FLORIDA SOUTHEAST CONNECTION PROJECT

RESOURCE REPORT 6

Geological Resources

September 2014

FLORIDA SOUTHEAST CONNECTION

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Filing Requirement	**Location in Environmental Report**
☐ For underground storage facilities, how drilling activity by others within or adjacent to the facilities would be monitored, and how old wells would be located and monitored within the facility boundaries.	Not Applicable
☒ Discuss the need for and locations where blasting may be necessary in order to construct the proposed facilities.	Section 6.3
☒ Identify the location (by milepost) of mineral resources and any planned or active surface mines crossed by the proposed facilities.	Section 6.4
☒ Identify any geologic hazards to the proposed facilities.	Section 6.5
☐ For LNG projects in seismic areas, the materials required by "Data Requirements for the Seismic River of LNG Facilities," NBSIR84-2833	Not Applicable

FEDERAL ENERGY REGULATORY COMMISSION COMMENTS ON RESOURCE REPORT 6—GEOLOGICAL RESOURCES	
Comment	**Location in Environmental Report**
☒ Include the relative thickness of each surficial geologic formation cited in section 6.2.4.	Section 6.2.4 – Relative thickness of surficial geological formations provided for those of which data is available.
☒ In section 6.2.4, the citation for United States Geological Survey (USGS), 2013 does not provide the number and detail of the formations cited in this section. Assess the citation and correct, if appropriate.	Section 6.2.4
☒ Section 6.5.6.1 states that "previous analyses in the construction and operation of pipeline facilities in Florida's karst terrain have demonstrated a low potential for damage due to sinkhole collapse." Include additional detail and/or citation regarding these previous analyses.	Appendix 6C
☒ Include a discussion of paleontological resources including classification, location in the project area, inspection, and reporting of finds. Identify and describe any applicable state paleontological regulations.	Section 6.6
☒ In addition to a general discussion of karst features, risks, and mitigation in section 6.5.6.1, include a separate plan addressing karst in detail. The karst plan should include, but not be limited to, the following information and analysis:	Appendix 6B

FEDERAL ENERGY REGULATORY COMMISSION COMMENTS ON RESOURCE REPORT 6—GEOLOGICAL RESOURCES	
Comment	**Location in Environmental Report**
☒ Describe the geologic processes by which karst features form and the types of karst features that occur in the Florida Southeast Connection (FSC) Project region (e.g. sinkholes, closed topographic depressions, epikarst, etc.).	Appendix 6B
☒ Describe the process that FSC undertook to identify existing karst features and assess the risk for future karst development (e.g., literature research, agency consultation, field survey, geotechnical studies, etc.). Provide citations for referenced information and the qualifications of FSC staff and prospective consultants that would conduct the assessment, where applicable.	Appendix 6B
☒ Utilize existing data and reports from the USGS, the Florida Geological Survey, the South Florida Water Management District, and other sources to describe karst vulnerability in areas affected by the FSC Project.	Figures 6.5-2 and 6.5-3; Appendix 6B
☒ Based on information obtained or developed, provide detailed descriptions and locations of all karst features within and near the FSC Project pipeline and construction yards. These descriptions should include, but may not be limited to, the dimensions of existing sinkholes, closed topographic depressions, and other features; the known or expected thickness of overburden; and the depth and degree of epikarst.	Figures 6.5-2 and 6.5-3; Appendix 6B
☒ Describe the potential for karst features to develop in and near the areas affected by the FSC Project including, but not limited to, the potential for sinkholes to form in the closed topographic depressions.	Appendix 6B
☒ Discuss how construction and operation of the FSC Project could contribute to the development of karst features.	Appendix 6B
☒ Describe the pipeline construction, restoration, maintenance, and monitoring procedures that would be implemented in known karst terrain. Include in this discussion the measures that FSC would take to reduce and/or prevent runoff from draining into areas of high sinkhole development, known or identified sinkholes, closed depressions, or other known or exposed karst features within the construction work areas.	Appendix 6B
☒ Describe the measures that FSC would implement to mitigate soil dome, rock cavity or other incipient feature should remediation become necessary. Describe how FSC would monitor, document and report remediation activities and whether the remediation was successful at stabilizing the underlying sinkhole/void.	Appendix 6B

ACRONYMS AND ABBREVIATIONS

Certificate	Certificate of Public Convenience and Necessity
FDEP	Florida Department of Environmental Protection
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FGS	Florida Geological Survey
FPL	Florida Power & Light
FSC Project	Florida Southeast Connection Project
FSC	Florida Southeast Connection
HCA	High Consequence Area
MMcf/d	million cubic feet per day
MP	milepost
mya	million years ago
NGA	Natural Gas Act
PHMSA	Pipeline and Hazardous Materials Safety Administration
Sabal Trail	Sabal Trail Transmission Pipeline Project
USGS	United States Geological Survey

6.0 RESOURCE REPORT 6 – GEOLOGICAL RESOURCES

6.1 INTRODUCTION

Florida Southeast Connection, LLC ("FSC"), a subsidiary of NextEra Energy, Inc., is seeking a Certificate of Public Convenience and Necessity ("Certificate") from the Federal Energy Regulatory Commission ("FERC") pursuant to Section 7(c) of the Natural Gas Act ("NGA") authorizing the construction and operation of an approximately 126.4 mile natural gas pipeline known as the Florida Southeast Connection Project ("FSC Project"). The FSC Project is designed to meet the increased demand for natural gas by the electric generation, distribution, and end use markets in Florida. The FSC Project will also provide additional natural gas supply diversity through a connection to the new Sabal Trail Transmission Pipeline Project ("Sabal Trail") via a new interconnection hub in central Florida ("Central Florida Hub"). The Sabal Trail Project is the subject of a separate, but related, certificate filing to the FERC.

The FSC Project will increase natural gas transportation capacity and availability to southern Florida by adding a new third pipeline in central and southern Florida. Upon the anticipated in-service date of May 2017, the FSC Project will be capable of providing a minimum of 640 million cubic feet per day ("MMcf/d") of natural gas to a delivery point at an existing gas yard at Florida Power & Light Company's ("FPL") Martin Clean Energy Center in Martin County, Florida.

The proposed FSC Project consists of the construction and operation of approximately 77.1 miles of 36-inch diameter pipeline (MP 0.0 to MP 77.1) and 49.3 miles of 30-inch diameter pipeline (MP 77.1 to MP 126.4) and the construction and operation of the Martin Meter Station. The FSC Project pipeline will start in Osceola County, Florida at the interconnection with Sabal Trail within the Central Florida Hub. The pipeline will traverse Polk, Osceola, Okeechobee, St. Lucie, and Martin Counties, and terminate at the Martin Meter Station. In addition, FSC will install a pig launcher and receiver on the 36-inch diameter segment and on the 30-inch diameter segment of the FSC Project. Resource Report 1 provides a complete summary of the FSC Project facilities (Table 1.2-1) and a location map of the FSC Project facilities (Figure 1.2-1).

This Resource Report describes the geologic setting and resources of the FSC Project area for the pipeline facilities and the new aboveground facilities (Section 6.2) and addresses the potential for blasting (Section 6.3), use of mineral resources (Section 6.4), and geological hazards that may affect the construction and operation of these new facilities (Section 6.5). Where appropriate, mitigation measures intended to reduce the impact of the FSC Project on geological resources and/or reduce the impact of geological hazards on FSC Project facilities are identified. A checklist showing the status of the FERC filing requirements for Resource Report 6 is included after the table of contents.

6.2 GEOLOGIC SETTING

Rock core samples taken in Florida from thousands of feet below the surface, called basement rocks, show that Florida's geology consists of igneous and metamorphic suites overlain by sandstones and shales (Means, 2012). As land masses converged they created the foundation

for the accumulation of vast thicknesses of carbonate (limestone) that would eventually become the Florida Platform (Means, 2012).

6.2.1 Geologic History of Florida

The following is summarized from the Florida Department of Environmental Protection ("FDEP") Division of Resource Assessment and Management, Florida Geological Survey ("FGS") website titled Florida's Geologic History (Means, 2012).

Florida took its current shape during the Cenozoic Era, starting 65.5 million years ago ("mya"). Warm oceans covered the state until the Late Oligocene Epoch, 23 to 28 mya, in which limestone comprised of the skeletons of billions of small creatures called foraminifera accumulated. Small patch reefs formed in the warm, clear, shallow waters and a marine current very similar to the Gulf Stream swept across northern Florida and scoured the sea floor. The current deflected sediment that was being eroded and transported from the mainland, as a result limestone from this period is pure (up to 99% calcium carbonate).

At the end of the Oligocene Epoch, sea levels dropped and Florida emerged from the sea. The dissolution of limestone by slightly acidic rain water resulted in the formation of large pore spaces, conduits, and caverns, referred to as karst topography. As the land surface collapsed into these voids, sinkholes formed, which are a prominent feature in the Florida landscape. Other karst features include springs, air caves, and disappearing streams. Throughout the end of the Oligocene and into the Miocene, sea levels fluctuated and clays and sands became common deposits. In the early Miocene, the Appalachians were uplifted and continental siliciclastic sediments filled the Gulf trough, which began encroaching upon the carbonate depositing environments and resulted in large deposits of phosphorite as cool, nutrient-laden ocean water bathed Florida.

The Pleistocene Epoch (2.6 mya to 10,000 years ago), also known as the Ice Age, was characterized by extreme climate and sea level change. During warm periods, sea levels rose as much as 100 feet higher than today and allowed accumulation of limestone. During glacial periods seas dropped as much as 300 feet lower than today and allowed dissolution of limestone. Sea level reached its current elevation during the Holocene Epoch (10,000 years ago to present).

6.2.2 Physiography

Florida lies within the Floridian section of the Atlantic Coastal Plain physiographic province (USGS, 2003(a)). The following description of the Atlantic Coastal Plain was referenced from the University of Connecticut School of Engineering (UCSE, nd): The Atlantic Coastal Plain is the flattest of all provinces in the U.S. and stretches over 2,200 miles in length from Cape Cod to the Mexican border and southward another 1,000 miles to the Yucatan Peninsula. The Atlantic Coastal Plain slopes gently seaward from the inland highlands in a series of terraces and continues far into the Atlantic and Gulf of Mexico, forming the continental shelf. The relief at the land-sea interface is low and the boundary between them is often indistinct, especially along stretches of the Louisiana bayous and the Florida Everglades.

Physiography within Florida is further subdivided into primary and secondary provinces.

6.2.2.1 Primary Provinces

The FSC Project is located within the Atlantic Coastal Lowlands, Intermediate Coastal Lowlands, and the Central Highlands primary physiographic provinces (NRC, 2012). Each of the secondary physiographic provinces within the primary provinces is discussed in detail in Section 6.2.2.2 below (NRC, 2012; FDEP, nd).

6.2.2.1.1 Atlantic Coastal Lowlands

The predominant landform in the Atlantic Coastal Lowlands is a flat, weakly dissected alluvial plain formed by deposition of continental sediments onto submerged, shallow continental shelf, which was later exposed by sea level subsidence (USFS, nd). Along the coast, fluvial deposition and shore zone processes are active in developing and maintaining beaches, swamps, and mud flats. Elevation averages approximately four to five feet above sea level and there is little local relief (USFS, nd). About 50 percent of the strata consist of Tertiary marine deposits, limestone interbedded with marl, sand, and clay, with quaternary marine deposits making up the other strata, which includes sand, silt, and clay (USFS, nd).

6.2.2.1.2 Intermediate Coastal Lowlands

The Intermediate Coastal Lowlands landform extends south from the Okeechobee Plain to the Southern Slope and Florida Keys (NRC, 2012). Elevations range from 50 to 60 feet above sea level in the Caloosahatchee Valley to sea level and below sea level in the Everglades, Southern Slope, Florida Bay and Florida Keys (NRC, 2012). Soils in the Intermediate Coastal Lowlands landform vary greatly, from fibrous peat in the Everglades to Pleistocene reef sediments in the Florida Keys to thin modern soils on bedrock in the Southwestern Slope (NRC, 2012).

6.2.2.1.3 Central Highlands

The Central Highlands landform is characterized by alternating uplands and lowlands, which form high hills and swampy plains, and thousands of sinkholes and sinkhole lakes (Motz and Dogen, 2004). The Central Highlands contain the most extensive area of closely spaced lakes in North America (Mueller and Helsel, 1996). This region includes localized areas of high elevations and large areas of low elevations that comprise the valleys of the major rivers (Grosz et. al, 1989). Land elevations in the Central Highlands region range from about 40 to 325 feet above sea level (Mueller and Helsel, 1996). In general, the higher ridge-like areas and the larger river valleys are elongate and parallel to the length of the peninsula (Grosz et. al, 1989).

6.2.2.2 Secondary Provinces

6.2.2.2.1 Osceola Plain

The Osceola Plain secondary physiographic secondary province is located within the Atlantic Coastal Lowlands primary physiographic province and extends southeasterly through eastern Okeechobee County, extreme southwestern St. Lucie County, and into western Martin County. It is bounded on the west and northwest by the Lake Wales Ridge and the southern ends of the Mount Dora and Orlando Ridges. On the northeast, east, and south it is bounded by an outward-facing erosional ridge. The Osceola Plain reaches approximately 90 to 95 feet in elevation near its northern edge. It reaches an elevation of 80 feet east and northeast of Lake

Kissimmee. Its local relief is very small, with variations of 10 feet across the entire subprovince. The Kissimmee River passes roughly west of the Osceola Plain. The river is confined to a valley for 25 miles south of Lake Kissimmee. North of Lake Kissimmee, several lakes occupy most of the Osceola Plain. The Arbuckle Creek on the western side of the Osceola Plain (west of the Bombing Range Ridge) drains Lake Arbuckle into Lake Istokpoga below the southern bounding scarp of the Osceola Plain.

6.2.2.2.2 Lakes Wales Ridge

The Lakes Wales Ridge secondary physiographic province is located within the Central Highlands primary physiographic province and is a unique mosaic of elevated sandy ridges encompassing an area from about the southern Highlands County boundary 99 miles north to near Orlando. The Lake Wales Ridge averages about 4.6 miles wide. Though the name implies a single physiographic area, the Lake Wales Ridge consists of three elevated sandy ridges that were once the beach and dune systems of Miocene, Pliocene, and early Pleistocene seas. These relict dunes and the deep, sandy, well-drained soils support a number of plant communities that have adapted to xeric conditions over millions of years. Due to the elevation and geologic age of the soils of Lake Wales Ridge scrubs, it has been estimated that the highest hilltops in this area have supported upland vegetation for about 25 million years. On the Lake Wales Ridge, an estimated 200 ancient scrub islands have been identified. Between ridges and at the base of hills, the soils become fine and compacted and often retain surface water, forming wetlands and lakes. Rainfall, seepage, and elevated water tables provide the sources of water for these aquatic systems. Combined with the aquatic and wetland communities that now exist between and within the ridges, this subregion consists of a complex mosaic of habitats, some unique to Florida.

6.2.2.2.3 Bombing Range Ridge

The Bombing Range Ridge secondary physiographic province is located within the Atlantic Coastal Lowlands primary physiographic province and is a small province located east of elongate Lake Wales Ridge. The lakes of the Bombing Range Ridge and the northern Lake Wales Ridge are darker colored with higher nutrients than the lakes found on the southern Lake Wales Ridge. Elevations are 70 to 130 feet, and there are more extensive areas of poorly drained soils, such as the Satellite and Basinger series. Peaty muck Samsula soils border many of the lakes.

6.2.2.2.4 Okeechobee Plain

The Okeechobee Plain secondary physiographic province is located within the Intermediate Coastal Lowlands within Okeechobee County, including part of Lake Okeechobee. The southern part of this plain abuts the Everglades with Lake Okeechobee bisecting the plain. The Okeechobee Plain is divisible from the Everglades by its slightly better drainage and slightly steeper slope and a higher mineral content in its soils. The Okeechobee Plain slopes gradually south to approximately elevation 20 feet at the northern shore of Lake Okeechobee.

6.2.2.2.5 Eastern Valley – Lowlands, Gaps, and Valleys

The Eastern Valley secondary physiographic province is located within the Atlantic Coastal Lowlands primary province in central Florida and consists of a broad flat valley. The FSC Project crosses the Eastern Valley in Martin and St. Lucie Counties. The elevation of the Eastern Valley varies from 20 to 30 feet above sea level. There are relicts of beach ridges that at one time constituted a regressional or progradational beach ridge plain. The head of the St. Johns River consists of a broad swampy valley with lakes. The river flows through each lake along its longest axis. This suggests that at one time there was a standing body of water that has been filled with sediments and vegetation between the upper levels of the lakes that eventually formed the flat, swampy flood plain; the unfilled places became the current chain of lakes in the St. Johns River's headwaters.

Southward of the St. Johns River, the topography has approximately 5 feet of local relief throughout the area. This topography is bounded by the headwaters of the St. Johns River at the north, the bounding scarp of the Eastern Valley on the west, the St. Lucie Canal on the south, and Ten Mile and Atlantic Coastal Ridges on the east. The surface of the entire area has elevations close to 25 to 30 feet.

6.2.3 Topography

Topography along the FSC pipeline route varies from flat to a maximum of a 22 percent slope. Elevation ranges from 26 feet above sea level at MPs 114.4 to 114.8 and 116.3 to 117.0, to 161 feet above sea level at MPs 20.9 to 21.0. For topographic details along the FSC pipeline route, see the USGS 7.5 minute series topographic quadrangle excerpts located in Appendix 1B of Resource Report 1.

6.2.4 Surficial Geology of the FSC Project Area

Surficial geology of the FSC Project area is characterized as Beach Ridge and Dune, Cypresshead Formation, Dunes, Holocene Sediments, Reworked Cypresshead Formation, Shell-Bearing Sediments, and Undifferentiated Sediments. Appendix 6A shows the surficial geology in the FSC Project area and Table 6.2-1 summarizes surficial geology in the vicinity of the proposed pipeline and aboveground facilities. Each Florida surficial geologic unit that is crossed by or in the vicinity of the FSC pipeline is described below.

6.2.4.1 Quaternary Beach Ridge and Dune (Qbd)

The following information on the Quaternary Beach Ridge and Dune was referenced from the USGS Minerals Resources On-Line Spatial Data (USGS, 2013). Much of Florida's surface is covered by a varying thickness of undifferentiated sediments consisting of siliciclastics, organics and freshwater carbonates. Sediments showing surficial expression of beach ridges and dunes were mapped separately as Qbd, formed during the Pleistocene and Holocene epochs. These Qbd undifferentiated sediments exceed a depth of 20 feet. The siliciclastics are light gray, tan, brown to black, unconsolidated to poorly consolidated, clean to clayey, silty, unfossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty clays. Organics occur as plant debris, roots, disseminated organic matrix and beds of peat. Freshwater carbonates, often referred to as marls in the literature, are scattered over much of the State. In southern Florida, freshwater carbonates are nearly ubiquitous in the

Everglades. These sediments are buff colored to tan, unconsolidated to poorly consolidated, fossiliferous carbonate muds. Sand, silt and clay may be present in limited quantities. These carbonates often contain organics. The dominant fossils in the freshwater carbonates are mollusks.

6.2.4.2 Tertiary Cypresshead Formation (Tc)

The following information on the Tertiary Cypress Formation was referenced from the USGS Mineral Resources On-Line Spatial Data (USGS, 2013a): The Cypresshead Formation formed during the Pliocene epoch and is composed of siliciclastics and occurs only in the Florida peninsula and eastern Georgia. It is at or near the surface from northern Nassau County southward to Highlands County forming the peninsular highlands. It appears that the Cypresshead Formation occurs in the subsurface southward from the outcrop region and similar sediments. The Cypresshead Formation is a shallow marine, near shore deposit equivalent to the Citronelle Formation deltaic sediments and the Miccosukee Formation prodeltaic sediments. The Cypresshead Formation consists of reddish brown to reddish orange, unconsolidated to poorly consolidated, fine to very coarse grained, clean to clayey sands. Cross bedded sands are common within the formation. Discoid quartzite pebbles and mica are often present. Clay beds are scattered and not really extensive. In general, the Cypresshead Formation in exposure occurs above 100 feet above Mean Sea Level ("MSL"). Maximum thickness is approximately 200 feet in the Central Highlands (Scott, 1988). Original fossil material is not present in the sediments although poorly preserved molds and casts of mollusks and burrow structures are occasionally present. The presence of these fossil "ghosts" and trace fossils document marine influence on deposition of the Cypresshead sediments. The permeable sands of the Cypresshead Formation form part of the surficial aquifer system.

6.2.4.3 Tertiary-Quaternary Dunes (TQd)

These dune sediments are fine to medium quartz sand with varying amounts of disseminated organic matter that formed during the Pliocene and Pleistocene epochs (USGS, 2013b). The sands form dunes at elevations greater than 100 feet above MSL (USGS, 2013b).

6.2.4.4 Quaternary Sediments (Qh)

These Holocene sediments in Florida occur near the present coastline at elevations generally less than 5 feet above MSL (USGS, 2013c). The sediments include quartz sands, carbonate sands and muds, and organics (USGS, 2013c).

6.2.4.5 Tertiary-Quaternary Reworked Cypresshead Sediments (TQuc)

This unit is the result of post depositional reworking of the Cypresshead siliciclastics, formed during the Pliocene and Pleistocene epochs (USGS, 2013d). The sediments are fine to coarse quartz sands with scattered quartz gravel and varying percentages of clay matrix (USGS, 2013d).

6.2.4.6 Tertiary-Quaternary Shell Bearing Sediments (TQsu)

These "formations" are biostratigraphic units that consist of shelly sediments formed during the Pliocene and Pleistocene epochs (USGS, 2013e). The primary rock type is limestone, a sedimentary rock consisting chiefly of calcium carbonate, primarily in the form of mineral calcite

(USGS, 2013e). Lithologically these sediments are complex, varying from unconsolidated, variably calcareous and fossiliferous quartz sands to well indurated, sandy, fossiliferous limestones (both marine and freshwater) (USGS, 2013e). Clayey sands and sandy clays are present (USGS, 2013e). These sediments form part of the surficial aquifer system (USGS, 2013e).

6.2.4.7 Undifferentiated Quaternary Sediments (Qu)

This surficial expression of undifferentiated sediments is similar to the Pleistocene/Holocene Beach Ridge and Dune (Qbd), except the subdivisions of the Undifferentiated Quaternary Sediments are not lithostratigraphic units but rather utilized in order to facilitate a better understanding of the State's geology (USGS, 2013f). These undifferentiated sediments do not exceed a depth of 20 feet (USGS, 2013f).

6.2.5 Bedrock Geology of the FSC Project Area

Bedrock in Florida is characterized as the Florida Platform, one of the largest carbonate platform complexes on Earth. Bedrock nearest to the ground surface in Florida is a 1.2- to 3.7-mile-thick carbonate (limestone, dolomite) and evaporate (salts) sedimentary rock succession punctured by dissolution features and resultant karst terrain expressed at the surface (Hine, 2009). Overburden thickness ranges from 30 to 200 feet thick along the length of the pipeline.

Karst terrain is present in the vicinity of FSC Project facilities and is discussed in Section 6.5.6.

6.3 BLASTING

Based on available geotechnical data and the geology described in this Resource Report, FSC anticipates that minimal rock removal will be required during construction of the FSC pipeline.

If bedrock is encountered and requires removal, several conventional (non-explosive) techniques are available including:

- Conventional excavation with a backhoe;
- Ripping with a dozer followed by backhoe excavation; or
- Hammering with a pointed backhoe attachment followed by backhoe excavation.

If it is determined that the bedrock cannot be removed by conventional techniques, blasting options may include:

- Blasting followed by backhoe excavation; or
- Blasting surface rock prior to excavation.

Blasting is not anticipated; however, if blasting is required for the FSC Project, it will be conducted in accordance with Florida blasting codes and any local blasting requirements. The state licensed contractors will meet or exceed all applicable requirements governing the use of explosives. The specific blasting procedures will depend on the relative hardness and volume of the rock to be removed, its fracture susceptibility, and the specifics of the location. If blasting is required, a blasting plan will be developed by FSC, approved and permitted by the appropriate state and local authorities, and submitted to the Commission prior to the initiation of blasting.

6.4 MINERAL RESOURCES

Mineral resources in the FSC Project area consist largely of sand and gravel (USGS, 2003(b)) and the FSC pipeline passes near locations used for sand mining. Although the Project does not pass through any mines, it does cross through registered Mandatory Non-Phosphate Sites (Approximate MPs 17.5, 23.8, 29.9, and 30.6) and abuts a Mandatory Non-Phosphate Site at MP 4.5. Mandatory Non-Phosphate Sites are aggregate mining sites that require registration with the FDEP Bureau of Mines in order to conduct extraction. Although the FSC Project crosses these sites, it does so along existing rights-of-way or adjacent to property lines within the 100 ft. required setback and is not located within any areas used for mining operations. Table 6.2-2 lists known mines within 0.5 mile of the FSC Pipeline, and Figure 6.2-1 shows mineral resources in the area.

FSC has conducted on-ground field surveys of the entire pipeline right-of-way and have not identified evidence of oil and gas wells in the vicinity. GIS mapping indicates that there is one oil and gas well more than 700 feet east of the right-of-way near MP 100, but that this well is defined as a "dry hole" (FDEP, 2002) (See Figure 6.2-1). If an oil or gas well is later found along the pipeline route during construction, a proper assessment of the area will be conducted by appropriate engineering and construction staff. Avoidance of the area may be possible by a minor route variation and/or prohibiting equipment from working in this portion of the temporary workspace.

6.5 GEOLOGIC HAZARDS

Geologic hazards are natural physical conditions that, when active, can impact environmental features and man-made structures and may present public safety concerns. Such hazards typically include seismicity, soil liquefaction, landslides, subsidence, flooding, and volcanism.

6.5.1 Seismic Environment and Risk

Florida is classified as a stable geological area (FGS, 1994). Although Florida is not usually considered to be a state subject to earthquakes, several minor shocks have occurred (USGS, 2014). Additional shocks of doubtful seismic origin also are listed in earthquake documents (USGS, 2014). With respect to probable damage from the largest expected distant earthquake, some areas may experience tremors, with only minor damage, such as broken glass or glassware (FGS, 1994).

The United States Geological Survey (USGS) produces probabilistic Seismic Hazard Maps for the United States with peak ground acceleration values represented as a factor of "g". The factor "g" is equal to the acceleration of a falling object due to gravity. These USGS Seismic Hazard Maps were reviewed for the Project area with the following results: There is a 2 percent probability of a 0.02-0.04 percent "g" exceedance in 50 years; and, a 10 percent probability of a 0.01-0.02 percent "g" exceedance in 50 years.

Therefore, earthquakes and related seismic hazards are not anticipated to have an impact on the FSC Project. The FSC Project area is not located along a tectonic plate boundary where frequent high energy earthquakes are typically common. Rather, the FSC Project location is an intraplate setting with historically low seismic risk and minimal seismic activity. Seismic

provisions are in place within local building codes detailing construction requirements in this seismic environment. To meet the known seismic conditions in the vicinity of the FSC Project, all FSC Project facilities will be built to meet or exceed the seismic design provisions of the Pipeline and Hazardous Materials Safety Administration ("PHMSA") under the U.S. Department of Transportation Office of Pipeline Safety, the Florida Public Service Commission, and the guidelines of the FERC.

6.5.2 Active Faults

Florida is situated on the trailing (or passive) margin of the North American Plate while California, for example, is located on its active margin. The active margin is bounded by faults that generate earthquakes when there is movement along them. Accordingly, Florida has an extremely low incidence of earthquakes. None of the geologic features in Florida are known to have any seismicity associated with them and, therefore, active faults are not anticipated to have an impact on the FSC Project (FGS, 2013a).

6.5.3 Tsunamis

The risk of a tsunami striking Florida is considered to be low (FGS, 2013b). The website for the National Oceanographic and Atmospheric Administration lists the following states as being especially vulnerable to tsunamis, in addition to the U.S. Caribbean Islands: Hawaii, Alaska, Washington, Oregon, and California (FGS, 2013b). Due to this low probability and the location of the pipeline well inland of the coast, tsunamis are not anticipated to have an impact on the FSC Project.

6.5.4 Areas Susceptible to Soil Liquefaction

Soil liquefaction is a process whereby the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. The result is a transformation of soil to a liquid state. Severe shaking is most commonly caused by a large earthquake. This factor is limited by the distance from the large earthquake epicenter. That is, liquefaction potential decreases as location increases from the epicenter of a large earthquake. For liquefaction to occur, a relatively shallow water table, rapid strong ground motion, and non-cohesive soils all must be present (University of Washington, 2000).

Soil liquefaction can result in surface settlement in areas where the ground surface is flat, and soil flow or slope instability in areas where the landscape is sloped. Soil liquefaction can lead to the failure of building foundations and other structures that rely on such soils for support. Susceptibility to liquefaction is augmented in areas where overburden stress in loose, saturated sand is increased due to imposition of a surface load (ex, a new building or embankment fill).

The low seismic risk in the FSC Project area is a limiting factor for liquefaction to occur; as a result, the likelihood of naturally occurring soil liquefaction in the FSC Project area is low.

6.5.5 Areas Susceptible to Landslides

Landslides occur when rock, sediments, soils, and debris move down steep slopes. Such gravity-induced flow is usually precipitated by heavy rains, erosion by rivers, earthquakes, or human activities (e.g., man-made structures or pilings of rock). The following description of

landslides and their occurrence potential in Florida is summarized from the FGS Landslides Hazards website (FGS, 2013c).

Landslides are very rare in Florida, given the state is generally characterized by low topographic relief. Gravity is the force that is responsible for landslides. In areas where there are steep slopes, unconsolidated soils and sediments may move downward. This movement may be too slow to notice, in which case it is called soil creep. If the movement is sudden and catastrophic, it is referred to as a landslide or slump. Landslides may be associated with excessive amounts of rain that lead to saturation of earth materials by water. The steepening of slopes by erosion or construction may also be a factor in the development of landslides.

As there has been only one recorded occurrence of a landslide in Florida over 60 years ago on a very steep slope, and given the low-gradient topography of the FSC Project area, the risk of landslides occurring at or near the FSC Project area is considered very low.

6.5.6 Surface Subsidence

6.5.6.1 Karst and Sinkholes

Subsidence is the local downward movement of surface material with little or no horizontal movement. Karst conditions, which are a type of land subsidence, have been identified in the FSC Project area (See Figure 6.5-1 and 6.5-2). Previous analyses and experience in the construction and operation of pipeline facilities in Florida's karst terrain have demonstrated a low potential for sinkhole collapse. This is based on a review of recent sinkhole incidents, which showed only one sinkhole within a mile of the FSC Project (FDEP, 2014). To mitigate for any potential for sinkhole impacts, refer to FSC's Karst Plan in Appendix 6B, which includes further information on location of karst features, FSC's proposed measures to prevent formation of sink holes during construction and its proposed mitigation to address the formation of a sink hole if it were to occur.

6.5.6.2 Underground Mines

Underground mining poses risks to engineered structures because of the potential for the overlying strata to collapse into the void formed by the extraction of minerals. No current or former underground mining activities exist along the FSC pipeline route or at the location of new aboveground facilities based on information from the Active Mines and Mineral Plants in the US list (USGS, 2003(b)). Therefore, no ground subsidence from underground mines is anticipated.

6.5.7 Flooding

From 2000 to 2010, Florida has experienced five federally declared disasters due to flooding, and has sustained severe flood damage from a number of major hurricanes and tropical storms (FEMA, 2010). The following describes the types of flooding encountered in Florida, the causes, and impacts (FEMA, 2010):

- Heavy Rains - Hurricanes, tropical storms, and summer thunderstorms have the potential to unload heavy and sustained rainfall, which overwhelms drainage systems and causes flooding.
- Storm Surge and Inland Flooding - Storm surge, the water that is pushed toward the shore by the strong storm winds, can cause severe flooding in coastal areas. Coastal

communities are not the only ones impacted. Hurricanes and tropical storms are powerful systems that have the ability to travel far from the initial strike zone. Once inland, they continue to bring powerful and heavy rains. Hurricane Irene (1999) resulted in up to 20 inches of rain on South Florida, and caused severe and inland flooding.

- Flash Flooding - Flash floods caused by sudden, heavy rainfall can occur in just a few hours or less. Moving water from flash floods can lift rocks and debris, and damage homes and buildings.

6.5.7.1 Flooding During Construction

Flood prone areas in Florida are associated with either low-lying coastal areas where the land surface elevation is below 30 feet National Geodetic Vertical Datum of 1929 ("NGVD 29") or with inland rivers, lakes, or depressional areas. Severe coastal flooding problems can result from the storm surge associated with a hurricane. Inland flooding can occur in poorly drained areas such as wetlands or within the floodplains of rivers and lakes. Generally, flooding only poses a problem during pipeline construction, because the pipeline is buried well below the surface once construction is complete.

Project related activities could cause surface drainage patterns and hydrology to be temporarily altered and could increase the potential for the trench to act as a drainage channel, although the potential effect will be minimized by the use of trench plugs and trench breakers. Disturbance of adjacent wetlands could also affect the capacity to control erosion and flooding.

Prior to construction, a Project-specific Storm Water Pollution Prevention Plan ("SWPPP") will be developed to minimize impacts from overland flow. In addition, FSC's contractor will minimize overland flooding by:

- Limiting the time the trench is left open;
- Maintaining natural overland flow patterns by providing breaks in the topsoil and subsoil stockpiles;
- Maintaining flow in drainage systems during construction to prevent ponding in adjacent non-disturbed areas;
- Constructing across wetlands and waterbodies in accordance with the measures set forth in FSC's Plan and Procedures;
- Obtaining consumptive use permits for water withdrawals related to hydrostatic testing and dust control. Each of these permits will identify the water source and discharge locations for the FSC Project. A standard set of state approved hydrostatic test water discharge best management practices will be included with each permit application. (Additional information on these project activities is provided in Resource Report 2.) It is anticipated that all hydrostatic test water will be discharged overland; and
- Installing temporary erosion controls after initial disturbance of the soils, where necessary, to minimize erosion and maintaining those controls throughout construction. All temporary erosion and sediment controls will be installed in accordance with FSC's Plan and Procedures.

6.5.7.2 Flooding During Pipeline Operation

Flooding accounts for less than one percent of all pipeline accidents. The effects of flooding can lead to potential exposure of the pipeline and associated affects. To prevent and mitigate such damage to pipeline facilities, the PHMSA issued an advisory bulletin on July 12, 2013 ("Bulletin"), cautioning all owners and operators of gas and hazardous liquid pipelines to inspect at-risk facilities and take appropriate precautionary measures to prevent or mitigate damage from flooding.

Pipeline safety regulations require pipeline operators to have procedures for surveying their facilities and to take appropriate action when problems arise, such as from "unusual operating and maintenance conditions" (49 C.F.R. § 192.613(a)). The Bulletin makes clear that severe flooding is the kind of unusual operating condition that can adversely affect a pipeline's safety and potentially require corrective action, including shutting down operations if it poses an immediate hazard to persons or property.

Flooding can lead to pipeline damage in a variety of ways. Washouts and erosion caused by flooding increases stress on piping and support structures, which can lead to ruptures. Exposed pipelines are susceptible to the force of water flow and are more likely to be struck, such as by floating debris or boaters involved in rescue operations. Additionally, valves, regulators, relief sets and other facilities normally above ground are also more susceptible to damage when submerged.

The PHMSA's Bulletin urges operators with pipeline facilities in areas affected by flooding to:

1. Evaluate the accessibility of pipeline facilities that may be in jeopardy, such as valve settings, which are needed to isolate water crossings or other sections of a pipeline.
2. Extend regulator vents and relief stacks above the expected flooding level, as appropriate.
3. Provide maps and information about pipeline location and condition to emergency and spill responders.
4. Coordinate with other pipeline operators in the flood area and establishing emergency response centers to act as a liaison for pipeline problems and solutions.
5. Deploy and position personnel to take emergency action, including shut down, isolation or containment.
6. Determine if facilities that are normally above ground (e.g., valves, regulators, relief sets, etc.) have become submerged and are in danger of being struck by vessels or debris and, if possible, mark such facilities with an appropriate buoy and Coast Guard approval.
7. Perform frequent patrols, including appropriate overflights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Determine if flooding has exposed or undermined pipelines as a result of new river channels cut by the flooding or by erosion or scouring.
8. Perform surveys to determine the depth of cover over pipelines and the condition of any exposed pipelines, such as those crossing scour holes (including using divers or instrumented detection, as appropriate). Information gathered by these surveys should be

shared with affected landowners. Agricultural agencies may help to inform farmers of the potential hazard from reduced cover over pipelines.

9. Ensure that line markers are still in place or replaced in a timely manner. Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover.
10. The Bulletin advises that if a pipeline is damaged from flooding, the operator should inform the appropriate PHMSA regional office or state pipeline safety authority before returning the line to service, increasing its operating pressure, or otherwise changing its operating status. Reporting a Safety Related Condition may also be required. See 49 C.F.R. §§ 191.23 and 195.55.

FSC has designed and will operate, and manage its pipeline by adhering to its own operating procedures and in accordance to all local and Federal Pipeline Safety Regulations. As a result, flooding during operation of the pipeline in the FSC Project area is not expected to be a significant concern.

6.5.7.3 Design for Keeping Aboveground Facilities from Flooding

A review of the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Maps ("FIRM") showed no designated flood zones at the Martin Meter Station, Launcher/Receiver and Mainline Valve Locations. The Launcher/Receiver and Mainline Valve site locations will be designed similar to the Martin Meter Station. During FSC Project construction, the sites will have no impact on the flood storage capacity at these locations because no permanent aboveground structures will be located within the FEMA FIRM boundary and the construction area will be restored to pre-construction grade to the extent practicable.

Based on regional conditions, the potential for flash flooding to significantly impact construction or operation of the FSC Project is low. FSC will monitor local weather conditions during construction to anticipate and plan for significant weather events. Rainfall runoff during construction will be managed through the implementation of the FSC's Plan and Procedures. Post-construction storm water management will be provided through the construction of permanent storm water quality and quantity facilities as appropriate.

6.5.8 Volcanism

No active or inactive volcanic features are present near the FSC Project area based on the ages and types of rock mapped by the USGS. Therefore, no impacts from volcanism are anticipated.

6.6 PALEONTOLOGICAL RESOURCES

To date, no important or recognized fossil assemblages have been identified in the FSC Project area and no comments were received on these issues during the scoping process. However, FSC has developed a Plan for Recognizing and Reporting Paleontological Resources, which is provided in Appendix 6C. The FSC Environmental Inspectors will adhere to this plan and will be trained to identify fossils that require a permit to collect. If vertebrate fossils are found that require a permit to collect, the Environmental Inspector will keep a location log and notify the Florida Museum of Natural History as per the intent of Section 1004.57 of the 2014 Florida Statutes.

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TABLES

Table 6.2-1
Surficial Geology of the FSC Project

County	Starting MP	Ending MP	Linear Distance (Mile) a/	Map Symbol	Surficial Deposit
Osceola/Polk	0.0	2.4	2.4	Qu	Undifferentiated Sediments
Polk	2.4	2.6	0.2	TQd	Dunes
Polk	2.6	2.8	0.2	Qu	Undifferentiated Sediments
Polk	2.8	6.2	3.4	TQd	Dunes
Polk	6.2	6.8	0.6	Qu	Undifferentiated Sediments
Polk	6.8	7.3	0.5	TQd	Dunes
Polk	7.3	7.7	0.4	Qu	Undifferentiated Sediments
Polk	7.7	8.6	0.9	TQd	Dunes
Polk	8.6	9.5	0.9	TQuc	Reworked Cypresshead Formation
Polk	9.5	11.2	1.7	Qu	Undifferentiated Sediments
Polk	11.2	12.2	1.0	TQd	Dunes
Polk	12.2	13.3	1.1	Qh	Holocene sediments
Polk	13.3	15.3	2.0	TQd	Dunes
Polk	15.3	20.4	5.1	TQuc	Reworked Cypresshead Formation
Polk	20.4	21.5	1.1	Tc	Cypresshead Formation
Polk	21.5	23.4	1.9	TQuc	Reworked Cypresshead Formation
Polk	23.4	24.9	1.5	Tc	Cypresshead Formation
Polk	24.9	36.2	11.3	TQuc	Reworked Cypresshead Formation
Polk / Osceola / Okeechobee	36.2	86.7	50.5	Qu	Undifferentiated Sediments
Okeechobee	86.7	94.5	7.8	Qbd	Beach Ridge and Dune
Okeechobee	94.5	95.5	1.0	TQsu	Shell-bearing sediments
Okeechobee	95.5	101.9	6.4	Qbd	Beach Ridge and Dune
Okeechobee / St. Lucie	101.9	102.3	0.4	TQsu	Shell-bearing sediments
St. Lucie	102.3	105.2	2.9	Qbd	Beach Ridge and Dune
St. Lucie / Martin	105.2	117.9	12.7	TQsu	Shell-bearing sediments
Martin	117.9	121.9	4	Qbd	Beach Ridge and Dune
Martin	121.9	126.3	4.5	TQsu	Shell-bearing sediments
Aboveground Facilities					
Launcher Site Osceola	0.0	---	---	Qu	Undifferentiated Sediments
Martin Meter Station Martin	126.3	---	---	TQsu	Shell-bearing sediments
Sources: USGS, ESRI					

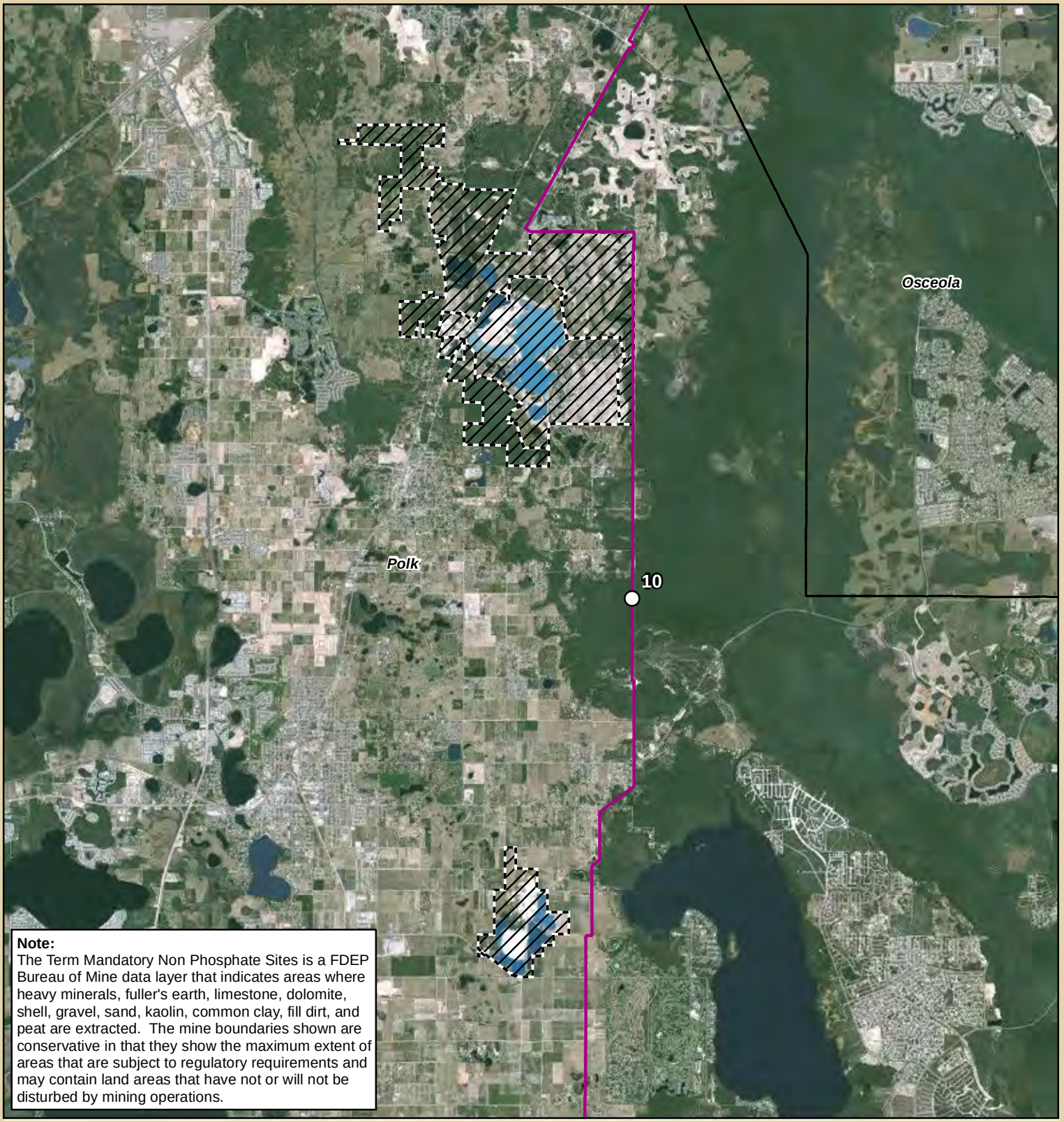
Table 6.2-2

Mandatory Non-Phosphate Mine Sites within 0.5-Mile of the FSC Project

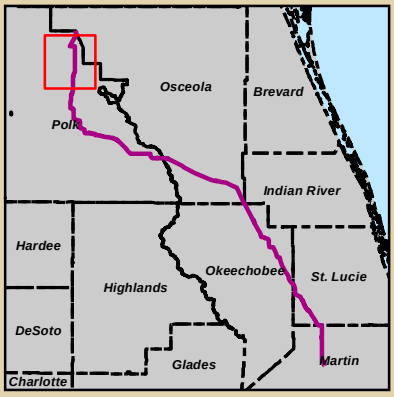
Approximate MP	Operator	Site Name	Distance from FSC Project (ft.)	Type
4.5	Standard Sand and Silica Co.	Davenport Mine	Abutting	Sand
7.0	Cemex Construction Materials Florida	Davenport Sand Mine	500	Sand
14.0	E.R. Jahna Industries, Inc.	Haines City Sand Mine	1,056	Sand
17.6	Holmes Garden Associates, Ltd.	Hatchineha Mine	a/	Peat
23.6	C.C. Calhoun, Inc.	St. Helena Road Pit	a/	Sand
27.8	Florida Rock Industries, Inc.	Sandland Plant	1,350	Sand
29.7	Florida Rock Industries, Inc.	Diamond Sand Plant	a/	Sand
31.3	Cemex Construction Materials Florida	Lake Wales South Addition	a/	Sand
30.3	Standard Sand and Silica Co.	Lake Wales Dry Plant	225	Sand
95.7	Horizon Aggregates, LLC	Horizon Aggregates Mine	360	Sand

a/ The FSC Project crosses a mandatory non-phosphate site at this location, but does so along existing rights-of-way or adjacent to property lines within the 100 ft. required setback and is not located within any areas used for mining operations.

FIGURES



Note:
The Term Mandatory Non Phosphate Sites is a FDEP Bureau of Mine data layer that indicates areas where heavy minerals, fuller's earth, limestone, dolomite, shell, gravel, sand, kaolin, common clay, fill dirt, and peat are extracted. The mine boundaries shown are conservative in that they show the maximum extent of areas that are subject to regulatory requirements and may contain land areas that have not or will not be disturbed by mining operations.



Legend

- Mile Post
- Pipeline Centerline
- Permitted Oil & Gas Wells within 0.5 miles of pipeline
- MSHA Active Mines within 0.5 miles of pipeline
- Mandatory Non-Phosphate Sites within 0.5 miles of pipeline

N

0 1 2
Miles

Sources: FDEP/FGS, Mine Safety and Health Administration (MSHA), ESRI, USGS, FSC, TRC

FLORIDA SOUTHEAST CONNECTION™

Figure: 6.2-1
Mineral Resources Within 0.5 Miles of the FSC Project

Sheet 1 of 3

8/9/2014

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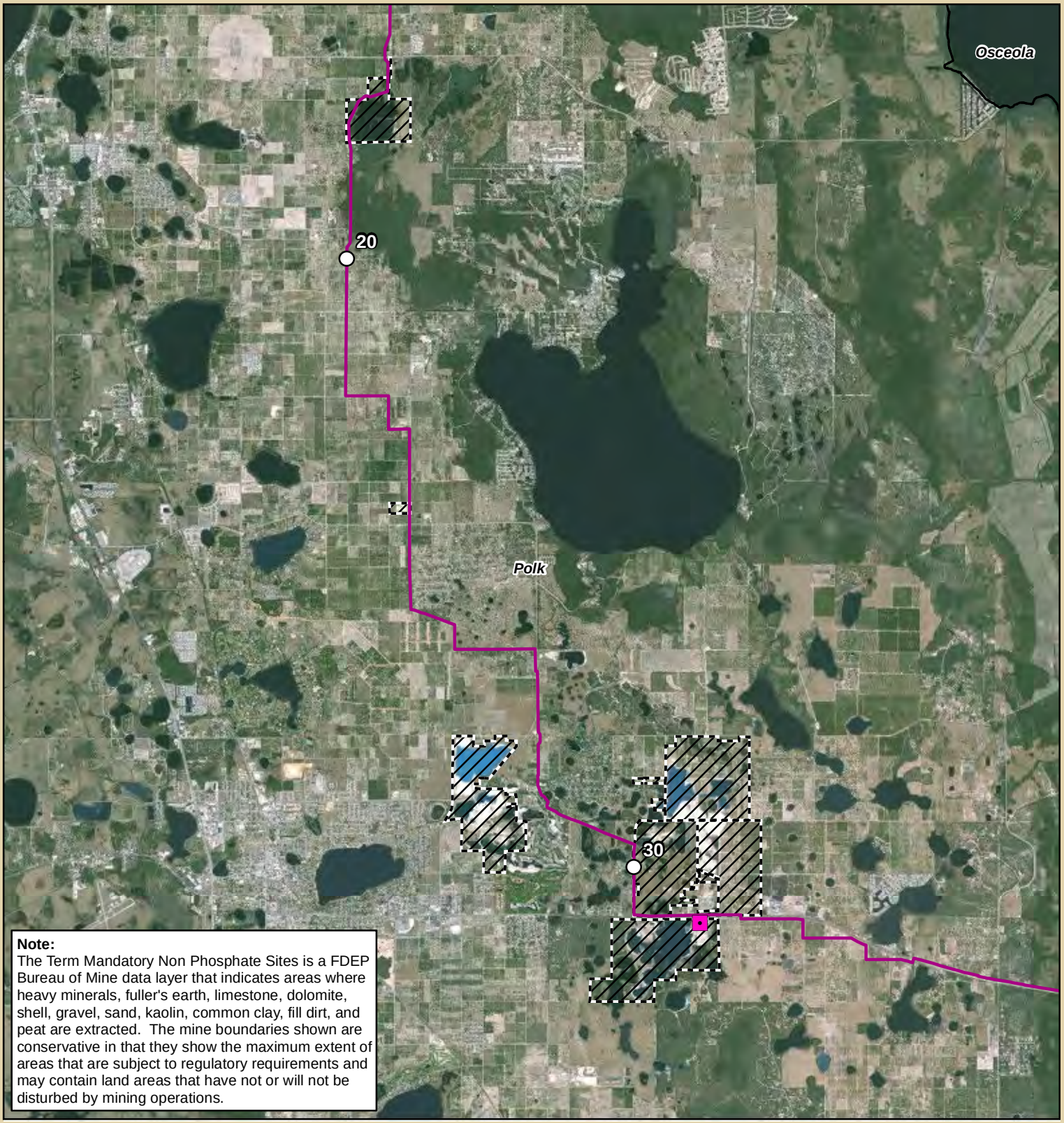

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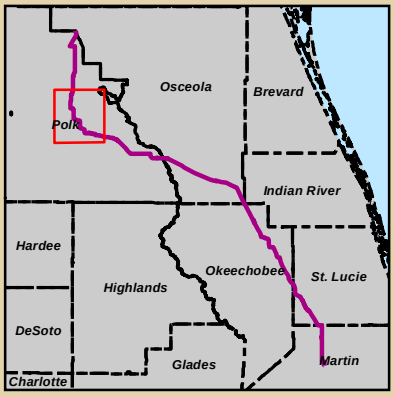

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N

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Miles

Sources: FDEP/FGS, Mine Safety and Health Administration (MSHA), ESRI, USGS, FSC, TRC

FLORIDA SOUTHEAST CONNECTION

Figure: 6.2-1
Mineral Resources Within 0.5 Miles of the FSC Project

Sheet 2 of 3

8/9/2014

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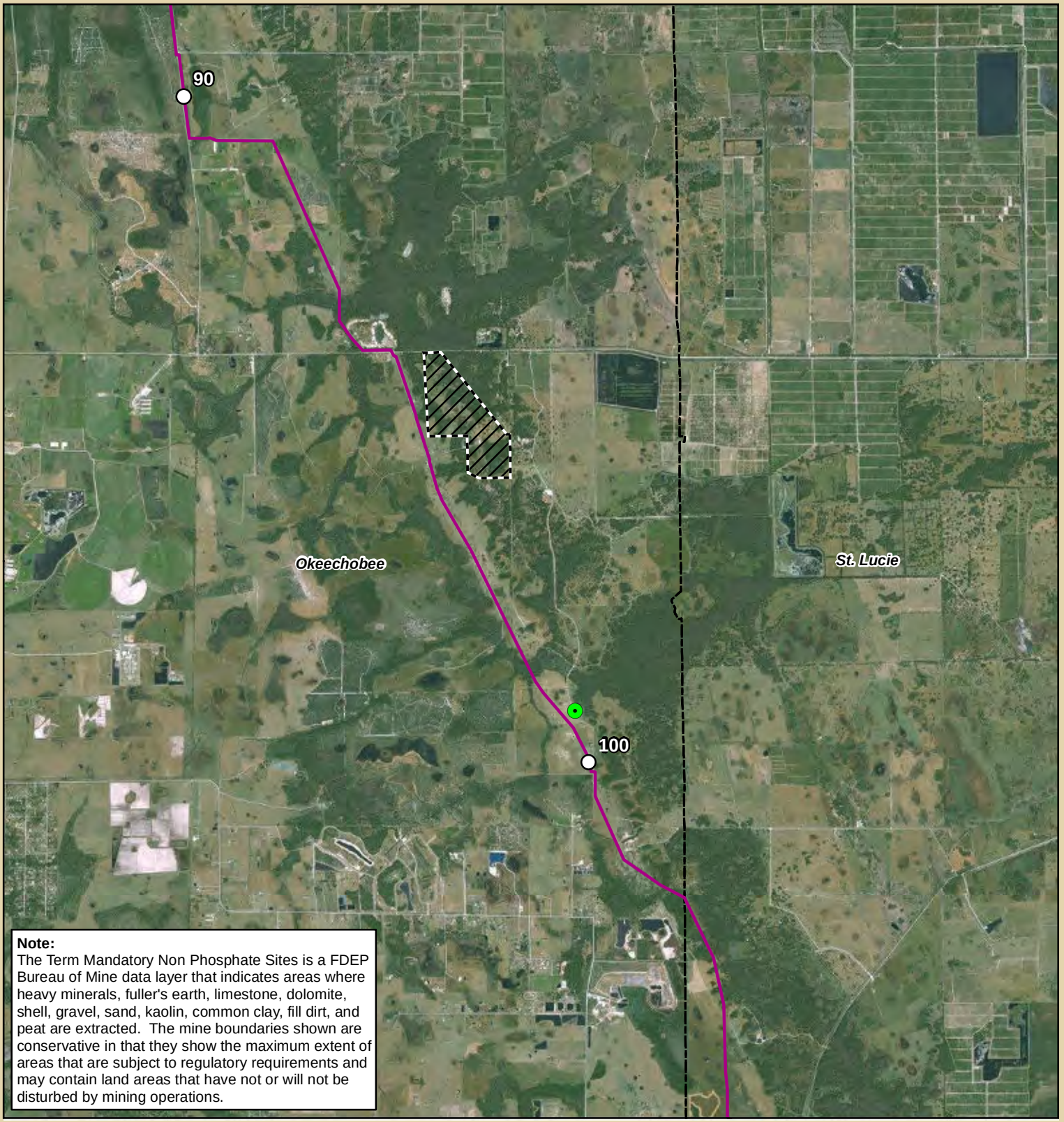
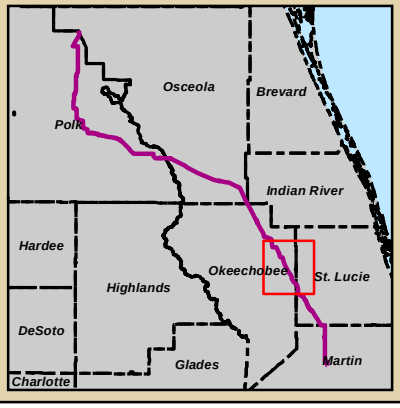


Note:
The Term Mandatory Non Phosphate Sites is a FDEP Bureau of Mine data layer that indicates areas where heavy minerals, fuller's earth, limestone, dolomite, shell, gravel, sand, kaolin, common clay, fill dirt, and peat are extracted. The mine boundaries shown are conservative in that they show the maximum extent of areas that are subject to regulatory requirements and may contain land areas that have not or will not be disturbed by mining operations.



Legend

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- MSHA Active Mines within 0.5 miles of pipeline
- Mandatory Non-Phosphate Sites within 0.5 miles of pipeline

N

0 1 2
Miles

Sources: FDEP/FGS, Mine Safety and Health Administration (MSHA), ESRI, USGS, FSC, TRC

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Figure: 6.2-1
Mineral Resources Within 0.5 Miles of the FSC Project

Sheet 3 of 3

8/9/2014

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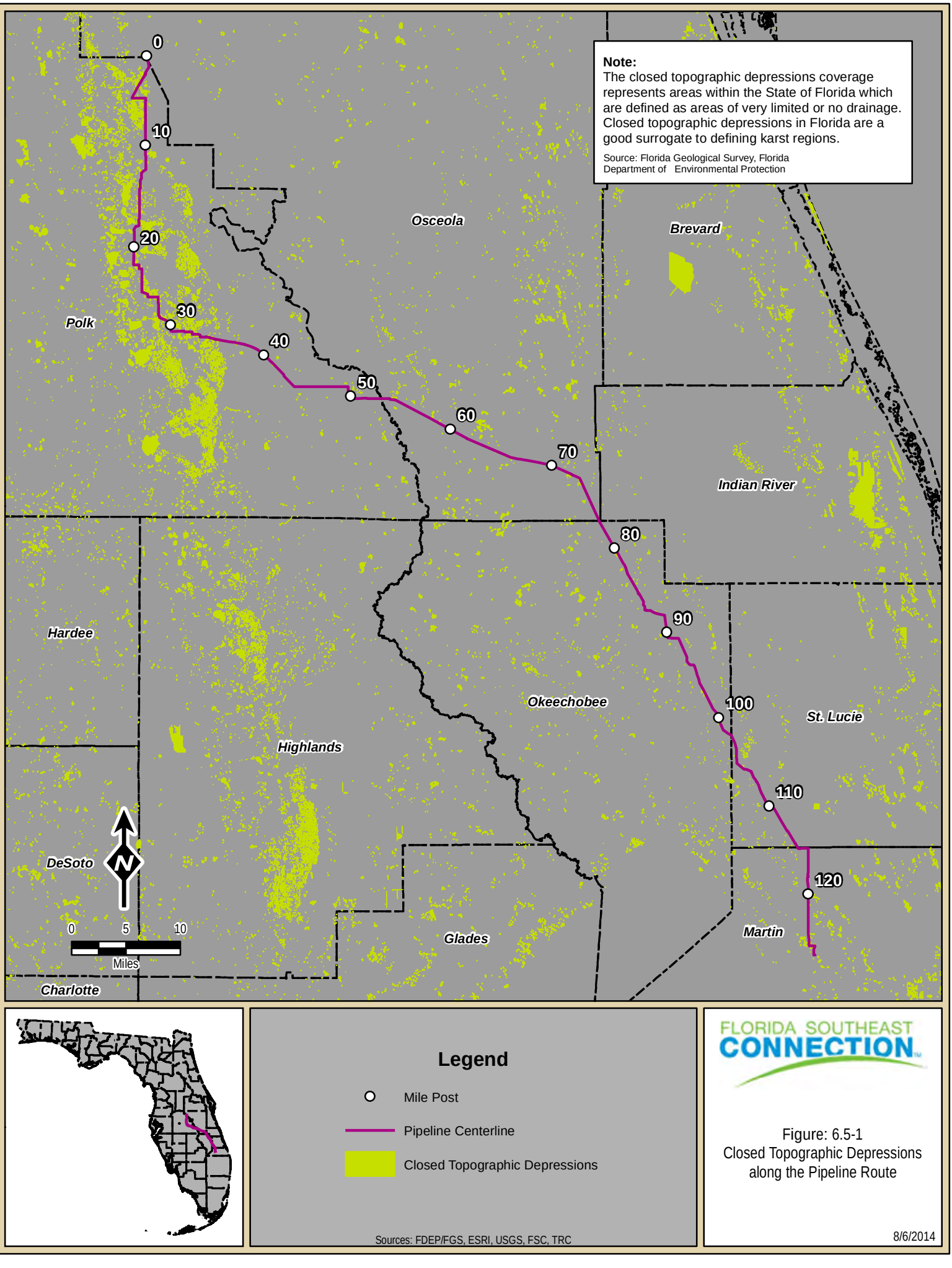

Figure: 6.5-1
Closed Topographic Depressions along the Pipeline Route

8/6/2014

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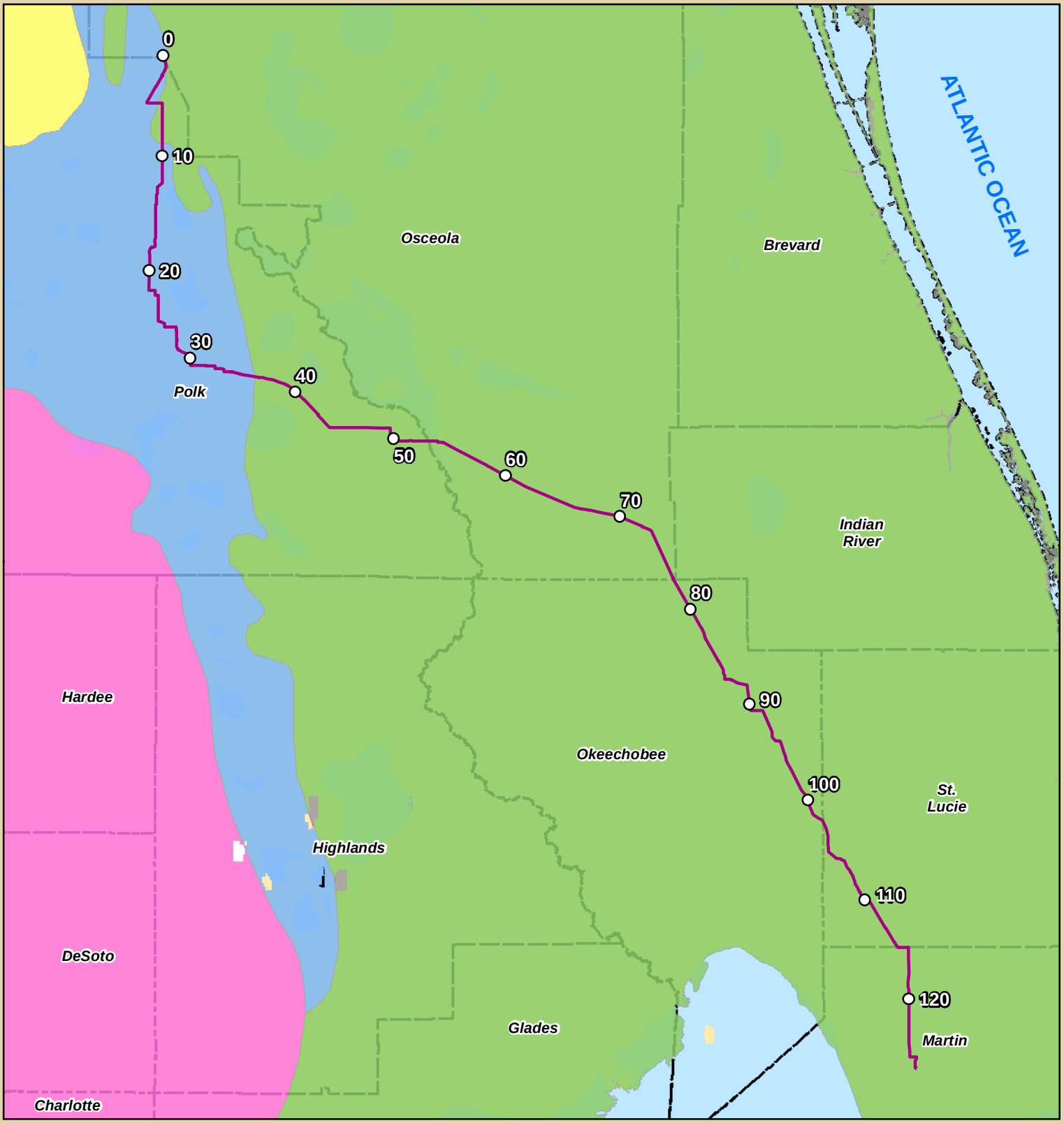

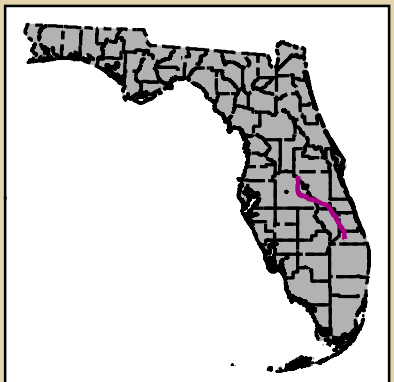

AREA I. BARE OR THINLY COVERED LIMESTONE: Sinkholes are few, generally shallow and broad and develop gradually. Solution sinkholes dominate.

AREA II. COVER IS 30' TO 200' THICK: Consists mainly of incohesive and permeable sand. Sinkholes are few, shallow, of small diameter and develop gradually. Cover-subsidence sinkholes dominate.

AREA III. COVER IS 30' TO 200' THICK: Consists mainly of cohesive clayey sediments of low permeability. Sinkholes are most numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate.

AREA IV. COVER IS MORE THAN 200' THICK: Consists of cohesive sediments interlayed with discontinuous carbonate beds. Sinkholes are very few, but several large diamete, deep sinkholes occur. Cover-collapse sinkholes dominate.

Mile Post

Pipeline Centerline

N

0 5 10

Miles

Sources: ESRI, USGS, FSC, TRC

FLORIDA SOUTHEAST CONNECTION™

Figure: 6.5-2
Karst Regions of Florida
Along the FSC Pipeline Route

8/6/2014

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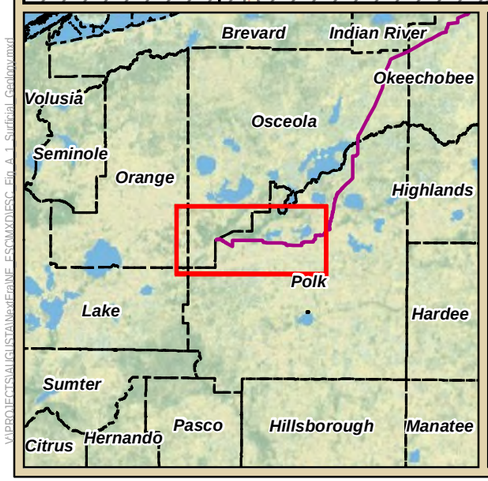
APPENDIX 6A

Surficial Geology Crossed by the FSC Pipeline

Qu
Qu
Osceola
Orange
Polk
Lake
0
10
20
TQd
TQd
Qh
Qh
Qh
Qh
TQd TQd
TQuc
TQuc
Tc
Tc
TQuc
TQuc
Tc
Tc
Tc



Legend

- Pipeline Centerline
- Counties
- Mile Post

- Qa - Anastasia Formation
- Qbd - Beach Ridge and Dune
- Qh - Holocene Sediments
- Qu - Undifferentiated

- Tc - Cypresshead Formation
- TQd - Dunes
- TQsu - Shell-bearing Sediments
- TQuc - Reworked Cypresshead Formation

N

0 2 4
Miles

FLORIDA SOUTHEAST CONNECTION™

Figure: A-1
Surficial Geology

Sheet 1 of 4

8/6/2014

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TQd TQd

TQuc TQuc

30

40

Qu Qu

50

60

Osceola

Polk

TQd

TQd TQd

Tc Tc

TQd TQd

Qh Qh

TQuc TQuc

Legend

- Pipeline Centerline
- Counties
- Mile Post
- Qa - Anastasia Formation
- Qbd - Beach Ridge and Dune
- Qh - Holocene Sediments
- Qu - Undifferentiated
- Tc - Cypresshead Formation
- TQd - Dunes
- TQsu - Shell-bearing Sediments
- TQuc - Reworked Cypresshead Formation

N

0 2 4

Miles

FLORIDA SOUTHEAST CONNECTION™

Figure: A-1
Surficial Geology

Sheet 2 of 4

8/6/2014

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Qh
Qh
Indian River
St. Lucie
TQsu
TQsu
Qbd
Qbd
70
80
90
Osceola
Qu
Qu
Okeechobee

Legend

- Pipeline Centerline
- Counties
- Mile Post
- Qa - Anastasia Formation
- Qbd - Beach Ridge and Dune
- Qh - Holocene Sediments
- Qu - Undifferentiated
- Tc - Cypresshead Formation
- TQd - Dunes
- TQsu - Shell-bearing Sediments
- TQuc - Reworked Cypresshead Formation

N

0 2 4
Miles

FLORIDA SOUTHEAST CONNECTION™

Figure: A-1
Surficial Geology

Sheet 3 of 4

8/6/2014

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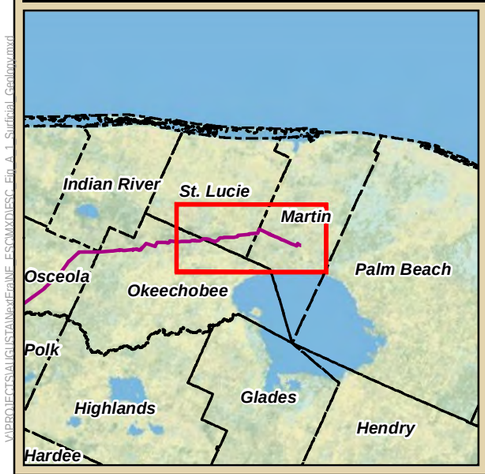
Qa
Qa
St. Lucie
TQsu
TQsu
110
100
120
Martin
Qbd
Qbd
Okeechobee
Qu
Qu
Palm Beach



Legend

- Pipeline Centerline
- Counties
- Mile Post
- Qa - Anastasia Formation
- Qbd - Beach Ridge and Dune
- Qh - Holocene Sediments
- Qu - Undifferentiated
- Tc - Cypresshead Formation
- TQd - Dunes
- TQsu - Shell-bearing Sediments
- TQuc - Reworked Cypresshead Formation

N

0 2 4
Miles

FLORIDA SOUTHEAST CONNECTION™

Figure: A-1
Surficial Geology

Sheet 4 of 4

8/6/2014

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APPENDIX 6B

Karst Plan

FLORIDA SOUTHEAST CONNECTION PROJECT
KARST PLAN

Karst Formations

Karst is a generic term which refers to the characteristic terrain produced by erosional processes associated with the chemical weathering and dissolution of limestone or dolomite, the two most common carbonate rocks in Florida (FGS, 2013). Dissolution of carbonate rocks begins when they are exposed to acidic water (FGS, 2013). Most rainwater is slightly acidic and usually becomes more acidic as it moves through decaying plant debris (FGS, 2013). Limestones in Florida are porous, allowing the acidic water to percolate through their strata, dissolving some limestone and carrying it away in solution (FGS, 2013). Over eons of time, this persistent erosional process has created extensive underground voids and drainage systems in much of the carbonate rocks throughout the state, which can cause collapse of overlying sediments into the underground cavities producing sinkholes (FGS, 2013).

Epikarst is the zone of weathering that penetrates the upper surface of a limestone stratum (FGS, 2003). Weathering of limestone results in development of rubble, fine-grained, carbonate-rich silt, clay, and karren (including pinnacles and valleys in the limestone rock surface) (FGS, 2003). Epikarst consists of an intensely dissolved zone consisting of an intricate network of intersecting roofless, dissolution-widened fissures, cavities, and tubes dissolved into the uppermost part of the carbonate bedrock (FGS, 2003). The dissolution features in the epikarst zone are organized to move infiltrating water laterally to down-gradient seeps and springs or to collector structures such as shafts that conduct the water farther into the subsurface (FGS, 2003). The thickness of the epikarst zone typically ranges from a few meters to 15 meters, but vertical weathering of joints may be much deeper (Jones, 2013).

Closed topographic depressions, as discussed herein, are defined as areas of very limited or no drainage. Although not all closed topographic depressions are karst features, there is a strong correlation between the density of depressions on USGS 7.5-minute quadrangle maps and areas that include sinkholes of various types (Arthur et al., 2005).

Identification of Karst Features

Identification of karst features at and near the FSC Project involved review of available mapping produced by the Florida Department of Environmental Protection (“FDEP”), Florida Geological Survey (“FGS”), and U.S. Geological Survey (“USGS”) for known sinkholes and closed topographic depressions, as well as a visual survey of aerial photographs by a qualified geologist for other karst features. Closed topographic depressions at and near the FSC Project are depicted in Figure 6.5-1, and Table B-1 identifies the location and area of closed topographic depressions and other karst features at and within 0.25-mile of the FSC Project.

As shown in Figure 6.5-2, the FSC pipeline route traverses karst regions II and III, both of which have an overburden thickness of 30 to 200 feet (Sinclair and Stewart, 1985). A majority of the route passes through region II, in which sinkholes are few, shallow, of small diameter, and develop gradually (Sinclair and Stewart, 1985). Cover-subsidence sinkholes dominate (Sinclair and Stewart, 1985). Cover-subsidence sinkholes tend to develop gradually where the covering sediments are permeable and contain sand (USGS, 2014). In areas where cover material is thicker or sediments contain more clay, cover-subsidence sinkholes are relatively uncommon, are smaller, and may go undetected for long periods (USGS, 2014).

The northern portion of the FSC pipeline passes through region III in Polk and Osceola Counties, in which sinkholes are most numerous, of varying size, and develop abruptly (Sinclair and Stewart, 1985). Cover-collapse sinkholes dominate (Sinclair and Stewart, 1985). Cover-collapse sinkholes may develop abruptly (over a period of hours) and cause catastrophic damages (USGS, 2014). They occur where the covering sediments contain a significant amount of clay (USGS, 2014). Over time, surface drainage, erosion, and deposition can form a sinkhole into a shallower bowl-shaped depression (USGS, 2014).

As such, the northern portion of the FSC Project which traverses karst region III has a higher probability of sinkhole occurrence than the southern portion of the FSC Project in karst region II. No sinkholes were identified during field surveys of the FSC Project's proposed right-of-way.

Closed topographic depressions, which are defined as areas of very limited or no drainage, are a good indicator of karst regions (FDEP, 2013). Table B-1 identifies the location and area of closed topographic depressions at and within 0.25-mile of the FSC Project. Most of the closed topographic contours are circular- or oval-shaped, but as shown on Figure 6.5-1, the horizontal geometry of these features is highly variable and depends on the topographic contours of the landscape. Similarly, the vertical geometry of closed topographic depressions is highly variable and depends on the topographic contours of the landscape. Although not all closed topographic depressions are karst features, there is a strong correlation between the density of depressions on USGS 7.5-minute quadrangle maps and areas that include sinkholes of various types (Arthur et al., 2005). Therefore, there is potential for cover-subsidence and cover-collapse sinkholes to form in closed topographic depressions.

Measures to Avoid and Minimize Impacts to Karst Features and Caves

In all work areas, the protection of known and potential karst features (including sinkholes, caves, sinking or losing streams, swallow holes, and springs) will be in accordance with the FSC's Plan and its Spill Control Plan. HDD installation will be designed to avoid any caves identified during geophysical surveys. Buffer zones of 300 feet will be established around karst features in all work areas. During all construction earthwork activities, these zones will be clearly marked in the field with signs and safety fencing (or similar barrier depending on the feature). All excavation activities will be completed to minimize alteration of the existing grade and stormwater flow to the karst features. In linear excavations adjacent to karst features, spoils will be placed on the opposite side of the karst feature. In the event of stormwater erosion during construction, the soil will flow into the excavation and not toward the karst feature.

Stormwater control measures will include detention, diversion, or containerization to prevent construction influenced stormwater from flowing to the karst feature drainage point (or throat). Drainage points in karst features will not be used for the disposal of water. Hydrostatic test water from a new pipe will not be discharged directly into the buffer zone of a karst feature. This water will be discharged downgradient of the karst feature. If site conditions prevent a downgradient discharge, the water will be discharged as far from the karst feature buffer zone as is practicable with a filtered discharge and sediment and erosion control features detailed in the FSC Plan. Post-construction monitoring will ensure proper re-vegetation and restoration of these areas.

Sinkhole Mitigation

FSC will conduct awareness training for karst-like features during Supervisor Staff environmental training, including buffer zone requirements for known karst features. The Chief Inspector, Craft Inspectors, Safety Inspector, Lead Environmental Inspector and Environmental Inspectors will be aware of the potential for sinkhole formation during construction and trained to identify the signs of sinkhole formation.

Signs of sinkhole formation and the presence of sinkholes will be immediately and clearly marked and a karst buffer zone established. Evaluation of the area will be conducted by appropriate engineering and construction staff. Avoidance of the area may be possible by a minor route variation or by prohibiting equipment from working in this portion of the temporary workspace.

Should unknown sinkholes be encountered during construction, the following mitigation measures may be undertaken:

- Route the pipeline away from sinkholes.
- Use a thicker walled pipe.
- Remediate the sinkhole.

Several options are considered viable for remediation/mitigation of sinkholes and depressions along the Project pipeline facilities.

Inverted Filter Approach for Pipeline Excavation Structural Zones

The sinkhole would be excavated until the throat of the underlying bedrock is encountered. On occasion, the throat may not be fully identified. It is often advantageous to inject water into the excavation in order to further identify and clean the throat location. At which point, a field decision regarding the more suitable repair method would be developed. This approach is anticipated for those cases in which the pipeline traverses directly across the bottom or near the throat of a sinkhole.

If the inverted filter approach is selected, a non-woven geotextile fabric and large (typically one to two feet diameter size) rock would be initially placed to establish a working base and fill the sinkhole bottom and/or throat. Layers of progressively smaller size rock would then be placed at an appropriate elevation to allow placement of well-compacted structural soil fill. After placement of stone is complete, the stone filter backfill would be wrapped with the geotextile and the excavation capped with well-compacted soil fill to achieve proposed subgrade elevation.

Concrete Plug Approach for Pipeline Excavation Structural Zones

This approach would initially consist of excavating and cleaning out the throat or open void to allow placement of a concrete plug consisting of flowable fill. Depending on the size and shape of the throat opening, it may be prudent to initially place graded stone within the throat area. The concrete plug would be installed such that it is bonded to adjacent bedrock. The thickness of the concrete plug would be based on field observations, but in general, the thickness should be at a minimum of two (2) times the width of the plug. Large rock fill may be incorporated into the flowable fill to reduce the overall volume of flowable fill material.

After curing, the remaining site area will be filled with well-compacted soil if required to achieve proposed subgrade elevation. This approach is anticipated for those cases in which the pipeline traverses directly across a sinkhole void/opening in a non-closed depression areas that typically do not receive normal storm water flow (i.e., along a hillside for example) or if an unanticipated opening is identified during pipeline excavation.

Large Rock Placement in Cave or Opening

Although not anticipated based on FSC's surveys, in the event the pipeline must traverse a large open void or cave feature previously not observable, stabilizing and filling the large opening would

be implemented to minimize disturbance of the underlying cave feature or large open void. Initially, large rock (several feet in diameter) will be securely placed and wedged into the opening or cave feature. Additional angular rock (up to two feet in size) may be placed prior to placement of a nonwoven filter fabric. The remaining depth may be capped with No. 1 stone, suitable graded rock, and soil backfill to achieve proposed subgrade elevation.

General Site Filling Approach

In some cases, pipeline construction will necessitate the backfilling of certain site features (i.e., closed depressions without visible openings/voids at the ground surface and depressions with karst voids or openings exposed to ground surface) in order to facilitate construction and installation of the pipeline. These closed depressions or karst features will typically be located within the construction right-of-way of the FSC Project but not within the actual pipeline excavation zone or pipe non-structural zone. Backfill activity for both situations would consist initially of vegetation removal and placement of a geogrid and non-woven filter fabric across the footprint of the site feature to be backfilled. Large angular rock (up to two feet in diameter) may be placed over the geogrid and geotextile. Placement of a layer of No. 1 size stone over the large angular rock may be utilized (if required) and will be based on field decision at the time of construction. The goal of this remediation approach will be to minimize the overall impact to natural/existing storm water infiltration/recharge rates and flow direction.

Route Surveillance

As required by 49 C.F.R §192.613, FSC will conduct route surveillance during construction and operation of the facilities, along with training of surveillance personnel, to monitor the pipeline right-of-way for evidence of subsidence, surface cracks, or depressions which could indicate sinkhole formation. Should either be identified, the FSC Project geotechnical engineer will be notified. Mitigation measures may include backfilling the sinkhole with fill material, injecting grout into the sinkhole to seal the hole and prevent further collapse, or a combination of grouting and backfilling. In extreme instances, the affected pipeline segment will be excavated, repositioned, or replaced to a stress-free state, and properly bedded and backfilled to pre-construction contours.

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%2Fsp_52.pdf&ei=kGGoU5_3JLXfsATqwIDwBA&usg=AFQjCNE9ETLsloXtuOanK3u2idaKHGi0wA&bvm=bv.69411363,d.cWc.

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Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
0	-990	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
1	+220	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
1.2	-370	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
1.5	+780	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
1.7	-1230	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
1.9	+710	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
1.9	+980	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
2	-1150	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
2	-970	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
2.2	-120	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
2.3	-420	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
2.6	-310	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3	-760	Cluster of large Karst Features MP 2.7-3.2	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
3	-140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.1	+1140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.2	+550	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.3	-330	Karst feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.3	+480	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.4	+1000	Karst feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.5	-1300	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.5	-920	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.5	+1060	Potential Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.5	-1310	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.6	-700	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.7	-100	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
3.7	+410	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
3.9	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4	-180	Large Karst Feature MP 3.8-4.1	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4	+920	Cluster of Karst features MP4.0-4.7	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.1	+270	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.1	+870	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.2	-1180	Snaking Karst Feature MP 4.0-4.3	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.5	-650	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.5	-120	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.5	-410	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.6	-1200	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.6	-110	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
4.6	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.7	-930	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.7	-840	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.8	-680	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.8	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.9	+370	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.9	-130	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.9	+1300	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
4.9	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
5	-830	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
5	-620	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
5.1	+90	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
5.2	+480	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
5.2	-210	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
5.3	-1150	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.4	-630	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.4	-860	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.5	-410	Numerous Shallow Karst Features MP 5.4-5.7	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.6	+810	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.7	+520	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.7	+950	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.7	+560	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.7	+770	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
5.9	-640	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
5.9	+390	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6	-830	Large Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6.2	-960	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6.2	+1260	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6.7	-650	Karst feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6.8	+120	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
6.9	+390	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
7.1	-780	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
7.3	-1200	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
7.6	-810	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
7.7	-700	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
7.9	-1080	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
8.9	+240	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.4	+670	Potential Karst feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.8	+1130	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.8	+970	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.9	+520	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.9	+770	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.9	+320	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
10.9	+670	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
11	-150	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
11	-170	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
11.5	-430	Cluster of small Potential sinkholes	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
11.6	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
11.7	+930	Potential Karst feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
11.9	-810	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.1	+140	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.2	-250	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.3	-910	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.5	+700	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.6	-1100	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.7	-900	Potential Karst feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.7	-550	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.7	-740	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.7	-370	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
12.9	-190	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
13.5	-770	Potential Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
13.7	-1270	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
13.8	-670	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
13.9	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
13.9	-720	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14	+710	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.1	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.2	+1140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.2	+230	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.3	-300	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.4	+750	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.5	+210	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
14.6	+60	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.7	+470	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.8	+770	Potentially Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.8	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
14.8	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15	+370	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15.1	-960	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15.4	-830	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15.6	+1110	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15.8	-1320	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
15.9	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
16	-540	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
16	+730	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
16.1	-380	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
16.5	+270	Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
16.6	-950	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
16.9	+1280	Subsidence Incident Report	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.1	-1170	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.1	-150	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.2	+440	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.3	-860	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.3	+580	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.3	-1320	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.4	+430	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
17.4	+1140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.4	+180	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
17.6	+800	Potential Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
18.5	+1030	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
18.6	-1070	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
18.7	-200	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
18.7	-120	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
18.8	-210	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.6	-700	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.6	-720	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.7	-1300	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.7	-990	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
19.8	-510	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.8	-680	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
19.9	-590	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20	-480	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.1	+290	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.1	+900	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.2	+640	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.3	+900	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.5	+830	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.6	+520	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.7	+1260	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
20.7	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
21.5	+500	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
21.6	-680	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
21.6	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
21.8	-1300	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
21.8	+170	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
21.9	+690	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.3	+180	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.3	+890	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.4	-1010	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.5	-1090	Cluster of Potential Sinkholes	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.5	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
22.7	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
22.9	+290	Small Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.1	-760	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.3	-1080	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.3	-950	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.4	+1230	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.4	+550	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.5	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.6	+1020	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.6	+140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.8	-830	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
23.9	-1100	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24	-270	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
24.1	+980	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.2	+120	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.3	+1090	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.4	+1140	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.4	+980	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.5	+290	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.6	+1260	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.6	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.6	+780	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.7	+350	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
24.7	+290	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25	+490	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
25	-340	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.1	+1090	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.1	+580	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.2	-320	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.2	+140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.2	-110	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.3	+750	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.3	+280	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.5	+280	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.5	+520	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.5	+80	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.6	-520	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
25.6	-1260	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.6	+180	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
25.7	-890	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26	+790	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26	+500	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26	-840	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26	-1160	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.2	-150	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.2	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.3	-890	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.3	+560	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.3	+300	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
26.3	-820	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.4	+680	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.4	-590	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.5	+1140	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.7	+1320	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.7	+1190	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.8	+600	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.8	-110	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.9	-250	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
26.9	-610	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27	+700	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27.1	+1170	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
27.3	+800	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27.5	+990	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27.5	+650	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27.6	-140	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
27.8	+240	Cluster of small Potential Sinkholes	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28	-860	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.2	-940	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.3	-920	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.4	-230	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.5	+320	Potential Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.5	+560	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.5	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
28.6	-580	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.6	-300	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.6	-1270	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.7	-1080	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
28.8	+90	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29	+910	Potential Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29	-1040	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.1	+780	Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.1	+1300	Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.1	-530	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.1	+510	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.2	+70	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
29.2	-120	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.3	+460	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.3	+1000	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.5	-360	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.5	+130	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.6	+710	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.7	-340	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.7	+110	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.7	-50	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.8	+1260	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.8	+360	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.9	-660	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
29.9	+810	Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
29.9	-200	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.1	-530	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.1	-80	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.2	-540	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.2	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.3	-1150	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.8	+190	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
30.9	+350	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31	+710	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31.1	+910	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31.3	+1110	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
31.4	+1010	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31.4	+210	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31.4	-1060	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
31.5	+60	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32	+930	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32	+840	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.1	-850	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.2	-1140	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.2	+1310	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.2	+1220	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.2	+320	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.2	-870	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
32.3	-200	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.3	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.4	-640	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.5	+50	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.5	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.6	+1060	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.6	+540	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.6	+330	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.8	-1030	Modified Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
32.9	-1300	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33	-960	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.1	+1200	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
33.1	-180	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.1	-820	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.2	-1060	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.2	+1130	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.2	+760	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.2	+120	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.3	-250	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.3	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.4	+490	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.5	-200	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
33.6	+930	Modified Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
34.2	+480	Modified Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.3	-90	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.4	0	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.5	-830	Large Karst Feature	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.5	+810	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.5	+600	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.6	+1170	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.6	+160	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.8	-250	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.9	+760	Potential Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.9	-810	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
34.9	+690	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
35	-610	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
35.1	-1160	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
35.4	-490	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
35.5	-770	Closed Topographic Depression	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
36.2	+1290	Sinkhole	Sinkholes are numerous, of varying size and develop abruptly. Cover-collapse sinkholes dominate. Cover is 30'-200'.
36.4	+280	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
36.7	+220	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.1	+1030	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.2	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.2	-560	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.3	+710	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.4	+620	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
37.6	+940	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.7	-1180	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
37.9	-400	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
38.1	+850	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
38.7	+270	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
38.8	+520	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
39.2	+390	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
39.7	+1030	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
39.8	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
40.2	-1130	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
40.2	+500	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
40.4	-1060	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
40.8	+130	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
40.9	-840	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
40.9	+200	Potential Sinkholes	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
41.1	-130	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
41.2	-240	Large Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
41.2	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
41.2	-660	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
41.9	+310	Large Karst Features MP 41.2-42.6	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
42.3	+320	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
42.8	-730	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
42.9	-480	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
43	+780	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
43.2	+520	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
43.6	+170	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
43.6	+350	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
44.1	-370	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
44.5	+1160	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
44.9	-1160	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
45.6	-1310	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
46.9	-1260	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
47	+260	Large Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
47.2	+1020	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
47.7	+720	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
47.7	-740	Karst feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
48.1	-1210	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
48.3	+820	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
48.3	-670	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
48.7	+1030	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49	+940	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49	+470	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49.2	+770	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49.5	+1050	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49.6	-360	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
49.7	+1020	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
50	-220	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
50.1	+410	Modified Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
50.9	-570	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
50.9	+210	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
51.2	-390	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
51.3	-230	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
51.4	+1200	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
52.1	+980	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
52.3	+1210	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
52.4	+260	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
54	+670	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
54.2	+910	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
54.3	+1070	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
55.6	-1250	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
55.7	+290	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
55.9	-730	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
56.6	+1200	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
57.2	-1120	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
57.5	+470	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
57.7	-1010	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.1	+710	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.4	+910	Karst feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.6	+790	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.8	+640	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.8	+1240	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
58.8	+460	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
59.2	+570	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
59.4	-580	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
59.6	+670	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
59.6	-890	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
59.9	+380	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
61.4	+690	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
61.4	-360	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
61.7	-750	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
61.7	-540	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
61.7	+1090	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
62.1	-210	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
62.7	+410	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
63.1	+950	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
63.4	-230	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
63.5	-160	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
64	+220	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
64.2	+1250	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
64.4	+1230	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
64.4	-590	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
64.7	-180	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
65.1	+960	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
65.3	-970	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
65.4	+1130	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
65.6	-190	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
65.9	-510	Large Karst Feature MP 65.7-66.3	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66	+1230	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.1	-200	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.2	-900	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.4	-160	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.4	-150	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.8	-1100	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
66.9	-230	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
67	+890	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
67.7	-400	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
68	-930	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
68.1	+880	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
69.2	-240	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
69.3	+550	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
69.5	-490	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
70.1	+1020	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
70.2	-260	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
70.3	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
70.6	-320	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
71.4	-420	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
71.6	-320	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
71.7	-1220	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
71.9	-210	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
72.9	-310	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
73.5	-170	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
74	-820	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
74.1	-370	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
74.6	+670	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
74.6	-320	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
75.2	-640	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
75.9	+1240	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
76.3	+350	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
77.5	-590	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
77.5	-320	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
77.6	-800	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
78.2	-600	Modified Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
79.3	+970	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.4	+950	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.5	+830	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.7	+900	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.7	+970	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.8	-470	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
79.8	+620	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
80.1	-460	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
80.1	-740	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
80.5	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
80.5	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
81	+180	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
81	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
81.4	+900	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
82.2	+100	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
82.4	-110	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
82.8	-140	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
83.2	-530	Large Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
83.3	+1120	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
83.4	+110	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
83.8	-230	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
83.8	+1230	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
84.4	-120	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
84.6	-1040	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
84.6	+520	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
84.9	-150	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
86	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
86.2	+860	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
86.2	+970	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
86.4	-940	Modified Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
87.2	-110	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
87.5	+630	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
87.7	-1030	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
88.1	-1110	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
88.4	+870	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
88.4	+1260	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
88.6	+390	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
88.6	+1140	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
89	+1320	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
89.2	+1230	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
89.4	+540	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
89.8	+380	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.1	-860	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.3	-1280	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.3	-410	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.5	-1150	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.5	-1310	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
90.9	+1090	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
91.2	+1020	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
91.2	+430	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
91.3	-1280	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
92.7	+220	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
92.8	+920	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93	-90	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93	-50	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93	-240	Cluster of Small Potential Sinkholes	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93	+1230	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.1	+580	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.3	+1160	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.3	+720	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
93.3	+470	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.5	-200	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.5	-130	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.6	-480	Potential sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.8	-1010	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
93.9	-370	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
94	+980	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
94.4	-750	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
94.9	+430	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95	+1310	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95	-620	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95.1	-720	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
95.3	+230	Potential sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95.6	-200	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95.6	-490	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95.7	+260	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
95.7	+700	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
96	+460	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
96.1	-700	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
96.1	-1220	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
96.2	+80	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
96.5	-600	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
97.2	-280	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
97.4	-460	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
97.6	-980	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
97.6	-750	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
97.8	+570	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
97.9	+550	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
99.1	+540	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
99.2	+420	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
99.8	-620	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
99.8	+490	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.2	-110	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.5	-590	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.5	-1070	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.6	+620	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
100.6	-1170	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.6	+400	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.6	+600	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.7	+330	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
100.8	-180	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
101.1	-470	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
101.4	+680	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
101.5	+1090	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
101.5	+750	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
101.9	-200	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
102.6	+280	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
102.9	-520	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
103	+220	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103	-270	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103.2	+260	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103.5	+930	Modified Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103.7	-330	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103.9	+360	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
103.9	-550	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.1	-1220	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.1	-1030	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.2	+170	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.2	-450	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.2	-230	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
104.3	-630	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.4	-480	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.4	+840	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.7	-430	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.7	+910	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.8	-720	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
104.9	+400	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
105.1	+280	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
105.1	+460	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
105.4	+800	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
106.7	-1240	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
107.9	-200	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
108.6	-320	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
108.7	-1250	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
109.2	-470	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
109.3	+780	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
109.9	+730	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
110.2	-1320	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
110.7	-260	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
111	-440	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
111.1	-1180	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
111.3	-480	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
111.4	-1180	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
113.2	-1240	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
113.4	-1250	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
113.7	-410	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.1	-520	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.1	-570	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.2	-330	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.5	+260	Potential sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.6	-730	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.7	-660	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
114.7	-1160	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
115.7	+1050	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
116.3	+460	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
116.4	+790	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1 Karst Features within 0.25 Miles of the FSC Pipeline Route			
M.P.	**Distance (ft)/ Direction (+ east/ - west)**	**Karst Feature**	**Description of Karst Terrain Region**
116.5	+1190	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
116.6	+1280	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
116.8	+830	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
118.2	-330	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
120	-1190	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
120.5	-150	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121	+420	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121	+660	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121.1	-710	Modified Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121.5	-410	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121.6	+510	Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
121.8	+290	Large Karst Features MP 121.6-122.3	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
122.5	-990	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
122.9	+750	Large Karst Features MP 122.6-123.2	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
123	-710	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
123.7	+330	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
123.7	+910	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
123.7	+130	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
123.9	+400	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
124	+1170	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
124.3	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
124.5	-910	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
124.7	-730	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
124.9	-170	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.1	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Table B-1
Karst Features within 0.25 Miles of the FSC Pipeline Route

M.P.	Distance (ft)/ Direction (+ east/ - west)	Karst Feature	Description of Karst Terrain Region
125.1	-270	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.2	0	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.3	+1280	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.5	-90	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.6	+1310	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
125.7	+600	Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
126.1	+400	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
126.3	+670	Potential Karst Feature	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
126.3	+1240	Potential Sinkhole	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
126.3	+1320	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.
126.3	-1320	Closed Topographic Depression	Sinkholes are few, shallow, small, and develop gradually. Cover-subsidence sinkholes dominate. Cover is 30'-200'.

Sources: Aerial Photo Analysis, Cichon 2014, FGS 2004, Sinclair and Stewart 1985
References:
Cichon, J., 2014, SubsidenceIncidentReports_2014March_WGS84, Florida Geological Survey, < http://www.dep.state.fl.us/geology/gisdatamaps/SIRs_database.htm>
Florida Geological Survey, 2004, Closed Topographic Depressions, Florida Department of Environmental Protection, vector digital data, < http://www.fgdl.org/metadata/fgdc_html/ctds_2004.fgdc.htm>
Sinclair, W.C. and Stewart, J. W., 1985, Sinkhole Types, U.S. Geological Survey, < http://ca.dep.state.fl.us/www.dep.state.fl.us/metadata.jsp?layer=DEP.SINKHOLE_TYPES>

ATTACHMENT 1

QUALIFICATION OF KARST PLAN PREPARER

KENNETH J. CORMIER, PG, CHMM

EDUCATION

Certificate of Professional Development, Environmental Compliance Management, Concentration in Industry, Northeastern University, 1997
B.S., Geological Sciences, Concentration in Environmental Geology, Minor in Chemistry, Salem State College, 1991

PROFESSIONAL REGISTRATIONS

Licensed Professional Geologist, New Hampshire, (# 72)
Certified Hazardous Materials Manager, Institute of Hazardous Materials Management/Council of Engineering and Scientific Specialty Boards, (# 08404)

AREAS OF EXPERTISE

Mr. Cormier has over 20 years of experience encompassing:

- Environmental Permitting
- Geologic Hazard Assessment and Mitigation
- Bedrock Investigations
- Groundwater Investigations
- Sediment Source Assessments
- Contingency Planning
- Environmental Audits
- Solid Waste Management
- Spill Prevention, Control, and Countermeasure Plans

REPRESENTATIVE EXPERIENCE

Florida Southeast Connection Project

As Project Geologist, Mr. Cormier identified geologic hazards including karst features, developed a Karst Plan to address issues of construction and operation in Karst areas, and supervised the preparation of the geological assessment for the FERC resource report for the 126 mile underground gas pipeline in Polk, Osceola, Okeechobee, St. Lucie, and Martin Counties, Florida.

Florida Gas Transmission, Pipeline Expansion

As Project Geologist, Mr. Cormier identified geologic hazards, including identifying karst features and sinkholes, proposed mitigation measures, and prepared a FERC filed Resource Report for a natural gas pipeline expansion encompassing approximately 500 miles through Mississippi, Alabama, and Florida. In addition, Mr. Cormier supported the assessment of contaminated sites located along or adjacent to proposed pipeline facilities and horizontal directional drilling locations.

Freeport LNG Liquefaction and Interconnection Project
Under the direction of the Federal Energy Regulatory Commission (FERC), Mr. Cormier has assessed the geologic setting, geologic hazards, including sea-level rise and erosion on the barrier island, and potential environmental impacts for the proposed facility expansion and pipeline interconnection.

Mid-Continent Express Pipeline, Soil Impact Mitigation Plan - Oklahoma to Alabama
As Project Geologist, Mr. Cormier developed a Loess Soils Management Plan for a proposed 500-mile natural gas pipeline stretching from Oklahoma to Alabama. In consultation with the Natural Resource Conservation Service, he developed a plan to minimize impacts to loess soils during construction and a plan for post-construction restoration.

Laurel Mountain Wind Project – Barbour and Randolph Counties, West Virginia
As Project Geologist, Mr. Cormier evaluated geologic and hydrogeologic site conditions at the top of Laurel Mountain in support of an approximate 125 MW wind project. Mr. Cormier provided rebuttal to intervener testimony and expert witness testimony at Public Service Commission hearings on the Project.

Astoria Energy and Astoria Energy Interconnection – Queens, New York
Project Geologist on the proposed development of a 1,000 MW fossil fuel facility located in Queens, New York. Work included developing permitting strategy, completing a geologic investigation of the soil, groundwater, and bedrock resources, conducting studies for potential impacts to water resources, prepared permit applications, obtaining local water and sewer connection permits, and negotiated permit conditions with regulators.

Quoddy Bay LNG Project - Mr. Cormier prepared Resource Report 6 for the FERC application and supported geologic field activities including marine sediment sampling for the Quoddy Bay LNG import terminal near Eastport, Maine. Mr. Cormier analyzed geologic hazards associated with the construction and operation of the proposed facility, including localized methane gas fields (pockmarks) located in marine sediments.

ELBA Express, LNG Facility and Natural Gas Pipeline - Savannah, Georgia
Under the direction of the Federal Energy Regulatory Commission (FERC), Mr. Cormier assessed the geologic setting, mineral resources, geologic hazards, and potential environmental impacts for a proposed liquefied natural gas terminal in Savannah and the proposed construction of a 190-mile natural gas pipeline in the State. During this assessment and drafting of an Environmental Impact Statement, Mr. Cormier recommended additional mitigation measures be required in the developers blasting plan, including a pre-blast survey of wells, structures, and utilities near blasting zones.

APPENDIX 6C

Paleontological Resource Plan

Florida Southeast Connection
Paleontological Plan

Prepared for

Florida Southeast Connection, LLC
Juno Beach, Florida 33408

August 2014

INTRODUCTION

The Florida Southeast Connection's ("FSC") Natural Gas Pipeline Project Paleontological Resource Plan ("FSC Paleontological Plan") will be incorporated into the environmental plans, which will be included in the Environmental Inspector's Manual in the event that vertebrate paleontological material is identified during construction. The FSC Paleontological Plan was developed in accordance with Chapter 1004.57, *Florida Statutes* (*F.S.*), which is intended to protect and preserve vertebrate paleontological sites and to discourage paleontological field investigation activities that are not conducted in accordance with the provisions or spirit of the law. The FSC Project does not cross federal lands, so the Paleontological Resources Preservation Act of 2009 (PL 111-011) does not apply to the Project.

Chapter 1004.57, *F.S.* states that the all vertebrate fossils found on state-owned lands belong to the state of Florida with the title vested in the Florida Museum of Natural History at the University of Florida (Attachment 1). A permit is required to collect or salvage vertebrate fossils on state-owned or leased lands only. No permit is required on private lands, but heavy equipment operators and construction projects are encouraged to cooperate with the spirit of the law:

> It is not the intention of the Legislature that the provisions of this act impede mining or quarrying…or the construction of canals or similar excavations when such activities are permitted by law. Rather, it is the intent of the Legislature that mine and heavy equipment operators be encouraged to cooperate with the state in preserving its vertebrate paleontological heritage and vertebrate fossils by notifying the Florida Museum of Natural History whenever vertebrate fossils are discovered during mining or digging operations and by allowing such fossils to be properly salvaged and that persons having knowledge of vertebrate paleontological sites be encouraged to communicate such information to the museum (Chapter 1004.57 (1), *F.S.*).

PROJECT LOCATION

The FSC Project originates in Osceola County, and runs approximately 126.4 miles south and east through the counties of Osceola, Polk, Okeechobee, St. Lucie, and Martin where it terminates at Florida Power & Light Company's Martin Clean Energy Center near Indiantown. Although Florida contains numerous fossiliferous deposits, the closest area to the FSC Project known to contain sensitive vertebrate paleontological resources is the Bone Valley Member, located approximately 14 miles to the west of the Project (Figure 1). Bone Valley Member is a subunit of the Peace River Formation within the Hawthorn Group (USDA 1990). The Peace River Formation dates from the Middle Miocene to Lower Pliocene (16 to 4 million years ago). This area is high in phosphate which is believed to have been deposited in the shallow seas that once

covered this area. Phosphate content is variable within the Formation with the Bone Valley area having the highest concentration. Both terrestrial and marine vertebrate fossils are common in the Bone Valley area. Fossils from Bone Valley are best known for the wide variety of species, excellent preservation, and good color (Florida Industrial and Phosphate Research Institute 2010). Fossils from the area include large sharks such as the megalodon, giant whales, horses, saber-tooth cats, camels, and mastodons (Scott and Rupert 1994). Silicified corals and wood are also found.

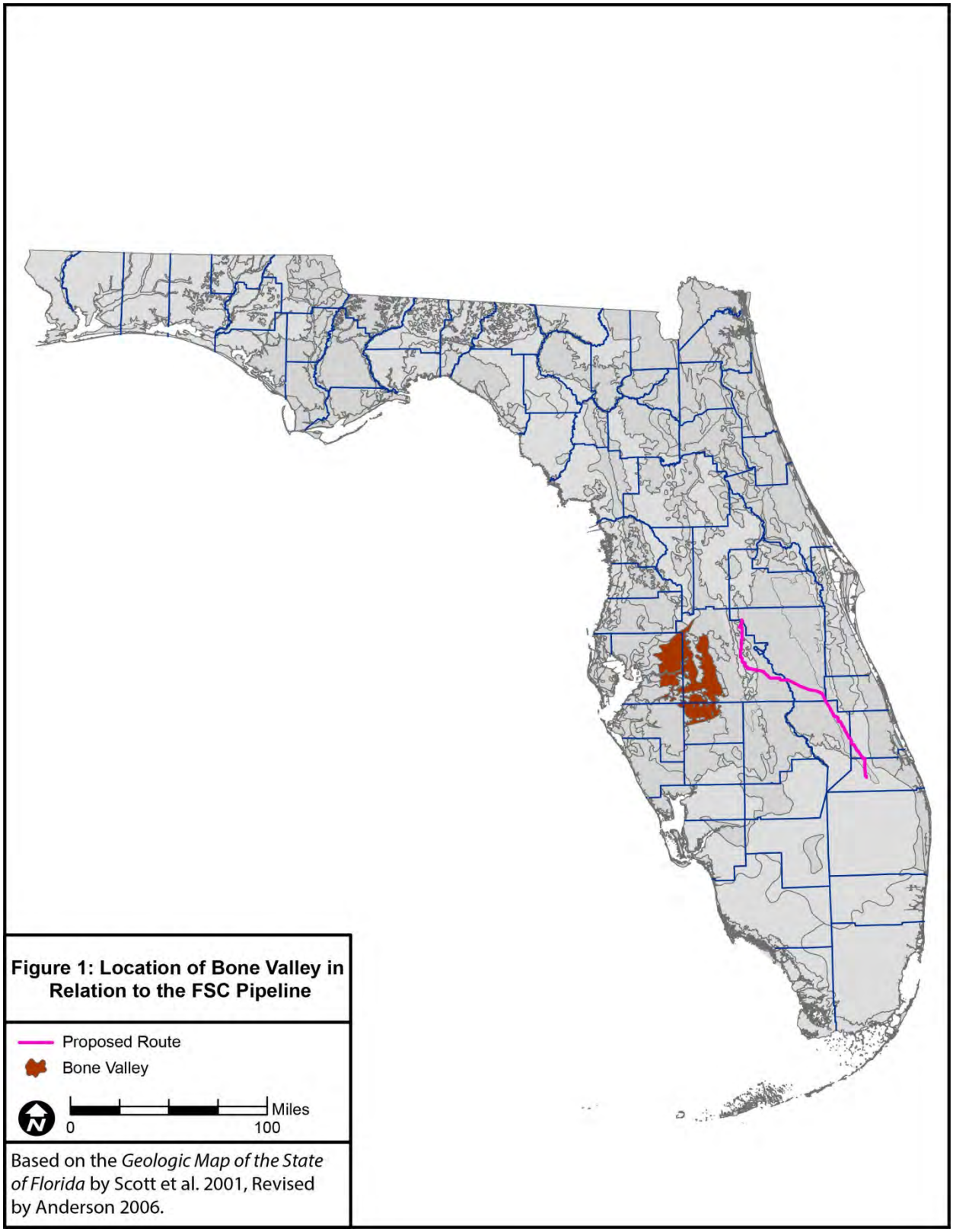

Figure 1: Location of Bone Valley in Relation to the FSC Pipeline

Based on the *Geologic Map of the State of Florida* by Scott et al. 2001, Revised by Anderson 2006.

Notification

In the event that paleontological material is uncovered or suspected deposits are identified, the Environmental Inspector or that person's designated representative will notify the Florida Museum of Natural History Program of Vertebrate Paleontology at the Florida Museum of Natural History. The intent is to give the Florida Museum of Natural History an opportunity to provide a paleontological monitor to be present during construction activities. The presence of a monitor is not required, and construction may proceed if a monitor is not present. The Florida Museum of Natural History contact person is:

Dr. Richard Hulbert
Program of Vertebrate Paleontology
Florida Museum of Natural History
University of Florida
Gainesville, FL 32611
Telephone: (352) 273-182
Email: rhulbert@flmnh.ufl.edu

The paleontological monitor will be required to obtain a permit from the Florida Museum of Natural History for the monitoring and recovery of paleontological specimens on state-owned lands, including uplands and submerged lands. A copy of the permit will be provided by the monitor to the Environmental Inspector or that person's designated representative. This permit will require that the monitor submit a list of all fossils collected, report any unusual specimen or unusually rich site to the Florida Museum of Natural History, and donate, if requested, any of the collected fossils. As necessary, FSC will prepare an agreement with the Florida Museum of Natural History to curate any collected specimens.

Salvage and Monitoring

Each of these tasks shall be performed under the direct supervision of a qualified Paleontologist, holding at a minimum a Master's degree in a related field, or with related regional experience. A representative designated by the qualified paleontologist may assist the qualified individual. In this case, the qualified individual would remotely direct site monitoring and remain on-call.

If material is identified, the paleontological monitor, or designated representative, will observe spoil piles and excavated material where new subsurface impacts will occur. The monitor will identify the diagnostic elements of any such fossil and be equipped to preserve unearthed fossils. The activities will be conducted on a salvage basis and in accordance with Occupational Safety and Health Administration regulations.

The collection of fossil materials on state-owned lands requires a permit from the Florida Museum of Natural History. A note to this effect will be included in the environmental alignment plans.

Preparation, Identification, Preservation, and Curation

Fossils recovered by the paleontological monitor or designated representative will be prepared for identification by washing of sediments, as appropriate, to recover small vertebrate fossils. Upon identification, recovered fossils will be permanently preserved for curation at the Florida Museum of Natural History, or as set forth in the repository agreement. The curation will include an itemized inventory, which will be included in the report.

Report

If material is identified during construction, a final report will be prepared by the qualified paleontologist upon completion of the subsurface excavations and grading activities. The report will include a summary of field observations and an itemized list of all specimens collected. A weekly report, if appropriate, and a daily report, if vertebrate material is found, will be submitted to the Chief Environmental Inspector. The final report and itemized list will be forwarded to the Project Manager for submittal to the Federal Energy Regulatory Commission.

REFERENCES

Florida Industrial and Phosphate Research Institute
2010 Fossils: What They Tell Us About Florida's Natural History. Electronic document, http://www1.fipr.state.fl.us/PhosphatePrimer/0/D9C86FE1F1FD08DE85256F7700750C39, accessed on August 8, 2014.

Scott, Thomas M., P.G. #99, Kenneth M. Campbell, Frank R. Rupert, Jonathan D. Arthur, Richard C. Green, Guy H. Means, Thomas M. Missimer, Jacqueline M. Lloyd, J. William Yon and Joel G. Duncan
2001 *Geologic Map of the State of Florida*, revised by David Anderson on April 15th, 2006. Department of Environmental Protection. Electronic Document, http://ufdc.ufl.edu/UF00094042/00001/1x, accessed on August 7, 2014

Scott, Thomas M. and Frank R. Rupert
1994 A Fossil Hunter's Guide to the Geology of Southern Florida. Florida Geological Survey, Open File Report 66. Tallahassee.

United States Department of Agriculture (USDA)
1990 *Soil Survey of Polk County, Florida.* United States Department of Agriculture/Natural Resources Conservation Service.

Attachment 1

Florida Statute 1004.57–Vertebrate Paleontological Sites and Remains; Legislative Intent and State Policy

1004.57 Vertebrate paleontological sites and remains; legislative intent and state policy.—

(1) It is the declared intention of the Legislature that vertebrate paleontological sites be protected and preserved and that, pursuant thereto, vertebrate paleontological field investigation activities, including, but not limited to, collection, excavation, salvage, restoration, and cataloging of fossils, be discouraged except when such activities are carried on in accordance with both the provisions and the spirit of this act. However, it is not the intention of the Legislature that the provisions of this act impede mining or quarrying for rock, gravel, fill, phosphate, and other minerals, or the construction of canals or similar excavations, when such activities are permitted by law. Rather, it is the intent of the Legislature that mine and heavy equipment operators be encouraged to cooperate with the state in preserving its vertebrate paleontological heritage and vertebrate fossils by notifying the Florida Museum of Natural History whenever vertebrate fossils are discovered during mining or digging operations and by allowing such fossils to be properly salvaged and that persons having knowledge of vertebrate paleontological sites be encouraged to communicate such information to the museum.

(2) It is hereby declared to be the public policy of this state to protect and preserve vertebrate paleontological sites containing vertebrate fossils, including bones, teeth, natural casts, molds, impressions, and other remains of prehistoric fauna, and to provide for the collection, acquisition, and study of the vertebrate fossils of the state which offer documentation of the diversity of life on this planet.

(3) It is further declared to be the public policy of the state that all vertebrate fossils found on state-owned lands, including submerged lands and uplands, belong to the state with title to the fossils vested in the Florida Museum of Natural History for the purpose of administration of this section and ss. 1004.575-1004.577.

History.—s. 204, ch. 2002-387.

1004.575 Program of vertebrate paleontology within Florida Museum of Natural History.—

There is established within the Florida Museum of Natural History a program of vertebrate paleontology, which program has the following responsibilities:

(1) Encouraging the study of the vertebrate fossils and vertebrate paleontological heritage of the state and providing exhibits and other educational materials on the vertebrate fauna to the universities and schools of the state.

(2) Developing a statewide plan, to be submitted to the director of the Florida Museum of Natural History, for preserving the vertebrate paleontological resources of the state in a manner which is consistent with the state policies in s. 1004.57 and which will not unduly hamper development in this state, including mining and excavating operations.

(3) Locating, surveying, acquiring, collecting, salvaging, conserving, and restoring vertebrate fossils; conducting research on the history and systematics of the fossil fauna of the state; and maintaining the official state depository of vertebrate fossils.

(4) Locating, surveying, acquiring, excavating, and operating vertebrate paleontological sites and properties containing vertebrate fossils, which sites and properties have great significance to the scientific study of such vertebrate fossils or to public representation of the faunal heritage of the state.

(5) Enlisting the aid of professional vertebrate paleontologists, mine and quarry operators, heavy digging equipment operators, and qualified amateurs in carrying out the provisions of subsections (1)-(4), and authorizing their active support and cooperation by issuing permits to them as provided in s. 1004.576.

(6) Cooperating and coordinating activities with the Department of Environmental Protection under the provisions of ss. 375.021 and 375.031 and the Department of State under chapter 267 in the acquisition, preservation, and operation of significant vertebrate paleontological sites and properties of great and continuing scientific value, so that such sites and properties may be utilized to conserve the faunal heritage of this state and to promote an appreciation of that heritage.

(7) Designating areas as “state vertebrate paleontological sites” pursuant to the provisions of this section, which areas are of great and continuing significance to the scientific study and public understanding of the faunal history of the state. However, no privately owned site or grouping of sites shall be so designated without the express written consent of the private owner of the site or group of sites. Upon designation of a state vertebrate paleontological site, the owners and occupants of such site shall be given written notification of such designation by the program. Once such site has been so designated, no person may conduct paleontological field investigation activities on the site without first securing a permit for such activities as provided in s. 1004.576.

(8) Arranging for the disposition of the vertebrate fossils by accredited institutions and for the temporary or permanent loan of such fossils for the purpose of further scientific study, interpretative display, and curatorial responsibilities by such institutions.

History.—s. 205, ch. 2002-387.

1004.576 Destruction, purchase, and sale of vertebrate fossils prohibited, exceptions; field investigation permits required; penalty for violation.—

(1) The destruction, defacement, purchase, and sale of vertebrate fossils found on or under land owned or leased by the state and on land in state-designated vertebrate paleontological sites are prohibited, except that the Florida Museum of Natural History may sell vertebrate fossils and may adopt rules defining “nonessential vertebrate fossils” and prescribing the conditions under which such fossils may be sold or otherwise disposed of by a person holding a permit issued by the Florida Museum of

Natural History. Field investigations of vertebrate fossils, including, but not limited to, the systematic collection, acquisition, excavation, salvage, exhumation, or restoration of such fossils, are prohibited on all lands owned or leased by the state and on lands in state-designated vertebrate paleontological sites, unless such activities are conducted under the authority of permits issued by the Florida Museum of Natural History. A permit may be granted by the Florida Museum of Natural History upon application for the permit accompanied by an application fee not to exceed $5. The privileges authorized pursuant to the grant of a permit as provided in this subsection may not be assigned or sublet to any other party.

(2) Any person who, in violation of this section, engages in any of the activities described in subsection (1) without first having obtained a permit to engage in such activity commits a misdemeanor, punishable by a fine not to exceed $500 or by imprisonment in the county jail for a period not to exceed 6 months, or both; and, in addition, he or she shall forfeit to the state all specimens, objects, and materials collected and excavated in violation of this section, together with all photographs and records relating to such materials.

(3) The Florida Museum of Natural History may institute a civil action in the appropriate circuit court for recovery of any unlawfully taken vertebrate fossil. The fossil shall be forfeited to the state if the Florida Museum of Natural History shows by the greater weight of the evidence that the fossil has been taken from a particular site within this state and that the person found in possession of the fossil is not authorized by law to possess such fossil.

History.—s. 206, ch. 2002-387.

1004.577 Certain rights of mine or quarry operators and dragline or heavy equipment operators preserved.—

Nothing in ss. 1004.57-1004.576 shall infringe upon the right of a legitimate mine or quarry operator to extract rock, gravel, fill, phosphate, or other minerals or infringe upon the right of a legitimate operator of draglines or similar heavy dredging, trenching, or digging equipment to construct drainage canals or other excavations because of the actual or potential destruction of vertebrate fossils.

History.—s. 207, ch. 2002-387.