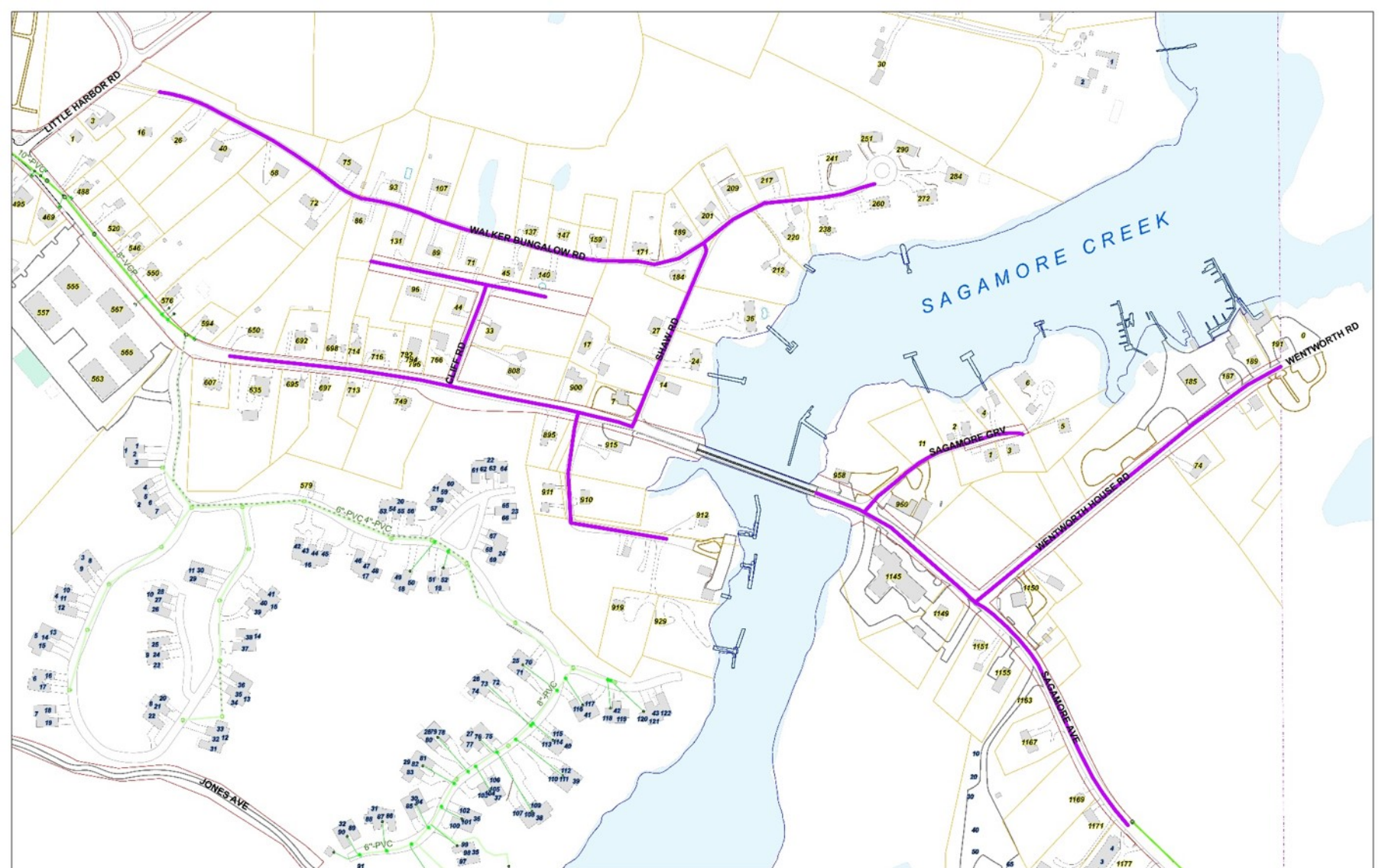


Sagamore Avenue Sewer Extension Project Description

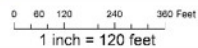
The City of Portsmouth, NH, intends to extend public sewer services to the southern portions of Sagamore Avenue and the surrounding area in accordance with the City's September 2016 Consent Decree modification. The New Hampshire Department of Environmental Services (NHDES) completed a Total Maximum Daily Load (TMDL) study for bacteria of Little Harbor and identified Sagamore Creek (adjacent to the project area) as a potential contributor to impaired water quality in Little Harbor. In 2016, the EPA and NHDES updated a Consent Decree to the City requiring construction of the new sewer extension begin no later than June 2020 and be substantially completed on or before June 30, 2022. The City has requested an extension to these Consent Decree deadlines to June 2021 and December 2022 respectively. To meet the requirements of the Consent Decree, installation of a low-pressure sewer system (LPSS) is recommended due to the shallow ledge located during field inspections. This type of system reduces construction costs by using small diameter pipes that can be installed at shallower depths than conventional sewer system mains. This system requires each property has a grinder pump that discharges the sewerage into the small diameter main located in the roadway.

Project Overview

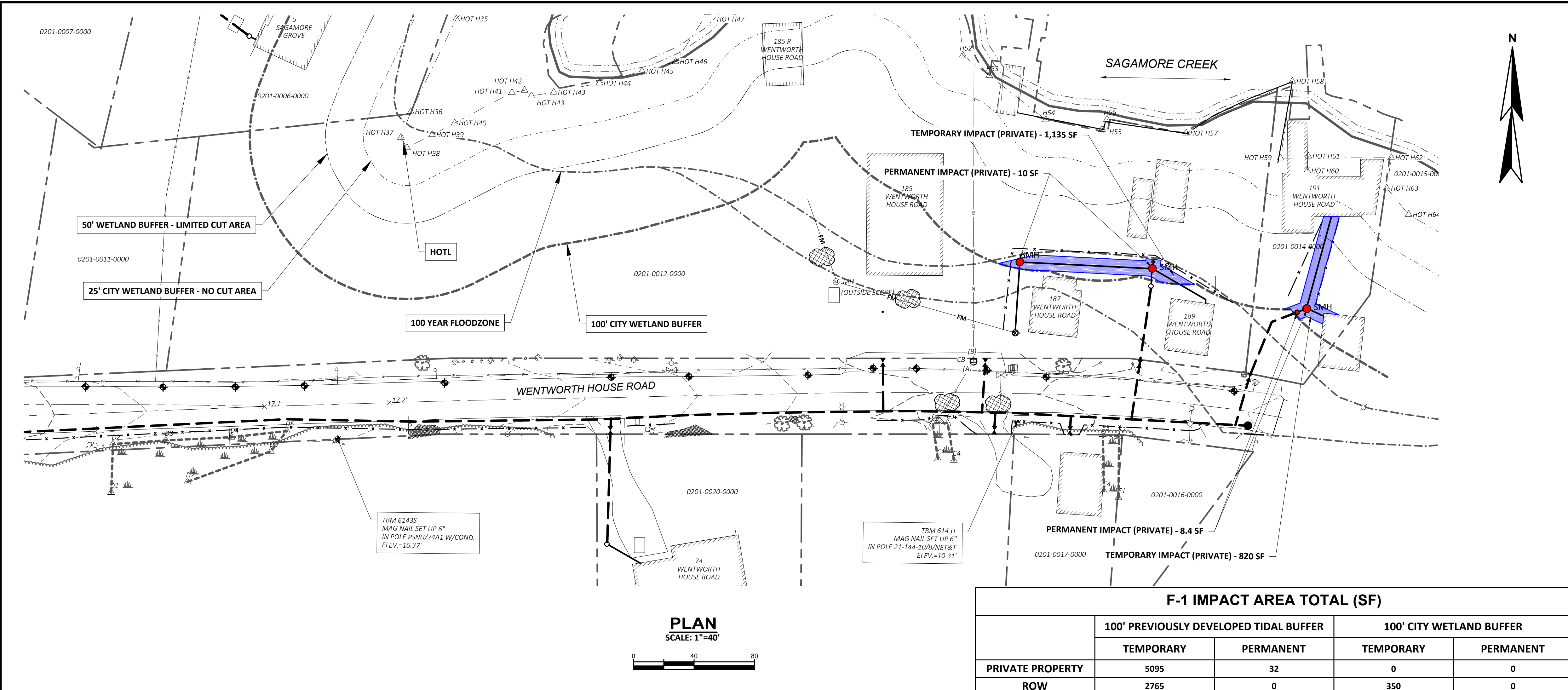
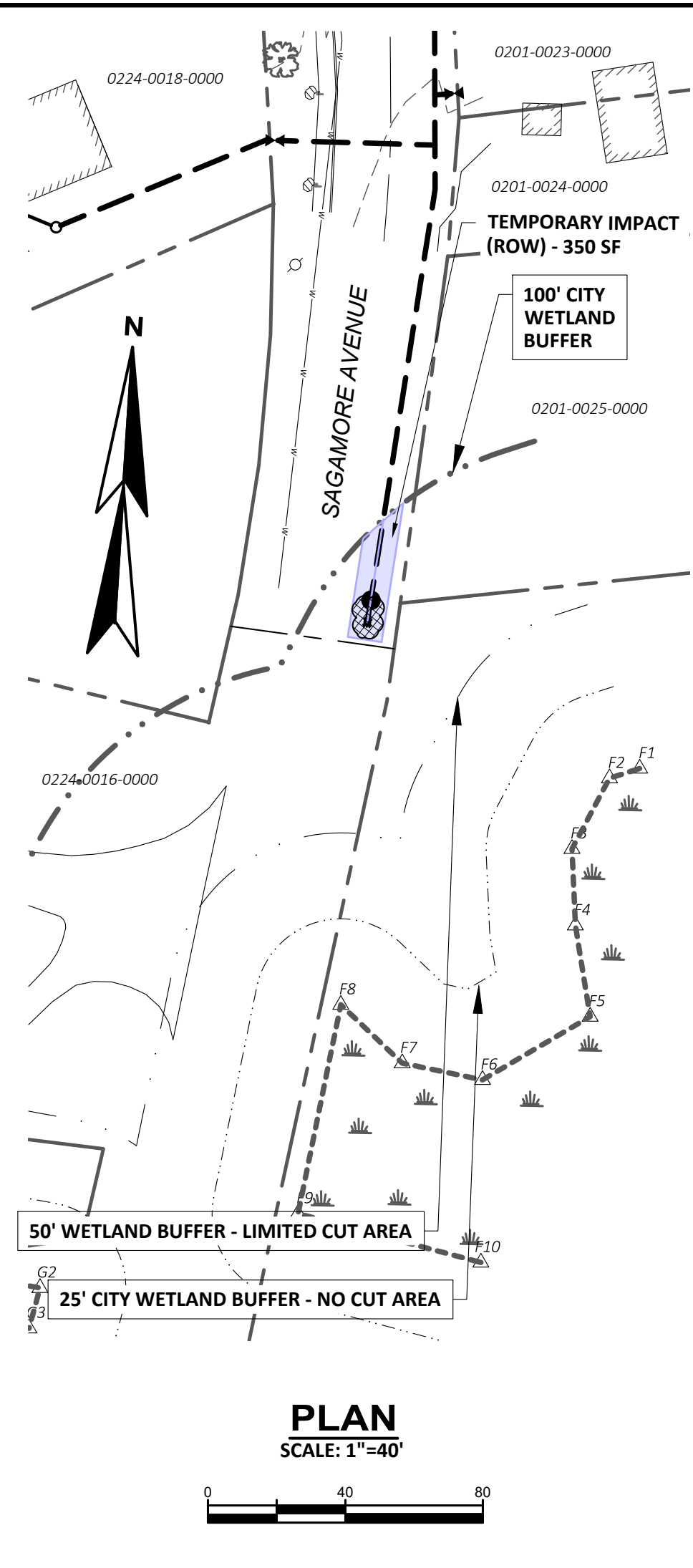


Legend

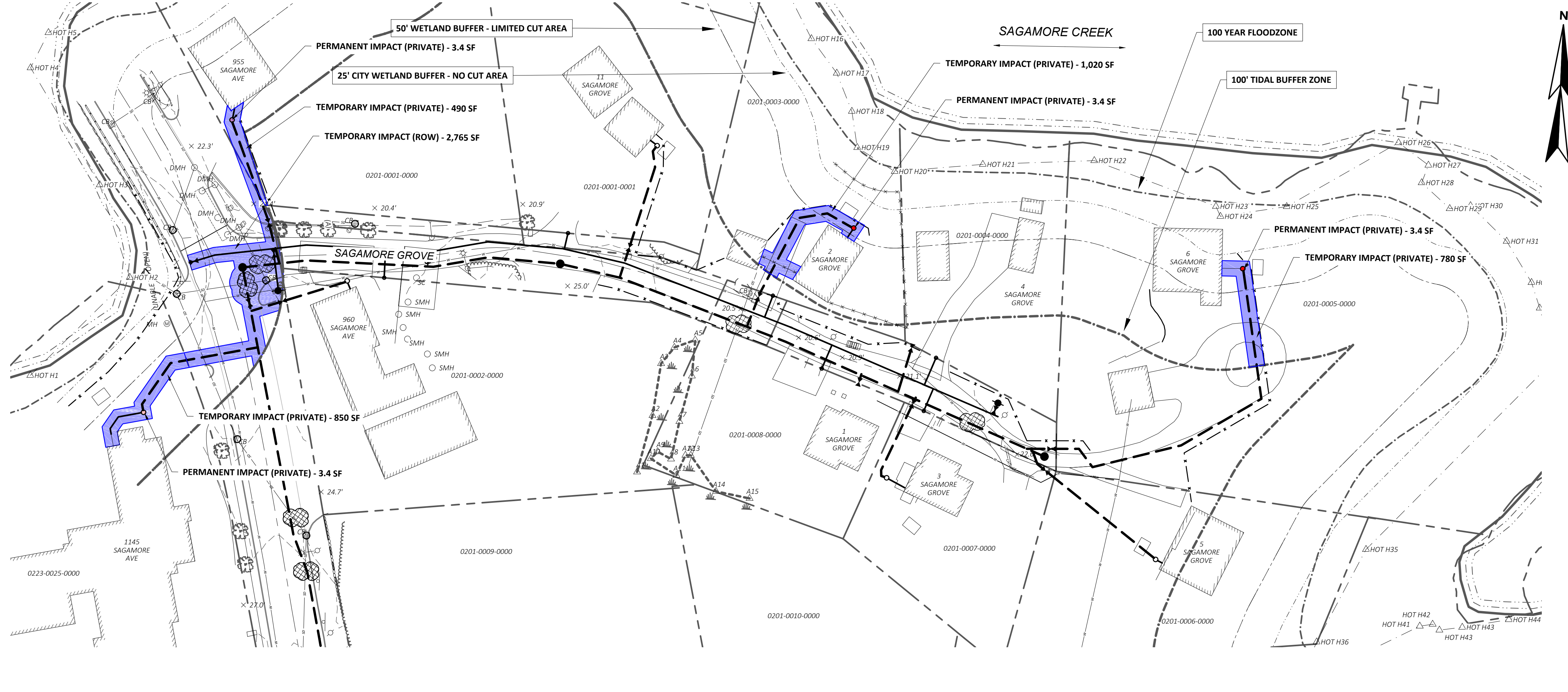
Proposed Low Pressure Sewer Main



Wetland Buffer Impacts Plan Set



F-1 IMPACT AREA TOTAL (SF)				
	100' PREVIOUSLY DEVELOPED TIDAL BUFFER		100' CITY WETLAND BUFFER	
	TEMPORARY	PERMANENT	TEMPORARY	PERMANENT
PRIVATE PROPERTY	5095	32	0	0
ROW	2765	0	350	0



LEGEND:	
TEMPORARY IMPACT 100' CITY WETLAND BUFFER	[Light Blue Box]
PERMANENT IMPACT 100' CITY WETLAND BUFFER	[Light Red Box]
TEMPORARY IMPACT 100' HOTL BUFFER	[Light Blue Box]
PERMANENT IMPACT 100' HOTL BUFFER	[Light Red Box]
PERIMETER CONTROL	[Dashed Line]
EDGE OF WETLANDS	[Dashed Line]
100 YEAR FLOODPLAIN	[Dashed Line]
HOTL	[Dashed Line]
100' TIDAL BUFFER	[Dashed Line]
100' CITY WETLAND BUFFER	[Dashed Line]
50' CITY WETLAND BUFFER	[Dashed Line]
25' CITY WETLAND BUFFER	[Dashed Line]

NOTES:
 JURISDICTIONAL WETLANDS DEPICTED WERE DELINEATED IN WINTER 2020/2021 BY MARC JACOBS, CERTIFIED WETLANDS SCIENTIST NUMBER 090. A DELINEATION REPORT AND FUNCTIONAL ASSESSMENT ARE ATTACHED FOR REFERENCE. SURVEY OF THE PROJECT AREA WAS COMPLETED BY DOUCET SURVEY INC.
 HORIZONTAL DATUM: NEW HAMPSHIRE STATE NAD83
 VERTICAL DATUM: NAVD88 PER NHDOT DISK 379-0990
 UNITS: US SURVEY FEET
 PROPOSED IMPACTS OUTSIDE OF THE TIDAL BUFFER ZONE AND WITHIN 250 FT OF THE HOTL WILL BE ADDRESS IN AN NHDES SHORELAND PERMIT APPLICATION
 GRINDER PUMPS ARE NOT DRAWN TO SCALE. GRINDER PUMP COVERS ARE 24.9" DIAMETER AND CONSIDERED A PERMANENT IMPACT.
 ALL PROPOSED IMPACTS WITHIN CITY BUFFER ZONES ARE LOCATED IN PREVIOUSLY DISTURBED AREAS AND DESIGNED TO MINIMIZE DISTURBANCE TO THE MAXIMUM EXTENT PRACTICABLE.

NO	PERMITTING	DESIGNED BY: J.SHA	APP'D DATE
1	▲	L.MIC	K.GAR 01-21
2	▲	D.FUD	
3	▲	B.ECK	
4	▲	K.GAR	
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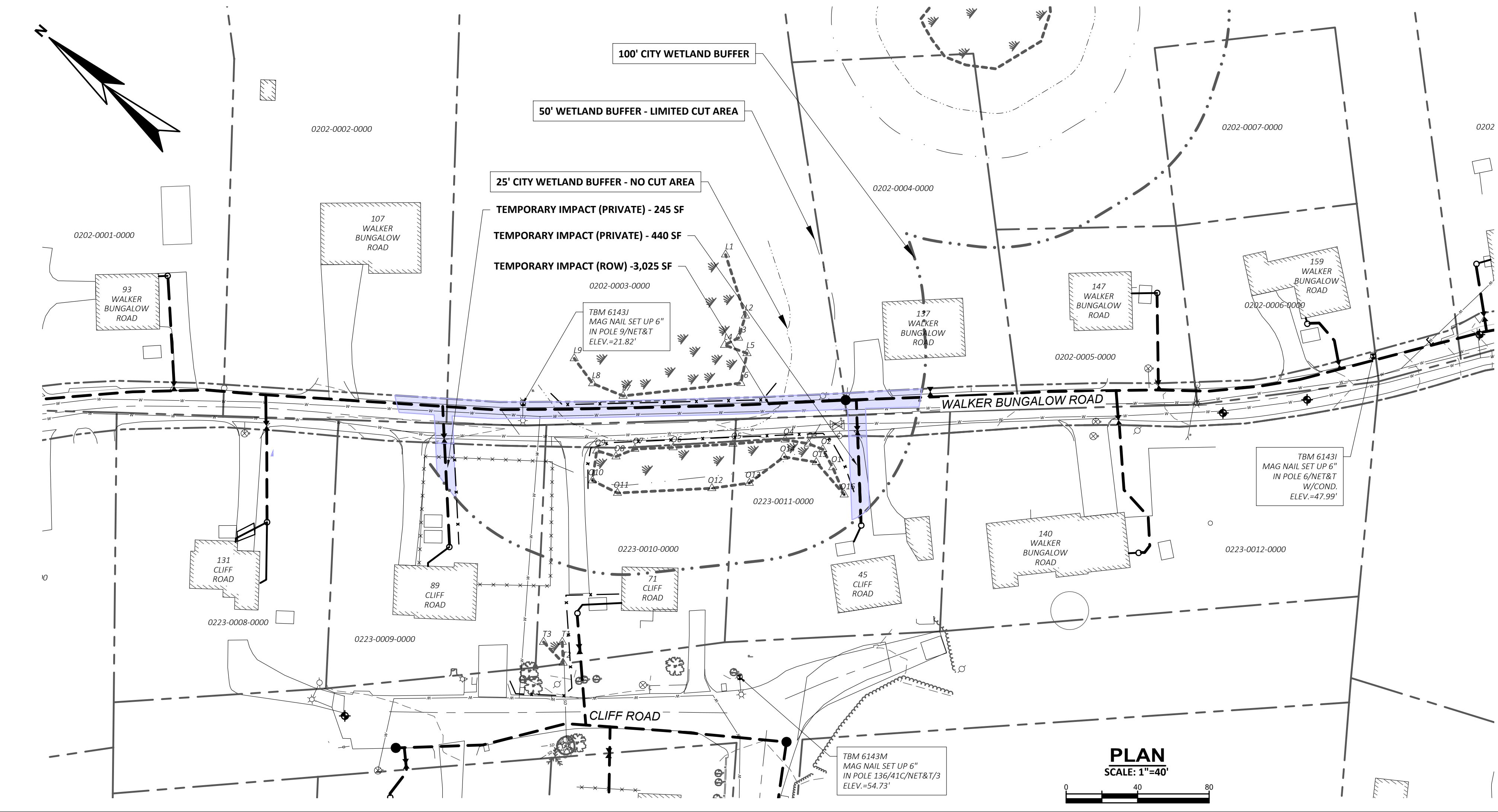
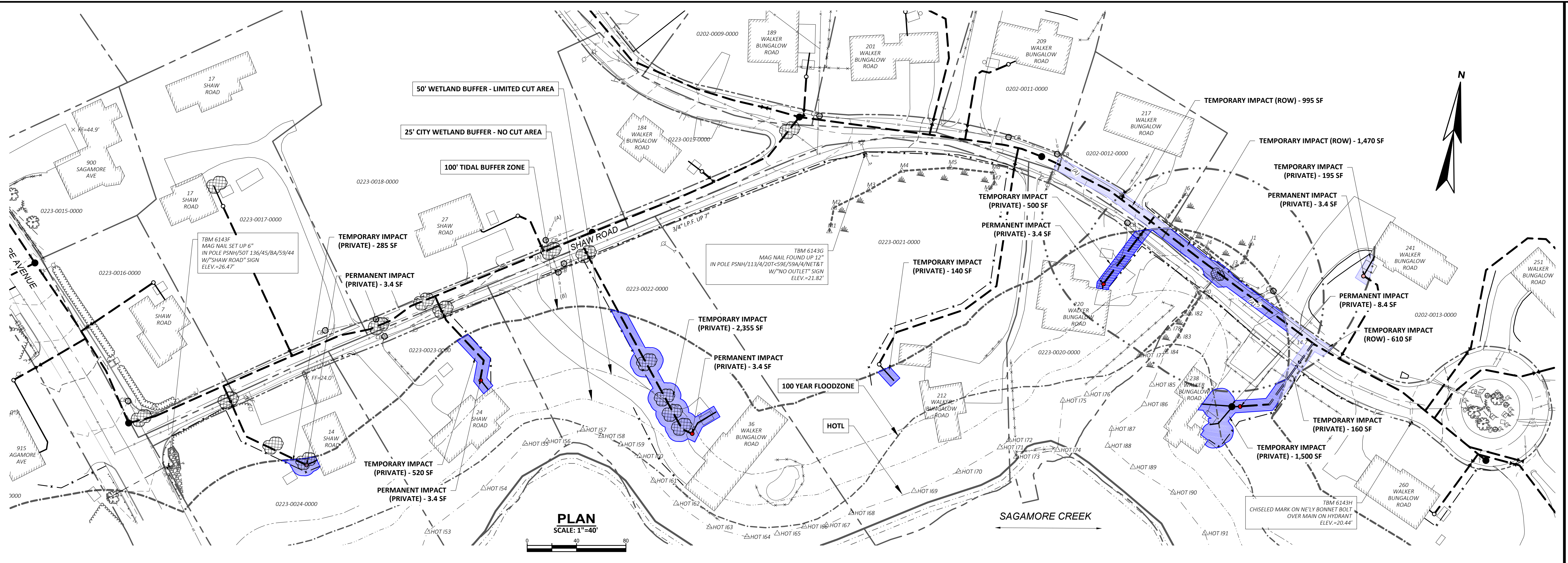
DESIGNED BY: J.SHA
 CAD CORP: L.MIC
 CDD: D.FUD
 CHECKED BY: B.ECK
 DATE: 02-21
 APPROVED BY: K.GAR
 DATE: 02-21
 PROJECT NO.: 11304C

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CITY OF PORTSMOUTH, NH
SAGAMORE AVENUE SEWER EXTENSION
PROJECT

CONSERVATION FIGURE 1

DRAWING
F-1

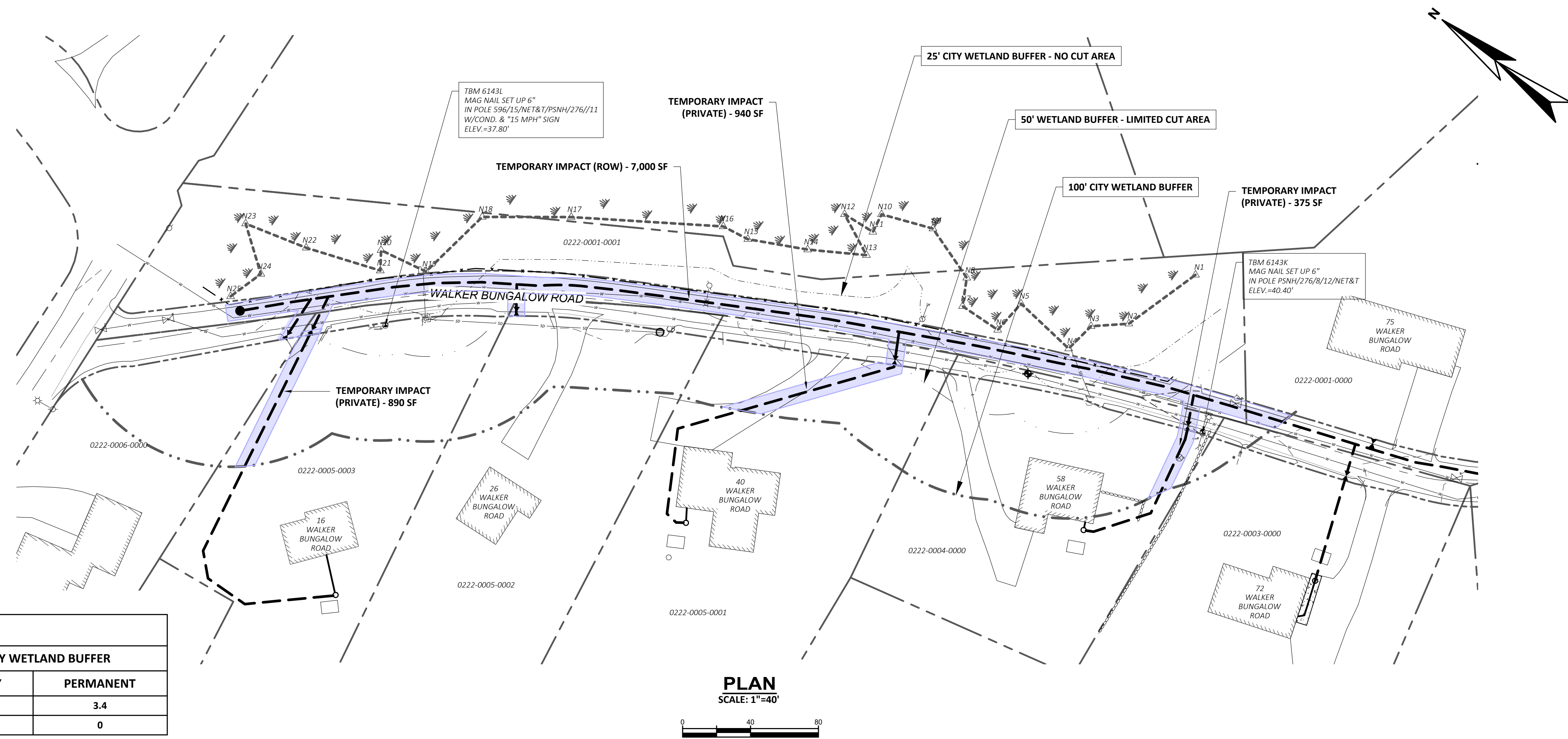


F-2 IMPACT AREA TOTAL (SF)				
	100' PREVIOUSLY DEVELOPED TIDAL BUFFER		100' CITY WETLAND BUFFER	
	TEMPORARY	PERMANENT	TEMPORARY	PERMANENT
PRIVATE PROPERTY	5300	23.6	1040	0
ROW	1470	0	4630	0

LEGEND:	
TEMPORARY IMPACT 100' CITY WETLAND BUFFER	[Light Blue Box]
PERMANENT IMPACT 100' CITY WETLAND BUFFER	[Light Red Box]
TEMPORARY IMPACT 100' HOTL BUFFER	[Light Purple Box]
PERMANENT IMPACT 100' HOTL BUFFER	[Light Red Box]
PERIMETER CONTROL	[Dashed Line]
EDGE OF WETLANDS	[Dashed Line]
100 YEAR FLOODPLAIN	[Dashed Line]
HOTL	[Dashed Line]
100' TIDAL BUFFER	[Dashed Line]
100' CITY WETLAND BUFFER	[Dashed Line]
50' CITY WETLAND BUFFER	[Dashed Line]
25' CITY WETLAND BUFFER	[Dashed Line]

NOTES:
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SUBMISSIONS/REVISIONS	APP'D	DATE	K.GAR	01-21			
NO	PERMITTING	NO	DESIGNED BY: J.SHA	CHECKED BY: B.ECK	DATE: 02-21	APPROVED BY: K.GAR	DATE: 02-21
1	A	A	CIVIL	D.FUD	02-21	K.GAR	02-21
						PROJECT NO.: 11304C	
WRIGHT-PIERCE Engineering a Better Environment 888.621.8156 www.wright-pierce.com							
CITY OF PORTSMOUTH, NH SAGAMORE AVENUE SEWER EXTENSION PROJECT CONSERVATION FIGURE 2							
DRAWING F-2							



F-3 IMPACT AREA TOTAL (SF)				
	100' PREVIOUSLY DEVELOPED TIDAL BUFFER		100' CITY WETLAND BUFFER	
	TEMPORARY	PERMANENT	TEMPORARY	PERMANENT
PRIVATE PROPERTY	2985	0	5365	3.4
ROW	0	0	7000	0

LEGEND:	
TEMPORARY IMPACT 100' CITY WETLAND BUFFER	
PERMANENT IMPACT 100' CITY WETLAND BUFFER	
TEMPORARY IMPACT 100' HOTL BUFFER	
PERMANENT IMPACT 100' HOTL BUFFER	
PERIMETER CONTROL	
EDGE OF WETLANDS	
100 YEAR FLOODPLAIN	
HOTL	
100' TIDAL BUFFER	
100' CITY WETLAND BUFFER	
50' CITY WETLAND BUFFER	
25' CITY WETLAND BUFFER	

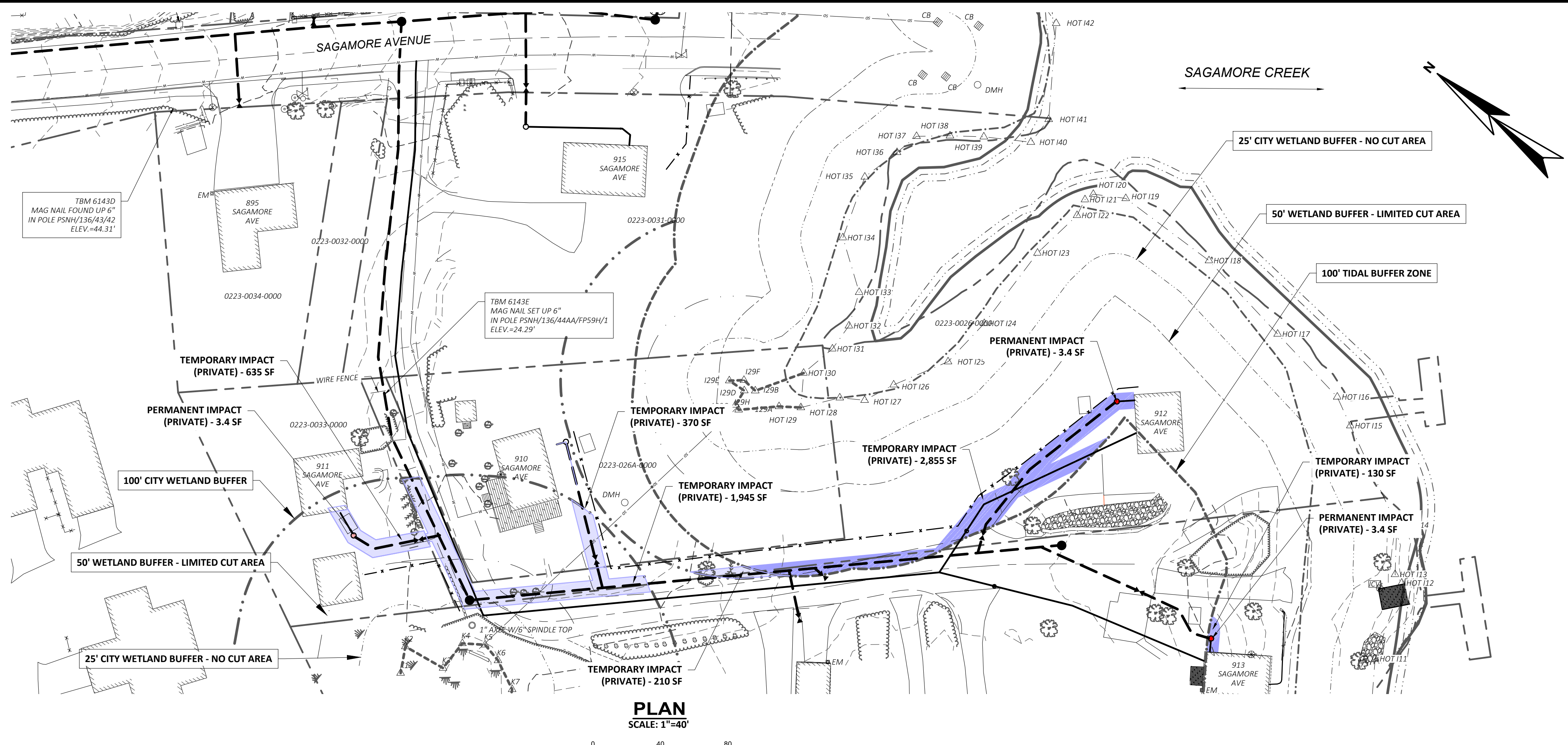
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HORIZONTAL DATUM: NEW HAMPSHIRE STATE NAD83
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NO	PERMITTING	DESIGNED BY: J.SHA	APP'D DATE
1	DESIGNED	J.SHA	03-21
2	CHECKED	D.FUD	03-21
3	APPROVED	K.GAR	03-21

NO	PERMITTING	DESIGNED BY: J.SHA	APP'D DATE
1	DESIGNED	J.SHA	03-21
2	CHECKED	D.FUD	03-21
3	APPROVED	K.GAR	03-21

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CITY OF PORTSMOUTH, NH
SAGAMORE AVENUE SEWER EXTENSION PROJECT
 CONSERVATION FIGURE 3
DRAWING
 F-3