U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
FINAL ENVIRONMENTAL ASSESSMENT
and
FINDING OF NO SIGNIFICANT IMPACT

Special Permit Information:

Docket Number:	PHMSA-2021-0052
Requested By:	Sabal Trail Transmission, LLC
Operator ID#:	39167
Original Date Requested:	April 5, 2021
Effective Date:	September 19, 2023
Code Section(s):	49 CFR 192.611(a)

I. Background

The National Environmental Policy Act (NEPA), 42 United States Code (USC) 4321 – 4375 et seq., Council on Environmental Quality Regulations, 40 Code of Federal Regulations (CFR) Parts 1500-1508, and U.S. Department of Transportation (DOT) Order No. 5610.1C, requires the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS)[1] to analyze a proposed action to determine whether the action will have a significant impact on the human environment. PHMSA analyzes special permit requests for potential risks to public safety and the environment that could result from our decision to grant, grant with additional conditions, or deny the request. As part of this analysis, PHMSA evaluates whether a special permit would impact the likelihood or consequence of a pipeline failure as compared to the operation of the pipeline in full compliance with the Pipeline Safety Regulations. PHMSA's environmental review associated with the special permit application is limited to impacts that

[1] References to PHMSA in this document means PHMSA OPS.

would result from granting or denying the special permit. PHMSA developed this assessment to determine what effects, if any, our decision would have on the environment.

Pursuant to 49 USC 60118(c) and 49 CFR 190.341, PHMSA may only grant special permit requests that are not inconsistent with pipeline safety. PHMSA will impose conditions in the special permit if we conclude they are necessary for safety, environmental protection, or are otherwise in the public interest. If PHMSA determines that a special permit would be inconsistent with pipeline safety or is not justified, the application will be denied.

The purpose of this Final Environmental Assessment (FEA) is to comply with National Environmental Policy Act (NEPA) for the Sabal Trail Transmission, LLC (STT)[2] application for a special permit request to waive compliance from 49 CFR 192.611(a) "Change in class location: Confirmation or revision of maximum allowable operating pressure" for approximately 10.13 miles of 36-inch diameter gas transmission pipelines located in Sumter County, Florida. This FEA assesses the pipeline special permit request, in accordance with 49 CFR 190.341, and is intended to specifically analyze any environmental impact associated with the waiver of 49 CFR 192.611(a).[3] This permit requires STT to implement additional conditions on the operations, maintenance, and integrity management (IM) of the 10.13 miles of 36-inch diameter pipeline located in Sumter County, Florida (***special permit segment***), and 183.23 miles of 36-inch-diameter pipelines located in Suwannee, Gilchrist, Alachua, Levy, Marion, Citrus, Sumter, Lake, Polk, and Osceola Counties, Florida (***special permit inspection area***).

II. Introduction

Pursuant to 49 USC 60118(b) and 49 CFR 190.341, STT submitted an application for a special permit to PHMSA on March 22, 2021, requesting that PHMSA waive the requirements of 49 CFR 192.611(a) to permit STT to maintain the maximum allowable operating pressure (MAOP) of one (1) pipe segment located in Sumter County, Florida, for which the class location has changed from Class 1 to Class 3 location, or will change from Class 1 to Class 3 location in the

[2] STT is a joint venture comprised of Spectra Energy Partners, LP (Enbridge), NextEra Energy, Inc., and Duke Energy, and is operated by Enbridge Inc. STT operates under operator identification (OPID) number 39617 issued by PHMSA.

[3] Waiver of 49 CFR 192.611(a) would also waive corresponding regulation 49 CFR 192.611(d) which requires confirmation or revisions of MAOP within 24 months of the change in class location.

near future. Without the special permit, 49 CFR 192.611(a) would require STT to replace the pipe or reduce pipeline MAOP in the ***special permit segment*** and 49 CFR 192.611(d) would require confirmation or revision of MAOP within 24 months of the change in class location.

PHMSA is granting a special permit to waive certain regulatory requirements where it is not inconsistent with pipeline safety. A special permit is typically conditioned on the performance of additional measures beyond minimum Federal pipeline safety regulations, in accordance with 49 CFR 190.341.

III. Regulatory Background

PHMSA regulations at 49 CFR 192.611 require that an operator confirm or revise the MAOP of a pipe segment that is in satisfactory condition when the hoop stress of the segment is no longer commensurate with the class location. Under section 192.611(a), an operator may be required to reduce the operating pressure of a pipe segment, or alternatively, may have to replace the pipe in order to maintain the MAOP.

Below is the relevant text of 49 CFR 192.611(a) and 192.611(d):

49 CFR Part 192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

(a) If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised according to one of the following requirements:

(1) If the segment involved has been previously tested in place for a period of not less than 8 hours:

(i) The maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations, 0.667 times the test pressure in Class 3 locations, or 0.555 times the test pressure in Class 4 locations. The corresponding hoop stress may not exceed 72 percent of the specified minimum yield strength (SMYS) of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(ii) The alternative maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations and 0.667 times the test pressure in Class 3 locations. For pipelines operating at alternative maximum allowable pressure per §192.620, the corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

(2) The maximum allowable operating pressure of the segment involved must be reduced so that the corresponding hoop stress is not more than that allowed by this part for new segments of pipelines in the existing class location.

(3) The segment involved must be tested in accordance with the applicable requirements of subpart J of this part, and its maximum allowable operating pressure must then be established according to the following criteria:

(i) The maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations, 0.667 times the test pressure for Class 3 locations, and 0.555 times the test pressure for Class 4 locations.

(ii) The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(iii) For pipeline operating at an alternative maximum allowable operating pressure per §192.620, the alternative maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations and 0.667 times the test pressure for Class 3 locations. The corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

(d) Confirmation or revisions of the maximum allowable operating pressure that is required as a result of a study under § 192.609 must be completed within 24 months of the change in class location. Pressure reduction under paragraph (a)(1) or (2) of this section within the 24-month period does not preclude establishing a maximum allowable operating pressure under paragraph (a)(3) of this section at a later date.

49 CFR 192.619 What is the maximum allowable operating pressure for steel or plastic pipelines?

(a)(2)(ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table:

Table 1 to Paragraph (a)(2)(ii)

Class location	Factors, [1] segment - Installed before (Nov. 12, 1970)	Installed after (Nov. 11, 1970) and before July 1, 2020	Installed on or after July 1, 2020	Converted under § 192.14
1	1.1	1.1	1.25	1.25
2	1.25	1.25	1.25	1.25
3	1.4	1.5	1.5	1.5
4	1.4	1.5	1.5	1.5

[1] For offshore pipeline segments installed, uprated or converted after July 31, 1977, that are not located on an offshore platform, the factor is 1.25. For pipeline segments installed, uprated or converted after July 31, 1977, that are located on an offshore platform or on a platform in inland navigable waters, including a pipe riser, the factor is 1.5.

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was uprated according to the requirements in subpart K of this part:

- Section 192.619(a) requires Class 3 location pipe to be pressure tested to 1.5 times MAOP.

IV. Purpose and Need

STT requested a waiver from the requirements of 49 CFR 192.611(a) for the ***special permit segment*** consisting of approximately 10.13 miles of natural gas transmission pipeline listed below in **Table 1 – Special Permit Segment**. Without a special permit, the cited regulations require that STT complete pipe replacement, hydrotest, and pressure reduction, based on population changes in the vicinity of the ***special permit segment***. This special permit will require implementation of special permit conditions, including increased IM activities, in lieu pressure reduction or replacement of approximately 10.13 miles (53,486 feet) of one (1) ***special permit segment*** located on STT's 36-inch diameter Line 1 Pipeline in Sumter County, Florida, where the class location has changed, or will likely change in the near future, from a Class 1 to Class 3 location. The class location change was identified by STT in June 2020, as a result of routine gathering of information regarding activities on and near the pipeline right-of-way. The pipeline ***special permit segment*** and ***special permit inspection area*** have a MAOP of 1,456 pounds per square inch gauge (psig). The ***special permit inspection area*** is comprised of 36-inch diameter pipelines constructed between 2016 and 2017. **Attachment A** and **Attachments**

B-1 through B-4 are pipeline route maps showing the ***special permit segment*** and ***special permit inspection area***.

PHMSA requires compliance with the special permit conditions for the approximately 10.13 miles (53,486 feet) of the ***special permit segment*** and the approximately 183.23 miles of the ***special permit inspection area***. The special permit does not include future class changes within the ***special permit inspection area*** (***special permit segment extensions***) under the special permit.

V. Site Description

STT's Line 1 Pipeline extends approximately 482.37 miles from STT's Alexander City Compressor Station in Tallapoosa County, Alabama, to its Reunion Compressor Station in Osceola County, Florida. The STT 36-inch diameter Line 1 Pipeline was originally constructed in 2016 and 2017 and placed into service in 2017. The ***special permit segment*** is located in Sumter County, Florida, and the ***special permit inspection area*** is located in Suwannee, Gilchrist, Alachua, Levy, Marion, Citrus, Sumter, Lake, Polk, and Osceola Counties, Florida. The ***special permit inspection area*** extends approximately 183.23 miles of the pipeline. Maps of the ***special permit inspection area*** and ***special permit segment*** are provided in **Attachments A and B**, respectively. The ***special permit inspection area*** contains eighteen high consequences areas (HCA), which are calculated by Method 2 (49 CFR 192.903).

The area within the 948-foot potential impact radius (PIR) the ***special permit segment*** consists primarily of single-family dwellings, with a total of approximately 680 single family dwellings, one (1) business (20+ occupants), four (4) small well-defined outside areas, two (2) places of assembly, and one (1) multiple occupancy building. STT did not propose to increase the MAOP under this special permit.

VI. Special Permit Segment and Special Permit Inspection Area

This special permit pertains to the specified special permit segment and corresponding special permit inspection area defined in this section. This special permit requires STT to operate the 36-inch diameter Line 1 Pipeline from the outlet of Dunnellon Compressor Station (MP 395.73) to the inlet of the Reunion Compressor Station (MP 482.37) at or below a MAOP of 1,355 psig without requiring pipe replacement or further pressure reduction for the Class 1 to 3 location

change. This MAOP pressure would be a stress level of 67% of specified minimum yield strength (SMYS) of the Class 1 pipe that is currently in-place. A Class 3 location normally requires pipe to have either Class 2 or Class 3 pipe with a stress level of either 60% or 50% SMYS.

The Selected Alternative will lower the MAOP from 1,456 psig to 1,355 psig and thus will change the PIR to 948 feet to 914.4 feet.

1) **Special Permit Segment:**

This special permit applies to the ***special permit segment*** located in Sumter County, Florida, that is identified using STT survey station (SS) and mile post (MP) reference, as defined in **Table 1 – Special Permit Segment**.

	Table 1 – Special Permit Segment								
Special Permit Segment Number	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station (SS)	End Survey Station (SS)	County, State	No. Dwellings	Year Installed	Seam Type
1	36	Line 1	53,486	22251+50 (MP 421.43)	22786+36 (MP 431.56)	Sumter, FL	640+	2016 & 2017	HSAW, SAWL

Note: HSAW is helical submerged arc welded (spiral) seam steel pipe. SAWL is submerged arc-welded longitudinal seam steel pipe.

2) **Special Permit Inspection Area:**

The special permit inspection area is defined as the area that extends 220 yards on each side of the centerline as listed in **Table 2 – Special Permit Inspection Area**.

Table 2 – Special Permit Inspection Area						
Special Permit Inspection Area Number	Special Permit Segment(s) Included	Outside Diameter (inches)	Line Name	Start Survey Station (SS)	End Survey Station (SS)	Length[4] (miles)
1	1	36	Line 1	15797+96 (MP 299.14)	25468+07 (MP 482.37)	183.23

[4] If the ***special permit inspection area*** footage does not extent from launcher to receiver, then the ***special permit inspection area*** would need to be extended.

3) **High Consequence Area:**

HCAs located in the ***special permit inspection area*** are shown in **Table 3 – High Consequence Areas**. The ***special permit inspection area*** contains HCAs calculated by Method 2 (49 CFR Part 192.903) and are caused by ≥ 20 dwellings or an identified site within the calculated potential impact circle of the pipeline.

Table 3 – High Consequence Areas

Special Permit Inspection Area Number	Within Special Permit Segment 1	HCA ID	Start Survey Station (SS) and Mile Post (MP)	End Survey Station (SS) and Mile Post (MP)	Length (miles)
1	No	STT-10531	16235+99.00 (MP 307.5)	16277+87.00 (MP 308.293)	0.793
1	No	STT-10532	16854+98.00 (MP 319.223)	16882+61.00 (MP 319.746)	0.523
1	No	STT-10533	17712+28.00 (MP 335.46)	17756+91.00 (MP 336.305)	0.845
1	No	STT-10534	17811+59.00 (MP 337.341)	17840+95.00 (MP 337.897)	0.556
1	No	STT-10535	19348+00.00 (MP 366.439)	19396+93.00 (MP 367.366)	0.927
1	No	STT-10536	19789+78.00 (MP 374.806)	19827+01.00 (MP 375.512)	0.706
1	No	STT-10538	20771+17.00 (MP 393.393)	20812+03.00 (MP 394.167)	0.774
1	No	STT-10540	21015+46.00 (MP 398.02)	21059+94.00 (MP 398.863)	0.843
1	No	STT-10541	21974+96.00 (MP 416.192)	22015+65.00 (MP 416.963)	0.771
1	No	STT-10542	22077+33.00 (MP 418.131)	22125+78.00 (MP 419.049)	0.918
1	Yes	STT-10543	22286+63.00 (MP 422.095)	22334+89.00 (MP 423.009)	0.914
1	Yes	STT-10544	22356+59.00 (MP 423.42)	22556+55.00 (MP 427.207)	3.787
1	No	STT-10547	24464+01.00 (MP 463.334)	24503+08.00 (MP 464.073)	0.739
1	No	STT-10549	24856+24.00 (MP 470.762)	25054+39.00 (MP 474.515)	3.753
1	No	STT-10550	25108+26.00 (MP 475.535)	25182+27.00 (MP 476.937)	1.402
1	No	STT-10551	25207+65.00 (MP 477.418)	25335+49.00 (MP 479.839)	2.421
1	No	STT-10552	25433+80.00 (MP 481.701)	25468+07.00 (MP 482.35)	0.649
1	No	STT-10553R	25468+07.00 (MP 482.35)	25468+59.00 (MP 482.36)	0.010

VII. Alternatives

Alternative 1: "No Action" Alternative

If PHMSA were to select the "No Action" alternative, PHMSA would deny STT's special permit request. STT would be required to fully comply with 49 CFR 192.611(a) and to replace the 10.13 miles of pipe with a higher-grade pipe in the ***special permit segment***, or alternatively, reduce pressure on the segment. STT states that it would choose to replace the segment to maintain MAOP.

Alternative 2: "Selected" Alternative – Issuance of the special permit

PHMSA is selecting this alternative, and STT will be allowed to operate at a reduced MAOP of 1,355 psig in the Class 3 location while complying with the special permit conditions, as described below.

VIII. Overview of the Special Permit Conditions:

The special permit conditions are designed to prevent leaks and ruptures such that the special permit is not inconsistent with pipeline safety. This section provides an overview of the special permit conditions. For STT specific technical requirements, see the special permit in **Attachment C – Special Permit Conditions**.

1) **Current Status of Pipe in the Ground**

   To ensure that key characteristics of the pipe currently installed in a ***special permit segment*** is known, STT must provide records that confirm pipe specifications, successful pressure tests, and girth weld non-destructive tests. Should records be unavailable or unacceptable, additional activities as detailed in the special permit must be completed. If STT does not complete these additional activities or should pipe be discovered that does not meet specific requirements of eligibility, the ***special permit segment*** must be replaced.

2) **Operating Conditions**

   The ***special permit inspection area*** must continue to be operated at or below the existing MAOP until a restoration or uprating plan has been approved, if allowed by the special permit. To ensure compliance with special permit conditions, the operator's Operations and

Maintenance Manual (O&M), IM program, and Damage Prevention (DP) program must be modified to implement the special permit conditions. In addition, PHMSA must approve any long-term flow reversals that would impact ***special permit segment(s)***.

3) **Threat Management**

Threats are factors that can lead to the failure of a pipeline. Activities are required to identify, assess, remediate, and monitor threats to the pipeline.

a) **General activities.** STT must perform annual data integration and identification of threats to which the ***special permit inspection area*** is susceptible. These activities must include integrity assessments with specific inline inspection tools, strict anomaly repair criteria, and appropriate environmental assessment and permitting. Additional integrity assessment methodologies may be used if allowed by the special permit. Integrity assessments must then be conducted periodically at an interval determined in the special permit for each threat identified.

b) **External corrosion control requirements.** The special permit requires additional activities to monitor and mitigate external corrosion. These activities include installation and annual monitoring of cathodic protection (CP) test stations, periodic close interval surveys (CIS), and clearing or remediating shorted casings that may impede CP effectiveness. These activities ensure the appropriate level of CP is reaching the pipeline in areas where coating loss or damage has occurred in order to prevent or mitigate external corrosion. In addition, STT will be required to develop and implement a plan that identifies and remediates interference from alternating or direct current (AC/DC) sources (such as high-voltage powerlines) that could adversely impact the effectiveness of CP.

c) **Internal corrosion control requirements.** The special permit includes gas quality specifications to mitigate internal corrosion because internal corrosion is highly dependent on the quality of the gas transported within the pipeline and.

d) **Stress corrosion cracking (SCC) requirements.** To ensure that SCC is discovered and remediated, any time a pipe segment is exposed during an excavation, STT must examine coating to determine type and condition. If the coating is in poor condition, STT must

conduct additional SCC analysis. If SCC is confirmed, STT must implement additional special permit defined remediation and mitigation.

e) **Pipe seam requirements.** STT must perform an engineering integrity analysis to determine susceptibility to seam threats. STT must re-pressure test any ***special permit segment*** with an identified seam to ensure the issue is not systemic in nature.

f) **External pipe stress requirements.** Upon identification of any source of external stress on the pipeline (such as soil movement), STT must develop procedures to evaluate and periodically monitor these stresses.

g) **Third-party specific requirements.** To assist in identifying the pipeline location and minimizing the chance of accidental pipeline strikes, STT must install and maintain line-of-site markers for the pipeline. STT must perform mitigation activities for any location where a depth-of-cover survey shows insufficient soil cover.

4) **Consequence Mitigation**

To ensure quick response and decreased adverse outcome in the event of a failure, each side (upstream and downstream) of the ***special permit segment*** must have and maintain operable automatic shutdown valves (ASV) or remote-controlled valves (RCV). STT must monitor valves through a control room with a supervisory control and data acquisition (SCADA) system. In addition to the mainline valves, should a crossover or lateral connect between the valve locations, additional isolation valves may be required.

5) **Post Leak or Failure**

If the ***special permit inspection area*** experiences an in-service or pressure test leak/failure, STT must conduct a root cause analysis to determine the cause. If the cause is determined to be systemic in nature, STT must implement a remediation plan or the ***special permit segment*** must be replaced, as determined by the special permit specific conditions.

6) **Class Location Study and Potential Extension of Special Permit Segment**

STT must conduct a class location study at an interval specified in the special permit. This allows STT to quickly identify extended locations that must comply with the ***special permit segment*** requirements. STT may extend a ***special permit segment*** with proper notification,

update of the Final Environmental Assessment, and implementation of all requirements in the special permit.

7) **PHMSA Oversite and Management**

PHMSA maintains oversight and management of each special permit. This includes annual meetings with executive level officers on special permit implementation status, written certification of the special permit, special permit required notification of planned activities, notification of root cause analysis results, and notification prior to certain excavation activities so that PHMSA may observe.

8) **Gas Leakage Surveys and Remediation**

The ***special permit segment*** and ***special permit inspection area*** have requirements in the special permit to conduct leakage surveys more frequently than is presently required in 49 CFR 192.706. Gas leakage surveys using instrumented gas leakage detection equipment must be conducted along a ***special permit segment*** and at all valves, flanges, pipeline tie-ins with valves and flanges, and inline inspection (ILI) launcher and receiver facilities in a ***special permit inspection area***, at least twice each calendar year, not to exceed 7½ months. STT must document the type of leak detection equipment used, survey findings, and remediation of all instrumented gas leakage surveys. The special permit will require a three-step grading process with a time interval for remediation based upon the type of leak.

9) **Documentation**

STT must maintain documentation that supports compliance with special permit conditions for the life of the pipeline.

IX. Affected Resources and Environmental Consequences

A. Affected Resources and Environmental Consequences of the Granted Alternative and the No Action Alternative

The potential effects on each of the environmental resources listed below due to the 2016-2017 construction of the pipeline were addressed in the Final Environmental Impact Statement (FEIS) issued by the Federal Energy Regulatory Commission (FERC).

The potential effects of the "No Action" alternative and the "Selected" alternative on environmental resources are described in the following sections.

At the time of pipeline construction in 2016 and 2017, the 10-mile ***special permit segment*** of the pipeline route in Sumter County from Mile Post 421.43 to 431.56 was open land and pasture. Since that time residential development has extended from the existing residential development in the area south of Ocala, Florida, known as "The Villages" (with a population that is more likely senior with potentially underlying health conditions), into the previously undeveloped area and directly abuts the 50-foot-wide permanent pipeline right-of-way. Roads, residences, parks, pools, clubhouses, athletic fields, trails, golf cart paths, and amenities typical to the residential development in Florida, now occupy the former open lands.

Aesthetics:

The aesthetics of the residential areas will be temporarily affected by the construction associated with pipe replacement under the "No Action" alternative. Lawns and residential landscape plantings will be disturbed as will parks, trails, parking areas, and athletic fields. The noise and dust generated by the construction activity will have an effect on the aesthetics of the residential area during any construction. The effects on aesthetics will continue until the pre-construction conditions return, which could be one (1) or two (2) growing seasons.

The "Selected" alternative will avoid construction activities and will not have a substantial effect on aesthetics. The special permit could cause minimal impacts to aesthetics as a result of the monitoring, maintenance, and repair requirements set forth in the special permit conditions along the ***special permit inspection area***. These maintenance activities are intended to reduce the likelihood of a pipeline incident or failure.

Agricultural Resources:

Some of the land crossed by the portion of the pipeline route from MP 427 to 431.56 in the ***special permit segment*** may still be used for grazing until the land is used for residential development. The effect on cattle grazing as a result of the "No Action" alternative would result from the temporary displacement of the cattle from the construction area. Once the construction is complete and the vegetation restored, the cattle would be allowed to return to grazing.

The "Selected" alternative will avoid such construction activities and, thus, will reduce impact to the agricultural resources in the ***special permit segment***. The special permit could cause minimal impacts to agricultural resources over the duration of the special permit as a result of the monitoring, maintenance and repair requirements set forth in the special permit conditions along the ***special permit inspection area***.

Air Quality:

The air quality in the area of the pipeline replacement construction activities would be temporarily affected by the tailpipe emissions and the fugitive dust generated by the construction equipment required to implement the "No Action" alternative. In addition, pipe removal and replacement would necessitate blowing down approximately 14.3 miles of 36-inch pipeline and the release of approximately 40 million standard cubic feet of unburned natural gas into the atmosphere. Since the entire length of the ***special permit segment*** has not yet changed to Class 3, construction could be done in phases, resulting in the potential for additional blowdown volume. The effect on air quality would be limited to the duration of construction and would be localized to the area of the construction. Since the construction area is a residential area, the air quality effects would have a more direct effect on the humans than would occur in a less populated area. As the population of this residential area is more likely senior with potentially underlying health conditions, the construction related effects on air quality degradation may be more significant.

The "Selected" alternative may require some additional construction activities over the duration of the special permit for additional monitoring, maintenance, and repair activities. There would be minimal and temporary air quality impacts associated with these activities.

Biological Resources:

Biological resources affected by the "No Action" alternative would include wetlands and threatened and endangered species. There are 10 wetlands that would be affected by the replacement of the ***special permit segment***. Each of these wetlands affected by the 2016-2017 construction has been completely restored and any new construction would require new mitigation and approximately 3 years to completely restore the wetlands to pre-construction conditions.

Based on field surveys conducted for the pipeline installation, threatened, and endangered species that could be affected by construction activities include eastern indigo snake, Southeastern American Kestrel, scrub jay, and the gopher tortoise. Gopher tortoises and indigo snakes could be directly affected by construction excavation and the kestrel and scrub jay could be indirectly affected by construction related noise and activity.

Potentially Occurring Federal and State Listed Species in the Vicinity of the Special Permit Area					
Species	**Federal Status**	**Florida Status**	**Habitat**	**Occurrence**	**FERC FEIS Effect Determination**
Eastern Indigo Snake (*Drymarchon couperi*)	Threatened	Threatened	Pine flatwoods, scrubby flatwoods, scrub and sandhill	Habitat present, species not observed	Likely to Adversely Affect
Gopher Tortoise (*Gopherus polyphemus*)	Candidate	Threatened	Sand pine and oak scrub	Habitat present, species not observed	Not Likely to Jeopardize
Florida Scrub Jay (*Aphelocoma coerulescens*)	Threatened	Threatened	Scrub and scrubby flatwoods	Habitat present, species not observed	Likely to Adversely Affect
Southeastern American Kestrel (*Falco sparverius Paulus*)	None	Threatened	Pasture-like open areas	Habitat present, species not observed	Not Federal Species

The "Selected" alternative could have minimal but temporary effects on biological resources from excavation activities or vehicle/equipment presence associated with the heightened monitoring, maintenance, and repair activities for the duration of the special permit.

Climate Change:

The "No Action" alternative would result in the release of construction equipment emissions including carbon dioxide and other pollutants, as well as the release of approximately 40 million standard cubic feet of unburned natural gas to the atmosphere from the blowing down of approximately 14.3 miles of 36-inch pipeline. The precise amount of natural gas released would depend on mitigation actions that the operator could take decrease the volume of unburned natural gas, which is a potent greenhouse gas. Since the entire length of the ***special permit segment*** has not yet changed to Class 3, construction could be done in phases, resulting in the potential for additional blowdown volume.

The "Selected" alternative would result in emissions that result from increased maintenance, monitoring, and repair requirements for the duration of the special permit. These emissions would be expected to be significantly less than the replacement associated with the "No Action" alternative.

Cultural Resources:

Neither the "No Action" nor the "Selected" alternative would have an effect on cultural resources. No cultural or historic sites eligible for listing on the National Register of Historic Places were identified the ***special permit segment*** or the ***special permit inspection area*** during the surveys conducted for the 2016-2017 pipeline installation.

Environmental Justice:

The occupants of the residential area living in the vicinity of the ***special permit segment*** do not meet the "minority" requirements to be defined as an Environmental Justice population as defined in DOT's Environmental Justice Order 5610.2(a)[5] and based on the data from the U.S. EPA EJSCREEN Mapping tool.[6] A portion of the population meets low-income requirements under EJSCREEN. A summary of the demographics of the local population living within a 0.5-mile radius of the ***special permit segment*** using EJSCREEN is included here for reference (see also **Appendix C**):

[5] Available at https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/index.cfm.

[6] PHMSA technical guidance provides that special permit applicants must use the EPA EJSCREEN tool for analysis of potential impacts to "environmental justice" on the special permit segment. PHMSA, Environmental Justice Requirements for Pipeline Special Permits (May 1, 2021). EJSCREEN can be accessed at https://ejscreen.epa.gov/mapper/.

Table 1 - Demographic Information for Special Permit Segment – Using EPA EJSCREEN[7]						
	State	**County**	**Total Population (Along Special Permit Segment)** **(Based Upon 2010 Census)**	**Minority*/People of Color** Population**	**Low Income Population**	**Linguistically Isolated**
Special Permit Segment	FL	Sumter	193	7%	45%	0%

The transportation of natural gas by pipeline may involve some degree of risk to the environmental resources and the population living within the immediate vicinity of the pipeline in the unlikely event of a release of natural gas. In the unlikely event that minor leaks occur, it is anticipated that there would be minimal adverse effects to environmental resources and human safety. Repairs may cause some minor inconveniences to people in the immediate vicinity of the leak. The area affected by the construction repair activity would be restored to pre-existing conditions and over time, would revert to prior uses. The greatest hazard is a fire or explosion following a major pipeline rupture; however, this risk is extremely low. In the highly unlikely event of a pipeline failure within the ***special permit segment***, adverse effects could occur to environmental resources and human health and safety within 948 feet of the pipeline centerline depending on the severity of the failure. Within this zone around the pipeline, habitat could be adversely affected as well as existing land uses such as agriculture use. Depending on the severity of the failure, residential structures and potential injuries could occur. Based on the safety record of the pipeline industry, the potential for this occurrence is extremely low.

In addition, federal pipeline safety laws incorporate multiple margins of safety with respect to pipeline design, construction, operation, and IM. The STT pipeline was designed and constructed to minimize the probability of failure. The pipeline is constructed of high strength

[7] This data was gathered using a shapefile of the ***special permit segment***, including a half mile buffer, pursuant to the instructions in PHMSA's Environmental Justice Requirements for Pipeline Special Permits (May 1, 2021). Note that the EJSCREEN data relies on data from 2014-2018, and it does not account for development that has occurred since that timeframe that triggered the need for this class location special permit. The ***special permit segment*** crosses a residential area known as "The Village of Linden," which is an expansion to the Central of the original "The Villages" center of development. Based on 2019 aerial imagery from Google Earth, there appears to be approximately 1,000 homes in The Village of Linden. Assuming that the demographics of The Village of Linden largely reflect the demographics of The Villages which according to DataUsa: The Villages (https://datausa.io/profile/geo/the-villages-fl-31000US45540), population in the affected area is predominantly white, median age of 71.2, medium income of $61,533 and a 4.6 percent poverty rate.

carbon steel and is covered with an epoxy coating. All pipeline joints were welded and x-rayed to verify their integrity before the pipe is backfilled. Each of the joints is also epoxy coated to form a continuous coated pipeline. The pipeline was also hydrostatically tested to 1.5 times the maximum allowable operating pressure. External corrosion control is also provided by cathodic protection. During operation, the pipeline pressure is constantly monitored with safeguards built in to shut down the pipeline operation in the event of an anomalous condition. The pipeline is inspected from the air on a periodic basis as well as from the ground. The pipeline location is marked with signs which have a phone number to contact if something unusual is noted. An odorant is also added to the gas in the pipeline to aid in leak detection.

Most notably for purposes of the Special Permit application, neither the "No Action" alternative nor the "Selected" alternative, increases the likelihood of a pipeline failure. Under the "No Action" alternative, STT would be required to entirely replace the ***special permit segment***. Under the "Selected" alternative, the special permit conditions are intended to maintain safety along the ***special permit segment*** and increase the level of pipeline integrity along the ***special permit inspection area***. The maintenance and IM activities implemented by Sabal Trail will ensure a low probability of pipeline failure commensurate with the no action alternative in which Sabal Trail would have to replace the 10.13 miles of pipe in the ***special permit segment***.

Although neither the "No Action" alternative nor the "Selected" alternative increase the risk of pipeline failure, the "No Action" alternative, based on necessary construction and related disruptions, may have an adverse effect that would be disproportionately high and adverse for the low-income population living in the vicinity of the ***special permit segment***. Construction required by the "No Action" alternative will result in increased noise, land disturbance, and potential air quality issues, including blowing down approximately 14.3 miles of 36-inch pipeline and the release of approximately 40 million standard cubic feet of unburned natural gas into the atmosphere–all of which may impact the low-income population living near the ***special permit segment***. In contrast, the "Selected" alternative requires more frequent maintenance, monitoring, and repair in the ***special permit segment*** and in the ***special permit inspection area***, but these activities would be less disruptive than construction activities associated with replacement of the ***special permit segment***.

Geology, Soils, and Mineral Resources:

Construction of the ***special permit segment*** required under the "No Action" alternative could have an effect on karst geology from the physical activity of the construction or from the post-construction discharge of hydrostatic test water. The ***special permit segment*** pipeline route does not cross any known sink holes, but by the nature of the karst geology in the area, the potential for sink hole or other karst related geology issues does exist. The effect would be mitigated through the implementation of the Karst Mitigation Plan developed for the 2016-2017 pipeline installation.

There could also be an effect on the soils along the ***special permit segment*** that would have to be replaced under the "No Action" alternative. The soils that were previously disturbed during the 2016-2017 pipeline installation were restored to pre-construction conditions. Any construction associated with the "No Action" alternative will affect these soils and require additional time for the soils to be restored to pre-construction conditions.

No mineral resources would be affected by the construction of the 8-mile segment required under the "No Action" alternative as any mineral resources occurring in the area would have been previously affected by the construction of the 2016-2017 pipeline installation.

The "Selected" alternative would not require construction activities and, thus, will minimize ground disturbance and any effect on geology, soils, or mineral resources.

Indian Trust Assets:

Native American assets would not be affected by either the "No Action" or the "Selected" alternative. No Native American assets were identified or reported to occur along the ***special permit segment*** or in the ***special permit inspection area*** during consultations with Native American Tribes as part of the FERC FEIS.

Land Use:

Land use would be affected by the replacement of the ***special permit segment*** required under the "No Action" alternative. When the pipeline was installed in 2016-2017, the area land use was open land/pasture. Since the time of the 2016-2017 pipeline installation, residential development has occurred in this area and the land use has changed from open land/pasture to moderately

dense residential development. The construction required to replace the ***special permit segment*** would thus have an effect on the existing land use. These disruptions will be limited to the construction work area and to the duration of the construction activities. Road access may be temporarily limited as well as access to houses, cart paths, open spaces, and other residential amenities.

The "Selected" alternative would not require construction activities and therefore would be limited to potential minimal ground disturbance or modifications along the ***special permit segment*** and ***special permit inspection area*** from increased maintenance activities.

Noise:

The residential area through which the ***special permit segment*** crosses would be affected by the noise generated by construction equipment required to replace the pipeline segment under the "No Action" alternative. The construction noise would be temporary and localized to the construction area, but it would not be consistent with the normal noise environment of a residential area. Currently there are a number of newly constructed residential roads that most likely would have to be horizontally directional drilled (HDD).

The "Selected" alternative would not require construction activities and therefore would only have potential minimal localized and temporary increases in noise levels in the vicinity of the pipeline as a result of increased maintenance activities in the ***special permit segment*** and the ***special permit inspection area***.

Recreation:

Recreation would be affected by the replacement of the ***special permit segment*** required by the "No Action" alternative, as this segment occurs in close proximity to athletic fields and parking areas that have been constructed since the pipeline line was installed in 2016-2017. Hiking trails and golf cart paths have also been installed in the residential area crossed by the ***special permit segment***. The use of each of these recreational amenities would be restricted during the construction activities. The recreational amenities are a major component of these residential areas and the aspect of these residential areas, and the use restriction would be a significant adverse effect.

The "Selected" alternative would not require construction activities and therefore would have only potential limited and temporary disturbances to recreational activities as a result of increased maintenance activities.

Safety:

The Federal pipeline safety regulations require pressure reduction or replacement of Class 1 and Class 2 location pipe in the event of certain population growth due to more conservative safety factors required as the number of dwellings for human occupancy increase near the pipeline. Within the current Class 3 location area, there are approximately 680 single family dwellings, 1 business (20+ occupants), 4 small well-defined outside areas, 2 places of assembly and 1 multiple occupancy building (20+ occupants) located within the 948-foot PIR around the ***special permit segment*** that would benefit from increased safety associated with pipe replacement.

The special permit would waive the requirement to reduce pressure or replace the existing pipe. The special permit would, however, require compliance with operations and maintenance activities, including IM, all of which are conditions intended to improve safety and environmental protection to equal or exceed that provided by the measures required under 49 CFR 192.611(a). The special permit conditions include: coating surveys and remediation, corrosion surveys and remediation, damage prevention activities, line of sight markers, in-line inspections for threats (corrosion, third party damage, and cracking–pipe body, and seam and girth welds), remediation of pipe threats based upon design factor for class location, reassessments based upon IM program, procedures, and documentation. The pipeline integrity attributes (such as pipe diameter, wall thickness, grade, pipe seam type, pressure test, maximum allowable operating pressure, and anomaly findings) for the special permit segment can be reviewed in the Federal Dockets Management System (FDMS) located at www.regulations.gov under the document titled "**2021-0052 - Attachment A – Segment Integrity Information**." Details about the pipeline's integrity and compliance history are provided in the **Special Permit Analysis and Findings (SPAF)** document, which is available in the docket (PHMSA-2021-0052) in the FDMS at www.regulations.gov. The SPAF does not describe any integrity issues (such as pipe body, seam or girth weld, operational or environmental) that would affect the approval of the special permit with implementation by STT of conditions to maintain

safety. PHMSA has determined that the pipeline and ***special permit segment*** is in satisfactory condition for the issuance of the special permit.

These activities provide safety and environmental protection in the area of the ***special permit segment*** and the ***special permit inspection area***. Under the "Selected" alternative compliance with the monitoring and maintenance requirements in the special permit will ensure the integrity of the pipe and protection of the population living near the ***special permit segment*** to a similar degree as the "No Action" alternative of a lower MAOP, new pressure test, or thicker walled or higher-grade pipe. In addition, populations living near the ***special permit inspection area*** will benefit from a higher level of safety and pipeline integrity.

The above-described monitoring conditions associated with the special permit would not be applicable if PHMSA denied the special permit request because the safety requirements in 49 CFR Part 192, Subpart O only apply to 21.331 miles of HCAs and a yet to be determined mileage of moderate consequence areas (MCAs) within the ***special permit inspection area***.

These monitoring conditions are intended to provide more information about the condition of the pipe so that any integrity issues can be remediated to avoid risk.

On the other hand, the "No Action" alternative would require full compliance with 49 CFR 192.611(a). This provision would result in the replacement of the existing pipeline with a thicker pipeline that meets the requirements of 49 CFR 192.611(a). The monitoring conditions associated with the special permit, however, would not be applicable if the special permit were denied because those conditions are not mandated by the current 49 CFR Part 192. Accordingly, both alternatives are expected to lead to a similar safety result within the ***special permit segment***. The "Selected" alternative will extend pipeline safety benefits to a much greater area along the pipeline and thus provide an increased level of safety in the ***special permit inspection area***.

The SPAF, which is incorporated by reference into this FEA, details that the pipe seam is a helical submerged arc welded (HSAW) seam, externally coated with fusion bonded epoxy, and was manufactured in 2016 by Berg Steel Pipe Corporation. No known integrity issues exist in the ***special permit segment*** or the ***special permit inspection area.***

(a) Will operation under the special permit change the risk of rupture or failure?

Since the safety risk with respect to the special permit focuses on the integrity of the pipeline and its effect on the increased population in the event of a catastrophic failure, the special permit contains conditions to ensure the safety level meets the requirements of 49 CFR Part 192 in the ***special permit inspection area***. Several pipeline safety measures that exceed the requirements of 49 CFR Part 192 have already been implemented in the ***special permit inspection area***. The measures include conducting a baseline in-line inspection in 2020, conservatively repairing conditions that do not present a near-term risk to pipeline integrity in order to help ensure the integrity and safety of the pipeline, patrolling frequencies that exceed the requirements of 49 CFR 192.705, and performing annual system-wide risk assessment to identify the risk levels associated with pipeline segments both in HCAs and non-HCAs. In addition, STT has implemented, or will implement, the required preventive and mitigative measures to ensure an adequate safety level for the ***special permit segment*** and the ***special permit inspection area***. These measures include, but are not limited to, confirming adequate depth of cover based on construction as-built data within the ***special permit segment***, conducting a close interval survey to confirm adequate cathodic protection levels within the ***special permit segment*** and the ***special permit inspection area***, prompt remediation of any areas of inadequate CP, and conducting a post-backfill coating survey and remediation of coating holidays during construction. As a result of these measures, the pipeline is confirmed to be in excellent condition. The special permit will allow operation at a lower MAOP, creating no additional risk. Additional inspections will lower the risk of rupture or failure.

(b) If a failure occurred, will consequences and spill or release volumes be different under the permit? Will granting this permit increase, decrease, or have no change on the risk of failure?

STT believes that granting the special permit will not increase the risk of failure with implementation of the special permit conditions. The implementation of the pipeline safety measures that exceed the requirements of 49 CFR Part 192 that have already been implemented on STT (as explained above), in conjunction with increased mitigative

measures that are required under the special permit, will meet, or exceed safety and reliability standards of 49 CFR 192.611(a) in the requested ***special permit segment*** and ***special permit inspection area***.

However, if PHMSA denies the special permit and STT opted to reduce pressure instead of replacing the pipe, a failure on a reduced-pressure pipeline could result in a smaller volume of natural gas released. STT contends that it will not opt to reduce pressure due to ongoing supply needs in the region and contractual obligations.

(c) Will the Potential Impact Radius (PIR) of a rupture change under the special permit? Please calculate and provide PIR data, if applicable. Will more people be affected by a failure if PHMSA granted the permit?

The PIR of 36-inch Line 1 will not change under the special permit. Consequently, no more people would be affected by a failure under the permit. The calculated 948-foot PIR of the ***special permit segment*** is determined using the current MAOP.

(d) Will operation under the special permit have any effect on pipeline longevity or reliability? Will there be any life cycle or maintenance issues?

The implementation of increased pipeline assessment within the ***special permit inspection area*** as per required in the special permit will improve pipeline reliability and safety. Continued operation of the ***special permit segment*** will not be expected to have an effect on the pipeline longevity and reliability or cause any life cycle or maintenance issues. In addition, the pipe in ***special permit inspection area*** has the same characteristics of the other pipe on STT system along Line 1. This pipe operates as one (1) system. The MAOP and other factors will not change under the special permit; renewal of the special permit will not impact the overall pipeline longevity or reliability and will not cause any life cycle or maintenance issues.

Socioeconomics:

The construction associated with the replacement of the ***special permit segment*** required by the "No Action" alternative could have a small positive socioeconomic effect from the construction workers and local expenditures. This small socioeconomic positive effect will be short lived and

may be balanced out by the negative effects associated with disruptions to the recreational amenities of the residential area, as well as the overall disruptions to the residential community.

The "Selected" alternative will not have either a positive or a negative effect on socioeconomics because no construction activities will be required. Further, the special permit will be designed to maintain pipeline safety for the ***special permit segment*** and increase pipeline integrity for the ***special permit inspection area***.

Topography:

The "No Action" alternative would not have an effect on topography as the required construction for pipeline segment replacement would occur on an area where the topography has been previously affected by pipeline installation. This conclusion assumes that the topography is returned to pre-construction conditions. Effects could occur should the topography of the pipeline route not be returned to pre-construction conditions or if temporary and permanent erosion controls are not implemented and maintained.

The "Selected" alternative will not have an effect on topography as no construction activities will be required.

Transportation:

The "No Action" alternative could have an effect on transportation in the area where the ***special permit segment*** is replaced. In order to cross the new roads constructed in the residential area with the replacement pipeline, road closures and traffic diversions may be required. This will disrupt the traffic patterns and cause delays to residents between their homes and outside destinations. The traffic disruptions could also lead to traffic congestion, which in turn, may affect response times of police, fire, and ambulance services.

The "Selected" alternative will not have an effect on transportation as no construction activities will be required.

Water Resources:

The construction from replacement of the ***special permit segment*** under the "No Action" alternative will not have an effect on surface or ground water resources. With regard to surface water resources, there are no major waterbodies crossed by the ***special permit segment***. Pipeline

construction may temporarily affect stormwater drainage swales and canals that, in turn, may lead to temporary flooding in certain residential areas. This will be a short-term effect and will be time limited to the construction period, unless the drainage patterns are not returned to pre-construction conditions, in which long term effects could occur.

The "Selected" alternative will not have an effect on water resources as no construction activities will be required.

B. Comparative Environmental Impacts of Alternatives

As PHMSA recognized in its June 29, 2004, Criteria for Class Location Change Waivers,[17] implementing additional preventative and mitigative measures enables a pipeline to improve its knowledge and understanding of the pipeline's integrity, accelerate the identification and repair of actionable anomalies, and better manage and mitigate threats to the public and environment. Implementing enhanced inspection and assessment practices throughout the ***special permit segment*** and ***special permit inspection area***, in lieu of replacing a small segment of pipe experiencing the class location change, extends pipeline safety benefits to a much greater area along the pipeline. In addition, avoiding pipe excavation and replacement will minimize costs to the operator, will avoid delivery interruptions and supply shortages, and avert environmental disturbance. All of these benefits will be realized under STT's requested special permit.

If the special permit was not granted, 49 CFR 192.611(a) would require a reduced MAOP and STT would have to replace the pipe to maintain reliable transportation service and supply to the region. However, the monitoring conditions associated with the special permit would not be applicable if the special permit were denied because those conditions are not mandated by applicable regulations. Accordingly, both alternatives are expected to lead to a similar safety result.

The mode of pipeline failure would be the same whether the pipe operates under a special permit or is replaced. Likewise, human safety would not be affected.

The natural environment would be temporarily disturbed if the pipe is replaced; a special permit would have little to no impact on the environment in the ***special permit segment***.

X. Consultation and Coordination

STT and PHMSA personnel involved in preparation of this document include:

Personnel from partner and operator of STT

Nathan Atanu, Manager, Operational Compliance, Enbridge Gas Transmission & Midstream

PHMSA

Amelia Samaras, PHMSA, US DOT

Steve Nanney, PHMSA, US DOT

Joshua Johnson, PHMSA, US DOT

XI. Request for Public Comments Placed on Docket PHMSA-2021-0052

PHMSA published the special permit request in the Federal Register (86 FR 47734) for a 30-day public comment period from August 26, 2021, through September 27, 2021. The STT special permit application, DEA, and draft special permit conditions are available in Docket No. PHMSA-2021-0052 at: www.regulations.gov for public review. PHMSA uses the special permit conditions to protect public safety and to minimize pipeline impacts to the environment. PHMSA sought comments on any potential environmental impacts that could result from the selection of either alternative, including the special permit conditions. PHMSA received one (1) comment from the Pipeline Safety Trust (PST) as a result of this notice.

The PST noted that the location of the STT Line 1 Pipeline was a rural class 1 area when the pipeline was constructed. However, substantial development was predictable since the portion of the pipeline for the ***special permit segment*** was located just south of the one of the fastest growing U.S. census districts over the past decade, primarily because of a very large 55+ housing development, The Villages. The PST stated that the operator should have known that it was within the city limits of Wildwood, planned for dense development, and should have built the pipeline to Class 3 standards from the start. The PST also believed that the request to grant a future extension of a special permit without another application should be denied. Any future class location changes in this area, as foreseeable as these were, should require the operator to

file a new application, with another opportunity for public and agency review of the operator's operational history.

PHMSA acknowledges PST's comment and has structured the conditions for this special permit to reduce the MAOP for the approximately 87-mile section of pipe that includes the ***special permit segment***. This restricts the operating pressure to no greater than 67% of SMYS in Class 3 locations. In addition, the remediation criteria have been modified to account for this reduction in MAOP and equivalent or slightly more conservative remediation requirements, which are mandatory. Finally, STT will have to apply for further class changes on the pipeline to facilitate public and PHMSA review. PHMSA has limited the special permit to the ***special permit segment*** initially requested, and if an extension of the segment is necessary due to a class change, STT must apply for an additional special permit at that time.

XII. Finding of No Significant Impact

In consideration of the FEA, the special permit conditions explained above, the SPAF, and other documents included as part of this action, PHMSA finds that no significant negative impact to human health or safety or the human environment will result from the issuance and full implementation of the above-described special permit to waive the requirements of 49 CFR 192.611(a) for ***special permit segment***, which consists of 10.13 miles of 36-inch diameter pipeline located in Sumter County, Florida. This permit will require STT to implement additional conditions on the operations, maintenance, and IM of the ***special permit segment*** and ***special permit inspection area***.

This special permit requires STT to operate the 36-inch diameter Line 1 Pipeline from the outlet of Dunnellon Compressor Station (MP 395.73) to the inlet of the Reunion Compressor Station (MP 482.37) at or below a MAOP of 1,355 psig without requiring pipe replacement or further pressure reduction for the Class 1 to 3 location change. This MAOP pressure would be a stress level of 67% SMYS of the Class 1 pipe that is currently in-place. A Class 3 location normally requires pipe to have either Class 2 or Class 3 pipe with a stress level of either 60% or 50% SMYS.

XIII. Bibliography

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Biological Report 79/31.Washington DC.

Davies, W.E., J.H. Simpson, G.C. Ohlmacher, W.S. Kirk, and E.G. Newton. 1984. Engineering Aspects of Karst. U.S. Geological Survey. National Atlas of the United States, scale 1:7,500,000.

Federal Emergency Management Agency. 2014. FEMA Flood Zone Designations. Available at: https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=- 1&content=floodZones&title=FEMA+Flood+Zone+Designations.

Federal Energy Regulatory Commission. 2015. Southeast Market Pipeline Project. Final Environmental Impact Statement. Docket Nos. CP14-554-000, CP15-16-000, and CP15-17-000. FERC/EIS-0262F. Federal Energy Regulatory Commission, Office of Energy Projects. Washington, D.C. 20426.

Florida Department of Environmental Protection. 2019. Florida Geological Survey's Subsidence Incident Database. Available at: http://www.dep.state.fl.us/geology/gisdatamaps/SIRs_database.htm.

Florida Geological Survey. 2004. Closed Topographic Depressions (CTDS). Available at: http://www.dep.state.fl.us/geology/programs/hydrogeology/fava_gis_data.htm.

Gutierrez, F., M. Parise, J. DeWaele, and H. Jourde. 2014. A Review on Natural and Human-induced Geohazards and Impacts in Karst. Earth Science Reviews 138, 61-88.

Marella, R.L. 2009. Water Withdrawals, Use, and Trends in Florida, 2005: U.S. Geological Survey Scientific Investigations Report 2009-5125, p. 49. Available at: http://pubs.usgs.gov/sir/2009/5125/.

Marella, R.L., and M.P. Berndt. 2005. Water Withdrawals and Trends from the Floridan Aquifer System in the Southeastern United States, 1950 – 2000. U. S. Department of the Interior, U.S. Geological Survey Circular 1278. p. 20.

National Wild and Scenic Rivers System. 2014. Maps and GIS Mapping Files. Available at: http://www.rivers.gov/mapping-gis.php.

Ryder, J. 1985. Hydrology of the Floridan Aquifer System in West-Central Florida. USGS Professional Paper 1403-F. p. 63.

Sabal Trail Transmission. 2015. Karst Mitigation Plan for the Sabal Trail Pipeline Project. FERC Docket Number CP15-17-000. Sabal Trail Transmission. Lake Mary, FL.

Sinclair, W.C., and J.W. Stewart. 1985. Sinkhole Type, Development, and Distribution in Florida. In cooperation with the Florida Department of Environmental Regulation Bureau of Water Resources Management and the Florida Department of Natural Resources Bureau of Geology. USGS Map Series 110.

Tihansky, A.B. 1999. Sinkholes, West-Central Florida. In: D. Galloway, D.R. Jones, and S.E. Ingebritsen (Eds.), Land Subsidence in the United States. U.S. Geological Survey Circular 1182. 121-140.

U.S. Army Corp of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0), ed. J. F. Berkowitz, J.S. Wakeley, R. W. Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers. 2016. Department of the Army Permit. Permit Number:SAJ-2013-03030. U.S. Army Engineer District. Jacksonville, FL.

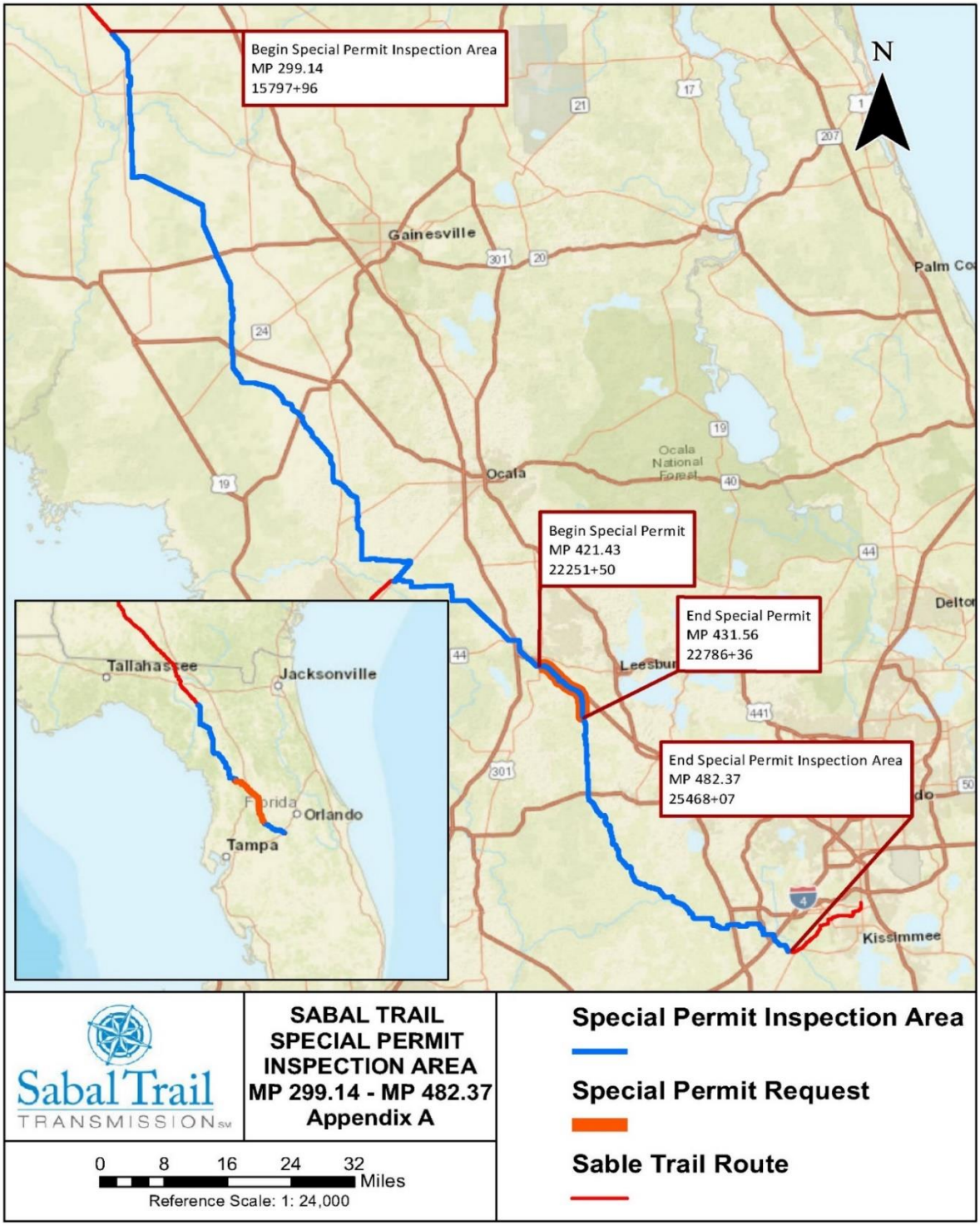
U.S. Environmental Protection Agency. 2021. EJSCREEN. EPA's Environmental Justice Screening and Mapping Tool (Version 2020). ACS Summary Report. Available at: Ejscreen.epa.gov/mapper/. Accessed February 2021.

U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. Available at: http://www.fws.gov/migratorybirds/.

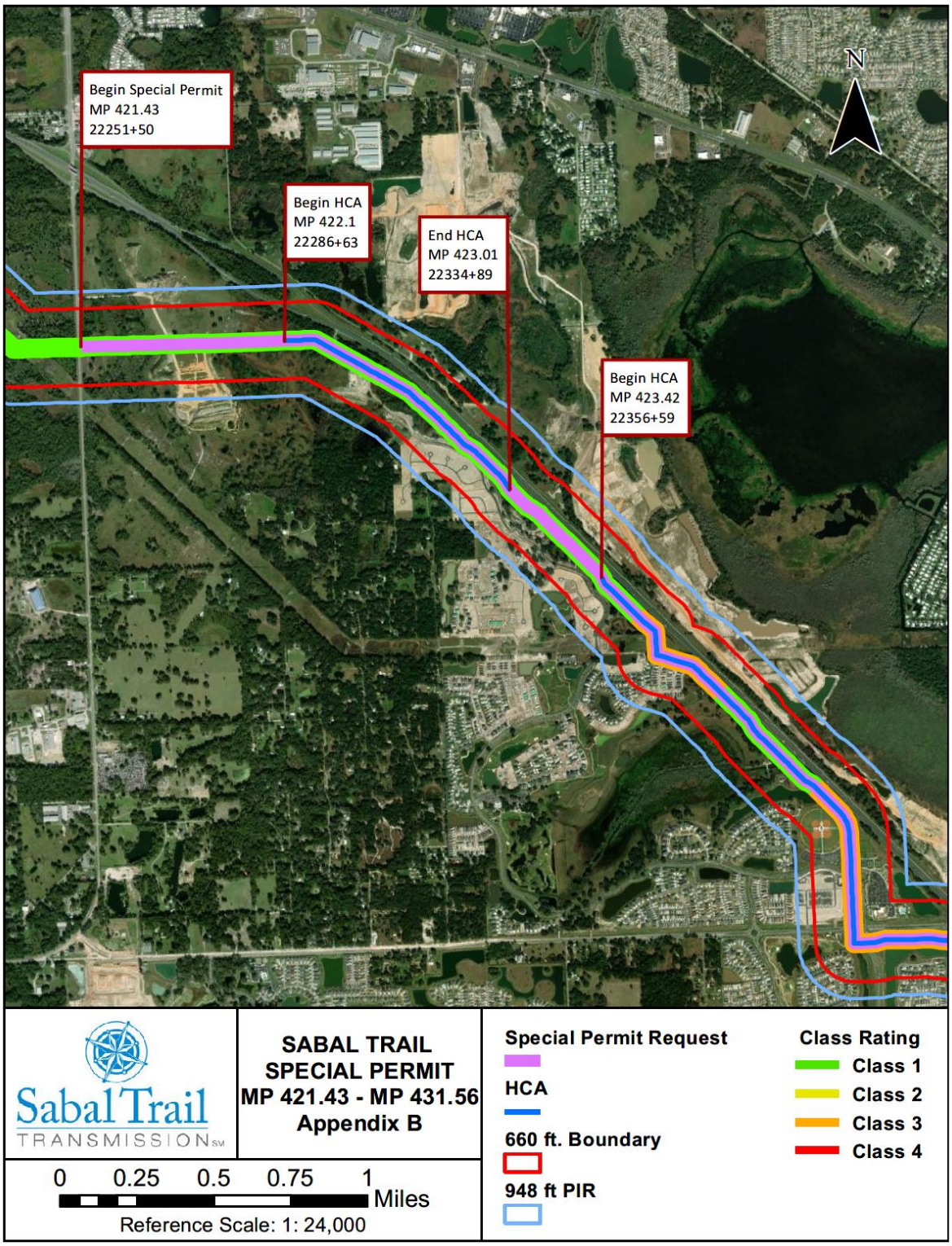
U.S. Fish and Wildlife Service. 2016. Biological Opinion for the Southeast Market Pipeline. Issued to the Federal Energy Regulatory Commission. U.S. Department of the Interior. U.S. Fish and Wildlife Service. Jacksonville, FL. FWS Log No. 04EF1000-2014-F-0319.

Attachment A

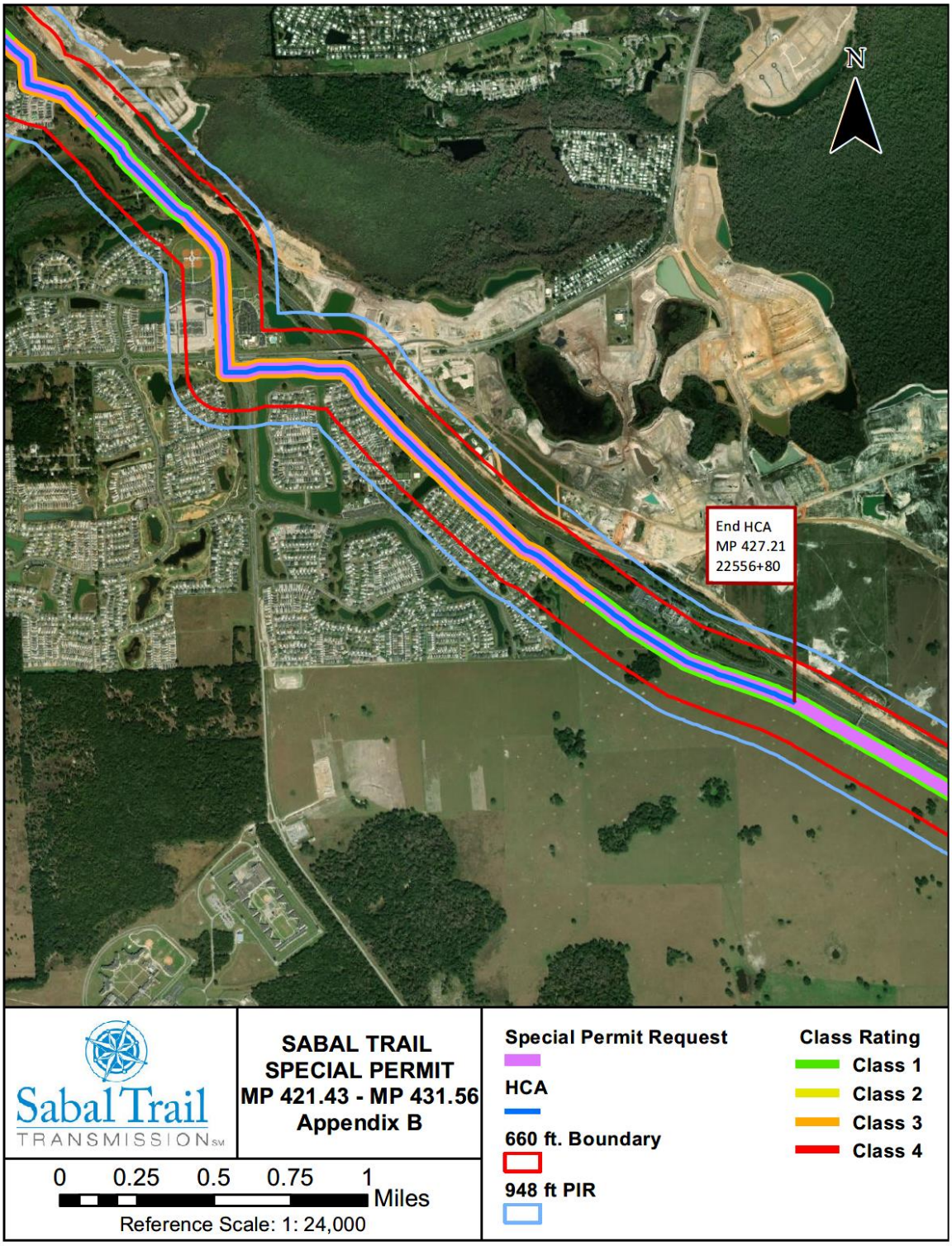
Special Permit Inspection Area Map



Attachment B-1
Special Permit Segment Maps

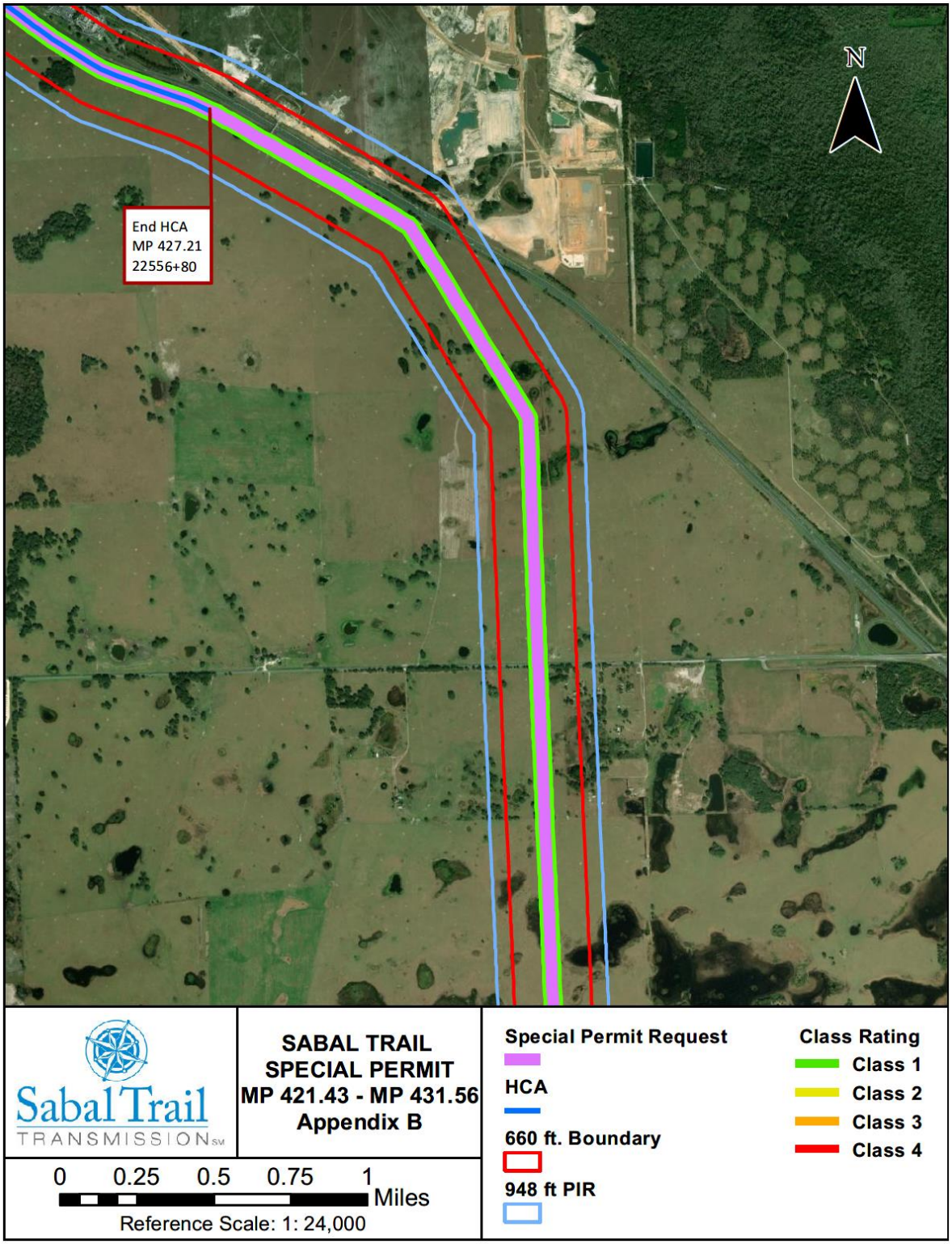


Attachment B-2
Special Permit Segment Maps



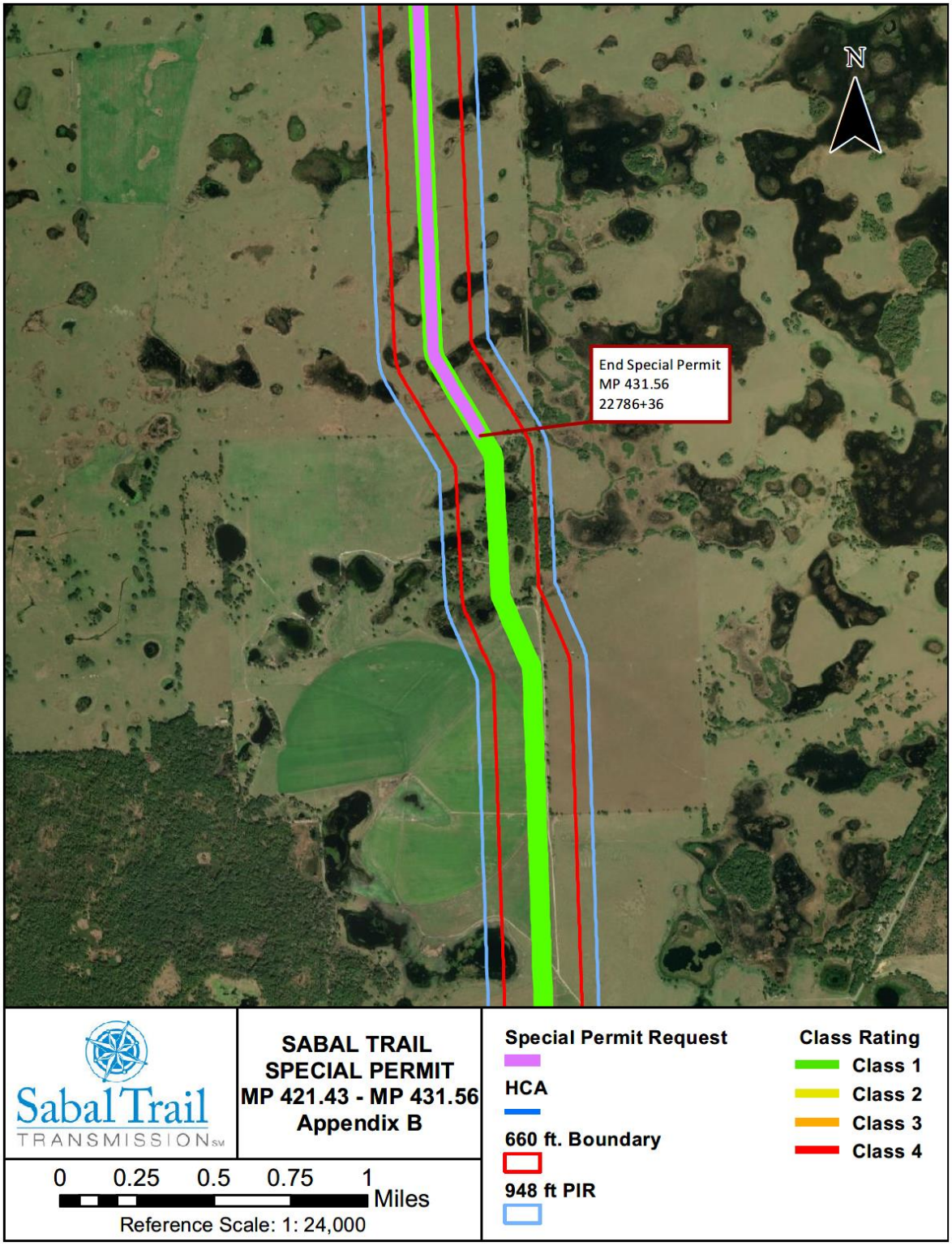
Attachment B-3

Special Permit Segment Maps



Attachment B-4

Special Permit Segment Maps



The granted special permit with conditions for STT, SPAF, and **Attachment A – Segment Integrity Information** for Docket No. PHMSA-2021-0052 can be found on the FDMS located on the internet at www.regulations.gov or on the PHMSA website for special permits issued at https://www.phmsa.dot.gov/pipeline/special-permits-state-waivers/special-permits-issued.

Completed by PHMSA in Washington, DC on: September 19, 2023

Last Page of the FEA and FONSI