

1. Planning Board Regular Zoom Meeting Agenda - Amended

Documents:

[20201022 NCPB AGENDA AMENDED.PDF](#)

2. Planning Board Staff Reports And Plans

Documents:

[20201008 117 WEST GLENWOOD STREET LOT LINE RELOCATION STAFF REPORT.PDF](#)

[20201008 117 WEST GLENWOOD STREET LOT LINE RELOCATION PLAN.PDF](#)

[20201008 117 WEST HOBART STREET SITE PLAN STAFF REPORT.PDF](#)

[20201008 117 WEST HOBART STREET SITE PLAN.PDF](#)

[20201022 1 MORNINGSIDE DRIVE SUBDIVISION AMENDED STAFF REPORT.PDF](#)

[20201022 1 MORNINGSIDE DRIVE SUBDIVISION PLAN.PDF](#)

[20201008 453 SOUTH MAIN STREET SUBDIVISION STAFF REPORT.PDF](#)

[20201008 453 SOUTH MAIN STREET SUBDIVISION PLAN.PDF](#)

[20201008 190 BROAD STREET SITE PLAN STAFF REPORT.PDF](#)

[20201008 190 BROAD STREET SITE PLAN.PDF](#)

[20201008 278 DANIEL WEBSTER HIGHWAY SITE PLAN STAFF REPORT.PDF](#)

[20201008 278 DANIEL WEBSTER HWY SITE PLAN.PDF](#)

[20201022 25 VAN BUREN STREET AND 38 BRIDGE STREET SITE PLAN STAFF REPORT.PDF](#)

[20201022 25 VAN BUREN STREET AND 38 BRIDGE STREET SITE PLAN.PDF](#)



City of Nashua
Planning Department
229 Main Street
Nashua, New Hampshire 03061-2019

Planning & Zoning 589-3090
Fax 589-3119
WEB www.nashuanh.gov

October 15, 2020

AMENDED AGENDA

To: NCPB Members

From: Planning Staff

Re: Regular Meeting and Public Hearing, October 22, 2020

Notice is hereby given that a Public hearing of the City of Nashua Planning Board will meet on Thursday, October 22, 2020 at 7:00 PM via a Zoom Meeting. Real-time public comment can be addressed to the Board utilizing Zoom virtual meeting software for remote access. This application will allow users to view the meeting and ask questions to the Board via the chat function. The public is also encouraged to submit their comments via email planningdepartment@nashuanh.gov to the Department email or by mail (please make sure to include your name/address and comments) by 5pm on October 22, 2020 and read into the record at the appropriate time. Letters should be addressed to City of Nashua, Planning Department, P.O. Box 2019, Nashua, NH 03061. Plans can be viewed on online starting October 16, 2020 at www.nashuanh.gov in the Calendar or Agendas and Minutes.

To access Zoom: <https://us02web.zoom.us/j/89597005178?pwd=emNyUE5RVWhmUmV3dnJJaWJpK0hOdz09>

Meeting number/access code: **895 9700 5178**– Password: **357624**

To join by phone: **1 (929) 436-2866** - Meeting number/access code: **895 9700 5178**

If for some reason you can't connect to Zoom, please contact us at **(603) 589-3115**.

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes – October 8, 2020
- D. Communications
- E. Report of Chairman, Committee, & Liaison
- F. Executive Session

OLD BUSINESS – CONDITIONAL / SPECIAL USE PERMITS

None

OLD BUSINESS - SUBDIVISION PLANS

1. Roscommon Investments, LLC and MAG RE Holdings-Nashua, LLC (Owners). - Proposed lot line adjustment. Property is located at 117 West Glenwood Street and “L” West Hobart Street. Sheet 132 - Lots 84 & 31. Zoned “RA” Urban Residence. Ward 7. **(Postponed from the October 08, 2020 meeting)**
2. MG Holdings (Owner) - Proposed three lot subdivision. Property is located at 1 Morningside Drive. Sheet 118 - Lot 129. Zoned “RA” Urban Residence. Ward 7. **(Postponed from the October 08, 2020 meeting)**

OLD BUSINESS – SITE PLANS

3. Roscommon Investments, LLC (Owner) - Proposed site plan to construct a new 22,560 sf auto body shop with parking, vehicle storage, and associated site improvements. Property is located at 117 West Hobart Street, "L" Glenwood Street, and "L" West Hobart Street. Sheet 132, Lots 84 & 38. Sheet 128, Lots 31, 32, & 84. Zoned "HB" Highway Business and "RA" Urban Residence. Ward 7. **(Postponed from the October 08, 2020 meeting)**
4. City of Nashua (Owner) – Proposed site plan amendment to Pennichuck Middle School to construct additions, complete various renovations and upgrade the existing school layout. Site layout changes include a realigned perimeter access road, a new curb-cut from Manchester Street for a one-way drive for bus/emergency traffic, a new bus loop and additional parking. Property is located at 207 Manchester Street. Sheet 54 - Lot 32. Zoned "R18" Suburban Residence. Ward 3. **(Postponed to the November 5, 2020 meeting)**

NEW BUSINESS – CONDITIONAL / SPECIAL USE P-RMITS

None

NEW BUSINESS –SUBDIVISION PLANS

- 5 Stellos Family Investment Properties, LLC (Owner) – Application and acceptance of proposed five lot subdivision and dedication of land. Property is located at 453 South Main Street. Sheet 112 - Lot 11. Zoned "RA" Urban Residence. Ward 7. **(Postponed from the October 08, 2020 meeting) (THIS CASE WILL BE HEARD SECOND)**

NEW BUSINESS – SITE PLANS

6. Granite State Credit Union (Owner) - Application and acceptance of proposed amendment to NR2186 to show a proposed 2-story, 10,000 sf credit union with drive-through facilities and associated site improvements. Property is located at 190 Broad Street. Sheet E - Lot 744. Zoned "GB" General Business. Ward 1. **(Postponed from the October 08, 2020 meeting) (THIS CASE WILL BE HEARD FIRST)**
7. 278 Daniel Webster Highway, LLC (Owner) – Application and acceptance of proposed site plan amendment to show the redevelopment of an existing retail building and associated site improvements. The property is located at 278 Daniel Webster Highway. Sheet A - Lot 133. Zoned "HB" Highway Business & "TOD" Transit Oriented Development. Ward 7. **(Postponed from the October 08, 2020 meeting) (THIS CASE WILL BE HEARD THIRD)**
8. Liberty Utilities (Owner) - Application and acceptance of proposed amendment to install an impermeable cap over former Gas Holders #1 & #2 to meet requirements of the NH Department of Environmental Services, regrade, repave and expand the site's existing parking lot and improve the stormwater management system. Property is located at 25 Van Buren & 38 Bridge Streets. Sheets 4 & 39 - Lots 11 & 26. Zoned "TOD" Transit Oriented Development and GI-General Industrial. Ward 7. **(Postponed from the October 08, 2020 meeting)**
9. 75 Deerwood Drive, LLC (Owner) - Application and acceptance of proposed 10 unit multi-family residential development. Property is located at 18 & 20 Dumaine Avenue. Sheet H – Lots 137 & 149. Zoned "PI" Park Industrial and "MU" Mixed Use. Ward 2. **(Postponed to the November 5, 2020 meeting)**

OTHER BUSINESS

1. Review of tentative agenda to determine proposals of regional impact.
2. Adoption of the "2021" Meeting and Deadlines Dates" for the Nashua City Planning Board.
(Postponed from the October 08, 2020 meeting)

DISCUSSION ITEM

None

NONPUBLIC SESSION

The Planning Board will need to make a motion to enter into a Nonpublic Session under RSA 91-A:3, II (e) for consideration or negotiation of pending claims or litigation which has been threatened in writing or filed against the public body.

NEXT MEETING

November 5, 2020

ADJOURN

WORKSHOP

ACCOMMODATIONS FOR THE SENSORY IMPAIRED

**"SUITABLE ACCOMMODATIONS FOR THE SENSORY IMPAIRED
WILL BE PROVIDED UPON ADEQUATE ADVANCE NOTICE."**

CONDUCT AT PLANNING BOARD MEETING

When the meeting is called to order, the only talking allowed in the Auditorium will be remarks addressed to the Chairman. Except for the original presentation of the subject or application, each person speaking for or against shall be limited to five (5) minutes until all have been given an opportunity to be heard, at which time each person may be allowed additional time if deemed necessary by the Board or the Chairman. When you are recognized by the Chairman, proceed to the podium, using the microphone, state your name and address and then make your comments. Courtesy is shown when you reserve your comments for the proper time.

PLEASE BE COURTEOUS

By Order of the Chair

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 10, 2020
RE: **New Business #3 - Subdivision**

I. Project Statistics:

Owner : Roscommon Investments, LLC and MAG RE Holdings-Nashua, LLC
Proposal: Lot line relocation plan and consolidation
Location: 117 West Glenwood Street and "L" West Hobart Street
Total Site Area: 3.761 acres (163,828 sf)
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential and commercial

II. Background Information:

Lot 84 ("L" West Hobart Street) is a vacant lot that is mostly wooded. On August 4, 2016 the planning board approved a site plan for a 163 space parking lot on Lot 31 (117 West Glenwood Street); the approval letter and staff report are attached.

III. Project Description:

The purpose of this plan is to show a proposed lot line adjustment and consolidation for Sheet 132, Lot 84 and Sheet 132 Lot 31. A proposed access easement will be created to benefit Roscommon Investments, LLC. Parcel "A" as shown on the plan will be consolidated with Sheet 132, Lot 84. Parcels "B" & "C" as shown on the plan will be consolidated with Sheet 132, Lot 31. A site plan has also been submitted as part of the project.

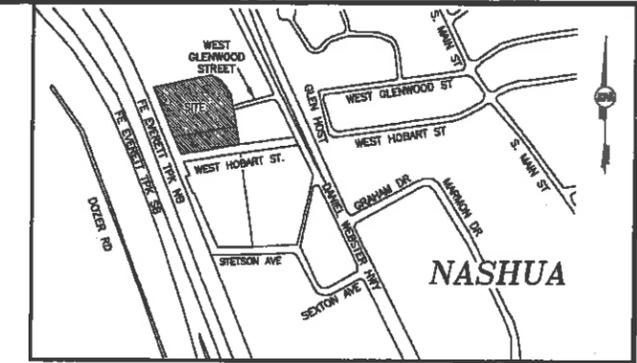
The applicant has requested a waiver from the requirement to show physical features on site and within 1,000 feet.

The plan was reviewed by City staff; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulation be made part of that approval:

1. The request for a waiver of § 190-282(B)(9), which requires an existing conditions plan, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, all minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer dated _____ shall be addressed to the satisfaction of the Engineering Department.
4. Prior to recording of the plan, all conditions from the Planning Board approval letter will be added to the final mylar and paper copies submitted to the City.
5. Prior to recording the plan, the electronic file of the plan shall be submitted to the City of Nashua.
6. Any easements will be submitted to Planning staff for review and recorded with the plan at the applicant's expense.
7. The site plan for 117 West Glenwood Street will need to be amended to show the change in lot size.



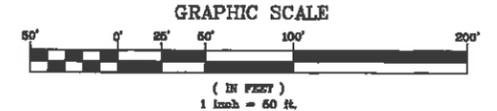
VICINITY PLAN
SCALE: 1" = 500' +/-

NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT PROPOSED LOT LINE ADJUSTMENTS AND CONSOLIDATIONS ON ASSESSOR'S MAP 128 LOT 84 AND MAP 132 LOT 31 SITUATED ON THE WESTERLY END OF WEST GLENWOOD STREET IN NASHUA, NEW HAMPSHIRE. FURTHER TO SHOW INFORMATION FOR A PROPOSED ACCESS EASEMENT FOR THE BENEFIT OF ROSCOMMON INVESTMENTS, LLC AND NO OTHER PURPOSE.
- LOT AREAS PRIOR TO ADJUSTMENTS: MAP 132 LOT 31: 112,105 SF, OR 2.573 ACRES. MAP 132 LOT 84: 35,395 SF, OR 0.812 ACRES.
- PARCEL "A" IS TO BE CONSOLIDATED WITH MAP 132 LOT 84. PARCELS "B" & "C" TO BE CONSOLIDATED WITH MAP 132 LOT 31.
- ZONING: URBAN RESIDENCE DISTRICT (R-A)
MINIMUM BUILDING SETBACKS:
- FRONT 25 FT
- SIDE 10 FT
- REAR 25 FT
HIGHWAY BUSINESS DISTRICT (HB)
- FRONT 20 FT
- SIDE 10 FT
- REAR 20 FT
- BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN DECEMBER OF 2017 AND JANUARY OF 2018 HAVING A MINIMUM ERROR OF CLOSURE OF NOT LESS THAN ONE PART IN TEN THOUSAND (1:10,000).
- HORIZONTAL DATUM IS NAD 83, VERTICAL DATUM IS NAVD83.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE CITY OF NASHUA, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 330097 0522 PANEL NUMBER 652 OF 701, EFFECTIVE DATE, APRIL 15, 2011 INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
- BOUNDARY INFORMATION FOR MAP 132 LOT 31 IS BASED ON REFERENCE PLAN 1, THE BEARINGS SHOWN ON REFERENCE PLAN 1 HAVE BEEN TRANSLATED TO MATCH THE BEARING SYSTEM OF THE SURVEY WORK BY THIS OFFICE.
- SUBJECT TRACTS HAVE AVAILABLE MUNICIPAL SEWER SERVICE AND PENNICHUCK WATER WORKS WATER SERVICE.
- ANY FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS, EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED WITHIN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.
- A WAIVER IS REQUESTED FROM SECTION LUC 180-252(B)(9) SINCE AN EXISTING CONDITIONS PLAN IS DETAILD IN THE ACCOMPANYING SITE PLAN.

REFERENCE PLANS:

- EASEMENT PLAN, MAP 132 LOT 31, 117 WEST GLENWOOD STREET, NASHUA, NEW HAMPSHIRE. DATED: 30 SEPTEMBER 2016. SCALE: 1"=30'. PREPARED BY HAYNER/SWANSON INC. HCRD PLAN #33110.
- BOUNDARY PLAN - SIENKIEWICZ PROPERTY, WEST GLENWOOD STREET, NASHUA, NEW HAMPSHIRE. SCALE: 1"=50'. DATED: JANUARY 22, 2018. PREPARED BY THIS OFFICE. RECORDED AT THE HCRD AS PLAN #39872.



Lot Line Adjustment & Consolidation Plan

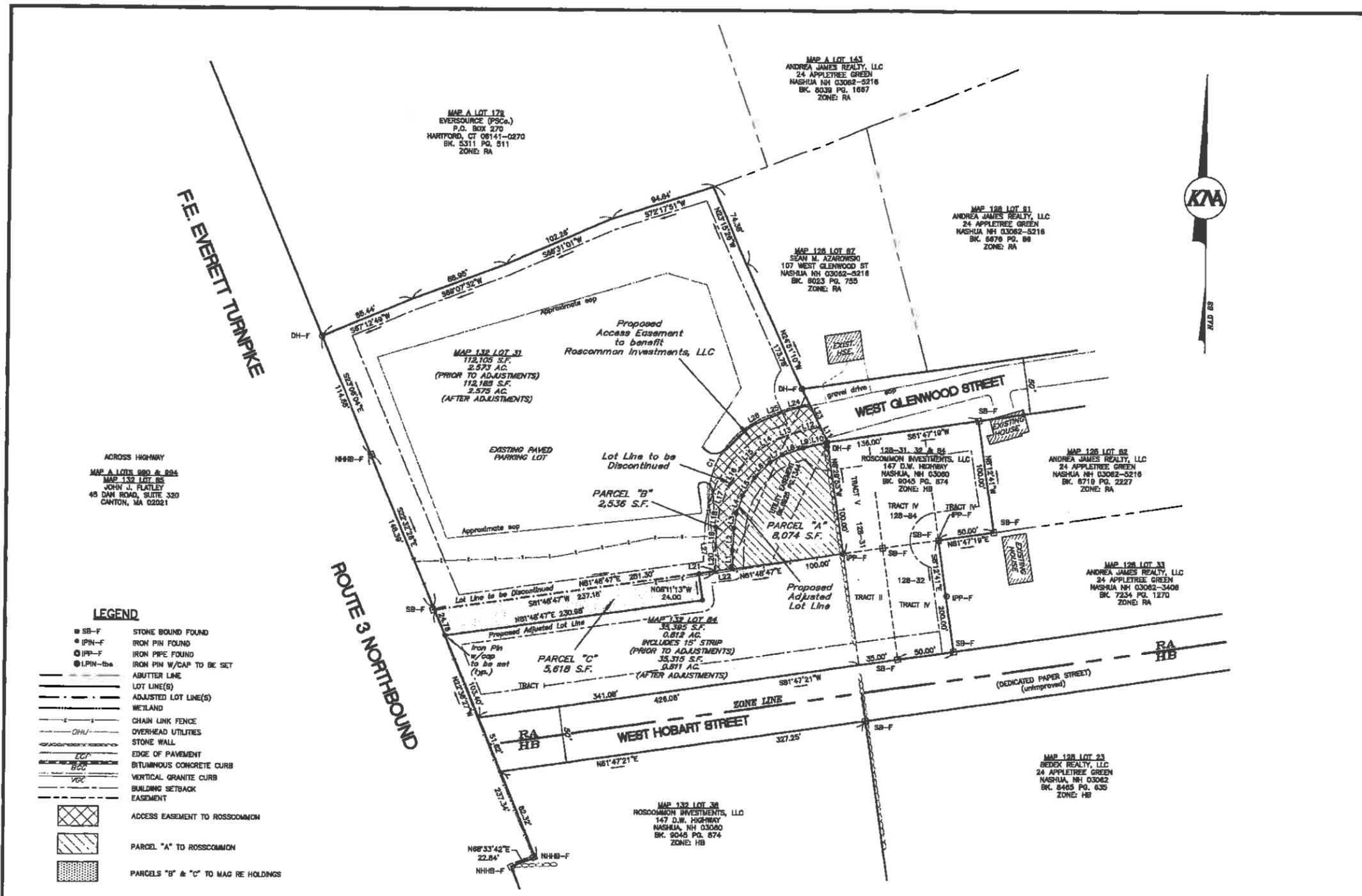
between the lands of
ROSCOMMON INVESTMENTS, LLC & MAG RE HOLDINGS-NASHUA, LLC
MAP 132 LOTS 31 & 84 and MAP 128 LOTS 31, 32 & 84
117 WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNERS OF RECORD:
ROSCOMMON INVESTMENTS, LLC 147 D.W. HIGHWAY NASHUA, NH 03060 H.C.R.D. BK. 8045 PG. 874 (803) 868-5050
MAG RE HOLDINGS-NASHUA, LLC 777 WASHINGTON STREET NEWTON, MA 02460 H.C.R.D. BK. 8926 PG. 2664 (617) 928-5400

K/A KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
19 Commerce Park North, Suite 20, Bedford, NH 03110 Phone (603) 887-2661

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/24/20	MINOR REVISIONS	PCM
2	9/23/20	MINOR REVISIONS	PCM

DATE: JUNE 15, 2020 SCALE: 1"=50'
PROJECT NO: 17-1011-1 SHEET 1 OF 1



LEGEND

- SB-F STONE BOUND FOUND
- IPIN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- LIPIN-iba IRON PIN W/CAP TO BE SET
- ABUTTER LINE
- LOT LINE(S)
- ADJUSTED LOT LINE(S)
- WETLAND
- CHAIN LINK FENCE
- OVERHEAD UTILITIES
- STONE WALL
- EDGE OF PAVEMENT
- BITUMINOUS CONCRETE CURB
- VERTICAL GRANITE CURB
- BUILDING SETBACK EASEMENT
- ACCESS EASEMENT TO ROSCOMMON
- PARCEL "A" TO ROSCOMMON
- PARCELS "B" & "C" TO MAG RE HOLDINGS

LINE TABLE

LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
L1	18.19	N00°26'13"E	L12	18.78	S78°18'50"W
L2	20.41	N03°04'07"E	L13	22.00	S70°27'58"W
L3	12.79	N08°37'05"E	L14	16.03	S59°32'39"W
L4	17.21	N18°43'40"E	L15	22.84	S45°10'07"W
L5	18.81	N33°35'37"E	L16	22.28	S33°35'37"W
L6	19.42	N45°10'07"E	L17	20.49	S18°43'40"W
L7	12.70	N58°32'30"E	L18	14.84	S08°37'05"W
L8	19.81	N70°27'58"E	L19	21.49	S03°04'07"W
L9	20.94	N78°12'26"E	L20	16.54	S00°26'13"W
L10	1.43	N81°36'00"E	L21	2.28	S03°52'30"E
L11	15.48	N26°16'58"W	L22	15.00	N81°48'47"E
			L23	22.44	S26°17'03"E
			L24	19.04	N76°18'50"E
			L25	24.58	N70°27'58"E
			L26	19.87	S59°32'30"W
			L27	59.63	N05°12'29"W

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	75.00	84.76	80.32	S27°10'02"W	64°44'55"

OWNER'S SIGNATURE BLOCK

ROSCOMMON INVESTMENTS, LLC DATE: 6/18/2020

MAG RE HOLDINGS-NASHUA, LLC DATE: 6/22/20

APPROVED - NASHUA CITY PLANNING BOARD

CHAIRMAN DATE

SECRETARY DATE

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING DECEMBER OF 2017 AND JANUARY OF 2018. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1:10,000).

Michael J. Keach, Licensed Land Surveyor, 9-24-2020



UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, KEACH-NORDSTROM ASSOCIATES, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. KEACH-NORDSTROM ASSOCIATES, INC. HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 10, 2020
RE: **New Business #7 - Site Plan**

I. Project Statistics:

Owner: Roscommon Investments, LLC
Proposal: Site plan to show a new 24,020 sf auto body shop with associated site improvements
Location: 117 West Hobart St, "L" West Glenwood St, & "L" West Hobart St
Total Site Area: 220,696 sf
Existing Zoning: RA-Urban Residence & HB-Highway Business
Surrounding Uses: Commercial and residential

II. Background Information:

The property consists of five lots, approximately 5.01 acres. Currently the project area is cleared; however the site was historically comprised of woods and an existing house. The lots are bordered by the Everett Turnpike to the west, BJ's Wholesale to the south, Nashua Foreign Auto and two residential homes to the east and a car lot and more residential homes to the north.

III. Project Description:

The proposal is to construct a 22,560 sf (22,560 sf footprint and a 1,460 sf mezzanine) auto body shop with overflow auto storage from the Tulley dealership located further south on the Daniel Webster Highway. The project also proposes the reconstruction of a section of Sexton Road to provide adequate access to the site. Site work includes construction of a new building, parking lot and auto storage area, reconstruction of Sexton Road and stormwater management provisions. The proposed stormwater management system will include two proposed detention ponds, a proposed subsurface infiltration system, a treatment swale, and a series of catch basins and drainage pipes which will direct runoff into said pond.

A Traffic Impact Report (TIR) Threshold Worksheet was submitted for this project and indicates that a formal TIR Report is not required as the daily and peak hour trip estimates are below the TIR threshold values.

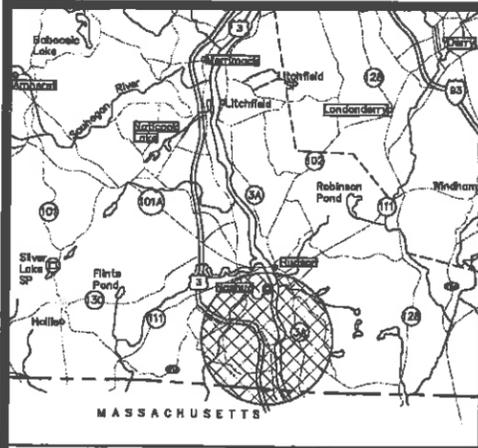
The site will be serviced by underground utilities, Pennichuck water, and city sewer. Hours of operation will be seven days a week, from 6 am to 8 pm. A landscape plan, lighting plan, and building elevations have been submitted as part of this application. One waiver is being requested from the requirement for landscaped islands for every 10 parking spaces in a row.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

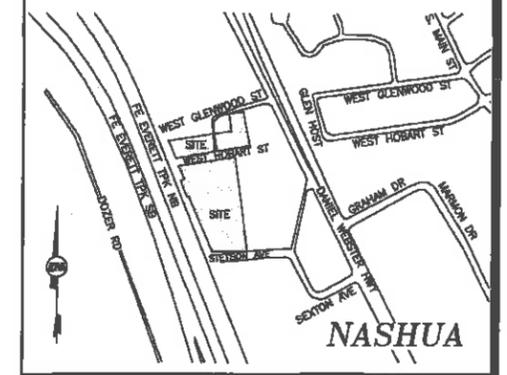
1. The request for a waiver of § 190-184 D (1) which requires parking aisles not contain more than 10 spaces in a row without a planted median and/or island, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
4. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer, dated _____ shall be addressed to the satisfaction of the Engineering Department.
5. Prior to the issuance of a building permit, the lots will be merged.
6. Prior to the issuance of a building permit, all comments in an e-mail from Mark Rapaglia, Inspector/Investigator, dated July 7, 2020 shall be addressed to the satisfaction of the Fire Marshal's Office.
7. Prior to the issuance of a building permit, stormwater documents will be submitted to City staff for review and recorded at the applicant's expense.
8. Prior to the issuance of a building permit, the electronic file of the plan will be submitted to the City of Nashua.
9. Prior to any work on site, a pre-construction meeting shall be held and a financial guarantee shall be approved.
10. Prior to any site disturbance, the Alteration of Terrain Permit for the project shall be approved by NHDES.
11. Prior to the issuance of the Certificate of Occupancy, all off-site and on-site improvements will be completed.



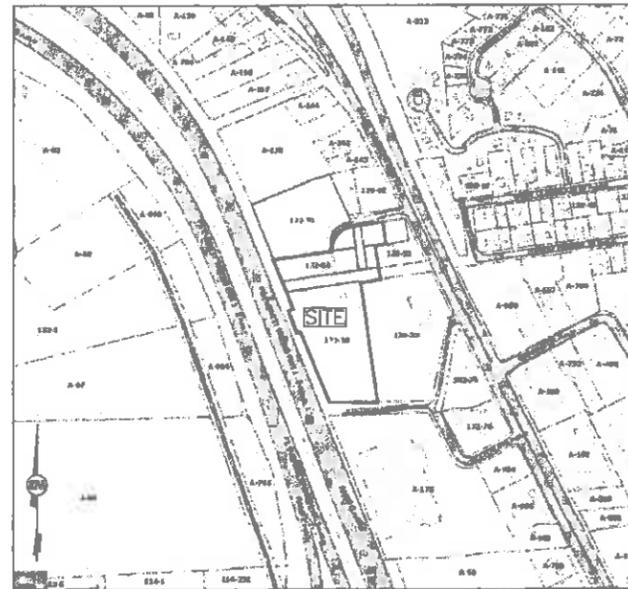
VICINITY PLAN
NOT TO SCALE

NON-RESIDENTIAL SITE PLAN AUTO BODY SHOP

MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE



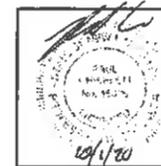
LOCATION PLAN
SCALE: 1" = 500' +/-



EXISTING FEATURES WITHIN 1,000-FT
NOT TO SCALE

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881



KNA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

JUNE 22, 2020

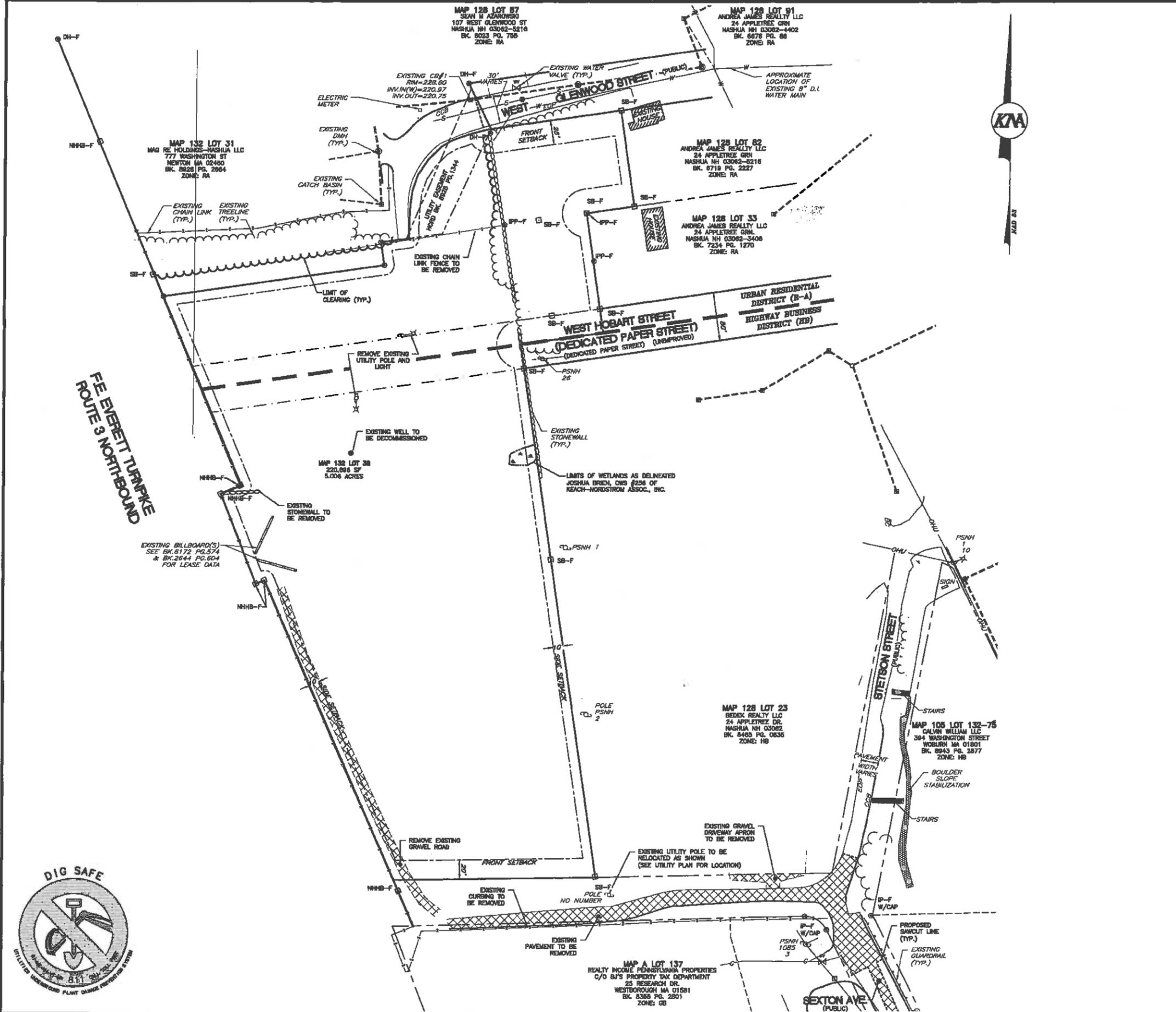
PROJECT NO. 17-1011-1

SHEET TITLE

SHEET No.

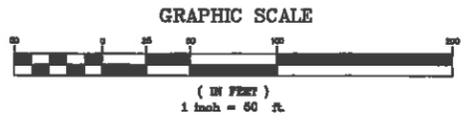
EXISTING CONDITIONS PLAN	1
REMOVALS PLAN	2
NON-RESIDENTIAL SITE PLAN	3
GRADING & DRAINAGE PLAN	4
UTILITY PLAN	5
EROSION CONTROL PLAN	6
LANDSCAPE PLAN	7
LIGHTING PLAN	8
ROADWAY PLAN & PROFILE	9
DRIVEWAY DRAINAGE PLAN & PROFILE	10
SIGHT DISTANCE PLAN & PROFILES	11 - 12
DRAINAGE PROFILES	13
SEWER PROFILE	14
CONSTRUCTION DETAILS	15 - 21
TEST PITS	22

ARCHITECTURAL PLANS
(BY BRUCE RONAYNE HAMILTON ARCHITECTS)



- NOTES:**
1. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS, AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
 2. STRIP, STOCKPILE, AND REUSE ON-SITE GRAVEL AND FILL AREAS WHERE APPROPRIATE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE DESIGN ENGINEER.
 3. REMOVE ALL ASPHALT, CURBS, CONCRETE, VEGETATION, TREES, SHRUBS, LIGHT POLES, SIGNAGE, AND STRUCTURES WITHIN THE HATCHED AREA, UNLESS OTHERWISE NOTED.
 4. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 5. ALL WORK PERFORMED ON BEHALF OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NASHUA'S CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION.
 6. THE CONTRACTOR SHALL APPLY FOR AN EXCAVATION PERMIT FOR WORK WITHIN THE CITY RIGHT-OF-WAY OR ON CITY OWNED PROPERTY. CONTACT THE CITY OF NASHUA'S ENGINEERING SERVICES DIVISION PRIOR TO CONSTRUCTION TO APPLY FOR THE PERMIT.
 7. THE CONTRACTOR SHALL APPLY FOR A DRIVEWAY PERMIT TO REPAIR, WIDEN, RECONSTRUCT, OR CONSTRUCT A DRIVEWAY.
 8. THE CONTRACTOR SHALL REQUEST A PRECONSTRUCTION MEETING WITH ENGINEERING SERVICES TO DISCUSS SITE INSPECTIONS, SCHEDULES, SPECIAL CONDITIONS, ETC.
 9. SITE CONTRACTOR SHALL ESTABLISH TEMPORARY PERIMETER CONTROLS PRIOR TO THE START OF SITE EXCAVATION.
 10. CONTRACTOR SHALL WORK WITH LOCAL UTILITY PROVIDERS DURING SHUT DOWN AND REMOVAL EFFORTS.
 11. ALL ITEMS TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR.

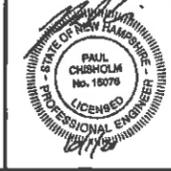
- LEGEND**
- SB-F STONE BOUND FOUND
 - IPW-F IRON PIPE FOUND
 - PP-F IRON PIPE FOUND
 - UTY UTILITY POLE
 - SGN SIGN
 - LGT LIGHT
 - GSV GAS VALVE
 - WTV WATER VALVE
 - HYD HYDRANT
 - WSO WATER SHUT OFF
 - SMM SEWER MANHOLE
 - DMH DRAINAGE MANHOLE
 - CBN CATCH BASIN
 - FES FLARED END SECTION
 - WEL WELL
 - ALB ABUTTER LINE
 - PRL PROPERTY LINE
 - WTL WETLAND
 - CLF CHAIN LINK FENCE
 - OHU OVERHEAD UTILITIES
 - GAS GAS LINE
 - WTR WATER LINE
 - SWR SEWER LINE
 - DRG DRAINAGE LINE
 - TRF TREELINE
 - SWL STONE WALL
 - EOP EDGE OF PAVEMENT
 - BCC BITUMINOUS CONCRETE CURB
 - VGC VERTICAL GRANITE CURB
 - SWL STONE WALL
 - BSB BUILDING SETBACK
 - EAS EASEMENT
 - ZLN ZONE LINE
 - SLC SAWCUT LINE
 - REM REMOVALS



REMOVALS PLAN
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-5050

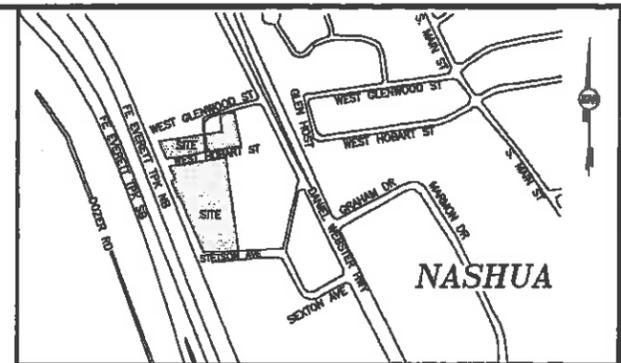
KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 50, Bedford, NH 03110 Phone (603) 637-8881



REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 2 OF 22





VICINITY PLAN
SCALE: 1" = 500' +/-

NOTES:

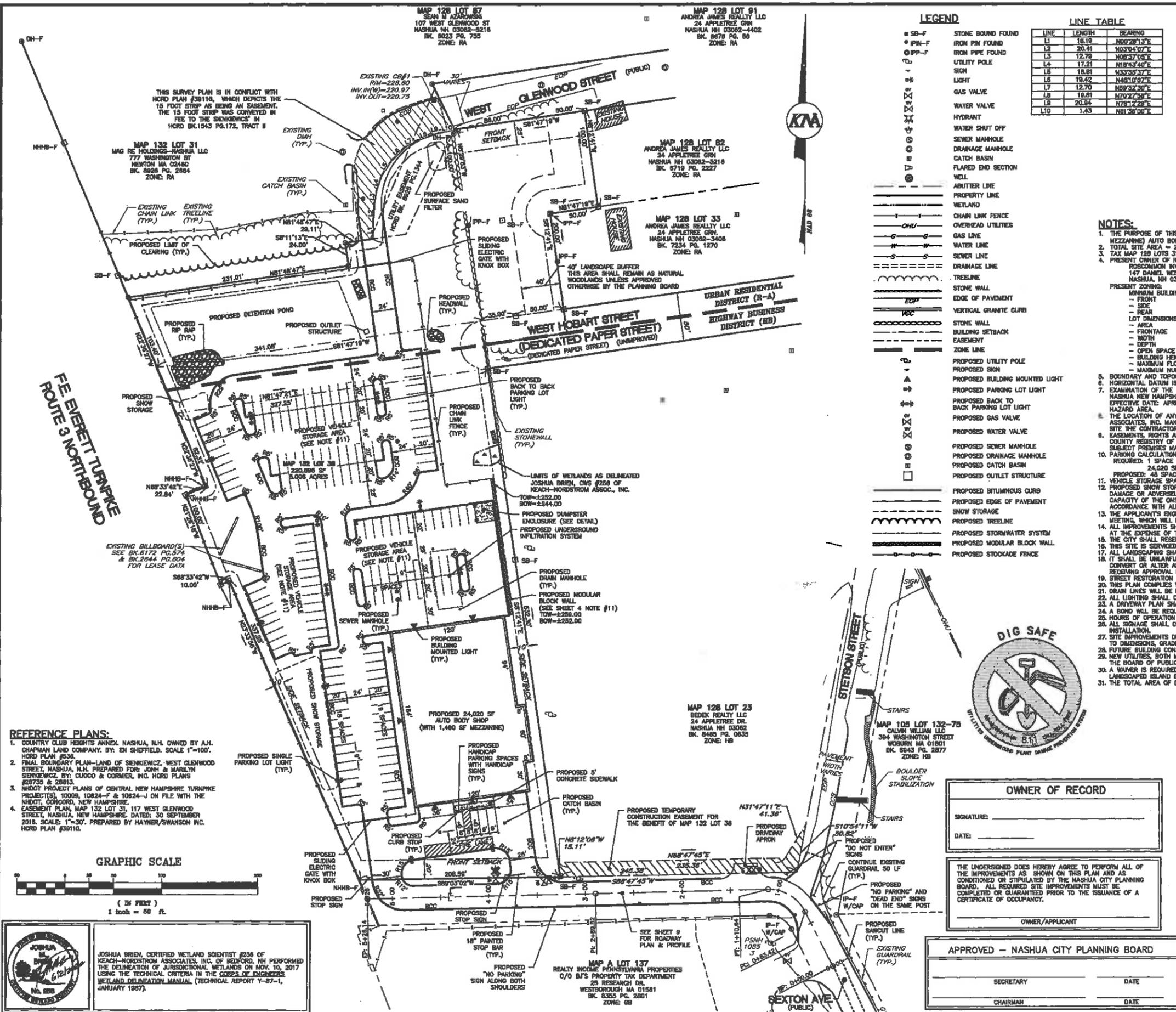
- THE PURPOSE OF THIS PLAN IS TO SHOW INFORMATION REGARDING A PROPOSED 24,020 SQUARE FOOT (22,560 FOOTPRINT + 1,460 MEZZANINE) AUTO BODY SHOP AND ACCOMPANYING PARKING LOT FOR AUTO STORAGE AND NO OTHER PURPOSE.
 - TOTAL SITE AREA = 210,842 SF, OR 4.84 ACRES.
 - TAX MAP 128 LOTS 31, 32 & 84 AND MAP 132 LOTS 38 & 84 INDICATE CITY OF NASHUA TAX ASSESSORS MAP AND LOT NUMBER.
 - PRESENT OWNER OF RECORD: ROSCOMMON INVESTMENTS, LLC 147 DANIEL WEBSTER HIGHWAY NASHUA, NH 03080
- PRESENT ZONING: URBAN RESIDENCE DISTRICT (R-A) HIGHWAY BUSINESS DISTRICT (HB)
- MINIMUM BUILDING SETBACKS:
- | | | |
|-------|-------|-------|
| FRONT | 25 FT | 20 FT |
| SIDE | 10 FT | 10 FT |
| REAR | 25 FT | 20 FT |
- LOT DIMENSIONS:
- | | | |
|--------------------------|-----------|-----------------|
| AREA | 20,000 SF | PROPOSED LOT 38 |
| FRONTAGE | 80 FT | 220,896 SF |
| WIDTH | 100 FT | 206.59 FT |
| DEPTH | 80 FT | 107.13 FT |
| OPEN SPACE | 20% | 81.36% |
| BUILDING HEIGHT | 60 FT | 21 FT |
| MAXIMUM FLOOR AREA RATIO | 0.75 | 0.75 |
| MAXIMUM NUMBER OF STORES | 5 STORES | 2 STORES |
- BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN OCTOBER OF 2017. HORIZONTAL DATUM IS NAD 83, NORTH ORIENTATION IS NAD 83, VERTICAL DATUM IS NGVD29.
 - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE CITY OF NASHUA NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 330097 0822E PANEL NUMBER 652 OF 701, EFFECTIVE DATE: APRIL 16, 2011 INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
 - EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
 - PARKING CALCULATIONS FOR VEHICLE REPAIR AND STORAGE REQUIRED: 1 SPACE PER 600 SF 24,020 SF / 600 SF = 40.03 = 40 SPACES PROPOSED: 48 SPACES PROPOSED INCLUDING TWO HANDICAP SPACES
 - VEHICLE STORAGE SPACES ARE SHOWN FOR REPRESENTATION PURPOSES ONLY AND DO NOT NEED TO BE STRIPED.
 - PROPOSED SNOW STORAGE AREAS ARE SHOWN AS APPROXIMATE. PLOWING SHALL BE DONE IN SUCH A FASHION AS TO NOT DAMAGE OR ADVERSELY IMPACT ANY LANDSCAPED FEATURES. SHOULD THE VOLUME OF ACCUMULATED SNOW EXCEED THE CAPACITY OF THE ON-SITE STORAGE AS SHOWN ON THIS PLAN, THE EXCESS SNOW SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
 - THE APPLICANT'S ENGINEER AND/OR CONTRACTOR SHALL CONTACT THE CITY OF NASHUA TO SCHEDULE A PRECONSTRUCTION MEETING, WHICH WILL BE HELD WITH STAFF PRIOR TO STARTING CONSTRUCTION.
 - ALL IMPROVEMENTS SHOWN ON THE SITE PLAN OF-RECORD, INCLUDING NOTES 1-31, SHALL BE COMPLETED IN THEIR ENTIRETY AND AT THE EXPENSE OF THE APPLICANT OR HIS ASSIGNS.
 - THIS SITE IS SERVED BY POTABLE WATER AND SEWER.
 - ALL LANDSCAPING SHALL BE AS SHOWN ON THE PLAN AND CONFORM TO THE APPLICABLE CITY OF NASHUA ZONING REGULATIONS.
 - IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURES SHOWN ON THIS PLAN IN ANY WAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.
 - STREET RESTORATION TO BE IN ACCORDANCE WITH NRO 285-13.
 - THIS PLAN COMPLES WITH THE MINIMUM REQUIREMENTS SET FORTH IN THE NASHUA LAND USE CODE.
 - DRAIN LINES WILL BE INSPECTED PRIOR TO BACKFILLING AND PAVING.
 - ALL LIGHTING SHALL CONFORM TO THE NASHUA LAND USE CODE.
 - A DRIVEWAY PLAN SHALL BE APPROVED BY THE ENGINEERING DEPARTMENT PRIOR TO ISSUANCE OF A BUILDING PERMIT.
 - A BOND WILL BE REQUIRED FOR ALL WORK WITHIN THE CITY'S RIGHT OF WAY.
 - HOURS OF OPERATION FOR THE PROPOSED AUTO BODY SHOP WILL BE SEVEN DAYS A WEEK FROM 5 AM TO 5 PM.
 - ALL SIGNAGE SHALL CONFORM TO THE APPLICABLE CITY OF NASHUA ZONING REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
 - SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM TO TITLE 15 OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSIONS, GRADE, AND NUMBER OF SPACES.
 - FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINS.
 - NEW UTILITIES, BOTH MAIN AND SERVICE CONNECTIONS, SHALL BE PROVIDED UNDERGROUND AND INSTALLED IN ACCORDANCE WITH THE BOARD OF PUBLIC WORKS SPECIFICATIONS.
 - A WAIVER IS REQUIRED FROM SECTION 180-B(4)(1) TO ALLOW AN ALTERNATIVE LANDSCAPE PLAN IN LIEU OF PROVIDING A LANDSCAPED ISLAND EVERY TEN PARKING SPACES.
 - THE TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 219,351 SQUARE FEET.

LEGEND

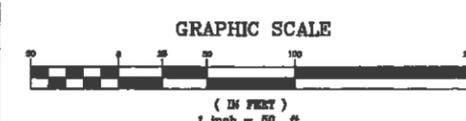
- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- UPP-F UTILITY POLE FOUND
- SIGN SIGN
- LIGHT LIGHT
- GAS VALVE GAS VALVE
- WATER VALVE WATER VALVE
- HYDRANT HYDRANT
- WATER SHUT OFF WATER SHUT OFF
- SEWER MANHOLE SEWER MANHOLE
- DRAINAGE MANHOLE DRAINAGE MANHOLE
- CATCH BASIN CATCH BASIN
- FLARED END SECTION FLARED END SECTION
- WELL WELL
- ABUTTER LINE ABUTTER LINE
- PROPERTY LINE PROPERTY LINE
- WETLAND WETLAND
- CHAIN LINK FENCE CHAIN LINK FENCE
- OVERHEAD UTILITIES OVERHEAD UTILITIES
- GAS LINE GAS LINE
- WATER LINE WATER LINE
- SEWER LINE SEWER LINE
- DRAINAGE LINE DRAINAGE LINE
- TREELINE TREELINE
- STONE WALL STONE WALL
- EDGE OF PAVEMENT EDGE OF PAVEMENT
- VERTICAL GRANITE CURB VERTICAL GRANITE CURB
- STONE WALL STONE WALL
- BUILDING SETBACK BUILDING SETBACK
- EASEMENT EASEMENT
- ZONE LINE ZONE LINE
- PROPOSED UTILITY POLE PROPOSED UTILITY POLE
- PROPOSED SIGN PROPOSED SIGN
- PROPOSED PARKING LOT LIGHT PROPOSED PARKING LOT LIGHT
- PROPOSED BACK TO BACK PARKING LOT LIGHT PROPOSED BACK TO BACK PARKING LOT LIGHT
- PROPOSED GAS VALVE PROPOSED GAS VALVE
- PROPOSED WATER VALVE PROPOSED WATER VALVE
- PROPOSED SEWER MANHOLE PROPOSED SEWER MANHOLE
- PROPOSED DRAINAGE MANHOLE PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN PROPOSED CATCH BASIN
- PROPOSED OUTLET STRUCTURE PROPOSED OUTLET STRUCTURE
- PROPOSED BITUMINOUS CURB PROPOSED BITUMINOUS CURB
- PROPOSED EDGE OF PAVEMENT PROPOSED EDGE OF PAVEMENT
- PROPOSED SNOW STORAGE PROPOSED SNOW STORAGE
- PROPOSED TREELINE PROPOSED TREELINE
- PROPOSED STORMWATER SYSTEM PROPOSED STORMWATER SYSTEM
- PROPOSED MODULAR BLOCK WALL PROPOSED MODULAR BLOCK WALL
- PROPOSED STOCKADE FENCE PROPOSED STOCKADE FENCE

LINE TABLE

LINE	LENGTH	BEARING
L1	16.19	N02°28'12"E
L2	20.41	N03°04'07"E
L3	12.79	N08°37'05"E
L4	17.21	N18°33'40"E
L5	16.81	N33°33'27"E
L6	19.42	N45°10'07"E
L7	12.70	N58°32'30"E
L8	18.87	N70°27'58"E
L9	20.84	N78°12'28"E
L10	1.43	N81°36'00"E



- REFERENCE PLANS:
- COUNTRY CLUB HEIGHTS ANNEX, NASHUA, N.H. OWNED BY A.H. CHAPMAN LAND COMPANY, BY: EN SHEPHERD, SCALE 1"=100', HORD PLAN #936.
 - FINAL BOUNDARY PLAN-LAND OF SIENKIEWICZ, WEST GLENWOOD STREET, NASHUA, N.H. PREPARED FOR JOHN & MARILYN SIENKIEWICZ, BY: CUDCO & CORMIER, INC. HORD PLANS #28733 & 28813.
 - WHDOT PROJECT PLANS OF CENTRAL NEW HAMPSHIRE TURNPIKE PROJECT(S), 10009, 10824-F & 10824-J ON FILE WITH THE WHDOT, CONCORD, NEW HAMPSHIRE.
 - EASEMENT PLAN, MAP 132 LOT 31, 117 WEST GLENWOOD STREET, NASHUA, NEW HAMPSHIRE, DATED: 30 SEPTEMBER 2015, SCALE: 1"=30'. PREPARED BY HAYNER/SWANSON INC. HORD PLAN #39110.



JOSHUA BRIEN, CERTIFIED WETLAND SCIENTIST #256 OF KEACH-NORDSTROM ASSOCIATES, INC. OF BEDFORD, NH PERFORMED THE DELINEATION OF JURISDICTIONAL WETLANDS ON NOV. 10, 2017 USING THE TECHNICAL CRITERIA IN THE CODES OF ENGINEERS WETLAND DELINEATION MANUAL (TECHNICAL REPORT Y-87-1, JANUARY 1987).

OWNER OF RECORD

SIGNATURE: _____

DATE: _____

THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

OWNER/APPLICANT

APPROVED - NASHUA CITY PLANNING BOARD

SECRETARY _____ DATE _____

CHAIRMAN _____ DATE _____

NON-RESIDENTIAL SITE PLAN

AUTO BODY SHOP

MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

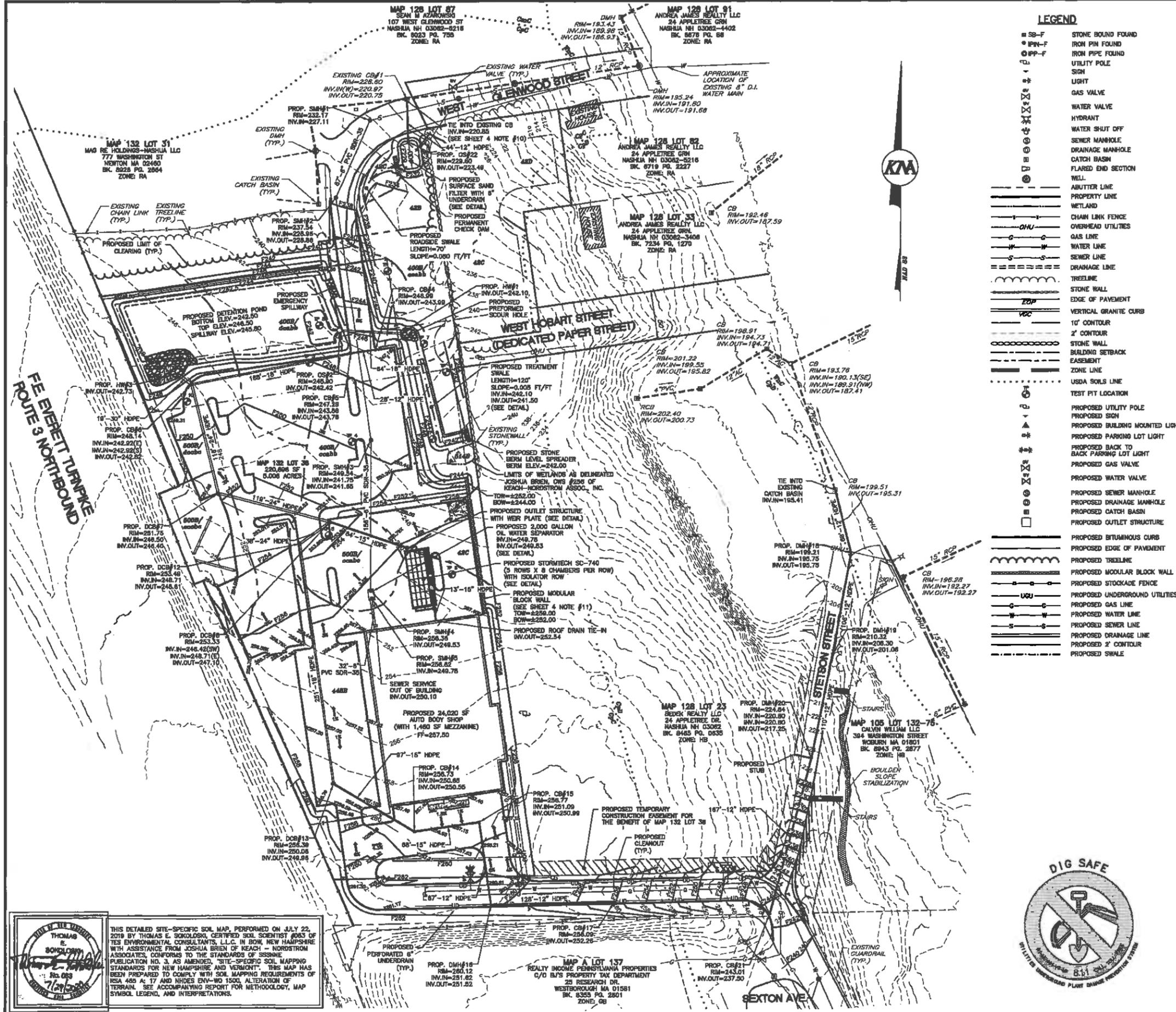
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03080
(603) 888-5050

KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 38, Bedford, NH 03110 Phone (603) 687-2881

NO.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'

PROJECT NO: 17-1011-1 SHEET 3 OF 22



LEGEND

- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- IPF-F IRON PIPE FOUND
- UP-F UTILITY POLE FOUND
- SIGN SIGN
- LIGHT LIGHT
- GV GAS VALVE
- WV WATER VALVE
- HYDRANT HYDRANT
- WSD OFF WATER SHUT OFF
- SM SEWER MANHOLE
- DM DRAINAGE MANHOLE
- CB CATCH BASIN
- FLS FLARED END SECTION
- WELL WELL
- AL ABUTTER LINE
- PL PROPERTY LINE
- WL WETLAND
- CLF CHAIN LINK FENCE
- OHU OVERHEAD UTILITIES
- GL GAS LINE
- WL WATER LINE
- SL SEWER LINE
- DL DRAINAGE LINE
- TL TREELINE
- SW STONE WALL
- EPV EDGE OF PAVEMENT
- VCC VERTICAL GRANITE CURB
- 10' 10' CONTOUR
- 2' 2' CONTOUR
- SW STONE WALL
- BE BUILDING SETBACK EASEMENT
- UL ZONE LINE
- USL USDA SOILS LINE
- TP TEST PIT LOCATION
- PU PROPOSED UTILITY POLE
- PS PROPOSED SIGN
- PML PROPOSED BUILDING MOUNTED LIGHT
- PPL PROPOSED PARKING LOT LIGHT
- PBL PROPOSED BACK TO BACK PARKING LOT LIGHT
- PGL PROPOSED GAS VALVE
- PWL PROPOSED WATER VALVE
- PSM PROPOSED SEWER MANHOLE
- PSD PROPOSED DRAINAGE MANHOLE
- PCC PROPOSED CATCH BASIN
- POS PROPOSED OUTLET STRUCTURE
- PBC PROPOSED BITUMINOUS CURB
- PEP PROPOSED EDGE OF PAVEMENT
- PTL PROPOSED TREELINE
- PMB PROPOSED MODULAR BLOCK WALL
- PSF PROPOSED STOCKADE FENCE
- UGU PROPOSED UNDERGROUND UTILITIES
- GL GAS LINE
- WL WATER LINE
- SL SEWER LINE
- DL DRAINAGE LINE
- 2' 2' CONTOUR
- SW SWALE

CONSTRUCTION NOTES:

- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE SYSTEMS FOR THIS SITE.
- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK PERFORMED IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2018 ARE HEREBY INCORPORATED BY REFERENCE.
- CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT, NASHUA, NEW HAMPSHIRE. ALL DRAINAGE PIPES SHOWN SHALL BE HDPE. CATCH BASINS SHALL BE TYPE B, AND HAVE 3" SLEEPS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT 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 TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
- ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- ALL WATER UTILITIES SHALL CONFORM TO PENNACRICK WATER WORKS REGULATIONS.
- THE WATER, SANITARY SEWER, AND ELECTRICAL UTILITIES SHOWN HERE SHALL BE COORDINATED WITH THE FINAL BUILDING PLANS PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- ROOF DRAIN TIE-INS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER DURING CONSTRUCTION OF ROOF DRAIN LOCATIONS NEED TO BE MOVED.
- CATCH BASINS WITH A DOUBLE GRATE SHOULD HAVE A 8 FOOT INNER DIAMETER.
- EXISTING CATCH BASINS THAT ARE BEING TIED INTO SHALL BE INSPECTED BY THE CONTRACTOR DURING CONSTRUCTION. IF THE STRUCTURES ARE DAMAGED PRIOR TO OR DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING THEM.
- DESIGN OF THE PROPOSED MODULAR BLOCK WALL SHALL BE APPROVED BY THE NASHUA DEPARTMENT OF PUBLIC WORKS PRIOR TO CONSTRUCTION.

USDA SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS
CaC	CANTON FINE SANDY LOAM	0-15%
CpC	CHAFFIELD-HOLLIS-CANTON	0-15%
CpB	CHAFFIELD-HOLLIS-CANTON	15-25%
WaC	WINDSOR-URBAN LAND COMPLEX	3-15%

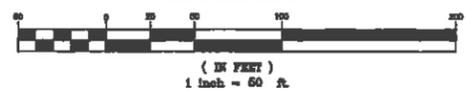
SOURCE: WEB SOIL SURVEY, WWW.WEBSOILSURVEY.SCGOV.USDA.GOV

SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
48B	CANTON FINE SANDY LOAM	0-8%	WELL	B
48C	CANTON FINE SANDY LOAM	8-15%	WELL	B
48D	CANTON FINE SANDY LOAM	15-25%	WELL	B
448B	SITUATE, VERY STONY	0-8%	MODERATELY WELL	C
514B	LECHESTER	0-8%	POORLY DRAINED	C
400B/oaab	UDORTHERTS	0-8%	MODERATELY WELL	B
400B/oaab	UDORTHERTS	0-8%+	MODERATELY WELL	B
400B/oaab	UDORTHERTS	0-8%	MODERATELY WELL	B
500B/oaab	UDORTHERTS	0-8%+	MODERATELY WELL	C
500B/oaab	UDORTHERTS	0-8%+	MODERATELY WELL	C
500B/oaab	UDORTHERTS	0-8%	MODERATELY WELL	C

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOILS SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP AND MAP KEY.

GRAPHIC SCALE

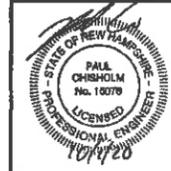


GRADING & DRAINAGE PLAN

AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-5050

KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commers Park North, Suite 30, Bedford, NH 03110 Phone (603) 637-8861

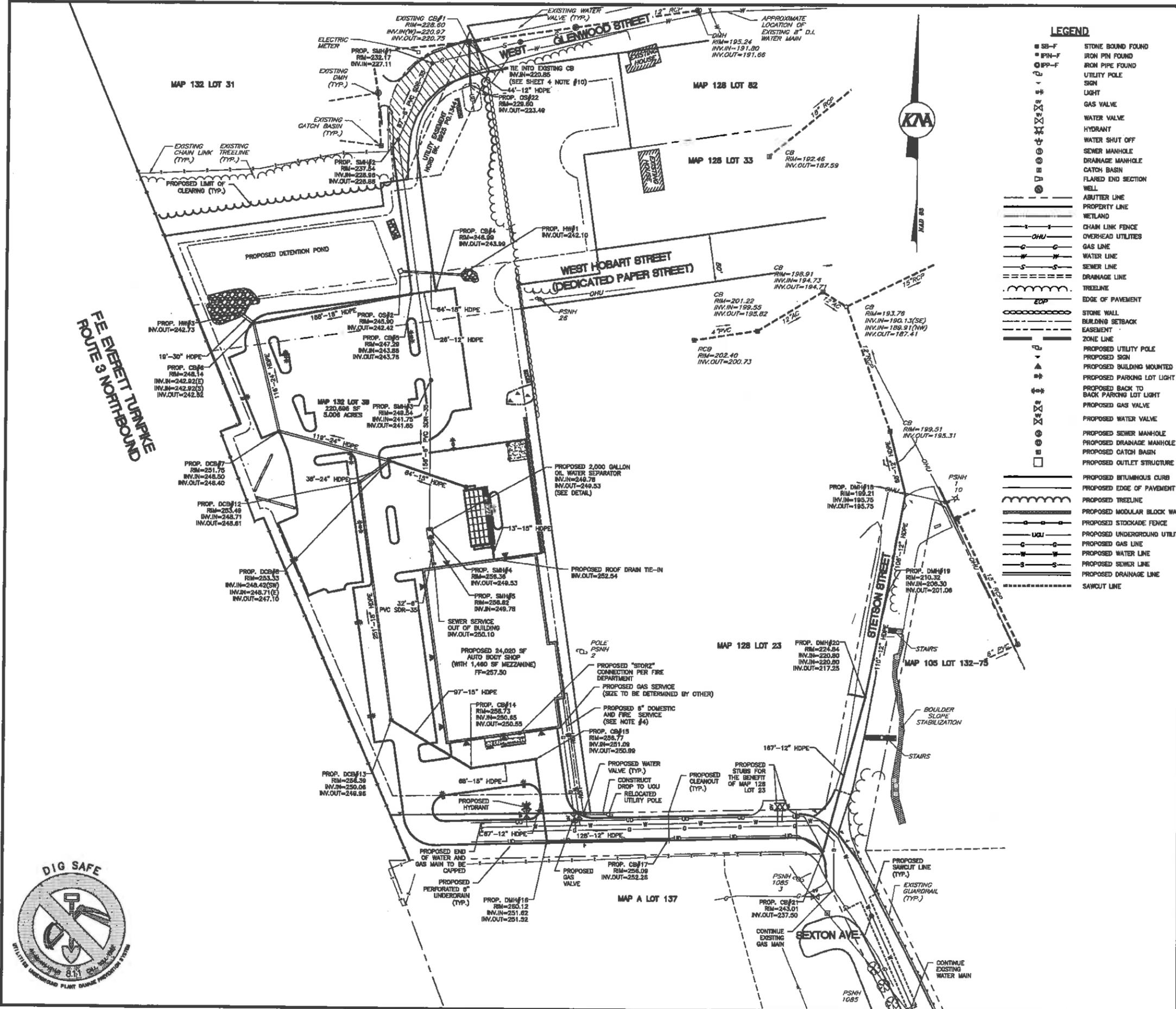


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 4 OF 22

THIS DETAILED SITE-SPECIFIC SOIL MAP, PERFORMED ON JULY 22, 2019 BY THOMAS E. SKOGLORSKI, CERTIFIED SOIL SCIENTIST #003 OF THE ENVIRONMENTAL CONSULTANTS, L.L.C. IN BOW, NEW HAMPSHIRE WITH ASSISTANCE FROM JOSHUA BRIEN OF KEACH-NORDSTROM ASSOCIATES, CONFORMS TO THE STANDARDS OF SSSNNE PUBLICATION NO. 3, AS AMENDED, "SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT". THIS MAP HAS BEEN PREPARED TO COMPLY WITH SOIL MAPPING REQUIREMENTS OF RSA 480-A:17 AND NHDES ENV-WO 1500, ALTERATION OF TERRAIN. SEE ACCOMPANYING REPORT FOR METHODOLOGY, MAP SYMBOL LEGEND, AND INTERPRETATIONS.





LEGEND

- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- UTY UTILITY POLE
- SGN SIGN
- GSV GAS VALVE
- WTV WATER VALVE
- HYD HYDRANT
- WSO WATER SHUT OFF
- SMM SEWER MANHOLE
- CMB CATCH BASIN
- FES FLARED END SECTION
- WEL WELL
- ALN ABUTTER LINE
- PLN PROPERTY LINE
- WTL WETLAND
- CLF CHAIN LINK FENCE
- OHU OVERHEAD UTILITIES
- GLN GAS LINE
- WLN WATER LINE
- SWLN SEWER LINE
- DRN DRAINAGE LINE
- TRL TIE LINE
- EOP EDGE OF PAVEMENT
- SWL STONE WALL
- BSB BUILDING SETBACK
- EAS EASEMENT
- ZLN ZONE LINE
- PUP PROPOSED UTILITY POLE
- PPS PROPOSED SIGN
- PBL PROPOSED BUILDING MOUNTED LIGHT
- PPL PROPOSED PARKING LOT LIGHT
- PBP PROPOSED BACK TO BACK PARKING LOT LIGHT
- PGL PROPOSED GAS VALVE
- PWR PROPOSED WATER VALVE
- PSM PROPOSED SEWER MANHOLE
- PDR PROPOSED DRAINAGE MANHOLE
- PCB PROPOSED CATCH BASIN
- POS PROPOSED OUTLET STRUCTURE
- PBC PROPOSED BITUMINOUS CURB
- PEP PROPOSED EDGE OF PAVEMENT
- PTR PROPOSED TREELINE
- PML PROPOSED MODULAR BLOCK WALL
- PSF PROPOSED STOCKADE FENCE
- PGLN PROPOSED UNDERGROUND UTILITIES
- PGLG PROPOSED GAS LINE
- PGLW PROPOSED WATER LINE
- PGLS PROPOSED SEWER LINE
- PGLD PROPOSED DRAINAGE LINE
- PGLA PROPOSED SAWCUT LINE

CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE CITY OF NASHUA, LATEST EDITION, CONSTRUCTION STANDARDS AND DETAILS. IN THE ABSENCE OF A CITY STANDARD/SPECIFICATION, WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED BY THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, ARE HEREBY INCORPORATED BY REFERENCE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT 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 TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
3. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. CONTRACTOR TO VERIFY SIZE OF WATER AND GAS SERVICE LINES WITH MECHANICAL CONTRACTOR/FIRE SUPPRESSION ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. THE PROPOSED BUILDING SHALL BE FULLY SPRINKLER PROTECTED AND CONTAIN AN INTERNAL FIRE PUMP.
6. PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING ANY WATER SYSTEM/SERVICE PARTS, THE PROPOSED SIZE OF THE VARIOUS WATER SERVICES SHALL BE CONFIRMED BY THE PROJECT FIRE SUPPRESSION ENGINEER. ANY ADJUSTMENTS TO THE DESIGN MUST BE APPROVED BY THE CITY OF NASHUA.
7. FINAL LAYOUT OF UNDERGROUND UTILITIES TO BE APPROVED BY LOCAL PROVIDER PRIOR TO CONSTRUCTION.
8. FINAL OIL/WATER SEPARATOR SIZE SHALL BE DETERMINED BY PLUMBING ENGINEER PRIOR TO CONSTRUCTION.

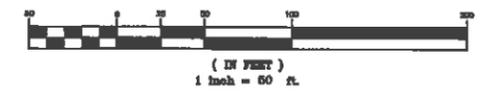
FIRE DEPARTMENT NOTES

1. THE MASTER FIRE ALARM BOX LOCATION SHALL BE DETERMINED AT TIME OF BUILDING DESIGN BY THE FIRE DEPARTMENT.
2. FINAL KNIX BOX LOCATIONS FOR THE PROPOSED BUILDING SHALL BE DETERMINED BY THE FIRE DEPARTMENT OR FIRE PROTECTION ENGINEER.
3. THERE WILL BE NO FLAMMABLE LIQUID STORAGE ROOM OR SHED LOCATED ON SITE.
4. THE PAINT MIXING ROOM WILL BE MADE EXPLOSION PROOF TO COMPLY WITH NH FIRE CODE.

UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREIN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

GRAPHIC SCALE



**UTILITY PLAN
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY**

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

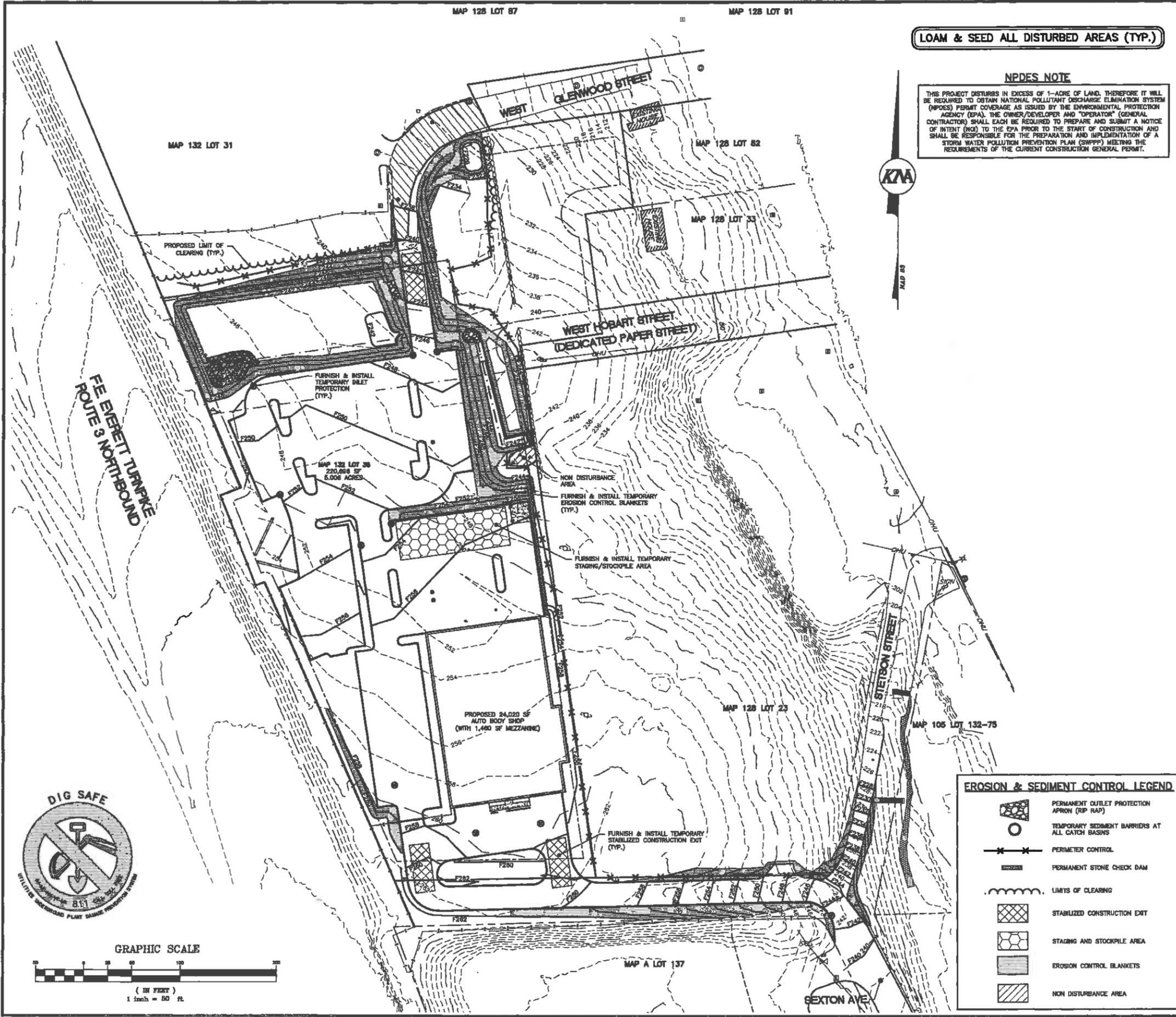
KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 301, Bedford, NH 08110 Phone (603) 487-2801



REVISIONS				
No.	DATE	DESCRIPTION	BY	PCN
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM	
2	10/1/20	CITY ENGINEERING REVISIONS	PCM	

DATE: JUNE 22, 2020 SCALE: 1"=50'
PROJECT NO: 17-1011-1 SHEET 5 OF 22





LOAM & SEED ALL DISTURBED AREAS (TYP.)

NPDES NOTE
 THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND, THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH 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 CONSTRUCTION GENERAL PERMIT.

- EROSION CONTROL NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
 2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2010, AS AMENDED FROM TIME TO TIME.
 3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
 4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
 5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
 6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
 7. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
 8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
 9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
 10. THE CITY OF NASHUA SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.

LEGEND

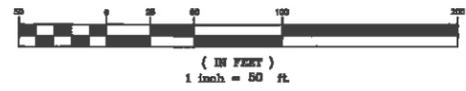
- SB-F STONE BOUND FOUND
- IPW-F IRON PIPE FOUND
- IPP-F IRON PIPE FOUND
- UTY UTILITY POLE
- SGN SIGN
- LGT LIGHT
- GVS GAS VALVE
- WTV WATER VALVE
- HYR HYDRANT
- WSO WATER SHUT OFF
- SMM SEWER MANHOLE
- DMH DRAINAGE MANHOLE
- CBN CATCH BASIN
- FES FLARED END SECTION
- WEL WELL
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- CHAIN LINK FENCE
- OHU OVERHEAD UTILITIES
- TREELINE
- EOP EDGE OF PAVEMENT
- SWW STONE WALL
- BSB BUILDING SETBACK
- EASEMENT
- ZONE LINE
- PUP PROPOSED UTILITY POLE
- PPS PROPOSED SIGN
- PBLM PROPOSED BUILDING MOUNTED LIGHT
- PPLP PROPOSED PARKING LOT LIGHT
- PBLB PROPOSED BACK TO BACK PARKING LOT LIGHT
- PPGV PROPOSED GAS VALVE
- PPTV PROPOSED WATER VALVE
- PPSM PROPOSED SEWER MANHOLE
- PDMH PROPOSED DRAINAGE MANHOLE
- PCBN PROPOSED CATCH BASIN
- POUTS PROPOSED OUTLET STRUCTURE
- PCUR PROPOSED BITUMINOUS CURB
- EOPR PROPOSED EDGE OF PAVEMENT
- TREELINE
- PMBW PROPOSED MODULAR BLOCK WALL
- PSFC PROPOSED STOCKADE FENCE

EROSION & SEDIMENT CONTROL LEGEND

- POMP PERMANENT OUTLET PROTECTION APRON (RIP RAP)
- TSBB TEMPORARY SEDIMENT BARRIERS AT ALL CATCH BASINS
- PC PERIMETER CONTROL
- PSCD PERMANENT STONE CHECK DAM
- LCL LIMITS OF CLEARING
- SCST STABILIZED CONSTRUCTION EXIT
- SAS STAGING AND STOCKPILE AREA
- ECB EROSION CONTROL BLANKETS
- NDA NON DISTURBANCE AREA



GRAPHIC SCALE



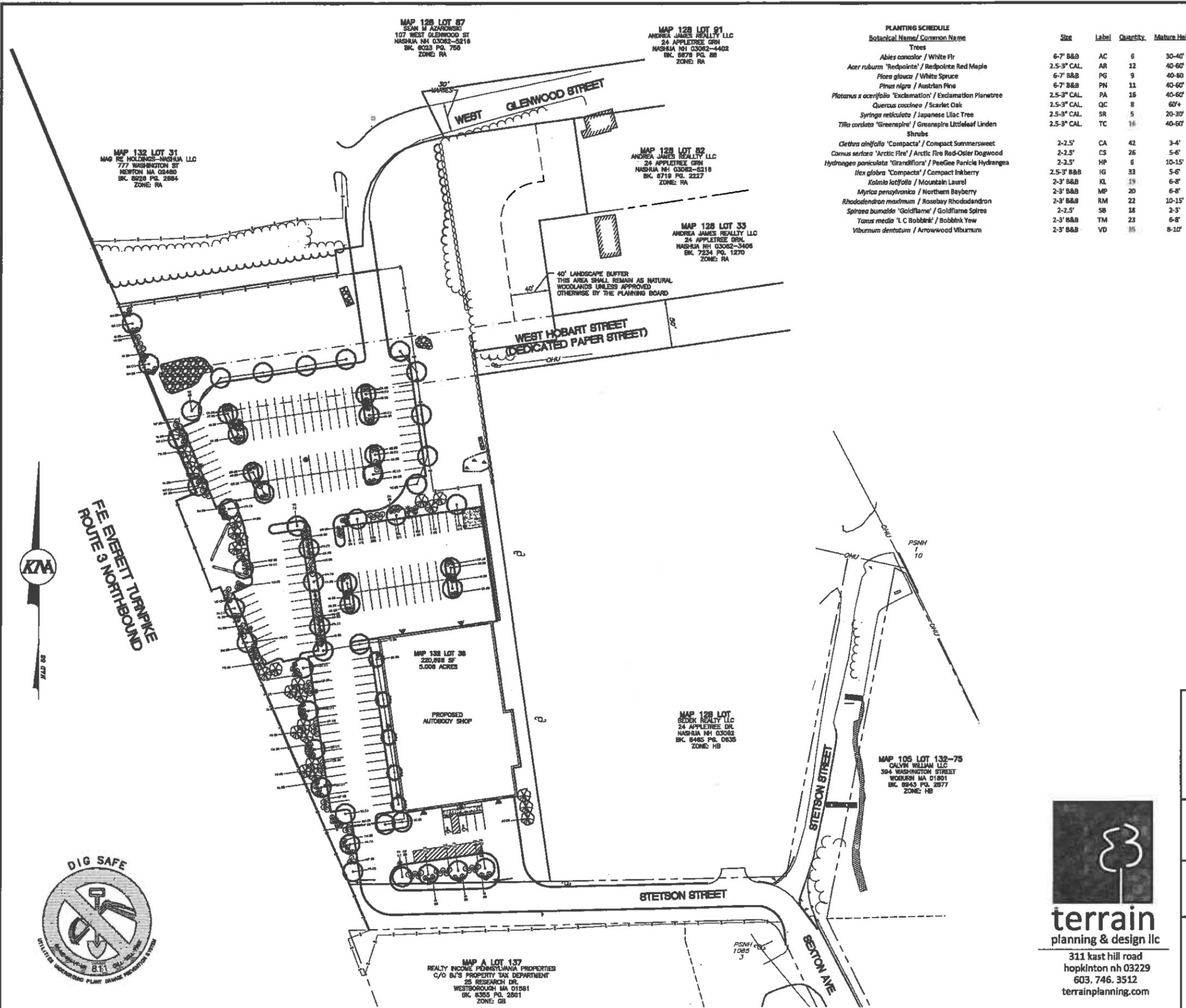
EROSION CONTROL PLAN
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03050
 (603) 888-5050

KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 30, Bedford, NH 03110 Phone (603) 887-8881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/28/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 6 OF 22



PLANTING SCHEDULE

Botanical Name/ Common Name	Size	Label	Quantity	Mature Height
Trees				
<i>Abies concolor</i> / White Fir	6-7' B&B	AC	6	30-40'
<i>Acer rubrum</i> 'Redpointe' / Redpointe Red Maple	2.5-3' CAL	AR	12	40-60'
<i>Picea glauca</i> / White Spruce	6-7' B&B	PG	9	40-60'
<i>Pinus nigra</i> / Austrian Pine	6-7' B&B	PN	11	40-60'
<i>Platanus x acerifolia</i> 'Exclamation' / Exclamation Planetree	2.5-3' CAL	PA	16	40-60'
<i>Quercus cocinea</i> / Scarlet Oak	2.5-3' CAL	QC	8	60'+
<i>Syringa reticulata</i> / Japanese Lilac Tree	2.5-3' CAL	SR	5	20-30'
<i>Tilia cordata</i> 'Greenspire' / Greenspire Littleleaf Linden	2.5-3' CAL	TC	16	40-60'
Shrubs				
<i>Clethra alnifolia</i> 'Compacta' / Compact Summersweet	2-2.5'	CA	42	3-4'
<i>Camus sericea</i> 'Arctic Fire' / Arctic Fire Red-Osier Dogwood	2-2.5'	CS	26	5-6'
<i>Hydrangea paniculata</i> 'Grandiflora' / PeeGee Panicle Hydrangea	2-2.5'	HP	6	10-15'
<i>Ilex glabra</i> 'Compacta' / Compact Inkberry	2.5-3' B&B	IG	33	5-6'
<i>Kalmia latifolia</i> / Mountain Laurel	2-3' B&B	KL	39	6-8'
<i>Myrica pensylvanica</i> / Northern Bayberry	2-3' B&B	MP	20	6-8'
<i>Rhododendron maximum</i> / Rosebay Rhododendron	2-3' B&B	RM	22	10-15'
<i>Spiraea bumalda</i> 'Goldflame' / Goldflame Spirea	2-2.5'	SB	18	2-3'
<i>Taxus media</i> 'L.C. Bobbink' / Bobbink Yew	2-3' B&B	TM	23	6-8'
<i>Viburnum dentatum</i> / Arrowwood Viburnum	2-3' B&B	VD	35	8-10'

LANDSCAPE CALCULATIONS

INTERIOR LANDSCAPE AREA:
 MEDIAN = 136'
 LENGTH = 136'
 TREES REQUIRED: 1 TREE + 1 TREE / 40' OF MEDIAN LENGTH
 = 136 / 40 = 3.4 + 1 = 5 TREES REQUIRED
 TREES PROPOSED: 5 TREES PROVIDED
 SHRUBS REQUIRED: 1 SHRUB + 1 SHRUB / 5' OF MEDIAN LENGTH
 = 136 / 5 = 27 + 1 = 28 SHRUBS REQUIRED
 SHRUBS PROPOSED: 28 SHRUBS PROVIDED

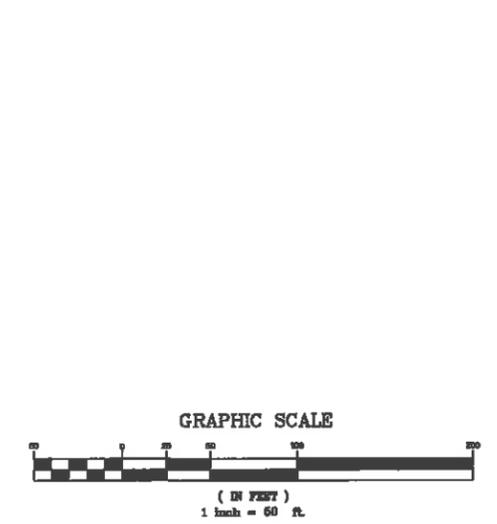
ISLANDS:
 6 ISLANDS (40' LENGTH EACH)
 SHADE TREES REQUIRED = 2 x 6 = 12 SHADE TREES REQUIRED
 = 2 x 5 = 10 SHADE TREES PROVIDED
 SHADE TREES PROPOSED: 12 SHADE TREES PROVIDED
 SHRUBS REQUIRED: 1 SHRUB + 1 SHRUB / 5' OF ISLAND LENGTH
 = 40 / 5 = 8 + 1 = 9 SHRUBS REQUIRED PER ISLAND
 SHRUBS PROPOSED: 9 SHRUBS PROVIDED PER ISLAND

LANDSCAPE YARD REQUIREMENTS:
 SHADE TREES REQUIRED: 1 SHADE TREE / 40 LF OF FRONTAGE
 SHRUBS REQUIRED: 1 SHRUB + 1 SHRUB / 5' OF FRONTAGE

MAP 132 LOT 36:
 78 LINEAR FEET OF FRONTAGE ON EVERETT TURNPIKE
 SHADE TREES REQUIRED = 78 / 40 = 2 SHADE TREES REQUIRED
 SHADE TREES PROPOSED: 2 SHADE TREES PROVIDED
 SHRUBS = 78 / 5 = 15.6 + 1 = 17 SHRUBS REQUIRED
 SHRUBS PROPOSED: 17 SHRUBS PROVIDED

MAP 132 LOT 38:
 175 LINEAR FEET OF FRONTAGE ON STETSON STREET (MINUS DRIVEWAY)
 SHADE TREES REQUIRED = 175 / 40 = 4 SHADE TREES REQUIRED
 SHADE TREES PROPOSED: 4 SHADE TREES PROVIDED
 SHRUBS = 175 / 5 = 35 + 1 = 36 SHRUBS REQUIRED
 SHRUBS PROPOSED: 40 SHRUBS PROVIDED

320 LINEAR FEET OF FRONTAGE ON EVERETT TURNPIKE:
 SHADE TREES REQUIRED = 320 / 40 = 8 SHADE TREES REQUIRED
 SHADE TREES PROPOSED: 13 SHADE TREES PROVIDED
 SHRUBS = 320 / 5 = 64 + 1 = 65 SHRUBS REQUIRED
 SHRUBS PROPOSED: 108 SHRUBS PROVIDED



LANDSCAPE PLAN
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
 (603) 888-5050

KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 20, Bedford, NH 03110 Phone (603) 887-8881

REVISIONS

No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/17/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 7 OF 22

311 kast hill road
 hopkinton nh 03229
 603. 746. 3512
 terrainplanning.com



FE EVERETT TURNPIKE
 ROUTE 3 NORTHBOUND



MAP 128 LOT 87
 SSN & AZAROVSKI
 107 WEST GLENWOOD ST
 NASHUA NH 03082-5218
 BK. 8023 PG. 758
 ZONE: RA

MAP 128 LOT 91
 ANDREA JAMES REALTY LLC
 24 APPLETREE GRN
 NASHUA NH 03082-4402
 BK. 8678 PG. 88
 ZONE: RA

MAP 132 LOT 31
 M&G RE HOLDINGS-NASHUA LLC
 777 WASHINGTON ST
 NEWTON MA 02460
 BK. 8928 PG. 2884
 ZONE: RA

MAP 128 LOT 82
 ANDREA JAMES REALTY LLC
 24 APPLETREE GRN
 NASHUA NH 03082-8218
 BK. 8719 PG. 2227
 ZONE: RA

MAP 128 LOT 33
 ANDREA JAMES REALTY LLC
 24 APPLETREE GRN
 NASHUA NH 03082-3406
 BK. 7234 PG. 1270
 ZONE: RA

40' LANDSCAPE BUFFER
 THIS AREA SHALL REMAIN AS NATURAL
 WOODLANDS UNLESS APPROVED
 OTHERWISE BY THE PLANNING BOARD

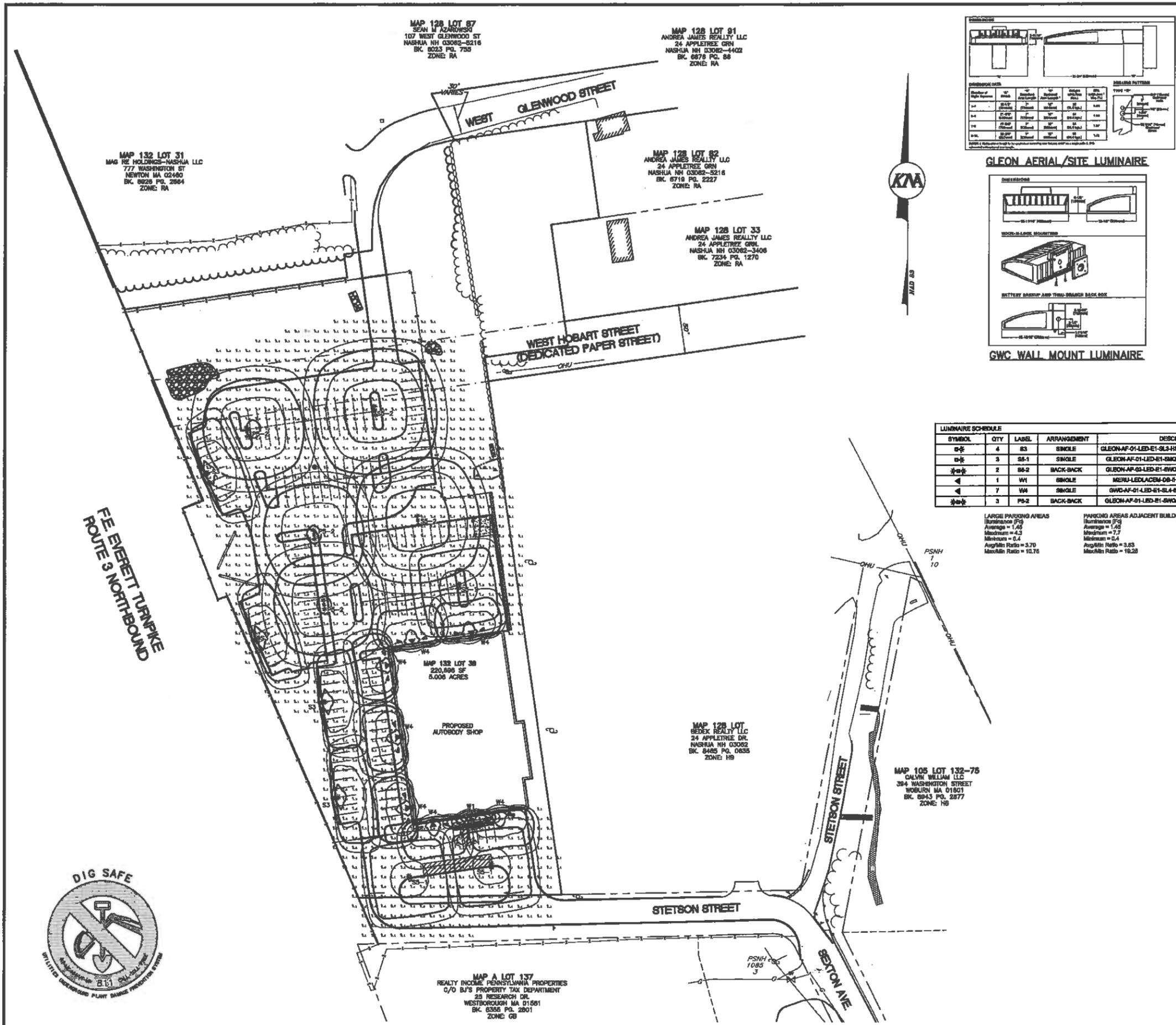
WEST HOBART STREET
 (DEDICATED PAPER STREET)

MAP 132 LOT 38
 220,888 SF
 5.008 ACRES

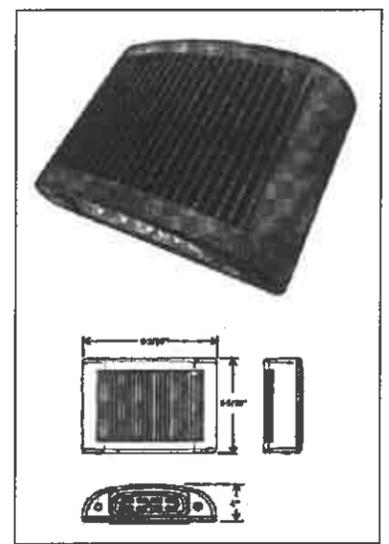
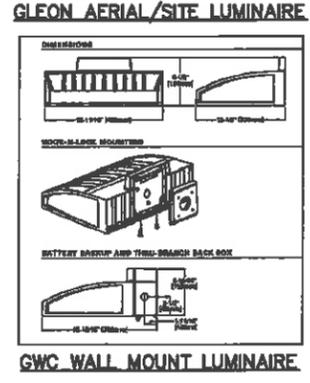
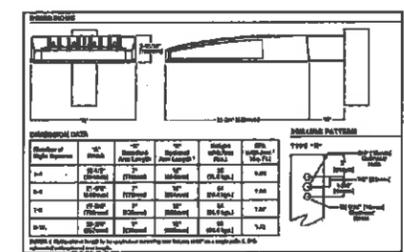
MAP 128 LOT
 BEDEK REALTY LLC
 24 APPLETREE DR
 NASHUA NH 03082
 BK. 8485 PG. 0635
 ZONE: HB

MAP 105 LOT 132-75
 CALVIN WILLIAM LLC
 394 WASHINGTON STREET
 WOODBURY MA 01501
 BK. 8943 PG. 2577
 ZONE: HB

MAP A LOT 137
 REALTY INCOME PENNSYLVANIA PROPERTIES
 C/O BJ'S PROPERTY TAX DEPARTMENT
 25 RESEARCH DR.
 WESTBOROUGH MA 01581
 BK. 8355 PG. 2861
 ZONE: GB



- LIGHTING NOTES:**
1. ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY CHARRON LIGHTING.
 2. ALL PROPOSED LIGHTS/FIXTURES ARE TO BE FULL CUTOFF.
 3. FIXTURES SHALL BE MOUNTED AT HEIGHTS AS SPECIFIED IN TABLE.
 4. PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ELECTRICIAN FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE AND CIRCUITS ASSOCIATED WITH THE SITE LIGHTING.

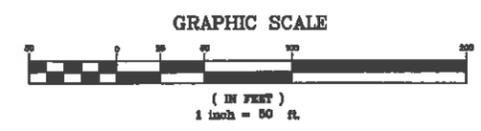


LUMINAIRE SCHEDULE

SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION
☼	4	S3	SINGLE	GLEON-AF-01-LED-E1-SL3-H89/SS84A208FN1 (27 AFG)
☼	3	S8-1	SINGLE	GLEON-AF-01-LED-E1-SM0/SS84A208FN1 (27 AFG)
☼☼	2	S8-2	BACK-BACK	GLEON-AF-02-LED-E1-SM0/SS84A208FN2 (27 AFG)
◀	1	W1	SINGLE	MERU-LEDLACEM-08-01/WALL MTD (17 AFG)
◀	7	W4	SINGLE	GWC-AF-01-LED-E1-SL4-H89/WALL MTD (17 AFG)
☼☼	3	P8-2	BACK-BACK	GLEON-AF-01-LED-E1-SM0/SS84A208FN2 (27 AFG)

LARGE PARKING AREAS
Illuminance (Fc)
Average = 1.42
Minimum = 0.43
Maximum = 0.4
Average Ratio = 5.70
Max/Min Ratio = 13.75

PARKING AREAS ADJACENT BUILDING
Illuminance (Fc)
Average = 1.42
Minimum = 0.4
Maximum = 7.7
Average Ratio = 3.53
Max/Min Ratio = 19.25



IN ASSOCIATION WITH:

CHARRON
BRIGHTER.

P.O. BOX 4560
MANCHESTER, NH 03108
(603) 654-4827
FAX (603) 654-8754
SALES@CHARRONINC.COM

LIGHTING PLAN
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

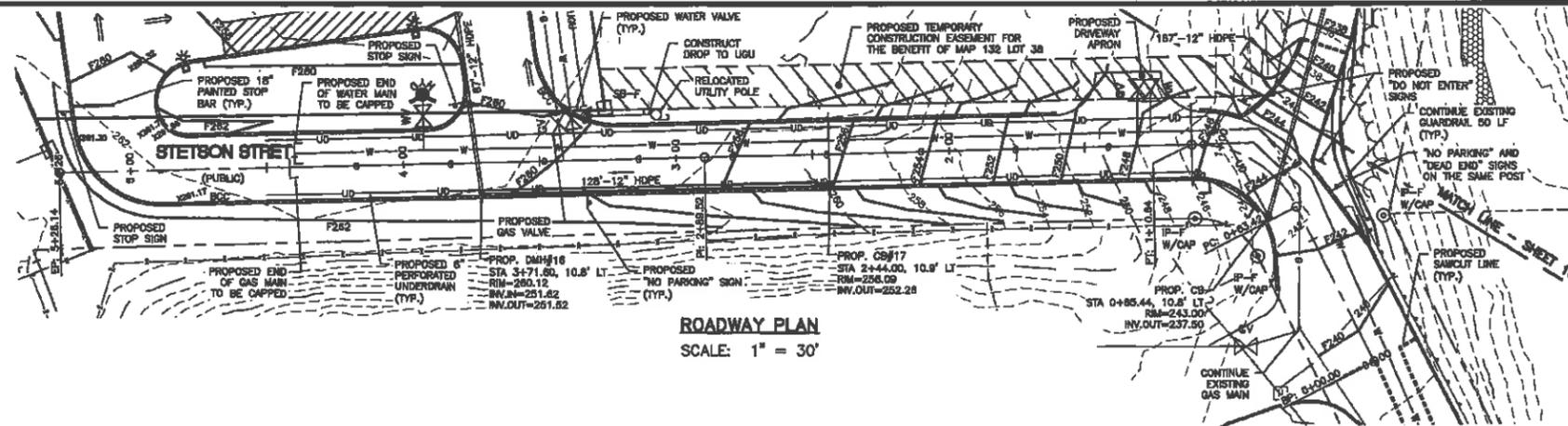
KM
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 30, Bedford, NH 03110 Phone (603) 687-8881

REVISIONS

No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	QTY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=50'
PROJECT NO: 17-1011-1 SHEET 8 OF 22

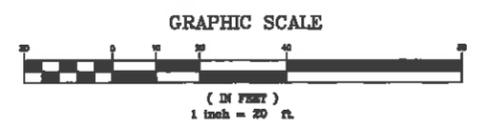
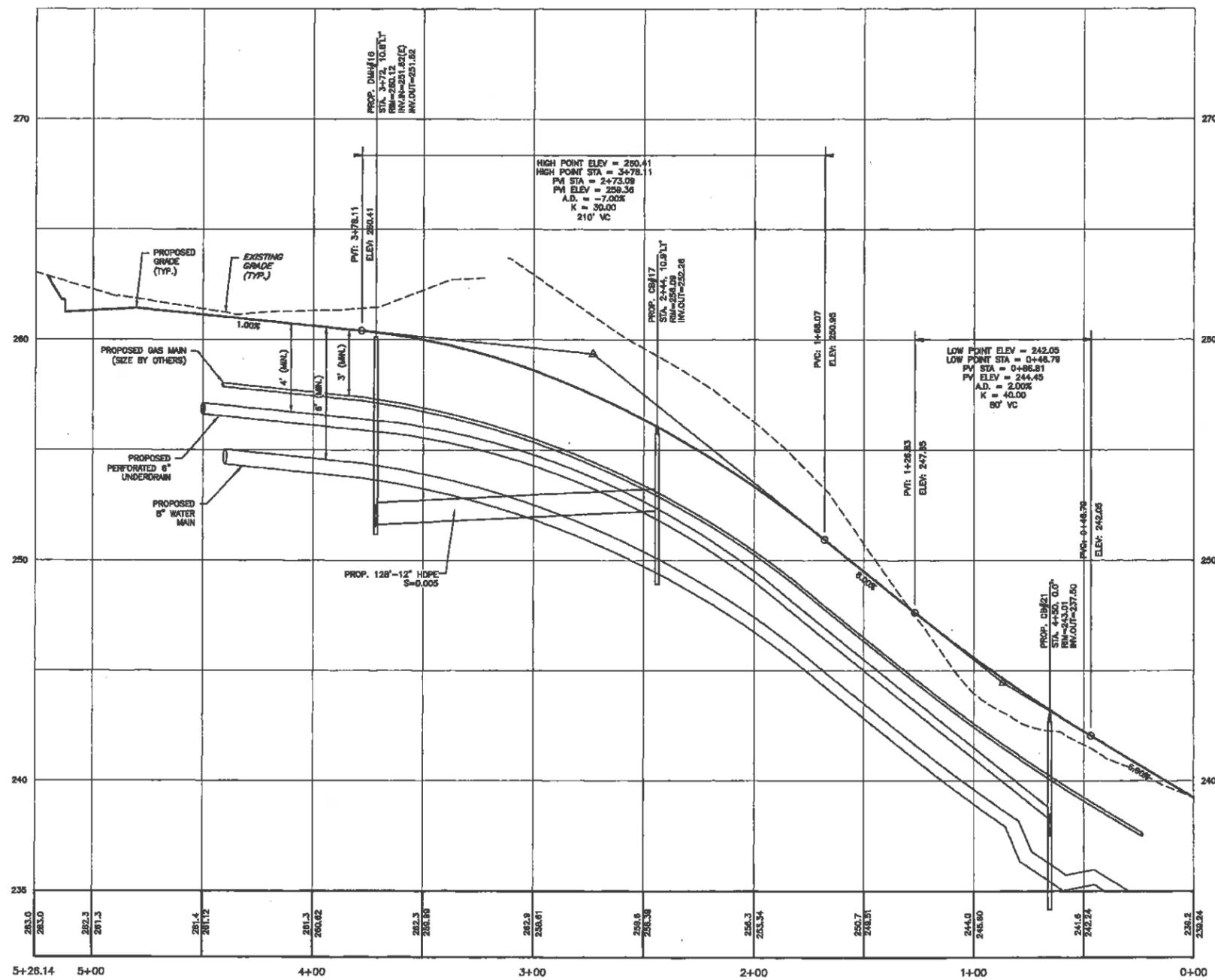




- CONSTRUCTION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED RECONSTRUCTION OF STETSON STREET.
 2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK PERFORMED IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE. CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT, NASHUA, NEW HAMPSHIRE.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT 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 TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 4. THE GAS AND ELECTRICAL UTILITIES SHOWN HERE SHALL BE COORDINATED WITH THE FINAL BUILDING PLANS PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.

LEGEND

- ABUTTER LINE
- PROPERTY LINE
- EDP --- EDGE OF PAVEMENT
- 10' CONTOUR
- 2' CONTOUR
- PROPOSED UTILITY POLE
- PROPOSED SIGN
- PROPOSED BITUMINOUS CURB
- PROPOSED EDGE OF PAVEMENT
- UGU --- PROPOSED UNDERGROUND UTILITIES
- PROPOSED GAS LINE
- PROPOSED 2' CONTOUR



ROADWAY PLAN & PROFILE
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

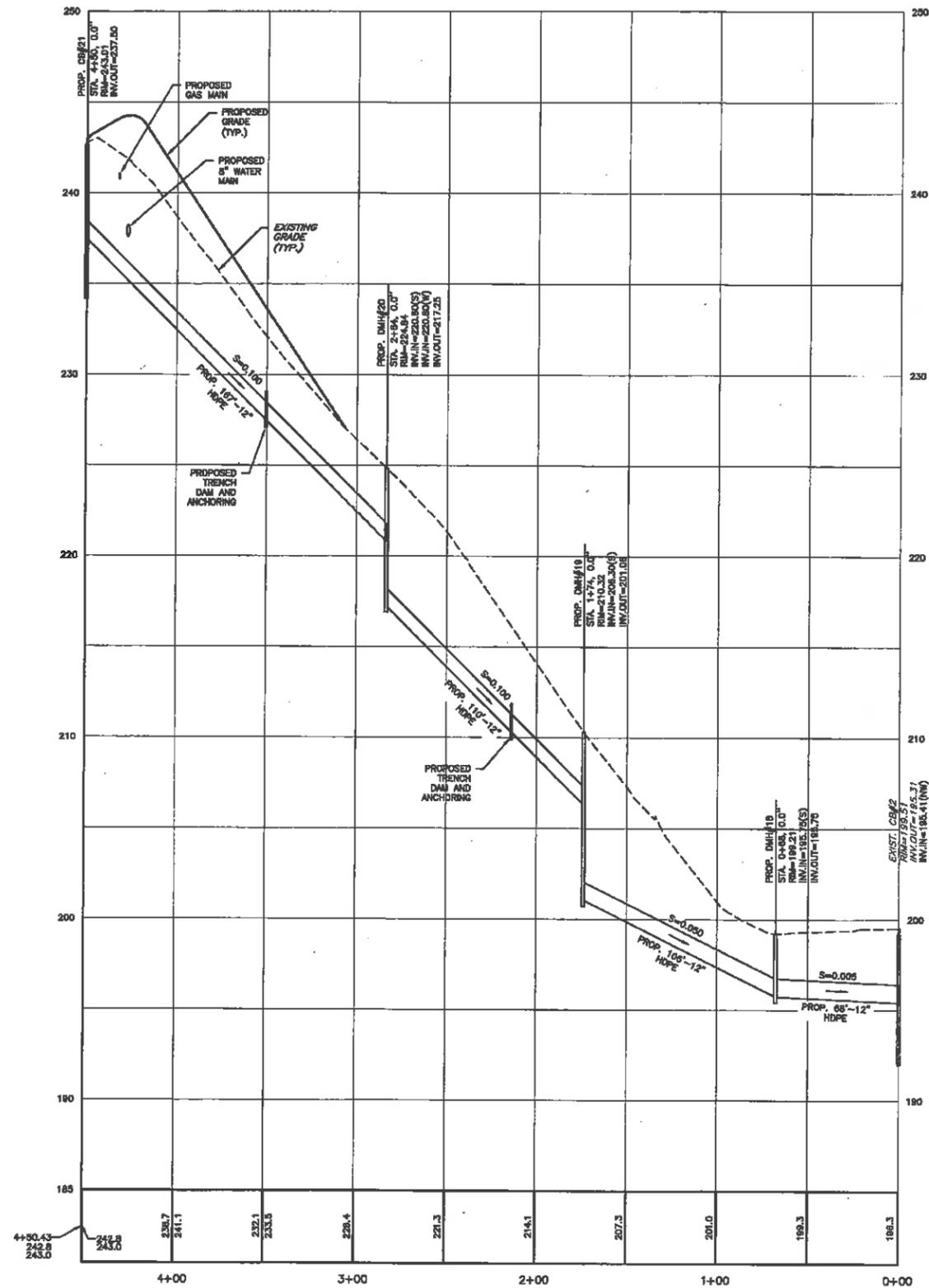
KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 08110 Phone (603) 887-2881



REVISIONS				
No.	DATE	DESCRIPTION	BY	PC
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM	
2	10/1/20	CITY ENGINEERING REVISIONS	PCM	

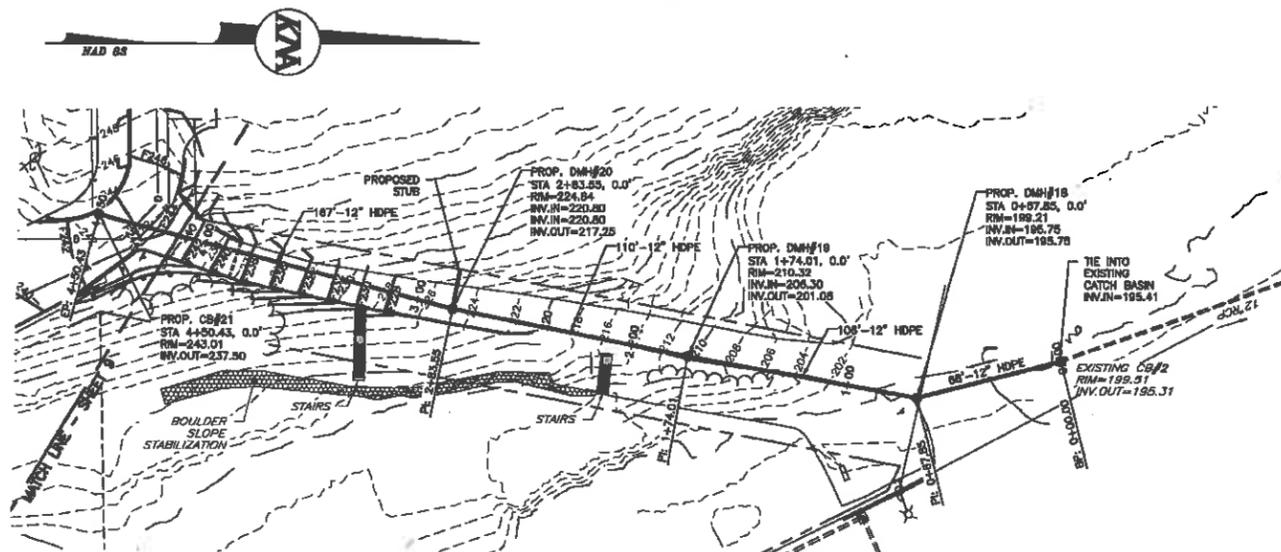
DATE: JUNE 22, 2020
PROJECT NO: 17-1011-1
SCALE: 1"=20'
SHEET 9 OF 22



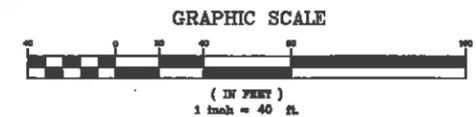


DRIVEWAY DRAINAGE PROFILE

SCALE: 1" = 40' (HORIZ.)
1" = 4' (VERT.)



DRIVEWAY PLAN
SCALE: 1" = 40'



DRIVEWAY DRAINAGE PLAN & PROFILE
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

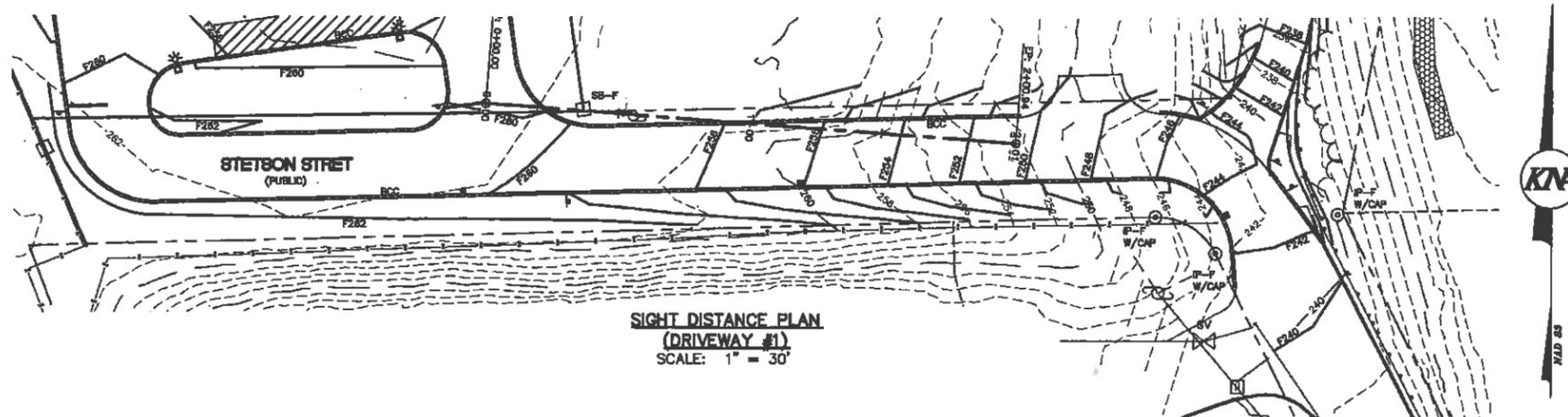
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03080
(603) 888-5050

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 302, Bedford, NH 08110 Phone (603) 887-8881

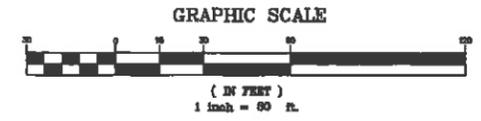
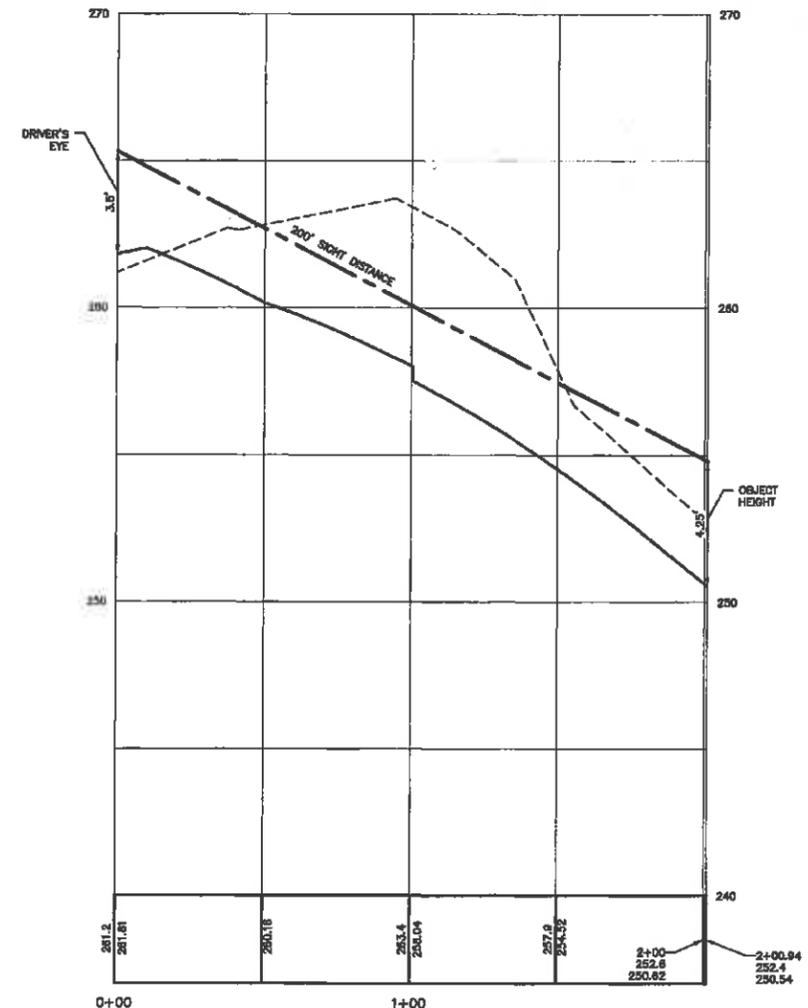


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: 1"=40'
PROJECT NO: 17-1011-1 SHEET 10 OF 22



- LEGEND**
- ABUTTER LINE
 - PROPERTY LINE
 - EOP --- EDGE OF PAVEMENT
 - 10' CONTOUR
 - 2' CONTOUR
 - PROPOSED UTILITY POLE
 - PROPOSED SIGN
 - PROPOSED BITUMINOUS CURB
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED 2' CONTOUR



SIGHT DISTANCE PLAN & PROFILE
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

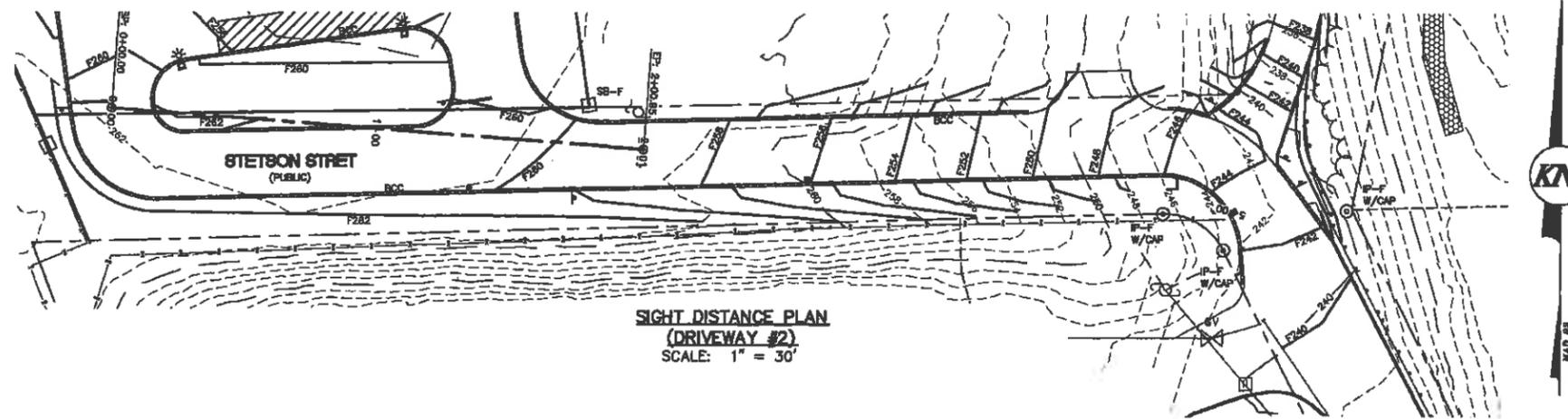
OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
 (603) 888-5050

KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 35, Bedford, NH 08115 Phone (603) 887-8861

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

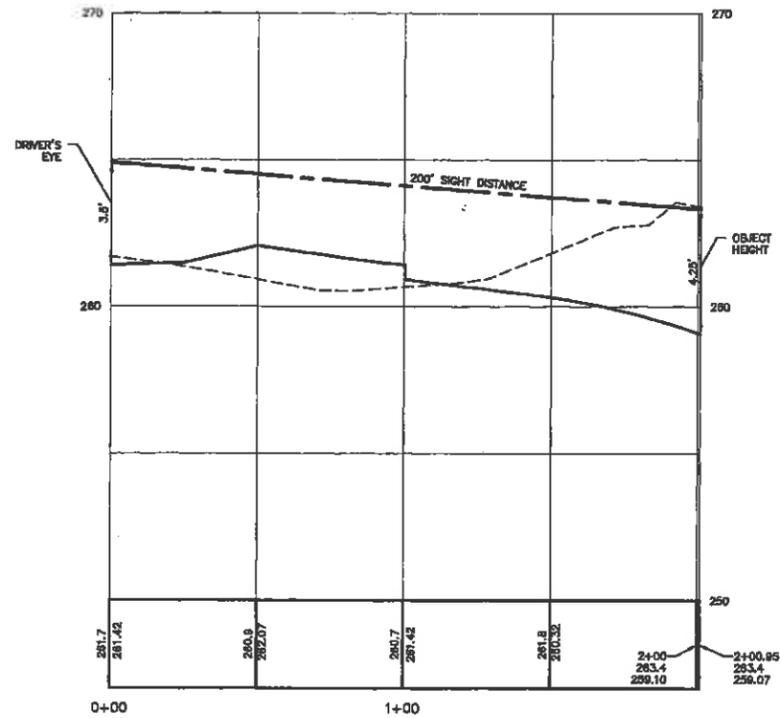
DATE: JUNE 22, 2020 SCALE: 1"=30'
 PROJECT NO: 17-1011-1 SHEET 11 OF 22



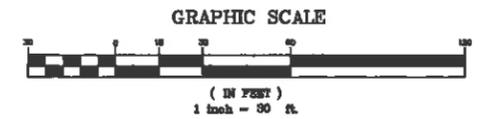


- LEGEND**
- ABUTTER LINE
 - PROPERTY LINE
 - EOP
 - 10' CONTOUR
 - 2' CONTOUR
 - PROPOSED UTILITY POLE
 - ▽ PROPOSED SIGN
 - PROPOSED BITUMINOUS CURB
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED 2' CONTOUR

**SIGHT DISTANCE PLAN
(DRIVEWAY #2)**
SCALE: 1" = 30'



SIGHT DISTANCE PROFILE
SCALE: 1" = 30' (HORIZ.)
1" = 3' (VERT.)



SIGHT DISTANCE PLAN & PROFILE
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

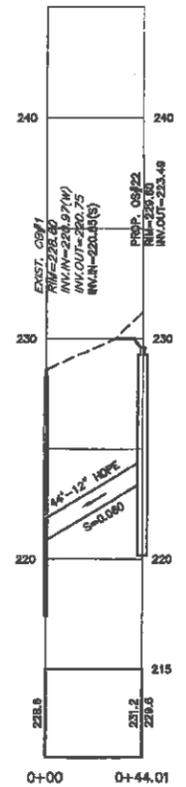
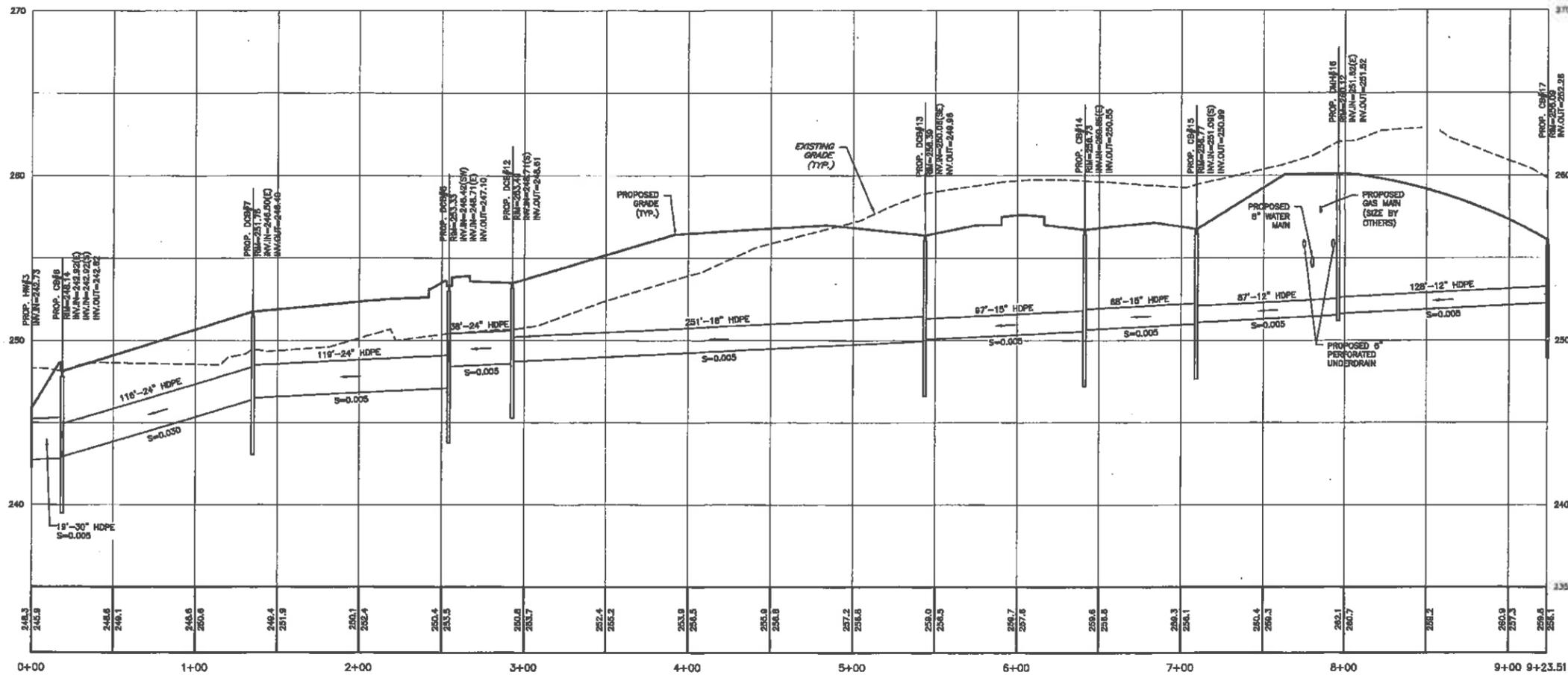
KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 2B, Bedford, NH 03110 Phone (603) 887-8861



REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

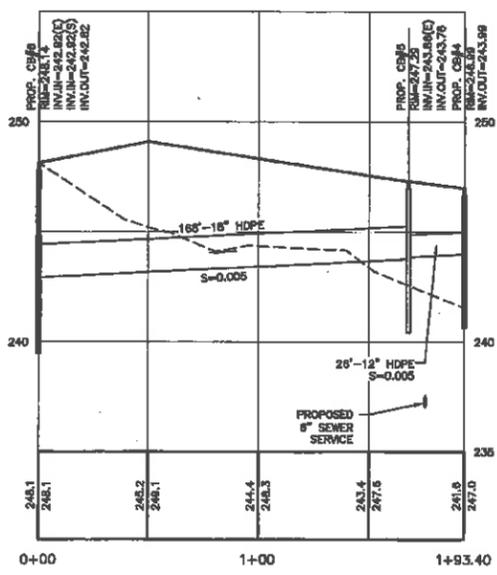
DATE: JUNE 22, 2020 SCALE: 1"=30'
PROJECT NO: 17-1011-1 SHEET 12 OF 22



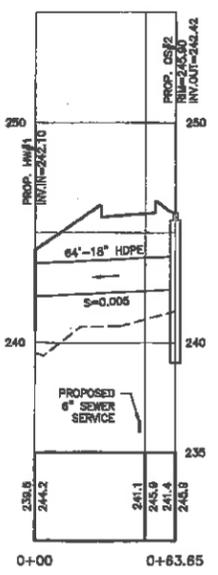


HW#3 TO CB#17
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)

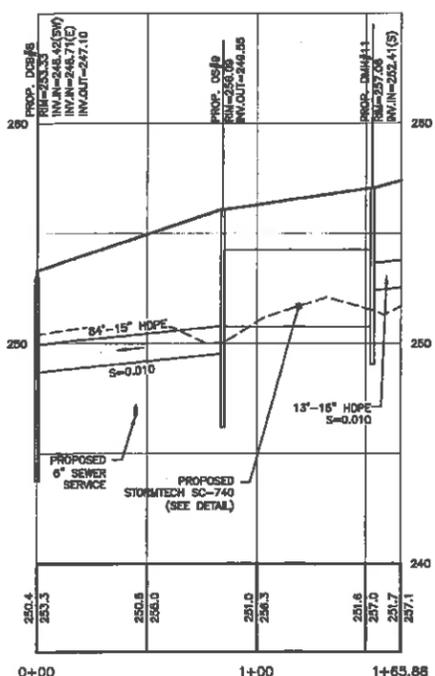
EXISTING CB TO OS#22
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



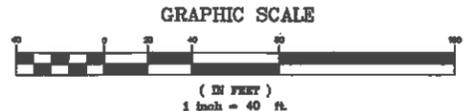
CB#6 TO CB#4
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



HW#1 TO OS#2
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



DCB#8 TO ROOF DRAIN
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



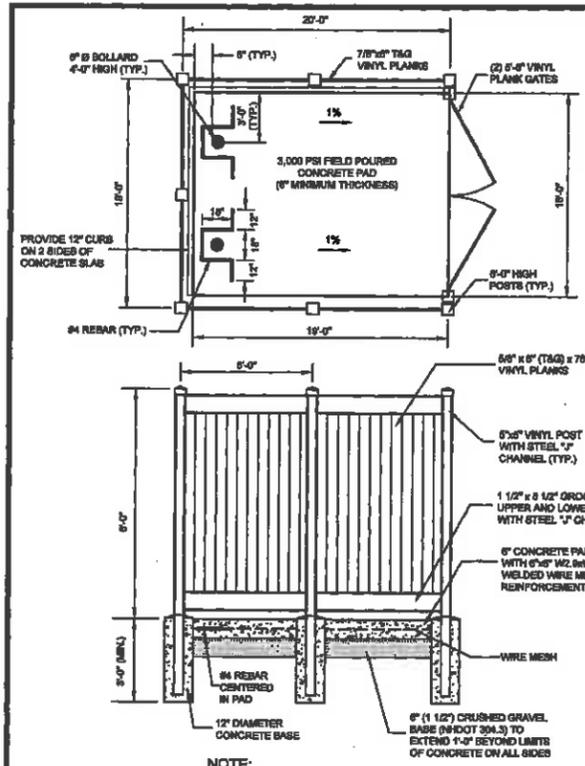
DRAINAGE PROFILES
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-5050

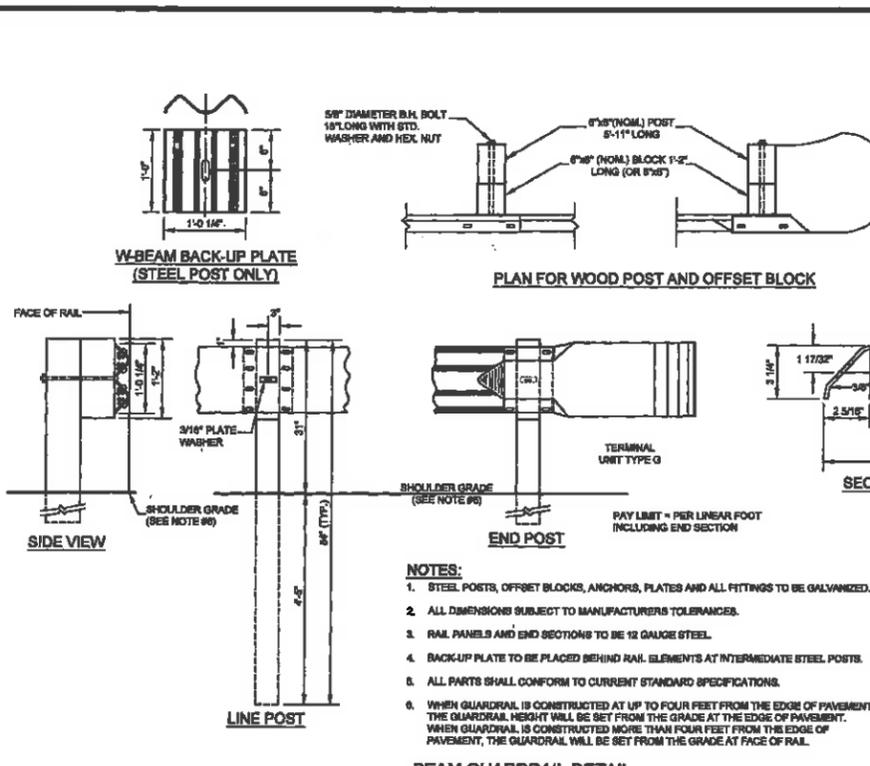
KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 22, Bedford, NH 03110 Phone (603) 687-8881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/17/20	CITY ENGINEERING REVISIONS	PCM

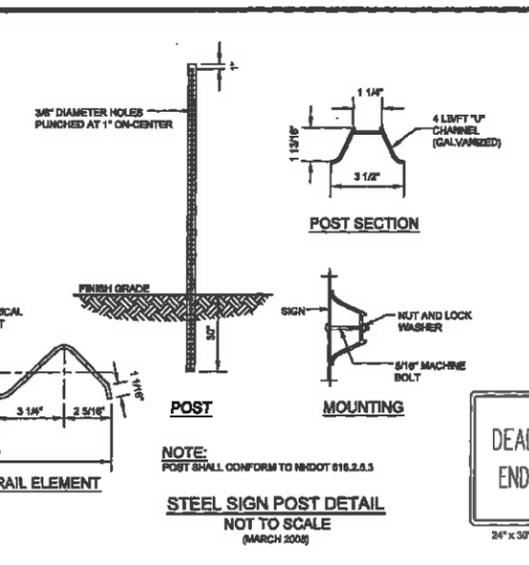
DATE: JUNE 22, 2020 SCALE: 1"=40'
 PROJECT NO: 17-1011-1 SHEET 13 OF 22



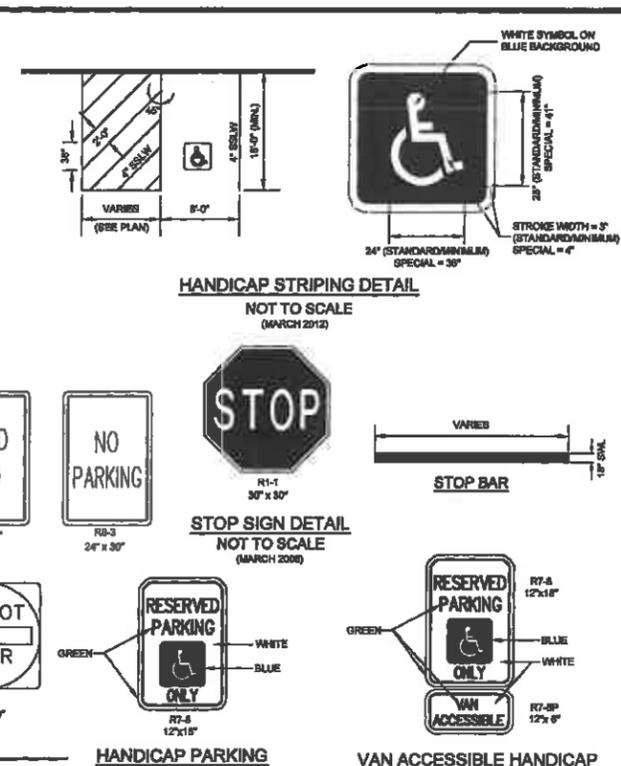
VINYL STOCKADE TRASH ENCLOSURE DETAIL
NOT TO SCALE



BEAM GUARDRAIL DETAIL
NOT TO SCALE
(MARCH 2008)



STEEL SIGN POST DETAIL
NOT TO SCALE
(MARCH 2008)

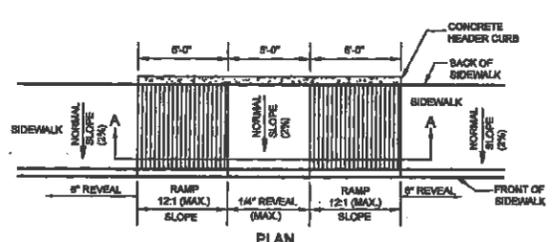


HANDICAP PARKING SIGN DETAIL
NOT TO SCALE
(MARCH 2008)

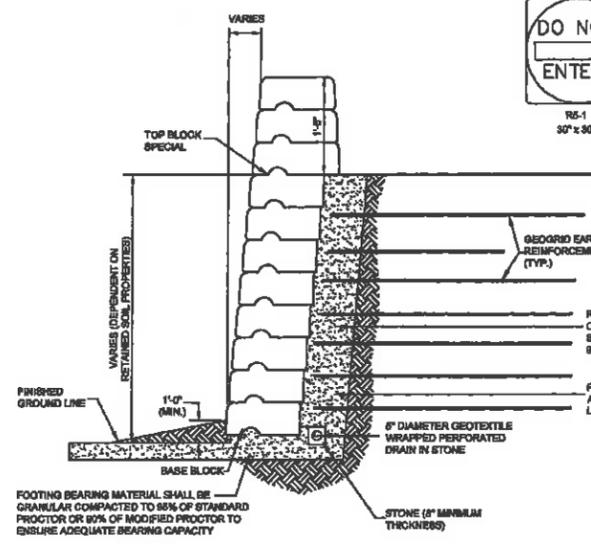
VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL
NOT TO SCALE
(NOVEMBER 2016)



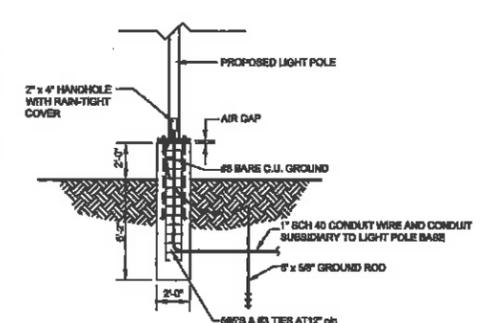
CURB TIP DOWN
NOT TO SCALE



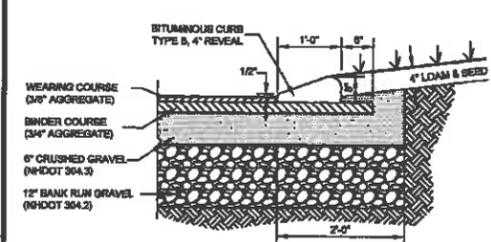
SIDEWALK RAMP
NOT TO SCALE
(JUNE 2012)



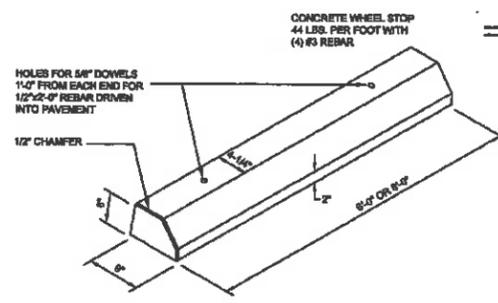
MODULAR BLOCK RETAINING WALL
(TO BE DESIGNED BY OTHERS)
NOT TO SCALE



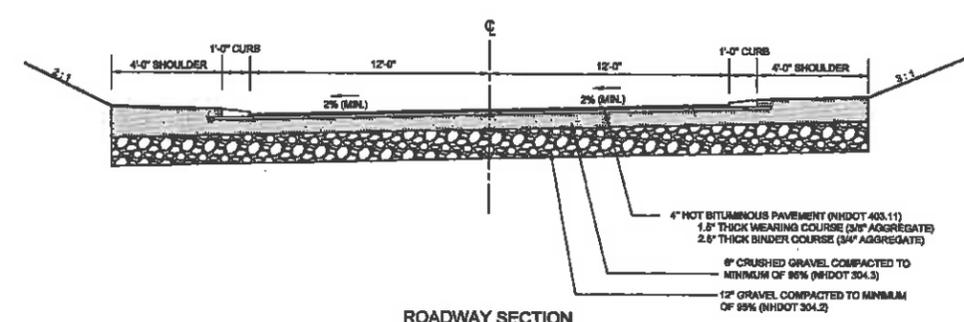
CONCRETE LIGHT POLE BASE DETAIL
NOT TO SCALE
(MARCH 2008)



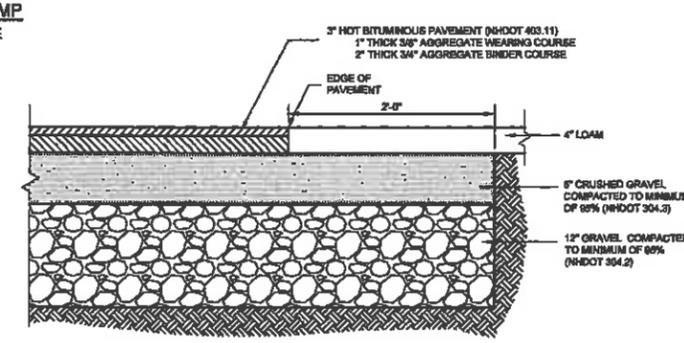
BITUMINOUS CURB TYPE B DETAIL
NOT TO SCALE
(MARCH 2008)



PRECAST CONCRETE WHEEL STOP
NOT TO SCALE
(MARCH 2008)



ROADWAY SECTION
NOT TO SCALE
(MARCH 2008)



DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE
(MARCH 2008)

CONSTRUCTION DETAILS
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

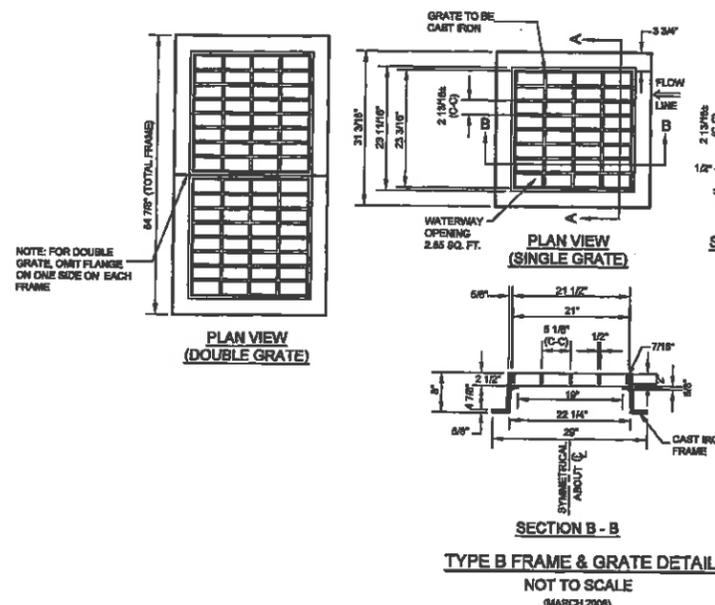
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03080
(603) 888-5050

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Lead Surveying Landscape Architecture
10 Commerce Park North, Suite 20, Bedford, NH 03110 Phone (603) 687-8881

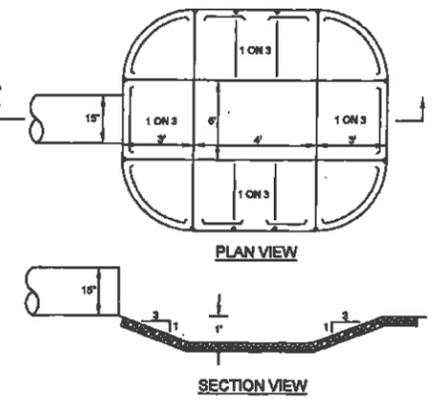


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

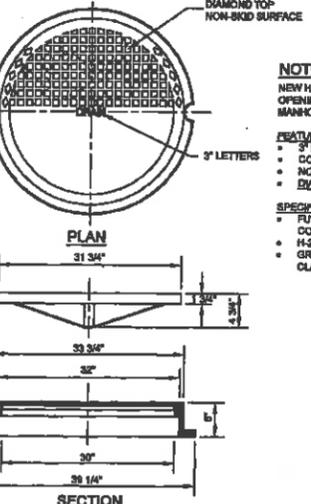
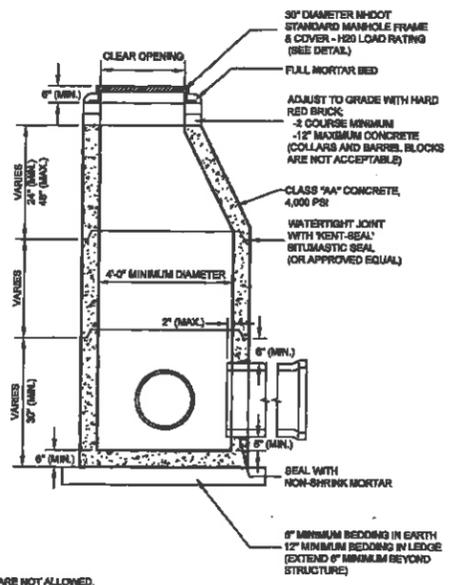
DATE: JUNE 22, 2020 SCALE: AS NOTED
PROJECT NO: 17-1011-1 SHEET 15 OF 22



TYPE B FRAME & GRATE DETAIL
NOT TO SCALE
(MARCH 2008)



PREFORMED SCOUR HOLE DETAIL
NOT TO SCALE
(MARCH 2008)



DRAIN MANHOLE FRAME AND COVER DETAIL
NOT TO SCALE

NOTES:
NEW HAMPSHIRE MAINTAINS A CLEAR OPENING DESIGNATION OF 30\"/>

FEATURES:
• 3\"/>

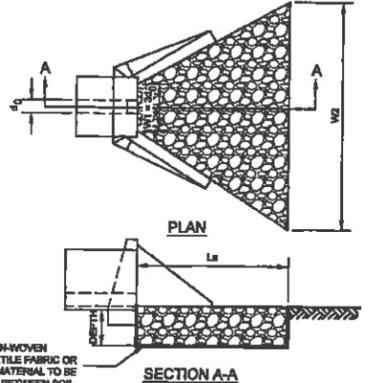
SPECIFICATIONS:
• FULLY MACHINED FRAME AND COVER
• H-30 LOAD RATED
• GRAY CAST IRON MEETS ASTM A48 CLASS 30

TABLE 7-04 - RECOMMENDED RIP RAP GRADATION RANGES

PERCENT OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100%	1.5 TO 2.0 (50)
85%	1.3 TO 1.8 (45)
50%	1.0 TO 1.5 (30)
15%	0.5 TO 0.8 (15)

- CONSTRUCTION SPECIFICATIONS:**
- THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
 - FRAGMENTED ROCK USED FOR FILTER OR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
 - GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
 - STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

MAINTENANCE:
THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR RAIN EVENT. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.



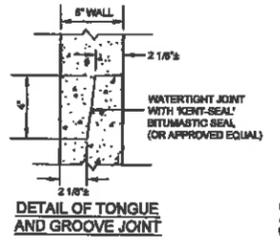
PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL
NOT TO SCALE
(MARCH 2008)

LOCATION	La	W1	W2	ØD	DEPTH
PROP. HWYS	23'	6'	30'	4"	10"

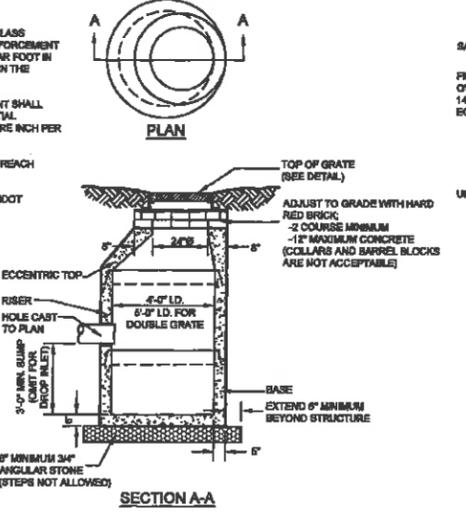


PRECAST REINFORCED DRAIN MANHOLE DETAIL
NOT TO SCALE
(MARCH 2008)

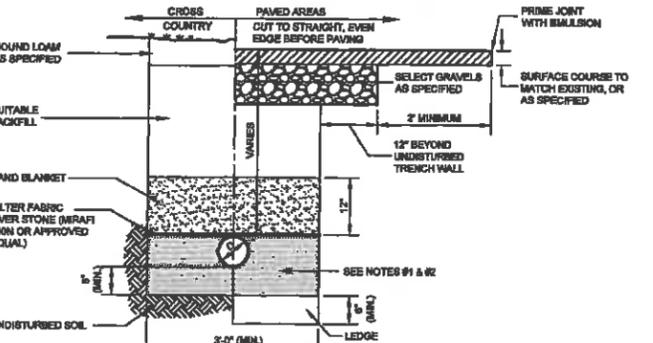
- NOTES:**
- ALL SECTIONS SHALL BE CONCRETE CLASS AA (4,000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCH PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
 - THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCH PER LINEAR FOOT.
 - RISER OF 1\", 2\", 3\" & 4\" CAN BE USED TO REACH DESIRED DEPTH.
 - MATERIALS AND CONSTRUCTION TO MHDT STANDARDS.



DETAIL OF TONGUE AND GROOVE JOINT

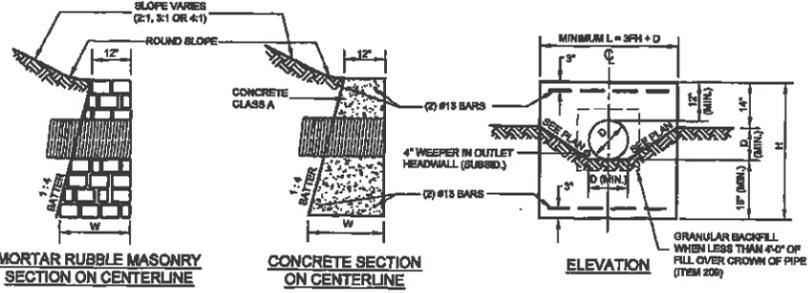


PRECAST REINFORCED CATCH BASIN
NOT TO SCALE
(MAY 2012)



STORM DRAINAGE TRENCH DETAIL
NOT TO SCALE
(MARCH 2008)

- NOTES:**
- THOROUGHLY COMPACTED SCREENED GRAVEL FOR RCP PIPE. SCREENED GRAVEL TO EXTEND TO SELECT FILL LINE.
 - FOR HDPE OR PVC PIPE, BEDDING SHALL BE 3/4\"/>



MORTAR RUBBLE MASONRY SECTION ON CENTERLINE

CONCRETE SECTION ON CENTERLINE

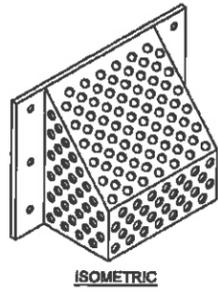
ELEVATION

NOTE:
DIMENSIONS SHOWN ARE TO PAYMENT LINES. MORTAR RUBBLE MASONRY TO BE STEPPED OUTSIDE PAYMENT LINES ON SLOPING FACES.

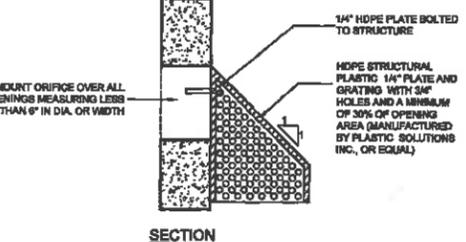
DIAMETER D (INCH)	AREA OF PIPE (SQ FT)	MASONRY PER FOOT OF WALL (CU. YD.)	MASONRY PER HOLE (CU. FT.)	MASONRY PER STANDARD HEADER (CU. YD.)	STEEL PER STANDARD HEADER (LBS)	LENGTH OF BARS	PIPE EXC. 1\"/>								
12"	0.78	0.188	1.58	0.91	8	3'-2"	0.111	0.786	0.30	3'-6"	3'-6"	10"	1'-10 1/2"	0.28	1.067
15"	1.25	0.282	2.22	0.85	11	3'-10"	0.130	0.947	0.35	4'-6"	3'-6"	11'-4"	1'-11 1/4"	0.31	1.232
18"	1.77	0.376	2.82	1.13	14	5'-2"	0.150	1.111	0.39	6'-0"	4'-0"	1'-8"	2'-0"	0.36	1.408
24"	3.14	0.580	4.71	1.78	20	7'-2"	0.148	1.451	0.48	7'-8"	4'-0"	1'-10"	2'-1 1/2"	0.43	1.778
30"	4.91	0.801	7.87	2.58	28	9'-2"	0.168	1.910	0.65	9'-6"	5'-0"	2'-4"	2'-3"	0.51	2.184

NOTE: STEEL QUANTITIES ARE FOR CONCRETE HEADWALLS ONLY.

MORTAR RUBBLE MASONRY AND CONCRETE HEADWALLS
NOT TO SCALE
(MARCH 2008)



ISOMETRIC



TRASH RACK DETAIL
NOT TO SCALE

CONSTRUCTION DETAILS
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

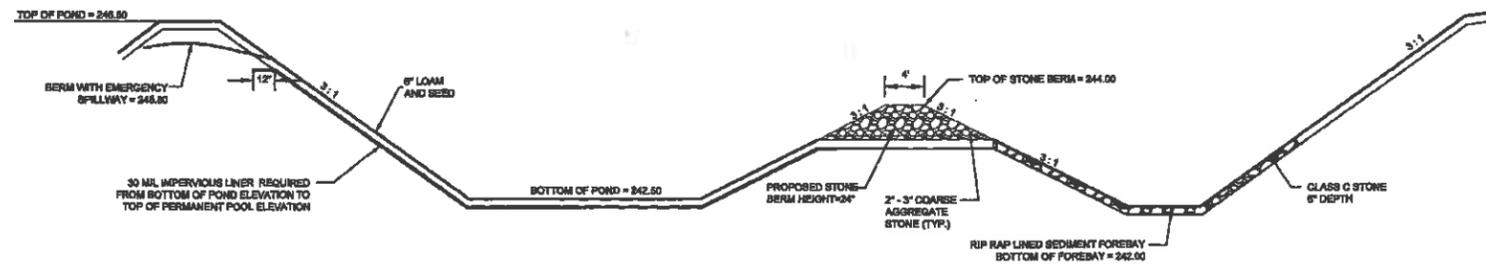
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

KM **KEACH-NORDSTROM ASSOCIATES, INC.**
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 62, Bedford, NH 03110 Phone (603) 887-8881



No.	DATE	REVISIONS	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 **SCALE:** AS NOTED
PROJECT NO: 17-1011-1 **SHEET:** 16 OF 22



TYPICAL DETENTION POND SECTION
NOT TO SCALE

MAINTENANCE REQUIREMENTS:

SEDIMENT FOREBAYS:

- INSPECT AT LEAST ANNUALLY;
- CONDUCT PERIODIC MOWING OF EMBANKMENTS (GENERALLY TWO TIMES PER YEAR) TO CONTROL GROWTH OF WOODY VEGETATION ON EMBANKMENTS;
- REMOVE DEBRIS FROM OUTLET STRUCTURES AT LEAST ONCE ANNUALLY;
- REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION;
- INSTALL AND MAINTAIN A STAFF GAGE OR OTHER MEASURING DEVICE, TO INDICATE DEPTH OF SEDIMENT ACCUMULATION AND LEVEL AT WHICH CLEAN-OUT IS REQUIRED.

DETENTION POND:

- THE BOTTOMS, INTERIOR AND EXTERIOR SIDE SLOPES AND CREST OF EARTHEN DETENTION BASINS SHOULD BE MOVED, 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" OR "DAMS" THAT IMPOUND WATER SHOULD BE MOVED AT LEAST ONCE ANNUALLY TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION;
- INLET AND OUTLET PIPES, INLET AND OUTLET STRUCTURES, ENERGY DISSIPATION STRUCTURES OR PRACTICES AND OTHER STRUCTURAL APPURTENANCES SHOULD BE INSPECTED AT LEAST ANNUALLY BY A QUALIFIED PROFESSIONAL AND CORRECTIVE ACTION IMPLEMENTED (E.G. MAINTENANCE, REPAIRS OR REPLACEMENT) AS INDICATED BY SUCH INSPECTION;
- TRASH AND DEBRIS SHOULD BE REMOVED FROM THE BASIN AND ANY INLET OR OUTLET STRUCTURES WHENEVER OBSERVED BY INSPECTION;
- ACCUMULATED SEDIMENT SHOULD BE REMOVED WHEN IT SIGNIFICANTLY AFFECTS BASIN CAPACITY.

SUBSURFACE:

- INSPECT SUB-SURFACE CHAMBER OR PIPE SYSTEM TWO (2) TIMES PER YEAR (PREFERABLY IN SPRING AND FALL) VIA THE INSPECTION PORTS, CLEANOUTS OR OTHER ACCESS STRUCTURE. CLEAN SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. INSPECT OUTLET CONTROL STRUCTURES TO ENSURE THEY ARE IN GOOD WORKING ORDER AND ARE UNOBSTRUCTED FROM TRASH AND DEBRIS. REMOVE AND DISPOSE OF ANY SEDIMENTS OR DEBRIS.

ISOLATOR ROW:

- INSPECT ALL UPSTREAM PRE-TREATMENT MEASURES FOR SEDIMENT AND FLOATABLE ACCUMULATION. REMOVE AND DISPOSE OF SEDIMENTS OR DEBRIS AS NEEDED. INSPECT ISOLATOR ROW ON A SEMI-ANNUAL BASIS BY USING INSPECTION PORT AND/OR ACCESS STRUCTURE. REMOVE SEDIMENT AS NEEDED WHEN AVERAGE DEPTHS REACH 1" PER THE MANUFACTURER'S RECOMMENDATION.

SWALE:

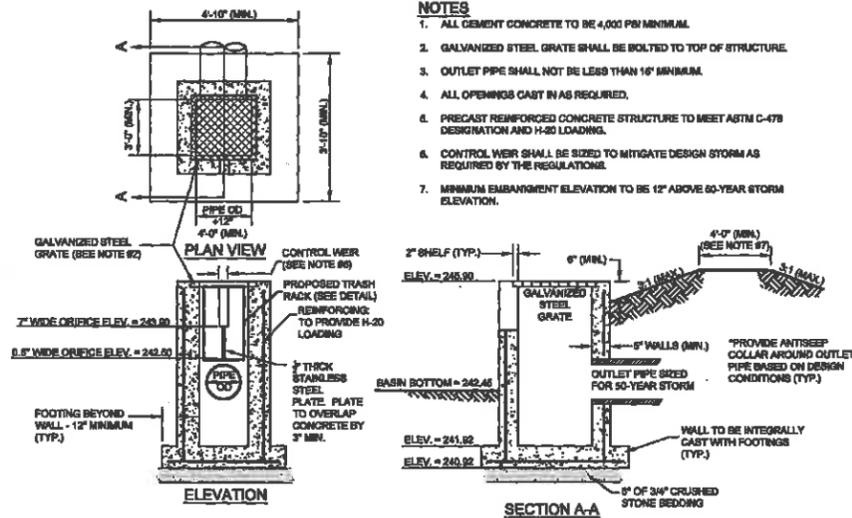
- INSPECT AT LEAST TWICE ANNUALLY.
- CONDUCT PERIODIC MOWING OF EMBANKMENTS (GENERALLY TWO TIMES PER YEAR) TO CONTROL GROWTH OF WOODY VEGETATION ON EMBANKMENTS;
- REMOVE TRASH AND DEBRIS AT LEAST EACH INSPECTION;
- REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION;

CONSTRUCTION PRACTICE REQUIREMENTS:

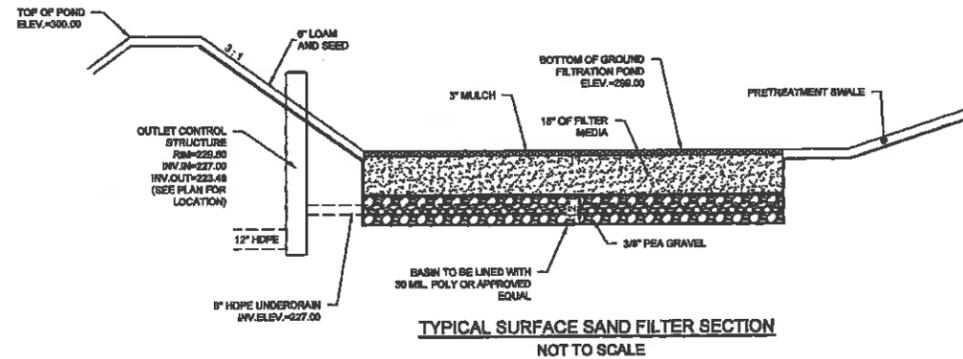
1. STORMWATER PONDS, INFILTRATION BASINS, AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING TO SITE.
2. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER SWIPS ARE STABILIZED.
3. STORMWATER PONDS, INFILTRATION BASINS, AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
4. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.

NOTES

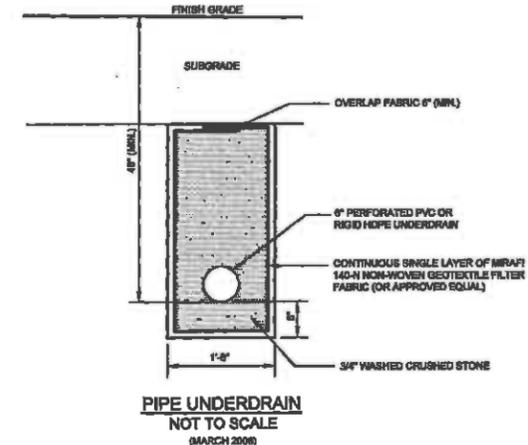
1. ALL CEMENT CONCRETE TO BE 4,000 PSI MINIMUM.
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE.
3. OUTLET PIPE SHALL NOT BE LESS THAN 16" MINIMUM.
4. ALL OPENINGS CAST IN AS REQUIRED.
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY THE REGULATIONS.
7. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION.



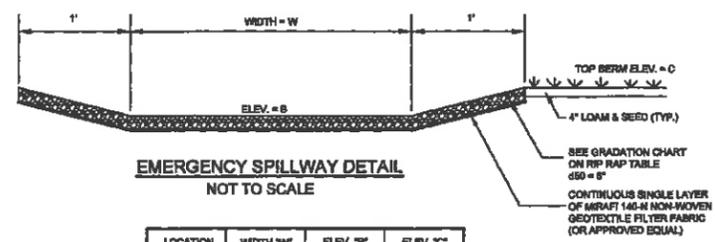
OUTLET STRUCTURE #2 AT DETENTION POND
NOT TO SCALE
(AUGUST 2011)



TYPICAL SURFACE SAND FILTER SECTION
NOT TO SCALE

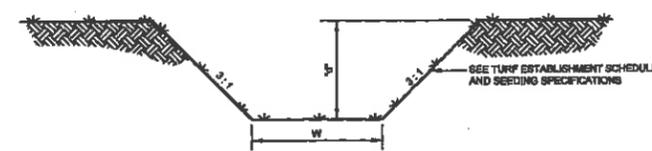


PIPE UNDERDRAIN
NOT TO SCALE
(MARCH 2008)



EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

LOCATION	WIDTH "W"	ELEV. "B"	ELEV. "C"
DETENTION POND	20'	245.80	246.80
INFILTRATION POND	8'	238.80	237.80



MAINTENANCE

1. TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE FILTERING EFFECT. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.
2. THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

TREATMENT SWALE DETAIL
NOT TO SCALE
(MARCH 2008)

LOCATION	SWALE WIDTH "W"	SWALE LENGTH	SWALE SLOPE	DEPTH "D"
SWALE #1	6'	120'	0.005 FT/FT	2'

CONSTRUCTION DETAILS
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

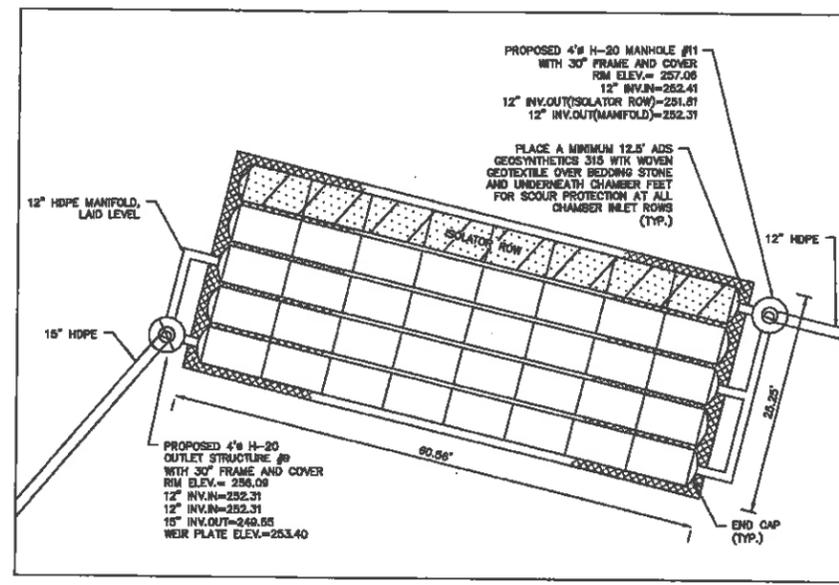
OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
 (603) 888-5050

KM
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Lead Surveying Landscape Architecture
 10 Commerce Park North, Suite 20, Bedford, NH 03110 Phone (603) 687-2881

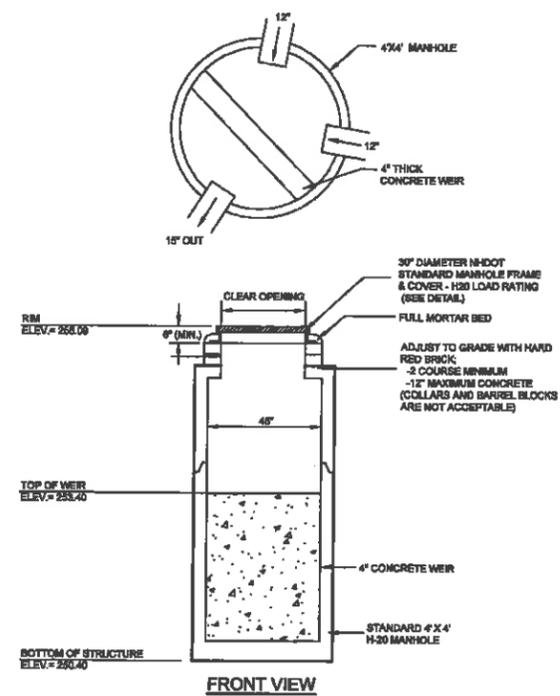


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	QTY ENGINEERING REVISIONS	PCM

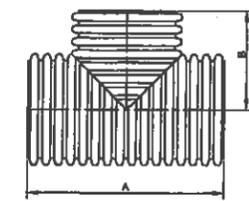
DATE: JUNE 22, 2020 SCALE: AS NOTED
 PROJECT NO: 17-1011-1 SHEET 17 OF 22



STORMTECH SC-740 CHAMBER SYSTEM
SCALE 1' = 10'



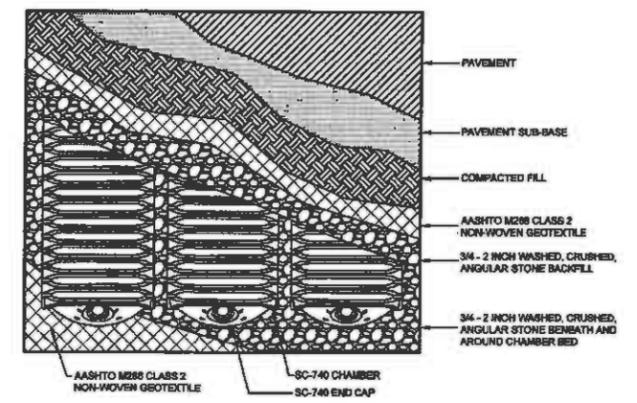
OUTLET STRUCTURE #9
NOT TO SCALE



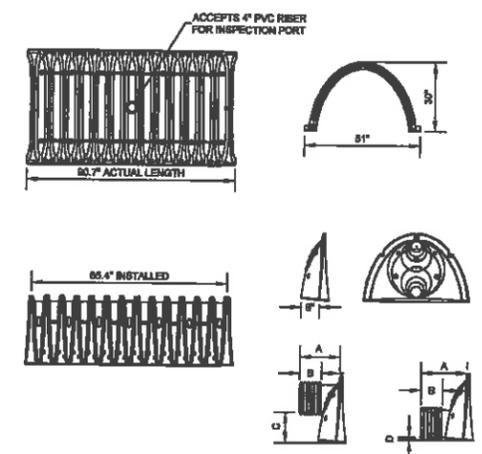
SC-740 SINGLE MANIFOLD
NOT TO SCALE
(OCTOBER 2012)

PIPE SIZE	A	B
6" (150 mm)	58.08" (1447 mm)	28.49" (724 mm)
8" (200 mm)	68.84" (1749 mm)	28.32" (719 mm)
10" (250 mm)	68.70" (1740 mm)	28.36" (720 mm)
12" (300 mm)	67.80" (1728 mm)	28.50" (725 mm)
15" (375 mm)	64.08" (1628 mm)	28.48" (724 mm)
18" (450 mm)	58.28" (1480 mm)	28.14" (715 mm)
24" (600 mm)	68.70" (1740 mm)	28.32" (720 mm)

- STORMTECH GENERAL NOTES:**
- INSTALLING CONTRACTORS ARE REQUIRED TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
 - OUR TECHNICAL SERVICES DEPARTMENT OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICES REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE-INSTALLATION CONSULTATION. OUR REPRESENTATIVE CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEM'S CONSTRUCTION. CALL 1-888-892-2894 TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT WWW.ADS-PIPE.COM TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
 - STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVES, ETC.): MINIMUM COVER IS 18 INCHES NOT INCLUDING PAVEMENT; MAXIMUM COVER IS 96 INCHES INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES, MAXIMUM COVER IS 96 INCHES.
 - THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
 - AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
 - STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
 - BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
 - THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: WWW.ADS-PIPE.COM. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMWATER SYSTEM. TEMPORARY FENCING, WARNING TAPE, AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
 - THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMWATER SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
 - STORMTECH PRODUCT WARRANTY IS LIMITED. SEE CURRENT PRODUCT WARRANTY FOR DETAILS. TO ACQUIRE A COPY CALL STORMTECH AT 1-888-892-2894 OR VISIT WWW.ADS-PIPE.COM.



SC-740 CHAMBER SYSTEM PLAN VIEW DETAIL
NOT TO SCALE
(OCTOBER 2012)

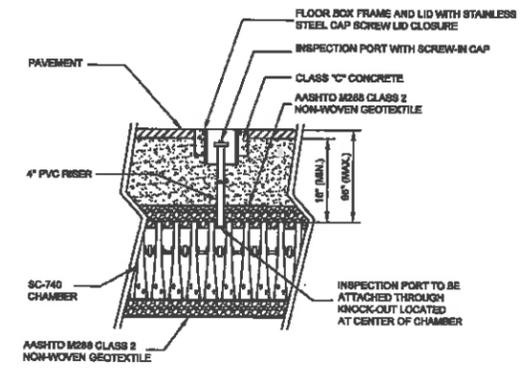


SC-740 ISOLATOR ROW PROFILE
NOT TO SCALE
(OCTOBER 2012)

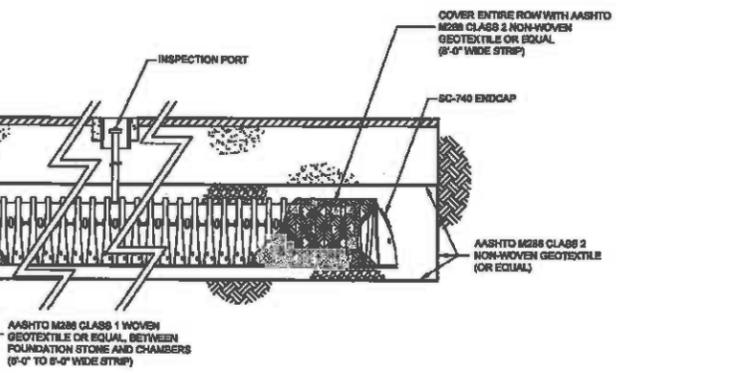
NOMINAL CHAMBER SPECIFICATIONS
SIZE (W x H x INSTALLED LENGTH)
CHAMBER STORAGE
MINIMUM INSTALLED STORAGE WEIGHT

PIPE SIZE	A	B	C	D
6 in (150 mm)	10.90 in (277 mm)	5.85 in (98 mm)	18.50 in (470 mm)	N/A
8 in (200 mm)	10.90 in (277 mm)	3.85 in (98 mm)	N/A	0.50 in (13 mm)
12 in (300 mm)	14.70 in (373 mm)	7.70 in (198 mm)	12.50 in (318 mm)	N/A
12 in (300 mm)	14.70 in (373 mm)	7.70 in (198 mm)	N/A	1.20 in (30 mm)
15 in (375 mm)	16.40 in (467 mm)	10.38 in (263 mm)	9.00 in (229 mm)	N/A
15 in (375 mm)	16.40 in (467 mm)	10.38 in (263 mm)	N/A	1.30 in (33 mm)
18 in (450 mm)	18.70 in (500 mm)	16.72 in (423 mm)	8.00 in (127 mm)	N/A
18 in (450 mm)	18.70 in (500 mm)	16.72 in (423 mm)	N/A	1.50 in (41 mm)
24 in (600 mm)	18.50 in (470 mm)	9.46 in (240 mm)	N/A	0.10 in (3 mm)

SC-740 TECHNICAL SPECIFICATIONS
NOT TO SCALE
(OCTOBER 2012)



SC-740 INSPECTION PORT DETAIL
NOT TO SCALE
(OCTOBER 2012)



SC-740 CROSS SECTION
NOT TO SCALE
(OCTOBER 2012)

CONSTRUCTION DETAILS
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

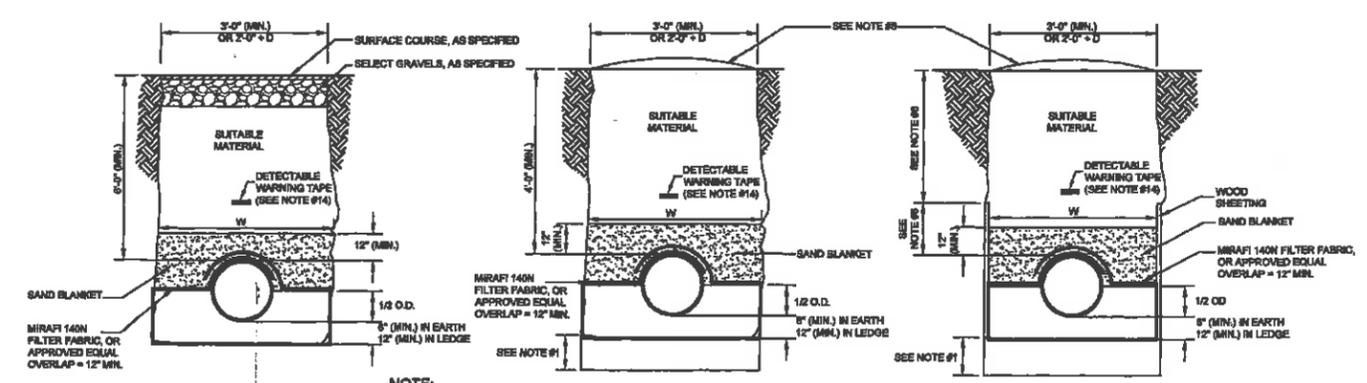
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 300, Bedford, NH 03110 Phone (603) 637-2881

REVISIONS

No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

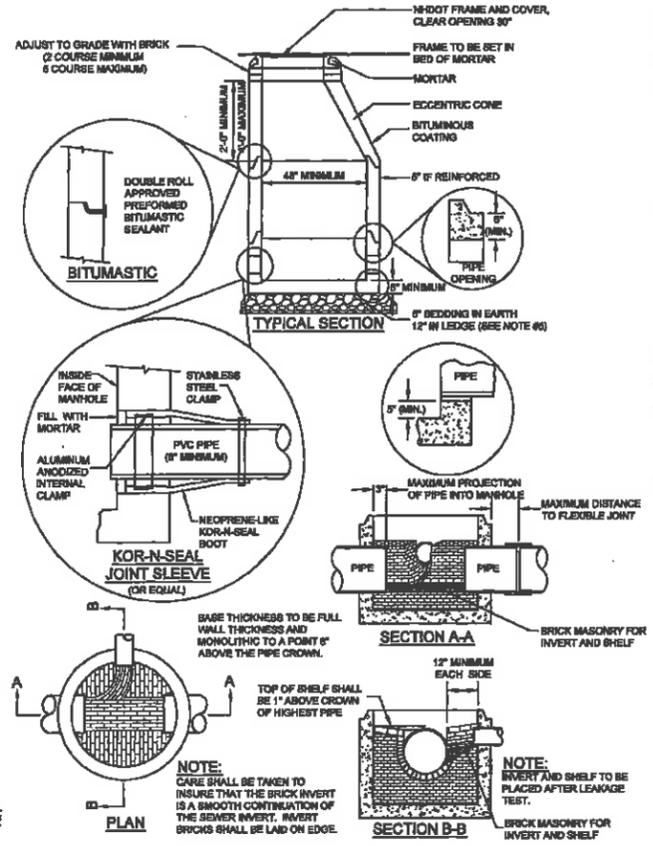
DATE: JUNE 22, 2020
PROJECT NO: 17-1011-1
SCALE: AS NOTED
SHEET 18 OF 22



SANITARY SEWER TRENCH DETAIL
NOT TO SCALE
(NOVEMBER 2018)

NOTES:

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL, ALSO SEE NOTE #7. BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33/C36M STONE SIZE NO. 57.
 - 100% PASSING 1 INCH SCREEN
 - 90 - 100% PASSING 3/4 INCH SCREEN
 - 20 - 65% PASSING 3/8 INCH SCREEN
 - 0 - 10% PASSING # 4 SIEVE
 - 0 - 5% PASSING # 8 SIEVE
 WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED CRUSHED STONE 1/2 INCH TO 1-1/2 INCHES SHALL BE USED.
- SAND BLANKET: GRADED CLEAN SAND FREE FROM ORGANIC MATTER, SO THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 1% WILL PASS A # 200 SIEVE. BLANKET MAY BE OMITTED FOR CAST IRON, DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED, HOWEVER, THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.
- MIRAFI 140N FILTER FABRIC, OR APPROVED EQUAL, SHALL BE INSTALLED ABOVE PIPE.
- SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL AND ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER WILL BE PRESERVED FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY.
- BASE COURSE: IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS".
- WOOD SHEETING: IF REQUIRED, WHERE PLACED ALONGSIDE THE PIPE AND EXTENDING BELOW MID-DIAMETER, SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LIFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISH GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- IF MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE, FOR PIPES 18 INCHES NOMINAL DIAMETER OR LESS, SHALL BE NO MORE THAN 30 INCHES. FOR PIPES GREATER THAN 18 INCHES NOMINAL DIAMETER, SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE 10 FEET OF SEPARATION BETWEEN WATER AND SEWER. HOWEVER, SHOULD CONSTRUCTION REVEAL OR EXPOSE A WATERLINE (GAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL, AND LESS THAN 10 FEET HORIZONTALLY FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICAL TO RELOCATE THE SEWER, A DEVIATION MAY BE GRANTED PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENT SPECIFIED BELOW.
 - A. FORCE MAINS SHALL BE CONSTRUCTED FROM DUCTILE IRON, HIGH DENSITY POLYETHYLENE, OR PVC PER ENH-704.09(6). PVC SHALL CONFORM TO ASTM D2241-05 OR ASTM D1785-05.
 - B. HOPE SHALL CONFORM TO ASTM D2635-05.
- D.I. SHALL BE CORROSION PROTECTED IN CORROSIVE ENVIRONMENTS
- WHERE WATER LINES AND SEWER LINES CROSS, THEY SHOULD CROSS AS PERPENDICULAR AS POSSIBLE AND THE WATER MAIN SHALL CROSS AT LEAST 18 INCHES ABOVE THE SEWER. FURTHER, THE SEWER JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.
- ALL SEWERS AT 8 PERCENT SLOPE, OR GREATER, SHALL HAVE IMPROVED TRENCH DAMS CONSTRUCTED EVERY 300 FEET.
- UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 98% OF THE MODIFIED PROCTOR TEST.
- WHERE WATER MAINS CROSS UNDER SEWER MAINS, BOTH THE SEWER AND WATER MAINS SHALL BE PRESSURE RATED PIPE PER ENH-704.06 AND TESTED PER AWWA C900-06 AT 1.5 TIMES DESIGN PRESSURE OR 100 PSI, WHICHEVER IS GREATER, WITH NO JOINTS WITHIN 9 FEET OF THE CROSSING POINT AND 18" MINIMUM VERTICAL SEPARATION.
- ALL SEWERS SHALL BE MARKED USING METAL IMPREGNATED MARKING TAPE OR TRACER WIRE THAT CAN BE LOCATED USING METAL DETECTION EQUIPMENT.
- GRAVITY PIPE SEWER TESTING:
 - A. ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
 - B. LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:
 - ASTM F417-02(2009) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR," OR
 - UNI-BELL PVC PIPE ASSOCIATION UNI-3-4, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" (1998).
 - C. ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION.
 - D. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION.
 - E. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANHOLE WITH A DIAMETER OF AT LEAST 36 PERCENT OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.

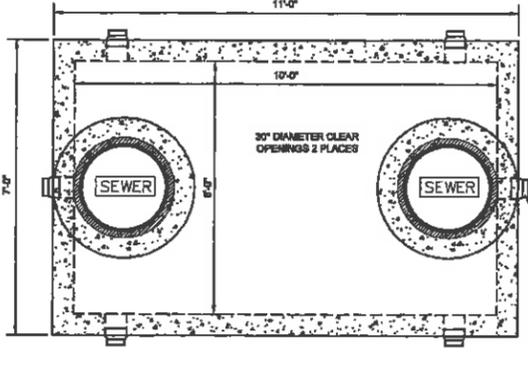
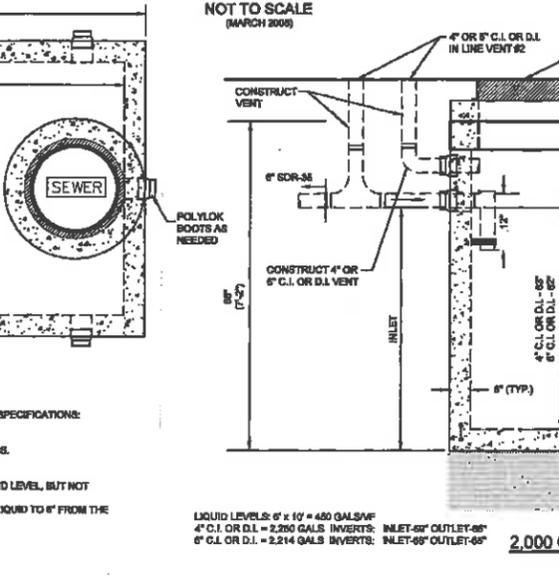


SANITARY SEWER MANHOLE

NOTES:

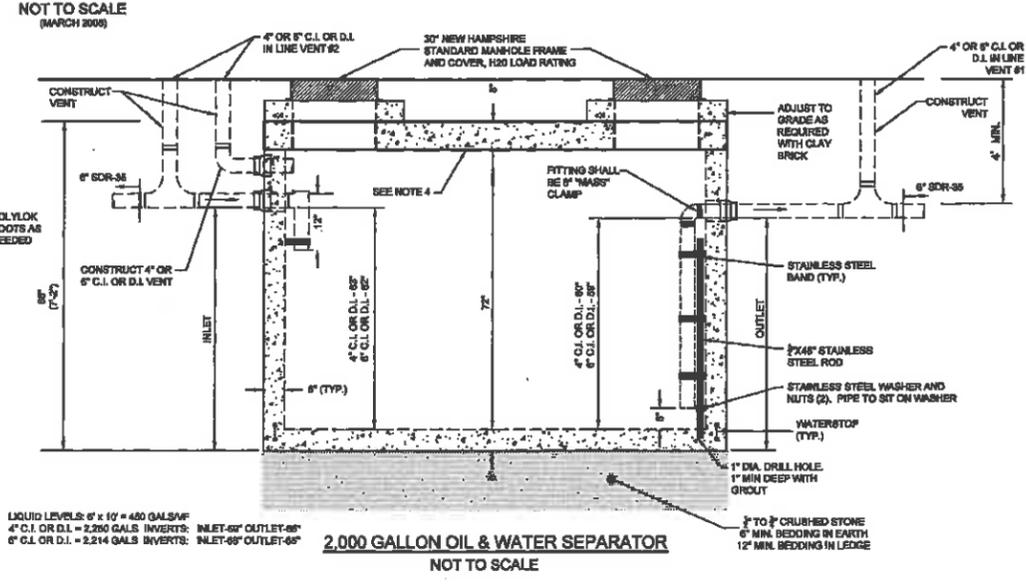
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO PENNSYLVANIA WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
- ALL WATER MAINS SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
- SEE DETAIL FOR TRENCH SPECIFICATIONS.
- SEE DETAIL FOR OUTSIDE SERVICE ENTRANCE SPECIFICATIONS.

UTILITY SEPARATION (MAIN) DETAIL
(A-01)
NOT TO SCALE
(MARCH 2008)

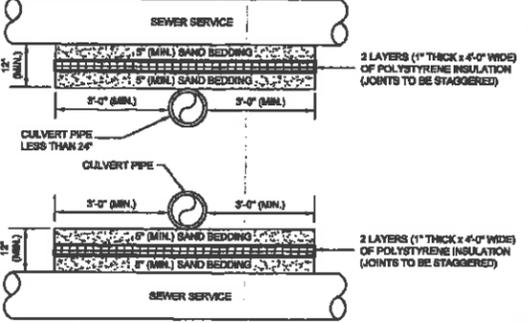


OIL & WATER SEPARATOR NOTES:

- STEEL REINFORCEMENT CONFORMS TO LATEST ASTM SPECIFICATIONS.
- ASTM-A618 GRADE 60 REBAR.
- CONCRETE: FC = 4,000 PSI @ 28 DAYS MINIMUM.
- FLEXIBLE SLEEVES PROVIDED ON ALL PIPE CONNECTIONS.
- BUTYL RUBBER JOINT SEALANT PROVIDED.
- INTERIAL PVC BAPLES AVAILABLE UPON REQUEST.
- INLET: SHALL PENETRATE AT LEAST 6" BELOW THE LIQUID LEVEL, BUT NOT DEEPER THAN THE OUTLET BAFFLE.
- OUTLET: SHALL EXTEND BELOW THE SURFACE OF THE LIQUID TO 6" FROM THE FLOOR. (ENR 302 1012.02)
- DESIGN LOADINGS: AASHTO-H20-44, ASTM C-893-05.
- DESIGN SPECIFIED AS: ASTM C-1227-08, ASTM C-913-08.
- STEPS ARE NOT ALLOWED.
- TWO INLINE VENTS MAY BE MERGED INTO SINGLE RISER.



2,000 GALLON OIL & WATER SEPARATOR
NOT TO SCALE



SEWER PIPE CROSSING INSULATION DETAIL
NOT TO SCALE
(JUNE 2012)

NOTES:

- INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

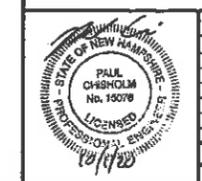
NOTES: (NHDES ENV WQ700 - 2015)

- ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
- MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.
- MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF THE HEIGHT OF THE STRUCTURE.
- BARRELS, CONCRETE GRADE RINGS AND CONE SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE AND SHALL CONFORM TO ASTM C475.
- BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 100% PASSING 1 INCH SCREEN 90% PASSING 3/4 INCH SCREEN 20-65% PASSING 3/8 INCH SCREEN 0-10% PASSING # 4 SIEVE 0-5% PASSING # 8 SIEVE
- WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.
- BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
- PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
 - A. ELASTOMERIC RUBBER GASKET WITH WATER-TIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
 - B. CAFT INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
 - C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE; COMPRESSION OF THE RING AND
 - D. NON-SHRINK GROUTED JOINTS WHERE WATER-TIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
- MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
- ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDUBLY MARKED ON THE INSIDE WALL.
- ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
- MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPE. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
- MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS:
 - A. CONCRETE FOR PRECAST BASES OR GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
 - B. REINFORCING FOR PRECAST CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
 - C. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURERS AS CONFORMING TO ASTM C475.
 - D. THE MANHOLE FRAME AND COVER SHALL PROVIDE A 20-INCH DIAMETER CLEAR OPENING.
 - E. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3/4-INCH LETTERS CAST INTO THE TOP SURFACE.
 - F. THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LAMPS, BUSTERS, SAND Holes AND DEFECTS.
 - G. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
 - H. CASTINGS SHALL BE EQUAL TO CLASS 30, BE CERTIFIED BY THEIR MANUFACTURERS AS CONFORMING TO ASTM A486.
 - I. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY THEIR MANUFACTURERS AS CONFORMING TO ASTM C222, CLAY OR SHALE, FOR GRADE 88 HARD BRICK; MORTAR SHALL BE COMPOSED OF TYPE 3 PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITIVE;
 - K. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
 - 1. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
 - 2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
 - L. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150/C150M;
 - M. HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";
 - N. SAND SHALL CONSIST OF MIST NATURAL SAND CONFORMING TO THE ASTM C33 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";
 - O. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
 - P. SUBJECT TO (Q) BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION:
 - 1. WITHIN 48-INCHES FOR REINFORCED CONCRETE (PVC) PIPE; AND
 - 2. WITHIN 60-INCHES FOR PVC PIPE LARGER THAN 18-INCH DIAMETER;
 - Q. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR D.I. PIPE OR FOR PVC PIPE UP THROUGH 18-INCH DIAMETER; AND
 - R. WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE GLASS COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE GLASS HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING H-20 LOADS.
- MANHOLE TESTING:
 - A. MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.
 - B. THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
 - 1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg; AND
 - 2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCH Hg SHALL BE:
 - a. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;
 - b. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 16 FEET DEEP; AND
 - c. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 16 FEET DEEP.
 - C. THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.
 - D. FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENTS TO GRADE.

CONSTRUCTION DETAILS
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

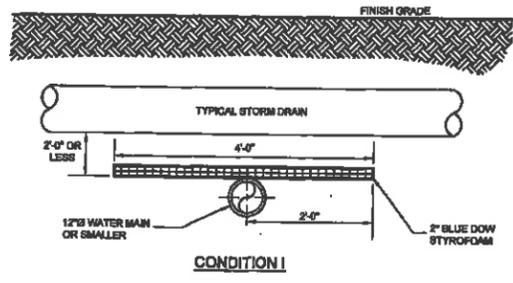
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03080
(603) 888-5050

KMA KEACE-NORSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commers Park North, Suite 303, Bedford, NH 03110 Phone (603) 887-8821

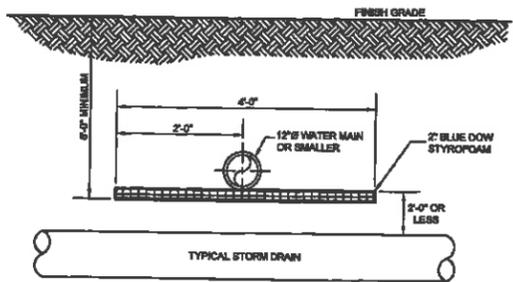


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: AS NOTED
PROJECT NO: 17-1011-1 SHEET 19 OF 22



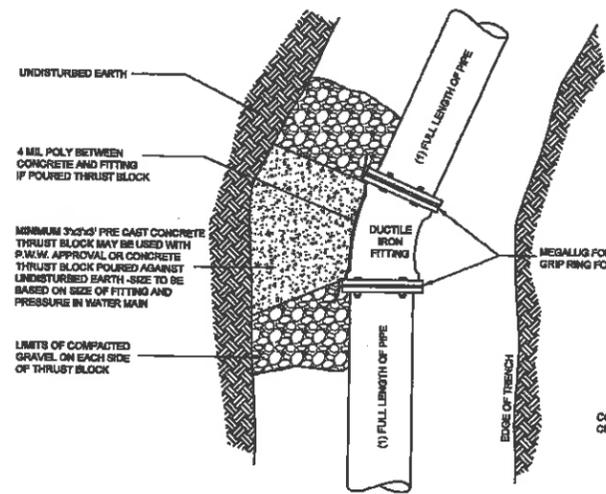
CONDITION I



CONDITION II

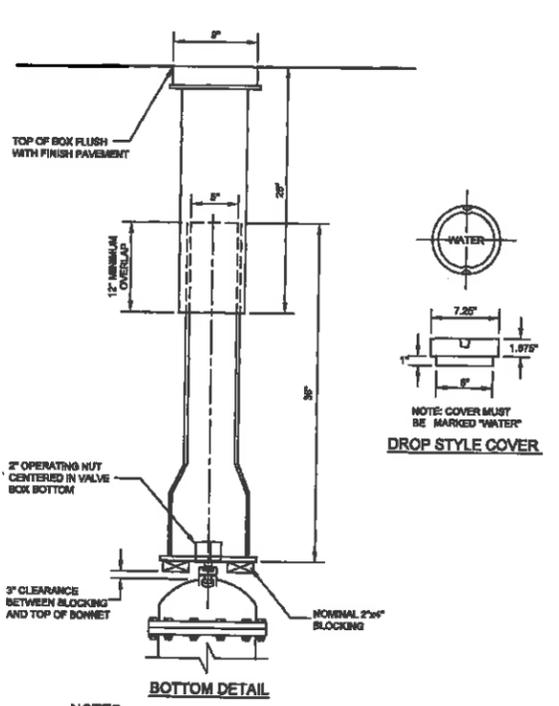
- NOTES:**
1. PENNICHUCK WATER WORKS, INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
 2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2" BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
 3. ALL JOINT SEAMS TO BE OVERLAPPED WITH A 1" PIECE OF INSULATION CENTERED OVER SEAM.

STORM DRAIN/WATER MAIN INTERSECTION RUNS - ELEVATION VIEW (A-18) NOT TO SCALE



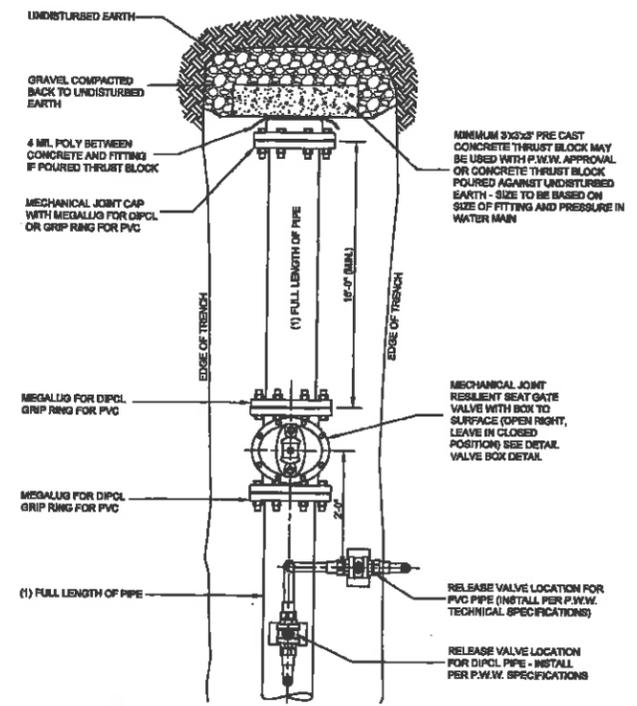
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOCIATED HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOCIATED HARDWARE.
 4. MIN 3x3x3 PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH PENNICHUCK WATER WORKS, INC. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

THRUST BLOCK BEHIND FITTINGS INSTALLATION (A-07) NOT TO SCALE (MARCH 2008)



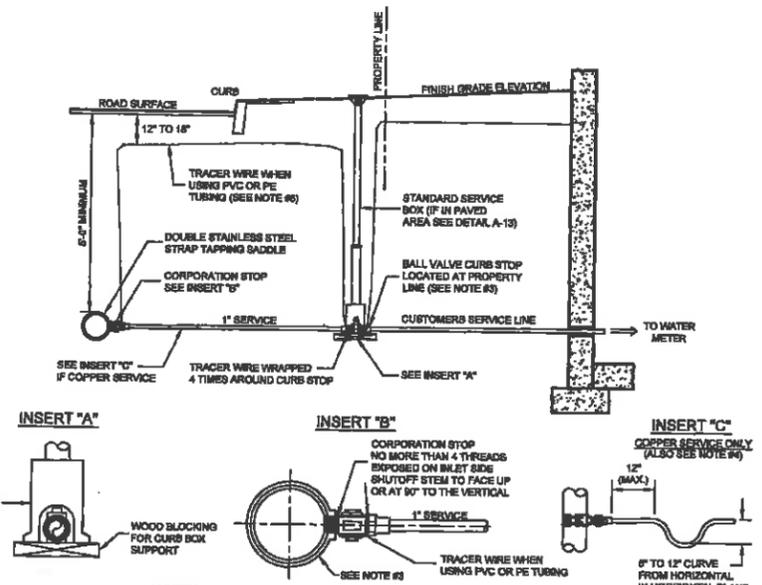
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

VALVE BOX DETAIL (A-09) NOT TO SCALE (MARCH 2008)



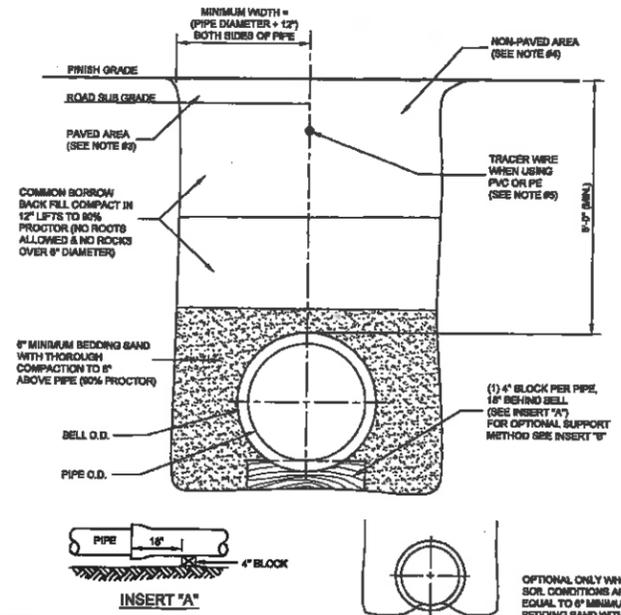
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

END OF MAIN INSTALLATION (A-08) NOT TO SCALE (MARCH 2008)



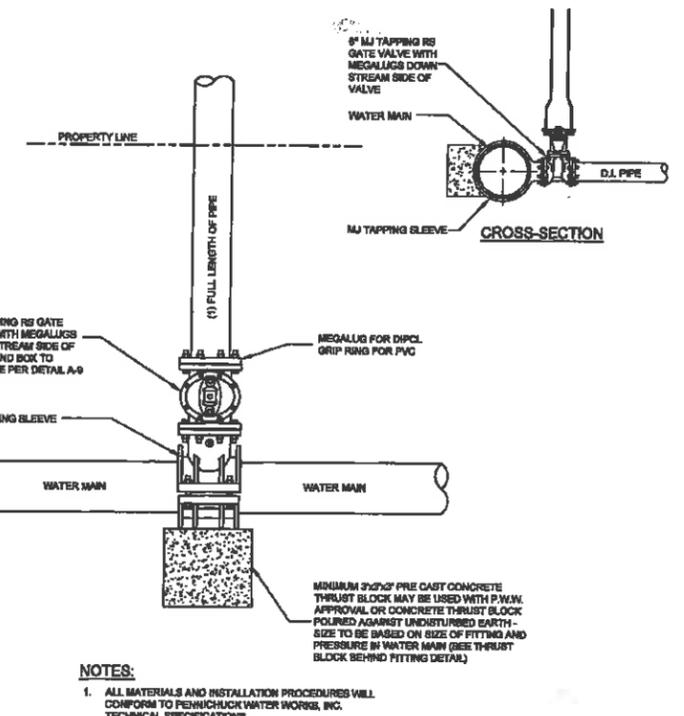
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN.
 4. IF WATER MAIN IS PVC OR TRANSITE, AND THE NEW WATER SERVICE IS COPPER THEN SEE DETAIL A-16.
 5. IF WATER MAIN IS A FIRE SERVICE, THEN SEE DETAIL A-2A.
 6. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBETAR CORP., AVON, MA OR EQUIVALENT.

1" SERVICE AND VALVE BOX INSTALLATION DETAIL (A-20) NOT TO SCALE (MARCH 2008)



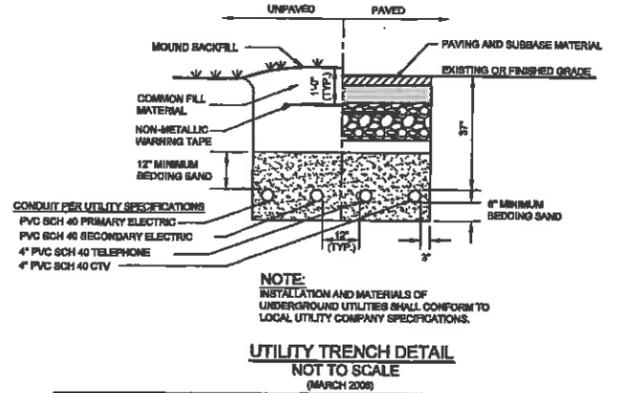
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
 4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
 5. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBETAR CORP., AVON, MA OR EQUIVALENT.

TRENCH DETAIL (A-02) NOT TO SCALE (MARCH 2008)



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

LARGE SERVICE AND/OR TAPPING SLEEVE DETAIL (A-21) NOT TO SCALE (MARCH 2008)



- NOTE:** INSTALLATION AND MATERIALS OF UNDERGROUND UTILITIES SHALL CONFORM TO LOCAL UTILITY COMPANY SPECIFICATIONS.
- UTILITY TRENCH DETAIL (A-03) NOT TO SCALE (MARCH 2008)**

CONSTRUCTION DETAILS

AUTO BODY SHOP

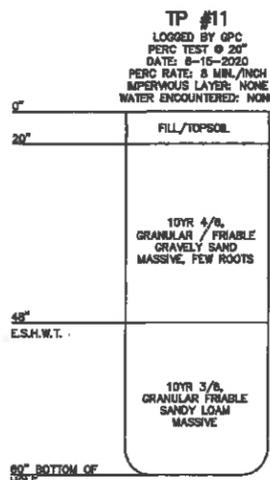
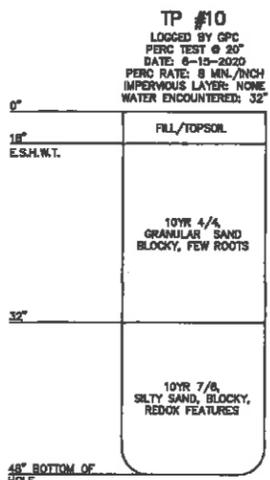
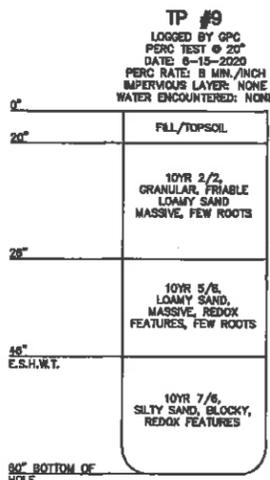
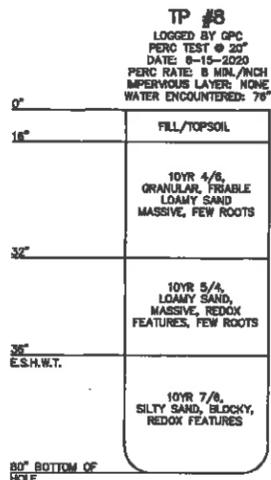
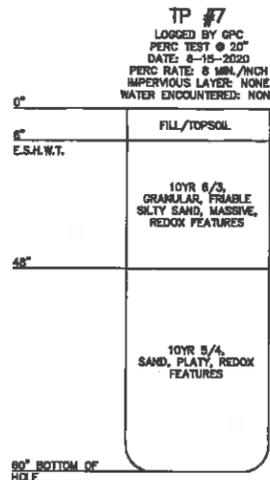
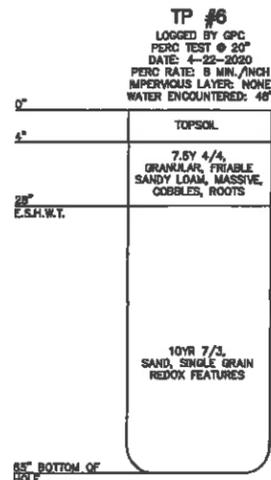
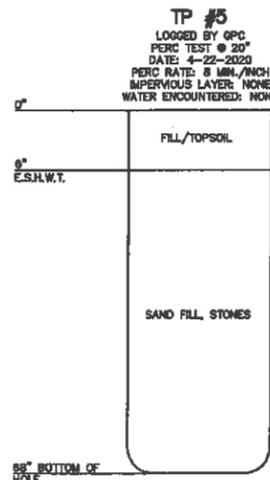
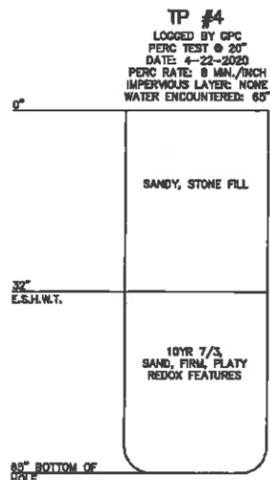
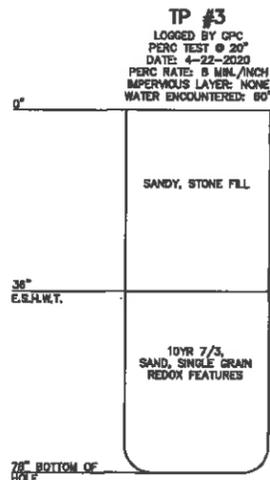
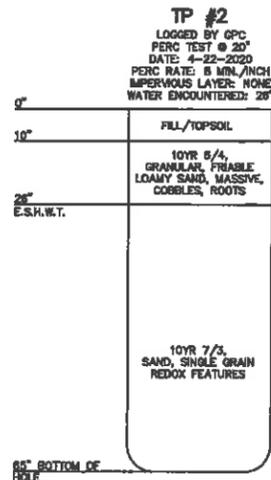
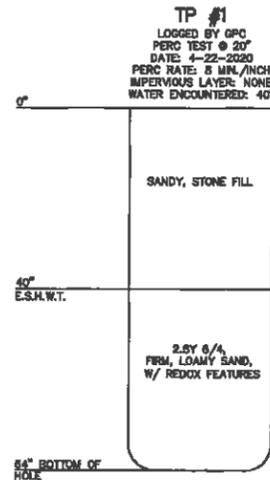
MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
 (603) 888-5050

KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 202, Bedford, NH 03110 Phone (603) 687-8881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/29/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: AS SHOWN
 PROJECT NO: 17-1011-1 SHEET 20 OF 22



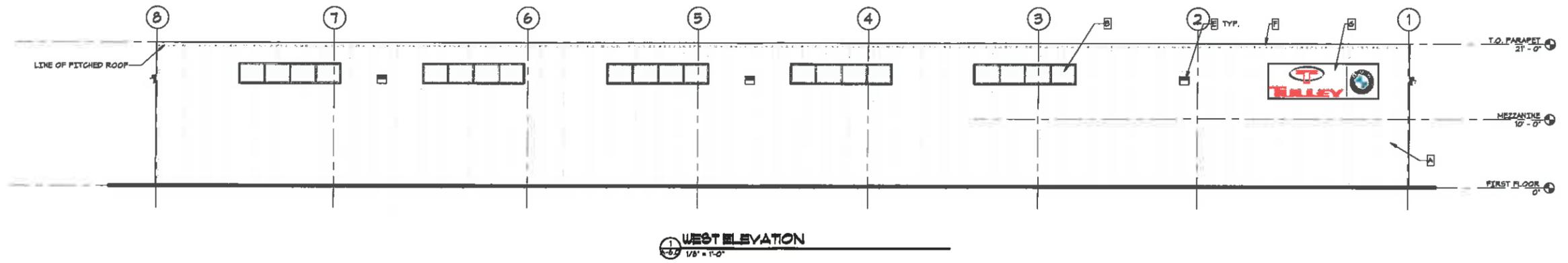
TEST PITS
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-8050

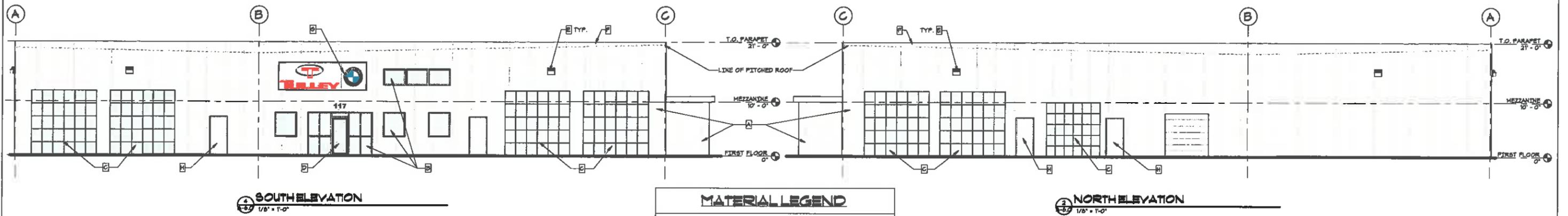
KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 52, Bedford, NH 08110 Phone (603) 687-8881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	7/28/20	AUTO STORAGE & MEZZANINE REVS	PCM
2	10/1/20	CITY ENGINEERING REVISIONS	PCM

DATE: JUNE 22, 2020 SCALE: AS SHOWN
 PROJECT NO: 17-1011-1 SHEET 22 OF 22



1 WEST ELEVATION
1/8" = 1'-0"

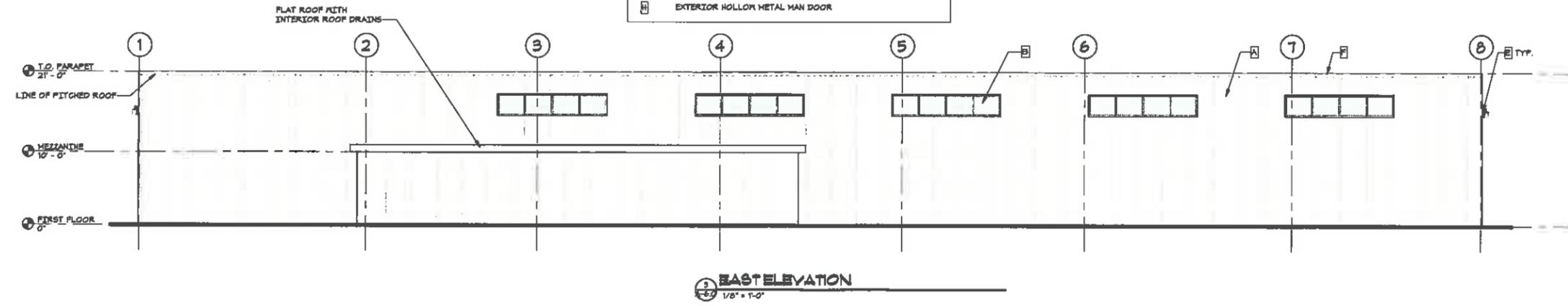


2 SOUTH ELEVATION
1/8" = 1'-0"

3 NORTH ELEVATION
1/8" = 1'-0"

MATERIAL LEGEND

- A 3" INSULATED METAL PANEL, 42" WIDE, BY METL SPAN (OR APPROVED EQUAL) COLOR TO MATCH RAL 9010 (WHITE)
- B FIXED ALUM. & GLASS STOREFRONT WINDOWS w/ INSULATED GLAZING AND THERMALLY BROKEN FRAMES (CLEAR ANODIZED)
- C FULL LITE OVERHEAD DOORS
- D EXTERIOR ALUM. & GLASS DOOR
- E EXTERIOR WALL PACKING LIGHTING (SEE CIVIL)
- F PRE-FINISHED ALUM. ROOF EDGE - COLOR TBD
- G EXTERIOR SIGNAGE, PROVIDE BLOCKING & ELECTRICAL FEED AS REQUIRED
- H EXTERIOR HOLLOW METAL MAN DOOR



4 EAST ELEVATION
1/8" = 1'-0"

EXTERIOR ELEVATIONS

TULLEY BODY SHOP

WEST GLENWOOD STREET
NASHUA, NH, 03060
1/29/20

ARCHITECTURE
LAND PLANNING
INTERIOR DESIGN
3D VISUALIZATION

833 TURNPIKE ROAD P.O. BOX 104
NEW IPSWICH, NEW HAMPSHIRE 03071



NASHUA CITY PLANNING BOARD
AMENDED STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: October 22, 2020
RE: **New Business #2 - Subdivision Plan**

I. Project Statistics:

Owners: MG Holdings
Proposal: Three lot subdivision
Location: 1 Morningside Drive
Total Site Area: 0.68 acres 29,714 sf
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential and Rivier University

II. Background Information:

According to city records, presently on the lot is a single family 2-story home with a basement. There is a pool and shed also on the property.

III. Project Description:

The purpose of this plan is to subdivide the parcel into three residential lots. The existing home will remain on Lot 129 and contain 12,276 sf. Lot 131 will contain 7,822 sf and have an address of 7 Morningside Drive. Lot 132 will contain 9,616 sf and have an address of 11 Morningside Drive. The minimum lot area in the RA zone is 7,500 sf and all lots meet the minimum requirements. The pool and shed will be removed. Underground utilities are being proposed.

Several waivers are being requested. The first waiver is from the requirement to show physical features on site and within 1,000 feet of the subdivision. The applicant has requested a waiver from the requirement to show existing waterlines on the plan. **The third waiver is to allow for overhead utilities.**

The final waiver is for sidewalks. While there is a significant need for sidewalks and pedestrian facilities throughout the City of Nashua, Morningside Drive and Taft Street are not on the sidewalk priority list and does not meet the standards for granting a waiver. The site meets the criteria in § 190-212(D) and the owner would be eligible to make a contribution in lieu of sidewalk construction. The applicant has offered to make a contribution in the amount of \$13,576.50, which is based on \$50 per linear foot along the entire frontage of the lots on Morningside Drive, subtracting a driveway width of 36 feet (18 feet per lot for the driveway). If the frontage on Taft Street is included in the sidewalk calculation of \$50 per linear foot (131.90 feet – 18 feet for a driveway), an additional \$5,695.00 contribution (or a total of \$19,271.50) would be required.

City Staff reviewed the plans; comments are attached.

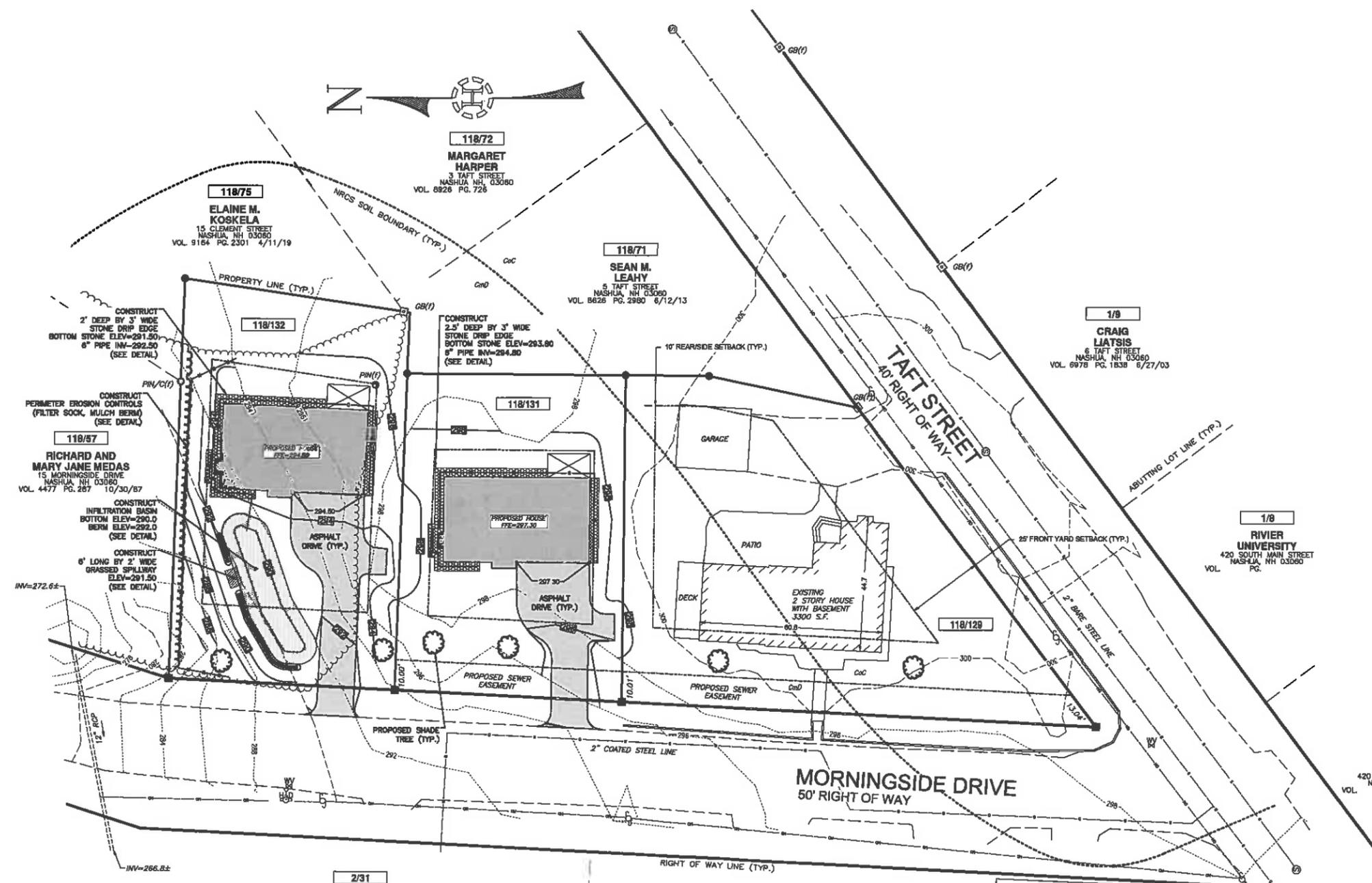
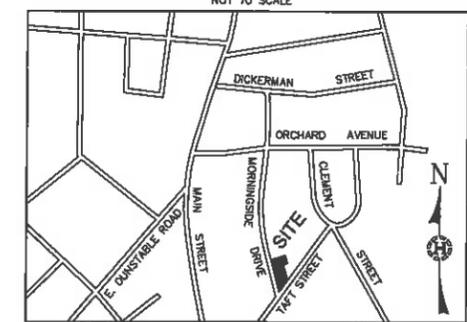
Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulation be made part of that approval:

1. The request for a waiver of § 190-282(B)(9), which requires physical features on site and within 1,000 feet, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of § 190-282(B)(28), which waterlines to be shown for new subdivisions, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. The request for a waiver § 190-212(A)(1), which requires that a sidewalk be located on at least one side of the street, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation. The applicant has agreed to make a contribution in the amount of \$_____ in lieu of sidewalk construction pursuant to §190-212(D)(2), payment to be made prior to recording the plan.
4. The request for a waiver of § 190-221, which requires utilities to be underground, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
5. Prior to the Chair signing the plan, all minor drafting corrections will be made.
6. Prior to recording the plan, all comments in an e-mail from **Pete Kohalmi, P.E., dated October 8, 2020** shall be addressed to the satisfaction of the Engineering Department.
7. Prior to recording of the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
8. Prior to recording of the plan, addresses shall be shown on the plan as assigned by the Fire Marshal.
9. Prior to recording the plan, a drainage report shall be submitted to Planning and Engineering staff for review.
10. Stormwater documents and utility easements will be submitted to Planning staff for review and recorded with the plan at the applicant's expense.
11. Prior to the issuance of a building permit, the plan electronic file of the subdivision plan shall be submitted to the City of Nashua.
12. Prior to any work, a pre-construction meeting shall be held and a financial guarantee shall be approved.

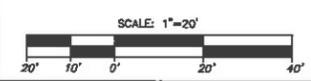
13. Applicant shall enlist the services of a registered professional engineer or land surveyor to review the as-constructed condition of engineered site plan aspects, including but not limited to, site grading, soil retention systems, and drainage systems (as applicable). Applicant shall submit, prior to issuance of Certificate of Occupancy, an affidavit stating as-constructed conditions are in conformance with the approved plan.

LOCUS MAP
NOT TO SCALE



- LEGEND:**
- EXISTING PAVEMENT
 - LOT LINE
 - BUILDING SETBACK LINE
 - FENCE
 - CONCRETE
 - GRANITE CURB
 - TREE LINE
 - 2' CONTOUR INTERVAL
 - 10' CONTOUR INTERVAL
 - UNDERGROUND SEWER LINE
 - OVERHEAD ELECTRIC LINE
 - UNDERGROUND GAS LINE
 - UNDERGROUND WATER LINE
 - PROPOSED SHADE TREE
 - WATER VALVE
 - ELECTRIC UTILITY POLE
 - PIN/CAP TO BE SET
 - GRANITE BOUND TO BE SET
 - SEWER MANHOLE
 - HYDRANT

NRCS SOIL KEY:
 CxD - CANTON FINE SANDY LOAM, 15-25% SLOPES, VERY STONY
 CxG - CANTON-URBAN LAND COMPLEX, 3-15% SLOPES



REV.	DATE	DESCRIPTION	BY
B	7/31/20	REV. PER TOWN COMMENTS	DBH
A	7/13/20	REV. PER TOWN COMMENTS	DBH

2/31
JOSEPH L. BINGHAM
 3 MORNINGSIDE DRIVE
 NASHUA, NH 03080
 VOL. 4346 PG. 289 12/14/87

2/29
SUNLIN V. & SUNEETA S. KULKARIN
 933 NE SHAMENTAL STREET
 HILLSBORO OR 97124-5010
 VOL. 5600 PG. 341 12/22/94

2/28
ROBERT G. DROIUN REVOCABLE TRUST
 9 TAFT STREET
 NASHUA, NH 03080
 VOL. 6322 PG. 1848 5/27/11

CIVIL ENGINEERING SERVICES PROVIDED BY:

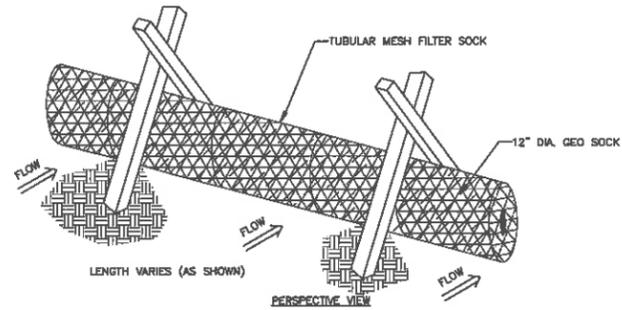
MERIDIAN
LAND SERVICES, INC.
 ENGINEERING | SURVEYING | PERMITTING
 SOIL & WETLAND MAPPING | SEPTIC DESIGN
 31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL. 603-673-1441
 MERIDIANLANDSERVICES.COM FAX 603-673-1384



GRADING AND DRAINAGE PLAN
 PREPARED FOR:
MG HOLDINGS
 1 MORNING SIDE DRIVE
TAX MAP 118 LOT 129
NASHUA, NEW HAMPSHIRE

JUNE 18, 2020

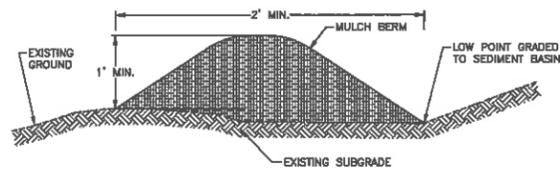
HIGGINSON
LAND SERVICES
 LAND SURVEYING - SEPTIC SYSTEM DESIGNS - PERMITTING
 78 PATTERSON HILL ROAD HENNIKER, NH 03242
 TEL: 603-660-6412 | NOTE BOOK #18 | JOB #625



1. THE FILTER SOCK SHALL BE A MESH TUBE FILLED WITH COMPOSTED MATERIAL.
2. MINIMAL CLEARING MAY BE REQUIRED TO INSTALL FILTER SOCKS.
3. INSTALL FILTER SOCKS PRIOR TO ANY CLEARING OR GRUBBING.

FILTER SOCK (ALTERNATE)

MAR. 23, 2010
SCALE: NONE

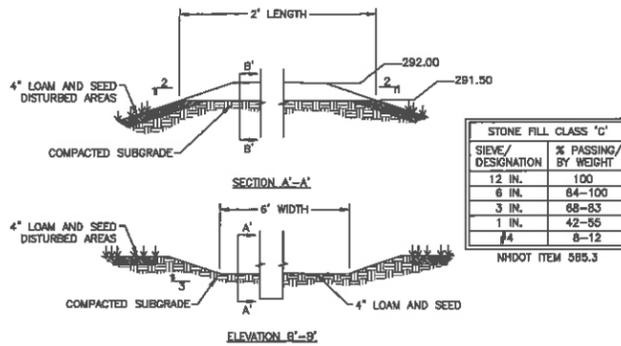


NOTES:

1. MULCH BERM MUST CONSIST PRIMARILY OF ORGANIC MATERIAL AND MAY INCLUDE THE FOLLOWING: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK OR ACCEPTABLE MANUFACTURED WOOD PRODUCTS.
2. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPOSESSED WOOD PRODUCTS ARE NOT ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.
3. EROSION CONTROL MIX SHOULD CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER.
4. THE ORGANIC MATTER CONTENT SHOULD BE BETWEEN 25% AND 85% ON A DRY WEIGHT BASIS.
5. THE MIX SHOULD NOT CONTAIN SILTS, CLAYS OR SANDS.
6. REFER TO THE NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOL. 3 SECTION 4.2 FOR COMPLETE DETAILS.

TYPICAL MULCH BERM - ALTERNATE

AUG. 29, 2016
SCALE: NONE

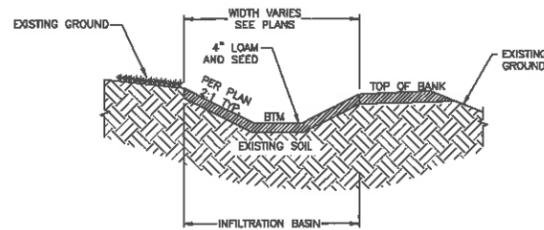


STONE FILL CLASS 'C'	
SIEVE / DESIGNATION	% PASSING / BY WEIGHT
12 IN.	100
6 IN.	84-100
3 IN.	68-83
1 IN.	42-55
#4	8-12

NHDOT ITEM 585.3

INFILTRATION BASIN SPILLWAY

DEC. 11, 2015
SCALE: NONE

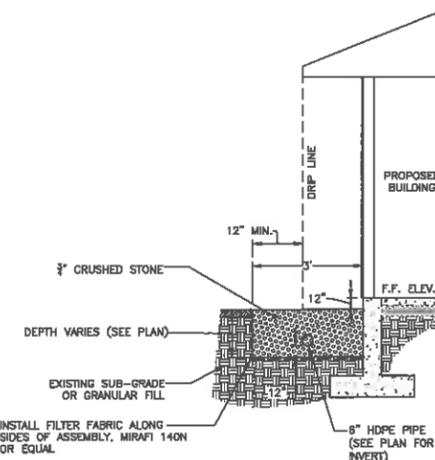


NOTES:

1. TO PREVENT DEGRADATION OF INFILTRATION FUNCTION:
 - A. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
 - B. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIO-RETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
2. DO NOT PLACE INFILTRATION BASINS INTO SERVICE UNTIL THE CONTRIBUTING AREA HAS BEEN COMPLETELY STABILIZED.
3. PREPARE THE BOTTOM OF THE INFILTRATION BASIN BED WITH 4" OF LOAM AND SEED.

INFILTRATION BASIN - TYPICAL CROSS-SECTION

NOV. 13, 2009
SCALE: NONE



ROOF DRIP LINE

JULY 15, 2013
SCALE: NONE

REV.	DATE	DESCRIPTION	BY
B	7/31/20	REV. PER TOWN COMMENTS	DBH
A	7/13/20	REV. PER TOWN COMMENTS	DBH

CIVIL ENGINEERING SERVICES PROVIDED BY:



MERIDIAN
LAND SERVICES, INC.
ENGINEERING | SURVEYING | PERMITTING
SOIL & WETLAND MAPPING | SEPTIC DESIGN
31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL: 603-673-1441
MERIDIANLANDSERVICES.COM FAX: 603-673-1594



SITE DETAILS
PREPARED FOR:
MG HOLDINGS
1 MORNING SIDE DRIVE
TAX MAP 118 LOT 129
NASHUA, NEW HAMPSHIRE

JUNE 18, 2020

HIGGINSON
LAND SERVICES
LAND SURVEYING - SEPTIC SYSTEM DESIGNS - PERMITTING
76 PATTERSON HILL ROAD HENNIKER, NH 03242
TEL: 603-660-6412 | NOTE BOOK #8 | JOB #625

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: October 8, 2020
RE: **New Business #5 - Subdivision Plan**

I. Project Statistics:

Owner: Stellos Family Investment Properties, LLC
Proposal: Five lot subdivision
Location: 453 South Main Street
Total Site Area: 1.925 acres (83,868 sf)
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential and Rivier University

II. Background Information:

The existing parcel is located in the RA-Urban Residence Zone. Abutting the site is Oldfield Road to the west, Weld Street to the north, South Min Street to the west and existing single-family homes on the south. Surrounding properties include the Nashua Country Club and a number of the homes on Oldfield Road are owned by Rivier University.

III. Project Description:

The purpose of this plan is to subdivide the parcel into five residential lots as follows;

Lot #	Address	Lot Size
Lot 11	451 South Main Street	30,806 sf
Lot 125	455 South Main Street	16,687 sf
Lot 124	5 Oldfield Road	13,141 sf
Lot 123	7 Oldfield Road	10,089 sf
Lot 122	9 Oldfield Road	12,076 sf

The minimum lot size in the RA zone is 7,500 sf and all lots exceed the minimum zoning requirements. The existing house and garage will be razed as part of this project. In addition, two areas located at the intersection of the public roads will be dedicated for added right-of-way. The lots will be serviced by municipal sewer, Pennichuck Water, underground gas and utilities. Presently Lot 11 is showing more than one driveway. Driveway width at the front yard setback cannot exceed 24'. The applicant would need to seek relief from the Zoning Board of Adjustment if they plan to keep the driveways as shown.

The applicant's engineer has provided a stormwater report (see attached). Approximately 7,930 sf of new impervious area will be added as part of the proposed subdivision.

One waiver is being requested for sidewalks. This lot is surrounded by South Main Street, Weld Street and Oldfield Road. There is an existing sidewalk along South Main Street. While there is

a significant need for sidewalks and pedestrian facilities throughout the City of Nashua, Weld Street and Oldfield Road are not on the sidewalk priority list. The site meets the criteria in § 190-212(D) and the owner would be eligible to make a contribution in lieu of sidewalk construction; the applicant's engineer is offering to make a contribution of \$10,795.50, based on \$50 per linear foot along the entire frontage of Oldfield Road (215.91 linear feet) and subtracting a driveway width of 54 feet (18 feet per lot on Oldfield Road). No contribution is being offered for the frontage on Weld Street.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulation be made part of that approval:

1. The request for a waiver § 190-212(A)(1), which requires that a sidewalk be located on at least one side of the street, is/is not granted, finding that the waiver will/will not be contrary to the spirit and intent of the regulation. The applicant has agreed to make a contribution in the amount of \$_____ in lieu of sidewalk construction pursuant to §190-212(D)(2), payment to be made prior to recording the plan.
2. Prior to the chair signing the plan, all minor drafting corrections will be made.
3. Prior to recording of the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
4. Prior to recording the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer dated October 2, 2020 shall be addressed to the satisfaction of the Engineering Department.
5. Stormwater documents and easements will be submitted to Planning staff for review and recorded with the plan at the applicant's expense.
6. Prior to any work and a pre-construction meeting, a financial guarantee shall be approved.

3 Congress Street Nashua, NH 03062 (603) 883-2057
 131 Middlesex Turnpike Burlington, MA 01803 (781) 203-1501
 www.haynerswanson.com

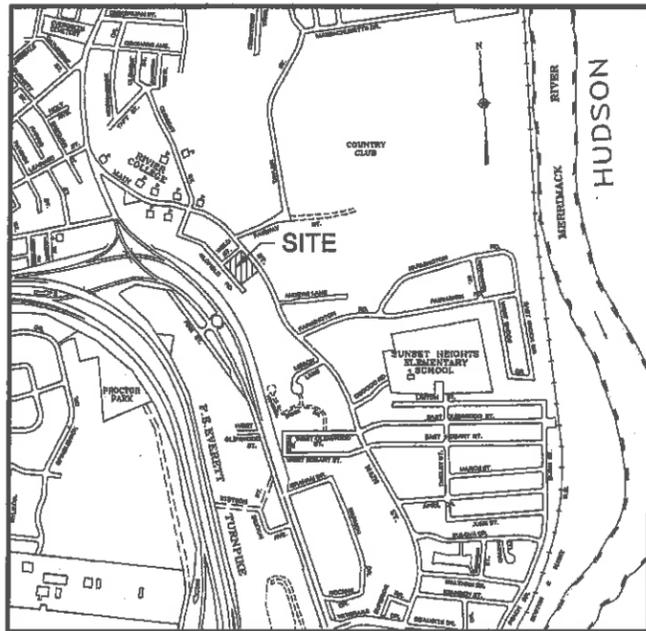
Hayner/Swanson, Inc.



MAP 112, LOT 11
 SUBDIVISION / STREET DEDICATION PLAN

453 SOUTH MAIN STREET

NASHUA, NEW HAMPSHIRE



VICINITY PLAN
 SCALE: 1" = 1,000'

PREPARED FOR/RECORD OWNER

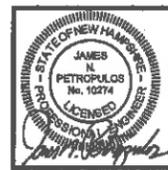
STELLOS FAMILY INVESTMENT PROPERTIES, L.L.C.

125 NORTHEASTERN BOULEVARD
 NASHUA, NEW HAMPSHIRE 03062
 (603) 882-3126

27 AUGUST 2020

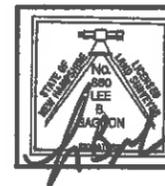
INDEX OF PLANS

SHEET No.	TITLE	
1 OF 5	SUBDIVISION / STREET DEDICATION PLAN	1" = 30'
2 OF 5	TOPOGRAPHIC SUBDIVISION PLAN	1" = 30'
3 OF 5	LOT GRADING PLAN	1" = 30'
4-5 OF 5	DETAIL SHEET - GENERAL SITE	

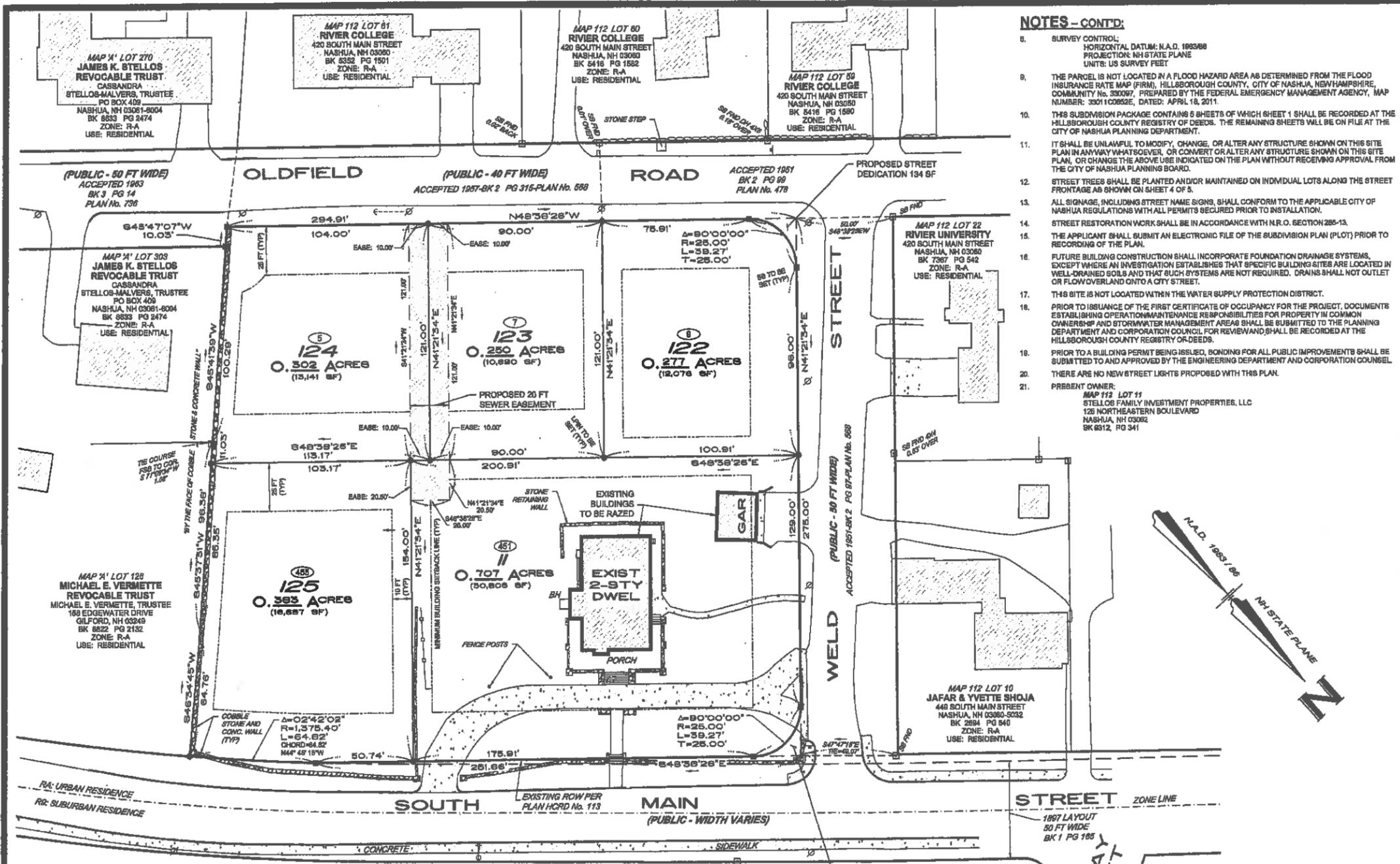


HSI Hayner/Swanson, Inc.

Civil Engineers/Land Surveyors
 3 Congress Street Nashua, NH 03062 (603) 883-2057
 131 Middlesex Turnpike Burlington, MA 01803 (781) 203-1501
 www.haynerswanson.com

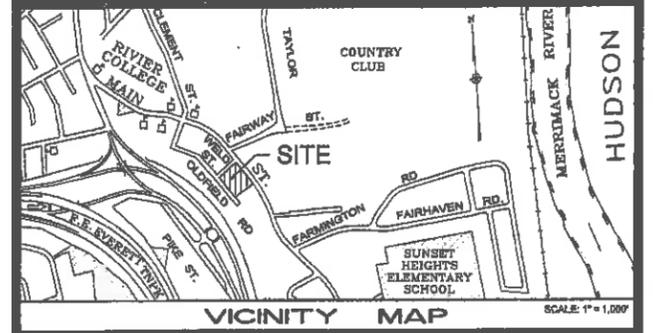


9/22/20



NOTES - CONT'D.

1. SURVEY CONTROL:
HORIZONTAL DATUM: N.A.D. 1983/98
PROJECTION: NH STATE PLANE
UNITS: US SURVEY FEET
2. THE PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE RATE MAP (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY No. 330097, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 330110262E, DATED: APRIL 18, 2011.
3. THIS SUBDIVISION PACKAGE CONTAINS 6 SHEETS OF WHICH SHEET 1 SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS. THE REMAINING SHEETS WILL BE ON FILE AT THE CITY OF NASHUA PLANNING DEPARTMENT.
4. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY OF NASHUA PLANNING BOARD.
5. STREET TREES SHALL BE PLANTED AND/OR MAINTAINED ON INDIVIDUAL LOTS ALONG THE STREET FRONTAGE AS SHOWN ON SHEET 4 OF 5.
6. ALL SIGNAGE, INCLUDING STREET NAME SIGNS, SHALL CONFORM TO THE APPLICABLE CITY OF NASHUA REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
7. STREET RESTORATION WORK SHALL BE IN ACCORDANCE WITH N.H.O. SECTION 286-13.
8. THE APPLICANT SHALL SUBMIT AN ELECTRONIC FILE OF THE SUBDIVISION PLAN (PLOT) PRIOR TO RECORDING OF THE PLAN.
9. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS, EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL-DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED. DRAINS SHALL NOT OUTLET OR FLOW OVERLAND ONTO A CITY STREET.
10. THIS SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
11. PRIOR TO ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR THE PROJECT, DOCUMENTS ESTABLISHING OPERATION/MAINTENANCE RESPONSIBILITIES FOR PROPERTY IN COMMON OWNERSHIP AND STORMWATER MANAGEMENT AREAS SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT AND CORPORATION COUNCIL FOR REVIEW AND SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS.
12. PRIOR TO A BUILDING PERMIT BEING ISSUED, BONDING FOR ALL PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEERING DEPARTMENT AND CORPORATION COUNSEL.
13. THERE ARE NO NEW STREET LIGHTS PROPOSED WITH THIS PLAN.
14. PRESENT OWNER:
MAP 112 LOT 11
STELLOS FAMILY INVESTMENT PROPERTIES, LLC
125 NORTHEASTERN BOULEVARD
NASHUA, NH 03082
BK 8912, PG 341



PLAN REFERENCES:

1. PLAN OF ADDITION TO NASHUA TERRACES, SCALE: 1" = 80'. H.C.R.D. PLAN No. 113.
2. NASHUA, NH, SCALE: 1" = 50', DATED: FEBRUARY 1980, PREPARED BY: NED SPAULDING H.C.R.D. PLAN No. NOT RECORDED.
3. BOUNDARY PLAN, RIVIER COLLEGE, SOUTH MAIN STREET, NASHUA, NEW HAMPSHIRE, PREPARED FOR/RECORD OWNER: RIVIER COLLEGE, DATED: 17 APRIL 1982, SCALE: 1" = 100' AND PREPARED BY: ALLAN H. SWANSON H.C.R.D. PLAN No. 287.28.
4. FINAL SUBDIVISION PLAN, MAP A, LOTS 760 & 323, SOUTH MAIN STREET, NASHUA, NEW HAMPSHIRE, PREPARED FOR DONALD REID, DATED: MAY 21, 1967, SCALE: 1" = 87' AND PREPARED BY CUOCO & CORMIER H.C.R.D. PLAN No. 20818.
5. LOT LINE RELOCATION PLAN, SHEET A, LOTS 785 & 126, SOUTH MAIN STREET, NASHUA, NEW HAMPSHIRE, PREPARED FOR DONALD REID, DATED: OCTOBER 13, 1967, SCALE: 1" = 20' AND PREPARED BY CUOCO & CORMIER, INC. H.C.R.D. PLAN No. 21396.

NOTES:

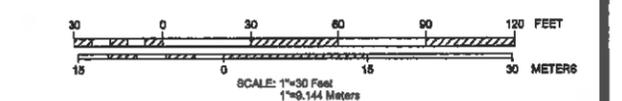
1. EXISTING SITE AREA 1.525 AC (63,886 SF)
2. PRESENT ZONING: R-A; A-URBAN RESIDENCE
3. MINIMUM LOT REQUIREMENTS: REQUIRED LOT 11 LOT 122 LOT 123 LOT 124 LOT 125
 - LOT SIZE 7,800 SF 30,809 SF 12,076 SF 10,990 SF 13,141 SF 18,997 SF
 - FRONTAGE 60 FT 344.16 FT 211.16 FT 90.00 FT 104.00 FT 115.96 FT
 - WIDTH 75 FT 200 FT 100 FT 90 FT 106 FT 108 FT
 - DEPTH 80 FT 164 FT 121 FT 121 FT 121 FT 153 FT
 MINIMUM SETBACK REQUIREMENTS:
 - FRONT YARD 25 FT
 - SIDE YARD 10 FT
 - REAR YARD 25 FT
 - MAX BUILDING HEIGHT 35 FT
 - MAX STORIES 2.5
 - OPEN SPACE (%) 60
 - MAX FLOOR RATIO 0.5
4. LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAPS 'A', 112 AND 116.
5. PURPOSE OF PLAN:
 (A) TO SUBDIVIDE OLD LOT 11 INTO FIVE (5) NEW RESIDENTIAL LOTS
 (B) TO DEDICATE 134 SF OF LOT 11 FOR WELD STREET RIGHT OF WAY
 (C) TO DEDICATE 134 SF OF LOT 122 FOR WELD STREET RIGHT OF WAY
6. SITE IS SERVICED BY MUNICIPAL SEWER, WATER BY PENNICK-LUCK WATER WORKS, UNDERGROUND GAS AND A COMBINATION OF UNDERGROUND AND OVERHEAD ELECTRIC AND TELECOMMUNICATION UTILITIES.
7. MONUMENTS, WHERE REQUIRED, TO BE SET BY A LICENSED LAND SURVEYOR AS FOLLOWS:
 (A) STONE BOUNDS: AT STREET INTERSECTIONS, POINTS OF CURVATURE AND TANGENCY OF PUBLIC STREET
 (B) IRON PINS: AT LOT CORNERS
8. THERE ARE NO WETLANDS ON THIS SITE.

No.	DATE	REVISION	BY

SUBDIVISION / STREET DEDICATION PLAN (MAP 112, LOT 11)

453 SOUTH MAIN STREET NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER:
STELLOS FAMILY INVESTMENT PROPERTIES, LLC
 125 NORTHEASTERN BOULEVARD NASHUA, NEW HAMPSHIRE 03082 (603) 882-3128



27 AUGUST 2020

HSL Hayner/Swanson, Inc.
 Civil Engineers/Land Surveyors
 3 Congress Street Nashua, NH 03063 (603) 883-2037
 151 Middlesex Turnpike Burlington, MA 01803 (781) 203-1508
 www.haynerswanson.com

FIELD BOOK: 1247	DRAWING NAME: 5718SUB-P531	5718 SUB	1 OF 5
DRAWING LOC: J:\5000\5718 STELLOS\DWG\5718SUB	Fig Number	Sheet	

ZONING NOTE 1
 THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY HAYNER/SWANSON, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

APPROVED NASHUA CITY PLANNING BOARD
 CHAIRMAN _____ DATE _____

- LEGEND**
- UTILITY POLE WITH GUY SUPPORT
 - STREET LIGHT
 - SIGN
 - CONCRETE BOUND
 - STONE BOUND
 - IRON PIPE
 - DH DRILL HOLE & STORE WALL
 - STONE BOUND TO BE SET
 - IRON PIN TO BE SET
 - BUILDING SETBACK LINE
 - STOCKADE FENCE
 - CURBING
 - STREET ADDRESS
 - CONCRETE
 - COBBLE/STONE/CONCRETE WALL
 - EXISTING BUILDING (PER NASHUA GIS)

MAP 116 LOT 1
 NASHUA DEVELOPMENT CO
 c/o HANBLETT & KERRIGAN
 20 TRAFALGAR SQUARE, STE 505
 NASHUA, NH 03063-1991
 BK 2884 PG 540
 ZONE: R-9
 USE: COUNTRY CLUB

THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE SITE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

Cassandra Malvera 09/21/2020
 FOR STELLOS FAMILY INVESTMENT PROPERTIES, LLC. DATE

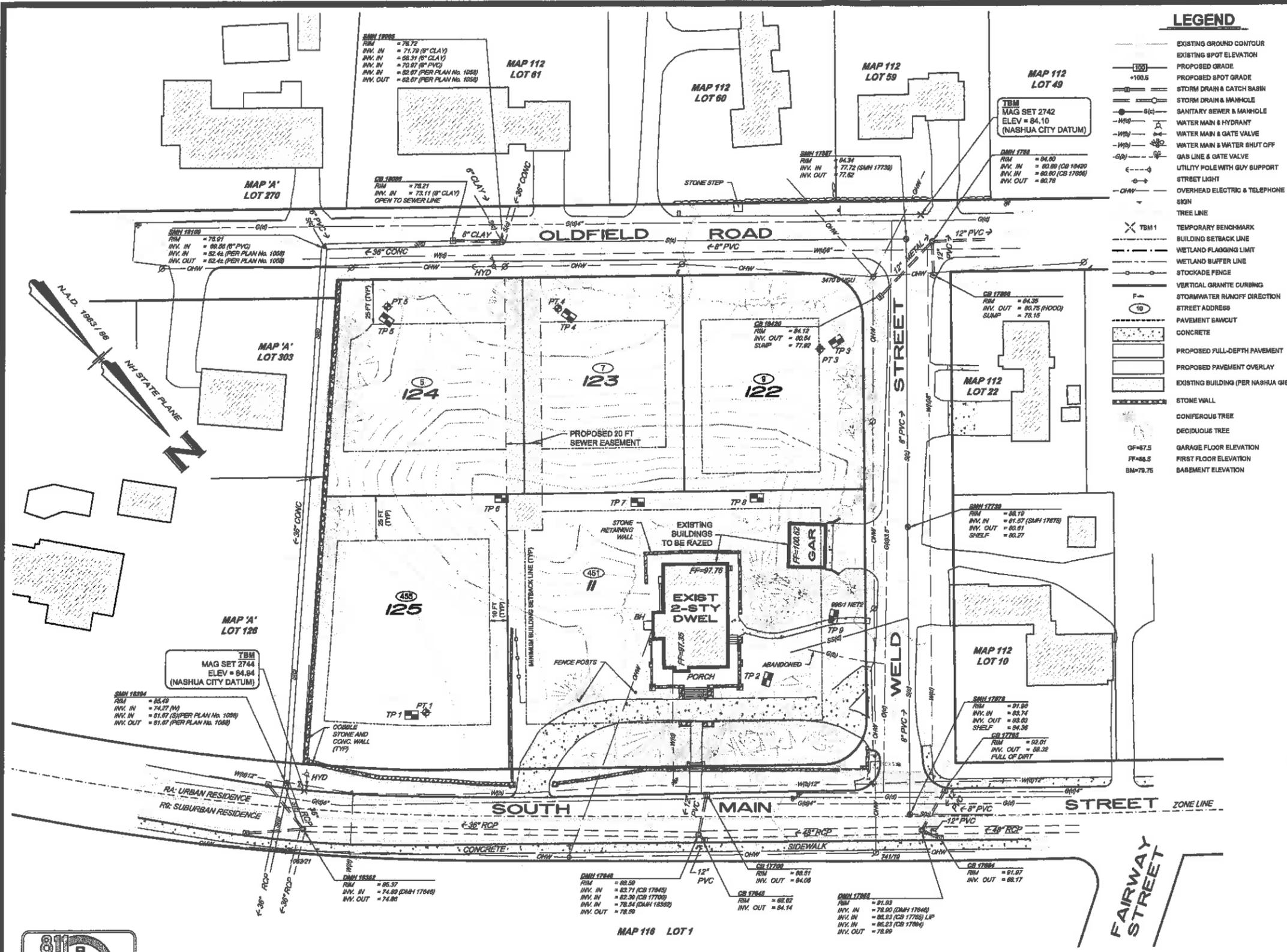
CERTIFICATION

I HEREBY CERTIFY, TO MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN SHOWS THE RESULTS OF AN ON THE GROUND "STANDARD PROPERTY SURVEY" AND THAT SAID SURVEY MEETS THE MINIMUM PRECISION AND/OR ACCURACY MEASUREMENTS FOR SURVEY CLASSIFICATION "U" (URBAN) AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS ADOPTED 08/23/01, EFFECTIVE 01/01/08.

I FURTHER CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN FIFTEEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY.

9/25/20 DATE





LEGEND

- EXISTING GROUND CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED GRADE
- PROPOSED SPOT GRADE
- STORM DRAIN & CATCH BASIN
- STORM DRAIN & MANHOLE
- SANITARY SEWER & MANHOLE
- WATER MAIN & HYDRANT
- WATER MAIN & GATE VALVE
- WATER MAIN & WATER SHUT OFF
- GAS LINE & GATE VALVE
- UTILITY POLE WITH GUY SUPPORT
- STREET LIGHT
- OVERHEAD ELECTRIC & TELEPHONE SIGN
- TREE LINE
- TEMPORARY BENCHMARK
- BUILDING SETBACK LINE
- WETLAND FLAGGING LIMIT
- WETLAND BUFFER LINE
- STOCKADE FENCE
- VERTICAL GRANITE CURBING
- STORMWATER RUNOFF DIRECTION
- STREET ADDRESS
- PAVEMENT SAWCUT
- CONCRETE
- PROPOSED FULL-DEPTH PAVEMENT
- PROPOSED PAVEMENT OVERLAY
- EXISTING BUILDING (PER NASHUA 618)
- STONE WALL
- CONIFEROUS TREE
- DECIDUOUS TREE
- GF=67.5 GARAGE FLOOR ELEVATION
- FF=68.5 FIRST FLOOR ELEVATION
- BM=79.75 BASEMENT ELEVATION

SURVEY NOTES:

1. THE TOPOGRAPHY SHOWN IS BASED ON A FIELD SURVEY BY THIS OFFICE IN JULY AND AUGUST 2020.
2. SURVEY CONTROL:
HORIZONTAL DATUM: N.A.D. 1983/86
PROJECTION: NH STATE PLANE
VERTICAL DATUM: NASHUA CITY DATUM
UNITS: US SURVEY FEET
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY OF THE EXISTING TOPOGRAPHY PRIOR TO EARTHWORK OPERATIONS. NO CLAIM FOR THE EXTRA WORK DUE TO TOPOGRAPHIC INACCURACY SHALL BE CONSIDERED AFTER EARTHWORK HAS COMMENCED.
4. THE CONTRACTOR SHALL ONLY USE BENCHMARKS AS PROVIDED BY THE ENGINEER.
5. TEST PIT LOCATIONS AS SHOWN ARE APPROXIMATE. TEST PITS WERE PERFORMED ON AUGUST 14, 2020 UNDER THE SUPERVISION OF HAYNER/SWANSON, INC.

UTILITY CONTACTS

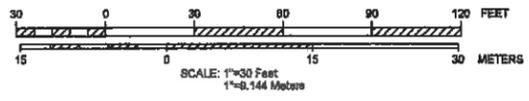
- WATER:**
PENNACUCK WATER WORKS
25 MANCHESTER STREET
MERRIMACK, NH 03054
ATT: JOHN BOISVERT, PE
(603) 913-2300
- GAS:**
LIBERTY UTILITIES
11 NORTHEASTERN BLVD.
SALEM, NH 03079
ATT: ANDREW MORGAN
(603) 327-5357
- TELEPHONE:**
CONSOLIDATED COMMUNICATIONS
100 GAY STREET
MANCHESTER, NH 03103
ATT: ROBERTO DIAZ
(603) 296-5998
- POWER:**
EVERSOURCE
370 AMHERST STREET
NASHUA, NH 03060
ATT: MARC GAGNIN
(603) 882-5864
- PLANNING DEPARTMENT**
COMMUNITY DEVELOPMENT DIVISION
229 MAIN STREET
NASHUA, NH 03060
ATT: LINDA McGRHEE
(603) 588-3110
- ENGINEERING DEPARTMENT**
NASHUA DEPT. OF PUBLIC WORKS / ENGINEERING
9 RIVERSIDE STREET
NASHUA, NH 03062
ATT: JOE MENDOLA
(603) 589-3147
- FIRE DEPARTMENT**
NASHUA FIRE RESCUE
177 LAKE STREET
NASHUA, NH 03062
ATT: ADAM POULIOT, FIRE MARSHALL
(603) 588-3460



NO.	DATE	REVISION	BY

TOPOGRAPHIC SUBDIVISION PLAN
(MAP 112, LOT 11)
453 SOUTH MAIN STREET
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER:
STELLOS FAMILY INVESTMENT PROPERTIES, LLC
125 NORTHEASTERN BOULEVARD NASHUA, NEW HAMPSHIRE 03062 (603) 582-3128



27 AUGUST 2020



UTILITY QUALITY LEGEND
SUBSURFACE UTILITIES AS DEPICTED ON THIS PLAN ARE IDENTIFIED BY QUALITY LEVELS DEFINED BY CHANCE 38-02 "AGE STANDARD GUIDELINE FOR COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

LEVEL A (a) PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY ACTUAL EXPOSURE AND SUBSEQUENT MEASUREMENTS OF SUBSURFACE UTILITIES.

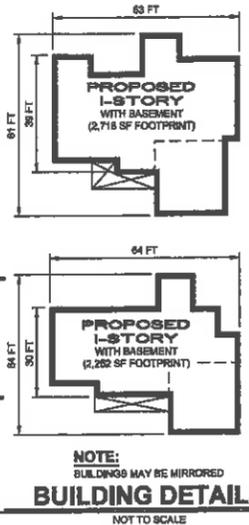
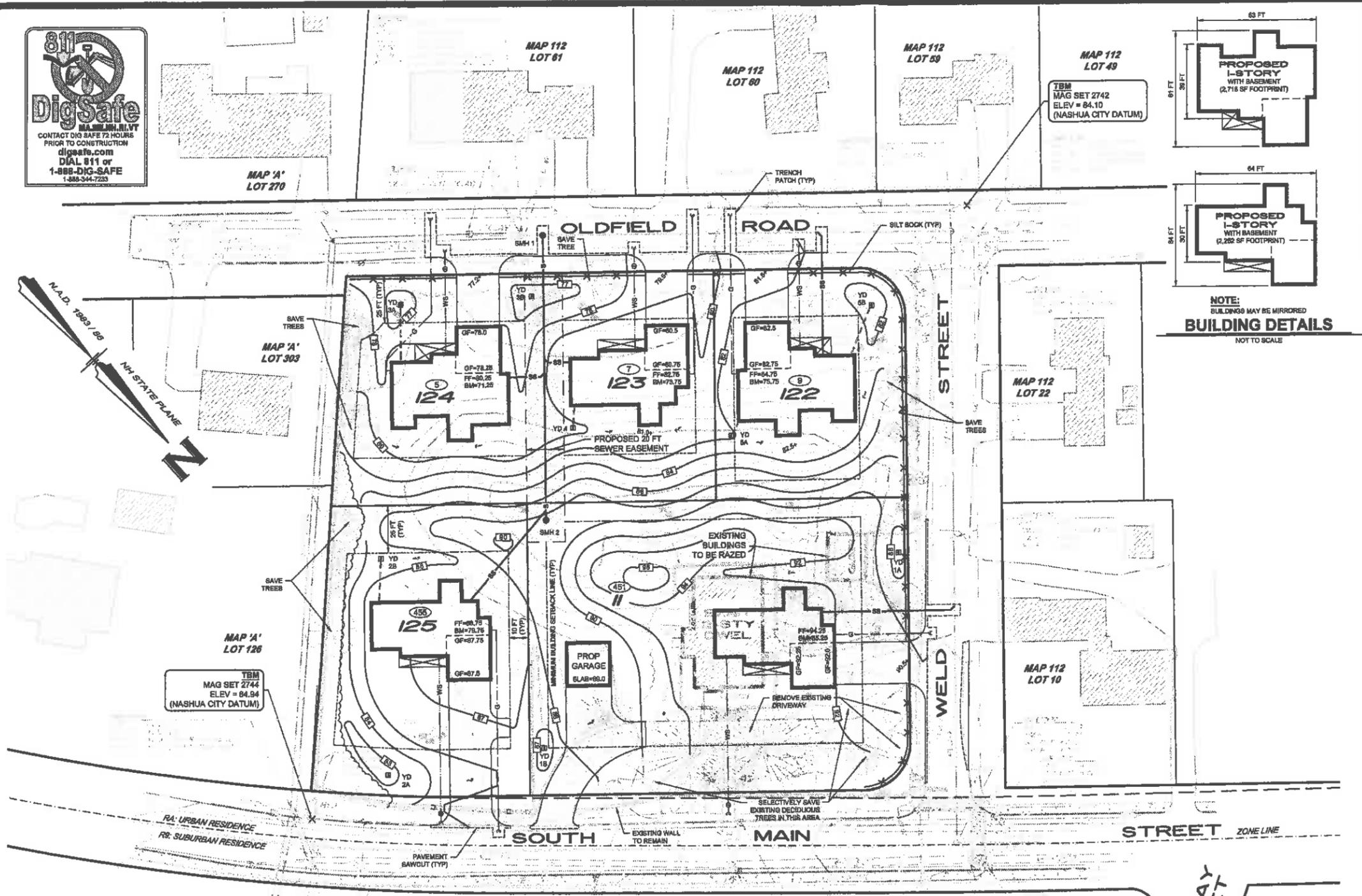
LEVEL B (b) INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. (IE. DNG68F8)

LEVEL C (c) INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

LEVEL D (d) INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL COLLECTIONS.

UTILITY NOTE
THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.





- ### CONSTRUCTION NOTES
- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, LATEST EDITION ARE HEREBY INCORPORATED BY REFERENCE.
 - ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT 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 TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
 - PRIOR TO ANY WORK BEING STARTED, THE APPLICANT AND THEIR CONTRACTORS SHALL HOLD A PRE-CONSTRUCTION CONFERENCE WITH PLANNING STAFF TO REVIEW SCHEDULING, EROSION AND TRAFFIC CONTROL, AND TREE PROTECTION.
 - BLASTING, IF NEEDED, SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NASHUA FIRE DEPARTMENT REGULATIONS.
 - ALL STUMPS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
 - ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IMMEDIATELY UPON BEING CONSTRUCTED.
 - BASEMENTS MAY ENCOUNTER GROUNDWATER CONDITIONS THAT REQUIRE SUBSURFACE MITIGATION MEASURES. IT IS RECOMMENDED THAT SUBSURFACE CONDITIONS BE EVALUATED BY A GEOTECHNICAL ENGINEER, AND MITIGATION MEASURES BE IMPLEMENTED BY THE BUILDER ON A HOUSE BY HOUSE BASIS.
 - A DRIVEWAY PLAN SHALL BE APPROVED BY THE ENGINEERING DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
 - LOTS WILL BE SERVICED BY UNDERGROUND ELECTRIC AND COMMUNICATION UTILITIES. SERVICE CONNECTION LOCATIONS TO BE COORDINATED WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION.

- ### EROSION CONTROL NOTES:
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION CONTROL SHALL OBTAIN A COPY OF THE STORMWATER POLLUTION CONTROL PLAN (SPCP) AND NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT (CGP) AND BECOME FAMILIAR WITH THEIR CONTENTS.
 - THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SPCP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY SITE CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
 - BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
 - EARTH MATERIAL STOCKPILE AREAS AS SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE. STOCKPILE AREAS SHALL BE SURROUNDED BY SILT FENCE AND RE-SEEDED IF THEY ARE LEFT UNTOUCHED FOR MORE THAN TEN (10) DAYS.
 - ALL MEASURES STATED ON THIS EROSION CONTROL PLAN, AND IN THE STORMWATER POLLUTION CONTROL PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETE PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT.
 - SILT SOCKS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

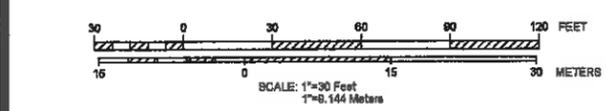
No.	DATE	REVISION	BY

LOT GRADING PLAN (MAP 112, LOT 11)

453 SOUTH MAIN STREET

NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER:
STELLOS FAMILY INVESTMENT PROPERTIES, LLC
 125 NORTHEASTERN BOULEVARD NASHUA, NEW HAMPSHIRE 03082 (603) 882-3128



27 AUGUST 2020

FIELD BOOK: 1247	DRAWING NAME: 5718SUB-FG31	5718 SUB	3 OF 5
DRAWING LOC: J:\5000\5718 STELLOS\DWG\5718SUB		File Number	Sheet

SITE MAINTENANCE PLAN

THE FOLLOWING PROVIDES AN ITEMIZATION OF SPECIFIC SITE MAINTENANCE PRACTICES THAT WILL BE EMPLOYED ON THE SITE TO MINIMIZE POLLUTANT GENERATION AND TRANSPORT FROM THE SITE. THE SITE MAINTENANCE PROGRAM INCLUDES ROUTINE INSPECTIONS, PREVENTATIVE MAINTENANCE AND "GOOD HOUSEKEEPING" PRACTICES.

- #### ROUTINE INSPECTIONS
- INSPECT SITE ON A QUARTERLY BASIS OR AFTER A SIGNIFICANT RAIN EVENT.
- #### PREVENTATIVE MAINTENANCE
- CLEAN RECHARGE AREA AND YARD DRAINS TWICE PER YEAR IF NEEDED OR MORE FREQUENTLY AS DICTATED BY QUARTERLY INSPECTIONS.
 - IMPLEMENT OTHER MAINTENANCE OR REPAIR ACTIVITIES AS DEEMED NECESSARY BASED UPON INSPECTIONS.
- #### GOOD HOUSEKEEPING PRACTICES
- SWEEP DRIVEWAY REGULARLY TO MINIMIZE SEDIMENT ACCUMULATION. FREQUENCY WILL VARY SEASONALLY ACCORDING TO SEDIMENT ACCUMULATION ON PAVED SURFACES (E.G., MORE FREQUENT SWEEPING DURING THE WINTER AND SPRING).
 - USE NO-SALT (N.O.) ALTERNATIVES SUCH AS CLOSE PLOWING AND SANDING FOR DEICING ON THE DRIVEWAY.

UTILITY QUALITY LEGEND

SUBSURFACE UTILITIES AS DEPICTED ON THIS PLAN ARE IDENTIFIED BY QUALITY LEVELS DEFINED BY CHANCE 38-02 "ASCE STANDARD GUIDELINE FOR COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

- LEVEL A (a) PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY ACTUAL EXPOSURE AND SUBSEQUENT MEASUREMENTS OF SUBSURFACE UTILITIES.
- LEVEL B (b) INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. (E. DIGSAFE)
- LEVEL C (c) INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.
- LEVEL D (d) INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

UTILITY NOTE 1

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

NOTE

THE PURPOSE OF THE LOT GRADING PLAN IS TO SHOW THE INTENDED LOCATION OF THE PROPOSED SINGLE-FAMILY HOUSES. THE DEVELOPER/BUILDER RESERVES THE RIGHT TO MAKE CHANGES TO THE SINGLE-FAMILY DETACHED INDIVIDUAL HOUSE SIZE, TYPE, LOCATION, GARAGE CONFIGURATION, ELEVATION, DRIVEWAY, RETAINING WALLS AND UTILITY LOCATIONS AS LONG AS THE OVERALL INTEGRITY OF THIS PLAN IS MAINTAINED.



TEST PIT INFORMATION

TEST PIT #1 DATE: 8/14/20
 0-10' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 10-18' 10YR 6/6, YELLOWISH BROWN, SANDY LOAM, 2% ROUNDED COBBLES, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 18-23' 10YR 6/4, YELLOWISH BROWN, GRAVELLY SANDY LOAM, 15% ROUNDED COBBLES, 5% GRAVEL, FINE GRANULAR, FRIABLE WITH FEW ROOTS
 23-28' 10YR 6/4, YELLOWISH BROWN, GRAVELLY SAND, 15% ROUNDED COBBLES, 5% GRAVEL, SINGLE GRAIN, LOOSE WITH FEW ROOTS
 28-30' 10YR 6/4, YELLOWISH BROWN, LOAMY SAND, FINE GRANULAR, FRIABLE WITH FEW ROOTS
 30-35' 10YR 6/4, YELLOWISH BROWN, LOAMY SAND, FINE GRANULAR, FRIABLE WITH FEW ROOTS
 35-40' 2.5Y 7/4, VERY PALE BROWN, GRAVELLY SANDY LOAM, 10% ROUNDED COBBLES, 10% GRAVEL, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 48"
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 90' LEDGE: NONE OBSERVED
 PERC TEST#1 DATE: 8/14/20
 PERCOLATION RATE: 1 MINUTE/ INCH AT 80" DEEP

TEST PIT #2 DATE: 8/14/20
 0-10' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 10-27' 10YR 6/4, YELLOWISH BROWN, GRAVELLY LOAMY SAND, 10% ROUNDED COBBLES, 10% GRAVEL, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 26-48' 10YR 7/4, VERY PALE BROWN, GRAVELLY SANDY LOAM, 10% ROUNDED COBBLES, 10% GRAVEL, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 48"
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 48' LEDGE: 48'

TEST PIT #3 DATE: 8/14/20
 0-14' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 14-24' 10YR 5/6, YELLOWISH BROWN, GRAVELLY LOAMY SAND, 10% ROUNDED COBBLES, 10% GRAVEL, 10% 12-18" ROCKS, GRANULAR, LOOSE WITH COMMON ROOTS
 24-28' 10YR 6/4, YELLOWISH BROWN, GRAVELLY LOAMY SAND, 20% ROUNDED COBBLES, 20% GRAVEL, 10% 12-18" ROCKS, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 48"
 28-34' 2.5Y 7/2, VERY PALE BROWN, GRAVELLY LOAMY SAND, 10% ROUNDED COBBLES, 10% GRAVEL, GRANULAR, FRIABLE WITH 7.5YR 5/6, STRONG BROWN COMMON, DISTINCT REDOXIMORPHIC FEATURES AT 78"
 ESHWT: 78' OWT: NONE OBSERVED ROOTS: 48' LEDGE: 64'

TEST PIT #4 DATE: 8/14/20
 PERCOLATION RATE: <1 MINUTE/ INCH AT 84" DEEP

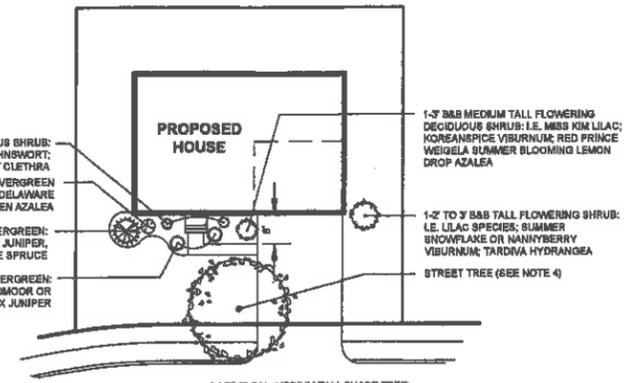
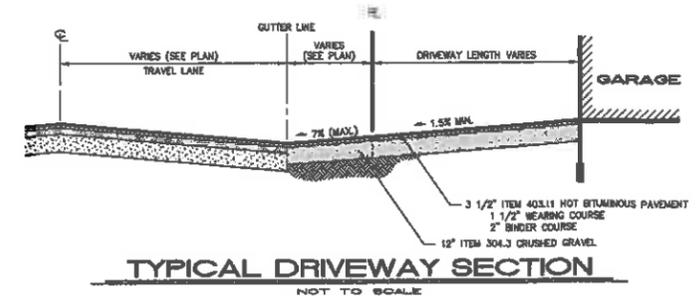
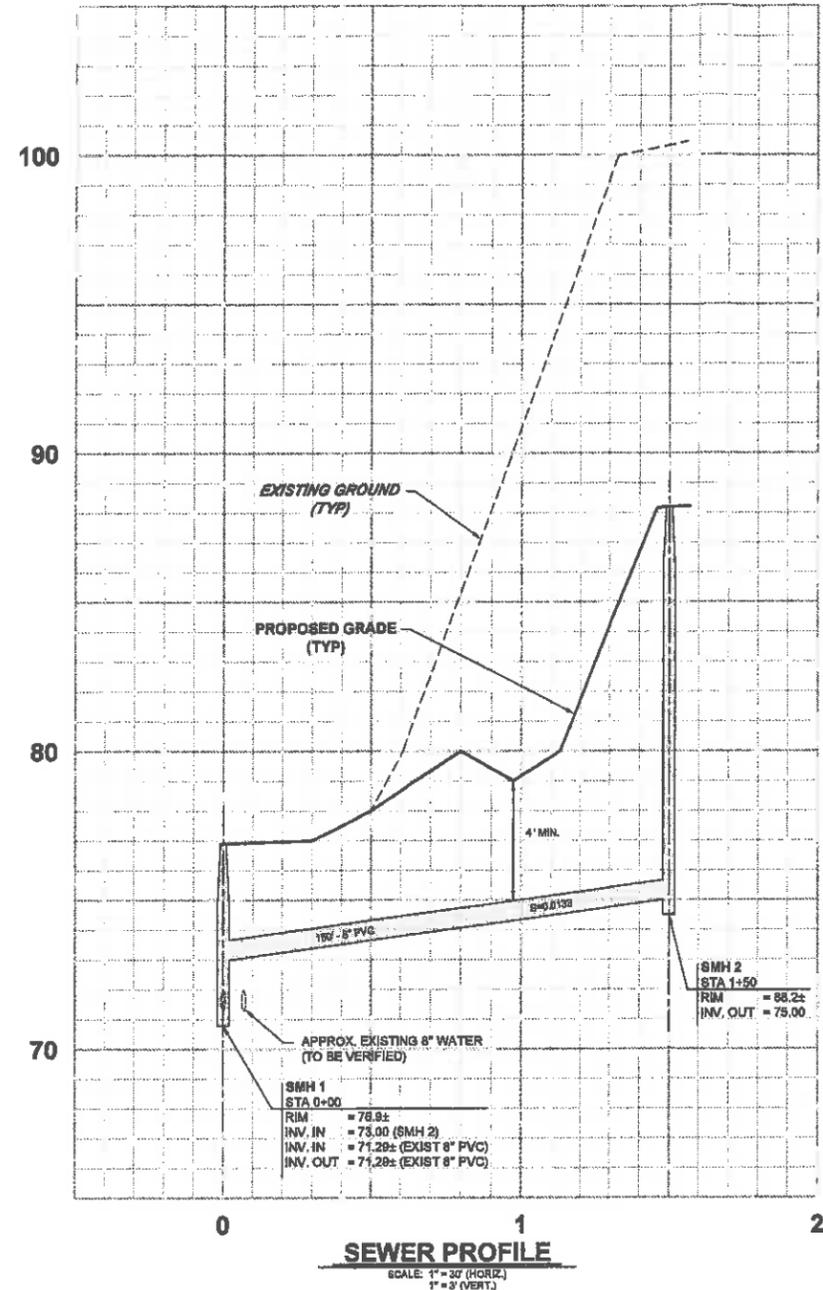
TEST PIT #5 DATE: 8/14/20
 0-4' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 4-15' 10YR 5/6, YELLOWISH BROWN, SANDY LOAM, 2% ROUNDED COBBLES, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 15-12' 10YR 6/6, BROWNISH YELLOW, LOAMY SAND, SINGLE GRAIN, LOOSE WITH FEW ROOTS
 12-29' 2.5Y 7/4, VERY PALE BROWN, FINE SAND, SINGLE GRAIN, LOOSE WITH FEW ROOTS
 29-78' 2.5Y 7/3, VERY PALE BROWN, LOAMY SAND, GRANULAR, FRIABLE WITH FEW ROOTS TO 78" AND 7.5YR 5/6, STRONG BROWN, COMMON, DISTINCT REDOXIMORPHIC FEATURES AT 78"
 78-82' 2.5Y 7/2, VERY PALE BROWN, LOAMY SAND, GRANULAR, CEMENTED, FIRM WITH 7.5YR 5/6, STRONG BROWN, COMMON, DISTINCT REDOXIMORPHIC FEATURES THROUGHOUT
 82-90' 2.5Y 7/2, VERY PALE BROWN, LOAMY SAND, GRANULAR, FRIABLE WITH NO REDOXIMORPHIC FEATURES OBSERVED
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 78' LEDGE: NONE OBSERVED
 RESTRICTIVE CEMENTED LAYER 78-82"
 PERC TEST#4 DATE: 8/14/20
 PERCOLATION RATE: <1 MINUTE/ INCH AT 86" DEEP

TEST PIT #6 DATE: 8/14/20
 0-5' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 5-15' 10YR 5/6, YELLOWISH BROWN, SANDY LOAM, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 15-44' 10YR 6/6, BROWNISH YELLOW, LOAMY SAND, SINGLE GRAIN, LOOSE WITH FEW ROOTS
 44-80' 2.5Y 7/4, VERY PALE BROWN, FINE SAND, 2% ROUNDED COBBLES, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 72"
 80-95' 2.5Y 7/3, VERY PALE BROWN, LOAMY SAND, GRANULAR, FRIABLE
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 72' LEDGE: NONE OBSERVED
 PERC TEST#6 DATE: 8/14/20
 PERCOLATION RATE: 1 MINUTE/ INCH AT 60" DEEP

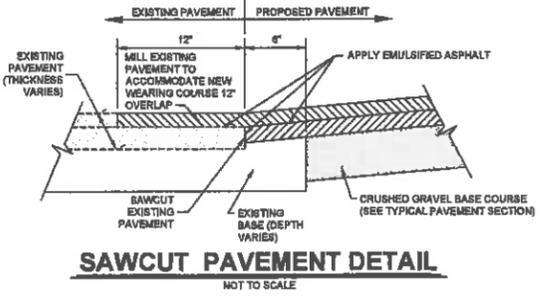
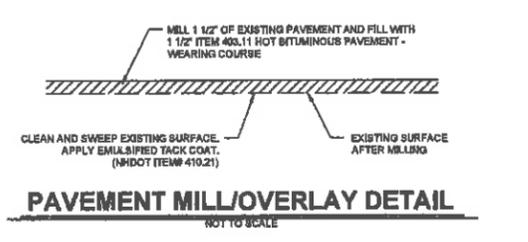
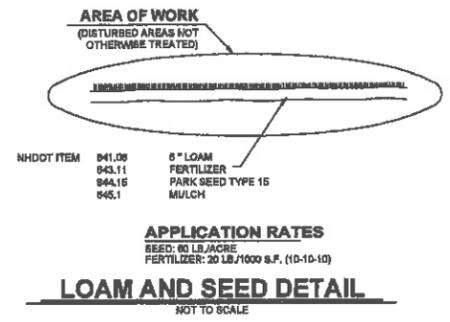
TEST PIT #7 DATE: 8/14/20
 0-5' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 5-15' 10YR 5/6, YELLOWISH BROWN, SANDY LOAM, 5% ROUNDED COBBLES, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 15-30' 10YR 6/4, YELLOWISH BROWN, GRAVELLY SANDY LOAM, 15% ROUNDED COBBLES, 5% GRAVEL, 10% 12-18" ROCKS, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 30-42' 10YR 5/4, YELLOWISH BROWN, GRAVELLY SAND, 16% ROUNDED COBBLES, 10% GRAVEL, 10% 12-18" ROCKS SINGLE GRAIN, LOOSE WITH MANY ROOTS
 42-48' 2.5Y 7/3, VERY PALE BROWN, COARSE SAND, SINGLE GRAIN, LOOSE WITH FEW ROOTS
 48-95' 10YR 5/4, YELLOWISH BROWN, GRAVELLY COARSE SAND, 20% ROUNDED COBBLES, 20% GRAVEL, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 80"
 95-138' 2.5Y 7/3, VERY PALE BROWN, COARSE SAND, SINGLE GRAIN AND LOOSE LAYERS BETWEEN 30" TO 138" APPEAR TO BE THICK STRATIFIED LAYERS
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 90' LEDGE: NONE OBSERVED

TEST PIT #8 DATE: 8/14/20
 0-5' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 5-15' 10YR 5/6, YELLOWISH BROWN, SANDY LOAM, 5% ROUNDED COBBLES, FINE GRANULAR, FRIABLE WITH COMMON ROOTS
 15-26' 10YR 5/4, YELLOWISH BROWN, GRAVELLY SAND, 10% ROUNDED COBBLES, 10% GRAVEL, 10% 12-18" ROCKS SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 80"
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 80' LEDGE: NONE OBSERVED

TEST PIT #9 DATE: 8/14/20
 0-5' 10YR 3/3, DARK BROWN, FINE SANDY LOAM, WEAK FINE GRANULAR, VERY FRIABLE WITH MANY ROOTS
 5-54' 10YR 5/4, YELLOWISH BROWN, GRAVELLY COARSE SAND, 20% ROUNDED COBBLES, 20% GRAVEL, 5% 12-18" ROCKS SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 78"
 ESHWT: NONE OBSERVED OWT: NONE OBSERVED ROOTS: 78' LEDGE: NONE OBSERVED
 PERC TEST#9 DATE: 8/14/20
 PERCOLATION RATE: <1 MINUTE/ INCH AT 60" DEEP



- NOTES:**
1. THE HOME BUILDER RESERVES THE RIGHT TO MODIFY THE TYPE, SIZE AND LOCATION OF THE FOUNDATION PLANT MATERIALS.
 2. STREET TREE LOCATIONS AS SHOWN ARE APPROXIMATE.
 3. STREET TREES ARE INTENDED TO MEET THE REQUIREMENTS OF THE NASHUA LAND USE CODE SECTION 100-115.
 4. EXISTING TREES TO REMAIN IN FRONT OF THE LOT SHALL COUNT AS A STREET TREE.



NO.	DATE	REVISION	BY

DETAIL SHEET - GENERAL SITE
 (MAP 112, LOT 11)

453 SOUTH MAIN STREET
 NASHUA, NEW HAMPSHIRE

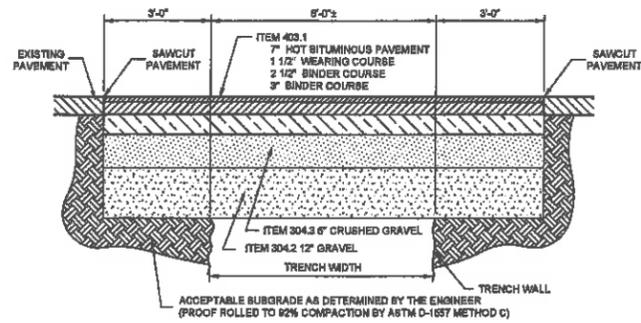
PREPARED FOR/RECORD OWNER:
STELLOS FAMILY INVESTMENT PROPERTIES, L.L.C.
 125 NORTHEASTERN BOULEVARD NASHUA, NEW HAMPSHIRE 03082 (603) 882-3128

SCALE AS SHOWN

27 AUGUST 2020

HSI Hayner/Swanson, Inc.
 Civil Engineers/Land Surveyors
 3 Congress Street
 Nashua, NH 03062
 (603) 883-2057
 131 Middlesex Turnpike
 Burlington, MA 01803
 (781) 203-1501
 www.haynerswanson.com

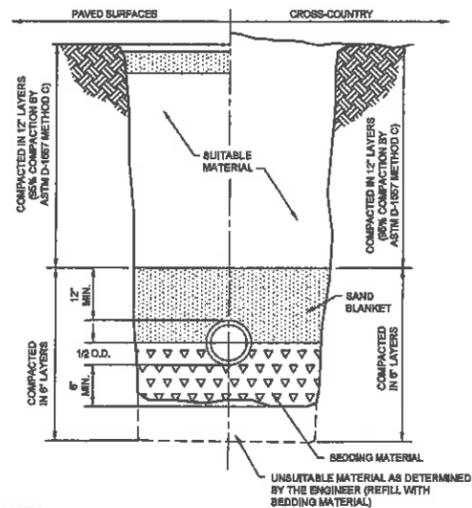
FIELD BOOK: 1247	DRAWING NAME: 5718SUB-021	5718 SUB	4 OF 5
DRAWING LOC: J:\9000\5718 STELLOS\DWG\5718SUB		File Name	9/2/20



NOTE:
THE BINDER COURSE SHALL BE PLACED IMMEDIATELY AFTER THE TRENCH CONSTRUCTION, AND ALLOWED TO STAND FOR A MINIMUM OF 90 DAYS. A LEVELING COURSE SHALL BE APPLIED OVER THE TRENCH AFTER 90 DAYS AND THE ENTIRE ROAD OVERLAYED TO THE LIMITS SHOWN ON THE PLANS.

TRENCH PATCH DETAIL

NOT TO SCALE



NOTES

1. THE SEWER TRENCH SECTION SHALL CONFORM TO THE NHDES STANDARD TRENCH SECTION AND TO THE ADDITIONAL REQUIREMENTS OF THIS TYPICAL SECTION.
2. IN GENERAL, DISTURBED CROSS-COUNTRY AREAS SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER AND SHALL BE LOAMED AND BEEDED IN ACCORDANCE WITH THE DETAIL, AND SHALL BE MAINTAINED UNTIL A VIABLE STAND OF GRASS HAS BEEN ESTABLISHED.
3. ROADWAYS, DRIVEWAYS, AND OTHER PAVED AREAS SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE PLANS.

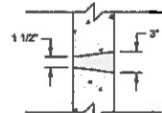
TYPICAL SEWER TRENCH SECTION

NOT TO SCALE

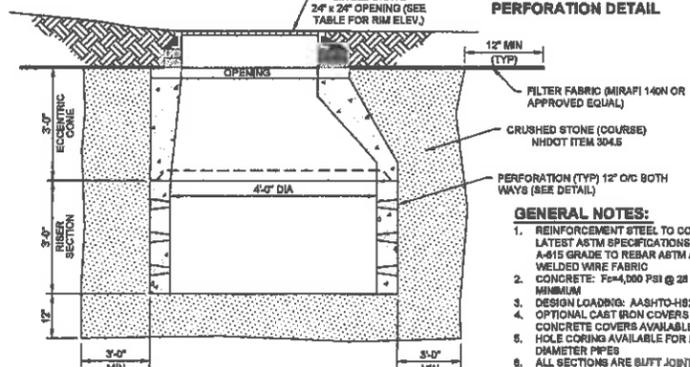
LOCATION	RIM ELEV	LOCATION	RIM ELEV
YD 1A	87.5 ±	YD 3B	76.7 ±
YD 1B	86.7 ±	YD 4	76.5 ±
YD 2A	82.7 ±	YD 5A	82.0 ±
YD 2B	85.5 ±	YD 5B	81.5 ±
YD 3A	78.5 ±		

NOTE:

1. LCB 38 SHALL BE SURROUNDED BY A MINIMUM OF 4- FEET OF STONE



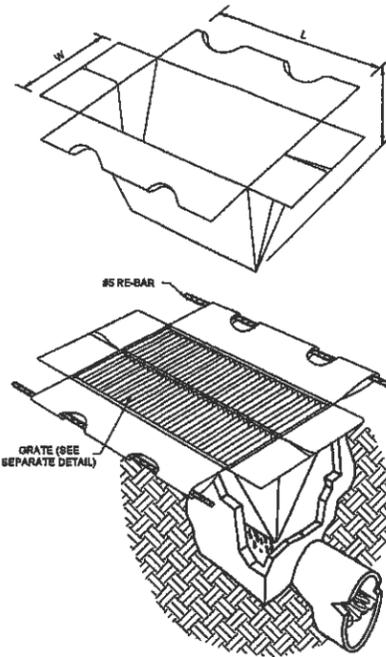
PERFORATION DETAIL



YARD DRAIN DETAIL

NOT TO SCALE

- GENERAL NOTES:**
1. REINFORCEMENT STEEL TO CONFORM TO: LATEST ASTM SPECIFICATIONS: ASTM A-615 GRADE TO REBAR ASTM A-105 WELDED WIRE FABRIC CONCRETE: Fc=4,000 PSI @ 28 DAYS MINIMUM
 2. DESIGN LOADING: AASHTO-HS20-44
 3. OPTIONAL CAST IRON COVERS OR CONCRETE COVERS AVAILABLE
 4. HOLE CORING AVAILABLE FOR LARGER DIAMETER PIPES
 5. ALL SECTIONS ARE BUTT JOINT



SILTSAK® DETAIL

NOT TO SCALE

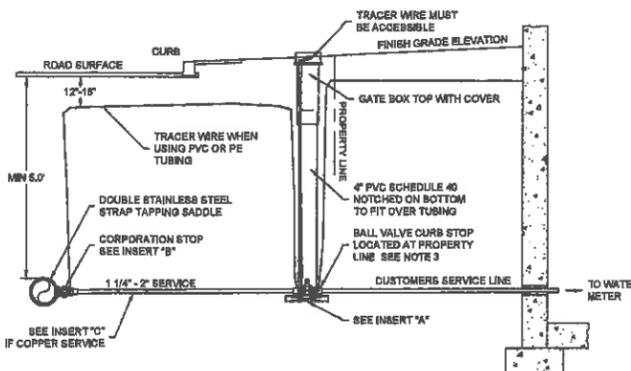
SILTSAK® NOTES:

- 1.0 THE SILTSAK® SHALL BE MANUFACTURED FROM WOVEN POLYPROPYLENE AND SEWN BY A DOUBLE NEEDLE MACHINE, USING A HIGH STRENGTH NYLON THREAD.
- 2.0 THE SILTSAK® BEAMS SHALL HAVE A CERTIFIED AVERAGE WIDE WIDTH STRENGTH PER ASTM D-4864 STANDARDS AS FOLLOWS:

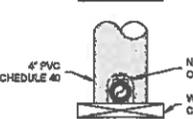
BEAM STYLE	TEST METHOD	TEST RESULT
REGULAR FLOW	ASTM D-4864	165.0 LBS/IN
HS-FLOW	ASTM D-4864	114.8 LBS/IN
- 3.0 THE SILTSAK® WILL BE MANUFACTURED TO FIT THE OPENING OF THE CATCH BASIN OR DROP INLET. THE SILTSAK® WILL HAVE THE FOLLOWING FEATURES: TWO DUMP STRAPS ATTACHED AT THE BOTTOM TO FACILITATE THE EMPTYING OF THE SILTSAK®; THE SILTSAK® SHALL HAVE LIFTING LOOPS AS AN INTEGRAL PART OF THE SYSTEM TO BE USED TO LIFT THE SILTSAK® FROM THE BASIN; THE SILTSAK® SHALL HAVE A RESTRAINT CORD APPROXIMATELY HALFWAY UP THE BACK TO KEEP THE SIDES AWAY FROM THE CATCH BASIN WALLS. THIS YELLOW CORD IS ALSO A VISIBLE MEANS OF INDICATING WHEN THE SOCK SHOULD BE EMPTIED, CLEANED, AND PLACED BACK INTO THE BASIN.
- 4.0 THE GEOTEXTILE FABRIC SHALL BE WOVEN POLYPROPYLENE FABRIC WITH THE FOLLOWING PROPERTIES:

PROPERTY	TEST METHOD	TEST RESULT
GRAB TENSILE	ASTM D-4832	300 LBS
GRAB ELONGATION	ASTM D-4831	20%
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4833	120 LBS
UV RESISTANCE	ASTM D-4355	50%
APPARENT OPENING	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/FT2
PERMITTIVITY	ASTM D-4491	0.55 SEC

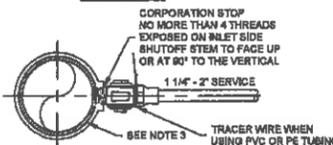
OR SILTSAK® HS-FLOW	TEST METHOD	TEST RESULT
GRAB TENSILE	ASTM D-4832	285 LBS
GRAB ELONGATION	ASTM D-4832	20%
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4833	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/FT2
PERMITTIVITY	ASTM D-4491	1.5 SEC



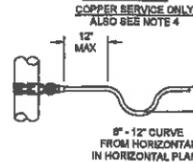
INSERT "A"



INSERT "B"



INSERT "C"

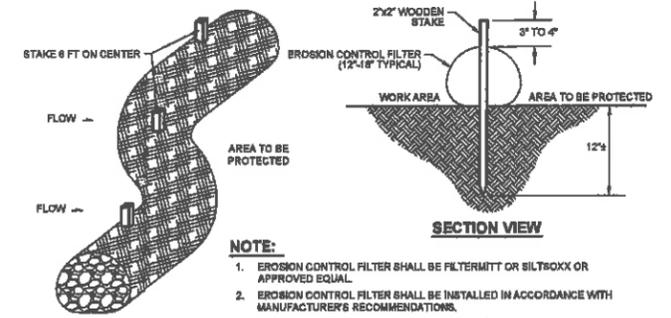


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.M. TECHNICAL SPECIFICATIONS.
2. ALL PIPES SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. IF WATER MAIN IS PVC OR TRANSTITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN.
4. IF WATER MAIN IS PVC OR TRANSTITE, AND THE NEW WATER SERVICE IS COPPER THEN SEE P.W.M. TECHNICAL SPECIFICATIONS.

TYPICAL 1 1/4\"/>

NOT TO SCALE



NOTE:

1. EROSION CONTROL FILTER SHALL BE FILTERMITT OR SILTSAK® OR APPROVED EQUAL.
2. EROSION CONTROL FILTER SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. COMPOST TO BE REMOVED OR DISPOSED ON-SITE AS DETERMINED BY THE ENGINEER.

MAINTENANCE

1. SILT SOCK BARRIER SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE SILT SOCK SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE BARRIER SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE BARRIER HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATION.

SILT SOCK DETAIL

NOT TO SCALE



DETAIL SHEET - GENERAL SITE
(MAP 112, LOT 11)

453 SOUTH MAIN STREET
NASHUA, NEW HAMPSHIRE

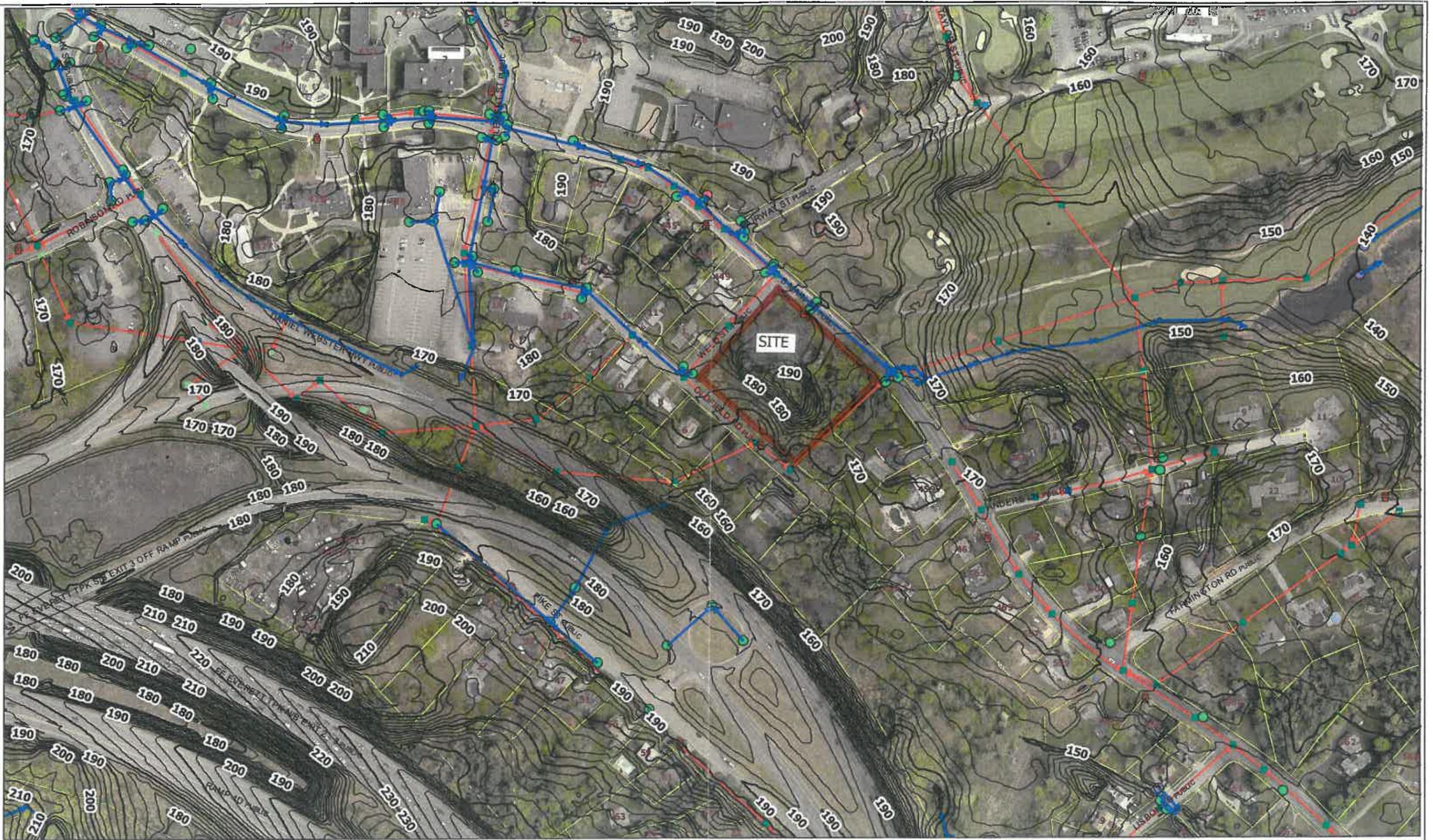
PREPARED FOR/RECORD OWNER:
STELLOS FAMILY INVESTMENT PROPERTIES, L.L.C.
125 NORTHEASTERN BOULEVARD NASHUA, NEW HAMPSHIRE 03062 (603) 552-3128

SCALE AS SHOWN

27 AUGUST 2020

HSI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors

3 Congress Street
Nashua, NH 03062
(603) 883-3037
131 Middlesex Turnpike
Sunnyvale, MA 01903
(781) 203-1501
www.hayner-swanson.com



453 South Main Street - 1,000 FT Vicinity Map



NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #7- Site Plan**

I. Project Statistics:

Owner: Granite State Credit Union
Proposal: Amendment to NR2186 to show a proposed credit union
Location: 190 Broad Street
Total Site Area: 1.224 acres (53,333 sf)
Existing Zoning: GB-General Business
Surrounding Uses: Retail and medical

II. Background Information:

According to assessing records, this parcel has been home to medical offices since the 1960's. On November 16, 2014, the planning board approved a site plan to construct a 2-story 10,388 sf multi-tenant office. In 2015, 2016 and 2017 the board granted one year extensions; however that project never moved forward. Copies of the approval letters and staff reports are attached.

III. Project Description:

The proposal is to redevelop the existing two-story 6,400 sf building and construct a new two-story, 10,000 sf credit union building. Like the current site, there will be access from Coliseum Avenue to an upper driveway entry with four drive-through lanes and one bypass lane. The lower floor of the building will face the south and contain a parking lot, with access to Norwood Street. A one-way directional travel lane will connect the north drive-through lanes to the parking lot. A total of 37 parking spaces will service the proposed credit union. On-site drainage improvements include two subsurface stormwater recharge areas. Additionally, a number of other site improvements including curbing, sidewalks, landscaping and new site lighting are proposed.

A traffic memorandum dated July 9, 2020 from Stephen G. Pernaw, P.E., PTOE has been submitted for the proposed development. The Traffic Impact Report (TIR) Threshold Worksheet demonstrates a formal Traffic Impact Report is not required. A waiver request for architectural standards has been requested.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of § 190-172(D) (3) and (4), which requires façade colors and predominant exterior building materials, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all comments in a letter Joe Mendola, Street Construction Engineer, dated _____ shall be addressed to the satisfaction of the Engineering Department.

3 Congress Street Nashua, NH 03063 (603) 883-2057
 131 Middlesex Turnpike Burlington, MA 01803 (781) 203-1501
 www.hayner-swanson.com

Hayner/Swanson, Inc.



MAP 'E', LOT 744
 SITE PLAN

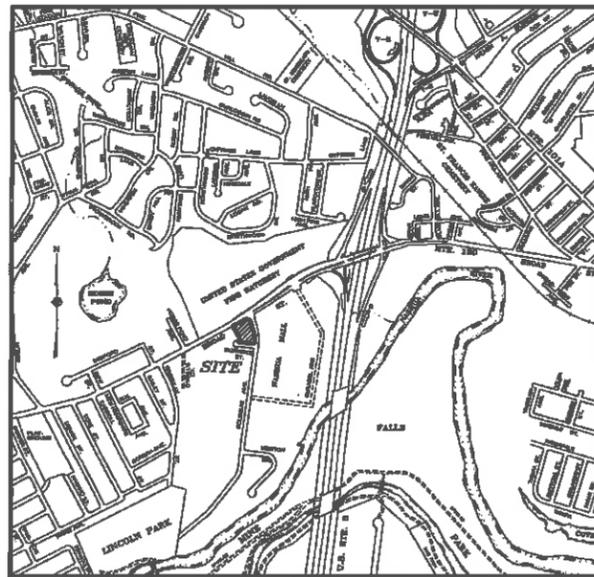
PROPOSED CREDIT UNION BUILDING

190 BROAD STREET
 NASHUA, NEW HAMPSHIRE

PREPARED FOR / RECORD OWNER

GRANITE STATE CREDIT UNION

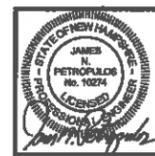
1415 ELM STREET
 MANCHESTER, NEW HAMPSHIRE 03108
 (603)-668-2221



VICINITY PLAN
 SCALE: 1"=200'

30 JULY 2020
 24 SEPTEMBER 2020

INDEX OF PLANS		
SHEET No.	TITLE	
1 OF 16	MASTER SITE PLAN	1"=30'
2 OF 16	EXISTING CONDITIONS PLAN	1"=20'
3 OF 16	SITE DEMOLITION PLAN	1"=20'
4 OF 16	SITE PLAN	1"=20'
5 OF 16	FIRE TRUCK TURNING ANALYSIS PLAN	1"=30'
6 OF 16	UTILITY PROFILES AND SMA DETAILS	H:1"=20' V:1"=4'
7-8 OF 16	DETAIL SHEET - GENERAL SITE	
9 OF 16	DETAIL SHEET - SEWER	
10 OF 16	DETAIL SHEET - WATER	
11 OF 16	EROSION CONTROL PLAN	1"=20'
12 OF 16	DETAIL SHEET - EROSION CONTROL	
13 OF 16	LANDSCAPE PLAN	1"=20'
14 OF 16	DETAIL SHEET - LANDSCAPE	
15 OF 16	PHOTOMETRIC LIGHTING PLAN	1"=20'
16 OF 16	LIGHTING SPECIFICATIONS	
BUILDING ELEVATIONS		

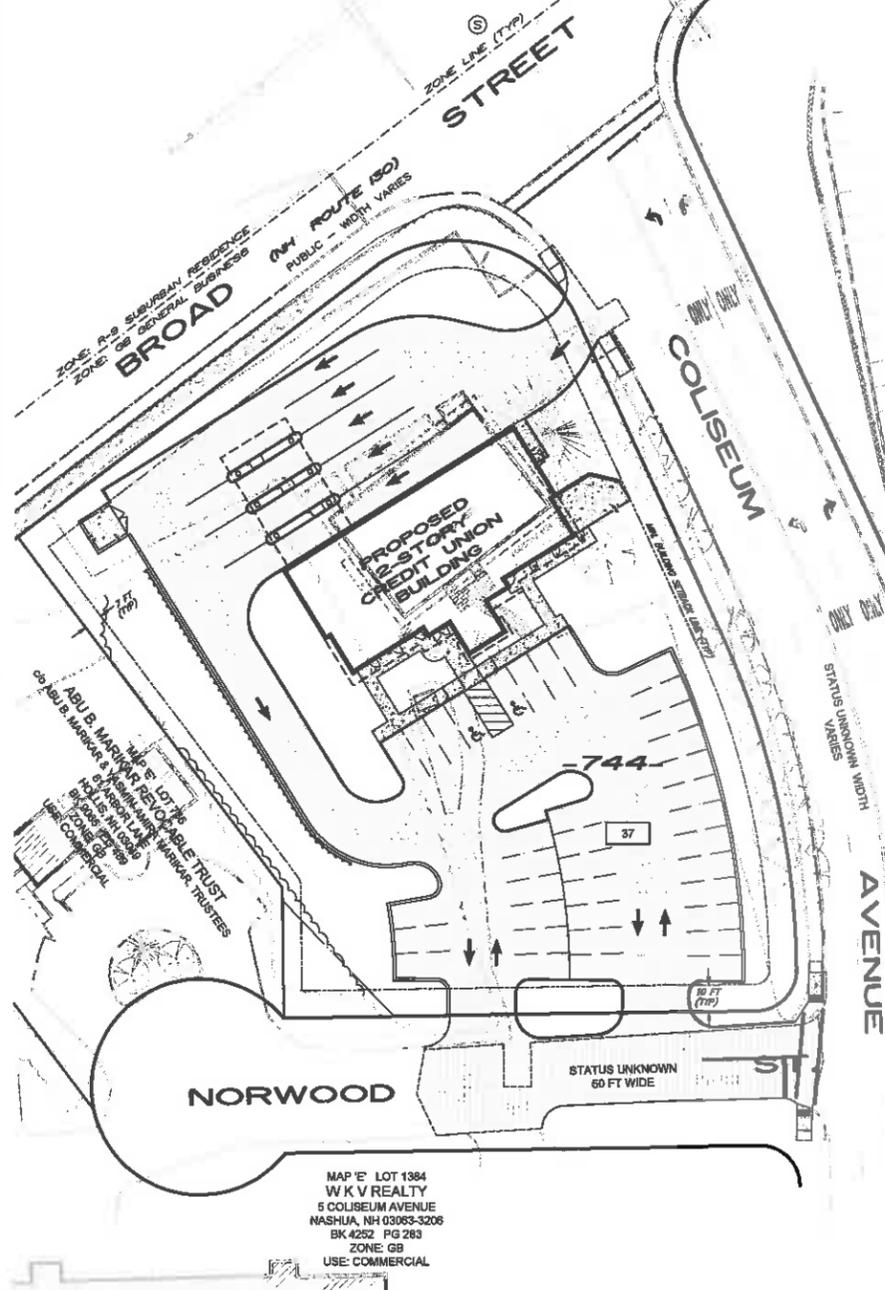


HSI Hayner/Swanson, Inc.

Civil Engineers/Land Surveyors
 3 Congress Street Nashua, NH 03062 (603) 883-2057
 131 Middlesex Turnpike Burlington, MA 01803 (781) 203-1501
 www.hayner-swanson.com



MAP 'E' LOT 42
 US FISH COMMISSION
 151 BROAD STREET
 NASHUA, NH 03063
 BK 1842 PG 287
 ZONE: R-9
 USE: HATCHERY



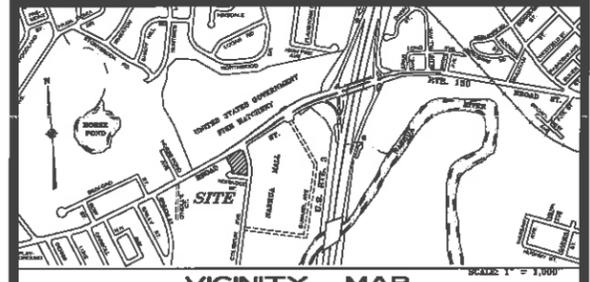
MAP 'E' LOT 2187
 VICKERRY REALTY CO
 o/a THE MEG COMPANIES
 25 ORCHARD DRIVE DRIVE
 LONDON DERRY, NH 03053
 ZONE: GB
 USE: RETAIL

MAP 'E' LOT 2188
 VICKERRY REALTY CO
 o/a THE MEG COMPANIES
 25 ORCHARD VIEW DRIVE
 LONDON DERRY, NH 03053
 ZONE: GB
 USE: RETAIL

MAP 'E' LOT 1384
 W K V REALTY
 5 COLISEUM AVENUE
 NASHUA, NH 03063-3206
 BK 4282 PG 283
 ZONE: GB
 USE: COMMERCIAL

NOTES - CONT'D:

14. ALL LIGHTING SHALL BE AS SHOWN ON THE PLANS, DIRECTED ONTO THE SITE AND CONFORM TO APPLICABLE CITY OF NASHUA LAND USE CODE REGULATIONS.
15. A PRE-CONSTRUCTION MEETING WITH THE CITY OF NASHUA PLANNING/ENGINEERING/FIRE OFFICIALS SHALL TAKE PLACE PRIOR TO ANY WORK BEING PERFORMED.
16. HOURS OF OPERATION:
 MONDAY - FRIDAY: 8:30 AM TO 5:00 PM
 SATURDAY: 8:30 AM TO 12:00 NOON
17. THE APPLICANT SHALL SUBMIT AN ELECTRONIC FILE OF THE SITE PLAN (PLOT) PRIOR TO ISSUANCE OF A BUILDING PERMIT.
18. PRIOR TO A BUILDING PERMIT BEING ISSUED, BONDING FOR ALL PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEERING DEPARTMENT AND CORPORATION COUNSEL.
19. PRIOR TO A BUILDING PERMIT BEING ISSUED, DOCUMENTS PERTAINING TO THE STORM WATER OPERATION AND MAINTENANCE PLAN SHALL BE RECORDED.
20. THE PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY No. 33007, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 3301100613D, DATED: SEPTEMBER 25, 2003.
21. ROOF DRAIN TIE-INS AND DRAIN LINES SHALL BE INSPECTED PRIOR TO BACKFILLING AND PAVING.
22. MECHANICAL APPURTENANCES, IF ANY, SHALL BE SCREENED AND FINISHED TO MATCH THE BUILDING EXTERIOR. MECHANICAL APPURTENANCES SHALL NOT EXCEED 90 DECIBELS BETWEEN 7 AM - 8 PM AND 45 DECIBELS AT NIGHT 8 PM - 7 AM ALONG RESIDENTIAL ZONING DISTRICTS.
23. THE DEVELOPER/BUILDER SHALL WORK WITH THE CITY OF NASHUA PLANNING STAFF TO OPTIMIZE SIGHT DISTANCE, WHICH MAY REQUIRE TREE REMOVAL, AT THE NORWOOD STREET/COLISEUM AVENUE INTERSECTION.
24. PRESENT OWNER OF RECORD:
 MAP 'E', LOT 744
 GRANITE STATE CREDIT UNION
 1415 ELM STREET
 MANCHESTER, NEW HAMPSHIRE 03101
 BK 9316, PG 185



PLAN REFERENCES:

1. RIVERSIDE PARK, NASHUA, NEW HAMPSHIRE, SCALE: 1"=50', DATED: AUGUST 1995. PREPARED BY: A.E. MAYNARD C.E. RECORDED: HCRD - PLAN No. 3193.
2. BOUNDARY PLAN OF LAND OF, CHANTAL VON OLDENBURG, NORWOOD STREET, SHT F -- LOT 730, NASHUA, NEW HAMPSHIRE, SCALE: 1"=20', DATED: 9 JUNE 1987, PREPARED BY: GEORGE F. KELLER ENGINEER. RECORDED: HCRD - PLAN No. 20757
3. NASHUA, NH BROAD STREET 1936 S.A.O., SCALE 1"=50', DATED JANUARY 1936 ON FILE AT THE CITY OF NASHUA PUBLIC WORKS DEPARTMENT, CITY ENGINEERS OFFICE.

NOTES:

1. SITE AREA: 1.224 ACRES (53,333 SF)
2. PRESENT ZONING: GB, GENERAL BUSINESS

MINIMUM LOT REQUIREMENTS	GB	LOT 744
- LOT AREA	10,000 SF	63,333 SF
- LOT FRONTAGE	50 FT	709 FT
- LOT WIDTH	50 FT	184.7 FT
- LOT DEPTH	76 FT	N/A FT

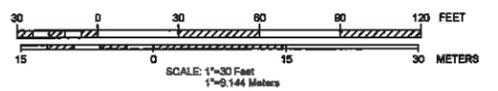
MINIMUM YARD SETBACKS	GB	LOT 744
- FRONT YARD	10 FT	33.9 FT
- SIDE YARD	7 FT	87.8 FT
- REAR YARD	10 FT	N/A FT
- MAX. BUILDING HEIGHT	80 FT	28 FT
- MAX. STORIES	8	2
- OPEN SPACE (%)	10%	37.5%
- F.A.R.	1.25	0.22

3. LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP 'E'.
4. SITE IS SERVICED BY MUNICIPAL SEWER, WATER BY PENNICKICK WATER WORKS AND UNDERGROUND TELEPHONE, ELECTRIC AND GAS UTILITIES.
5. PURPOSE OF PLAN: TO AMEND PLAN WNR-2186, TO SHOW PROPOSED 2-STORY 10,000 SF BANK BUILDING WITH DRIVE-THROUGH FACILITIES AND ACCOMPANYING SITE IMPROVEMENTS.
6. PARKING:
 REQUIRED (BANK):
 MINIMUM: 1 SPACE/500 SF ± 10,000 SF = 34 SPACES
 MAXIMUM: 1 SPACE/150 SF ± 10,000 SF = 67 SPACES
 PROVIDED: (INCLUDING 2 RESERVED SPACES) = 37 SPACES
7. THE SUBJECT PROPERTY WAS INSPECTED BY A CERTIFIED WETLAND SCIENTIST ON AUGUST 28, 2014 AT THE DATE OF THE INSPECTION, IT WAS DETERMINED THAT THERE ARE NO WETLANDS OR ASSOCIATED BUFFERS AFFECTING THE PROPERTY.
8. ALL LANDSCAPING SHALL BE AS SHOWN ON THE PLANS AND CONFORM TO THE APPLICABLE CITY OF NASHUA LAND USE CODE UNDER ARTICLE 8 XV.
9. ALL SIGNAGE SHALL CONFORM TO THE APPLICABLE CITY OF NASHUA REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
10. SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION, GRADE AND NUMBER OF PARKING SPACES.
11. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.
12. PUBLIC STREET RESTORATION WORK SHALL BE IN ACCORDANCE WITH N.R.O. SECTION 285-13, LATEST EDITION.
13. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS, EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL-DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.

No.	DATE	REVISION	BY
1	06/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	6JA

MASTER SITE PLAN
 (LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
 190 BROAD STREET
 NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221



30 JULY 2020

HISJ Hayner/Swanson, Inc.
 Civil Engineer/Lead Surveyor
 3 Congress Street
 Nashua, NH 03063
 (603) 883-2037
 237 Middlesex Turnpike
 Burlington, MA 01803
 (781) 203-1501
 www.hayner-swanson.com



FIELD BOOK: ---	DRAWING NAME: 2292CU F031	5292	1 OF 16
DRAWING LOG: G:\2292\01\ 590	File Name: ---	Sheet: ---	

APPROVED
 NASHUA CITY PLANNING BOARD

CHAIRMAN _____ DATE _____

*** ZONING NOTE ***
 THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY HAYNER/SWANSON, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUYER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE SITE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

[Signature] 7-13-2020
 FOR GRANITE STATE CREDIT UNION DATE



CERTIFICATION

I HEREBY CERTIFY, TO MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN SHOWS THE RESULTS OF AN ON THE GROUND "STANDARD PROPERTY SURVEY" AND THAT SAID SURVEY MEETS THE MINIMUM PRECISION AND/OR ACCURACY MEASUREMENTS FOR SURVEY CLASSIFICATION "U" (URBAN) AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS ADOPTED 08/23/01, EFFECTIVE 01/01/08.

I FURTHER CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN FIFTEEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY.

DATE 9-28-20



ZONING NOTE

THE ZONING/BUILDING RETRACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INFERRED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY HAYNER/SWANSON, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE OUTCOME, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO ENSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

UTILITY NOTE

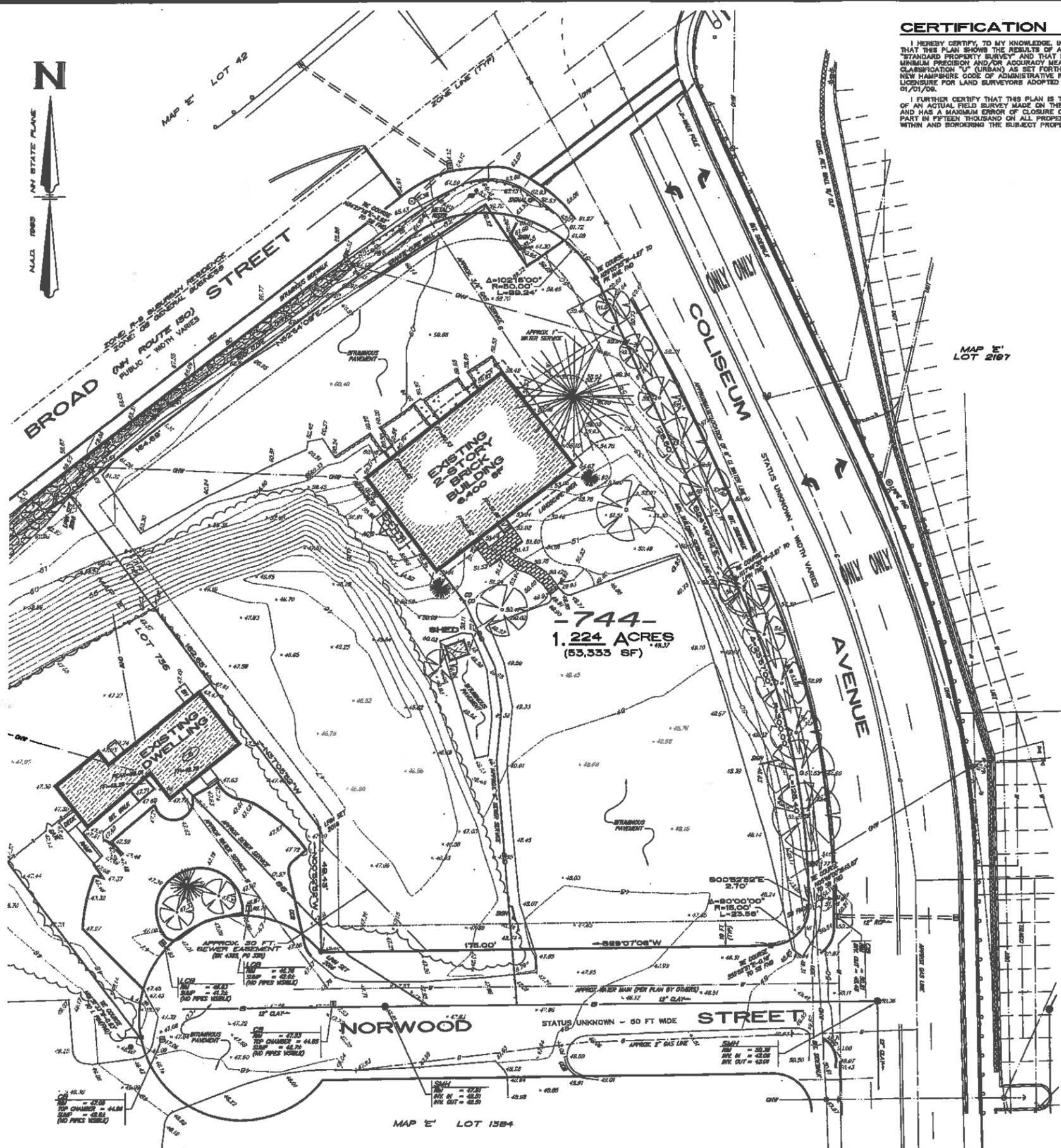
THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES DEPICTED CORRESPOND TO ALL SUCH UTILITIES IN THE AREA, EITHER IN KIND OR IN LOCATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNRECORDED PORTIONS OF THE UTILITIES.

GENERAL NOTES:

1. THE EXISTING TOPOGRAPHY, AS SHOWN ON THE PLANS, IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND IN AUGUST 2014.
2. THE NASHUA CITY DATUM HAS BEEN USED ON THIS PROJECT. (NASHUA CITY DATUM TO NGVD 1929 DATUM = + 90.47).
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY OF THE EXISTING TOPOGRAPHY PRIOR TO EARTHWORK OPERATIONS. NO CLAIM FOR EXTRA WORK DUE TO TOPOGRAPHIC INACCURACY SHALL BE CONSIDERED AFTER EARTHWORK HAS COMMENCED.
4. THE CONTRACTOR SHALL ONLY USE BENCHMARKS AS PROVIDED BY THE ENGINEER.
5. MAP E, LOT 744 IS SUBJECT TO THE RESTRICTIONS CONTAINED IN THE DEED FROM F.N.M., INC. RECORDED AT BOOK 2586, PAGE 62 AS AMENDED BY THE LIMITED WARRANTY OF VICKERY REALTY CO. TRUST RECORDED AT BOOK 8316, PAGE 173 AND THE CONSENT AND WAIVER OF TD BANK, NA AS RECORDED AT BOOK 8316 PAGE 176

LEGEND

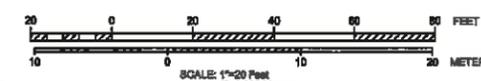
- 100 — EXISTING GROUND CONTOUR
- +50.5 EXISTING SPOT ELEVATION
- 100 — PROPOSED GRADE
- +100.5 PROPOSED SPOT GRADE
- S — STORM DRAIN & CATCH BASIN
- S — STORM DRAIN & MANHOLE
- S — SANITARY SEWER & MANHOLE
- W — WATER MAIN & HYDRANT
- W — WATER MAIN & GATE VALVE
- G — GAS LINE & GATE VALVE
- U — UTILITY POLE WITH GUY SUPPORT
- S — STREET LIGHT
- O — OVERHEAD ELECTRIC & TELEPHONE
- U — UNDERGROUND ELEC./TEL. & MANHOLES
- S — SIGN
- T — TREE LINE
- S — STONE BOUND
- I — IRON PIN
- S — BUILDING SETBACK LINE
- C — CHAINLINK FENCE
- C — CAPE COD BERM
- V — VERTICAL GRANITE CURBING
- S — SLOPE GRANITE CURBING
- S — STORMWATER RUNOFF DIRECTION
- H — HANDICAP PARKING SPACE
- H — HANDICAP SIDEWALK RAMP
- C — PARKING SPACE COUNT
- G — GUARD RAIL
- S — PAVEMENT SAWCUT
- C — CONCRETE
- P — PROPOSED FULL-DEPTH PAVEMENT
- P — PROPOSED MILL/FILL PAVEMENT
- S — RIPRAP / STONE
- S — RETAINING WALL
- T — CONIFEROUS TREE
- D — DECIDUOUS TREE
- S — STREET ADDRESS



No.	DATE	ADDRESS TECHNICAL REVIEW COMMENTS	BY
1	09/28/20		BJA

EXISTING CONDITIONS PLAN
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
150 BROAD STREET
NASHUA, NEW HAMPSHIRE

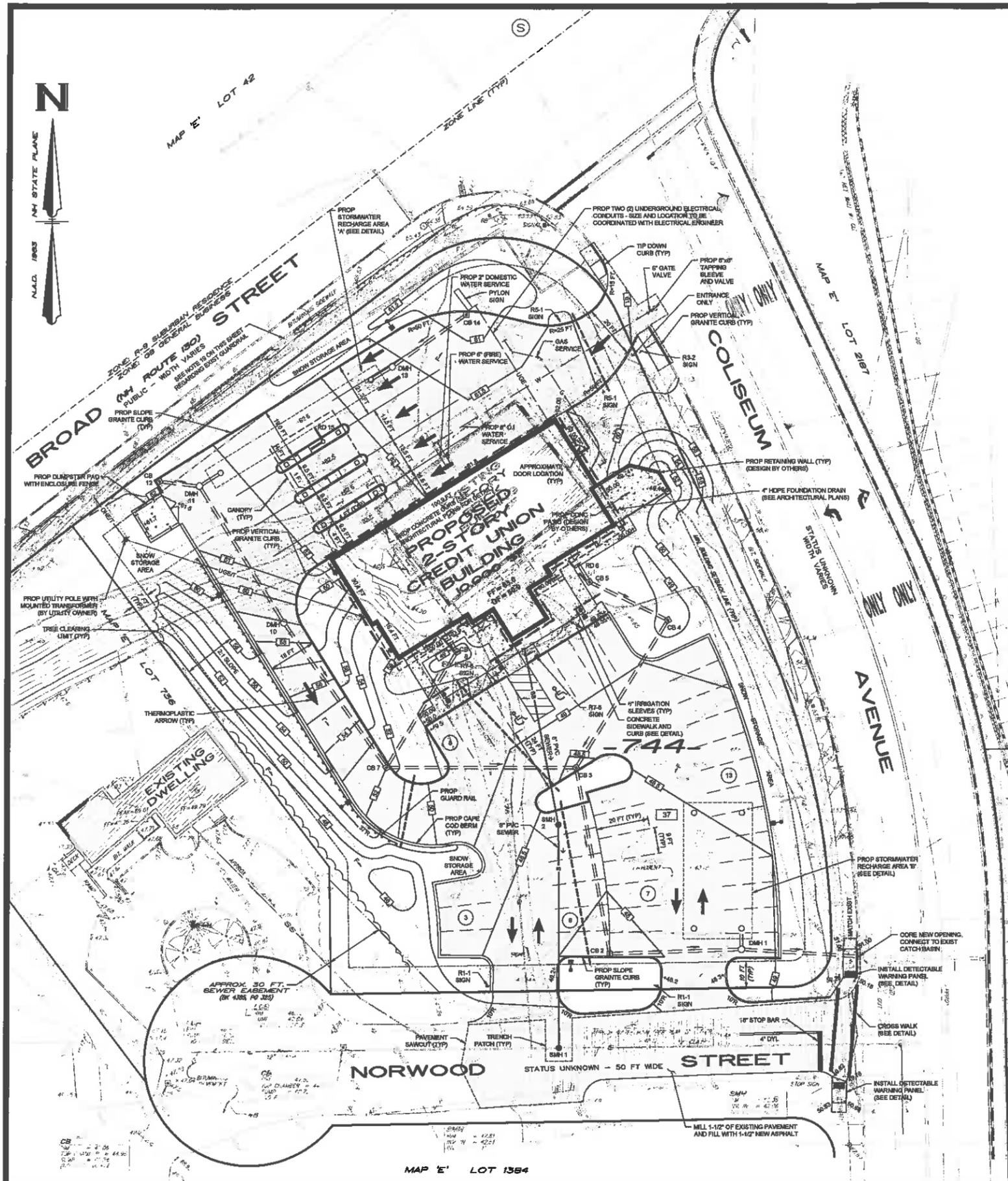
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 866-2221



30 JULY 2020

HSI Hayner/Swanson, Inc.
Civil Engineer/Lead Surveyor
3 Congress Street
Nashua, NH 03083
(603) 883-9057
www.haynerswanson.com

© Hayner/Swanson, Inc.



CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
- ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT 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 TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7283 AT LEAST 72 HOURS BEFORE DIGGING.
- BLASTING, IF NEEDED, SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NASHUA FIRE DEPARTMENT REGULATIONS.
- ALL STUMPS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IMMEDIATELY UPON BEING CONSTRUCTED.
- ALL DRAINAGE PIPE SHALL BE FURNISHED AND INSTALLED WITH FLEXIBLE GASKETS. JOINTS SHALL BE MADE WITH OIL RESISTANT COMPRESSION RINGS OF AN ELASTOMERIC MATERIAL CONFORMING TO ASTM C-443. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE FOLLOWED.
- ALL DRAINAGE PIPES SHALL BE CLASS IV 3000 D (RCP) UNLESS OTHERWISE NOTED. CATCH BASINS SHALL BE TYPE B, AND HAVE 4 FT SLABS UNLESS OTHERWISE NOTED.
- SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLANS AND SPECIFICATIONS AND WITH THE REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL SERVICES, WS 4 POC AND ANY STRICTER REQUIREMENTS OF DIVISION 3 - SANITARY SEWERS, OF THE STANDARD SPECIFICATIONS OF SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, LATEST EDITION.
- SEWER SHALL BE SOLID WALL PVC UNLESS OTHERWISE REQUIRED BY THESE SPECIFICATIONS. SEWER SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY AND 18 INCHES VERTICALLY FROM WATER LINES. WHENEVER SEWER MUST CROSS WATER MAINS, SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
 - SEWER PIPE SHALL BE CLASS 52 DUCTILE IRON FOR A MINIMUM DISTANCE OF 8 FEET EACH SIDE OF THE CROSSING.
 - JOINTS SHALL BE MECHANICAL TYPE WATER PRESSURE RATED WITH ZERO LEAKAGE WHEN TESTED AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWERS AND 1-1/2 TIMES WORKING PRESSURE FOR FORCE MAINS. JOINTS SHALL NOT BE LOCATED WITHIN 8 FEET OF THE CROSSING.
- THE CONTRACTOR SHALL COORDINATE THE EXACT SIZE, LOCATION AND ELEVATION OF ALL ROOF DRAINS AND SEWER SERVICE CONNECTIONS PRIOR TO THE CONSTRUCTION OF THE BUILDING.
- ROOF DRAIN TIE-INS AND DRAIN LINES WILL BE INSPECTED PRIOR TO BACKFILLING AND PAVING.
- FOUNDATION DRAINS, IF NECESSARY, SHALL BE COORDINATED WITH THE ARCHITECT AND ENGINEER PRIOR TO CONSTRUCTION.
- ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- DIMENSIONS TO CURB AND GUTTERS INDICATE EDGE OF PAVING UNLESS OTHERWISE NOTED.
- EXISTING PAVEMENT SHALL BE SAWCUT AS NECESSARY. CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING PAVEMENT.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND DETAILS.
- THE CONTRACTOR SHALL MONITOR THE EXISTING QUADRAL ALONG BROAD STREET DURING CONSTRUCTION AND REPORT ANY CHANGES, IF ANY, TO THE ENGINEER.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL DIG TEST PITS AND PERFORM PERMEABILITY TESTING IN THE VICINITY OF SMA 'A' AND SMA 'B'. RESULTS SHALL BE REPORTED TO THE ENGINEER.

CITY OF NASHUA CONTACTS

PLANNING DEPARTMENT
COMMUNITY DEVELOPMENT DIVISION
228 MAIN STREET
NASHUA, NH 03080
ATT: LINDA MCGHEE
(603) 598-3110

ENGINEERING DEPARTMENT
NASHUA DIVISION OF
PUBLIC WORKS / ENGINEERING
9 RIVERSIDE STREET
NASHUA, NH 03062
ATT: JOE MENDOLA
(603) 598-3124

FIRE DEPARTMENT
NASHUA FIRE RESCUE
177 LAKE STREET
NASHUA, NH 03082
ATT: ADAM POLJOT
(603) 598-3480

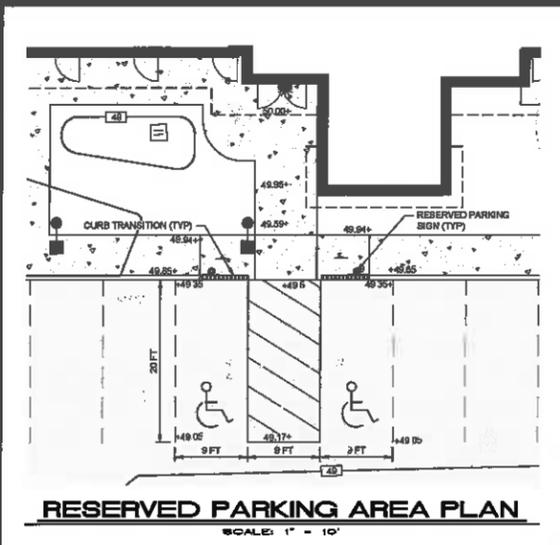
UTILITY CONTACTS

WATER:
PENNICUK WATER WORKS
28 MANCHESTER STREET
MERRIMACK, NH 03064
ATT: JOHN BOISVERT, PE
(603) 913-2200

TELEPHONE:
CONSOLIDATED COMMUNICATIONS
100 BAY STREET
MANCHESTER, NH 03103
ATT: ROBERTO DIAZ
(603) 292-5288

POWER:
EVERSOURCE
370 AMHERST STREET
NASHUA, NH 03080
ATT: MARC GAGNON
(603) 882-8884

GAS:
LIBERTY UTILITIES
11 NORTHEASTERN BOULEVARD
SALEM, NH 03079
ATT: ANDREW MORGAN
(603) 327-5387



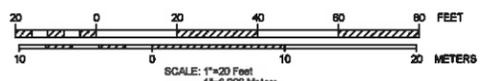
SIGN LEGEND

TEXT	IDENTIFICATION NUMBER	SIZE WIDTH/HEIGHT
SEE MUTCD FOR TEXT DIMENSIONS		
	R1-1	30" / 30"
	R5-1	30" / 30"
	R3-2	36" / 36"

SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS

SITE PLAN
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

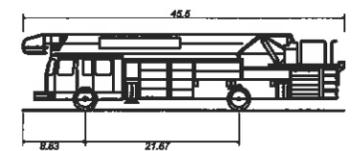
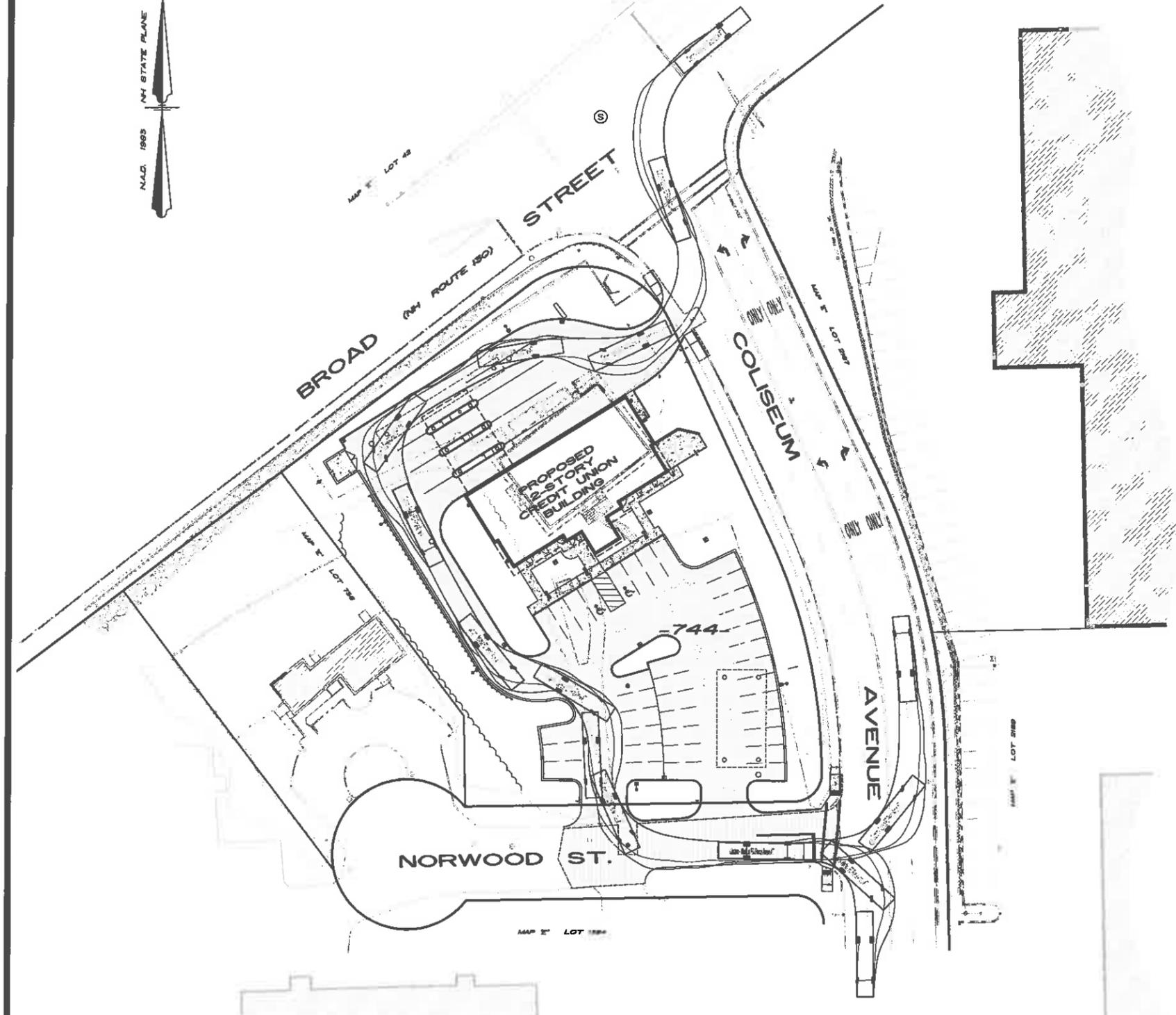
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221



30 JULY 2020

HSI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors
3 Congress Street
Nashua, NH 03062
(603) 883-4057
www.haynerswanson.com

FIELD BOOK: --	DRAWING NAME: 529201 F021	5292	4 OF 16
DRAWING LOC: Q:\5292\001.DWG		Per: [Signature]	Sheet

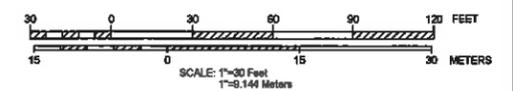


Custom - Nashua FD Pierce Arrow-XT
 Overall Length 45.500ft
 Overall Width 8.670ft
 Overall Body Height 10.622ft
 Min Body Ground Clearance 1.052ft
 Track Width 9.085ft
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 36.920ft

No.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	MA

FIRE TRUCK TURNING ANALYSIS PLAN
 (LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
 190 BROAD STREET
 NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 868-2221



30 JULY 2020

HSI Hayner/Swanson, Inc.
 Civil Engineer/Land Surveyor
 3 Congress Street
 Nashua, NH 03063
 (603) 883-2057
 www.hayner-swanson.com

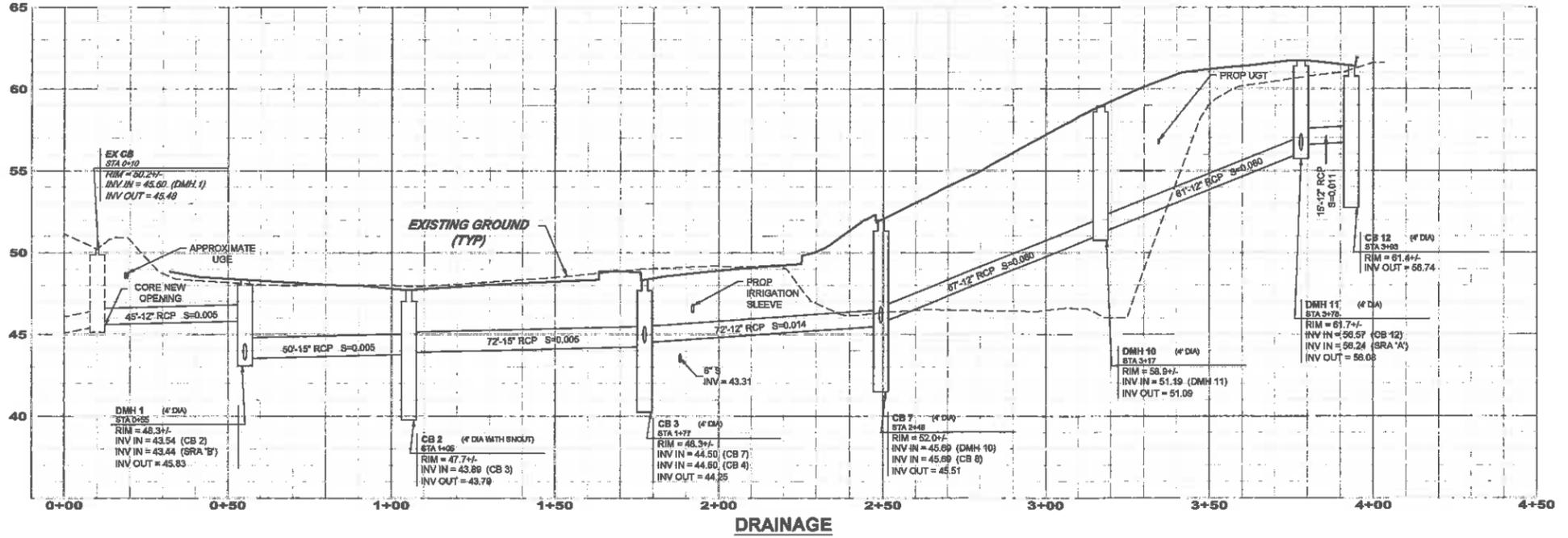
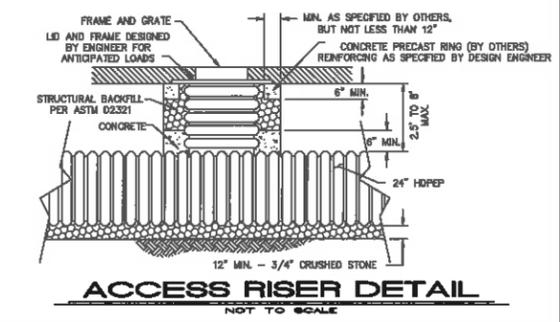
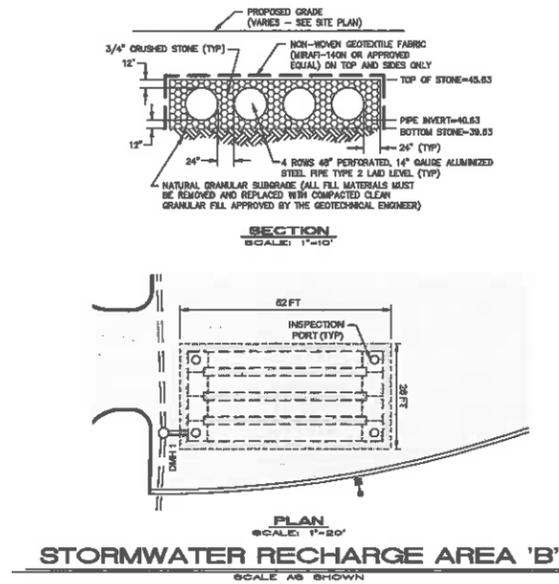
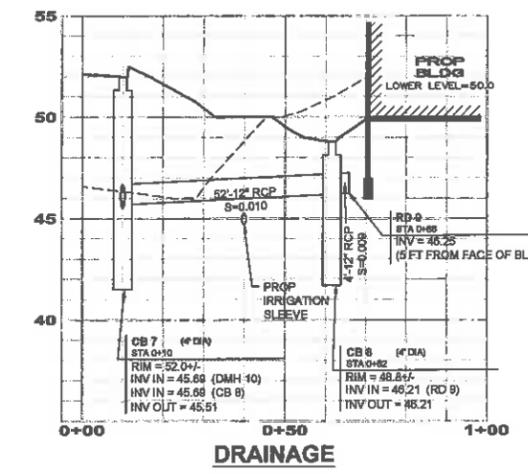
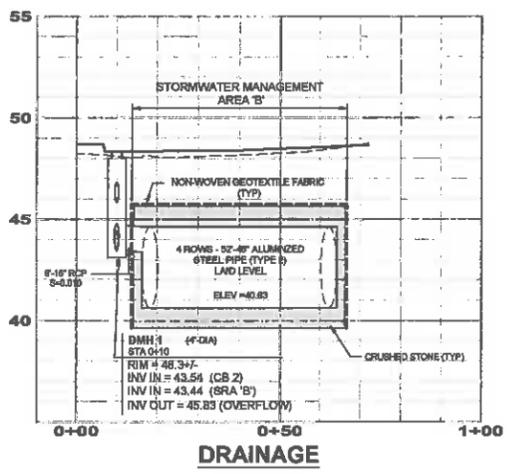
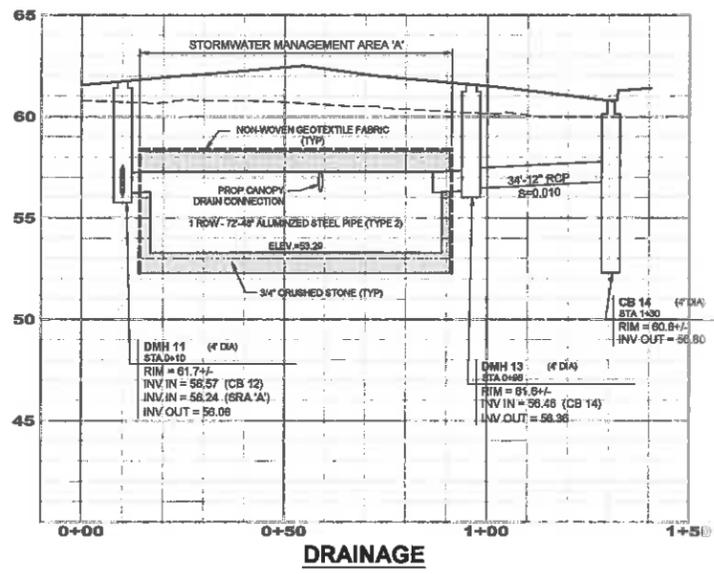
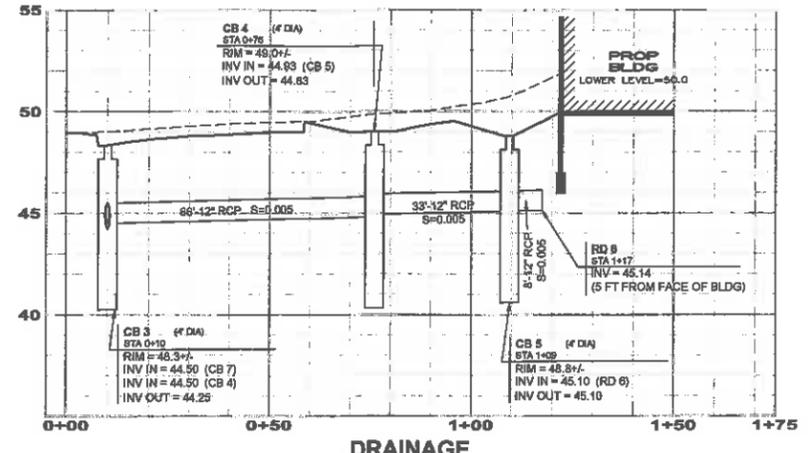
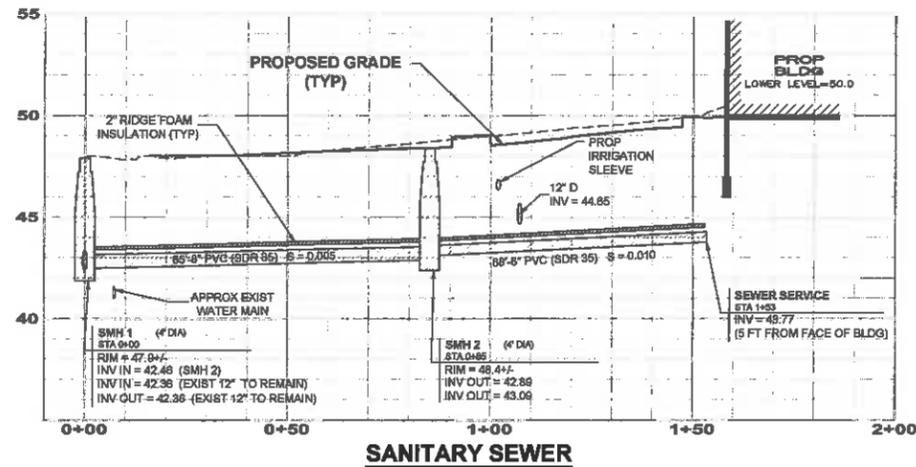


NOTES

- STRUCTURE DIAMETERS AS SHOWN ON DRAINAGE PROFILES ARE CONSIDERED TO BE MINIMUM INSIDE DIMENSIONS. ALL STRUCTURES SHALL BE A MINIMUM INSIDE DIAMETER OF 48" UNLESS OTHERWISE INDICATED. LARGER STRUCTURES MAY BE NECESSARY DUE TO ALIGNMENT AND/OR PIPE SIZES. STRUCTURE MANUFACTURER SHALL DETERMINE FINAL SIZE.
- PIPE LENGTHS ARE MEASURED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
- EXTERIOR FOUNDATION WALLS AND FOOTINGS AS SHOWN ARE APPROXIMATE. REFER TO ARCHITECTURAL PLANS.

STORMWATER RECHARGE AREA NOTES

- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED SUBSURFACE STORMWATER MANAGEMENT AREA, FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE PREPARED BY A NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.
- DIMENSIONS OF THE PIPE/FIELD ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
- SYSTEM IS TO BE DESIGNED FOR H20 AND H25 LOADING.
- PRIOR TO CONSTRUCTION, THE ENGINEER SHALL WITNESS A TEST FIT AND PERFORM A PERCOLATION TEST AT THE PROPOSED STORMWATER RECHARGE AREAS. THE RESULTS SHALL BE SUBMITTED TO THE CITY OF NASHUA ENGINEERING DEPARTMENT.



NO.	DATE	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	BY
1	09/24/20		SJA

UTILITY PROFILES AND STORMWATER MANAGEMENT AREA (SMA) DETAILS (LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING

190 BROAD STREET NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER

GRANITE STATE CREDIT UNION

1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 868-2221

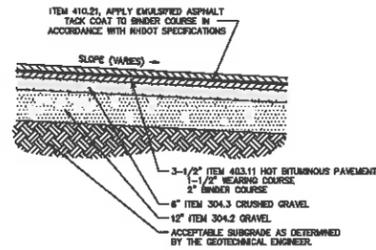
SCALE: HORIZ. 1" = 20 Feet
VERT. 1" = 4 Feet

30 JULY 2020

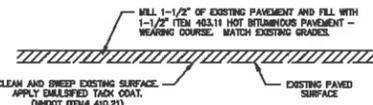
HISI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors
121 Middlesex Turnpike
Nashua, NH 03063
(603) 883-2057
www.hayner-swanson.com

FIELD BOOK: — DRAWING NAME: 5292CU FY21 5292 6 OF 16
DRAWING LOC: 0:5292/CIVL.DWG PLS. NUMBER: 5292

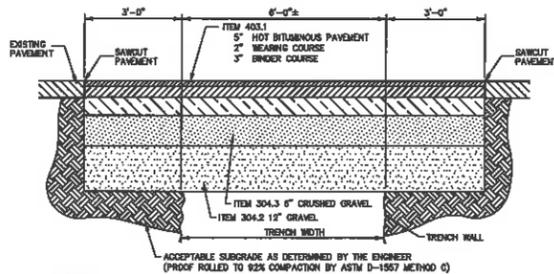




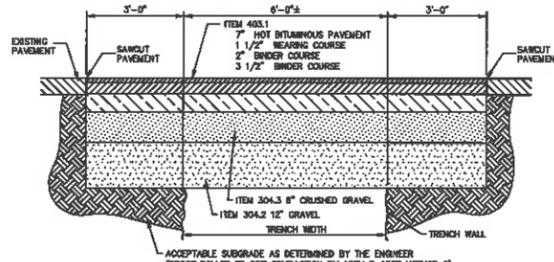
TYPICAL PAVEMENT SECTION
NOT TO SCALE



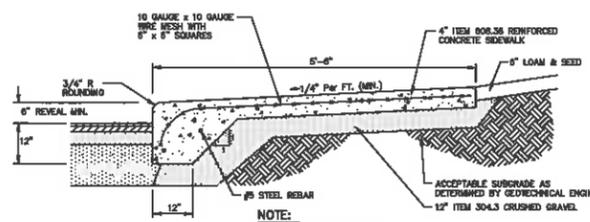
PAVEMENT MILL/FILL DETAIL
NOT TO SCALE



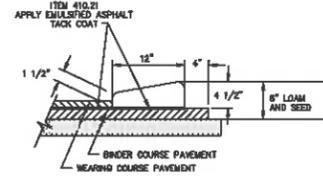
TRENCH PATCH DETAIL NORWOOD STREET
NOT TO SCALE



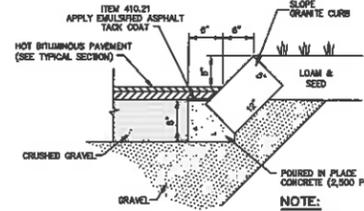
TRENCH PATCH DETAIL COLISEUM AVENUE
NOT TO SCALE



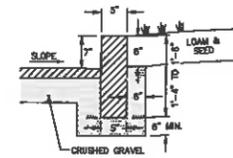
CONCRETE SIDEWALK AND CURB DETAIL
NOT TO SCALE



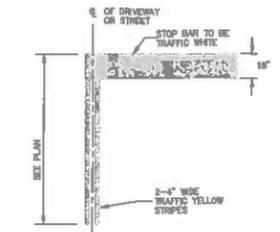
CAPE COD BERM DETAIL
NOT TO SCALE



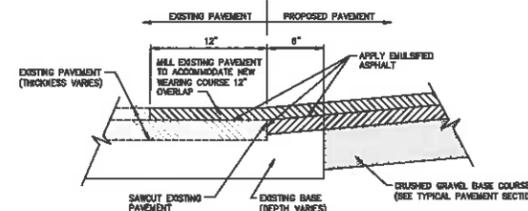
SLOPE GRANITE CURB DETAIL
NOT TO SCALE



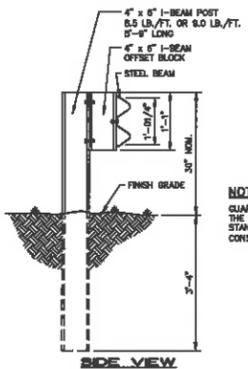
STRAIGHT OR CURVED GRANITE CURB
(ITEM 608.1 OR 608.3-MODIFIED)
NOT TO SCALE



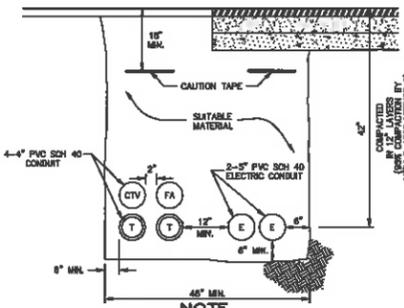
STOP BAR DETAIL
NOT TO SCALE



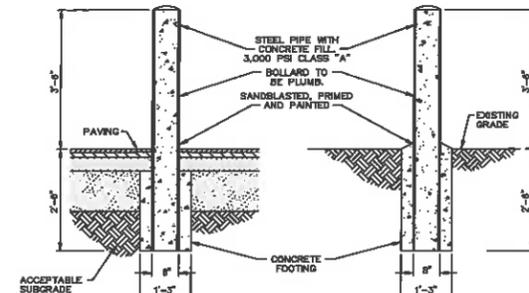
SAWCUT PAVEMENT DETAIL
NOT TO SCALE



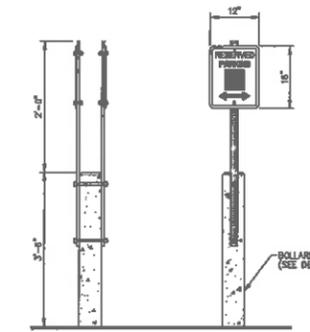
STEEL POST GUARDRAIL DETAIL
NOT TO SCALE



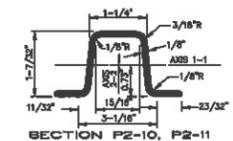
TYPICAL UTILITY TRENCH
NOT TO SCALE



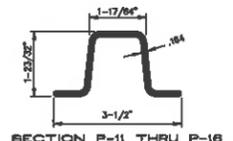
BOLLARD DETAIL
NOT TO SCALE



RESERVED PARKING SIGN DETAIL
NOT TO SCALE

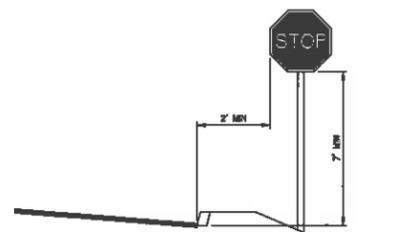


SECTION P2-10, P2-11
LENGTH: P2-10, 10'-0", P2-11, 11'-0"
WEIGHT PER LINEAR FOOT: 3.00 LBS
STEEL: 3/8" DIA. 1" O-D FULL LENGTH
FINISH: SHALL BE PAINTED WITH TWO COATS OF ENAMEL OR USE AN OTHER FINISH OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT.

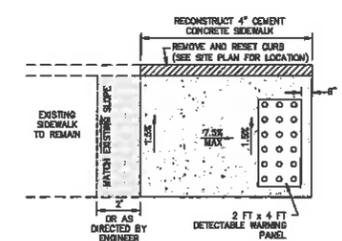


SECTION P-11 THRU P-16
LENGTH: P-11, 11'-0", P-12, 12'-0", P-14, 14'-0", P-15, 15'-0"
WEIGHT PER LINEAR FOOT: 3.00 LBS
STEEL: SAME AS FOR P2-10, P2-11
FINISH: SAME AS FOR P2-10, P2-11
DIMENSIONS SHOWN ARE NOMINAL. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

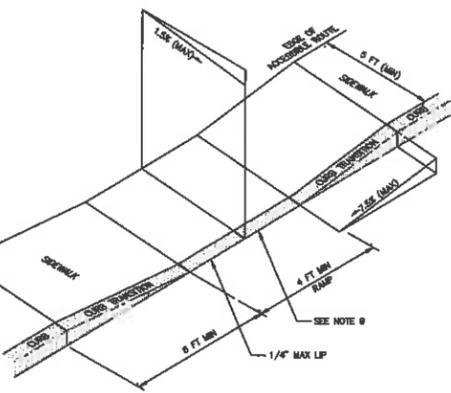
TRAFFIC SIGN SUPPORT DETAIL
NOT TO SCALE



STOP SIGN LOCATION DETAIL
NOT TO SCALE



COLISEUM AVENUE SIDEWALK DETAIL
NOT TO SCALE



HANDICAP ACCESSIBLE CURB RAMP DETAIL
NOT TO SCALE

- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB CROSS SLOPES SHALL BE 1:50 (1% MIN).
 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 1:50.
 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E. HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
 5. CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
 6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
 7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5 FT IN WIDTH (EXCLUDING CURB) A 5 FT x 5 FT PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 9. ELIMINATE ALL CURBING AT RAMP OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH WITH ADJACENT PAVEMENT.

No.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	SJA

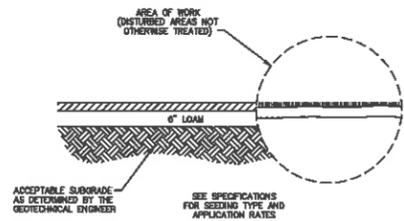
DETAIL SHEET - GENERAL SITE
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221

SCALE AS SHOWN
30 JULY 2020

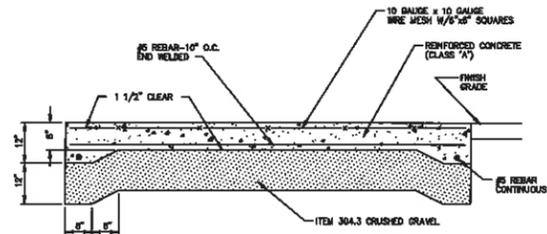
HISI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors
121 Middlesex Turnpike
Nashua, NH 03063
(603) 883-2057
www.hisyswanson.com

FIELD BOOK: — DRAWING NAME: 52820U DET1 5292 7 OF 16
DRAWING LOC: G:\2020\CIVIL DWG

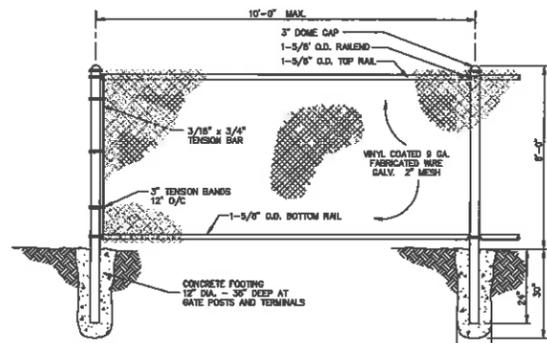




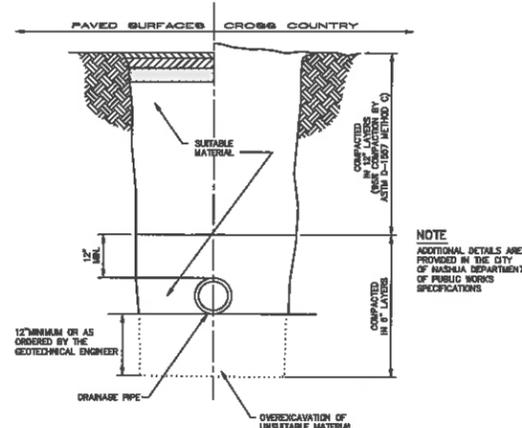
LOAM AND SEED DETAIL
NOT TO SCALE



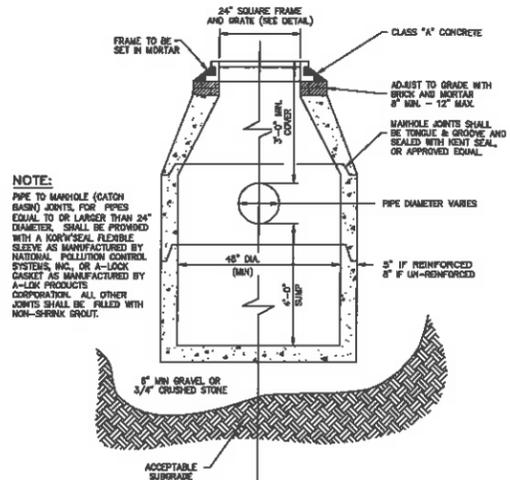
DUMPSTER PAD DETAIL
NOT TO SCALE



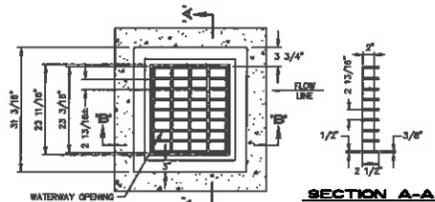
CHAINLINK (6'-0\") FENCE DETAIL
NOT TO SCALE



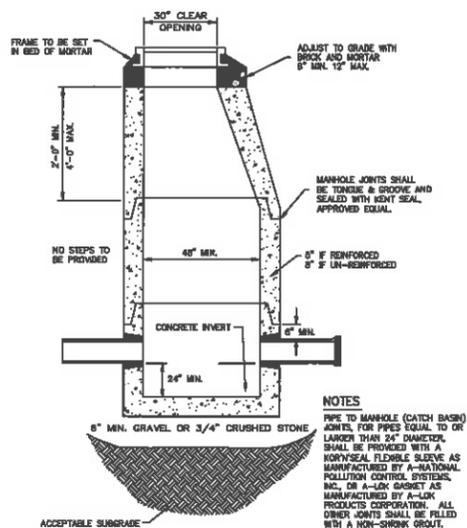
TYPICAL DRAINAGE TRENCH SECTION
NOT TO SCALE



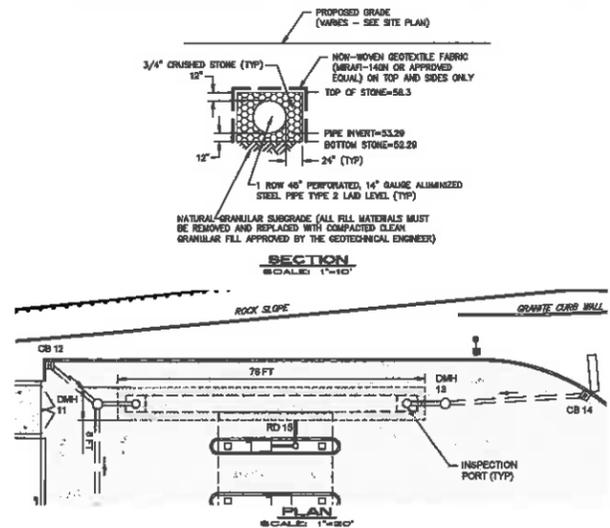
CATCH BASIN DETAIL
NOT TO SCALE



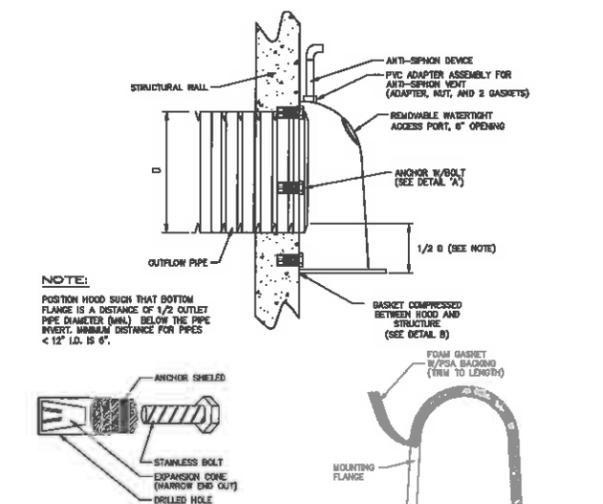
CATCH BASIN - TYPE B FRAME AND COVER DETAIL
NOT TO SCALE



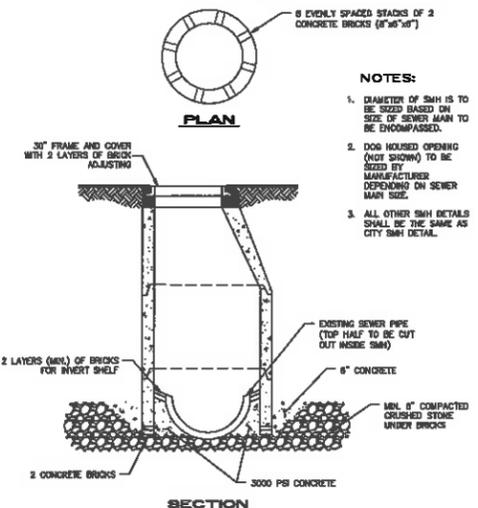
DRAIN MANHOLE DETAIL
NOT TO SCALE



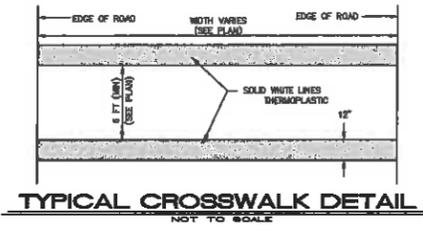
STORMWATER RECHARGE AREA 'A'
SCALE AS SHOWN



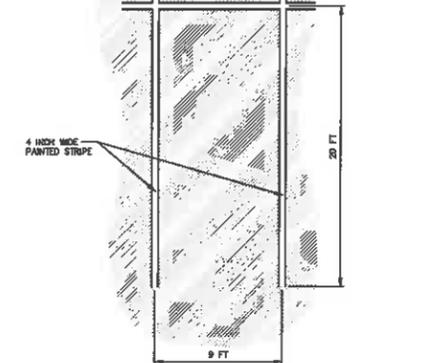
SNOUT® OIL AND DEBRIS STOP DETAIL
NOT TO SCALE



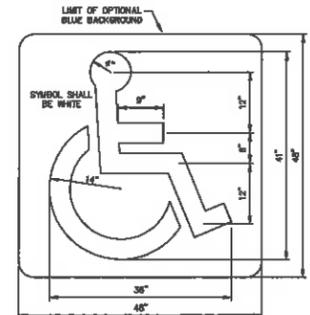
DROP OVER SEWER MANHOLE
NOT TO SCALE



TYPICAL CROSSWALK DETAIL
NOT TO SCALE



TYP. PARKING STALL DETAIL
NOT TO SCALE



ACCESSIBLE PARKING SPACE PAVEMENT MARKING
NOT TO SCALE

NO.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	SA

DETAIL SHEET - GENERAL SITE
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

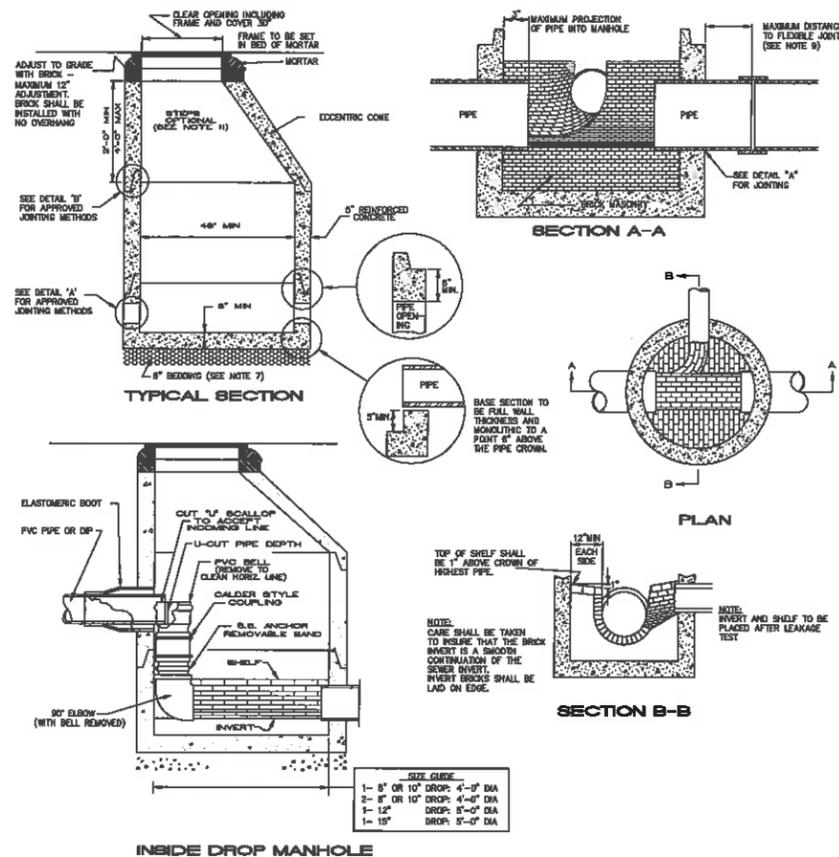
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221

SCALE AS SHOWN

30 JULY 2020

HISI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors
3 Congress Street 151 Middlesex Turnpike
Nashua, NH 03062 Danbury, MA 01903
(603) 883-2057 (781) 203-1501
www.hayner-swanson.com

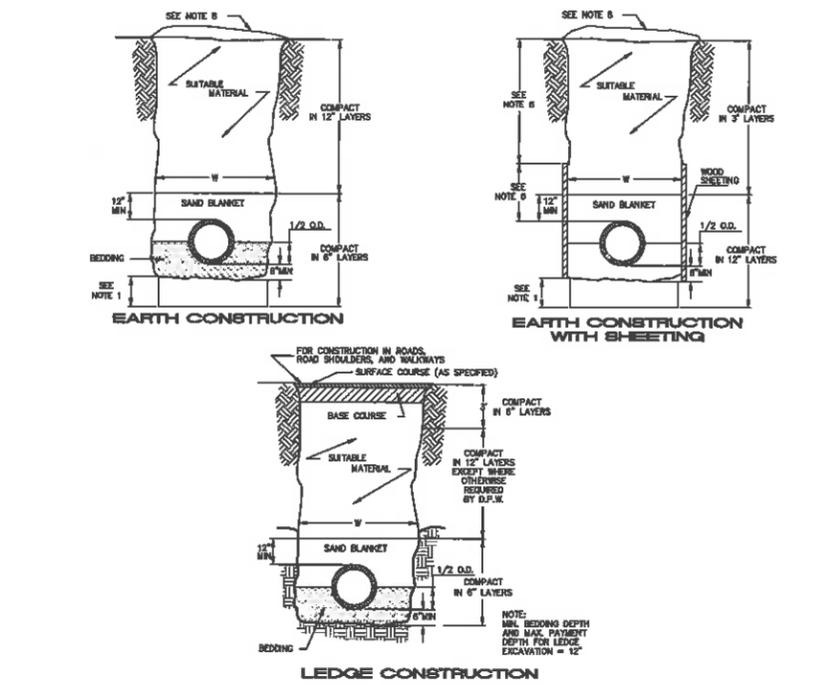




STANDARD MANHOLE - PART A

NOTES

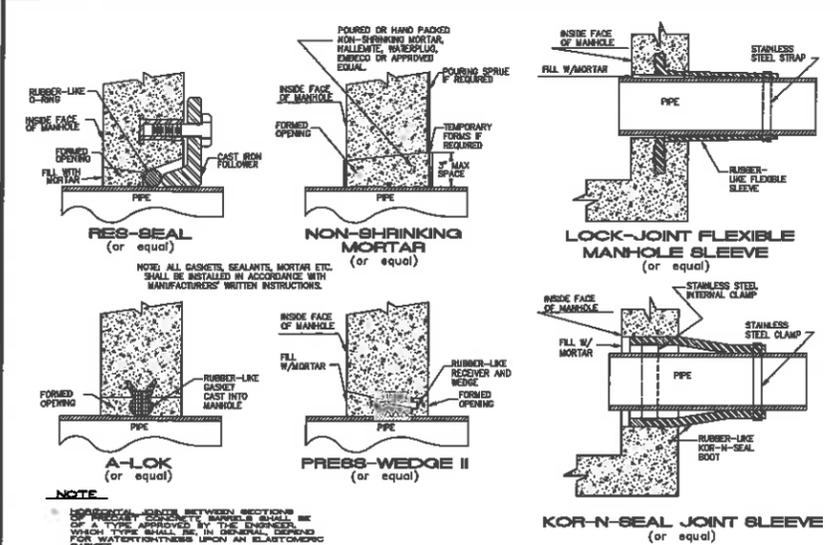
1. ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, AS APPLICABLE TO THE STATE OF NEW HAMPSHIRE.
2. PRECAST CONCRETE MANHOLE SECTIONS, JOINTS AND BASES SHALL CONFORM TO ASTM C 478.
3. BRICKS AND REINFORCING BARS SHALL HAVE A TENSILE STRENGTH CONFORMING TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, AS APPLICABLE TO THE STATE OF NEW HAMPSHIRE.
4. BRICKS SHALL BE Laid IN A COURSE AND SHALL BE SET IN A BED OF MORTAR.
5. THE TOP OF THE MANHOLE SHALL BE FINISHED TO THE FINISH GRADE.
6. THE MANHOLE SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 4 FEET.
7. THE MANHOLE SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 4 FEET.
8. THE MANHOLE SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 4 FEET.
9. THE MANHOLE SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 4 FEET.
10. THE MANHOLE SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 4 FEET.



STANDARD TRENCH SECTION

NOTES

1. EXCAVATION OF UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH BEDDING MATERIAL.
2. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
3. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
4. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
5. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
6. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
7. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
8. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
9. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.
10. BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE 1/2" TO 1" IN SIZE.

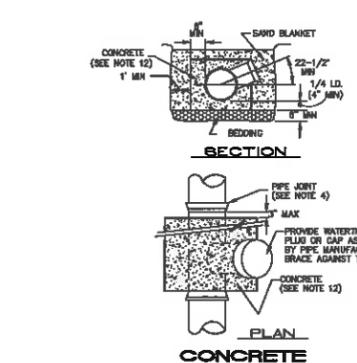


DETAIL A

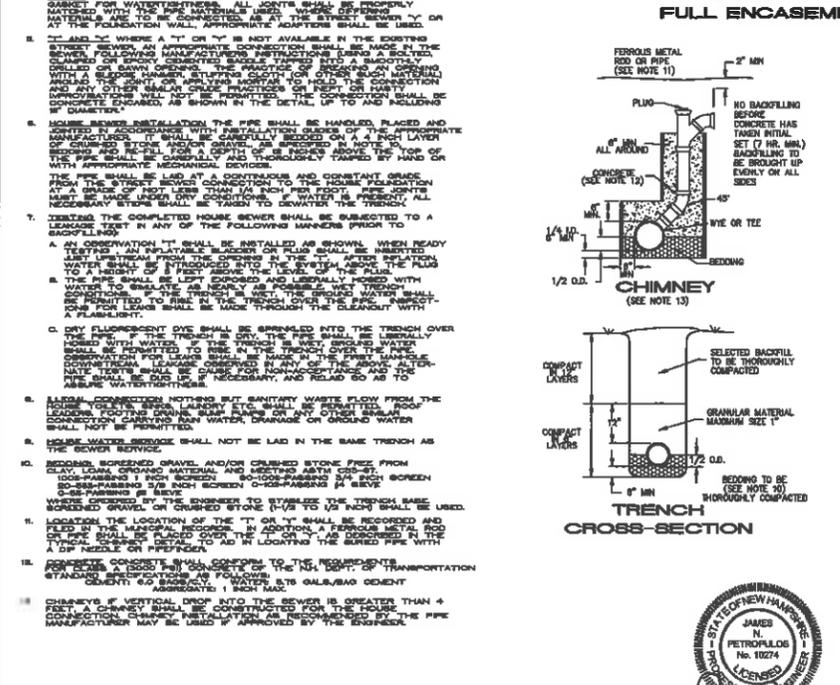
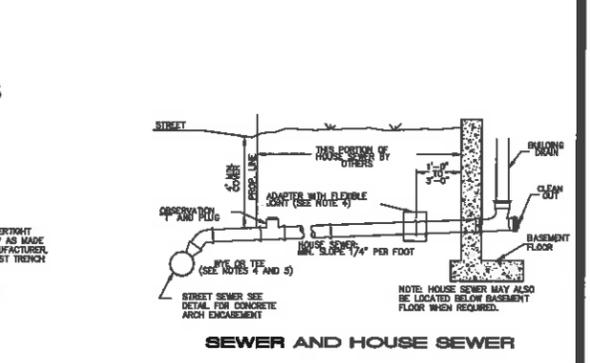
STANDARD MANHOLE - PART B

NOTES

1. MANHOLE SIZE FOR HOUSE SERVICE SHALL BE 8 INCHES.
2. SEE AND JOINT MATERIALS.
3. SEE AND JOINT MATERIALS.
4. SEE AND JOINT MATERIALS.
5. SEE AND JOINT MATERIALS.
6. SEE AND JOINT MATERIALS.
7. SEE AND JOINT MATERIALS.
8. SEE AND JOINT MATERIALS.
9. SEE AND JOINT MATERIALS.
10. SEE AND JOINT MATERIALS.



CONCRETE FULL ENCASUREMENT



HOUSE SEWER DETAILS

DETAIL SHEET - SEWER
(LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

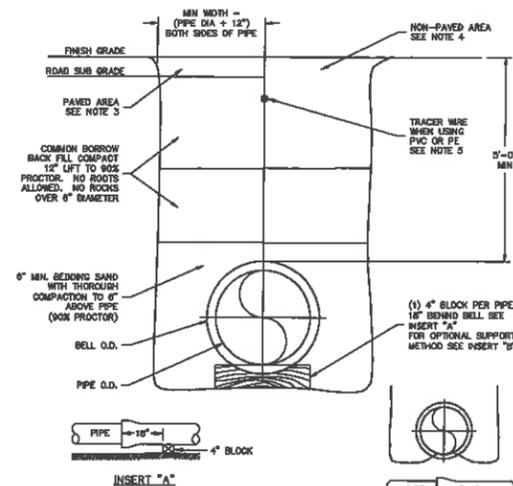
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 658-2221

SCALE AS SHOWN

30 JULY 2020

HSL Hayner/Swanson, Inc.
Civil Engineer/Land Surveyor
131 Middlesex Turnpike
Dorchester, MA 01928
(603) 883-2057
www.hayner-swanson.com

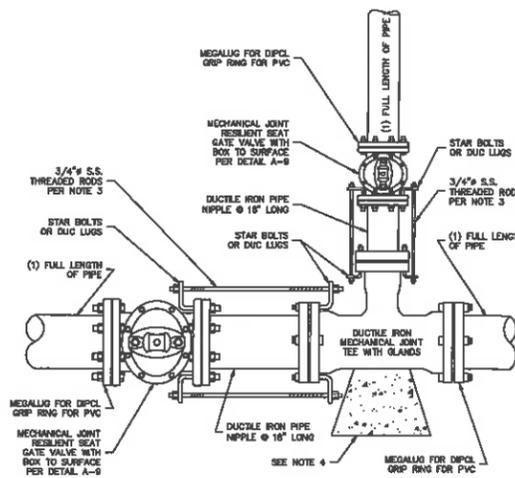
FIELD BOOK: — DRAWING NAME: 5292CU DET1 5292 9 OF 16
DRAWING LOC: \5292\CIVIL.DWG



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
 4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
 5. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBESTAR CORP., AVON, MA OR EQUIVALENT.

TYPICAL TRENCH DETAIL

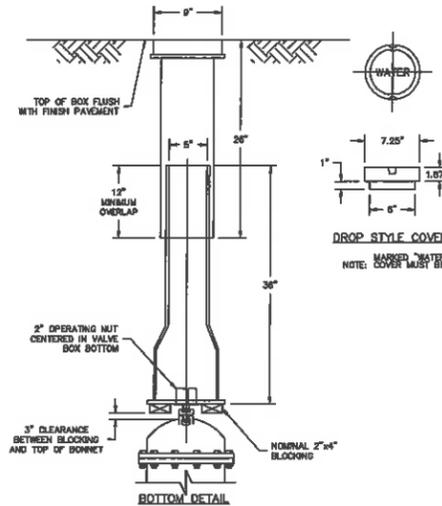
NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

TYPICAL TEE INSTALLATION

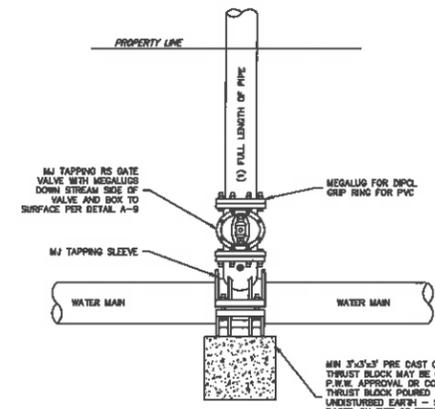
NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

TYPICAL VALVE BOX DETAIL

NOT TO SCALE



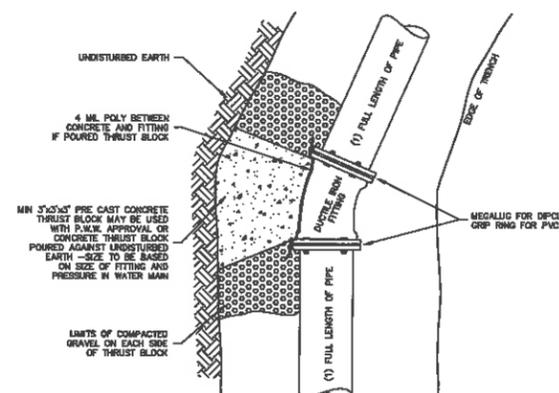
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. SEE DETAIL A-22 FOR CROSS-SECTIONAL VIEW.

TYPICAL LARGE SERVICE AND/OR TAPPING SLEEVE DETAIL

NOT TO SCALE

WATER NOTES

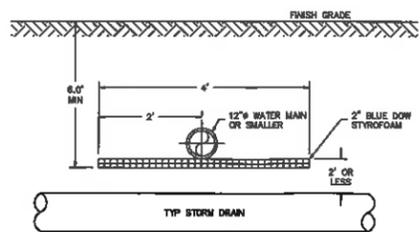
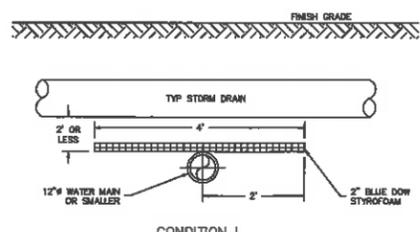
1. REFERENCE PENNACOCK WATER WORKS SPECIFICATIONS FOR INSTALLATION OF ALL WATER LINES.
2. ALL SPRINKLER AND DOMESTIC LEADS TO BUILDING SHALL END 5'-0" OUTSIDE THE FACE OF BUILDING WALL UNLESS NOTED, AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
3. THRUST BLOCKS AND MEGALUG RESTRAINTS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS. SEE DETAIL.
4. MINIMUM COVER ON ALL WATER LINES IS 5'-0".
5. CONTRACTOR SHALL MAINTAIN A 5'-0" HORIZONTAL (UNLESS OTHERWISE NOTED) AND 12" VERTICAL SEPARATION BETWEEN WATER SERVICE AND UTILITIES OTHER THAN SANITARY SEWER.
6. INSPECTIONS ON WATER SERVICE INSTALLATION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE SITE CONTRACTOR AND SHALL BE COORDINATED WITH PENNACOCK WATER WORKS, AND ALL INSPECTION FEES SHALL BE PAID BY THE CONTRACTOR.
7. CONTRACTOR SHALL HAVE BACTERIOLOGICAL AND PRESSURE TESTING PERFORMED. CONTRACTOR SHALL GIVE PENNACOCK WATER WORKS A COPY OF RESULTS. PENNACOCK WATER WORKS SHALL BE ON-SITE TO WITNESS TEST.
8. ALL PIPE, VALVES, MISCELLANEOUS MATERIALS AND INSTALLATION SHALL CONFORM WITH PENNACOCK WATER WORKS SPECIFICATIONS.
9. ALL FIRE HYDRANTS, VALVES, FITTINGS, PIPES, ETC. SHALL BE IN ACCORDANCE WITH PENNACOCK WATER WORKS REQUIREMENTS.
10. METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED IN THE SAME TRENCH WITH ALL NONMETALLIC PIPE SUCH THAT THE PIPE MAY BE LOCATED WITH ELECTRONIC LOCATING EQUIPMENT. DETECTOR WIRE OR METALLIC TAPE SHALL BE INSTALLED APPROXIMATELY 12" TO 18" BELOW GRADE DIRECTLY ABOVE THE TOP OF THE PIPE. DETECTOR WIRE SHALL BE 14 - GAUGE SOLID COPPER, SIMPLEX BRAND, OR EQUAL. METALLIC TAPE SHALL BE 2" MINIMUM METALLIZED TAPE, GRIFPOLYN COMPANY, INC. TERALAPE OR EQUAL.
11. CONTRACTOR SHALL ENSURE ALL WATER VALVES ARE IN A FULLY-OPEN POSITION UPON COMPLETION OF PROJECT.
12. CONTRACTOR SHALL COORDINATE ALL WATER INTERRUPTIONS WITH THE PENNACOCK WATER WORKS AND AFFECTED PROPERTY OWNERS.



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

TYPICAL THRUST BLOCK BEHIND FITTINGS INSTALLATION

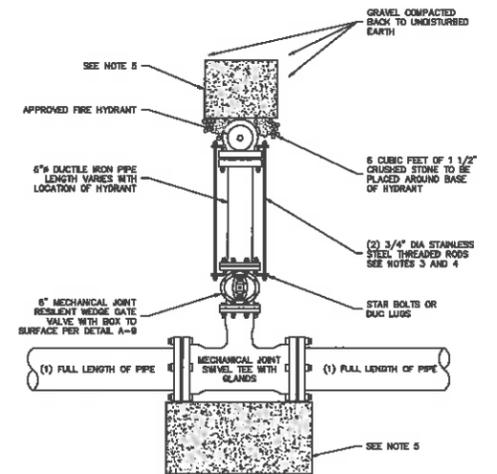
NOT TO SCALE



- NOTES:**
1. PENNACOCK WATER WORKS, INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
 2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEHIND 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.
 3. ALL JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

STORM DRAIN/WATER MAIN INTERSECTING RUNS-ELEV. VIEW

NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. WHEN DISTANCE FROM WATER MAIN TO HYDRANT IS MORE THAN 10' SUBSTITUTE MEGALUGS (OR GRP RINGS) IN LIEU OF THREADED RODS.
 5. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

TYPICAL HYDRANT INSTALLATION

NOT TO SCALE



NO.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	SJA

DETAIL SHEET - WATER
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

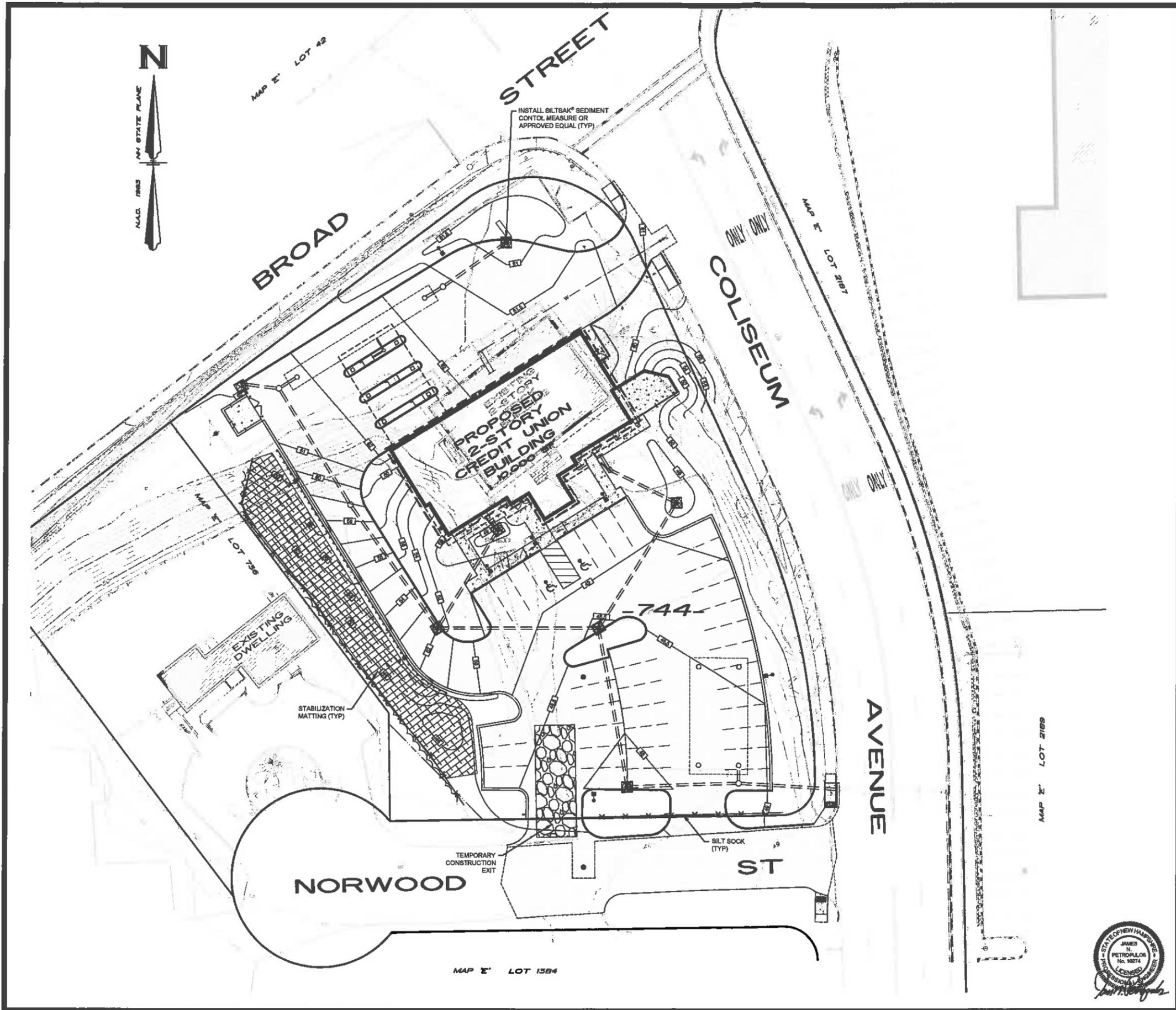
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221

SCALE AS SHOWN

30 JULY 2020



FIELD BOOK: ---	DRAWING NAME: 52220J DET1	5292	10 OF 16
DRAWING LOC: D:\52202\CIVIL.DWG	FILE NUMBER: ---	Sheet	Sheet



VICINITY MAP

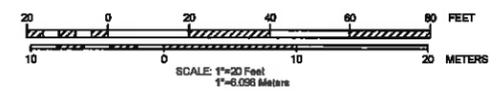
CONSTRUCTION SEQUENCE

1. CLEAR SITE ACCORDING TO PLAN.
2. CONSTRUCTION OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING SILT FENCES, TO BE IN ACCORDANCE WITH THE PLANS.
3. GRUB SITE ACCORDING TO PLAN.
4. CUT AND DISPOSE OF ANY DEBRIS PRODUCED DURING THE CLEARING AND GRUBBING ACTIVITY.
5. SITE GRADING OF BUILDING AND PARKING AREAS. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED AFTER BEING CONSTRUCTED.
6. INSTALLATION OF UNDERGROUND UTILITIES AND SUBSURFACE STORMWATER MANAGEMENT AREAS. CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT IN ACCORDANCE WITH THE SILTSAK DETAIL. THE CONTROL SHALL REMAIN UNTIL THE SITE IS SUFFICIENTLY STABILIZED.
7. AS THE BUILDING IS COMPLETED, ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
8. NO PORTION OF THE PROJECT SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR A PERIOD OF TWO (2) MONTHS OR GREATER. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED PRIOR TO WINTER CONDITIONS. STABILIZATION SHALL BE DEFINED AS 70% VEGETATIVE GROWTH BY NOVEMBER 1ST OR INSTALLATION OF EROSION CONTROL MATTING.
9. COMPLETED AREAS SHALL BE STABILIZED 72 HOURS AFTER COMPLETION.
10. FINAL PAVING OF PARKING LOT.
11. LODM AND SEED ALL DISTURBED AREAS.
12. INSPECTION OF ALL SEDIMENT AND EROSION CONTROL MEASURES.
13. SITE LANDSCAPING ALONG WITH PERMANENT SEEDING OF ALL DISTURBED AREAS.
14. REMOVE ANY TEMPORARY EROSION CONTROL MEASURES NOT NEEDED.

NO.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	SJA

EROSION CONTROL PLAN
 (LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
 190 BROAD STREET
 NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 888-2221

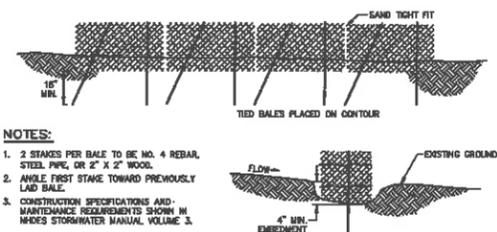


30 JULY 2020

HESI Hayner/Strauss, Inc.
 Civil Engineers/Land Surveyors
 3 Congress Street
 Nashua, NH 03062
 603-883-2057
 122 Middle Street
 Manchester, MA 03103
 (603) 263-2901
 www.hesiv.com

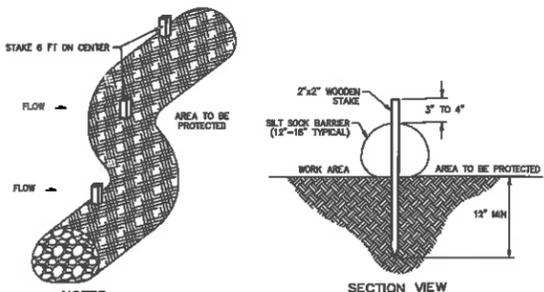


© Hayner/Strauss, Inc.



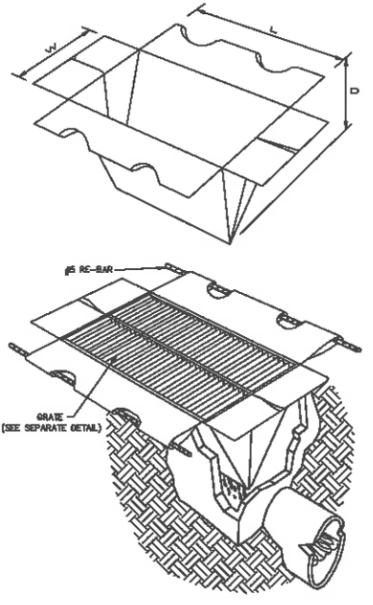
STRAW BALE BARRIER DETAIL
NOT TO SCALE

- NOTES:**
- 2 STAKES PER BALE TO BE NO. 4 REBAR, STEEL PIPE, OR 2" X 2" WOOD.
 - WHILE FIRST STAKE TOWARD PREVIOUSLY Laid BALE.
 - CONSTRUCTION SPECIFICATIONS AND MAINTENANCE REQUIREMENTS SHOWN IN NHDES STORMWATER MANUAL, VOLUME 3.



SILT SOCK DETAIL
NOT TO SCALE

- NOTES:**
- SILT SOCK BARRIER SHALL BE FILTERED SILT SOCK (OR APPROVED EQUAL) AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - SILT SOCK BARRIER SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
 - IF THE SILT SOCK SHOULD DECOMPOSE OR BECOME INEFFECTIVE, THE BARRIER SHALL BE REPLACED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
 - SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE BARRIER HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.
 - COMPOST TO BE REMOVED OR DISPOSED ON-SITE AS DETERMINED BY THE ENGINEER.



SILTSAK® DETAIL
NOT TO SCALE

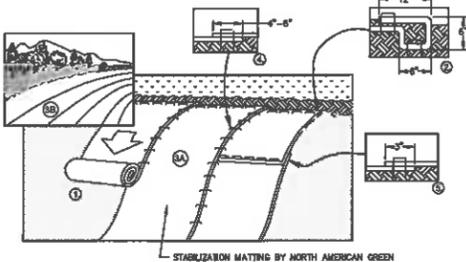
SILTSAK NOTES

- THE SILTSAK SHALL BE MANUFACTURED FROM WOVEN POLYPROPYLENE AND SEWN BY A DOUBLE NEEDLE MACHINE, USING A HIGH STRENGTH NYLON THREAD.
- THE SILTSAK SEAMS SHALL HAVE A CERTIFIED AVERAGE WIDE WIDTH STRENGTH PER ASTM D-4844 STANDARDS AS FOLLOWS:

SILTSAK STYLE	TEST METHOD	TEST RESULT
REGULAR FLOW	ASTM D-4844	160.0 LBS/W
H-FLOW	ASTM D-4844	114.8 LBS/W

- THE SILTSAK WILL BE MANUFACTURED TO FIT THE OPENING OF THE CATCH BASIN OR DRAIN INLET. THE SILTSAK WILL HAVE THE FOLLOWING FEATURES: TWO DUMP STRAPS ATTACHED AT THE BOTTOM TO FACILITATE THE REMOVAL OF THE SILTSAK. THE SILTSAK SHALL HAVE LIFTING LOOPS AS AN INTEGRAL PART OF THE SYSTEM TO BE USED TO LIFT THE SILTSAK FROM THE BASIN. THE SILTSAK SHALL HAVE A REINFORCED CORNER APPROXIMATELY HALFWAY UP THE SACK TO KEEP THE BODIES AWAY FROM THE CATCH BASIN WALLS. THIS YELLOW CORNER IS ALSO A VISIBLE MEANS OF INDICATING WHEN THE SACK SHOULD BE EMPTIED, CLEANED, AND PLACED BACK INTO THE BASIN.
- THE GEOTEXTILE FABRIC SHALL BE WOVEN POLYPROPYLENE FABRIC WITH THE FOLLOWING PROPERTIES:

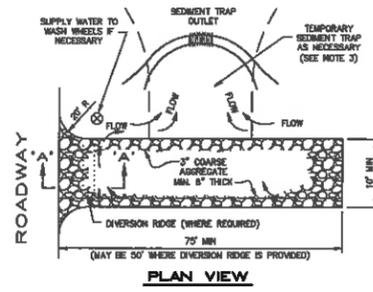
MULTIRAIN REGULAR FLOW	PROPERTY	TEST METHOD	TEST RESULT
MULTIRAIN REGULAR FLOW	GRAB TENSILE	ASTM D-4802	300 LBS
	GRAB ELONGATION	ASTM D-4801	25%
	PUNCTURE	ASTM D-4853	130 LBS
	MULLEN BURST	ASTM D-3788	60 PSI
	TRAPEZOID TEAR	ASTM D-4333	100 LBS
	UV RESISTANCE	ASTM D-4355	90%
	APPROXIMATE OPENING	ASTM D-4791	40 US BIEVE
	FLOW RATE	ASTM D-4461	40 GAL/MIN/FT
	PERMEABILITY	ASTM D-4461	0.55 SEC
	OR SILTSAK H-FLOW	GRAB TENSILE	TEST METHOD
GRAB TENSILE		ASTM D-4802	266 LBS
GRAB ELONGATION		ASTM D-4801	30%
PUNCTURE		ASTM D-4853	100 LBS
MULLEN BURST		ASTM D-3788	40 PSI
TRAPEZOID TEAR		ASTM D-4333	40 LBS
UV RESISTANCE		ASTM D-4355	90%
APPROXIMATE OPENING		ASTM D-4791	20 US BIEVE
FLOW RATE		ASTM D-4461	200 GAL/MIN/FT
PERMEABILITY		ASTM D-4461	1.5 SEC



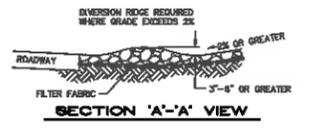
STABILIZATION MATTING DETAIL
NOT TO SCALE

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 - BEgin AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEHIND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
 - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE FORCE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S RECOMMENDATION.
 - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PROXIMALLY INSTALLED BLANKET.
 - CONSECUTIVE BLANKETS SPACED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLED) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
 - PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.
- NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

STABILIZATION MATTING DETAIL
NOT TO SCALE



TEMPORARY GRAVEL CONSTRUCTION EXIT
NOT TO SCALE



- NOTES:**
- THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO EXITTING THE SITE ONTO A PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 - CONSTRUCTION SPECIFICATIONS AND MAINTENANCE REQUIREMENTS SHOWN IN NHDES STORMWATER MANUAL, VOLUME 3.

GENERAL NOTES

- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS THEREOF IN NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES STORMWATER MANUAL, VOLUME 1-3, LATEST EDITION.
 - THE WORK AREA SHALL BE GRADED, SHAPED, AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SALINITY OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE THE LIMITS OF THE WORK AREA. SILT FENCES, STRAW BALES AND/OR DETENTION BASINS WILL BE NECESSARY TO ACCOMPLISH THIS END.
 - STRIPPED TOPSOIL SHALL BE STOCKPILED, WITHOUT COMPACTION, AND STABILIZED AGAINST EROSION IN ACCORDANCE WITH TEMPORARY STABILIZATION OF DISTURBED AREAS, AS OUTLINED IN NOTE NO. 4.
 - TEMPORARY STABILIZATION OF DISTURBED AREAS: SEED BED PREPARATION: 10-16 LB FERTILIZATION TO BE SPREAD AT THE RATE OF 7 LBS PER 1,000 SF AND AGRICULTURAL LIMESTONE AT A RATE OF 10 LBS PER 1,000 SF AND INCORPORATED INTO THE SOIL. THE SOIL, FERTILIZER AND LIMESTONE SHALL BE TILLED TO PREPARE FOR SEEDING.
- | SPECIES | RATE PER 1,000 SF | DEPTH | SEEDING DATES |
|------------------|-------------------|-------|----------------|
| WINTER RYE | 2.5 LBS | 1" | 08/15 TO 09/15 |
| OATS | 2.5 LBS | 1" | 04/15 TO 10/15 |
| ANNUAL RYE GRASS | 1.0 LBS | 0.25" | 08/15 TO 09/15 |
- SEED MIXTURE: USE ANY OF THE FOLLOWING:

TYPE	RATE PER 1,000 SF	USE & COMMENTS
STRAW	70 TO 90 LBS	MAY BE USED WITH PLANTINGS, MUST BE ANCHORED TO BE USED ALONE
WOOD CHIPS OR BARK MULCH	450 TO 820 LBS	USED WITH TREE AND SHRUB PLANTINGS
FIBROUS MATTINGS	AS RECOMMENDED BY MANUFACTURER	MUST BE BIODEGRADABLE, USE IN SLOPE AREAS AND AREAS DIFFICULT TO VEGETATE
CRUSHED STONE	SPREAD TO GREATER THAN 1/2" THICKNESS	USE IN SPECIFIC AREAS AS SHOWN ON PLAN OR AS NEEDED.
 - PERMANENT STABILIZATION OF DISTURBED AREAS:
 - ALL ROADWAYS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 - ALL CUT AND FILL SLOPES SHALL BE SEED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 - THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 3 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
 - AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 - A MINIMUM OF 80% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED.
 - OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 - ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
 - SITE LOCATION: 47° 49' 31" N LATITUDE, 71° 29' 53" W LONGITUDE (PER GOOGLE EARTH)
 - TOTAL AREA OF DISTURBED SOILS: 50,906 SF
 - REFERENCE IS MADE TO THE LATEST EDITION OF THE FEDERAL REGISTER (39 FR 7827), ENVIRONMENTAL PROTECTION AGENCY NEEDED GENERAL PERMITS FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. FOR ADDITIONAL INFORMATION CONTACT (202) 364-8245 OR www.epa.gov/whpdes/epdconstr.
 - THE ENTIRE CONTENTS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE OBTAINED ON-SITE FOR THE DURATION OF THE CONTRACT AND BE MADE AVAILABLE TO LOCAL, STATE AND FEDERAL CODE ENFORCEMENT PERSONNEL.

WINTER CONDITION NOTES

- ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE 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 PER ACRE, SECURED WITH ANCHORED NETTING ELASTOMERS. THE PLACEMENT 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.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER 1000 TYPICAL 304.3.

SITE MAINTENANCE/INSPECTION PROGRAM

THE FOLLOWING PROVIDES AN ITEMIZATION OF SPECIFIC SITE MAINTENANCE PRACTICES THAT WILL BE EMPLOYED ON THE SITE TO MINIMIZE POLLUTANT GENERATION AND TRANSPORT FROM THE SITE. THE SITE MAINTENANCE PROGRAM INCLUDES ROUTINE INSPECTIONS, PREVENTATIVE MAINTENANCE AND "GOOD HOUSEKEEPING" PRACTICES.

ROUTINE INSPECTIONS

- THE CONTRACTOR SHALL INSPECT ALL CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN TWELVE (12) HOURS OF THE END OF A STORM WITH RAINFALL AMOUNT GREATER THAN 0.5 INCHES. THE INSPECTIONS WILL VERIFY THAT THE STRUCTURAL BMPs DESCRIBED IN THE PLANS ARE IN GOOD CONDITION AND ARE MINIMIZING EROSION. A MAINTENANCE INSPECTION REPORT WILL BE MADE WITH EACH INSPECTION. COMPLETED INSPECTION FORMS SHALL BE KEPT ON-SITE FOR THE DURATION OF THE PROJECT. FOLLOWING CONSTRUCTION, THE COMPLETED FORMS SHALL BE RETAINED AT THE CONTRACTOR'S OFFICE FOR A MINIMUM OF ONE YEAR.

PREVENTATIVE MAINTENANCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY AND PERMANENT CONTROLS THROUGHOUT THE DURATION OF THE CONTRACT. MAINTENANCE PRACTICES SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- CLEANING OF CATCH BASINS TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY QUARTERLY INSPECTIONS
 - CLEANING OF SEDIMENT AND DEBRIS FROM STORMWATER MANAGEMENT AREA FOREBAY TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY MONTHLY INSPECTIONS.
 - IMPLEMENTATION OF OTHER MAINTENANCE OR REPAIR ACTIVITIES AS DEEMED NECESSARY BASED UPON WEEKLY INSPECTIONS.
 - REMOVAL OF BUILT UP SEDIMENT ALONG SILT FENCES AND/OR STRAW BALE BARRIERS.
 - REMOVAL OF BUILT UP SEDIMENT IN BOTH TEMPORARY AND PERMANENT CONTROLS SUCH AS GRASS SWALES, SEDIMENT FOREBAYS AND RECHARGE/DETENTION BASINS
 - RECONSTRUCTING THE TEMPORARY GRAVEL CONSTRUCTION EXIT IF NOT WORKING PROPERLY.
 - TREATMENT OF NON-STORM WATER DISCHARGES SUCH AS WATER FROM WATER LINE FLUSHINGS OR GROUNDWATER FROM DEWATERING EXCAVATIONS. SUCH FLOWS SHOULD BE DIRECTED TO A TEMPORARY SEDIMENTATION BASIN OR STORMWATER MANAGEMENT AREA.
 - SWEEP PARKING LOTS AND DRIVES REGULARLY TO MINIMIZE SEDIMENT ACCUMULATION. FREQUENCY WILL VARY SEASONALLY ACCORDING TO SEASONAL ACCUMULATION ON PAVED SURFACES (E.G., MORE FREQUENT SWEEPING DURING THE WINTER AND SPRING).

GOOD HOUSEKEEPING PRACTICES

- THE CONTRACTOR SHALL EMPLOY MEASURES AND PRACTICES TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS TO STORM AND WATER RUNOFF. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE HANDLING, USE AND DISPOSAL OF MATERIALS SUCH AS PETROLEUM PRODUCTS, FERTILIZERS AND PAINTS TO ENSURE THAT THE RISK ASSOCIATED WITH THE USE OF THESE PRODUCTS IS MINIMIZED. THE FOLLOWING "GOOD HOUSEKEEPING" PRACTICES SHALL BE FOLLOWED DURING CONSTRUCTION OF THE PROJECT:
- AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
 - ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
 - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THEIR MANUFACTURER'S LABELS.
 - WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER.
 - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 - THE CONTRACTOR SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

SPILL PREVENTION AND CLEANUP PRACTICES

- MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE. EQUIPMENT AND MATERIAL WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, BAGS, GLOVES, BOOZERS, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

No.	DATE	REVISION	BY
1	09/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	BJA

DETAIL SHEET - EROSION CONTROL
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221

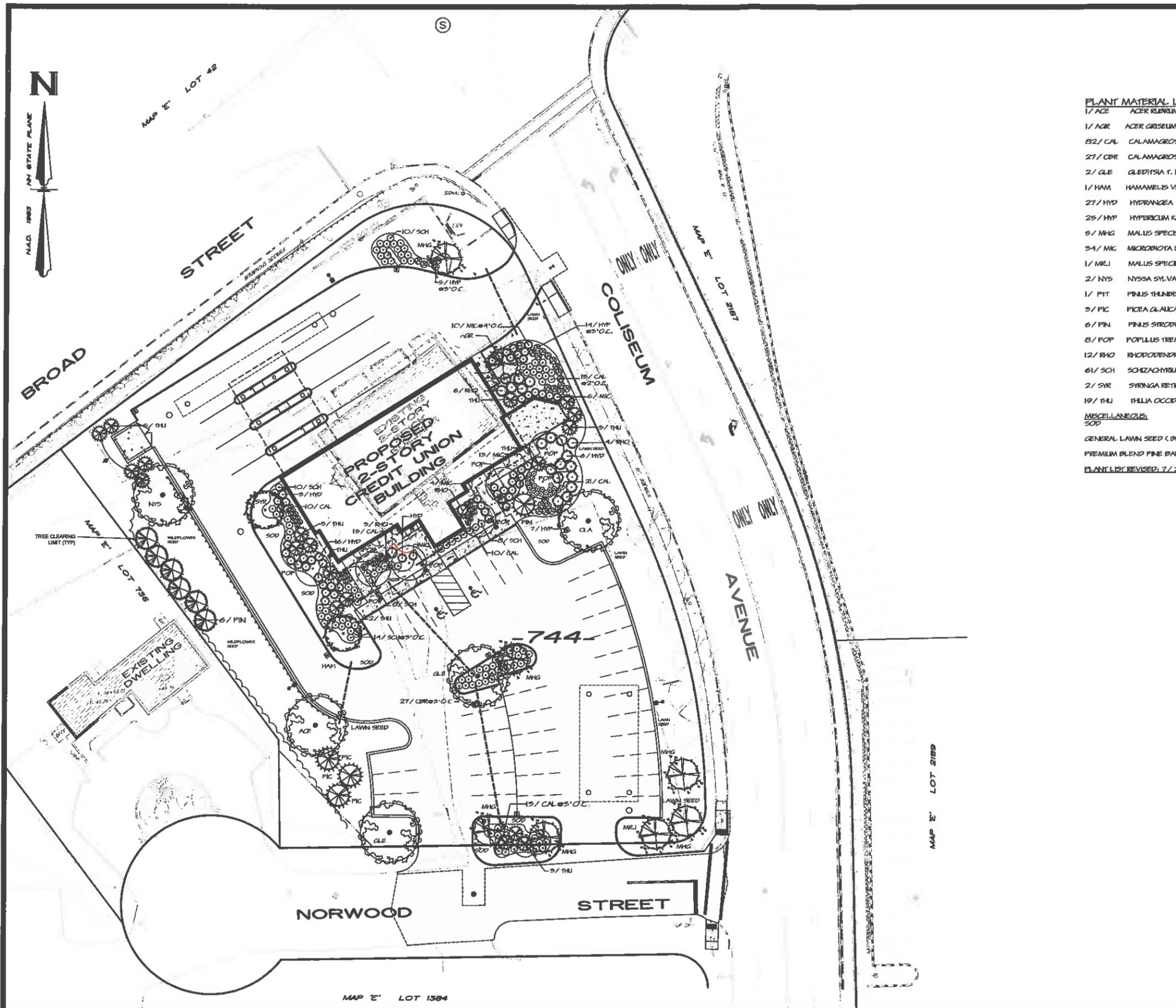
SCALE AS SHOWN

30 JULY 2020



HESI Haynes/Swanson, Inc.
Civil Engineers/Land Surveyors
3 Congress Street
Nashua, NH 03083
(603) 883-2097
www.hayneswanson.com

FIELD BOOK	DRAWING NAME: 029201 DET1	5292	12 OF 16
DRAWING LOC: 0: 02921/CVIL DWG			



PLANT MATERIAL LIST

1/ ACE	ACER RUBRUM (RED SUNSET MAPLE)	2.5"-3" CAL.
1/ AGR	ACER GRISEUM (PAPERBARK MAPLE)	10'-12' MULTI-STEM
82/ CAL	CALAMAGROSIS A. (OVERDAM FEATHER REED)	#2 GAL.
27/ CBR	CALAMAGROSIS BRACHYTRICHA (KOREAN FEATHER REED)	#1 GAL.
2/ GLE	GLEPITSIA T. I. (CHALKA HONEYLOCUST)	2.5"-3" CAL.
1/ HAM	HAMAMELIS VIRGINIANA (COMMON WITCHAZZEL)	7'-8' B&B
27/ HYD	HYDRANGEA QUERCIFOLIA (RUBY SLIPPERS OAKLEAF)	2.5"-3" B&B
28/ HYP	HYPERICUM KALMIANUM (AMES ST. JOHNSWORT)	#2 GAL.
8/ MHG	MALUS SPECIES (HARVEST GOLDCRABAPPLE)	2.5"-3" CAL.
34/ MIC	MICROBIOTA DECUSSATA (RUSSIAN CYPRESS)	#9 GAL.
1/ MRJ	MALUS SPECIES (RED JADE CRABAPPLE)	2.5"-3" CAL.
2/ NYS	NYSSA SYLVATICA (TUPELO & WILDFIRE)	2.5"-3" CAL.
1/ PYT	PINUS THUNBERGIANA (THUNDERHEAD JAPANESE PINE)	6'-7' B&B
3/ PIC	PICEA GLAUCA (WHITE SPRUCE)	7'-8' B&B
6/ PIN	PINUS STROBUS (WHITE PINE)	6'-7' B&B
8/ POP	POPULUS TREMULOIDES (MOUNTAIN SENTINEL ASPEN)	2"-2.5" CAL.
12/ RHO	RHODODENDRON (WHITE CATAMPA RHODODENDRON)	#7 GAL.
61/ SCH	SCHIZACHYRIUM ACOPARUM (THE BLUES BLUESTEM)	#1 GAL.
2/ SYR	SYRINGA RETICULATA (IVORY SILK JAPANESE TREE LILAC)	5"-5.5" CAL.
19/ THU	THUJA OCCIDENTALIS (TECHNY MISSION ARBORVITAE)	7'-8' B&B
MISCELLANEOUS		
SOD		PER PLAN
GENERAL LAWN SEED (BLUE SEAL 'EZ GREEN' #1 LB./ 2005F.)		PER PLAN
PREMIUM BLEND PINE BARK MULCH (DO NOT USE TINTED MULCH)		4" SETTLED
PLANT LIST REVISED: 7/28/20		

No.	DATE	REVISION	BY
1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	SJA

LANDSCAPE PLAN
(LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 688-2221

30 JULY 2020

PREPARED BY:
BLACKWATER DESIGN
PHONE (603) 646-6300 FAX (603) 646-6305
Land Planning - Landscape Architecture
85 Front Lane - Webster, NH 03303

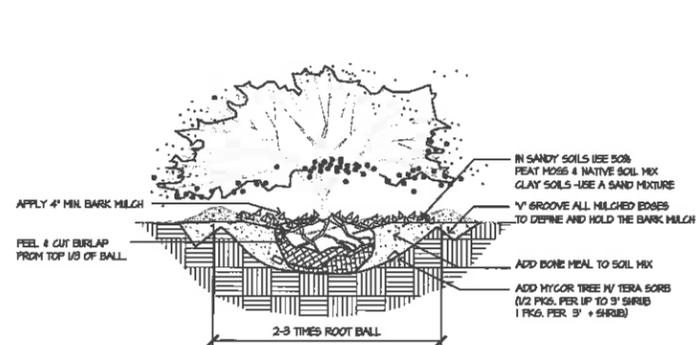
FIELD BOOK: ---	DRAWING NAME: S283CU L521	5292	13 OF 16
DRAWING LOG: Q:\S283\CIVIL.DWG			

General Specifications

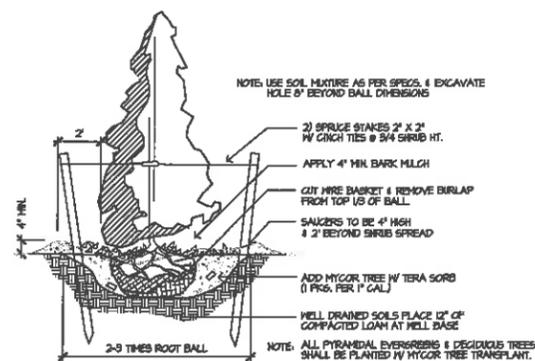
- The contractor shall at his expense furnish all the materials, supplies, machinery, equipment, tool, superintendent, labor, insurance, & other accessories and services necessary to complete the said project within the unit costs stated within the bid price.
- The work to be done under this contract is as shown and described on the drawings. Each bidder shall make a careful examination of the plans and specifications (the plan shall dictate quantities) and acquaint himself with all conditions before making his proposal. He will be held responsible for errors in his proposal resulting from his failure to make such an examination. All bidders shall visit the site and inform themselves of all conditions.
- The bids shall be based on materials and equipment complying with the drawings and the specifications. The contractor shall be responsible under this contract price, for furnishing and installing materials conforming to the bid items. Under no circumstances may a species "hybrid" be substituted or size changed without written consent of the landscape architect.
- The contractor shall be responsible for the protection of such existing utilities as water mains, sewer systems, gas mains, electrical conduits, telephone lines and any other utilities and if any damage or destruction may occur to these utilities, he shall be responsible for their repair and/or replacement at his expense.
- The contractor shall make payment for all damages to buildings, structures, trees, shrubs and/or any other property outside the construction area or located within those limits but not designated for removal or reconstructed providing such damage shall result from accident caused by negligence for which the contractor shall be legally liable.
- If additional labor and/or materials is requested or required, the contractor shall submit a price to the owner. If the owner approves the price he shall prepare a change order for approval and signature. The contractor shall not proceed without a written authorization from the owner for the additional work. If the contractor proceeds with the additional work without this authorization he shall forfeit any claim for additional compensation.
- The landscape architect shall reserve the right to inspect the project work at any time deemed necessary to insure that the specifications and plans and any other contract documents are being followed.
- The L.A. shall have the right to reject any plant on-site based upon condition, size, or incorrect species or hybrid. LA must be contacted prior to install, to inspect materials delivered to the site, and to insure that soil amendments, bark mulch, roof ballast, etc. are to the written specifications.
- All seeded areas shall receive a minimum 6" topsoil blanket (by site contractor) w/site preparation, raking and general clean up prior to application. Operations shall include a preemergence type herbicide, 12-25-12 granular fertilizer @ 10 lbs./1000 sq. ft., and pelletized limestone @ 25 lbs./1000 sq. ft. powder raked into the top 2" of soil prior to hydro-seeding. Ratios & application rates may change based upon the required soil analysis.
- Contractor is responsible for establishing a thick, weed free lawn. Seed shall be spread @ 4lbs./1000. Lawn germination shall be 95% free of noxious weeds for acceptance. Define differences in seed mixes (if applicable) with irrigation flagging until 2nd mowing. Site review by LA is required.

- Review of the installed irrigation system by the designer is required prior to release of final payment.
- Hydroseeding operations shall be a one part process with a paper fiber mulch; a tackifier shall be applied on all slopes greater than 3:1. Excelsior Drainage mat shall be applied to all 2:1 slopes and drainage swales per plan.
- Contractor shall maintain, from acceptance date, the lawn areas through the first mowing. Contractor is not responsible for the first mowing.
- All plant materials shall be installed in accordance with A.L.C.C. Trees and shrubs shall have appropriate soil mixtures, fertilizer and soil retention granules.
- If the soil conditions are extremely sandy, all trees shall have a 6" layer of compacted topsoil (verify with Landscape Architect) placed in the base of the plant pit as a moisture retention layer. The plant pit sidewalls shall be over excavated by an additional 12" beyond the normal outside radius of the hole. A topsoil planting mixture shall be used to backfill as per spec # 22.
- Landscape architect shall have the right to reject and have ground removed any plant material not of proper size or of weak quality, i.e. thin, no lower branching, etc. Contractor must submit shipping lists (billing invoices) for verification, prior to installation.
- All plant material shall be guaranteed for a period of one (1) year from date of installation. Any material which dies or does not show a healthy appearance within this time shall be replaced at the contractors expense; with same warranty requirements as the original. Warranty does not cover loss due mechanical damage, i.e. snow storage. Contractor should protect susceptible species from insect infestation. Use a liquid systemic application on birch, etc.
- Plant beds and saucers vary in dia. (refer to dwg). Trees and shrubs shall receive a 4" (settled) covering of pine/hamlock bark mulch; saucer diameters per drawing & details. Deciduous trees shall have a 6" dia. saucer (typ.), evergreen trees shall have a saucer 2' min. beyond it's outer branches. All edges shall have a "V" groove.
- All B&B material which are encased in wire baskets shall have the wires cut loose and the top third removed prior to backfill operation.
- If road base is encountered in any plant bed areas, i.e. parking islands, it shall be removed and suitable amended soil installed per drawings and specifications.
- Soil planting mixture shall be a 6%-10% organic topsoil, amended with 10% wood ash, 10% manure, & 30% peatmoss or incorporate a dehydrated compost material. If planting in sand, gravel or other well drained soils, a 50% peatmoss to excavated soil. Other soil amendments shall include; Agriform tablets, Hydro-Gel or equal, and Roots growth enhancer to all trees and shrubs listed, per manufacturers specifications. All plant material pits will receive a min. 20% in volume mix of a compost soil amendment. Submittal required. 'Roots' STEP 1 can be substituted for the individual supplements. Install per manufacturer's specs.
- Landscape contractor shall not be responsible for topsoil spreading but shall coordinate with the site contractor adherence to the mound grades, plant bed soil depths and soil type per dwgs & spec. Landscape contractor shall power rake-out for seed.

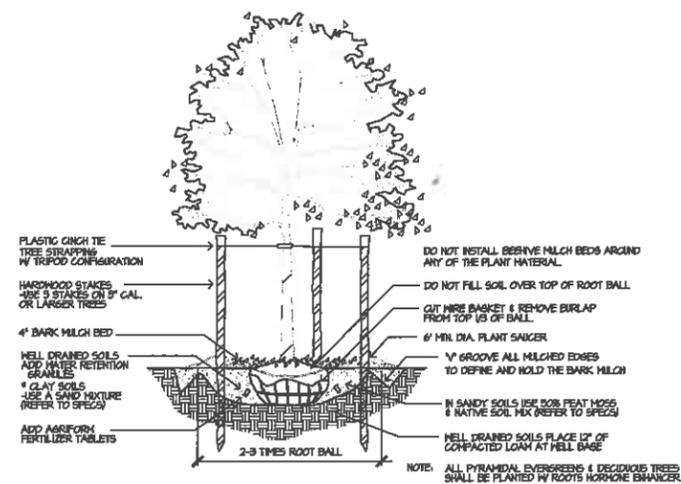
- Landscape contractor shall provide a soil analysis of the topsoil planting mixture. Analysis to show soil classification (min. sandy loam) and nutrients.
- Contractor shall protect all B&B materials left above grade prior to installation from drying out. All plants shall be stored, covered in mulch, and irrigated until planted. Any plant left on the ground and whose outer ball surface dries out, shall be rejected by the landscape architect. Plants stored in shade and off pavement.
- Plan dictates, contractor shall alert Landscape Architect if any discrepancies exist between the plan, the material list, and as-built site conditions.
- Installer shall notify landscape architect prior to planting, to review plant locations and bedline configurations. If contractor installs without the placement approval of the L.A., said architect shall have the right to relocate any installed plants at the contractor's expense.
- Installer shall notify landscape architect prior to plant installation to review all materials. Any plants of poor condition, improper size, or species will be rejected.
- Upon one year review, contractor shall straighten any trees that have shifted. Any weak or bare spots in lawn shall be reseeded.
- All bedlines shall have a deep 'V' groove to define lawn to mulch edge. No "Beehive" mounding of mulch is allowed, also keep mulch away from base of perennials.
- Do not plant materials too close to the edge of bedlines. Refer to drawings for center of plant to bedline. At a minimum no outer branching of a shrub or perennial shall be closer than two feet from the bedlines. If the as-built does not comply contractor shall adjust the plant location or bedline at his expense.
- Seed mixes include: Sandy Soil Lawn Mix by: deercrekseed.com; New England Wetland Plants, Amherst, Ma. refer to planting plan for designations.
- Any items not completed to the specifications will be required at contractors expense prior to final approvals. Contractor is to bid the work according to the specifications and not to what they may do under their standard practices. Special attention will be payed to soils, amendments, guy stakes, bedline & saucer configurations, seed mixtures, etc.
- Certain designated foundation edging is road ballast (washed rounds, non-crushed, natural) Size of stone is a range of 3/4"-1.5" dia. placed to a depth of 3", upon placement apply a coating of granular Preen (preemergent).
- Any questions concerning this drawing shall be directed to Joseph Hochrein c/o Blackwater Design, 85 Frost Lane, Webster, NH 03303, 603-668-2541.



B&B SHRUB PLANTING
NOT TO SCALE



PYRAMIDAL EVERGREEN TREE PLANTING
NOT TO SCALE



TREE PLANTING 2' + CAL.
NOT TO SCALE

1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	BA
NO.	DATE	REVISION	BY

DETAIL SHEET - LANDSCAPE
(LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

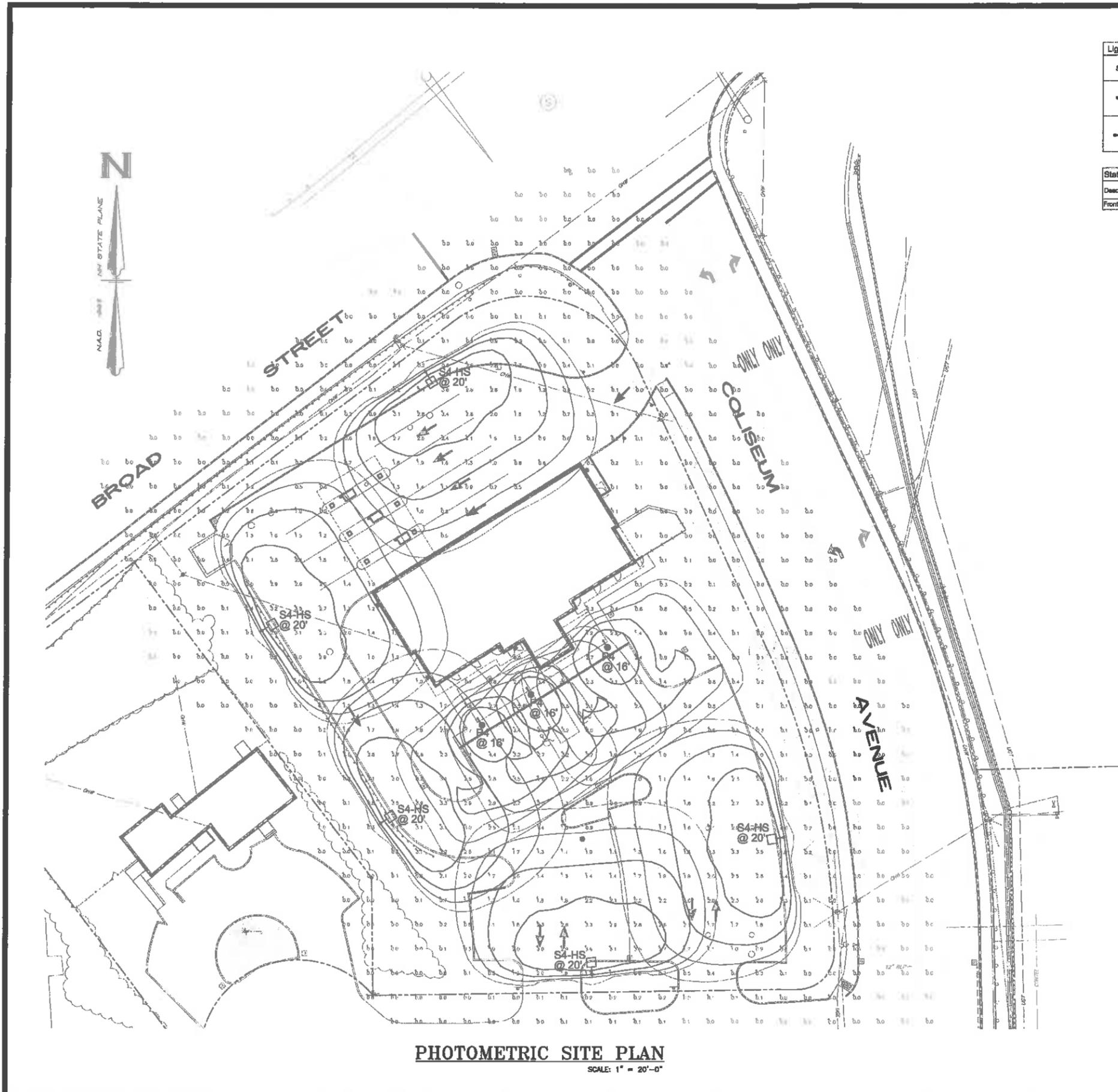
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 668-2221

SCALE: 1"=20 Feet
1"=6.096 Meters

30 JULY 2020

PREPARED BY:
BLACKWATER DESIGN
PHONE (603) 648-6300 FAX (603) 648-6305
Lead Planning - Landscape Architecture
85 Frost Lane - Webster, NH 03303

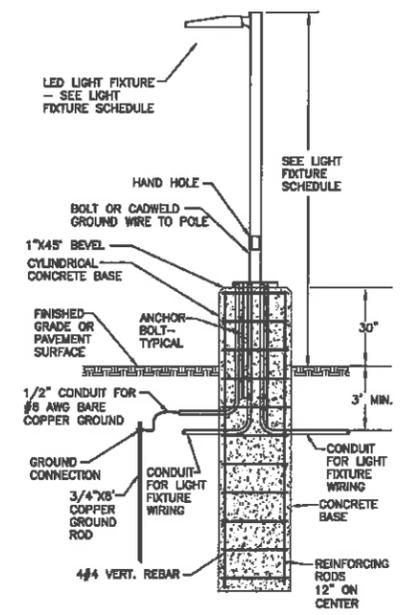
FIELD BOOK: ---	DRAWING NAME: 5292CU LS21	5292	14 OF 16
DRAWING LOG Q:\5292\CIVIL.DWG			



Light Fixture Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wallage
□	S4-HS	5	GLEON-AP-02-LED-E1-SL4-7030-HSS/888420SPN1	EATON MCGRAW-EDISON AREA/SITE POLE LIGHT WITH TYPE 4 DISTRIBUTION WITH SPILL CONTROL, 20-FT SQUARE STRAIGHT STEEL POLE	LED	1	7,374	-	113
●	P4	3	ECM-ED2-LED-E1-SL4-90-9L-6K-7030/9A6164-6K/STL1649R946K	EATON EPIC MEDIUM DECORATIVE/SITE POLE LIGHT WITH TYPE 4 DISTRIBUTION WITH SPILL CONTROL, 16-FT DECORATIVE POLE	LED	1	6,847	-	62

Statistics Area 1					
Description	Avg	Max	Min	Avg/Min	Max/Min
Front Parking Lot Only	1.99 fc	4.4 fc	0.5 fc	3.98	8.80

Statistics Area 2					
Description	Avg	Max	Min	Avg/Min	Max/Min
Side Drive and Drive Up Area	1.91 fc	3.9 fc	0.5 fc	3.82	7.80



POLE BASE DETAIL
N.T.S.

1	08/24/20	ADDRESS TECHNICAL REVIEW COMMITTEE COMMENTS	8/A
NO.	DATE	REVISION	BY

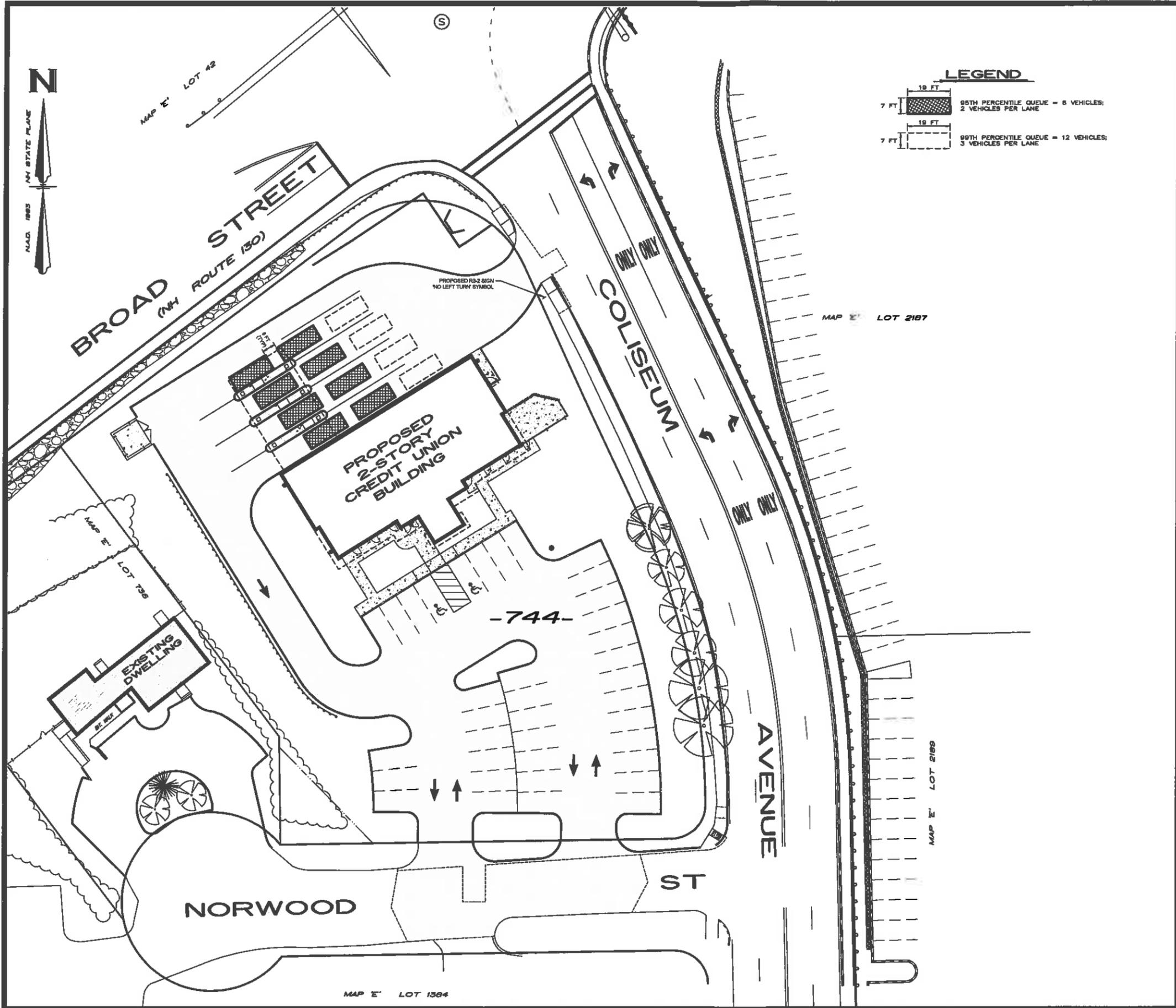
PHOTOMETRIC LIGHTING PLAN
(LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
190 BROAD STREET
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108 (603) 688-2221

30 JULY 2020

VA
YEATON ASSOCIATES, INC.
Bedford, NH | Lebanon, NH
MEP/FP Engineers
603.444.6578
5292

FIELD BOOK ---	DRAWING NAME: 0220CJ 01.21	5292	15 OF 16
DRAWING LOG: Q:\5292\CIVIL.DWG		Plot Number	Sheet



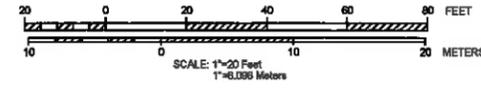
LEGEND

19 FT	95TH PERCENTILE QUEUE = 6 VEHICLES; 2 VEHICLES PER LANE
7 FT	95TH PERCENTILE QUEUE = 12 VEHICLES; 3 VEHICLES PER LANE

NO.	DATE	REVISION	BY

DRIVE-THRU STACKING PLAN
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

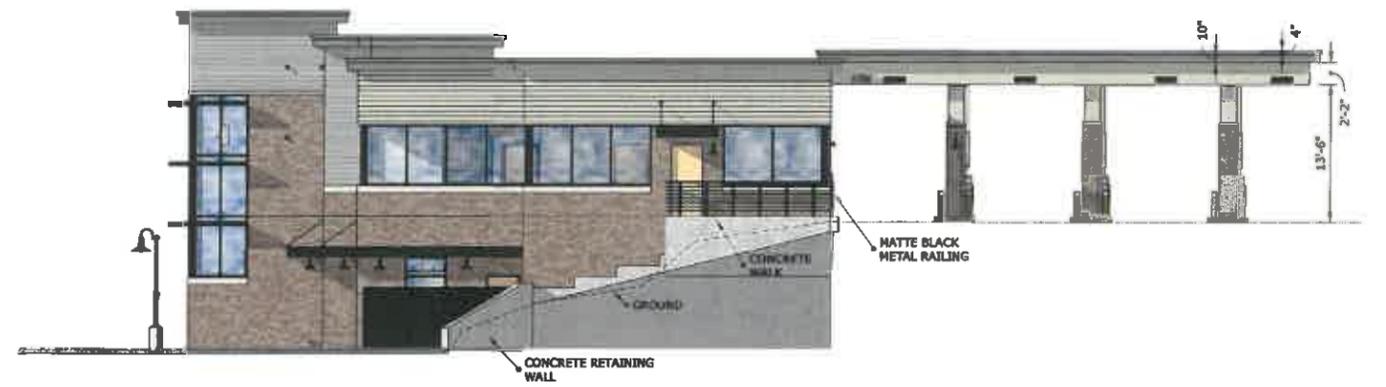


14 SEPTEMBER 2020

HISI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors
3 Congress Street 131 Middlesex Turnpike
Nashua, NH 03063 Burlington, MA 01803
603-883-3037 (NH) 303-4304
www.hisinc.com



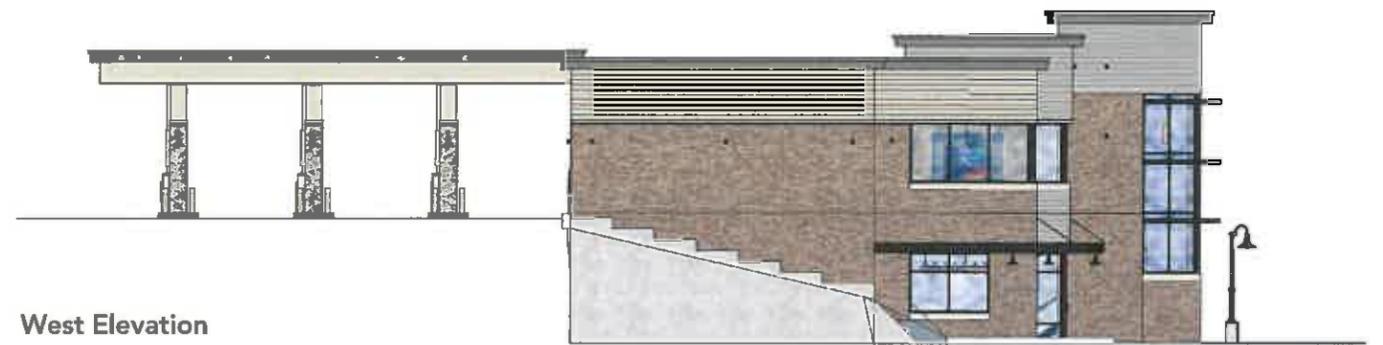
South Elevation



East Elevation



North Elevation



West Elevation



Right Perspective



Drive Thru Perspective



Left Perspective

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: October 8, 2020
RE: **New Business #9 - Site Plan**

I. Project Statistics:

Owner: 278 Daniel Webster Highway, LLC
Proposal: Site plan amendment to NR974 to demolish existing building and construct a 4,000 sf Sleep Number store and associated site improvements
Location: 278 Daniel Webster Highway
Total Site Area: 0.69 acres
Existing Zoning: HB - Highway Business and TOD – Transit Oriented Development
Surrounding Uses: Commercial

II. Background Information:

On the subject parcel is two-story mixed use retail and office building that was constructed in 1983. The building is comprised of eight units ranging in size from 798 sf to 1,914sf. Primary access is via a curb cut on Danforth Road. The property is located adjacent to the Daniel Webster Highway.

III. Project Description:

The proposal is to demolish the existing building and construct a new 4,000 sf Sleep Number store along with parking, utilities, signs, landscaping, lighting and other improvements. A 24' wide entrance from Danforth Road is being proposed along with 20 parking spaces. The site plan also maintains the cross-access easement between the subject property and the U-Haul facility to the south. Typical store hours will be 11 am to 7 pm during the weekdays and weekends.

A stormwater management plan was submitted and is attached to this report.

A Traffic Impact Report (TIR) Threshold Worksheet was submitted for this project and indicates that a formal Traffic Impact Report (TIR) is not required as the daily and peak hour trip estimates are below the TIR threshold values.

Within the Mixed Use Districts, all site plans submitted to the planning board for approval shall be accompanied by a site plan suitability report and is subject to the provisions of the code. The report has been attached for the board's review.

One waiver is being requested for setback relief. In the TOD, a maximum setback of 15' is allowed. The applicant is requesting a setback of 50'7" from Daniel Webster Highway and 66'7" are being proposed to allow for vehicle access and parking.

City staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D) and §190-23(E). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, they should state specific reasons. If the Planning Board chooses to approve this plan, staff recommends the following stipulation(s) be made part of that approval:

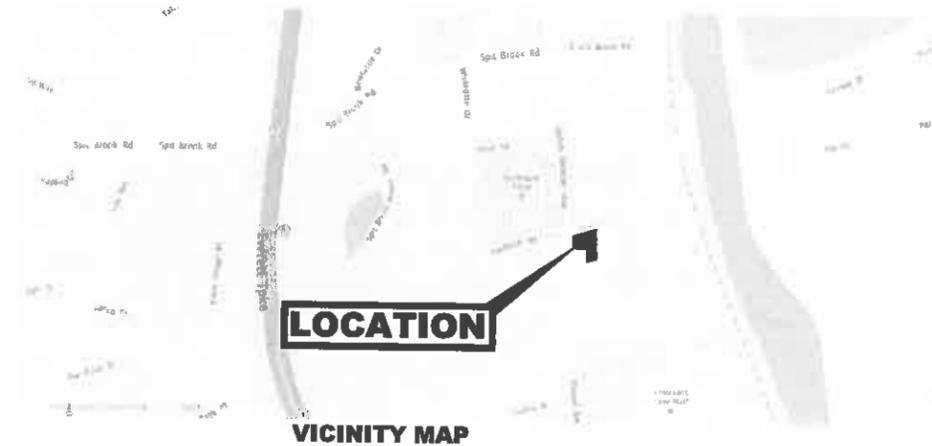
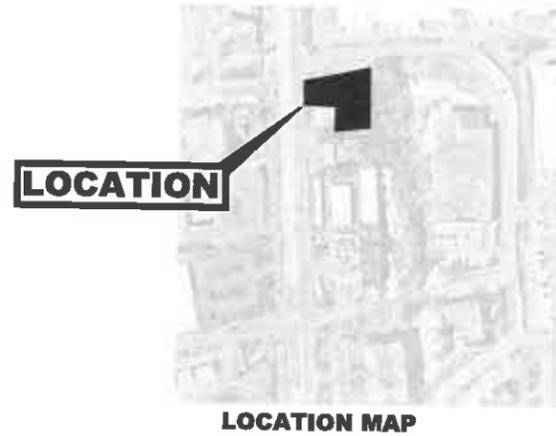
1. The request for a waiver of NRO § 190-26.1(H)(2), which requires a maximum front setback of 15 feet, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final plans.
3. Prior to the Chair signing the plan, minor drafting corrections will be made.
4. Prior to the Chair signing the plan, all comments in an e-mail from Pete Kohalmi, P.E. dated October 5, 2020 shall be addressed to the satisfaction of the Engineering Department.
5. Prior to the issuance of a building permit, stormwater documents shall be submitted to Planning Staff for review and recorded at the applicant's expense.
6. Prior to any work and a pre-construction meeting, a financial guarantee shall be approved.
7. Prior to the issuance of a Certificate of Occupancy, all off-site and on-site improvements will be completed.

GMX REAL ESTATE

278 DANIEL WEBSTER HWY & DANFORTH RD CITY OF NASHUA

HILLSBOROUGH COUNTY, NEW HAMPSHIRE

MAP A, LOT 133



No.	DATE	DESCRIPTION	ISSUED FOR PERMIT
0	08/26/20		

600 E. Algonquin Road
 Suite 250
 Nashua, NH 03073
 Telephone (603) 756-4180
 www.tntm.com

OWNER / APPLICANT/CONTACT

GMX REAL ESTATE GROUP, LLC
 3000 DUNDEE RD STE 408
 NORTHBROOK, IL 60062

ANDY GOODMAN
 PHONE (312) 607-6418

APPROVED - NASHUA PLANNING BOARD

CHARMAN SIGNATURE	DATE
SECRETARY SIGNATURE	DATE

SHEET INDEX

Sheet List Table		
Sheet Number	Sheet Title	Revision Date
C0.0	TITLE SHEET	
C1.0	EXISTING CONDITIONS & DEMOLITION PLAN	
C2.0	SITE PLAN	
C3.0	UTILITY PLAN	
C3.1	UTILITY PROFILES	
C4.0	GRADING PLAN	
C5.0	EROSION CONTROL PLAN	
C5.1	EROSION CONTROL DETAILS	
C6.0	SPECIFICATIONS	
C7.0	DETAILS	
C7.1	DETAILS	
C8.0	OPERATION AND MAINTENANCE PLAN	
ES1.0	PHOTOMETRIC PLAN	
X1.0	DRAINAGE PLAN	

CITY OF NASHUA CONTACTS:

- PLANNING / ZONING DEPARTMENT:**
COMMUNITY DEVELOPMENT DIVISION
229 MAIN STREET
NASHUA, NH 03060

ATT: ROGER HOUSTON,
PLANNING DIRECTOR
(603) 589-3090
- BUILDING DEPARTMENT:**
229 MAIN STREET
NASHUA, NH 03060

ATT: NELSON ORTEGA,
CODE ENFORCEMENT MANAGER
(603) 589-3080
- ENGINEERING DEPARTMENT:**
NASHUA DEPT. OF PUBLIC WORKS
9 RIVERSIDE STREET
NASHUA, NH 03060

ATT: LISA FAUTEUX,
PUBLIC WORKS DIRECTOR
(603) 589-3169
- FIRE DEPARTMENT:**
NASHUA FIRE DEPARTMENT
70 EAST HOLLIS STREET
NASHUA, NH 03060

ATT: BRIAN RHODES, CHIEF
(603) 594-3651

UTILITY CONTACTS:

- WATER:**
PENNINGLUCK WATER WORKS
25 MANCHESTER STREET
MERRIMACK, NH 03054

ATT: JOHN BOISVERT, PE
(603) 913-2300
- GAS:**
LIBERTY UTILITIES
130 ELM STREET
MANCHESTER, NH 03101

ATT: RYAN LAGASSE
(603) 327-7151
- TELEPHONE:**
FAIRPOINT COMMUNICATIONS
237 DANIEL WEBSTER HWY,
MERRIMACK, NH 03054

ATT: ROBERTO DIAZ
(603) 595-1150
- POWER:**
EVERSOURCE
370 AMHERST STREET
NASHUA, NH 03060
ATT: THOMAS VALLTON
(603) 662-5694 EXT. 5208

OWNER SIGNATURE BLOCK

THE UNDER-SIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

OWNER SIGNATURE	DATE
-----------------	------

1. THE LOCATION OF THE UTILITIES SHOWN ARE APPROXIMATE. ITS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PRESERVE ALL UTILITY SERVICES.

2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL UTILITY COMPANIES AND JURISDICTIONAL AGENCIES PRIOR TO AND DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND WORK PRIOR TO CONSTRUCTION.

CONTACT DIG SAFE
72 HOURS PRIOR
TO CONSTRUCTION
DIGSAFE.COM
OR DIAL 811
CALL BEFORE YOU DIG
ITS THE LAW

NOTES

- SITE ACCESS CONTROL INCLUDING SAFETY FENCES AND TRAFFIC CONTROL, ALL CONSTRUCTION MEANS AND METHODS, AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ALL UTILITIES SHOWN IN THE PLANS ARE FROM RECORDS OR FIELD OBSERVABLE IN INFORMATION LOCATED BY SURVEYOR. ANY UTILITY LOCATIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
- PLANS BASED UPON GEOTECHNICAL ENGINEERING REPORT PREPARED BY JOHN TURNER CONSULTING, INC., DATED: AUGUST 18, 2020.



SIGNED AT : 08-26-2020

User: emt.asd@nashua.com File: J:\2019\19.GMX.C08 - GMX Nashua, NH\09 DESIGN DRAWINGS\02-SHEETS\C00-TITLE SHEET.dwg Time: Aug 26, 2020 - 11:14am

PROJECT NAME: GMX NASHUA

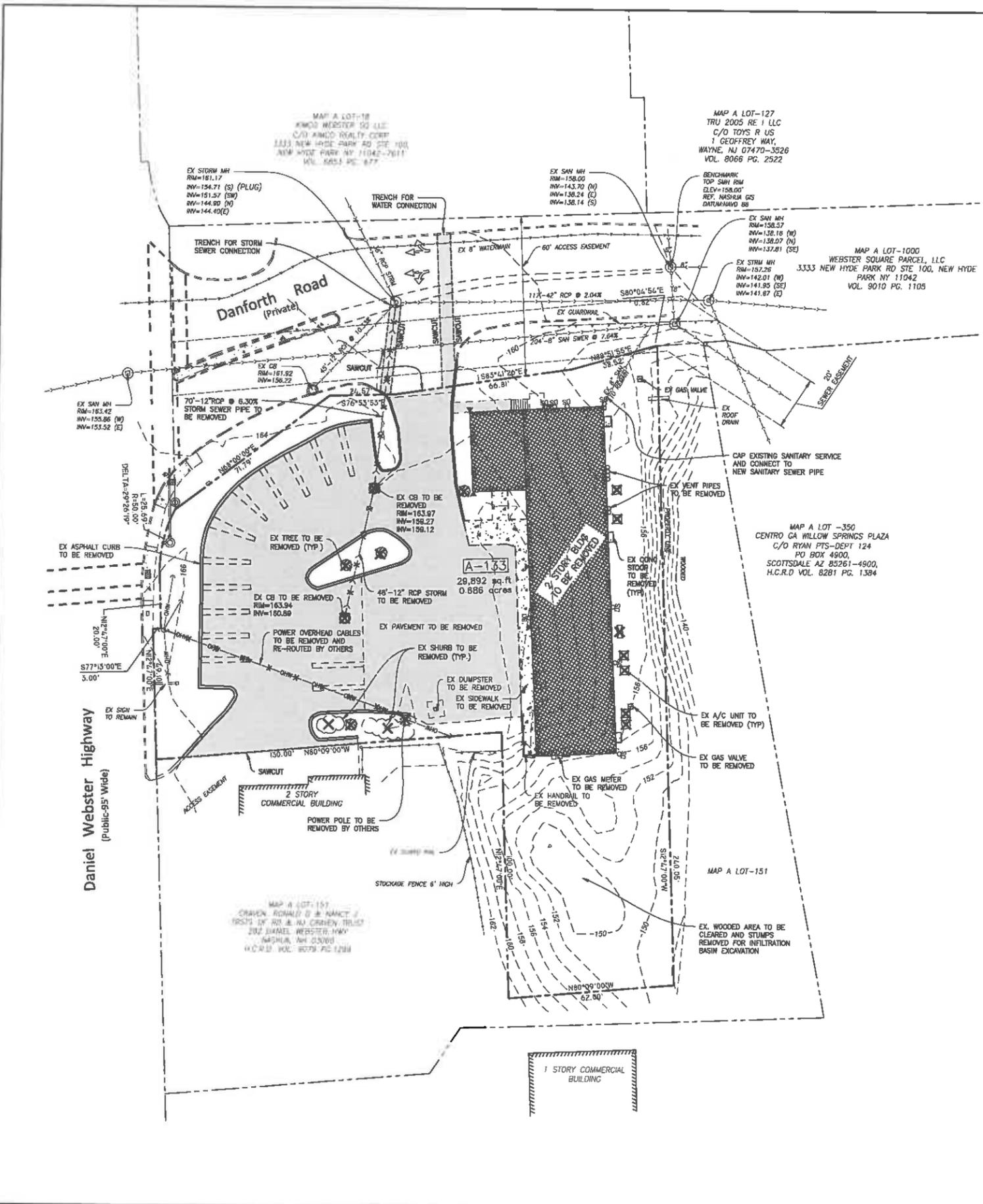
SHEET NAME: TITLE SHEET

PROJECT No. 19.GMX.C08

SHEET No. C0.0

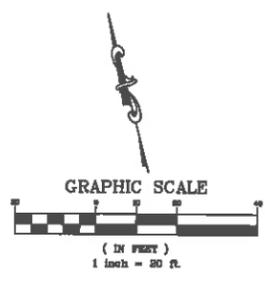
OF 14 SHEETS

278 DANIEL WEBSTER HWY NASHUA, NH



LEGEND:

- SAWCUT LINE
- x - x - LINEAR ITEM REMOVAL
- X ITEM REMOVAL SAWCUT LINE
- LINEAR ITEM REMOVAL
- [Cross-hatched box] EXISTING BUILDING REMOVAL
- [Dotted box] CONCRETE PAVEMENT/SIDEWALK REMOVAL
- [Solid grey box] ASPHALT PAVEMENT REMOVAL

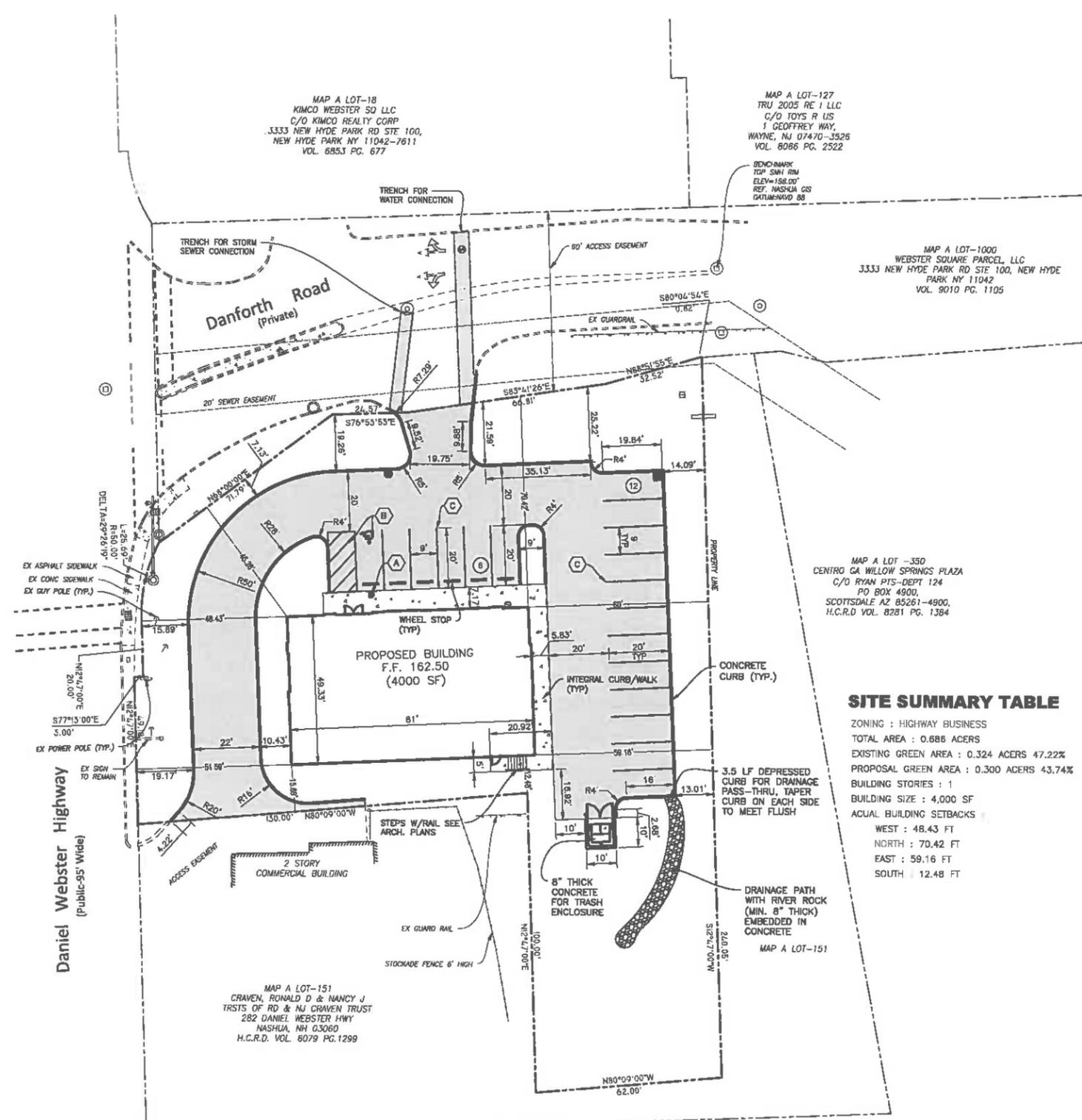


NOTES:

1. SITE ACCESS CONTROL INCLUDING SAFETY FENCES AND TRAFFIC CONTROL, ALL CONSTRUCTION MEANS AND METHODS, AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.
3. ALL SITE CLEARING, TOPSOIL STRIPPING, EXCAVATION, EMBANKMENT, GRADING, COMPACTION, SUB GRADE PREPARATION AND OTHER WORK HEREIN CONTEMPLATED SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION, JANUARY 2016 EDITION, (HEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS) EXCEPT THAT PAYMENT WILL BE DEFINED AS DETAILED IN THE STANDARD SPECIFICATIONS FOR WATER AND SEWER SIXTH EDITION, 2009.
4. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING WORK IN THE CONSTRUCTION AREA. EXCAVATION IN THE VICINITY OF EXISTING STRUCTURES AND UNDERGROUND UTILITIES SHALL BE PERFORMED BY HAND. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING FACILITIES, MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR IS TO UNCOVER ALL LINES BEING TIED INTO AND VERIFY SIZE AND ELEVATION BEFORE ANY CONSTRUCTION.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL STREET AND SIDEWALK CLOSURES WITH THE MUNICIPALITY.
7. CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS AND SPOILS TO INSURE MINIMAL INTERFERENCE WITH OWNER OPERATIONS.
8. INSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION. REMOVE FROM SITE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND LAWFULLY DISPOSE OF SAME.
9. ALL ITEMS TO BE REMOVED SHALL BE PROPERLY AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
10. AT LOCATIONS OF UTILITY REMOVAL, ANY OPEN TRENCHES REQUIRED, SHALL BE BACKFILLED WITH COMPACTED TRENCH BACKFILL.
11. NOTIFY UTILITY OWNER 72 HOURS IN ADVANCE OF ANY UTILITY SHUTDOWN.
12. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER ALL ITEMS DESIGNATED TO BE REMOVED OR RELOCATED.
13. IF ANY ITEMS ARE ENCOUNTERED IN THE FIELD THAT ARE NOT SHOWN ON THE PLAN WHICH REQUIRE DEMOLITION OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE A/E IMMEDIATELY.
14. THE SURVEY BASE PROVIDED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. THE OWNER, ARCHITECT & ENGINEER(S) ARE NOT RESPONSIBLE FOR ANY MISCHARTED OR UNCHARTED UTILITIES, OR OTHER DISCREPANCIES DETECTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS.
15. THE CONTRACTOR WILL PROTECT ALL UTILITIES, STREETS, STRUCTURES, VEGETATION, AND ADJACENT PROPERTY DESIGNATED TO REMAIN. ANY DAMAGE BY THE CONTRACTOR TO UTILITIES, STREETS, STRUCTURES, VEGETATION AND ADJACENT PROPERTY WILL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
16. THE CONTRACTOR WILL PAY ALL REQUISITE FEES TO THE MUNICIPALITY, AND ANY OTHER AGENCY REQUIRED, FOR COMPLETION OF DEMOLITION WORK.
17. CONTRACTOR TO ADJUST RIMS OF EXISTING STRUCTURES WITHIN SCOPE OF WORK TO FINAL GRADE ELEVATIONS.
18. EXISTING LATERAL CONNECTIONS FOR UTILITIES SHALL BE COORDINATED WITH THE CORRESPONDING UTILITY COMPANY FOR CAPPING AND CUT OFF WITHIN THE SCOPE OF WORK.
19. THE CONTRACTOR IS TO COMPLY WITH FEDERAL, STATE, AND LOCAL ORDINANCES WITH REGARD TO REMOVAL AND DISPOSAL OF MATERIALS FOR ALL ITEMS TO BE DEMOLISHED. WORK INCLUDES THE COMPLETE REMOVAL AND LEGAL DISPOSAL OF ALL OBJECTS AND MATERIALS (REGARDLESS OF THEIR NATURE) INCLUDING BUT NOT LIMITED TO TREE ROOTS, ORGANIC SOIL, DRUMS, TIRES, WOOD, BROKEN CONCRETE PIECES, AND FENCES ABOVE THE REQUIRED ELEVATION.
20. BURNING ON OWNERS PROPERTY IS NOT PERMITTED.
21. FULL DEPTH SAWCUTS ARE REQUIRED FOR PAVEMENT REMOVALS, ADJACENT TO EXISTING PAVEMENT TO REMAIN.
22. SAWCUT ALL TREE ROOTS ENCOUNTERED IN LIEU OF USING SHOVELS (HAND SHOVELS OR MECHANICAL).
23. ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY PREPARED BY GATE CITY SURVEY, INC., DATED JANUARY 2ND, 2020.

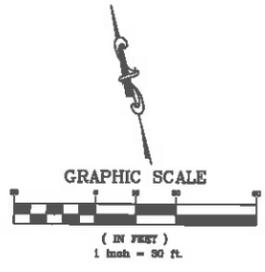
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	27B DANIEL WEBSTER HWY
SHEET No.	NASHUA, NH
PROJECT No.	19.GMX.C08
SHEET No.	C1.0
PROJECT NAME	GMX NASHUA
SHEET NAME	EXISTING CONDITIONS & DEMOLITION PLAN
PROJECT No.	2

User: emkashman File: J:\2019\19.GMX.C08 - GMX Nashua, NH\08 DESIGN\08-DESIGN\08-SHEETS\C2.0_SITE_PLAN.dwg Title: Aug 26, 2020 1:14pm



LEGEND

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- BARRIER CURB UNLESS NOTED OTHERWISE
- DEPRESSED CURB
- EXISTING CURB
- EXISTING STRIPING
- EXISTING SIDEWALK
- PARKING STALL COUNT
- SIGN AND STRIPING CALLOUT



CITY OF NASHUA SITE NOTES:

1. THE PURPOSE OF THIS PLAN IS TO OBTAIN SITE PLAN APPROVAL AND PERMITS FOR CONSTRUCTION OF THE NEW COMMERCIAL BUILDING, PARKING LOT, SIDEWALKS, TRASH ENCLOSURE AND UTILITY SERVICES.
2. PROPERTY IS ZONED: HIGHWAY BUSINESS
3. ALL SIGNAGE SHALL CONFORM TO APPLICABLE CITY OF NASHUA ZONING REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
4. SITE IMPROVEMENTS DEPICTED ON THESE PLANS SHALL CONFORM TO TITLE 111 OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSIONS AND GRADE AND NUMBER OF SPACES.
5. BASED ON AVAILABLE GIS MAPPING, THE SITE IS BELIEVED TO BE SERVED BY BOTH MUNICIPAL SEWER AND BY PENNICHUCK WATERWORKS.
6. NO VARIANCES OR SPECIAL EXCEPTIONS ARE BEING REQUESTED AS PART OF THESE PLANS.
7. PER FEMA FLOOD INSURANCE RATE MAP (FIRM) NUMBER 33011C0658D, THE SITE IS NOT LOCATED IN A FLOOD ZONE.
8. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED SITE DESIGN AND ASSOCIATED FEATURES IN SUPPORT OF THE APPLICATION FOR PLANNING BOARD ACTION.
9. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.
10. PRIOR TO ANY WORK BEING CONDUCTED, A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE PLANNING STAFF AND OTHER CITY DEPARTMENTS AS NECESSARY TO REVIEW THE PROPOSED WORK.
11. UTILITIES, INCLUDING ALL ELECTRIC, TELEPHONE, CABLE TELEVISION, AND OTHER COMMUNICATION LINES, BOTH MAIN AND SERVICE CONNECTIONS, SERVING NEW DEVELOPMENTS SHALL BE PROVIDED BY UNDERGROUND WIRING WITHIN EASEMENTS OR DEDICATED PUBLIC RIGHT-OF-WAY INSTALLED IN ACCORDANCE WITH THE BOARD OF PUBLIC WORKS SPECIFICATIONS.
12. STREET RESTORATION WORK IS TO BE IN ACCORDANCE WITH NRO SECTION 19-26.
13. THE PRESENCE OF WETLANDS HAVE NOT BEEN OBSERVED ON THE SUBJECT SITE.
14. THE PROPOSED SITE PLAN DOCUMENTS, AS DESIGNED, ARE BELIEVED TO COMPLY WITH THE MINIMUM REQUIREMENTS ESTABLISHED IN THE LAND USE CODE CHAPTER 190 OF THE CITY OF NASHUA BY-LAWS.
15. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS PLAN IN ANY WAY WHATSOEVER, OR CONVERT OR ALTER THE STRUCTURE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.
16. PERMITTED USE: RETAIL.

SITE SUMMARY TABLE

ZONING : HIGHWAY BUSINESS
 TOTAL AREA : 0.686 ACERS
 EXISTING GREEN AREA : 0.324 ACERS 47.22%
 PROPOSAL GREEN AREA : 0.300 ACERS 43.74%
 BUILDING STORIES : 1
 BUILDING SIZE : 4,000 SF
 ACTUAL BUILDING SETBACKS
 WEST : 48.43 FT
 NORTH : 70.42 FT
 EAST : 59.16 FT
 SOUTH : 12.48 FT

GENERAL NOTES:

1. ALL DIMENSIONS ALONG CURB LINES ARE TO FACE OF CURB, UNLESS NOTED OTHERWISE.
2. BUILDINGS AND ADJACENT TO BUILDING IMPROVEMENTS SHOWN ON THESE PLANS ARE BASED UPON THE BUILDING PLANS PROVIDED BY OTHERS AT THE DATE OF THESE PLANS BEING PREPARED. BUILDING PLANS NORMALLY CONTINUE TO CHANGE AFTER SITE PLANS HAVE BEEN APPROVED. THEREFORE THE CONTRACTOR SHALL USE THE BUILDING PLANS FOR FINAL BUILDING IMPROVEMENTS, AND VERIFY THAT ALL ADJACENT IMPROVEMENTS ARE CONSISTENT WITH THE DESIGN INTENT AND REQUIREMENTS OF THE SITE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF CLARIFICATION IS NEEDED, OR IF CONFLICTS OR INCONSISTENCIES EXIST.
3. ADA DETECTABLE WARNING STRIPS SHALL BE CAST IRON TILES, WET SET INTO CONCRETE SURFACE, PER MANUFACTURERS INSTALLATION RECOMMENDATIONS.
4. REFER TO LANDSCAPE PLAN FOR RESTORATION OF ALL NON-PAVED AREAS.

SIGNING AND STRIPING SCHEDULE

- A. HANDICAP SIGN
- B. HANDICAP SYMBOL AND STRIPING (BLUE)
- C. 4" YELLOW STRIPE

PARKING SUMMARY

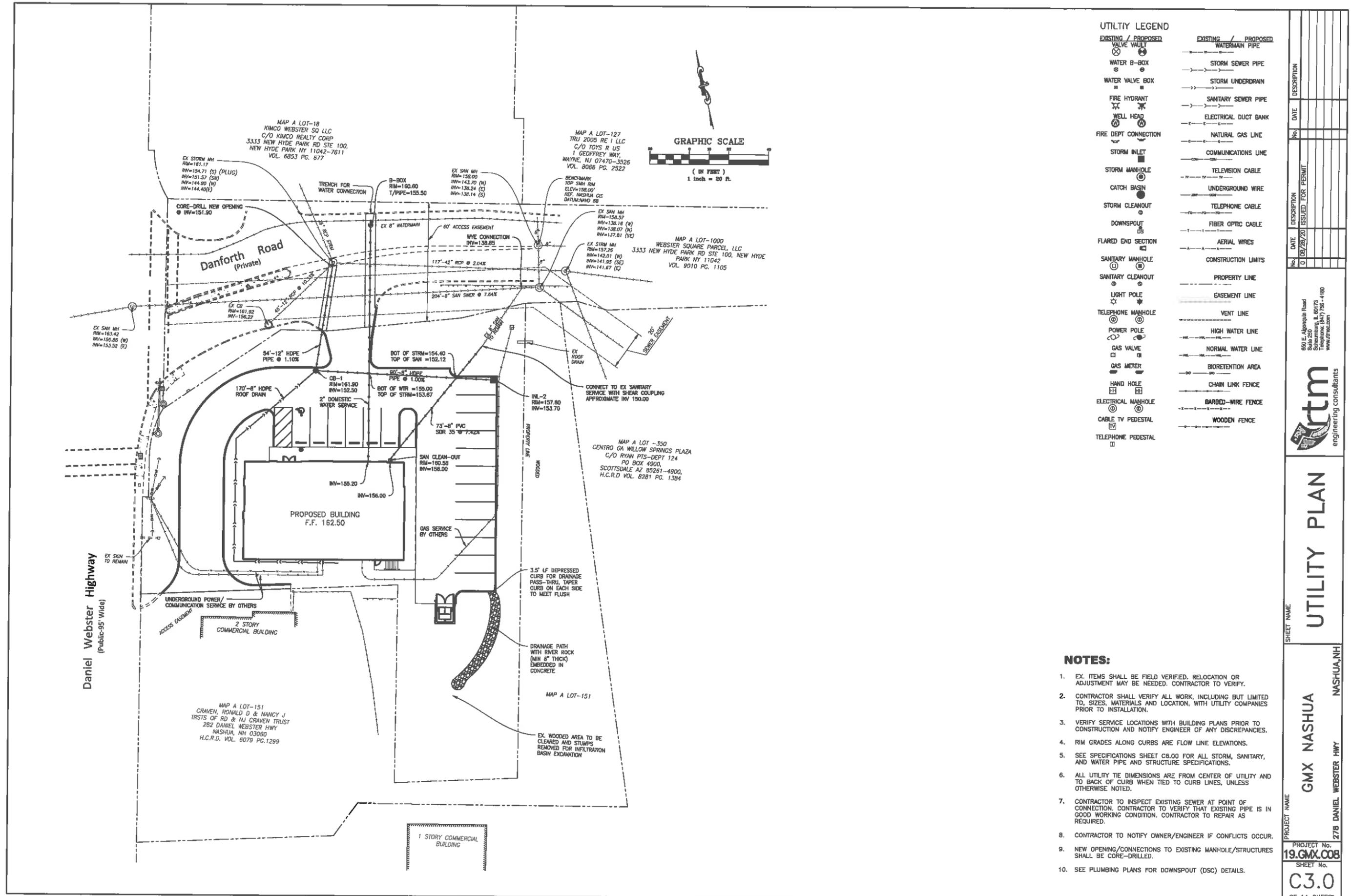
PARKING SPACES PROVIDED: 17
 ADA PARKING SPACES PROVIDED = 1
 TOTAL PARKING SPACES PROVIDED = 18

PROJECT NAME	GMX NASHUA			NASHUA, NH			SHEET NAME		
278 DANIEL WEBSTER HWY			NASHUA, NH			SITE PLAN			
PROJECT No.	19.GMX.C08			SHEET No.			C2.0		
OF 14 SHEETS									

600 E. Algonquin Road
 Schaumburg, IL 60173
 Telephone: (815) 756-4180
 www.rtmcc.com



User: cmtf.milmon File: J:\2018\1804\GMX - GMX Nashua, NH\GIS DESIGN\DRMINGS\DR-SHEETS\C3.0_UTILITY_PLAN.dwg Time: Aug 28, 2020 - 11:15pm



EXISTING / PROPOSED		EXISTING / PROPOSED	
VALVE VAULT	WATERMAIN PIPE	WATERMAIN PIPE	STORM SEWER PIPE
WATER B-BOX	STORM SEWER PIPE	STORM UNDERDRAIN	SANITARY SEWER PIPE
WATER VALVE BOX	STORM UNDERDRAIN	SANITARY SEWER PIPE	ELECTRICAL DUCT BANK
FIRE HYDRANT	SANITARY SEWER PIPE	ELECTRICAL DUCT BANK	NATURAL GAS LINE
WELL HEAD	ELECTRICAL DUCT BANK	NATURAL GAS LINE	COMMUNICATIONS LINE
FIRE DEPT CONNECTION	NATURAL GAS LINE	COMMUNICATIONS LINE	TELEVISION CABLE
STORM INLET	COMMUNICATIONS LINE	TELEVISION CABLE	UNDERGROUND WIRE
STORM MANHOLE	TELEVISION CABLE	UNDERGROUND WIRE	TELEPHONE CABLE
CATCH BASIN	UNDERGROUND WIRE	TELEPHONE CABLE	FIBER OPTIC CABLE
STORM CLEANOUT	TELEPHONE CABLE	FIBER OPTIC CABLE	AERIAL WIRES
DOWNSPOUT	FIBER OPTIC CABLE	AERIAL WIRES	CONSTRUCTION LIMITS
FLARED END SECTION	AERIAL WIRES	CONSTRUCTION LIMITS	PROPERTY LINE
SANITARY MANHOLE	CONSTRUCTION LIMITS	PROPERTY LINE	EASEMENT LINE
SANITARY CLEANOUT	PROPERTY LINE	EASEMENT LINE	VENT LINE
LIGHT POLE	EASEMENT LINE	VENT LINE	HIGH WATER LINE
TELEPHONE MANHOLE	VENT LINE	HIGH WATER LINE	NORMAL WATER LINE
POWER POLE	HIGH WATER LINE	NORMAL WATER LINE	BIORETENTION AREA
GAS VALVE	NORMAL WATER LINE	BIORETENTION AREA	CHAIN LINK FENCE
GAS METER	BIORETENTION AREA	CHAIN LINK FENCE	BARBED-WIRE FENCE
HAND HOLE	CHAIN LINK FENCE	BARBED-WIRE FENCE	WOODEN FENCE
ELECTRICAL MANHOLE	BARBED-WIRE FENCE	WOODEN FENCE	
CABLE TV PEDESTAL	WOODEN FENCE		
TELEPHONE PEDESTAL			

DATE	DESCRIPTION	DATE	DESCRIPTION
08/28/20	ISSUED FOR PERMIT		

60 E. Algonquin Road Salem, NH 03073 Telephone: (603) 756-4180 www.dtmec.com

dtm engineering consultants

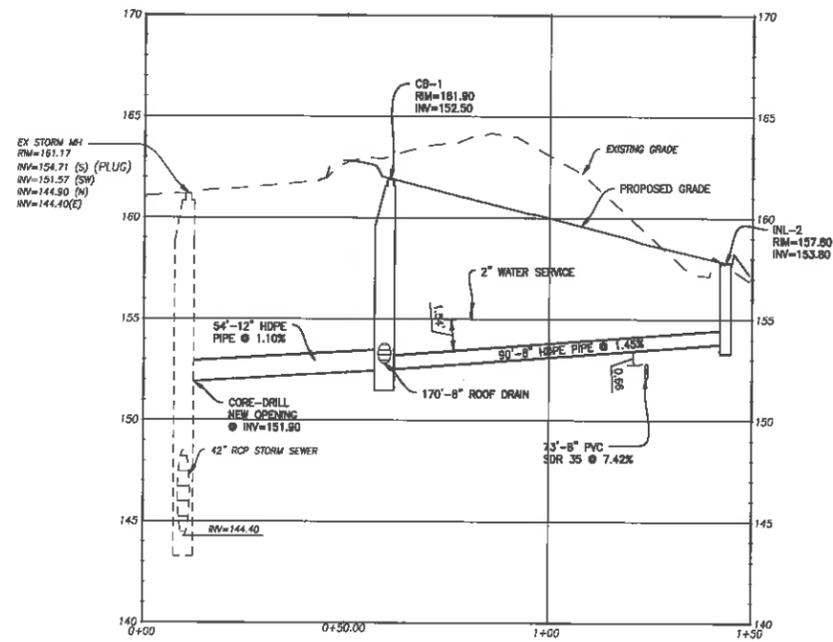
UTILITY PLAN

SHEET NAME	PROJECT NAME	PROJECT No.
	GMX NASHUA	19.GMX.C08
		SHEET No.
		C3.0
		OF 14 SHEETS

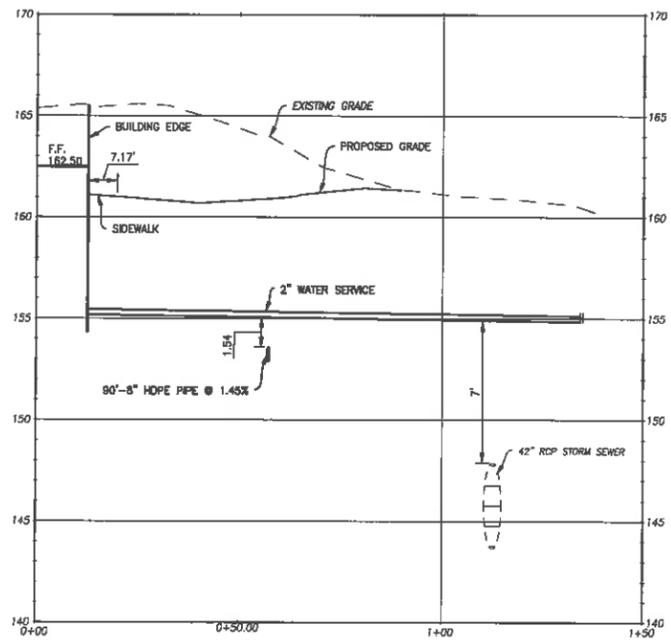
NASHUA, NH	278 DANIEL WEBSTER HWY
------------	------------------------

- NOTES:**
- EX. ITEMS SHALL BE FIELD VERIFIED. RELOCATION OR ADJUSTMENT MAY BE NEEDED. CONTRACTOR TO VERIFY.
 - CONTRACTOR SHALL VERIFY ALL WORK, INCLUDING BUT LIMITED TO, SIZES, MATERIALS AND LOCATION, WITH UTILITY COMPANIES PRIOR TO INSTALLATION.
 - VERIFY SERVICE LOCATIONS WITH BUILDING PLANS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - RIM GRADES ALONG CURBS ARE FLOW LINE ELEVATIONS.
 - SEE SPECIFICATIONS SHEET C8.00 FOR ALL STORM, SANITARY, AND WATER PIPE AND STRUCTURE SPECIFICATIONS.
 - ALL UTILITY TIE DIMENSIONS ARE FROM CENTER OF UTILITY AND TO BACK OF CURB WHEN TIED TO CURB LINES, UNLESS OTHERWISE NOTED.
 - CONTRACTOR TO INSPECT EXISTING SEWER AT POINT OF CONNECTION. CONTRACTOR TO VERIFY THAT EXISTING PIPE IS IN GOOD WORKING CONDITION. CONTRACTOR TO REPAIR AS REQUIRED.
 - CONTRACTOR TO NOTIFY OWNER/ENGINEER IF CONFLICTS OCCUR.
 - NEW OPENING/CONNECTIONS TO EXISTING MANHOLE/STRUCTURES SHALL BE CORE-DRILLED.
 - SEE PLUMBING PLANS FOR DOWNSPOUT (DSC) DETAILS.

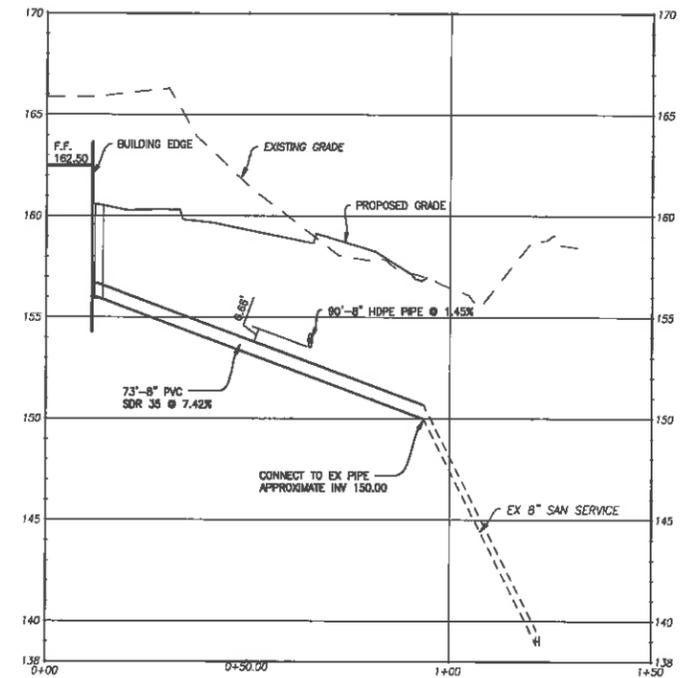
User: emfrcadman File: J:\2019\19.GMX.C08 - GMX Nashua, NH\08 DESIGN DRAWINGS\02-SHEETS\C3.0_UTILITY_Plan.dwg Time: Aug 26, 2020 1:15pm



STORM PROFILE



WATER PROFILE



SANITARY PROFILE

VERTICAL



1 inch = 4 ft.

HORIZONTAL



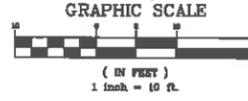
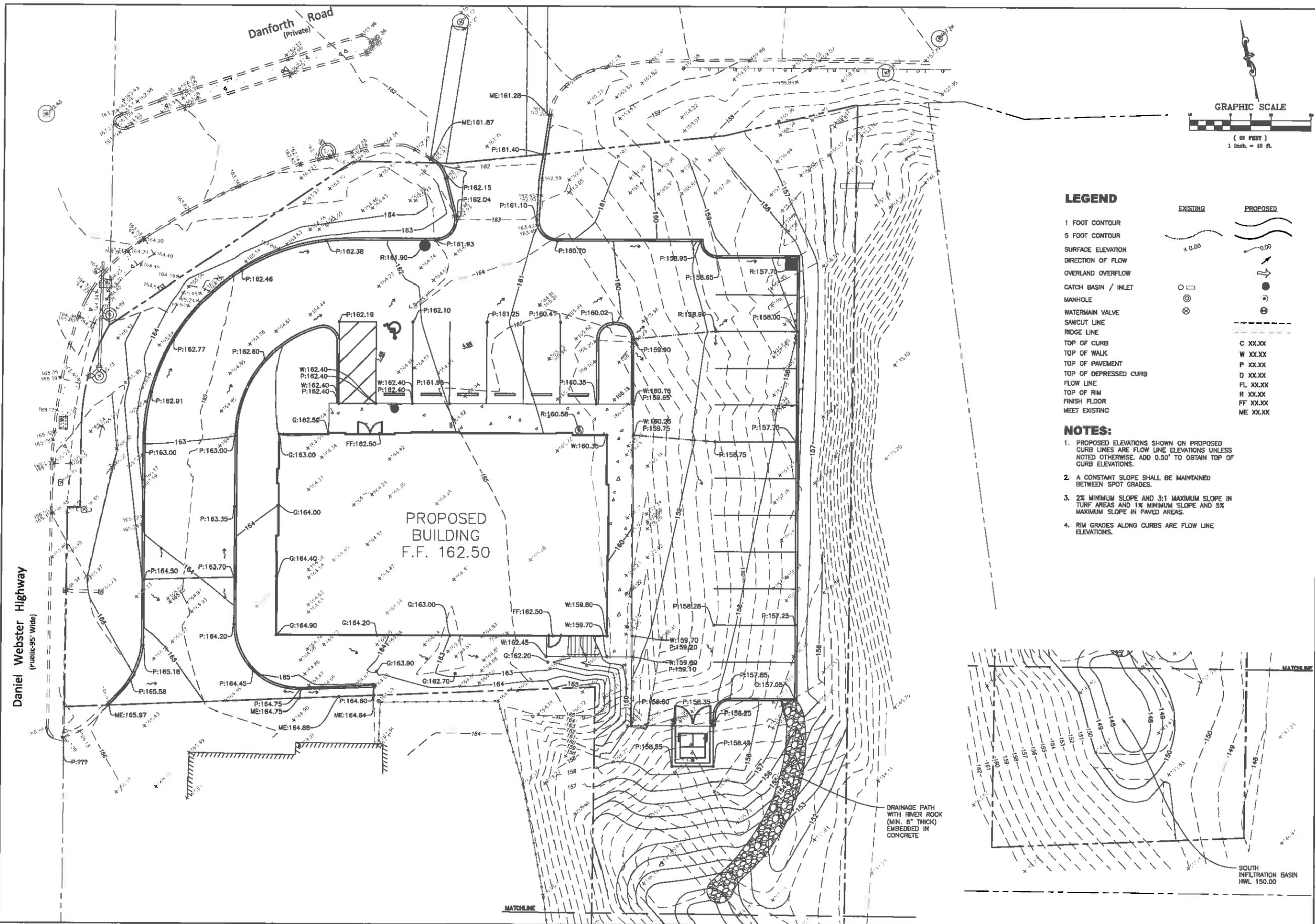
(IN FEET)
1 inch = 20 ft.

PROJECT NAME		SHEET NAME	
GMX NASHUA		UTILITY PROFILES	
278 DANIEL WEBSTER HWY		NASHUA, NH	
PROJECT No.		PROJECT No.	
19.GMX.C08		19.GMX.C08	
SHEET No.		SHEET No.	
C3.1		C3.1	
OF 14 SHEETS		OF 14 SHEETS	
No.	DATE	DESCRIPTION	ISSUED FOR PERMIT
01	08/26/20		
No.	DATE	DESCRIPTION	

artm
engineering consultants

850 E. Hampton Road
Schaumburg, IL 60173
Telephone: (847) 786-4180
www.artm.com

User: emicadman File: J:\2019\19.06.C4.00 - GMX Nashua, NH\05 DESIGN DRAWINGS\02-SHEETS\C4.0_GROUND PLAN.dwg Time: Aug 26, 2020 - 1:15pm

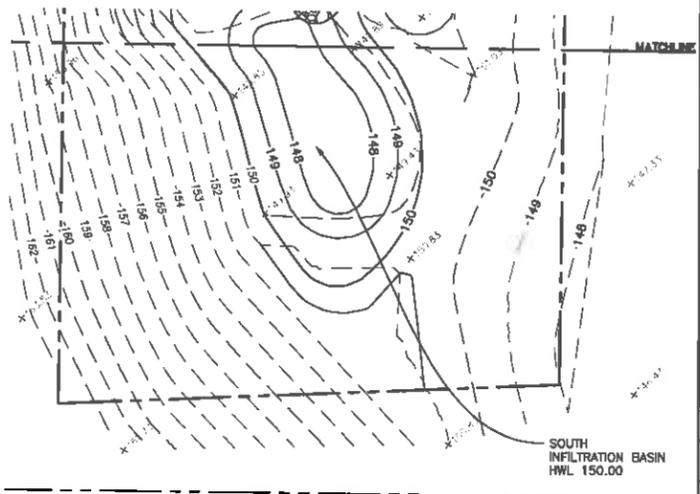


LEGEND

- | | | |
|-----------------------|----------|----------|
| 1 FOOT CONTOUR | EXISTING | PROPOSED |
| 5 FOOT CONTOUR | ~ | ~ |
| SURFACE ELEVATION | x 0.00 | o 0.00 |
| DIRECTION OF FLOW | → | → |
| OVERLAND OVERFLOW | ↗ | ↗ |
| CATCH BASIN / INLET | □ | ● |
| MANHOLE | ⊗ | ⊙ |
| WATERMAIN VALVE | ⊗ | ⊙ |
| SAWCUT LINE | — | — |
| RIDGE LINE | — | — |
| TOP OF CURB | | C XX.XX |
| TOP OF WALK | | W XX.XX |
| TOP OF PAVEMENT | | P XX.XX |
| TOP OF DEPRESSED CURB | | D XX.XX |
| FLOW LINE | | FL XX.XX |
| TOP OF RIM | | R XX.XX |
| FINISH FLOOR | | FF XX.XX |
| MEET EXISTING | | ME XX.XX |

NOTES:

1. PROPOSED ELEVATIONS SHOWN ON PROPOSED CURB LINES ARE FLOW LINE ELEVATIONS UNLESS NOTED OTHERWISE. ADD 0.50' TO OBTAIN TOP OF CURB ELEVATIONS.
2. A CONSTANT SLOPE SHALL BE MAINTAINED BETWEEN SPOT GRADES.
3. 2% MINIMUM SLOPE AND 3:1 MAXIMUM SLOPE IN TURF AREAS AND 1% MINIMUM SLOPE AND 5% MAXIMUM SLOPE IN PAVED AREAS.
4. RIM GRADES ALONG CURBS ARE FLOW LINE ELEVATIONS.



No.	DATE	DESCRIPTION	DESCRIPTION
0	08/26/20	ISSUED FOR PERMIT	

50 E. Abbequin Road
 Schaumburg, IL 60173
 Telephone: (847) 756-4180
 www.rtm.com

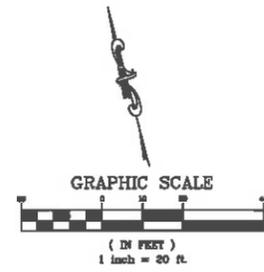
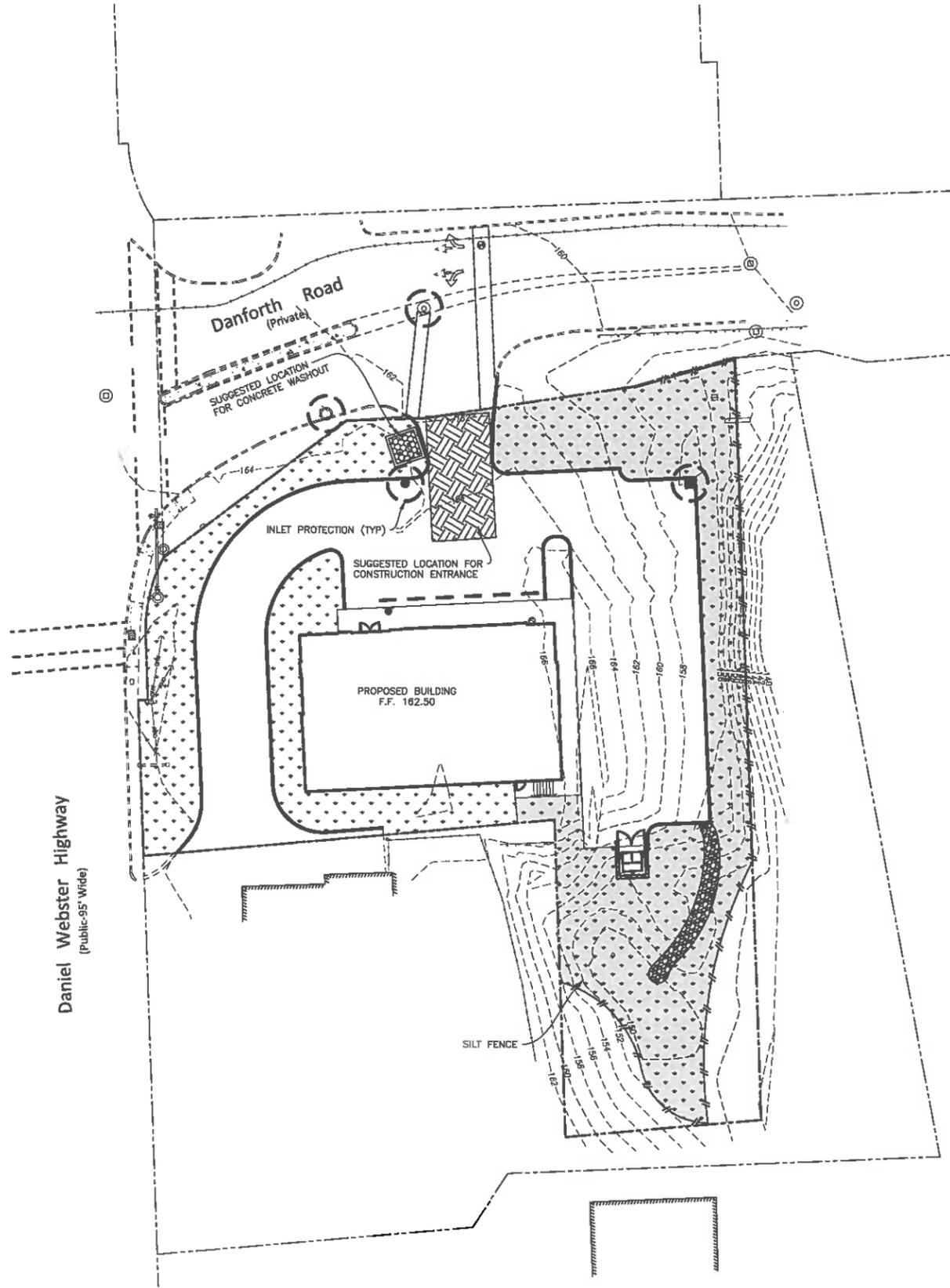
rtm
engineering consultants

GRADING PLAN

PROJECT No. **19.GMX.C08**
SHEET No. **C4.0**
OF 14 SHEETS

PROJECT NAME: **GMX NASHUA**
SHEET NAME: **GRADING PLAN**
PROJECT ADDRESS: **278 DANIEL WEBSTER HWY NASHUA, NH**

Users: emf:admmon File: J:\2019\19.06MX.C08 - GMX Nashua, NH\09 DESIGN DRAWINGS\02-SHEETS\05-0 EROSION CONTROL.dwg Time: Aug 26, 2020 1:15pm



LEGEND

- 20' X 40' CONSTRUCTION ENTRANCE, SEE DETAILS.
- EROSION CONTROL BLANKET
- RESTORE PER LANDSCAPE PLANS
- INLET PROTECTION, AND INLET BASKET FILTERS, SEE DETAILS.
- SILT FENCE, SEE DETAILS.
- CONCRETE/MORTAR WASHOUT FACILITY
- CATCH BASIN/INLET
- STORM SEWER MANHOLE

SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. INLET PROTECTION SHALL BE INSTALLED AT EACH DRAINAGE STRUCTURE THAT ACCEPTS WATER ONCE THAT STRUCTURE IS ABLE TO RECEIVE WATER.
2. ALL ROADS INCLUDING ADJACENT ROADWAYS, SWALES, DRAINAGE STRUCTURES, MANHOLES AND PIPES MUST BE KEPT CLEAN AND FREE OF DIRT, SILT AND DEBRIS AT ALL TIMES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD ADJUSTING THE LOCATION OF THE SILT FENCE TO ACCOMMODATE CONSTRUCTION ACTIVITIES. RELOCATED SILT FENCE SHALL BE RELOCATED BACK TO ORIGINAL LOCATION AS NECESSARY AFTER CONSTRUCTION ACTIVITY IN THE EFFECTED AREA IS COMPLETED.
4. AFTER PERMANENT GROUND COVER IS ESTABLISHED THROUGHOUT THE SITE, THE SEDIMENT SHALL BE REMOVED FROM THE UNDERGROUND DETENTION SYSTEM AND ALL STORM SEWER PIPES AND STRUCTURES.

INSPECTION SCHEDULE

1. EROSION CONTROL DEVICES & SWALES SHALL BE MONITORED DAILY.
2. FOREBAY/SEDIMENT TRAPS SHALL BE MONITORED WEEKLY. TRAPPED SEDIMENT SHALL BE REMOVED, RESPREAD, & STABILIZED.
3. VEGETATIVE PLANTINGS (SEEDING, SODDING, ETC.) SHALL BE CHECKED PERIODICALLY TO VERIFY THAT ADEQUATE GROUND COVER IS BEING ESTABLISHED. AREAS OF INSUFFICIENT COVER SHALL BE RESEEDED.
4. REPAIRS TO EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY UPON DISCOVERY.

ANTICIPATED CONSTRUCTION SEQUENCE	RESPONSIBLE CONTRACTOR			
	GRADING	UNDERGROUND	PAVING	LANDSCAPE
1. INSTALL SEDIMENT CONTROL DEVICES				
STABILIZED CONSTRUCTION ENTRANCE	X			
SILT FENCE	X			
2. GRADE SITE / STOCK PILE TOPSOIL				
SILT FENCE (TOPSOIL STOCKPILES & OPEN SPACE SLOPES)	X			
3. INSTALL STORM WATER MANAGEMENT				
STORM SEWER EXPLORATORY DIG		X		
INLET PROTECTION		X		
4. TEMPORARY VEGETATIVE STABILIZATION				
TEMPORARY SEEDING				X
MULCHING				X
5. SITE WORK - CONCRETE WASHOUT AREA				
CURB & GUTTER & PATCHING			X	
AGGREGATE SUBBASE			X	
BAW & SINDER			X	
SIDEWALKS AND CONCRETE PAVEMENT			X	
ASPHALT PATCHES			X	
LANDSCAPE INSTALLATION				X
6. TEMPORARY SEEDING ON ALL AREAS TO BE EXPOSED LONGER THAN 60 DAYS				X
7. SURFACE PARKING LOTS			X	
8. PERMANENT VEGETATIVE STABILIZATION OF EXPOSED AREAS				X
PERMANENT SEEDING				X
SODDING				X
9. PERFORM CONTINUING MAINTENANCE	X	X	X	X

SEEDING SCHEDULE

A KENTUCKY BLUEGRASS 135#/ac. MIXED WITH PERENNIAL RYEGRASS 45#/ac. & 2 TONS STRAW MULCH PER ACRE
 B SPRING OATS 100#/ac.
 C WHEAT OR CEREAL RYE 150#/ac.
 D SALT TOLERANT SOD, PER PROJECT SPECIFICATIONS
 E STRAW MULCH

STABILIZATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DORMANT SEEDING	A									A		
TEMPORARY SEEDING			B				C					
SODDING			D**									
MULCHING	E											

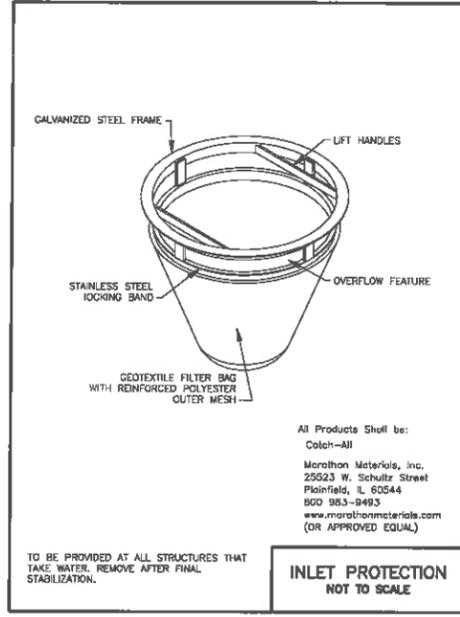
* IRRIGATE AS NECESSARY
 ** IRRIGATE AS NECESSARY TO ESTABLISH SOD

PROJECT No. **19.GMX.C08**
 SHEET No. **C5.0**
 OF 14 SHEETS

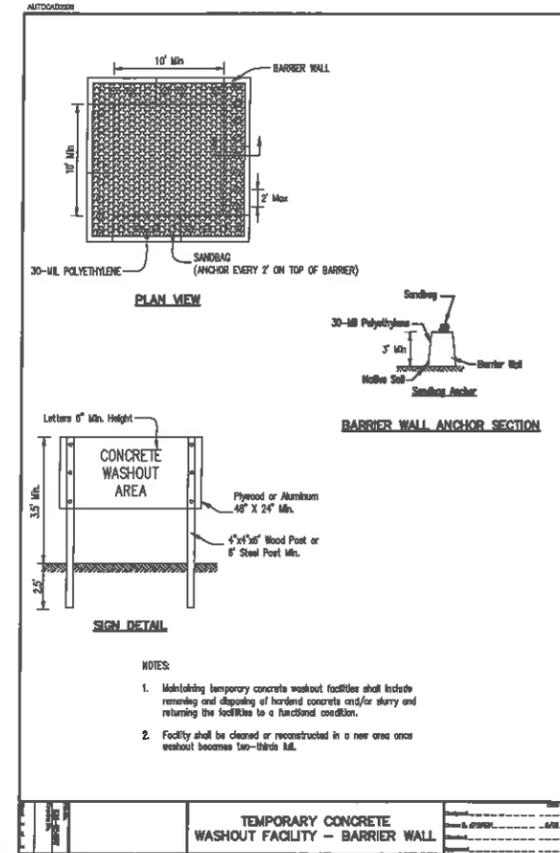
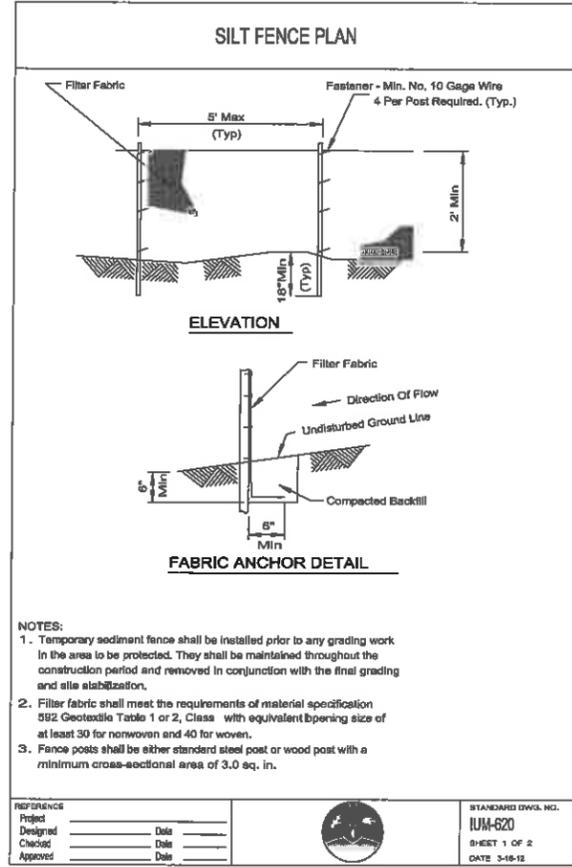
PROJECT NAME: **GMX NASHUA**
 SHEET NAME: **EROSION CONTROL PLAN**
 NASHUA, NH
 278 DANIEL WEBSTER HWY

DESIGN FIRM: **rtm engineering consultants**
 650 E. Algonquin Road
 Schaumburg, IL 60173
 Telephone: (815) 766-1168
 www.rtm.com

DATE ISSUED FOR PERMIT: 08/26/20



All Products Shall be:
 Colch-Ali
 Marathon Materials, Inc.
 25523 W. Schultz Street
 Plainfield, IL 60544
 800 383-2493
 www.marathonmaterials.com
 (OR APPROVED EQUAL)



PROJECT NAME	GMX NASHUA			EROSION CONTROL DETAILS			
PROJECT No.	19.GMX.008			NASHUA, NH			
SHEET No.	C5.1			278 DANIEL WEBSTER HWY			
OF 14 SHEETS							
SHEET NAME				NASHUA, NH			
DESCRIPTION				DESIGN FIRM: 19400877-0002			
DATE				DESIGNER: J. J. JONES			
NO.				DRAWN: J. J. JONES			
ISSUED FOR PERMIT				CHECKED: J. J. JONES			
DATE				APPROVED: J. J. JONES			
NO.				DATE: 8-27-2012			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.				OF 14 SHEETS			
DESCRIPTION				PROJECT: 19.GMX.008			
DATE				SHEET: C5.1			
NO.</							

GENERAL NOTES AND CONDITIONS

- 1. THE MUNICIPAL AUTHORITY GOVERNING THIS WORK IS CITY OF NASHUA.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING SPECIFICATIONS...
3. THE PROJECT SPECIFICATIONS SHALL GOVERN THE CONSTRUCTION OF THIS DEVELOPMENT WITH THE ABOVE SPECIFICATIONS...
4. IN THE EVENT OF CONFLICTS, ERRORS, OR AMBIGUITIES IN THE DOCUMENTS CLIENT AND OR CONTRACTOR SHALL IMMEDIATELY...
5. THE STANDARD SPECIFICATIONS, CONSTRUCTION PLANS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT...
6. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS CONSTRUCTED UNDER THESE CONTRACT DOCUMENTS...
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES INDICATED ON THE ENGINEERING PLANS...
8. THE IMPROVEMENTS SHOWN ON THE ENGINEERING PLANS SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL AND EQUIPMENT...
9. ANY QUANTITIES CONTAINED IN THESE DOCUMENTS ARE APPROXIMATE AND ESTIMATED...
10. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED 'FOR CONSTRUCTION'...
11. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS AND MUNICIPAL REGULATIONS AND STANDARDS...
12. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE...
13. THE CITY OF NASHUA MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY APPROVED CONSTRUCTION ACTIVITY...
14. EXCAVATIONS SHOULD COMPLY WITH THE REQUIREMENTS OF OSHA 29CFR, PART 1926, SUBPART P...
15. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, EXCESS MATERIALS, DEBRIS, ANY EXCESS DIRT OR MATERIALS, ETC. SHALL BE LEGALLY DISPOSED OF AT OFF-SITE LOCATIONS...
16. CONSTRUCTION SITE SAFETY IS SOLE RESPONSIBILITY OF THE CONTRACTOR WHO CONTROLS THE MEANS, METHODS, AND SEQUENCING OF CONSTRUCTION OPERATIONS...
17. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE SIGNS, BARRICADES, FENCING, TRAFFIC CONTROL DEVICES AND MEASURES...
18. SITE ACCESS CONTROL INCLUDING SAFETY FENCES, AND ALL CONSTRUCTION MEANS AND METHODS AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR...
19. ALL PERMANENT TYPE PAVEMENTS OR PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED...
20. WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS, AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT...
21. THE CONTRACTOR, BY AGREEING TO PERFORM THE WORK, AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER, THE ENGINEER, THE CITY, AND ALL AGENTS AND ASSIGNS OF THOSE PARTIES...
22. ALL ROADS, SWALES, DRAINAGE STRUCTURES, MANHOLES AND PIPES MUST BE KEPT CLEAN AND FREE OF DIRT, SILT AND DEBRIS AT ALL TIMES...
23. IF ANY EXISTING UNDERGROUND UTILITIES ARE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION...
24. CONTRACTOR SHALL PURCHASE AND MAINTAIN FOR THE DURATION OF THE WORK INSURANCE TO PROTECT ENGINEER, OWNER, ALL OF THEIR AGENTS EMPLOYEES, SUCCESSORS, AND ASSIGNS FROM ANY AND ALL CLAIMS ARISING OUT OF THE CONSTRUCTION...
25. ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE...

EARTHWORK AND GRADING

- 1. THE GEOTECHNICAL REPORT FOR THE PROJECT WAS PREPARED BY JOHN TURNER CONSULTING, DATED, AUGUST 18, 2020. THEIR REQUIREMENTS AND RECOMMENDATIONS SHALL BE FOLLOWED...
2. SOIL EROSION CONTROL SPECIFICATIONS SHALL BE CONSIDERED AS PART OF THIS SECTION...
3. SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE CHARLES SOIL CONSERVATION DISTRICT SHALL BE FOLLOWED...
4. ALL PROPOSED PAVEMENT AREAS SHALL BE STRIPPED OF ALL TOPSOIL AND UNSUITABLE MATERIAL...
5. STOCKPILING OF SOIL SHALL BE AT LOCATIONS APPROVED BY THE OWNER...
6. PROPOSED PAVEMENT AREAS AND WHEN APPLICABLE, BUILDING PADS, DRIVEWAYS AND SIDEWALKS SHALL BE EXCAVATED OR FILLED TO PLUS OR MINUS 0.1 FOOT OF DESIGN SUBGRADE ELEVATIONS...
7. THE SUBGRADE SHALL BE FREE OF UNSUITABLE MATERIAL AND SHALL BE COMPACTED TO A MINIMUM OF NINETY-FIVE (95) PERCENT OF MODIFIED PROCTOR DENSITY...
8. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE...
9. UPON COMPLETION OF THE SURFACE IMPROVEMENTS, THE CONTRACTOR SHALL RE-SPREAD A MINIMUM OF A 6" LAYER OF TOPSOIL...
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL SPILLS MATERIAL AS NECESSARY...

PAVING

- 1. THE PROPOSED ASPHALT PAVEMENT SHALL CONSIST OF THE SUBGRADE COURSE (AS SPECIFIED) BASE COURSE, BITUMINOUS CONCRETE BINDER COURSE AND BITUMINOUS CONCRETE SURFACE COURSE...
2. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB AND GUTTER SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND MUNICIPALITY...
3. CONCRETE CURBS (& GUTTERS):
A. ALL CURB AND GUTTER SHALL BE CONSTRUCTED WITH NHDOT CLASS A APPROVED CONCRETE...
B. CONTRACTION JOINTS SHALL BE SAW-CUT AT TWENTY (20) FOOT INTERVALS...
C. PREFORMED FIBER BOARD EXPANSION JOINTS, ONE (1) INCH THICK...
D. TWO (2)-#5 PLAIN ROUND STEEL BOWLS, 2 FEET LONG...
E. THE PROPOSED CURB AND GUTTER AND PAVEMENT SHALL BE OF THE TYPE AND THICKNESS AS SPECIFIED...
F. DEPRESSED CURB SHALL BE PROVIDED FOR HANDICAPPED RAMPS LOCATIONS...
G. ALL ON-SITE JOINTS SHALL BE SEALED WITH CONCRETE JOINT SEALANT...
4. CONCRETE SIDEWALK (INCLUDING CURB RAMPS):
A. ALL SIDEWALK SHALL BE CONSTRUCTED WITH NHDOT, CLASS A CONCRETE...
B. TOOLED CONTRACTION JOINTS SHALL CONSTRUCTED AT EVERY ± FIVE (5) FEET...
C. PREFORMED FIBER BOARD EXPANSION JOINTS, 3/4" THICK...
D. PREFORMED EXPANSION JOINTS, 1/2" THICK...
E. ALL SIDEWALKS CROSSING UTILITY TRENCHES SHALL HAVE TWO #4 REINFORCING BARS...
F. DETECTIBLE WARNING SHALL CONSIST OF TRUNCATED DOMES MEETING THE REQUIREMENTS OF ADAAG AND INSTALLED AT LOCATIONS SHOWN ON PLAN...
5. CONCRETE PAVEMENT AND DRIVE APRONS:
A. CONCRETE PAVEMENT SHALL BE CONSTRUCTED WITH NHDOT CLASS AA CONCRETE...
B. ADEQUATE CONSTRUCTION JOINTS, CONTRACTION JOINTS FOR ISOLATION JOINTS...
C. ALL ON-SITE JOINTS, WITH THE EXCEPTION OF SAWED JOINTS, SHALL BE SEALED WITH CONCRETE JOINT SEALANT...

STANDARD UTILITY PROVISIONS

- 1. ALL UTILITY CONSTRUCTION WORK SHALL GOVERNED BY:
- SANITARY DISTRICT REQUIREMENTS
- MUNICIPAL/LOCAL REQUIREMENTS
- ROADWAY AUTHORITIES REQUIREMENTS
2. ALL UTILITY TRENCHES UNDER AND WITHIN TWO FEET OF PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE BACKFILLED WITH SCREENED GRAVEL...
3. UTILITY CONNECTIONS WITHIN THE STREET RIGHT OF WAY SHALL BE ACCOMPLISHED BY SAW CUTTING AND REMOVING EXISTING PAVEMENT...
4. THE UNDERGROUND CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL REMOVE AND DISPOSE OF OFFSITE ANY EXCESS DIRT OR MATERIALS...
5. 'BAND/SEAL' OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OR DISSIMILAR MATERIALS...
6. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER MAIN AND ANY SEWERS...
7. ALL CAST AND DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED IN A 8-MIL POLYETHYLENE TUBING...
8. ALL MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS SHALL BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE RING CONSTRUCTION...
9. SEE DETAIL SHEETS THIS SET FOR FURTHER INFORMATION REGARDING THE STORM, SANITARY AND WATERMAIN REQUIREMENTS...

STANDARD SANITARY SEWER PROVISIONS:

- 1. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
2. ALL DOWNSPOUTS, FOOTING DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM OR TO GRADE.
3. SANITARY SEWER SHALL BE CONSTRUCTED OF ONE OR MORE OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:
A. POLYVINYLCHLORIDE PLASTIC GRAVITY SEWER PIPE (PVC) SDR-35...
B. DUCTILE IRON PIPE CLASS 52...
C. ALL SANITARY FIRING SHALL BE INSTALLED ON CLASS "B" BEDDING
4. 'BAND-SEAL' OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS OR SIZES.
5. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
A. CIRCULAR SAW-CUT OF THE SEWER MAIN BY PROPER TOOLS...
B. REMOVE AN ENTIRE SECTION OF PIPE...
C. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH...
D. INSTALL A NEW MANHOLE.
6. SANITARY MANHOLES SHALL HAVE IN ADDITION TO THE GENERAL MANHOLE REQUIREMENTS:
A. BASE AND BOTTOM SECTION SHALL BE MONOLITHICALLY CAST...
B. PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATERTIGHT PIPE SLEEVES...
C. CHIMNEY SEAL OR APPROVED ALTERNATE AS REQUIRED...
D. ALL SANITARY MANHOLES SHALL BE TESTED PER ASTM C-898...
E. SANITARY MANHOLES SHALL HAVE NENM41 R-1772 CASTINGS...
7. ALL SEPTIC TANKS (IF ANY) BEING ABANDONED SHALL BE FILLED OR REMOVED...
8. ALL SANITARY SEWERS SHALL BE TESTED PER MUNICIPAL STANDARDS...
9. ALL SANITARY SEWER MANHOLES SHALL BE INSPECTED AND TESTED PER MUNICIPAL STANDARDS...
10. ALL FLEXIBLE (PVC) PIPE SHALL BE DEFLECTION TESTED PER MUNICIPAL AND/OR MANUFACTURER REQUIREMENTS.
11. ALL SANITARY SEWERS SHALL BE TIGHTNESS AND TESTED AS REQUIRED BY THE MUNICIPALITY...
12. ALL SANITARY SEWERS SHALL BE TIGHTNESS AND TESTED AS REQUIRED BY THE MUNICIPALITY...
13. ALL SANITARY SEWERS SHALL BE TIGHTNESS AND TESTED AS REQUIRED BY THE MUNICIPALITY...

STANDARD WATER MAIN PROVISIONS

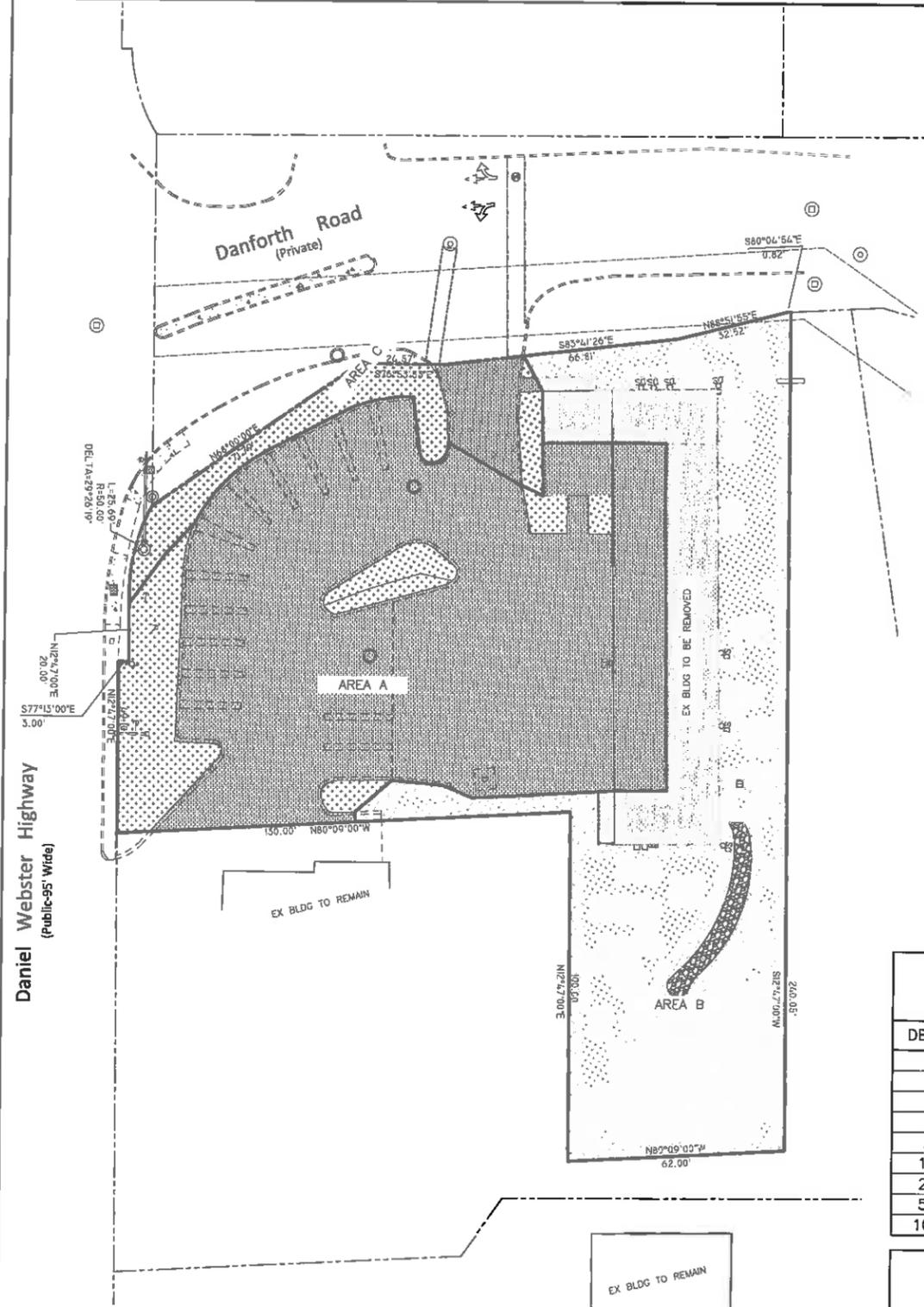
- 1. WATER MAIN AND SERVICES SHALL BE CONSTRUCTED OF ONE OR MORE OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:
A. DUCTILE IRON PIPE CLASS 52 PER ANSI A 21.51 (AWWA C151), 150 PSI, CEMENT LINED PER ANSI A 21.4 (AWWA C104), WITH 'PUSH ON' JOINTS.
B. TYPE K, OR GREATER, COPPER WATER TUBE, CONFORMING TO ASTM B88 AND ASTM B251.
C. POLYVINYLCHLORIDE PLASTIC PRESSURE PIPE, PER AWWA C-900, CLASS 150, WITH A DR OF 1/8" BILE IN COLOR AND CLEARLY LABELED AS 'WATER', BEAR THE NSF SEAL, WITH RUBBER COMPRESSION RING SEALS PER ASTM D-1869...
2. FITTINGS TO BE FURNISHED AND INSTALLED AS NEEDED...
3. ALL JOINTS AT BENDS, TEES, OFFSETS, REDUCERS, ETC. SHALL HAVE MEGA-LUG 1100 MECHANICAL JOINT RESTRAINTS...
4. ALL RUBBER GASKETS SHALL BE VULCANIZED NATURAL OR VULCANIZED SYNTHETIC RUBBER...
5. THE PIPE JOINT SHALL BE SUCH THAT ELECTRICAL CURRENT WILL PASS FROM ONE PIPE TO THE OTHER...
6. THE MINIMUM COVER FOR ALL WATER MAIN AND WATER SERVICE PIPE IS FIVE AND ONE-HALF FEET...
7. ALL VALVE BASINS ARE TO BE A MINIMUM OF 5 FEET IN DIAMETER...
8. VALVES SHALL BE MUELLER, OR APPROVED EQUAL, RESILIENT WEDGE GATE VALVES...
9. HYDRANTS SHALL BE IN ACCORDANCE WITH THE MUNICIPALITIES STANDARD DETAIL.
10. ALL WATER MAINS SHALL BE INSPECTED, TESTED AND DISINFECTED PER ALL GOVERNING AGENCY REQUIREMENTS.
11. ANY WELLS FOUND SHALL BE CAPPED/ABANDONED PER COUNTY HEALTH DEPARTMENT REQUIREMENTS.

STANDARD STORM SEWER PROVISIONS

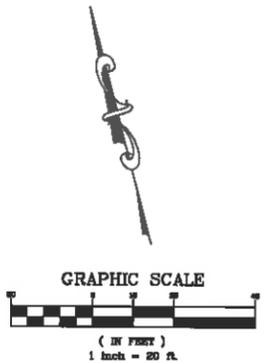
- 1. STORM SEWER SHALL BE CONSTRUCTED OF ONE OR MORE OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:
A. ADS HP-STORM HDPE HIGH PERFORMANCE PIPE...
B. UNDERDRAINS: PERFORATED POLYVINYLCHLORIDE PLASTIC GRAVITY SEWER PIPE (PVC) SDR-35...
C. DUCTILE IRON PIPE CLASS 52...
2. STORM STRUCTURES SHALL HAVE IN ADDITION TO THE GENERAL MANHOLE REQUIREMENTS:
A. ALL STORM STRUCTURE CASTINGS SHALL HAVE 'DRAINS TO RIVER' AND 'DUMP NO WASTE' CAST IN LID.
B. ALL STORM STRUCTURES SHALL HAVE STRUCTURAL STEEL, BICYCLE SAFE, HEAVY DUTY, OPEN GRATES.
C. PROVIDE EXPANDED INLET BOXES WHERE STORM DRAIN DIAMETER AND/OR ORIENTATION PROHIBITS THE OUTSIDE OF PIPE WALLS...
3. ALL ROOF DRAINS, FOOTING DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
4. MINIMUM SIZE OF STORM SEWER SHALL NOT BE LESS THAN 4 INCHES.
5. ALL STORM SEWERS SHALL BE INSPECTED AND TESTED IN KEEPING WITH ALL GOVERNING AGENCY REQUIREMENTS.

Project information block including: PROJECT NAME: GMX NASHUA, SHEET NAME: SPECIFICATIONS, SHEET No. C6.0 OF 14 SHEETS, PROJECT No. 19.GMX.C08, SHEET No. C6.0, and contact information for dtm engineering consultants.

User: emil.asilmon File: J:\2018\18.000.000 - GMX Nashua, NH\08 DESIGN DRAWINGS\02 - SHEETS\08 DRAINAGE PLAN.dwg Time: Aug 28, 2020 - 1:17pm

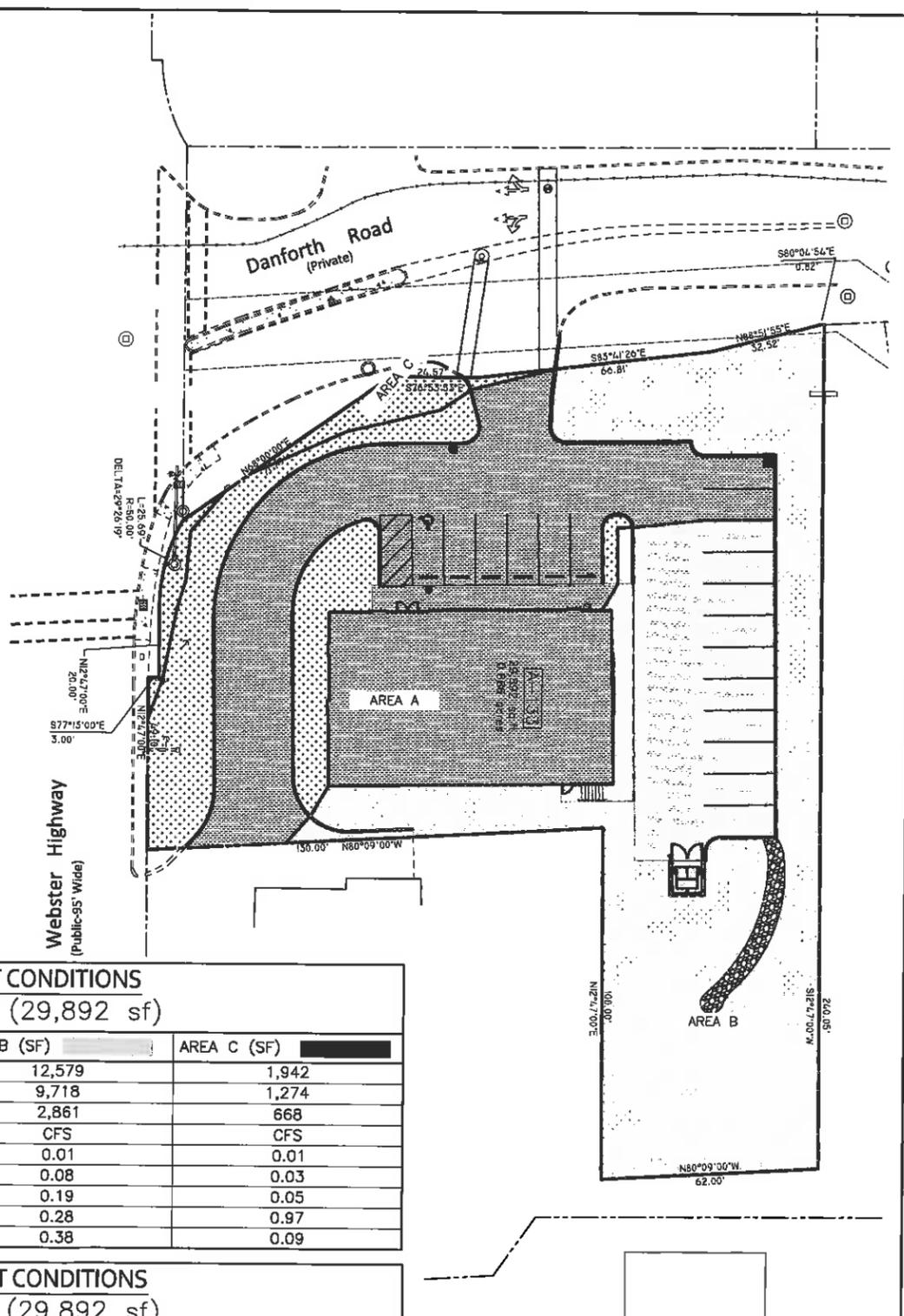


PREDEVELOPMENT CONDITIONS



LEGEND

-  PERVIOUS AREA
-  IMPERVIOUS AREA
-  DRAINAGE AREA
-  PROPERTY LINE



POSTDEVELOPMENT CONDITIONS

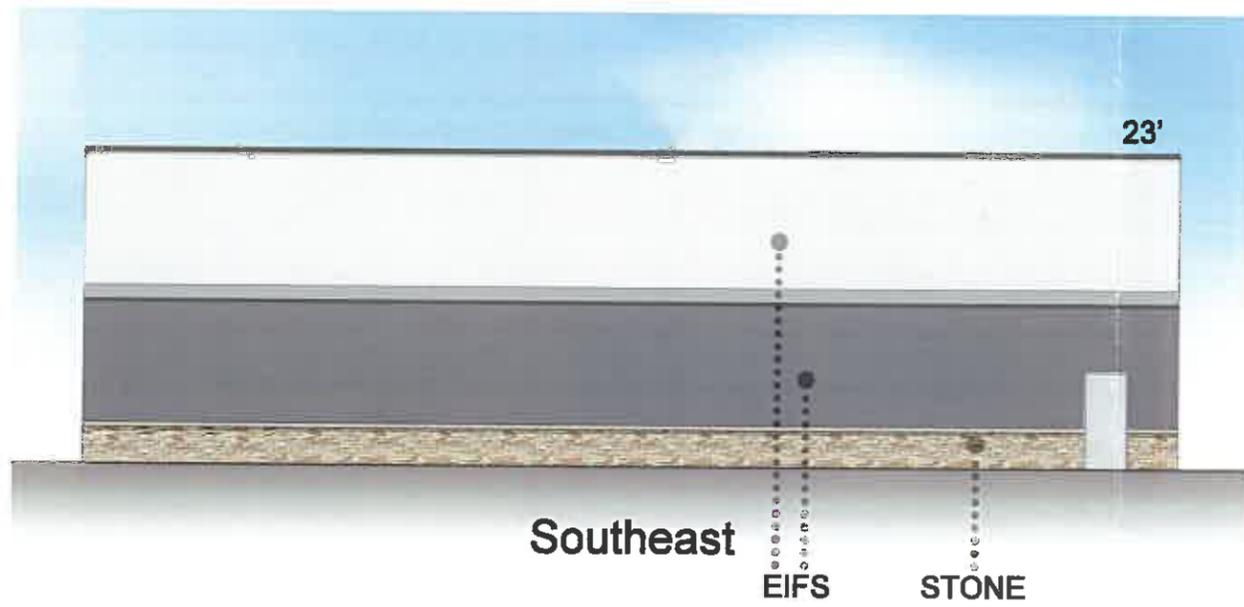
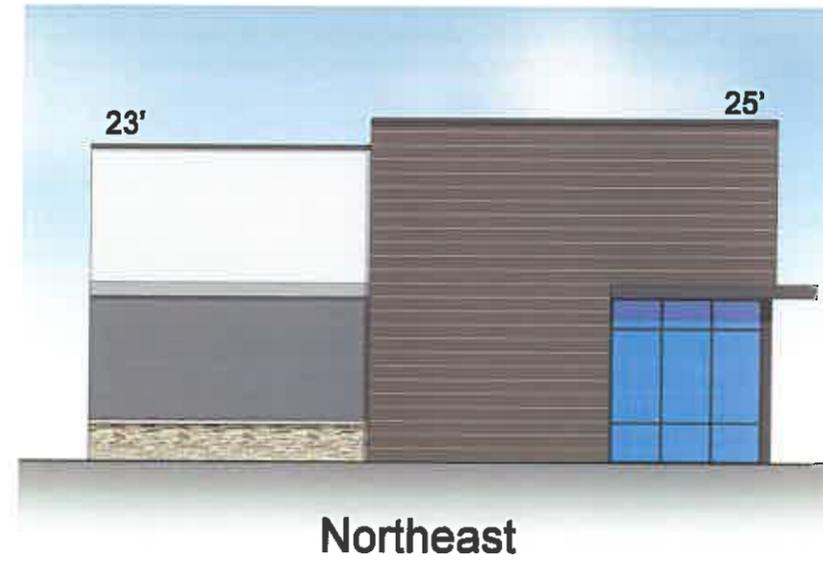
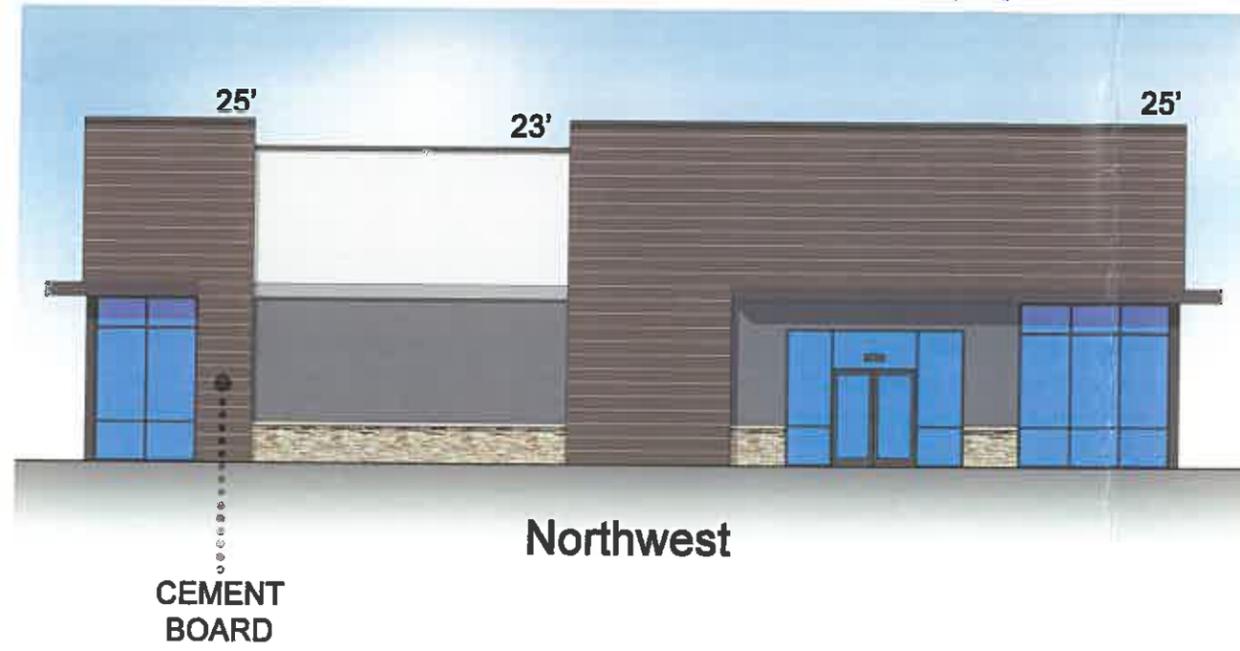
PREDEVELOPMENT CONDITIONS DRAINAGE TABLE (29,892 sf)			
DESCRIPTION/AREA	AREA A (SF)	AREA B (SF)	AREA C (SF)
TOTAL	15,371	12,579	1,942
PERVIOUS	2,078	9,718	1,274
IMPERVIOUS	13,293	2,861	668
CFS	CFS	CFS	CFS
2-YR RUNOFF	0.70	0.01	0.01
10-YR RUNOFF	1.12	0.08	0.03
25-YR RUNOFF	1.40	0.19	0.05
50-YR RUNOFF	1.59	0.28	0.97
100-YR RUNOFF	1.78	0.38	0.09

POSTDEVELOPMENT CONDITIONS DRAINAGE TABLE (29,892 sf)			
DESCRIPTION/AREA	AREA A (SF)	AREA B (SF)	AREA C (SF)
TOTAL	14,322	14,854	716
PERVIOUS	3,000	10394	716
IMPERVIOUS	11,322	4,460	0
CFS	CFS	CFS	CFS
2-YR RUNOFF	0.55	0.01 reduced to 0.00	0.00
10-YR RUNOFF	0.93	0.03 reduced to 0.00	0.00
25-YR RUNOFF	1.20	0.36 reduced to 0.00	0.00
50-YR RUNOFF	1.38	0.48 reduced to 0.00	0.00
100-YR RUNOFF	1.55	0.62 reduced to 0.00	0.00

AREA B RUNOFF REDUCED TO ZERO THROUGH RECHARGE IN THE SOUTH INFILTRATION BASIN

No.	DATE	DESCRIPTION	ISSUED FOR PERMIT	DATE	DESCRIPTION
0	08/28/20				
					
DRAINAGE PLAN					
PROJECT NAME			SHEET NAME		
GMX NASHUA			NASHUA, NH		
PROJECT No.			278 DANIEL WEBSTER HWY		
19.GMX.008					
SHEET No.					
X1.0					
OF 14 SHEETS					

880 E. Algonquin Road
Schaumburg, IL 60173
Telephone: (847) 758-4180
www.artm.com



NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: October 22, 2020
RE: **New Business #8 - Site Plan**

I. Project Statistics:

Owner:
Proposal: Site plan amendment to NR1577 to install an impermeable cap along with other site improvements
Location: 25 Van Buren Street & 38 Bridge Street
Total Site Area: 4.75 acres
Existing Zoning: TOD-Transit Oriented Development and GI-General Industrial
Surrounding Uses: Commercial and residential

II. Background Information:

The site was formally used by a manufactured gas plant from 1850's to the 1950's, and is used by Liberty Utilities for storage and distribution of natural gas and propane. The site includes an office building, warehouse, parking and numerous above-ground storage tanks, storage bays, pipes and infrastructure.

On August 4, 2020 the applicant appeared before the Conservation Commission and received a favorable recommendation. On August 11, 2020 the Zoning Board of Adjustment approved a Special Exception to allow this project to move forward. Copies of the approval letters are attached.

III. Project Description:

The proposal is for the regrading, repaving, and expansion of the site's existing parking lot, installation of a proposed impermeable cap in an area of the site as required by the New Hampshire Department of Environmental Services and improvements to the site's stormwater management system.

The project proposes to add approximately 53,900 sf of new impervious pavement to an existing primarily paved site and will repave approximately 104,735 sf of existing impervious. Surface drainage issues will be alleviated by promoting positive drainage to existing and proposed expanded stormwater infrastructure. The applicant is proposing to do the work in four phases (see attached).

One waiver has been requested to include a traffic report. The project does not propose an increase in the number of buildings and does not anticipate an increase in the number of employees.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D) and §190-23(E). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of § 190-279(OO), which requires a traffic impact analysis, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, minor drafting corrections will be made.
3. Prior to the Chair signing the plan, stormwater documents shall be submitted to Planning Staff for review and recorded at the applicant's expense.
4. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final plans.
5. Prior to the Chair signing the plan, all comments in an email from Joe Mendola, Street Construction Engineer, dated August 25, 2020 shall be addressed to the satisfaction of the Engineering Department.
6. Prior to the Chair signing the plan, the electronic file of the site plan shall be submitted to the City of Nashua.
7. All Zoning Board of Adjustment conditions of approval are incorporated herein and made part of this approval.

SITE GRADING, PAVING AND IMPERVIOUS CAP LIBERTY UTILITIES 38 BRIDGE STREET NASHUA, NEW HAMPSHIRE

FEBRUARY 27, 2020

DRAWING LIST:

COVER SHEET

- EX-1 EXISTING CONDITIONS SURVEY - 1 of 5
- EX-2 EXISTING CONDITIONS SURVEY - 2 of 5
- EX-3 EXISTING CONDITIONS SURVEY - 3 of 5
- EX-4 EXISTING CONDITIONS SURVEY - 4 of 5
- EX-5 EXISTING CONDITIONS SURVEY - 5 of 5

C-1 PHASING PLAN

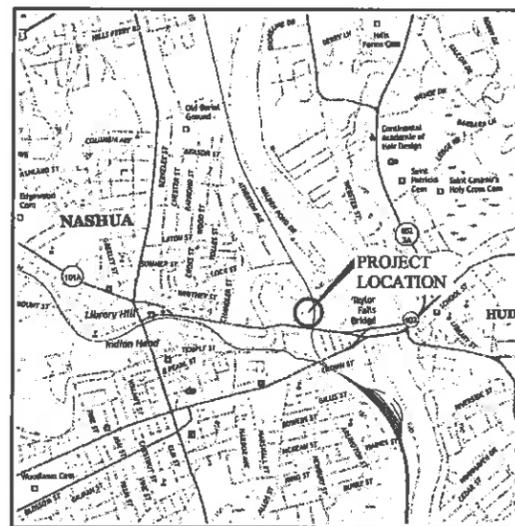
C-2 SITE PREPARATION & DEMOLITION PLAN AND
SEDIMENT & EROSION CONTROL PLAN

C-3 LAYOUT PLAN

C-4 GRADING PLAN

C-5 DETAILS

C-6 DETAILS



LOCUS PLAN

38 BRIDGE STREET, NASHUA, NH
U.S.G.S. Nashua North, NH
1" = 2000'

APPROVED - NASHUA PLANNING BOARD

DATE: _____ CHAIR

DATE: _____ SECRETARY

THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE IMPROVEMENTS SHOWN ON THESE DRAWINGS AND AS CONDITIONED OR STIPULATED BY THE NASHUA PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THESE DRAWINGS IN ANY WAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THESE DRAWINGS, OR CHANGE THE ABOVE USE INDICATED ON THESE DRAWINGS WITHOUT RECEIVING APPROVAL FROM THE CITY.

DATE: _____ OWNER

SITE CONSTRUCTION NOTES:

1. PLANS DO NOT PURPORT TO SHOW ALL UTILITIES. CONTRACTOR SHALL CONTACT DIG-SAFE (1-888-344-7233) AND THE CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS A MINIMUM OF 72 HOURS PRIOR TO BEGINNING EXCAVATION WORK AT THE SITE.
2. THE ACCURACY AND COMPLETENESS OF ANY UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN ON THE PLANS ARE NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UTILITIES THAT MAY BE AFFECTED BY THE WORK OF THIS PROJECT.
3. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL REVIEW SCHEDULING AND SITE SAFETY WITH THE OWNER. CONTRACTOR SHALL ENSURE THAT HIS OPERATIONS HAVE THE MINIMUM POSSIBLE IMPACT ON ALL AREAS OF THE PROPERTY. ACCESS TO FACILITY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES. HOURS OF WORK AND SITE ACCESS SHALL BE COORDINATED THROUGH THE OWNER. THE CONTRACTOR SHALL PROTECT THE PROPERTY AND EMPLOYEES FROM THE HAZARDS ASSOCIATED WITH CONTRACTOR'S WORK AT ALL TIMES, INCLUDING THE INSTALLATION OF TEMPORARY BARRICADES OR FENCING AT ACCESS POINTS TO ACTIVE WORK AREAS.
4. UNLESS OTHERWISE NOTED, ALL WORK AND MATERIALS SHALL COMPLY WITH APPLICABLE SECTIONS OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS AMENDED.
5. CONTRACTOR SHALL PERFORM ALL EXCAVATIONS IN STRICT CONFORMANCE WITH APPLICABLE STATE AND O.S.H.A. RULES, AS AMENDED.
6. CONTRACTOR SHALL DEMOLISH, RAZE, REMOVE, AND DISPOSE OF ALL PAVEMENTS, PIPING, VEGETATION, STRUCTURES, AND OTHER OBSTRUCTIONS TO NEW WORK, EXCEPT OPERATING UTILITIES AND THOSE ITEMS FOR WHICH OTHER PROVISIONS HAVE BEEN MADE FOR REMOVAL AND/OR PROTECTION. UNLESS OTHERWISE INDICATED, ALL MATERIALS TO BE DISPOSED OF SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN OFF-SITE LOCATION, IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
7. AT ALL AREAS OF PAVEMENT REMOVAL, THE PAVING EDGE TO REMAIN SHALL BE SAW CUT THROUGH THE ENTIRE PAVEMENT THICKNESS AND SHALL FORM A CLEAN EDGE.
8. REPLACE DISTURBED SURFACES WITH MATERIALS AND THICKNESS TO MATCH EXISTING.
9. ALL AREAS DISTURBED AND NOT OTHERWISE SURFACED SHALL RECEIVE MINIMUM 6" LOAM AND SHALL BE SEEDED, MULCHED, AND VEGETATION ESTABLISHED AS REQUIRED BY OWNER.

PREPARED FOR:

LIBERTY UTILITIES (NEW HAMPSHIRE)

15 Buttrick Road
Londonderry, NH 03053
(603) 216-3595



SURVEYOR:

WSP
WSP USA Inc.
155 Main Dunstable Road
Suites 120 & 125
Nashua, NH 03060

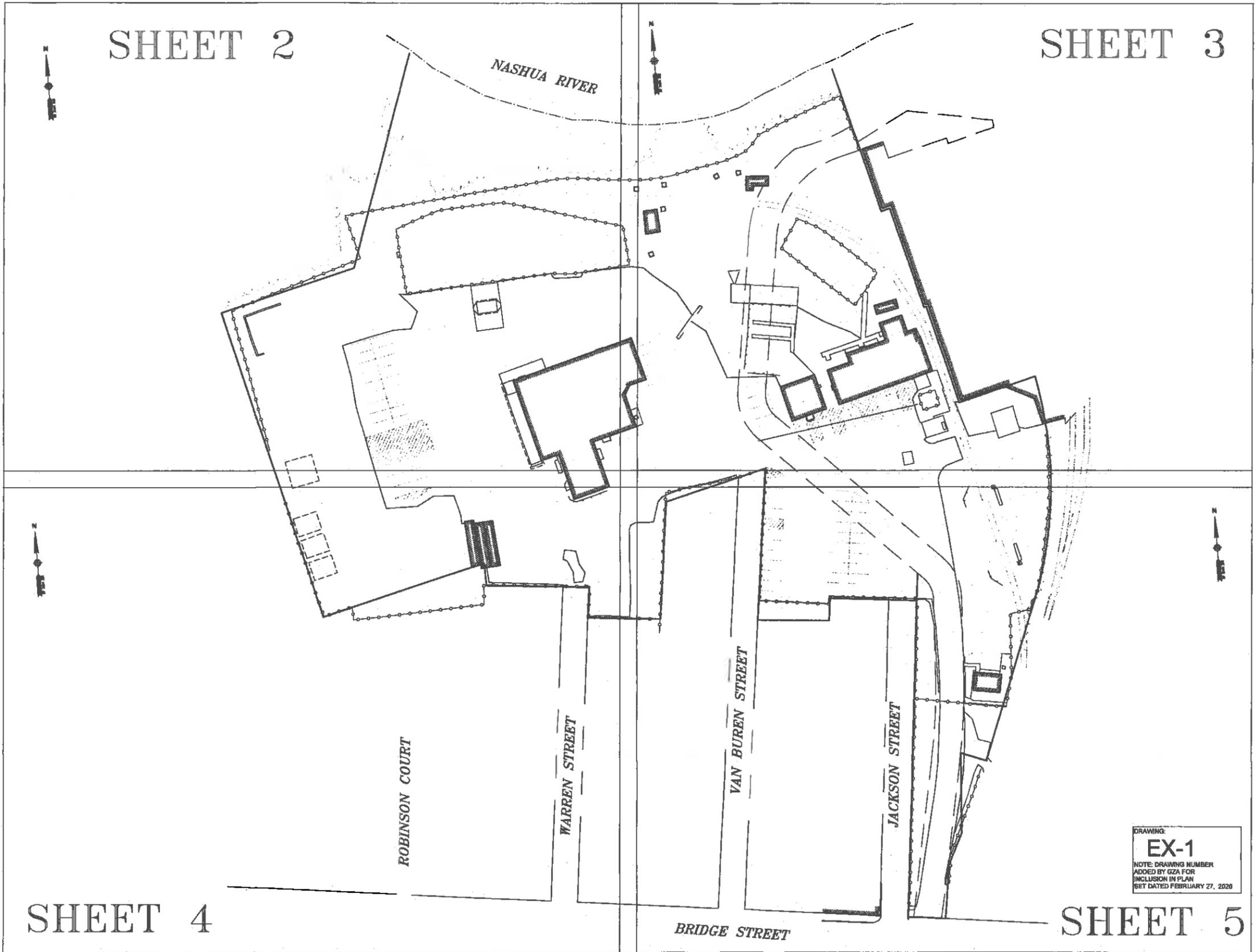
DESIGNER:

GZA GeoEnvironmental, Inc.
Engineers and Scientists
5 Commerce Park North, Suite 201
Bedford, NH 03110
603-623-3600



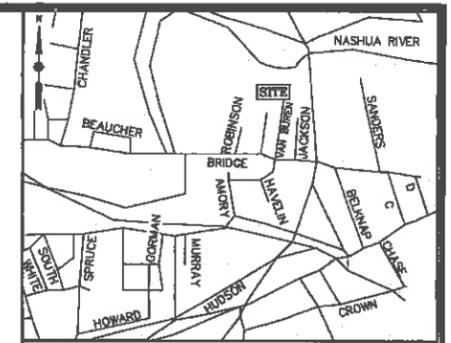
SHEET 2

SHEET 3



SHEET 4

SHEET 5



LOCUS MAP (N.T.S.)

UTILITY STATEMENTS

THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

NOTES

1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP IN MAY 2018.
2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83.
3. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD83.
4. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE INFORMATION SHOWN HEREON. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF THE TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
5. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON LABELED WITH AN (R) ARE FROM RECORDED DOCUMENTS. ADDITIONAL FIELD INVESTIGATION WILL BE REQUIRED BY OTHERS TO DETERMINE THE ACTUAL PIPE SIZE(S) AND TYPE(S).
6. THE METFLAGS SHOWN HEREON WERE SET BY OTHERS AND FIELD LOCATED BY WSP DURING MAY OF 2018.

PLAN REFERENCES

1. PLAN ENTITLED "GAS SERVICE, INC., PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE", DATED JANUARY 1973, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 7088 IN DRAWER 8.
2. PLAN ENTITLED "BRIDGE STREET SUBDIVISION AND CONSOLIDATION (LAND SWAP) OF LAND OF GAS SERVICE, INC." DATED JULY 1987, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 2189 IN DRAWER 80.
3. SEWER EASEMENT PLANS FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS - SHEETS 3/28 & 3/29.
4. BOSTON AND MAINE RAILROAD VAL MAP NUMBER V.21-1, FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS.
5. PLAN ENTITLED "GAS SERVICE COMPANY, INC., PLOT PLAN, NASHUA RIVER INTERCEPTOR - II, CITY OF NASHUA", DATED AUGUST 17, 1972, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 6178 IN DRAWER 28A, SHEET 38 OF 63.



DAVID PRINCE, L.L.S.
REG. NO. 977
WSP USA, Inc.
135 MAIN DUNSTABLE ROAD
NASHUA, NEW HAMPSHIRE

REVISION	DATE	DESCRIPTION

EXISTING CONDITIONS SURVEY
25 VAN BUREN STREET AND
38 BRIDGE STREET
NASHUA, NEW HAMPSHIRE
PREPARED FOR
GZA GEOENVIRONMENTAL, INC.

DRAWING:
EX-1
NOTE: DRAWING NUMBER
ADDED BY GZA FOR
INCLUSION IN PLAN
SET DATED FEBRUARY 27, 2020

wsp WSP USA, Inc.
135 Main Dunstable Rd, Suite 120 & 125
Nashua, NH 03080
603.580.7800

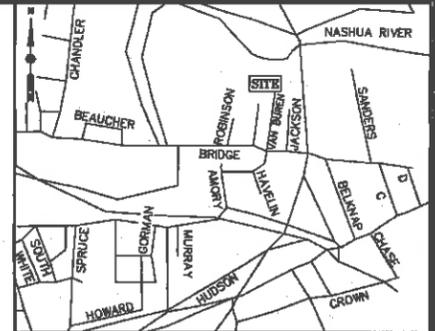
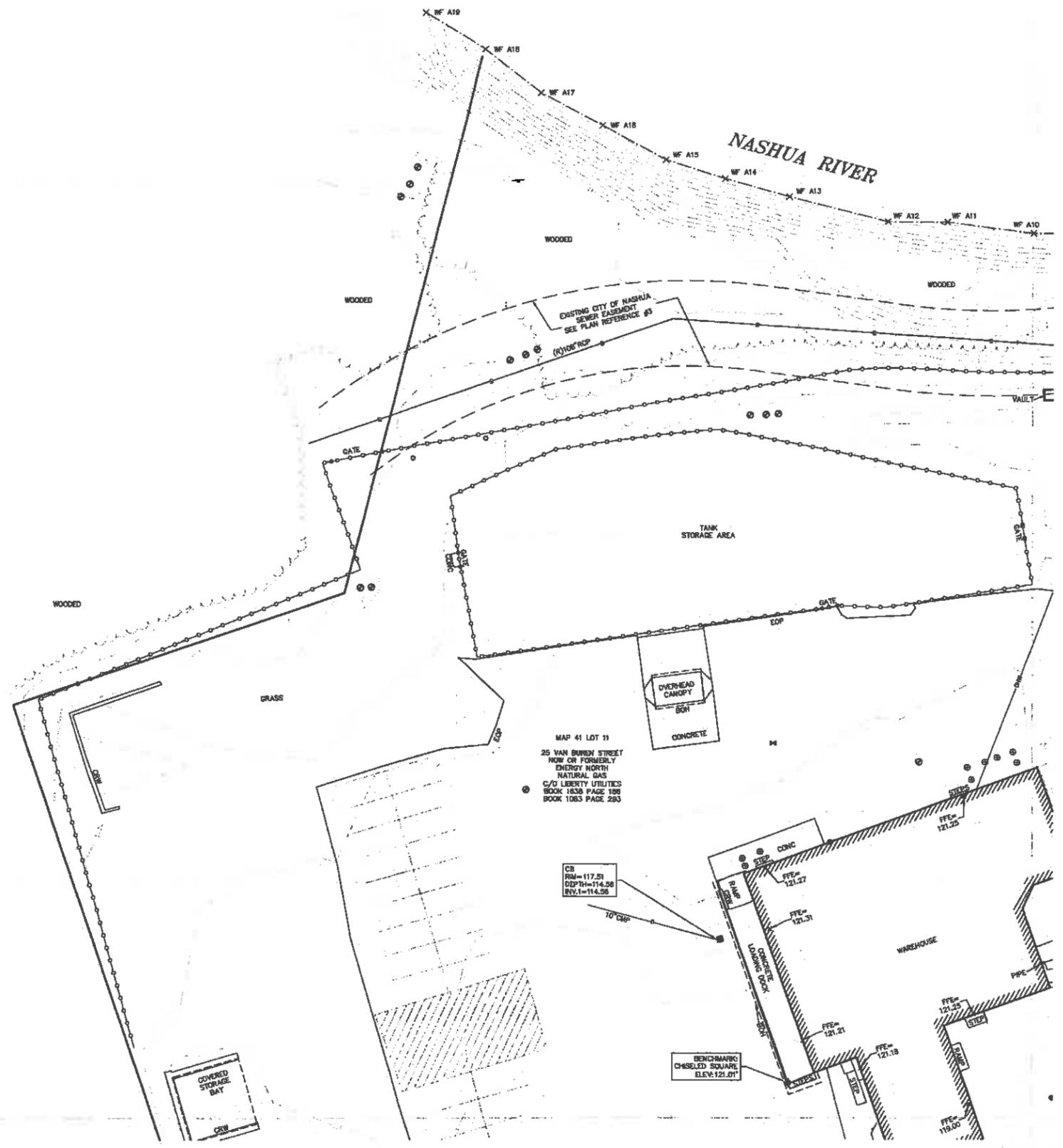
Drawn By	CG	Date	MAY 18, 2018	Job No.	190072B
Surveyed By	TD - JT	Scale	1" = 40'	Sheet No.	1 OF 5
Checked By	DPP	Book No.	N-255A		



LEGEND

- | | |
|---|----------------------------------|
| FOC ○ FIRE DEPARTMENT CONNECTION | IR ○ IRON ROD FOUND |
| UP ○ UTILITY POLE WITH RISER | SD ○ STONE BOUND WITH DRILL HOLE |
| U ○ UTILITY POLE | SB □ STONE BOUND |
| UL ○ UTILITY POLE WITH LIGHT | FA ○ FIRE ALARM |
| UT ○ UTILITY POLE WITH TRANSFORMER | GM ○ GAS MANHOLE |
| UR ○ UTILITY WITH RISER AND TRANSFORMER | RCB ○ ROUND CATCH BASIN |
| SHR ○ SHRUB | CB □ CATCH BASIN |
| S ○ SIGN (SINGLE POSTED) | DM ○ DRAIN MANHOLE |
| BOMD ○ BOLT OVER MAIN OUTLET | NLM ○ NO LABEL MANHOLE |
| EDP — EDGE OF PAVEMENT | SM ○ SEWER MANHOLE |
| VGC — VERTICAL GRANITE CURB | EB □ ELECTRIC BOX |
| CC — CONCRETE CURB | EHC ○ ELECTRIC HANDHOLE |
| LSA — LANDSCAPED AREA | EM ○ ELECTRIC METER |
| FTE — FINISHED FLOOR ELEVATION | EMH ○ ELECTRIC MANHOLE |
| CRW — CONCRETE RETAINING WALL | GM ○ GAS METER |
| BOH — BUILDING OVERHANG | GV — GAS VALVE |
| JB — JERSEY BARRIER | WG — WATER GATE |
| CMP — CORRUGATED METAL PIPE | FH ○ FIRE HYDRANT |
| PVC — POLYVINYL CHLORIDE | SDP — SIGN (DOUBLE POSTED) |
| CI — CAST IRON | ○ POST |
| INV. — INVERT | ○ MONITORING WELL |
| (R) — RECORD INFORMATION | ○ LIGHT POLE |
| UTD — UNABLE TO OBSERVE | ○ BOLLARD |
| GND — COULD NOT OPEN | ○ HANDICAP PARKING |
| | ○ VALVE |
| | ○ BENCHMARK |
| | — ABUTTERS LOT LINE |
| | — RIGHT OF WAY |
| | — PROPERTY LINE |
| | — EASEMENT |
| | — CHAIN LINK FENCE |
| | — METAL GUARDRAIL |
| | — BUILDING OVERHANG |
| | — SEWER LINE |
| | — DRAIN LINE |
| | — WATER LINE |
| | — GAS LINE |
| | — OVERHEAD WIRES |
| | — TREE LINE |
| | — INTERMEDIATE CONTOURS |
| | — INDEX CONTOURS |
| | — WETLAND LINE |

MAP 41 LOT 1
1 JACKSON SQUARE
NOW OR FORMERLY
PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE
BOOK 1024 PAGE 339



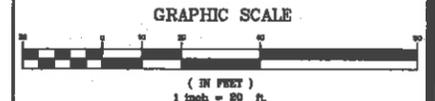
LOCUS MAP (N.T.S.)

UTILITY STATEMENTS
THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

NOTES
1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP IN MAY 2018.
2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83.
3. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD83.
4. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE INFORMATION SHOWN HEREON. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF THE TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
5. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON LABELED WITH AN (R) ARE FROM RECORD DOCUMENTS. ADDITIONAL FIELD INVESTIGATION WILL BE REQUIRED BY OTHERS TO DETERMINE THE ACTUAL PIPE SIZE(S) AND TYPE(S).
6. THE WETPLACES SHOWN HEREON WERE SET BY OTHERS AND FIELD LOCATED BY WSP DURING MAY OF 2018.

PLAN REFERENCES
1. PLAN ENTITLED "GAS SERVICE, INC., PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE," DATED JANUARY 1973, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 7068 IN DRAWER 8.
2. PLAN ENTITLED "BRIDGE STREET SUBDIVISION AND CONSOLIDATION (LAND SWAP) OF LAND OF GAS SERVICE, INC.," DATED JULY 1987, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 21689 IN DRAWER 80.
3. SEWER EASEMENT PLANS FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS - SHEETS 2/38 & 3/38.
4. BOSTON AND MAINE RAILROAD VAL. MAP NUMBER V.21-1, FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS.
5. PLAN ENTITLED "GAS SERVICE COMPANY, INC., PLOT PLAN, NASHUA RIVER INTERCEPTOR - II, CITY OF NASHUA," DATED AUGUST 17, 1972, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 6179 IN DRAWER 28A, SHEET 39 OF 63.

DRAWING:
EX-2
NOTE: DRAWING NUMBER
ADDED BY GZA FOR
INCLUSION IN PLAN
SET DATED FEBRUARY 27, 2020

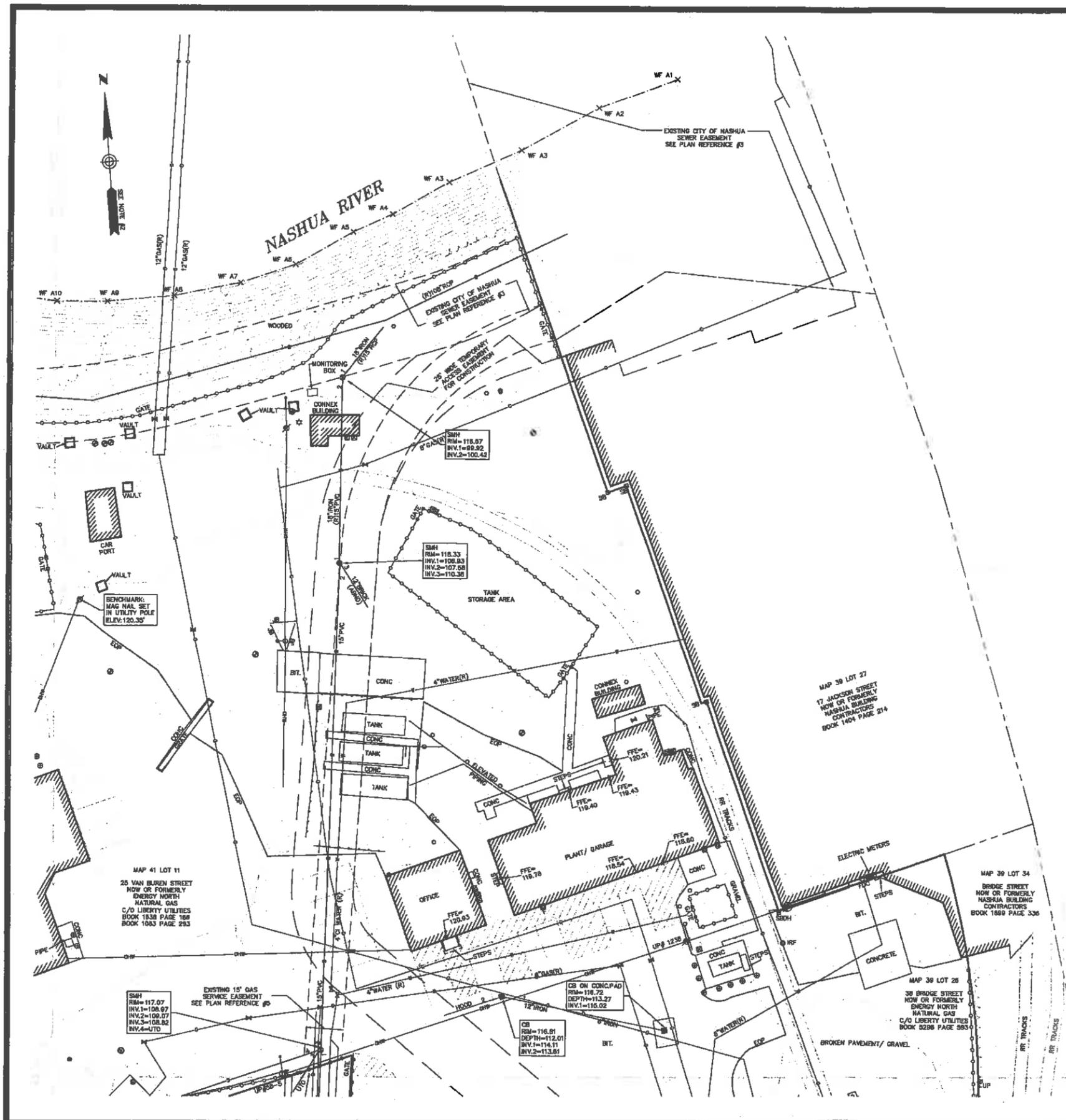


REVISION	DATE	DESCRIPTION

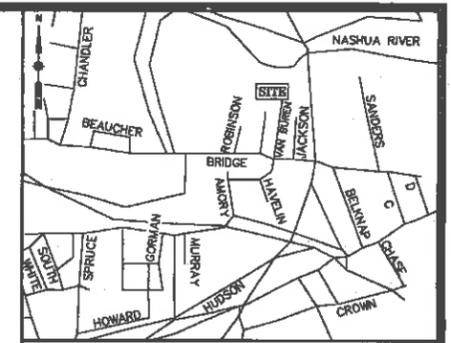
EXISTING CONDITIONS SURVEY
25 VAN BUREN STREET AND
38 BRIDGE STREET
NASHUA, NEW HAMPSHIRE
PREPARED FOR
GZA GEOENVIRONMENTAL, INC.

wsp WSP USA Inc.
158 Main Durable Rd., Suite 120 & 125
Nashua, NH 03060
603.585.7800

Drawn By: CS	Date: MAY 18, 2018	Job No.: 1900728
Surveyed By: TO - JT	Scale: 1" = 20'	Sheet No.: 2 OF 5
Checked By: DPP	Book No.: N-255A	



- LEGEND**
- FIRE DEPARTMENT CONNECTION
 - UTILITY POLE WITH RISER
 - UTILITY POLE
 - UTILITY POLE WITH LIGHT
 - UTILITY POLE WITH TRANSFORMER
 - UTILITY WITH RISER AND TRANSFORMER
 - SHRUB
 - SIGN (SINGLE POSTED)
 - BOLT OVER MAIN OUTLET
 - EOP EDGE OF PAVEMENT
 - VDC VERTICAL GRANITE CURB
 - CC CONCRETE CURB
 - LSA LANDSCAPED AREA
 - FFE FINISHED FLOOR ELEVATION
 - CRW CONCRETE RETAINING WALL
 - BOH BUILDING OVERHANG
 - JB JERSEY BARRIER
 - CMP CORRUGATED METAL PIPE
 - PVC POLYVINYL CHLORIDE
 - CI CAST IRON
 - INV. INVERT
 - (R) RECORD INFORMATION
 - UTD UNABLE TO OBSERVE
 - CNO COULD NOT OPEN
 - IRON ROD FOUND
 - STONE BOUND WITH DRILL HOLE
 - STONE BOUND
 - FIRE ALARM
 - GAS MANHOLE
 - ROUND CATCH BASIN
 - ELECTRIC CATCH BASIN
 - CATCH BASIN
 - DRAIN MANHOLE
 - NO LABEL MANHOLE
 - SEWER MANHOLE
 - ELECTRIC BOX
 - ELECTRIC HANDHOLE
 - ELECTRIC METER
 - ELECTRIC MANHOLE
 - GAS METER
 - GAS VALVE
 - WATER GATE
 - FIRE HYDRANT
 - SIGN (DOUBLE POSTED)
 - POST
 - MONITORING WELL
 - LIGHT POLE
 - BOLLARD
 - HANDICAP PARKING
 - VALVE
 - BENCHMARK
 - ADJUTERS LOT LINE
 - RIGHT OF WAY
 - PROPERTY LINE
 - EASEMENT
 - CHAIN LINK FENCE
 - METAL GUARDRAIL
 - BUILDING OVERHANG
 - SEWER LINE
 - DRAIN LINE
 - WATER LINE
 - GAS LINE
 - OVERHEAD WIRES
 - TREE LINE
 - INTERMEDIATE CONTOURS
 - INDEX CONTOURS
 - WETLAND LINE



LOCUS MAP (N.T.S.)

UTILITY STATEMENTS

THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

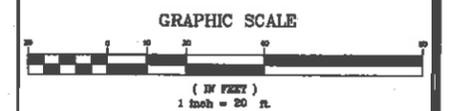
NOTES

1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP IN MAY 2018.
2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83.
3. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD83.
4. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE INFORMATION SHOWN HEREON. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF THE TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
5. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON LABELED WITH AN (R) ARE FROM RECORD DOCUMENTS. ADDITIONAL FIELD INVESTIGATION WILL BE REQUIRED BY OTHERS TO DETERMINE THE ACTUAL PIPE SIZE(S) AND TYPE(S).
6. THE WETLAGS SHOWN HEREON WERE SET BY OTHERS AND FIELD LOCATED BY WSP DURING MAY OF 2018.

PLAN REFERENCES

1. PLAN ENTITLED "GAS SERVICE, INC., PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE", DATED JANUARY 1973, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 7088 IN DRAWER B.
2. PLAN ENTITLED "BRIDGE STREET SUBDIVISION AND CONSOLIDATION (LAND SWAP) OF LAND OF GAS SERVICE INC." DATED JULY 1987, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 21689 IN DRAWER B0.
3. SEWER EASEMENT PLANS FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS - SHEETS 2/30 & 3/31.
4. BOSTON AND MAINE RAILROAD VAL. MAP NUMBER V.21-1, FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS.
5. PLAN ENTITLED "GAS SERVICE COMPANY, INC., PLOT PLAN, NASHUA RIVER INTERCEPTOR - 6, CITY OF NASHUA", DATED AUGUST 17, 1972, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 6179 IN DRAWER 25A, SHEET 39 OF 93.

DRAWING:
EX-3
NOTE: DRAWING NUMBER ADDED BY GZA FOR INCLUSION IN PLAN (BET DATED FEBRUARY 27, 2020)



REVISION	DATE	DESCRIPTION

EXISTING CONDITIONS SURVEY
25 VAN BUREN STREET AND
38 BRIDGE STREET
NASHUA, NEW HAMPSHIRE
PREPARED FOR
GZA GEOENVIRONMENTAL, INC.



Drawn By	CG	Date	MAY 18, 2018	Job No.	190072B
Surveyed By	TG - JT	Scale	1" = 20'	Sheet No.	3 OF 5
Checked By	DPP	Book No.	N-255A		



MAP 41 LOT 1
1 JACKSON SQUARE
NOW OR FORMERLY
PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE
BOOK 1024 PAGE 339

MAP 36 LOT 30
2-4 ROBINSON COURT
NOW OR FORMERLY
CRIMSON PROPERTIES LLC
BOOK 7283 PAGE 2317

MAP 38 LOT 63
ROBINSON COURT
NOW OR FORMERLY
ENERGY NORTH NATURAL GAS
C/O LIBERTY UTILITIES
BOOK 1088 PAGE 293

MAP 38 LOT 20
ROBINSON COURT
NOW OR FORMERLY
ENERGY NORTH NATURAL GAS
C/O LIBERTY UTILITIES
BOOK 1088 PAGE 293

MAP 41 LOT 11
25 VAN BUREN STREET
NOW OR FORMERLY
ENERGY NORTH
NATURAL GAS
C/O LIBERTY UTILITIES
BOOK 1083 PAGE 293

MAP 38 LOT 14
17 WARREN STREET
NOW OR FORMERLY
24 WHEAT LN
BOOK 8146 PAGE 1793

LEGEND

- | | | | |
|-----|------------------------------------|-----|-----------------------------|
| FOO | FIRE DEPARTMENT CONNECTION | IR | IRON ROD FOUND |
| UP | UTILITY POLE WITH RISER | SDH | STONE BOUND WITH DRILL HOLE |
| U | UTILITY POLE | SB | STONE BOUND |
| UL | UTILITY POLE WITH LIGHT | FA | FIRE ALARM |
| UT | UTILITY POLE WITH TRANSFORMER | GM | GAS MANDHOLE |
| UR | UTILITY WITH RISER AND TRANSFORMER | RCB | ROUND CATCH BASIN |
| SR | SHRUB | CB | CATCH BASIN |
| SP | SIGN (SINGLE POSTED) | DM | DRAIN MANHOLE |
| BO | BOLT OVER MAIN OUTLET | NLM | NO LABEL MANHOLE |
| ED | EDGE OF PAVEMENT | SM | SEWER MANHOLE |
| VG | VERTICAL GRANITE CURB | EB | ELECTRIC BOX |
| CC | CONCRETE CURB | EHL | ELECTRIC HANDHOLE |
| LSA | LANDSCAPED AREA | EM | ELECTRIC METER |
| FFE | FINISHED FLOOR ELEVATION | EMH | ELECTRIC MANHOLE |
| CRW | CONCRETE RETAINING WALL | GM | GAS METER |
| BOH | BUILDING OVERHANG | GV | GAS VALVE |
| JB | JERSEY BARRIER | WG | WATER GATE |
| CMP | CORRUGATED METAL PIPE | FH | FIRE HYDRANT |
| PVC | POLYVINYL CHLORIDE | SD | SIGN (DOUBLE POSTED) |
| CI | CAST IRON | P | POST |
| INV | INVERT | MW | MONITORING WELL |
| (R) | RECORD INFORMATION | LP | LIGHT POLE |
| UTO | UNABLE TO OBSERVE | B | BOLLARD |
| CHD | COULD NOT OPEN | HCP | HANDICAP PARKING |
| | | V | VALVE |
| | | B | BENCHMARK |
| | | AL | ADJUTERS LOT LINE |
| | | ROW | RIGHT OF WAY |
| | | PL | PROPERTY LINE |
| | | E | EASEMENT |
| | | CLF | CHAIN LINK FENCE |
| | | MGL | METAL GUARDRAIL |
| | | BO | BUILDING OVERHANG |
| | | SL | SEWER LINE |
| | | DL | DRAIN LINE |
| | | WL | WATER LINE |
| | | GL | GAS LINE |
| | | OW | OVERHEAD WIRES |
| | | TL | TREE LINE |
| | | IC | INTERMEDIATE CONTOURS |
| | | IX | INDEX CONTOURS |
| | | WL | WETLAND LINE |

W 117



LOCUS MAP (N.T.S.)

UTILITY STATEMENTS

THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

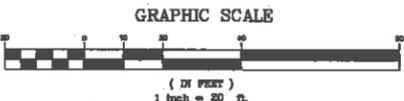
NOTES

1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP IN MAY 2018.
2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCE THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83.
3. THE VERTICAL DATUM SHOWN HEREON REFERENCE NAVD83.
4. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE INFORMATION SHOWN HEREON. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF THE TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
5. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON LABELED WITH AN (D) ARE FROM RECORD DOCUMENTS. ADDITIONAL FIELD INVESTIGATION WILL BE REQUIRED BY OTHERS TO DETERMINE THE ACTUAL PIPE SIZE(S) AND TYPE(S).
6. THE METFLAHS SHOWN HEREON WERE SET BY OTHERS AND FIELD LOCATED BY WSP DURING MAY OF 2018.

PLAN REFERENCES

1. PLAN ENTITLED "GAS SERVICE, INC., PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE", DATED JANUARY 1973, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 7088 IN DRAWER 6.
2. PLAN ENTITLED "BRIDGE STREET SUBDIVISION AND CONSOLIDATION (LAND SHAP) OF LAND OF GAS SERVICE INC." DATED JULY 1987, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 21089 IN DRAWER 80.
3. SEWER EASEMENT PLANS FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS - SHEETS 2/38 & 3/38.
4. BOSTON AND MAINE RAILROAD VAL MAP NUMBER V.21-1, FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS.
5. PLAN ENTITLED "GAS SERVICE COMPANY, INC., PLOT PLAN, NASHUA RIVER INTERCEPTOR - II, CITY OF NASHUA", DATED AUGUST 17, 1972, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 8179 IN DRAWER 28A, SHEET 39 OF 83.

DRAWING:
EX-4
NOTE: DRAWING NUMBER
ADDED BY GZA FOR
INCLUSION IN PLAN
SET DATED FEBRUARY 27, 2020

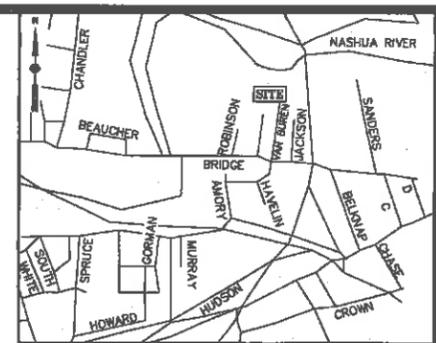
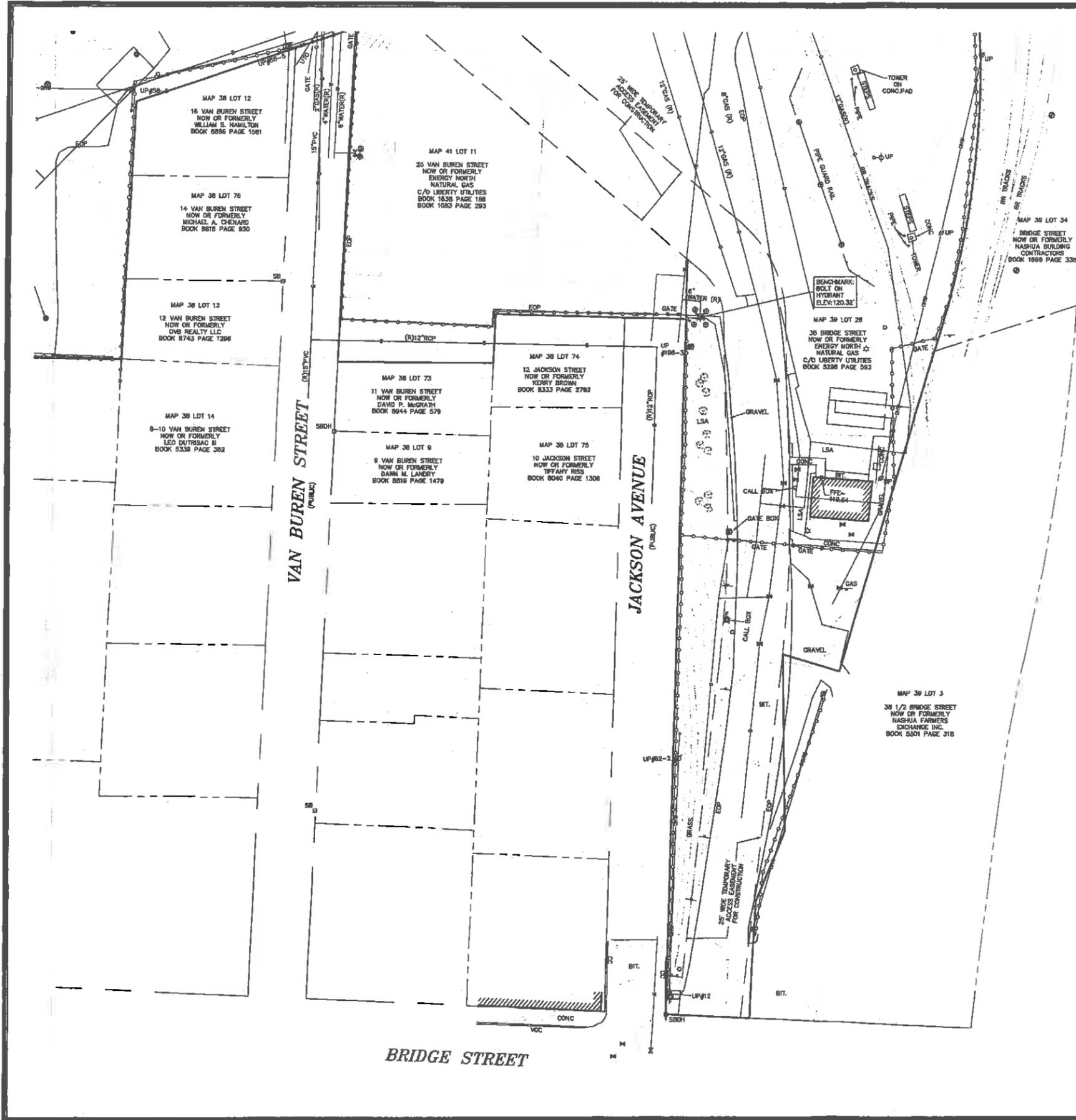


REVISION	DATE	DESCRIPTION

EXISTING CONDITIONS SURVEY
25 VAN BUREN STREET AND
38 BRIDGE STREET
NASHUA, NEW HAMPSHIRE
PREPARED FOR
GZA GEOENVIRONMENTAL, INC.

wsp WSP USA Inc.
163 Main Durable Rd, Suites 120 & 125
Nashua, NH 03080
603.586.7900

Drawn By	CG	Date	MAY 18, 2018	Job No.	190072B
Surveyed By	TO - JT	Scale	1" = 20'	Sheet No.	4 OF 5
Checked By	DPP	Book No.	N-255A		



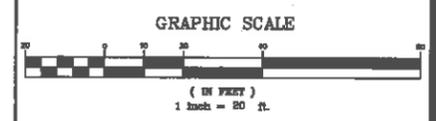
LOCUS MAP (N.T.S.)

UTILITY STATEMENTS
 THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

- NOTES**
1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP IN MAY 2018.
 2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM MADDS.
 3. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD83.
 4. THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE INFORMATION SHOWN HEREON. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF THE TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
 5. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON LABELED WITH AN (R) ARE FROM RECORD DOCUMENTS. ADDITIONAL FIELD INVESTIGATION WILL BE REQUIRED BY OTHERS TO DETERMINE THE ACTUAL PIPE SIZE(S) AND TYPE(S).
 6. THE METPLACES SHOWN HEREON WERE SET BY OTHERS AND FIELD LOCATED BY WSP DURING MAY OF 2018.

- PLAN REFERENCES**
1. PLAN ENTITLED "GAS SERVICE, INC., PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE", DATED JANUARY 1973, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 7088 IN DRAWER 6.
 2. PLAN ENTITLED "BRIDGE STREET SUBDIVISION AND CONSOLIDATION (LAND SWAP) OF LAND OF GAS SERVICE INC." DATED JULY 1987, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 2188 IN DRAWER 80.
 3. SEWER EASEMENT PLANS FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS - SHEETS 2/38 & 3/38.
 4. BOSTON AND MAINE RAILROAD VAL MAP NUMBER V.21-1, FILED AT CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS.
 5. PLAN ENTITLED "GAS SERVICE COMPANY, INC., PLOT PLAN, NASHUA RIVER INTERCEPTOR - II, CITY OF NASHUA", DATED AUGUST 17, 1972, RECORDED AT HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NUMBER 8179 IN DRAWER 28A, SHEET 38 OF 83.

DRAWING:
EX-5
 NOTE: DRAWING NUMBER ADDED BY GZA FOR INCLUSION IN PLAN SET DATED FEBRUARY 27, 2020



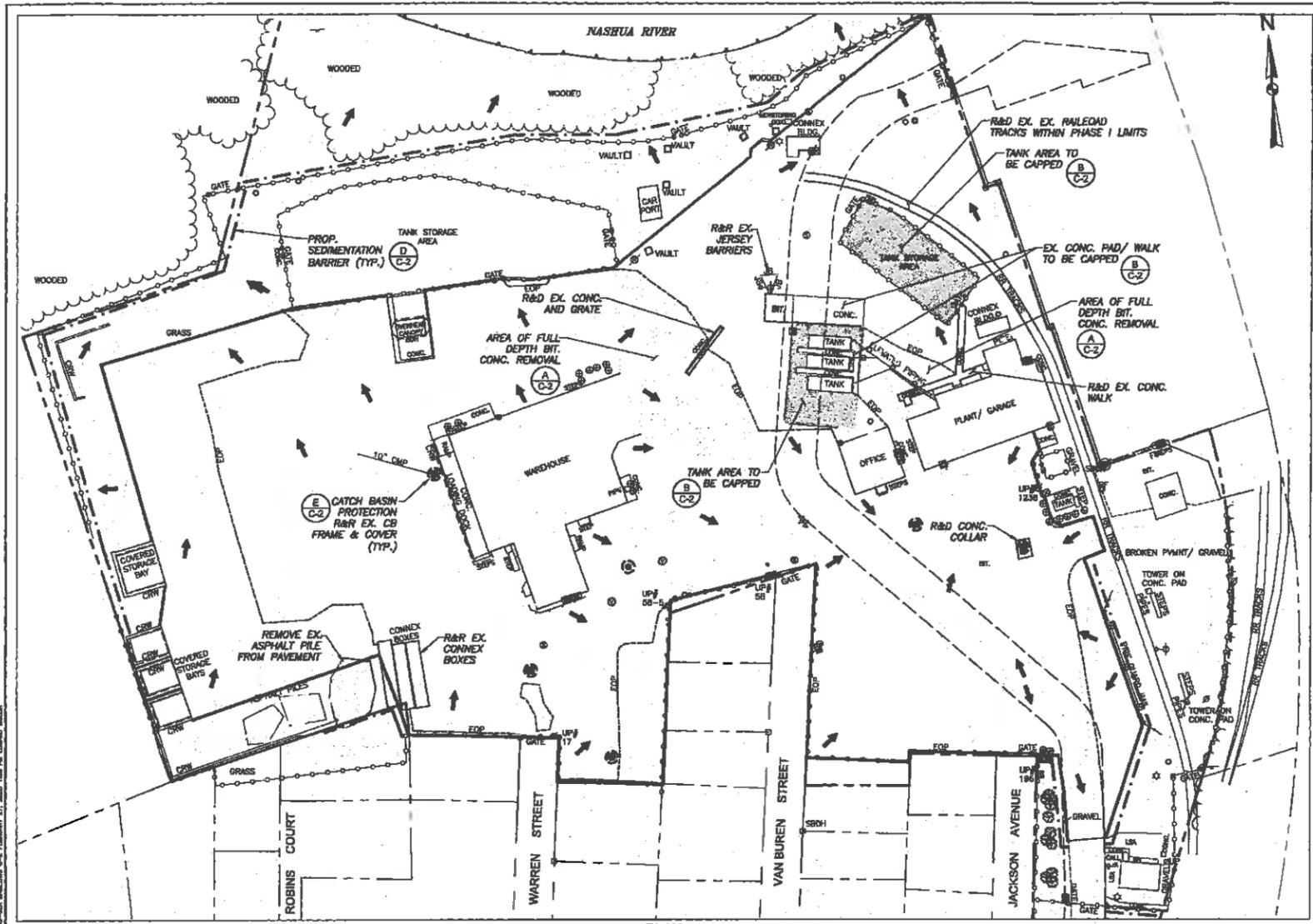
- LEGEND**
- | | |
|---|--|
| <ul style="list-style-type: none"> FRG FIRE DEPARTMENT CONNECTION UP UTILITY POLE WITH RISER UP UTILITY POLE UP UTILITY POLE WITH LIGHT UP UTILITY POLE WITH TRANSFORMER UP UTILITY WITH RISER AND TRANSFORMER SHRUB SIGN (SINGLE POSTED) BOMO BOLT OVER MAIN OUTLET EOP EDGE OF PAVEMENT VOC VERTICAL GRANITE CURB CC CONCRETE CURB LSA LANDSCAPED AREA FTE FINISHED FLOOR ELEVATION CRW CONCRETE RETAINING WALL BOH BUILDING OVERHANG JB JERSEY BARRIER CMP CORRUGATED METAL PIPE PVC POLYVINYL CHLORIDE CI CAST IRON INV. INVERT (R) RECORD INFORMATION UTO UNABLE TO OBSERVE CHD COULD NOT OPEN | <ul style="list-style-type: none"> IRON ROD FOUND STONE BOUND WITH GRILL HOLE STONE BOUND FIRE ALARM GAS MANHOLE ROUND CATCH BASIN CATCH BASIN DRAIN MANHOLE NO LABEL MANHOLE SEWER MANHOLE ELECTRIC BOX ELECTRIC HANDHOLE ELECTRIC METER ELECTRIC MANHOLE GAS METER GAS VALVE WATER GATE FIRE HYDRANT SIGN (DOUBLE POSTED) POST MONITORING WELL LIGHT POLE BOLLARD HANDICAP PARKING VALVE BENCHMARK ABUTTERS LOT LINE RIGHT OF WAY PROPERTY LINE EASEMENT CHAIN LINK FENCE METAL GUARDRAIL BUILDING OVERHANG SEWER LINE DRAIN LINE WATER LINE GAS LINE OVERHEAD WIRES TREE LINE INTERMEDIATE CONTOURS INDEX CONTOURS WETLAND LINE |
|---|--|

REVISION	DATE	DESCRIPTION

EXISTING CONDITIONS SURVEY
 25 VAN BUREN STREET AND
 38 BRIDGE STREET
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR
GZA GEONVIRONMENTAL, INC.

wsp WSP USA Inc.
 155 Main Durrant Rd, Suite 120 & 125
 Nashua, NH 03060
 603.586.7600

Drawn By CG	Date MAY 18, 2018	Job No. 190072B
Surveyed By TD - JT	Scale 1" = 20'	Sheet No. 5 OF 5
Checked By DPF	Book No. N-255A	



CAP CONSTRUCTION NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ANDES APPROVED ASBESTOS DISPOSAL SITE (ADS) WORK PLAN. IN GENERAL, WORK SHALL BE DONE WITHOUT RELEASE OF FUGITIVE EMISSIONS AND DUST.
- LOOSE SURFICIAL DEBRIS (BRICK, WOOD, CONCRETE) GREATER THAN TWO INCHES SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPROVED WORK PLAN.
- AREAS REQUIRING EXCAVATION TO MEET GRADES OR REMOVAL OF PAVEMENT AND OR CONCRETE SHALL BE DONE IN ACCORDANCE OF THE APPROVED WORK PLAN.
- UTILITY STRUCTURES AND MONITORING WELLS IN CAP AREAS WILL BE RAISED TO MEET FINISHED GRADES.
- EXCESS EXCAVATED SOIL SHALL BE CHARACTERIZED FOR DISPOSAL AND DISPOSED OF AT A FACILITY PERMITTED TO ACCEPT THE WASTE.
- PAVING AND CAPPING OF RAILROAD SPUR WILL BE PERFORMED IN ACCORDANCE WITH AREMA SPECIFICATIONS.
- GENERAL PAVEMENT CAP AREAS (METAL A)**
 - ONCE THE SUBGRADE HAS BEEN REGRADED, THE SUBGRADE SHALL BE PROOF-COMPACTED WITH FOUR PASSES OF A LARGE SELF-PROPELLED ROLLER.
 - HIGH STRENGTH WOVEN GEOTEXTILE FABRIC CONSISTING OF MIRAFI HP570 OR EQUIVALENT SHALL BE PLACED OVER THE SUBGRADE AND OVERLAPPED A MINIMUM 12-INCHES WITH ADJOINING SECTIONS.
 - A MINIMUM OF 2 INCHES OF CRUSHED GRAVEL (FREE-DRAINING SAND AND GRAVEL) MEETING THE FOLLOWING SPECIFICATIONS:

Sieve Designation	Percent Passing
1 1/2 in.	100
3/4 in.	85-100
1/2 in.	50-90
No. 4	20-80
No. 200	0-10
 - THE CRUSHED GRAVEL SHALL BE COMPACTED WITH A MINIMUM 6 PASSES OF A LARGE VIBRATORY ROLLER.
 - PAVEMENT SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL DETAIL. PAVEMENT WEARING COURSE SHALL CONSIST OF 1 1/2" 5/8" MOD. PAVEMENT BINDER COURSE SHALL CONSIST OF 1 1/2" 1/4" INCH BINDER MISC. AIR VOIDS SHALL NOT EXCEED 4%. ASPHALT SHALL BE PLACED AND COMPACTED IN 1-INCH LIFTS.
- TANK/VAPORIZER CAP AREAS (METAL B)**
 - REMOVE UP TO FOUR INCHES OF EXISTING CRUSHED STONE BELOW TANK AND VAPORIZER AREAS. DO NOT REMOVE SOIL BELOW THE CRUSHED STONE.
 - CRUSHED STONE REMOVAL SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF ASBESTOS CONTAINING MATERIALS (ACMs) IN ACCORDANCE WITH APPROVED ASB WORK PLAN. CRUSHED STONE THAT CONTAINS ACMs WILL BE RELOADED AND CAPPED TO AN ALTERNATE LOCATION WITHIN THE PROPOSED CAP AREA OR DISPOSED OF AT A FACILITY PERMITTED TO ACCEPT THE WASTE.
 - ONCE THE STONE HAS BEEN REMOVED THE AREA SHOULD BE GRADED AND CROWNED TO PROMOTE DRAINAGE TO THE SURROUNDING FINISHED AREAS AND PARKING LOT. FREE-DRAINING SAND AND GRAVEL SOIL CAN BE USED TO GRADE THE AREA. A MEMBRANE SYSTEM CONSISTING OF A SPRAY-APPLIED 60 MIL LINER BETWEEN TWO PROTECTIVE FABRICS WILL BE PLACED IN THE TANK AND VAPORIZER AREAS.
 - A MINIMUM OF 4-INCHES OF CRUSHED STONE SHALL BE PLACED OVER THE MEMBRANE SYSTEM. THE CRUSHED STONE MAY CONSIST OF THE EXISTING CRUSHED STONE OR EQUIVALENT IMPORTED CRUSHED STONE.
 - THE CONCRETE SIDEWALKS WITHIN THE TANK/VAPORIZER AREAS WILL BE MAINTAINED AND THE CRUSHED STONE SHOULD MEET THE GRADES OF THE CONCRETE SIDEWALKS.
 - SPRAY-ON MEMBRANE - MEMBRANE SHALL CONSIST OF A SINGLE COURSE, HIGH DUELS, POLYESTER REINFORCED, ASPHALT EMULSION WATERBORNE AND SPRAY APPLIED AT AMBIENT TEMPERATURES. A NORMAL THICKNESS OF 80 DRY MILS, NON-TOXIC AND OODLESS.
- EXISTING CONCRETE PAD CAP AREAS (METAL C)**
 - CONCRETE PAD SHALL BE CLEANED AND PREPPED IN ACCORDANCE WITH SEALER MANUFACTURER INSTRUCTIONS.
 - CONCRETE PADS WILL BE SEALED WITH A WATER-PROOF SEALER (LITH-TEK 9500 OR EQUIVALENT).
- CAP SURFACE AREAS WILL BE GRADED TO ALLOW DISCHARGE TO THE EXISTING STORMWATER SYSTEM AT THE SITE. THE CAP SYSTEM WILL BE INTEGRATED INTO THE CAPITAL IMPROVEMENTS FOR THE SITE WHICH WILL INCLUDE REGRADING AND REPAIRING THE EXISTING PARKING LOT. AS PART OF THE CAPITAL IMPROVEMENTS, THE STORMWATER SYSTEM WILL BE EVALUATED AND ADDITIONAL STORMWATER CAPACITY WILL ADDED AS NEEDED TO COMPENSATE FOR THE ADDITIONAL IMPERVIOUS CAP AREAS.

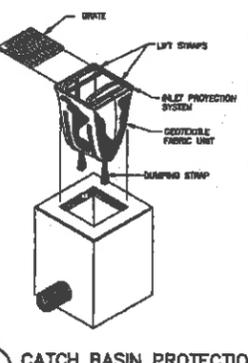
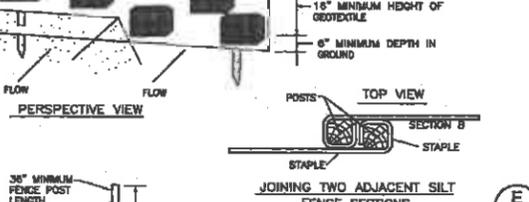
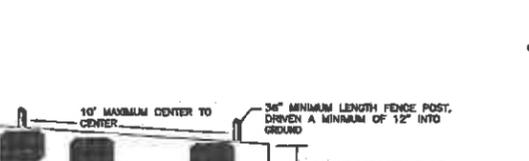
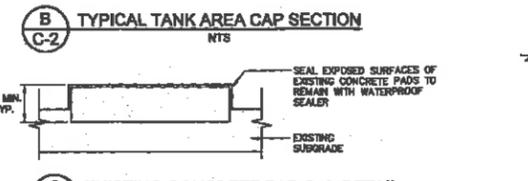
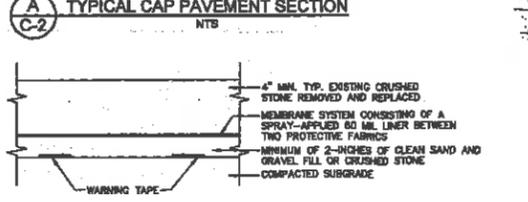
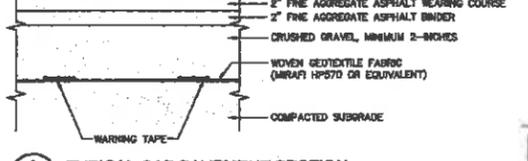
SEDIMENT AND EROSION CONTROL NOTES:

- SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
- THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE SEDIMENT AND EROSION CONTROL PLAN PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. SHALL INSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES UNTIL THE AREAS DRAINING TO THEM ARE RESTORED TO ORIGINAL OR BETTER CONDITION. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED. CONDUCT INSPECTIONS AND REPORTING IN ACCORDANCE WITH ALL PERMITS.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION. THE CONTRACTOR SHALL INSTALL AND MAINTAIN, AT NO ADDITIONAL COST TO THE OWNER, ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY FOR PERMIT COMPLIANCE BY THE CONTRACTOR, THE OWNER AND/OR THEIR REPRESENTATIVES, OR BY FEDERAL/STATE/LOCAL GOVERNMENT INSPECTIONS.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE PUBLISHED STANDARDS AND SPECIFICATIONS AND THE "BMP" GUIDELINES FOR TEMPORARY EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT (04-007, MAY 2002).
- THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS OUTSIDE TRAVELLED PUBLIC THROUGHFARES. ALL MATERIALS DEPOSITED OUTSIDE TRAVELLED THROUGHFARES SHALL BE REMOVED IMMEDIATELY.
- ALL SEDIMENT BASINS, TRAP EMBANKMENTS, SWALES, PERIMETER DICES, AND PERMANENT SLOPES STEEPER OR EQUAL TO 3:1 SHALL BE STABILIZED WITH SO2, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT, NO AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL BARRIER OR LIMIT OF WORK SHALL BE DISTURBED.
- THE CONTRACTOR SHALL APPLY SO2, SEED AND ANCHORED STRAW MULCH OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED OR THAT AREA MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
- STOCKPILES WHICH HAVE NOT BEEN USED FOR 14 CALENDAR DAYS SHALL BE STABILIZED THROUGH THE APPLICATION OF SO2, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES.
- ALL CATCH BASINS OR OTHER DRAIN INLETS WHICH MAY RECEIVE STORMWATER FROM DISTURBED AREAS SHALL BE PROVIDED WITH SUITABLE INLET PROTECTION CONSISTING OF AN OPEN-TOP FILTER FABRIC BAG THAT IS DESIGNED TO HANG UNDERNEATH A STORM GRATE TO FILTER SEDIMENT-LADEN STORMWATER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DRIFT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING, CALCIUM CHLORIDE, OR OTHER EFFECTIVE MEANS OF CONTROL.
- ALL WASTE MATERIALS GENERATED AT THE SITE SHALL BE IMMEDIATELY REMOVED AND DISPOSED OF OR STORED IN A SECURELY COVERED CONTAINER IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS. CONTAINER SHALL BE EMPTIED ON A REGULAR BASIS AND AS NECESSARY. NO CONSTRUCTION WASTE OR DEBRIS SHALL BE BURIED ON-SITE.
- FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS OR OPENINGS.
- PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES THE CONTRACTOR SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS USING SO2 OR AN APPROVED PERMANENT SO2 MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. AREAS BROUGHT TO FINISHED GRADE DURING THE STABILIZATION PERIOD SHALL BE PERMANENTLY STABILIZED WITHIN 14 CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS WHEN PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH OR OTHER ACCEPTABLE MEANS SHALL BE APPLIED TO DISTURBED AREAS.
- TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITHIN (30) CALENDAR DAYS FOLLOWING COMPLETION OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CLEANED AND CONVERTED TO THEIR PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL. ALL STORM DRAINAGE STRUCTURES, Sumps, AND PIPES SHALL BE CLEANED OF ALL SEDIMENTS PRIOR TO FINAL PAYMENT.

LEGEND

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> FOC FIRE DEPARTMENT CONNECTION UTILITY POLE WITH RISER UTILITY POLE UTILITY POLE WITH LIGHT UTILITY POLE WITH TRANSFORMER UTILITY WITH RISER AND TRANSFORMER STURUS SIGN (SINGLE POSTED) BOMG BOLT OVER MAIN OUTLET EOP EDGE OF PAVEMENT VGC VERTICAL GRANITE CURB CC CONCRETE CURB LSA LANDSCAPED AREA FFC FINISHED FLOOR ELEVATION CRW CONCRETE RETAINING WALL BOH BUILDING OVERHANG JB JERSEY BARRIER RF IRON ROD FOUND WKSX STONE BOUND WITH DRILL HOLE SD STONE BOUND | <ul style="list-style-type: none"> FA FIRE ALARM GM GAS MANHOLE CB ROUND CATCH BASIN CATCH BASIN DM DRAIN MANHOLE NL NO LABEL MANHOLE SM SEWER MANHOLE EB ELECTRIC BOX EH ELECTRIC HANDHOLE EM ELECTRIC METER GM ELECTRIC MANHOLE GS GAS METER GV GAS VALVE WG WATER GATE OW OVERHEAD WIRES TL TREE LINE IC INTERMEDIATE CONTOURS IX INDEX CONTOURS WL WETLAND LINE PC PROPOSED CURB CBP CATCH BASIN PROTECTION SFD SURFACE FLOW DIRECTION | <ul style="list-style-type: none"> PL PROJECT PROPERTY LINE PL PROPERTY LINE AL ALIEN LOT LINE RM RIGHT OF WAY EX EXISTING EASEMENT TE TEMPORARY EASEMENT EP EDGE OF PAVEMENT CL CHAIN LINK FENCE MG METAL GUARDRAIL BO BUILDING OVERHANG SL SEWER LINE DR DRAIN LINE WA WATER LINE GA GAS LINE OW OVERHEAD WIRES TL TREE LINE IC INTERMEDIATE CONTOURS IX INDEX CONTOURS WL WETLAND LINE PC PROPOSED CURB CBP CATCH BASIN PROTECTION SFD SURFACE FLOW DIRECTION |
|---|--|--|

PLAN 1"=40'



Installation: Remove the grate from catch basin. If using optional all absorbent, place absorbent pillow in unit. Stow the grate on end. Move the top lifting straps out of the way and place the grate into the geotextile fabric unit so that the grate is below the top strap and above the lower strap. Hoisting the lifting device, insert the grate into the inlet.

Maintenance: Remove all accumulated sediment and debris from vicinity of unit after each storm event. After each storm event and at regular intervals, look into the geotextile fabric unit. If the catchment area is more than 1/2 full of sediment, the unit must be emptied. To empty unit, lift the unit out of the inlet using the lifting straps and remove the grate. If using optional all absorbent, replace absorbent when near saturation.

NO.	ISSUE/DESCRIPTION	BY	DATE

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOTECHNICAL, INC. (GZA). THE INFORMATION SHOWN ON THIS DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE REPRODUCED, COPIED, OR ALTERED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF GZA. FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, ANY TRANSMISSION, REUSE, OR MODIFICATION TO THE DRAWING OR ANY PART THEREOF, WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY LIABILITY TO GZA.

SITE GRADING, PAVING AND IMPERVIOUS CAP
LIBERTY UTILITIES
 38 BRIDGE STREET, NASHUA, NH

SITE PREPARATION & DEMOLITION PLAN AND SEDIMENT & EROSION CONTROL PLAN

PREPARED BY: GZA Geotechnical, Inc. Engineers and Scientists www.gza.com	PREPARED FOR: LIBERTY UTILITIES (NEW HAMPSHIRE) 15 BUTTRICK ROAD LONDONDERRY, NH 03053
PROJECT NO.: 6TD	REVIEWED BY: 6TD
DESIGNED BY: 6TD	CHECKED BY: TEJ
DATE: FEB. 27, 2020	SCALE: AS NOTED
PROJECT NO.: 15-0198587.03	REVISION NO.:

STATE OF NEW HAMPSHIRE
 DAWD LAMONTHE
 PROFESSIONAL ENGINEER
 LICENSE NO. 10000

