












- ## Existing Conditions

-  Existing Structure
-  Existing Structure to be Removed
-  Existing Right of Way
-  Existing Transmission Line
-  Existing Transmission Line to be Removed
-  100-year Floodzone
-  Wetlands
-  USACE Reviewed Wetlands

-  Vernal Pool
-  100' Buffer of Vernal Pools
-  Stream Buffer (varies : 25', 50', or 100')

Delineated Waterbodies

- Stream Centerlines**
- Perennial
 - Intermittent
 - Ephemeral

- LiDAR 10' Contour
- LiDAR 2' Contour
- USGS 10' Contour
- USGS 2' Contour





Proposed Conditions

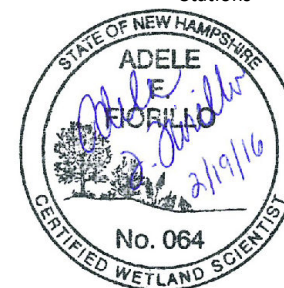
-
- Proposed Structure - No Permanent Impact
 Proposed Structure - Permanent Impact
 Proposed New ROW
 Proposed Transmission/Distribution Line
 Trenched UG
 Trenchless UG
 Erosion and Sedimentation Control BMPs
 Erosion and Sedimentation Control BMPs (Steep Slope)
 Temporary Wetlands
 Permanent Impacts - Stations
- 1 inch equals 100 feet
when printed at 11" x 17"

- Vegetation Clearing Areas
- Span Stream with No Permanent Impacts

RTE Bars

-

-  UG Disturbance Area
-  UG Splice Vaults
-  Lay Down Yard
-  Limit of Disturbance - Stations



**NHDES Wetlands & US Army Corps of Engineers
Section 404/10 Permit Application Plans**

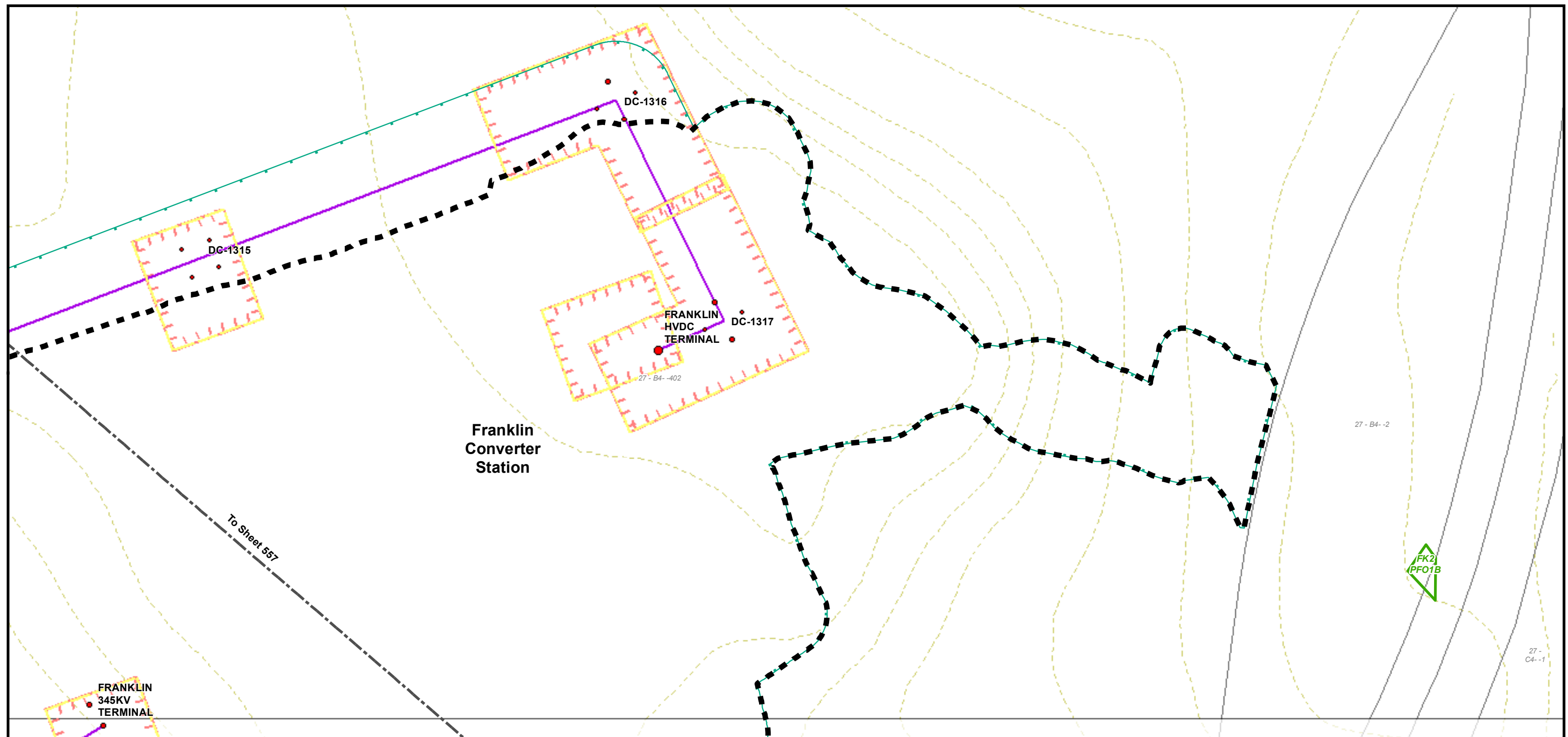
THE NORTHERN PASS PROPOSED ROUTE

[illegible]









Date: 1/22/2017










* High Quality Wetland, ^ Corps Reviewed
--

Sheet : 557A














Existing Conditions






-  Existing Structure
-  Existing Structure to be Removed
-  Existing Right of Way
-  Existing Transmission Line
-  Existing Transmission Line to be Removed
-  100-year Floodzone
-  Wetlands
-  USACE Reviewed Wetlands





-  Vernal Pool
 -  100' Buffer of Vernal Pools
 -  Stream Buffer (varies : 25', 50', or 100')
- Delineated Waterbodies**
-  Perennial
 -  Intermittent
 -  Ephemeral
- Stream Centerlines**
-  Perennial
 -  Intermittent
 -  Ephemeral

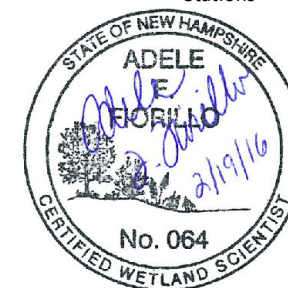
- LiDAR 10' Contour
- LiDAR 2' Contour
- USGS 10' Contour
- USGS 2' Contour

Proposed Conditions

-
-  Proposed Structure - No Permanent Impact
 Proposed Structure - Permanent Impact
 Proposed New ROW
 Proposed Transmission/Distribution Line
 Trenched UG
 Trenchless UG
 Erosion and Sedimentation Control BMPs
 Erosion and Sedimentation Control BMPs (Steep Slope)
 Temporary Wetlands
 Matting
 Permanent Impacts - Stations
- 1 inch equals 100 feet
when printed at 11" x 17"

-  Vegetation Clearing Areas
-  Span Stream with No Permanent Impacts
- RTE Bars**
-  Animal
-  Vegetation
-  Both

-  UG Disturbance Area
-  UG Splice Vaults
-  Lay Down Yard
-  Limit of Disturbance - Stations



1 inch equals 100 feet
when printed at 11" x 17"



**NHDES Wetlands & US Army Corps of Engineers
Section 404/10 Permit Application Plans**

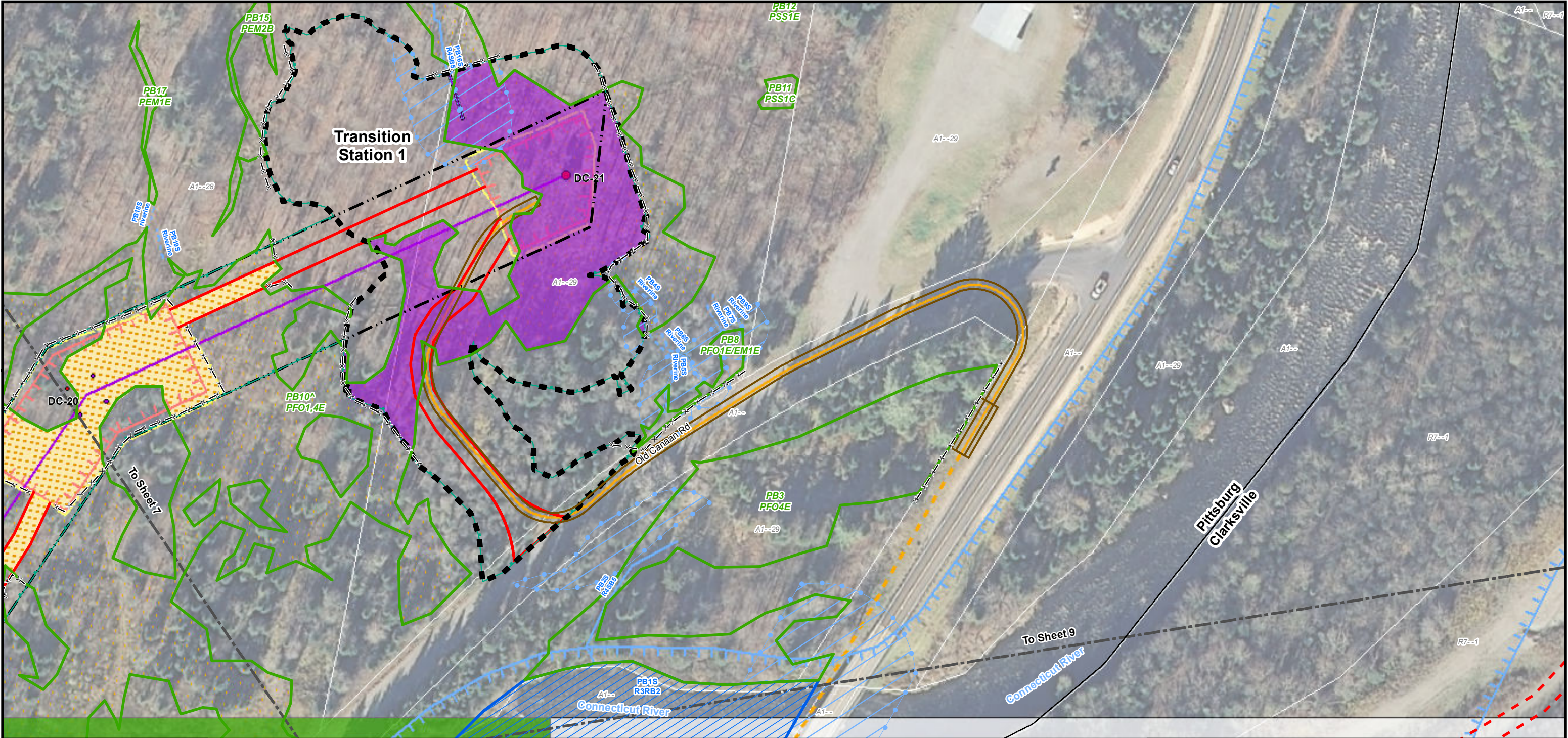
THE NORTHERN PASS PROPOSED ROUTE

[illegible]

Date: 1/22/2017

* High Quality Wetland, ^ Corps Reviewed
--

Sheet : 557A



Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

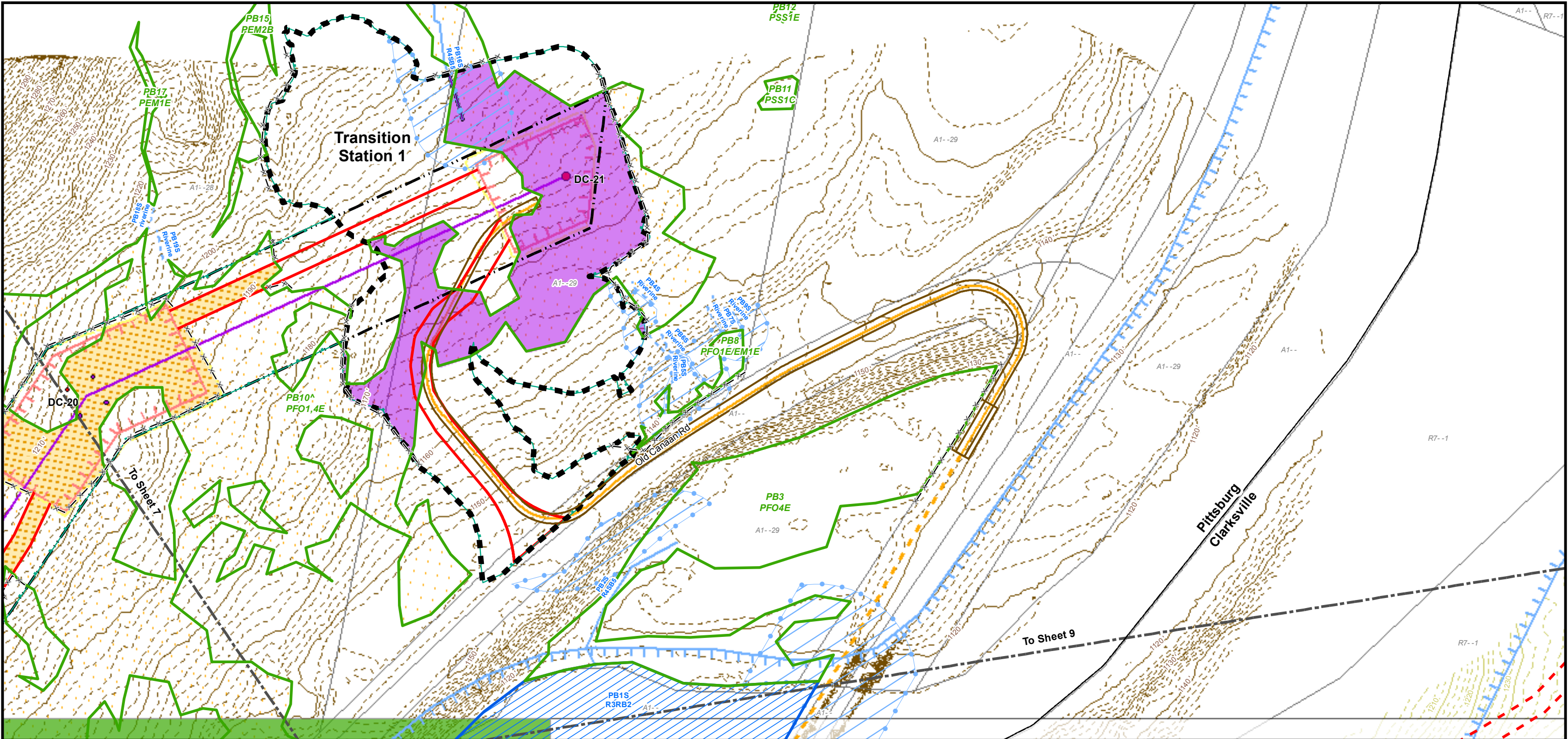
Lay Down Yard

Limit of Disturbance - Stations

1 inch equals 100 feet
when printed at 11" x 17"

NHDES Wetlands & US Army Corps of Engineers Section 404/10 Permit Application Plans						
THE NORTHERN PASS PROPOSED ROUTE						
Jurisdictional Impact Type and Amount			Extent of Clearing (sq ft)			
Wetland / Waterbody	Temporary Impact (sq ft)	Permanent Impact (sq ft)	In Forested Wetlands	Uplands w/in 100' of Streams	Uplands w/in 100' of Vernal Pools	
PB10 ^A , PFO1,4E	14,167	45,936	71,172	6,409	0	
PB15, PEM2B	0	2				
PB3, PFO4E	0	0				
PB8, PFO1E/EM1E	0	0				
PB16S, R4SB5	0	99				
PB1S, R3RB2	0	0				
PB2S, R4SB5	0	0				
PB5S, Riverine	0	0				
PB6S, Riverine	0	0				
PB7S, Riverine	0	0				
PB9S, Riverine	0	0				
Date: 1/20/2017			* High Quality Wetland, ^ Corps Reviewed			Sheet : 008

Sources: NH GRANIT, Normandeau; Cornerstone, Burns & McDonnell.



Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

Existing Conditions

Existing Structure

Existing Structure to be Removed

Existing Right of Way

Existing Transmission Line

Existing Transmission Line to be Removed

100-year Floodzone

Wetlands

USACE Reviewed Wetlands

Delineated Waterbodies

Perennial

Intermittent

Ephemeral

Stream Centerlines

Perennial

Intermittent

Ephemeral

Proposed Conditions

Proposed Structure - No Permanent Impact

Proposed Structure - Permanent Impact

Proposed New ROW

Proposed Transmission/Distribution Line

Trenched UG

Trenchless UG

LiDAR 10' Contour

LiDAR 2' Contour

USGS 10' Contour

USGS 2' Contour

New Access Route

Existing Access Route

Temporary Construction Pad

Temporary Area of Disturbance - Construction Pad

Erosion and Sedimentation Control BMPs

Erosion and Sedimentation Control BMPs (Steep Slope)

Temporary Wetlands Matting

Permanent Impacts - Stations

Vegetation Clearing Areas

Span Stream with No Permanent Impacts

RTE Bars

Animal

Vegetation

Both

UG Disturbance Area

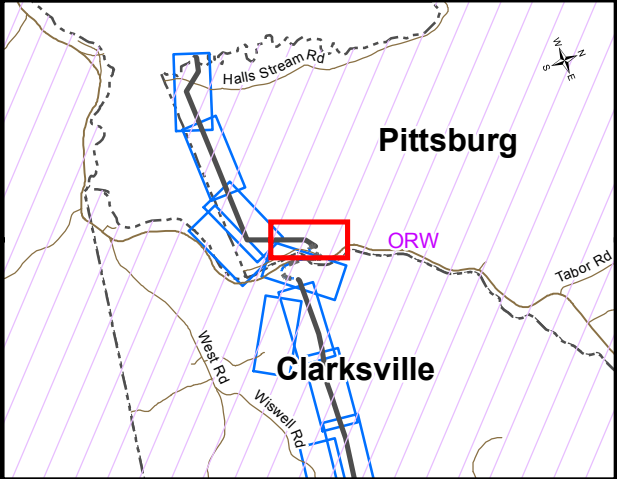
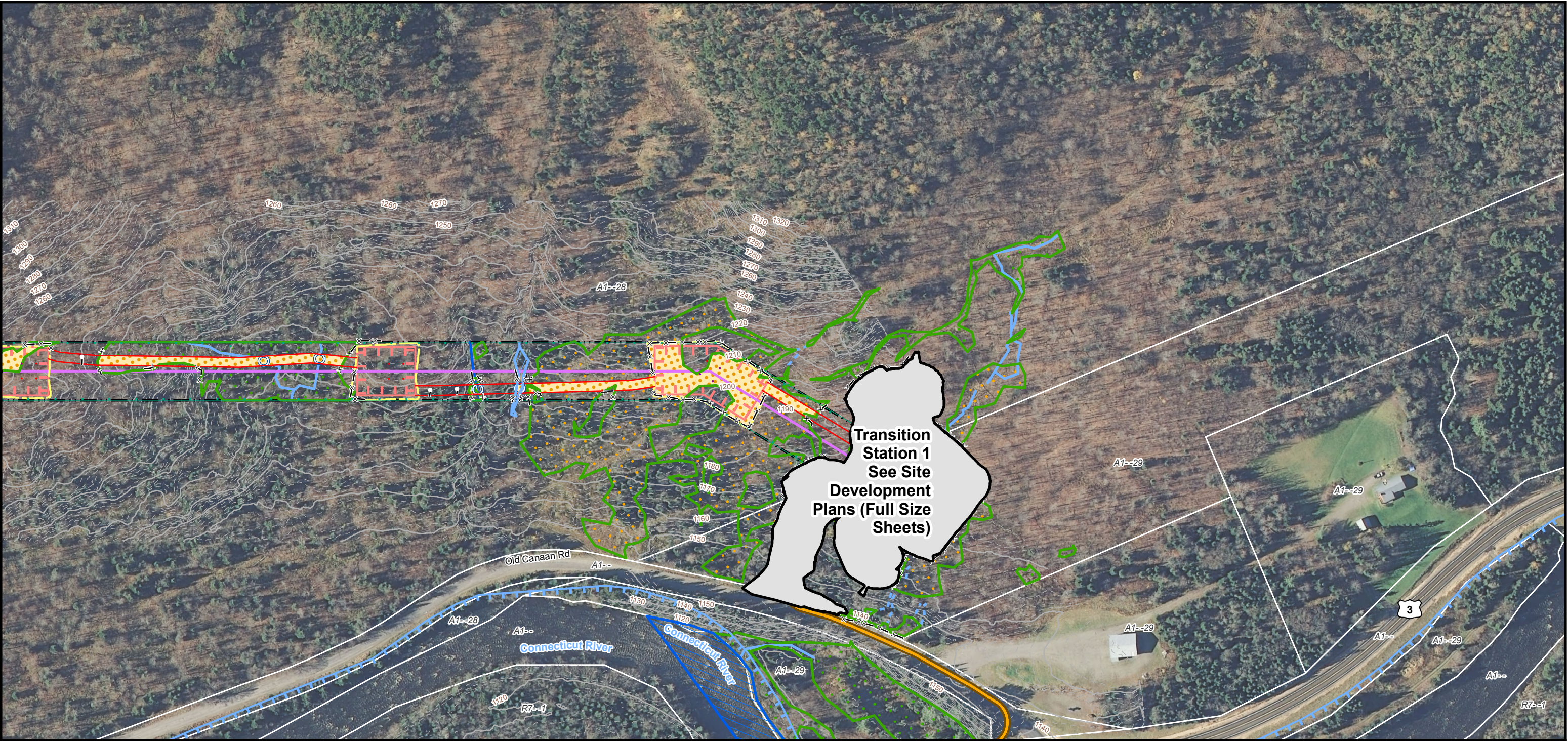
UG Splice Vaults

Lay Down Yard

Limit of Disturbance - Stations

NHDES Wetlands & US Army Corps of Engineers Section 404/10 Permit Application Plans						
THE NORTHERN PASS PROPOSED ROUTE						
Jurisdictional Impact Type and Amount			Extent of Clearing (sq ft)			
Wetland / Waterbody	Temporary Impact (sq ft)	Permanent Impact (sq ft)	In Forested Wetlands	Uplands w/in 100' of Streams	Uplands w/in 100' of Vernal Pools	
PB10^, PFO1,4E	14,167	45,936	71,172	6,409	0	
PB15, PEM2B	0	2				
PB3, PFO4E	0	0				
PB8, PFO1E/EM1E	0	0				
PB16S, R4SB5	0	99				
PB1S, R3RB2	0	0				
PB2S, R4SB5	0	0				
PB5S, Riverine	0	0				
PB6S, Riverine	0	0				
PB7S, Riverine	0	0				
PB9S, Riverine	0	0				
Date: 1/20/2017			* High Quality Wetland, ^ Corps Reviewed		Sheet : 008	

Sources: NH GRANIT, Normandeau; Cornerstone, Burns & McDonnell.



Existing Conditions		Proposed Conditions	
Existing Structure	LiDAR 10' Contour	Proposed Structure - No Permanent Impact	Proposed New Right of Way
Existing Structure to be Removed	LiDAR 2' Contour	Proposed Structure - Permanent Impact	Proposed Access Route
Existing Transmission Line	USGS 10' Contour	Proposed Transmission / Distribution Line	Temporary Work Pad Disturbance Area
Existing Transmission Line to be Removed	USGS 2' Contour		Temporary Wetlands Matting (16' x 16')
Existing Right of Way	Parcels		Erosion and Sedimentation Control BMPs
Wetlands	100-year Floodzone		Erosion and Sedimentation Control BMPs (Steep Slope)
USACE Reviewed Wetlands	Delineated Waterbodies		
	Perennial		
	Intermittent		
	Ephemeral		
	Stream Centerlines		
	Perennial		
	Intermittent		
	Ephemeral		
	Temporary Construction Pad		
	Trenched UG		
	Trenchless UG		
	UG Splice Vault		
	UG Sending/Receiving Pit		
	Vegetation Clearing Areas		
	Span Stream with No Permanent Impacts		

The Northern Pass Transmission Project
NHDES Alteration of Terrain
Permit Application Plans
Sheet 004

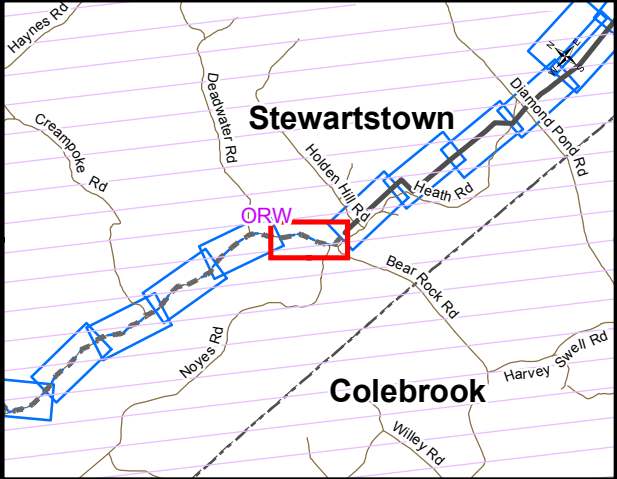
THE NORTHERN PASS

1 inch equals 200 feet
when printed at 11" x 17"

0 100 200 Feet

1/22/2017

Source: New Hampshire GRANIT GIS Data, Normandeau, Cornerstone, Burns & McDonnell



Existing Conditions

- Existing Structure
- Existing Structure to be Removed
- Existing Transmission Line
- Existing Transmission Line to be Removed
- Existing Right of Way
- Wetlands
- USACE Reviewed Wetlands

Existing Contours

- LiDAR 10' Contour
- LiDAR 2' Contour
- USGS 10' Contour
- USGS 2' Contour
- Parcels
- 100-year Floodzone

Delineated Waterbodies

- Perennial
- Intermittent
- Ephemeral

Stream Centerlines

- Perennial
- Intermittent
- Ephemeral

Proposed Conditions

- Proposed Structure - No Permanent Impact
- Proposed Structure - Permanent Impact
- Proposed Transmission / Distribution Line

Construction Features

- Temporary Construction Pad
- Proposed New Right of Way
- Proposed Access Route
- Temporary Work Pad Disturbance Area
- Temporary Wetlands Matting (16' x 16')
- Erosion and Sedimentation Control BMPs
- Erosion and Sedimentation Control BMPs (Steep Slope)

UG Features

- Trenched UG
- Trenchless UG
- UG Splice Vault
- UG Sending/Receiving Pit
- Vegetation Clearing Areas
- Span Stream with No Permanent Impacts

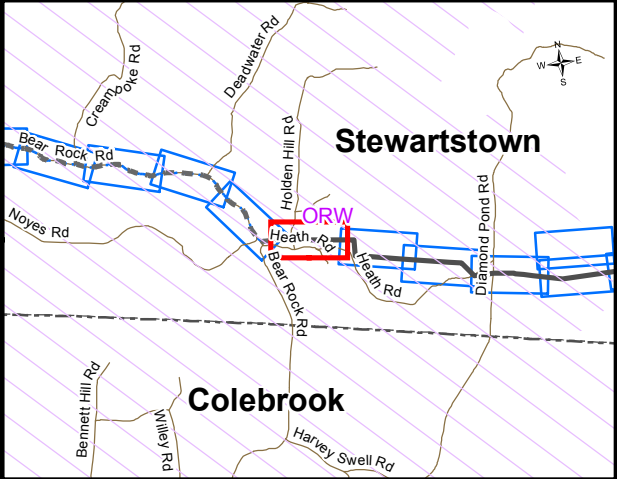
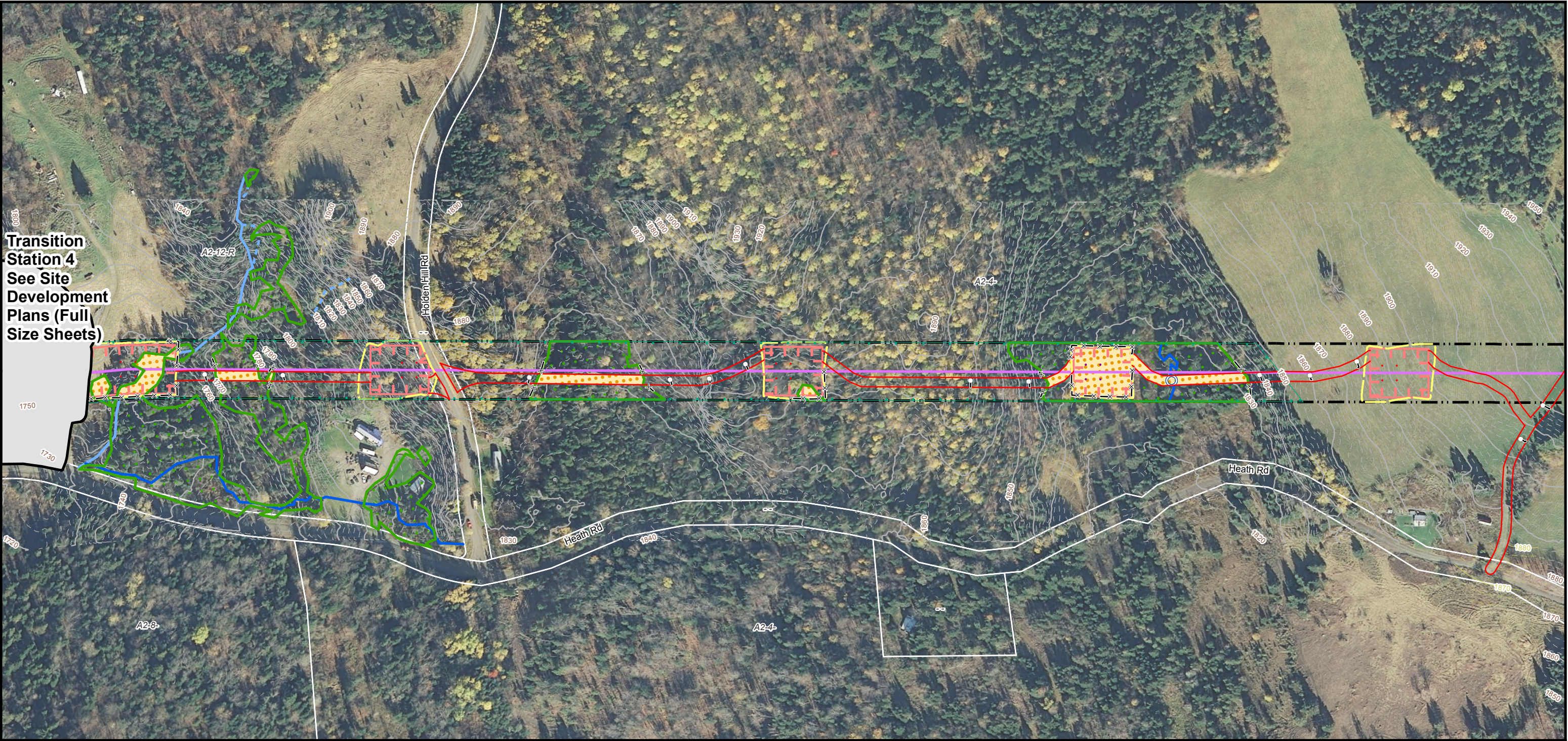
The Northern Pass Transmission Project
NHDES Alteration of Terrain
Permit Application Plans
Sheet 022

1 inch equals 200 feet
when printed at 11" x 17"

0 100 200 Feet

1/22/2017

Source: New Hampshire GRANIT GIS Data, Normandeau, Cornerstone, Burns & McDonnell



Existing Conditions	<ul style="list-style-type: none">LiDAR 10' ContourLiDAR 2' ContourUSGS 10' ContourUSGS 2' ContourParcels100-year Floodzone	Stream Centerlines	<ul style="list-style-type: none">PerennialIntermittentEphemeral	<ul style="list-style-type: none">Temporary Construction PadProposed New Right of WayProposed Access RouteTemporary Work Pad Disturbance AreaTemporary Wetlands Matting (16' x 16')Erosion and Sedimentation Control BMPsErosion and Sedimentation Control BMPs (Steep Slope)	<ul style="list-style-type: none">Trenched UGTrenchless UGUG Splice VaultUG Sending/Receiving PitVegetation Clearing AreasSpan Stream with No Permanent Impacts
<ul style="list-style-type: none">Existing StructureExisting Structure to be RemovedExisting Transmission LineExisting Transmission Line to be RemovedExisting Right of WayWetlandsUSACE Reviewed Wetlands	<ul style="list-style-type: none">Delineated WaterbodiesPerennialIntermittentEphemeral	Proposed Conditions	<ul style="list-style-type: none">Proposed Structure - No Permanent ImpactProposed Structure - Permanent ImpactProposed Transmission / Distribution Line		

The Northern Pass Transmission Project
NHDES Alteration of Terrain
Permit Application Plans
Sheet 023

1/22/2017

Source: New Hampshire GRANIT GIS Data, Normandeau, Cornerstone, Burns & McDonnell