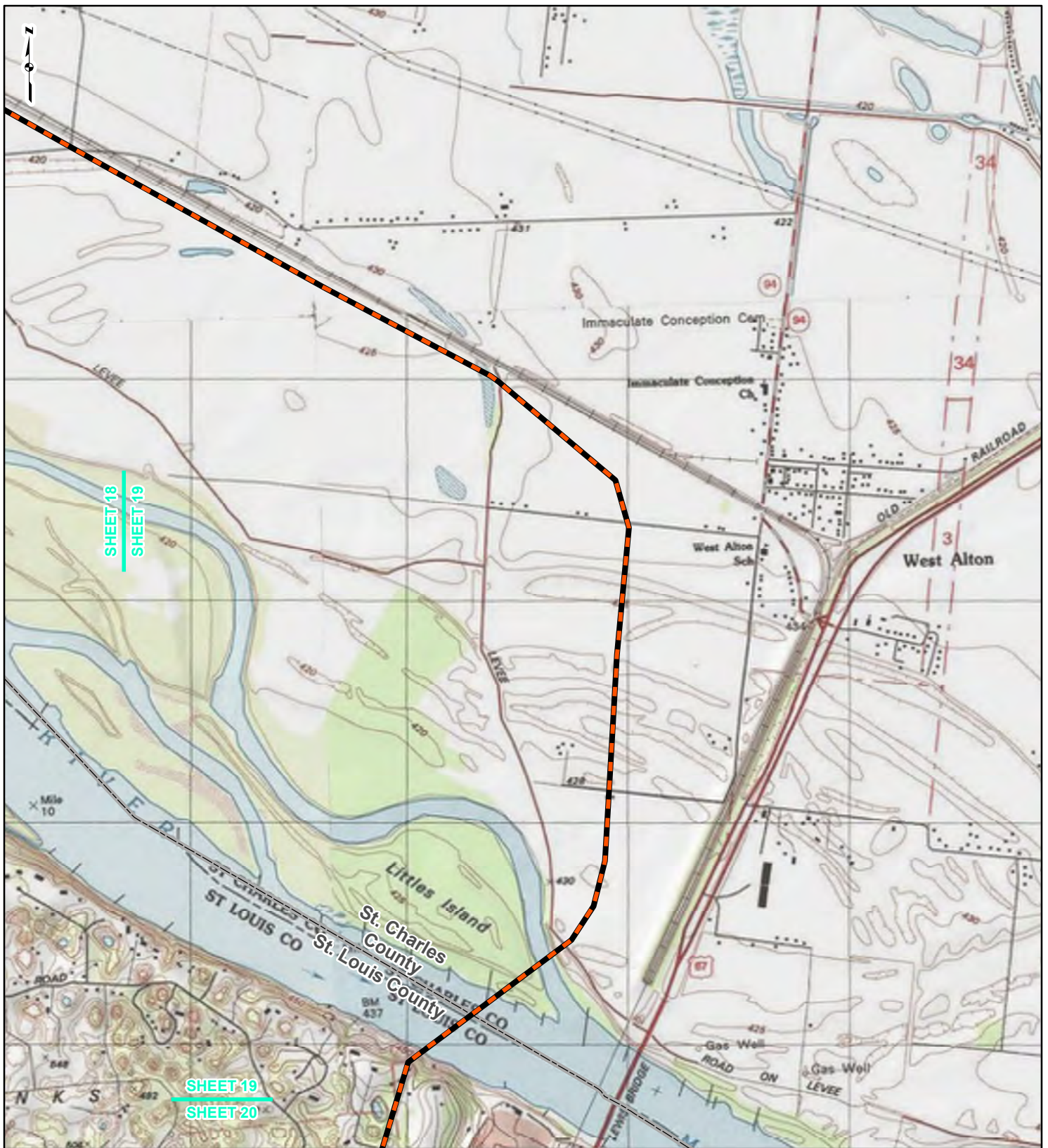
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Feet

**FIGURE 1
LOCATION MAP
SHEET 18 OF 21**

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ELSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

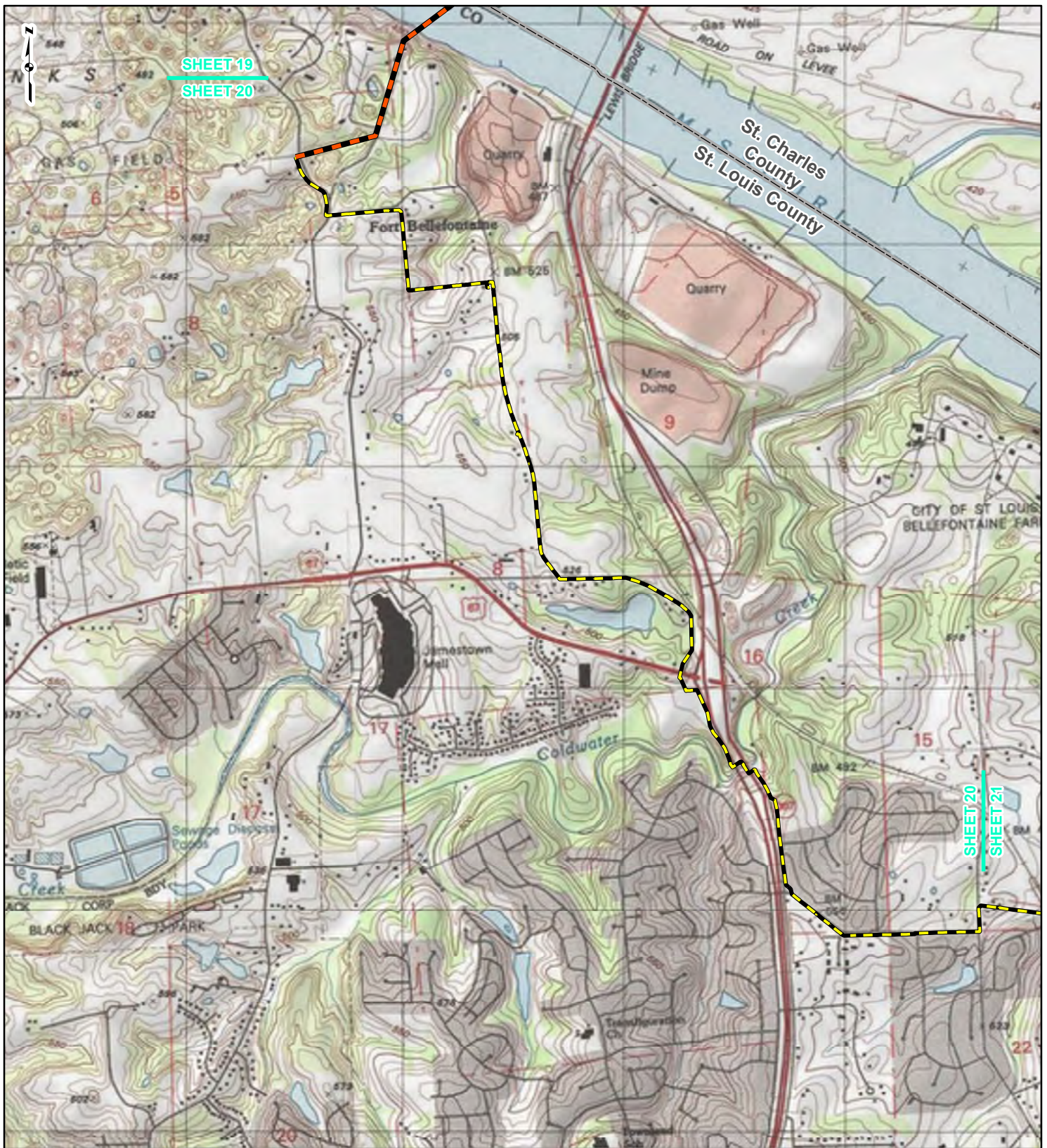
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 19 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

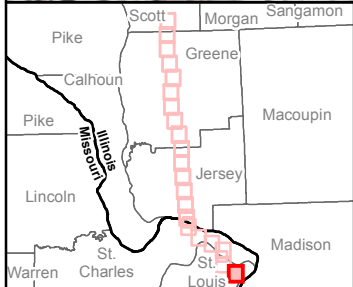
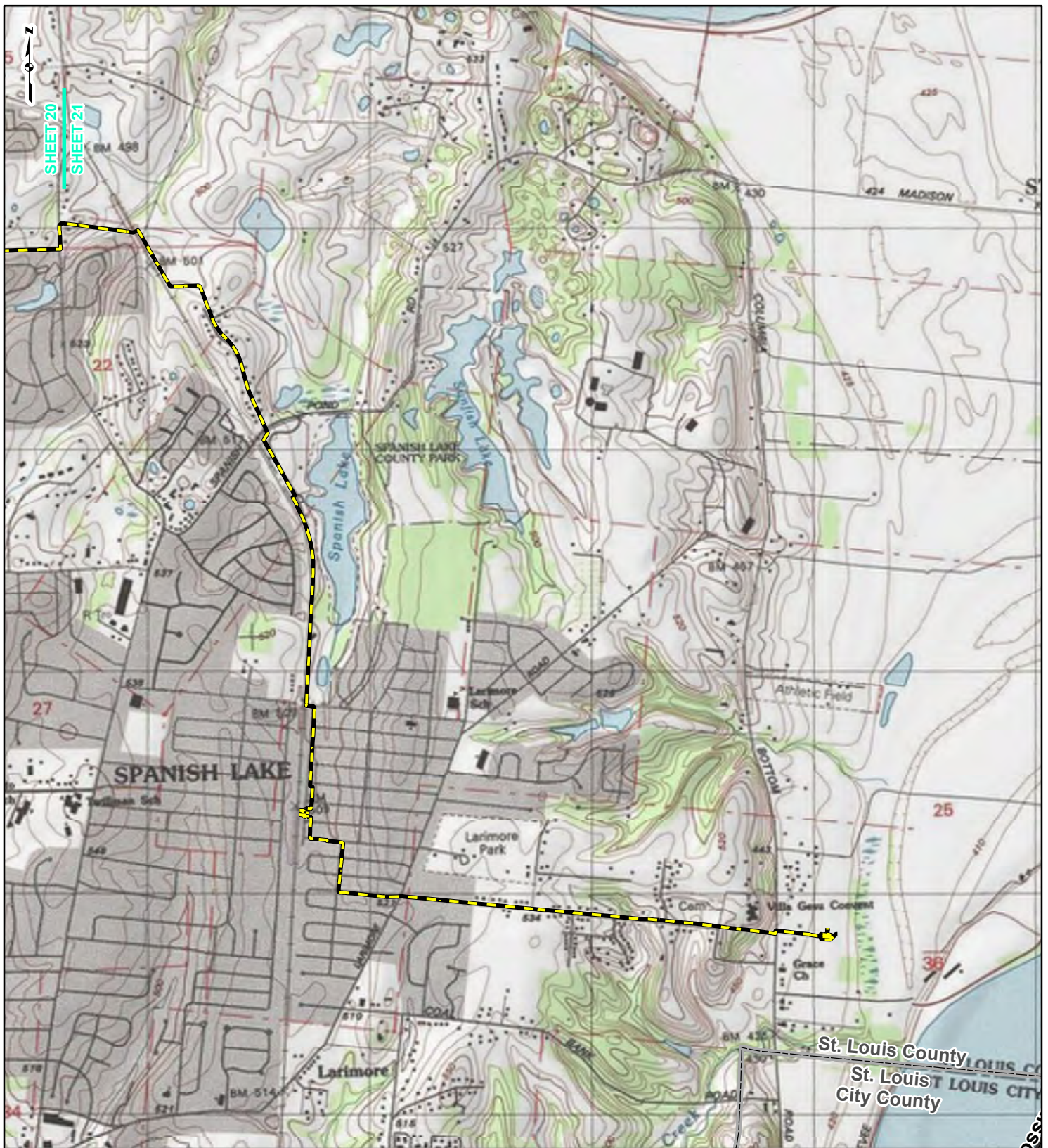
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FIGURE 1
LOCATION MAP
SHEET 20 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- - - NEW BUILD 24-INCH DIAMETER PIPELINE
- - - LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 21 OF 21**

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



July 29, 2016

Mr. Paul Mueller
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

**Re: Notice of Use of Pre-Filing Process
Spire STL Pipeline
Scott, Greene, and Jersey Counties, IL
St. Charles and St. Louis Counties, MO**

Dear Mr. Mueller:

Spire STL Pipeline LLC ("Spire") is in the planning stages of the Spire STL Pipeline ("Project"). As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project as proposed will consist of approximately 60 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC ("REX") pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri until crossing the Missouri river and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880 from LGC and modify approximately nine miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("MRT") pipeline along the western bank of the Mississippi river in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles.

Construction and operation of the proposed Project will be regulated by the Federal Energy Regulatory Commission ("Commission") among other regulatory agencies. Spire intends to utilize the Commission's pre-filing process detailed in Section 157.21 of the Commission's regulations, which allows the Commission and other agencies to initiate National Environmental Policy Act ("NEPA") review prior to Spire filing an application to the Commission. The Commission would need to issue Spire a Certificate of Public Convenience and Necessity to enable construction and operation of the proposed pipeline. The preliminary Project schedule includes the following target dates:

- July 22, 2016 - Commission acceptance into pre-filing; commencement of the NEPA process (pre-filing docket no. PF16-9-000);
- August 2016 (Anticipated) - biological and cultural resource surveys;
- January 2017 (Anticipated) - file final application with Commission;
- August 2017 (Anticipated) - NEPA document published;
- November 2017 (Anticipated) - Commission decision on application; and
- February 2018 (Anticipated) - commence construction activities.

On behalf of Spire, GAI would like to take this opportunity to invite the Missouri Department of Natural Resources to participate in the review of this Project as a cooperating agency during the Commission's pre-filing process. We look forward to your involvement in the review of this important Project and appreciate your cooperation.

Please note the intent of this letter is solely for the purpose of inviting you to participate in the Commission's NEPA pre-filing process. The Commission will also reach out to you requesting your agency to be a cooperating agency. Specific and necessary consultations and/or applicable permit applications will be addressed to you under separate cover.

If you have any questions or would like additional information, please feel free to contact me at 331.301.2002 or by e-mail at L.Ferry@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

A handwritten signature in black ink that reads "Lori M. Ferry". The signature is written in a cursive, flowing style.

Lori M. Ferry
Environmental Project Manager

LMF/gmg

Attachment: United States Geological Survey (USGS) Topographic Map (Figure 1)

telephone log



gai consultants

Date: 7/11/2016

Project / Admin. No.: E160438.00

Call From: Ali Trunzo

Company: GAI Consultants

Phone No.: 412-399-5096

Call To: Mr. Chris Wieberg

Company: MODNR Water Protection Program

Phone No.: 573-526-5781

Subject: Hydrostatic Test Water Discharges – 303d waters

cc:

Summary of Discussion, Decisions, and Commitments:

I spoke with Chris regarding discharging near a 303d water and he did not have concerns with discharging near 303d streams. As long as we are discharging to an upland area and avoid certain sensitive areas (described in applicability point 8) the Project will be eligible for General Permit MO-G67. He encouraged us to check for sinkholes, losing streams, and metropolitan no-discharge streams based on the area the Project is in. These are specified in 10 CSR 20, Chapter 7.

telephone log



gai consultants

Date: 7/8/2016

Project / Admin. No.: E160438.00

Call From: Ali Trunzo

Company: GAI Consultants

Phone No.: 412-399-5096

Call To: Mr. Scott Kaden

Company: MODNR Water Resources Center

Phone No.: 573-368-2175

Subject: Hydrostatic Test Water Withdrawals

cc:

Summary of Discussion, Decisions, and Commitments:

I spoke to Scott Kaden of the MODNR Water Resources Center regarding temporary water withdrawals from the Mississippi River for hydrostatic test. You can withdraw water in Missouri from the Mississippi River without a permit. If withdrawals exceed 70 gallons/minute, Missouri will consider you a Major Water User. This does not require a permit, but does require annual reporting. If the quantity threatens navigation, the Corps would be involved.

I inquired about water withdrawals from 303d listed streams and waterbodies. Scott recommended that I talk to the Surface Water group (Water Protection) regarding water withdrawals from 303d waters.

I inquired about water withdrawals from Spanish Lake. This would be under the same requirements as described previously (no permit, register use if necessary) as far as the state is concerned. However, he cautioned that depending on who "owns" the lake, there may be other considerations. He was not immediately aware of the jurisdiction.

telephone log



gai consultants

Date: 7/8/2016

Project / Admin. No.: E160438.00

Call From: Ali Trunzo

Company: GAI Consultants

Phone No.: 412-399-5096

Call To: Mr. Robert Voss

Company: MODNR Water Protection Program

Phone No.: 573-751-1300

Subject: Hydrostatic Test Water Withdrawals – 303d streams

cc:

Summary of Discussion, Decisions, and Commitments:

I discussed temporary water withdrawals for hydrostatic tests from 303d waters with Robert Voss of the MODNR Water Protection Program. Withdrawing water from a 303d stream should not be an issue. However, returning it (discharge) may have its own specific permit requirements, of which he was not immediately aware. Robert referred me to Chris Wieberg (573-526-5781).

Ali Trunzo

From: Jayme Fuller
Sent: Thursday, June 16, 2016 2:42 PM
To: steve.mcintosh@dnr.mo.gov
Cc: Lori Ferry <L.Ferry@gaiconsultants.com>
Subject: Project Review- Spire STL Pipeline

Hi Steve,

Thanks for taking the time to speak with me today. I have provided a project description about the pipeline below. We, as well as a few folks from Spire, would like to sit down with your office for a quick meeting to discuss possible permitting issues that we may face with this project. We are trying to reach out to agencies as early as possible in the process and create a great working relationship. We will be in St. Louis the week of June 27th and if possible, would like to meet with you all the 29th or 30th of June.

Please let me know if this is doable. Thanks again.

Spire STL Pipeline LLC (Spire) is proposing to build, operate, and maintain the Spire STL Pipeline Project (Project). The Project consists of approximately 60-miles of new 24-inch-diameter natural gas pipeline commencing in Scott County, Illinois at an interconnect with the existing Rockies Express Pipeline and traversing south through Greene and Jersey counties, Illinois and into St. Charles and St. Louis counties, Missouri. Spire plans to install three metering and regulating stations, one odorization station and one standalone regulating station as part of the new build section of the project. The Project also includes an upgrade of an existing 9-mile 20-inch natural gas pipeline in St. Louis County, Missouri which would include the addition of two additional measuring and regulating stations. No compressor stations are currently proposed for the Project. The proposed pipeline will be designed and built to carry up to 400,000 dekatherms per day (Dth/d) and is proposed to provide an additional source of natural gas to the local distribution company (LDC) in the St. Louis metropolitan area.

Jayme L. Fuller, Environmental Manager

GAI Consultants, Inc.

6420 Castleway West, Indianapolis, IN 46250

1-234-203-0763 | C 614.499.6258 |     

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Missouri State Historic Preservation Office



January 26, 2017

Ms. Judith Deel
Missouri State Historic Preservation Office
1101 Riverside Drive
Jefferson City, Missouri 65101

**Re: Spire STL Pipeline Project; St. Charles and St. Louis Counties, Missouri
Submittal of Technical Report - Phase I Archaeological Survey
SHPO Log #: 061-MLT-16**

Dear Ms. Deel:

Spire STL Pipeline LLC ("Spire"), a wholly owned subsidiary of Spire Inc., is seeking authorization from the Federal Energy Regulatory Commission pursuant to Section 7(c) of the Natural Gas Act to construct and operate the proposed Spire STL Pipeline Project ("Project") located in Scott, Greene, and Jersey Counties, Illinois, and St. Charles and St. Louis Counties, Missouri. The total length of the Project pipelines will be approximately 66 miles, of which 20.48 miles are in Missouri.

GAI Consultants, Inc. ("GAI") conducted Phase I archaeological survey between October and December 2016. The Area of Potential Effect ("APE") for the Project was defined as the area of ground disturbance anticipated for the construction activities. The APE along the new 24-inch pipeline portion of the Project consists of a 300-foot-wide study corridor centered on the proposed pipeline route, a 100-foot-wide study corridor for each access road, and the footprint of the workspace needed for construction of the metering and regulating station interconnect in Missouri and the construction of a new meter and regulating facility at an existing site along Line 880. Other workspace required in Missouri for construction includes one groundbed, and contractor yards/staging areas. The APE for modifications to the existing Line 880 pipeline consists of an irregularly-shaped corridor, generally 100 to 200 feet wide along the existing pipeline.

The APE for the Missouri portion of the Project was 255.8 hectares (632.1 acres). Of this, 174.6 hectares (431.4 acres) was surveyed during this field season, 11.8 hectares (29.2 acres) was previously surveyed, and 69.4 hectares (171.6 acres) was not surveyed, due to land access restrictions, slope, disturbance, or avoidance via horizontal directional drilling.

In total, eight archaeological sites and 19 isolated finds were identified during Phase I survey of the Missouri APE. Sites 23SC2215, 23SC2216, 23SC2218, and 23SC2219 may meet the requirements for listing in the National Register of Historic Places ("NRHP"). Additional work is recommended if these sites cannot be avoided. The remaining sites (23SC2213, 23SC2214, 23SC2217, and 23SC2220) are recommended not eligible, and no further work is recommended. The 19 isolated finds are all recommended not eligible for listing in the NRHP.

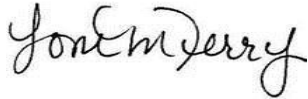
GAI, on behalf of Spire, is requesting your review and concurrence of the attached technical report presenting the archaeological results and recommendations for the Project.

We look forward to continuing to work with you on this Project. Please contact Eric Scuoteguazza at (412) 399-5188 or e.scuoteguazza@gaiconsultants.com, if there are questions regarding this report.

Sincerely,
GAI Consultants, Inc.



Eric P. Scuoteguazza, M.A., M.B.A., RPA
Senior Manager, Cultural Resources



Lori M. Ferry
Environmental Project Manager

EPS/LMF

Attachment: Technical Report Phase I Archaeological Survey; Spire STL Pipeline Project;
St. Charles and St. Louis Counties, Missouri



January 26, 2017

Ms. Judith Deel
Missouri State Historic Preservation Office
1101 Riverside Drive
Jefferson City, Missouri 65101

**Re: Spire STL Pipeline Project; St. Charles and St. Louis Counties, Missouri
Submittal of Architectural and Historical Resources Reconnaissance Survey Report**

SHPO Log #: 061-MLT-16

Dear Ms. Deel:

Spire STL Pipeline LLC ("Spire"), a wholly owned subsidiary of Spire Inc., is seeking authorization from the Federal Energy Regulatory Commission pursuant to Section 7(c) of the Natural Gas Act to construct and operate the proposed Spire STL Pipeline Project ("Project") located in Scott, Greene, and Jersey Counties, Illinois, and St. Charles and St. Louis Counties, Missouri. The total length of the Project pipelines will be approximately 66 miles, of which approximately 20.48 miles are in Missouri.

GAI Consultants, Inc. ("GAI") conducted the architectural and historical resources survey for the Project in St. Charles and St. Louis Counties, Missouri, between October 27 and 29, 2016. The Area of Potential Effect ("APE") for the Project accounts for areas of physical disturbance (direct impacts), as well as potential visual impacts (indirect impacts) introduced by the proposed Project. The direct APE for architecture is defined as defined as related to the construction right-of-way ("ROW"), aboveground facilities, and access roads. The indirect impact APE is defined as the viewshed from the proposed construction ROW, aboveground pipeline facilities, and access roads related to the project. For the new pipeline construction and the locations where belowground modifications are planned for Line 880, temporary visual and noise impacts may occur during construction. The proposed and existing pipelines are underground pipelines, and no buildings will be altered or removed as a result of construction. In addition, the construction ROW will be restored to its current condition at the completion of the Project. The APE in these locations, therefore, was focused on the construction ROW and immediately adjacent properties.

The survey resulted in the identification of 54 architectural and historical resources in St. Charles and St. Louis Counties. Of the 54 identified resources, none was previously recorded. Additionally, one resource (GAI-02/Chicago, Burlington, and Quincy Railroad) is recommended eligible for listing in the National Register of Historic Places (NRHP) under Criterion A. No impacts on the railroad related to the proposed Project are anticipated. The remaining 53 identified resources are recommended not eligible for NRHP listing due to a lack of sufficient integrity and/or significance.

GAI, on behalf of Spire, is requesting your review and concurrence of the attached report presenting the architectural results and recommendations for the Project.

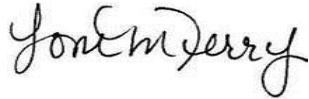
We look forward to continuing to work with you on this Project. Please contact Eric Scuoteguazza at (412) 399-5188 or e.scuoteguazza@gaiconsultants.com, if there are questions regarding this report.

Sincerely,

GAI Consultants, Inc.



Eric P. Scuoteguazza, M.A., M.B.A., RPA
Senior Manager, Cultural Resources



Lori M. Ferry
Environmental Project Manager

EPS/LMF

Attachment: Architectural and Historical Resources Reconnaissance Report; Spire STL
Pipeline Project; St. Charles and St. Louis Counties, Missouri



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

November 17, 2016

Jonathan Glenn
Cultural Resources Manager
GAI Consultants, Inc.
1444 Farnsworth Avenue, Suite 303
Aurora, Illinois 60505

Re: Unanticipated Discoveries Plan, Spire STL Pipeline Project (FERC) St. Charles & St. Louis Counties, Missouri

Dear Mr. Glenn:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the draft Unanticipated Discoveries Plan for Cultural Resources in Missouri, which has been prepared for the Spire STL Pipeline Project. Based on this review, we have the following comments:

- Page 1 – Please reference the 36 CFR Part 61, Professional Qualifications Standards, rather than “state-approved”. SHPO does not “approve” consultants.
- We recommend that you add a tribal notification and consultation process.
- Please add Heather Gibb to the Missouri State Historic Preservation Office (M-SHPO) contact information.

We look forward to the opportunity to review a revised draft of the document.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number (061-MLT-16) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Toni M. Prawl, Ph.D.
Director and Deputy State
Historic Preservation Officer

TMP:jd

c Laurie Boros, FERC

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Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

November 17, 2016

Lori M. Ferry
Environmental Manager
GAI Consultants, Inc.
1444 Farnsworth Avenue, Suite 303
Aurora, Illinois 60505

Re: Draft Resource Report 4 Cultural Resources, Spire STL Pipeline Project (FERC) St. Charles & St. Louis Counties, Missouri

Dear Ms. Ferry:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the Draft Resource Report 4 Cultural Resources in Missouri, which has been prepared for the Spite STL Pipeline Project. Based on this review, we have the following comments:

- Page 4-4 – We recommend that shovel tests be conducted as appropriate in areas of greater than 25% visibility in order to define site and site boundaries.
- Page 4-4 - Excavate to sterile soil in all cases.
- Page 4-4 – Has a geomorphological study been conducted? This is essential information in determining vertical APE.
- Page 4/5 – 23SC5 is a very old site form, we recommend a field visit to verify the current condition of the reported site area.
- Please reference the 36 CFR Part 61, Professional Qualifications Standards, rather than "state-approved" throughout. SHPO does not "approve" consultants.
- For the Unanticipated Discoveries Plant, we recommend that you add a tribal notification and consultation process.
- Please add Heather Gibb to the Missouri State Historic Preservation Office (M-SHPO) contact information.

We look forward to the opportunity to review a revised draft of the document.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862.

Please be sure to include the SHPO Log Number (061-MLT-16) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE



Toni M. Prawl, Ph.D.
Director and Deputy State
Historic Preservation Officer

TMP:jd

c Laurie Boros, FERC

telephone log



gai consultants

Date: November 15, 2016

Project / Admin. No.: E160438.00

Call From: Eric P. Scuteguazza, M.A., M.B.A., RPA

Company: GAI Consultants

Phone No.: (412) 399-5188

Call To: Judith Deel

Company: Missouri State Historic Preservation Office

Phone No.: (573) 751-7862

Subject: Spire STL Pipeline (Archaeological Site SL64)

cc: Bill Caramana, Lori Ferry

Summary of Discussion, Decisions, and Commitments:

The purpose of the phone meeting was to discuss pipeline routing through a previously recorded archaeological site—SL64 in St. Louis County, MO. Available information indicates a large artifact assemblage having been collected over a period of several years by local collectors. The assemblage represents multiple cultural and temporal affiliations. However, Phase I systematic testing (50-foot interval shovel testing) revealed only one artifact (non-diagnostic lithic debitage) from a poor context. GAI concludes that if the state-filed site boundary is accurate, artifact concentrations are likely to be confined to rises on either side of (and beyond) the project limits.

Therefore, the discussion was conducted to include the SHPO in a recommendation that the project is not likely to impact the site, because portions of the site with the ability to contribute to the site's overall significance will not be crossed during construction.

SHPO agrees with this recommendation. Furthermore, Ms. Deel questions the actual boundary and stated that it cannot be trusted from a cultural resources management perspective. She also questions that the private collection depicted in the state site form actually came from this location at all, or at least that it all came from this location, suggesting that this collection could have been amassed from multiple locations. In other words, there is not enough substantiated information on file to recommend further consideration of the site, especially since GAI testing did not encounter additional intact artifacts. For these reasons, Ms. Deel agrees that the project will cause no adverse to the site, and that the pipeline should proceed as planned at this location.

telephone log



gai consultants

Date: 11-15-2016

Project / Admin. No.: E160438.00

Call From: Elizabeth Williams, Senior Architectural Historian

Company: GAI Consultants

Phone No.: 412.399.5060

Call To: Amanda Burke

Company: Missouri SHPO

Phone No.: 573-751-7862

Subject: Architectural History Reporting

cc:

Summary of Discussion, Decisions, and Commitments:

Discussion with Amanda Burke, Above Ground Section 106 Reviewer, concerning architectural history reporting. Agreed to submit a full report including an identified resource table, photos, figures with parcel boundaries, and a copy of the report on CD for their database.

GAI Consultants, Inc.

Chicago Office
 1444 Farnsworth Avenue, Suite 303
 Aurora, IL 60505
 T 313.301.2002
www.gaiconsultants.com

Letter of Transmittal

TRANSMITTAL NO.	T010
DATE:	11/1/2016
PROJECT NO.	E160438.00, Task 003

Missouri State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102
Attention: Ms. Judith Deel
and Ms. Heather Gibb

PROJECT TITLE:
Spire STL Pipeline Project
Spire STL Pipeline LLC
Scott, Greene, and Jersey Counties, Illinois
and St. Charles and St. Louis Counties, Missouri

SUBJECT:
PF16-9-000
Federal Energy Regulatory Commission
Draft Environmental Report

WE ARE SENDING YOU: Paper Documents
VIA: Regular US Mail
PURPOSE: For Your Use

COMMENTS:

ATTACHMENTS:

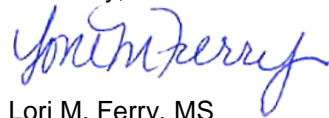
Quantity	Document No.	Rev.	Document Date	Document Description/Title	Status*
1	-	-	October 2016	Draft Resource Report 4 Cultural Resources	-

*Status Codes for Submittal Package Reviews: NE=No Exceptions; EN=Exceptions Noted; RR=Revise & Resubmit; RJ=Rejected

DISTRIBUTION:

Name	Company	Transmittal (Y/N)	Attachments (Y/N)
Mr. Scott Jaskowiak	Spire Inc.	Y	N
Mr. David Yonce	Spire Inc.	Y	N
Mr. Russell English	Spire Inc.	Y	N

Sincerely,



Lori M. Ferry, MS
 Environmental Manager

Jonathan Glenn

From: Elizabeth Williams
Sent: Monday, October 03, 2016 7:25 AM
To: Jonathan Glenn
Subject: FW: Katy Trail

From: Gibb, Heather [mailto:Heather.Gibb@dnr.mo.gov]
Sent: Friday, September 30, 2016 3:55 PM
To: Elizabeth Williams <E.Williams@gaiconsultants.com>
Subject: RE: Katy Trail

Hi Liz,

I checked. We don't have anything that is digitally available and wouldn't consist of gathering many smaller surveys together. There is a whole trail survey, but we only have it on paper. The survey focused on the bridges incorporated into the trail. If you wanted to know more about Katy Trail, we may have some surveys that touch upon it, but that would be a more extensive literature search than I can assist with. You would need to come back into the office. There is also information available through Missouri State Parks. Kim Dillon (Dillon, Kim kim.dillon@dnr.mo.gov) would be a contact through Missouri State Parks to see if they have information on the trail as a whole. Sorry I can't be of more assistance, but the Katy Trail is a pretty big historic resource with many small associated parts.

Thanks,
Heather

Heather Gibb

Archaeologist/Records Manager
State Historic Preservation Office
P. O. Box 176
Jefferson City, Missouri 65102
573/751-4589 (phone)

From: Elizabeth Williams [<mailto:E.Williams@gaiconsultants.com>]
Sent: Thursday, September 29, 2016 6:43 AM
To: Gibb, Heather
Subject: RE: Katy Trail

Heather,

Is there a DOE for the entire trail or park? If there is any information about the trail in the area of Machens, south of Portage des Sioux in St. Charles County, that would be very helpful. Thank you!

Liz

From: Gibb, Heather [<mailto:Heather.Gibb@dnr.mo.gov>]
Sent: Wednesday, September 28, 2016 5:56 PM
To: Elizabeth Williams <E.Williams@gaiconsultants.com>
Subject: RE: Katy Trail

Hi Liz,

Do you have a particular location that you are interested in? The Katy trail is fairly extensive and cuts across a fair part of Missouri. If it's a simple file from a single location, then I can probably track it down.

Thanks,
Heather

Heather Gibb





Archaeologist/Records Manager
State Historic Preservation Office
P. O. Box 176
Jefferson City, Missouri 65102
573/751-4589 (phone)

From: Elizabeth Williams [<mailto:E.Williams@gaiconsultants.com>]
Sent: Wednesday, September 28, 2016 11:07 AM
To: Gibb, Heather
Subject: Katy Trail

Hello Heather,

I was at the Missouri SHPO last week to conduct background research for a natural gas pipeline project in St. Louis and St. Charles County. After going over the files I pulled, I noticed that there was no information on the Katy Trail, which may be within the project area. We've been told it's an eligible resource and to contact Missouri State Parks, however we haven't heard back from them. I was wondering if you would be able to give me any information the SHPO may have on the trail. Thank you!

Elizabeth H. Williams
Senior Architectural Historian

GAI Consultants
385 East Waterfront Drive, Homestead, PA 15120-5005
T 412.476.2000 | D 412.399.5060 | M 412.477.3196 | gaiconsultants.com |    



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Ali Trunzo

From: Deel, Judith <judith.deel@dnr.mo.gov>
Sent: Tuesday, September 20, 2016 3:43 PM
To: Jonathan Glenn
Cc: Lori Ferry; Ali Trunzo
Subject: RE: Spire STL Pipeline - Tribal Correspondence

Thank you!

Judith Deel
Compliance Coordinator
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102
judith.deel@dnr.mo.gov
573/751-7862 (phone)

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From: Jonathan Glenn [mailto:j.glenn@gaiconsultants.com]
Sent: Tuesday, September 20, 2016 2:29 PM
To: Deel, Judith
Cc: Lori Ferry; Ali Trunzo
Subject: Spire STL Pipeline - Tribal Correspondence

Judith,

As you requested, I have attached an updated list of correspondence with Native American Tribes for Spire's proposed Spire STL Pipeline Project, as requested during yesterday's call with the FERC.

During our initial outreach to the tribes, the Iowa Tribe of Kansas and Nebraska requested copies of the archaeological survey reports. In addition, the Osage Nation and the Miami Tribe of Oklahoma have notified the FERC of their intent to be a consulting party.

GAI and Spire appreciate your assistance on this Project. Feel free to contact us should you have questions or concerns.

Thanks,
Jonathan

Jonathan Glenn, M.A., RPA
Cultural Resources Manager

GAI Consultants, Inc.
385 East Waterfront Drive, Homestead, PA 15120-5005

☎ 412.399.5191 | 📠 412.297.3611 |      | gaiconsultants.com (412-476-2000)



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**Spire STL Pipeline
Native American Tribe Correspondence Tracking List**

Agency Correspondence - Native American Tribes

Agency	Region/ Division	Contact Name	Address	City	State	Zip	Contact Phone	Contact Email	Permit/Clearance/ Approval	Date Sent	Response Type/ Date	Responding Contact	Correspondence
Absentee-Shawnee Tribe of Indians of Oklahoma	Tribal Historic Preservation Officer	Leonard Longhorn	2025 South Gordon Cooper Drive	Shawnee	OK	74801	405-275-4030	leonard.longhorn@astribe.com	Native American Coordination	6/30/2016			Voicemail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Delaware Nation		Ms. Nekole Alligood	P.O. Box 825 31064 State Highway 281	Anadarko	OK	73005	405-247-2448	nalligood@delawarenation.com	Native American Coordination	6/30/2016			Voicemail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Delaware Tribe of Indians	Historic Preservation Office	Dr. Brice Obermeyer	1200 Commercial Street Roosevelt Hall, Room 212	Emporia	KS	66801	918-335-7026	bobermeyer@delawaretribe.org	Native American Coordination	6/30/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Eastern Shawnee Tribe of Oklahoma	Cultural Preservation Director	Ms. Robin Dushane	P.O. Box 350 127 West Oneida	Seneca	MO	64865	918-666-2435, ext. 247 (Office) 918-801-6677 (Cell)	radushane@gmail.com	Native American Coordination	6/30/2016			Voicemail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Iowa Tribe of Kansas and Nebraska	Tribal Historic Preservation Officer	Mr. Lance M. Foster	3345 B. Thrasher Road	White Cloud	KS	66094	785-595-3258	lfoster@iowas.org	Native American Coordination	6/30/2016	7/6/2016	Mr. Foster	Telephone
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Iowa Tribe of Oklahoma	Division Director	Patrick Durham	R.R. 1, Box 721	Perkins	OK	74059- 9599	405-547-5433, ext. 350	pdurham@iowanation.org	Native American Coordination	6/30/2016	6/30/2016	Mr. Durham	Telephone
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Kaw Indian Nation of Oklahoma	Museum Director	Ms. Crystal Douglas	Drawer 50	Kaw City	OK	74641	580-269-2552	Crystal_douglas@kawnation.c om	Native American Coordination	6/30/2016	6/30/2016	Ms. Douglas	Telephone
										8/16/2016			Open House Invitation Letter
										8/30/2016			Voicemail
Kaw Indian Nation of Oklahoma	Chairman	Ms. Jacqlyn Secondine Hensley	Drawer 50	Kaw City	OK	74641	580-269-2552	execsec@kawnation.com	Native American Coordination	7/29/2016, 8/9/16			Notice of Prefiling Letter, courtesy follow up copy by email
										8/16/2016			Open House Invitation Letter
										9/6/2016			Email
Kickapoo Tribe in Kansas	NAGPRA Director	Ms. Nellie Cadue	1107 Gold Finch Road P.O. Box 271	Horton	KS	64439	785-486-2601, ext. 5		Native American Coordination	6/30/2016			Voicemail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Kickapoo Traditional Tribe of Texas	Director	Mr. Juan Garza, Jr.	HCR 1, Box 9700	Eagle Pass	TX	78852	830-758-1936	juangarza73@yahoo.com	Native American Coordination	6/30/2016			Voicemail
										7/29/2016	Delivery Refused		Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Kickapoo Tribe of Oklahoma	Attorney/Preserv ation Rep	Kent Collier	PO Box 70	McCloud	OK	74851	405-964-4227	kcollier@kickapootribeofoklahoma.com	Native American Coordination	6/30/2016			Voicemail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Miami Tribe of Oklahoma	Acting Tribal Historic Preservation Officer	Ms. Diane Hunter	P.O. Box 1326	Miami	OK	74355	918-541-8966	dhunter@miamination.com	Native American Coordination	6/30/2016	6/30/2016	Ms. Hunter	Telephone
										7/29/2016, 8/9/16			Notice of Prefiling Letter, courtesy follow up copy by email
										-	8/12/2016	Ms. Hunter	Email
Osage Nation	Archaeologist	John Fox	P.O. Box 779 627 Grandview	Pawhuska	OK	74056	918-287-5328	ahunter@osagetribe.org	Native American Coordination	6/30/2016	6/30/2016	Mr. Fox	Telephone
										7/29/2016	8/16/2016	Mr. Fox	Notice of Prefiling Letter; Email Response
										8/16/2016	8/18/2016	Mr. Fox	Open House Invitation Letter
Peoria Tribe of Indians of Oklahoma		Logan Davenport	PO Box 1527 118 S. Eight Tribes Trails	Miami	OK	74355	918-540-2535	ldavenport@peoriatribe.com	Native American Coordination	9/6/2016			Telephone
										7/1/2016			Email
										7/29/2016			Voicemail
Ponca Tribe of Nebraska	Tribal Historic Preservation Officer	Mr. Shannon Wright	P.O. Box 288	Niobrara	NE	68760	402-857-3519		Native American Coordination	8/16/2016	7/1/2016	Mr. Wright	Open House Invitation Letter
										7/29/2016			Telephone
										8/16/2016			Notice of Prefiling Letter
Ponca Tribe of Oklahoma	Tribal Historic Preservation Officer	Ms. Halona Clawson	20 White Eagle Drive	Ponca City	OK	74601	580-762-8104	halona.clawson@ponca.com	Native American Coordination	7/1/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter

**Spire STL Pipeline
Native American Tribe Correspondence Tracking List**

Agency Correspondence - Native American Tribes

Agency	Region/ Division	Contact Name	Address	City	State	Zip	Contact Phone	Contact Email	Permit/Clearance/ Approval	Date Sent	Response Type/ Date	Responding Contact	Correspondence
Citizen Potawatomi Nation		Andrew Gourd	1601 S. Gordon Cooper Drive	Shawnee	OK	74801	405-878-5830	andrew.gourd@potawatomi.org	Native American Coordination	7/1/2016			Voice mail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Forest County Potawatomi	Tribal Historic Preservation Officer	Ms. Melissa Cook	Cultural Center, Library & Museum PO Box 340 8130 Mishkoswen Drive	Crandon	WI	54520	800-960-5479	melissa.cook@fcpotawatomi-nsn.gov	Native American Coordination	7/1/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Potawatomi Nation- Hannahville Indian Community		Mr. Kenneth Mechigaud	N14911 Hannahville B-1 Road	Wilson	MI	49896	906-466-9933	kennethmechigaud@hannahville.org	Native American Coordination	7/1/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Pokagon Band of Potawatomi Indians	Tribal Historic Preservation Officer	Mr. Marcus Winchester	PO Box 180 58620 Sink Road,	Dowagiac	MI	49047	269-462-4224	marcus.winchester@pokagonband- nsn.gov	Native American Coordination	7/1/2016			Voice mail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Prairie Band Potawatomi Nation		Ms. Hattie Mitchell	16281 Q Road	Mayetta	KS	66509	785-966-4000	hattiem@pbpnation.org	Native American Coordination	7/1/2016			Voice mail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Quapaw Tribe of Oklahoma	Chairman	Mr. John Berrey	P.O. Box 765	Quapaw	OK	74363	888-641-4724		Native American Coordination	7/1/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Quapaw Tribe of Oklahoma	THPO	Mr. Everett Bandy	P.O. Box 765	Quapaw	OK	74363		ebandy@quapawtribe.com	Native American Coordination				
Sac and Fox Tribe of the Missouri in Kansas and Nebraska	Chair	Mr. Edmore Green	305 North Main	Reserve	KS	66434	785-742-7471	egreen@sacandfoxcasino.com	Native American Coordination	7/1/2016			Attempted Telephone Call, No Response
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter
Sac and Fox Tribe of the Mississippi in Iowa	Historic Preservation Director	Mr. Johnathan L. Buffalo	349 Meskwaki Road	Tama	IA	52339	641-484-3185	jbuffalo@meskwaki.org	Native American Coordination	7/1/2016	7/1/2016	Mr. Buffalo	Telephone
										7/29/2016, 8/9/16			Notice of Prefiling Letter, courtesy follow up copy by email
										8/16/2016			Open House Invitation Letter
Sac and Fox Nation of Oklahoma	Cultural Resources	Ms. Sandra Kaye Massey	920883 S. Hwy 99, Building A	Stroud	OK	74079	918-968-3526	smassey@sacandfoxnation-nsn.gov	Native American Coordination	7/1/2016			Voice mail
										7/29/2016			Notice of Prefiling Letter
										8/16/2016			Open House Invitation Letter

Ali Trunzo

From: Deel, Judith <judith.deel@dnr.mo.gov>
Sent: Wednesday, September 14, 2016 6:08 PM
To: Jonathan Glenn; Gibb, Heather
Cc: Tegan Baiocchi
Subject: RE: Spire - background research questions

The Katy Trail has been determined to be eligible for inclusion in the National Register.

Judith Deel
Compliance Coordinator
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102
judith.deel@dnr.mo.gov
573/751-7862 (phone)

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From: Jonathan Glenn [mailto:j.glenn@gaiconsultants.com]
Sent: Wednesday, September 14, 2016 10:34 AM
To: Deel, Judith; Gibb, Heather
Cc: Tegan Baiocchi
Subject: Spire - background research questions

Judith or Heather,

There seems to be some confusion on our end about the Katy Trail. One of our managers was at a DNR meeting for the Spire STL pipeline project a few weeks ago and thought that someone said the Katy Trail was now listed as a resource. I think they took that to mean a cultural resource. The Katy Trail is not in the online architectural GIS as a historic resource. Can you confirm for me whether or not the Katy Trail is recorded as a cultural resource, and if so whether it has been determined eligible?

Thanks,
Jonathan

Jonathan Glenn, M.A., RPA
Cultural Resources Manager
GAI Consultants, Inc.
385 East Waterfront Drive, Homestead, PA 15120-5005
O 412.399.5191 | C 412.297.3611 | gaiconsultants.com (412-476-2000)

From: Deel, Judith [mailto:judith.deel@dnr.mo.gov]
Sent: Tuesday, September 13, 2016 8:41 AM
To: Tegan Baiocchi <T.Baiocchi@gaiconsultants.com>
Cc: Gibb, Heather <Heather.Gibb@dnr.mo.gov>
Subject: RE: Background Research questions

Ms. Baiocchi,

While an on-site research visit is not required, it is encouraged, as the CRM reports and archaeological site files cannot be accessed remotely. You may contact Heather Gibb, Archaeologist/Records Manager, to schedule a visit.

The only way we track not eligible properties is by the Section 106 Project Log, which is only available in our office.

I will forward your question about the Katy Trail to staff at Missouri State Parks, who will better be able to provide you with the information on the trail.

Thank you,

Judith Deel
Compliance Coordinator
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102
judith.deel@dnr.mo.gov
573/751-7862 (phone)

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From: Tegan Baiocchi [<mailto:T.Baiocchi@gaiconsultants.com>]

Sent: Monday, September 12, 2016 2:06 PM

To: Deel, Judith

Subject: Background Research questions

Good afternoon Ms. Deel,

We are conducting a Section 106 pipeline project in Missouri, and had a few questions regarding background research. We have already reviewed the GIS data for archaeology and architecture, but wanted to confirm where we would need to conduct on-site background research to see site forms and/or surveys. Also, it looks like the GIS system only has NRHP listed or eligible resources. Do you keep a database/record of previously recorded architectural resources that have been determined not NRHP eligible or that haven't had their eligibility determined?

Also, we have a specific question about the Katy Trail. Could you tell me if the trail route has recently been extended or changed? The current mapping we have of the Katy Trail shows it ending at Machens, just east of Machens Road at the railroad. Our project is located to the east of the trail, but wanted to make sure that the Katy Trail had not recently been extended eastward.

Thank you very much!

Tegan D. Baiocchi, M.S.
Project Architectural Historian

GAI Consultants

1502 Magnavox Way, Fort Wayne, IN 46804

T 260.969.8800 | D 260.969.8856 | M 260.205.4859 | gaiconsultants.com |     

* Please update your records with my new direct telephone number



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Jonathan Glenn

From: Smith, Melanie <Melanie.Robinson-Smith@dnr.mo.gov>
Sent: Wednesday, September 14, 2016 5:18 PM
To: Deel, Judith
Cc: Dillon, Kim
Subject: RE: Background Research questions

The trail has not been extended beyond the Machens trailhead. The termination point is just before you would cross Machens Rd. I pulled up google maps and the termination point would be somewhere around 38.903462, -90.331417 but our restroom and info depot are actually about 150' back to the west along the trail. Let me know if you need any other info. Thanks!

Melanie Robinson-Smith
Assistant District Supervisor
Katy Trail/Rock Island Trail Coordinator
Missouri State Parks, Northern Parks District
Melanie.robinson-smith@dnr.mo.gov
573-449-7402



Promoting, Protecting and Enjoying our Natural Resources. Learn more at dnr.mo.gov.

From: Deel, Judith
Sent: Tuesday, September 13, 2016 8:36 AM
To: Smith, Melanie
Cc: Dillon, Kim
Subject: FW: Background Research questions

Good morning, Melanie,

Kim Dillon tells me that you are the new Katy Trail Coordinator. We have a request for information from a consultant, including the question (below in red) about the Katy Trail. Could you please respond? It would be greatly appreciated.

Thank you,

Judith Deel
Compliance Coordinator
State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102
judith.deel@dnr.mo.gov
573/751-7862 (phone)

Promoting, Protecting and Enjoying our Natural Resources. Learn more at dnr.mo.gov.

From: Tegan Baiocchi [<mailto:T.Baiocchi@gaiconsultants.com>]
Sent: Monday, September 12, 2016 2:06 PM

To: Deel, Judith

Subject: Background Research questions

Good afternoon Ms. Deel,

We are conducting a Section 106 pipeline project in Missouri, and had a few questions regarding background research. We have already reviewed the GIS data for archaeology and architecture, but wanted to confirm where we would need to conduct on-site background research to see site forms and/or surveys. Also, it looks like the GIS system only has NRHP listed or eligible resources. Do you keep a database/record of previously recorded architectural resources that have been determined not NRHP eligible or that haven't had their eligibility determined?

Also, we have a specific question about the Katy Trail. Could you tell me if the trail route has recently been extended or changed? The current mapping we have of the Katy Trail shows it ending at Machens, just east of Machens Road at the railroad. Our project is located to the east of the trail, but wanted to make sure that the Katy Trail had not recently been extended eastward.

Thank you very much!

Tegan D. Baiocchi, M.S.

Project Architectural Historian

GAI Consultants

1502 Magnavox Way, Fort Wayne, IN 46804

T 260.969.8800 | D 260.969.8856 | M 260.205.4859 | gaiconsultants.com |    

* Please update your records with my new direct telephone number



CONFIDENTIALITY NOTICE: This communication contains confidential information belonging to the sender and may be legally privileged. This communication is solely for the use of its intended recipient. If you are not the intended recipient, inform the sender of the error and remove this email from your system. If this transmission includes any technical information, design data, and/or recommendations, they are provided only as a matter of convenience and may not be used for final design and/or construction.



August 29, 2016

Ms. Judith Deel
Compliance Coordinator
Missouri State Historic Preservation Office
P.O. Box 176
Jefferson City, Missouri 65102

**Re: Initial Cultural Resources Coordination
Spire STL Pipeline LLC
Spire STL Pipeline
St. Charles and St. Louis Counties, Missouri**

Dear Ms. Deel:

GAI Consultants, Inc. ("GAI") is submitting for your review the attached documentation on behalf of Spire STL Pipeline LLC ("Spire"), for the Spire STL Pipeline Project ("Project") in St. Charles and St. Louis Counties, Missouri. The overall Project includes components in both Missouri and Illinois, and consultation with the Illinois Historic Preservation Agency is being submitted under separate cover. Spire will be applying to the Federal Energy Regulatory Commission ("FERC") for a certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act, as amended, for construction, operation, and maintenance of natural gas transmission facilities. Representatives from GAI and Spire met with your office on July 8, 2016 to introduce the Project.

Project Description

Spire is in the planning stages of the Project. As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project as proposed will consist of approximately 57.4 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with the Rockies Express Pipeline LLC pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri. The new build then crosses the Missouri River and ties into an existing pipeline in St. Louis County, Missouri that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire is proposing to purchase Line 880, including its appurtenant and ancillary facilities, from LGC and modify the pipeline before placing it in interstate service. Line 880 consists of approximately 7.6 miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("Enable MRT") pipeline along the western bank of the Mississippi River in St. Louis County, Missouri. The total length of the Project pipelines will be approximately 65.0 miles and will include the construction of minor aboveground facilities including three metering and regulating stations, one standalone regulating station, and two additional metering and regulating stations along Line 880. A pig launcher/receiver will also be installed at each portion of the Project. The overall design capacity of the new build portion of the pipeline is expected to be 400,000 dekatherms per day. No compression will be required.

Spire anticipates a 90-foot temporary construction right-of-way width and a 75-foot permanent easement. An additional 25 feet of temporary right-of-way will be required through agricultural areas. Up to an additional 50 feet may be requested to facilitate road, stream or wetland crossings.

Missouri

Approximately 13 miles of new build 24-inch diameter steel pipeline will be located in Missouri and traverse St. Charles and St. Louis Counties. Approximately 7.6 miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri will be modified. Three meter and regulating stations are proposed in St. Louis County, Missouri, including at the interconnection location between the new build and pipeline modifications, and the interconnection location with Enable MRT. In addition, Spire has assumed the use/development of new and/or existing access roads throughout the Project area. Additional temporary workspaces will be utilized to accommodate equipment staging and stockpiling of materials along the proposed corridor during construction. The locations of these facilities are still pending.

Site Description

The Missouri portion of the Project is located in St. Charles and St. Louis Counties, Missouri, and is depicted on the attached portions of the Grafton (1979), Elsah (1979), Alton (1979), Florissant (1979), and Columbia Bottom (1979), Missouri United States Geological Survey (USGS) 7.5-minute series topographic maps (Figure 1).

The majority of the new build 24-inch pipeline is Greenfield and crosses a primarily agricultural landscape. The existing pipeline to be modified is located primarily within existing right-of-way, which traverses residential, agricultural, and some wooded areas.

Methods

On behalf of Spire, GAI will conduct a Phase I archaeological survey, geomorphological assessment of select locations with potential to contain deeply buried cultural deposits, and a Phase I historic architectural survey. Prior to fieldwork, GAI will conduct additional background research to supplement the online GIS data obtained for the Project area, and further determine the extent of previously recorded cultural resources in the proposed Area of Potential Effect ("APE").

Investigations will be completed for the APE for the Greenfield portion of the Project, which will consist of a 300-foot wide study corridor centered on the new pipeline route, a 100-foot wide study corridor for each access road, and study of a contractor yard, if needed. The APE for the pipeline modification will include the proposed limits of earth disturbance. Subsurface testing will be employed to determine if the existing right-of-way has been previously disturbed.

GAI proposes to conduct systematic Phase I archaeological survey for those portions of the proposed APE determined to contain moderate to high potential for yielding archaeological sites. Per the current accepted guidelines, previously plowed areas exhibiting at least 25 percent ground surface visibility will be surface collected by walking five meter intervals to look for exposed artifacts. This will be supplemented by excavating shovel test pits ("STPs") in small areas where surface visibility drops below the accepted threshold. In areas that have not been previously plowed, or large areas where surface visibility is below the 25 percent visibility threshold, subsurface testing will be conducted by excavating STPs at 15 meter intervals along transects spaced 15 meters apart. Each STP will measure at least 25 centimeters in diameter. STPs will be excavated to an average depth of 60 centimeters deep unless culturally sterile subsoil is reached first. If culturally sterile subsoil cannot be reach in STPs, then samples using a hand auger will be taken from approximately every third STP. Excavated soil will be screened through one-quarter-inch mesh to allow for systematic artifact recovery. If artifacts are recovered in STPs, radial STPs placed at five meter intervals will be excavated around the perimeter of the cluster of positive STPs to more accurately define the archaeological site boundaries, per state guidelines.

Portions of the new-build pipeline will be located on floodplains that may have potential to contain buried soils. GAI will consult with the State Historic Preservation Office (SHPO) to establish a vertical

APE for the Project in these settings. If the vertical APE is still considered to extend deep enough to impact potentially buried soils, a professional soil scientist will conduct an initial geomorphological assessment of those settings. GAI will collect soil samples via hand-augering. That data, combined with previous soil survey reports, will be used to present an opinion as to the potential of select areas to contain buried deposits that could contain intact archaeological remains. That assessment will be used to consult with the SHPO to determine if deep testing is required, and if required, help focus the efforts in limited areas of higher potential. Subsequent deep archaeological testing will be conducted as necessary and in coordination with the SHPO.

Based on guidance from the SHPO, GAI will complete an historic architectural survey within the APE for the proposed Greenfield pipeline, and resources directly adjacent to the proposed limits of disturbance for the pipeline modifications. Architectural survey will serve to identify buildings, objects, structures, sites, or districts within the APE that are 50 years old or older. This will consist of photography of identified resources and landscape features using a high resolution digital camera, field notes recording significant architectural and landscape features, and marking locations of identified resources on Project mapping.

Following completion of the Phase I survey of the Project, GAI will prepare draft Phase I Survey reports describing the methods and results of the cultural resources investigations, including Project maps, graphics and photographs, in accordance with the SHPO's guidelines. Mapping will be submitted displaying the survey status of each tract, areas tested versus disturbed, previously recorded sites within the APE, and STP locations in the vicinity of recorded sites.

GAI would appreciate your review of the above proposed methods for this Project. GAI anticipates to begin background research and surveys in August 2016, and will coordinate with the appropriate personnel to conduct additional background research as the Project progresses.

Please note the intent of this letter is solely for the purpose of formally initiating consultations and/or applicable permit applications. An invitation for you to participate in the FERC's National Environmental Policy Act Pre-Filing Process will be addressed to you under separate cover.

If you have any questions regarding this submission, please feel free to contact me at 412.399.5191, or by e-mail at J.Glenn@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.



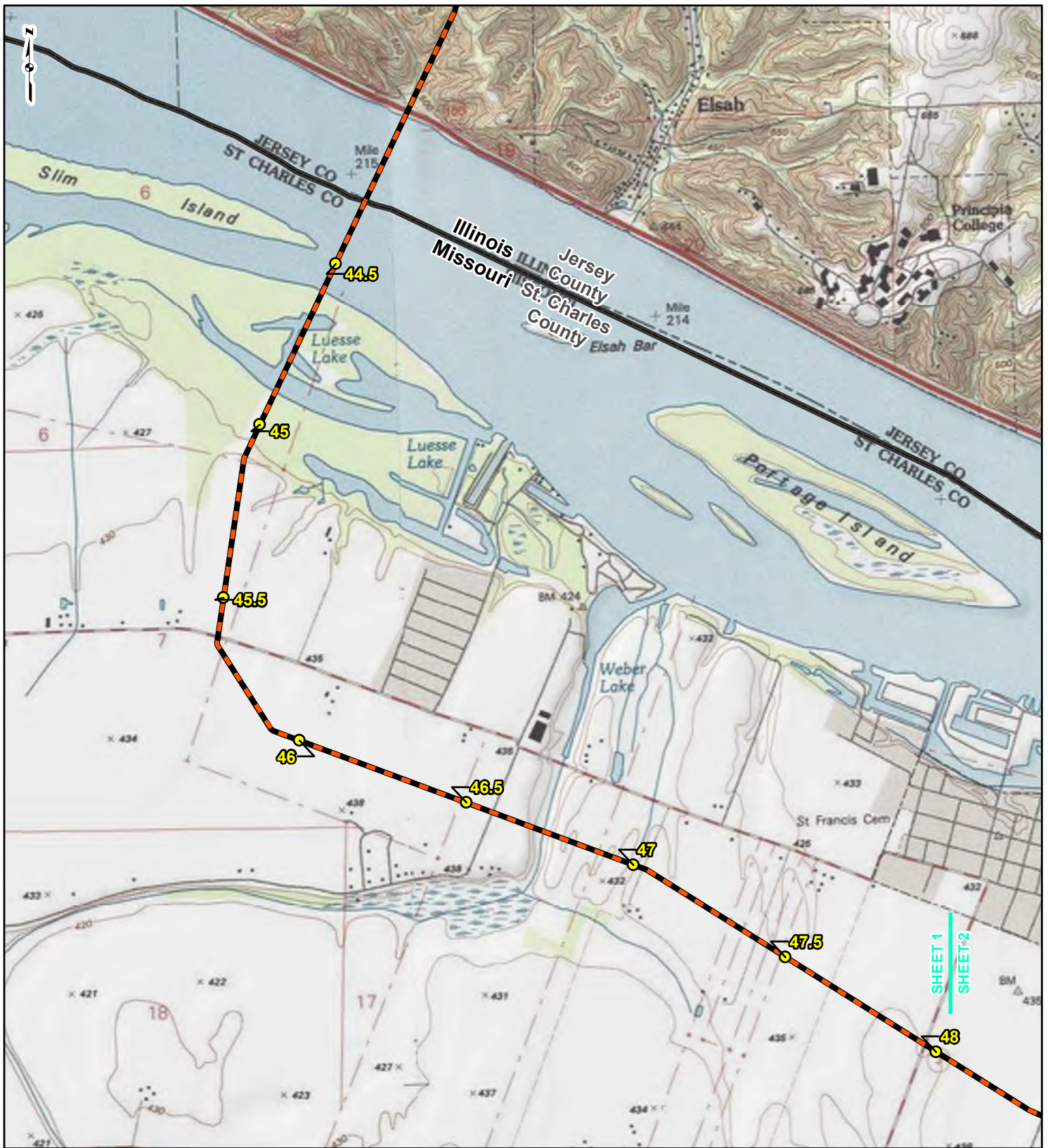
Jonathan Glenn, M.A., RPA
Cultural Resources Manager

JG/gmg

cc: Ms. Heather Gibb, Missouri State Historic Preservation Office

Attachment: USGS Topographic Maps (Figure 1)

ATTACHMENT 1
USGS TOPOGRAPHIC MAPS (FIGURE 1)



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

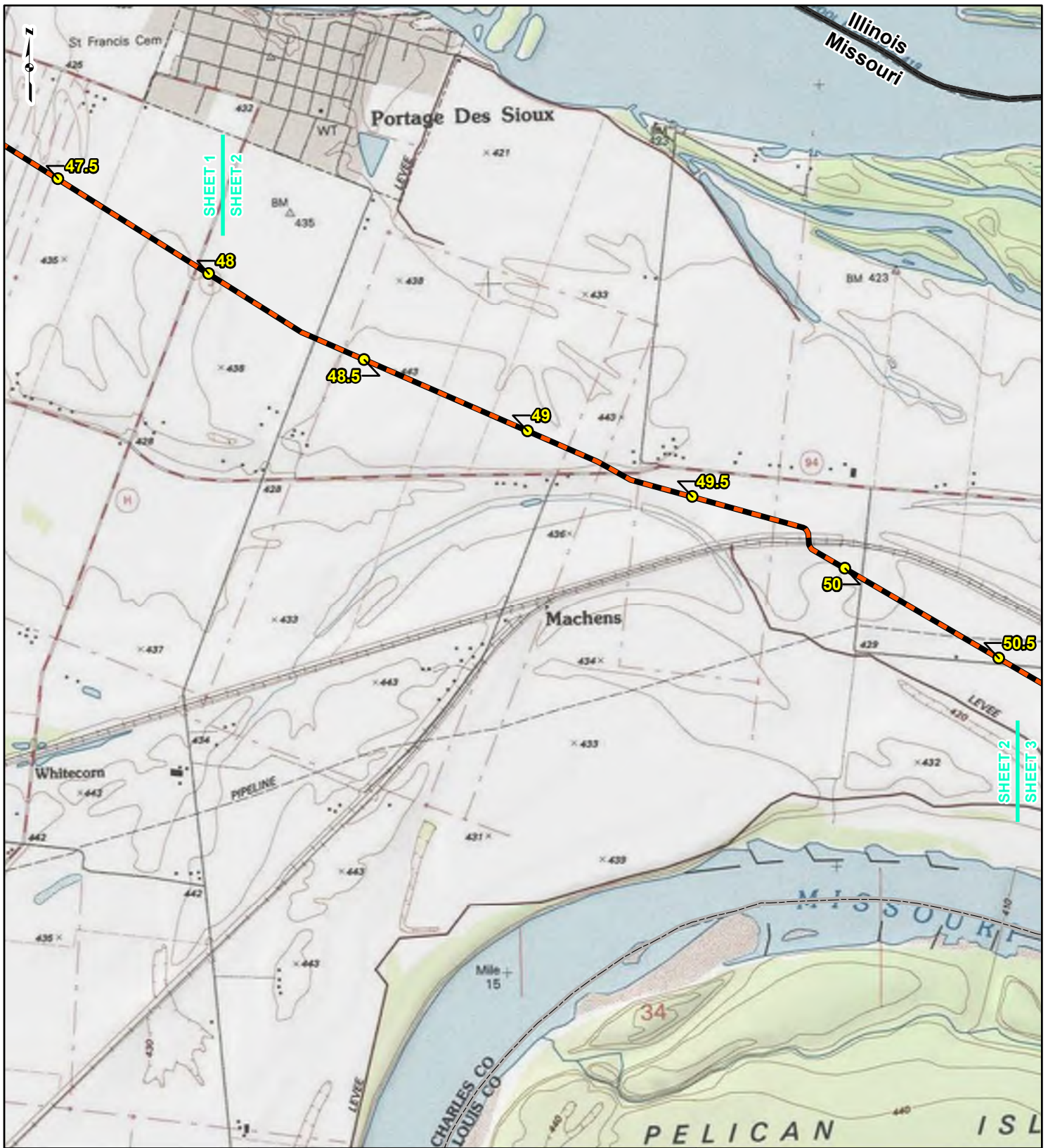
**FIGURE 1
LOCATION MAP
SHEET 1 OF 6**

Spire STL Pipeline

gi consultants spire

DRAWN BY: PMH DATE: 8/12/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

NEW BUILD MILEPOST	LINE 880 MODIFICATIONS
LINE 880 MILEPOST	COUNTY BOUNDARY
NEW BUILD 24-INCH DIAMETER PIPELINE	STATE BOUNDARY

0 1,000 2,000 4,000
Feet

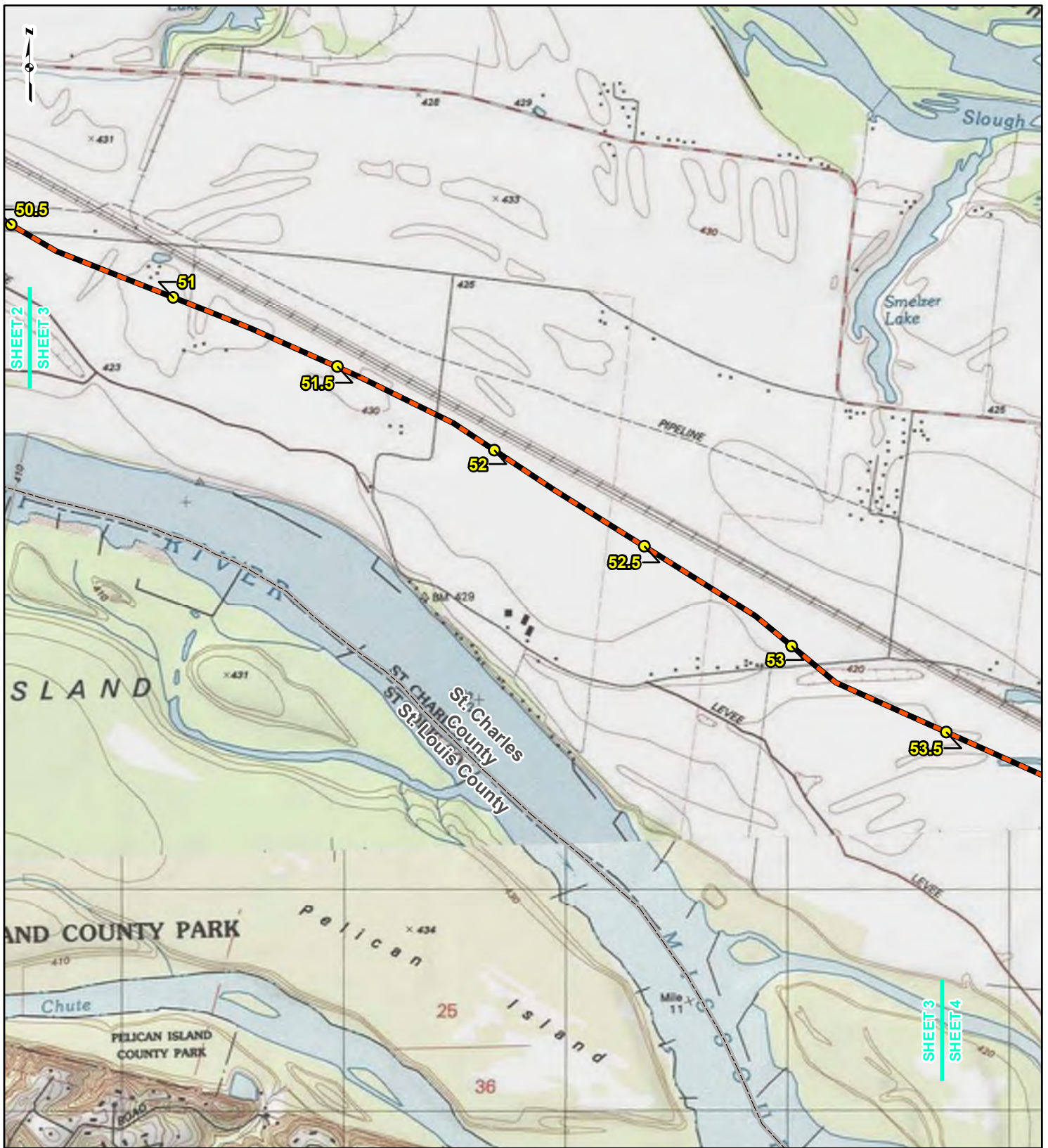
**FIGURE 1
LOCATION MAP
SHEET 2 OF 6**

Spire STL Pipeline

gimconsultants

DRAWN BY: PMH	DATE: 8/12/2016
CHECKED: SWW	APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

	NEW BUILD MILEPOST		LINE 880 MODIFICATIONS
	LINE 880 MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

0 1,000 2,000 4,000
Feet

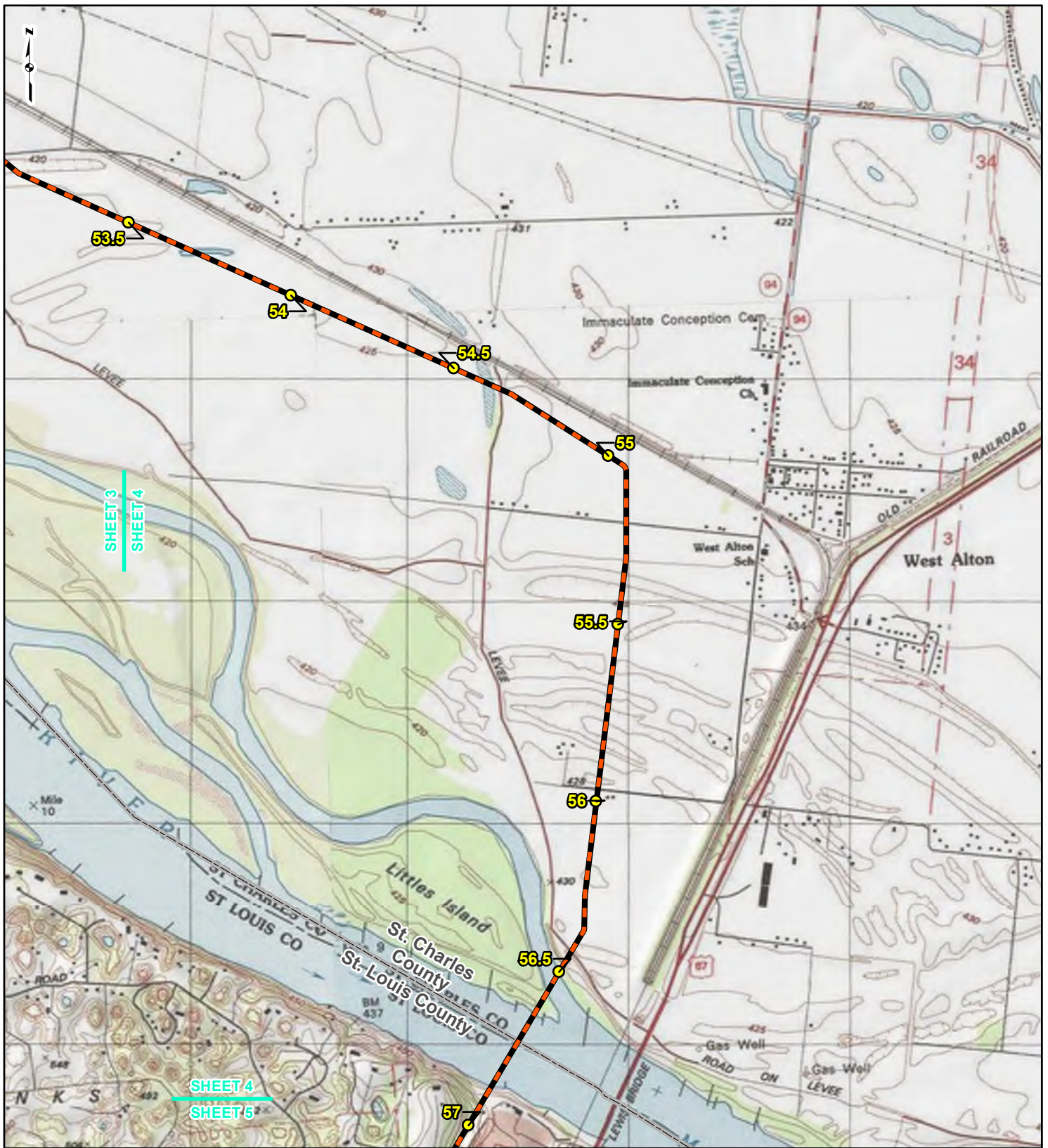
**FIGURE 1
LOCATION MAP
SHEET 3 OF 6**

Spire STL Pipeline

ginnconsultants

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

	NEW BUILD MILEPOST		LINE 880 MODIFICATIONS
	LINE 880 MILEPOST		COUNTY BOUNDARY
	NEW BUILD 24-INCH DIAMETER PIPELINE		STATE BOUNDARY

0 1,000 2,000 4,000
Feet

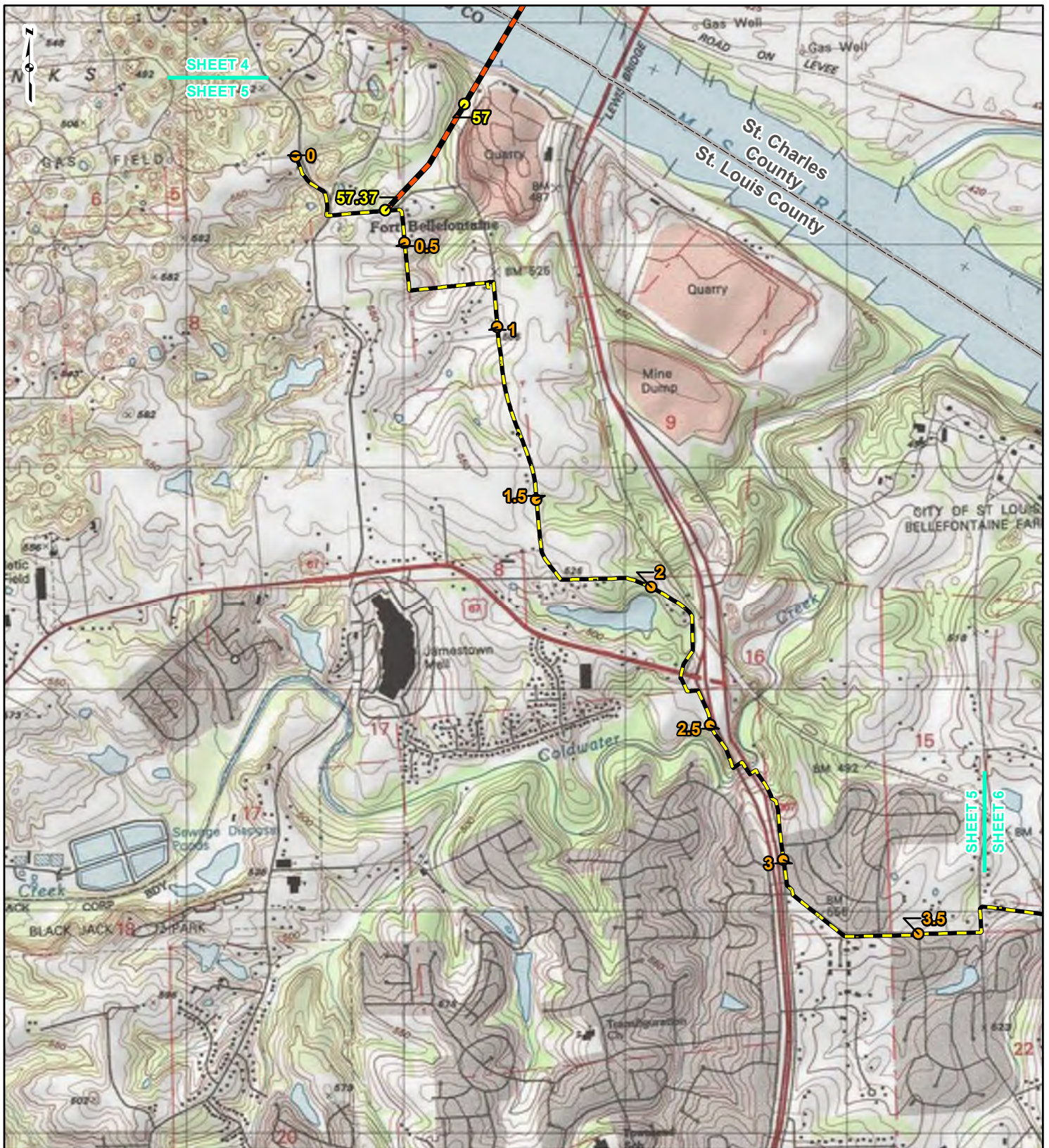
**FIGURE 1
LOCATION MAP
SHEET 4 OF 6**

Spire STL Pipeline

ginnconsultants

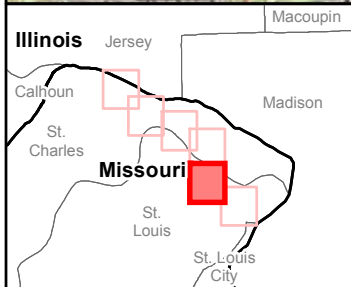
DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



SHEET 4
SHEET 5

SHEET 5
SHEET 6



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

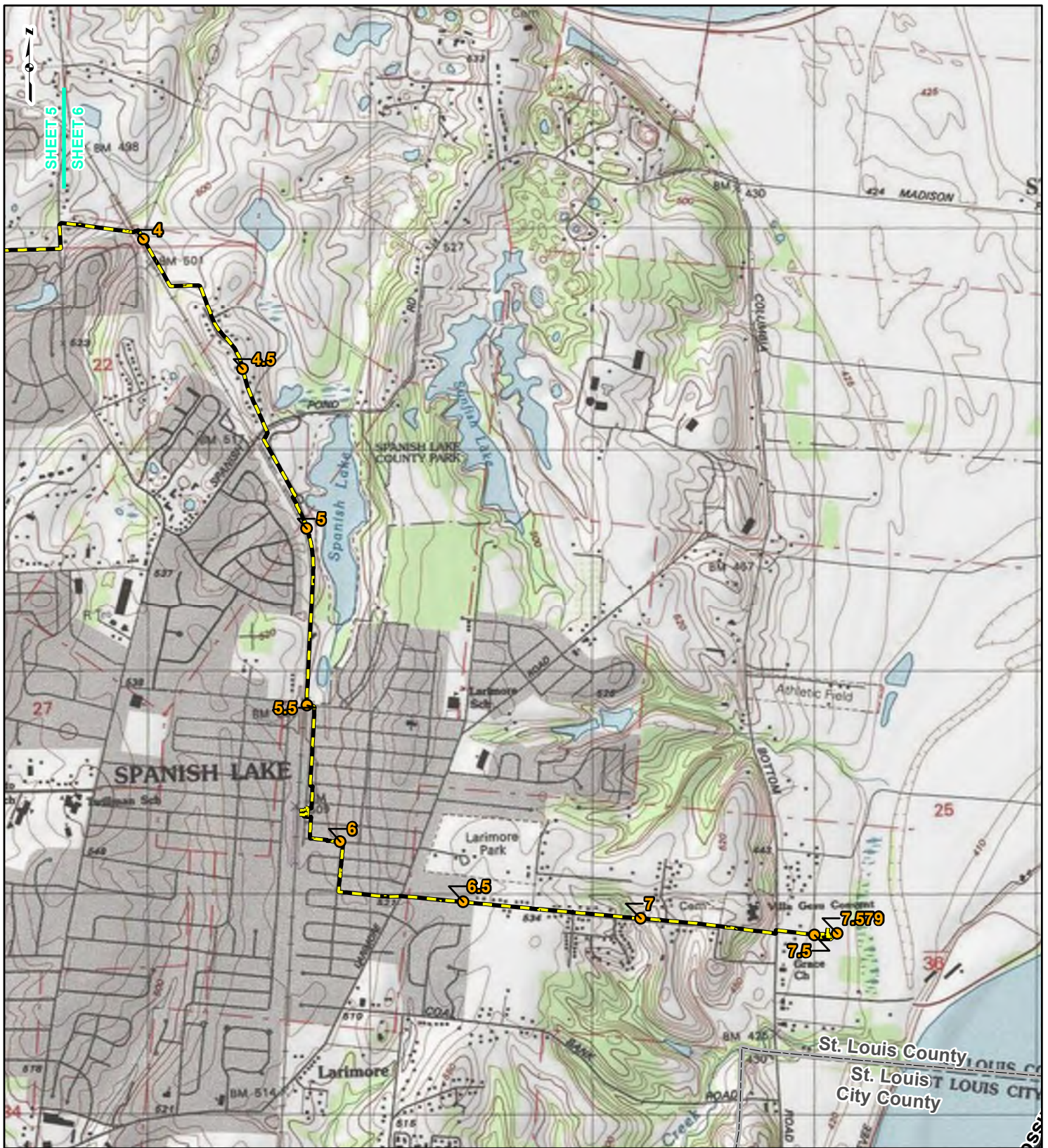
**FIGURE 1
LOCATION MAP
SHEET 5 OF 6**

Spire STL Pipeline

gimconsultants

DRAWN BY: PMH DATE: 8/12/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



LEGEND

- NEW BUILD MILEPOST
- LINE 880 MILEPOST
- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY

0 1,000 2,000 4,000 Feet

**FIGURE 1
LOCATION MAP
SHEET 6 OF 6**

Spire STL Pipeline

ginnconsultants

DRAWN BY: PMH DATE: 8/12/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALTON (1979), COLUMBIA BOTTOM (1979), ELSAH (1979), FLORISSANT (1979) AND GRAFTON (1979), MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 08/2016.



Spire STL Pipeline LLC
700 Market Street
Saint Louis, MO 63101

August 5, 2016

Ms. Judith Deel
Compliance Coordinator Missouri State Historic Preservation Office
PO Box 176
Jefferson City, MO 65102

Re: Spire STL Pipeline
FERC Docket No. PF16-9

Dear Ms. Deel,

At Spire, formerly The Laclede Group, we never stop looking for better ways to provide energy now and for the future. That's why Spire STL Pipeline LLC, a wholly owned subsidiary of Spire Inc., is proposing to develop and construct a new interstate natural gas pipeline that will bring an efficient energy source to southwest Illinois and the St. Louis region. As a member of the community, we want you to be informed about our proposed project and we want you to hear from us first.

We are proposing to construct 60 miles of new build pipeline and upgrade nine miles of existing underground pipeline to further improve reliability and better serve homes and businesses across Illinois and Missouri. The planned route runs through Scott, Greene and Jersey counties in Illinois and St. Charles and St. Louis counties in Missouri.

You are receiving this letter because your property is located on or near our currently proposed route.

Spire STL Pipeline LLC has started the pre-filing application process for developing interstate natural gas pipelines by the Federal Energy Regulatory Commission ("FERC") pursuant to 18 C.F.R. § 157.21. FERC staff recently started a pre-filing environmental review process, which encourages early involvement by citizens, governmental entities and other interested parties. You can find more information about this pre-filing process at www.ferc.gov. You can see all the information about the Spire STL Pipeline using the docket number PF16-9.

Included with this letter, for your information, is a general overview map of the proposed pipeline route and a diagram illustrating the FERC process.

We believe that we can create a better project by hearing from you and listening to your feedback. That's why we are hosting open houses this month so you can learn more about the project and we can learn more about you.

At the open houses, more detailed maps will be available to show where the proposed pipeline may be located relative to your property. We want you to come, ask questions and provide feedback. Representatives of the Federal Energy Regulatory Commission (FERC) will also be there to answer questions about the FERC process for natural gas pipelines.

Spire STL Pipeline open house schedule

Tuesday August 16, 2016 5 p.m. – 7:30 p.m.	Wednesday August 17, 2016 5 p.m. – 7:30 p.m.	Thursday August 18, 2016 5 p.m.– 7:30 p.m.	Tuesday August 23, 2016 5 p.m.– 7:30 p.m.	Wednesday August 24, 2016 5 p.m. – 7:30 p.m.
Scott County, Illinois	Jersey County, Illinois	St. Louis County, Missouri	St. Charles County, Missouri	Greene County, Illinois
Scott County Fairgrounds 401 North Walnut Winchester, IL 62694	Jerseyville Recreation Center 401 Mound Street Jerseyville, IL 62052	Hazelwood Civic Center East 8969 Dunn Road Hazelwood, MO 63042	American Legion Post 312 2500 Raymond Drive St Charles, MO 63301	Knights of Columbus Hall U.S. HWY 67 Carrollton, IL 62016

Check out more information on our website at www.SpireSTLPipeline.com. If you have any questions, please do not hesitate to contact us toll-free at 1 844-885-7234 or at STLPipelineInfo@SpireEnergy.com.

We look forward to working with you.

Sincerely,

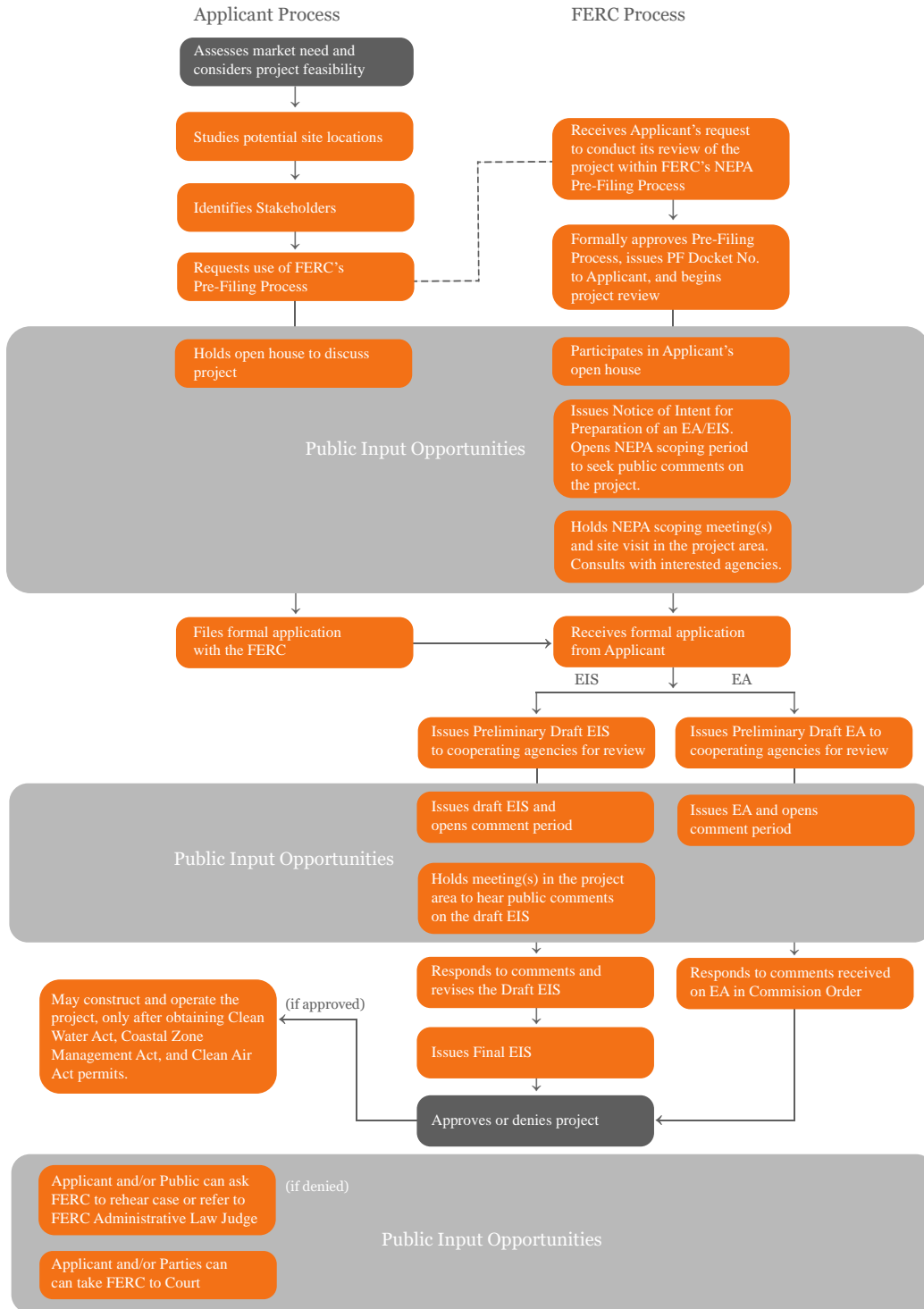


Scott Jaskowiak
Vice President
Spire STL Pipeline LLC

Project Map



FERC Pre-Filing Process





July 29, 2016

Ms. Judith Deel
Compliance Coordinator
Missouri State Historic Preservation Office
P.O. Box 176
Jefferson City, MO 65102

**Re: Notice of Use of Pre-Filing Process
Spire STL Pipeline
Scott, Greene, and Jersey Counties, IL
St. Charles and St. Louis Counties, MO**

Dear Ms. Deel:

Spire STL Pipeline LLC ("Spire") is in the planning stages of the Spire STL Pipeline ("Project"). As proposed, the Project will serve the energy needs of residential, commercial and industrial customers in the eastern portion of Missouri, including the St. Louis metropolitan area and surrounding counties. The Project as proposed will consist of approximately 60 miles of new build 24-inch diameter steel pipeline (referred to as the "new build" portion of the Project) originating at an interconnection with Rockies Express Pipeline LLC ("REX") pipeline in Scott County, Illinois, extending down through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri until crossing the Missouri river and tying into an existing 20-inch diameter steel transmission pipeline in St. Louis County, Missouri that is currently owned and operated by Laclede Gas Company ("LGC") (referred to as "Line 880"). Spire plans to purchase Line 880 from LGC and modify approximately nine miles of existing 20-inch diameter steel natural gas pipeline located in St. Louis County, Missouri that will connect the new build part of the Project to the Enable Mississippi River Transmission, LLC ("MRT") pipeline along the western bank of the Mississippi river in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles.

Construction and operation of the proposed Project will be regulated by the Federal Energy Regulatory Commission ("Commission") among other regulatory agencies. Spire intends to utilize the Commission's pre-filing process detailed in Section 157.21 of the Commission's regulations, which allows the Commission and other agencies to initiate National Environmental Policy Act ("NEPA") review prior to Spire filing an application to the Commission. The Commission would need to issue Spire a Certificate of Public Convenience and Necessity to enable construction and operation of the proposed pipeline. The preliminary Project schedule includes the following target dates:

- July 22, 2016 - Commission acceptance into pre-filing; commencement of the NEPA process (pre-filing docket no. PF16-9-000);
- August 2016 (Anticipated) - biological and cultural resource surveys;
- January 2017 (Anticipated) - file final application with Commission;
- August 2017 (Anticipated) - NEPA document published;
- November 2017 (Anticipated) - Commission decision on application; and
- February 2018 (Anticipated) - commence construction activities.

On behalf of Spire, GAI would like to take this opportunity to invite the Missouri State Historic Preservation Office to participate in the review of this Project as a cooperating agency during the Commission's pre-filing process. We look forward to your involvement in the review of this important Project and appreciate your cooperation.

Please note the intent of this letter is solely for the purpose of inviting you to participate in the Commission's NEPA pre-filing process. The Commission will also reach out to you requesting your agency to be a cooperating agency. Specific and necessary consultations and/or applicable permit applications will be addressed to you under separate cover.

If you have any questions or would like additional information, please feel free to contact me at 331.301.2002 or by e-mail at L.Ferry@gaiconsultants.com.

Sincerely,

GAI Consultants, Inc.

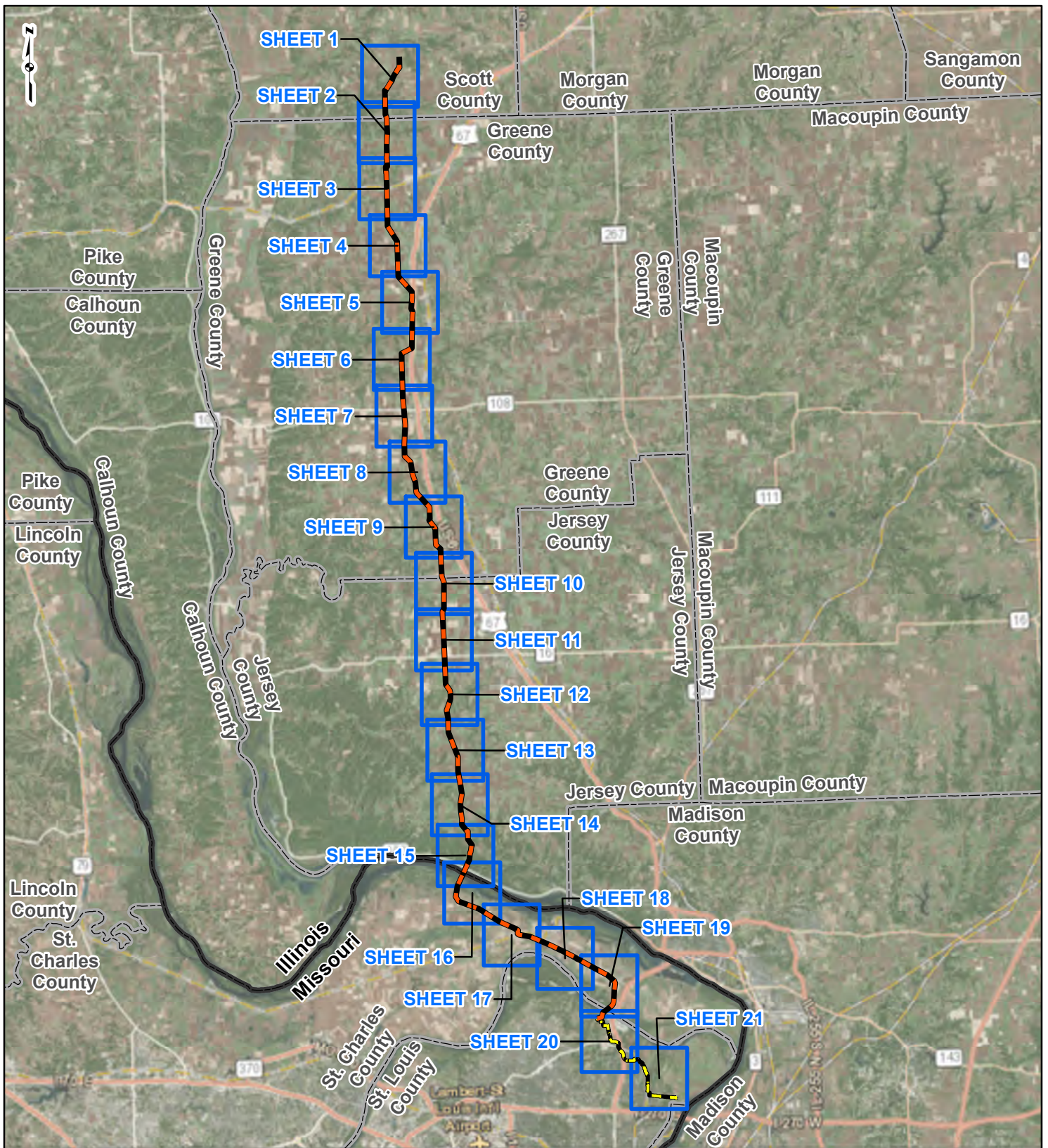
A handwritten signature in black ink that reads "Lori M. Ferry". The signature is written in a cursive style with a large, stylized "L" and "F".

Lori M. Ferry
Environmental Project Manager

LMF/gmg

Attachment: United States Geological Survey (USGS) Topographic Map (Figure 1)

ATTACHMENT
USGS TOPOGRAPHIC MAP (FIGURE 1)



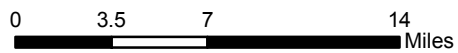
PROJECT LOCATION



SCOTT, GREENE AND JERSEY COUNTIES, ILLINOIS AND ST. CHARLES AND ST. LOUIS COUNTIES, MISSOURI

LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- COUNTY BOUNDARY
- STATE BOUNDARY
- SHEET INDEX

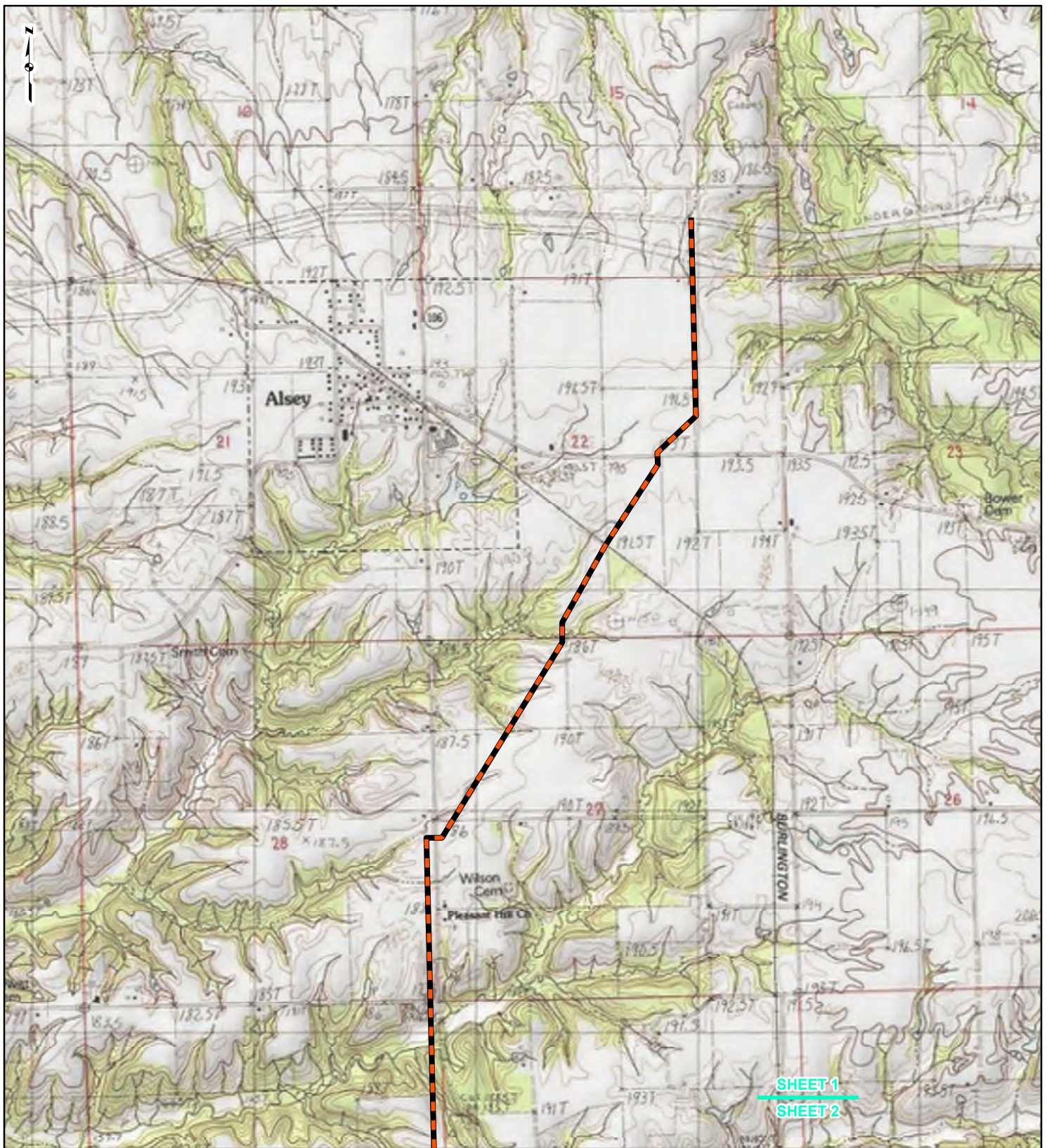


**FIGURE 1
LOCATION MAP
SHEET INDEX**

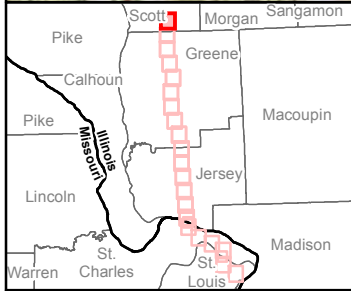


DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: ESRI WORLD IMAGERY AND TRANSPORTATION, NAIP, USDA FSA, 2015, ACCESSED 07/2016.



SHEET 1
SHEET 2



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 1 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.





SHEET 1
SHEET 2



SHEET 2
SHEET 3



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

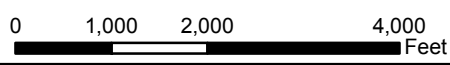
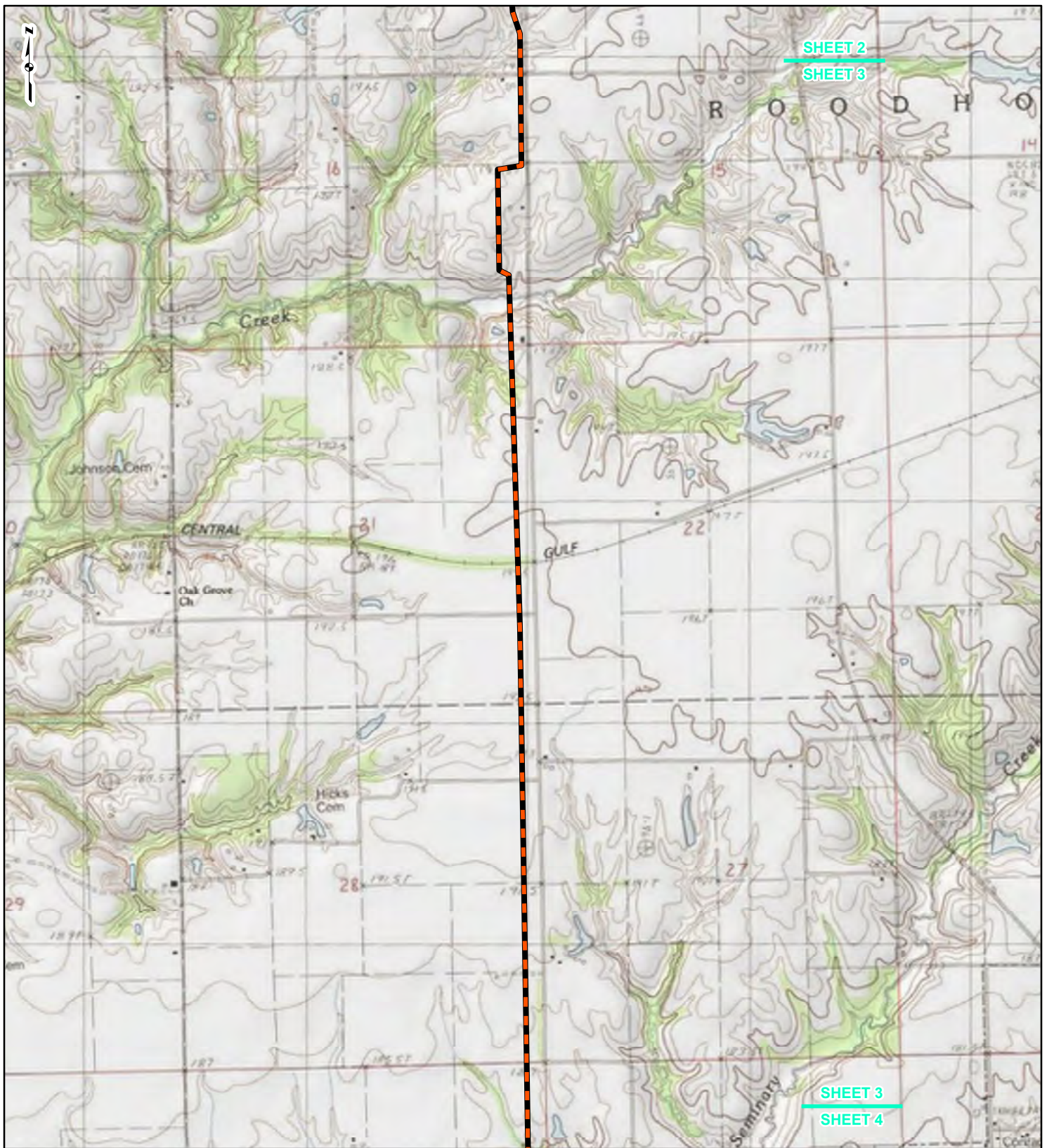


FIGURE 1
LOCATION MAP
SHEET 2 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.

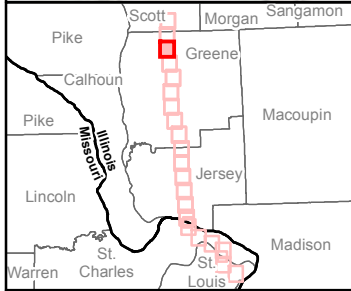


SHEET 2





SHEET 3

SHEET 3

SHEET 4



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

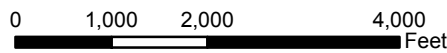
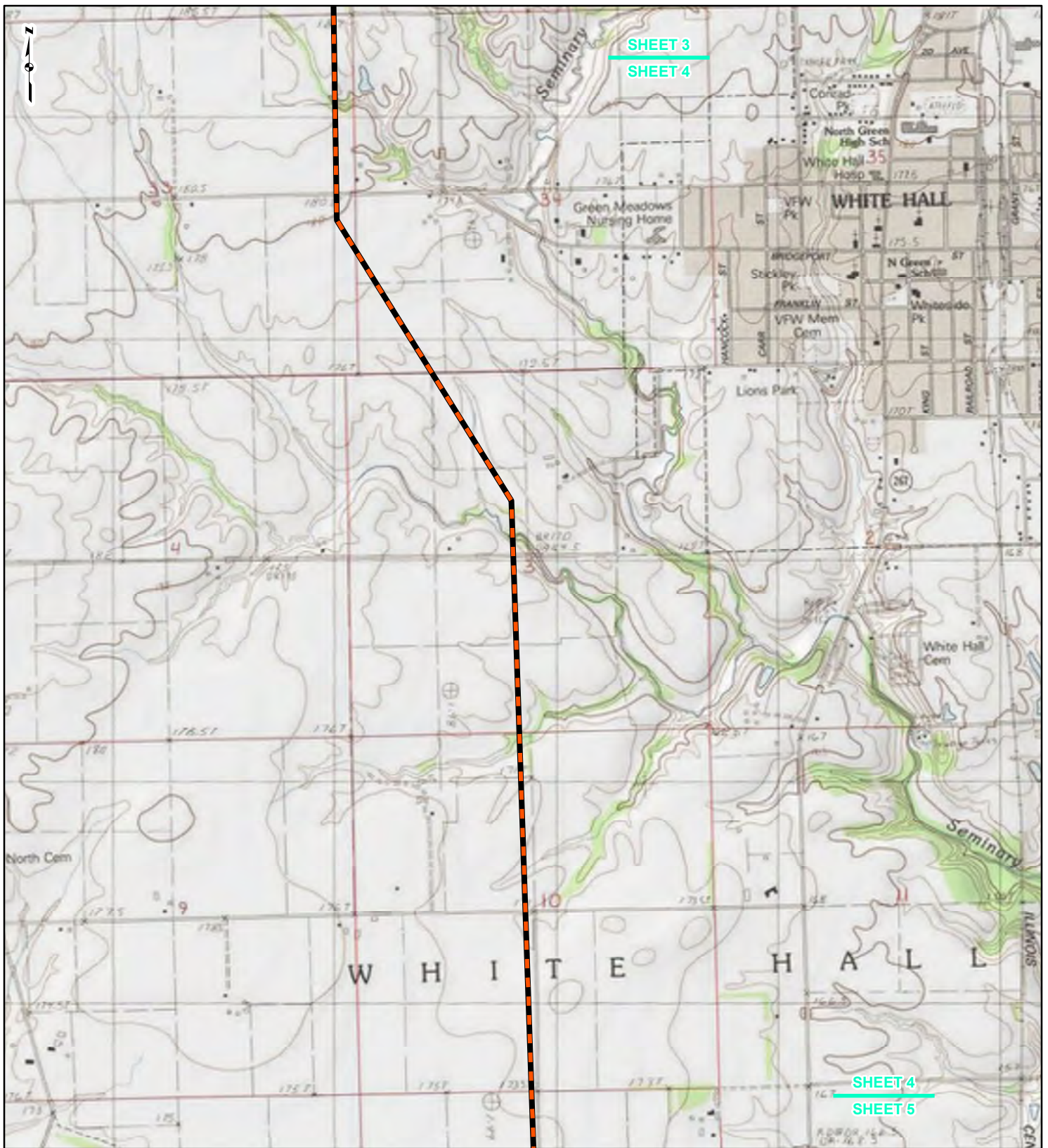


FIGURE 1
LOCATION MAP
SHEET 3 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1995), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

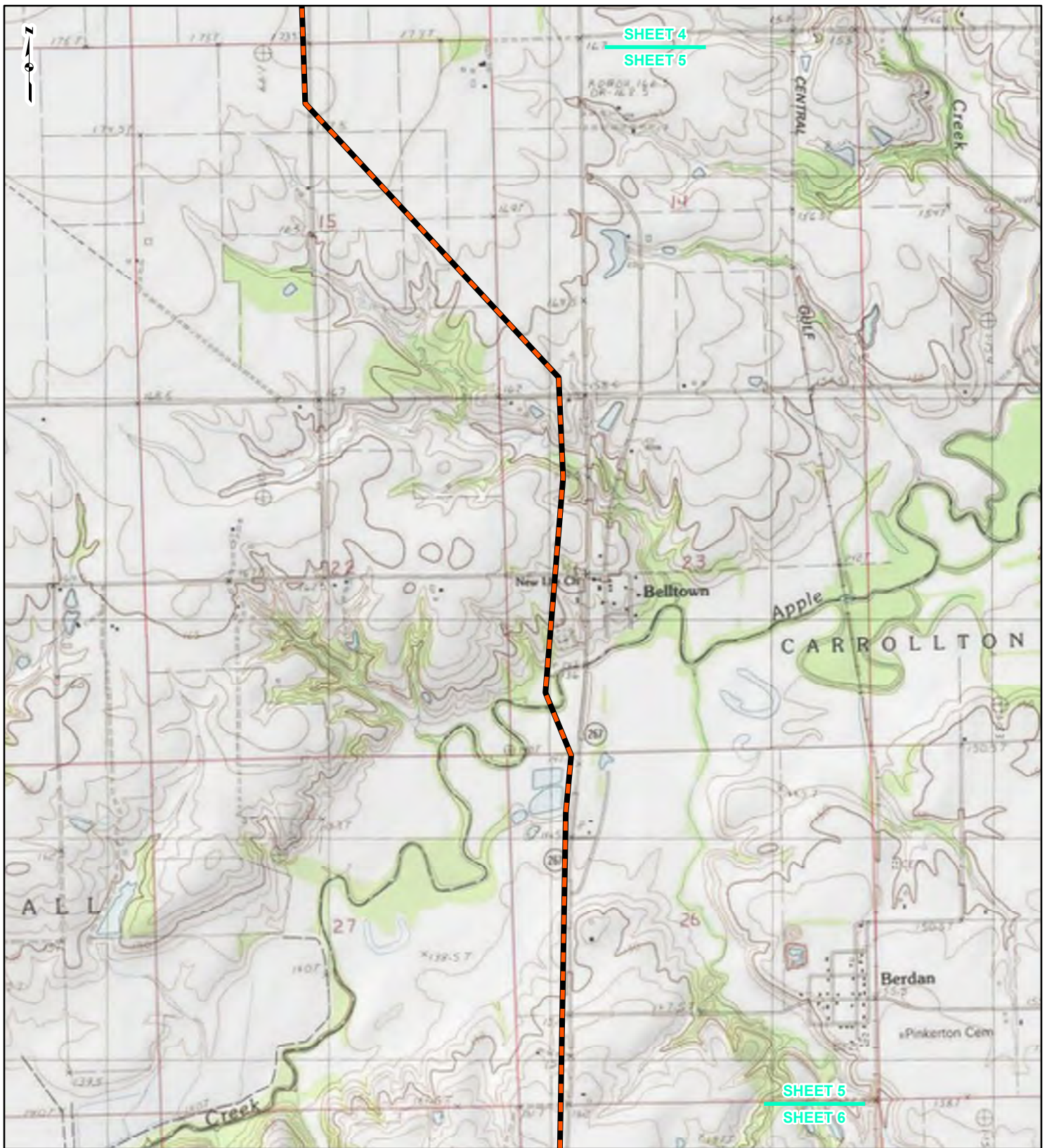
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 4 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

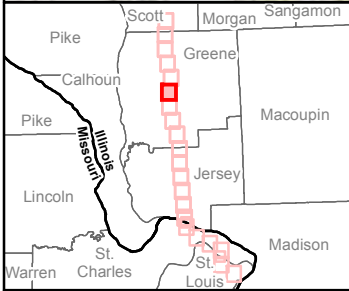
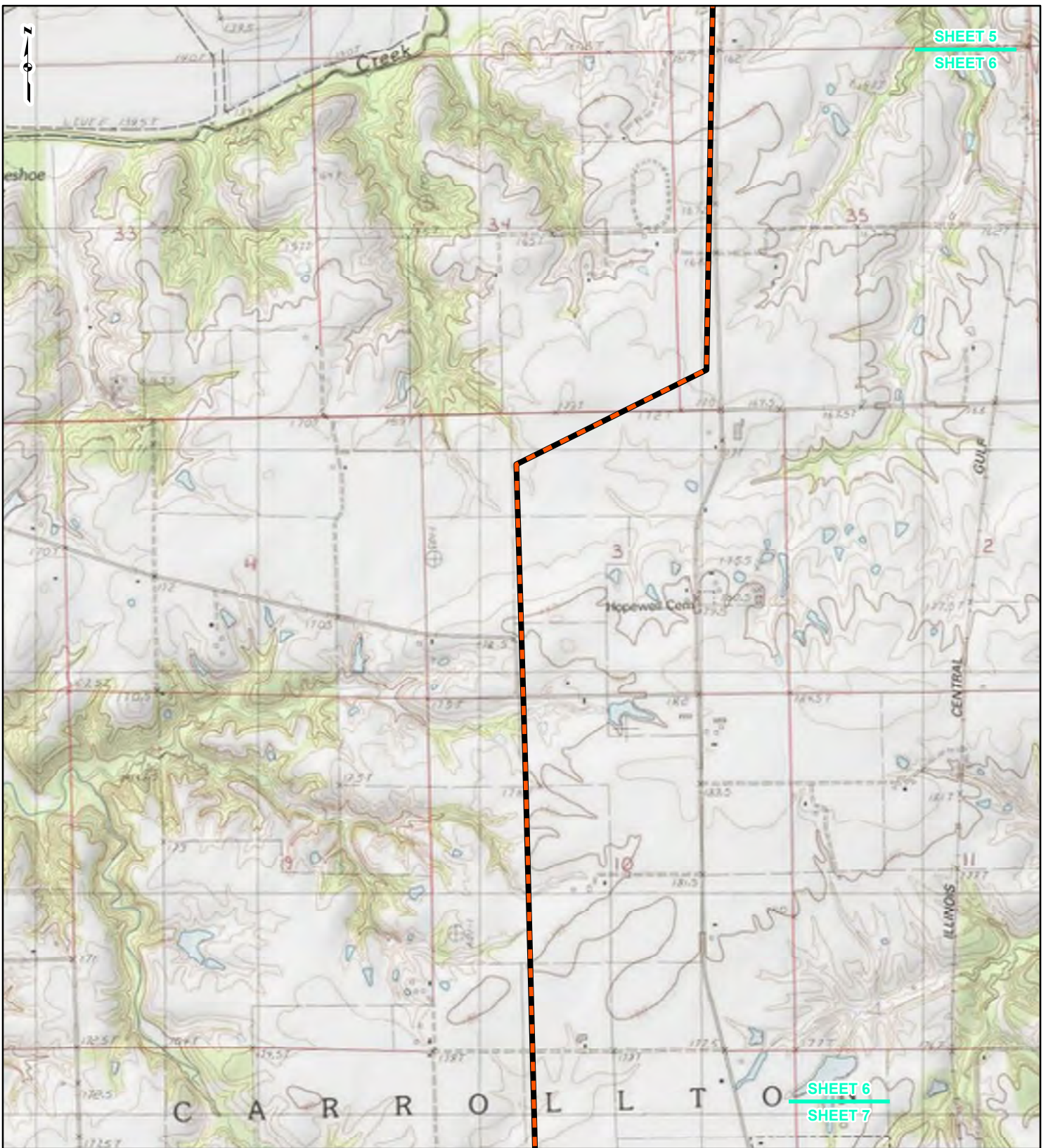
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 5 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

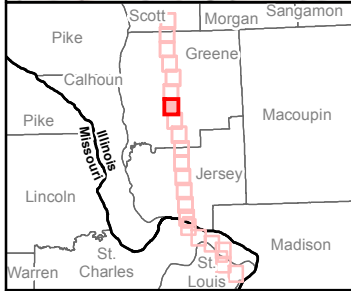
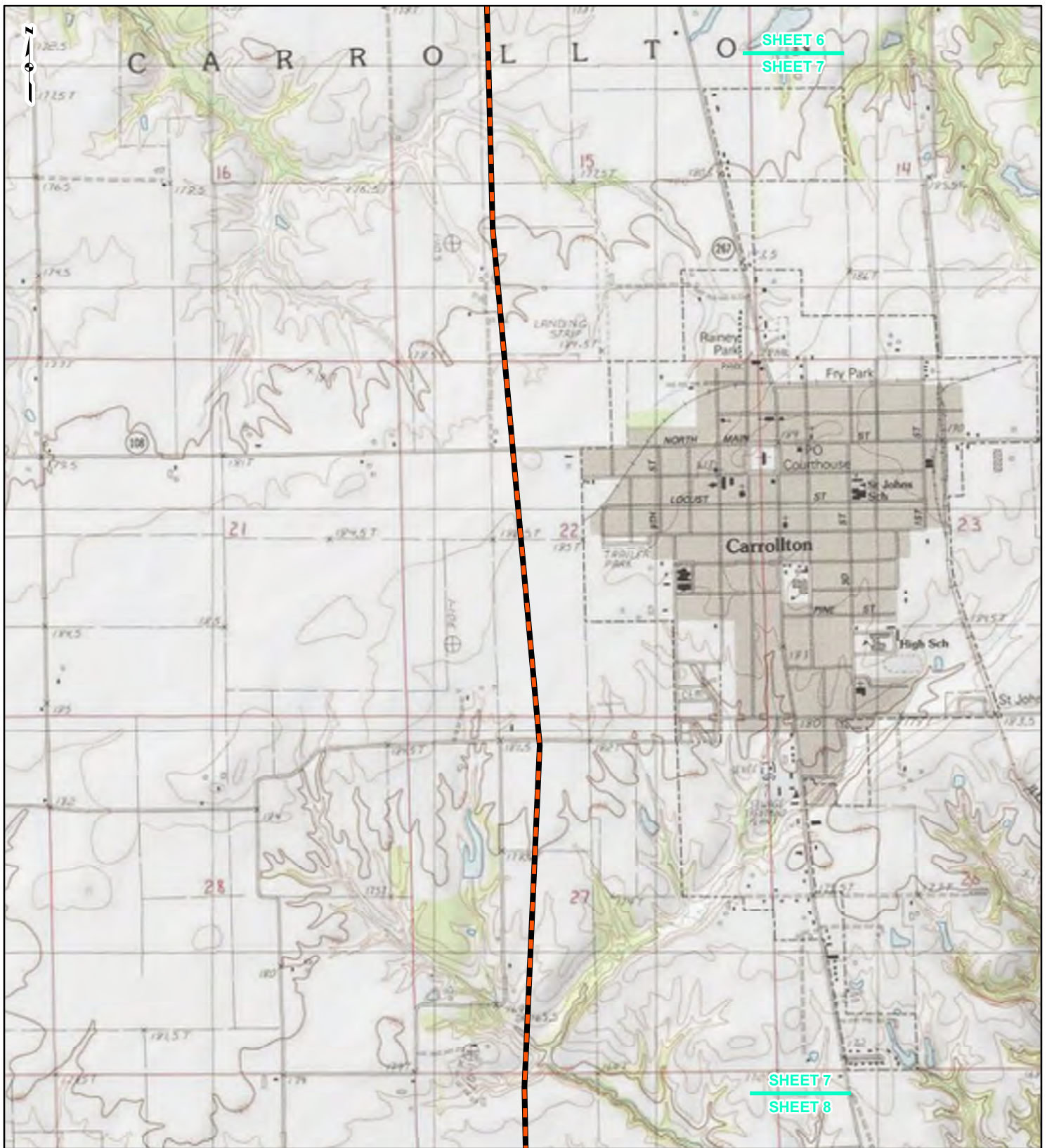
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 6 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 7 OF 21**

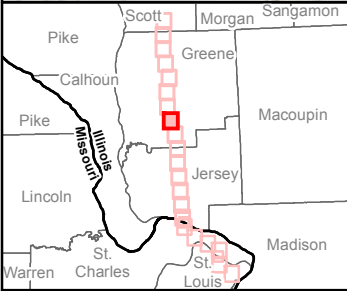
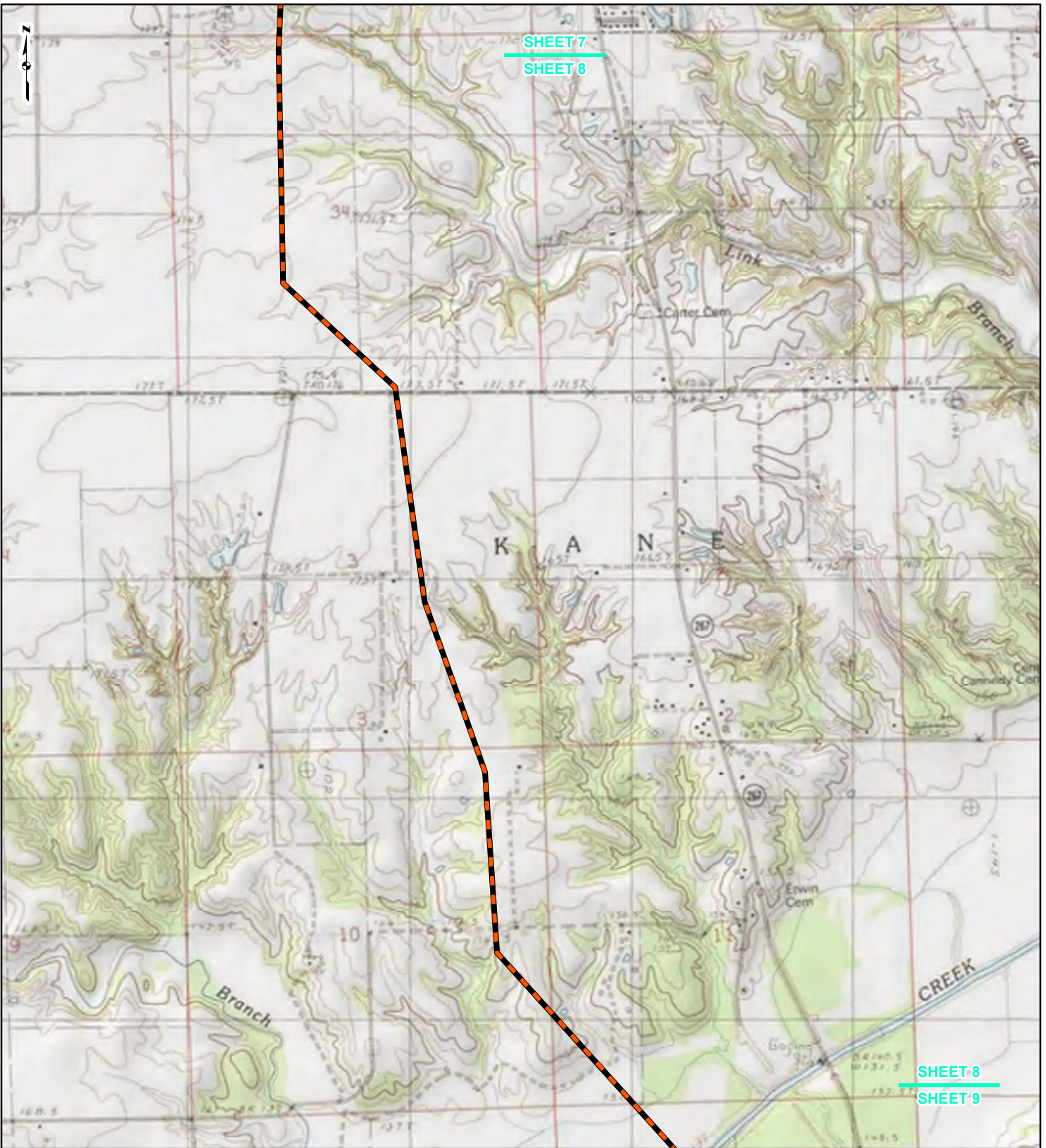
Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF





REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.

SHEET 7
SHEET 8

SHEET 8
SHEET 9



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

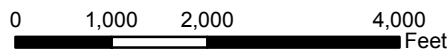
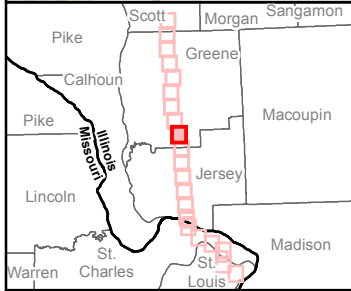
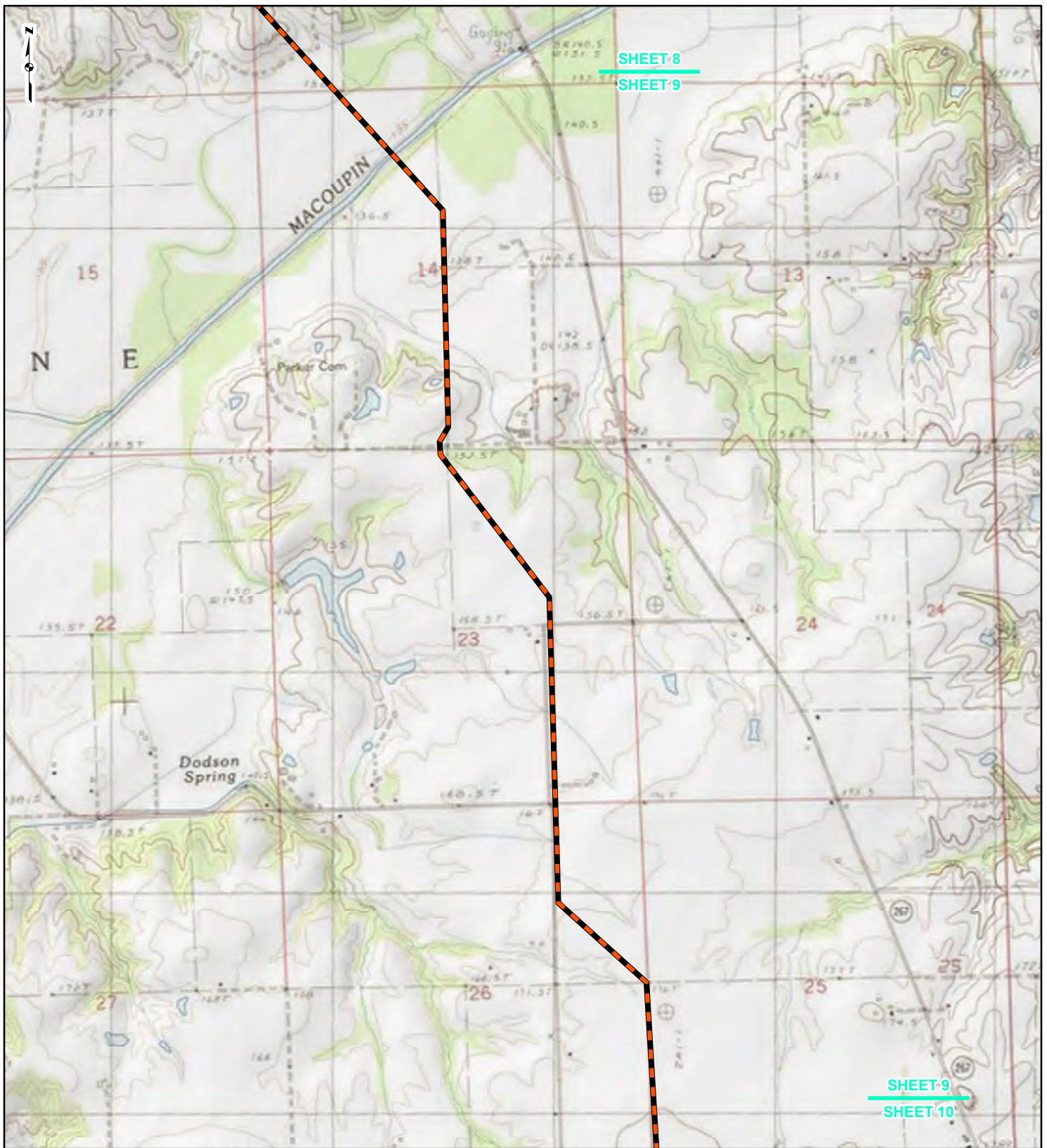


FIGURE 1
LOCATION MAP
SHEET 8 OF 21



DRAWN BY: PMH DATE: 7/28/2016
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REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

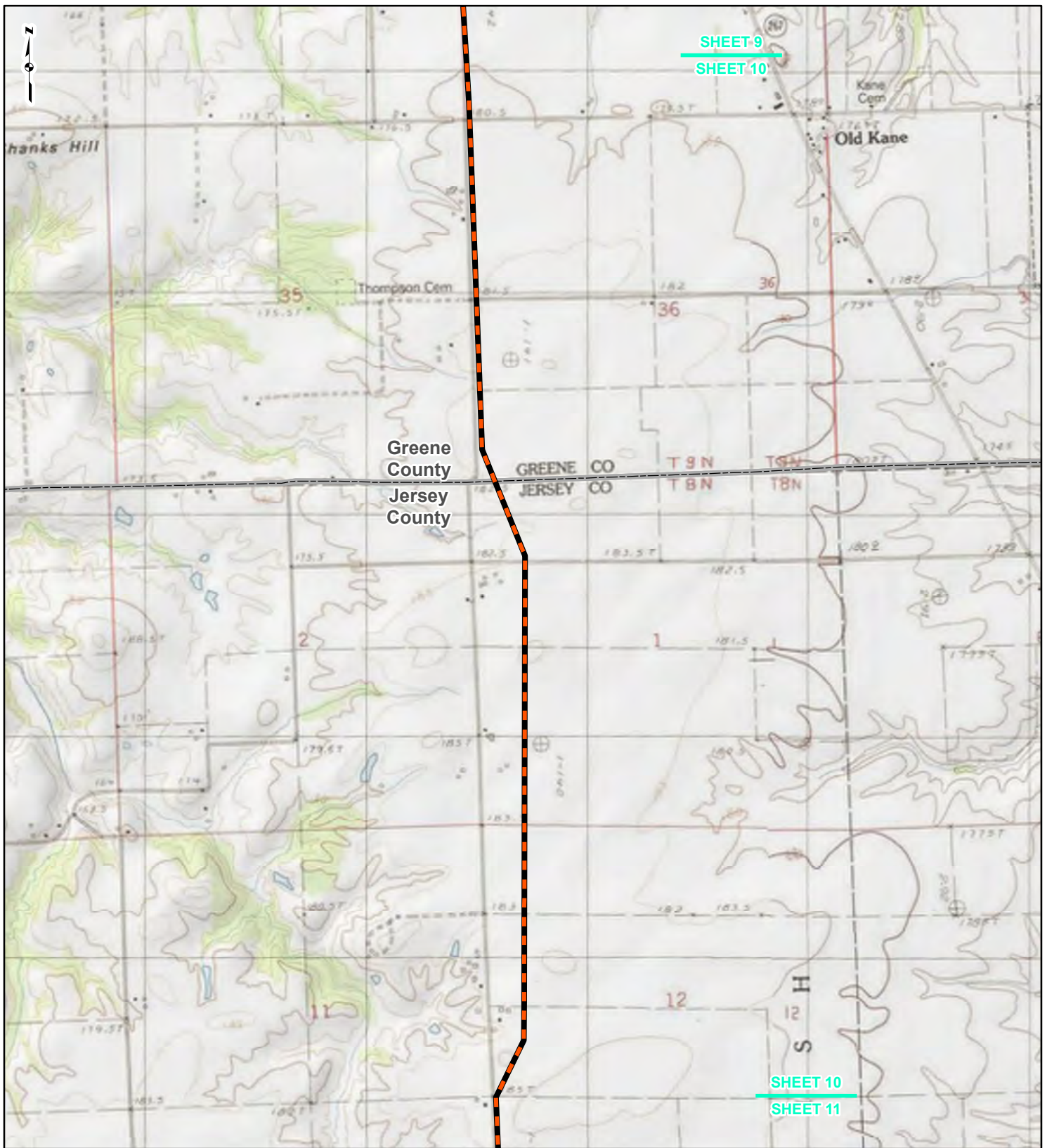
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 9 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



SHEET 9
SHEET 10





SHEET 10
SHEET 11

Greene
County
Jersey
County

GREENE CO T9N T8N
JERSEY CO T8N T7N



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

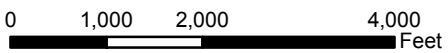
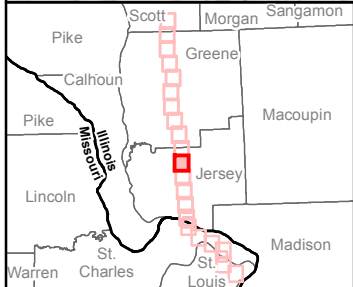
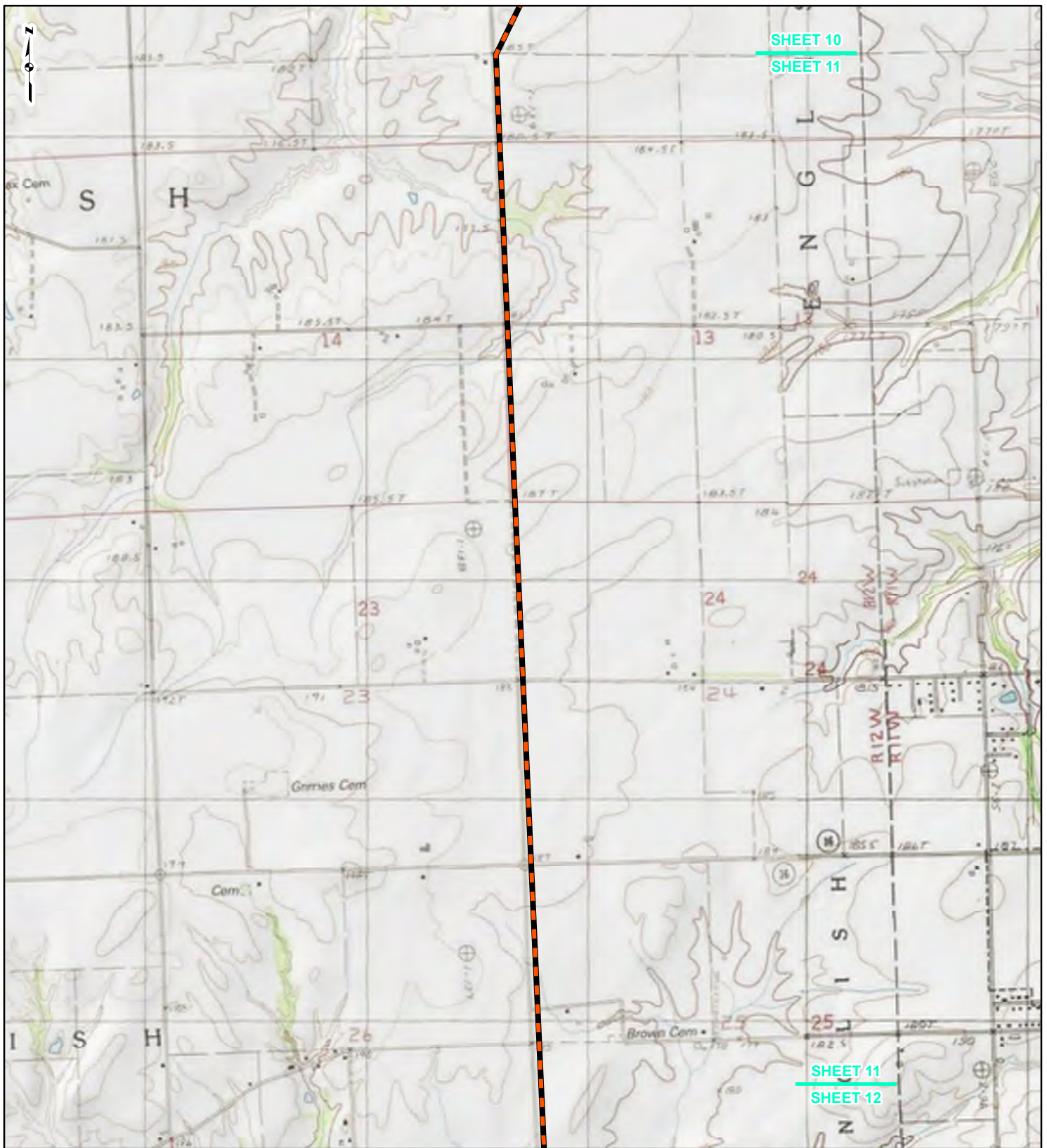


FIGURE 1
LOCATION MAP
SHEET 10 OF 21

 **Spire STL Pipeline** 

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

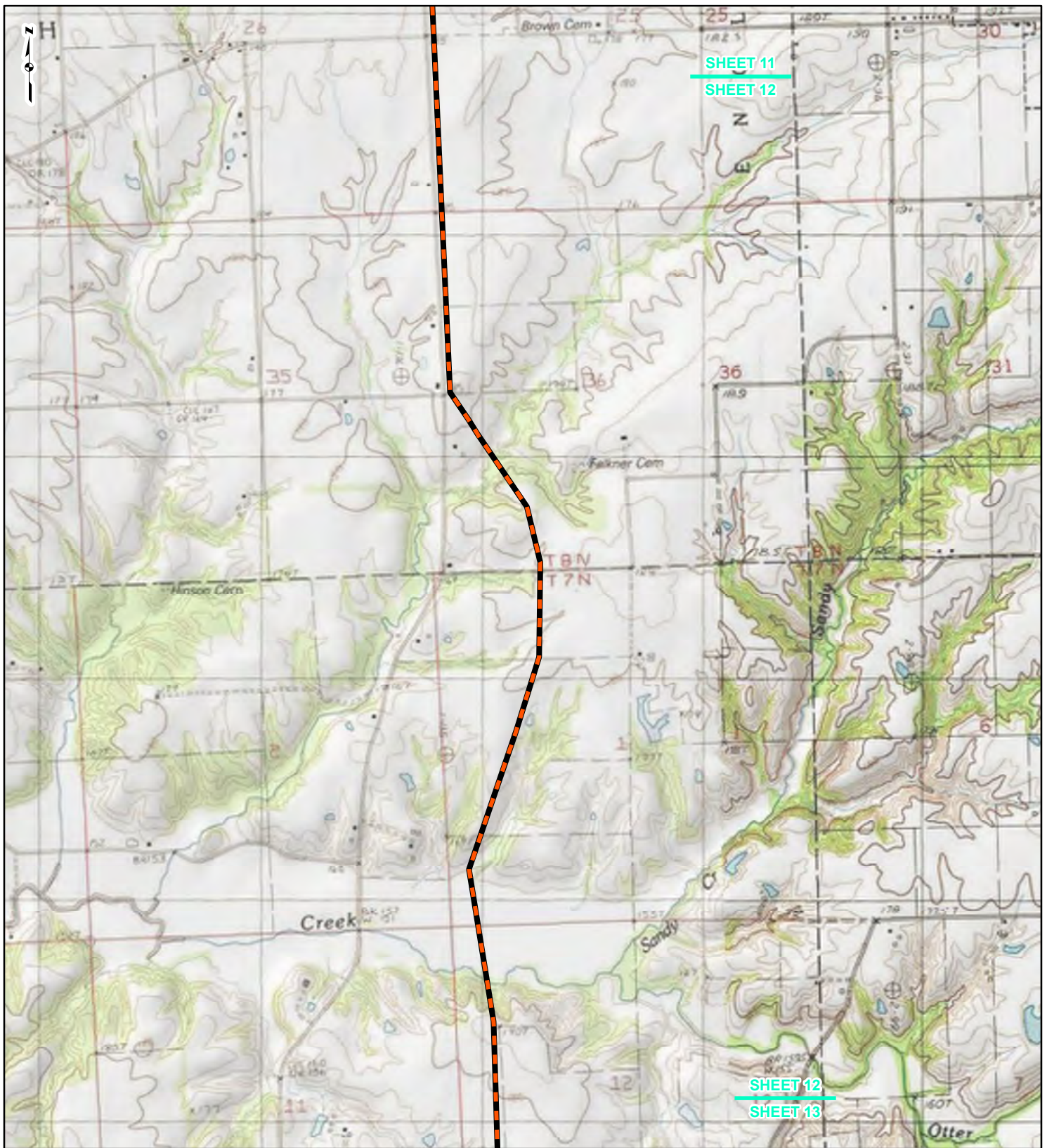
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 11 OF 21



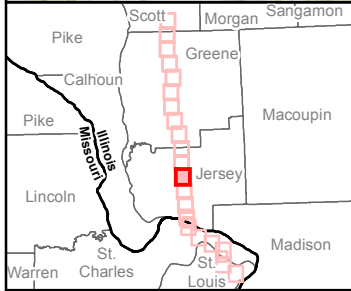
DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



SHEET 11
SHEET 12

SHEET 12
SHEET 13



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

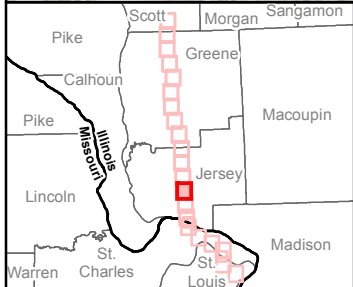
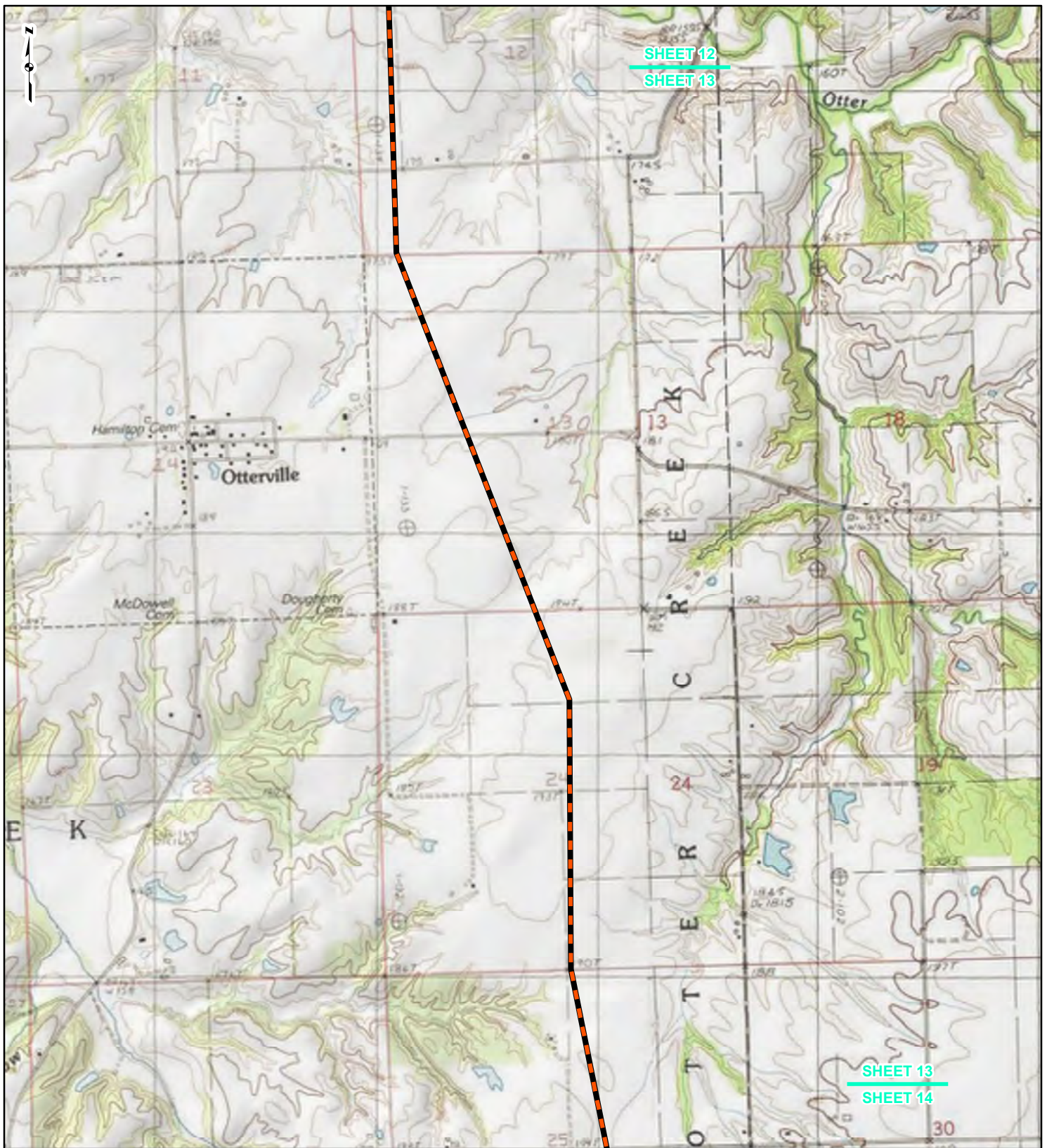
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 12 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

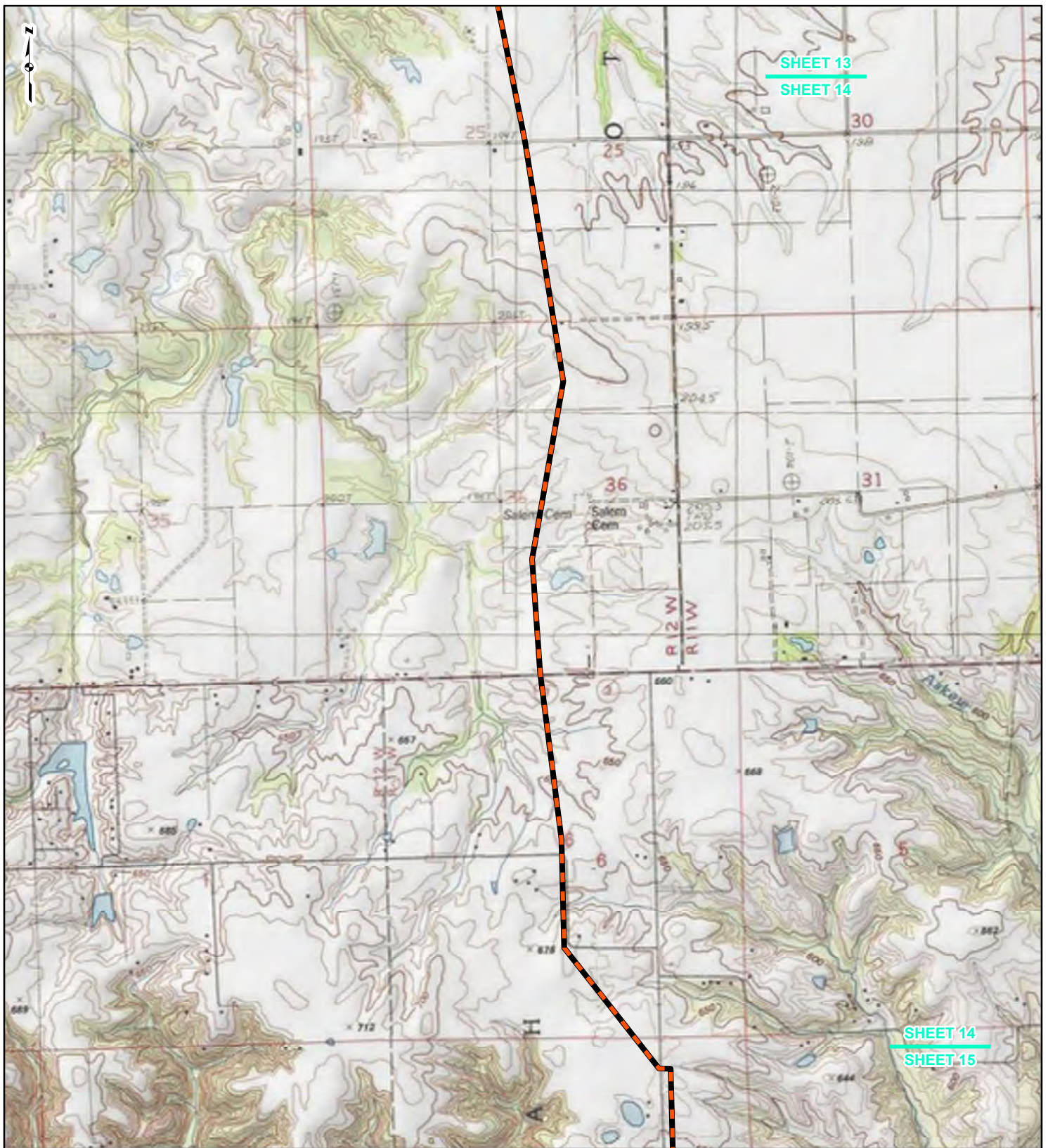
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 13 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/20/16.



SHEET 13





SHEET 14

SHEET 14

SHEET 15



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

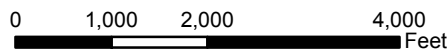
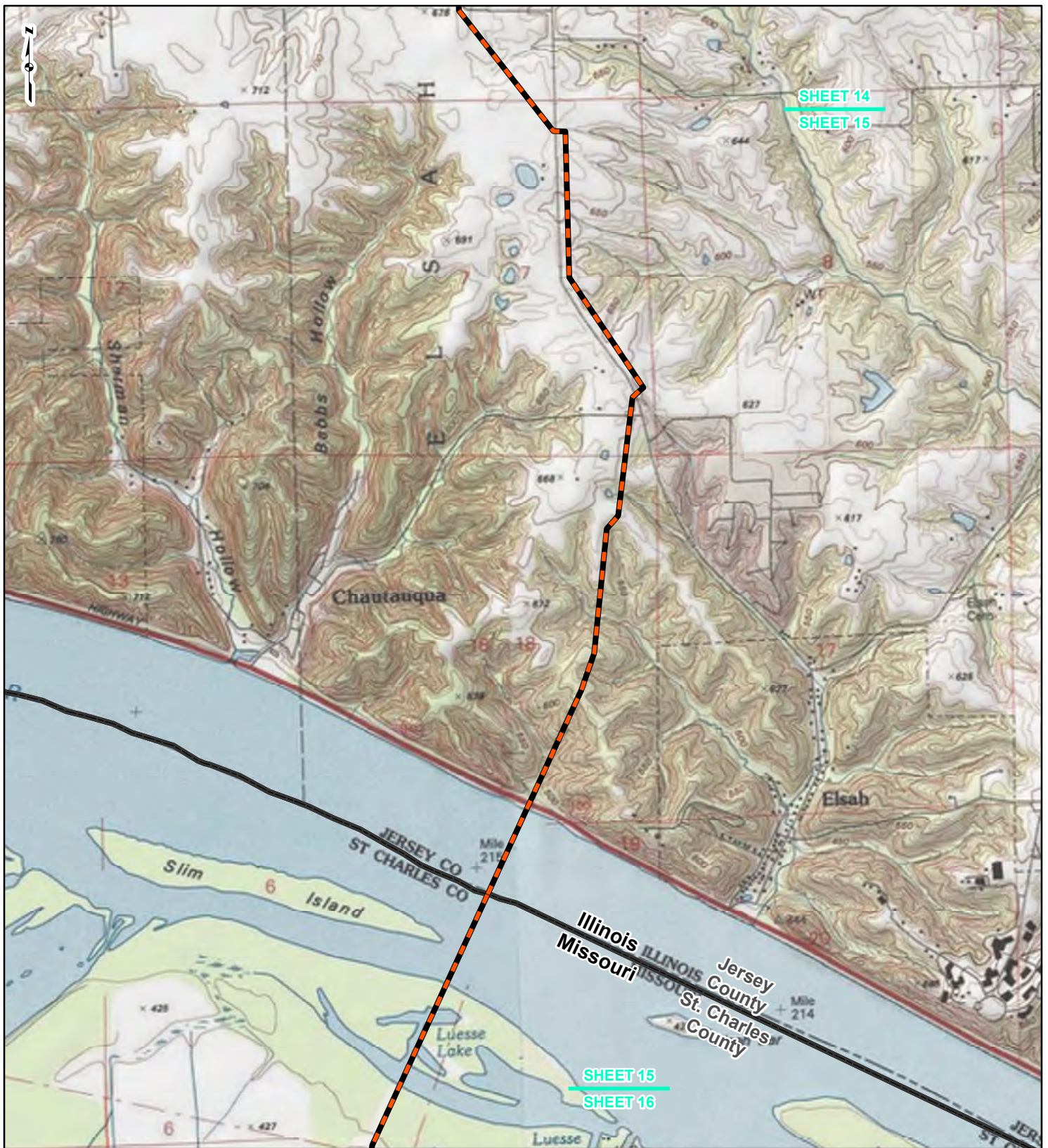


FIGURE 1
LOCATION MAP
SHEET 14 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLOISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

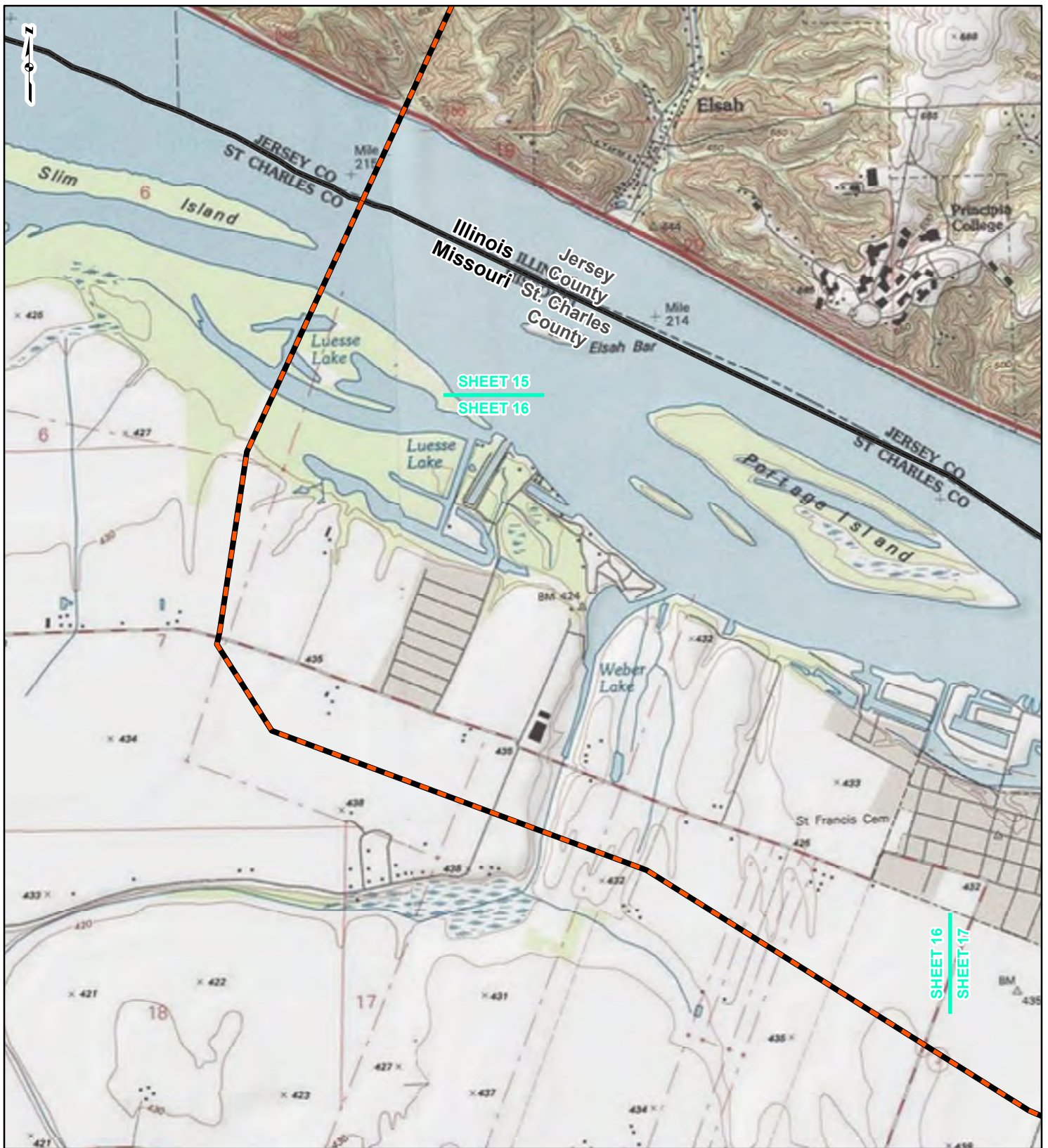
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 15 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983), AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.







SHEET 15
SHEET 16

SHEET 16
SHEET 17



LEGEND

-  NEW BUILD 24-INCH DIAMETER PIPELINE
-  LINE 880 MODIFICATIONS
-  STATE BOUNDARY
-  COUNTY BOUNDARY

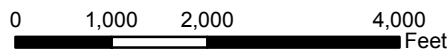
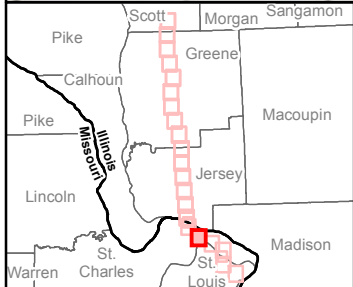
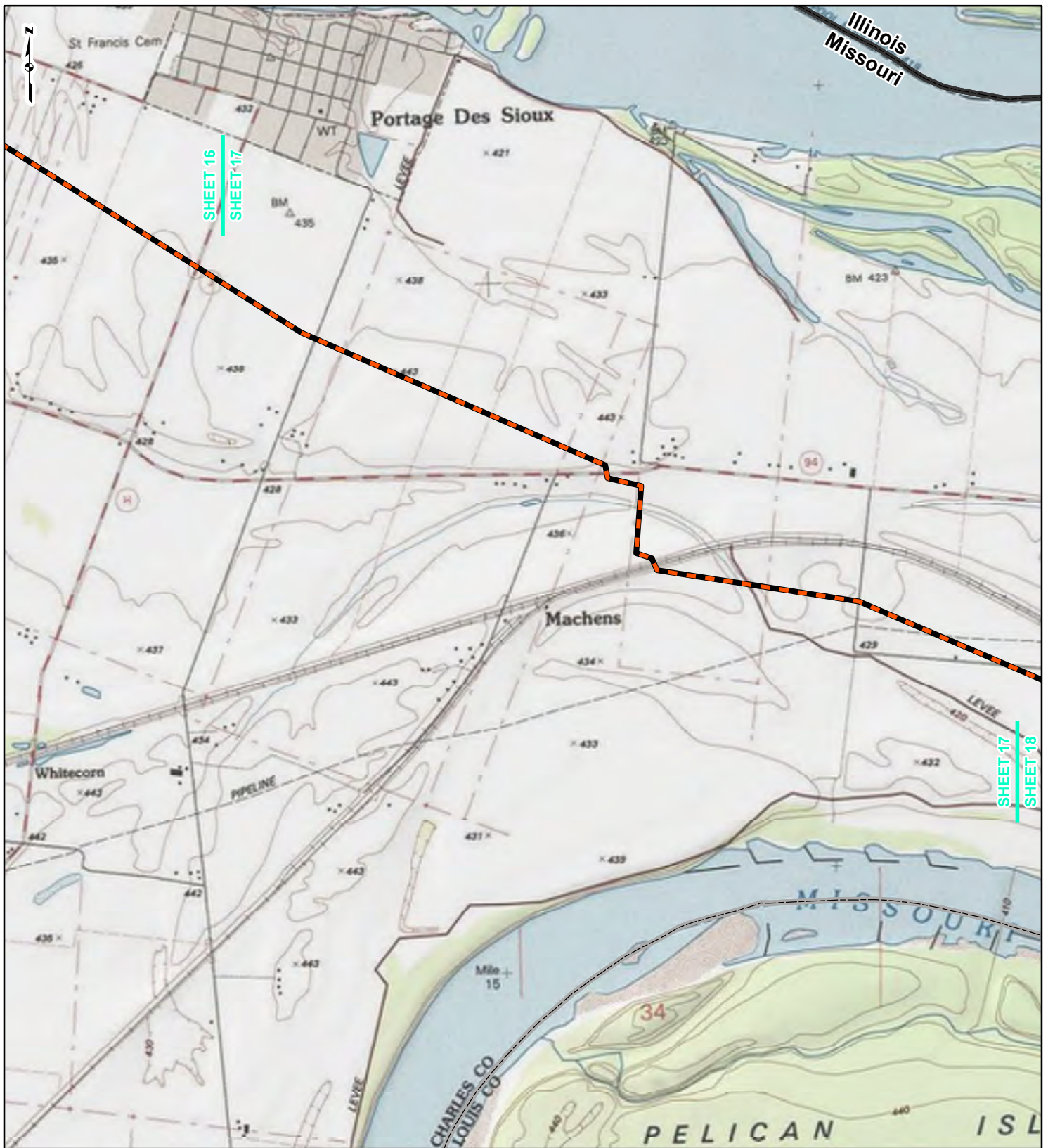


FIGURE 1
LOCATION MAP
SHEET 16 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

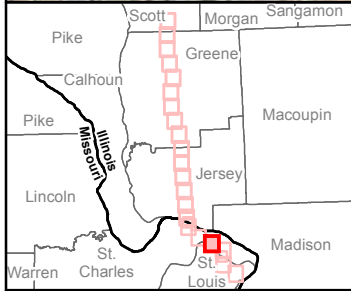
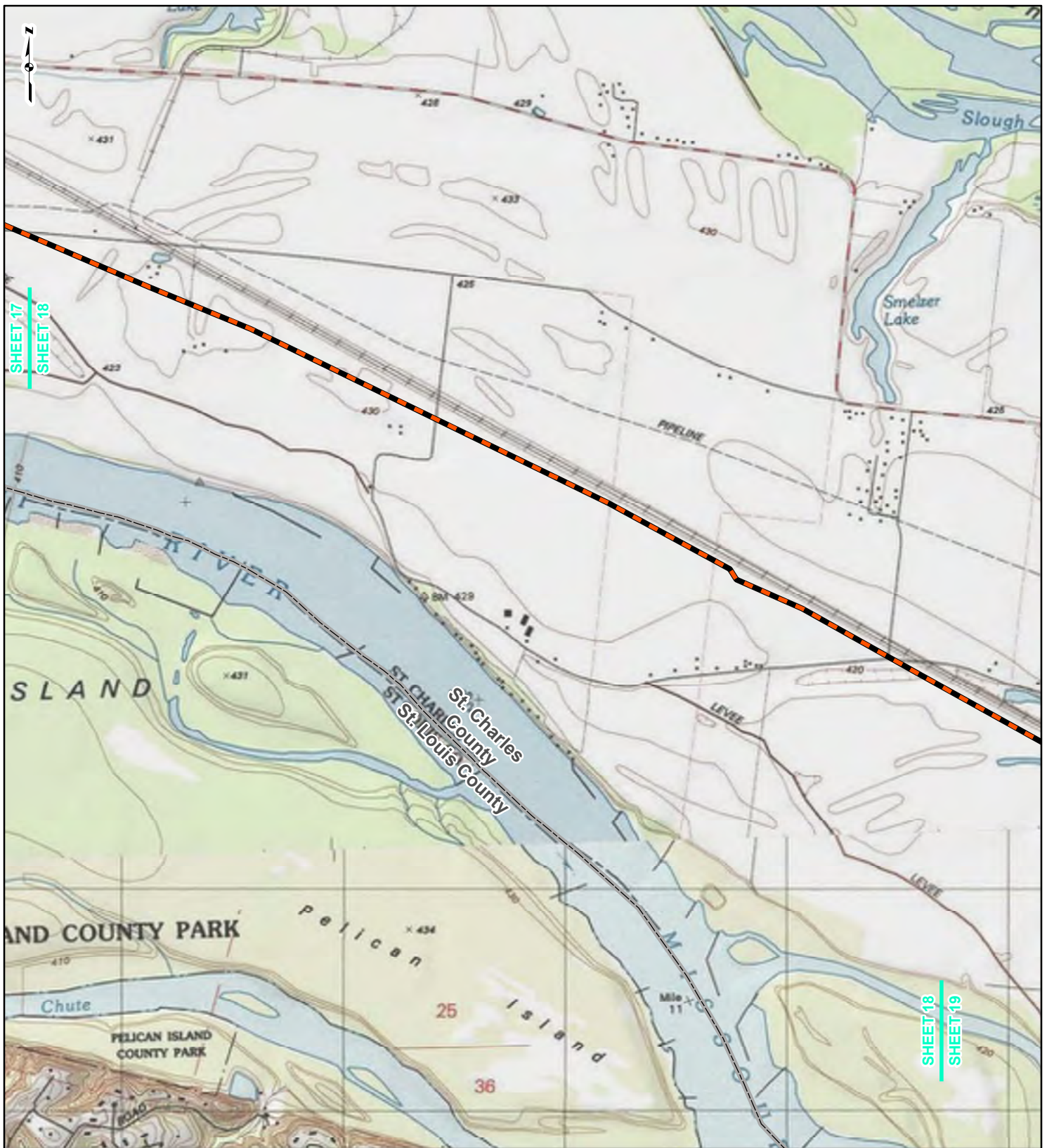
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 17 OF 21

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

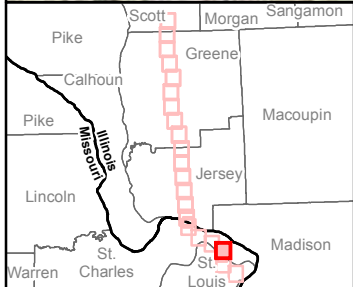
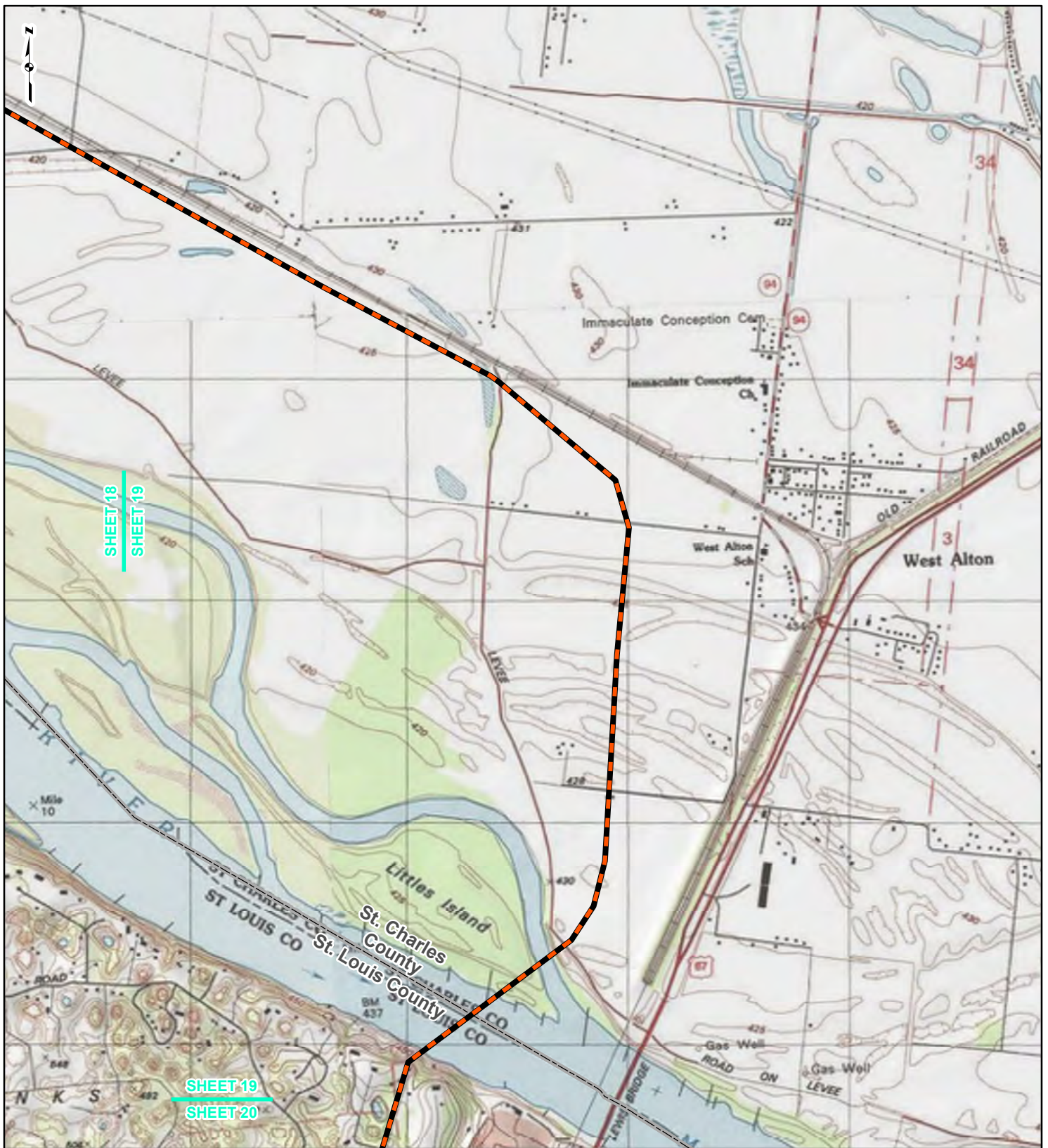
0 1,000 2,000 4,000
Feet

**FIGURE 1
LOCATION MAP
SHEET 18 OF 21**

Spire STL Pipeline

DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ELSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

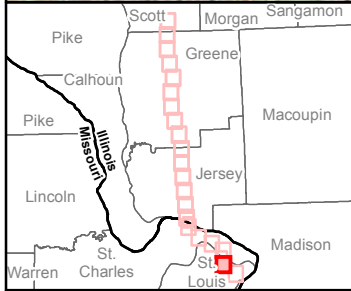
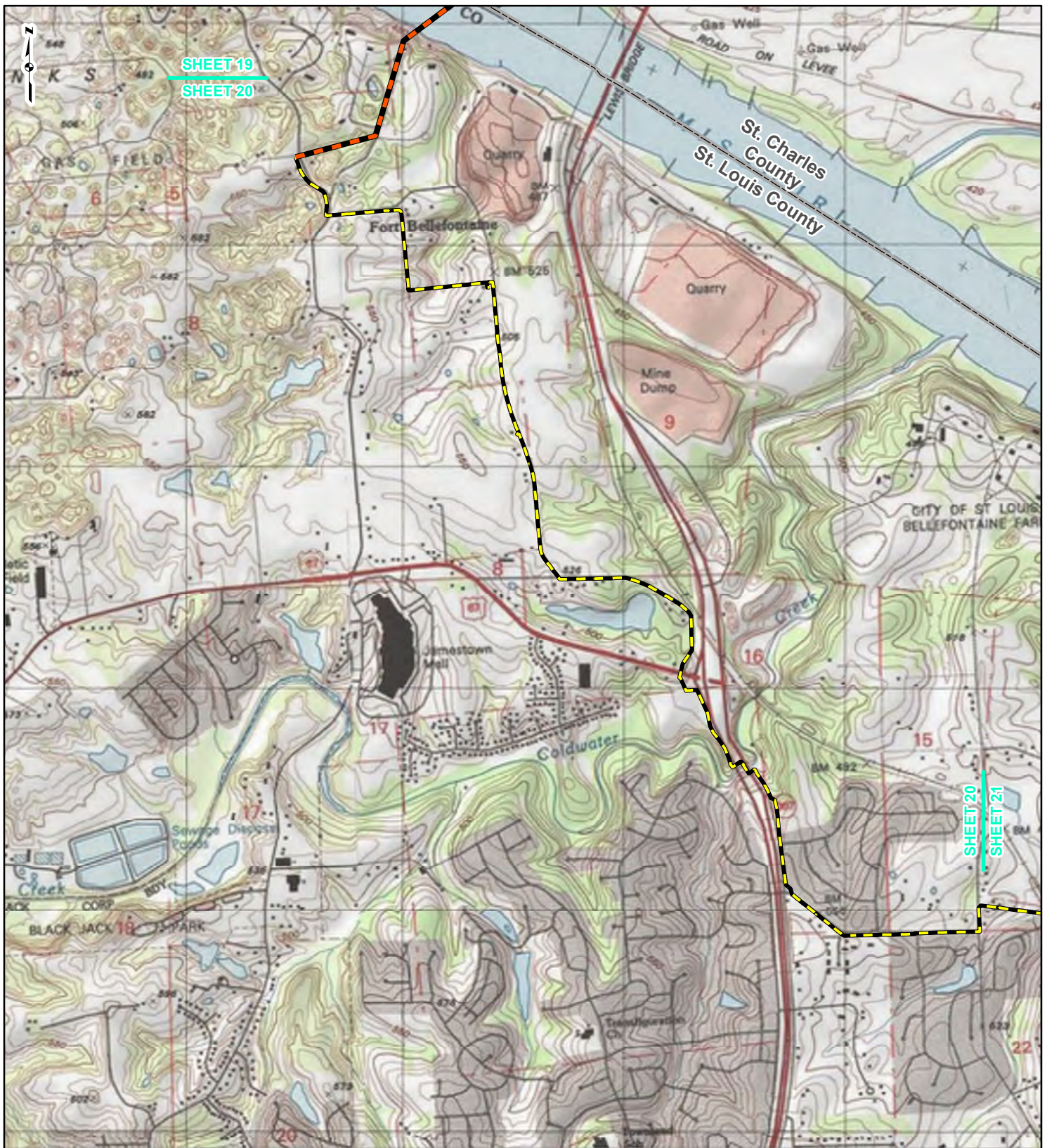
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 19 OF 21



DRAWN BY: PMH DATE: 7/28/2016
 CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

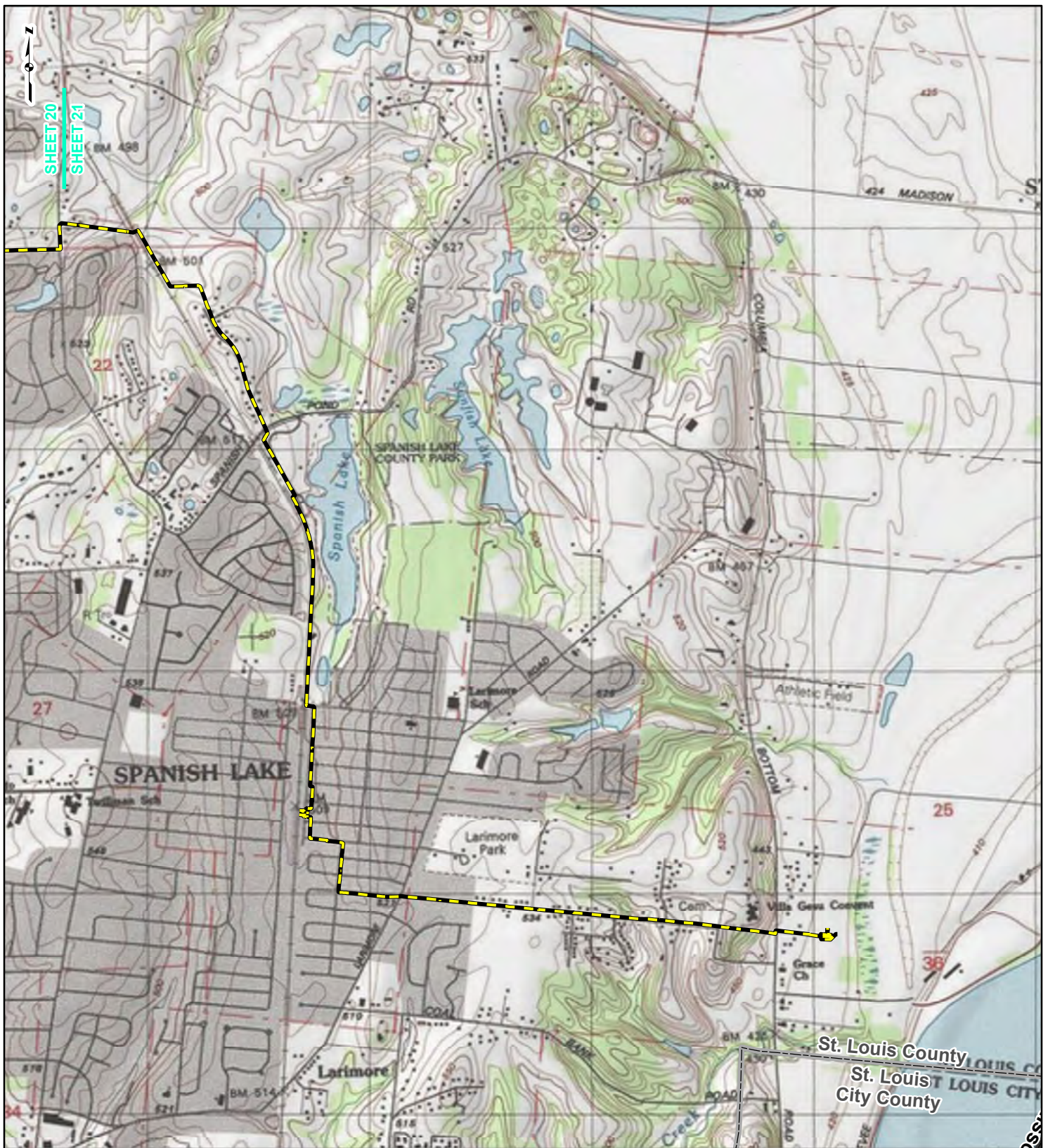
0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 20 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSAH (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.



LEGEND

- NEW BUILD 24-INCH DIAMETER PIPELINE
- LINE 880 MODIFICATIONS
- STATE BOUNDARY
- COUNTY BOUNDARY

0 1,000 2,000 4,000
Feet

FIGURE 1
LOCATION MAP
SHEET 21 OF 21



DRAWN BY: PMH DATE: 7/28/2016
CHECKED: SWW APPROVED: LMF

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: ALSEY (1983), ALTON (1994), BOYER CREEK (1983), CARROLLTON (1983), COLUMBIA BOTTOM (1999), ELSA (1995), FLORISSANT (1999), GRAFTON (1995), JERSEYVILLE NORTH (1983), JERSEYVILLE SOUTH (1983), OTTERTVILLE (1983) AND ROODHOUSE WEST (1983), ILLINOIS AND MISSOURI, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND I-CUBED, ACCESSED 07/2016.