

NONRESIDENTIAL SITE PLAN APPLICATION City of Rochester, New Hampshire

Updated

Describe proposed activity/use: Proposed to be developed into an into an automotive facility, specializing in custom aftermarket upgrades.
Proposed 625+/- driveway to be constructed off the north side of Tebbetts Road, accessing two 6,000+/-sf buildings, parking spaces, utilities, well, and septic.
Describe existing conditions/use (vacant land?): Undeveloped Land
Utility information City water? yes no _x; How far is City water from the site? On Tebbetts Road
City sewer? yes no <u>x</u> ; How far is City sewer from the site? N/A
If City water, what are the estimated total daily needs? N/A gallons per day
If City water, is it proposed for anything other than domestic purposes? yes no
If City sewer, do you plan to discharge anything other than domestic waste? yes no
Where will stormwater be discharged? Three onsite Stormwater Management Areas for Mitigation and Treatment
Building information Type of building(s): Steel Frame and Panel
Building height: 19'10" and 23'6" Finished floor elevation: 197.0
Other information # parking spaces: existing: 0 total proposed: 38; Are there pertinent covenants? No Number of cubic yards of earth being removed from the site
Number of existing employees: 4 ; number of proposed employees total: 8
Check any that are proposed: variance \underline{x} ; special exception $\underline{\hspace{1cm}}$; conditional use \underline{x}
Wetlands: Is any fill proposed? x ; area to be filled: 1025sf ; buffer impact? x

Proposed post-development disposition of site (should total 100%)				
	Square footage	% overall site		
Building footprint(s) – give for each building	11,775	0.1		
Parking and vehicle circulation	38,566	3.0		
Planted/landscaped areas (excluding drainage)	14800	1.0		
Natural/undisturbed areas (excluding wetlands)	215,700	17.3		
Wetlands	932,605 (assumed)	74.6		
Other – drainage structures, outside storage, etc.	12,840	1.0		

Updated

Page 2 (of 3 pages)

Comments

Please feel free to add any comments, additional information, or requests for waivers here:

Waiver request for parking is being requested from Section 10.A. Providing 38 spaces where 40 are required. CU for wetland and buffer impact is required. NHDES AoT and Wetlands Permits are required.

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

I(we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the <u>City of Rochester Site Plan Regulations</u> and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property	owner: Mun L	
	m /	Date: 2/18/2/
Signature of applican	t/developer:	- El
	Λ	Date: 2/18/2/
Signature of agent: _	Wd DB	
		Date: 2021-02-23

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _	Man		
		Date: _	2/18/21



February 23, 2021

Seth Creighton, AICP - Chief Planner City of Rochester Planning & Development 33 Wakefield Street Rochester, NH 03867

Tax Map 257 / Lot 66

Tebbetts Road

Non-Residential Site Plan and Conditional Use Wetland Submittal Letter

F&O Reference No. 20200646.A10

Dear Seth,

Please find enclosed materials for an Application for the Planning and Development Department for a proposed nonresidential site plan design. This project is proposing the development of a high performance/specialty mechanic/ automotive facility located upon the above referenced lot. A 625+/- driveway will be constructed off of the north side of Tebbetts Road, accessing two buildings, paved parking, with associated grading, stormwater management, and utilities. See below for detailed information regarding the development.

Submitted Plan Sets/Applications

Attached are the following submittal packets:

• Site plan set entitled "EFI Express; Site Development Drawings; Tax Map 257 Lot 66; Tebbetts Road; Rochester, New Hampshire 03867"

Lot Configuration and Information:

The existing lot is approximately 28.6±acres and currently undeveloped. Zoned General Industrial (GI) along with the abutting properties to the northwest. Properties to the south and southeast are zoned Agricultural District, and properties opposite of NH Route 16 are

Proposed Use/Site Plan:

The proposed use is the development of a high performance/specialty mechanic/ automotive facility; specializing in custom aftermarket upgrades. The driveway will access two buildings, a 5,775sf footprint service and office building with 1,300sf accessory security apartment (mezzanine style), as well as a 6,000sf vehicle and parts storage building.

The Gateway Building 50 Commercial Street Manchester, NH t 603.668.8223 800.286.2469

www.fando.com

California Connecticut

Maine

Massachusetts

Rhode Island



February 23, 2021 Tax Map 257 / Lot 66 – Site Plan and Conditional Use Applications Fuss & O'Neill Reference No. 20200646.A10 Page 2 of 6

Driveway Access

An existing access to a woods road is currently located upon the north side of Tebbetts Road. This access was reviewed for potential re-use during design, it was determined this access point is not able to be used. Safety sight distances in relation to the overpass to Route 16 require the access point to be shifted southerly along Tebbetts Road. This also benefits the grading design, upgrading the existing woods road in its current location would result in a greater wetland impact due to grading and widening impacts.

The driveway is proposed to be a 625' ± paved, 24' width, crowned, with bit curbing along both sides to direct stormwater to catch basins. Driveway configuration was laid out to minimize both wetland and wetland buffer impacts.

Parking, Loading, and Circulation:

As illustrated upon the attached Site Plans 38 paved parking spaces are required and provided, with an additional 22± internal building spaces. Parking for two RV's/Motor homes are proposed towards the back of the proposed parking lot.

The parking lot accommodates circulation emergency access for a typical 48' Fire Truck. The applicant does not expect larger vehicles than the RVs or a Fire Truck this on site, the typical largest daily transient vehicles will be FedEx and UPS delivery box trucks.

Traffic and Sight Distance

While the expected trip generation for the proposed site plan use will generate higher volumes of traffic than the current vacant property occupying the site; it is our opinion this level of traffic generation can be accommodated by the existing street network with the proposed driveway layout. The development of the existing vacant property for a proposed high performance/specialty mechanic/automotive facility use is not anticipated to have a detrimental impact on the existing Tebbetts Road roadway network.

Town regulations require 250' sight distance for the 35mph Tebbetts Road. The proposed driveway location is specifically designed to provide a minimum of 400' sight distance left, and a minimum of 300' sight distance right, exceeding the requirements.



February 23, 2021 Tax Map 257 / Lot 66 - Site Plan and Conditional Use Applications Fuss & O'Neill Reference No. 20200646.A10 Page 3 of 6

Utilities:

Water - The buildings will be serviced by a proposed well, discussions with the Fire Department is required to determine if a fire suppression system is required for either or both of the buildings.

Septic – a private septic is proposed to connect to both buildings, as well as handle connection of the RVs.

Cable, Electric, Telephone - a drop service is proposed at the existing utility pole on Tebbetts Road.

Grading & Stormwater/Drainage:

Site stormwater management is proposed to meet both City and NHDES Alteration of Terrain drainage requirements. The design mitigates the peak flows to and treats the stormwater to meet Town and NHDES AoT requirements to match/reduce flows in the 2-Year, 10-Year, 25-Year, and 50-Year storm events. The curbed driveway and closed drainage systems will collect stormwater via catch basins and drain man holes, and direct the stormwater to one of three Stormwater Management Areas (SMAs). Two infiltration basins and one hybrid bioretention with internal reservoir are proposed on site.

SMA-100 is the smaller of the two infiltration basins, located along the driveway, this basin is proposed to treat driveway stormwater.

<u>SMA-200</u> is the larger of the two infiltration basins, located along east of building #2, this basin is proposed to treat building and parking lot stormwater.

<u>SMA-300</u> is the hybrid bioretention pond with internal storage, located along the driveway, this basin is proposed to treat driveway stormwater.

Buildings

Two buildings are proposed for the site with the following information:

- Building #2 is proposed to be service, office, and security apartment
 - o Minimum 14' height, mono-pitched roof
 - o 7,075sf Total building area
 - 5,775sf (35'x165') footprint
 - 1,300sf security/accessory apartment above office
 - Seven overhead doors and one person door



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- Building #2 is proposed to be vehicle and part storage.
 - o Minimum 16' height, double-pitched roof
 - o Max 23'6" height at gable
 - o 6,000sf (60'x100')
 - o Two overhead doors and one person door

Landscaping

As the majority of the site is currently wooded, the site was designed to minimize ground disturbance and unnecessary tree clearing. Additional trees are not proposed, any disturbed areas will be loamed and seeded. The buildings are set back 625'± from Tebbetts Road, and will be adequately tucked away behind the existing treeline that is proposed to be maintained. A waiver is being requested for a landscaping plan.

Lighting

Lighting was designed to illuminate the parking lot with building mounted wall packs for security/safety, as to not create a "box store parking lot" with unnecessary lights.

Trash/Refuse

A double dumpster pad with screened enclosure is proposed.

Signage

Site signage locations are currently proposed upon the attached plan sets, unfortunately the final signage packages are unknown at this time. All proposed signage is to be designed by others and submitted for proper City approval, prior to installation. As illustrated upon the attached Site Plans, a proposed monument pylon sign is proposed along the frontage of Tebbetts Road, to the north of the new site driveway entrance. Building mounted signage is also expected to be proposed and potentially internal "wayfinding" signs may be installed to simplify transient confusion as well.

Zoning

Per <u>Article</u> 12 of the City of Rochester Zoning Ordinance, the onsite wetlands and wetland buffers are categorized as the Conservation Overlay District. <u>Section 275-12.9.A(1)</u> states that a Conditional Use Approval may be granted by the Planning Board.



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The proposed wetland and wetland buffer impact is for the construction of the 24' wide, 625' ± long commercial driveway, with bypass culvert. The existing woods road access to the property is unable to be maintained or upgraded in a manner to benefit the site. The existing access point along Tebbetts Road location does not allow for adequate sight distance, and relocation to the south is required to achieve proper sight distance. The current layout of the location of the woods road, would create a larger wetland impact, due to widening and grading.

Wetlands

An NHDES Wetlands Permit is required for a wetland impact associated with the driveway access. Total impact is 1,025±sf, which is under the 10,000sf impact threshold to require payment into the Wetland ARM fund. A proposed 53', 30" CMP culvert, with FES and plunge pool is proposed to continue to allow flow of water under the proposed driveway.

Gove Environmental Services performed the wetland and soils delineation, and the Wetlands permit is being submitted concurrently with this City Submittal.

We understand this wetland impact will trigger Conservation Commission review, and are willing to provide any additional information to the CC for their input.

NHDES Alteration of Terrain:

We have designed the stormwater to meet NHDES Alteration of Terrain Permit requirements. Submittal to the NHDES AoT is expected to occur concurrently with City PB approval, and all comments/feedback will be coordinated into the plan sets.

Permits/Approvals Status

- City of Rochester Site Plan Pending
 - o Section 5 Landscaping Waiver Pending
 - o Section 7(F) Signage Waiver Pending
 - o Section 10(A) Parking Waiver Pending
- City of Rochester Conditional Use Permit Pending
- City of Rochester Conservation Commission Pending
- NHDES Alteration of Terrain Pending, Submitting Concurrently as City
- NHDES Wetland Permit Pending, Submitting Concurrently as City
- NHDES Septic System Permit Pending, to be submitted after City approval

Application for Conditional Use Conditional Uses and Buffer Reductions

Section 42.19 - <u>Conservation Overlay District</u> City of Rochester, NH

Date: 2020-02-23 **Property information** Tax map #: 257 ; Lot #('s): 66 ; Zoning district: GI- General Industrial Property address/location: Tebbetts Road Name of project (if applicable): EFI Express **Property owner** Name (include name of individual): EFI Express, LLC (C/O Marc Swanson) Mailing address: 61 Thompson Mill Road, Lee NH 03861 Telephone #: 603-732-9077 Fax support@efiexpress.com **Applicant/developer** (if different from property owner) Name (include name of individual): Same Mailing address: _____ Telephone #: _____ Fax #: Engineer/designer Name (include name of individual): Fuss & O'Neill c/o Brian Pratt and A. Cory DuBois Mailing address: The Gateway Building, 50 Commercial Street, Manchester, NH 03101 ____ Fax #: ____ Telephone #: 603-668-8223 **Proposed Project** Please describe the proposed project: Property is proposed to be developed into an into an automotive facility specializing in custom aftermarket upgrades. A 625+/- driveway will be constructed off of the north side of Tebbetts Road, accessing two 6,000+/-sf buildings, parking spaces, utilities, well, and septic. Driveway is designed to impact a minimal amount of wetland and buffer. NHDES Wetland and AoT required. Please describe the existing conditions: Current undeveloped, mature woods, pockets of wetlands delineated by Gove Environmental Services \\roch-fileshare\plan\$\Forms\Applications\Conditional Use-Wetland.doc

[revised 4/2/2015]

(continued <u>Conditional Use</u> application Tax Map: <u>257</u> Lot: <u>66</u>)
*Please fill in one of the next two sections – for either <u>Conditional Uses</u> or <u>Buffer Reductions</u> *
Conditional Uses
For <u>Conditional Uses</u> only, justify the proposal in terms of each of the criteria below (in accordance with subsection 42.19 (i) (1) (A)). All four criteria must be satisfied.
(i) The proposed construction is essential to the productive use of land not in the COD.
In order to meet typical driveway design standards, and due to the existing wetland pockets located onsite,
accessing the upland platform is unachievable without wetland and buffer impact. All impervious pavement stormwater
runoff will be collected and treated and mitigated per NHDES AoT regulations.
(ii) Design and construction methods will be such as to minimize impact upon the wetlands and will include restoration of the site consistent with the permitted use.
The driveway is currently designed to match existing grades as best possible, while "weaving" through the site
to minimize wetland and buffer impact.
(iii) There is no feasible alternative route on land controlled by the applicant that does not cross the CO District nor has less detrimental impact on the wetlands. Nothing in this Section shall limit the applicant from exploring alternatives with abutting property owners.
The proposed route and grading was determined to be the path of minimal impact, creating a safe driveway
location taking into account grades and sight distance.
(iv) Economic advantage is not the sole reason for the proposed location of work.
Unfortunately in order to access the buildable upland area, the portions of the COD are required to be impacted.
Based on the configuration, constructing the buildings and driveway in other on-site locations is not a valid option.
Other on site construction location would impact more wetland and wetland buffer.
(Buffer Reductions on next page)

2

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

I(we) hereby submit this Conditional Use application to the City of Rochester Conservation Commission and Planning Board pursuant to the <u>City of Rochester Zoning Ordinance</u> and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

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Signature of property owner:	lone b		
		Date:	2/18/21
Signature of applicant/developer:	Same as C	Owner	
	1	Date:	7/18/7
Signature of agent:	JOB B		
		Date:	2020-02-23
Authorization to enter subject I hereby authorize members of t Board, and other pertinent City de the purpose of evaluating thi inspections. This authorization legitimately involved in evaluating. It is understood that these indi diligence when entering the prop Planning Board application has be Signature of property owner:	the Rochester Conse- partments, boards and application included applies specifically, reviewing, or inspect viduals must use all perty. (It is not necessary)	d agen ling pe y to t ting this	cies to enter my property for erforming any appropriat hose particular individual s specific application/project onable care, courtesy, an
Oignature of property owner.		Date:	2//8/2/

4

**	*****************	*********	*******
С	onservation Commission Recomme	ndation:	[office use only]
Na	ame of project	Case #	
Re	ecommendation:		
	Approval		
	Approval with conditions		
	Denial		
Co	omments/recommended conditions:		
_			
_	·		
Co	nservation Commission	date	
Pla	anning Department	date	
		4	



Application for Waiver from Regulation

City of Rochester, New Hampshire

Project name EFI Express
Case #pending
Subdivision: Lot line revision: Site Plan:_X Minor Site Plan:
Section and subsection of the <u>Site Plan Regulations</u> from which the waiver is
requested (including identifying number, title, and description of provision): Section 5 - Landscaping. Regulations require landscaping plan to be created
OR - Article, section, and subsection of the <u>Site Plan Regulations</u> from which the waiver is requested (including identifying number, title, and description of provision):
The current let is entirely used at a salub. It is
Reason/justification(s) for waiver request The current lot is entirely wooded, and the building envelope
will be behind a visual barrier of natural growth. All disturbed areas are proposed to be loamed and seeded. Project is proposing to minimize land/tree disturbance and maintain as much existing growth as possible.
Name of applicant or agent filling out this formA. Cory DuBois
Applicant? Agent?X Today's date2021-02-18
Office use below
Waiver approved: Waiver denied:
Comments:
Signature: Date:

Waiver approved:	Waiver denied:	_	
Comments:			
Signature:		Date:	
N:\Forms\Applications\Waiver request.doc			



Application for Waiver from Regulation

City of Rochester, New Hampshire

Project nameEFI Express
Case # pending
Subdivision: Lot line revision: Site Plan:_X Minor Site Plan:
Section and subsection of the <u>Site Plan Regulations</u> from which the waiver is requested (including identifying number, title, and description of provision):
Section 7(F) - Signage Design. Regulations require submittal of signage package for review.
Signage is not designed, applicant will review with City prior to permit issuance.
OR - Article, section, and subsection of the <u>Site Plan Regulations</u> from which the waiver is requested (including identifying number, title, and description of provision):
Reason/justification(s) for waiver request Currently the applicant does not have signage designed,
due to the current project timeline and status. Applicant is aware review of all signage is a prerequisite
prior to permit being issued. Applicant will coordinate with City as project advances.
Name of applicant or agent filling out this formA. Cory DuBois
Applicant? Agent? X Today's date2021-02-18
Office use below
Waiver approved: Waiver denied:
Comments:
Signature: Date:

N:\Forms\Applications\Waiver request.doc



Application for Waiver from Regulation

City of Rochester, New Hampshire

Project nameEFI Express
Case #pending
Subdivision: Lot line revision: Site Plan:_X Minor Site Plan:
Section and subsection of the <u>Site Plan Regulations</u> from which the waiver is requested (including identifying number, title, and description of provision):
Section 10(A) - Parking. Regulations require 40 surface parking spaces, providing 38 surface a
22+/- internal parking spaces
OR - Article, section, and subsection of the <u>Site Plan Regulations</u> from which the waiver is requested (including identifying number, title, and description of provision):
Reason/justification(s) for waiver request Proposed parking is currently more than operations
requires, based on current business model and customers. Attempting to reduce the impervious
pavement where possible.
Name of applicant or agent filling out this formA. Cory DuBois
Applicant? Agent?
Office use below
Waiver approved: Waiver denied:
Comments:
Signature: Date:

N:\Forms\Applications\Waiver request.doc

EFI EXPRESS

SITE DEVELOPMENT DRAWINGS

TAX MAP 257 LOT 66 · TEBBETTS ROAD ROCHESTER · NEW HAMPSHIRE · 03867 FEBRUARY 23, 2021

PREPARED FOR EFI EXPRESS, LLC

C/O MARC SWANSON 61 THOMPSON MILL ROAD LEE, NH 03861

SHEET INDEX

SHEET NO.	SHEET NAME	REVISION DATE
GI-001	COVER SHEET	REVISION DATE
G1-101 - GI-102	GENERAL NOTES	
BD-101	BOUNDARY PLAN	
EX-101	LOT OVERVIEW EXISTING CONDITIONS PLAN	
EX-102	SITE PAD EXISTING CONDITIONS PLAN	
CP-101	SITE PAD DEMOLITION PLAN	
CS-101	SITE PAD SITE PLAN	
CT-101	SITE PAD TRAFFIC - CIRCULATION PLAN	
CT-102	SITE PAD TRAFFIC DRIVEWAY SIGHT-DISTANCE PLAN	
CG-101	SITE PAD GRADING, DRAINAGE, AND EROSION CONTROL	
CG-102	SITE PAD WETLAND IMPACT PLAN	
CU-101	SITE PAD UTILITY PLAN	
CU-102	SITE PAD UTILITY LIGHTING PLAN	
CU-103	SITE PAD UTILITY SEPTIC PLAN	
CU-104	SITE PAD UTILITY SEPTIC DETAILS	
LP-101	SITE PAD LANDSCAPE PLAN	
LP-102	SITE PAD LANDSCAPE DETAILS	
CD-501	CIVIL DETAILS - PAVEMENT & SIDEWALK	
CD-502	CIVIL DETAILS - SIGNAGE & PAVEMENT MARKINGS	
CD-503	CIVIL DETAILS - ELECTRIC AND LIGHTING	
CD-504	CIVIL DETAILS - WATER AND SEWER	
CD-505	CIVIL DETAILS - STORMWATER	
CD-506	CIVIL DETAILS - STORMWATER	
CD-507	CIVIL DETAILS - STORMWATER & TESTPIT DATA	
CD-508	CIVIL DETAILS - EROSION CONTROL	
CD-509	CIVIL DETAILS - EROSION CONTROL	
	ARCHITECTURAL PLANS	
	(11"X17" - BY OTHERS, UNDER SEPARATE COVER)	

PREPARED BY

FUSS & O'NEILL

MANCHESTER, NEW HAMPSHIRE 03101 603.668.8223

50 COMMERCIAL STREET

www.fando.com

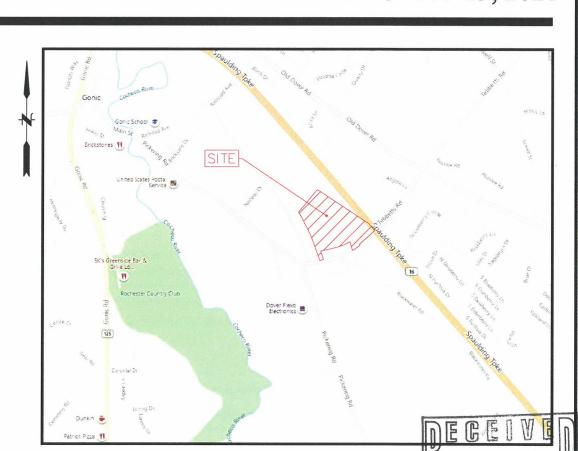




OF ROCHESTER, NH				
SIGNATURE	DATE			
CHAIR				

THE SIGNATURE OF THREE (3) OR MORE OF THE PLANNING BOARD MEMBERS INDICATES APPROVAL OF THIS PLAN

CITY DEPARTM	MENT REVIEWS
SIGNATURE	DATE
ROCHESTER POLICE DEPARTMENT	
ROCHESTER FOLICE DEL ARTME	NI
ROCHESTER POLICE DEPARTME	
	NT



LOCATION MAP

SCALE: 1" = 1000'

PROJ. No.: 20200646.A10

GI-001

REQUIRED APPROVALS	PERMIT #	DATE APPROVED	EXPIRATION DATE
PLANNING BOARD			E
SITE PLAN	PENDING	PENDING	
WAIVER			
SECTION 5 - ALLOW OMISSION OF LANDSCAPING PLAN	PENDING	PENDING	-
SECTION 7(F) - SIGNAGE TO BE REVIEWED PRIOR TO INSTALL	PENDING	PENDING	-
SECTION 10(A) - ALLOW 38 SPACES WHERE 40 ARE REQUIRED	PENDING	PENDING	
DPW			
STORMWATER	PENDING	PENDING	
DRIVEWAY	PENDING	PENDING	
ZONING BOARD			
VARIANCES			
275-23.2.A(1)(k) - 1,300SF ACCESSORY/SECURITY APARTMENT	PENDING	PENDING	-
800SF ALLOWED BY ZONING			
NHDES			
ALTERATION OF TERRAIN (AOT)	PENDING	PENDING	
WETLAND IMPACT PERMIT	PENDING	PENDING	-
SEWAGE DISPOSAL SYSTEM	PENDING	PENDING	-

LEGEND

- PROPERTY LINE/RIGHT-OF-WAY

---- CENTERLINE

- -- - EASEMENT

10+00 BASELINE

--- -- ZONING LINE

--- LIMIT OF DISTURBANCE

--- STATE HIGHWAY BASELINE

---- BUILDING SETBACK

ABBREVIATIONS

APRX.

CONC.

ELEV

EXIST

APPROXIMATE

BOTTOM OF WALL

CAPE CODE BERM

CONCRETE CURB REM REMOVE

RAD

TOS TW

BITUMINOUS

CONCRETE

ELEVATION

GRANITE CURB

NOT TO SCALE

POLYETHYLENE PIPE

FRAME AND GRATE

FRAME AND COVER

POLYETHYLENE PIPE

DOUBLE CATCH BASIN

CATCH BASIN INV
CORRUGATED METAL PIPE PVC

EXISTING

MAXIMUM

CORRUGATED

PCC PRE CAST

CONCRETE CURB

REMOVE AND DISPOSI

INVERT ELEVATION

CHLORIDE PIPE

CONCRETE PIPE ROOF DRAIN

SEWER MANHOLE

VALVE AND BOX

STORM DRAINAGE PIPE

SANITARY SEWER PIPE

OVERHEAD WIRES

SANITARY MANHOLE

STORM MANHOLF

CATCH BASIN

WATER VALVE

FIRE HYDRANT

UTILITY POLE

GAS GATE

FLARED END

DECIDUOUS TREE

ROLLARO /POST

ELECTRIC MANHOLE

TELEPHONE MANHOLE

DOUBLE CATCHBASIN

WATER MAIN

POLYVINYL

TSV TAPPING SLEEVE.

UP UTILITY POLE

REMOVE AND RESET

PROPOSED

R&S REMOVE AND STACK

TOP OF WALL

VGC VERTICAL GRANITE

TYPICAL

CURB

RCP

LEGEND (CONT.)

(S)

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(E)

(1)

×

⊹

OGG

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TOP OF SLOPE

"PARTIAL BOUNDARY; LAND OF EFI EXPRESS;TAX MAP 0257-0066, TEBBETTS ROAD ROCHESTER, NEW HAMPSHIRE, STRAFFORD COUNTY" CREATED BY THIS OFFICE, ON RECORD AT THE CITY OF ROCHESTER PLANNING DEPARTMENT. INCLUDED IN THIS PLAN SET.

REGULATORY REQUIREMENTS

REFERENCE PLANS AND NOTES:

- PROVIDE TRAFFIC SIGNAGE AND PAVEMENT MARKINGS IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 CONTRACTOR TO COORDINATE AND CREATE A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL WITH CITY
- AND/OR NHDOT PRIOR TO START OF CONSTRUCTION, IF REQUIRED.

 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS, AND CITY OF ROCHESTER REQUIREMENTS, POLICIES, AND SPECIFICATIONS.

EROSION AND SEDIMENT CONTROL

- INSTALL EROSION CONTROL MEASURES PRIOR TO STARTING ANY WORK ON THE SITE.
- IMPLEMENT ALL NECESSARY MEASURES REQUIRED TO CONTROL STORMWATER RUNOFF, DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE. PERFORM CORRECTIVE ACTION AS NEEDED FOR EROSION CLEANUP AND REPAIRS TO OFF SITE AREAS, IF ANY, AT NO COST TO OWNER.
 INSPECT AND MAINTAIN EROSION CONTROL MESSURES PER TYPICAL STANDARDS. DISPOSE OF SEDIMENT IN AN UPLAND AREA. DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- PERFORM CONSTRUCTION SEQUENCING IN SUCH A MANNER TO CONTROL EROSION AND TO MINIMIZE THE TIME
- THAT EARTH MATERIALS ARE EXPOSED BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED.

 UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAIN

NHDES INVASIVE SPECIES NOTES

- 1. IF INVASIVE SPECIES ARE ENCOUNTERED ON SITE AND SHOULD BE REMOVED ACCORDING TO NHDES
- THE CONTRACTOR SHALL TAKE STEPS TO PREVENT THE SPREAD OF INVASIVE PLANT, INSECT, AND FUNGAL SPECIES BY MEETING THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES. HTTP://GENCOURT.STATE.NH.US/RULES/STATE_AGENCIES/AGR3800.HTML

- THIS PROJECT IS ONE OF NUMEROUS TOTAL PROJECTS UPON THE SUBJECT PROPERTY, WHICH IN TOTAL DISTURBS 110,000±SF 2.5± AC) OF LAND WHICH EXCEEDS THE NPDES THRESHOLD AMOUNT OF 43,560 SF (1 AC). THEREFORE, THE PROJECT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT NPDES PERMIT.

 2. A COPY OF THE NOI AND SWPPP SHALL BE PROVIDED TO THE CITY PLANNING DEPT. AND/OR DPW.

NHDES AOT NOTES:

- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS.
- A CONDITION OF THE ALTERATION OF TERRAIN PERMIT ISSUED, REQUIRES ENVIRONMENTAL MONITORING TO OCCUR. IT SHALL BE THE OWNER AND/OR CONTRACTOR'S RESPONSIBILITY TO ACQUIRE NIDES APPROVED ENVIRONMENTAL MONITORING DURING CONSTRUCTION, FOR WEEKLY MONITORING AND REPORTING. ENV-WQ REQUIRES THAT THE PERMIT HOLDER AND A QUALIFIED ENGINEER MUST SUBMIT A CERTIFICATION
- INDICATING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, OR THAT DEVIATIONS WERE MADE THAT DID NOT REQUIRE AN AMENDED PERMIT OR NEW
- POST CONSTRUCTION, THE PROPERTY OWNER/OPERATOR SHALL SHALL BE RESPONSIBLE FOR MAINTAINING ALL DRAINAGE AND STORMWATER PRACTICES. REFER TO THE ALTERATION OF TERRAIN/DRAINAGE CALCULATION
- DRAINAGE AND STORMWATER PRACTICES. REFER TO THE ALTERATION OF TERRAIN/URAINAGE CALCULATIONS FOR THE OPERATION AND MAINTENANCE MANUAL.

 SALT SHALL BE APPLIED BY A GREEN SNOW PRO CERTIFIED CONTRACTOR. REFER TO THE INSPECTION AND MAINTENANCE MANUAL FOR THE WINTER MAINTENANCE AND SALT MINIMIZATION PLAN WITH ASSOCIATED INFORMATION
- THIS PROJECT DOES NOT MEET THE CURRENT DEFINITION OF A "HIGH LOAD AREA" PER ENV-WQ 1502.30:

 THERE WILL BE NO EXPOSURE OF REGULATED SUBSTANCES TO PRECIPITATION OR RUNOFF AND NO RELEASE OF REGULATED SUBSTANCES FROM ANY PORTION OF THE SITE:
- ANY LAND USE OR ACTIVITY IN WHICH REGULATED SUBSTANCES ARE EXPOSED TO RAINFALL OR RUNOFF WITH THE EXCEPTION OF AREAS WHERE THE ONLY REGULATED SUBSTANCE EXPOSED TO RAINFALL OR RUNOFF IS ROAD SALT THAT HAS BEEN APPLIED FOR DEICING OF PAVEMENT ON THE SITE; THERE SHALL BE NO VEHICLE MAINTENANCE OR RELATED OUTDOOR ACTIVITIES THAT INVOLVE THE TRANSFER, STORAGE
- OF REGULATED OR HAZARDOUS SUBSTANCES INCLUDING THE USE OF PETROLEUM. COOLANT OR OTHER AUTO PRODUCTS/WASTES OUTSIDE THE BUILDING ENVELOPE OR A SOURCE PROTECTION PLAN FROM NHOES WILL BE REQUIRED. NO FLOOR DRAINS ARE PERMITTED IN NH WHEN A REGULATED CONTAMINANT OR REGULATED SUBSTANCE, AS DEFINED UNDER NHOES REGULATIONS, IS ALLOWED TO BE DISCHARGED TO THE GROUND. COLLECTION AND CONTAINMENT TO A HOLDING TANK IS PERMITTED AND REQUIRES CITY/STATE PERMITS PRIOR TO INSTALL.
- BULK REGULATED PRODUCTS WILL NOT EXCEED 1,320 GALLONS ONSITE, TO MAINTAIN AN AMOUNT UNDER THE ABOVE STORAGE TANK THRESHOLD. THE USE OF 5 GALLON CONTAINERS WITH POTENTIALLY 55 GALLON DRUMS ARE PROPOSED
- 7. REFER TO THE AOT PERMIT FOR ADDITIONAL CONDITIONS OF APPROVAL, APPROVAL NUMBER IS LISTED UPON

STORMWATER BASIN MAINTENANCE NOTES:

- 1. EMBANKMENT THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE.

 VEGETATION - THE VEGETATED AREAS OF THE STRUCTURE SHOULD BE PROTECTED FROM DAMAGE BY FIRE,
 GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS
- DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY
- 3. SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED.

 4. OUTLETS PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION
- OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLE SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY
- 6. SAFETY INSPECTIONS ALL PERMANENT IMPOUNDMENTS SHOULD BE INSPECTED BY A QUALIFIED
- REFER TO THE INSPECTION AND MAINTENANCE MANUAL, LOCATED WITHIN THE ALTERATION OF TERRAIN STORMWATER MANAGEMENT REPORT.

DRAINAGE MAINTENANCE NOTES PIPES

- S
 STEP 1 CLEAN OUT PIPE USING THE JETVAC PROCESS
 A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" OR MORE IS PREFERRED
 B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 2 REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS. STEP 3 INSPECT AND CLEAN BASINS AND MANHOLES

- CATCH BASINS & PIPES

 a. INSPECT CATCH BASINS EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH
- b. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

GENERAL PLAN NOTES:

- 1. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION OR LOCATION. COORDINATE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

 DO NOT RELY SOLELY ON ELECTRONIC VERSIONS OF DRAWINGS, SPECIFICATIONS, AND DATA FILES THAT ARE
- PROVIDED BY THE ENGINEER. FIELD VERIFY LOCATION OF PROJECT FEATURES.
- STITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF ROCHESTER. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED
 - FOR MORE INFORMATION ABOUT THIS SITE PLAN CONTACT DESIGN ENGINEERS, CONTACT INFORMATION IS ON

DEMOLITION PLAN NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE AREAS AND LOCATIONS OF DEMOLITION ON THE SUBJECT PARCEL.

 2. REMOVE AND DISPOSE OF EXISTING STUMPS AND UNSUITABLE MATERIAL IN ACCORDANCE WITH APPLICABLE
- NHDES STANDARDS.
- NHDES STANDARDS.

 REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND OTHER DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.

 NO CHANGES ARE PROPOSED OUTSIDE OF THE VISIBLE CONTENT PRESENTED ON THIS PLAN. SEE EXISTING
- CONDITIONS PLAN SHEET FOR AN OVERVIEW OF THE PROJECT AREA.
- ANY BUILDING TO BE REMOVED FROM THE SITE MUST HAVE A DEMOLITION PERMIT. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION

PROPOSED DRAINAGE SCHEDULE

		DRAIN	AGE PIF	E TABL	E		
FROM	INV OUT	то	INV IN	L (FT)	SLOPE	DIA.	TYPE
CB11	191.60		191.50	22	0.005	12"	HDPE
CB12	191.80	CB11	191.70	22	0.005	12"	HDPE
CB13	189.40	CB14	189.30	22	0.005	12"	HDPE
CB14	189.20	FES15	189.00	30	0.007	12"	HDPI
CB21	192.00	CB23	191.50	101	0.005	12"	HDP
CB22	192.00	CB23	191.50	99	0.005	12"	HDPE
CB23	191.00	CB26	190.45	63	0.009	18"	HDPE
CB25	191.10	CB26	190.95	28	0.005	12"	HDPE
CB26	190.35		188.35	60	0.034	18"	HDP
FES32	190.20	FES33	186.00	53	0.079	30*	СМР
0530	190.80		190.60	29	0.007	12"	HDPE

DD	AINA	CE	SCI	4ED		=	NO	re
DIV	71130	<u>u</u>	301	ILD	OL	_	140	

<u>es:</u> Imum 3' over over all drainage lines. 2. REFER TO DETAILS SHEET FOR STRUCTURE AND PIPE RUN DETAILS

RIM	DIA
196.8	4
196.8	4
194.3	4
194.3	4
196.0	4
196.0	4
196.0	4
195.1	4
195.3	4
190.0	N/A
191.5	N/A
190.0	N/A
190.6	N/A
190.2	N/A
186.0	N/A
192.0	4
	196.8 194.3 194.3 194.3 196.0 196.0 195.1 195.3 190.0 191.5 190.0 190.6 190.2

DRAINAGE

STRUCTURE

PROPOSED SEWER SCHEDULE PROPOSED STRUCTURES:

BUILDING#1 INV OUT (6" PVC) = 191 15 L =70', 6" PVC, S = 0.020 BUILDING#2

FF=197.0 INV. OUT (6" PVC) = 191.15 L =95', 6" PVC, S = 0.027

INV. OUT (6" PVC) = 191.15 L =23', 6" PVC, S = 0.083 SEPTIC TANK - 1,500 GALLON RIM = 197.0± INV. IN (6" PVC) = 188.25 (ALL INVERTS)

- SEWER SCHEDULE NOTES:

 1. SEE DETAIL SHEET CU-103 FOR ADDITIONAL SYSTEM DESIGN INFORMATION 2. MINIMUM 6.0' COVER OVER ALL SEWER LINES AND SEWER SERVICES.

 3. IN AREAS WITH LESS THAN 6' COVER, INSTALL 2" THICK X 5" WIDE BLUEBOARD INSULATION ABOVE SEWER LINE.

 4. REFER TO DETAILS SHEET FOR STRUCTURE AND PIPE RUN DETAILS.

 5. INSTALL CLEANOUTS AT ALL BENDS AND A MAXIMUM OF EVERY 75'.

PROPOSED SEWER FLOWS
PER TABLE 1008-1 OF ENV-WQ 1000
FACTORIES/WAREHOUSE (10 GPD PER EMPLOYEE)
TRANSIENTS (SGPD/TRANSIENT)
2BR ACCESSORY/SECURITY APARTMENT
RECREATIONAL CAMPGROUND WITH 3-WAY HOOKUP (60GPD/SITE) = TWO (2) SITES

TOTAL ESTIMATE FLOW = 550 GALLONS PER DAY
DESIGN FOR MINIMUM OF 600 GALLONS PER DAY

PLANS UNDER DESIGN

DEVELOPMENT. ISSUEL FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

HORZ.: VERT.:	HORZ.:	DATUM:	VERT.:	HORZ.:	SCALE:	VERT::
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GENERAL NOTES PLAN TAX MAP 257 I 0 TEBBETTS F

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

GI-101

OWNER OF RECORD IS EFI EXPRESS, LLC. WITH A LEGAL ADDRESS OF 61 THOMPSON MILL ROAD, LEE, NH 03861. PROPERTY LINE/BOUNDARY LINE INFORMATION IS BASED ON REFERENCE PLAN 1. ACTUAL FIELD SURVEY WAS

PERFORMED ON THE GROUND BY THIS OFFICE BETWEEN OCTOBER AND NOVEMBER OF 2020.
HORIZONTAL DATUM IS NH STATE GRID/CITY OF ROCHESTER GIS NAD83/92. VERTICAL DATUM IS NAVD88

EXISTING CONDITIONS AND TOPOGRAPHY IS BASED ON A COMBINATION OF ACTUAL GROUND SURVEY FROM REFERENCE PLAN #1 COLLECTED BETWEEN OCTOBER AND NOVEMBER OF 2020. AFRIAL SURVEY, CITY OF ROCHESTER GIS MAPPING, AND ONLINE NOAA CONTOURS OFFSITE INFORMATION OF RESIDENCES WAS SUPPLEMENTED WITH AXIS GIS APPRAISAL AND CITY OF ROCHESTER GIS INFORMATION. F&O DID NOT PERFORM FULL GROUND SURVEY. NO REPRESENTATION OR WARRANTY IS MADE AS TO NON-SURVEY FEATURES OF REFERENCE BY F&O.

6. PER THE CURRENT CITY OF ROCHESTER ZONING ORDINANCE; THE SUBJECT PROPERTY IS ZONED GENERAL INDUSTRIAL (GI) DISTRICT ALONG WITH ABUTTING PROPERTIES TO THE NORTHWEST. PROPERTIES TO THE SOUTH AND SOUTHEAST ARE ZONED AGRICULTURAL DISTRICT, AND PROPERTIES OPPOSITE OF NH ROUTE 16 ARE ZONED RESIDENTIAL. ZONING REQUIREMENTS FOR THE GI ZONING DISTRICT ARE AS FOLLOWS:

	REQUIRED:	EXISTING LOT:
MIN. LOT SIZE	40,000 SF	28.6±AC (PER TAX CARD
MIN. LOT FRONTAGE	100'	580'±
MIN. FRONT SETBACK	25'	N/A
MIN. SIDE SETBACK	20'	N/A
MIN. REAR SETBACK	25'	N/A
MIN. BUILDING SETBACK TO	100'	N/A
RESIDENTIAL LOT		
MAX. LOT COVERAGE	75%	N/A
MAX. BUILDING HEIGHT	55'	N/A

7. MINIMUM LOT AREA CALCULATION:

"MINIMUM LOT AREA" DOES NOT INCLUDE VERY POORLY DRAINED (GROUP 6) SOILS

"USABLE AREA" IS DEFINED AS A 3,000 SF RECTANGLE (MIN 30' WIDTH) THAT CAN BE FIT INSIDE THE LOT; NOT TO ENCOMPASS SETBACKS, WETLANDS, WETLAND BUFFERS, OR SLOPES GREATER THAN 25%.

TOTAL LOT AREA = $28.6\pm$ ACRES (PER TAX CARD) A FULL BOUNDARY WAS NOT PERFORMED FOR THIS SUBMITTAL, ONLY A PARTIAL BOUNDARY WAS PREPARED ILLUSTRATING THE UPLAND AREA TO BE UTILIZED FOR DEVELOPMENT.

PLAN SHEET CP-101 ILLUSTRATES A 28,000SF (200'W X 140'H) "USABLE AREA" RECTANGLE THAT FITS INSIDE THE LOT AND DOES NOT ENCOMPASS SETBACKS, WETLANDS, WETLAND BUFFERS, OR SLOPES GREATER THAN

ONSITE WETLANDS WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. ON SEPTEMBER 15, 2020. WETLANDS WERE DELINEATED UTILIZING THE FOLLOWING STANDARDS:
 S.1. US ARMY CORPS OF ENGINEERS REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, TECHNICAL REPORT ERDC/EL TR-12-1

8.2. FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND - VERSION 4, APRIL 2019. NEW

ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE.
FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, - VERSION 4, APRIL 2019. NEW ENGLAND

HYDRIC SOILS TECHNICAL COMMITTEE.
US ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLANT LIST, 2018.

CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS-79/31 (1979).

THIS PROPERTY IS SERVICED BY PRIVATE WELL AND PRIVATE SEWER AND PUBLIC ELECTRIC SYSTEM (EVERSOURCE).

THE SUBJECT PARCEL OF LAND IS LOCATED IN ZONE X AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP(S) FIRM 33017C0214D, EFFECTIVE DATE: MAY 17, 2005. FLOOD ZONE X IS NOT A SPECIAL FLOOD HAZARD AREA, AND DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING

CONDITIONS SURROUNDING IT AND THEREON. 12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING FEATURES BOTH ABOVE GROUND AND BELOW, NO GUARANTEE IS MADE BY THIS OFFICE OR INDIVIDUALS OF LOCATION OF EXISTING FEATURES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCES LOCATED ON THE BOUNDARY

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION. SIZE AND FLEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT NEW HAMPSHIRE DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING.

14. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION.

SEE DETAIL SHEET CD-507 FOR TEST PIT DATA

IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THI CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION

17. THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED JANUARY 18, 2021, AND WAS PREPARED BY JAMES P. GOVE, CSS # 004, GOVE ENVIRONMENTAL SERVICES, INC. THE SURVEY AREA IS LOCATED AT TIBBETTS ROAD, ROCHESTER,

17.1. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

17.2. SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX. A CONVERSION TO HIGH INTENSITY SOIL SURVEY

SYMBOLS IS PROVIDED. 17.3. HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF

NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

17.4. SOIL BOUNDARIES ARE SHOWN PER THE SITE SPECIFIC SOIL SURVEY REPORT AND INCLUDE THE FOLLOWING: ALTERNATE/EQUIVALENT

SSSS SY	MBOL	SOIL NAME	SOIL GROUP	DRAINAGE CLASS
24		AGAWAM FINE SANDY LOAM	В	WD
38		ELDRIDGE FINE SANDY LOAM	С	MWD
300		UDIPSAMMENTS	Α	WD
350		DIPSAMMENTS, WET SUBSTRATE	л с	MWD
393		TIMAKWA MUCK	D	VPD
900		EDOAQUENTS, SANDY	D	PD/VPD
NOTE:	WD-WELL	DRAINED, MWD-MODERATELY WE	LL DRAINED, PD	-POORLY DRAINED,
	VPD-VERY	POORLY DRAINED		

SLOPE PHASE: B = 0-8%, C = 8-15%, D=15-25%, E= 25%+

SITE PLAN NOTES:

1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE PROPOSED SITE IMPROVEMENTS FOR THE CONSTRUCTION OF A HIGH PERFORMANCE/SPECIALTY MECHANIC/AUTOMOTIVE FACILITY ON THE SUBJECT PARCEL LOCATED. TWO BUILDINGS ARE PROPOSED, BUILDING #1 IS A PROPOSED 5,775 SF SERVICE AND OFFICE BUILDING WITH AN ADDITIONAL MEZZANINE STYLE 1,300 SF SECURITY ACCESSORY APARTMENT; BUILDING #2 IS A 6,000 SF VEHICLE AND PARTS STORAGE BUILDING

PROPERTY LINE/BOUNDARY LINE INFORMATION IS BASED ON REFERENCE PLAN 1.

PROPOSED USE ON THE LOT FOR TAX MAP 257 LOT 66, IS AN ALLOWED USE OF COMMERCIAL MECHANIC.
PER THE CURRENT CITY OF ROCHESTER ZONING ORDINANCE; THE SUBJECT PROPERTY IS ZONED GENERAL

INDUSTRIAL (GI) DISTRICT. ZONING REQUIREMENTS FOR THE GI ZONING DISTRICT ARE AS FOLLOWS.

	REQUIRED:	EXISTING LOT:	PROPOSED:
MIN. LOT SIZE	40,000 SF	28.6±AC	N/C
TWO BUILDINGS	80,000 SF		
MIN. LOT FRONTAGE	100'	580'±	N/C
MIN. FRONT SETBACK	25'	N/A	457'±
MIN. SIDE SETBACK	20'	N/A	24'±
MIN. REAR SETBACK	25'	N/A	815'±
MIN. BUILDING SETBACK TO RESIDENTIAL LOT	100'	N/A	417'± BLDG#1 TO 14 TEBBE
MAX. LOT COVERAGE	75%	N/A	4.5%±
MAX. BLDG HEIGHT	55'	N/A	23'6"'± BLDG#2
NO DISTURB WETLAND BUFFER	25'	N/A	CU REQUESTED
SIGNAGE FREESTANDING			
MIN. AREA	75 SF	N/A	N/A
MAX. HEIGHT	30'	N/A	N/A
SIGNAGE-BUILDING			
MAX. AREA	10% OF FRONT	N/A	N/A
ENTRANCE WALL ARE	A		

5. LOT COVERAGEA AREA TOTAL LOT AREA

= 28.6± ACRES

TOTAL IMPERVIOUS AREA = 1.3± ACRES (56,410SF)

BUILDING AREA CALC = 28.6± ACRES/ 1.3± ACRES

6. PARKING CALCULATIONS PER SECTION 10(A) OF THE SITE PLAN REGULATIONS TOMOTIVE SERVICES

1.5 SPACES PER 1,000 SF = (5,775 SF / 1,000) 8* 1.5 4 SPACES REQUIRED

= 4 SPACES PER BAY = 4*7 28 SPACES REQUIRED

1 SPACE PER 1,000 SF = 6,000 SF /1000 STORAGE AND WAREHOUSE

6 SPACE REQUIRED

ACCESSORY SECURITY 2 SPACES REQUIRED **APARTMENT**

TOTAL SPACES	=	40 SPACES REQUIRED	•
		38 SURFACE SPACES PROVIDED (2 ADA)	
		WITH AN ADDITIONAL 22± INTERNAL SPACES	
		WAIVER REQUIRED	

7. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF ROCHESTER PLANNING DEPARTMENT.

SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.

IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE CITY.

10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.

11. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WILL ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS.

12. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT

THE SITE. THESE PLANS, PREPARED BY FUSS & O'NEILL, INC. DO NOT EXTEND TO OR INCLUDE SYSTEM PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HERE ON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEM WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.

13. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS, IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.

14. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THEIR WORK AT ALL TIMES. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED

WITH THIS FIRM ON CORRECTIVE ACTION. 16. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CITY OF ROCHESTER SITE PLAN
REGULATIONS, CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF

17. THE DRIVEWAY IS DESIGNED TO ACCOMMODATE THE CITY OF ROCHESTER EMERGENCY VEHICLE - 48' FIRE TRUCK

18. SNOW SHALL BE STORED IN OPEN AREAS ON SITES. SNOW SHALL NOT BLOCK SIGHT DISTANCES AND SHALL BE TRANSPORTED OFFSITE OR INTO OPEN AREAS IF NEEDED. SNOW SHALL NOT BE STORED WITHIN INFI BASINS. OFFSITE TRANSPORT OF SNOW SHALL BE DONE SO IN ACCORDANCE WITH NHDES REGULATIONS.

19. FERTILIZER SHALL BE HANDLED IN ACCORDANCE WITH RSA 431:33 TO 35. OR AS AMENDED. SEE MANUAL OF REST MANAGEMENT PRACTICES FOR AGRICULTURE IN NEW HAMPSHIRE AS PREPARED BY NEW HAMPSHIRE DEPARTM

20. A SEPARATE PERMIT IS REQUIRED FOR ALL SIGNS. SITE SIGNAGE SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO INSTALLATION.

21. ALL STATE PERMITS WILL BE PROVIDED TO THE PLANNING DEPARTMENT UPON RECEIPT.

22. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION

LIGHTING PLAN NOTES:

THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED LIGHTING FOR THE SUBJECT PROPERTY. THIS ANALYSIS WAS PERFORMED AND PROVIDED BY KEN SWEENEY CHARRON INC. 603-624-4827, KSWEENEY@CHARRONINC.COM

2. THE PROFESSIONAL ENGINEER ENDORSEMENT BY F&O ON THIS SHEET DOES NOT INCLUDE DESIGN ENDORSEMENT OF THIS DETAILED INFORMATION. CONTACT CHARRON INC. FOR ADDITIONAL INFORMATION.

3. ALL SITE LIGHTING IS TO COMPLY WITH ALL PROVISIONS OUTLINED WITHIN THE CITY OF ROCHESTER

REGULATIONS.

LIGHTING CONDUIT DESIGNED BY OTHERS.

5. SEE DETAIL SHEETS FOR LIGHTING DETAILS.

GRADING, DRAINAGE, AND EROSION CONTROL PLAN NOTES:

THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE PROPOSED GRADING, DRAINAGE, STORMWATER MANAGEMENT, AND EROSION CONTROL SITE IMPROVEMENTS FOR THE SUBJECT PARCEL.

2. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF ROCHESTER.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL VERIFY TEMPORARY BENCH MARKS (TBMS)
IDENTIFIED ON REFERENCE PLANS PRIOR TO CONSTRUCTION AND NOTIFY THE CERTIFIED LAND SURVEYOR OR ANY

GRADING, DRAINAGE, AND EROSION CONTROL PLAN NOTES (CONT):

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING FEATURES BOTH ABOVE GROUND AND BELOW, NO GUARANTEE IS MADE BY THIS OFFICE OR INDIVIDUALS OF LOCATION OF EXISTING FEATURES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCES LOCATED ON THE COVER SHEET.

6. ALL DRAINAGE STRUCTURES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY

7. DRAINAGE PIPE LENGTHS NOTED ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE LINLESS

8. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THE DETAILS PROVIDED SERVE AS A GUIDE ONLY.

IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE, THE PROPERTY OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE MUNICIPALITY. 11. ALL PROPOSED AND EXISTING CATCH BASINS, THAT MAY RECEIVE STORMWATER RUNOFF FROM THE DEVELOPMENT

DURING CONSTRUCTION, SHOULD BE OUTFITTED WITH INLET PROTECTION. 12. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION. 13. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING STORM WATER

RUN-OFF TO THEM. 14. INSTALL UNDERDRAIN IN ALL CUT SECTIONS. DAYLIGHT TO STORMWATER BASIN, SWALE, OR CONNECT TO CATCH

15. FLUSH CLEAN AND REMOVE ALL DEBRIS OF EXISTING AND PROPOSED CULVERTS DURING AND POST

16. INSPECT EXISTING CONDITION OF ALL PIPES/CULVERTS/HEADWALLS DURING CONSTRUCTION, REPLACE AS

17. INSTALL EROSION CONTROL BLANKETS ON ALL SLOPES 3:1 AND STEEPER.

18. REMOVE ALL UNSUITABLE MATERIALS ENCOUNTERED DURING EXCAVATIONS AND REPLACE WITH SUITABLE FILL. CONTRACTOR TO COORDINATE ADDITIONAL TEST BORINGS, TEST PITS, AND COORDINATE WITH A GEOTECHNICAL ENGINEER, IF NECESSARY,

19. IF LEDGE IS DISCOVERED DURING EXCAVATION, REMOVE LEDGE A MINIMUM OF TWO (2) FEET BELOW GRAVELS AND REPLACE WITH SAND.

20. CONTRACTORS LOAM AND SEED ALL DISTURBED AREAS PER DETAIL LOCATED WITHIN THIS PLAN SET.

21. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

BUILDING AND UTILITY PLAN NOTES:

UTILITY LOCATIONS AS SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM VARIOUS SOURCES AND THEIR LOCATIONS ARE ONLY APPROXIMATE. BEFORE ANY CONSTRUCTION ACTIVITY BEGINS, THE CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-DIG-SAFE AND FIELD VERIFY ALL UTILITY LOCATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION THE CONTRACTOR STARLE BE RESPONSIBLE FOR VERIFTIME AND DETERMINING THE COCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING IF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT NEW HAMPSHIRE DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING

3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.

4. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.

INSTALLATION OF ALL UTILITIES SHALL BE UNDERGROUND.

COORDINATE WITH ELECTRIC UTILITY COMPANY FOR FINAL ELECTRICAL LAYOUT.

INSTALL 2" THICK X 5' WIDE BLUEBOARD INSULATION ABOVE SEWER LINE IN ANY AREAS WITH LESS THAN 6' COVER, AND ABOVE WATER LINE IN ANY AREAS WITH LESS THAN 5.5' COVER (TYP)

PRIOR TO THE DATE OF APPROVAL OF THESE DESIGN PLANS; FINAL MECHANICAL, ELECTRICAL, PLUMBING (MEP), AND ARCHITECTURAL PLANS WERE NOT PROVIDED TO THE DESIGN ENGINEER, PRIOR TO CONSTRUCTION THE MEP CONTRACTORS AND ARCHITECTS ARE REQUIRED TO REVIEW, APPROVE, AND/OR AMEND ALL MEP AND ARCHITECTURAL DESIGN WITHIN THE BUILDINGS OR UPON THE SITE. INCLUDING BUT NOT LIMITED TO SIZES, MATERIALS, ELEVATIONS, AND OVERALL DESIGN. COORDINATE WITH THE MUNICIPALITY AND DESIGN ENGINEER FOR ALL PLAN REVISIONS.

A MINIMUM 10' HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL WATER AND SEWER UTILITIES. AT MAIN AND SERVICE CROSSINGS WHERE 10' HORIZONTAL SEPARATION IS NOT POSSIBLE, AN 18" VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER OVER SEWER, (TYP)

10. EXTERNAL FIRE LANES ARE NON DEMARCATED AND PARKING SPACES ARE ILLUSTRATED UPON THE PLAN.

11. COORDINATE WITH THE CITY TO PROVIDE ANY REQUIRED PERFORMANCE GUARANTEES, TO SERVE AS A FINANCIAL SURETY IN THE EVENT OF ABANDONMENT, INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD, AND FILL AND FINAL COMPLETION OF PUBLIC

ALL RETAINING WALLS SHALL HAVE DESIGN DRAWINGS STAMPED BY A STATE OF NH LICENSED PROFESSIONAL STRUCTURAL ENGINEER, AND SUBMITTED TO THE CITY FOR REVIEW.

13. BOTH A STORMWATER AND DRIVEWAY PERMIT ARE REQUIRED BY ROCHESTER DPW.

14. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION

PLANS UNDER DESIGN DEVELOPMENT. ISSUEL FOR INTERIM REVIEW ONLY NOT FOR

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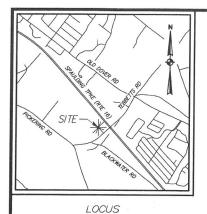
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ROAD NEW I GENERAL NOTES PLAN TAX

DATE: JANUARY 2021

GI-102



N. T. S.

REFERENCE PLANS:

1) STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS — PLANS OF PROPOSED — LES 1826 (1), N.H. NO. P-2692-T, SPAULDING TURNPIKE, CIRCA 1956, ON FILE AT THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

2) STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS — PLANS OF PROPOSED — LS 1826 (3), N.H. NO. P-2692—X, SPALIDING TURNPHIKE, CIRCA 1957, OR TILE AT THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

3) PLAN SHOWING LAND OWNED BY THE STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HICHMAYS (TRACTS NO. 1 AND NO. 2) ADJACENT TO THE SPAULDING TURNPIKE, ROCHESTER, NEW HAMPSHIRE, DATED OCTOBER 16, 1972, PLAN \$412, ON FILE AT THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

4) "LIMITED SUBDIVISION, ARTHUR POMERLEAU, ROCHESTER, N.H.", DATED JANUARY 1978, BY FREDERICK E. DREW ASSOCIATES, S.C.R.D. PLAN P017B-0007.

5) "LIMITED SUBDIVISION, ARTHUR POMERLEAU, ROCHESTER, N.H.", DATED JULY 1979, BY FREDERICK E. DREW ASSOCIATES, S.C.R.D. PLAN P017C-0127.

6) "LOT LINE REVISION LAND OF BENJAMIN J. JR. & RUBY J. WASHOK, ROCHESTER, N.H.", DATED MAY 28, 1986, BY JOHN W. DURGIN ASSOCIATES, INC., S.C.R.D. PLAN P029A—0003.

1) THE INTENT OF THIS PLAN IS TO DEFINE THE PARTIAL BOUNDARY OF THE SUBJECT PARCEL AS SHOWN HEREON. THE BOUNDARY LINES THAT HAVE BEEN SURVEYED ARE DENOTED AS LIMIT OF BOUNDARY SURVEY.

2) THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BETWEEN OCTOBER AND NOVEMBER 2020.

3) BASIS OF BEARING IS NH GRID NORTH.

4) THE SUBJECT PROPERTY IS LOCATED IN THE GENERAL INDUSTRIAL ZONING DISTRICT (G) PER THE CITY OF ROCHESTER ZONING ORDINANCE, AS AMENDED, BUILDING SETBACKS ARE AS FOLLOWS: FRONT 25', SIDE 20', REAR 25', BUILDING SETBACKS AND IS OUR INTERPRETATION OF THE REFERENCED ZONING ORDINANCE, FINAL DETERMINATION IS MADE BY THE CITY OF ROCHESTER ZONING

5) SUBLECT PREMISES IS LOCATED IN ZONE X AS SHOWN ON FEMA FLOOD INSURANCE RATE WAP(S) FROM 33017CO2140, EFFECTIVE DATE: MAY 17, 2005. FLOOD ZONE X IS NOT A SPECIAL FLOOD HAZARD AREA.

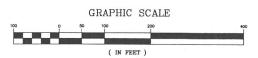
6) EASEMENTS AND/OR RICHTS-OF-WAY AS SHOWN ARE THOSE FOUND DURING OUR RESEARCH OF THE SUBJECT PROPERTY AND ABUTTING TRACTS. IN ADDITION, THE SUBJECT PREMISES MAY BE SUBJECT TO AND/OR WITH THE BENEFIT OF THE FOLLOWING:

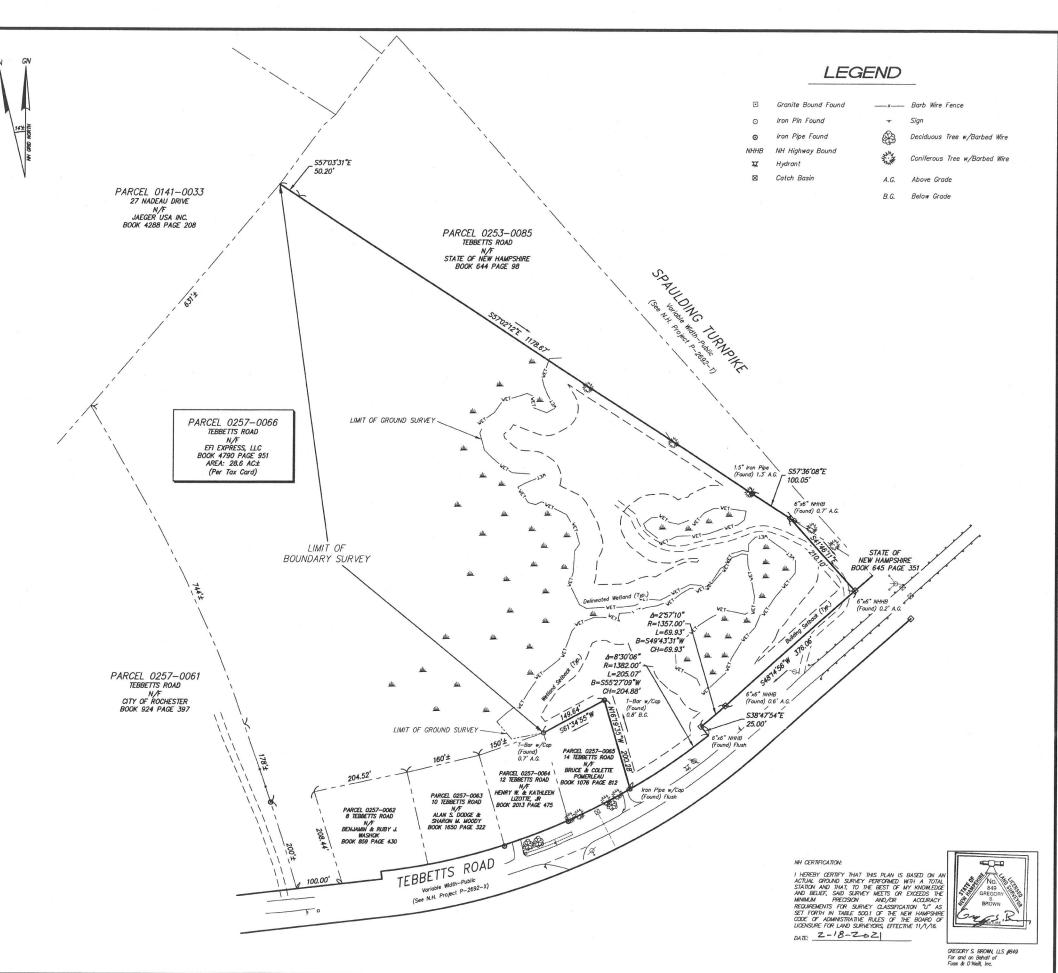
e) COMMISSIONERS' RETURN OF LAYOUT DATED JULY 25, 1956, S.C.R.D. BOOK PAGE 55 (SPALDING TURNPIKE). AS AFFECTED BY DEEDS FROM JOSEPH N. POMERIEAU ET AL TO THE STATE OF NEW HAMPSHEE DATED APRIL 21, 1955, S.C.R.D. BOOK 644 PAGE 357 AND DATED MAY 1955, S.C.R.D. BOOK 645 PAGE 351

b) COMMISSIONERS' RETURN OF LAYOUT DATED NOVEMBER 8, 1956, S.C.R.D. BOOK 669 PAGE 84. AS AFFECTED BY DEED FROM JOSEPH N. POMERIEAU ET AL TO THE STATE OF NEW HAMPSHIRE DATED NOVEMBER 1, 1956, S.C.R.D. BOOK 669 PAGE 28.

7) DELINEATED WETLANDS SHOWN HEREON WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES INC. DURING SEPTEMBER 15, 2020.

B) UTILITY STRUCTURES AT OR ABOVE THE GROUND SURFACE SHOWN HEREON ARE THOSE THAT HAVE BEEN GBSERVED FROM SURFACE EVIDENCE. UTILITIES BENEATH THE GROUND SURFACE HAVE NOT BEEN GBSERVED AND ARE SHOWN APPROXIMATELY HEREON AS DERIVED FROM A COMBINATION OF SURFACE MARKINGS BY OTHERS AND/OR RECORD INFORMATION AND ARE NOT VERIFIED LOCATIONS OR CONFIRMATION OF EXISTENCE OF SAID UNDERGROUND UTILITIES. ALL UNDERGROUND UTILITIES. HOLD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL STE MORK. CALL DIG SAFE 1—888—344—7233 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.





&O'NEILL FUSS

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EFI EXPRESS 31 THOMPSON MILL ROAD LEE, NEW HAMPSHIRE BOOK 4790 PAGE 951

AL BOUNDARY

OF EFI EXPRESS

PARCEL 0257-0066

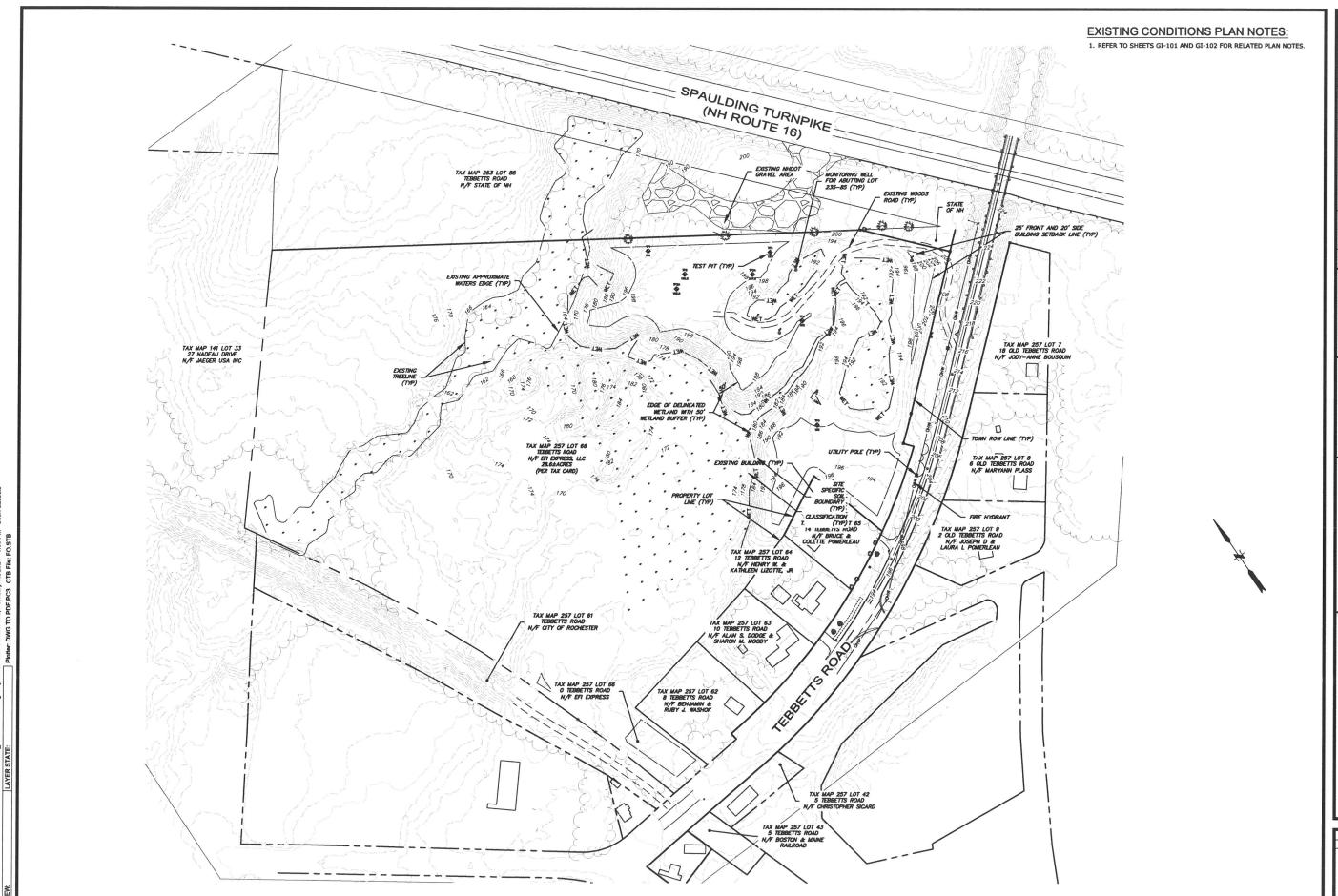
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PROJ. No.: 20200646A10 DATE: 10/19/2020 SCALE: 1"=100"

BD-101



PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

FUSS & O'NEILL
SOCHMERCHA STREET
MANCHESTER, NEW HANDSHILLE 03101
603.6642.002

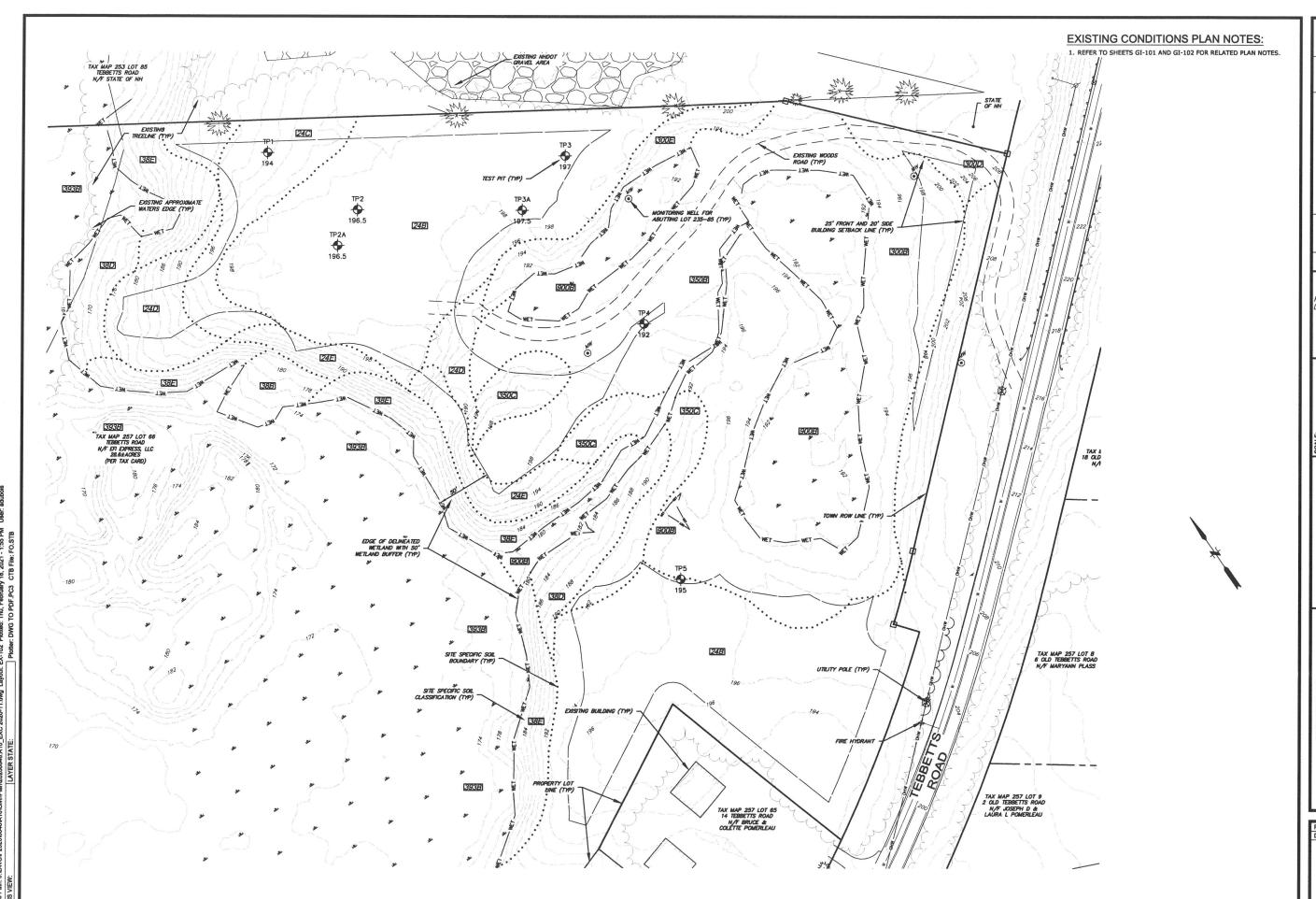
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LOT OVERVIEW
EXISTING CONDITIONS PLAN
TAX MAP 257 LOT 66
TEBBETTS ROAD
TEBBETTS ROAD

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

EX-101



PLANS UNDER DESIGN DESIGNER BENIEWER

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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

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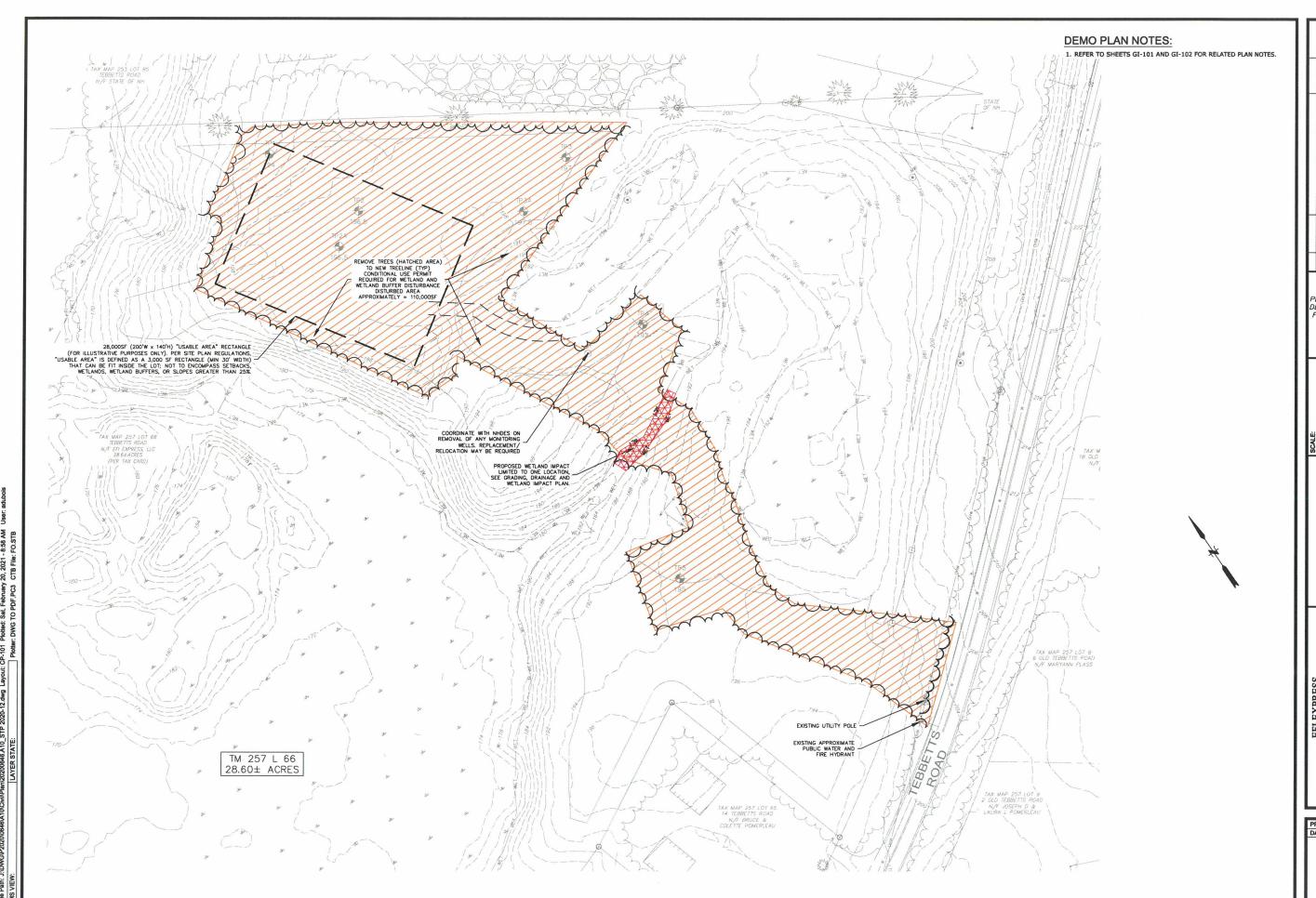
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EXISTING CONDITIONS PLAN
TAX MAP 257 LOT 66
TBBETTS ROAD
NEW HAMPSHIRE

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

EX-102



PLANS UNDER DESIGN
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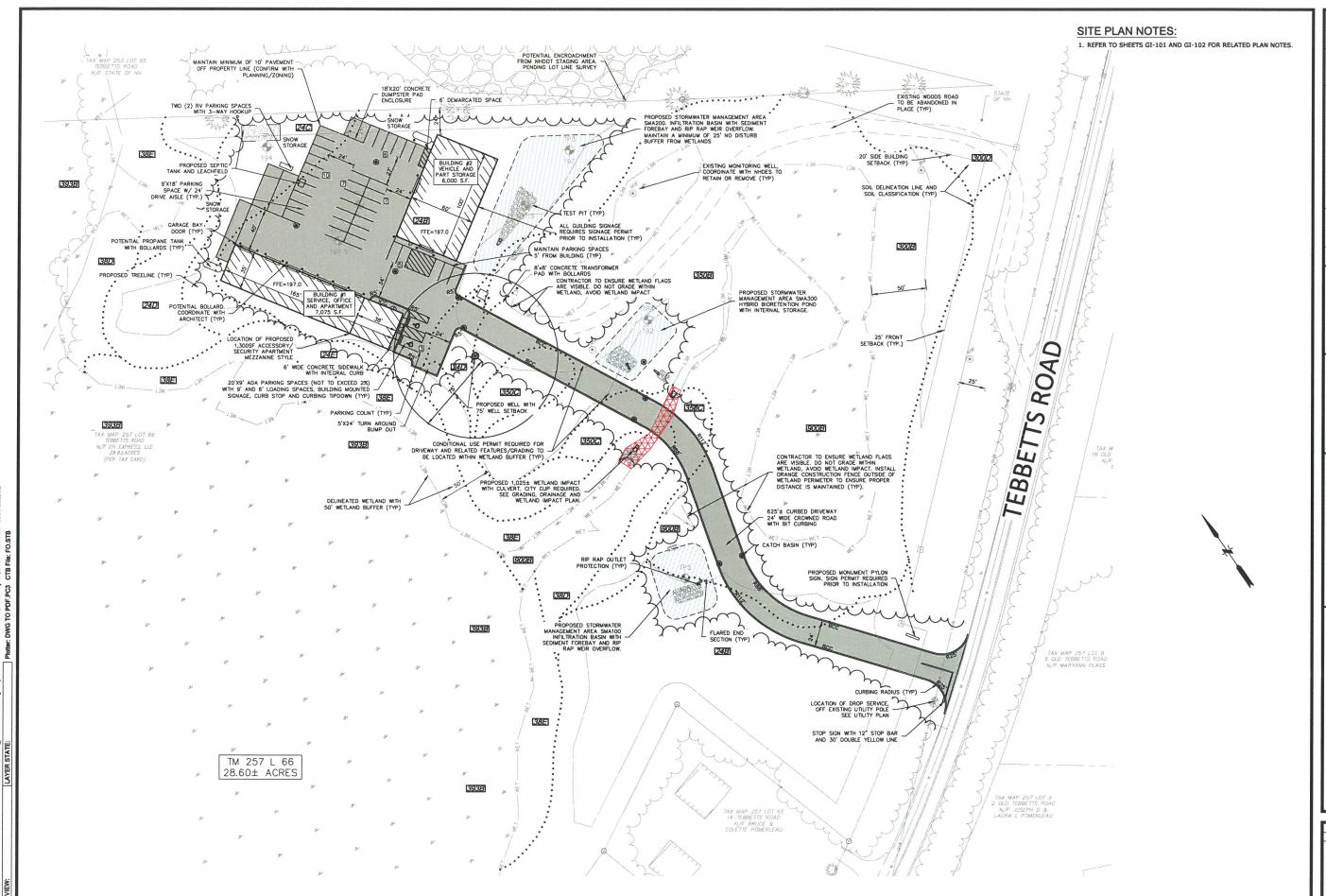
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EFI EXPRESS
SITE PAD
DEMOLITION PLAN
TAX MAP 257 LOT 66
TEBBETTS ROAD
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NEW HAMPSH

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION FUSS & O'NEILL

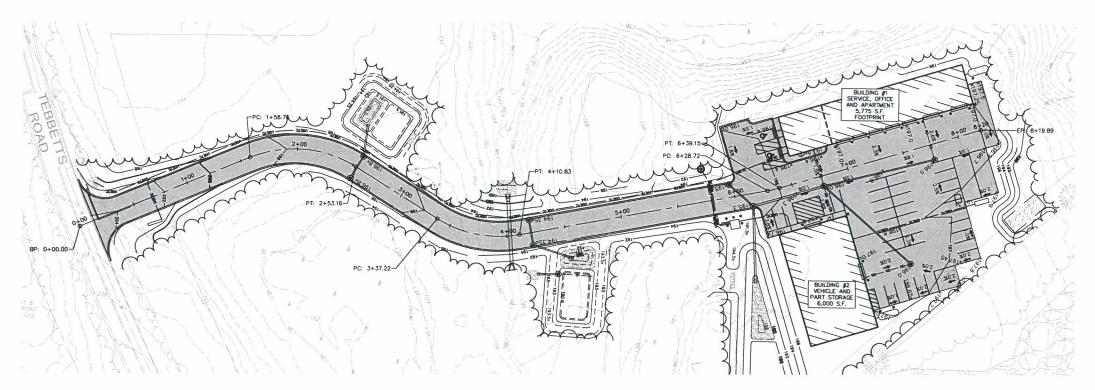
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TAX MAP 257 LOT 66
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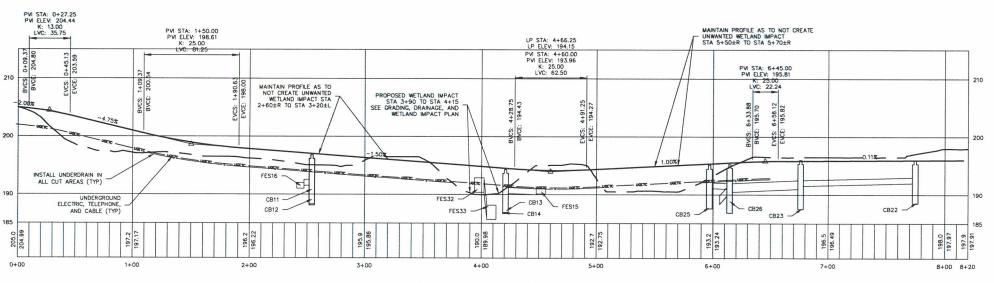
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CS-101

DRIVEWAY PROFILE NOTES:

1. REFER TO SHEETS GI-101 AND GI-102 FOR RELATED PLAN NOTES.





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SITE PAD
DRIVEWAY PROFILE
TAX MAP 257 LOT 66
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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

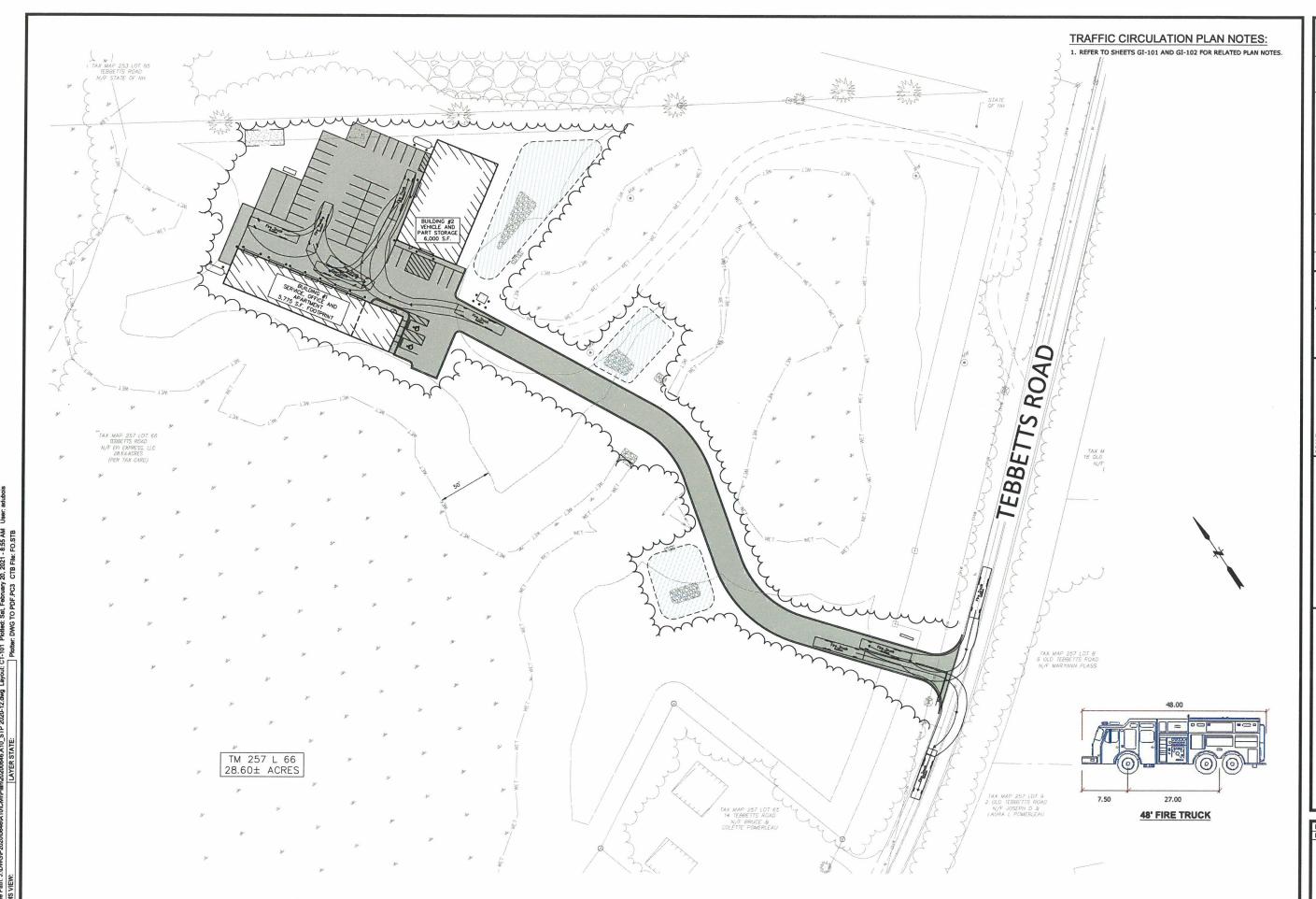
FUSS & O'NEILL

SO COMMERCIAL STREET
MANCHESTER, NEW HAMPSHIRE 03101
603.668.25.

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

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DRIVEWAY PROFILE
H: 1"=40' V: 1"=8'



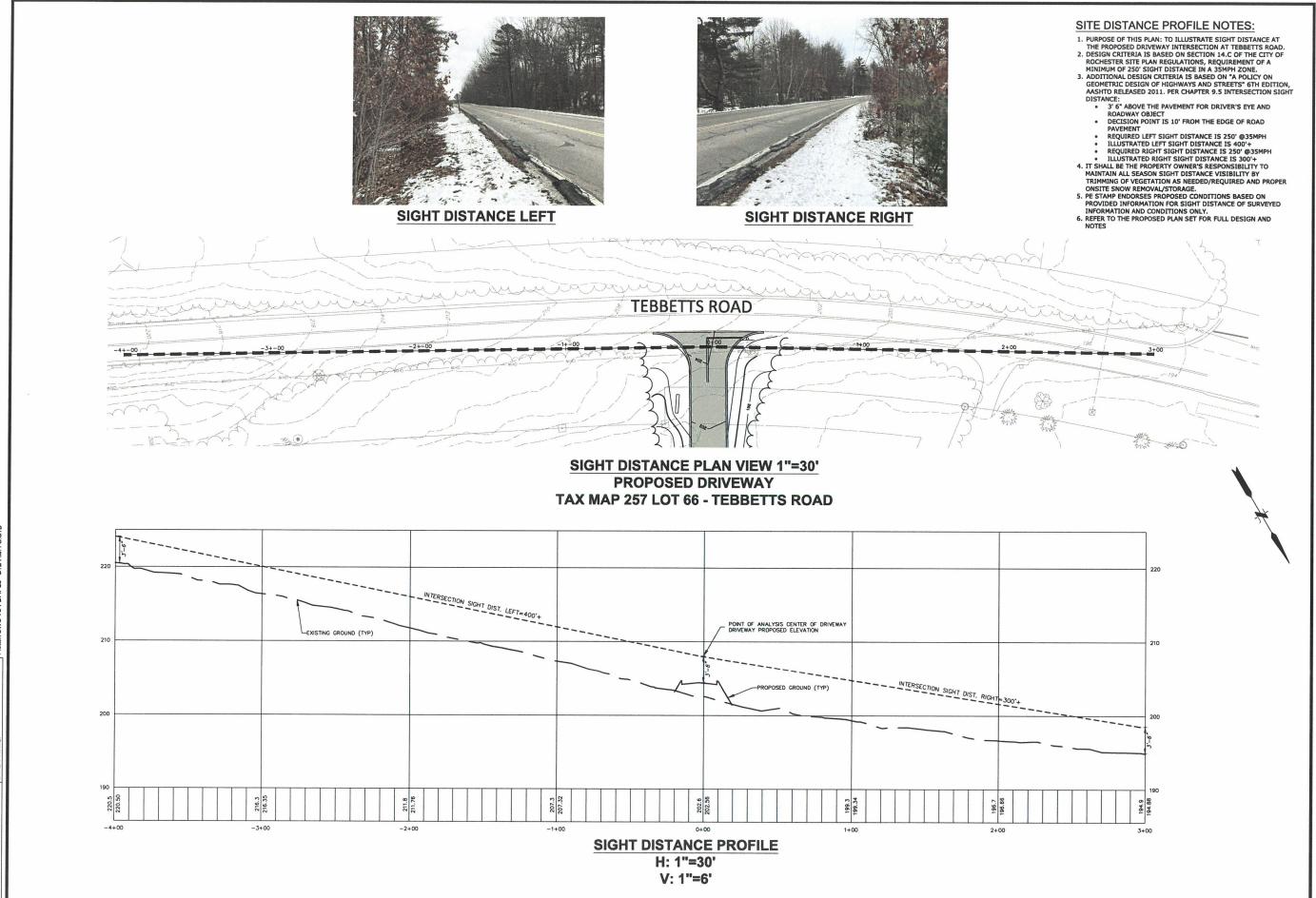
PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION FUSS & O'NEILL

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EFI EXPRESS
SITE PAD
TRAFFIC CIRCULATION
PLAN
TAX MAP 257 LOT 66
TEBBETTS ROAD
NEW HAMPSI

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

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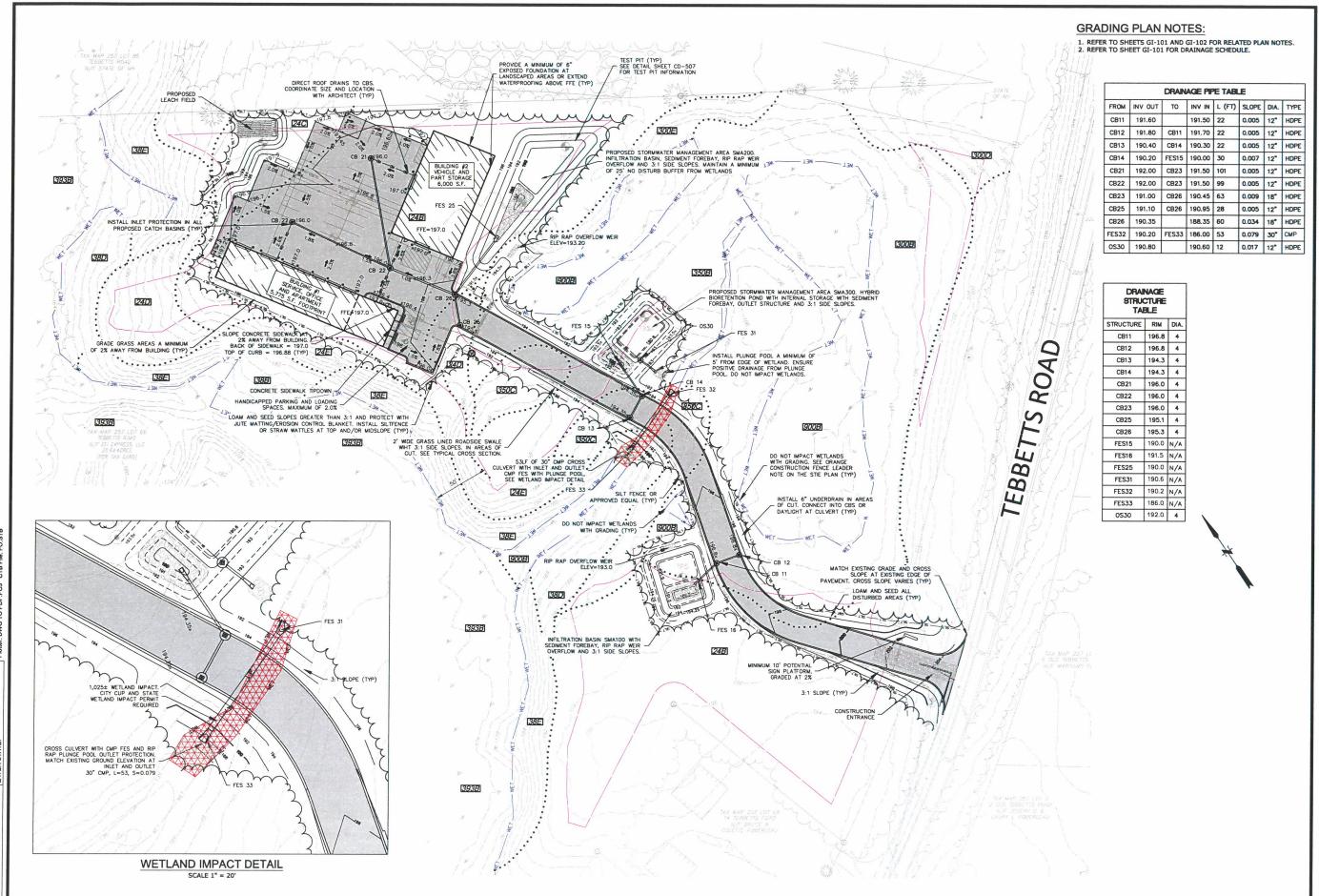
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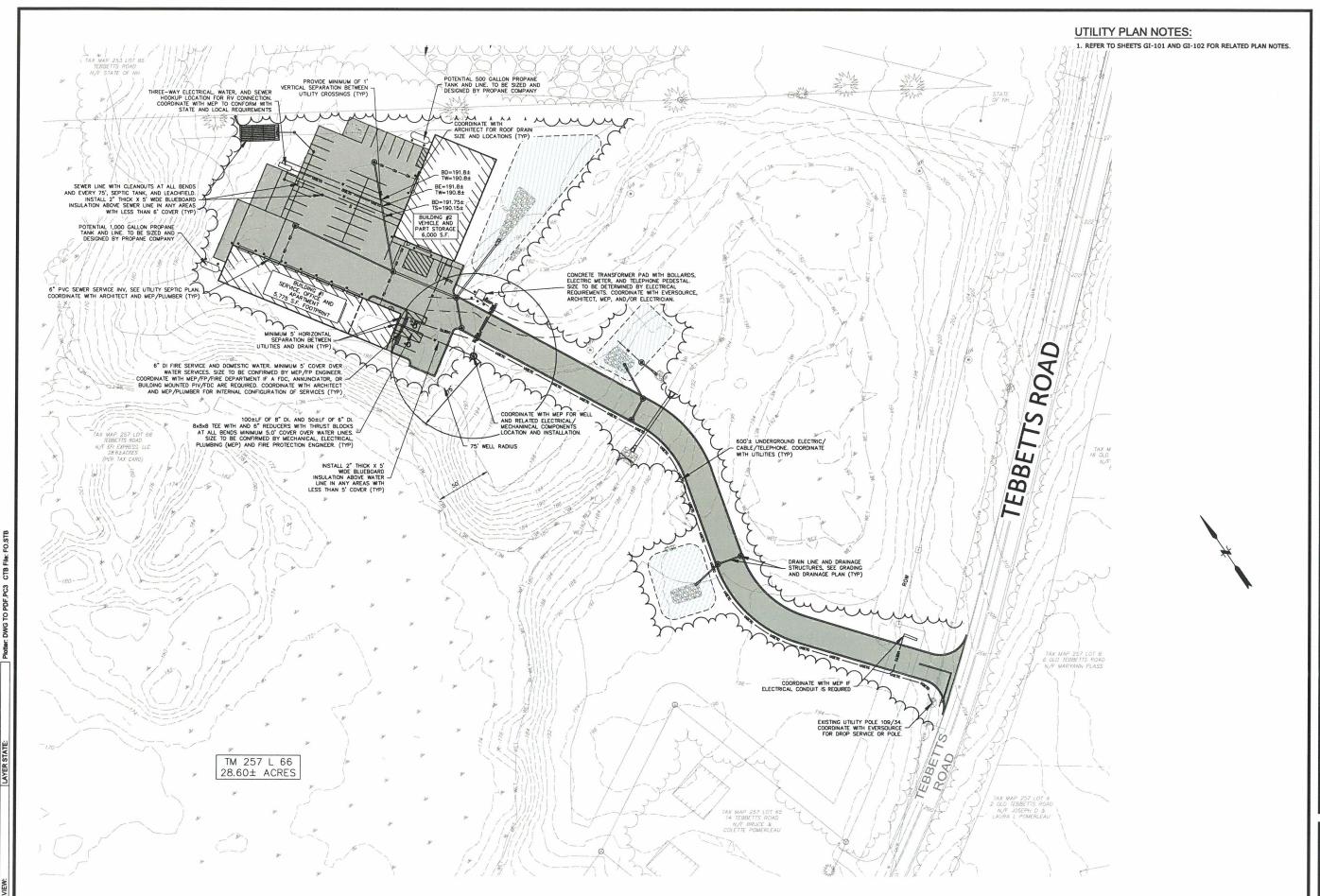
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EFI EXPRESS
SITE PAD GRADING, DRAINAGE,
EROSION CONTROL PLAN, AND
WETLAND IMPACT PLAN
TAX MAP 257 LOT 66
TAX MAP 257 LOT 66
TAX BEBETTS ROAD
NEW HAMPSHIRE

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

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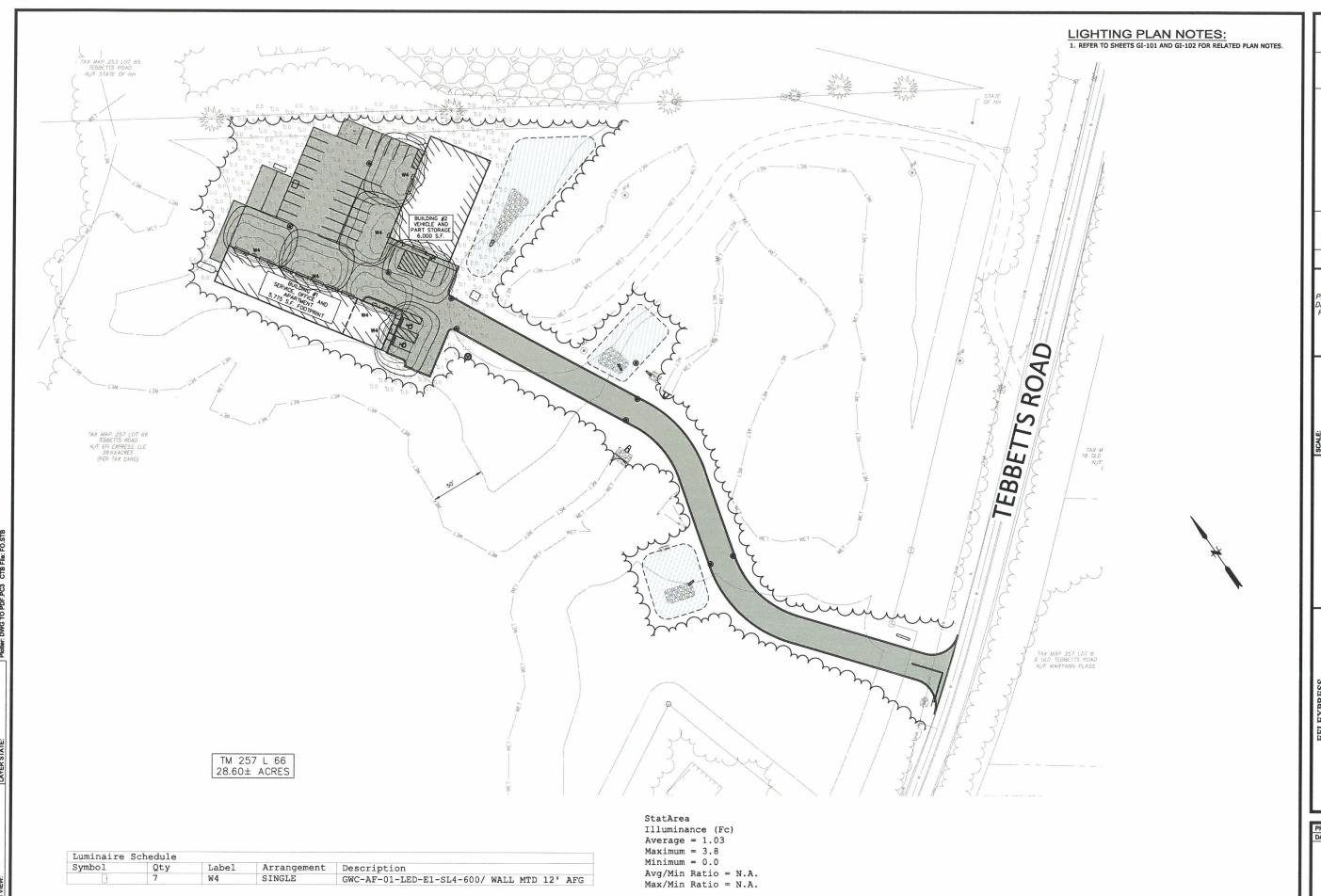
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EFI EXPRESS
SITE PAD
UTILITY PLAN
TAX MAP 257 LOT 66
TEBBETTS ROAD
NEW HAMPSH

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

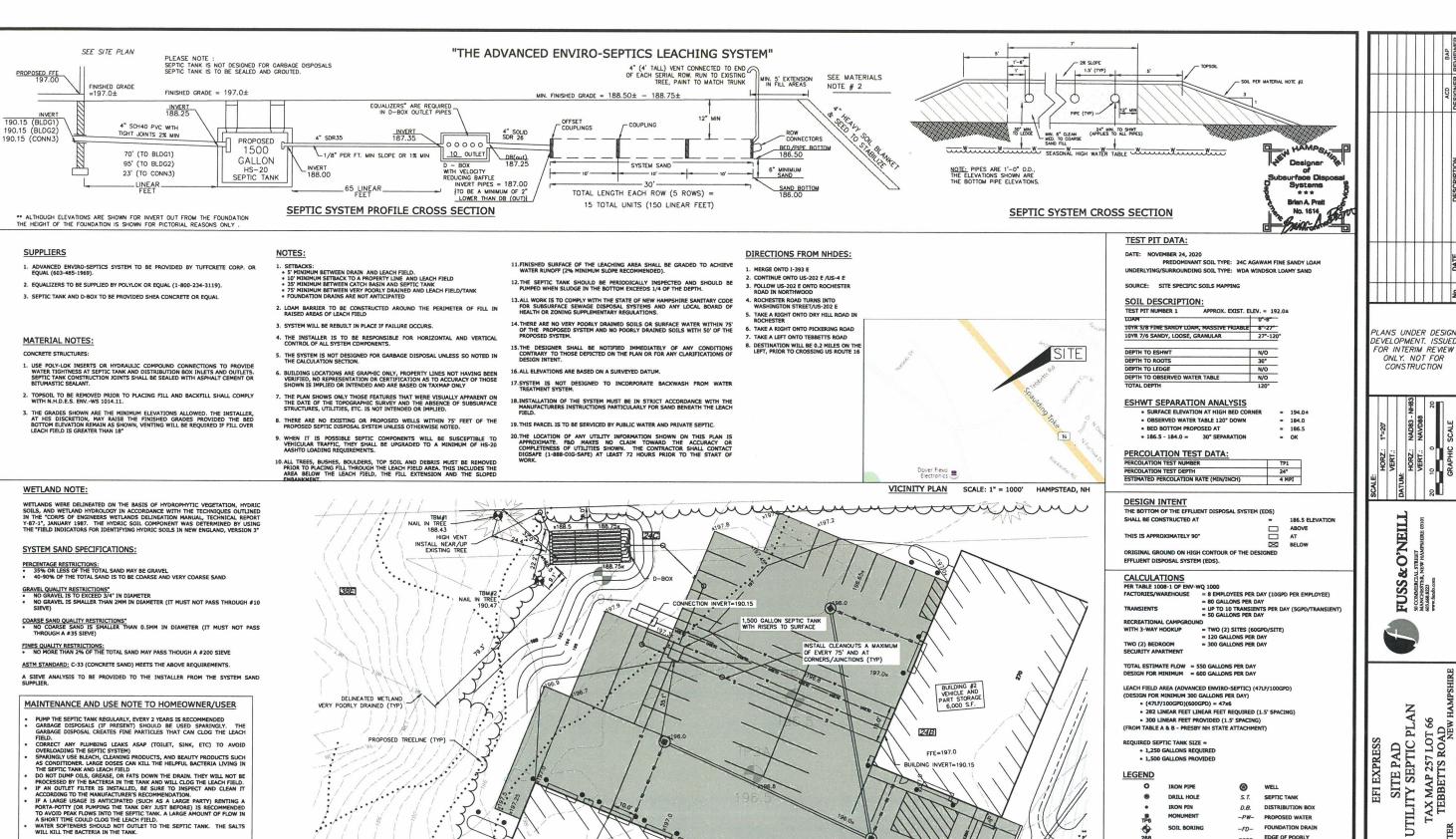
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90 COMMERCIA, STREET
MAKCHESTER, NEW HAMPSHIRE 03101
600.5644520.



SITE PAD
UTILITY LIGHTING PLAN
TAX MAP 257 LOT 66
TEBBETTS ROAD
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PROJ. No.: 20200646.A10 DATE: JANUARY 2021

CU-102



PLAN T 66 TAX MAP 257 LOT 66
TEBBETTS ROAD SITE PAD UTILITY SEPTIC I

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PROJ. No.: 20200646.A10

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SOIL BORING

GRAPHIC SCALE

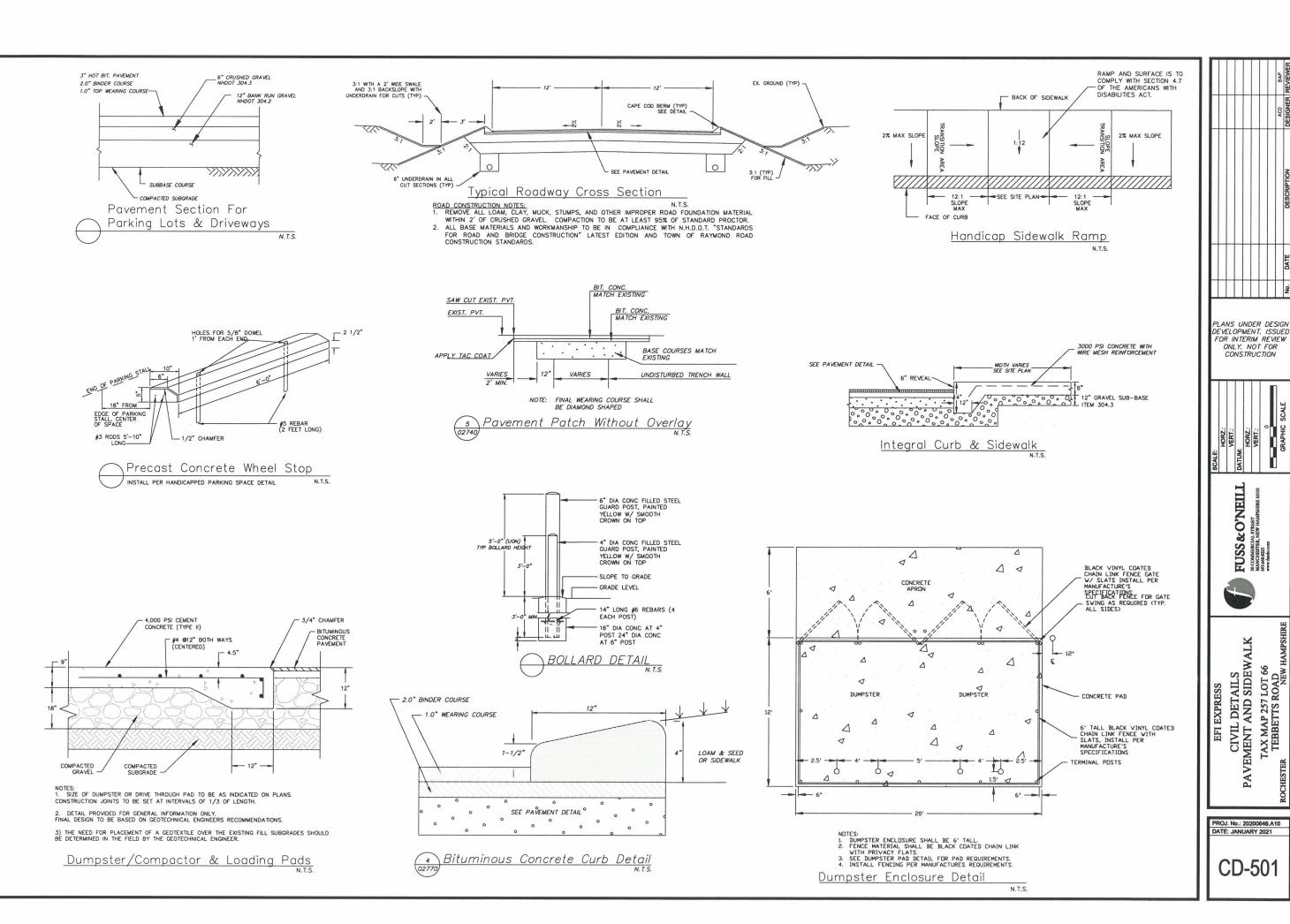
PLAN REFERENCE:

1. "FIT EXPRESS; SITE DEVELOPMENT DRAWINGS; TAX MAP 257 LOT 66
TEBBETTS ROAD; ROCHESTER NEW HAMPSHIRE, 03867" CREATED BY THIS
OFFICE ON RECORD AT THE CITY OF ROCHESTER PLANNING DEPARTMENT.

PROPOSED WATER

-FD- FOUNDATION DRAIN EDGE OF POORLY

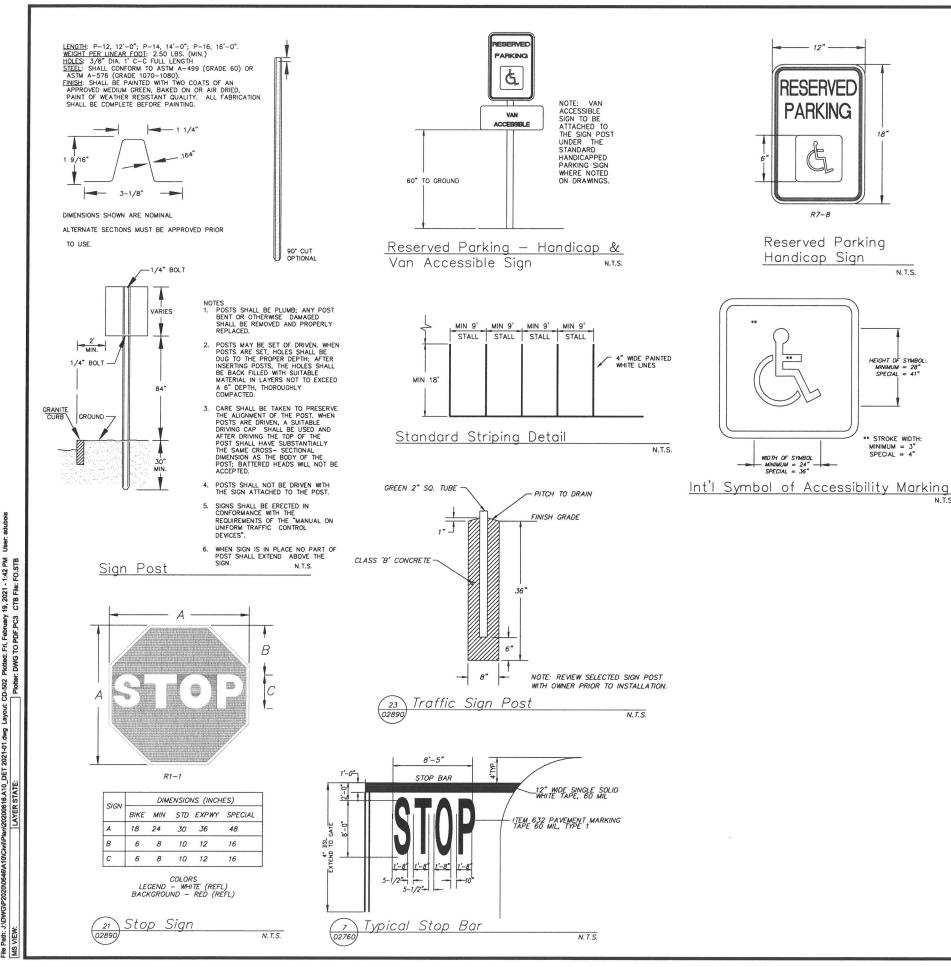
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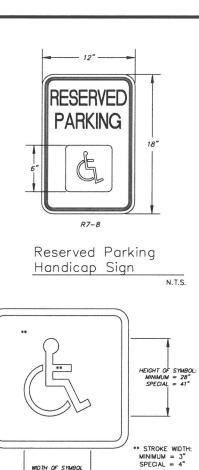


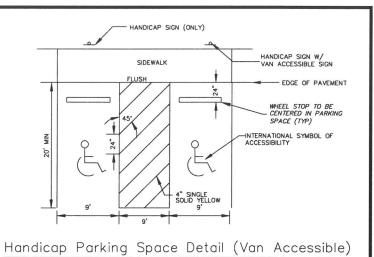
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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

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FUSS & O'NEILL

90 COMBERCIAL STREET
MAKCHESTER, NEW HAMPSHIRE 03101
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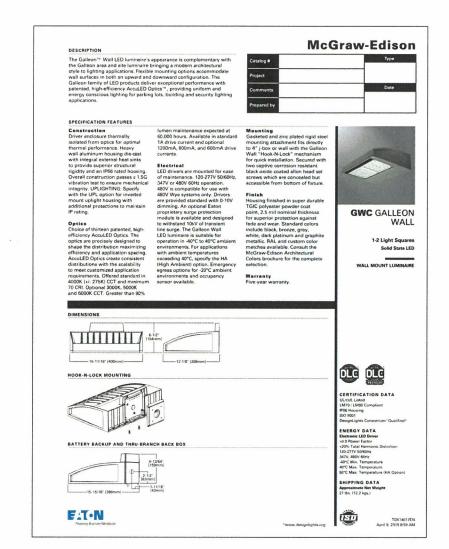


PROJ. No.: 20200646.A10 DATE: JANUARY 2021

CD-502

Utility Trench

UTILITY TRENCH MAY VARY. CONTRACTOR SHALL COORDINATE INSTALLATION WITH EACH UTILITY COMPANY AND INSTALL PER THEIR SPECIFICATIONS AND REQUIREMENTS.



Light Fixture Detail

Note: Ornamental fixtures may be substituted; coordinate with Owner, Engineer, and Town

N.T.S

PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION FUSS & O'NEILL
SOCOMBERCIA STREET
MANCHESTER, NEW HANTESHIRE 03101
603.546.252
www.findo.com

EFI EXPRESS

CIVIL DETAILS

ELECTRIC AND LIGHTING

TAX MAP 257 LOT 66

TEBBETTS ROAD

NEW HAMPSHI

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

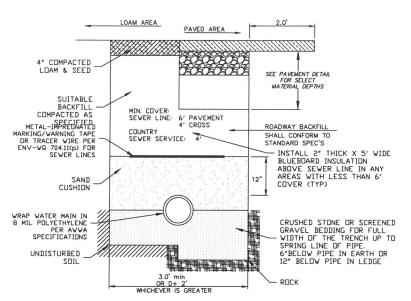
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LAYER STATE:

MS VIEW:





NOTIES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. DEPTH FOR BITUMINOUS PAVEMENT SHALL BE AS SPECIFIED IN PAVEMENT DETAIL.

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.

IN LIEU OF THE 12" GRAVEL COURSE AND 6" CRUSHED GRAVEL, 18" OF CRUSHED GRAVEL OR RECLAIMED STABILIZED BASE MAY BE USED AS A BASE FOR THE PAVEMENT

ORAVEL OF RECLAIMED STABILIZED BASE MAY BE USED AS A BASE FOR THE PAVEMENT REPAIR.

4. MATERIAL SHALL BE REPLACED IN KIND WHENEVER POSSIBLE.

5. A MINIMUM 2' CUTBACK IS REQUIRED AT THE TOP OF THE TRENCH WALL OVER UNDISTURBED MATERIAL.

6. COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

7. BACKFILL MATERIAL SHALL BE COMPACTED IN NO MORE THAN 3-FOOT THICK LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN NOT MORE THAN 12-INCH THICK LAYERS TO THE ROAD SURFACE.

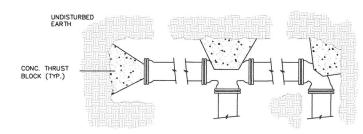
8. TRENCHES FOR SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ENV—WO 704.11. PIPE TRENCH BEDDING MATERIAL SHALL BE #67 STONE (ASTM C33/C33M) PER ENV—WO 704.11(d). SAND BLANKET MATERIAL SHALL CONFORM WITH PROVISIONS OF ENV—WO 704.11(b). TRENCH BACKFILL MATERIAL SHALL CONFORM WITH ENV—WO 704.11(f).

704.11(h).

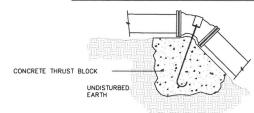
9. GRANTY SEWER CONSTRUCTION MATERIALS SHALL MEET THE REQUIREMENTS OF ENV WQ. 704.05. PVC PIPE SHALL CONFORM WITH ASTM D3034 AND ASTM D2412 AND PVC JOINTS SEALS SHALL CONFORM WITH ASTM D3212.

Typical Sewer Trench Detail

N.T.S.



PLAN - HORIZONTAL BENDS, TEES AND PLUGS

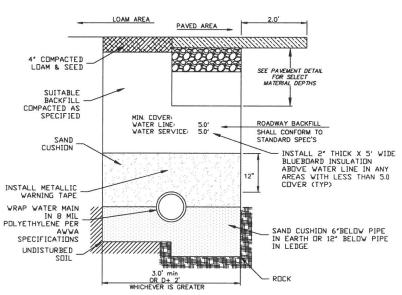


ELEVATION - VERTICAL BENDS

NOTES
1. THRUST BLOCK DIMENSIONS TO BE DETERMINED IN FIELD BY ENGINEER BASED ON PIPE SIZE, WATER PRESSURE AND SOIL TYPE.
2. STONE BACKING MAY BE SUBSTITUTED FOR CONCRETE THRUST BLOCKS PROVIDED THE STONE(S) ARE OF EQUAL SIZE AND BEAR ON UNDISTURBED EARTH.
3. USE OF JOINT RESTRAINT SYSTEMS SHALL NOT ELIMINATE THRUST BLOCK REQUIREMENTS (WHERE POSSIBLE).

Typical Thrust Blocks

6" P.V.C. TH'D FINISHED PAVEMENT GRADE -- PROSELECT 10" CAST IRON VALVE BOX. OR APPROVED EQUAL. INSTALLED PER MANUFACTURER SPECS 4' MIN. COVER Y-BRANCH SEWER Sewer Cleanout N.T.S.



NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. DEPTH FOR BITUMINOUS PAVEMENT SHALL BE AS SPECIFIED IN PAVEMENT DETAIL.

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO TOWN SPECIFICATIONS.

3. MATERIAL SHALL BE REPLACED IN KIND WHENEVER POSSIBLE.

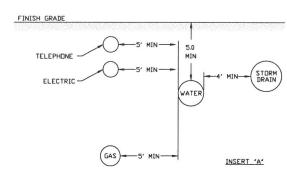
4. A MINIMUM 2' CUTBACK IS REQUIRED AT THE TOP OF THE TRENCH WALL OVER UNDISTURBED MATERIAL.

5. COMPACTION SHALL BE IN 12—INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

6. BACKFILL MATERIAL SHALL BE COMPACTED IN NO MORE THAN 3-FOOT THICK LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN NOT MORE THAN 12—INCH THICK LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN NOT MORE THAN 12—INCH THICK LAYERS TO THE ROAD SURFACE.

Typical Water Trench Detail

N.T.S.



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO — HAWC TECHNICAL SPECIFICATIONS.

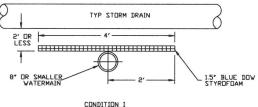
2. ALL WATER MAINS SHOULD HAVE A MINIMUM DEPTH OF 5.0 FROM TOP OF PIPE TO FINISH GRADE.

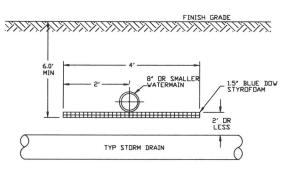
3. AT CROSSINGS WHERE 10' HORIZONTAL SEPERATION IS NOT POSSIBLE, 1819 VARIABLE AND VARIABLE AND VARIABLE PROPERTY AND VARIABLE PROPERTY OF THE WATER

AT CROSSINGS WHERE TO HOMIZONIAL SEPERATION IS NOT PUSSIBLE, 18" VERTICAL SEPERATION SHALL BE PROVIDED. SEE INSERT "A".
 A MINIMUM 10' HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL WATER AND SEWER UTILITIES. AT MAIN AND SERVICE CROSSINGS WHERE 10' HORIZONTAL SEPARATION IS NOT POSSIBLE, AN 18" VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER OVER SEWER.

Water Main-Numerous Details Separation







CONDITION II

NOTES:
1. HAWC RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.

- THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
- ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

Storm Drain -Watermain Intersecting Runs PLANS UNDER DESIGN

DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

HORZ. VERT.: DATUM: HORZ. VERT.: CDADUI		HORZ.: VERT.:	ATUM:	HORZ.:	VERT.:	0		GRAPHIC SCALE	
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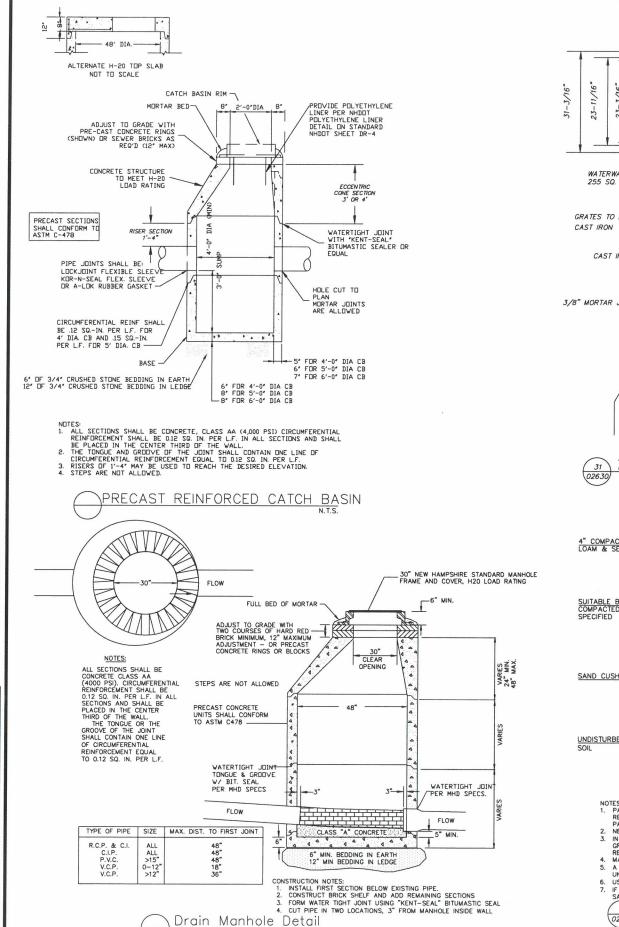
FUSS & O'NEILI

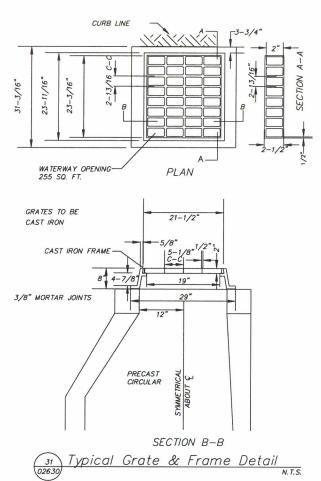


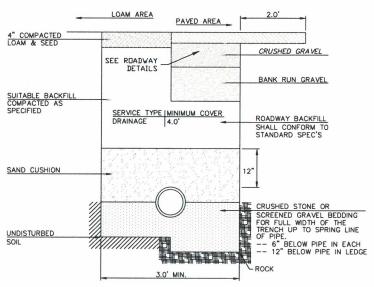
CIVIL DETAILS
WATER AND SEWER
TAX MAP 257 LOT 66
TEBBETTS ROAD

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

CD-504







NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. DEPTH FOR BITUMINOUS PAVEMENT SHALL BE AS SPECIFIED IN PAVEMENT DETAIL.

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.

3. IN LIEU OF THE 12" GRAVEL COURSE AND 6" CRUSHED GRAVEL, 18" OF CRUSHED GRAVEL OR RECLAIMED STABILIZED BASE MAY BE USED AS A BASE FOR THE PAVEMENT REPAIR.

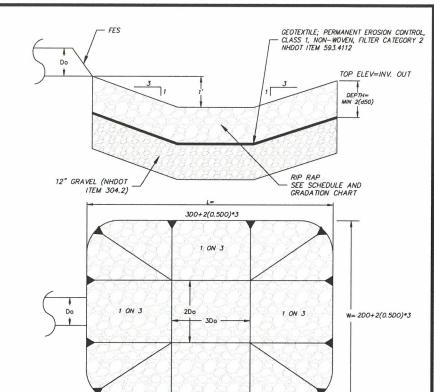
4. MATERIAL SHALL BE REPLACED IN KIND WHENEVER POSSIBLE.

5. A MINIMUM 2" CUTBACK IS REQUIRED AT THE TOP OF THE TRENCH WALL OVER UNDISTURBED MATERIAL.

6. USE CLASS V CONCRETE IN LOCATIONS WITH LESS THAN 3" OF COVER.

7. IF LEDGE IS DISCOVERED, REMOVE A MINIMUM OF 2" BELOW GRAVELS AND REPLACE WITH SAND.

Typical Drainage Trench Detail



USE MIN. d50 OF 4 IN.	RIP R	RAP GRADATI	ON (PER NR	cs)
		GHT SMALLE		STONE
	100 85 50 15		6.0 TO 5.0 TO 4.0 TO 1.0 TO	7.0 d50 6.0 d50
rt Location	FES15	FES16	FES25	FES31

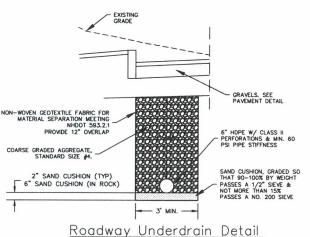
Culvert Location	FES15	FES16	FES25	FES31	FES33
	(From CB14)	(From CB11)	(From CB26)	(From FES30)	(From FES32)
Do(ft)	1.00	1.00	1.50	1.00	2.50
Q(cfs)	1.3	1.1	4.7	1.0	6.5
Bottom of Scour Hole Width	2	2	3	2	5
Bottom of Scour Hole Length	3	3	5	3	7.5
Depth of Scour Hole	0.5	0.5	0.75	0.5	1.25
Top of Scour Hole Width	6	6	9	6	15
Top of Scour Hole Length	5	5	8	5	12.5
d50 (in.) min	4.0	4.0	4.0	4.0	4.0

NOTES:

1. CALCULATIONS ILLUSTRATE THAT BASIN FOREBAYS ARE LARGER THAN REQUIRED PLUNGE POOLS.

2. CALCULATIONS FOR THE ABUTTING LOT ARE ILLUSTRATED WITHIN THE TABLE, REFER TO OTHER PLAN SET FOR FES NOT ILLUSTRATED UPON THIS PLAN SET.

RipRap Plunge Pool Detail N.T.S.





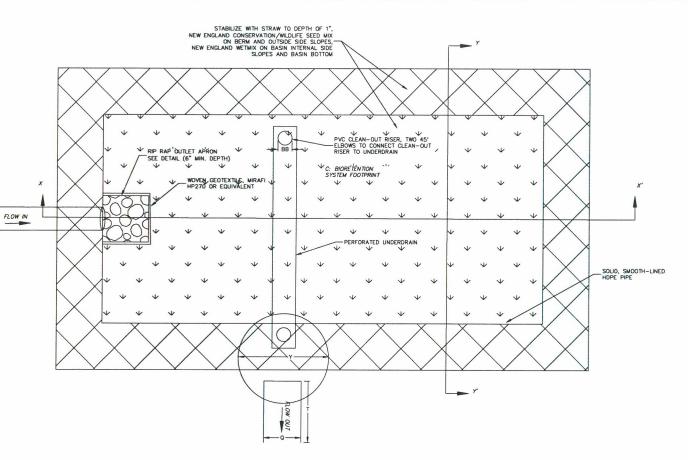
FUSS & O'NEILL

90 COMMERCIAL STREET
ANACHESTER, NEW HAMPSHIRE 03101
600.564.824.
www.fands.com

CIVIL DETAILS
STORMWATER
TAX MAP 257 LOT 66
TEBBETTS ROAD

PROJ. No.: 20200646.A10 DATE: JANUARY 2021

CD-505



CAPPED PVC CLEANOUT RISER (W/ TWO 45" BENDS)

LINER (SEE NOTE 1)

PERFORATED UNDERDRAIN

OUTLET CONTROL STRUCTURE

WQV

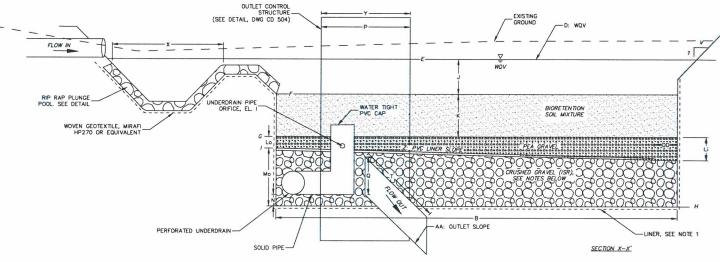
PVC LINER

SECTION Y-Y

6.3. ORGANIC MATTER SHOULD MAKE UP A MINIMUM OF 3% BY VOLUME AND A MAXIMUM 8% BY VOLUME OF THE BSM.
6.4. BSM MIXTURE SHOULD HAVE A SOIL REACTION PH OF 6 TO 7/
6.5. CATION EXCHANGE CAPACITY (see) OF BSM SHOULD BE A MINIMUM OF 10 MEO PER 100 ML AT A PH OF 7.0.
7. IF BSM IS PURCHASED FROM A MANUFACTURER, BSM MIXTURE SHALL NOT CONTAIN THE FOLLOWING,
7.1. IMAGCEPTABLE MATERIALS. CONCRETE SLURRY, CONCRETE LAYER OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, ASPHALT, BRICKS, OILS, GASQLINE, DESSEL FUEL, PAINT, THINNER, TURPENTINE, TAR, ROOFING COMPOUND, ACID, SOILD WASTE, OR OTHER CHUNKS, THERETHER, TAR, ROOFING COMPOUND, ACID, SOILD WASTE, OR OTHER CHUNKSUTABLE MATERIALS. STONES, ROOTS, PLANTS, SOO, CLAY LUMPS, OR POCKETS OF CONSES SAND THAT EXCEED A COMBINED MAXIMUM OF ST BY DRY WEIGHT OF THE MANUFACTURED SOIL.
7.3. LARGE MATERIALS. STONES, CLODS, ROOTS, CLAY LUMPS EXCEEDING 0.187 IN (4.76 MM) IN ANY DIMENSION.
8. RYGANIC SOIL AMENDMENTS;
8.1. NO COMPOST SHOULD BE USED IN THE PLANTING MIX (USED ON THE SIDE SLOPES AND SURVEY SHADOWIND PEAT: PARTIALLY DECOMPOSED SPHAONIUM PEAT MOSS, FINELY DIVIDED OR OF GRANDLAR TEXTURE WITH 100% PASSING THROUGH A 1/2-M (13 MM) SIEVE, WITH A PH OF 3.4 TO 4.8.
8.3. WOOD DERIVATIVES SHREDDED WOOD, WOOD CHIPS, GROUND BARK, OR WOOD WASTE; OF UNIFORM TEXTURE AND FREE OF STONES, STONE (3/4-m).

9. THE CRUSHED STONE LAYER SHOULD CONSIST OF AASHTO \$5 STONE (3/4-IN).

ID	DESIGN PARAMETER	MIN	POND 10P DESIGN	UNITS
A	SYSTEM FLOOR WIDTH	-	22	FI
В	SYSTEM FLOOR LENGTH	 	36	FT
c	BIORETENTION FOOTPRINT AREA	+	800	SF
D	WATER QUALITY VOLUME	-	935	CF
E	WQV ELEVATION	1	191.55	FI
F	SYSTEM FLOOR ELEVATION		190.80	FT
G	BOTTOM BSM ELEVATION		189.30	FT
н	BOTTOM STONE ELEVATION	1	187.80	FT
ī	TOP STONE/OUTLET INVERT ELEVATION		190.80	FT
J	WOV PONDING DEPTH		0.75	FT
К	BSM MEDIA DEPTH	18	18	iN
Li	INLET END PEA GRAVEL DEPTH	-	8	1N
Lo	OUTLET END PEA GRAVEL DEPTH	3	3	IN.
Mi	INLET END CRUSHED STONE DEPTH		9	1N
Мо	OUTLET END CRUSHED STONE DEPTH	14	14	
N	SUBDRAIN DEPTH ABOVE BOTTOM	4	4	ŧN
0	PERFORATED SUBDRAIN DIAMETER	6	6	1N
P	OUTLET STRUCTURE DIAMETER (I.D.)	6	48	in.
Q	OUTLET PIPE DIAMETER	6	12	- IN
R	INFLOW PIPE DIAMETER		12	#N
S	PERFORATED UNDERDRAIN LENGTH		20	FT
T	OUTLET PIPE LENGTH		SEE TABLE	FT
U	INFLOW PIPE LENGTH		SEE TABLE	FT
V	SIDE SLOPE GRADE (RUN PER 1FT RISE)		3	FT/F
w	ROCK APRON WIDTH		N/A	IN.
х	ROCK APRON LENGTH		N/A	FT
Y	RISER DOME GRATE DIAMETER	1	48	ŧN
Z	PVC LINER SLOPE		1	Z.
AA	OUTLET PIPE SLOPE	1	0.5	*
вв	CLEAN-OUT RISER DIAMETER		6	IN
cc	CLEAN-OUT RISER ELEVATION		191.80	FT
DD	PVC LINER GAP	0.1*B	3.6	FT
EE	UNDERDRAIN PIPE ORIFICE DIAMETER	1.0	1.0	ŧN
FF	TOP OF POND BERM ELEVATION		193.50	FT



ACCEPTABLE PARTICLE SIZE DISTRIBUTION

OF FINAL BIORETENTION SOIL MIX						
MEDIA TYPE	SIEVE #	SIZE (IN)	SIZE (MM)	% PASSING		
COURSE SAND	4	0.19	4.76	100		
MEDIUM SAND	10	0.08	2.00	95		
FINE SAND	40	0.02	0.42	40-15		
SILTS	200	0.00	0.75	10-20		
CLAYS	<200	PAN	PAN	0-5		

BIORETENTION SOIL MEDIA COMPONENTS: 4

- 60-85%, SAND (0.5 TO 2.0 MM) (SEE SPECS ABOVE)
 15-25%, LOAM OR TOPSOIL
 3-8%, ORGANIC MATTER
 0-5%, WATER TREATMENT RESIDUALS OR IRON FILINGS **

- * ALTERNATIVELY, USE MEDIA SPECIFIED IN THE ALTERATION OF TERRAIN RULES, ENV-WO 1508.07(k) ** THIS IS AN AMENDMENT USED FOR ENHANCED PHOSPHORUS ADSORPTION.

INTERNAL STORAGE RESERVOIR (ISR) NOTES:

- 1. THE HYBRID BIORETENTION SYSTEM HARBORS AN ANAEROBIC INTERNAL STORAGE RESERVOIR FOR

- 1. THE HYBRID BIORETENTION SYSTEM HARBORS AN ANAEROBIC INTERNAL STORAGE RESERVOIR FOR MITROGEN REMOVAL.

 2. THE ISR IS SEPARATED BY AN IMPERMEABLE PVC LINER BETWEEN THE PEA GRAVEL AND CRUSHED STONE LAYERS.

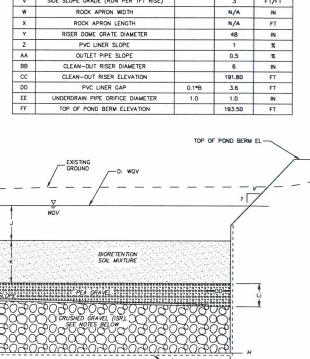
 3. THE PVC LINER SLOPES FROM THE OUTLET TOWARDS THE INLET TO MAXIMIZE STORAGE RETENTION AND PROVIDE EXTRA TREATMENT/FILTER TIME VIA PULG FLOW THROUGH CRUSHED STONE.

 4. WATER VOLUME IN THE ISR SHALL BE 26% OF THE WOV.

 5. PVC LINER THICKNESS OF 40 TO 60 MIL, PREFERABLY SEAMLESS. IF SEAMS ARE UNAVOIDABLE, THE SEAMS SHALL BE SEALED.

LINER NOTES:

- 1. ACCEPTABLE LINER OPTIONS INCLUDE:
- ALCEPTIBLE LIPER DEFINISH INCLUDE:
 SOLL COMPACTION: 6-12 IN CLAY SOIL (MINIMUM 15% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 1X10-5 CM/S)
 A 40 MIL PVC LINER WITH SAND BEDDING AND/OR NON-WOVEN GEOTEXTILE. PVC LINERSEAMS MAY BE WELDED, TAPED (WATERPROOF TAPE), OR OVERLAPPED (MIN. ONE FOOT).
 A 4" THICK LAYER OF BENTONITE.



CIVIL DETAILS
STORMWATER
TAX MAP 257 LOT 66
TEBBETTS ROAD EFI EXPRESS

O'NEILL

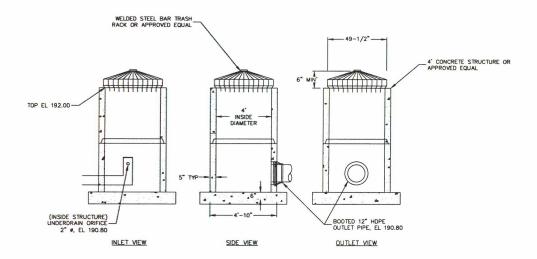
FUSS &

PLANS UNDER DESIGN DEVELOPMENT, ISSUEL OR INTERIM REVIEW ONLY, NOT FOR CONSTRUCTION

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		1-		n

Hybrid Bioretention Pond with Internal Storage Reservoir

PLAN VIEW



GENERAL NOTES:

- STEEL REINFORCEMENT CONFORMING TO THE LATEST ASTM SPECIFICATION: ASTM A-615, GRADE 60 BLACK DEFORMED BARS, ASTM A-185 WELDED WIRE FABRIC, 0.12 SQ IN/LINEAL FT AND 0.12 SQ IN.
- BLACK DEFORMED BARS, ASIM A-185 WELDED WINE FABRIC, 0.12 SO IN/LINEAL F1 AND 0.12 SI (BOTH WAYS) BASE BOTTOM.

 2. CONCRETE: fc=4,000 PSI © 28 DAYS MINIMUM, TYPE III CEMENT.

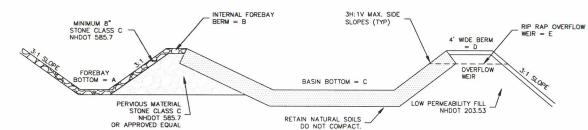
 3. BUTTL RÜBBER JOINT SEALANT CONFORMING TO ASTM C-990 AND FEDERAL SPEC SS-S-210A.

 4. HS-20 DESIGN LOADING TO CONFORM TO LATEST SPECIFICATIONS ASTM C478, AASHTO M199 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

 5. ONE POUR MONOLITHIC BASE SECTION.

Outlet Structure (SMA300)

N.T.S.



STORMWATER MANAGEMENT AREAS								
STORMWATER MANAGEMENT AREA	Α	В	С	D	E			
SMA 100	189.50	191.50	191.50	194.25	193.00			
SMA 200	188.00	190.00	190.00	193.20	194.50			



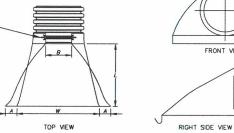
PE THREADED ROD W/WING NUTS AND SPACERS SEE NOTE A B (MAX) H L 6.50 IN 10.0 in 6.50 in 25.00 in 29.00 in 7.50 IN 15.0 in 6.50 in 32.00 in 35.00 in

24 in 7.50 IN 18.0 in 6.50 in 36.00 in 45.00 in 30 in (CMP) 7.50 IN 22.0 in 8.60 in 58.00 in 63.00 in NOTE: PE THREADED ROD W/WING NUTS PROVIDED FOR END SECTIONS $12^{\circ}-24^{\circ}$. 30° & 36° END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLE.

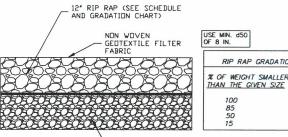
PIPE SIZE

12 in

18 in



HDPE Flared End Section



THAN THE GIVEN SIZE SIZE OF STONE 100 85 50 15 12.0 TO 16.0 d50 10.4 TO 14.4 d50 8.0 TO 12.0 d50 6.4 TO 10.4 d50 12' CRUSHED GRAVEL

Rip Rap Weir Detail

RIP RAP GRADATION (PER NRCS)

N.T.S.

Table 4-4. Bioretention Filter Media								
	Percent of Mixture	Gradation of Material						
Component Material	by Volume	Sieve No.	Percent by Weight Passing Standard Sieve					
	Filter Media	Option A						
ASTM C-33 concrete sand	-33 concrete sand 50 to 55							
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25					
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5					
	Filter Media	Option B						
Moderately fine shredded bark or wood fiber mulch, with fines 20 to 30 as indicated		200	< 5					
Loamy coarse sand	70 to 80	10	85 to 100					
		20	70 to 100					
		60	15 to 40					
		200	8 to 15					

Filter Media Mix

NOTES:

1. FILTER MEDIA TO BE MIXED/COMBINED PRIOR TO INSTALLATION.
2. DO NOT APPLY IN LAYERS/LIFTS.

STORMWATER MAINTENANCE NOTES:

- 1. EMBANKMENT THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE.

 2. VEGETATION THE VECETATED AREAS OF THE STRUCTURE SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY SPILLWAY AREAS.

 3. INLETS PIPE INLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED. IF PIPES ARE COATED, THE COATING SHOULD BE CHECKED AND REPAIRED AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLETS.

 5. SEDIMENT SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.
- REMOVED AND PROPERLY DISPOSED OF.

 6. SAFETY INSPECTIONS ALL PERMANENT IMPOUNDMENTS SHOULD BE INSPECTED BY A QUALIFIED
- PROFESSIONAL.

 7. REFER TO THE INSPECTION AND MAINTENANCE MANUAL, LOCATED WITHIN THE ALTERATION OF TERRAIN STORMWATER MANAGEMENT REPORT.

TEST PIT DATA:							
Test Pit 1		Approx E	xist Elev		194 ±		
0"-8" 8-27"	Loam	Cina Cana		· Annalium	F-:		
8-27 27-120"		Fine Sandy			Friable		
		,					
		NONE OF					
	ROOTS:	NONE OF	SERVED				
		NONE OF	SERVED				
24C	Agawam	Fine Sandy		HSC B			
Ksat=		6.0/20	in/hr				
Test Pit 2		Approx E	xist Elev	19	96.5 ±		
0"-8"	Loam						
8-25" 25-132"	10yr5/8 10YR 7/6	Fine Sand	ly Loam - l' Loose, Gi		Friable		
	,-	,	,				
		NONE OF					
	ROOTS:	NONE OF	SERVED				
		NONE OF	SERVED				
24B	Agawam I	ine Sandy		HSC B			
Ksat=		6.0/20	in/nr				
Test Pit 2A		Approx E	kist Elev	19	96.5 ±		
0"-8" 8-25"	Loam 10vr5/8	Fine Sano	ly I oam - N	Maccive	Friable		
25-132"		Sandy			Mable		
		NONE OB					
	ROOTS:		SERVED				
		NONE OB					
24B Ksat=	Agawam F		Loam in/hr	HSC B			
KSdt-		0.0/20	111/111				
Test Pit 3		Approx E	ist Elev		197 ±		
0"-8" 8-25"	Loam 10vr5/8	Fine Sand	v Loam - N	/Jassive	Friable		
25-132"	10YR 7/6		Loose, Gr		· madic		
		NONE OB					
	ROOTS:	30"					
24B	OWT: Agawam F	NONE OB		HSC B			
Ksat=	Agawaiii	6.0/20		HISC B			
T+ Di+ 24				40	7.5 %		
Test Pit 3A 0"-8"	Loam	Approx Ex	ist Elev	19	7.5 ±		
8-25"	10yr5/8		y Loam - N	/lassive l	Friable		
25-132"	10YR 7/6	Sandy	Loose, Gr	anular			
	LEDGE:	NONE OB	SERVED				
		NONE OB	SERVED				
	ROOTS:	NONE OB	SERVED				
24B	Agawam F			HSC B			
Ksat=		6.0/20	in/hr				
Test Pit 4		Approx Ex	ist Elev	1	192 ±		
0"-6"	Loam						
6-32" 32-58"	10yr5/8 10YR 7/6						
32-36	101K 7/6	very sirty	clayey, ii	iii, bioc	ку		
		NONE OB	SERVED				
	ESHWT: ROOTS:						
	OWT:						
350B	Udipsamm			m	HSC C		
Ksat=		0.6/2.0	in/hr				
Test Pit 5		Approx Ex	ist Elev	1	.95 ±		
0"-12" 12-26"	Loam 10yr5/8	Fine Sand	v Loam - N	Massive F	riable		
26-100"	10YR 7/6		Loose, Gr				
	iracr						
		NONE OBS					
	ROOTS:						
240		NONE OBS		LICC D			
24B Ksat=	Agawam F		Loam in/hr	HSC B			
Due to proxim 300B	ity of soil be Udipsamm		Iso listing	HSC A			
Ksat=			in/hr				

NO LES:

NO LES:

PERFORMED BY BRIAN PRATT OF THIS OFFICE ON NOVEMBER 24, 2020.

CALCULATION OF THE DESIGN INFILTRATION RATE REPRESENT KSAT VALUES FROM ENV-WO 1504.14(C)(1). SSSNNE SPECIAL PUBLICATION NO. 5, KSAT VALUES FOR NEW HAMPSHIRE SOLIS, SEPTEMBER 2009. REFER TO INFILTRATION FEASIBILITY REPORT WITHIN THE DRAINAGE ANALYSIS FOR ADDITIONAL INFORMATION.

PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

HORZ. HORZ VERT.



CIVIL DETAILS STORMWATER & TESTPIT 99

DATE: JANUARY 2021 **CD-507**

BASIN FLOOR PREPARATION AND NOTES:

1. PROVIDE GRASS SEED/HYDRO-SEED THAT CAN BE INUNDATED FOR 72+ HOURS.

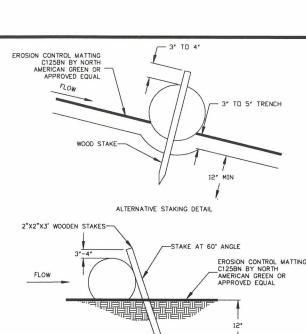
1.1. NEW ENGLAND WETMIX IN BASIN BOTTOM.

1.2. NEW ENGLAND CONSERVATION WILDLIFE MIX ON SLOPES.

2. THE BASIN FLOOR SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW, FOLLOWED BY A PASS WITH A LEVELING DRAG. PRIOR TO FILLER MEDIA LAYER BEING CONSTRUCTED.

3. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILLERATION SYSTEM. DO NOT PLACE INFILLERATION SYSTEMS INTO SERVICE UNTIL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

4. INFILERATION BASIN BOTTOM MATERIAL— REMOVE EXISTING SOILS TO A DEPTH OF 12" BELOW BOTTOM OF BASIN, REPLACED WITH 12" OF EXISTING SOIL.



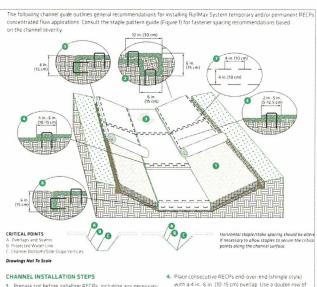
ALTERNATIVE STAKING DETAIL

FOR DITCH APPLICATIONS, MINIMUM INSTALLED HEIGHT OF SINGLE SOCK NOMINALLY. SOCKS ARE PLACED PERPENDICULAR TO FLOW OF WATER. FILTER SOCKS SHALL CONTINUE UP SIDE SLOPES TO TOP OF BANK OR MAXIMUM 3-FEET ABOVE INSTALLED HEIGHT. FILTER SOCKS SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED.
 REMOVE SEDIMENT FROM BEHIND THE FILTER SOCK ONCE IT ACCUMULATES TO ONE—HALF OF THE ORIGINAL HEIGHT OF THE FILTER SOCK.
 INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.
 SOCKS SHOULD BE REMOVED FROM SLOPES AFTER STABILIZATION IS COMPLETE UNLESS DIRECTED OTHERWISE.
 FILTER SOCKS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED ONCE VEGETATION IS ESTABLISHED.

Compost Filter Sock Installation Detail

N.T.S.

STAPLE 12" ON CENTER



1. Prepare soil before installing RECPs, including any nece application of lime, fertilizer and seed.

2. Begin at the top of the channel by anchoring the RECPs in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approx portion of the trench For supplemental scour protection, use RevetMax* System ShoreMax* Mat at the channel/ culvert outlet as needed. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the bottom of the trench Backfill and compact the trench after stapling. Apply seed to the compact do so and fold the remaining 12 in. (30 cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12 in (30 cm) apart across the width of the REEPs.

3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.

 Place consecutive RECPs end-over-end (shingle style) with a 4 in. -6 in. (10-15 cm) overlap. Use a double row of staples staggered 4 in. (10 cm) apart and 4 in. (10 cm) on center to secure RECPs. 5. Full-length edge of RECPs at top of side slopes must be

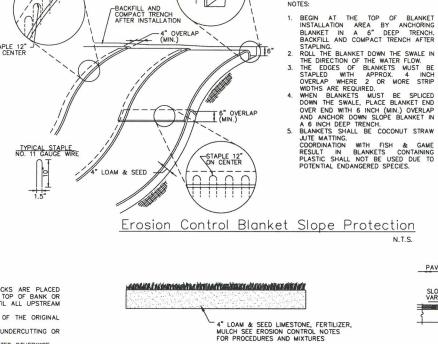
anchored with a row of staples/stakes approximately 12 in. (30 cm) apart in a 6 in. (15 cm) deep x 6 in. (15 cm)

6. Adjacent RECPs must be overlapped approximately 2 in

7. In high flow channel applications a staple check slot is recommended at 30 to 40 ft (9-17 m) intervals. Use a

8. The terminal end of the RECPs must be anchored with row of staples/stakes approximately 12 in. (30 cm) apart in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench. Backfill and compact the trench after stapling.

Erosion Control Channel Installation Detail



BACKFILL AND COMPACT TRENCH AFTER INSTALLATION

4" OVERLAP (MIN.)

The following slope guide outlines general recommendations for installing RollMax* System temporary and/or permanent RECPs or 1

Loam & Seed Detail

SLOPE INSTALLATION STEPS

1. Prepare soil before installing RECPs, including any necessary application of lime, fertilizer and seed

2. Begin at the top of the slope by anchoring the RECPs in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approx mately 12 in. (30 cm) of RECPs extended beyond the unslow matery 12 in (30 cm) or Recess extended deyond the upso-portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12 in. (30 cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12 in. (30 cm) apart across the width of the RECPs.

3. Roll the RECPs (3A) down or (3B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate location as shown in the staple pattern guide.

NOTES:

. The edges of parallel RECPs must be stapled with an approximately 2 in -5 in. (5-12.5 cm) overlap depending or the RECP type

5. Consecutive RECPs spliced down the slope must be endover-end (shingle style) with an approximate 3 in. (7.5 cm rlap. Staple through overlapped area, approximatel

REINFORCED -PROVIDE AND INSTALL
DANDY SACK ® BY DANDY
PRODUCT AND INSTALL
PER MANUFACTURES
RECOMMENDATIONS. Dandy Sack

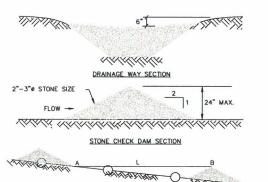
N.T.S.

FLAP FOLDS OVER TO ENCLOSE GRATE VELCRO CLOSURE A DANDY BAG PATENT PENDING DANDY BAG TM SECTION A-A INSTALLATION: STAND GRATE ON END. PLACE DANDY BAG OVER GRATE. ROLL GRATE OVER SO THAT OPEN END IS UP.

MANNENNEC:
MANNENNEC:
OTHER DEBRIS OFF SURFACE AFTER EACH EVENT. REMOVE FINE MATERIAL
FROM INSIDE ENVELOPE AS NEEDED.
(CONTACT DANDY PRODUCTS INC. 1-800-591-2284)

Dandy Bag

PAVEMENT REQUIRED FOR ALL SLOPES 3:1 OR STEEPER SLOPE VARIES EROSION CONTROL BLANKET (SEE DETAIL) VARIES SILT FENCE (SEE PLAN VIEW) Slope Stabilization



- ONTHER O MARKETON STONE CHECK DAM SPACING

MAINTENANCE:

1. TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. ARR REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES.

CONSTRUCTION SPECIFICATIONS:

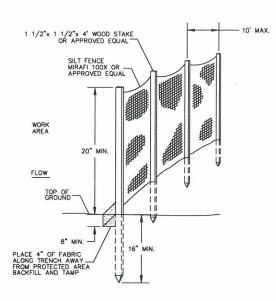
1. DAMS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS.

2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.

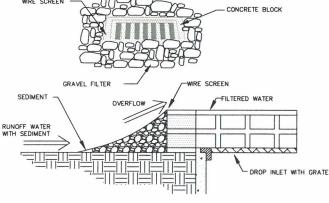
3. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BE COMPLETED.

4. STONE SHALL BE FRACTURED FACE STONE. D50 SIZE SHALL BE 2 TO 3 INCHES. NO STONE SMALLER THAN 1-1/2 INCHES OR LARGER THAN 4 INCHES SHALL BE USED.

Typical Stone Check Dam Detail



Silt Fence Barrier N.T.S.



Block and Gravel Inlet Sediment Filter

PLANS UNDER DESIGN DEVELOPMENT, ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

FUSS & O'NEILL

CIVIL DETAILS
EROSION CONTROL
TAX MAP 257 LOT 66
TEBBETTS ROAD EFI EXPRESS

PROJ. No.: 20200646 A10 DATE: JANUARY 2021 CD-508

Erosion Control Slope Installation Detail

N.T.S.

DUST CONTROL NOTE

THE CONTRACTOR SHALL, IN ACCORDANCE WITH ENV—A 1000 "....TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, HADE, AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING SHIFLDING OR VACUUMING

MAINTENANCE NOTES

- SILT FENCE/ FILTER SOCK SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED
- AND AT LEAST DAILT DURING PROLUNCED KAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.

 IF THE FABRIC ON A SILT FENCE OR THE FILTER SOCK SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE OR FILTER SOCK, THE FABRIC OR FILTER SOCK SHALL BE REPLACED PROMPTLY.

 SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS OF THE DAPPER PROMPTLY ONE—HALF THE HEIGHT OF THE DAPPER DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT.
- THE BARRIER.

 SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

BLOCK & GRAVEL INLET SEDIMENT FILTER

ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAX. OF 1/2 THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

BIORETENTION AREAS & SEDIMENT FOREBAY

- THE BOTTOM, INTERIOR AND EXTERIOR SIDE SLOPES AND CREST OF EARTHEN DETENTION PONDS SHALL BE MOWED, AND THE VEGETATION MAINTAINED IN HEALTHY CONDITION, AS APPROPRIATE TO THE FUNCTION OF THE FACILITY AND TYPE OF VEGETATION. VEGETATED EMBANKMENTS THAT SERVE AS "BERMS" THAT IMPOUND WATER SHALL BE MOWED AT LEAST ONCE ANNUALLY TO PREVENT THE ESTABLISHMENT OF WOODLY VECETATION.
- 2. VEGETATED EMBANKMENTS THAT SERVE AS "BERMS" THAT IMPOUND WATER SHALL BE MOWED AT LEAST ONCE ANNUALLY TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION.

 3. EMBANKMENTS SHALL BE INSPECTED AT LEAST ANNUALLY BY A QUALIFIED PROFESSIONAL FOR SETTLEMENT, EROSION, SEEPAGE, ANIMAL BURROWS, WOODY VEGETATION AND OTHER CONDITIONS THAT COULD DEGRADE THE EMBANKMENT AND REDUCE ITS STABILITY FOR IMPOUNDING WATER. IMMEDIATE CORRECTIVE ACTION SHOULD BE IMPLEMENTED IF ANY SUCH CONDITIONS ARE FOUND.

 4. INLET AND OUTLET PIPES, INLET AND OUTLET STRUCTURES, ENERGY DISSIPATION STRUCTURES OR PRACTICES AND OTHER STRUCTURAL APPURETNANCES SHOULD BE INSPECTED AT LEAST ANNUALLY BY A QUALIFIED PROFESSIONAL AND CORRECTIVE ACTION IMPLEMENTED AS INDICATED BY SUCH INSPECTION.

 5. TRASH AND DEBRIS SHALL BE REMOVED FROM THE POND AND ANY INLET OR OUTLET STRUCTURES WHENEVER OBSERVED BY INSPECTION.

 6. ACCUMULATED SEDIMENT SHOULD BE REMOVED FROM THE POND AND ANY INLET OR OUTLET STRUCTURES WHENEVER OBSERVED BY INSPECTION.

TYPICAL EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

- 1. INSTALLATION OF PERIMETER CONTROLS (SILT FENCE OR FILTER SOCK) SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILT FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURES' RECOMMENDATIONS.

 1. PERIMETER CONTROLS SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VECETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.

 3. EXISTING VECETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.

 4. NO MORE THAN FIVE ACRES OF LAND SHALL BE LEFT DISTURBED AT ANY ONE TIME. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.

 5. STABILIZATION SHALL INCLUDE THE FOLLOWING, AT A MINIMUM:

 A. INSTALLATION OF BASE COURSE GRAVELS (IN PAVED AREAS)

 B. MIN. 85% VECETATED GROWTH
 C. INSTALLATION OF STONE OR RIP RAP MATERIAL (3" MIN. DEPTH)

 D. PROPERLY INSTALLED EROSION CONTROL BLANKETS

 6. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN

- ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN 1.1 POUNDS OF SEED MIX PER 1,000 SQ. FT. SEED MIXTURE SHALL BE:

CREEPING RED FESCUE 0.45 LBS. 0.20 LBS. BIRDSFOOT TREFOIL ANNUAL RYEGRASS 1.10 LBS.

- ANNUAL RYEGRASS 1.10 LBS.

 1. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.

 8. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANDOMED AND APPLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

 9. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS BAY BE MADE FROM EARLY SYSTIME TO AMY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO IDSTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS, PLANT ANNUAL RYE GRASS PRIOR TO OCTOBER 15TH.

 10. THE LAND AREA EXPOSED SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AND SHALL NOT REMAIN EXPOSED MORE THAN 45 DAYS FROM INITIAL DISTURBANCE.

 11. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 A GRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED

 12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED A MINIMUM OF 85% OF VEGETATED GROWTH HAS BEEN ESTABLISHED A MINIMUM OF 3" NON EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN NORTHLIED.
- INSTALLED EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 13. ALL CONTRIBUTING WATERSHED AREAS MUST BE FULLY STABILIZED PRIOR TO DIRECTING STORMWATER TO THEM.

 14. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5° OR GREATER RAINFALL WITHIN A 24-HOUR PERIOD.
- KAINFALL WITHIN A 24-HOUR PERIOD. SEDIMENT BASINS, SWALES, ETC.) MUST BE USED AS NECESSARY TO CONTAIN RUNOFF UNITL SOILS ARE STABILIZED.

 16. CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

 17. STORMWATER BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE.

 18. STORMWATER BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNDS THEM.

TEMPORARY SEDIMENT TRAP NOTES

- TEMPORARY SEDIMENT TRAPS SHOULD MEET THE FOLLOWING REQUIREMENTS:

 SEDIMENT TRAPS SHOULD BE LOCATED SO THAT THEY CAN BE INSTALLED PRIOR TO DISTURBING THE AREA THEY ARE TO PROTECT.

 THE TRAP SHOULD BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.

 THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHOULD BE LESS THAN 5 ACRES.

 THE MINIMUM VOLUME OF THE TRAP SHOULD BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.

 THE SIDE SLOPES OF THE TRAP SHOULD BE 3.1 OR FLATTER, AND SHOULD BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.

2 FMRANKMENTS

- MBANKMENTS:
 THE MAXIMUM HEIGHT OF THE SEDIMENT TRAP EMBANKMENT SHOULD BE 4
 FEET WHEN MEASURED FROM THE LOWEST POINT OF NATURAL GROUND ON THE
 DOWNSTREAM SIDE OF THE EMBANKMENT.
 THE MINIMUM TOP WIDTH OF THE EMBANKMENT SHOULD BE 6 FEET.

- 3. OUTLETS (GENERAL REQUIREMENTS):

 THE OUTLET SHOULD BE DESIGNED, CONSTRUCTED AND MAINTAINED IN SUCH A MANNER THAT SEDIMENT DOES NOT LEAVE THE TRAP AND THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.

 OUTLETS SHOULD BE DESIGNED SO THAT THE TOP OF THE EMBANKMENT IS A MINIMUM OF 1 FOOT ABOVE THE CREST ELEVATION OF THE OUTLET.

 THE OUTLET OF THE TRAP SHOULD BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
- CREST OF THE TRAP
 THE OUTLET SHOULD DISCHARGE TO A STABILIZED AREA. THE OUTLETS MUST
 EMPTY ONTO UNDISTURBED GROUND, INTO A WATERCOURSE, STABILIZED
 CHANNEL OR A STORM SEWER SYSTEM.
- OUTLETS MAY BE CONSTRUCTED AS EARTH SPILLWAYS, STONE OUTLETS, OR PIPE OUTLETS.

4. EARTH OUTLETS:

- EARTH OUTLETS:

 AN EARTH OUTLET SEDIMENT TRAP HAS A DISCHARGE POINT THAT IS EITHER OVER NATURAL GROUND OR CUT INTO NATURAL GROUND.

 THE OUTLET WIDTH SHOULD BE EQUAL TO 6 TIMES THE DRAINAGE AREA IN
- THE EMBANKMENT AND OUTLET SHOULD BE VEGETATED WITHIN 3 DAYS OF

- 5. STONE OUTLETS:

 A STONE OUTLET SEDIMENT TRAP HAS AN OUTLET CONSISTING OF A CRUSHED STONE SECTION IN THE EMBANKMENT.

 THE STONE SECTION SHOULD BE LOCATED AT THE LOW POINT OF THE NATURAL GROUND, AS DETERMINED AT THE DOWNSTREAM SIDE OF THE
 - THE OUTLET SHOULD BE CONSTRUCTED OF MINIMUM SIZE 1 1/2 CRUSHED

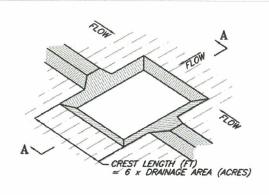
6. VEGETATION:

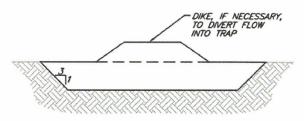
- VEGETATION:

 **ALL EMBANIMENTS, EARTH SPILLWAYS, AND DISTURBED AREAS BELOW THE STRUCTURE SHOULD BE VEGETATED WITHIN 72 HOURS OF COMPLETION OF THE CONSTRUCTION OF THE STRUCTURE.

 **IF THE STRUCTURE IS NOT PLANNED FOR MORE THAN ONE VEGETATIVE GROWING SEASON, THE STRUCTURE MAY BE VEGETATED USING THE RECOMMENDATION OF THE TEMPORARY VEGETATION BEST MANAGEMENT PRACTICE DESCRIBED IN NIDES STORMWATER MANAGEMENT MANUAL, VOL. 2.

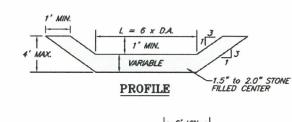
 **BASINS THAT MILL BE CARRIED OVER THE WINTER AND INTO THE NEXT VEGETATIVE GROWING SEASON, SHOULD BE VEGETATED USING THE RECOMMENDATIONS FOR PERMANENT VEGETATION BEST MANAGEMENT PRACTICE.





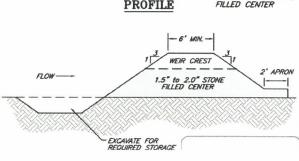
Earth Outlet Temporary Sediment Trap

1.5" to 2.0" STONE FILLED CENTER **APRON** UNDISTURRED



Temporary Sediment Trap

EXISTING PAVEMENT 10" MIN. MOUNTABLE BERM (OPTIONAL FOR 75' LENGTH ONLY) FILL



TYPICAL CONSTRUCTION SEQUENCE INSTALL HAY BALE BARRIERS AND SILT FENCES IN LOCATIONS SHOWN ON PLANS INSTALL HAT BALE BARRIERS AND SILT FENCES IN LOCATIONS SHOWN ON PLANS AS A MINIMUM. ERGSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION. PREPARE TEMPORARY STABILIZED CONSTRUCTION ENTRANCE IN SUITABLE LOCATION.

- STABILIZED CONSTRUCTION ENTRANCE IN SUITABLE LOCATION.
 INSPECT AND MAINTAIN REDISION CONTROL MEASURES ON A DAILY BASIS.
 DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES,
 SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
 CUT AND CLEAR TREES, DISPOSE OF DEBRIS IN AN APPROVED OFF-SITE
 LOCATION.
- THE WORK AREA SHALL BE GRADED, SHAPED AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS

- DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS
 OF THE WORK AREA. SILT FENCES, FILTER SOCK AND/OR DETENTION BASINS
 WILL BE NECESSARY TO ACCOMPLISH THIS.

 6. TOPSOIL SHALL BE STRIPPED AND STOCKPIELD DURING DRY CONDITIONS AND
 WITHOUT COMPACTION. TOPSOIL SHALL BE STABILIZED AGAINST EROSION.

 7. REMOVE ONSITE UNDESIRABLE SOILS AND LEDGE.

 8. GRUBBING AND STUMPING DISPOSAL IN AN APPROVED OFF—SITE LOCATION.

 9. CONSTRUCT ALL DITCHES AND SWALES.

 10. ALL DITCHES AND SWALES, SHALL BE STABILIZED PRIOR TO DIRECTING ANY
 STORM WATER INTO THEM.

 11. CONSTRUCT SLOPED EMBANKMENTS.

 12. ROUGH GRADE SITE OR PHASED WORK AREA. DISTURBED AREAS SHALL BE
 STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL
 NOTES. 13. INSTALL ALL UNDERGROUND UTILITIES.
- 13. INSTALL ALL UNDERGROUND UTILITIES.

 14. INSTALL DRAINAGE STRUCTURES, CULVERTS, HEADWALLS, RIP RAP, AND OTHER DRAINAGE FACILITIES. PLACE CATCH BASIN RIMS IN DANDY BAGS UNTIL PARKING AREAS ARE PAVED. STORMWATER PONDS, INFLITRATION BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

 15. FINISH GRADING, LOAMING AND SEEDING, ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.

 16. COMPLETE PERMANENT SEEDING AND LANDSCAPING.

 17. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED AND HAVE A HEALTHY VEGETATIVE COVER.

 18. CLEAN ALL DRAINAGE STRUCTURE SUMPS OF SEDIMENT AND DEBRIS (INCLUDES ALL SETUCCTURES WIMPS OF WINDS O

- ALL STRUCTURES WITHIN THE LIMITS OF WORK).

 19. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF

WINTER EROSION CONTROL NOTES

- 1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3:TO 4 TONS OF MULCH APER ACRE, SECURED WITH ANCHORED NETTING ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

 2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; AND 3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHOOT ITEM 304.3.

COLD WEATHER SITE STABILIZATION PER ENV-WQ 1505.06 - COLD WEATHER SITE STABILIZATION.

- A. TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH
- B. SUBJECT TO (C), BELOW, THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL
- L: LIMITED TO ONE ACRE; AND PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT.
- C. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN IS DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST AND SUBMITTED TO THE DEPARTMENT FOR APPROVAL AS A REQUEST TO WAIVE THE ONE-ACRE LIMIT.
- REQUEST TO WAIVE THE ONE—ACRE LIMIT.
 SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAWING
 A SLOPE OF LESS THAN 15% THAT DO NOT EXHIBIT A MINIMUM OF 85%
 VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER
 OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR
 STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFER OR
 WITH AT LEAST 2 NOHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF
- ENV-WQ 1506.05(B).

- WITH AT LEAST 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B).

 E. SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF 15% OR GREATER THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANNET OR WITH AT LEAST 4 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B).

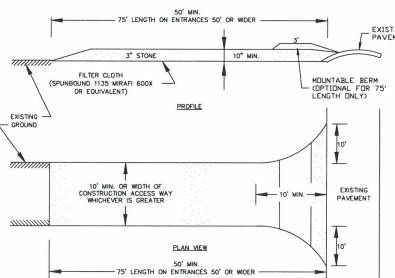
 F. ANCHORED HAY MULCH OR EROSION CONTROL MIX THAT MEETS THE CRITERIA OF ENV-WQ 1506.05(B) SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH.

 G. EROSION CONTROL BLANKETS SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.

 H. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (D) OR (E), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.

 ALL DITCHES OR SWALES THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STOME OR TERROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNERS ENGINEERING CONSULTANT.

 J. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREAS HERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM J-INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM J-INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM J-INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION FOR DATE OF STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, TABLE 304-1, 1TEM NO. 304-1, 304-2, OR 304-3, AVAILABLE AS NOTED IN APPENDIX B.



- 1. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 2. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED
- 3. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT MAINTENANCE — THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVE TRACKING OF FLOWING FO SEDIMENT ONTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS—OF—WAY MUST BE REMOVED IMMEDIATELY.
- 4. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO USDA - SCS Stabilized Construction Entrance

NTS

CIVIL DETAILS
EROSION CONTROL
TAX MAP 257 LOT 66
TEBBETTS ROAD

PLANS UNDER DESIGN

DEVELOPMENT, ISSUEI FOR INTERIM REVIEW ONLY. NOT FOR

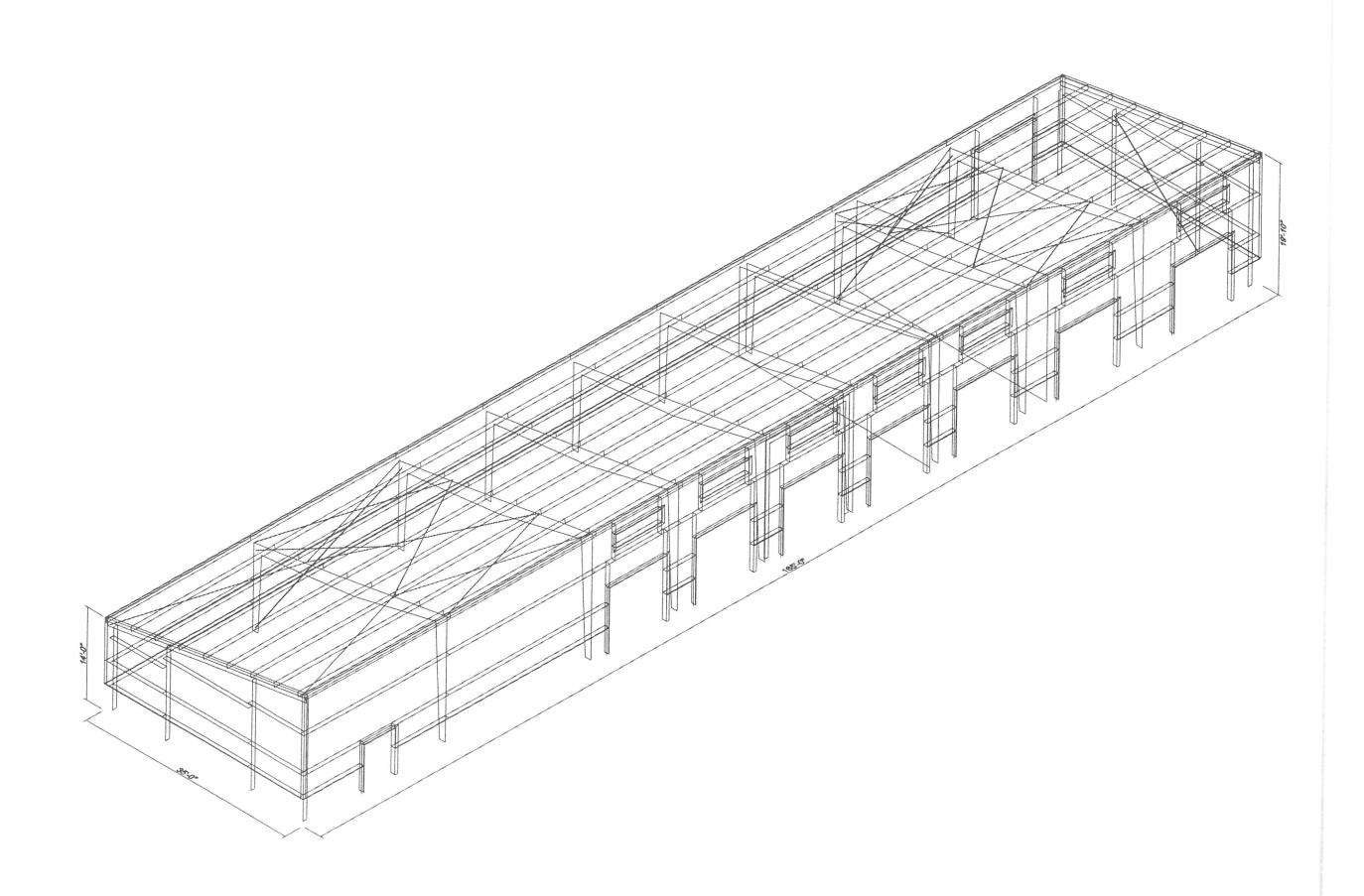
CONSTRUCTION

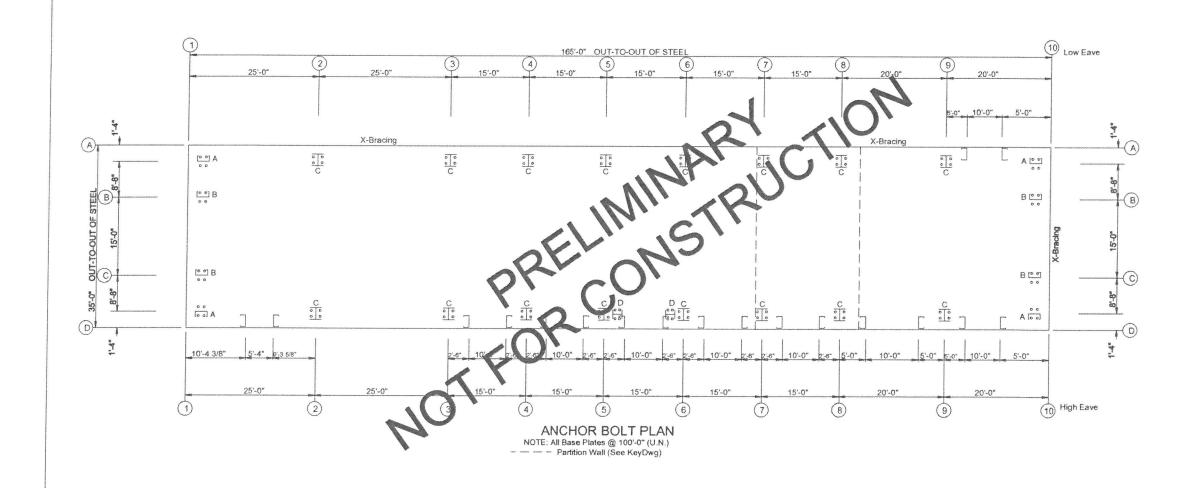
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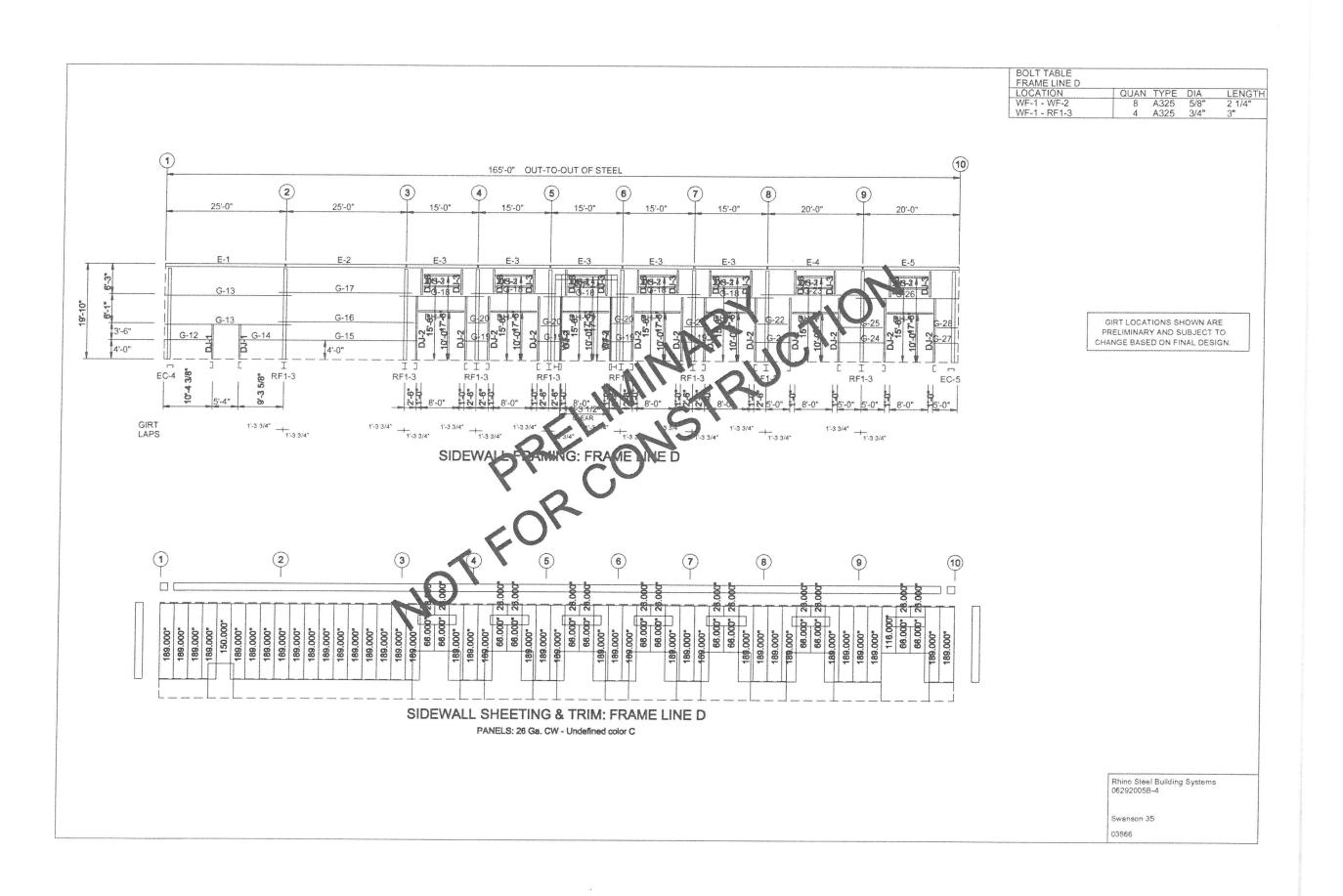
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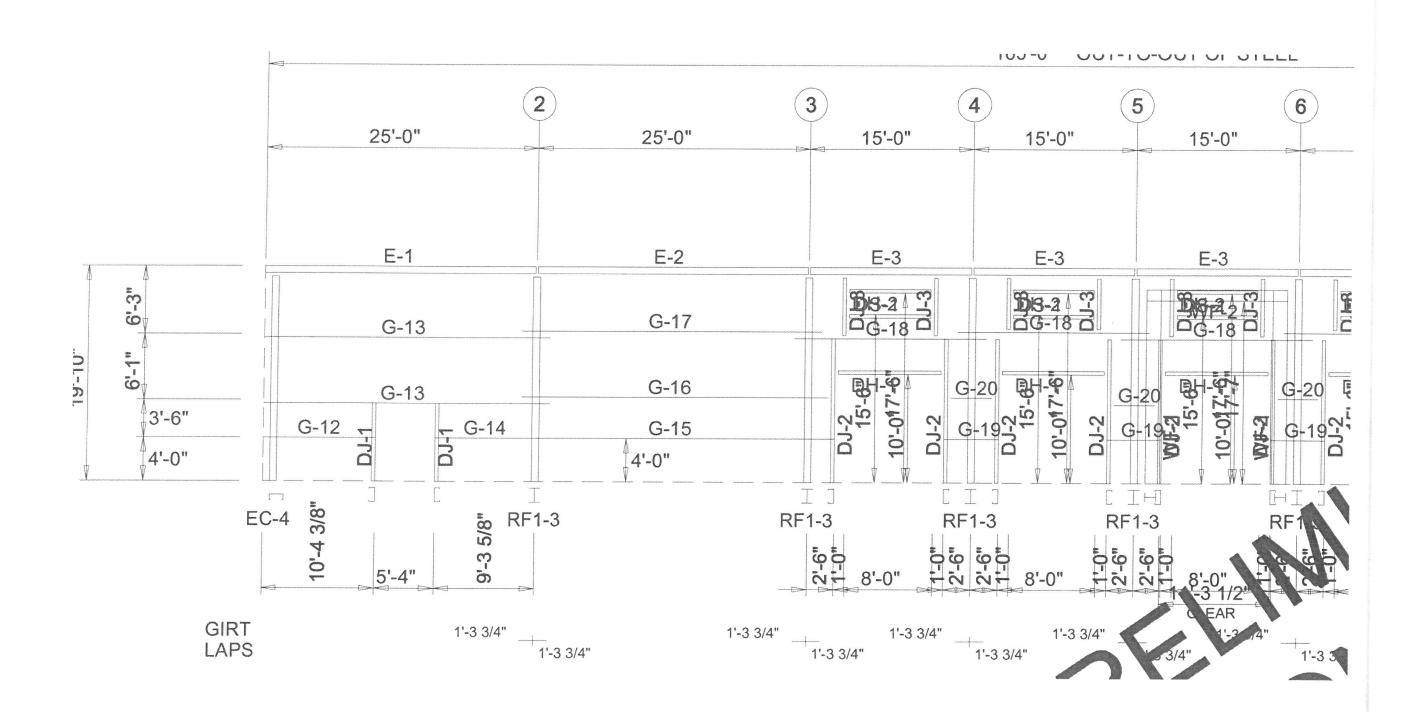


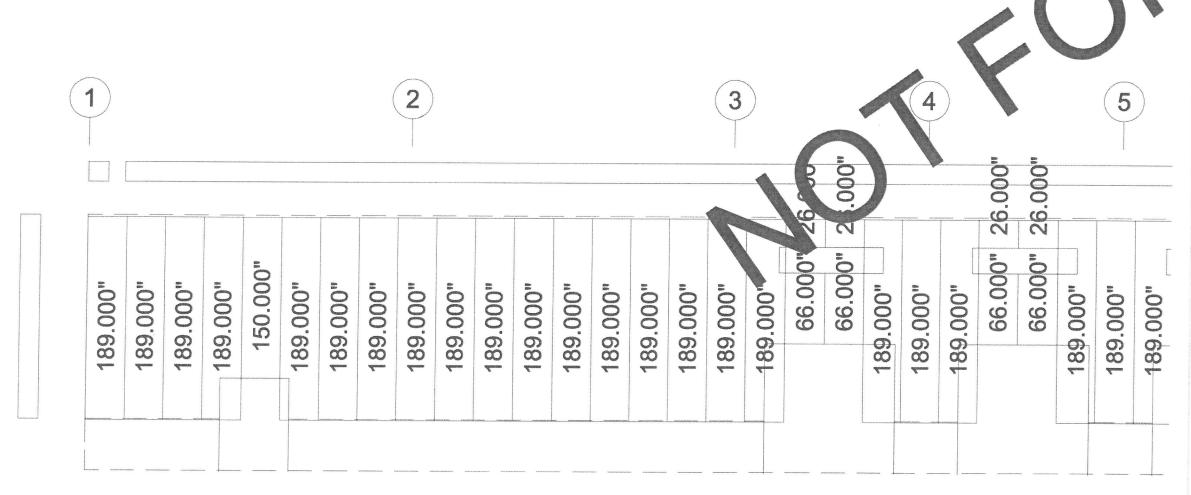


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SIDEWALL SHEETING &

PANELS: 26 Ga. CW -

