

GLOBALFOUNDRIES New Gas Transmission Line

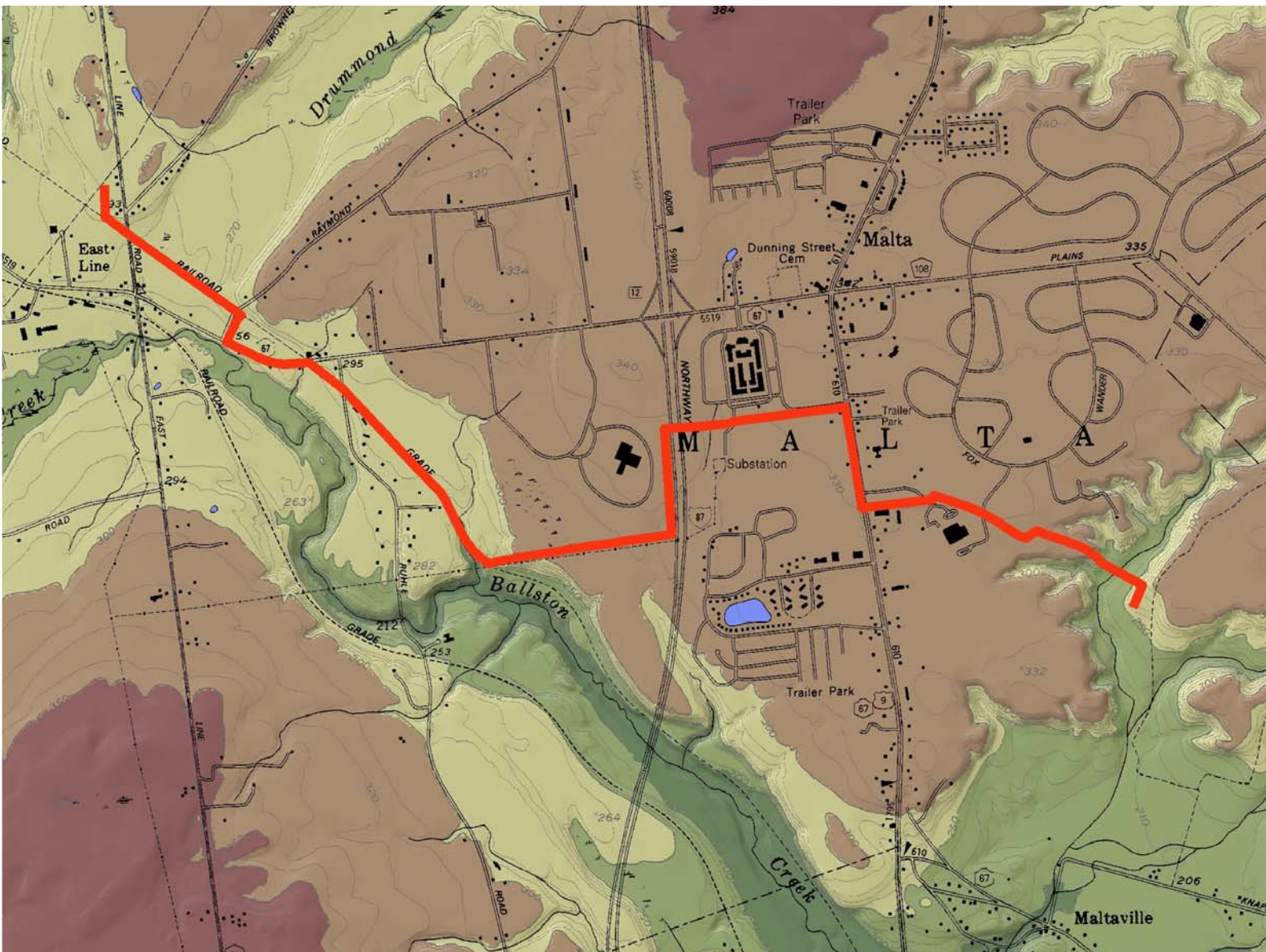
Article VII Application for a Certificate of Environmental Compatibility and Public Need

Niagara Mohawk Power Corporation d/b/a National Grid

Towns of Ballston and Malta in Saratoga County

August 2011

nationalgrid





August 19, 2011

Hon. Jaclyn A. Brillling
Secretary
State of New York
Public Service Commission
Empire State Plaza
Agency Building 3
Albany, New York 12223-1350

Re: Case _____ - Application of Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Construction of a New Gas Transmission Line From Ballston to Malta, New York

Dear Secretary Brillling:

Pursuant to Article VII of the New York State Public Service Law and 16 NYCRR § 85-1.3 of the New York State Public Service Commission's Rules of Procedure, enclosed please find for filing on behalf of Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid") one paper original, five paper copies and one electronic copy (on CD-ROM) of the *Application of Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Construction of a New Gas Transmission Line From Ballston to Malta, New York*.

Correspondence concerning the Application should be directed to the following persons:

Lisa M. Zafonte, Esq.
Senior Counsel
National Grid - Legal Dept.
175 E. Old Country Road
Hicksville, New York 11801
T: (516) 545-5246
lisa.zafontemaffei@us.ngrid.com

Edward M. Wencis
Lead Project Manager
National Grid
20 Sylvan Road
Waltham, Massachusetts 02451-1120
T: (866) 706-5098
edward.wencis@us.ngrid.com

Honorable Jaclyn A. Brillling, Secretary
August 19, 2011
Page 2

This Application is accompanied by a completed and signed copy of the Commission's Method of Service Form, and by proof of service on all parties on the service list.

Very truly yours,

Lisa M. Zafonte

Lisa M. Zafonte
Senior Counsel
Attorney for the Applicant,
Niagara Mohawk Power Corporation d/b/a National Grid

Enclosures

cc: Service List

NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

METHOD OF SERVICE FORM

This form should be filed with all new petitions and applications that require action by the Commission. It will allow us to serve you with the Commission decision using the method you select.

Name:	<u>Lisa M. Zafonte, Esq.</u>
Your Company/Organization:	<u>Niagara Mohawk Power Corporation d/b/a National Grid</u>
Mailing Address:	<u>175 E. Old Country Road</u> <u>Hicksville, New York 11801</u>
Company/Organization you represent, if different from above:	_____
E-Mail Address:	<u>lisa.zafontemaffei@us.ngrid.com</u>
Case/Matter # (if known)	_____

If you consent to receive Commission-issued orders electronically, you will receive all Commission-issued documents electronically. If you do not consent to receive Commission-issued orders electronically, you will receive all Commission-issued documents by mail.

Check the box(es) in A or B, below:

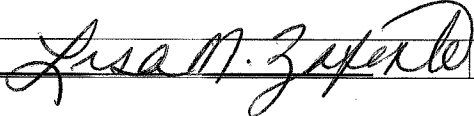
A.

☒ I am authorized by the party I represent to grant consent to receive electronic-only service of Commission-issued orders, AND

☒ I, on behalf of myself or the party I represent, knowingly waive the right specified in Public Service Law §23(1) to be served personally or by mail with orders that affect me or the party I represent and consent to receive service of Commission-issued orders by electronic means only. This consent remains in effect until revoked.

B

☐ I do not consent to receive electronic service and instead request that the DPS mail Commission-issued document(s) to me.

Signature: <u></u>	Date: <u>August 17, 2011</u>
---	------------------------------

Please note that this form applies to this filing only.

To the extent possible, please file this form in .pdf format.

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

----- x
:
Application of Niagara Mohawk Power :
Corporation d/b/a National Grid for a Certificate of :
Environmental Compatibility and Public Need for : Case _____
the Construction of a New Gas Transmission Line :
From Ballston to Malta, New York :
:
----- x

CERTIFICATE OF SERVICE

I hereby certify that on August __, 2011, on behalf of Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid") in the above-captioned proceeding, I served:

(1) one electronic copy (or a greater number if so indicated on the service list ("Service List") attached hereto) of the Application ("Application") of Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need pursuant to Article VII of the Public Service Law filed in this proceeding by National Grid on each person designated on the Service List to receive an electronic copy of the Application; and

(2) one hard copy (or a greater number if so indicated on the Service List) of the Application on each person designated on the Service List to receive a hard copy of the Application.

Name: _____
Address: _____

Sworn to before me this ____ day of August, 2011:

Notary Public

National Grid GLOBALFOUNDRIES Service List		
Mailing Address	Number of Copies	
	Hard Copies	CDs
Hon. Jaclyn A. Brilling Secretary to the Commission New York State Public Service Commission Empire State Plaza Agency Building 3 Albany, New York 12223-1350	6	1
Larry S. Eckhaus, Esq. Senior Attorney New York State Department of Environmental Conservation Office of General Counsel, 14th Floor 625 Broadway Albany, New York 12233-1500	0	1
Stephen Tomasik Project Manager Major Projects Management Section Division of Environmental Permits NYS Department of Environmental Conservation 625 Broadway, 4th Floor Albany, New York 12233-1750	1	1
Elizabeth M. Lowe, Region 5 Director Michael McMurray, Regional Permit Administrator NYS Dept. of Environmental Conservation 1115 Route 86 Ray Brook, New York 12977	0	1
Jed Hayden NYSDEC 232 Golf Course Road Warrensburg, New York 12885	1	1
Lance Durfey NYSDEC 1115 State Route 86 Ray Brook, New York 12977	0	1
Robert Meyer Regional Utilities Engineer NYS Department of Transportation Region 1 Utilities Section, Floor 3 328 State Street Schenectady, New York 12305	0	1
Commissioner New York State Department of Agriculture and Markets 10B Airline Drive Albany, New York 12235	0	1
Christina B. Rieth, Ph.D. State Archaeologist and Director, Cultural Resource Survey Program New York State Museum Cultural Education Center 3122 Albany, New York 12230	0	1
Philip A. Perazio (PEB) New York State Historic Preservation Office Peebles Island Resource Center Peebles Island State Park Delaware Avenue Cohoes, New York 12047	1	1

National Grid GLOBALFOUNDRIES Service List		
Mailing Address	Number of Copies	
	Hard Copies	CDs
Chairman Saratoga County Board of Supervisors 40 McMaster Street Ballston Spa, New York 12020	0	1
Town Supervisor Town of Ballston Ballston Town Hall 323 Charlton Road Ballston Spa, New York 12020	1	0
Town Supervisor Town of Malta 2540 Route 9 Malta, New York 12020	1	1
Director of Planning Saratoga County 50 West High Street Ballston Spa, New York 12020	0	1
Commissioner of Public Works Saratoga County 3654 Galway Road Ballston Spa, New York 12020	1	0
Chairman, Planning Board Town of Ballston Ballston Town Hall 323 Charlton Road Ballston Spa, New York 12020	1	0
Highway Superintendent Town of Ballston Ballston Town Hall 323 Charlton Road Ballston Spa, New York 12020	1	0
Director, Town Planner Town of Malta Malta Town Complex 2540 Route 9 Malta, New York 12020	1	0
Highway Superintendent Town of Malta Malta Town Highway Garage 2540 Route 9 Malta, New York 12020	1	1
Town of Ballston Community Library 2 Lawmar Lane Burnt Hills, New York 12027	1	1
Malta Town Library Malta Community Center 1 Bayberry Drive Malta, New York 12020	0	1
Totals	17	16

State of New York
Public Service Commission

----- X
:
Application of Niagara Mohawk Power Corporation :
d/b/a National Grid for a Certificate of Environmental :
Compatibility and Public Need for the Construction of a : Case _____
New Gas Transmission Line From Ballston to Malta, :
New York :
:
----- X

SUBMITTED TO:	State of New York Public Service Commission 3 Empire State Plaza Albany, New York 12223-1350
APPLICANT:	Niagara Mohawk Power Corporation d/b/a National Grid 300 Erie Blvd. West Syracuse, New York 13202
APPLICANT'S REPRESENTATIVES:	Edward M. Wencis Lead Project Manager National Grid 20 Sylvan Road Waltham, Massachusetts 02451-1120 edward.wencis@us.ngrid.com 866-706-5098 Lisa M. Zafonte, Esq. Senior Counsel National Grid - Legal Department 175 E. Old Country Road Hicksville, New York 11801 lisa.zafontemaffei@us.ngrid.com 516-545-5246
DATED:	August 19, 2011

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
FILING LETTER	
METHOD OF SERVICE FORM	
CERTIFICATE OF SERVICE	
SERVICE LIST	
1.0 PROJECT DESCRIPTION.....	1
1.1 Project Location.....	1
1.2 General Description of Project Facilities	2
1.3 Construction Techniques	3
1.4 Safety.....	4
2.0 PROJECT NEED	5
2.1 Market for Gas	5
2.2 Adequacy of Gas Supply	5
2.3 Improvements to System	5
2.4 Other Benefits	6
3.0 EXISTING CONDITIONS.....	6
3.1. Land Uses	6
3.1.1 Residential Land Uses.....	7
3.1.1.1 Existing Residential Land Uses	7
3.1.1.2 Officially Approved Residential Land Uses	8
3.1.2 Commercial Land Uses	8
3.1.2.1 Existing Commercial Land Uses.....	8
3.1.2.2 Officially Approved Commercial Land Uses	8
3.1.3 Public Services and Utility Land Uses	9
3.1.3.1 Existing Public Services and Utility Land Uses	9
3.1.3.2 Officially Approved Public Services and Utility Land Uses	9
3.1.4 Vacant Land Uses.....	9
3.1.4.1 Existing Vacant Land Uses.....	9
3.1.4.2 Officially Approved Vacant Land Uses	9
3.1.5 Wild, Forested, Conservation Lands & Public Parks Land Uses	9
3.1.5.1 Existing Wild, Forested, Conservation Lands & Public Parks Land Uses ...	9
3.1.5.2 Officially Approved Wild, Forested, Conservation Lands & Public Parks Land Uses	9
3.2 Ecosystem Resources.....	9
3.2.1 Highly Erodible Soils	10
3.2.2 Wetlands	10
3.2.3 Floodplains	11
3.2.4 Streams	12
3.2.5 Springs	12
3.2.6 Wells	13
3.2.7 Unique Old Growth Forest.....	13
3.2.8 Active Sugarbushes	13
3.2.9 Productive Timber Stands	13
3.2.10 Trees Listed in Registry of Big Trees in New York State	13

TABLE OF CONTENTS (Continued)

<u>SECTION</u>	<u>PAGE</u>
3.2.11 Habitats of Rare and Threatened and Endangered Species.....	13
3.3 Visual Resource Inventory	14
3.3.1 Scenic Areas	14
3.3.2 Scenic Roads	15
3.3.3 Vistas and Overlooks	15
3.4 Cultural Resources.....	15
3.4.1 Archaeological Sites.....	15
3.4.2 Historic Aboveground Structures and Districts.....	16
3.4.3 Phase 1B Field Survey	16
3.5 Property Boundaries	17
3.6 Adjacent Dwellings	18
4.0 CHECKLIST OF EM&CS&P MEASURES AND TECHNIQUES.....	19
4.1 Measures and Techniques from the Approved EM&CS&P Applicable to the Project.....	19
4.2 Name, Title and Qualifications of the Company Representatives Directly Responsible for Seeing that All Environmental Requirements are Fully Met	19
5.0 LIST OF APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS.....	20
5.1 State	20
5.2 Local	20
5.2.1 County of Saratoga	20
5.2.2 Town of Ballston	21
5.2.3 Town of Malta.....	23

TABLES

Table 1.1	Project Information
Table 3.1	Existing Land Uses Crossed by the Project
Table 3.2	NYSDEC-Regulated Wetlands and NWI Wetlands Crossed by the Project
Table 3.3	NYSDEC-Mapped Streams Crossed by the Project
Table 3.4	Aboveground Historic Structures within One Mile of the Project
Table 3.5	Properties Crossed by the Proposed Centerline
Table 3.6	Dwellings within 150 Feet of Centerline of Project

FIGURES

Figure 1.1	Locations of Proposed Facilities
Figure 3.1	Existing Land Uses along Project Route
Figure 3.2	Location of Erodible Soils in Vicinity of Project
Figure 3.3 a, b and c	Location of Ecosystem Resources in Vicinity of Project
Figure 3.4 a, b and c	Property Boundaries and Adjacent Dwellings within 150 Feet of Project

ATTACHMENTS

Attachment A	EM&CS&P Certification and Checklist
Attachment B	Agency Correspondence
Attachment C	Design Drawings
Attachment D	Copies of Local Laws the Applicant Requests that the Commission Refuse to Apply

1.0 PROJECT DESCRIPTION

Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid,” the “Company,” or the “Applicant”) proposes to construct a new natural gas transmission pipeline (the “Project”) within the Company’s Eastern New York gas service territory.

1.1 Project Location

The Project would be located entirely within Saratoga County, running generally from west to east from a proposed new tap point on the Company’s existing E13 pipeline in the Town of Ballston, New York, to its terminus at the inlet of a proposed new gas regulator station to be located in the Town of Malta, New York. The locations of Project facilities are shown on Figure 1.1. Design drawings of the proposed Project facilities are provided in Attachment C.

National Grid proposes to acquire and maintain a new 20-foot-wide, permanent right-of-way (“ROW”) for the new gas transmission pipeline. This ROW would be located along existing Company lands/easements, permanent easements on private property and roadway ROWs. The Project’s proposed route is as follows:

From the new tap at the Company’s existing E13 pipeline in the Town of Ballston, the Project route would head south on permanent easements to be acquired from private property owners for approximately 230 feet before turning in a southeasterly direction on a permanent easement to be acquired along an abandoned trolley bed for approximately 594 feet to a point in the center of East Line Road, being the division line between the Town of Ballston on the west and the Town of Malta on the east; thence southeasterly crossing East Line Road to a point that is 10 feet southerly of the southerly line of the aforementioned abandoned trolley bed; thence in a southeasterly direction along a permanent easement to be acquired, 10 feet southerly of and adjacent to the southerly line of the abandoned trolley bed approximately 1,993 feet to a point 10 feet easterly of the easterly highway boundary for Raymond Road; thence southerly along an easement to be acquired 10 feet easterly of and adjacent to the easterly boundary of Raymond Road 395 feet to a point 10 northerly of the northerly line of NYS Route 67; thence easterly along an easement to be acquired staying 10 feet northerly of and parallel to the northerly line of said Route 67 a distance of 1,269 feet to a point; thence southeasterly along the aforementioned trolley bed on lands to be acquired in fee 654 feet to a point in Ruhle Road; thence continuing southeasterly along the former trolley bed on lands of the Applicant a distance of 3,215 feet to a point 10 feet southerly of the northerly line of Applicant’s Spier Falls - Rotterdam 1 & 2 115 kV transmission line; thence easterly along said transmission line corridor 2,797 feet to a point 20 feet westerly of the westerly line of I-87; thence northerly on an easement to be acquired generally 20 feet westerly of and parallel to the westerly boundary of I-87 a distance of 1,486 feet to a point; thence easterly crossing I-87 and along an existing easement of Applicant approximately 2,624 feet to a point approximately 30 feet westerly of the westerly line of US Route 9; thence southerly and generally 30 feet westerly of the westerly line of US Route 9 a distance of 1,456 feet to a point; thence easterly crossing US Route 9 and then in the ROW of Stonebreak Road and southerly of the traveled way and crossing to the northerly side of the traveled way a distance of 4,397 feet to a point; thence southeasterly crossing the traveled way of Stonebreak Road a distance of 290 feet to its terminus at the inlet of the proposed new gas regulator station to be located at the intersection of Stonebreak Road and 100 Acre Woods Way on the Luther Forest Technology Campus.

1.2 General Description of Project Facilities

The Project is comprised of an approximately four (4) miles of new 12-inch diameter (490 pounds per square inch) steel gas transmission pipeline. It will serve a GLOBALFOUNDRIES, Inc. ("GLOBALFOUNDRIES") semiconductor manufacturing plant presently under construction on the Luther Forest Technology Campus. The completion of the first GLOBALFOUNDRIES plant (MOD 1) will require gas deliveries at a rate of approximately 465,000 cubic feet per hour (cfh) at 20 pounds per square inch gauge (psig). If GLOBALFOUNDRIES' builds a second plant (MOD 2) it will more than double that gas delivery rate to approximately 994,000 cfh. These gas demand rates are well beyond the capacity of National Grid's medium-pressure gas system currently serving the GLOBALFOUNDRIES site.

Table 1.1 provides certain specific information required by Part 85 of the Commission's Regulations (16 NYCRR Part 85):

Table 1.1: Project Information

Subpart of 16 NYCRR §85-1.2(a)	Project Information Required	Project Details
85-1.2(a)(1)	Construction Date	National Grid anticipates beginning construction of the proposed pipeline in April 2012.
85-1.2(a)(2)(i)	Pipeline length & diameter	The pipeline would be approximately 4 miles in length and 12 inches in diameter for its entire length.
85-1.2(a)(2)(ii)	Pipeline burial depth	The pipeline is proposed to be buried to a minimum depth of cover of 36 inches. Actual burial depth will be determined by subsurface conditions. Any necessary reduction in minimum depth will be implemented according to 16 NYCRR Part 255.327.
85-1.2(a)(2)(iii)	Max. allowable operating pressure	The maximum allowable operating pressure of the pipeline would be 490 psig.
85-1.2(a)(2)(iv)	ROW width	Typical construction ROW will vary between 30 and 70 feet in width; permanent pipeline ROW width will be 20 feet.
85-1.2(a)(2)(v)	Width of area to be cleared	A cleared corridor approximately 30 to 70 feet in width will be required for construction. After construction, a 20-foot-wide corridor therein will be maintained permanently and the rest will be allowed to naturally revegetate.
85-1.2(a)(2)(vi)	Known underground utilities crossed or paralleled	Locations of existing underground facilities are shown in Attachment C, Sheets 1-9.
85-1.2(a)(2)(vii)	Name or permit # of wells connected to gas pipeline	No gas wells will be connected to this Project.
85-1.2(a)(2)(viii)	Point where pipeline connects to another pipeline	Connection to the existing E13 pipeline (12-inch diameter) will be made at the northwest corner of SBL# 228-2-8.12 off of Commerce Drive in Ballston, as shown in Figure 3.4a.

Subpart of 16 NYCRR §85- 1.2(a)	Project Information Required	Project Details
85-1.2(a)(2)(ix)	Existing or proposed access roads	The pipeline will be constructed, operated, and maintained using existing public roads for access, as well as one permanent access road and three temporary access roads. The permanent access road will be from East Line Rd to the interconnection with E13 pipeline (see Attachment C, Sheet 1). The first temporary access road will be constructed along an existing sewer easement to State Farm Place (see Attachment C, Sheet 3). The second temporary access road will be constructed from the southeasterly corner of the State Farm parking lot to the permanent easement for the pipeline along the I-87 corridor (see Attachment C, Sheet 4). The last temporary access road will be constructed from the northeasterly corner of the State Farm parking lot to the permanent easement for the pipeline along the I-87 corridor (see Attachment C, Sheet 5).
85-1.2(a)(2)(x)	Compressor Station	The Project will not require any new or expanded compressor stations.
85-1.2(a)(2)(xi)	Municipalities in which pipeline is located	As depicted on Attachment C, Sheets 1-9, the pipeline will be located in the Towns of Ballston and Malta, both in Saratoga County. Approximately 1,000 feet of the pipeline will be located in Ballston west of East Line Rd, and approximately 3¾ miles of the pipeline will be located in Malta east of East Line Rd.

1.3 Construction Techniques

The Project will be constructed of 12" coated steel pipe with all joints welded and non-destructively tested (radiographed). National Grid designed and will procure all materials in connection with the Project. The Project will be installed by approved contractors and/or National Grid. All contractor activities will be monitored by National Grid. Contractors will primarily utilize open cut and restore construction methods to install the Project.

Depending on the available construction corridor width, one of two types of open cut method will be utilized for the Project. If the corridor is relatively narrow, up to 40', the "stove pipe" method will be employed. With this method, the contractor does not string pipe along the proposed route of the pipeline. Typically, during the same day, the trench is excavated up to 300', pipe layed and welded and trench backfilled. This method is generally more costly and time consuming than the "cross country" method, which likely will be utilized if the construction corridor is wider than 40'. With this method, pipe is strung along the trench line. The trench is excavated for at least several hundred feet. The pipe is welded above the trench. The pipe is then placed within the full length of trench and backfilled. This method is more productive than the "stove pipe" method resulting in less cost and reduced time for installation.

Highway and primary road crossings will be accomplished using trenchless construction methods. A hydraulic boring method will be used for shorter crossings, while a horizontal directional drill (“HDD”) will be used for longer crossings.

With the shorter crossings (hydraulic boring method), a launching and receiving pit is prepared appropriately on either side of the roadway crossing. A hydraulic machine is properly positioned within the launching pit and jacks the gas pipe under the roadway until it reaches the receiving pit. This method allows no directional guidance once the equipment is set-up. For longer crossings, HDD is used. The direction of the HDD is continuously guided through a transmitter. A path is drilled through the soil and the gas pipe is pulled through the void.

In general, for open cut construction, trenches will be excavated approximately 3 feet wide and 5 feet deep. Any soils dug from trenches will be backfilled into the trench or removed offsite, depending on the condition of the material.

Cleanup operations after pipeline installation and backfilling will include grading to original contour and restoration after consultation with property owners.

Construction equipment will include excavators to dig trenches, boom trucks to handle pipe along the trench, specialized directional drilling equipment, jacking equipment, and welding equipment. Trucks for moving soils, workers, supplies, and equipment will also be used.

The majority of pipeline is proposed to be installed off pavement within private property or roadway layout. Contractors, under direct supervision of an environmental monitor, will ensure that any area cleared for construction is as narrow as possible. The pipe, trench, soils trucks and other equipment will be located within the cleared area. Also, pipe staging, valves and fittings, pipe fabrication and certain equipment will be located at predetermined marshalling yards. During final restoration, all cleared areas will be re-graded to pre-construction grade. All paved areas, if any, will be restored in kind.

1.4 Safety

The proposed pipeline will be designed, constructed, operated, and maintained in compliance with New York State pipeline safety regulations contained in 16 NYCRR Part 255, and with United States Department of Transportation (“USDOT”) Minimum Federal Safety Standards contained in 49 CFR Part 192.

Test holes will be dug during the design phase to determine the best location of the pipeline relative to the exact location of subsurface facilities. In addition, test holes will be dug during construction to ensure proper placement and safe installation. All work will be performed in accordance with NYCRR Title 16 Part 753 for proper excavation and mark-out of subsurface facilities. In accordance with New York State Industrial Code Rule 53, contractors are required to have all utilities within the proposed construction areas identified and marked at least 48 hours prior to commencement of construction. Prior to excavation, a surface and subsurface facilities survey will be performed. All known utilities and facilities--including telephone, electric, gas, storm drain, sewer, traffic control, and water lines--will be included on the final design drawings. In the event that an unknown utility is encountered during construction, contractors will be directed to notify the appropriate agencies.

Safety practices will focus on worker and public safety, particularly as they relate to excavation, excavation near existing utilities, heavy equipment operation, and work in high traffic areas. Contractors will follow industry standard health and safety practices. All excavation and construction work will be performed under a Health and Safety Plan ("HASP"). National Grid's standard HASP will be modified, as necessary, for the Project. With the abovementioned safety procedures in place, the Project will not present an undue hazard to persons or property along the proposed route.

2.0 PROJECT NEED

This section explains the need for the Project.

2.1 Market for Gas

As stated above, the completion of the first GLOBALFOUNDRIES plant (MOD 1) will require gas deliveries at a rate of approximately 465,000 cubic feet per hour (cfh) at 20 pounds per square inch gauge (psig). If GLOBALFOUNDRIES' builds a second plant (MOD 2), it will more than double that gas delivery rate to approximately 994,000 cfh. These gas demand rates are well beyond the capacity of National Grid's medium-pressure gas system currently serving the GLOBALFOUNDRIES site.

2.2 Adequacy of Gas Supply

GLOBALFOUNDRIES provided multi-year project ramp schedules to National Grid. National Grid typically produces gas load demand forecasts for 5 years into the future in order to determine necessary assets to supply its firm customer load. The current 5 year forecast includes estimates for GLOBALFOUNDRIES and ancillary Luther Forest campus load. GLOBALFOUNDRIES receives bundled gas service (*i.e.*, including commodity) from National Grid under the SC3 rate (Large General Gas Service). In preliminary discussions with National Grid, GLOBALFOUNDRIES' energy consultant, Summit Energy, has not indicated whether GLOBALFOUNDRIES will remain a bundled firm sales customer in the future. National Grid estimates that it can continue to provide firm sales service to GLOBALFOUNDRIES through at least 2013-14. National Grid may need to increase East gate capacity from Dominion Transmission Inc. ("DTI") beginning in 2014-15, depending on the progress of the GLOBALFOUNDRIES project and actual load growth in the Albany area. The additional capacity would be used to manage the hourly flows at the East gate during operational flow orders issued by DTI. Currently, there are no other customers that would require National Grid to procure this capacity. National Grid has not committed to procuring any additional pipeline capacity or gas supplies because GLOBALFOUNDRIES may decide to procure its own gas supplies and obtain the associated upstream pipeline capacity from DTI. If that occurs, National Grid would thereafter no longer have to include GLOBALFOUNDRIES as a "core" (firm sales) customer and no additional supply or upstream assets would be needed to serve the ancillary load (Luther Forest and other Albany-area growth). Regardless of whether GLOBALFOUNDRIES remains a firm National Grid gas sales customer, National Grid has no reason to believe that gas supplies will not be adequate for the first 10 years of the Project's operation and the Project will be needed to transport gas to GLOBALFOUNDRIES.

2.3 Improvements to System

GLOBALFOUNDRIES' anticipated gas load (demand) is well beyond the delivery capacity of the existing gas distribution system in the area. The Project will allow for the delivery of the anticipated gas loads at GLOBALFOUNDRIES and the Luther Forest Technology Campus while maintaining

adequate system pressure and reliability of National Grid's system serving other customers in the area. Because the Project will be a direct pipeline supply to deliver incremental gas to GLOBALFOUNDRIES and the Luther Forest Technology Campus, its construction will relieve the existing distribution system and make its capacity available to provide gas service to additional customers as the local region continues to grow.

2.4 Other Benefits

GLOBALFOUNDRIES' decision to locate the most advanced semiconductor manufacturing facility in the world in Malta, New York, has already started to have a significant impact on the region's development. Known as the largest construction project in the United States, the manufacturing facility itself is already larger than originally planned; an additional office building is underway, and the technology that will be deployed there has already been upgraded. Fifty of the 283 tools have already been installed and are operational. GLOBALFOUNDRIES is estimating that the regional economic benefits of its semiconductor manufacturing facility (at the site, at companies that provide services to the site, and at local businesses) will be 6,500 new (annual, steady-state) jobs in the Saratoga, New York, area with a payroll of approximately \$290 million. This does not include the 1,600 construction jobs at the site or any related multiplier effects. The benefits of GLOBALFOUNDRIES' location decision on the development of a nanoelectronics cluster in this area, known as the "Tech Valley Corridor," are unfolding rapidly. Key suppliers of engineering services and production inputs (such as Tokyo Electron, KLA Tencor, Air Liquide, Matheson Tri Gas) are beginning to locate in the area to be near the facility. Local educational institutions are updating and improving education programs, and in some cases launching entirely new programs to train workers and staff for the facility and other new jobs expected in the region. Commercial and residential developers are active in the Albany-Glens Falls corridor, beginning the permitting and construction of a multitude of new projects. GLOBALFOUNDRIES owns 222 acres of the 1,414 Luther Forest Technology Campus, and this site is zoned for two additional plants in addition to MOD 1, each roughly equal to MOD 1 in load requirements.

3.0 EXISTING CONDITIONS

This section describes the specific relationship of the Project to certain existing land features. Existing land uses in the vicinity of the Project route generally include residential, commercial, industrial, open space (forestland), utility (electrical transmission), and transportation land uses (Figure 3.1). The Project route is located along existing Company lands/easements, permanent easements on private property and roadway ROWs.

3.1. Land Uses

This section provides a description of the existing and officially approved planned residential, commercial, industrial, institutional, recreational and agricultural land uses along the Project route in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(i).

Land use classifications were derived from Saratoga County GIS parcel data and March 2010 tax maps from the Town of Malta Assessor's database. Each parcel used in the analysis included the official New York State Office of Real Property Tax Services property classification codes. These codes were used to derive five land use types within the Project area. The parcel data obtained from the

County did not include road corridors and was added to complete the land use analysis as Public Services and Utility to coincide with the real property classification codes.

For the purpose of this Article VII application, five classification codes were identified from the parcel dataset for the Project. Table 3.1 identifies the land use classes along the Project route.

3.1.1 Residential Land Uses

3.1.1.1 Existing Residential Land Uses

Most of the residential properties are located within the first mile and a half of the Project. Adjacent streets of the proposed gas pipeline such as East Line Road and Ruhle Road are primarily one-family, year-round residences. The Project crosses approximately 765 feet of residential land uses and, with respect to total acreage, the Project ROW is approximately 10% residential land use.

Under code 200 of the official New York State Office of Real Property Tax Services property classification codes, residential refers to property used for human habitation. Living accommodations such as hotels, motels, and apartments were grouped under commercial land use (400).

Table 3.1: Existing Land Uses Crossed by the Project

Mile Post	Land Use Type	Length Crossed by Pipeline (approx feet)	Maximum Area within Temporary Construction ROW / Permanent ROW (approx square feet)
0 - 1	Commercial	1,646	72,330
0 - 1	Public Services & Utility	305	43,812
0 - 1	Residential	763	91,050
0 - 1	Vacant Land	2,416	101,124
1 - 2	Commercial	---	27,593
1 - 2	Public Services & Utility	3,280	147,682
1 - 2	Residential	---	38,198
1 - 2	Vacant Land	1,977	101,861
2 - 3	Commercial	2,832	166,957
2 - 3	Public Services & Utility	337	52,802
2 - 3	Vacant Land	1,988	89,100
3 - 4	Commercial	933	45,178
3 - 4	Public Services & Utility	4,024	249,214
3 - 4	Vacant Land	300	17,645
3 - 4	Wild, Forested, Conservation Lands & Public Parks	---	3,091

Mile Post	Land Use Type	Length Crossed by Pipeline (approx feet)	Maximum Area within Temporary Construction ROW / Permanent ROW (approx square feet)
4 - 5	Public Services & Utility	751	41,497
4 - 5	Vacant Land	---	715
4 - 5	Wild, Forested, Conservation Lands & Public Parks	---	4,204

3.1.1.2 Officially Approved Residential Land Uses

Current information concerning officially approved residential developments was obtained from the building departments of the Towns of Ballston and Malta. There are three residential developments officially approved along or in close proximity to the Project:

Location	Parcel ID	Development Type
Ballston	228.00-2-43	Condominium Project
Malta	229.00-3-42.1	Condominium Project
Malta	229.16	Residential Subdivision

3.1.2 Commercial Land Uses

3.1.2.1 Existing Commercial Land Uses

Most of the commercial properties in the vicinity of the Project are located between the second and third miles of the Project route. These areas include a State Farm Insurance complex as well as other small commercial properties adjacent to Saratoga Village Boulevard and Route 9. The Project crosses approximately one mile of commercial land, and, with respect to total acreage, the Project ROW is approximately 25% commercial land use.

Under code 400 of the official New York State Office of Real Property Tax Services property classification codes, commercial refers to property used for the sale of goods and/or services. For the area surrounding the Project, commercial refers to variety of operations such as dining establishments, office buildings, as well as warehouse and distribution facilities.

3.1.2.2 Officially Approved Commercial Land Uses

Current information concerning officially approved commercial developments was obtained from the Building Departments of the Towns of Ballston and Malta. There are two officially approved commercial land uses along or in close proximity to the Project. Both of these properties are within the State Farm Campus in Malta (Tax Assessor ID# 229.00-2-97.2 and 97.4).

3.1.3 Public Services and Utility Land Uses

3.1.3.1 Existing Public Services and Utility Land Uses

Public Services and Utility land uses refer to property being used to provide services to the general public. Approximately 1¾ miles of the Project, which equals approximately 40% of the Project ROW acreage, crosses land classified as Public Services and Utility.

3.1.3.2 Officially Approved Public Services and Utility Land Uses

Current information concerning officially approved Public Services and Utility was obtained from the Building Departments of the Towns of Ballston and Malta. No officially approved Public Services and Utility uses along or in close proximity to the Project were identified.

3.1.4 Vacant Land Uses

3.1.4.1 Existing Vacant Land Uses

Vacant land use refers to property that is not in use, is in temporary use, or lacks permanent improvement. The Project crosses approximately 1¼ miles of vacant land, which equals approximately 25% of the Project ROW acreage. The largest area of vacant land is located near the second mile marker of the Project (measured from west to east).

3.1.4.2 Officially Approved Vacant Land Uses

Current information concerning vacant land uses was obtained from the Building Departments of the Towns of Ballston and Malta. No officially approved vacant land uses located along or in close proximity to the Project were identified.

3.1.5 Wild, Forested, Conservation Lands & Public Parks Land Uses

3.1.5.1 Existing Wild, Forested, Conservation Lands & Public Parks Land Uses

Wild, Forested, Conservation Lands & Public Parks land use refers to reforested lands, preserves, and private hunting and fishing clubs. The Project does not cross any of this land use type; however, approximately 1% of the Project ROW total acreage is forested land use. This crossing occurs on one parcel of land, which is the Luther Forest Technology Campus.

3.1.5.2 Officially Approved Wild, Forested, Conservation Lands & Public Parks Land Uses

Current information concerning officially approved Wild, Forested, Conservation Lands & Public Parks was obtained from the Building Departments of the Towns of Ballston and Malta. No officially approved wild, forested, conservation lands, and public parks located along or in close proximity to the Project were identified.

3.2 Ecosystem Resources

This section provides a description of the ecosystem resources, including highly erodible soils, wetlands, flood plains, streams, springs, wells, unique old-growth forests, active sugar-bushes, productive timber stands, trees listed in the Registry of Big Trees in New York State and habitats of

rare, threatened and endangered species along the Project centerline in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(i).

Information on ecosystem resources was obtained through a combination of readily available resource information, agency consultations, and data collected during field surveys. Initial data were obtained from federal and state resource agencies through requests for information. This information combined within review of readily available resource information was consulted prior to initiating the field surveys. Available resource information included the following:

- U.S. Geological Survey topographic maps
- U.S. Fish and Wildlife Service (“USFWS”) National Wetlands Inventory maps
- Natural Resource Conservation Service mapping of soil characteristics for the study area
- New York State Department of Environmental Conservation (“NYSDEC”) Freshwater Wetland datalayer
- Federal Emergency Management Agency datalayer

3.2.1 Highly Erodible Soils

Soil data for Saratoga County and the proposed route were acquired through the United States Department of Agriculture Natural Resources Conservation Service (Soil Data Mart). This data were reviewed to identify the soil type(s) and slope(s) and respective limitations with respect to soil erodibility. Based on this soils information, approximately 37% of the Project route is categorized as slightly erodible, 51% as moderate and 12% as severely erodible (Figure 3.2).

3.2.2 Wetlands

Wetland areas were field delineated in June 2010, in accordance with both the New York State Freshwater Wetlands Delineation Manual, under Article 24 of the Freshwater Wetlands Act, and the U.S. Army Corps of Engineers Interim Regional Supplement, North Central and Northeast Region (2009) using the criteria of hydrophytic vegetation, hydric soils, and hydrology.

All wetland boundary flags were surveyed concurrently with delineation activities, using a Trimble Pro XR/Pathfinder GPS unit. Once the fieldwork was completed, the data were differentially corrected to get sub-meter accuracy using available base station data.

The proposed gas pipeline route and associated work area will cross approximately 17 wetlands (see Figures 3.3 a-c). There will be no loss of wetlands and/or waterbodies resulting from the Project. The only permanent impacts to wetlands will include the conversion of some forested wetland to scrub/shrub wetland within the permanently maintained, 20-foot ROW. Disturbance to wetlands outside the maintained ROW will be temporary in nature and will be restored to pre-existing conditions and allowed to revegetate naturally. Details concerning the wetland areas crossed by the Project are provided on Table 3.2.

3.2.3 Floodplains

New York State GIS Clearinghouse data were reviewed to determine the location of the 100-year floodplain in the vicinity of the Project. Figures 3.3 a-c provide an illustration of floodplains in the Project vicinity. The Project route will traverse an area of floodplain associated with an unnamed tributary to Ballston Creek located entirely within the roadway of Route 67 in Malta. Since pre-existing contours will be restored following pipeline installation, there will be no alteration to flood storage volumes or flood flows within the floodplains along the Project route.

Table 3.2: NYSDEC-Regulated Wetlands and NWI Wetlands Crossed by the Project

Mile Post	Town	Wetland ID	NYSDEC Wetland Classification	NWI Classification	Length Crossed by Pipeline (approx feet)	Temporary (approx square feet)	Permanent (approx square feet)
0 - 1	Ballston	2	N/A	PUB		2,049	193
0 - 1	Malta	3	Q-11 Class I	PFO/PSS	81	3,904	1,659
0 - 1	Malta	4	Q-11 Class I	PFO/PSS	301	11,365	5,452
0 - 1	Malta	6	N/A	PSS		1,108	0
1 - 2	Malta	7	N/A	PFO/PSS	1,366	45,473	23,922
1 - 2	Malta	8	N/A	PFO/PSS	45	5,936	1,457
1 - 2	Malta	9/9A/9B	N/A	R/PSS	9	3,049	174
1 - 2	Malta	10	N/A	PUB		1,162	0
1 - 2	Malta	11	N/A	PFO/PSS		2,475	0
1 - 2	Malta	13	N/A	R/PSS		107	0
1 - 2	Malta	14	R-10 Class III	PSS/PEM		9,592	174*
2 - 3	Malta	15A	R-10 Class III	PFO/R	248	12,398	4,835
2 - 3	Malta	16/16A	N/A	PSS/R	16	11,326	871*
3 - 4	Malta	17	N/A	PSS/R	15	1,365	312
4 - 5	Malta	18	N/A	PSS/R	214	12,667	4,279
Subtotals			Class I	-----	382	15,269	7,111
			Class III	-----	248	21,991	4,835
				PFO	2,041	81,551	37,325
				PUB		3,210	193
				PSS	246	36,058	4,591
				Riverine	9	3,156	174
Totals					2,925	161,235	54,229

Notes and Initialisms:

NWI = National Wetlands Inventory, PEM = Palustrine Emergent, PFO = Palustrine Forested, R = Riverine, PSS = Palustrine Scrub Shrub, PUB = Palustrine Unconsolidated Bottom.

*Wetland located within existing maintained ROW. Not included in permanent wetland impact calculation.

3.2.4 Streams

Streams along the Project route were identified during desktop GIS analysis and wetland field delineation. Data pertaining to streams in the project area were obtained from the New York State GIS Clearinghouse. Table 3.3 below summarizes the NYSDEC-mapped streams to be traversed by the Project. All of the streams to be crossed are classified by NYSDEC as Class C streams. With the exception of one small tributary within the Luther Forest Technology Campus, which is a tributary to Round Lake, the streams known to be traversed by the Project are within the drainage for Ballston Creek.

Table 3.3: NYSDEC-Mapped Streams Crossed by the Project

Mile Post	Town	Wetland ID	Stream Name	NYSDEC Classification*	Number of Crossings
0-1	Malta	N/A	Unnamed Tributary to Ballston Creek	Class C	1**
1-2	Malta	9	Unnamed Tributary to Ballston Creek	Class C	1**
2-3	Malta	15/A	Unnamed Tributary to Ballston Creek	Class C	2
2-3	Malta	16	Unnamed Tributary to Ballston Creek	Class C	1
4-5	Malta	18	Tributary to Round Lake	Class C (TS)	1
TOTAL					6

*NYSDEC Classifications:

A = A source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing; waters are suitable for fish, shellfish, and wildlife propagation and survival.

B = Primary and secondary contact recreation and fishing; waters are suitable for fish, shellfish, and wildlife propagation and survival.

C = Fishing use; waters are suitable for fish, shellfish, and wildlife propagation and survival; water quality is suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes. TS indicates a stream is suitable for trout spawning habitat.

** Stream culverted at crossing location.

Streams along the Project route will be crossed by open trench installation methods in accordance with the approved Environmental Management and Construction Standards and Practices ("EM&CS&P") applicable to the Project.

3.2.5 Springs

Based upon field surveys and review of the National Hydrology Dataset, no springs are known to be located within the temporary construction or permanent ROW of the Project.

3.2.6 Wells

Based upon field surveys and review of the National Hydrology Dataset, no public wells are known to be located within the temporary construction or permanent ROW of the Project.

3.2.7 Unique Old Growth Forest

Based on a review of available literature on the locations of old growth forest in New York (Davis, 2005; Kershner et al., 2004), the closest old growth forest is located approximately 8 miles from the Project in Saratoga Spa State Park, with another area in Lincoln Mountain State Forest. Additionally, no areas of old growth forest were observed adjacent to the Project route during wetland delineation.

3.2.8 Active Sugarbushes

Based on a review of information available from the New York State Maple Producers Association members, no active sugarbushes are known to be located within or adjacent to the temporary construction or permanent ROW of the Project.

3.2.9 Productive Timber Stands

Productive timber stands are viable or potential commercial forest stands composed of saplings (0 to 5 inches in diameter), poles (6 to 11 inches in diameter) and/or mature trees (12 inches plus in diameter). No areas of productive timber stands were observed in or adjacent to the Project route during initial field investigations. The Project route traverses areas that are either disturbed or exhibit signs of early-mid successional growth.

3.2.10 Trees Listed in Registry of Big Trees in New York State

The New York State Big Tree Register does not currently list any Big Trees in Saratoga County. No designated Big Trees are known to be located within or adjacent to the temporary construction or permanent ROW of the Project.

3.2.11 Habitats of Rare and Threatened and Endangered Species

The USFWS New York Field Office online database was reviewed to determine whether any federally listed rare species occur in Saratoga County. The Bald Eagle (*Haliaeetus leucocephalus*), Indiana Bat (*Myotis soldalis*) and Karner Blue Butterfly (*Lycaeides melissa samuelis*) are the only federally listed species in Saratoga County. The Bald Eagle has been delisted and the Indiana Bat and Karner Blue Butterfly are both federally endangered.

The USFWS New York Field Office was consulted to discuss the federally listed species in Saratoga County and any recommendations to avoid impacts to rare species. According to USFWS, although the Bald Eagle has been delisted, it is still protected under the Bald and Golden Eagle Protection Act. The USFWS recommends maintaining buffers free of tree clearing around any Bald Eagle nesting sites. Because the proposed gas pipeline does not cross any large lakes, rivers or reservoirs, it is unlikely that Bald Eagles nest in the vicinity of the Project. No Bald Eagle or raptor nests were observed adjacent to the Project route during the field surveys.

The Indiana Bat is likely extirpated or only occurs in very small numbers in Saratoga County as indicated on the Saratoga County species list downloaded from the USFWS online database (Attachment B). According to the USFWS, projects occurring in Saratoga County will not impact the Indiana bat.

Karner Blue Butterfly habitat includes pine barrens, oak savannahs, openings in oak woodlands or open areas at airports or within ROWs. These habitats typically include dry, sandy soils with open or limited tree canopy cover. The key habitat requirement is the presence of wild blue lupine (*Lupinus perennis*), the sole larval food source for the butterfly (New York Natural Heritage Program, 2009). The sandy habitat essential to the wild blue lupine, and therefore the Karner Blue, occurs mostly along river valleys and outwash plains (NYSDEC 2010). A general assessment of natural communities along the Project route was conducted during the wetland delineation. Some portions of the Project route contain early successional communities and dry, sandy open areas that could potentially provide habitat for wild blue lupine and therefore, the Karner Blue Butterfly. However, the Project does not include any permanent alteration of the early successional communities found along the proposed route. Further, there were no populations of wild blue lupine observed along the pipeline route.

Based on correspondence received from the New York Natural Heritage Program, there are no rare state-listed species on or near the Project route (Attachment B).

3.3 Visual Resource Inventory

This section provides a description of the officially designated visual resources, including scenic areas, roads, vistas and overlooks potentially affected by the Project in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(i). The basis for the visual resource inventory was the guidance contained in the 2000 NYSDEC Policy "Assessing and Mitigating Visual Impacts." Per this guidance, an officially designated visual resource is one that has been named as such by a governmental agency or entity. The Applicant conducted a spatial analysis to determine if any visual resources occurred along the Project ROW. Additionally, the Applicant has identified officially designated visual resources in the general vicinity of the Project route and assessed the resulting visual impact.

3.3.1 Scenic Areas

Scenic Areas of Statewide Significance (SASS) are designated by the New York Secretary of State pursuant to Article 42 of the Executive Law, and include coastal regions with aesthetic significance. Some SASS locations include portions of the Hudson River. However, the northernmost SASS is located in Albany County, over 30 miles south of the Project area.

Scenic Districts are designated by the Commissioner of NYSDEC pursuant to Article 49 of the Environmental Conservation Law. There are no Scenic Districts within the vicinity of the Project.

Data regarding Wild and Scenic Rivers identified by Congress, pursuant to 16 U.S.C. Section 1271, are available through the National Park Service. Data regarding State-designated Wild, Scenic and Recreational Rivers are available through NYSDEC. Neither state nor federally designated rivers are located within the vicinity of the Project.

3.3.2 Scenic Roads

Scenic Roads are designated by the Commissioners of DEC or the New York State Department of Transportation pursuant to Article 49 of the Environmental Conservation Law. The closest New York State Scenic Byway is the “Lakes to Locks Passage” running north-south along part of Lake Champlain connecting Waterford and Rouses Point. At its closest, the designated Scenic Byway is approximately 5.5 miles east of the Project.

3.3.3 Vistas and Overlooks

Adirondack Park Scenic Vistas, designated by the Adirondack Park Agency pursuant to Article 27 of the Executive Law are areas chosen for their scenic beauty. The closest vista or overlook is located on Rte 49 near Bolton Landing, approximately 40 miles to the north.

3.4 Cultural Resources

This section provides a description of the officially designated cultural resources, including archaeological sites and historic districts, places and properties along the centerline of the Project in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(i).

The State Historic Preservation Office at the New York State Office of Parks, Recreation and Historic Preservation (“OPRHP”) was notified about the Project in July 2010. OPRHP responded that review of files indicated a previously recorded archeological site was located in or adjacent to the Project, and therefore, a Phase 1 survey was recommended to determine the presence or absence of cultural resources in the Project’s Area of Potential Effect (OPRHP letter dated July 21, 2010 included in Attachment B). The Area of Potential Effect is considered to be all portions of the Project that will be directly or indirectly altered by the proposed undertaking, including temporary construction areas and access roads.

A Phase 1A literature and historic map review, walkover of the route corridor, file review at OPRHP, and sensitivity assessment of the corridor was then conducted by Hartgen Archeological Associates, Inc. (“HAA”) of Rensselaer, New York. The Phase 1A study was conducted according to the New York Archaeological Council’s *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP. The HAA report, entitled *Phase 1A Archeological Sensitivity Assessment: National Grid GLOBALFOUNDRIES Gas Pipeline Project* dated September 2010, was prepared according to OPRHP’s State Historic Preservation Office *Phase 1 Archeological Report Format Requirements* (2005). The report was submitted to OPRHP, which concurred with the report’s findings (OPRHP letter dated October 8, 2010 (Attachment B)). A summary of the report is provided below.

3.4.1 Archaeological Sites

HAA’s review of files at OPRHP and available reports indicated no archeological sites listed or determined eligible for listing on the National Register of Historic Places are located on or adjacent to the Project.

The Project is located within an area designated on the OPRHP website as a known archeologically sensitive area. Generally, this designation is based on the proximity of reported

archeological sites. The file review indicated that 38 archeological sites have been previously recorded within one mile of the route, including prehistoric (or pre-European Contact Period) sites and historic (post-European Contact Period) sites.

Two prehistoric sites identified by recent archeological investigations are located in proximity to the eastern end of the Project. The Project's location in the vicinity of several streams and wetlands would suggest a potential for occupation or use of the area by Native Americans who occupied the area. Therefore, HAA found that undisturbed portions of the Project area would be considered moderately to highly sensitive for potential precontact archaeological deposits.

Sections of the pipeline route that are undisturbed and near early roadways were considered by HAA to be sensitive for historic archeological deposits associated with nearby map-documented structures. Recent archeological investigations conducted near the eastern end of the pipeline route documented historic resources adjacent to Stonebreak Road. Overall, HAA considered the route corridor to have a low to moderate sensitivity for potential early historic archeological deposits in undisturbed areas.

3.4.2 Historic Aboveground Structures and Districts

A total of six aboveground structures that are listed or eligible for listing on the National Register of Historic Places were identified within one mile of the Project. These are listed in Table 3.4. No historic districts are located within one mile. Because the gas pipeline will be located underground, there will be no visual impacts to the historic settings of these resources.

3.4.3 Phase 1B Field Survey

Once the final design and engineering plans are available, they will be reviewed by HAA to determine if areas of proposed ground disturbance, including the pipeline trench, access roads, clearing areas, and staging areas, will be located in areas not previously disturbed by existing utilities or roadside ditches. Based on the information available to date, HAA recommended Phase 1B field testing within these areas of the route corridor:

- Along the western end of the Project (west of the structures located on East Line Road) along Raymond Road.
- Along the more level, better drained sections of the existing electric transmission line ROW, along I-87.
- Between I-87 and US Route 9.

If proposed disturbance extends beyond previously disturbed areas along the abandoned trolley bed, Route 67, US Route 9 or Stonebreak Road, subsurface testing may be necessary there as well. It is recommended that, pursuant to Section 106 of the National Historic Preservation Act, the US Army Corps of Engineers, as the involved federal agency, initiate consultation with federally recognized Tribal Nations with an interest in this area. The OPRHP concurred with these recommendations (OPRHP letter dated October 8, 2010).

Table 3.4: Aboveground Historic Structures within One Mile of the Project

Property	Historic Status/ OPRHP No.	Description	Location
Ruhle Road Bridge	Listed 04NR05237	Lenticular metal truss bridge erected in 1888 in Salem, New York. Moved to current location in 2001 for use as pedestrian bridge, one site of former Ruhle Road Stone Arch Bridge (NR 1990; collapsed and removed in 1993).	Over Ballston Creek, approx. 1500 feet SW of Project at nearest point.
Hubble Stone House	Eligible 09101.000117	c. 1831	6 Brookline Road, one mile west of western end of Project.
Malta Rocket Test Station	Eligible 09111.000333	Established in 1945 by US Government for rocket testing.	Hermes Road, about 4,000 feet NE of eastern end of Project.
	Eligible 09111.000276	Greek Revival Church/Schoolhouse	At intersection of NY 67 and East Line Rd. about 900 feet S of Project
"Structure 5"	Eligible 09111.000358	19th c. frame shop building	South side of NY 67; exact location unknown.
Starting Gate Cottages	Eligible 09111.000327		West side US 9, N of Rte 67; exact location unknown.

3.5 Property Boundaries

This section identifies the property boundaries, fences, walls and hedgerows to be crossed by the Project in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(ii). Attachment C, Sheets 1-9 indicate the proposed centerline with respect to neighboring properties and dwellings. Property boundaries were mapped according to data obtained from local Tax Assessors. Separate from this effort, through its landowner outreach efforts, the Applicant identified specific parcels where property rights would be acquired to construct and operate the Project (e.g., temporary and permanent easements). The Applicant has identified a total of 19 properties that will be crossed by the proposed centerline. Table 3.5 identifies these properties.

Table 3.5: Properties Crossed by the Proposed Centerline

Tax Assessor's Map Identification Number
228-2-43
228-2-8.11
229-2-6
229-2-60.1
229-2-98
228-2-8.12

Tax Assessor's Map Identification Number
229-3-43
229-3-44
229-3-27.11
240-2-61.1
229-3-42.11
229.82-1-98
229.82-1-97
229-1-39.11
229-1-39.12
229-2-60.2
240-1-4.112
229-2-37.12
240-1-5.2

3.6 Adjacent Dwellings

This section provides an identification of dwellings within 150 feet of the centerline of the Project in accordance with the requirements of 16 NYCRR §85-1.3(a)(2)(iii). For the sake of this assessment, dwellings are considered to be any residential-type structure that is presumed to be inhabited on a regular basis. A spatial analysis was completed to determine the proximity of all existing dwellings within 150 feet of the Project centerline. Aerial imagery (2007) in combination with field verification was used to identify structures. Table 3.6 includes data describing the relative location of the dwellings along the route. Figures 3.4 a - c indicate the proposed centerline and identify dwellings within 150 feet of the proposed centerline.

A total of 22 dwellings were identified within the 150 feet of the pipeline centerline. All of these dwellings appear to be single-family residences. In Ballston, these residences are located near the proposed tap of the E13 gas transmission line. In Malta, a concentration of nearby dwellings occurs where the proposed route parallels and crosses Route 67, as well as along the abandoned trolley bed near Ruhle Road and Settlers Ridge South. The proposed route will also pass in close proximity to three dwellings along Route 9.

Table 3.6: Dwellings within 150 Feet of Centerline of Project

Milepost	Town	Number of Dwellings	Distance from Pipeline Centerline (feet)
0-1	Ballston	1	132
0-1	Ballston	1	93
0-1	Malta	1	114
0-1	Malta	1	150
0-1	Malta	1	114

Milepost	Town	Number of Dwellings	Distance from Pipeline Centerline (feet)
0-1	Malta	1	110
0-1	Malta	1	47
0-1	Malta	1	101
0-1	Malta	1	116
1-2	Malta	1	76
1-2	Malta	1	103
1-2	Malta	1	146
1-2	Malta	1	130
1-2	Malta	1	133
1-2	Malta	1	119
1-2	Malta	1	115
3-4	Malta	1	141
3-4	Malta	1	75
3-4	Malta	1	74
3-4	Malta	1	42
3-4	Malta	1	112
3-4	Malta	1	30

4.0 CHECKLIST OF EM&CS&P MEASURES AND TECHNIQUES

This section addresses the checklist of those measures and techniques from the approved EM&CS&P applicable to the Project to be followed to minimize adverse impact associated with the Project in accordance with the requirements of 16 NYCRR §85-1.2(a)(3).

4.1 Measures and Techniques from the Approved EM&CS&P Applicable to the Project

During construction of the Project, National Grid and its contractors will follow the approved standards and practices set forth in the EM&CS&P (revised February 2006) adopted by the Commission on December 7, 2006 in Case 06-T-1383 (incorporated herein by reference), and National Grid has certified that it agrees to install and maintain the Project in accordance with this EM&CS&P (Attachment A). Pursuant to 16 NYCRR Subpart 85-1.2(a)(3), National Grid has developed a checklist of those measures and techniques from this EM&CS&P which it has agreed will be followed in an effort to minimize or avoid adverse impact on sensitive resources affected by the Project to the maximum extent practical (Attachment A).

4.2 Name, Title and Qualifications of the Company Representatives Directly Responsible for Seeing that All Environmental Requirements are Fully Met

1. Name: Edward M. Wencis

Title: Lead Project Manager, National Grid

Qualifications: 32 years experience with natural gas distribution and transmission LDCs. Primary responsibilities included project management, engineering, construction and maintenance.

2. Name: Stephen P. Haller

Title: Environmental Analyst

Qualifications: Approximately two years of experience in providing environmental support services for the planning, licensing and construction of National Grid projects, including provision of environmental impact analysis and permitting services to facilitate the construction of both major and minor electric and natural gas utility lines and substations. Has prepared environmental assessments and filings under 16 NYCRR Part 102 and State Environmental Quality Review Act and permit applications for electric transmission line projects subject to Adirondack Park Agency jurisdiction.

5.0 LIST OF APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS

In accordance with the requirements of 16 NYCRR §85-1.2(c)(2), this section provides a list of applicable State and local laws and regulations issued thereunder, including copies of any local ordinance, law, resolution or other action, any regulation issued thereunder, or any local standard or requirement that, as applied to the Project, the Applicant believes to be unreasonably restrictive in view of the existing technology, factors of cost or economics or the needs of consumers.¹

5.1 State

A Certificate of Environmental Compatibility and Public Need under Article VII of the New York Public Service Law.

Permits under the New York Environmental Conservation Law ("ECL") for crossing of wetlands and streams by the Project.

A State Pollutant Discharge Elimination System ("SPDES") Permit for Stormwater Discharges from Construction Activities pursuant to ECL Article 17.

New York State Department of Transportation ("NYSDOT") Utility Work Permits pursuant to 17 NYCRR, Part 131 to locate Project facilities in Interstate 87 and State Routes 9 and 67.

5.2 Local

5.2.1 County of Saratoga²

Chapter 186. Geodetic Survey Monumentation

Chapter 277. Solid Waste

¹ The scope of this Article VII Application does not include the gas regulator station the Applicant proposes to install in the Town of Malta, New York at the eastern terminus of the Project.

² The local laws of the County of Saratoga are available online at www.ecode360.com (see <http://www.ecode360.com/ecode3-back/getSimple.jsp?guid=SA2068>).

Article I. Recycling

Chapter 285. Storm Sewers

Article I. Illicit Discharges, Activities and Connections

5.2.2 Town of Ballston³

Chapter 62. Fire Prevention and Building Code

Chapter 80. Machinery and Equipment

Chapter 92. Storm Sewers, Illicit Discharges, Activities and Connections

Chapter 96. Solid Waste

Chapter 138. Zoning

Article VII. Rural District Regulations

§ 138-10. Uses permitted.

Under Section 138-10 of this chapter, the Project is not a permitted use in the Rural District. The Project would be located in the Rural District in this Town. A copy of Section 138-10 is provided in Attachment D. *The Applicant requests that the Commission refuse to apply this local law to the Project because the Project is unable to conform to the Town's zoning ordinance as a permitted use. It is technologically impossible for the Project to comply with this local law.*

Article X. Planned Unit Development District

§ 138-26. District standards.

Appendix A to Chapter 138, established under Section 138-26, is the Town of Ballston Zoning Law Amendment relating to Eastline Commons Planning Unit Development District (formerly "Planning Unit Development District #1 - H.R. Schultz") (adopted March 6, 2007 by Local Law No. 2).⁴ The Project would be located in the Eastline Commons Planning Unit Development District. The Project may not be in compliance with certain requirements of Appendix A to Chapter 138. These requirements include use restrictions and prohibitions on clearing and vegetation management. *To the extent the Project does not comply with the use restrictions of Appendix A to Chapter 138, the Applicant requests that the Commission refuse to apply the restrictions to the Project because they are unduly restrictive in view of the existing technology. It is technologically impossible for the Project to comply with the use restrictions in these*

³ The local laws of the Town of Ballston are available online at www.ecode360.com (see <http://www.ecode360.com/ecode3-back/getSimple.jsp?guid=BA1734>).

⁴ Appendix A to Chapter 138 is available online at www.ecode360.com (see <http://www.ecode360.com/ecode3-back/getSimple.jsp?custId=BA1734&guid=6233369>).

requirements. To the extent the Applicant's Commission-approved procedures for clearing gas pipeline rights-of-way are inconsistent with these local requirements, the Applicant requests that the Commission refuse to apply the local requirements because they are unduly restrictive in view of cost and the needs of the Applicant's consumers. The Applicant would incur considerable additional cost to adjust its procedures and practices to achieve full compliance with the local requirements applicable in the Eastline Commons Planning Unit Development District, particular when other municipalities traversed by the Project have different and sometimes conflicting requirements. Additionally, the needs of the Applicant's consumers are best met by enabling the Applicant to perform the Project and operate and maintain the gas pipeline safely and reliably pursuant to procedures that are based on state law and Commission precedent. These costs and consumer needs outweigh the impact on this municipality that would result from the Commission's refusal to apply these local requirements.

Article XII. Activity Standards for Annoying and Injurious Substances, Conditions and Operations

§ 138-41. Applicability of standards.

§ 138-42. Vibration.

§ 138-43. Smoke.

§ 138-44. Odors.

§ 138-45. Fly ash; dust.

§ 138-46. Glare.

§ 138-49. Noise.

§ 138-52. Electrical interference.

A copy of Sections 138-41, 138-42, 138-43, 138-44, 138-45, 138-46, 138-49, and 138-52 is provided in Attachment D. *To the extent the Project activities are inconsistent with these local laws, the Applicant requests that the Commission refuse to apply the local laws because they are unduly restrictive in view of the existing technology, cost and the needs of the Applicant's consumers. A number of the processes and activities to be conducted in the course of the Project, including motorized equipment engaged in excavation, make compliance impracticable. The Applicant will implement mitigation measures during the course of the Project. These measures demonstrate that this request is the minimum necessary, and the adverse impacts of granting the request are mitigated to the maximum extent practicable. Moreover, the Applicant would incur considerable additional cost if it were required to achieve full compliance with the local laws applicable in this municipality by further adjusting the Project's work schedule. The needs of the Applicant's consumers are best met by*

enabling the Applicant to perform this Project expeditiously so as to have it in service at the earliest possible date. These costs and consumer needs outweigh the impact on this municipality that would result from the Commission's refusal to apply these local laws.

Town Permits to locate Project facilities in Town streets and highways, including the portion of East Line Road in the Town.

5.2.3 Town of Malta⁵

Chapter 65. Burning, Open

Chapter 86. Farming

Chapter 89. Fire Prevention and Building Construction

Chapter 92. Flood Damage Prevention

Chapter 115. Noise

Chapter 115 contains several prohibitions on the type and the level of noise in the Town. In general, Section 115-2(B) prohibits any person from operating any source of sound in a manner that creates a sound level in excess of 50 decibels between the hours of 9:00 p.m. and 7:00 a.m. or 60 decibels between the hours of 7:00 a.m. and 9:00 p.m., when measured at the lot line. Section 115-2(A)(3) prohibits the exhaust into open air of any stationary, internal combustion engine (including generators and pumps) except through a muffler or other device designed to prevent loud or explosive noises. This Chapter further limits construction and excavation activities to the hours between 7:00 a.m. and 9:00 p.m. In addition, standing motor vehicles are not permitted to idle for more than 30 minutes per hour between the hours of 9:00 p.m. and 7:00 a.m. A copy of Chapter 115 is provided in Attachment D.

To the extent the Project activities are inconsistent with Chapter 115, the Applicant requests that the Commission refuse to apply the local laws because they are unduly restrictive in view of the existing technology, cost and the needs of the Applicant's consumers. This request cannot be obviated by design changes to the Project because noise is unavoidable given the nature of such construction activities. A number of the processes and activities to be conducted in the course of the Project, including motorized equipment engaged in excavation and erection of structures, make compliance technically impossible or impracticable. The Applicant will implement noise mitigation measures during the course of the Project. These measures demonstrate that this request is the minimum necessary, and the adverse impacts of granting the request are mitigated to the maximum extent practicable. Moreover, the Applicant would incur considerable additional cost if it were required to achieve full compliance with the local laws applicable in this municipality by further adjusting the Project's noise levels or work schedule. The needs of the Applicant's consumers are best met by enabling the Applicant to perform this Project expeditiously so as to have it completed at the earliest possible date. These needs are also met

⁵ The local laws of the Town of Malta are available online at www.ecode360.com (see <http://www.ecode360.com/ecode3-back/getSimple.jsp?guid=MA1379>).

by an expeditious Project schedule that keeps the duration of outages to a minimum. These costs and consumer needs outweigh the impact on this municipality that would result from the Commission's refusal to apply these local laws.

Chapter 121. Property Maintenance

Chapter 136. Stormwater Management and Erosion and Sediment Control

Chapter 167. Zoning

Article V. Permitted Uses, Uses Requiring Special Use Permits

§ 167-15. R-1 Residential District.

§ 167-17.1. R-5 Agricultural Residential District.

§ 167-18. C-1 Downtown District.

§ 167-20. Land Conservation District.

Under Sections 167-15, 167-17.1, 167-18, and 167-20, the Project is not a permitted use in the R-1 Residential, R-5 Agricultural Residential, C-1 Commercial Downtown, and Land Conservation districts. The Project would be located in such districts in this Town. A copy of these local laws is provided in Attachment D. *The Applicant requests that the Commission refuse to apply Sections 167-15, 167-17.1, 167-18, and 167-20 to the Project because the Project is unable to conform to the Town's zoning ordinance as a permitted use. It is technologically impossible for the Project to comply with these local laws.*

§ 167-21. Stream buffers and steep slope restrictions.

Article XA. Stormwater Control

Chapter 167A. Zoning Appendix

Chapter 167A⁶ creates the various Planned Development Districts ("PDDs") in this Town. The Project traverses the following PDDs (listed from west to east):

1. Woschanko PDD No. 5B (originally Laskey Woschanko PDD) (§ 167A-6)
2. Edgewood Estates PDD No. 24 (§ 167A-30)
3. Parker Planned Development District No. 26 (§ 167A-32)
4. Tanski PDD No. 11 (§ 167A-14)
5. Legend Planned Development District No. 31 (§ 167A-37)

⁶ Chapter 167A is available online at www.ecode360.com (see <http://www.ecode360.com/ecode3-back/getSimple.jsp?custId=MA1379&guid=8559626>).

6. State Farm Mutual Automobile Insurance Company PDD No. 22 (§ 167A-28)
7. Saratoga Village PDD No. 18 (§ 167A-24)
8. Park Place at Malta PDD No. 48 (§ 167A-54)
9. Luther Forest Planned Development District No. 9 (§ 167A-11)
10. Luther Forest Technology Campus PDD No. 46 (§ 167A-52)

The Project may not be in compliance with certain requirements of the foregoing PDDs. These requirements include use restrictions, requirements for tree plantings and prohibitions on clearing and vegetation management, requirements to install utilities only in road rights-of-way, and limitations on construction hours and days. *To the extent the Project does not comply with the referenced local requirements of Chapter 167A, the Applicant requests that the Commission refuse to apply the requirements to the Project because they are unduly restrictive in view of the existing technology, cost and the needs of the Applicant's consumers. It is technologically impossible for the Project to comply with the use restrictions in these requirements. The requirements to install utilities only in road rights-of-way are likely not intended to apply to gas transmission facilities, and in any event National Grid's compliance with the requirements would deny it and the Commission their appropriate roles in siting this pipeline. The Applicant would incur considerable additional cost if it were to adjust the Project's work schedule to achieve full compliance with the particular construction schedule limitations applicable in certain PDDs. The needs of the Applicant's consumers are best met by enabling the Applicant to perform this Project expeditiously so as to have it completed at the earliest possible date. These needs are also met by an expeditious Project schedule that keeps the duration of outages to a minimum. To the extent the Applicant's Commission-approved procedures for clearing gas pipeline rights-of-way are inconsistent with these local requirements, the Applicant requests that the Commission refuse to apply the local requirements because they are unduly restrictive in view of cost and the needs of the Applicant's consumers. The Applicant would incur considerable additional cost to adjust its procedures and practices to achieve full compliance with the local requirements applicable in certain PDDs in this municipality, particular when other PDDs and other municipalities traversed by the Project have different and sometimes conflicting requirements. Additionally, the needs of the Applicant's consumers are best met by enabling the Applicant to perform the Project and operate and maintain the gas pipeline safely and reliably pursuant to procedures that are based on state law and Commission precedent. These costs and consumer needs outweigh the impact on this municipality that would result from the Commission's refusal to apply these local requirements.*

Town Permits to locate Project facilities in Town streets and highways, including the portion of East Line Road in the Town, as well as Raymond Road, Ruhle Road, Saratoga Village Blvd., Landau Blvd., Phaeton Lane, and Stonebreak Road.