

HARTFORD PLANNING COMMISSION

April 15, 2024

Meeting Notice and Agenda

The Hartford Planning Commission will meet on Monday, April 15, 2024, beginning at 6:00 p.m. to consider the following Administrative Matters and Applications.

This meeting will be conducted in person at Hartford Town Hall, 171 Bridge Street, White River Junction, Vermont. In addition, you may join the meeting remotely as follows:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 256 907 519 246

Passcode: YsvzqZ

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 802-377-3677,,726316629#](#)

1 802 377 3677

Phone Conference ID: 726 316 629#

If you have problems accessing this meeting, please email Jo-Ann Ells at jells@hartford-vt.org

A. Administrative Matters beginning at **6:00 p.m.**

1. Public Comment. 2. Elect officers. 3. Minutes. 4. Administrative Permits. 5. Act 250 Applications. 6. Town Plan Steering Committee update. 7. Regional Planning Commission update. 8. Climate Action Plan update. 9. Availability for the next Public Hearing.

B. Public Hearing, beginning at **6:30 p.m.**

1. ~~Application #24-02 by Josh Jasmin, Sean Jasmin and Raymond Jasmin (owners/applicants) for Site Development Plan Approval under sections 260-45 of the Hartford Zoning Regulations for approval of a parking facility, lot 14-0015-000, 344 North Hartland Road, White River Junction, in a GCR zoning district.~~ CONTINUED

2. Application #24-01 by Guernsey Ruth Hall Revocable Trust (owner) and Summit Distributing (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for approval of a car wash, lot 44-0041-000, Sykes Mountain Avenue, White River Junction, in an IC zoning district.

Please call the Department of Planning and Development (802) 295-3075 to request copies of the application materials. Persons wishing to be heard regarding these applications may do so by participating in the meeting, having another party participate in the meeting on their behalf, and/or by submitting written testimony.

An interested person who has **participated** in a municipal regulatory proceeding may appeal a decision rendered in that proceeding to the Vermont Environmental Court. Participation in a local regulatory proceeding shall consist of offering, through oral or written testimony, evidence or a statement of concern related to the subject of the proceeding.

John Reid, Chair

**Planning Commission
Administrative Agenda
April 15, 2024**

1. Public Comment
2. Elect officers
3. Minutes
4. Administrative Permits
 - Maxfield, Batting Cage & Bullpen
 - Bugbee, Food/Baked Goods Trailer
5. Act 250 Applications
6. Town Plan Steering Committee update (Bruce)
7. Regional Planning Commission update (Bruce)
8. Climate Action Plan update (John R.)
9. Availability for the May 20 Public Hearing.

**DRAFT
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND
DECISION**

HARTFORD PLANNING COMMISSION

**Application #24-01 by Guernsey Ruth Hall Revocable Trust and
Summit Distributing
for Site Development Plan Approval
for approval of a car wash
lot 44-0041-000, Sykes Mountain Avenue
White River Junction, in an IC zoning district**

This decision pertains to Application #24-01 by Guernsey Ruth Hall Revocable Trust (owner) and Summit Distributing (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for approval of a car wash, lot 44-0041-000, Sykes Mountain Avenue, White River Junction, in an IC zoning district.

FINDINGS OF FACT

Based upon the information contained in the exhibits for this application (see attached list) and the evidence adduced at the Planning Commission meeting of April 15, 2024 the Hartford Planning Commission makes the following Findings of Fact:

General Information

1. The owner of record of 44-0041-000 is the Guernsey Ruth Hall Revocable Trust who acquired the lot on 06-18-14. The deed is recorded in volume 502, page 124 of the Hartford Land Records.
2. The lot is approximately 1.165 acres.
3. The lot is developed with a parking lot.
4. The lot is a class 1 lot.
5. The lot is in an IC zoning district.

This Application

6. The applicant proposes to develop a car wash on the lot including a 100 ft long car wash tunnel with two prepaid stations and fourteen (14) vacuum spaces.
7. The applicant submitted a Trip Generation and Site Access Study. The applicant will comply with the following as recommended in the study:

Proposed plantings, vegetation, landscaping, and signing along the site frontage be kept low to the ground (no more than 3.0 feet above street level) or set back sufficiently from Sykes Mountain Avenue so as not to inhibit the available sight lines.

(See exhibit #10)

8. Section 260-31 of the Zoning Regulations states:

Noise volume shall be limited to 70 decibels or less at or beyond the property line. Noise levels or frequencies which are not customary in the district or neighborhood, or which represent a repeated disturbance to others shall not be permitted.

The applicant submitted an Environmental Sound Study assessing compliance with Hartford's Noise Ordinance, Chapter 110.

(See exhibit #4 and #5)

9. The Zoning Regulations do not include a calculation for the number of parking spaces for a car wash. Therefore, the Planning Commission determines the number of required parking spaces.

The applicant proposes 15 parking spaces including one accessible parking space. (14 of the parking spaces will have access to vacuums.)

10. According to the applicant, "A combination of trees, shrubs, perennials and lawn have been provided while maintaining a significant portion of the existing rear residential buffer. Plant material has been for parking lot conditions, and they have been laid out in a manner so as to minimize any damage from vehicles, maintenance equipment or snow storage. Plant material to be removed has been shown on the Demolition Plan.

A significant portion of the existing rear residential buffer has been maintained with proposed evergreen trees for additional screening. Trees along the street and the east property line have been added for screening."

(See exhibit #2)

To ensure landscaping is maintained in a healthy condition, the applicant will hire a property maintenance company to maintain the landscaping.

11. There is an existing 8' high wooden stockade fence alongside a portion of the western boundary line installed by a previous owner of adjacent lot 44-0040-000.

The applicant proposes to install and maintain an 8' fence along Beech Street and along the shared property lines with lots 44-0042-000 and 44-0043-000, and a portion of lot 44-0055-000. (See exhibit #4 figure #1)

12. According to the applicant, "The site will be accessed from Lot 44-38 from either the retail motor fuel outlet or the driveway from Sykes Mountain Highway. The drive aisle in front of the site will maintain a two-way traffic flow to allow customers to access the vacuums, enter the car wash queue, or exit the car wash. There are two pay stations proposed for the car wash, paid car washes will most likely be recognized by license plates, so customers can leave the queue and use the vacuums to the rear of the site or continue to the car wash tunnel. The site has the capacity to queue 18 vehicles from the pay stations. The striped area to the rear of the site has been provided to allow trash trucks, maintenance trucks, and the Town's ladder truck to maneuver around the rear of the site. The one-way bypass is provided allow these vehicles to leave the site."

13. The applicant submitted turning movement plans for a ladder truck and trash hauler. (See exhibit #2)

14. The applicant submitted a photometric plan. (See exhibit #2)

The applicant understands that lighting must not create excessive off-site or sky glow. If the Zoning Administrative Officer determines that lighting does not meet this condition, the applicant will be required to comply.

15. The applicant proposes to install an enclosed dumpster at the rear of the site for use by the employees of car wash and the convenience store on adjacent lot 44-0038-000. In addition, trash receptacles will be available at the vacuum spaces for customers.
16. Hours of operation for the car wash are proposed to be 7:00 a.m. to 8:00 p.m., seven days and week. The vacuums will be operational 24/7.
17. The car wash will be connected to municipal water and sewer. Connections will be coordinated with the Hartford Department of Public Works (DPW).
18. Before construction commences, the applicant will schedule a preconstruction meeting

with the DPW and will contact the DPW at least two weeks before they want to hold this meeting.

The applicant understands that if the meeting with the DPW results in any revisions to the approved plans, they must contact the Zoning Administrator to discuss amending their permit.

19. According to the applicant, “stormwater runoff currently sheet flows over the existing pavement and flows toward Lot 44-55 and to the Right of Way of Sykes Mountain Avenue. As part of the redevelopment, a stormwater management system has been designed which includes deep sump catch basins with oil/water separator hoods, First Defense hydrodynamic separators and an underground stormwater detention system. Trench drains provided within the car wash tunnel will capture used car wash water and direct it to the reclamation system.”

In addition, “Granite curbing is proposed throughout the site to direct runoff to a series of catch basins that ultimately drains to the existing municipal drainage network. Per the Stormwater Report, there is no increase in runoff to existing design points. There will be no damage to other properties or any erosion of topsoil.”

20. According to the applicant, to prevent surface icing from vehicles exiting the wash, trench drains within the tunnel will capture wasted water from washings and direct the water to the reclaim system. The area adjacent to the tunnel exit has been graded to direct stormwater runoff to two proposed catch basin. In addition, the concrete aprons at the entrance and exit of the tunnel will be heated.
21. Snow will be stored on site and will be removed as needed. Snow will not be stored in such a manner as to create a hazard.
22. The applicant understands that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.
23. During construction of the project, erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.
24. The applicant understands that construction of the project must comply with the following:

Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.

25. The applicant understands that no structure, including construction/office trailers, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated.
26. The applicant retains the obligation to identify, apply for, and obtain relevant local and state permits for this project.
27. The applicant understands that all activities authorized by the issuance of the zoning permit shall be started within six (6) months and completed within two (2) years of its date of issue, or the zoning permit shall become null and void and reapplication to complete any activities shall be required. Any activities not completed within the above permit period shall be subject to any ordinance in effect at the time of reapplication. One six (6) month extension to both time periods may be granted by the Planning Commission.
28. The applicant understands that they must obtain a Certificate of Occupancy from the Zoning Administrative Officer upon completion of the project and before the site may be occupied. The applicant understands that a Certificate of Occupancy will not be issued if the project is not in compliance with these Findings, Plans and any conditions placed on the decision.

CONCLUSIONS OF LAW

The Hartford Planning Commission, based upon the forgoing Findings of Fact, concludes Based upon the foregoing Findings of Fact, the Hartford Planning Commission concludes that the proposed site plan provides, as required by **§260-45 C** of the Hartford Zoning Regulations:

(1) Maximum safety of **traffic circulation between the site and the street network** and integration with the overall traffic pattern, including provisions for auxiliary roadways connecting with adjacent properties where appropriate. Included in this evaluation shall be the location, number and width of access points, curve radii at access points, acceleration or deceleration lanes on adjacent public streets, sight distances, lighting, location of sidewalks and other walkways, and the overall relationship of the proposed development with existing traffic conditions in the area. All modes of transportation shall be taken into account, including pedestrian, bicycle, handicapped, delivery and emergency vehicles and public transportation.

(2) Adequacy of **on site circulation, parking, and loading facilities**, with particular attention to safety. Included in this evaluation shall be traffic movement patterns, drive and aisle widths, directional signs, location of loading docks and parking areas, number and size of parking spaces, and provision for lighting, drainage, snow removal and access for emergency vehicles and public transportation.

(3) Adequacy of **landscaping, screening, and setbacks** in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

(4) Adequacy of **provision for safety and convenience of pedestrians, bicyclists, and handicapped persons**. Included in this evaluation shall be lighting of walks and entrances, design and placement of walks and crosswalks, pick-up points for public transportation and provision of bicycle racks.

(5) **Protection of renewable energy resources**, including a finding that the proposed development does not adversely affect the ability of adjacent properties to use this form of energy.

(6) **Compliance with other provisions of these regulations** including § [260-27](#), Landscaping, and § [260-31](#), Land use performance standards.

(7) **Other** factors that are directly related to the above aspects of site plan review.

DECISION

The Hartford Planning Commission, based upon the forgoing Findings of Fact and Conclusions of Law, hereby approves application #24-01 by Guernsey Ruth Hall Revocable Trust (owner) and Summit Distributing (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for approval of a car wash, lot 44-0041-000, Sykes Mountain Avenue, White River Junction, in an IC zoning district **the condition that:**

1. Before a Zoning Permit is issued:

- **The plans are amended to include the location, height, and material for the proposed fence.**
- **The applicant submits copies of applicable access easement(s) to support the proposed traffic pattern.**
- **The applicant submits written verification from the Fire Marshal confirming they have reviewed and approved the turning movement plan for the ladder truck.**
- **A “Do Not Enter” sign is added to the plans to restrict access to the back of the lot from the rear of lot 44-0038-000.**
- **The applicant adequately addresses the questions outlined in the February 21, 2024 email from Jo-Ann Ells. (See exhibit #7)**
- **The note on plan sheet #5 referencing an “overhead canopy” for the rear vacuums is removed.**

- **The applicant submits a copy of their water and sewer allocation to the Zoning Administrator.**
- **The applicant's Engineer certifies that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit.**
- **A copy of the final plans is emailed to the Zoning Administrator.**

2. Before a Certificate of Occupancy is issued, the applicant submits:

- **Written verification from a Professional Engineer licensed by the State of Vermont certifying that the project was constructed in compliance with the approved plans, Findings of Fact, and Zoning Permit.**
- **Written verification from the DPW confirming that the water and sewer have been inspected and approved.**
- **Written verification from the DPW confirming that they have received acceptable record drawings.**
- **An electronic copy of the record drawings.**
- **A copy of the Energy Code Certificate as recorded in Hartford's Land Records.**

This decision is also subject to the condition that no modification or expansion shall be made to the project as described and limited in the above Findings of Fact and Conclusions of Law without the written approval of the Hartford Zoning Board of Adjustment and/or the Hartford Planning Commission. This decision may be revoked, and a new application or permit required if conditions and findings are violated or modified without written approval.

The applicants are responsible for insuring compliance with all applicable State and Federal regulations pertaining to this application.

Those in favor:

Those in opposition:

Those not participating:

Dated at Hartford, Vermont this ____ day of April 2024.

HARTFORD PLANNING COMMISSION

By: _____
Chairperson/Vice-Chairperson

Appeal Rights: An interested person who has participated in the proceeding related to this decision has the right to appeal this decision to the Vermont Environmental Court, pursuant to 24

V.S.A. s. 4471 and V.R.E.C.P.5, in writing, within 30 days of the date of this decision. The fee is \$250.00. If you fail to appeal this decision, your right to challenge this decision at some future time may be lost because you waited too long. You will be bound by this decision, pursuant to 24 V.S.A. s. 4472 (d) (exclusivity of remedy; finality).

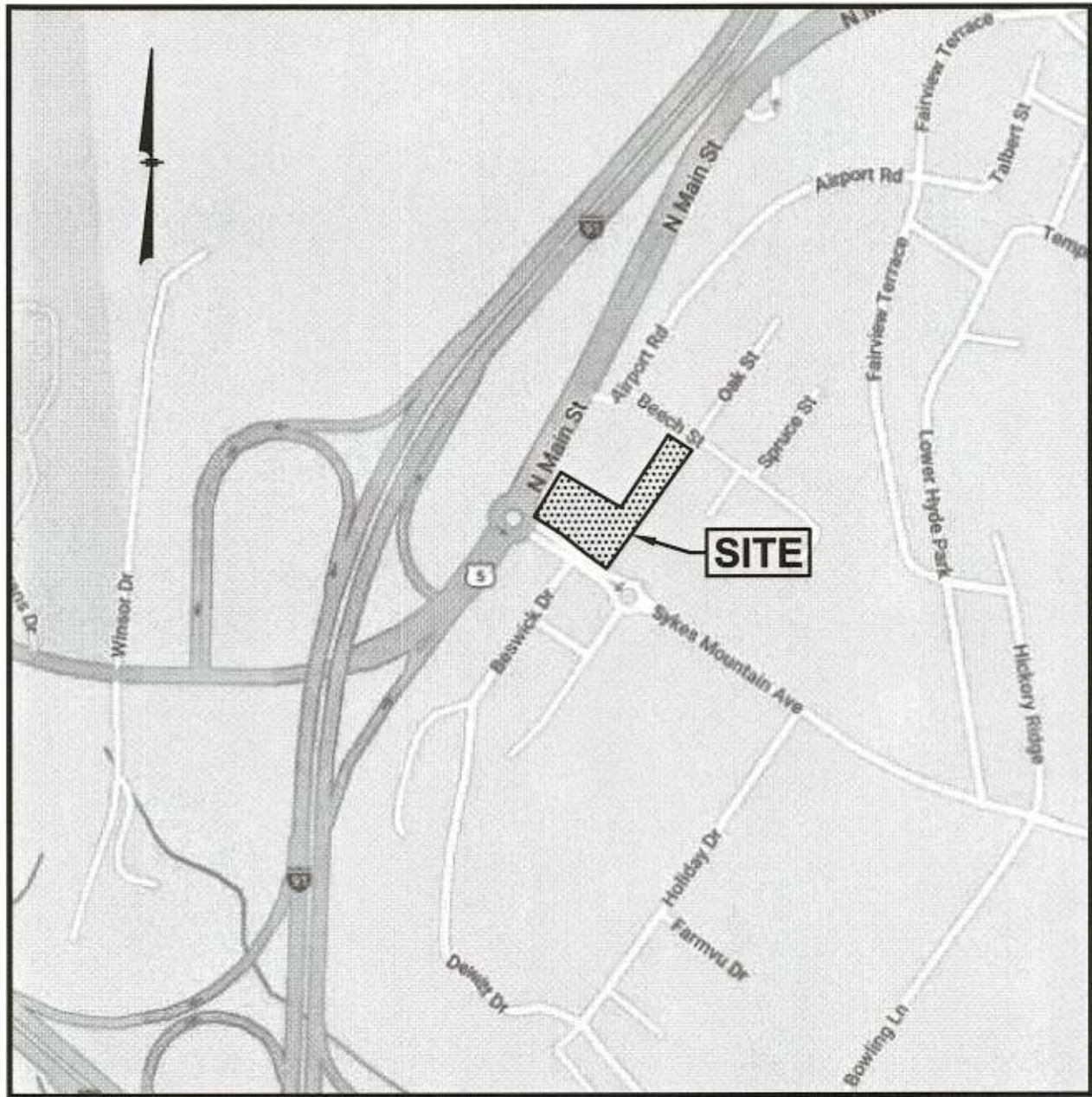
EXHIBIT LIST

1. Application #24-01
2. Set of plans entitled “Site Development Plan, Proposed Car Wash for Assessors Map 44 Lot 41, Sykes Mountain Avenue, White River Junction, Vermont, prepared for Summit Distributing, 240 Mechanic Street, Lebanon, NH 03766” including:
 - Title Sheet
 - General Notes
 - Existing Conditions Plan
 - Demolition Plan
 - Site Plan
 - Grading & Drainage Plan
 - Utility Plan
 - Erosion & Sediment Control Plan
 - Landscape Plan
 - Four Detail Sheets
 - Truck Turn Plan 1 (Fire)
 - Truck Turn Plan 4 (Garbage)
3. Project Narrative
4. Environmental Sound Study prepared by Cavanaugh Tocci dated March 29, 2024
5. Hartford Noise Ordinance, Chapter 110
6. Letter from Robert Bollinger dated March 1, 2024
7. Email from Jo-Ann Ells dated February 21, 2024 regarding traffic
8. Letter from Nicole Duquette dated February 15, 2024
9. Memo from Jo-Ann Ells dated February 9, 2024
10. Trip Generation and Site Access Study dated January 29, 2024

SITE DEVELOPMENT PLANS PROPOSED CAR WASH

for
ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT

Prepared for:
SUMMIT DISTRIBUTING
240 MECHANIC STREET
LEBANON, NH 03766



LOCATION MAP
(NOT TO SCALE)

INDEX TO DRAWINGS	
1.	TITLE SHEET
2.	GENERAL NOTES
3.	EXISTING CONDITIONS PLAN
4.	DEMOLITION PLAN
5.	SITE PLAN
6.	GRADING & DRAINAGE PLAN
7.	UTILITY PLAN
8.	EROSION & SEDIMENT CONTROL PLAN
9.	LANDSCAPE PLAN
10.	DETAIL SHEET
11.	DETAIL SHEET
12.	DETAIL SHEET
13.	DETAIL SHEET
1 OF 1.	TRUCK TURN PLAN 1
1 OF 1.	TRUCK TURN PLAN 2
1 OF 2.	LIGHTING PLAN (RL-9431-S1)
2 OF 2.	LIGHTING SPECIFICATIONS (RL-9431-S1)
1 OF 1.	BUILDING ELEVATIONS (A2.1)

PREPARED FOR
SUMMIT DISTRIBUTING
240 MECHANIC STREET
LEBANON, NH 03766

ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT



REVISIONS		
2.	REV. ALL SHEETS	2/15/24
1.	SHEETS 2, 7, & TTP	2/15/24
NO.	REVISION	DATE
FEBRUARY 2, 2024		
DRAWN/DESIGN BY		CHECKED BY
CCC		NID

TITLE SHEET

SCALE: AS SHOWN
NEX-2019181
1 OF 13

LEGEND

	SLOPED GRANITE CURB
	VERTICAL GRANITE CURB
	SLOPED CONCRETE CURB
	VERTICAL CONCRETE CURB
	CAPE COD BERM
	DOUBLE SOLID LINE YELLOW
	DOUBLE DASHED LINE YELLOW
	SINGLE DASHED LINE YELLOW
	SINGLE SOLID LINE YELLOW
	SINGLE SOLID LINE WHITE
	SINGLE DASHED LINE WHITE
	GAS LINE
	UNDERGROUND TELEPHONE
	WATER LINE
	UNDERGROUND ELECTRIC
	WOOD GUARDRAIL
	METAL GUARDRAIL
	CHAIN LINK FENCE
	STOCKADE FENCE
	POST & RAIL FENCE
	WIRE FENCE
	CONTOUR ELEVATION
	TREE
	UTILITY POLE
	GUY WIRE
	OVERHEAD WIRE
	TREELINE
	PULL BOX
	SIGN
	SPOT ELEVATION
	DRAIN MANHOLE
	CATCH BASIN
	ROOF DRAIN
	CLEANOUT
	VENT
	SEWER MANHOLE
	TELEPHONE MANHOLE
	ELECTRIC MANHOLE
	WATER MANHOLE
	MANHOLE
	GAS VALVE
	GAS SHUT OFF
	WATER VALVE
	WATER SHUT OFF
	FIRE HYDRANT
	BOLLARD
	GAS METER
	ELECTRIC METER
	MONITORING WELL
	LIGHT POLE
	BORING
	WETLAND LINE
	WATER FEATURE
	UNDERGROUND COMM
	DITCH LINE
	EASEMENT LINE
	PROPERTY LINE
	ABUTTER PROPERTY LINE
	BUILDING SETBACK
	SOIL TYPE LINE
	ZONE LINE
	FLOOD ZONE LINE
	TO BE REMOVED
	NUMBER OF PARKING SPACES
	TIP DOWN CURB
	PROP. VERTICAL CONC. CURB (VCC)
	PROP. VERTICAL GRANITE CURB (VGC)
	PROP. CLEANOUT
	PROP. CATCH BASIN
	PROP. DRAIN MANHOLE
	MEET EXISTING GRADE
	PROP. SPOT ELEVATION
	PROP. CONTOUR ELEVATION
	TOP OF WALL ELEV.
	BOTTOM OF WALL ELEV.
	GRADE BREAK
	TEST PIT
	PROP. GATE VALVE
	PROP. SEDIMENT CONTROL FENCE

GENERAL NOTES:

- EXISTING BOUNDARY AND PLANIMETRIC INFORMATION AS SHOWN IS THE RESULT OF AN ACTUAL FIELD SURVEY BY THIS OFFICE.
- TAX MAP 44 LOT 41
- ZONING DISTRICT: INDUSTRIAL COMMERCIAL (IC)
- LOT AREA = 50,752 Sq.Ft. = 1.165 Ac.±
- EXISTING USE: OVERFLOW PARKING LOT
PROPOSED USE: CAR WASH FACILITY
- ALL BUILDINGS AND SITE CONSTRUCTION SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990, AS AMENDED.
- THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THIS PLAN WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTED AS CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.
- WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 811 PRIOR TO ANY EXCAVATION.
- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF WHITE RIVER JUNCTION AND THE STATE OF VERMONT.
- THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 50027C03589, WITH AN EFFECTIVE DATE OF SEPTEMBER 28, 2007.
- ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND THE STANDARD CONSTRUCTION DRAWINGS AS SUPPLIED BY THE DEVELOPER.
- A SIGN PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION.
- PROPOSED SNOW STORAGE AREAS AS SHOWN. ANY EXCESS SNOW TO BE TRUCKED OFF-SITE.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY GREENMAN-PEDERSEN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- A CONDITIONAL USE PERMIT IS REQUESTED TO ALLOW A MOTOR VEHICLE CAR WASH WITHIN THE INDUSTRIAL COMMERCIAL DISTRICT.
- CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE HARTFORD DPW BEFORE COMMENCING WITH CONSTRUCTION. CONTRACTOR SHALL CONTACT DPW AT LEAST 2 WEEKS BEFORE AN INTENDED MEETING DATE.
- EARTH MOVING AND HAULING, ROCK DRILLING OR CRUSHING, JACK HAMMER AND SIMILAR EXCESSIVELY LOUD EQUIPMENT SHALL NOT BE OPERATED IN SUNDAYS OR BETWEEN THE HOURS OF 5:30 PM AND 7:00 AM EXCEPT IN EMERGENCY SITUATIONS.
- ANY STOCKPILING OF MATERIALS RELATED TO THE CONSTRUCTION OF THE PROJECT MUST BE LOCATED TWICE THE DISTANCE OF THE HEIGHT OF THE STOCKPILED MATERIALS FROM ANY PUBLIC OR PRIVATE RIGHT OF WAY OR PROPERTY BOUNDARY.
- CONSTRUCTION TRAILERS MAY BE USED AT CONSTRUCTION SITES FOR OFFICE AND LABRATORY USE ON THE CONDITION THAT THEY ARE PLACED A MINIMUM OF TEN FEET FROM ANY PROPERTY LINE, ARE USED FOR A PROJECT WITH A VALID ZONING PERMIT AND ARE REMOVED BEFORE A CERTIFICATION OF OCCUPANCY IS REQUESTED.

DEMOLITION NOTES:

- A DEMOLITION PERMIT MUST BE OBTAINED FROM THE TOWN OF WHITE RIVER JUNCTION PRIOR TO COMMENCEMENT OF WORK. ALL EXISTING UTILITY DISCONNECTIONS MUST BE COORDINATED WITH RESPECTIVE UTILITY COMPANIES.
- ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR TO INSTALL EROSION CONTROL DEVICES IN ACCORDANCE WITH EROSION AND SEDIMENT CONTROL PLAN PRIOR TO BEGINNING DEMOLITION ACTIVITIES.
- PROCEED WITH DEMOLITION IN A SYSTEMATIC MANNER, FROM THE TOP OF THE STRUCTURE(S) TO THE GROUND.
- DEMOLISH CONCRETE IN ALL SECTIONS.
- BREAK UP CONCRETE SLABS--ON-GRADE, UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.
- CONDUCT ALL DEMOLITION OPERATIONS IN A MANNER THAT WILL PREVENT INJURY, DAMAGE TO STRUCTURES, ADJACENT BUILDINGS AND ALL PERSONS.
- REFRAIN FROM USING EXPLOSIVES WITHOUT PRIOR WRITTEN CONSENT OF THE DEVELOPER AND APPLICABLE GOVERNMENTAL AUTHORITIES.
- CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF THE DEVELOPER AND APPLICABLE GOVERNMENTAL AUTHORITIES. REMOVE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATIONS.
- USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURE AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
- ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
- COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. STONES USED WILL NOT BE LARGER THAN 6 INCHES IN DIMENSION. MATERIAL FROM DEMOLITION ANY NOT BE USED AS FILL. PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERTAKE ALL NECESSARY ACTION IN ORDER TO INSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROZEN MATERIAL, TRASH, DEBRIS. PLACE FILL MATERIALS LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY, GRADE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
- REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS RUBBISH, SALVAGEABLE ITEMS, HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND DEPARTMENTS.
- DISCONNECT, SHUT OFF AND SEAL ALL UTILITIES SERVING THE STRUCTURE(S) TO BE DEMOLISHED BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION. MARK FOR POSITION ALL UTILITY DRAINAGE AND SANITARY LINES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY BEFORE THE COMMENCEMENT OF DEMOLITION SERVICES THE REQUIRED INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO INSURE THE CONTINUATION OF SERVICE.
- PROTECT EXISTING DRAINAGE SYSTEM(S) AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING DURING CONSTRUCTION. SEE DETAIL SHEETS FOR EROSION CONTROL DEVICES.
- ALL WORK WITHIN ROADWAY RIGHT-OF-WAYS TO CONFORM TO TOWN STANDARDS.
- THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY DIG SAFE (DIAL 811) 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER DEPARTMENT TO MARK OUT THEIR UTILITIES.
- NOTES ON THIS PLAN THAT READ "TBR" REPRESENT FEATURES TO BE REMOVED. ANY FEATURES NOT LABELED "TBR" OR "TO BE REMOVED" SHALL BE CONSIDERED EXISTING TO REMAIN.
- SEE LANDSCAPE PLAN FOR LIMITS OF CLEARING AND RUBBING. AFTER CLEARING, STRIP AND STOCKPILE TOP SOIL PER LANDSCAPE PLAN, IF APPLICABLE.

GRADING & DRAINAGE NOTES:

- ALL SITE DRAINAGE PIPE SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE WITH STANDARD JOINTS, DUAL-WALL, SMOOTH INTERIOR, AS MANUFACTURED BY ADS, INC. OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLAN. THE UNDERGROUND DETENTION SYSTEM SHALL HAVE WATER TIGHT (WT) JOINTS MEETING ASTM D3212 SPECIFICATIONS.
- ALL ROOF AND CANOPY DRAIN PIPE SHALL BE 6" PVC (SDR-35), EXCEPT WITHIN 10' OF A BUILDING FOUNDATION WHERE CAST IRON PIPE SHALL BE USED. MIN. SLOPE=1%.
- ELEVATIONS ARE BASED ON NAVD88 DATUM.
- ALL PROPOSED ELEVATIONS AS SHOWN ARE BOTTOM OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
- ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND COORDINATED WITH THE APPROPRIATE LOCAL UTILITY COMPANY.
- THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO MUNICIPAL DPW AND ALL APPLICABLE STATE AND FEDERAL STANDARDS.
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (DIAL 811) PRIOR TO COMMENCING ANY EXCAVATION.
- THIS SITE WILL REQUIRE A STATE OF VERMONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF CONSERVATION (DEC) STORMWATER CONSTRUCTION DISCHARGE GENERAL PERMIT 3-9050 FOR THE SITE CONSTRUCTION SINCE THE IMPERVIOUS AREA EXCEEDS ONE HALF OF AN ACRE (ACTUAL IMPERVIOUS = 25,380 SF±). BASED ON THE PROJECT RISK FACTOR, THE CONSTRUCTION SITE OPERATOR SHALL EITHER IMPLEMENT DEC'S EROSION PREVENTION AND SEDIMENT CONTROL PLAN (EPSC PLAN) OR DEVELOP AND IMPLEMENT A PROJECT SPECIFIC EPSC PLAN IN ACCORDANCE WITH THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL.
- ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL DPW.
- ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO VDOT AND THE TOWN DEPARTMENT OF PUBLIC WORKS, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
- ALL ADA ACCESSIBLE WALKWAYS CANNOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE. RAMPS CANNOT EXCEED 8.33% RUNNING SLOPE AND 2% CROSS SLOPE, AND ACCESSIBLE PARKING STALLS AND ACCESS AISLES CANNOT EXCEED 2% SLOPE IN ANY DIRECTION. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
- SEE UTILITY PLAN FOR DETAILED UTILITY LAYOUT.
- CONTRACTOR SHALL FIELD ADJUST GRADES FOR THE TANK PAD TO SHED WATER
- ALL PROPOSED CATCH BASINS SHALL HAVE 4" SUMPS AND OUTLETS EQUIPPED WITH "ELIMINATOR" OIL HOODS OR APPROVED EQUAL.
- ALL PIPE DATA IS CALCULATED TO CENTER OF STRUCTURE, TYP.
- CONTRACTOR TO REFER TO THE OPERATION & MAINTENANCE (O&M) MANUAL FOR STORMWATER MANAGEMENT SYSTEMS & SITE MAINTENANCE DURING AND AFTER CONSTRUCTION.
- CONTRACTOR TO INSTALL RISER STRUCTURES AT EACH CORNER OF UNDERGROUND DETENTION SYSTEMS AND CLEANOUTS AT EACH END OF EACH ROW TO PROVIDE ACCESS POINTS FOR CLEANING AND MAINTENANCE.
 - TOTAL RISERS PROPOSED = 3
 - TOTAL CLEANOUTS PROPOSED = 7

UTILITY NOTES:

- ALL SANITARY SEWER PIPE SHALL BE PVC (SDR-35), UNLESS OTHERWISE NOTED.
- ALL WATER PIPE SHALL BE COPPER (TYPE K), UNLESS OTHERWISE NOTED.
- ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND COORDINATED WITH THE APPROPRIATE LOCAL UTILITY COMPANY.
- THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES.
- ALL CONSTRUCTION SHALL CONFORM TO MUNICIPAL DPW AND ALL APPLICABLE STATE AND FEDERAL STANDARDS.
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 811 PRIOR TO ANY EXCAVATION.
- ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
- THIS SITE IS SERVED BY MUNICIPAL SEWER AND WATER.
- ALL ELECTRIC, TELEPHONE AND CABLE TV LINES ARE TO BE UNDERGROUND AND INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY CO. SPECIFICATIONS.
- ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL DPW.
- ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO VDOT AND TOWN DEPARTMENT OF PUBLIC WORKS, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
- REFER TO DETAIL SHEETS FOR ALL UTILITY DETAILS AND ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL CONTACT ENGINEER TO INSPECT THE EXISTING SEWER SERVICE LINE PRIOR TO USE. SLIP LINING MAY BE NECESSARY IF FLAWS FOUND IN EXISTING STUB.
- PRIOR TO CONNECTION INSTALLING WATER CONNECTION, THE CONTRACTOR SHALL APPLY FOR A CONNECTION AND PAY A CONNECTION FEE DETERMINED BY SIZE AND LENGTH OF SERVICES, AND THE COST OF THE METER IF PURCHASED THROUGH THE TOWN.

EROSION CONTROL NOTES:

- THE EROSION CONTROL PROCEDURES SHALL CONFORM TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL.
 - DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS NOTED: THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AS APPROVED BY THE ENGINEER. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
 - ALL PERMANENT STORM WATER STRUCTURES SHALL BE STABILIZED PRIOR TO DIRECTING FLOW INTO THEM. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 - B) A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED.
 - C) A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED.
 - D) OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 - SEDIMENT CONTROL FENCE SHALL BE INSTALLED AND MAINTAINED DURING AND AFTER DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER AND FROM LAND UNDERGOING DEVELOPMENT. WHERE POSSIBLE, NATURAL DRAINAGE WAYS SHOULD BE UTILIZED AND LEFT OPEN TO REMOVE EXCESS SURFACE WATER. SEDIMENT CONTROL FENCE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
 - ALL DISTURBED AREAS AND SIDE SLOPES WHICH ARE FINISHED GRADED, WITH NO FURTHER CONSTRUCTION TO TAKE PLACE, SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS AFTER FINAL GRADING. A MINIMUM OF 4" OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. THE SEED MIX SHALL BE AS DESIGNATED BELOW.
 - ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION. THE MAXIMUM LENGTH OF TIME FOR THE EXPOSURE OF DISTURBED SOILS SHALL BE 45 DAYS. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE. BALES SHALL BE UNPOOLED, AIR DRIED, AND FREE FROM WEED, SEEDS AND ANY COARSE MATERIAL.
 - DURING GRADING OPERATIONS INSTALL SEDIMENT CONTROL FENCE ALONG TOE OF SLOPE OF FILL AREAS WHERE SHOWN. BARRIERS ARE TO BE MAINTAINED UNTIL DISTURBED AREAS ARE PAVED OR GRASSED.
 - THE FILL MATERIAL SHALL BE OF APPROVED SOIL TYPE FREE FROM STUMPS, ROOTS, WOOD, ETC. TO BE PLACED IN 12" LIFTS OR AS SPECIFIED. BULLDOZERS, TRUCKS, TRACTORS, OR ROLLERS MAY BE USED FOR COMPACTION BY ROUTING THE EQUIPMENT TO ALL AREAS OR EACH LAYER.
 - AVOID THE USE OF FUTURE OPEN SPACES (LOAM & SEED) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ROADS.
- ### TEMPORARY EROSION CONTROL MEASURES:
- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
 - SEDIMENT CONTROL FENCE SHALL BE INSTALLED AS REQUIRED. FENCE IS TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
 - BALED HAY AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
 - FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
 - STOCKPILED MATERIALS SHALL BE PLACED ONLY IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL BE PROTECTED BY SEDIMENT CONTROL FENCING AND SEEDED TO PREVENT EROSION. THESE MEASURES SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED OR DISPOSED OFF SITE.
 - ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA.
 - SEED MIX SHALL BE EQUAL PARTS OF RED FESCUE (CREEPING), KENTUCKY BLUE GRASS, REDTOP, PERENNIAL RYEGRASS.
 - AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
 - PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
 - ALL CATCH BASIN INLETS WILL BE PROTECTED WITH INLET PROTECTION AND/OR SILT SACKS.
 - ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AND CLEANED AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
 - ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA OR DEWATERING FILTER BAG.
 - TO PREVENT TRACKING OF SEDIMENT ONTO THE EXISTING ROADS, ALL CONSTRUCTION TRAFFIC CAN ONLY EXIT THE SITE OVER THE CONSTRUCTION ENTRANCES SHOWN ON THIS PLAN.
- ### CONSTRUCTION SEQUENCE:
- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY ON-SITE CONSTRUCTION AS SHOWN. ADDITIONAL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICAL.
 - REMOVE AND STOCKPILE SOIL AS REQUIRED. STOCKPILE SHALL BE SURROUNDED WITH SEDIMENT CONTROL FENCING TO PREVENT EROSION.
 - CONSTRUCT DRIVEWAYS AND PERFORM SITE GRADING.
 - INSTALL UNDERGROUND UTILITIES & DRAINAGE.
 - BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED OR MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
 - DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SEDIMENT CONTROL FENCES, HAYBALES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING.
 - BEGIN EXCAVATION FOR AND CONSTRUCTION OF BUILDING.
 - FINISH PAVING ALL DRIVES AND PARKING AREAS. CLEAN ALL DRAINAGE STRUCTURES.
 - COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 - AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

WINTER STABILIZATION NOTES:

- MAINTENANCE REQUIREMENTS:**
MAINTENANCE MEASURES SHOULD CONTINUE AS NEEDED THROUGHOUT CONSTRUCTION, INCLUDING THE OVER-WINTER PERIOD. AFTER EACH RAINFALL, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUING FUNCTION. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO THE ONSET OF THE WINTER SEASON, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF VEGETATION COVER, AND REPAIR ANY DAMAGE AREAS OR BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 85% OF AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH).
- TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING STABILIZATION TECHNIQUES SHOULD BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15TH THROUGH MAY 15TH.
- THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO ONE ACRE AND SHOULD BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. SUBJECT TO APPLICABLE REGULATIONS, THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF ACTIVITIES ARE CONDUCTED ACCORDING TO A WINTER CONSTRUCTION PLAN, DEVELOPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF VERMONT OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPESC COUNCIL OF ENVIROCERT INTERNATIONAL, INC.
 - STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS:
 - A. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX (SEE DESCRIPTION OF EROSION CONTROL MIX BERMS FOR MATERIAL SPECIFICATION).
 - B. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHOULD NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
 - ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 - INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
 - ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED (E.G., BY NETTING, TRACKING, WOOD CELLULOSE FIBER).
 - STOCKPILES OF SOIL MATERIALS SHOULD BE MULCHED FOR OVER WINTER. PROTECTION WITH HAY OR STRAW AT THE BASE OF THE STOCKPILE WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. MULCHING SHOULD BE DONE WITHIN 24 HOURS OF STOCKING, AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. NO SOIL STOCKPILE SHOULD BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100 FEET FROM ANY WETLAND OR OTHER WATER RESOURCE AREA.
 - FROZEN MATERIALS, (E.G., FROST LAYER THAT IS REMOVED DURING WINTER CONSTRUCTION), SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION THAT IS AWAY FROM ANY AREA NEEDING TO BE PROTECTED. STOCKPILES OF FROZEN MATERIAL CAN MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO THE HIGH MOISTURE CONTENT IN THE SOIL.
 - INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
 - ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONTAINED BY A QUALIFIED PROFESSIONAL ENGINEER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPESC COUNCIL OF ENVIROCERT INTERNATIONAL, INC. IF A STONE LINING IS NECESSARY, THE CONTRACTOR MAY NEED TO RE-GRADE THE DITCH AS REQUIRED TO PROVIDE ADEQUATE CROSS-SECTION AFTER ALLOWING FOR PLACEMENT OF THE STONE.
 - ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 - AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL.
 - SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONSIST OF EROSION CONTROL MIX BERMS, OR CONTINUOUS CONTAINED BERMS. SEDIMENT CONTROL FENCES AND HAY BALES SHOULD NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.
- ### LANDSCAPE NOTES:
- ALL PLANT STOCK SHALL CONFORM TO ANSI Z260.1 -- NURSERY STOCK, LATEST EDITION (AMERICAN ASSOCIATION OF NURSERYMEN, INC.).
 - A 4" DIA. TREE RING WITH 3" AGED PINE BARK MULCH TO BE INSTALLED AT BASE OF ALL TREES IN LAWN AREAS.
 - 3" AGED PINE BARK MULCH SHALL BE APPLIED TO ALL SHRUB AND GROUNDCOVER BEDS.
 - A WEED BARRIER (TY-PAR FABRIC OR APPROVED EQUAL) SHALL BE APPLIED TO ALL SHRUB AND GROUNDCOVER BEDS. INSTALL WEED BARRIER AS PER MANUFACTURERS RECOMMENDATIONS.
 - THE CONTRACTOR SHALL PROVIDE TESTING OF SOILS IN PLANTING LOCATIONS. THE CONTRACTOR SHALL PROVIDE TEST RESULTS AND RECOMMENDATIONS AS NECESSARY FOR SOIL AMENDMENT TO THE ENGINEER FOR THEIR APPROVAL. BACKFILL SHALL BE A BLEND OF ONE-PART LOAM BORROW, ONE PART ORGANIC MATERIAL AND TWO-PARTS EXISTING SUBSOIL.
 - ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUNDCOVER SHALL BE RESTORED WITH SEED AS INDICATED ON PLANS.
 - ALL SEED, SHRUB AND TREE AREAS SHALL RECEIVE 6" PH CORRECTED TOPSOIL. AFTER TOPSOIL IS SPREAD EVENLY OVER ENTIRE AREA, ALL CLODS, LUMPS, STONES AND OTHER DELETERIOUS MATERIAL SHALL BE RAKED UP AND REMOVED.
 - APPLICATION OF GRASS SEED, FERTILIZERS AND STRAW MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:

LIMESTONE: 100 LBS./1,000 SQUARE FEET.	
FERTILIZER: 500 LBS/ACRE OF 10-20-20 OR 1000 LBS/ACRE OF 5-10-10.	
STRAW MULCH: APPROXIMATELY 3 TONS/ACRE	
SEED MIX (SLOPES LESS THAN 4:1)	LBS/ACRE
CREEPING RED FESCUE	20
TALL FESCUE	15
PERENNIAL RYEGRASS	5
RETOP	42
SLOPE MIX (SLOPES GREATER THAN 4:1)	LBS/ACRE
CREEPING RED FESCUE	20
TALL FESCUE	20
BIRDSFOOT TREFOIL	48
 - FOR TEMPORARY EROSION CONTROL NOTES, SEE EROSION & SEDIMENT CONTROL PLAN.
 - NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE STRAW MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 3 TONS PER ACRE.
 - ANY CHANGES IN PLANT LOCATIONS OR TYPES SHALL BE APPROVED BY THE DEVELOPER, LANDOWNER AND TOWN PRIOR TO INSTALLATION.
 - CLEAR AND GRUB (TO LIMITS REQUIRED ON GRADING PLAN) TO REMOVE VEGETATION, TREES, ROCKS, DEBRIS, ETC. STUMPS SHALL BE REMOVED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE REGULATIONS. AFTER CLEARING, STRIP AND STOCKPILE ALL ON-SITE TOPSOIL FOR REUSE TO THE MAXIMUM EXTENT POSSIBLE.
 - FOR SEED AREAS USE EXISTING TOPSOIL, IF AVAILABLE, FOR A 4" DEPTH AND TOP DRESS WITH 2" OF SCREENED TOPSOIL, UNLESS OTHERWISE NOTED ON PLAN. ALL LOAM OR TOPSOIL IMPORTED OR RE-UTILIZED FROM ON SITE SHALL BE TESTED AND AMENDED AS DIRECTED BY DEVELOPER TO MEET MINIMUM REQUIREMENTS.
 - PLANTINGS SHALL BE GUARANTEED BY THE CONTRACTOR FOR ONE YEAR AFTER WRITTEN ACCEPTANCE BY THE DEVELOPER.
 - EXPOSED SOILS SHALL BE SEEDED OR STRAW MULCHED WITHIN 72 HOURS OF FINAL GRADING.



PREPARED FOR
SUMMIT DISTRIBUTING
240 MECHANIC STREET
LEBANON, NH 03766

ASSESSORS MAP 44 LOT 41

SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT



REVISIONS		
2.	MISC REV.	2/15/24
1.	REV. PER TWON COMMENTS	2/15/24
NO.	REVISION	DATE
FEBRUARY 2, 2024		
DRAWN/DESIGN BY		CHECKED BY
CCC		NID

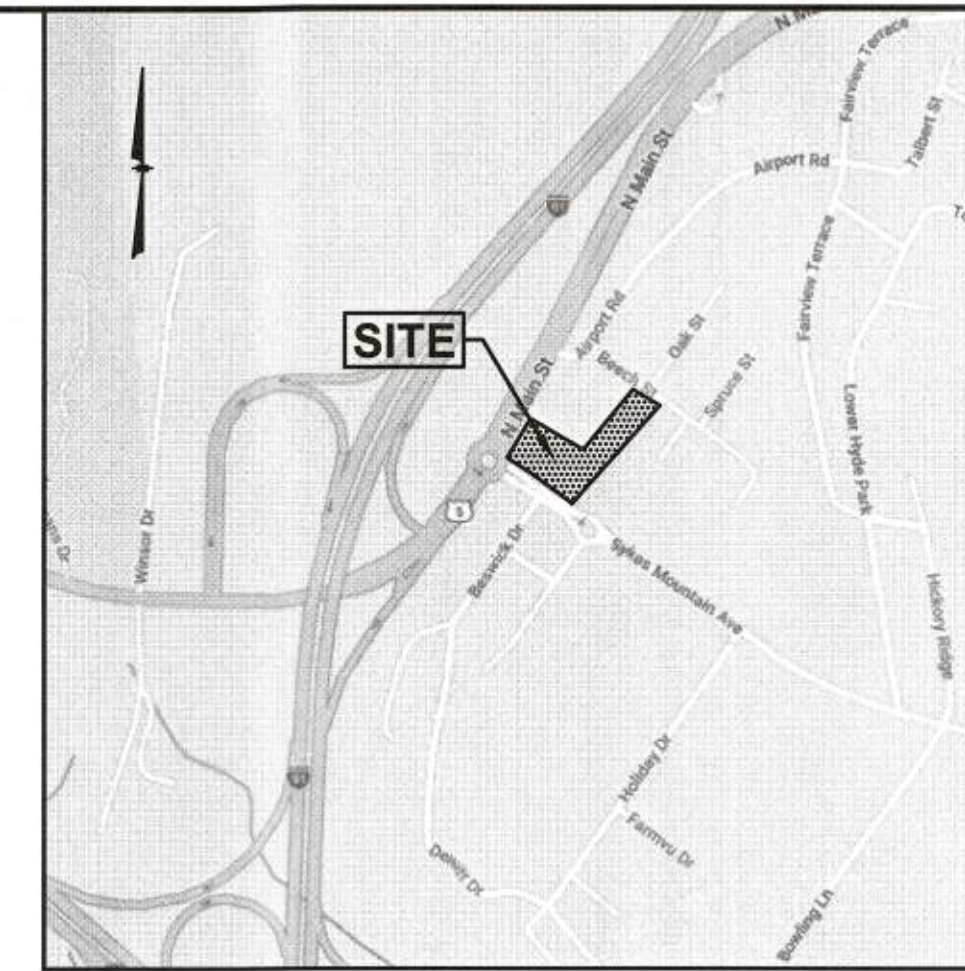
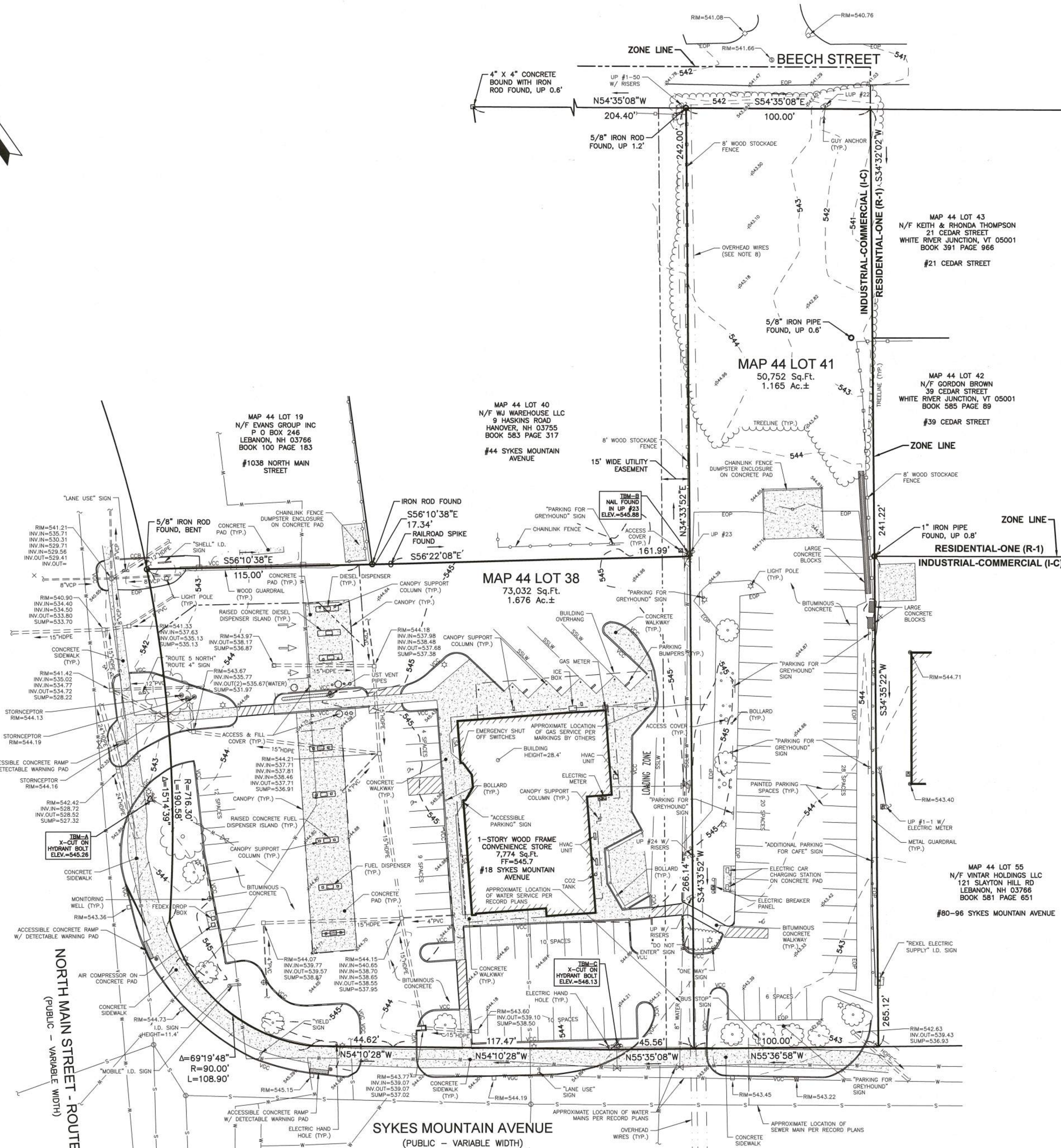
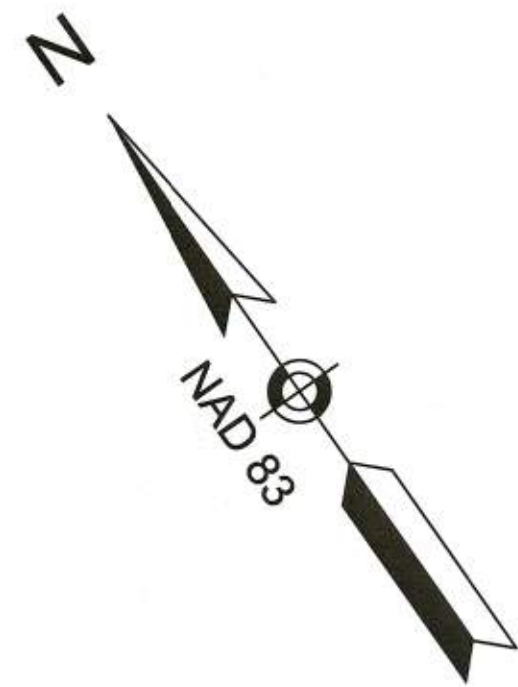
GENERAL NOTES

SCALE:

AS SHOWN

NEX-2019181

2 OF 13



LOCATION MAP
(NOT TO SCALE)

NOTES:

- 1) ZONE: INDUSTRIAL COMMERCIAL DISTRICT (I-C)
MIN. LOT SIZE: 10,000 Sq.Ft.
MIN. LOT FRONTAGE: 100 Ft.
SETBACKS:
FRONT 10 Ft.
SIDE 10 Ft.
REAR 20 Ft.
REFER TO THE TOWN OF HARTFORD ZONING ORDINANCE FOR VERIFICATION, ADDITIONAL RESTRICTIONS AND PERMITTED USES. THE ZONING INFORMATION SHOWN HEREON IS BASED ON A REVIEW OF THE HARTFORD ZONING ORDINANCE.
- 2) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY AND UAS SURVEY PERFORMED BY THIS OFFICE BETWEEN JULY 5 AND JANUARY 18, 2024. A PORTION OF THE PLANIMETRIC DETAIL AND PERMANENT PHYSICAL FEATURES SHOWN ON THIS PLAN WERE DIGITIZED FROM RECTIFIED ORTHOPHOTOGRAPHY DERIVED FROM AERIAL IMAGERY OBTAINED VIA UAS BY THIS OFFICE ON JULY 13, 2023.
- 3) BEARINGS SHOWN HEREON ARE BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JULY 5, 2023.
- 4) ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JULY 5, 2023.
- 5) LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY. ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED. INVERTS ARE LISTED IN A CLOCKWISE DIRECTION ENDING WITH THE INVERT OUT (UNLESS OTHERWISE NOTED).
- 6) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 50027C0389E, WITH AN EFFECTIVE DATE OF SEPTEMBER 28, 2007.
- 7) A TOTAL OF 99 (96 STANDARD, 3 ACCESSIBLE) CLEARLY IDENTIFIABLE PARKING SPACES WERE OBSERVED IN CONDUCTING THIS SURVEY.
- 8) THERE IS A GENERAL BLANKET EASEMENT THAT EXISTS OVER MAP 44 LOT 41 FOR ALL WIRES, POLE LINES, AQUEDUCTS, AND CONDUITS IN BOOK 248 PAGE 326

UTILITY NOTES:

WATER SERVICE - PUBLIC WATER - HARTFORD WATER SYSTEM
SEWER SERVICE - PUBLIC SEWER - HARTFORD WASTEWATER SYSTEM
GAS SERVICE - NATURAL GAS - VERMONT GAS SYSTEMS
ELECTRICAL SERVICE - GREEN MOUNTAIN POWER

PLAN REFERENCES:

- 1) "ALTA / ACSM LAND TITLE SURVEY" PREPARED BY: PATHWAY CONSULTING, LLC; PREPARED FOR: SUMMIT DISTRIBUTING, LLC; DATED: APRIL 23, 2009; RECORDED AS PLAN 894A-894C AT THE HARTFORD, VERMONT TOWN CLERK'S OFFICE.
- 2) "PLAN OF LAND OF CLARENCE E. THIBIDEAU & FRANK & OLIVE F. GILMAN" PREPARED BY: K.A. LECLAIR ASSOCIATES, INC.; DATED FEBRUARY 13, 1968; ON FILE WITH THE HARTFORD, VT TOWN CLERK IN CABINET 679 PAGE 262.
- 3) "TOWN OF HARTFORD, COUNTY OF WINDSOR, HARTFORD STP 0113(59)S, STP EH09(15), US ROUTE 5 & SYKES MOUNTAIN AVENUE" PREPARED BY STANTEC CONSULTING SERVICES, INC.; APPROVED BY THE TOWN OF HARTFORD ON FEBRUARY 26, 2020.

OWNER OF RECORD:

MAP 44 LOT 38
SUMMIT DISTRIBUTING LLC
240 MECHANIC ST
LEBANON, NH 03768
BOOK 604 PAGE 805

MAP 44 LOT 41
RUTH H. GUERNSEY, TRUSTEE
REVOCABLE TRUST OF RUTH HALL GUERNSEY
22 GREEN STREET WEST
WEST LEBANON, NH 03784
BOOK 502 PAGE 124



REVISIONS

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1.	MISC REV.	2/15/24

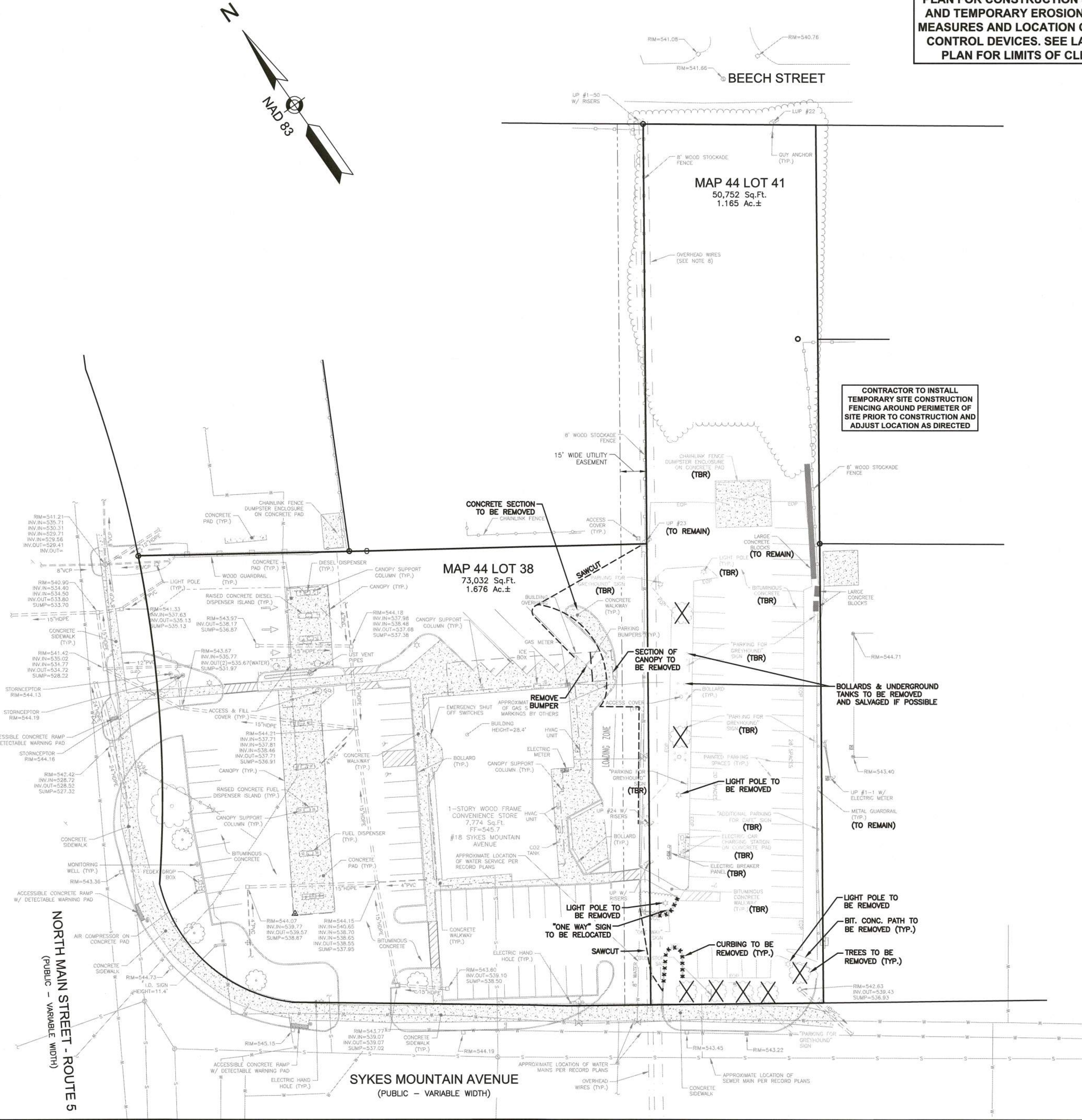
**EXISTING
CONDITIONS
PLAN**

SCALE: 1"=30'

NEX-2019181

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SEE EROSION & SEDIMENT CONTROL
PLAN FOR CONSTRUCTION SEQUENCE
AND TEMPORARY EROSION CONTROL
MEASURES AND LOCATION OF EROSION
CONTROL DEVICES. SEE LANDSCAPE
PLAN FOR LIMITS OF CLEARING.

NOTES:
1) SEE SHEET 2 FOR NOTES AND LEGEND INFORMATION.

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44 Stiles Road, Suite One
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ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT



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DEMOLITION PLAN	
SCALE:	1"=30'
NEX-2019181	
4 OF 13	

SIGN KEY		
SIGN I.D. NUMBER	TEXT/COLOR	SIZE/REMARKS
R1-1	R/W	30" x 30" NEW SIGN WITH POST
R5-1	R/W	30" x 30" NEW SIGN WITH POST
R6-1	B/W	36" x 12" NEW SIGN WITH POST
R7-B	G/B/W	12" x 18" NEW SIGN WITH POST
R7-BA	G/W	6" x 12"

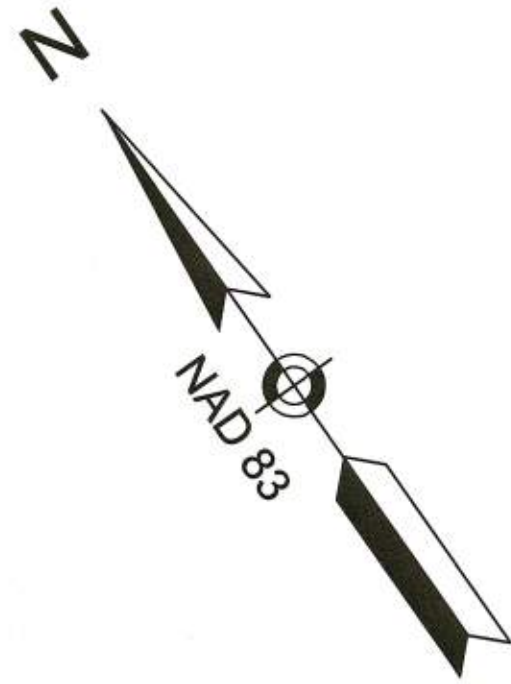
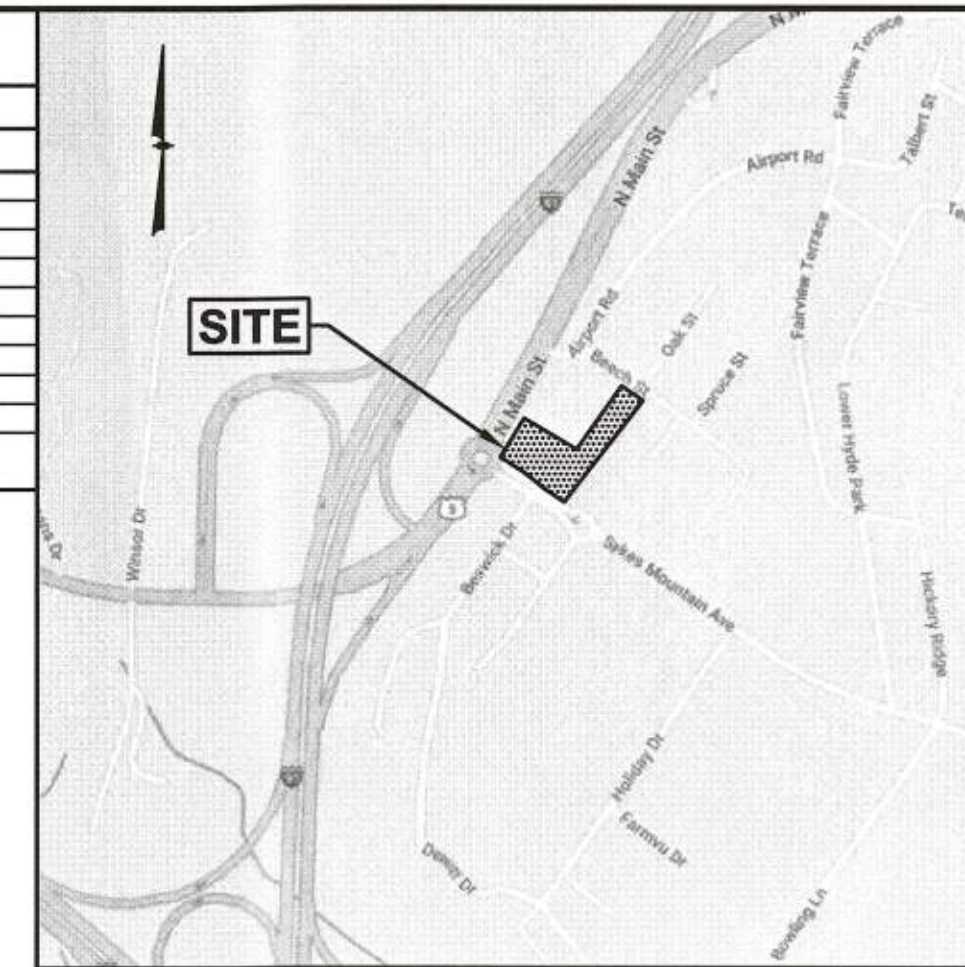


TABLE OF ZONING REGULATIONS - WHITE RIVER JUNCTION, VT		
ZONE: INDUSTRIAL COMMERCIAL (I-C)		
DESCRIPTION	REQUIRED	PROVIDED
MINIMUM LOT AREA Sq. Ft.	10,000 SF	50,752 SF
MINIMUM LOT FRONTAGE	N/A	100'
MINIMUM FRONT YARD BUILDING SETBACK	10'	91.1'
MINIMUM SIDE YARD BUILDING SETBACK	10'	15.6'
MINIMUM REAR YARD BUILDING SETBACK	20'	316.3'
PARKING SPACE DIMENSIONS	9'x18'	11'x19' (VAC SPACES)
MINIMUM NUMBER PARKING SPACES	N/A	15 SPACES
MINIMUM OPEN SPACE	15%	25,237 SF = 49.7%
FREESTANDING SIGN AREA, HEIGHT+SETBACK	100 SF, 25' HT., 10' SETBACK	TBD
TOTAL AGGREGATE SIGN AREA	150 SF	TBD



LOCATION MAP
(NOT TO SCALE)

NOTES:

- SEE SHEET 2 FOR NOTES AND LEGEND INFORMATION.
- A CONDITIONAL USE PERMIT IS REQUESTED FOR A CAR WASH WITHIN THE INDUSTRIAL COMMERCIAL DISTRICT.

ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT

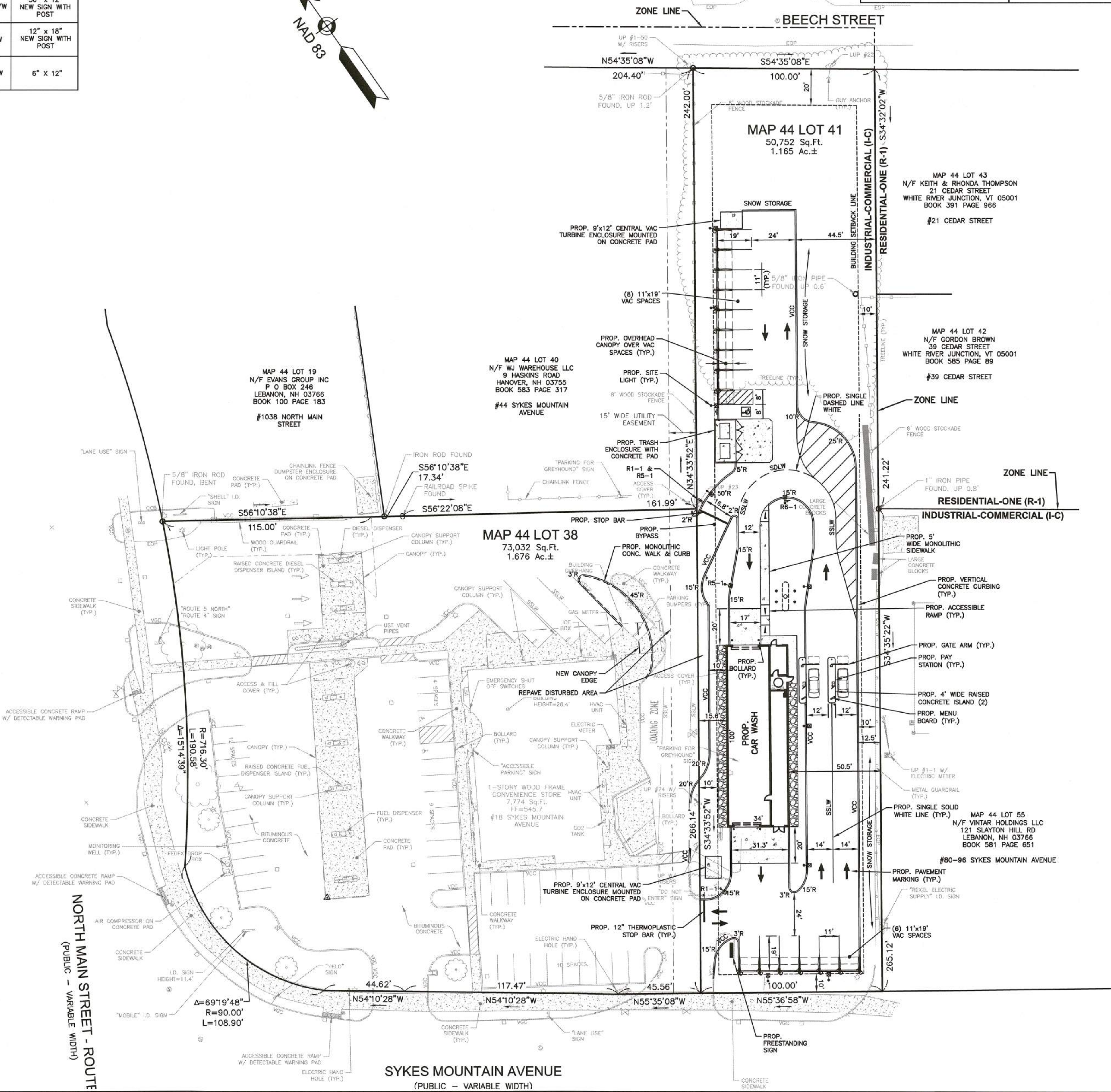


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SITE PLAN

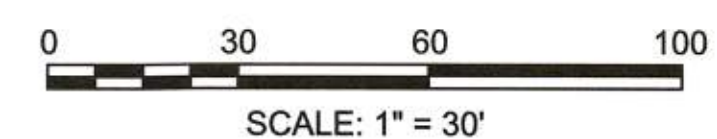
SCALE:	1"=30'
NEX-2019181	
5 OF 13	



OWNER OF RECORD:

MAP 44 LOT 38
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BOOK 502 PAGE 124



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DRAINAGE STRUCTURES

CB-1 (F.D.)
RIM=545.20
INV.OUT=541.80

CB-2
RIM=544.40
INV.OUT=541.35

CB-3 (F.D.)
RIM=544.70
INV.IN=541.20(CB-2)
INV.OUT=541.10

CB-4
RIM=544.00
INV.IN=540.70(OCS-1)
INV.OUT=540.60

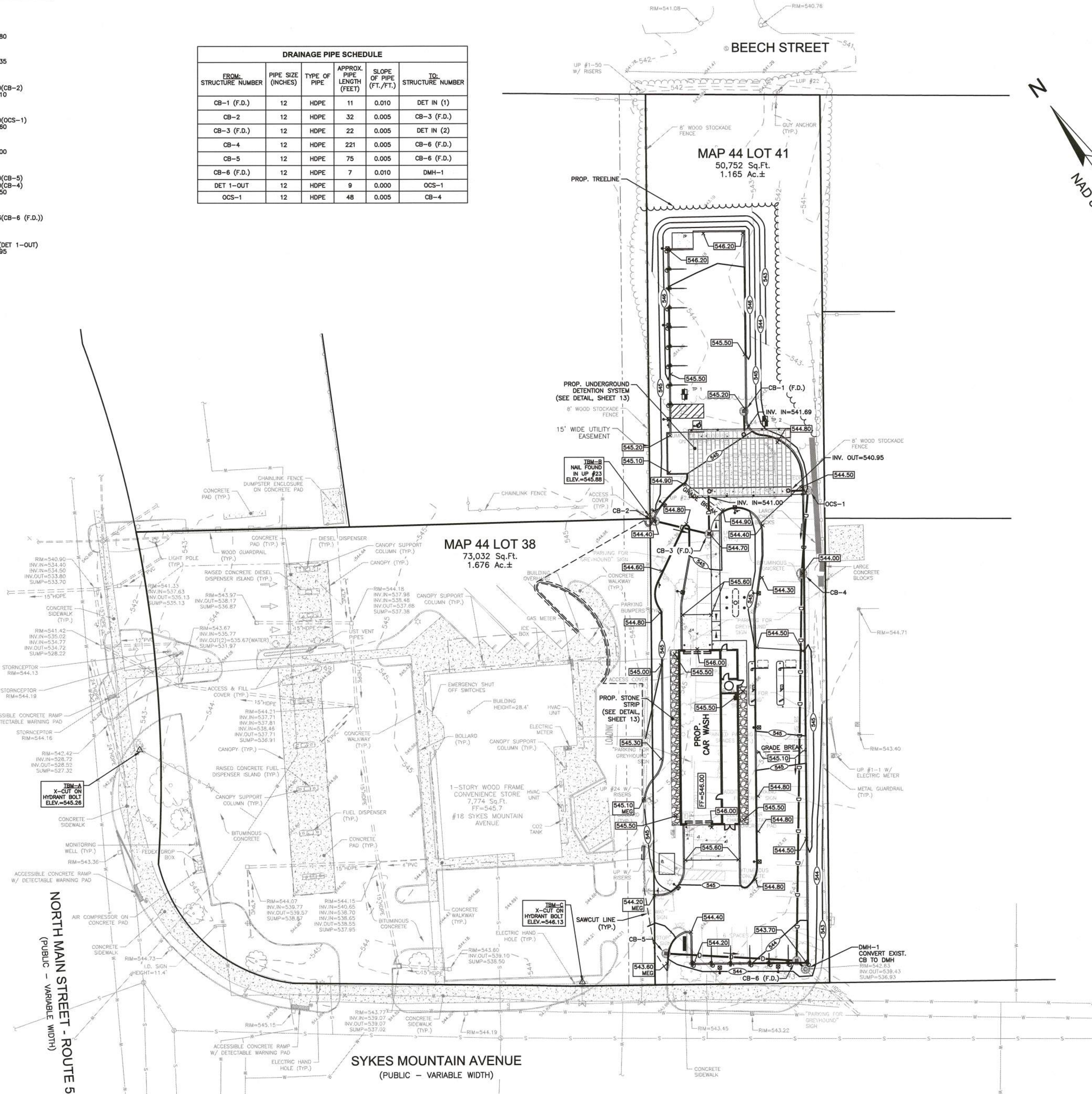
CB-5
RIM=543.80
INV.OUT=540.00

CB-6 (F.D.)
RIM=543.60
INV.IN=539.60(CB-5)
INV.IN=539.60(CB-4)
INV.OUT=539.50

DMH-1
RIM=544.00
INV.IN=539.43(CB-6 (F.D.))

OCS-1
RIM=545.00
INV.IN=-3.61(DET 1-OUT)
INV.OUT=540.95

DRAINAGE PIPE SCHEDULE					
FROM STRUCTURE NUMBER	PIPE SIZE (INCHES)	TYPE OF PIPE	APPROX. PIPE LENGTH (FEET)	SLOPE OF PIPE (FT./FT.)	TO STRUCTURE NUMBER
CB-1 (F.D.)	12	HDPE	11	0.010	DET IN (1)
CB-2	12	HDPE	32	0.005	CB-3 (F.D.)
CB-3 (F.D.)	12	HDPE	22	0.005	DET IN (2)
CB-4	12	HDPE	221	0.005	CB-6 (F.D.)
CB-5	12	HDPE	75	0.005	CB-6 (F.D.)
CB-6 (F.D.)	12	HDPE	7	0.010	DMH-1
DET 1-OUT	12	HDPE	9	0.000	OCS-1
OCS-1	12	HDPE	48	0.005	CB-4



NOTES:
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SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT



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**GRADING &
DRAINAGE
PLAN**

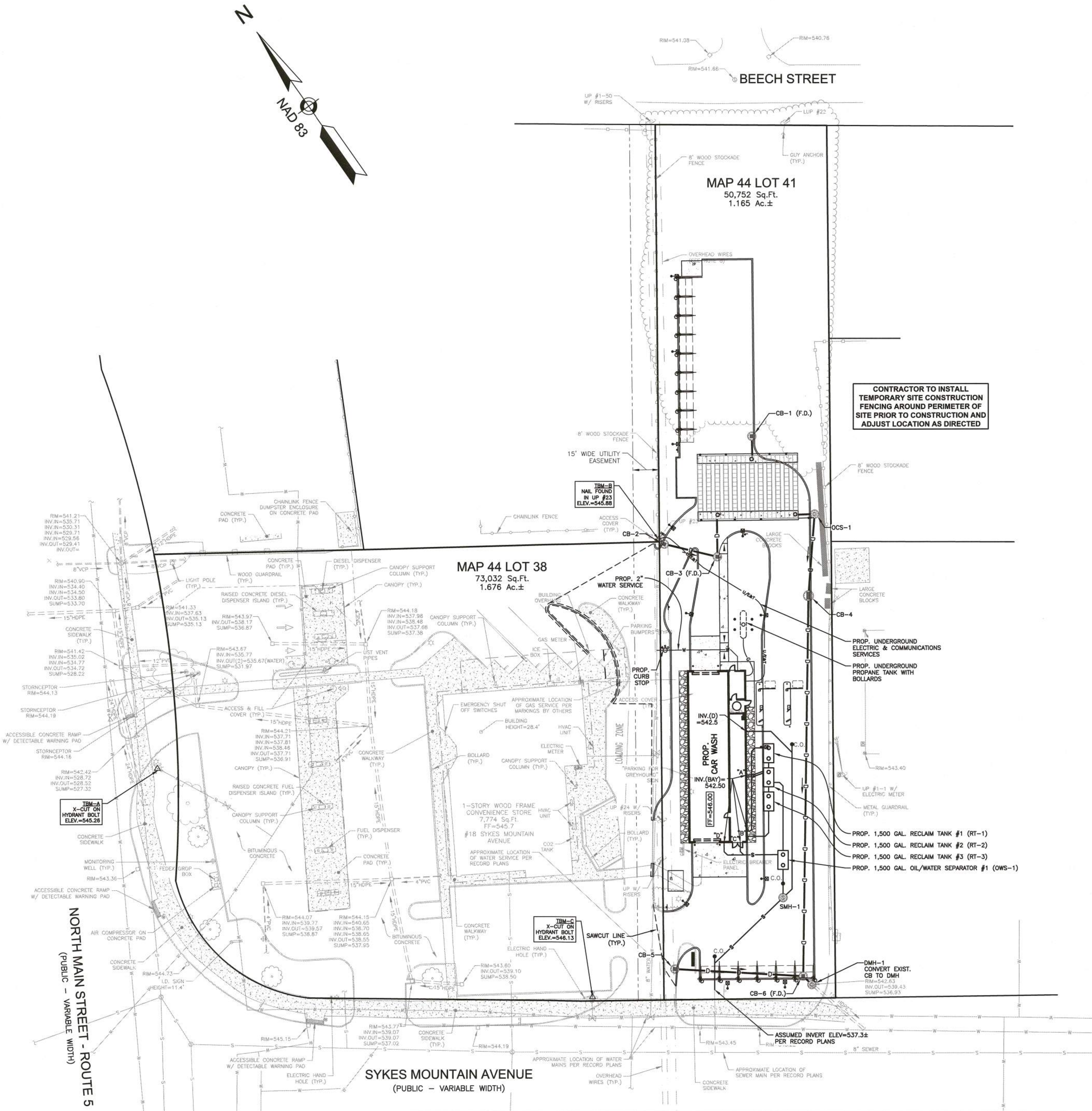
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NEX-2019181

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NOTES:

1) SEE SHEET 2 FOR NOTES AND LEGEND INFORMATION.

SEWER PIPE SCHEDULE					
FROM STRUCTURE NUMBER	PIPE SIZE (inches)	TYPE OF PIPE	APPROX. PIPE LENGTH (feet)	SLOPE OF PIPE (ft./ft.)	TO STRUCTURE NUMBER
BLDG.(D)	6	SDR 35 PVC	119	0.0280	SMH-1
BLDG.(BAY"A")	(2)8	SCH 80 PVC	15	0.1170	RT-2
BLDG.(BAY"B")	2	SCH 80 PVC	64	0.020	RT-1
BLDG.(BAY"C")	4	SCH 80 PVC	30	0.043	RT-3
BLDG.(BAY"D")	6	SCH 80 PVC	38	0.080	OWS-1
RT-2	6	SDR 35 PVC	41	0.020	OWS-1
SMH-1	6	SDR 35 PVC	70	0.024	EXIST. STUB
OWS-1	6	SDR 35 PVC	15	0.020	SMH-1

SEWER STRUCTURES

RT-1* RIM=545.0± INV.IN=541.20("B") INV.OUT=540.95	RT-3* RIM=544.8± INV.IN=541.20("C") INV.OUT=540.95
RT-2* RIM=545.1± INV.IN=540.75("A") INV.IN=540.75(RT-1) INV.OUT=540.50	OWS-1 RIM=544.8± INV.IN=539.10(OWS-1) INV.OUT=539.20
	SMH-1 RIM=544.5± INV.IN=539.10(DOMESTIC) INV.IN=539.10(OWS-1) INV.IN=539.00(RT-2) INV.OUT=540.20

* RECLAIM TANK INFORMATION PROVIDED IS CONCEPTUAL. REFER TO RECLAIM DESIGN DRAWINGS BY OTHERS FOR ACTUAL INVERTS & DEPTHS.

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ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT



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NO.	REVISION	DATE
2.	MISC REV.	2/15/24
1.	REV. PER TOWN COMMENTS	2/15/24

FEBRUARY 2, 2024

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UTILITY PLAN

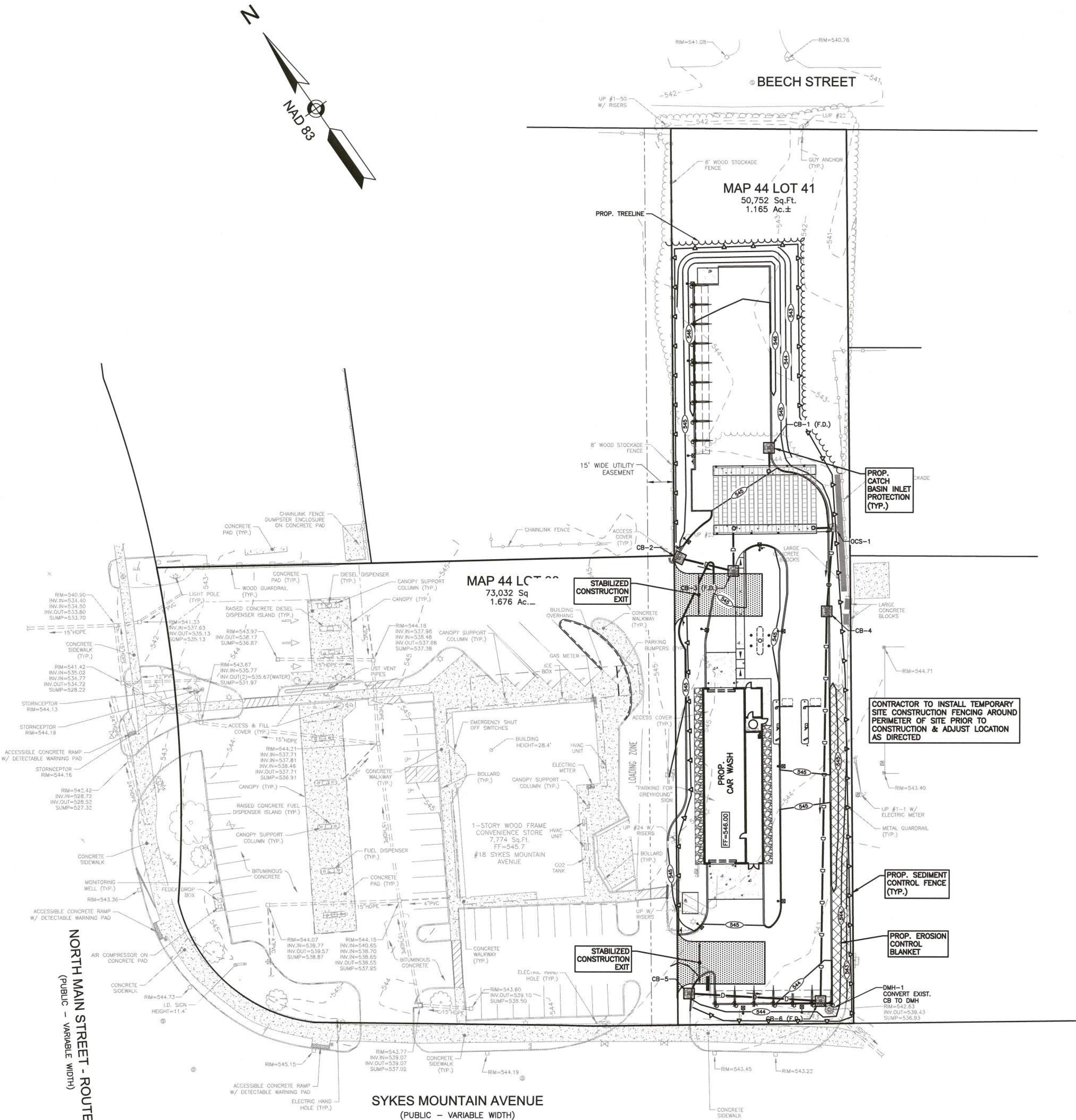
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0 30 60 100
SCALE: 1" = 30'

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NOTES:

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ASSESSORS MAP 44 LOT 41
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WHITE RIVER JUNCTION, VERMONT



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EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=30'

NEX-2019181

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PLANTING SCHEDULE				
PLANT	QNTY	BOTANICAL NAME	COMMON NAME	MIN. INSTALL SIZE
TREES				
AF	6	ABIES FRASERI	FRASER FIR	6"-7" HT., B&B
AR	3	ACER RUBRUM 'REDPOINT'	REDPOINT MAPLE	2 1/2"-3" CAL., B&B
SR	4	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE LILAC TREE	2 1/2"-3" CAL., B&B
MG	4	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2 1/2"-3" CAL., B&B
PP	6	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	6"-7" HT., B&B
SHRUBS				
CS	10	CORNUS SERICEA 'ARCTIC FIRE'	ARCTIC FIRE RED TWIG DOGWOOD	18"-24" HT., 3 GAL.
IG	27	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	2'-3" HT., 3 GAL.
PF	10	POTENTILLA FRUTICOSA 'GOLDSTAR'	GOLDSTAR BUSH CINQUEFOIL	2'-3" HT., 3 GAL.
SJ	21	SPHREA JAPONICA 'GOLDMOUND'	GOLDMOUND SPIREA	18"-24" HT., 3 GAL.
PERENNIALS & GRASSES				
HD	33	HEMEROCALLIS 'STELLA DE ORO'	DWARF YELLOW DAYLILY	1 GAL.

X PLANT QUANTITY
XX PLANT DESIGNATION
PROPOSED LOAM AND HYDROSEED
PROPOSED LANDSCAPE STONE

NOTES:
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ASSESSORS MAP 44 LOT 41
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REVISIONS

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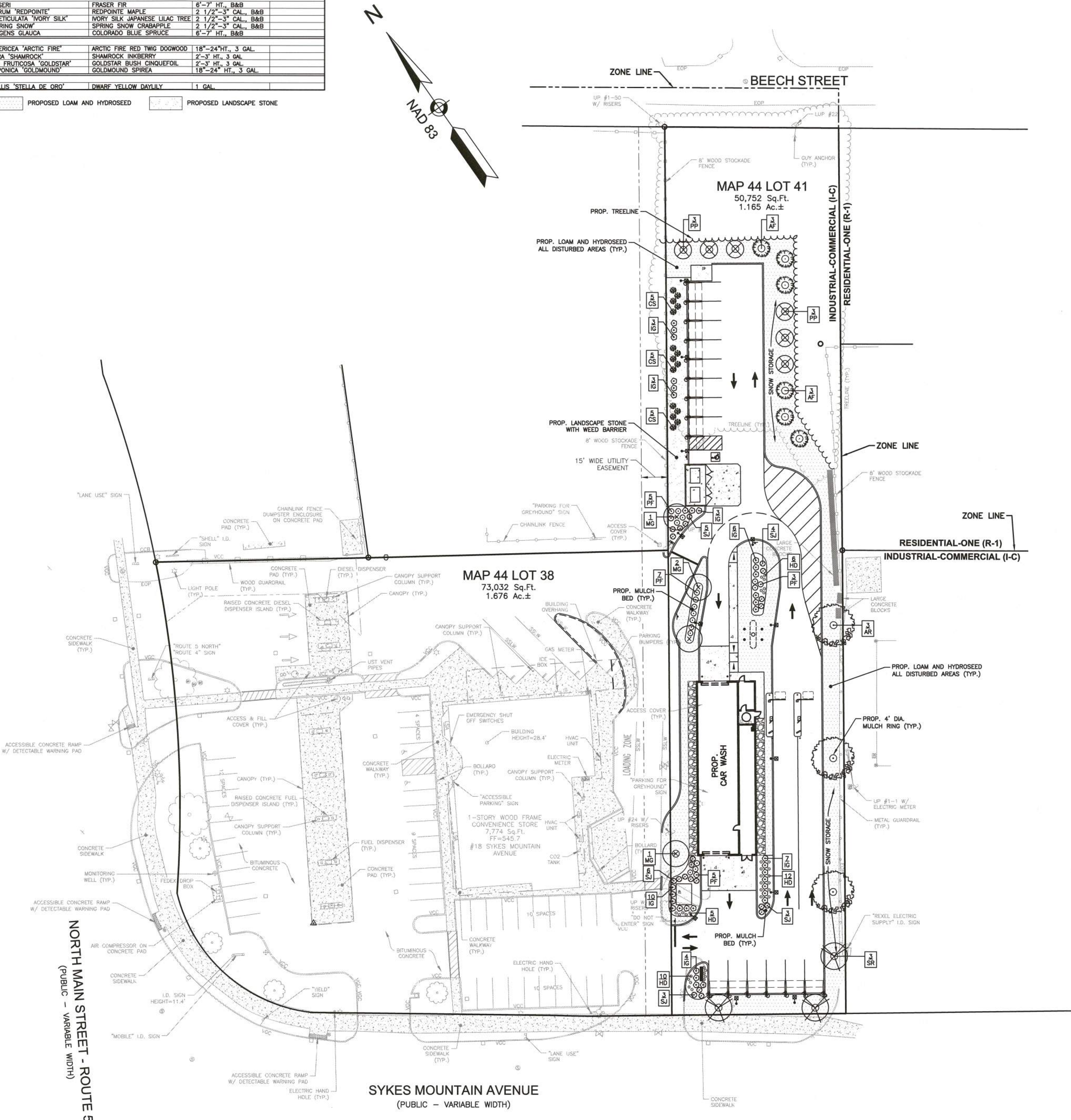
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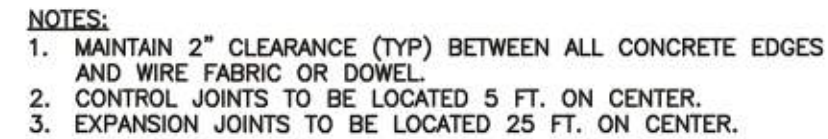
LANDSCAPE PLAN

SCALE: 1"=30'

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SECTION AND JOINT

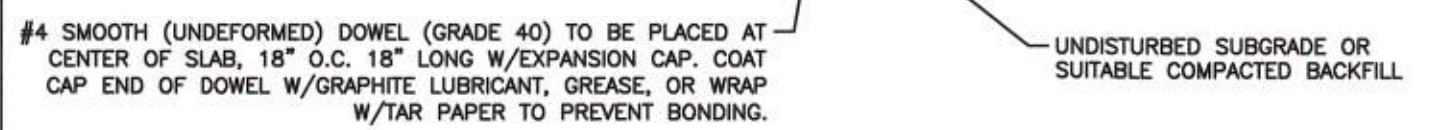
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NOTES:

1. MAINTAIN 2" CLEARANCE (TYP) BETWEEN ALL CONCRETE EDGES AND WIRE FABRIC, DOWEL, OR REBAR.
2. CONTROL JOINTS TO BE LOCATED 5 FT. ON CENTER OR AS SHOWN ON ARCHITECTURAL PLANS.
3. EXPANSION JOINTS TO BE LOCATED 25 FT. ON CENTER.
4. WELDED WIRE FABRIC SHALL BE LAPSED A MINIMUM OF 2 WIRE SPACES.

NOT TO SCALE



EMENT DETAILS



NOT TO SCALE



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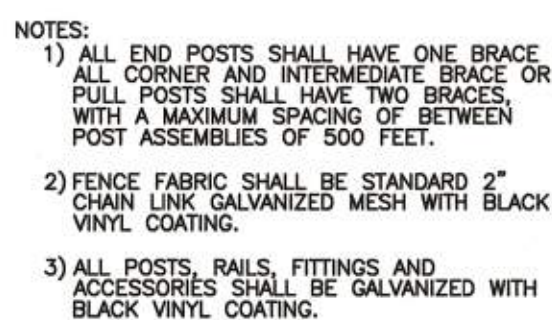


NOTE:
1) NOMINAL OUTSIDE DIAMETER (N.O.D.) OF GATE
FRAME AND BRACE TUBE TO BE 1.66" UP TO
6" IN WIDTH, AND 1.90" IF OVER 6' IN WIDTH.



REFERENCE DETAIL

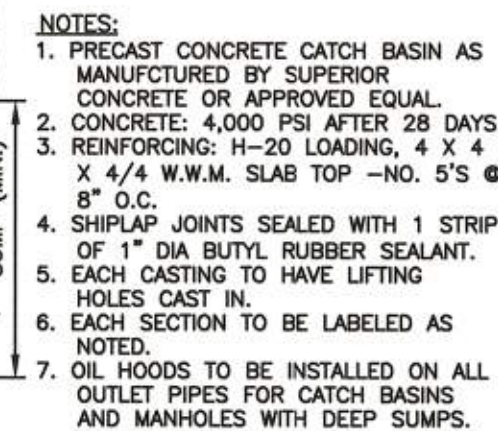
- FENCE NOTES:**
- 1) FENCE FABRIC SHALL BE STANDARD 2" CHAIN LINK GALVANIZED MESH WITH PRIVACY SLATS (FOREST GREEN).
 - 2) ALL POSTS SHALL BE GALVANIZED SCHEDULE 40 STEEL PIPE
 - 3) ALL LINE POSTS TO BE 2.375" O.D. PIPE. MAXIMUM SPACING TO BE 10' ON CENTER.
 - 4) ALL END AND CORNER POSTS TO BE 2.875" O.D. PIPE.
 - 5) ALL TOP AND MIDDLE RAILS TO BE 1.66" O.D. PIPE.
 - 6) ALL FITTINGS AND ACCESSORIES SHALL BE GALVANIZED.



NOT TO SCALE



NOT TO SCALE



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ASSESSORS MAP 44 LOT 41

**SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT**



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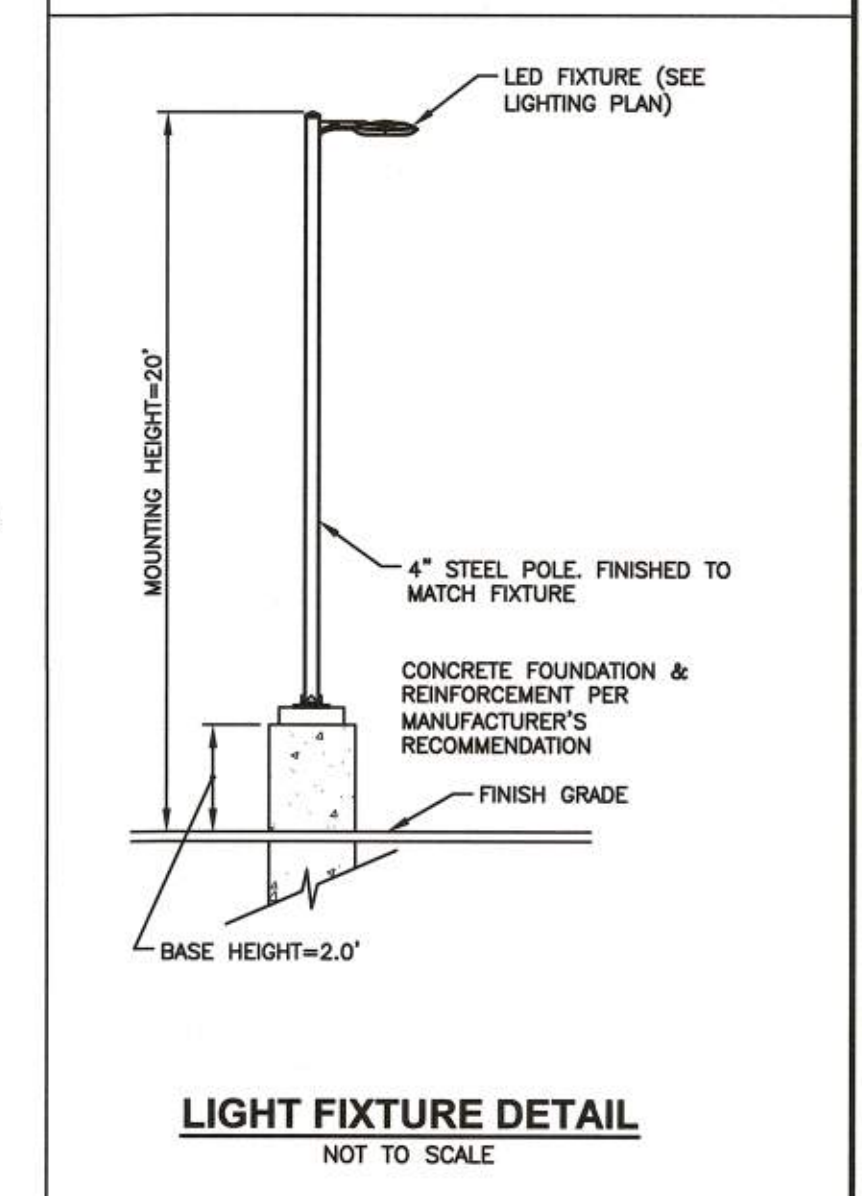
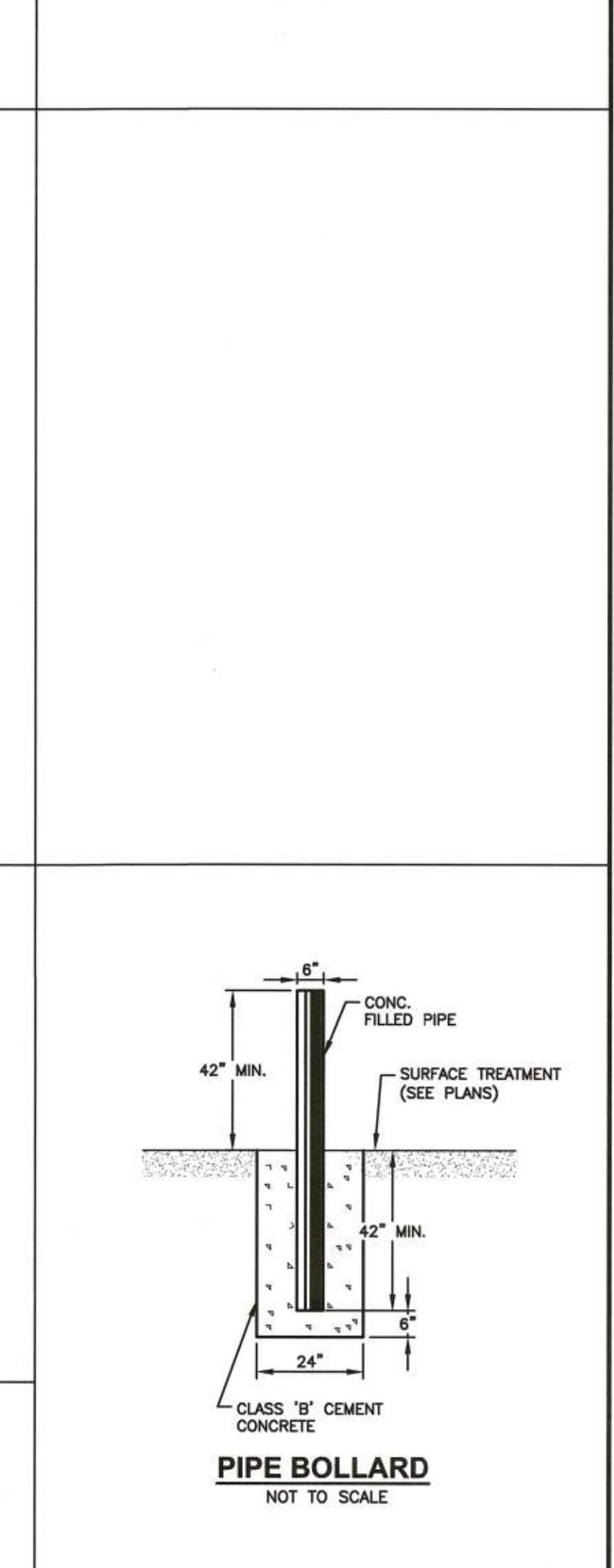
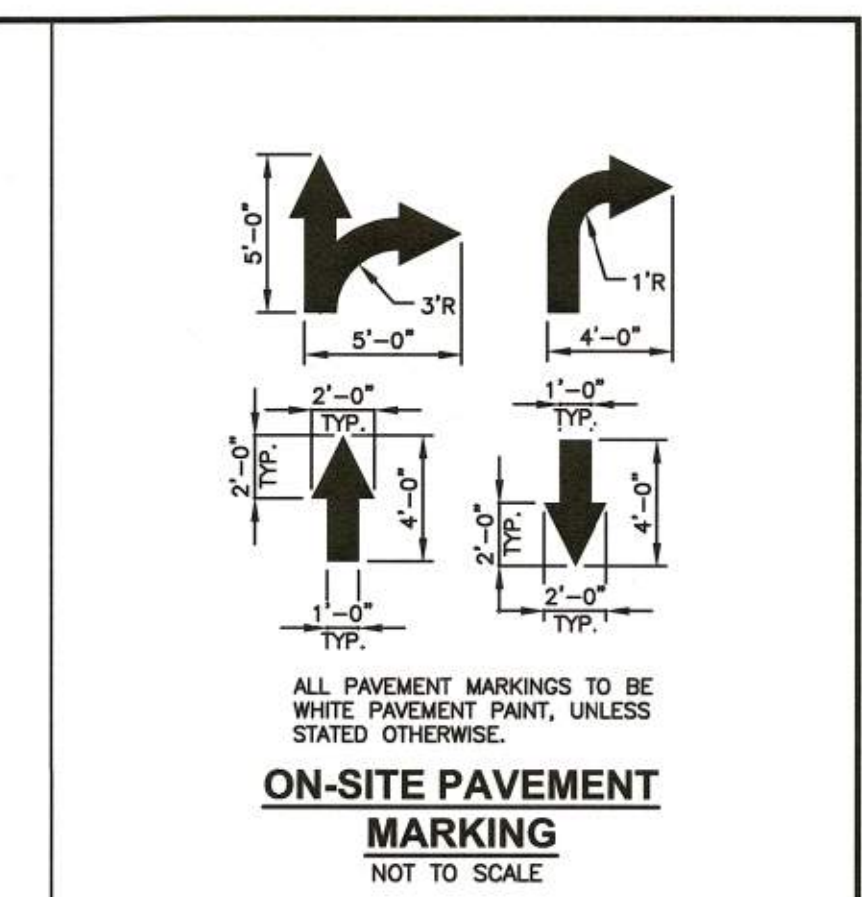
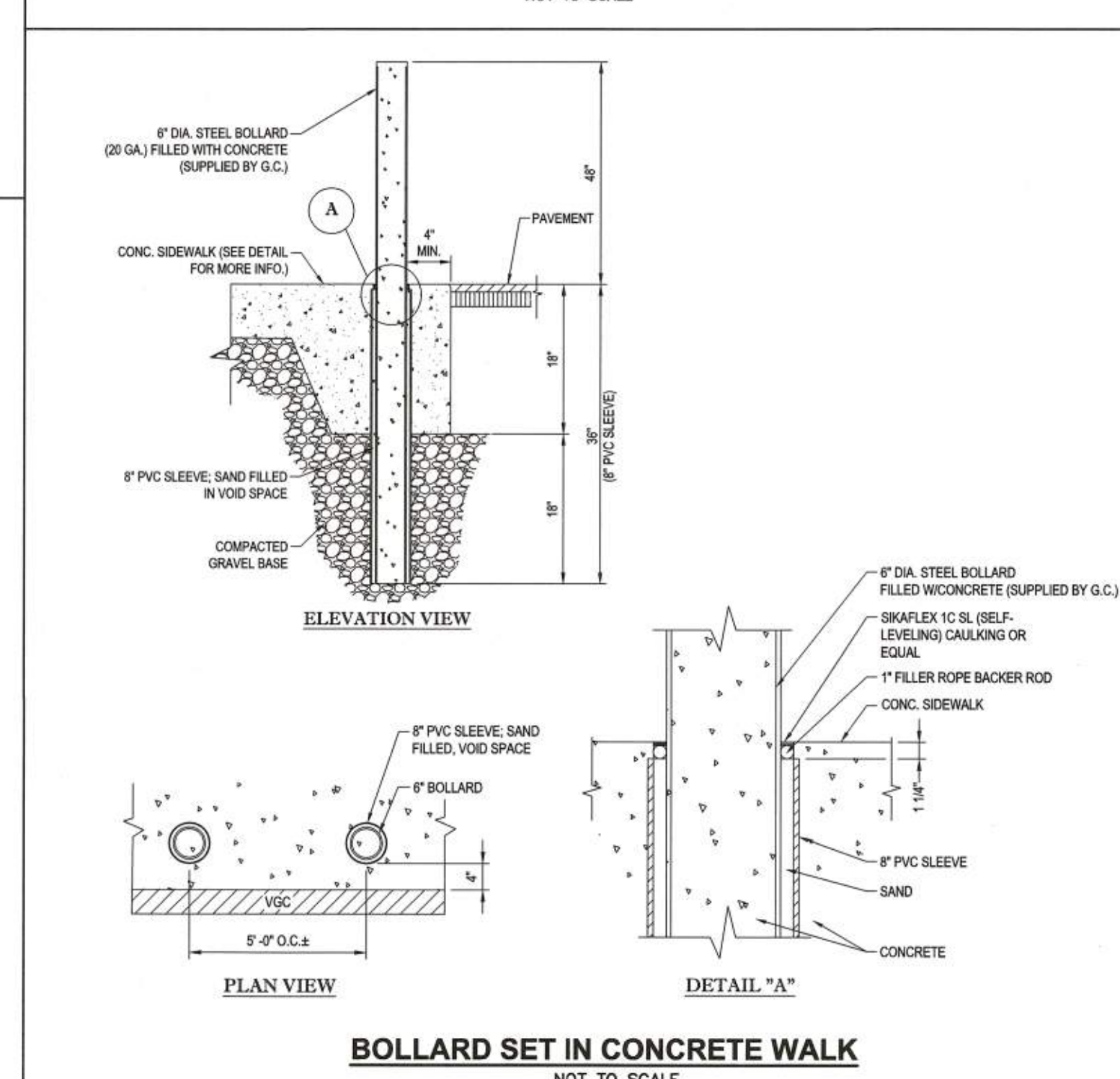
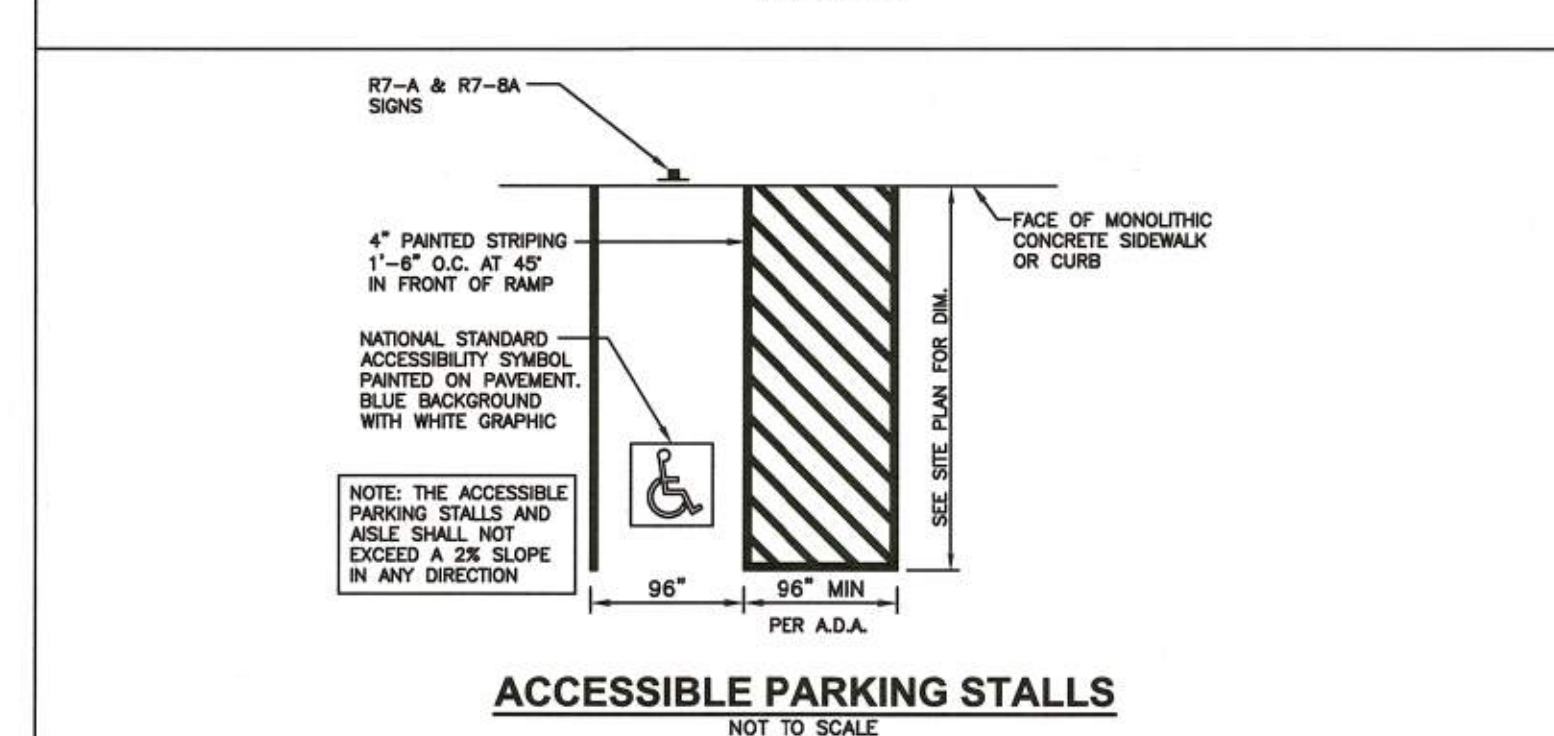
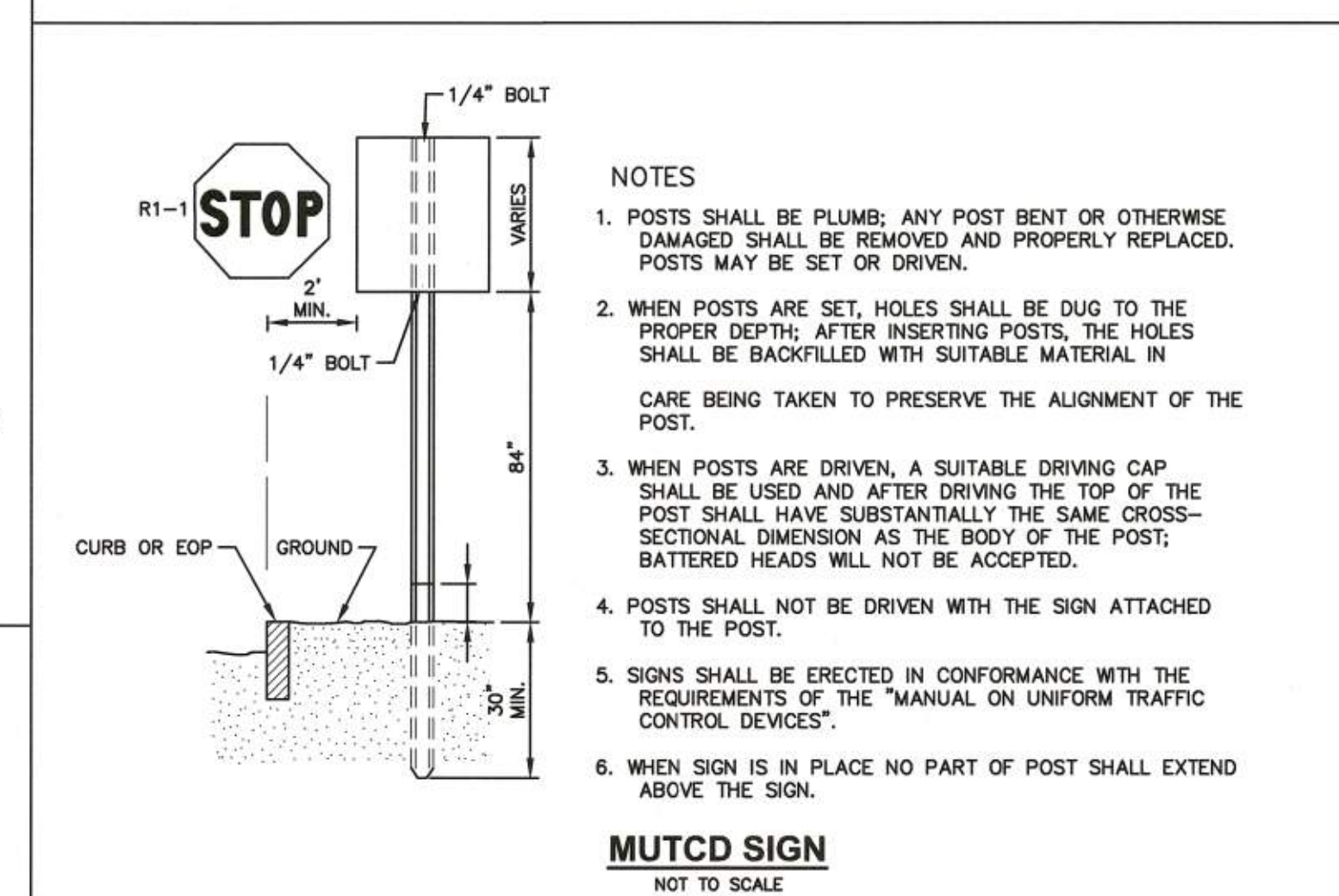
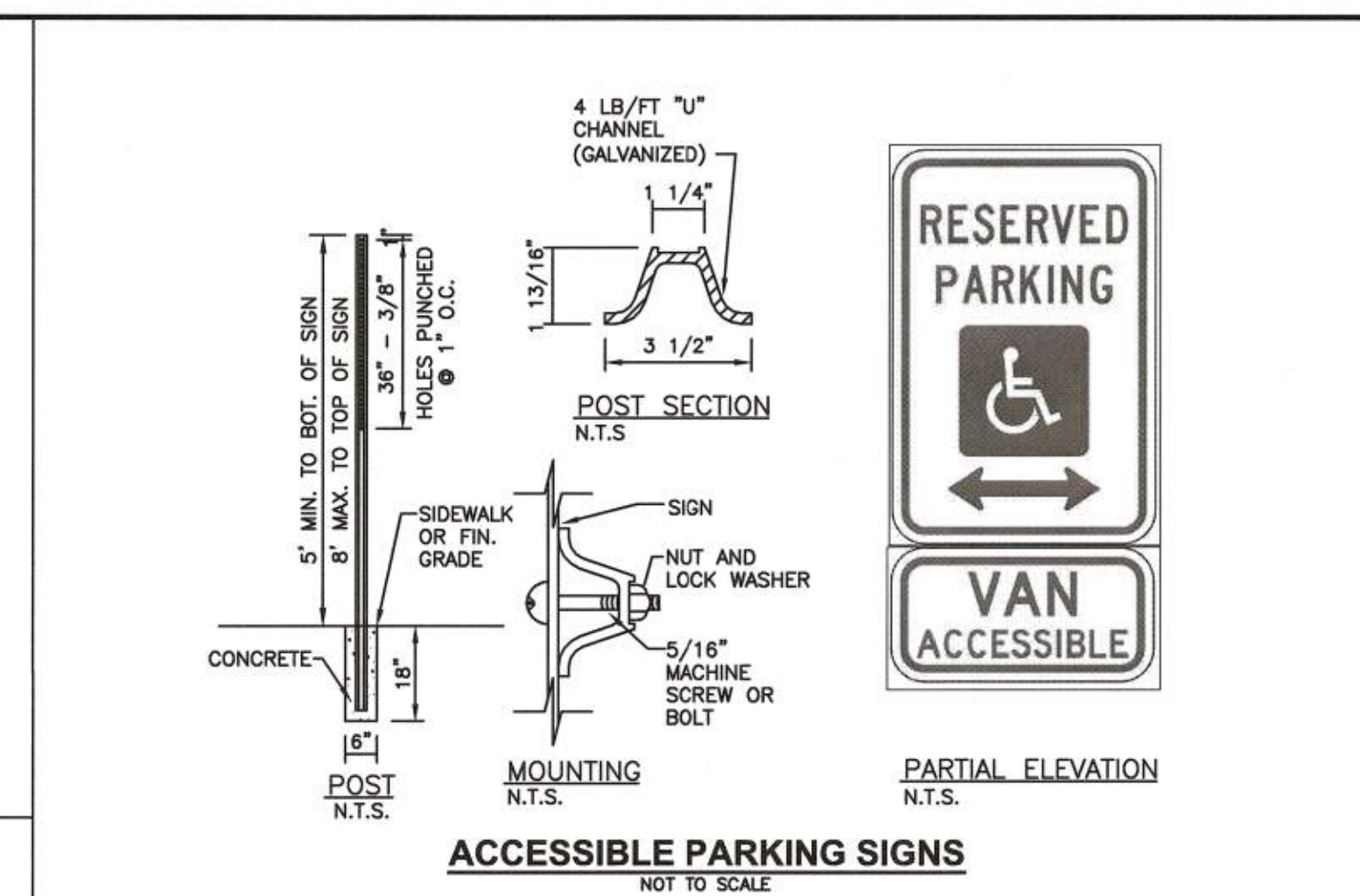
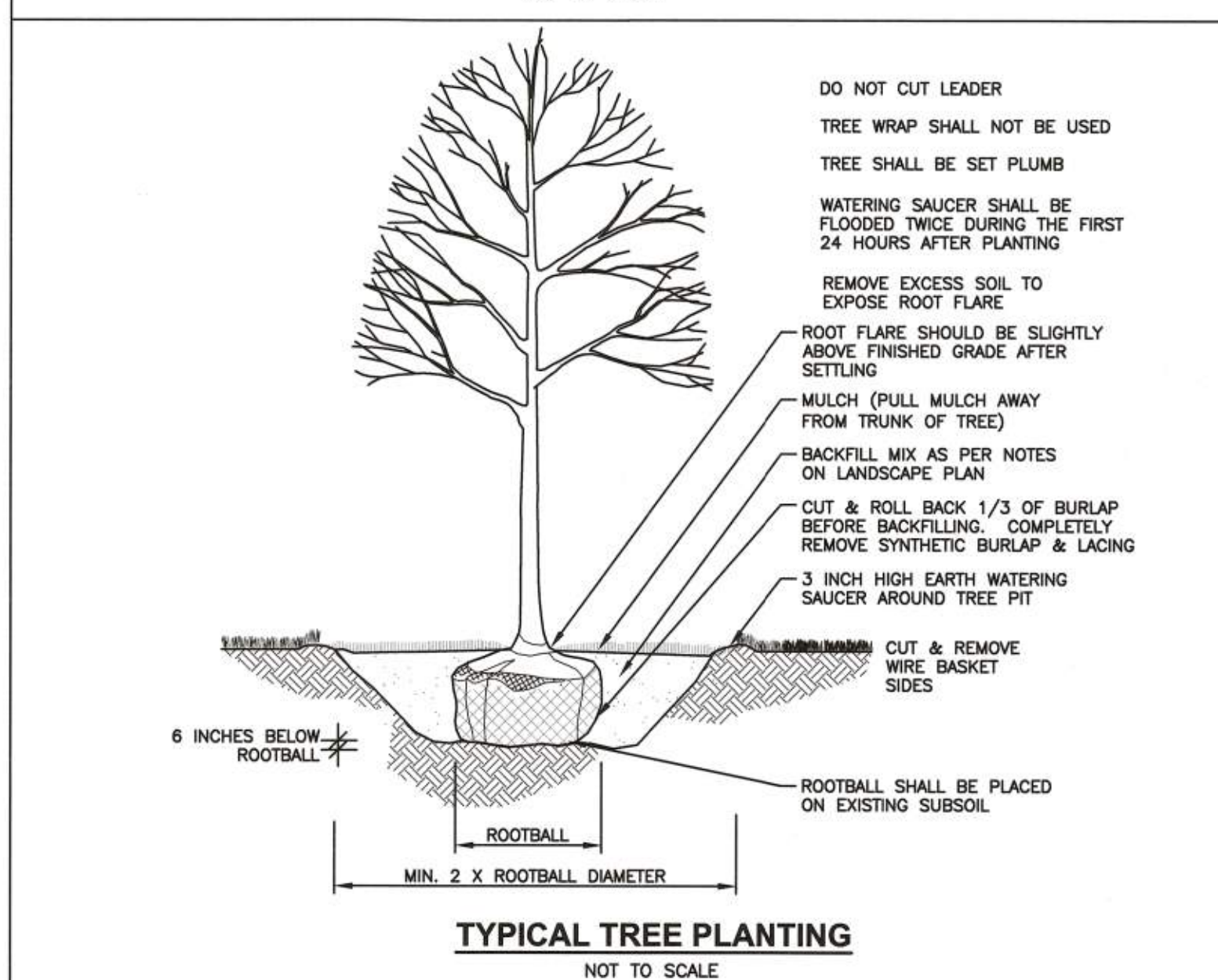
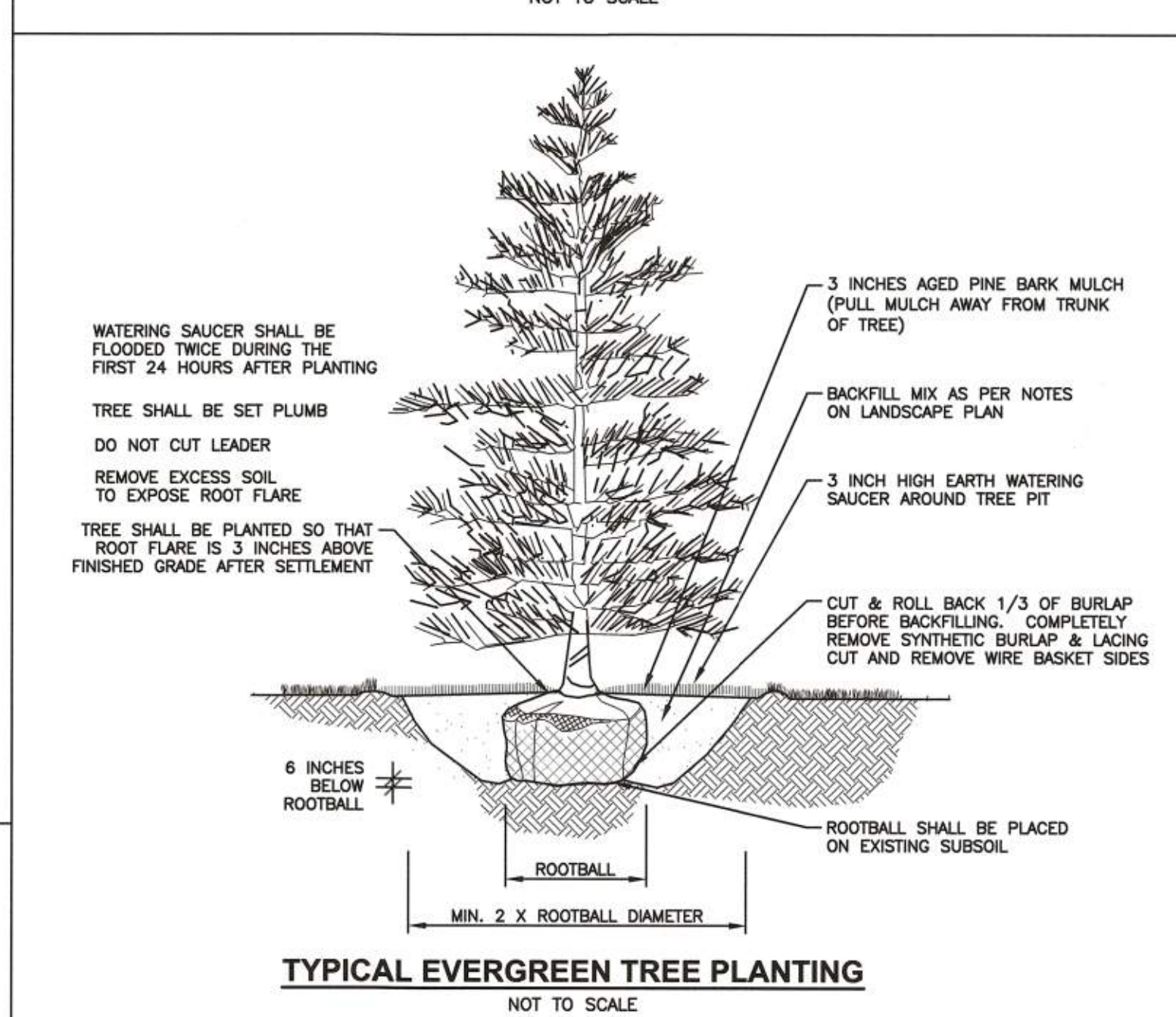
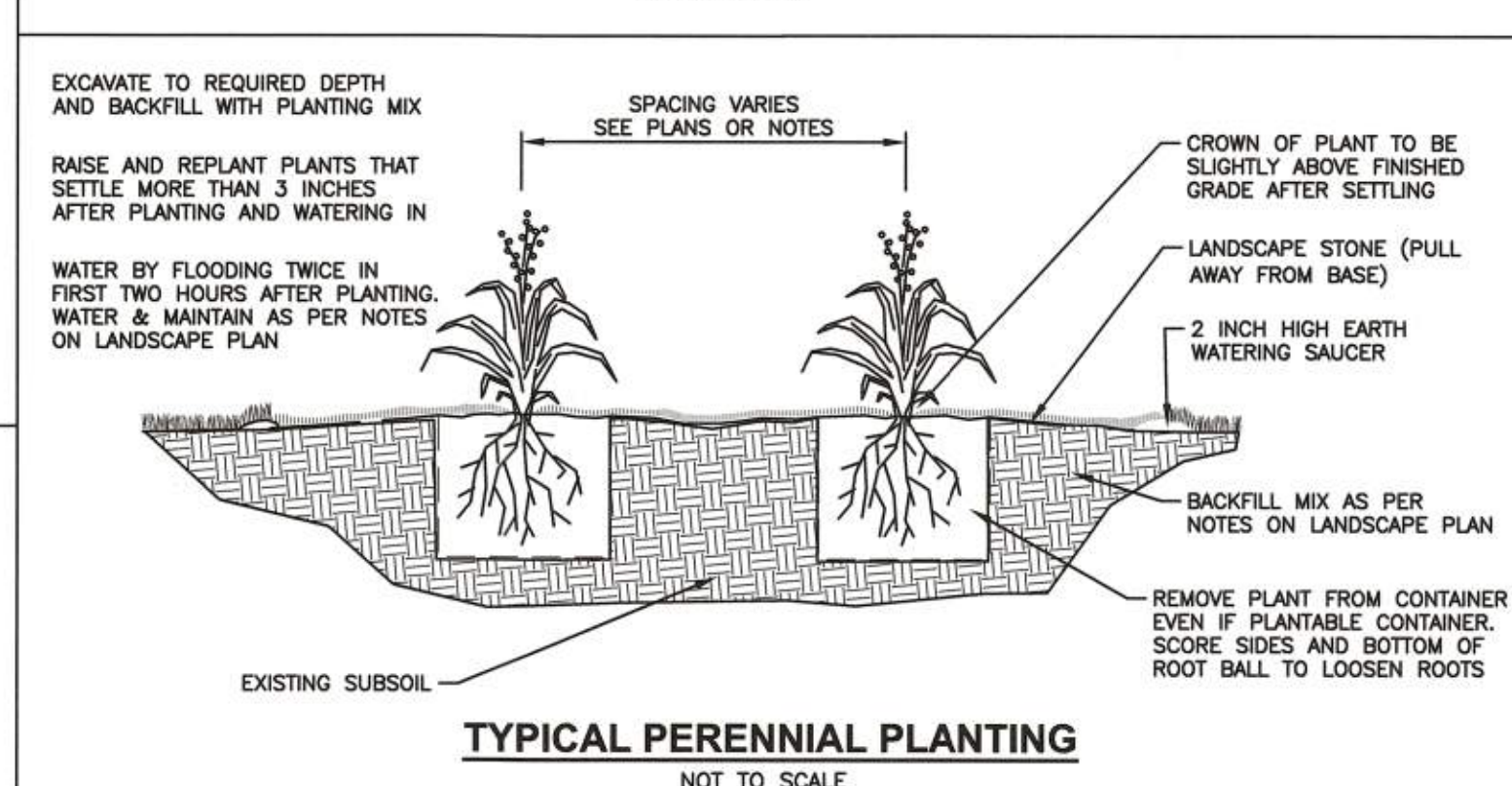
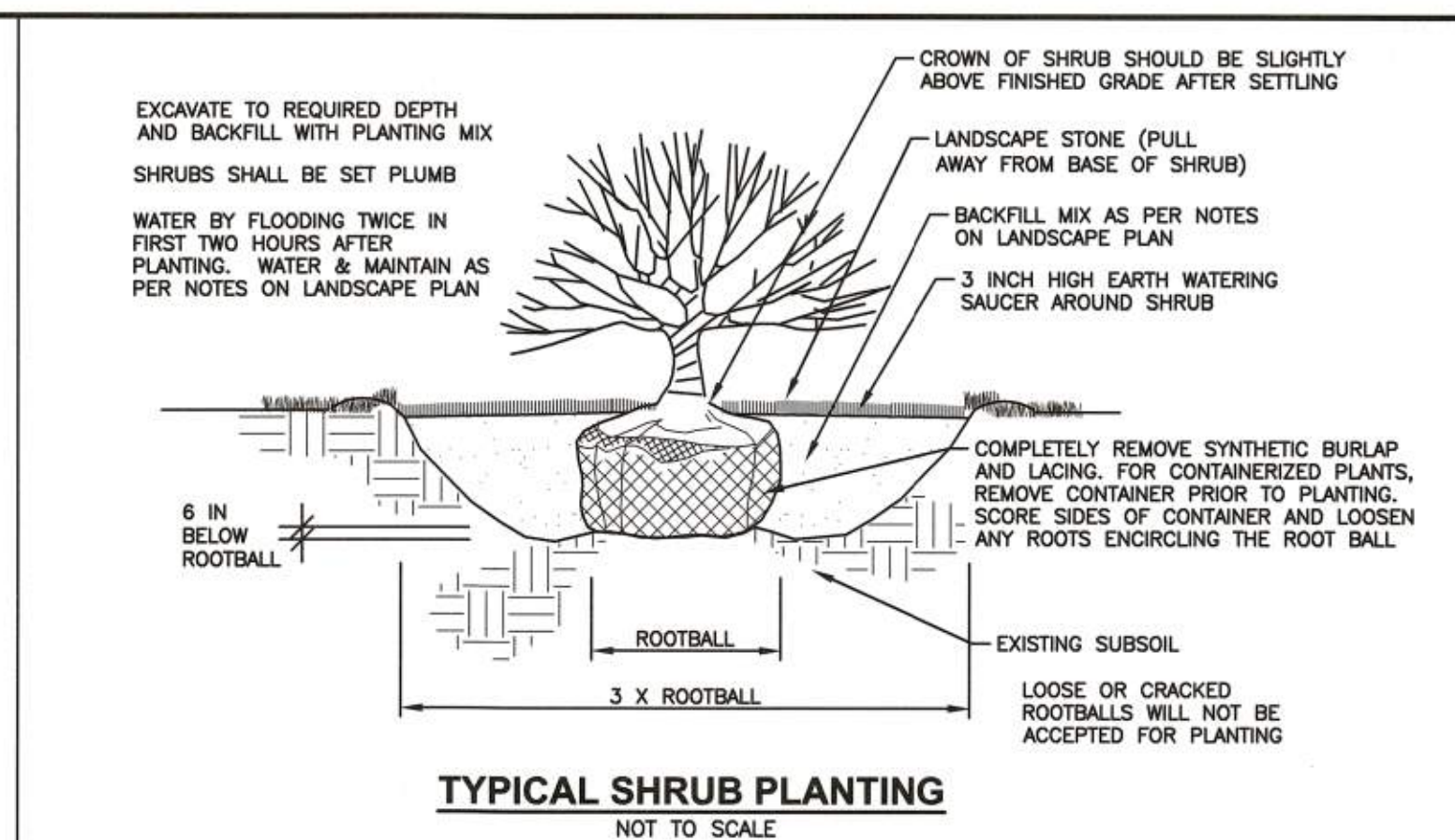
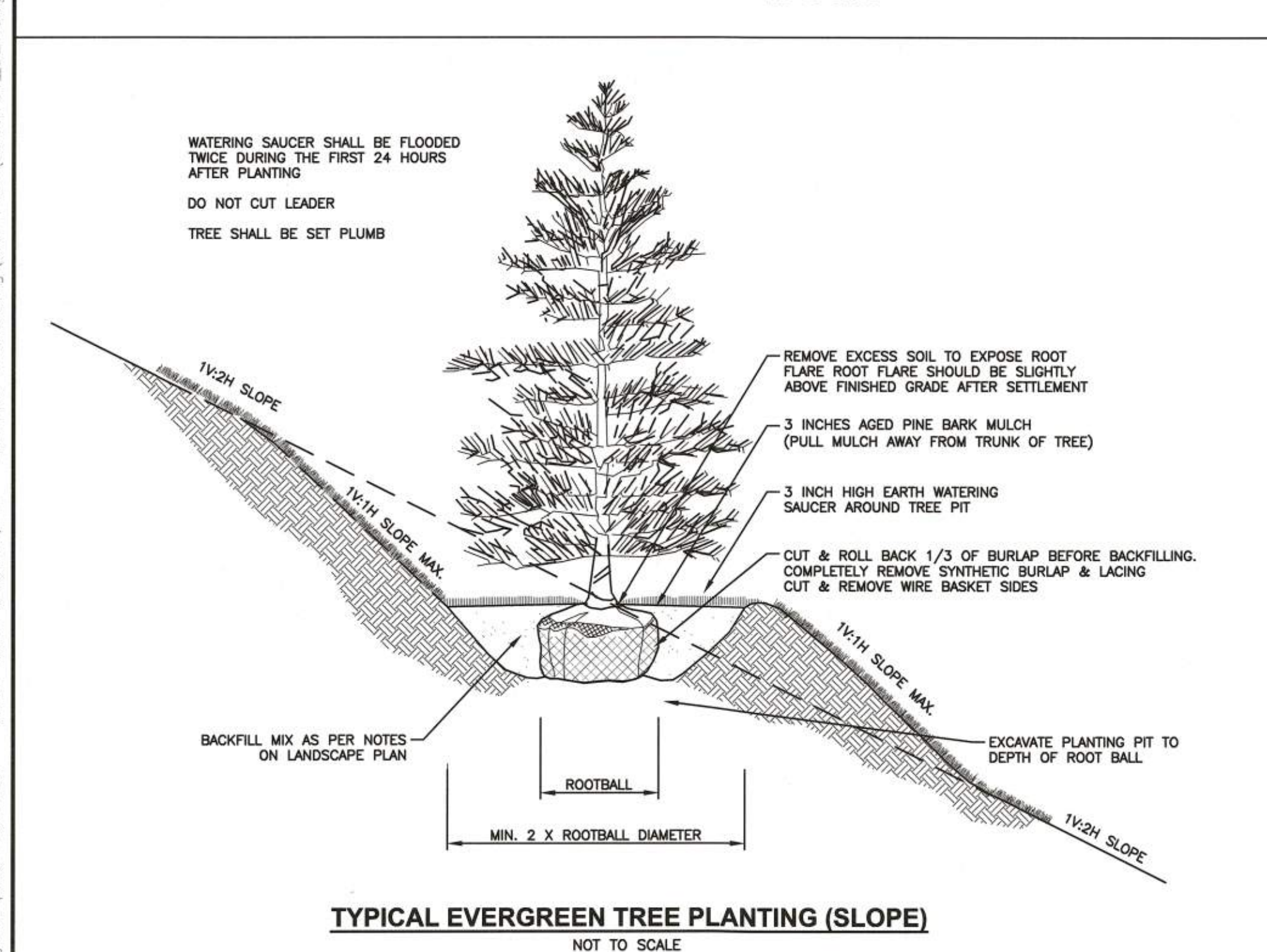
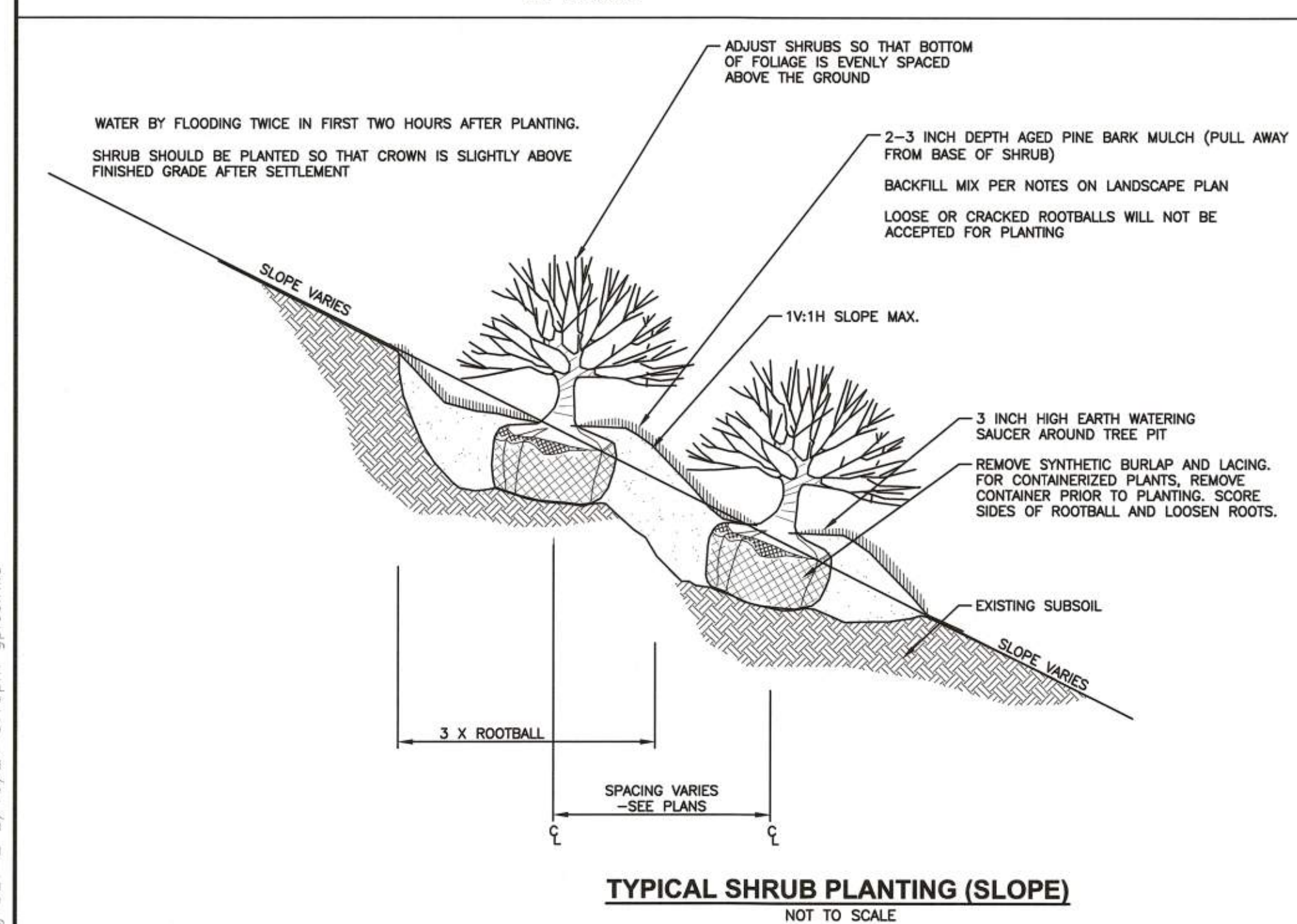
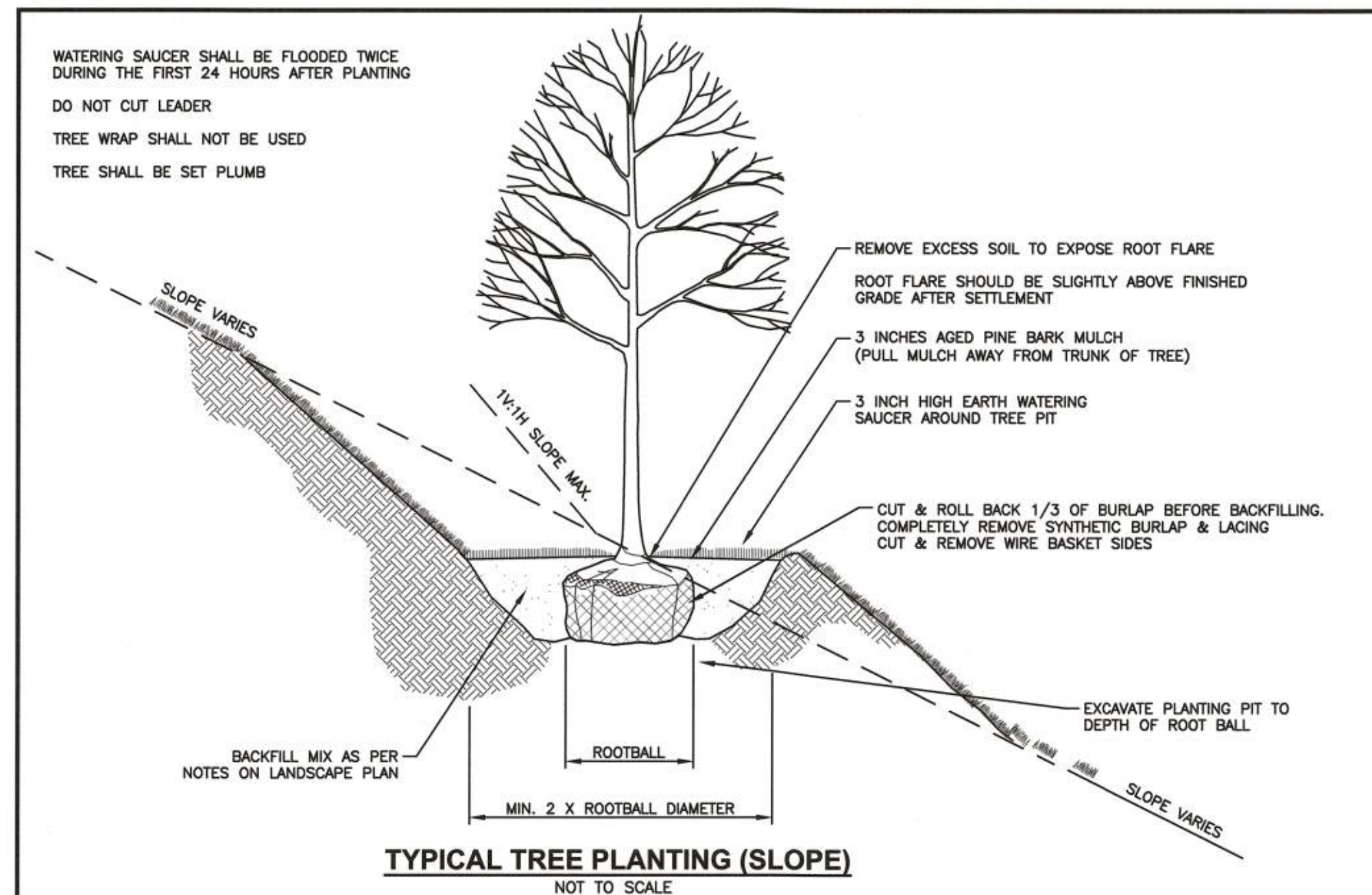
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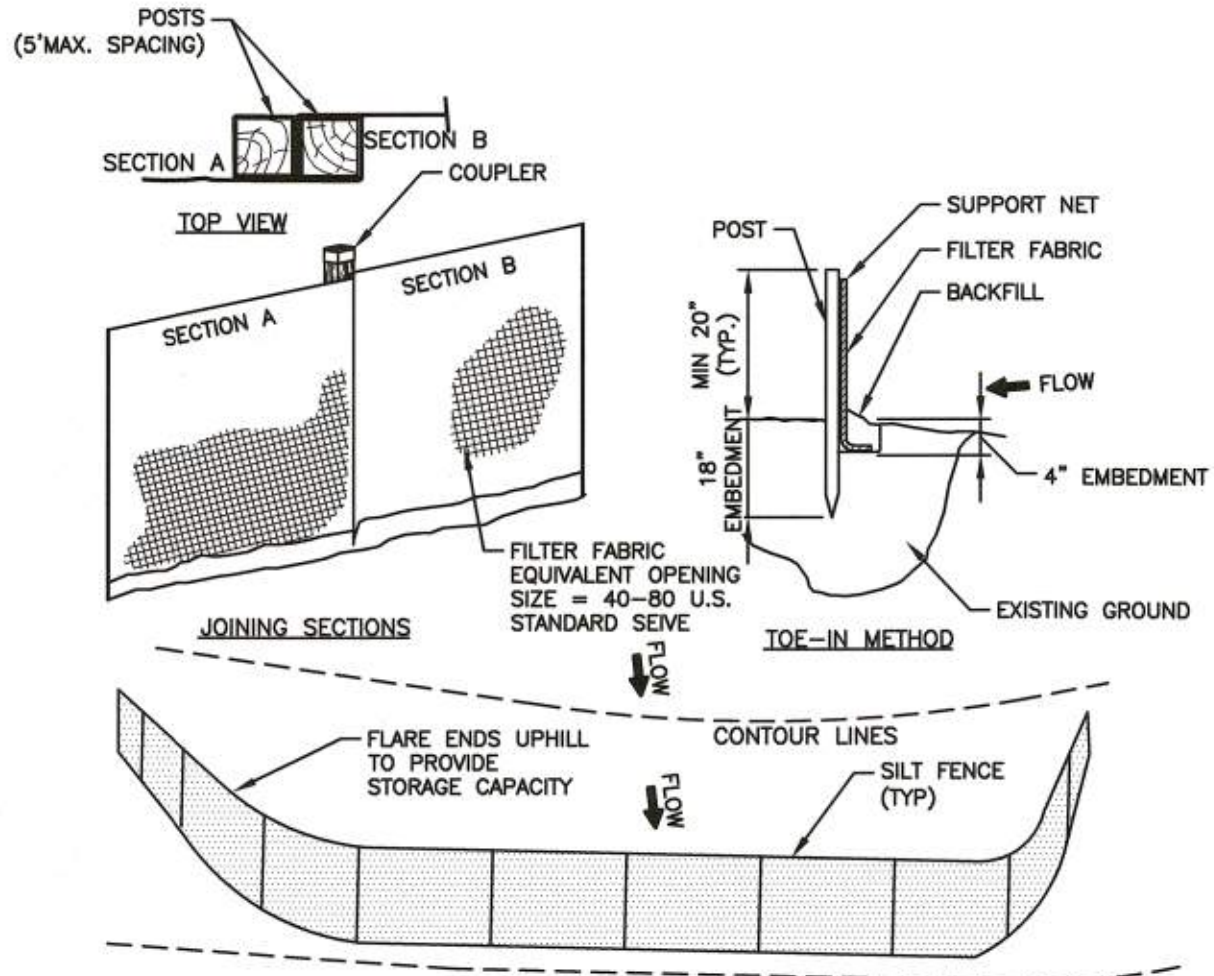
DETAIL SHEET

SCALE: AS SHOWN

NEX-2019181

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CRITERIA FOR SILT FENCES:

- 1) SILT FENCE FILTER CLOTH: THE FABRIC FOR THE SILT FENCE SHALL MEET THE FOLLOWING SPECIFICATIONS:
- | FABRIC PROPERTIES: | MINIMUM ACCEPTABLE VALUES | TEST METHOD |
|-----------------------------|---------------------------|--------------|
| GRAB TENSILE STRENGTH (lbs) | 50 | ASTM D1682 |
| ELONGATION AT FAILURE (%) | 50 | ASTM D1682 |
| MULLEN BURST STRENGTH (PSI) | 190 | ASTM D3786 |
| PUNCTURE STRENGTH (lbs) | 40 | ASTM D751 |
| EQUIVALENT OPENING SIZE | 40-80 | US STD SIEVE |
- 2) FENCE POSTS (FOR FABRICATED UNITS) - THE POSTS SHALL BE A MINIMUM OF 3/8 INCHES LONG. WOOD POSTS WILL BE OF SOUND QUALITY HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES. STEEL POSTS WILL BE STANDARD T OR U SECTIONS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT. MAXIMUM SPACING SHALL BE 6 LINEAR FEET.
- 3) WIRE FENCE (FOR FABRICATED UNITS) - WIRE FENCING SHALL BE A MINIMUM 14.5 GAUGE WITH A MAXIMUM 6 INCH MESH OPENING.
- 4) PREFABRICATED UNITS - PREFABRICATED UNITS MAY BE USED IN LIEU OF THE ABOVE METHOD PROVIDING: (1) THE FILTER CLOTH AND FENCE POSTS MEET THE ABOVE CRITERIA; AND (2) THE UNIT IS INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE:

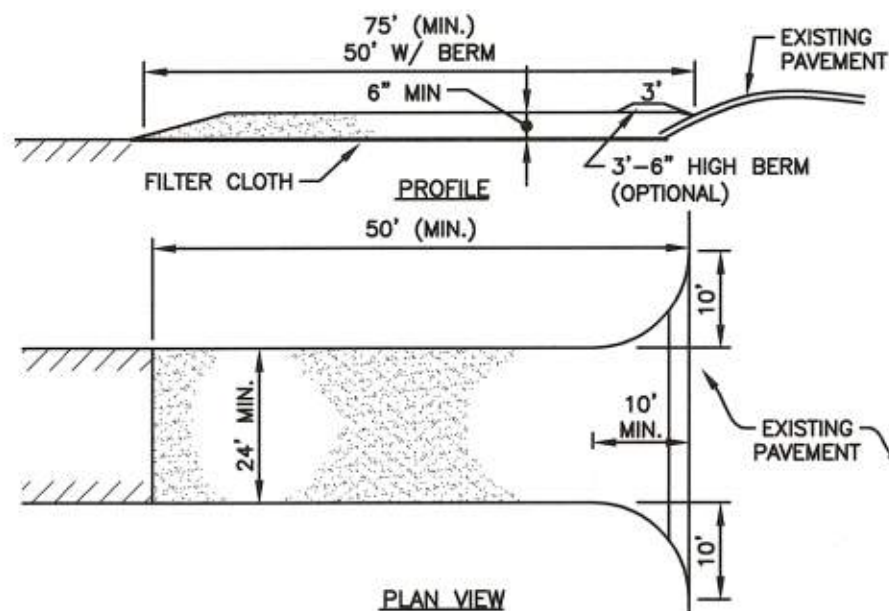
- 1) SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- 2) IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL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

CONSTRUCTION SPECIFICATIONS:

- 1) THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2) THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND (4" DEEP & 4" WIDE) AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- 3) WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
- 4) FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION AND BOTTOM.
- 5) WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES (24" IS PREFERRED), FOLDED, AND STAPLED.
- 6) POSTS TO BE SPACED AT A MAXIMUM OF 6' ON CENTER.

SEDIMENT CONTROL FENCE

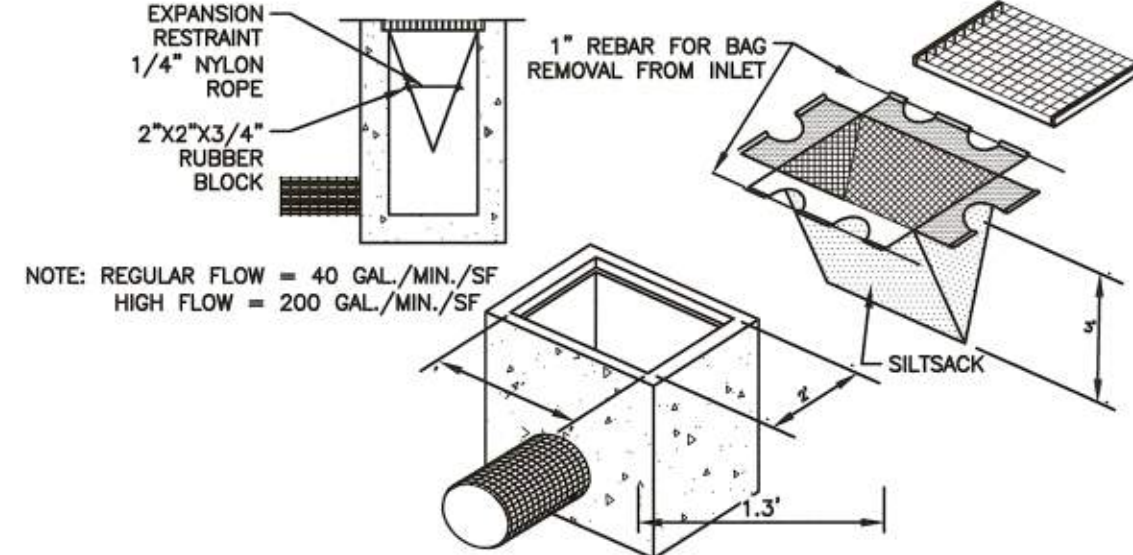
NOT TO SCALE



1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH COARSE AGGREGATE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN 24' WHERE INGRESS OCCURS.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO EXIT ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

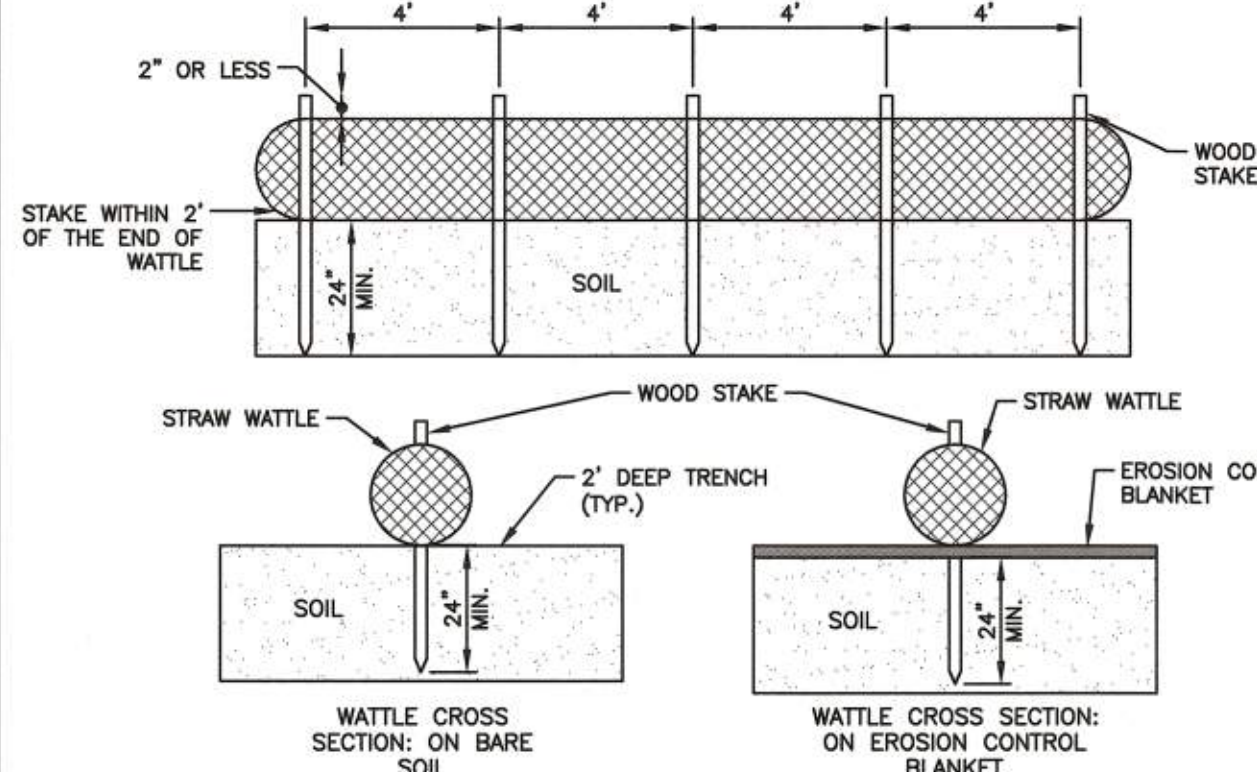
STABILIZED CONSTRUCTION EXIT

NOT TO SCALE



SILT SACK DETAIL-ON OR OFF SITE

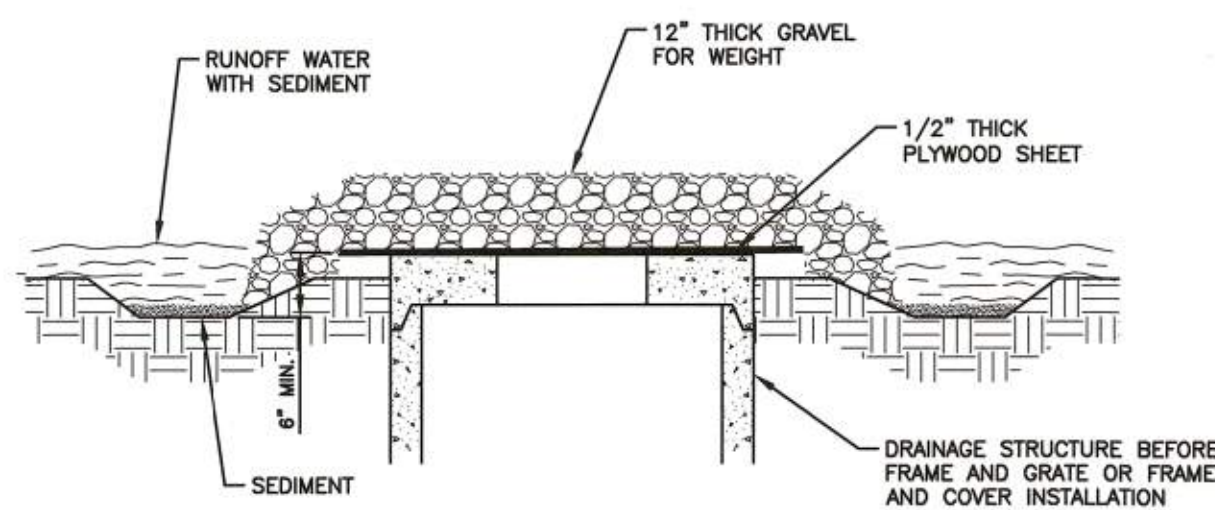
NOT TO SCALE



- NOTES:
1. ENDS OF WATTLES SHALL BE TURNED SLIGHTLY UP.
2. RECOMMENDED STAKES ARE 1 1/8" WIDE x 1 1/8" THICK x 30" LONG. STAKES SHALL NOT EXCEED ABOVE THE STRAW WATTLE MORE THAN 2".

STRAW WATTLE

NOT TO SCALE

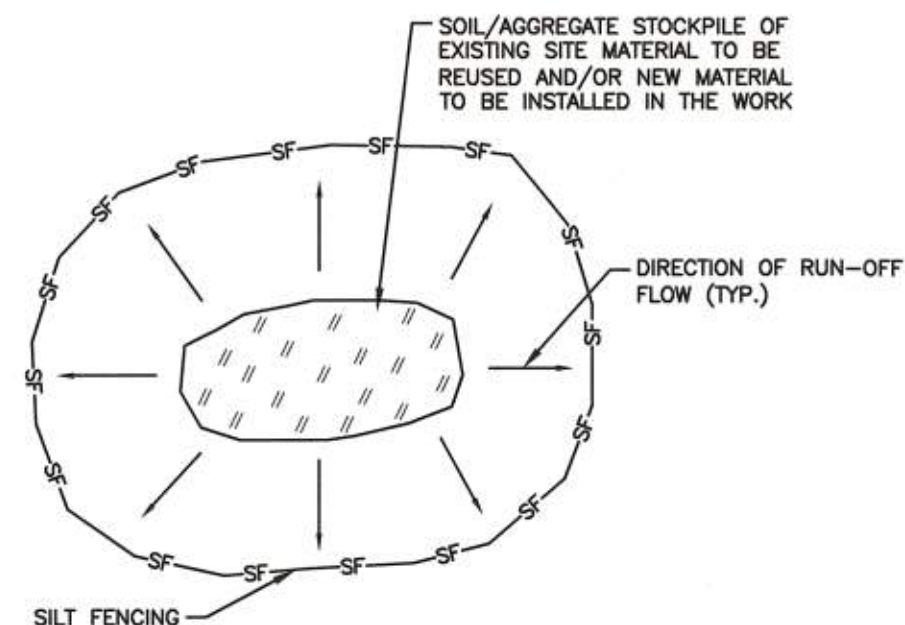


MAINTENANCE

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY.
2. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF OF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS.
3. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.
4. ALL STRUCTURES WITH INLET PROTECTION MUST BE CLEANED AT THE END OF CONSTRUCTION AND WHEN THE SITE IS FULLY STABILIZED.

INLET PROTECTION DETAIL

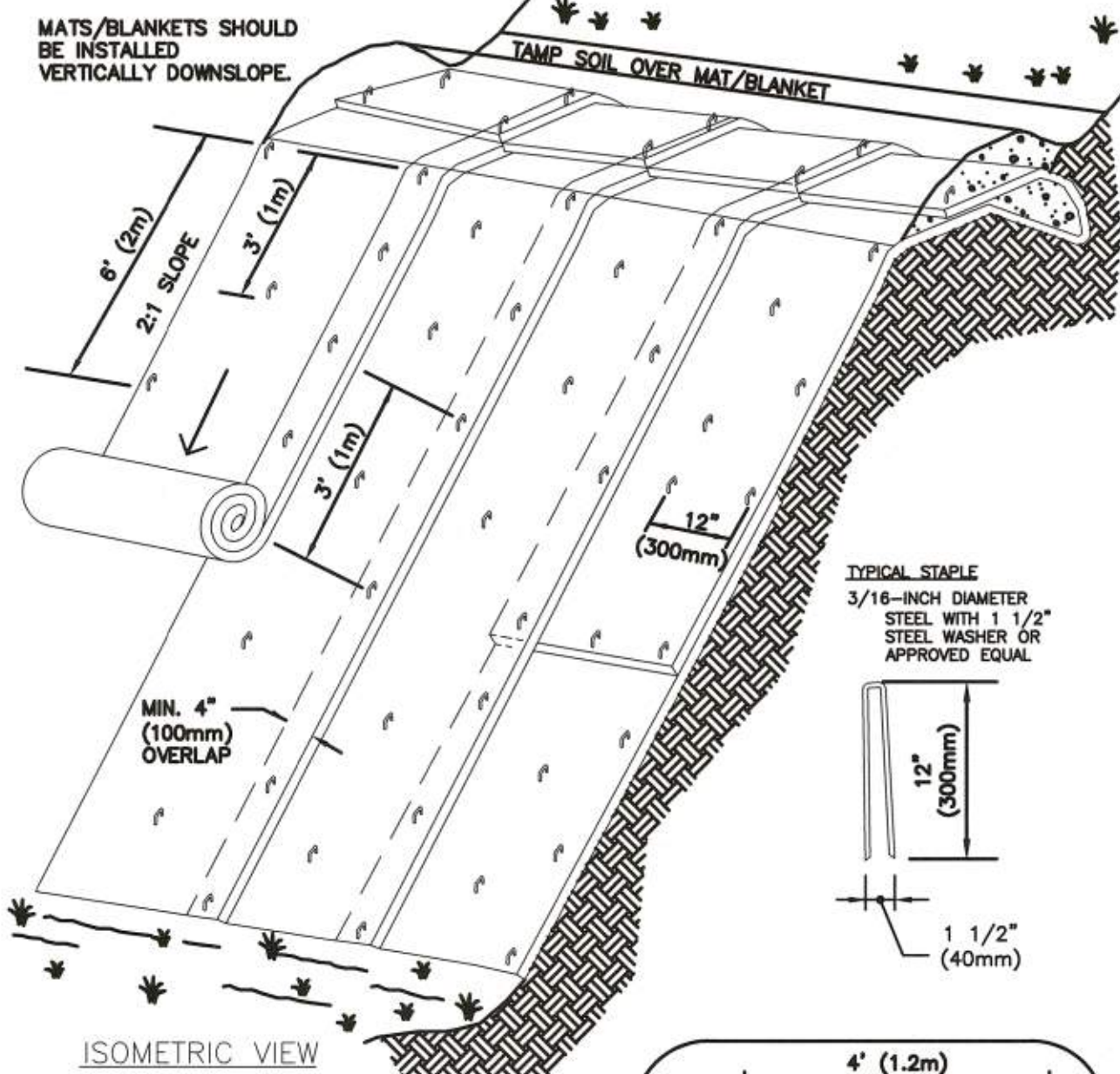
NOT TO SCALE



- NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.
3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
4. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

MATERIALS STOCKPILE

NOT TO SCALE



TYPICAL SLOPE SOIL STABILIZATION

NOTES:

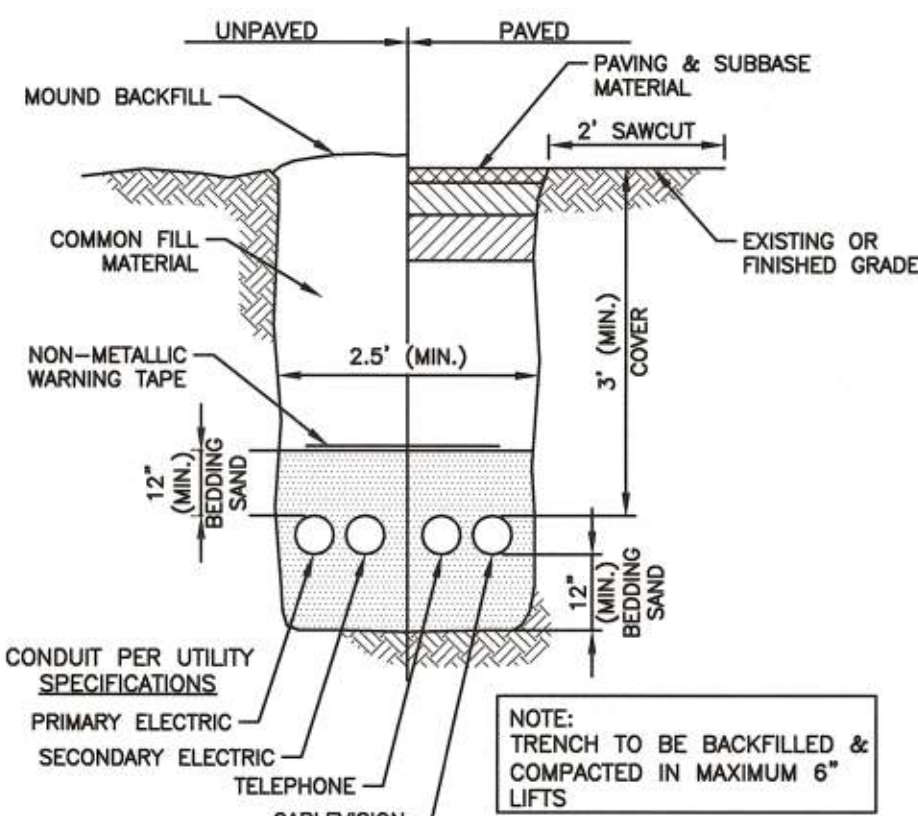
1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW. LAY BLANKETS LOOSELY & MAINTAIN DIRECT CONTACT WITH SOIL - DO NOT STRETCH.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE. BLANKET IN A 6 INCH DEEP TRENCH.
5. BLANKETS SHALL BE STAPLED ENOUGH TO ANCHOR BLANKET WHILE MAINTAINING CONTACT WITH SOIL. STAPLES SHALL BE PLACED DOWN THE CENTER & STAGGERED WITH THE STAPLES PLACED ALONG EDGES. PATTERN & AMOUNT OF STAPLES VARIES BY MANUFACTURER, SO FOLLOW MANUFACTURER'S RECOMMENDATIONS.
6. BLANKET SHALL BE NORTH AMERICAN GREEN SC-150 BN OR APPROVED EQUAL.

MAINTENANCE & MATS

1. BLANKETS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION & AFTER A RAINFALL IN EXCESS OF 1/2" IN A 24-HOUR PERIOD.
2. FAILURES SHALL BE REPAIRED IMMEDIATELY. IF ANY OF THE FOLLOWING OCCUR: SLOPE WASHOUT, MAT DISPLACEMENT, DAMAGE TO MAT, THE AFFECTED AREA SHALL BE REPAIRED & RESEED & MAT SHALL BE REPLACED OR RE-INSTALLED.

BLANKET SLOPE PROTECTION FOR EROSION CONTROL

NOT TO SCALE



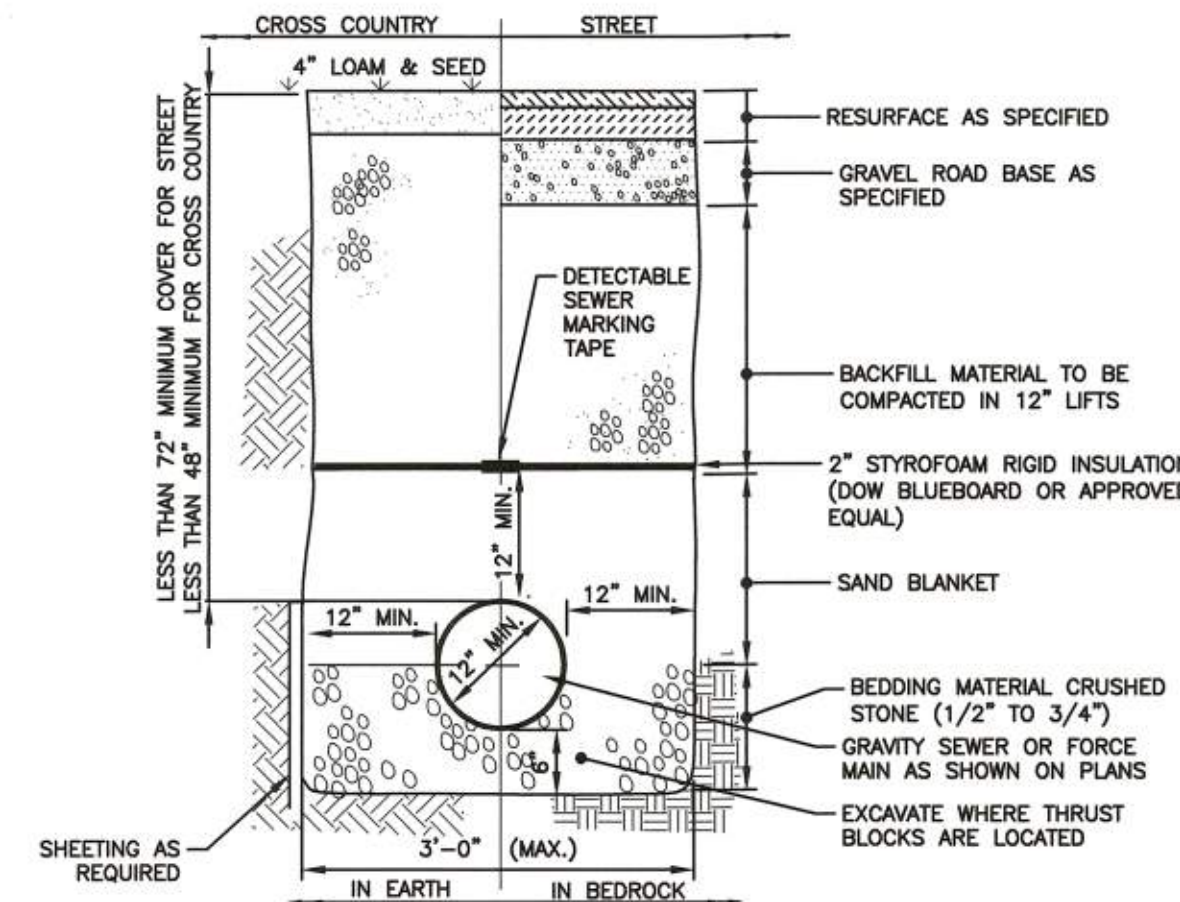
UTILITY TRENCH

NOT TO SCALE



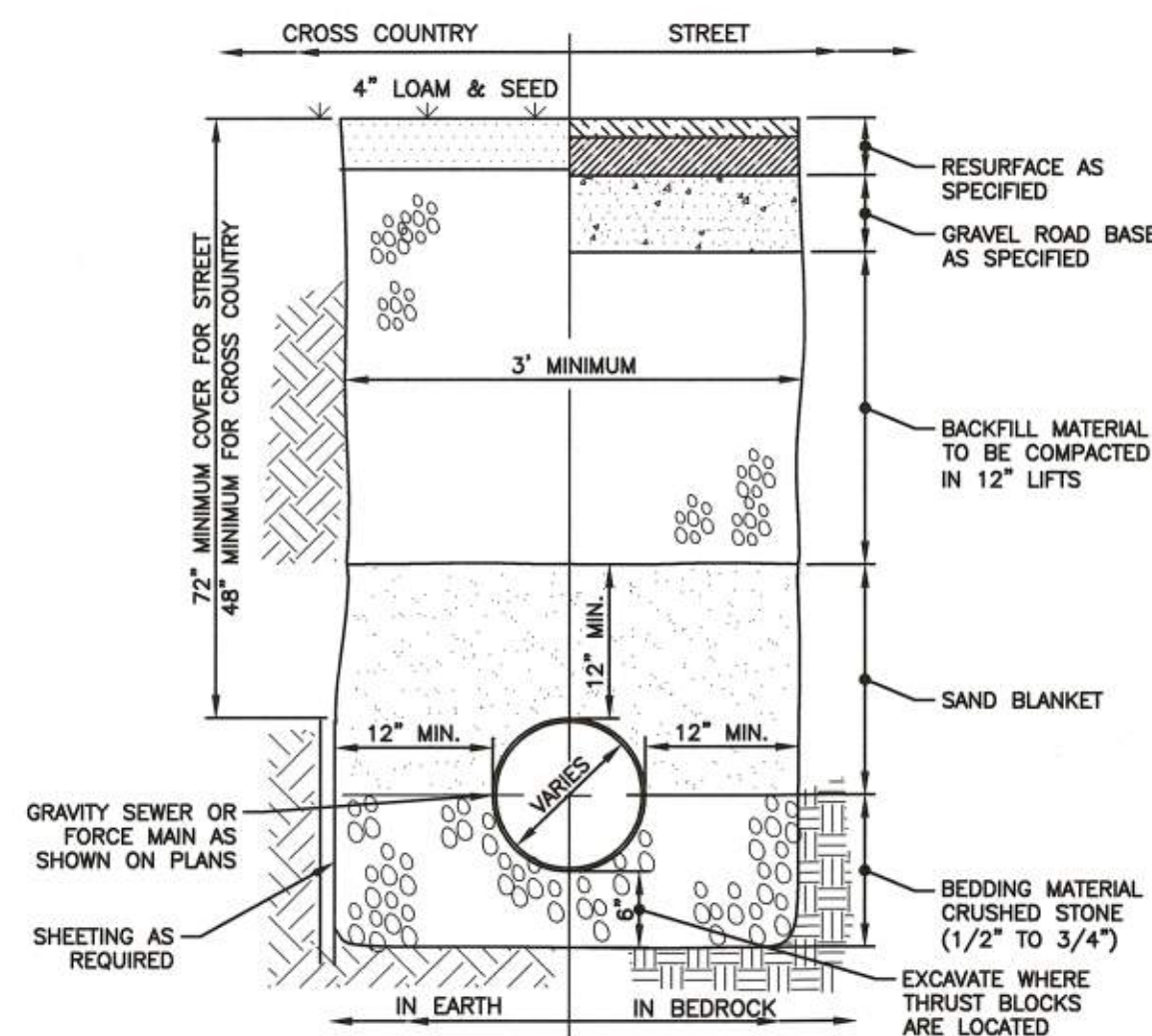
KOR-N-SEAL DETAIL

NOT TO SCALE



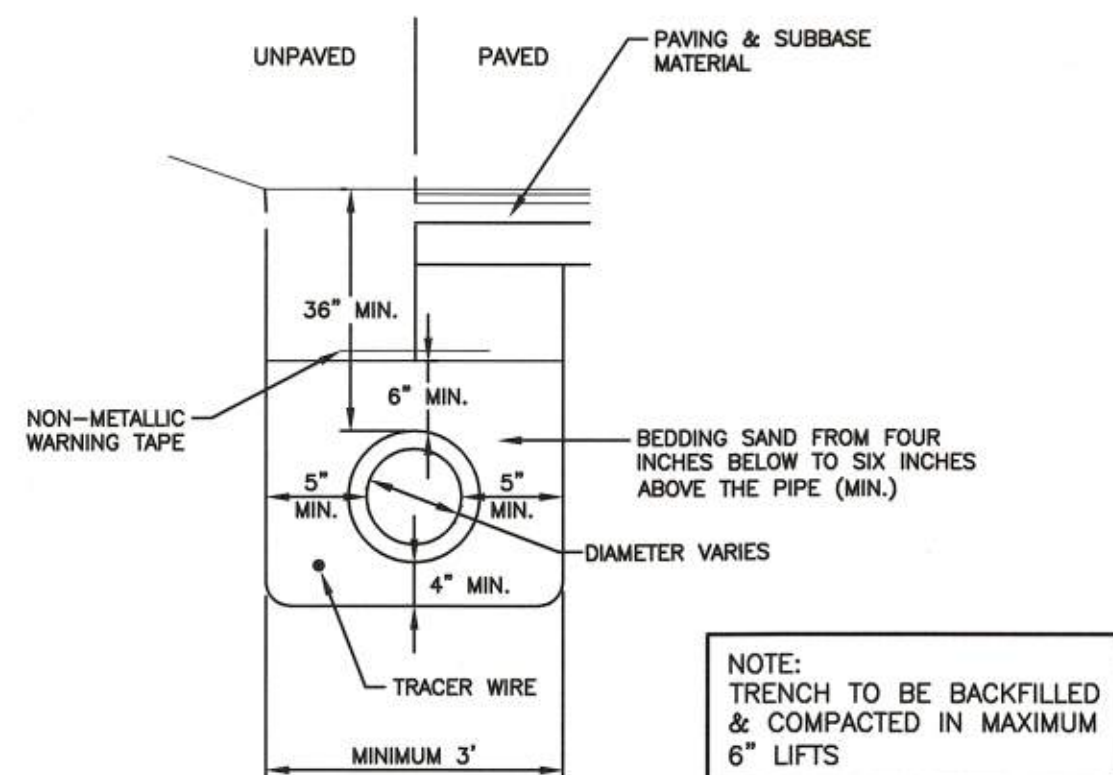
TYPICAL TRENCH SECTION FOR SANITARY SEWER SERVICE WITH LESS THAN 6' OF COVER

NOT TO SCALE



TYPICAL TRENCH SECTION FOR SANITARY SEWER SERVICE

NOT TO SCALE



TYPICAL GAS TRENCH

NOT TO SCALE

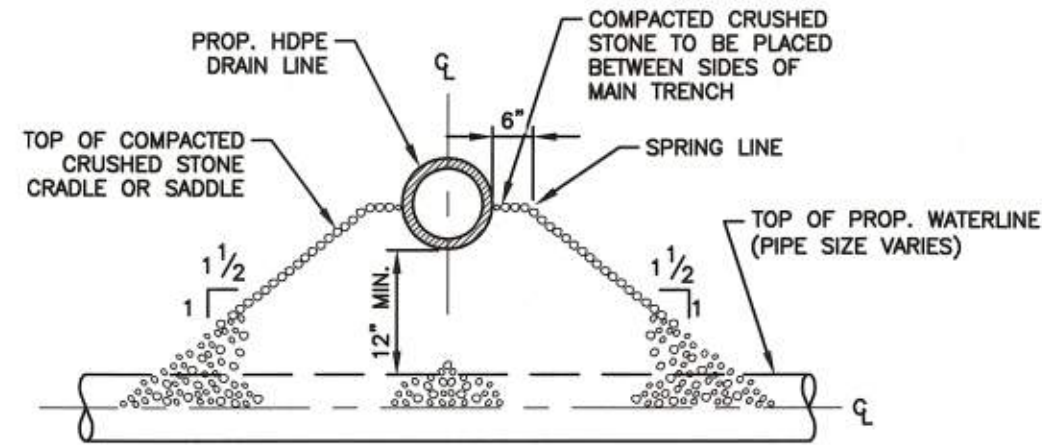
REVISIONS		
1.	MISC REV.	2/15/24
NO.	REVISION	DATE
FEBRUARY 2, 2024		
DRAWN/DESIGN BY		CHECKED BY
CCC		NID

DETAIL SHEET

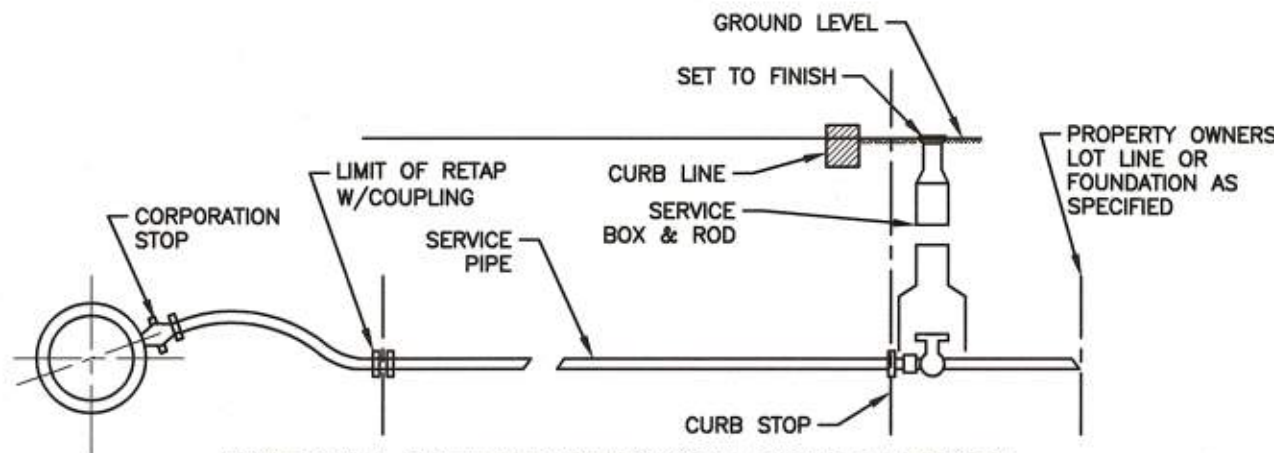
SCALE: AS SHOWN

NEX-2019181

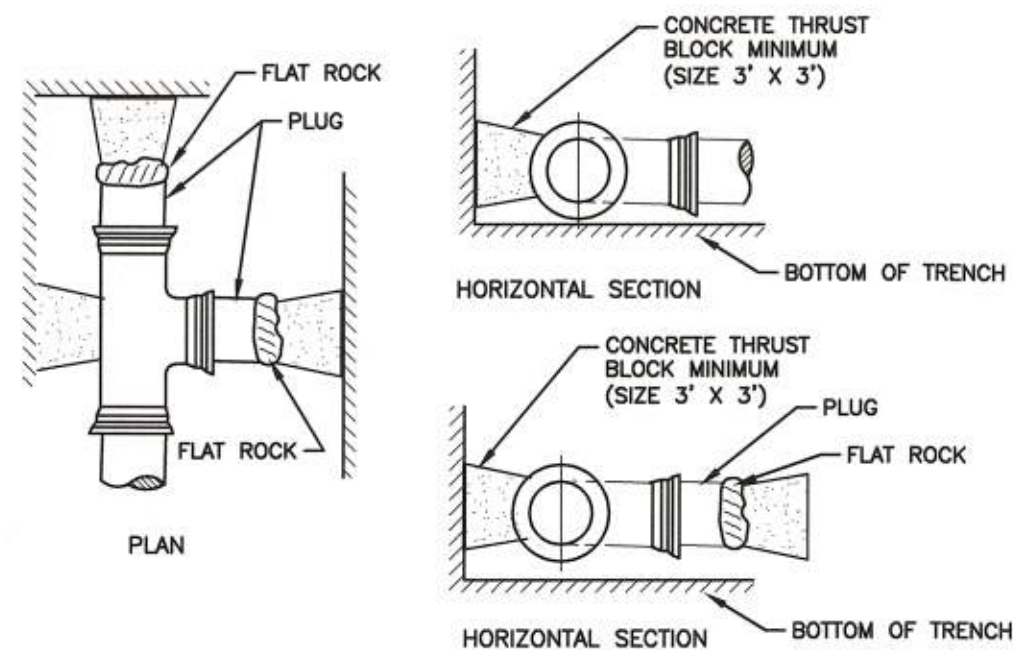
12 OF 13



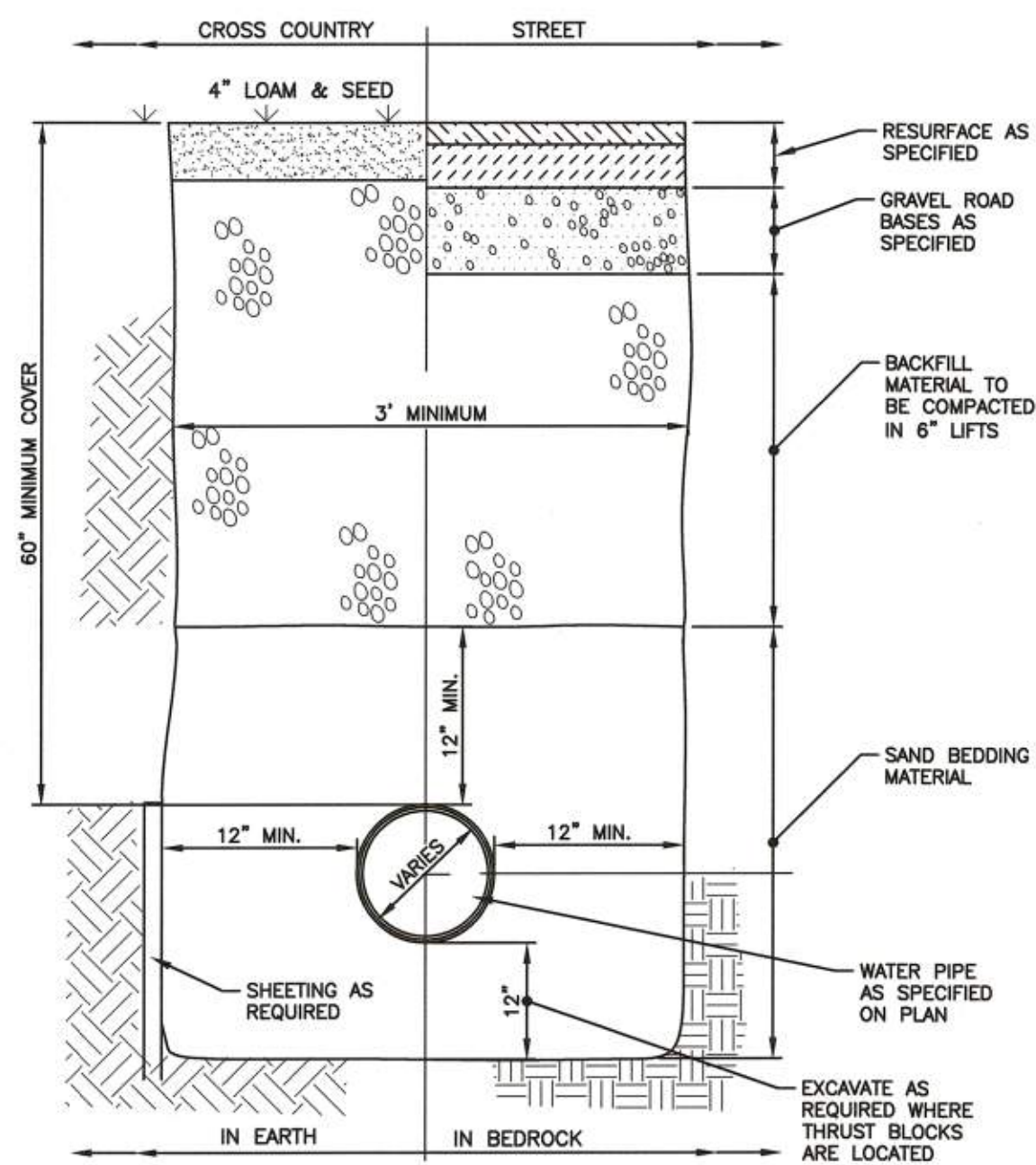
PIPE CROSSING DETAIL
NOT TO SCALE



TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE

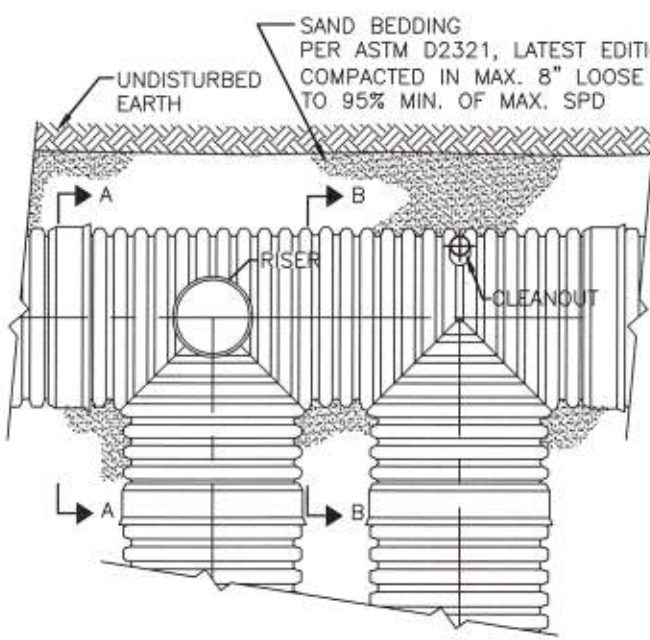


THRUST BLOCK
NOT TO SCALE

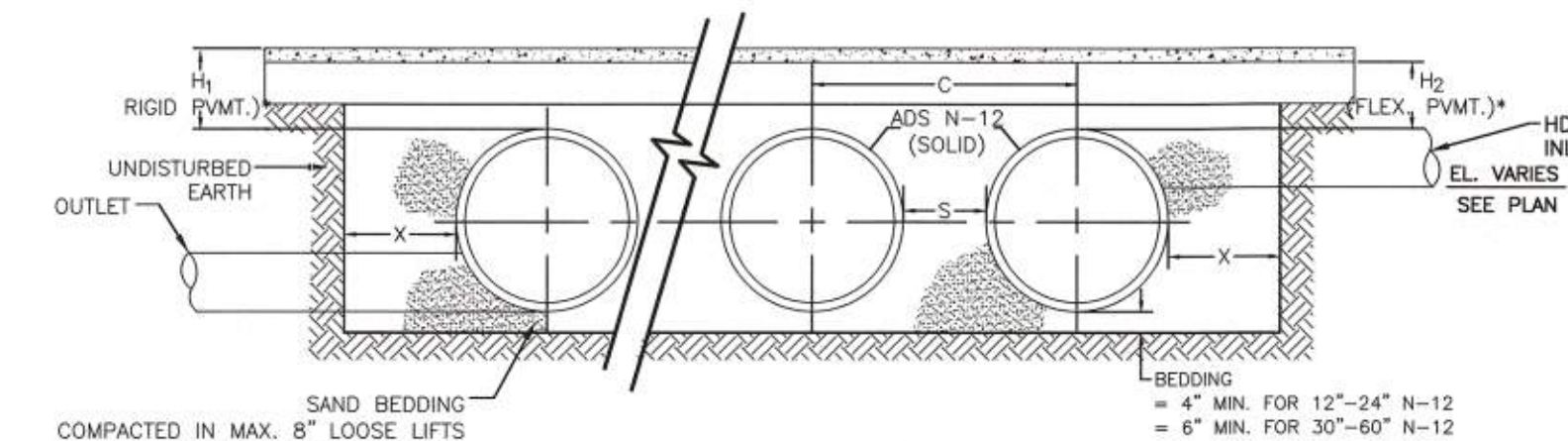
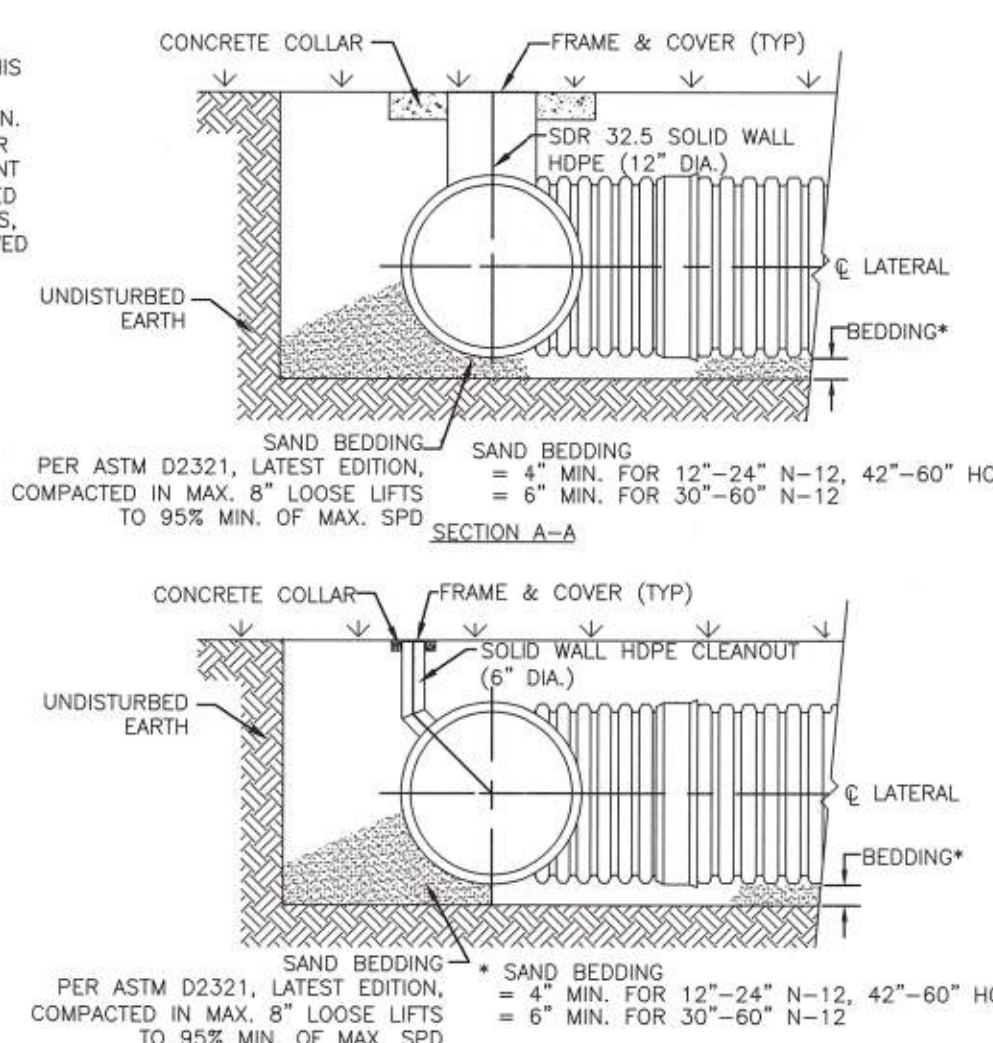


TYPICAL TRENCH SECTION
FOR WATER SERVICE
NOT TO SCALE

ADS STANDARD DETAILS DISCLAIMER
ADVANCED DRAINAGE SYSTEMS, INC. (ADS) HAS PREPARED THIS STANDARD DETAIL TO DEMONSTRATE ADS' RECOMMENDED INSTALLATION OF ITS PRODUCTS FOR THE DEPICTED APPLICATION. IN ADDITION TO ADS' RECOMMENDATIONS, THERE MAY BE OTHER NATIONAL, STATE OR LOCAL SPECIFICATIONS THAT ARE PERTINENT TO THIS APPLICATION. ADS' STANDARD DETAIL IS NOT INTENDED TO SUPERSEDE ANY NATIONAL, STATE OR LOCAL SPECIFICATIONS, AND ADS RECOMMENDS THAT THOSE REQUIREMENTS BE REVIEWED AND CONSULTED PRIOR TO THE INSTALLATION OF ADS' PRODUCTS. ADS HAS NOT AUTHORIZED, AND IT BEARS NO RESPONSIBILITY FOR, ANY REVISIONS, ALTERATIONS OR DEVIATIONS FROM THIS STANDARD DETAIL.

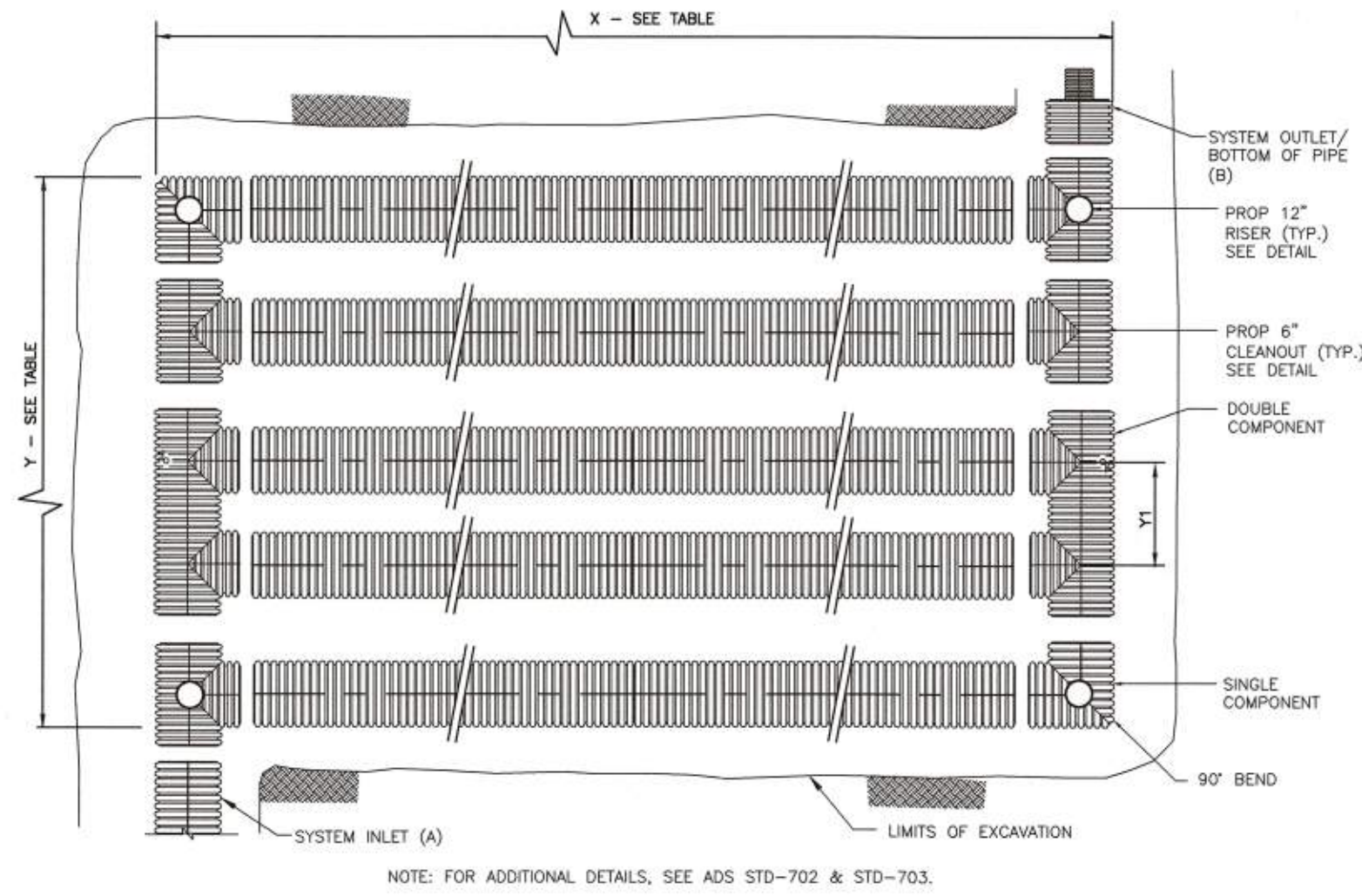


TYPICAL RISER AND CLEANOUT DETAILS
NOT TO SCALE



NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	TYPICAL SPACING "C"	TYPICAL SPACING "X"
12"	14.5"	11"	25.4"	8"
15"	18"	12"	28.9"	8"
18"	21"	13"	33.9"	9"
24"	28"	13"	40.7"	10"
30"	36"	17.1"	53.1"	18"
36"	42"	22"	63"	18"
42"	48"	24"	71.9"	18"
48"	54"	24.5"	78.5"	18"

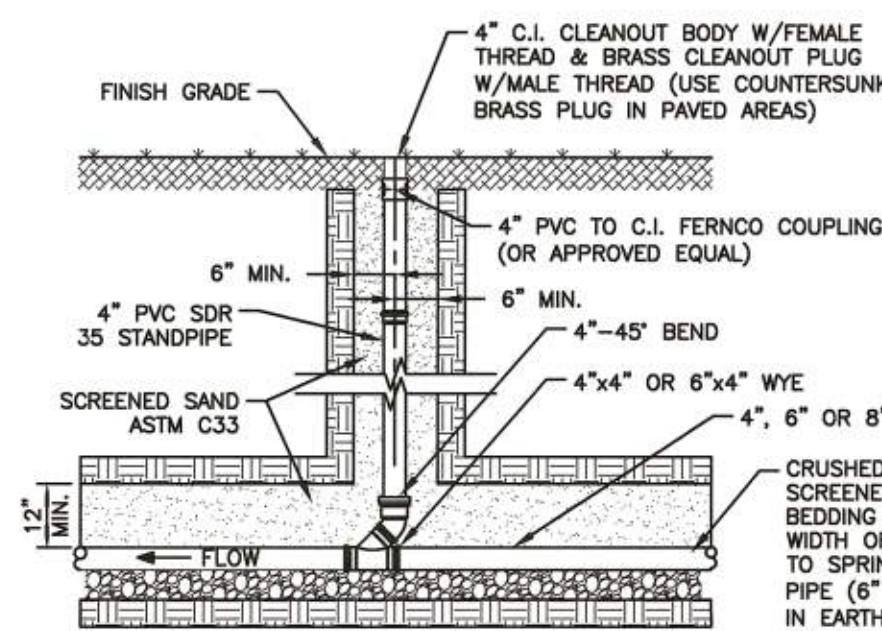
TYPICAL UNDERGROUND DETENTION SYSTEM CROSS SECTION
NOT TO SCALE



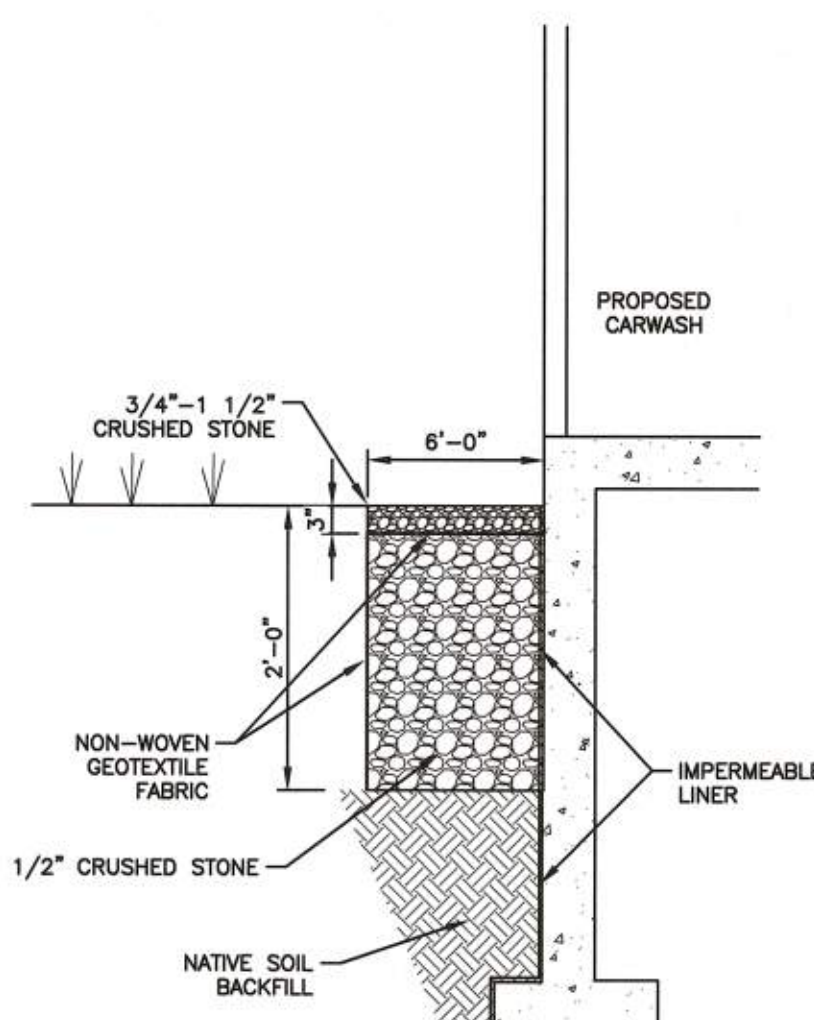
UNDERGROUND STORMWATER DETENTION SYSTEM TABLE						
UG DETENTION SYSTEM	LENGTH (X)	WIDTH (Y)	SPACING (Y1) (O.C. TYP.)	PIPE SIZE (INCHES) SOLID	INV. PIPE ELEV. (A)	# PIPE ROWS
UG-DET #1	36.00'	58.45'	53.1"	30" SOLID (WT)	541.69 541.00	12

NOTE: SEE TYPICAL CROSS SECTIONS BELOW
WT = WATERIGHT JOINTS

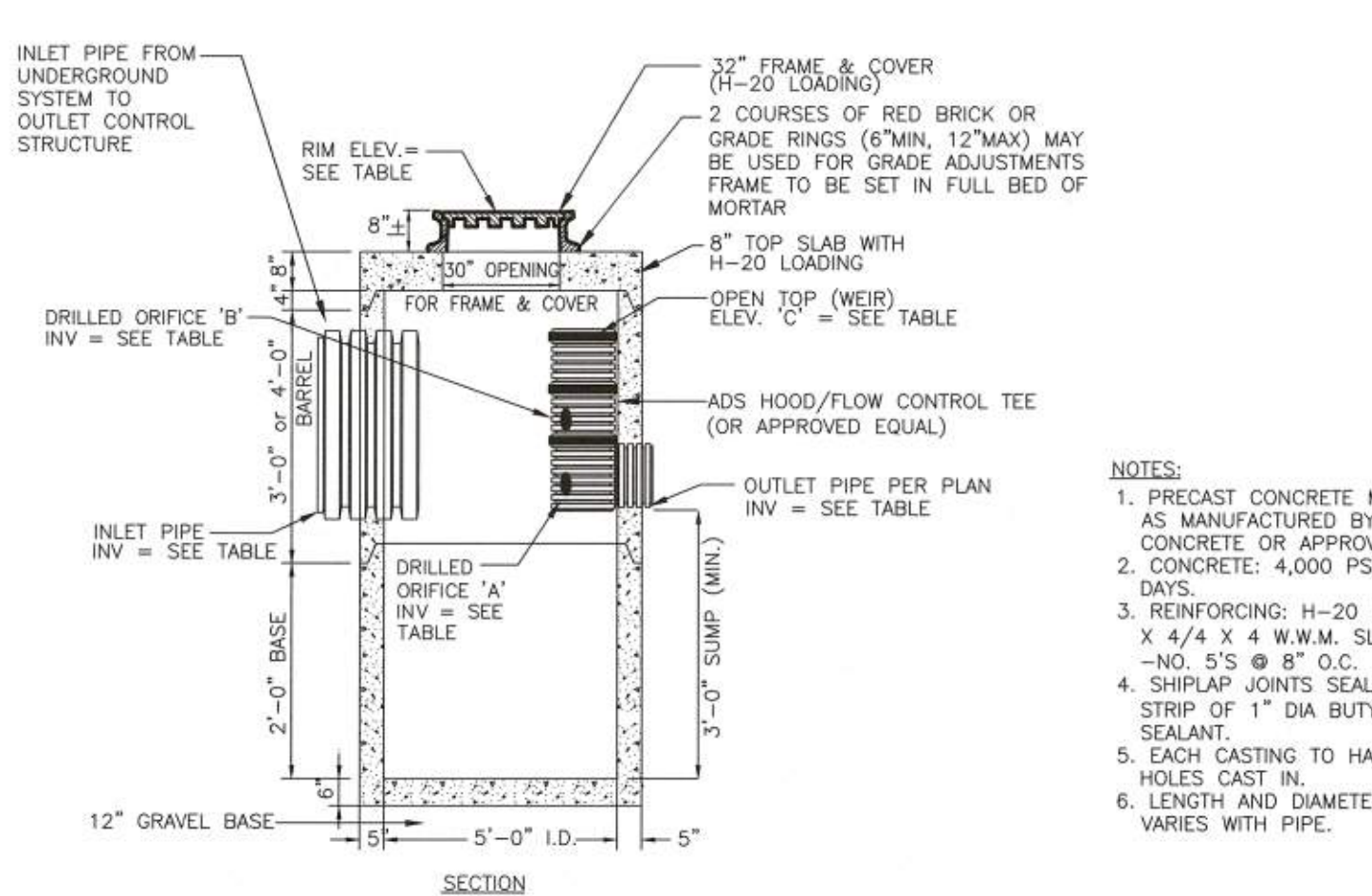
TYPICAL UNDERGROUND DETENTION SYSTEM LAYOUT
NOT TO SCALE



TYPICAL SEWER SERVICE CLEANOUT
NOT TO SCALE

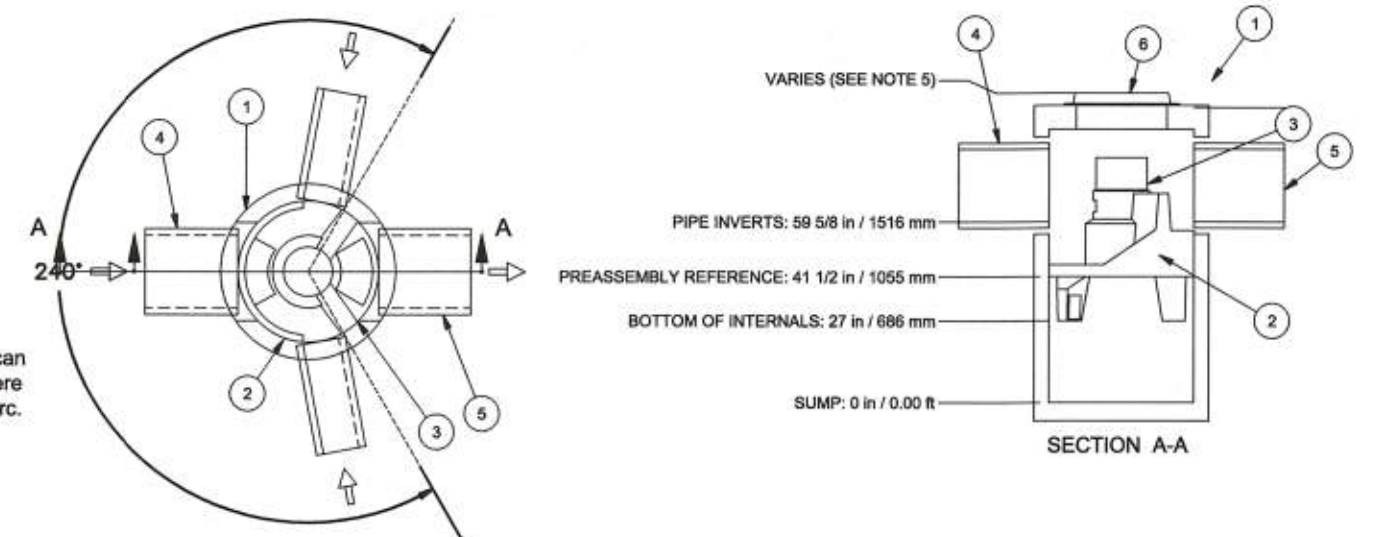


STONE DRIP EDGE
NOT TO SCALE



OUTLET CONTROL STRUCTURE TABLE								
OCS	RIM	ORIFICE	SIZE (IN.)	ELEV.	INV.IN (SIZE)	INV.IN (ELEV)	INV.OUT (SIZE)	INV.OUT (ELEV)
#1	545.00	A	1" DIA.	540.95	12"	540.95	12"	540.95
		B	1" DIA.	541.45				
		C	12" DIA.	543.10				

PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS) FOR UNDERGROUND SYSTEMS
NOT TO SCALE



FIRST DEFENSE FD-4HC UNIT DETAIL
(OR APPROVED EQUAL)
NOT TO SCALE

REVISIONS

NO.	REVISION	DATE
1.	MISC REV.	2/15/24
FEBRUARY 2, 2024		
DRAWN/DESIGN BY CCC		CHECKED BY NID

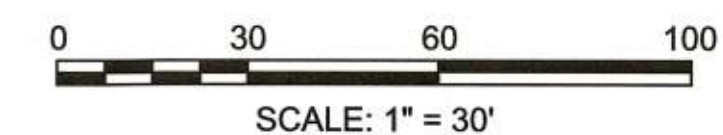
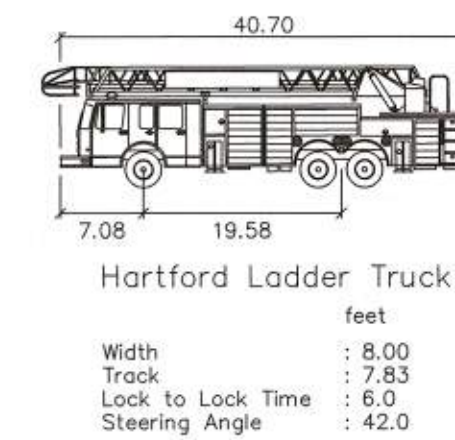
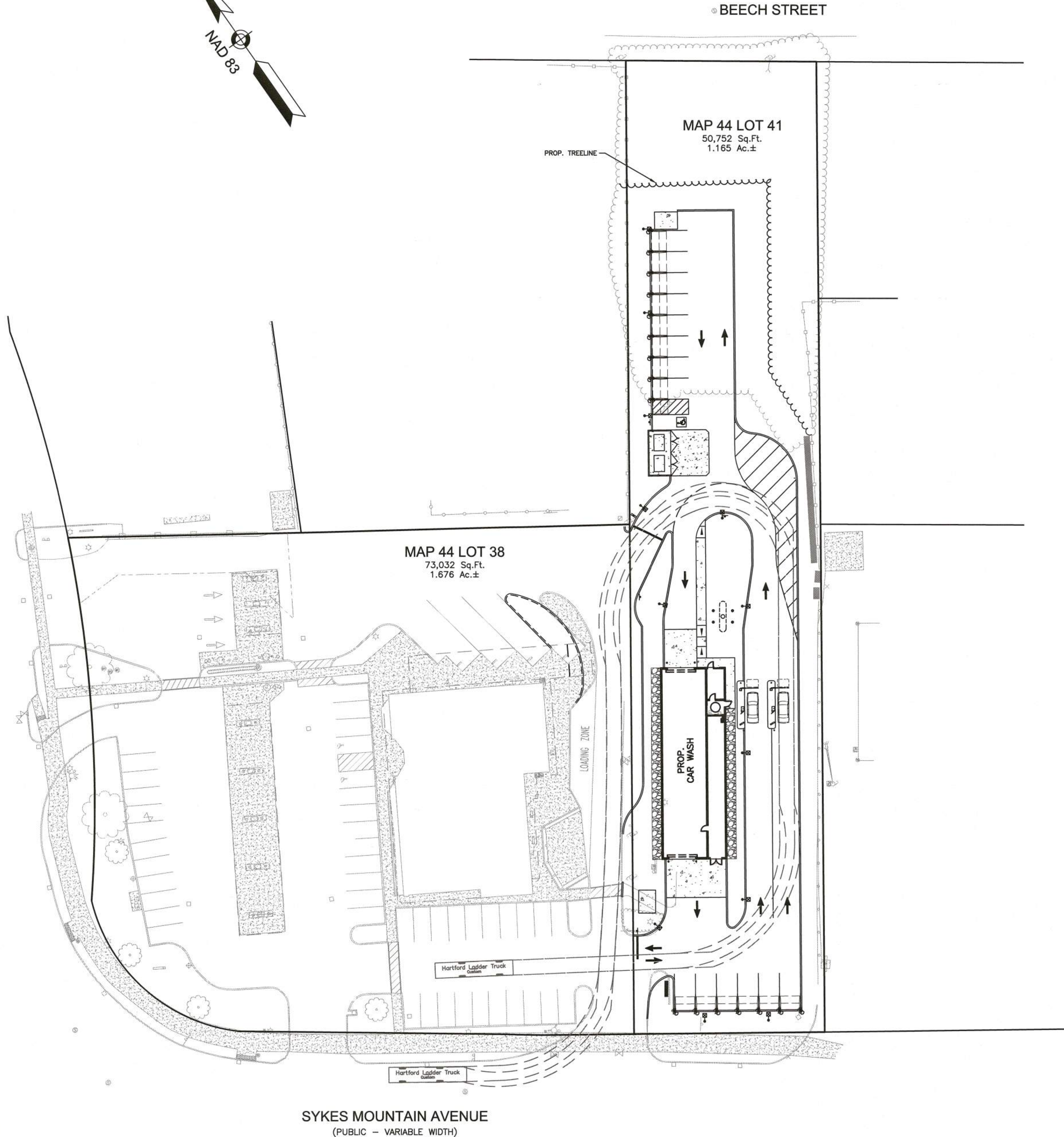
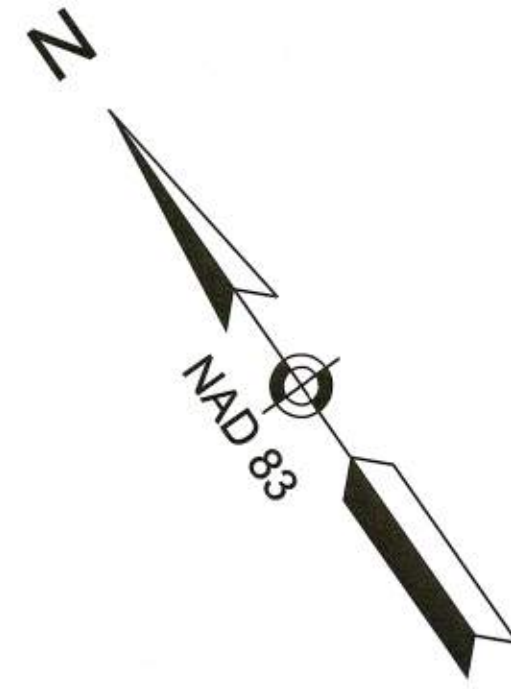
DETAIL SHEET

SCALE: AS SHOWN

NEX-2019181

F:\Projects\WAX-2019181 - White River Junction, VT - Summit Distributing\CAD Files\2019181_SP.dwg TT 1 2/15/24 3:27pm scollins

NORTH MAIN STREET - ROUTE 5
(PUBLIC - VARIABLE WIDTH)



PREPARED FOR
SUMMIT DISTRIBUTING
240 MECHANIC STREET
LEBANON, NH 03766

ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT

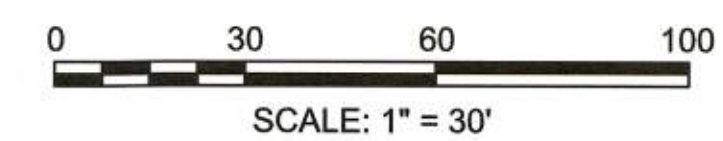
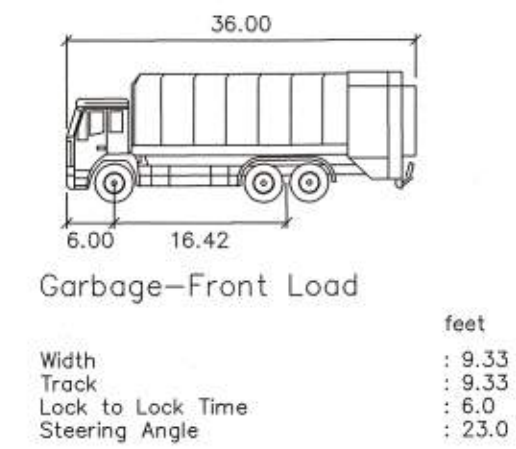
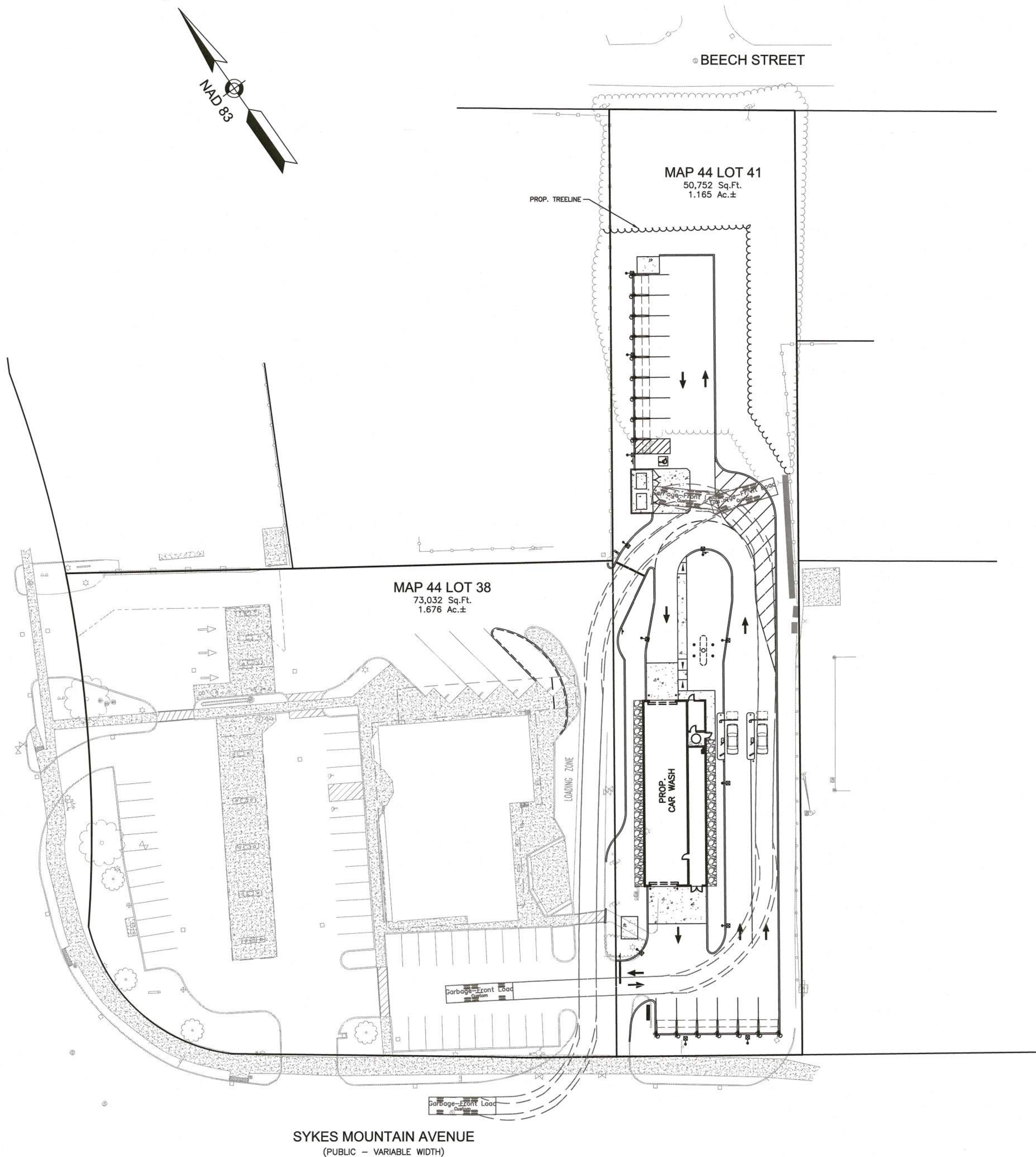
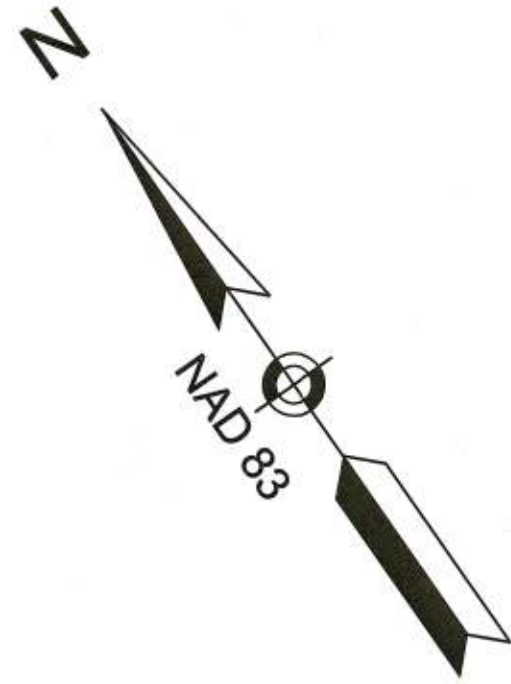


REVISIONS		
2.	MISC REV.	2/15/24
1.	REV. PER TOWN COMMENT	2/15/24
NO.	REVISION	DATE
FEBRUARY 2, 2024		
DRAWN/DESIGN BY		CHECKED BY
CCC		NID

TRUCK TURN
PLAN 1
(FIRE)

F:\Projects\MAX-2019181 - White River Junction, VT - Summit Distributing\CAD Files\2019181_SP.dwg TT 2 2/15/24 3:33pm arollins

NORTH MAIN STREET - ROUTE 5
(PUBLIC - VARIABLE WIDTH)



GPI Engineering
Design
Planning
Construction Management
603.893.0720
Greenman-Pedersen, Inc.
44 Stiles Road, Suite One
Salem, NH 03079
GPI.NET.COM

PREPARED FOR
SUMMIT DISTRIBUTING
240 MECHANIC STREET
LEBANON, NH 03766

ASSESSORS MAP 44 LOT 41
SYKES MOUNTAIN AVENUE
WHITE RIVER JUNCTION, VERMONT

REVISIONS		
1.	MISC REV.	2/15/24
NO.	REVISION	DATE
FEBRUARY 2, 2024		
DRAWN/DESIGN BY CCC		CHECKED BY NID

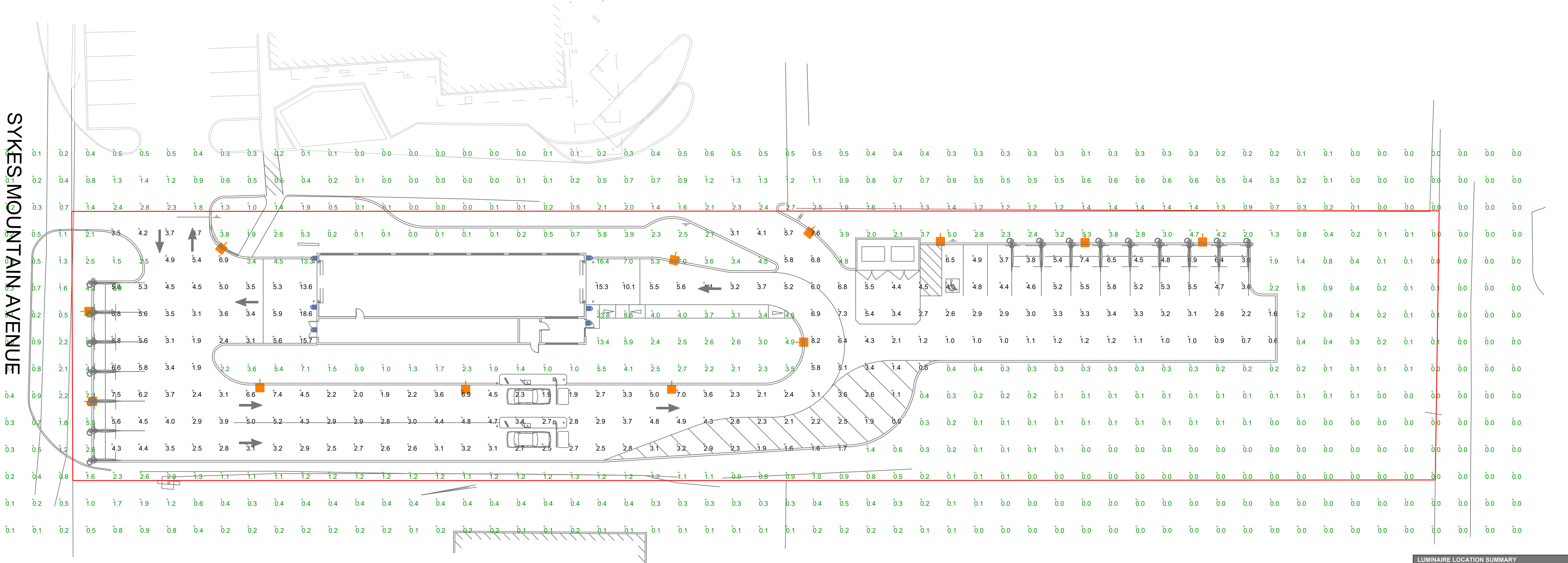
TRUCK TURN
PLAN 2
(GARBAGE)

SCALE: 1"=30'

NEX-2019181

1 OF 1

SYKES MOUNTAIN AVENUE



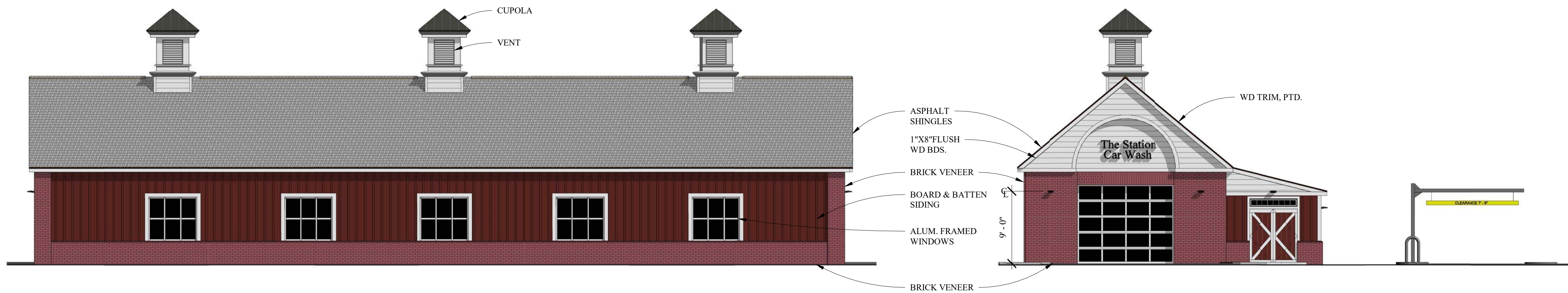
NOTES:
- POLE MOUNTED FIXTURES ARE MOUNTED ON A 17FT POLE
ATOP A 30 INCH HIGH CONCRETE BASE.

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A	19.5
2	A	19.5
3	A	19.5
4	A	19.5
5	A	19.5
6	A	19.5
7	A	19.5
8	A	19.5
9	A	19.5
10	A	19.5
11	A	19.5
12	A	19.5
13	W	9
14	W	9
15	W	9
16	W	9
17	W	9
18	W	9

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PAVED AREA	4.04	18.6	0.6	6.73	31.00
UNDEFIND AREA	0.96	23.8	0.0	N.A.	N.A.

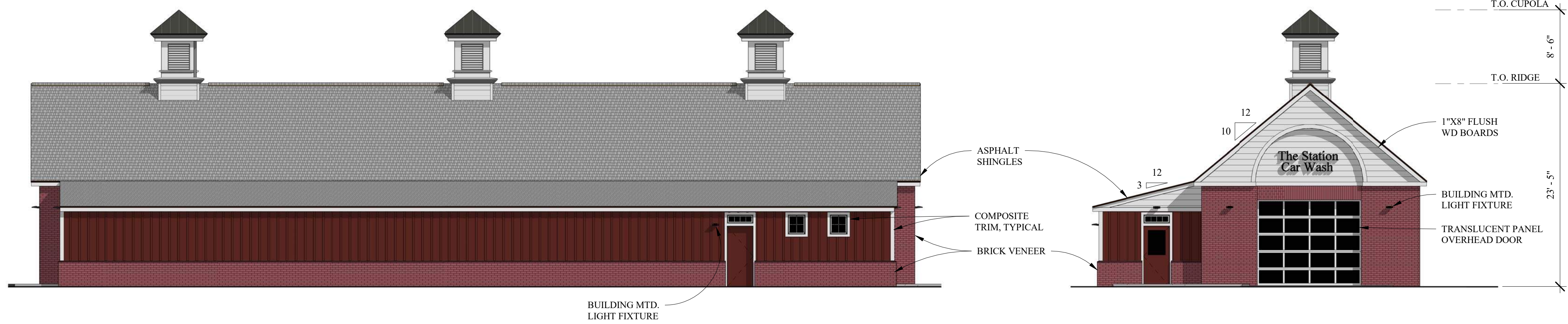
LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURE	CATALOG LOGIC
	12	A	SINGLE	10450	1.030	B2-U0-G2	68	816	Cree Lighting	OSQ-ML-C-DA + OSQM-C-11L-57K7-3M-UL-NM-XX-Q9
	6	W	SINGLE	4071	1.030	B1-U0-G1	26.8	160.8	Cree Lighting	OSQW-C-4L-40K7-3M-UL-WM-XX

REV.	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			



1 West Elevation
1/8" = 1'-0"

2 South Elevation
1/8" = 1'-0"



3 East Elevation
1/8" = 1'-0"

4 North Elevation
1/8" = 1'-0"

Summit Distributing, LLC
Summit - WRJ Carwash

18 Sykes Mountain Avenue, VT
Mudge Greeley Architects, PLLC
MGA
85 DCH
Route 10
Lyme, New Hampshire

Exterior Elevations



Town of Hartford

Planning Commission App # _____
Zoning Board of Adjustment App # _____

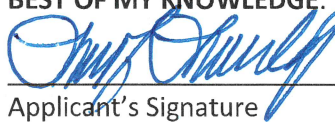
APPLICATION TO PLANNING COMMISSION &/OR ZONING BOARD OF ADJUSTMENT

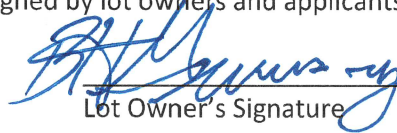
PLEASE COMPLETE ALL ITEMS APPLICABLE AND PROVIDE THE CORRECT NUMBER OF COPIES OF THIS APPLICATION AND THE SITE PLAN OR SUBDIVISION PLAT. ABUTTING LANDOWNERS WILL BE NOTIFIED BY THE PLANNING/ZONING OFFICE.

1. **NAME & ADDRESS OF RECORD OWNER(S)** Guernsey Ruth Hall Revocable Trust
22 Green Street West, West Lebanon, NH 03784
Deed Recorded Book 0502 Page 0124 (Available at Town Clerk's Office)
Telephone: Work _____ Cell _____ Email Address: _____
2. **NAME & ADDRESS OF APPLICANTS(S)** Summit Distributing
240 Mechanic Street, Lebanon, NH 03766
Telephone: Work _____ Cell 603-443-3469 Email Address: tomf@sumd.com
3. **NAME & ADDRESS OF APPLICANTS' CONSULTANT** Greenman Pedersen, Inc. (GPI) c/o Nicole Duquette
44 Stiles Road, Suite 1, Salem, NH 03079
Telephone: Work 603-374-7906 Cell _____ Email Address: nduquette@gpinet.com
4. **PROJECT LOCATION** Sykes Mountain Avenue (Map 44 Lot 41)
5. **PRESENT USE OF PROPERTY** overflow parking lot
6. **BRIEFLY DESCRIBE PROJECT** (in addition, a detailed narrative must be submitted)
The applicant is proposing to demolish the existing parking lot and construct a 3,400 sf
car wash facility.
7. **PROJECT SIZE IN SQ. FT OR ACREAGE** 39,000 sf
Lot Width 100 Lot Depth 506
8. **IS PROJECT ON TOWN WATER/SEWER?** Yes X No _____ If Yes, estimated
Water Consumption/day 7,500 gpd Amount of Sewer Flow Projected 7,500 gpd
Size of Closest Lines Above (water) 8" main (sewer) 6" sewer service stub
9. **DESCRIBE LANDSCAPING PLAN** Landscaping proposed is a mix of evergreen and
deciduous trees and shrubs. A concentration of white spruce and balsam fir are
planted adjacent to the reserved natural vegetated buffer along the district line.
10. **IF A BUSINESS** - Present # of Employees _____
Proposed Days & Hours of Operation 7 days, 6am to 8pm
Will you use the landfill & recycling center? Yes _____ No _____
The main waste by-product of your business is: trash from waste receptacles and vacuums

11. **IF A RESTAURANT** - Present seating NA Proposed NA
12. **PARKING SPACES** - Number to be provided 15
13. **SIGNAGE** - Free Standing X Attached two wall signs
14. **FENCING** - Location NA Height
15. **NEAREST WATER SUPPLY FOR FIREPROTECTION** hydrant within 45 ft of property line
16. **ESTIMATED VALUE OF PROPOSED WORK**
17. **IS THERE AN EXISTING DRIVEWAY?** shared driveway
18. **IF A SUBDIVISION** - Number of New Lots to be Created NA
- Do you request that the Town consider taking over maintenance of – Roads
- Or Park/Open Space

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. (This certification must be signed by lot owners and applicants).

 2/1/24
Applicant's Signature Date

 2/1/24
Lot Owner's Signature Date

Co-Applicant's Signature Date

Co-Owner's Signature Date

The applicant retains the obligation to identify, apply for, and obtain any relevant local or state permits before any construction may commence. Please call 802-282-6488 to speak with the State Permit Specialist.

For Office Use Only		
Map/Lot #		
Fee Paid \$:		Receipt #:
PC: Site Plan	Min. Sub.	Maj. Sub.
PD	PD Amend.	Other
ZBA: Conditional Use	Variance	Appeal
Other		
Zoning District (s)		Date Filed:
Official Submittal Date:		

Project Narrative for a Proposed Car Wash
Sykes Mountain Avenue
Map 44 Lot 41

Summit Distributing is proposing to redevelop Lot 44-14. Prior to 2009, the property owner, Revocable Trust of Ruth Hall Guernsey, had an agreement with Greyhound to provide overflow parking. No current parking agreement exists for Lot 44-41.

Summit Distributing, the owner of the adjacent Lot 44-38, currently has a Lease agreement with the owner with the intention of redeveloping the site for a car wash facility. As shown on the Site Plans, the proposed use will consist of a 100 ft long car wash tunnel with two prepaid stations and fourteen (14) vacuum spaces, which is typical of the industry.

Record plans show a 6" sewer stub from the main within Sykes Mountain Ave. It is our intent to use the existing sewer stub for the domestic waste and the waste from the car wash's reclamation system.

Record plans also show an 8" water main that runs from the main in Sykes Mountain Avenue to Lot 44-40. This water main services Lot 44-40, Lot 44-38, and Lot 44-41. Plans show a water service line to Lot 44-41; however, the existing location does not work well for the proposed development. The plans show a new service connection off the 8" shared main that will service the car wash.

The existing paved parking lot does not have a stormwater management system. Stormwater runoff currently sheet flows over the existing pavement and flows toward Lot 44-55 and to the Right of Way of Sykes Mountain Avenue. As part of the redevelopment, a stormwater management system has been designed which includes deep sump catch basins with oil/water separator hoods, First Defense hydrodynamic separators and an underground stormwater detention system. Trench drains provided within the car wash tunnel will capture used car wash water and direct it to the reclamation system; therefore, an exterior trench drain is not required.

For solid refuse, a dumpster is proposed to the rear of the site. This will be used by the car wash and the convenience store on Lot 44-38. Trash receptacles will also be available at the vacuum spaces for customers.

The site will be accessed from Lot 44-38 from either the retail motor fuel outlet or the driveway from Sykes Mountain Highway. The drive aisle in front of the site will maintain a two-way traffic flow to allow customers to access the vacuums, enter the car wash queue, or exit the car wash. There are two pay stations proposed for the car wash, paid car washes will most likely be recognized by license plates, so customers can leave the queue and use the vacuums to the rear of the site or continue to the car wash tunnel. The site has the capacity to queue 18 vehicles from the pay stations. The striped area to the rear of the site has been provided to allow trash trucks, maintenance trucks, and the Town's ladder truck to maneuver around the rear of the site. The one-way bypass is provided allow these vehicles to leave the site.

February 15, 2024

NEX-2019181.00

Jo-Ann Ells, Hartford Zoning Administrator
Hartford Town Hall
171 Bridge Street
White River Junction, VT 05001

SUBJECT: Response to Comment
Proposed Car Wash
Lot 44-0041-00

Dear Jo-Ann:

Greenman Pedersen, Inc. (GPI) has prepared this Response to Comments (RTC) letter to respond to your comments provided in the memorandum dated February 9, 2024 regarding the car wash for Lot 44-41 along Sykes Mountain Avenue in White River Junction. We have reviewed the comments and this letter has been prepared to summarize our responses. The review comments have been provided below followed by our responses to each, **in bold text**.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.

To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website [Welcome to DEC | Department of Environmental Conservation \(vermont.gov\)](#) and going to the "Permit Navigator Tool" [Permit Navigator \(force.com\)](#)

If further assistance is needed, please contact the Community Assistance Specialist for our area:

Rick Oberkirch, Community Assistance Specialist
Vermont Agency of Natural Resources/Department of Environmental Conservation
Environmental Compliance Division/Environmental Assistance Office
450 Asa Bloomer State Office Building, Rutland, VT 05701
802-282-6488
Rick.Oberkirch@vermont.gov

Response: We are aware that a Stormwater General Permit is required. It is our understanding that an ACT 250 permit is not required for this site; however, we have reached out to Rick Oberkirch to confirm.

2. If you have not done so already, please contact the Fire Marshal, Tom Peltier, to discuss obtaining a Public Building permit. tpeltier@hartford-vt.org (295-3232).

Response: The applicant has already started discussions with the Fire Marshall regarding the proposed plan.

3. I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency options, including the installation of solar panels, for your project. (dclawson@hartford-vt.org)

Response: This information has been provided to the applicant.

4. A staff member is reviewing the Trip Generation and Site Access Study. Any comments will be sent separately.

Response: No response necessary.

5. Any approval will include a condition that your engineer certify that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit. Please confirm your understanding.

Response: We understand this condition.

6. Any approval will include a condition that, in addition to the required hard copies, the final approved plans are emailed to me. Please confirm your understanding.

Response: We understand this condition.

7. Please provide a detailed project narrative describing the project including:

- The need for 14 vacuum parking spaces
- Existing/proposed of rights-of-way and easements
- Use of the travel lane/right-of way between lots 44-0038-000 and 44-0041-000 during construction
- Effect of the loss of parking spaces for the gas station/convenience store, bus station, and restaurant on the adjacent lot (China Moon)
- The percentage of the lot will be developed with building/pavement
- How surface icing will be prevented in front of the car wash
- If and where trash receptacles will be provided for customers using the vacuums
- Description of the location and size of proposed signage
- Compliance with section 260-31 of the Zoning Regulations which states:
Noise volume shall be limited to 70 decibels or less at or beyond the property line. Noise levels or frequencies which are not customary in the district or neighborhood, or which represent a repeated disturbance to others shall not be permitted.
- Vehicular circulation including:
 - A description of the flow of traffic
 - The number of vehicles that can line-up while waiting to be washed
 - The ability of a vehicle to bypass the lane for the pay station
 - Access to and from the rear vacuums
 - Adequacy of the width of travel lanes where the lane for vehicle entering the car wash and rear vacuum area meets

Response: Please see attached Narrative Letter. We are working with the vendor to determine noise levels anticipated from the car wash equipment and vacuum equipment and should be able to submit information early next week.

8. Please update the plan set as follows:

- Remove "18" from the address on the cover sheet
Response: The title sheet has been revised.
- Make sure the width of all access aisles/travel lanes are depicted and meet section 260-24 (4) of the Zoning Regulations.
Response: All access aisles/travel lane widths are noted on the plan. As required one-way travel lanes are 12' wide and aisle widths adjacent to parking spaces are 24 ft wide.
- Provide a turning movement plan for a trash hauler
Response: Please see the added Truck Turn Plan 2.
- Provide a circulation plan sheet including width of travel lanes, pavement markings, directional signage, and existing/proposed rights-of-way.
Response: This information is provided on the Site Plan, sheet 5.
- Consider adding plantings on the west side of the parking spaces at the rear of the lot
Response: Plantings have been added along the fence.
- Update the "Truck Turn Plan" using the details in the attached turning radius specification. Please make sure the truck has a clear path and is not driving over curbs etc.
Response: Please see the revised plan

9. Department of Public Works Comments (Stormwater)

- HSG Justifications: The drainage calculations indicate a HSG Soil Grouping of D based upon the Soil Survey. The test pit data indicates an ESHWT of between 24 and 32" below existing grade and Refusal at >90", and the drainage calculations for the infiltration trench indicate an infiltration rate of 1.02 inches per hour. Using the NRCS standards a ESHWT of between 20-40", a restrictive layer >40", and an infiltration rate of greater than 0.14" per hr. would indicate a HSG C condition as HSG D soils chiefly comprise of clayey soils.
How is the HSG D grouping of the soils justified? Did you perform infiltration tests in this area that you can share? (Particular concern is related to the grass and wooded areas in the rear of the parcel as it could artificially lower any difference in the increase in discharge rates and volumes.)
Response: The HSG D was taken directly from the NRCS soil map (Appendix B). We have revised the HydroCAD calculations to model the soils as HSG C. The calculations continue to show no increase in discharge rates leaving the site. We did not perform any test pits or infiltration tests in the area of the infiltration trench due to the presence of existing pavement or underground tanks. The test pit locations were mistakenly omitted from the plans and have been added to the revised plans (see sheet 6).
- Infiltration Trench/ Drainage Area Reduction Performance: The pre-development area draining to the closed drainage system in Sykes Mountain Avenue is 29,050 Sq. Ft. as modeled, and the post development area is 28,835 Sq. Ft. assuming the roof disconnect of 3,600 is properly functioning and not overtopping. Should the roof disconnect not properly function or capture the runoff from the roof the post development drainage area shall exceed the pre-development drainage area by 3,385 Sq. Ft.
How will run-off be captured within the trench during all storm events? How will the trench properly function under frozen conditions? Have you considered monitoring wells with grates and reverse curbing?
Response: Runoff will flow directly off the roof into the stone trench. When the ground is frozen it is typically snowing, not raining and stormwater runoff isn't as prevalent. Generally any infiltration BMP isn't going to function as well in frozen conditions. If the review engineer can point us to a method for providing such calculations, we would be happy to do so. We have added a monitoring well to the stone trenches.
- Infiltration Trench Calculations: Infiltration to reduce run-off volumes and/or to recharge the groundwater is provided by the roof disconnects. The bottom of these 5' wide trenches extend 24" below the finished grade of the trenches.
The Finished grade of the upper trench is roughly 545.5' (assumed from plans) putting the bottom of the trench at 543.5'. The existing grade at this location is approximately 545.0' which would place a seasonal high-water table at between 542.7' and 543.0' or within 6" of the bottom of the trench.
Please provide additional information about the seasonal water table at this location and include the estimated seasonal water table in the Pond 1P (infiltration trench) calculations to account for seasonal mounding to insure there is no surfacing.
Response: The seasonal high water table was taken from the two test pits that were performed onsite. The trench has been revised to be 18" deep and 6' wide (see detail, sheet 13). This will provide at least one foot to the SHWT. The HydroCAD calculations have been revised accordingly to include the SHWT.
- Inlet Control Modeling: The calculations for pre and post development conditions do not model the inlet control conditions created by the catch basin grates which allows for the proper assessment of impacts to the closed drainage network and surface flooding.
Please revise the models to incorporate the inlet control of the existing and proposed catch basin grates. The grate dimensions and openings utilized should accurately reflect the existing and proposed grates.

Response: The HydroCAD calculations have been updated to model the inlet control conditions for catch basins at the low points of the site.

- Run-off Volumes: The narrative is careful to discuss the pre and post discharge rates but does not discuss the discharge volumes and the additional time and impact on the closed drainage system to drain them. The rates and volumes directed to the Sykes Mountain Avenue drainage system (Pre-Development Subcatchment 200S) as taken from the provided HydroCad report are listed below.

EVENT	DISCHARGE RATE	DISCHARGE VOLUME	Volume Notes
2 YR PRE-DEV	1.31 CFS	3,503 CU. FT.	31% Increase or +8,530.8 GAL.
2 YR POST-DEV	1.28 CFS	4,596 CU. FT.	
2 YR DIFFERENCE	-0.03 CFS	+1,093 CU. FT.	
10 YR PRE-DEV	1.97 CFS	5,419 CU. FT.	32% Increase or +13,023.5 GAL.
10 YR POST-DEV	1.96 CFS	7,160 CU. FT.	
10 YR DIFFERENCE	-0.01 CFS	+1,741 CU. FT.	
25 YR PRE-DEV	2.46 CFS	6,868 CU. FT.	32% Increase or +16,793.7 GAL.
25 YR POST-DEV	2.47 CFS	9,113 CU. FT.	
25 YR DIFFERENCE	-0.01 CFS	+2,245 CU. FT.	
50 YR PRE-DEV	2.91 CFS	8,185 CU. FT.	34% Increase or +20,294.5 GAL.
50 YR POST-DEV	2.93 CFS	10,898 CU. FT.	
50 YR DIFFERENCE	+0.02 CFS	+2,713 CU. FT.	
100 YR PRE-DEV	3.43 CFS	9,748 CU. FT.	33.5% Increase or +24,461.2 GAL.
100 YR POST-DEV	3.47 CFS	13,018 CU. FT.	
100 YR DIFFERENCE	+0.04 CFS	+3,278 CU. FT.	

Please include information within the narrative regarding the increased runoff volumes entering the closed drainage system, their impact on the downstream infrastructure, and a professional opinion of the adequacy of the downstream infrastructure to accept the increased volume and duration.

Response: The runoff volumes have been added to the stormwater narrative (see Table 2). It is our professional opinion that the small increase in runoff volume from the proposed site improvements will not create an adverse effect to the existing municipal drainage system.

- Detention System: The project proposes an underground HDPE pipe system to lower the discharge rate from the proposed development. The system located in the upstream portion of the project to lower the discharge rates from the new pavement has a low invert of the pipe system is 540.95' with 6" stone bed under. The existing grade is approximately 544'. The ESHWT is reported to be 24" to 32" below grade or somewhere around 541.2' to 542.0'. The pipe and stone bedding are therefore up to 1.55' below the ESHWT.

Please provide information regarding the buoyancy of the system and any required anti-flotation measures to be taken to ensure the stability of the system and the parking lot above it.

Response: Buoyancy calculations have been performed and added to the Stormwater Report (see Appendix F).

10. Department of Public Works Comments (Water/Sewer)

- Allocation: The applicant shall complete an application for allocation (attached). This application shall include all pertinent site plans, detail sheets, and the manufacturer's specifications for the vehicle wash used to determine the flow rate.

Response: Per our discussions with the DPW, it is our understanding that the application for allocation can be submitted as part of the Building Permit Application process. The reclamation system will be designed with the car wash equipment.

- Reclaim Tanks: The site plans indicate the use of reclaim tanks to reduce water usage.

Please provide details and a description within the application for allocation.

Response: We are working with the vendor to provide information on some of their reclamation equipment. Per the vendor, it is anticipated that approximately 35% of the water used within the car wash will be reclaimed.

- Oil Water Separator: The site plan indicates the installation of a 1,500-gallon oil/water separator tank with two access ports.

Please include as an inspection/sampling port on the outside of the tank, a detail, sizing calculations, and a maintenance description/schedule within the application for allocation.

Response: The Oil/Water Separator will be sized with the reclamation design. A cleanout with a riser to grade is provided at the effluent end of the tank which can be used for sampling.

- Sewer Details: Please include a detail sheet for all sewer details.

Response: Please see responses above.

- Sewer Connection: The plan proposes to use an unutilized sewer stub.

Please include a note requiring the engineer to inspect the line prior to use and make necessary improvements such as slip lining if required.

Response: A note has been added to the Utility Notes on Sheet 2.

- Water Connection: The project proposes to connect a 2" water service to the private 6" water service serving the former bus garage at 44 Sykes Mountain Avenue.

Please confirm that the project has the legal right to connect to this line with a deeded easement. If it does not have one, please provide evidence that an easement and maintenance agreement can be obtained. A zoning permit should be subject to one being recorded.

Response: The existing deeds for Lot 44-38 & 44-41 include rights for the existing utilities between the properties.

- Connection to Systems: Prior to connecting to the systems the owner/contractor must apply for connection and pay a connection fee determined by the size and length of services, and the cost of the meter if purchased through the town. This process also includes questionnaires related to meter sizing.

backflow prevention, and fire suppression systems that are typically answered by the mechanical engineer.

Response: This information has been conveyed to the developer.

11. Please acknowledge that you understand the following:

Before you commence construction, you need to schedule a preconstruction meeting with the Department of Public Works (DPW). You need to contact the DPW at least two weeks before you want to hold this meeting. If this meeting results in any revisions to the approved plans, you must contact me to discuss amending your permit. Please confirm your understanding.

Response: A note has been added under General Notes on sheet 2 regarding the pre-construction meeting.

12. Please confirm that you are proposing that the car wash will be open 6AM-8PM seven days and week and that the vacuums will be operational 24/7.

Response: This is correct.

13. Are you proposing to relocate the existing EV charging stations?

Response: The applicant proposes to relocate the two EV charging stations to the adjacent retail motor fuel outlet.

14. Please provide details regarding the proposed canopies over the vacuums.

Response: The vacuum/vacuum spaces will not have canopies.

15. Does the photometric plan take into consideration the proposed tree line and landscaping?

Response: No, the photometric plan does not take into account existing or proposed trees/landscaping or fencing; therefore, lighting levels shown at property lines are conservative.

16. Please confirm that the proposed lights conform with section 260-31 E of the Hartford Zoning Regulations which states:

Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings. Searchlights are not permitted.

Response: The light fixtures have been proposed to prevent light trespass onto the residential neighbor and are dark sky approved. No flood lights or searchlights are proposed.

17. Please acknowledge that you understand that lighting must not create excessive off-site or sky glow and if the Zoning Administrator determines that lighting does not meet this condition, you will be required to comply.

Response: Dark sky approved fixtures are proposed and limit light trespass onto neighboring residential properties.

18. What will be done to ensure that the landscaping is maintained in a healthy condition?

Response: Summit Distributing currently hires a property maintenance company to maintain the landscaping on the adjacent retail motor fuel outlet lot. The same company will be maintained for the car wash lot.

19. Please outline how the proposed landscaping meets the following sections of the Zoning Regulations:
Section 260-24 (8) (b)

The site shall be designed and landscaped to minimize negative visual impacts and maximize safety. Plantings may be required for this purpose, both within the lot and between it and any public road or

adjacent property. Plants shall not be invasive to Vermont, shall be selected for their ability to survive under special conditions found in a parking lot, and shall be protected from damage by vehicles and maintenance equipment, including snow removal and storage.

Response: Plantings are non-invasive and selected for parking lot conditions. They have been laid out in a manner so as to minimize any damage from vehicles or maintenance equipment.

Section 260-27

B. Plantings. The following provisions shall apply to the planting element of all landscape plans submitted for site development plan approval:

(1) Plant materials included in landscape plans may be trees, shrubs, lawns, flower gardens, ground covers, cropland, pasture, meadows, wetlands and forests.

(2) Natural cover shall be retained on a site to the extent possible and reasonable. Site clearing shall be kept to the minimum required for the construction of buildings and improvements.

(3) Plantings included in landscape plans receiving site development plan approval shall be maintained in a healthy, growing condition. Where forest, cropland and "natural" areas are included, provision shall be made for their ongoing maintenance.

(4) The choice and placement of plantings in parking areas shall take into account the special hazards of salt, vehicles and maintenance equipment, and include provision for adequate and safe snow removal.

(5) Any landscape plan submitted for site development plan approval shall show the locations and types of plants to be removed as well as the species, sizes, quantities and locations of all new plants to be installed. Additional information may be required by the Planning Commission under the provisions of § 260-45 below.

Response: A combination of trees, shrubs, perennials and lawn have been provided while maintaining a significant portion of the existing rear residential buffer. Plant material has been for parking lot conditions and they have been laid out in a manner so as to minimize any damage from vehicles, maintenance equipment or snow storage. Plant material to be removed has been shown on the Demolition Plan.

Section 260-45 C (3)

Adequacy of landscaping, screening, and setbacks in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

Response: A significant portion of the existing rear residential buffer has been maintained with proposed evergreen trees for additional screening. Trees along the street and the east property line have been added for screening.

20. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states:

C. Grading and drainage. The following provisions shall apply to any changes which affect drainage of water to or from a property:

(1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.

Response: Granite curbing is proposed throughout the site to direct runoff to a series of catch basins that ultimately drains to the existing municipal drainage network. Per the Stormwater Report, there is no increase in runoff to existing design points.

(2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.

Response: As previously mentioned, there is no increase in runoff to existing design points.

(3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

Response: As mentioned above, granite curbing is proposed throughout the site to direct runoff to a series of catch basins that ultimately drains to the existing municipal drainage network. There will be no damage to other properties or any erosion of topsoil.

21. Please acknowledge that during construction of the proposed project erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.

Response: There is a note on the plan covering this requirement.

22. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to submit:

- Written verification from a Professional Engineer licensed by the State of Vermont certifying that the project was constructed in compliance with the approved plans and Findings of Fact.
- Written verification from the DPW confirming that the water, sewer, and hydrants have been inspected and approved.
- Written verification from the DPW confirming that they have received acceptable record drawings.
- An electronic copy of the recorded drawings.
- A copy of the Energy Code Certificate as recorded in Hartford's Land Records.

Please acknowledge that you understand these requirements.

Response: The applicant is aware of these conditions.

23. To avoid a separate application fee, you should consider submitting a sign permit application for any proposed signage in conjunction with applying for a zoning permit to finalize the Planning Commission/Zoning Board of Adjustment decisions.

You will be required to submit a photograph of the signs (as required by the Hartford Sign Ordinance) upon installation. Please acknowledge that you understand this requirement.

Response: Signage will be applied for by the signage company.

24. Please acknowledge that you understand that construction of the project must comply with Section 260-31 B of the Hartford Zoning Regulations, which states:

Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.

Response: A note has been added to Sheet 2 of the Site Plan set under General Notes.

25. Please acknowledge that you understand that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.

Response: A note has been added to Sheet 2 of the Site Plan set under General Notes; however, the lot is narrow and we do ask for permission to stockpile construction material closer to Lot 44-38 as it is owned by the applicant. We believe this arrangement would meet the intent of the requirement.

26. The Hartford Zoning Regulations provide that "Construction trailers may be used at construction sites for office and laboratory use on the condition that they are placed a minimum of ten feet from any property line, are used for a project with a valid zoning permit and are removed before a certificate of occupancy is requested. No construction trailer may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any construction trailer found to obstruct sight distance will be required to be relocated immediately."

Please acknowledge that you understand these requirements.

Response: A note has been added to Sheet 2 of the Site Plan set under General Notes.

27. Before construction commences, you will need to submit the attached form to Jack Hedges at the Fire Department to obtain an address for the property. Please acknowledge your understanding.

Response: The application will be submitted as part of the building permit application process.

28. Please email me a copy of:

- Application form
- Project Narrative

- Trip Generation and Site Access Study (revised if necessary, based on staff comments)
- Response to this memo
- Revised plan set

29. Please submit 15 copies of the following, revised as necessary:

- Application form
- Project Narrative
- Trip Generation and Site Access Study (revised based on staff comments if necessary)
- Response to this memo
- Revised plan set (please staple and fold the plan sets)

If you have any questions or need additional information, please feel free to contact myself by phone at 603-374-7906 or by email to nduquette@gpinet.com. We look forward to your response.

Sincerely,

GREENMAN-PEDERSEN, INC.

Nicole Duquette

Nicole Duquette, P.E.
Project Manager

44 Stiles Road, Salem, NH 03079

enclosure(s)

March 29, 2024

Mr. Tom Frawley
Summit Distributing
240 Mechanic Street
Lebanon, NH 03766

SUBJECT: White River Junction Car Wash
Environmental Sound Study

Dear Mr. Frawley,

As requested, Cavanaugh Tocci has completed a study of environmental sound produced by the proposed car wash located at 18 Sykes Mountain Avenue in White River Junction, VT. This report discusses applicable noise regulations and presents our sound impact assessment. Appendix A presents a glossary of acoustical terminology used in this report.

Noise Criteria

White River Junction is an unincorporated village in the town of Hartford, VT. The Town of Hartford Town Code contains noise limits that are pertinent to sound produced by this project, as listed below.

Hartford Town Code¹

Chapter 110 Noise

§ 110-5 Residential and other sensitive use areas.

A. In addition to the prohibitions set forth in § 110-6 below, it shall be unlawful for any person at any location to create any sound or to allow the creation of any sound on any property owned, leased, occupied or otherwise controlled by such person which causes the exterior sound level when measured at the property line of any affected single- or multiple-family residence, school, hospital, church, rest home, cemetery, public library or other sensitive use to exceed the sound level standards as set forth in Table I below:

Table I
Sound Level Standards
(for fixed sound sources)

Sound Level Description	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Hourly Leq, dB	50	45
Maximum Level, dB	70	65

¹ <https://www.hartford-vt.org/DocumentCenter/View/9335/Town-Code-PDF>

- (1) In the event the measured ambient sound level exceeds the applicable sound level standard identified in Table I, the sound level standard (the standard against which violations are measured) shall be adjusted so as to equal the ambient sound level plus three dB.
- (2) Each of the sound level standards specified in Table I shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be at a lower level than the ambient sound level plus three dB
- (3) If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table I.

§ 110-6 Noise disturbances.

A. In addition to and notwithstanding any other provisions of this chapter, it is unlawful for any person to willfully make or continue to cause or allow to be made or continued any loud, unnecessary, excessive or offensive noise or unusual sound which unreasonably disturbs the peace and quiet of any residential or other sensitive use or which causes discomfort or annoyance to any reasonable person of a normal sensitivity in the area.

B. In determining whether a violation of the provisions of this section exists, the enforcement officer may consider any of the following:

- (1) The volume and intensity of the sound.
- (2) The vibration intensity of the sound.
- (3) Whether the nature of the sound is usual or unusual.
- (4) Whether the origin of the sound is natural or unnatural.
- (5) The volume and intensity of the background sound, if any.
- (6) The proximity of the sound to residential sleeping facilities.
- (7) The nature and zoning of the area within which the sound is being produced.
- (8) The density of the inhabitation of the area within which the sound is being produced.
- (9) The time of day or night the sound occurs.
- (10) The duration of the sound.
- (11) Whether the sound is recurrent, intermittent or constant.

The proposed car wash will operate during daytime hours only (7 AM to 10 PM) and is subject to the daytime limits in Table I of the Hartford Town Code at nearest residential properties. Sound produced by the car wash is limited to an hourly Leq of 50 dBA and a maximum level of 70 dBA at residential property lines.

Project Sound Analysis

Facility related sound impacts that are associated with equipment at the proposed Project have been calculated using CadnaA environmental sound modeling software (Version 2023 MR2 DataKustic GmbH). The CadnaA sound modeling software uses algorithms and procedures described in International Standard ISO 9613-2:1996 “Acoustics- Attenuation of sound during propagation outdoors – Part 2: General method of calculation”. This standard and its associated methodology are the most universally accepted approach for environmental sound modeling of industrial and transit sound sources. The methodology described in this standard provides estimates of A-weighted and octave band sound levels for meteorological conditions that are favorable for the propagation of sound (downwind with a wind speed of 1-5 meters/sec). This methodology is also valid for sound propagation under well-developed moderate ground-based temperature profile inversions, which commonly occur on clear calm nights.

The analysis is based on source sound emission data derived from manufacturer provided sound data and measurements from previous car wash projects. Manufacturer provided sound data information is presented in Appendix B.

Table 1 lists the stationary car wash equipment sound sources that were included in the acoustic model.

Table 1 – Car Wash Equipment Sound Sources

Item	Quantity	Comments
PECO Dryer Blowers	8	Blowers Include acoustically lined cylindrical silencer covers attached to the air intake-side of the blowers
High Pressure Wash Equipment	-	High pressure wash system includes: Sprayers, washers and underbody wash
Vacuum Vac Systems Autovac Industrial	2	There are two central vac turbines located in enclosures on opposite ends of the site. The units modeled were 20 HP with VFD.

Figure 1 presents the results of acoustic modeling of stationary car wash equipment sound sources at the nearest residential property line locations (PL1-PL3) and residential receptors (R1-R6). The analysis includes an 8-foot high fence along the east and north sides of the site as shown in Figure 1. Table 2 below provides a summary of the results along with appropriate limits from Hartford Town Code noise ordinance.

Table 2 – Estimate of Rooftop Mechanical Equipment Sound Levels (dBA)

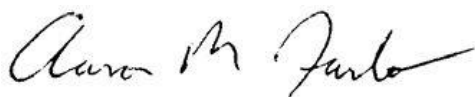
Receptor Location	Town of Hartford Town Code Daytime (7AM-10PM) Noise Limit	Estimated Hourly Leq Sound Level (dBA)	Estimated Maximum Sound Level (dBA)
PL1	Hourly Leq – 50 dBA Maximum Level – 70 dBA	44	50
PL2		40	46
PL3		41	46
R1		48	54
R2		46	51
R3		41	47
R4		43	48
R5		41	46
R6		44	50

Conclusion

Based on our review, it is our opinion that sound produced by proposed equipment associated with the car wash at 18 Sykes Mountain Avenue in White River Junction, VT will comply with the Town of Hartford Town Code Noise Limits.

Please do not hesitate to contact us with any questions.

Sincerely,
CAVANAUGH TOCCI



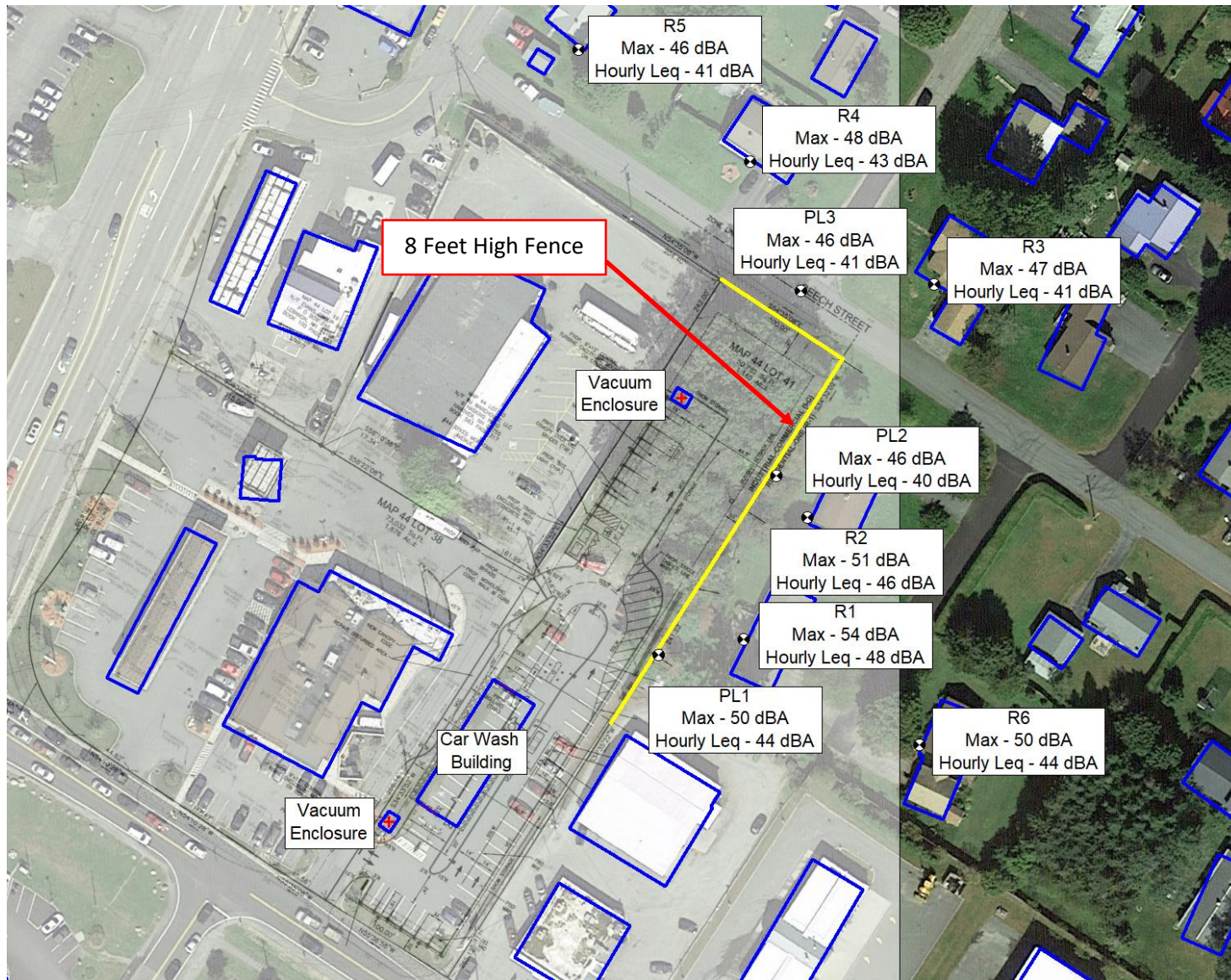
Aaron M. Farbo, Principal Consultant

afarbo@cavtocchi.com

24063/White River Junction Car Wash Sound Study Report.docx

FIGURES





Aerial Photograph Indicating Car Wash Building, Vacuum Enclosures and Sound Levels at Residential Property Lines and Receptor Locations

Figure 1



APPENDIX A

Sound Measurement Terminology

SOUND MEASUREMENT TERMINOLOGY

In order to quantify the amplitude, frequency, and temporal characteristics of sound, various acoustical descriptors are used. The following is an introduction to acoustic terminology that is used in this report.

Sound Level

Sound levels are typically quantified using a logarithmic decibel (dB) scale. The use of a logarithmic scale helps to compress the wide range of human sensitivity to sound amplitude into a scale that ranges from approximately 0 to 180 dB. Note however, that the use of the logarithmic scale prevents simple arithmetic operations when combining the cumulative impact of sources. For example, two sources of equal sound level operated simultaneously results in a combined sound level that is only 3 dB higher than if only one source was operated alone. An important feature of the human perception of continuous sound is that an increase or decrease in sound pressure level by 3 dB or less is barely perceptible, and an increase or decrease by 10 dB is perceived as a doubling or halving of noise level.

A-weighting

Generally, the sensitivity of human hearing is restricted to the frequency range of 20 Hz to 20,000 Hz. However, the human ear is most sensitive to sound in the 500 Hz to 5,000 Hz frequency range. Above and below this range, the ear becomes progressively less sensitive. To account for this feature of human hearing, sound level meters incorporate filtering of acoustic signals that corresponds to the varying sensitivity of the human ear to sound at different frequencies. This filtering is called A-weighting. Sound level measurements that are obtained using this filtering are referred to as A-weighted sound levels and are signified by the identifier, dBA. A-weighted sound levels are widely used for evaluating human exposure to environmental sounds. To help place A-weighted sound levels in perspective, Figure A-1 contains a scale showing typical sound levels for common interior and environmental sound sources.

Spectral Characteristics – Octave and 1/3 Octave Band Sound Levels

To characterize a sound, it is often necessary to evaluate the frequency distribution of the sound energy. As mentioned before, the frequencies of most interest where human exposure is concerned range between 20 Hz and 20,000 Hz. This frequency range is commonly divided into octave bands, where an octave band is a range of frequencies. Each octave band is referred to by its center frequency and has a bandwidth of one octave (a doubling of frequency). To cover the full range of human hearing, it is necessary to measure sound in 10 separate octave bands. Typically, the lowest frequency band measured has a center frequency of 31.5 Hz. The next frequency band has a center frequency of 63 Hz. This geometric series continues to the highest frequency band that has a center frequency of 16,000 Hz. A set of octave band sound levels to describe a particular sound is called an octave band spectrum. Covering the full range of hearing, an octave band spectrum would have 10 values, one for each band. Under certain circumstances, more frequency resolution in acoustical data is needed to identify the

presence of tonal sounds. A 1/3 octave band spectrum uses filters that divide each octave band into 3 separate frequency bands. Note that octave band and 1/3 octave band sound levels are not usually A-weighted, with their units being dB.

Environmental Noise Descriptors

Sound levels in the environment are continuously fluctuating and it is difficult to quantify these time-varying levels with single number descriptors. Statistical approaches, which use *percentile sound levels* and *equivalent sound levels*, are often used to quantify the temporal characteristics of environmental sound.

Percentile sound levels (L_n) are the A-weighted sound levels that are exceeded for specific percentages of time within a noise measurement interval. For example, if a measurement interval is one hour long, the 50th percentile sound level (L_{50}) is the A-weighted sound level that is exceeded for 30 minutes of that interval.

- L_{90} is the sound level in dBA exceeded 90 percent of the time during the measurement period. The 90th percentile sound level represents the nominally lowest level reached during the monitoring interval and is typically influenced by sound of relatively low level, but nearly constant duration, such as distant traffic or continuously operating industrial equipment. The L_{90} is often used in standards to quantify the existing background or residual sound level.
- L_{50} is the median sound level: the sound level in dBA exceeded 50 percent of the time during the measurement period.
- L_{10} is the sound level exceeded only 10 percent of the time. It is close to the maximum level observed during the measurement period. The L_{10} is sometimes called the intrusive sound level because it is caused by occasional louder noises like those from passing motor vehicles or aircraft.

By using percentile sound levels, it is possible to characterize the sound environment in terms of the steady-state background sound (L_{90}) and occasional transient sound (L_{10}).

The equivalent sound level (L_{eq}) is the energy average of the A weighted sound level for the measurement interval. Sounds of low level and long duration, as well as sounds of high level and short duration influence this sound level descriptor.

Noise levels at night generally produce greater annoyance than do the same levels which occur during the day. It is generally agreed that a given level of environmental noise during the day would appear to be 10 dBA louder at night – at least in terms of potential for causing community concern. The day night average sound level (L_{dn}) is a 24 hour average A-weighted sound level where a 10 dB “penalty” is applied to sound occurring between the hours of 10:00 p.m. and 7:00 a.m. The 10 dB penalty accounts for the heightened sensitivity of a community to noise occurring at night.

When a steady continuous sound is measured, the L_{10} , L_{50} , L_{90} and L_{eq} are all equal. For a constant sound level, such as from a power plant operating continuously for a 24-hour period, the L_{dn} is approximately 6 dBA higher than the directly measured sound level.

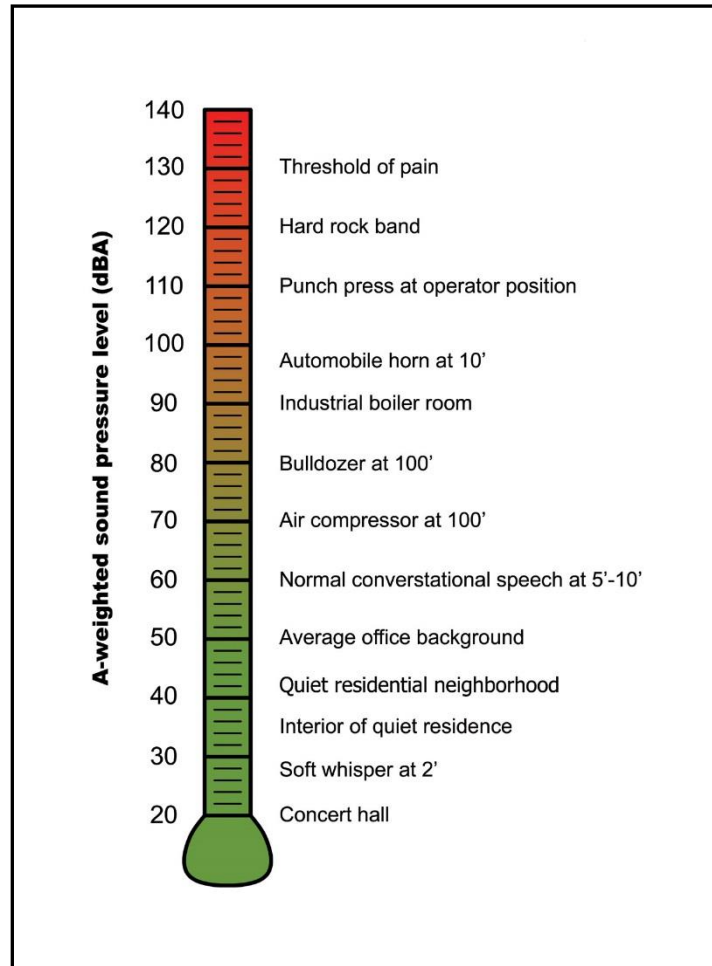


Figure A-1
Typical Sound Levels for Common Interior and Environmental Source



APPENDIX B

Manufacturer Sound Data



EQUIPMENT DECIBEL CERTIFICATION

This is to certify that the following AutoVAC equipment was measured with the following decibel levels of noise emission (+/- 2dB) in accordance with ISO 2151:2004. These ratings are taken at 15 feet from the machine with no background noise or outside interference in a 50 x 50ft interior room.

VACUUM PRODUCER					
HOESPPOWER	STAGE	START/RUN dB WITH VFD	START dB NO VFD	SERIAL NO	PASS/FAIL
10	3	64	84		
15	4	66	88		
20	5	66	88		
25	6	72	92		
30	7	74	92		
40	8	76	95		

BLOWER				
HOESPPOWER	START/RUN dB WITH VFD	START dB NO VFD	SERIAL NO	PASS/FAIL
15	72	85		

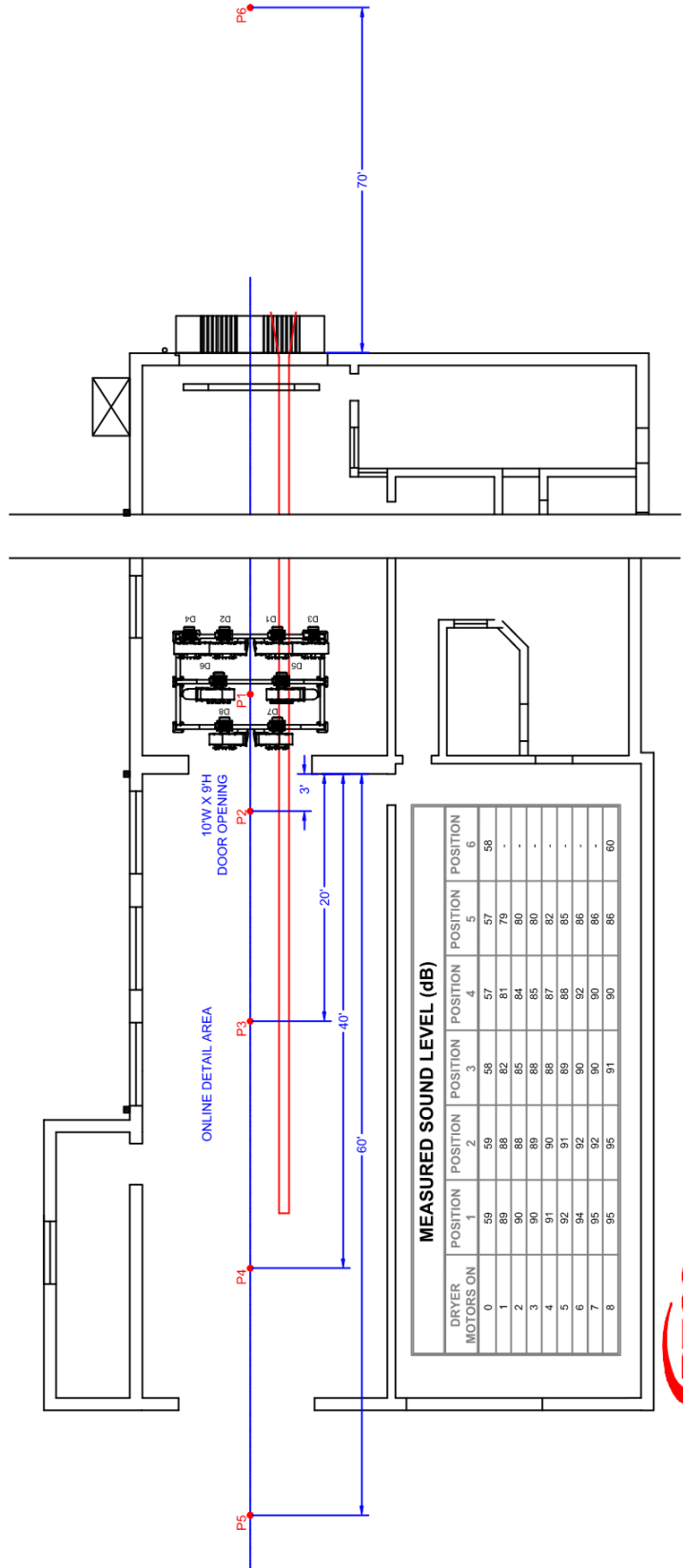
Equipment Used to measure decibel levels

EQUIPMENT	MANUFACTURER	MODEL NO	SERIAL NO
Sound Level Meter	Extech Instruments	407730	9848853

Certified By: _____ Date: _____

This certificate does not claim product approval or endorsement by NVLAP, NIST or any agency of the Federal Government. If you have any further questions, please contact AutoVAC at our toll free number 888-628-8682.







Project Description

This report presents the results of a second round of acoustical tests performed on Sonny's Car Wash dryer blowers and client-designed and installed prototype silencers. The first round of acoustical tests was described in a previous report, *Sonny's Car Wash Dryer Blowers Noise Assessment*, dated 2/16/18.

In this round of tests, the silencers were installed on the dryer blowers at Prestige Car Wash located at 4921 N. University Drive, Lauderhill, Florida. As shown in **Photos 1 and 2**, Prestige is an active car wash in commercial operation. The noise tests were performed after operating hours on 10/3/18 to minimize noise sources in the car wash not attributable to the blowers.



Photo 1. Prestige Car Wash Entry Portal



Photo 2. Prestige Car Wash Exit Portal

Noise Measurement Procedure

The procedure followed in this second round of acoustical tests involved performing calibrated A-weighted broadband and third-octave band noise measurements both with and without the prototype silencers attached to the dryer blowers. As shown in **Figure 1**, noise measurements were performed at nine measurement positions (M0 thru M8) inside, outside and in the vicinity of Prestige Car Wash. The nine positions can be described as follows:



Figure 1. Noise Measurement Positions

- M0 - Inside tunnel towards exit
- M1 - Tunnel exit portal (east)
- M2 - Outside tunnel in direct line from exit
- M3 - Outside tunnel in direct line from exit
- M4 - Tunnel entrance portal (west)
- M5 - Building facade property to south
- M6 - Northern property line
- M7 - Outside tunnel in line from entrance
- M8 - Inside office/waiting room area

The noise measurement instrumentation consisted of a Svantek Model 971 Sound Level Analyzer using a Svantek 7052E Precision Microphone covered with a 3½-inch windscreen. The SVAN-971 was programmed to measure and store L_{eq} noise data in 1-minute samples using an RMS 'slow' time response. The SVAN-971 computed broadband sound levels in unweighted (dBZ) and A-weighted (dBA) decibels, and computed the unweighted third-octave band L_{eq} levels from 20 Hz to 20 kHz. The noise measurement system was calibrated with a Larson Davis Model 150 Calibrator, and complies with ANSI Standard S1.4 for Type 1 quality and accuracy.

Data reduction and post-processing consisted of comparing the broadband A-weighted and third-octave band results measured with and without the silencers at each measurement position. The noise reduction (dBNR) is the difference in decibels between the two measured noise levels. Attempts were made to maintain consistency with as many variables as possible between the two noise measurements; however, background traffic noise did contribute slightly to some of the outdoor readings.

As shown in **Photo 3**, the dryer blowers are typical backward centrifugal air fans. The impellers spin at 3,600 RPM, and each fan has one impeller with 11 blades. Barring other effects, this would lead to expected higher noise emission levels in the 60 Hz, 120 Hz, 180 Hz, 630 Hz and 1,250 Hz third-octave frequency bands. As shown in **Photo 4**, the prototype silencers consisted of acoustically lined cylindrical covers attached to the air intake-side of the blowers. No noise control modifications were performed on the air exhaust-side of the blowers.



Photo 3. Dryer Blowers Without Silencers

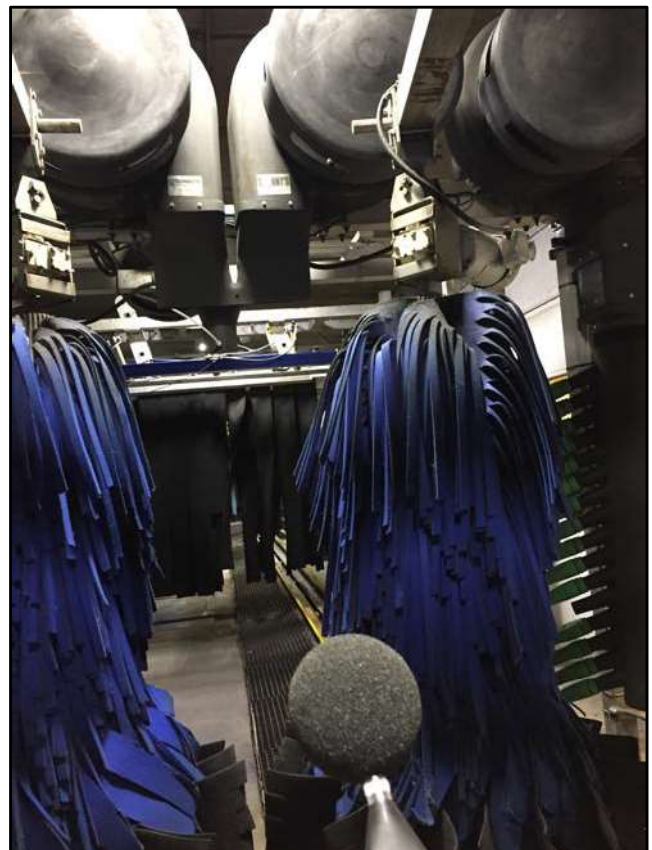


Photo 2. Dryer Blowers With Silencers



Noise Results and Findings

The results of the second round of acoustical tests of the dryer blower prototype silencers can be seen in **Table 1**. The magnitude of noise reduction attributable to the prototype silencers ranged from 1.1 to 4.5 dBNR depending on measurement position. The positions yielding the most noise reduction were those in line with the tunnel exit side of the blowers. The least noise reduction was found in line with the tunnel entrance side. This asymmetry could be attributable to the acoustical directivity of the blowers.

Figures 2 thru 10 show the A-weighted broadband and third-octave band results with and without the silencers for each measurement position. The noise reduction is the difference between the two plotted curves.

All results presented in the table and figures are shown in A-weighted decibels (dBA) so that visual results would correlate better with how humans would perceive the given sounds over the full audio spectrum. Presenting the results in A-weighted decibels also allows for easier identification of the louder frequency bands that would benefit the most from subsequent noise control efforts.

**Table 1. Sonny's Dryer Blower Silencers
Acoustical Test Results (Round 2)**

Sonny's Car Wash Blower and Silencer Noise Measurement Tests 10/3/18						
Prestige Car Wash - 4921 N. University Drive, Lauderhill, FL 33351						
Site No.	Distance to Blowers* (feet)	Noise Measurement Site Location	Traffic Noise Influence**	Noise Level No Silencers dBA Leq	Noise Level With Silencers dBA Leq	Approx. Noise Reduction dBNR
M0	8	Inside tunnel near blowers towards exit	No	99.7	96.9	2.8
M1	22	Tunnel exit portal (east)	No	96.3	92.8	3.6
M2	51	Outside tunnel in direct line from exit	Slightly	84.8	80.3	4.5
M3	95	Outside tunnel in direct line from exit	Yes	78.4	74.1	4.3
M4	68	Tunnel entrance portal (west)	No	88.3	87.1	1.1
M5	110	Building facade adjacent property to south	Yes	65.7	63.2	2.5
M6	83	Northern property line	Yes	69.7	66.7	3.1
M7	99	Outside tunnel in direct line from entrance	No	77.7	76.5	1.2
M8	10	Inside office/waiting room area	No	67.9	66.1	1.7
*Blowers are located approximately 22 feet inside the car wash tunnel exit and approximately 68 feet inside the tunnel entrance.						
**Traffic noise from N. University Drive NB & SB movements did have an impact on some noise measurements that were farther away from the blower noise.						

§ 90-8 Independent contracts.

Nothing herein shall be construed to impair the ability of the Town of Hartford, acting by and through its Selectboard, convened as Water and Sewer Commissioners, to enter into independent contracts for the provision, extension or maintenance of municipal water and sewer services, systems, and improvements; provided, however, that a reasonable proportion of the cost thereof attributable to and paid by any person otherwise subject to the impact fee imposed by § 90-1 hereof shall be deducted from such impact fee.

§ 90-9 Issuance of zoning permits.

No zoning permit shall be issued until full payment of, or adequate security for, the impact fee imposed by § 90-1 hereof shall be received in full by the Town Treasurer after computation by the Zoning Administrative Officer; provided, however, that such impact fee imposed on development deemed to be affordable housing within the meaning of 10 V.S.A. Chapter 15 may be paid in installments over a period of time to be determined by the Selectboard. Appeals from the decision of the Zoning Administrative Officer shall be made within 30 days to the Selectboard.

§ 90-10 Construal of provisions.

- A. This chapter shall not be construed to repeal, modify or amend any existing ordinances of the Town of Hartford
- B. Nothing in this chapter shall be construed as limiting the right of the Planning Commission or Zoning Board of Adjustment, when approving applications before them, from attaching such reasonable conditions and safeguards as they may deem necessary to implement the purposes of Title 24, Chapter 117.

§ 90-11 Violations and penalties.

Any person commencing or undertaking development in the Town of Hartford without first complying with the provisions of this chapter, including the payment of any impact fee imposed hereunder, shall be subject to a penalty as provided in § 1-16 of the Town Code for each day a violation of this chapter continues in existence. In addition to the penalties provided for herein, the Town shall have the power to enjoin and abate any violations of this chapter.

Attachments:

090a App A Impact Fee

Chapter 110

NOISE

[HISTORY: Adopted by the Selectboard of the Town of Hartford 6-21-2001. Amendments noted where applicable.]

GENERAL REFERENCES

Loud noises by itinerant vendors — See Ch. 238.

Zoning — See Ch. 260.

§ 110-1 Purpose and authority.

- A. It is hereby stated to be the policy of the Town of Hartford in the appropriate and permissible exercise of the police power of the municipality to prohibit unnecessary, excessive and annoying sound levels from all sources except as qualified below. At certain levels, such sounds become noise pollution and are detrimental to the health, safety and welfare of the citizens of the Town of Hartford and, to protect the public interest, such noise is forbidden and sanctioned by this chapter. This

chapter is not intended to take the place of or preempt any other municipal ordinance of the Town of Hartford which may state more restrictive performance or other standards for noise sources within the Town of Hartford, nor is it intended to have any effect on the invocation or enforcement of any state law, rule or regulation regulating noise or sound levels or sources.

- B. This chapter is adopted under the authority of 24 V.S.A. § 2291(14) and 24 V.S.A. Chapter 59 (civil enforcement).

§ 110-2 Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

AMBIENT SOUND LEVEL

The composite of normal or existing sound from all sources measured at a given location for a specified time of the day or night. The ambient sound level shall be measured with a precision sound level meter, using slow response and A-weighting. The minimum sound level shall be determined with the sound source at issue silenced.

A-WEIGHTING

A frequency response adjustment of a sound level meter that conditions the output signal to approximate human response.

C-WEIGHTING

The weighting network which best represents the response of the human ear to higher intensity low-frequency noise.

DECIBEL

A unit for measuring the relative loudness of sounds equal approximately to the smallest degree of difference of loudness ordinarily detectable by the human ear whose range includes approximately 130 decibels on a scale beginning with one with the faintest audible sound.

EQUIVALENT HOURLY SOUND LEVEL (LEQ)

The sound level corresponding to a steady state A-weighted sound level containing the same total energy as the actual time-varying sound level over a one-hour period.

FIXED SOUND SOURCE

A device or machine which creates sounds while fixed or stationary, including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment. It may also include motor vehicles operated on private property.

INTRUDING SOUND LEVEL

The sound level created, caused, maintained or originating from an alleged offensive source, measured in decibels, at a specified location while the alleged offensive source of sound is operating.

NOISE

Any loud, discordant or disagreeable sound or sounds.

PRECISION SOUND LEVEL METER

A device for measuring sound level and decibel units within the performance specifications in the American National Standards Institute (ANSI) Standard Number S1.4, "Specifications for Sound Level Meters."

PROPERTY LINE OR PLANE

A vertical plane including the property line which determines the property boundaries in space. When the term "property line" is used in this chapter, it refers to property plane.

PUBLIC PROPERTY

Any property owned by a public agency or instrumentality and held open to the public, including but not limited to parks, streets, sidewalks and alleys.

RESIDENTIAL PROPERTY

A parcel of real property which is zoned for residential use.

SCHOOL

Institutions conducting regular academic instruction at preschool, kindergarten, elementary, secondary, or collegiate levels.

SENSITIVE USE

A land use in which there is a reasonable degree of sensitivity as to noise. Such uses include single-family and multifamily residential uses, schools, hospitals, churches, rest homes, cemeteries, public libraries and other sensitive uses as may be determined by the individual enforcement officer at the time of complaint or enforcement.

SIMPLE TONE NOISE

Any sound which is distinctly audible as a single pitch (frequency) or set of pitches. It includes sound consisting of speech and music.

SOUND LEVEL

The sound pressure level and decibels as measured with a sound level meter using the A-weighting network. The unit of measurement is referred to herein as "dBA."

SOUND LEVEL METER

An instrument meeting American National Standard Institute (ANSI) Standard Number S1.4A-1985 for Type I or Type II sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

§ 110-3 Exemptions.

- A. Noise or sound emanating from the following sources and activities are exempt from the provisions of this chapter:
- (1) Sounds sources typically associated with residential uses: children at play (but not including use by children of sound-amplification devices of any description and not including children using any power accessory, toy or vehicle of any description), air-conditioning and similar equipment, but specifically not including barking dogs.
 - (2) Sound sources associated with usual and customary outdoor property maintenance (e.g., lawnmowers, edgers, blowers, pool pumps, power tools, chain saws, or other such equipment, etc.), provided that such activities do not take place between the hours of 9:00 p.m. and 7:00 a.m. There is no time limitation with regard to snow removal equipment.
 - (3) Safety, warning and alarm devices, including house and car alarms, and other warning devices which are designed to protect the health, safety and welfare of the citizens of the Town of Hartford in general or the occupant of a property in particular.

- (4) The normal operation of public and private schools typically consisting of classes and other school sponsored activities.
 - (5) Sound sources associated with outside activities on public property (e.g., athletic events, sporting events, fairs, entertainment events) not taking place between the hours of 10:00 p.m. and 7:00 a.m., provided that any amplified sound does not exceed 80 dBA at the property line of the property on which such event or activity is being held except as permitted.
 - (6) Maintenance of public facilities, including but not limited to parks, landscape corridors, golf courses, swimming pools and other recreational facilities.
 - (7) Governmental operations required to provide services, including but not limited to highway repair and maintenance, snow removal and municipal recreational facilities operation and maintenance, including use of controlled amplified sound equipment such as, for example, and not by way of limitation, a public address system at a municipal swimming pool).
 - (8) Governmental operations necessary to provide essential services, including but not limited to wastewater treatment plants, pumping and lift stations, water treatment plants, electric substations, fire stations, police stations and other municipal buildings.
 - (9) Emergencies involving the execution of the duties of duly authorized governmental personnel, including but not limited to sworn peace officers, emergency personnel, Public Works Director and those working under his or her supervision and the operation of emergency response vehicles and equipment.
 - (10) Railroad safety devices used in emergencies or as required for the safe operation of rail traffic.
 - (11) Commercial activity designed to maximize efficiency while minimizing impact on traffic or other concerns (e.g., trash or recycling collection, deliveries, etc.).
 - (12) Agricultural activity on or around lands used for commercial production.
- B. Earth-moving and hauling, rock drilling or crushing, jackhammer and similarly excessively loud equipment shall not be operated on Sundays, or between the hours of 5:30 p.m. and 7:00 a.m., except in emergency situations. Notwithstanding the foregoing, all construction equipment used in the course of any such exempt activity shall be fitted with the original or equivalent of factory-installed muffling devices, with all construction equipment to be maintained in good working order except as permitted.

§ 110-4 Sound measurement methodology.

- A. Subject to the alternative language in § **110-6** below, compliance with this chapter may be determined using methodology described in this section. Sound measurement may be made with a sound level meter using the A-weighting network at slow meter response, except that fast meter response shall be used for impulsive-type sounds. Sound measurement for amplified sound (low-frequency sound) shall use the methodology generally described in § **110-5** below.
- B. Calibration of the measurement equipment utilizing an acoustical calibrator meeting American National Standards Institute (ANSI) standards shall be performed immediately prior to recording any sound data.
- C. Exterior sound levels shall be measured at the property line or at any location within the property of the affected residence, school, hospital, church, public library or other sensitive-use facility. Sound measurement shall be taken in such a manner and location so that it can be determined whether sound levels are exceeded at the property line. Where practical, the microphone of the sound level meter shall be positioned three to five feet above the ground and away from reflective services. The actual location of the sound measurements shall be at the discretion of the municipal officer, agent or

employee performing the sound sampling.

- D. It shall be a violation of this chapter for any person to refuse to cooperate with, or to obstruct, any municipal officer, agent or employee in determining the ambient sound level of a commercial, noncommercial, private or public sound source. Such cooperation shall include, but is not limited to, the shutting off or quieting of any sound source so that an ambient sound level can be measured.

§ 110-5 Residential and other sensitive use areas.

- A. In addition to the prohibitions set forth in § 110-6 below, it shall be unlawful for any person at any location to create any sound or to allow the creation of any sound on any property owned, leased, occupied or otherwise controlled by such person which causes the exterior sound level when measured at the property line of any affected single- or multiple-family residence, school, hospital, church, rest home, cemetery, public library or other sensitive use to exceed the sound level standards as set forth in Table I below:

Table I		
Sound Level Standards		
(for fixed sound sources)		
Sound Level Description	Daytime	Nighttime
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Hourly Leq, dB	50	45
Maximum Level, dB	70	65

- (1) In the event the measured ambient sound level exceeds the applicable sound level standard identified in Table I, the sound level standard (the standard against which violations are measured) shall be adjusted so as to equal the ambient sound level plus three dB.
- (2) Each of the sound level standards specified in Table I shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be at a lower level than the ambient sound level plus three dB
- (3) If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table I.
- B. In addition to the sound level standards established in Table I, it shall be unlawful for any person at any location to produce any amplified music or sound which causes the exterior sound level when measured at the property line of any affected single- or multiple-family residence, school, hospital, church, rest home, cemetery, public library or other sensitive use to exceed the sound level standards set forth in Table II below:

Table II

Sound Level Standards

(for amplified sound sources)

Sound Level Description	Daytime	Nighttime
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Leq A-Weighting dBA	50	45
Leq C-Weighting dBC	75	70

- (1) The measurement shall be conducted with the sound meter level set to A-weighting and fast response. Fast response shall be used because the duration between low-frequency tones associated with amplified sound may be considerably less than one second (the average duration represented by the slow meter response). The fast meter response represents 1/8 second intervals.
- (2) If separation of low-frequency tones from the background ambient sound can be determined with the sound level meter on fast response (a clearly identifiable increase in ambient sound levels corresponding to the audible bass sounds), sound levels shall not exceed an Leq of 50 dBA daytime and 45 dBA nighttime for any one-minute period.
- (3) If separation of low-frequency tones cannot be determined with the sound level meter on A-weighting, the meter shall be switched to C-weighting to emphasize the low-frequency sound. If separation between low-frequency tones and ambient levels can be observed with the meter set to the C-weighting scale, the sound level from the low-frequency tone shall not exceed an Leq of 75 dBC daytime and 70 dBC nighttime for any one-minute period.
- (4) If existing background sound levels (ambient sound) are higher than standards identified in Table II above, then the maximum sound levels due to amplified music shall not exceed the background sound levels by more than three dB for A-weighted measurements and five dB for C-weighted measurements.

§ 110-6 Noise disturbances.

- A. In addition to and notwithstanding any other provisions of this chapter, it is unlawful for any person to willfully make or continue to cause or allow to be made or continued any loud, unnecessary, excessive or offensive noise or unusual sound which unreasonably disturbs the peace and quiet of any residential or other sensitive use or which causes discomfort or annoyance to any reasonable person of a normal sensitivity in the area.
- B. In determining whether a violation of the provisions of this section exists, the enforcement officer may consider any of the following:
 - (1) The volume and intensity of the sound.
 - (2) The vibration intensity of the sound.
 - (3) Whether the nature of the sound is usual or unusual.
 - (4) Whether the origin of the sound is natural or unnatural.
 - (5) The volume and intensity of the background sound, if any.
 - (6) The proximity of the sound to residential sleeping facilities.
 - (7) The nature and zoning of the area within which the sound is being produced.
 - (8) The density of the inhabitation of the area within which the sound is being produced.

- (9) The time of day or night the sound occurs.
- (10) The duration of the sound.
- (11) Whether the sound is recurrent, intermittent or constant.

C. Violations of this section are violations of this chapter and are enforceable as provided herein.

§ 110-7 Exceptions.

A. An exception may be requested from any section or provision of this chapter. Requests for exception shall be applied for on application forms to be provided by the Town Manager or the Zoning Administrative Officer or his or her designee. Exceptions for construction activities or special events shall conform to the criteria listed in Subsections **B** and **C** below, respectively. All other exception requests shall be evaluated against the criteria in Subsection **D** below.

B. Construction-related noise. If the applicant can show the Town Manager, Zoning Administrative Officer or his or her designee that, after investigation of available sound-suppression techniques for construction-related noise, immediate compliance with the requirements of this chapter would be impractical or unreasonable, due to the temporary nature or short duration of the activity for which an exception is sought, a permit to allow exception from this chapter may be issued. The approving authority must consider the following factors for construction-related exceptions, though the following list is not exclusive:

- (1) Conformance with the intent of this chapter.
- (2) Uses of existing property which are considered sensitive uses within the area affected by the sound for which the exception is sought.
- (3) Factors relating to the beginning and completing of the work or activity.
- (4) The time of day or night for which the exception is sought.
- (5) The duration of the activity.
- (6) The general public interest, welfare and safety.

C. Noise related to special events. If the applicant can show the Town Manager, Zoning Administrative Officer or his or her designee that the characteristics of a special event indicate that immediate compliance with this chapter would be impractical due to the type of event or unreasonable due to its temporary nature or short duration, a permit allowing exception may be issued. Special events factors for consideration shall include at least the following:

- (1) Conformance with the intent of this chapter.
- (2) Uses of existing property which are sensitive uses within the area affected by the sound for which the exception is sought.
- (3) Hardship to the applicant or community if not granting the exception.
- (4) The time of day or night for which the exception is sought.
- (5) The duration of the activity.
- (6) The general public interest, welfare and safety.

D. General. If the applicant can show the Town Manager, Zoning Administrative Officer or his or her

designee that the applicant's circumstances indicate that immediate compliance with this chapter would not result in a hazardous condition or nuisance, and strict compliance would be unreasonable due to the circumstances of the activity for which the exception is requested, a permit to allow exception from this chapter may be issued. Factors to be considered in all such general requests shall include at least the following:

- (1) Conformance with the intent of this chapter.
 - (2) Uses of existing property which are considered sensitive uses within the area affected by the sound produced.
 - (3) Age and useful life of the existing sound source.
 - (4) Hardship to the applicant or community if not granting the exception.
 - (5) The time of day or night for which the exception is sought.
 - (6) The duration of the activity.
 - (7) The general public interest, welfare and safety.
- E. Within 10 days of the receipt of any permit application, the Town Manager or Zoning Administrative Officer or his or her designee shall either approve or conditionally approve such request in whole or in part or deny the request. In the event the exception request is approved, conditions may be imposed which minimize the public detriment and may include restrictions on sound level, duration and operation hours and an improved method for achieving compliance with this chapter and time schedule therefor.
- F. If the Town Manager or Zoning Administrative Officer or his or her designee has approved an exception request, and therefore complaints are received related to the activity which was the subject of the exception, the Town Manager or Zoning Administrative Officer or his or her designee has authority to take the action deemed necessary to reduce the sound impacts which caused the complaint, which may include modification or revocation of the permit granting exception.
- G. Any person aggrieved with the decision on a request for a permit for exception under this chapter may appeal the decision of the Town Manager or Zoning Administrative Officer to the Selectboard by filing a written notice of appeal with the office of the Town Manager or Zoning Administrative Officer, as appropriate, with copy to the Chair of the Selectboard within 10 days of the decision to be appealed. The decision of the Selectboard shall be final, and shall be based on the considerations set forth in this section.

§ 110-8 Violations and penalties.

A violation of this chapter shall be subject the penalties prescribed in § 1-16 of the Town Code. Each day of violation shall constitute a separate violation of this chapter.

§ 110-9 No preemption of private remedy.

Nothing in this chapter shall be construed to limit or modify any remedy which may be available to any private person under existing common law or statute for abatement of nuisance, nor shall any enforcement process begun or completed by the Town of Hartford against any person be deemed or construed to exempt such person from imposition of liability resulting from pursuit of civil remedy by any other person.

March 1, 2024

NEX-2019181.01

Jo-Ann Ells
Zoning Administrator – Town of Hartford, Vermont
171 Bridge Street
White River Junction, VT 05001

SUBJECT: Response to Town Comments – 2/21/2024
Proposed Car Wash Development
18 Sykes Mountain Avenue – White River Junction, Vermont

Dear Ms. Ells:

Greenman-Pedersen, Inc. (GPI) has prepared this Response to Comments (RTC) letter to respond to the traffic comments provided in an email dated February 21, 2024 regarding the *Trip Generation and Site Access Letter* prepared for the proposed car wash development to be located at 18 Sykes Mountain Avenue. We have reviewed the comments and this letter has been prepared to summarize our responses to the comments.

Trip Generation and Site Access Letter Comments

Comment 1: The Study makes a recommendation regarding vegetation in order to maintain sight distance after development - consider as a condition of approval.

Response 1: No response required.

Comment 2: What is the specific time period for the PM Peak Hour?

Response 2: GPI provided trip generation estimates for the weekday PM peak hour period, and the Saturday midday peak hour period, respectively. Generally, the weekday PM peak hour period and Saturday midday peak hour period coincide with the adjacent street peak, where the weekday PM peak hour period is assumed to occur at some time between 4:00 and 6:00 PM, and the Saturday midday peak hour is assumed to occur at some time between 11:00 AM and 2:00 PM.

Comment 3: Typically, there are two Peak Periods. What is the second one and the specific time period?

Response 3: As noted in our previous response, it is assumed that the PM peak hour period will occur at some time between 4:00 and 6:00 PM, and the Saturday midday peak hour will occur at some time between 11:00 AM and 2:00 PM.

Comment 4: Show detailed data for Weekday and Saturday to conclude these are the peak periods.

Response 4: The most recent data published by VTrans¹ shows that the weekday PM peak hour on Sykes Mountain Road occurred between 4:15 and 5:15 PM, and the Saturday midday peak hour on Sykes Mountain Avenue occurred between 11:00 AM and 12:00 PM. Accordingly, it would be assumed that the respective peak hour trip generation estimates contained in our January 29, 2024 memorandum would coincide with these general timeframes for the respective weekday PM and Saturday midday peak hour periods.

Comment 5: Were there any background traffic counts in the vicinity of the access to the site that can be used to understand the impact of the additional traffic on Sykes Mountain Avenue and nearby intersections?

Response 5: Two VTrans count stations adjacent to the proposed site have been reviewed (count stations Y748 and 31408750-E). The most recent data collected by station Y748 is from 2012 and includes the only Saturday data available; station 31408750-E has most recent weekday data from 2021. Based on a review of these data, the respective peak hour traffic volumes on Sykes Mountain Avenue were 971 vehicles per hour (vph) during the weekday PM peak hour, and 770 vph during the Saturday midday peak hour.

As previously reported, the proposed car wash development is expected to generate 78 vehicle trips (39 entering and 39 exiting) during the weekday PM peak hour and 100 vehicle trips (50 entering and 50 exiting) during the Saturday midday peak hour. As previously reported, no reductions were taken for *pass-by* trips, the portion of site generated vehicle-trips already present on the adjacent roadway system that turn into the site on impulse, or as part of an overall trip elsewhere. Assuming a worst case scenario (that all trips are new, i.e., no *pass-by* reduction, and that all trips utilize the driveways on Sykes Mountain Avenue, i.e., no utilization of North Main Street), peak hour traffic volume increases of 78 vehicles (weekday PM hour) and 100 vehicles (Saturday midday peak hour), would equate to less than two trips per minute on Sykes Mountain Avenue. Traffic volume increases of this magnitude are expected to have a minimal impact on prevailing traffic operations in the area.

Comment 6: I recommend GPI provide summaries of the data presented to make it easier for the average person to follow the path and conclusions.

Response 6: We believe that the previously reported trip generation summaries along with the volumetric comparison to the most recent VTrans traffic counts available contained herein provide a sufficient basis for comparison of the relative impacts of the proposed development.

Comment 7: Is the developer anticipating providing car washing services for car dealerships on Sykes Mountain Avenue? If so, please have GPI provide detail on how this is reflected in the trip generation for the study over and above general public use.

Response 7: The Applicant has confirmed that no such agreements are in place, nor are any anticipated.

¹ VTrans Traffic Data Management System

Based on the information provided herein, it is expected that the proposed car wash facility will have no significant impact on prevailing traffic operations in the area. We hope this letter adequately addresses any outstanding traffic related matters. However, should you have any questions or require additional information throughout the review process, please feel free to contact me directly at (603) 766-5229 or bbollinger@gpinet.com.

Sincerely,

GREENMAN-PEDERSEN, INC.

A handwritten signature in blue ink, appearing to read "R. Bollinger", with a stylized flourish at the end.

Robert E. Bollinger
Traffic Engineering Department Head
116 S. River Road, Bldg. B, Suite 1
Bedford, NH 03110

Enclosure(s)

1. VTrans Peak Hour Traffic Data

cc: T. Frawley, Summit Distributing
N. Duquette, GPI
H. Monticup, GPI

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Volume Count Report

LOCATION INFO	
Location ID	31408750-E
Type	SPOT
Funct'l Class	5
Located On	SYKES MOUNTAIN AV
Loc On Alias	TH-10
Direction	2-WAY
County	WINDSOR
Community	HARTFORD
MPO ID	
HPMS ID	
Agency	Vermont AOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Thu 8/19/2021
End Date	Fri 8/20/2021
Start Time	12:00:00 AM
End Time	12:00:00 AM
Direction	2-WAY
Notes	
Station	
Study	
Speed Limit	
Description	
Sensor Type	
Source	TcdsBinToVol
Latitude,Longitude	

INTERVAL:15-MIN					
Time	15-min Interval				Hourly Count
	1st	2nd	3rd	4th	
 0:00-1:00	12	4	4	3	23
1:00-2:00	5	6	11	10	32
2:00-3:00	9	8	13	7	37
3:00-4:00	9	6	12	10	37
4:00-5:00	3	12	13	20	48
5:00-6:00	21	30	25	47	123
6:00-7:00	40	70	77	120	307
7:00-8:00	132	145	170	196	643
8:00-9:00	202	165	164	177	708
9:00-10:00	135	117	136	143	531
10:00-11:00	180	170	175	194	719
11:00-12:00	158	141	167	216	682
12:00-13:00	211	227	224	239	901
13:00-14:00	204	203	196	198	801
14:00-15:00	183	212	222	220	837
15:00-16:00	255	221	199	247	922
16:00-17:00	231	226	254	255	966
17:00-18:00	236	201	196	174	807
18:00-19:00	168	139	138	114	559
19:00-20:00	100	117	96	96	409
20:00-21:00	87	93	71	60	311
21:00-22:00	43	46	32	40	161
22:00-23:00	39	40	25	23	127
23:00-24:00 	25	18	19	3	65
Total					10,756
AADT					9,078
AM Peak					11:45-12:45 878
PM Peak					16:15-17:15 971

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Volume Count Report

LOCATION INFO	
Location ID	Y748
Type	SPOT
Funct'l Class	5
Located On	-
Loc On Alias	TH10
Direction	2-WAY
County	WINDSOR
Community	Hartford
MPO ID	
HPMS ID	
Agency	Vermont AOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Sat 5/19/2012
End Date	Sun 5/20/2012
Start Time	9:00:00 AM
End Time	9:00:00 AM
Direction	
Notes	
Station	
Study	
Speed Limit	
Description	
Sensor Type	
Source	
Latitude,Longitude	

INTERVAL:60-MIN	
Time	Hourly Count
0:00-1:00	129
1:00-2:00	78
2:00-3:00	49
3:00-4:00	47
4:00-5:00	37
5:00-6:00	68
6:00-7:00	140
7:00-8:00	275
8:00-9:00 	408
 9:00-10:00	710
10:00-11:00	736
11:00-12:00	770
12:00-13:00	671
13:00-14:00	663
14:00-15:00	534
15:00-16:00	572
16:00-17:00	475
17:00-18:00	467
18:00-19:00	404
19:00-20:00	335
20:00-21:00	286
21:00-22:00	337
22:00-23:00	230
23:00-24:00	178
Total	8,599
AM Peak	11:00-12:00 770
PM Peak	12:00-13:00 671

Email from Jo-Ann Ells dated 02-21-24

Good morning Tom and Nicole,

Below are comments I received from another staff member on traffic.

Site Distance

- The Study makes a recommendation regarding vegetation in order to maintain sight distance after development - consider as a condition of approval.

Peak Periods

- What is the specific time period for the PM Peak Hour?
- Typically, there are two Peak Periods. What is the second one and the specific time period?
- Show detailed data for Weekday and Saturday to conclude these are the peak periods.

Background Area Traffic

- Were there any background traffic counts in the vicinity of the access to the site that can be used to understand the impact of the additional traffic on Sykes Mountain Avenue and nearby intersections?

Trip Generation Calculation

- I recommend GPI provide summaries of the data presented to make it easier for the average person to follow the path and conclusions.

General

- Is the developer anticipating providing car washing services for car dealerships on Sykes Mountain Avenue? If so, please have GPI provide detail on how this is reflected in the trip generation for the study over and above general public use.

Tom, Please give me a call 802 478 1117.

Thank you,

Jo-Ann

Jo-Ann Ells

Zoning Administrator

Department of Planning & Development

Town of Hartford, Vermont

171 Bridge Street

White River Junction, VT 05001

Office: 802-295-3075 Direct: 802-478-1117

Visit us at www.hartford-vt.org

Please note that any response or reply to this electronic message may be subject to disclosure as a public record under the Vermont Public Records Act.

Memorandum

To: Tom Frawley, Summit Distributing
Cc: Nicole Duquette, GPI, Chris Holzwarth, Hartford Project Manager, Tom Peltier, Fire Marshal
From: Jo-Ann Ells, Hartford Zoning Administrator
Date: February 9, 2024
Re: Proposed Car Wash/Lot 44-0041-000

Please submit a response to the following comments/questions on your application for a car wash before **9:00 a.m., Friday, February 13, 2024**. If you are unable to meet this deadline, please contact me as soon as possible to discuss the deadline to have your application considered at the next round of Public Hearings.

Prior to the Zoning Board and Planning Commission Hearings, you will receive an agenda, draft Findings of Fact, and additional staff comments if there are any. Please feel free to contact me at any time during this process.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.

To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website [Welcome to DEC | Department of Environmental Conservation \(vermont.gov\)](#) and going to the "Permit Navigator Tool" [Permit Navigator \(force.com\)](#)

If further assistance is needed, please contact the Community Assistance Specialist for our area:

Rick Oberkirch, Community Assistance Specialist
Vermont Agency of Natural Resources/Department of Environmental Conservation
Environmental Compliance Division/Environmental Assistance Office
450 Asa Bloomer State Office Building, Rutland, VT 05701
802-282-6488
Rick.Oberkirch@vermont.gov

2. If you have not done so already, please contact the Fire Marshal, Tom Peltier, to discuss obtaining a Public Building permit. tpeltier@hartford-vt.org (295-3232).
 3. I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency options, including the installation of solar panels, for your project. (dclawson@hartford-vt.org)
 4. A staff member is reviewing the Trip Generation and Site Access Study. Any comments will be sent separately.
 5. Any approval will include a condition that your engineer certify that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit. Please confirm your understanding.
 6. Any approval will include a condition that, in addition to the required hard copies, the final approved plans are emailed to me. Please confirm your understanding.
 7. Please provide a detailed project narrative describing the project including:
 - The need for 14 vacuum parking spaces
 - Existing/proposed of rights-of-way and easements
 - Use of the travel lane/right-of way between lots 44-0038-000 and 44-0041-000 during construction
 - Effect of the loss of parking spaces for the gas station/convenience store, bus station, and restaurant on the adjacent lot (China Moon)
 - The percentage of the lot will be developed with building/pavement
 - How surface icing will be prevented in front of the car wash
 - If and where trash receptacles will be provided for customers using the vacuums
 - Description of the location and size of proposed signage
 - Compliance with section 260-31 of the Zoning Regulations which states:

Noise volume shall be limited to 70 decibels or less at or beyond the property line. Noise levels or frequencies which are not customary in the district or neighborhood, or which represent a repeated disturbance to others shall not be permitted.
- Vehicular circulation including:
 - A description of the flow of traffic

- The number of vehicles that can line-up while waiting to be washed
- The ability of a vehicle to bypass the lane for the pay station
- Access to and from the rear vacuums
- Adequacy of the width of travel lanes where the lane for vehicle entering the car wash and rear vacuum area meets

8. Please update the plan set as follows:

- Remove “18” from the address on the cover sheet
- Make sure the width of all access aisles/travel lanes are depicted and meet section 260-24 (4) of the Zoning Regulations.
- Provide a turning movement plan for a trash hauler
- Provide a circulation plan sheet including width of travel lanes, pavement markings, directional signage, and existing/proposed rights-of-way.
- Consider adding plantings on the west side of the parking spaces at the rear of the lot
- Update the “Truck Turn Plan” using the details in the attached turning radius specification. Please make sure the truck has a clear path and is not driving over curbs etc.

9. **Department of Public Works Comments (Stormwater)**

- **HSG Justifications:** The drainage calculations indicate a HSG Soil Grouping of D based upon the Soil Survey. The test pit data indicates an ESHWT of between 24 and 32” below existing grade and Refusal at >90”, and the drainage calculations for the infiltration trench indicate an infiltration rate of 1.02 inches per hour. Using the NRCS standards a ESHWT of between 20-40”, a restrictive layer >40”, and an infiltration rate of greater than 0.14” per hr. would indicate a HSG C condition as HSG D soils chiefly comprise of clayey soils.

How is the HSG D grouping of the soils justified? Did you perform infiltration tests in this area that you can share? (Particular concern is related to the grass and wooded areas in the rear of the parcel as it could artificially lower any difference in the increase in discharge rates and volumes.)

- **Infiltration Trench/ Drainage Area Reduction Performance:** The pre-development area draining to the closed drainage system in Sykes Mountain Avenue is 29,050 Sq. Ft. as modeled, and the post development area is 28,835 Sq. Ft. assuming the roof disconnect of 3,600 is properly functioning and not overtopping. Should the roof disconnect not properly function or

capture the runoff from the roof the post development drainage area shall exceed the pre-development drainage area by 3,385 Sq. Ft.

How will run-off be captured within the trench during all storm events? How the trench will properly function under frozen conditions? Have you considered monitoring wells with grates and reverse curbing?

- **Infiltration Trench Calculations:** Infiltration to reduce run-off volumes and/or to recharge the groundwater is provided by the roof disconnects. The bottom of these 5' wide trenches extend 24" below the finished grade of the trenches.

The Finished grade of the upper trench is roughly 545.5' (assumed from plans) putting the bottom of the trench at 543.5'. The existing grade at this location is approximately 545.0' which would place a seasonal high-water table at between 542.7' and 543.0' or within 6" of the bottom of the trench.

Please provide additional information about the seasonal water table at this location and include the estimated seasonal water table in the Pond 1P (infiltration trench) calculations to account for seasonal mounding to insure there is no surfacing.

- **Inlet Control Modeling:** The calculations for pre and post development conditions do not model the inlet control conditions created by the catch basin grates which allows for the proper assessment of impacts to the closed drainage network and surface flooding.

Please revise the models to incorporate the inlet control of the existing and proposed catch basin grates. The grate dimensions and openings utilized should accurately reflect the existing and proposed grates.

- **Run-off Volumes:** The narrative is careful to discuss the pre and post discharge rates but does not discuss the discharge volumes and the additional time and impact on the closed drainage system to drain them. The rates and volumes directed to the Sykes Mountain Avenue drainage system (Pre-Development Subcatchment 200S) as taken from the provided HydroCad report are listed below.

EVENT	DISCHARGE RATE	DISCHARGE VOLUME	Volume Notes
2 YR PRE-DEV	1.31 CFS	3,503 CU. FT.	31% Increase or +8,530.8 GAL.
2 YR POST-DEV	1.28 CFS	4,596 CU. FT.	
2 YR DIFFERENCE	-0.03 CFS	+1,093 CU. FT.	
10 YR PRE-DEV	1.97 CFS	5,419 CU. FT.	32% Increase or +13,023.5 GAL.
10 YR POST-DEV	1.96 CFS	7,160 CU. FT.	
10 YR DIFFERENCE	-0.01 CFS	+1,741 CU. FT.	
25 YR PRE-DEV	2.46 CFS	6,868 CU. FT.	32% Increase or +16,793.7 GAL.
25 YR POST-DEV	2.47 CFS	9,113 CU. FT.	
25 YR DIFFERENCE	-0.01 CFS	+2,245 CU. FT.	
50 YR PRE-DEV	2.91 CFS	8,185 CU. FT.	34% Increase or +20,294.5 GAL.
50 YR POST-DEV	2.93 CFS	10,898 CU. FT.	
50 YR DIFFERENCE	+0.02 CFS	+2,713 CU. FT.	
100 YR PRE-DEV	3.43 CFS	9,748 CU. FT.	33.5% Increase or +24,461.2 GAL.
100 YR POST-DEV	3.47 CFS	13,018 CU. FT.	
100 YR DIFFERENCE	+0.04 CFS	+3,278 CU. FT.	

Please include information within the narrative regarding the increased runoff volumes entering the closed drainage system, their impact on the downstream infrastructure, and a professional opinion of the adequacy of the downstream infrastructure to accept the increased volume and duration.

- **Detention System:** The project proposes an underground HDPE pipe system to lower the discharge rate from the proposed development. The system located in the upstream portion of the project to lower the discharge rates from the new pavement has a low invert of the pipe system is 540.95' with 6" stone bed under. The existing grade is approximately 544'. The ESHWT is reported to be 24" to 32" below grade or somewhere around 541.2' to 542.0'. The pipe and stone bedding are therefore up to 1.55' below the ESHWT.

Please provide information regarding the buoyancy of the system and any required anti-flotation measures to be taken to ensure the stability of the system and the parking lot above it.

10. Department of Public Works Comments (Water/Sewer)

- **Allocation:** The applicant shall complete an application for allocation (attached). This application shall include all pertinent site plans, detail sheets, and the manufacturer's specifications for the vehicle wash used to determine the flow rate.

- **Reclaim Tanks:** The site plans indicate the use of reclaim tanks to reduce water usage.

Please provide details and a description within the application for allocation.

- **Oil Water Separator:** The site plan indicates the installation of a 1,500-gallon oil/water separator tank with two access ports.

Please include as an inspection/sampling port on the outside of the tank, a detail, sizing calculations, and a maintenance description/schedule within the application for allocation.

- **Sewer Details:** Please include a detail sheet for all sewer details.

- **Sewer Connection:** The plan proposes to use an unutilized sewer stub.

Please include a note requiring the engineer to inspect the line prior to use and make necessary improvements such as slip lining if required.

- **Water Connection:** The project proposes to connect a 2" water service to the private 6" water service serving the former bus garage at 44 Sykes Mountain Avenue.

Please confirm that the project has the legal right to connect to this line with a deeded easement. If it does not have one, please provide evidence that an easement and maintenance agreement can be obtained. A zoning permit should be subject to one being recorded.

Further, please include more details on the tap such as any required tapping saddle. Also please note that all valves should open right in Hartford (the ordinance has a typo).

- **Connection to Systems:** Prior to connecting to the systems the owner/contractor must apply for connection and pay a connection fee determined by the size and length of services, and the cost of the meter if purchased through the town. This process also includes questionnaires related to meter sizing, backflow prevention, and fire suppression systems that are typically answered by the mechanical engineer.

11. Please acknowledge that you understand the following:

Before you commence construction, you need to schedule a preconstruction meeting with the Department of Public Works (DPW). You need to contact the DPW at least two weeks before you want to hold this meeting.

If this meeting results in any revisions to the approved plans, you must contact me to discuss amending your permit. Please confirm your understanding.

12. Please confirm that you are proposing that the car wash will be open 6AM-8PM seven days a week and that the vacuums will be operational 24/7.
13. Are you proposing to relocate the existing EV charging stations?
14. Please provide details regarding the proposed canopies over the vacuums.
15. Does the photometric plan take into consideration the proposed tree line and landscaping?
16. Please confirm that the proposed lights conform with section 260-31 E of the Hartford Zoning Regulations which states:

Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings. Searchlights are not permitted.
17. Please acknowledge that you understand that lighting must not create excessive off-site or sky glow and if the Zoning Administrator determines that lighting does not meet this condition, you will be required to comply.
18. What will be done to ensure that the landscaping is maintained in a healthy condition?
19. Please outline how the proposed landscaping meets the following sections of the Zoning Regulations:

Section 260-24 (8) (b)

The site shall be designed and landscaped to minimize negative visual impacts and maximize safety. Plantings may be required for this purpose, both within the lot and between it and any public road or adjacent property. Plants shall not be invasive to Vermont, shall be selected for their ability to survive under special conditions found in a parking lot, and shall be protected from damage by vehicles and maintenance equipment, including snow removal and storage.

Section 260-27

B. Plantings. The following provisions shall apply to the planting element of all landscape plans submitted for site development plan approval:

- (1) Plant materials included in landscape plans may be trees, shrubs, lawns, flower gardens, ground covers, cropland, pasture, meadows, wetlands and forests.
- (2) Natural cover shall be retained on a site to the extent possible and reasonable. Site clearing shall be kept to the minimum required for the construction of buildings and improvements.
- (3) Plantings included in landscape plans receiving site development plan approval shall be maintained in a healthy, growing condition. Where forest, cropland and "natural" areas are included, provision shall be made for their ongoing maintenance.
- (4) The choice and placement of plantings in parking areas shall take into account the special hazards of salt, vehicles and maintenance equipment, and include provision for adequate and safe snow removal.
- (5) Any landscape plan submitted for site development plan approval shall show the locations and types of plants to be removed as well as the species, sizes, quantities and locations of all new plants to be installed. Additional information may be required by the Planning Commission under the provisions of § 260-45 below.

Section 260-45 C (3)

Adequacy of landscaping, screening, and setbacks in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

20. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states:

C. Grading and drainage. The following provisions shall apply to any changes which affect drainage of water to or from a property:

- (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.
- (2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
- (3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

21. Please acknowledge that during construction of the proposed project erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.

22. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to submit:

- Written verification from a Professional Engineer licensed by the State of Vermont certifying that the project was constructed in compliance with the approved plans and Findings of Fact.
- Written verification from the DPW confirming that the water, sewer, and hydrants have been inspected and approved.
- Written verification from the DPW confirming that they have received acceptable record drawings.
- An electronic copy of the recorded drawings.
- A copy of the Energy Code Certificate as recorded in Hartford's Land Records.

Please acknowledge that you understand these requirements.

23. To avoid a separate application fee, you should consider submitting a sign permit application for any proposed signage in conjunction with applying for a zoning permit to finalize the Planning Commission/Zoning Board of Adjustment decisions.

You will be required to submit a photograph of the signs (as required by the Hartford Sign Ordinance) upon installation. Please acknowledge that you understand this requirement.

24. Please acknowledge that you understand that construction of the project must comply with Section 260-31 B of the Hartford Zoning Regulations, which states:

Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.

25. Please acknowledge that you understand that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.

26. The Hartford Zoning Regulations provide that “Construction trailers may be used at construction sites for office and laboratory use on the condition that they are placed a minimum of ten feet from any property line, are used for a project with a valid zoning permit and are removed before a certificate of occupancy is requested. No construction trailer may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any construction trailer found to obstruct sight distance will be required to be relocated immediately.”

Please acknowledge that you understand these requirements.

27. Before construction commences, you will need to submit the attached form to Jack Hedges at the Fire Department to obtain an address for the property. Please acknowledge your understanding.

28. Please email me a copy of:

- Application form
- Project Narrative
- Trip Generation and Site Access Study (revised if necessary, based on staff comments)
- Response to this memo
- Revised plan set

29. Please submit 15 copies of the following, revised as necessary:

- Application form
- Project Narrative
- Trip Generation and Site Access Study (revised based on staff comments if necessary)
- Response to this memo

- Revised plan set (please staple and fold the plan sets)