

**AROMA JOES**  
**SITE PLAN APPLICATION #08-21**  
**STAFF REPORT**  
July 28, 2021

**SITE:** 56 Derry Street; Map 173 Lot 029-000

**ZONING:** Business (B)

**PURPOSE OF PLANS:** Propose an Aroma Joes drive-thru coffee shop at 56 Derry Street with associated parking and drives.

**PLANS UNDER REVIEW:**

Non-Residential Site Plan, Aroma Joe's; prepared by Keach-Nordstrom Associates, Inc., 10 Commerce Park North, Suite 3B, Bedford, NH 03110; prepared for owner: Steve S. & Hsiang Hwa W. Pan, 13 King Henry Drive, Londonderry, NH 03053 and owner/applicant: Scott Ziefelder, 169 Cannan Back Road, Barrington, NH 03825; consisting of 12 sheets plus a cover sheet, with general notes 1-29 on Sheet 2; dated June 22, 2021.

**ATTACHMENTS:**

- A. Peer Review by Fuss & O'Neill, dated July 16, 2021
- B. Department Comments
- C. CAP Fee Worksheet

**APPLICATION TRACKING:**

- June 23, 2021 – Application received.
- July 20, 2021 - Traffic Impact and Access Study received.
- July 28, 2021 – Public hearing scheduled.

**WAIVER REQUESTS:**

- §276-11.1(B)(12)(c) – General Plan Requirements, 100' buffer

**COMMENTS & RECOMMENDATIONS:**

**BACKGROUND**

From Project Narrative: The project proposes to construct a new 900-sf Aroma Joe's coffee shop at 56 Derry Street. The site had been partially developed in the past, is cleared and currently contains a partially leveled building "pad site". The site improvements will include a new drive through, bypass lane, nine parking spaces, landscaping, lighting and stormwater management improvements. The driveway will feature three lanes, including right & left turnouts, one in lane and a new tapered turn lane into the site from Derry Street.

The 40,793 sf property abuts commercial developments to its left and right along Derry St.; commercial development and single-family homes across Derry St.; and a residential condominium on Buttercup Hill Drive, to the rear.

### STAFF COMMENTS

#### 1. **Additional Setback to Residential Use [§ 276-11.1:B(12)(c)]:**

“In all zoning districts other than the General (G) and the General-One Zoning Districts, where a commercial or industrial use or zoning district abuts a residential use or zoning district, there shall be a one-hundred-foot distance between the residential use or zoning district and any improved part of the nonresidential development.”

Given the proximity to the zoning boundary between the Business District and Traditional Residential District, alongside other active residential use on abutting lots, this application does NOT comply with the additional setback and, thus will be considered incomplete for the Planning Board’s consideration.

Finding that strict conformity to the additional setback requirement would significantly limit commercial development that is otherwise permitted on this commercially zoned lot, Staff recommends a waiver from the Planning Board for this requirement.

#### 2. **Pedestrian and Bicycle Safety and Access (§ 275-6:C):**

- a. While the plan includes a sidewalk across the driveway entrance and another sidewalk between the coffee shop and accessible parking space, there is no clear pedestrian path between the public sidewalk and the coffee shop. Staff suggest extending the sidewalk and adding a driveway crosswalk to provide a pedestrian path between the public sidewalk and the coffee shop on the southern side of the curbcut so as not to create conflict with vehicles entering the site.
- b. The proposed sidewalk requires an easement where it is outside of the public ROW as noted in **Attachment A**.
- c. All crosswalks/pedestrian crossings should have clear road marking.
- d. Staff also suggest the addition of a bike rack close to the building entrance, particularly for employees who may live nearby.

#### 3. **Off-Street Parking (§ 275-6:D):**

- a. **Stacking Spaces for Drive-Thru Window Service [§ 275-8:C(2)(c)[5]]:** 12 stacking spaces are required for eating and drinking establishments having drive-through window service. Even though the length of the drive-through lane shown on the plan appears to fit 12 stacking spaces, the plan should clearly demonstrate whether this requirement is met (e.g. show 12 stacking vehicles).
- b. **Off-street Loading Spaces [§ 275-8:C(6)]:** One space is required for every nonresidential building/structure having 5,000 square feet or less of gross floor area. The plan does not show a designated off-street loading space.

4. **Suggested Changes to Plan Notes:**

- a. Note #29: Staff suggests amending the note to state “All signs are subject to approval by the Zoning Administrator prior to installation.” The note provided is consistent with §276.11.1.B (13), however this regulation is inconsistent with actual sign permit practices.

5. **Peer Review Comments** – See **Attachment A** for additional comments from the Town’s peer reviewer.

6. **Department Comments** – see **Attachment B** for additional comments from Fire and Engineering Departments

7. **Outstanding Issues** – There are several issues identified in Attachment A and B that still need to be addressed prior to Planning Board approval. The Applicant has submitted a waiver request for the residential/non-residential buffer. There are some plan elements that need to be properly labelled such as snow storage and loading areas. Also the decal lane into the site requires some modification.

**DRAFT MOTIONS**

**ACCEPT the site plan application:**

I move to accept the site plan application for Aroma Joes at 56 Derry Street; Map 173 Lot 029-000.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_

*Staff recommends the following waiver as it is within the spirit and intent of the Business Zone.*

**GRANT a waiver:**

I move to grant a waiver from §276-11.1(B)(12)(c) – General Plan Requirements, 100’ buffer, based on the Board’s discussion, the testimony of the Applicant’s representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_

*If the Planning Board takes jurisdiction over the application (accepts) but needs more time to review, staff recommend continuing the hearing to date certain.*

**CONTINUE the public hearing to a date certain:**

I move to continue the public hearing for the site plan application for Aroma Joes at 56 Derry Street; Map 173 Lot 029-000 to date certain, \_\_\_\_\_, 2021.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_



July 16, 2021

Mr. Brian Groth  
Town Planner  
Town of Hudson  
12 School Street  
Hudson, NH 03051

Re: Town of Hudson Planning Board Review  
Aroma Joe's Site Plan, 56 Derry Street  
Tax Map 173 Lot 29; Acct. #1350-970  
Reference No. 20030249.2040

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the first submission of the materials received on June 22, 2021, related to the above-referenced project. Authorization to proceed was received on June 29, 2021. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

We have included a copy of Fuss & O'Neill's evaluation of the checklist for your reference. We note that several items could not be verified by Fuss & O'Neill and require action by the Town.

The project appears to consist of the development of a drive-thru coffee shop on a previously undeveloped site. Proposed improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, lighting and other associated site improvements. The proposed buildings will be serviced by public water and sewer.

The following items are noted:

**1. Site Plan Review Codes (HR 275)**

- a. Hudson Regulation (HR) 275-6.C. The applicant has proposed to realign the existing sidewalk along Derry Road to accommodate a turning lane and the site entrance. The Town should review a need for an easement for the new sidewalk areas that are out of the Right-of-Way.
- b. HR 275-6.I. The scope of this review does not include the adequacy of any fire protection provisions for the proposed building. No fire service connections to the buildings are shown.
- c. HR 275-6.T. The applicant is proposing the construction of a 10 foot wide right turn lane on Derry Street southbound to access the site. We note that no grading was provided for this right turn lane area. The applicant should review and provide spot grades on the plans to ensure positive drainage will exist in this area.
- d. HR 275-6.T. The applicant has shown a 50 foot long right turn lane with a 50' long 10:1

50 Commercial Street  
Manchester, NH  
03101  
t 603.668.8223  
800.286.2469  
[www.fando.com](http://www.fando.com)  
  
California  
Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont



Mr. Brian Groth

July 16, 2021

Page 2 of 5

taper. The applicant should confirm that these turn lane dimensions meet Town standards and the turn lane is long enough to accommodate expected traffic entering the site.

- e. HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set. The applicant has noted that 9 parking are required for the 900 square foot facility and that 9 spaces are provided.
- f. HR 275-8.C.(2).(c).[5]. The applicant should show the required stacking spaces in the drive thru area. We note that the Regulation requires a minimum of 12 stacking spaces in the drive thru, or a number of stacking spaces determined appropriate by the Planning Board for the use served.
- g. HR 275-8.C.(6). The applicant has not provided any off-street loading spaces on the plan set.
- h. HR 275-9.C.(11). The applicant has provided one handicap space for the site which meets the one space required. We recommend that the applicant add spot grades to the parking lot and sidewalk area to ensure that it is constructed as intended. This is especially important in the area of the handicap space and ramp.
- i. HR 275-9.F. The applicant did not provide copies of any easements or deeds as part of the package received for review, and has not shown any existing or proposed easements on the plans.

## **2. Administrative Review Codes (HR 276)**

- a. HR 276-11.1.B.(12).(c). The applicant should review and confirm that a 100 foot buffer exists between the residential use to the west of the site and the proposed development of this commercial site.
- b. HR 276-11.1.B.(13). The applicant has not included details for any proposed site signage other than traffic signs. The applicant has included a note stating that, "All signs are subject to approval by the Hudson Planning Board prior to installation."
- c. HR 276-11.1.B.(16). The applicant has not provided the locations of all driveways and travel ways within 200 feet of the site.
- d. HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.

## **3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)**

- a. HR 193.10.C. The applicant has not provided grading at the driveway connection to Derry Street so we are unable to confirm that the proposed driveway grading conforms to the Regulation and Town standards.
- b. HR 193.10.E. The applicant has not provided any sight distances for the proposed driveway location on the plan set.
- c. The driveway layout at the entrance and the parking lot doesn't appear to allow for larger trucks to access the site. The applicant should confirm that these are not anticipated, and review the need for signage to prevent such trucks from attempting to access the site. The applicant should also provide information as to the types of delivery trucks expected to access the site.

Mr. Brian Groth

July 16, 2021

Page 3 of 5

- d. The applicant has called for vertical granite curb on the plan set and provided a detail for bituminous curb only. The applicant should coordinate the plans and details.

#### **4. Traffic**

- a. HR 275-9.B. The applicant has not provided any traffic information as part of their review package.

#### **5. Utility Design/Conflicts**

- a. Engineering Technical Guideline & Typical Details (ETGTD) Section 720.8.3. The applicant has not provided a cleanout for the proposed sewer service. This should be located at the property line.
- b. The applicant should provide a water/sewer crossing detail for the sewer service crossing the water main in Derry Street, and crossing details for the service piping at the drain line in the driveway.

#### **6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)**

- a. HR 275-9.A.(3). The applicant should provide test pits within the footprint of the infiltration basin area, as required by NHDES and common engineering practice.
- b. HR 290-5.A.9. & 290-5.A.11. The applicant should provide NHDES BMP worksheets and an Infiltration Feasibility Report to illustrate the ESHWT is accounted for within the BMP design, as well as overall Stormwater Design meets NHDES standards.
- c. HR 290-7.B.14. Although the property has been partially developed in the past, the contours illustrate a low point near the existing CBs to be removed, as well as the close proximity of the abutting wetland discharge point. The applicant should provide a letter from a wetland scientist stating wetlands do not exist upon the site.
- d. HR 290-7.B.16. The applicant should label snow storage areas upon the plan set. Due to the close proximity of wetlands and proposed infiltration systems, we suggest reviewing the need for onsite signage or fencing to ensure proper snow storage/removal occurs.
- e. Engineering Technical Guideline & Typical Details (ETGTD) ETGTD 910.8. The HydroCAD analysis illustrates that the proposed conditions utilize an infiltration rate of 6.00in/hr. The applicant should provide additional information and/or conversion calculations to support the use of the infiltration rate. Does this rate utilize a factor of safety, does it follow typical current engineering practice as outlined within Env-Wq 1504.14(c), does the soil need to be amended, etc.
- f. ETGTD 920.4.18. & 920.4.11. The applicant should state on the plan that the responsibility of maintaining the stormwater features are solely the owner's.
- g. ETGTD 920.6. The applicant should provide rip rap outlet calculations within the Stormwater Management Report.
- h. ETGTD 930.4. We note that the majority of the stormwater design utilizes pipe slopes of less than the required 2.0%. The applicant should review these pipe slopes and provide calculations showing that the drain line velocities are self-cleaning.

Mr. Brian Groth

July 16, 2021

Page 4 of 5

- i. ETGTD 930.12. The applicant should review the use of curb cuts on this private site. Snow storage and snow melt could reduce the effectiveness of this drainage design, leading to unwanted flooding.
- j. The applicant will be required to comply with all provisions of the Town of Hudson's MS4 permit, including but not limited to annual reporting requirements, construction site stormwater runoff control, and record keeping requirements.
- k. Please note that this review was carried out in accordance with applicable regulations and standards in place in New Hampshire at this time. Note that conditions at the site, including average weather conditions, patterns and trends, and design storm characteristics, may change in the future. In addition, future changes in federal, state or local laws, rules or regulations, or in generally accepted scientific or industry information concerning environmental, atmospheric and geotechnical conditions and developments may affect the information and conclusions set forth in this review. In no way shall Fuss & O'Neill be liable for any of these changed conditions that may impact the review, regardless of the source of or reason for such changed conditions. Other than as described herein, no other investigation or analysis has been requested by the Client or performed by Fuss & O'Neill in preparing this review.

#### **7. Zoning (ZO 334)**

- a. ZO 334-14.A. The applicant has not provided the proposed building height on the plan set.
- b. ZO 334-17 & 334-21. The applicant has noted that the subject parcel is located within the Business (B) zoning district. The proposed use is permitted by the Ordinance within the Business district.
- c. ZO 334-33. The applicant has not shown any wetlands on the plan set.
- d. ZO 334-60. The applicant has not provided any information for any proposed signs on site, except traffic and parking signage. The applicant has noted that signs are subject to Planning Board approval prior to installation.
- e. ZO 334-83 and HR 218-4.E. The applicant has noted that the site is not located within a designated flood hazard area.

#### **8. Erosion Control/Wetland Impacts**

- a. The Town of Hudson should reserve the right to require any additional erosion control measures as needed. The applicant has noted this on the plans.

#### **9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))**

- a. HR 275-8.C.(7). The applicant has met the parking lot landscaping requirements.
- b. HR 275-8.C.(8). The applicant has provided screening for the residential use to the west by using the existing tree line.
- c. HR 276-11.1.B.(14). The applicant has shown lighting fixture locations on the plans with details and photometric information.
- d. HR 276-11.1.B.(14). The applicant has noted that the hours of operation for the facility are 6:00 am to 6:00 pm. The applicant should provide additional information regarding whether the lights are intended to be in operation during non-working hours.

Mr. Brian Groth  
July 16, 2021  
Page 5 of 5

#### 10. State and Local Permits (HR 275-9.G.)

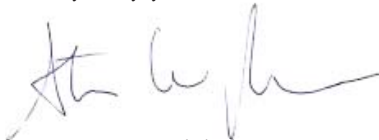
- a. HR 275-9.G. The applicant has listed required permits and statuses on the plan set.
- b. HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.
- c. Additional local and state permitting may be required.

#### 11. Other

- a. The applicant should review the circles shown on sheets 8 and 9. They appear to be a drafting error.
- b. The applicant has proposed retaining walls adjacent to the parking lot. The applicant has provided a typical detail for the walls but individual designs were not provided. We note that a portion of this wall appears to be nearly 10 feet tall but specific wall grades are not provided. The applicant should provide detailed design drawings for the proposed wall, stamped by an Engineer licensed in the State of New Hampshire, for Town review prior to construction.
- c. ETGTD Section 565.1.1. The applicant is reminded of Town of Hudson requirements for the importing of off-site fill materials for use in constructing this project. It is recommended that these requirements be stated on the plans for the Contractors attention.

Please feel free to call if you have any questions.

Very truly yours,



Steven W. Reichert, P.E.

**Steven W.  
Reichert, PE**

Digitally signed by Steven W. Reichert,  
PE  
DN: cn=Steven W. Reichert, PE, c=US,  
o=Fuss & O'Neill, Inc., ou=Fuss &  
O'Neill, Inc.,  
email=sreichert@fando.com  
Date: 2021.07.16 13:25:23 -0400

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File  
Keach- Nordstrom Associates, Inc. - alewis@keachnordstrom.com



# TOWN OF HUDSON

## FIRE DEPARTMENT

39 FERRY STREET, HUDSON, NEW HAMPSHIRE 03051



Emergency 911  
Business 603-886-6021  
Fax 603-594-1164

Robert M. Buxton  
Chief of Department

TO: Brian Groth  
Town Planner

FR: Robert M. Buxton   
Fire Chief

DT: June 25, 2021

RE: Aroma Joe's

---

The following is a list of site plan concerns for this project. This review was completed utilizing plans submitted by Keach-Nordstrom Associates dated May 14, 2021.

1. Please provide the markings for fire apparatus access in accordance with **NFPA 1**.
2. The project shall obtain site addressing from the Hudson Fire Department.
3. Please make sure that the proposed snow storage area shown on the plan does not impede parking or travel paths.

**\*\*The following life safety and fire protection concerns provided are for informational purposes to the applicant and Planning Board for this project. Final determinations on these issues occur after further review of the project.**

- A. The proposed building will require an approved sprinkler system. The Hudson Fire Department upon review of the building plans shall conduct this review. This requirement is in accordance with the **International Building Code (IBC)** and **Hudson Town Code (HTC), current revision, Chapter 210, Article VI**. Any fire protection system shall be monitored by an approved fire alarm system.
- B. The fire alarm system shall be connected to the Hudson Fire Department's municipal fire alarm system or a substantially equivalent system in accordance with the **Hudson Town Code, Chapter 210**. A site plan detailing the aerial or underground layout to the municipal fire alarm connection must be provided before the utilities are completed for this project.
- C. Any required fire alarm system component must remain accessible and visible at all times.
- D. A blasting permit will be required for any blasting on the site in accordance with the **Hudson Town Code, Chapter 202**.

cc: Project Engineer  
File



**Dubowik, Brooke**

---

**From:** Dhima, Elvis  
**Sent:** Wednesday, June 23, 2021 1:37 PM  
**To:** Dubowik, Brooke; Groth, Brian  
**Cc:** Forrence, Jess  
**Subject:** RE: SP# 08-21 Aroma Joe's Site Plan Sign-off

I have the following comments

1. Applicant shall add a sewer manhole, on their property by the property line, for future inspection or maintenance
2. The plan shows that runoff will sheet flow straight to the detention basins. It is not clear how a spill event will be handled without a catch basin equipped with a mechanical/oil separator.
3. Applicant shall add handicap ramp on both side of the entrance

Thanks

E

**Elvis Dhima, P.E.**  
**Town Engineer**

12 School Street  
Hudson, NH 03051  
Phone: (603) 886-6008  
Mobile: (603) 318-8286



---

**From:** Dubowik, Brooke <bdubowik@hudsonnh.gov>  
**Sent:** Wednesday, June 23, 2021 11:29 AM  
**To:** Bianchi, Dave <dbianchi@hudsonnh.gov>; Buttrick, Bruce <bbuttrick@hudsonnh.gov>; Buxton, Robert <RBuxton@hudsonnh.gov>; Caleb Chang <calebc@nashuarpc.org>; Dhima, Elvis <edhima@hudsonnh.gov>; Kirkland, Donald <dkirkland@hudsonnh.gov>; Forrence, Jess <jforrence@hudsonnh.gov>; Groth, Brian <bgroth@hudsonnh.gov>; Michaud, Jim <jmichaud@hudsonnh.gov>  
**Subject:** SP# 08-21 Aroma Joe's Site Plan Sign-off

Good morning,  
Attached is a sign-off for a new Site Plan @ 56 Derry Road.  
Please return by 7/1/21.  
Thank you,

**Brooke Dubowik**  
Planning Administrative Aide II





# TOWN OF HUDSON

## Planning Board

Timothy Malley, Chairman



12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-594-1142

### CAP FEE WORKSHEET - 2021

Date: 07-21-21 Zone # 1 Map/Lot: 173/029-000  
56 Derry Street

Project Name: Aroma Joe's

Proposed ITE Use #1: Commercial – Coffee Shop

Proposed Building Area (square footage): 900 S.F.

#### CAP FEES: (ONE CHECK NEEDED)

1.	(Bank 09) 2070-701	Coffee/Donut Shop (900 s.f @ \$16.27 per s.f)	\$ <u>14,643.00</u>
		Total CAP Fee	\$ <u>14,643.00</u>

Check should be made payable to the Town of Hudson.

Thank you,

*Brooke Dabowik*

Administrative Aide



June 21, 2021

Subject: **Aroma Joes**  
**Map 173, Lot 29**  
**56 Derry Street, Hudson NH**  
KNA Project No. 21-0311-1

### PROJECT NARRATIVE

The project proposes to construct a new 900-sf coffee shop, for Aroma Joes, on the property located at 56 Derry Street. The site had been partially developed in the past, is cleared and currently contains a partially leveled building 'pad site'. The site improvements will include a new drive through, bypass lane, nine parking spaces, landscaping, lighting and stormwater management improvements. The driveway will feature three lanes, including right & left turn outs, one in lane and a new tapered turn lane into the site from Derry Street.

The subject property is 40,793-sf (0.936-acres), referenced as Map 173, Lot 29 and situated within the Business zoning district. The property is surrounded by other commercial developments, single family homes across the street, and a residential condominium on Buttercup Hill Drive, in the rear.



**SITE PLAN APPLICATION**

Date of Application: June 17, 2021 Tax Map #: 173 Lot #: 29

Site Address: 56 Derry Street

Name of Project: Aroma Joes

Zoning District: Business (B) General SP#: \_\_\_\_\_  
(For Town Use Only)

Z.B.A. Action: \_\_\_\_\_

**PROPERTY OWNER:**

Name: Steve & Hsiang Hwa Pan

Address: 13 King Henry Drive

Address: Londonderry, NH 03053

Telephone # \_\_\_\_\_

Email: \_\_\_\_\_

**DEVELOPER:**

Scott Zielfelder

169 Canaan Back Road

Barrington, NH 03825

603-781-2668

s.zielfelder@metrocast.net

**PROJECT ENGINEER:**

Name: Keach-Nordstrom Associates Inc.

Address: 10 Commerce Park North

Address: Suite 3, Bedford, NH 03110

Telephone # 603-627-2881

Email: alewis@keachnordstrom.com

**SURVEYOR:**

Keach-Nordstrom Associates Inc.

10 Commerce Park North

Suite 3, Bedford, NH 03110

603-627-2881

chickey@keachnordstrom.com

**PURPOSE OF PLAN:**

The purpose of this application and plan set is to propose an Aroma Joes drive-thru coffee shop at 56 Derry Street with associated parking and drives.

(For Town Use Only)

Routing Date: \_\_\_\_\_ Deadline Date: \_\_\_\_\_ Meeting Date: \_\_\_\_\_

\_\_\_\_\_ I have no comments \_\_\_\_\_ I have comments (attach to form)

(Initials) Title: \_\_\_\_\_ Date: \_\_\_\_\_

Department: \_\_\_\_\_

Zoning: \_\_\_ Engineering: \_\_\_ Assessor: \_\_\_ Police: \_\_\_ Fire: \_\_\_ DPW: \_\_\_ Consultant: \_\_\_

**SITE DATA SHEET**

PLAN NAME: Aroma Joes

PLAN TYPE: SITE PLAN

LEGAL DESCRIPTION: MAP 173 LOT 29

DATE: June 17, 2021

Location by Street: 56 Derry Street

Zoning: Business (B)

Proposed Land Use: Commercial - Coffee Shop

Existing Use: Vacant

Surrounding Land Use(s): Commercial

Number of Lots Occupied: 1

Existing Area Covered by Building: 0 SF

Existing Buildings to be removed: 0 SF

Proposed Area Covered by Building: 900 SF

Open Space Proposed: 58.6%

Open Space Required: 40%

Total Area: S.F.: 40,793 Acres: 0.936

Area in Wetland: 0 SF Area Steep Slopes: 3,555 SF

Required Lot Size: 30,000 SF

Existing Frontage: 291.47'

Required Frontage: 150'

Building Setbacks:	<u>Required*</u>	<u>Proposed</u>
Front:	<u>50 FT</u>	<u>69 FT</u>
Side:	<u>15 FT</u>	<u>75.7 FT</u>
Rear:	<u>15 FT</u>	<u>48.4 FT</u>

**SITE DATA SHEET**

(Continued)

Flood Zone Reference: Map Number: 33011C0514E

Width of Driveways: 36 FT

Number of Curb Cuts: One

Proposed Parking Spaces: 9

Required Parking Spaces: 9

Basis of Required Parking (Use): Site Plan Regulation Section 275-8.C.2.(a)(5)

Dates/Case #/Description/Stipulations  
of ZBA, Conservation Commission,  
NH Wetlands Board Actions:  
(Attach stipulations on separate sheet)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Waiver Requests**

*Town Code Reference:*                      *Regulation Description:*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**(For Town Use Only)**

Data Sheets Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

July 28, 2021 - SP #08-21 - Application Package

**SUBDIVISION/SITE PLAN WAIVER REQUEST FORM**  
**Town of Hudson, New Hampshire**

Name of Subdivision/Site Plan: Aroma Joe's


Street Address: 56 Derry Street

I Allison Lewis hereby request that the Planning Board waive the requirements of item 276-11.1.B(12)(c) of the Subdivision/Site Plan Checklist in reference to a plan presented by Keach Nordstom Associates (name of surveyor and engineer) dated June 22, 2021 for property tax map(s) 173 and lot(s) 29 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):  
See attached

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):  
See attached

Signed:   
\_\_\_\_\_  
Applicant or Authorized Agent

Planning Board Action:  
Waiver Granted \_\_\_\_\_  
Waiver Not Granted \_\_\_\_\_



July 21, 2021

Town of Hudson Planning  
12 School Street  
Hudson, NH 03051

**Subject: Waiver for 100' Residential Buffer  
Aroma Joes Site Plan, 56 Derry Street  
Tax Map 173 Lot 29**

**Hardship reason(s) for granting this waiver:**

The Applicant is essentially requesting to reduce the 100-ft residential buffer to the standard side and rear setback distance. The zoning district allows the proposed coffee shop, and the use is reasonable, given the adjacent businesses along Derry Street. While the adjacent property is a residential use, the property is still within the Business Zone. Multifamily is an allowed use in the business zone. This lot within the same zone as the subject property should not impose a buffer on the property. If the 100-ft buffer were to remain in place the shape of the parcel relative to the buffer and the other lot setbacks would result in a non-buildable lot. This parcel would then sit vacant and be incongruent with the rest of Derry Street.

Furthermore, no fair and substantial relationship exists between the general public purposes of the ordinance provision and the specific application of the provision to the property. The public and neighboring abutter will realize no additional benefit should this waiver not be granted since the existing multi-family development abuts multiple retail establishments.

**Reason(s) for granting this waiver relative to not being contrary to the spirit and intent of the Land Use Regulations:**

The spirit and intent to this Land Use Regulation will not be opposed by granting this waiver. The parcel has been cleared and graded for multiple years. This project does not propose to use any more of the existing trees on the lot. This means that the existing woodland buffer between the multifamily units and Derry Street will remain unchanged. In addition, the proposed site is significantly uphill from the multifamily units. These single-story units therefore will not be affected by car lights and any other vehicle issues. For these reasons, this proposal will not be contrary to the spirit and intent of the regulation since the purpose of the regulation is to provide adequate screening and buffering between residential and industrial land uses.

**SITE PLAN APPLICATION AUTHORIZATION**

I hereby apply for *Site Plan* Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *Site Plan* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Town Planner, the Town Engineer, and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner:  Date: 6-16-2021

Print Name of Owner: Hsiang-Hwa Pan

❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer:  Date: 6/18/21

Print Name of Developer: Scott Zelfelder

❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

### Owner Affidavit

---

I, Hsiang Hwa Pan, owner of the property referenced on Tax Map 173 as Lot 29, located at 56 Derry Street, Hudson, New Hampshire, hereby verify that I have authorized Keach-Nordstrom Associates, Inc. and Scott Zielfelder to submit on my behalf, any and all applicable State and local permit applications as they pertain to improvements on said property.

Additionally, I authorize Keach-Nordstrom Associates, Inc. and Scott Zielfelder to aid in the representation of these applications throughout the approval process.

Signature of Owner: 

Printed Name of Owner: Hsiang Hwa Pan

Address of Owner: 13 King Henry Drive

Londonderry, NH 03053

Date: 6-16-2021

### Applicant Affidavit

---

I, Scott Zielfelder, applicant of the property referenced on Tax Map 173 as Lot 29, located at 56 Derry Street, Hudson, New Hampshire, hereby verify that I have authorized Keach-Nordstrom Associates, Inc. to submit on my behalf, any and all applicable State and local permit applications as they pertain to improvements on said property.

Additionally, I authorize Keach-Nordstrom Associates, Inc. to aid in the representation of these applications throughout the approval process.

Signature of Owner:



Printed Name of Owner:

Scott Zielfelder

Address of Owner:

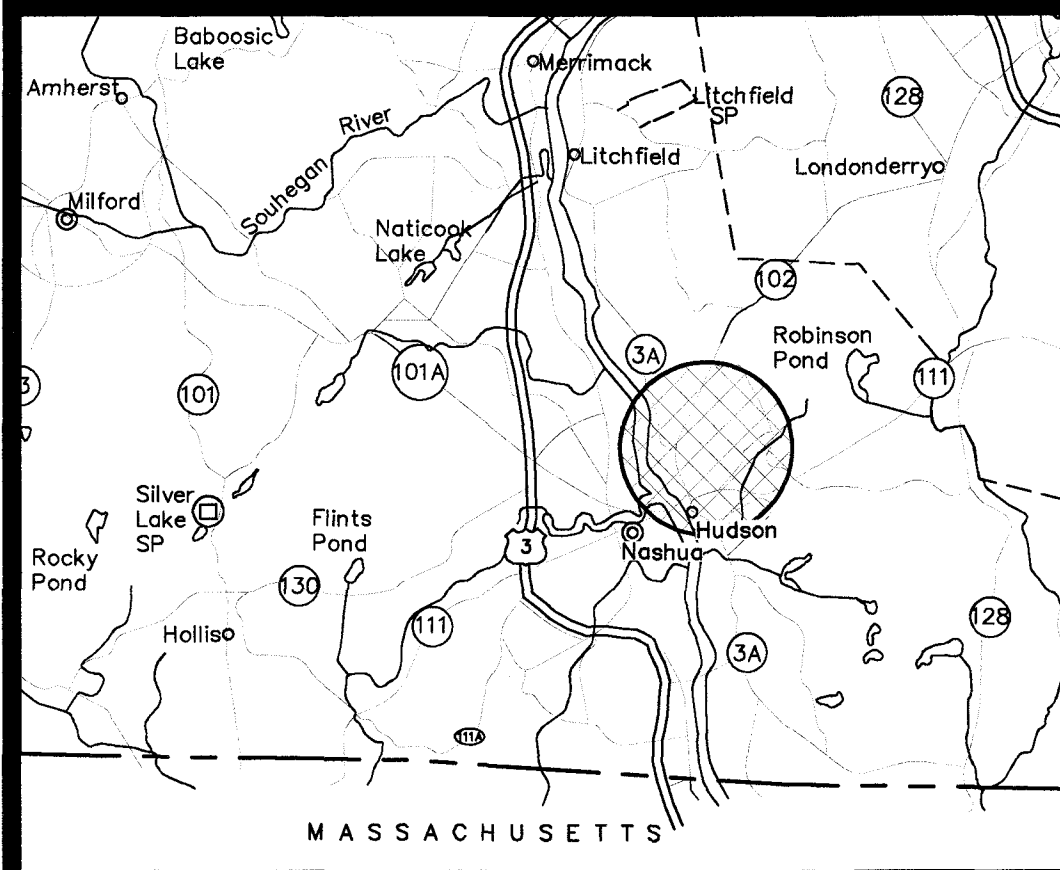
169 Canaan Back Road

Barrington, NH 03825

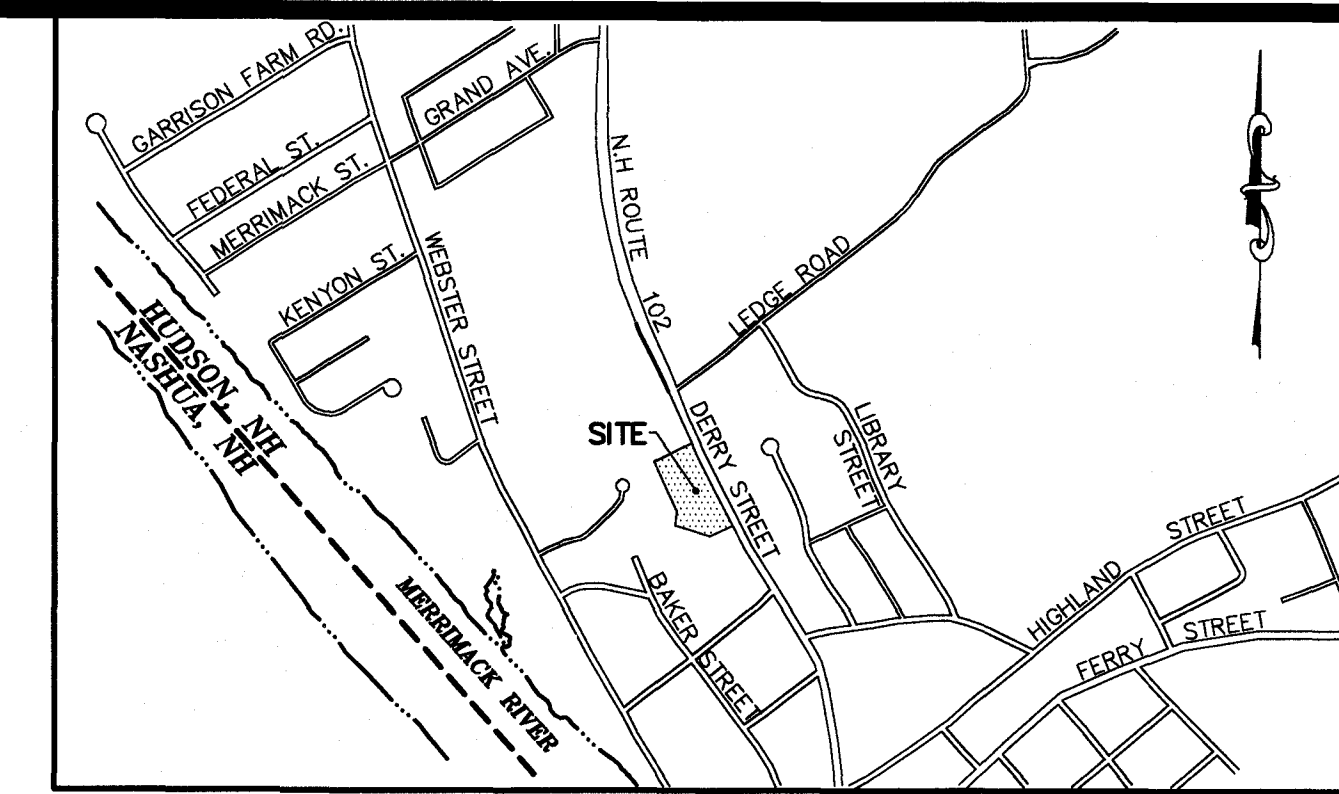
Date:

6/18/21





VICINITY PLAN  
NOT TO SCALE



VICINITY PLAN  
SCALE: 1" = 1000'

# NON RESIDENTIAL SITE PLAN

## AROMA JOE'S

### MAP 173; LOTS 29

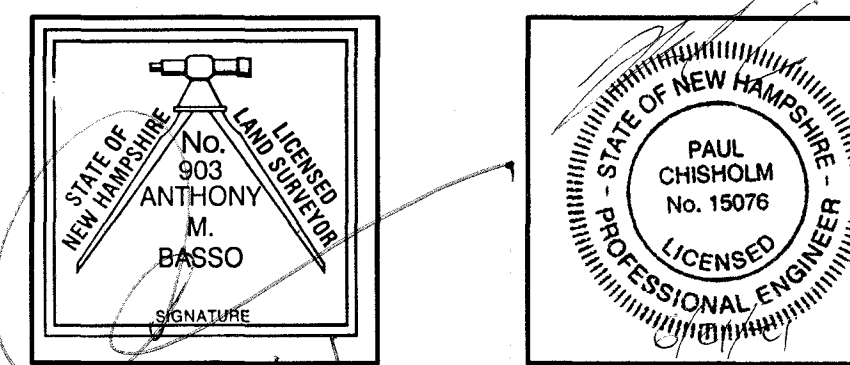
### 56 DERRY STREET

### HUDSON, NEW HAMPSHIRE

**OWNER:**  
**STEVE S. & HSIANG HWA W. PAN**  
 13 KING HENRY DRIVE  
 LONDONDERRY, NH 03053

**OWNER/APPLICANT:**  
**SCOTT ZIEFELDER**  
 169 CANAAN BACK ROAD  
 BARRINGTON, NH 03825

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



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

**SHEET TITLE**

- EXISTING CONDITIONS/REMOVALS PLAN
- NON-RESIDENTIAL SITE PLAN
- GRADING, DRAINAGE, AND UTILITY PLAN
- EROSION CONTROL PLAN
- LANDSCAPE PLAN
- LIGHTING PLAN
- CONSTRUCTION DETAILS

**SHEET No.**

- 1
- 2
- 3
- 4
- 5
- 6
- 7-12

JUNE 22, 2021

PROJECT NO. 21-0311-1

**LEGEND**

- GB-F GRANITE BOUND FOUND
- ⊙ IP-F IRON PIN FOUND
- ⊙ IP-S IRON PIN SET WITH CAP
- ⊙ W/CAP
- ⊙ UTILITY POLE
- ⊙ STREET LIGHT
- ⊙ GAS VALVE
- ⊙ WATER VALVE
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ ABUTTER LINE
- ⊙ PROPERTY LINE
- ⊙ OVERHEAD UTILITIES
- ⊙ GAS LINE
- ⊙ WATER LINE
- ⊙ SEWER LINE
- ⊙ DRAINAGE LINE
- ⊙ TREELINE
- ⊙ RETAINING WALL
- ⊙ EDGE OF PAVEMENT
- ⊙ VERTICAL GRANITE CURB
- ⊙ 10' CONTOUR
- ⊙ 2' CONTOUR
- ⊙ SOIL LINE
- ⊙ SETBACK

**SCS SOILS LEGEND**

- WdB** WINDSOR LOAMY SAND  
3 TO 8% SLOPES
- WnC** WINDSOR-URBAN LAND COMPLEX  
3 TO 15% SLOPES

SOURCE: USDA-SCS WEB SOIL SURVEY  
HILLSBOROUGH COUNTY

MAP 173 LOT 30  
DOM'S SPORTS BAR, LLC.  
820 SOUTH MANMOTH ROAD  
MANCHESTER, N.H. 03109  
BK. 9039 PG. 1582  
(REF. PLAN 2, 3, 4 & 5)

MAP 173 LOT 28  
BUTTERCUP HILL ASSOCIATES  
P.O. BOX 983  
KEENE, N.H. 03431  
BK. 2749 PG. 187  
(REF. PLAN 1 & 4)

MAP 173 LOT 29  
40,793 S.F.  
0.936 ACRES

MAP 173 LOT 28  
M325 REAL ESTATE, LLC.  
P.O. BOX 414  
NASHUA, N.H. 03061-414  
BK. 8147 PG. 464  
(REF. PLAN 1, 3 & 4)

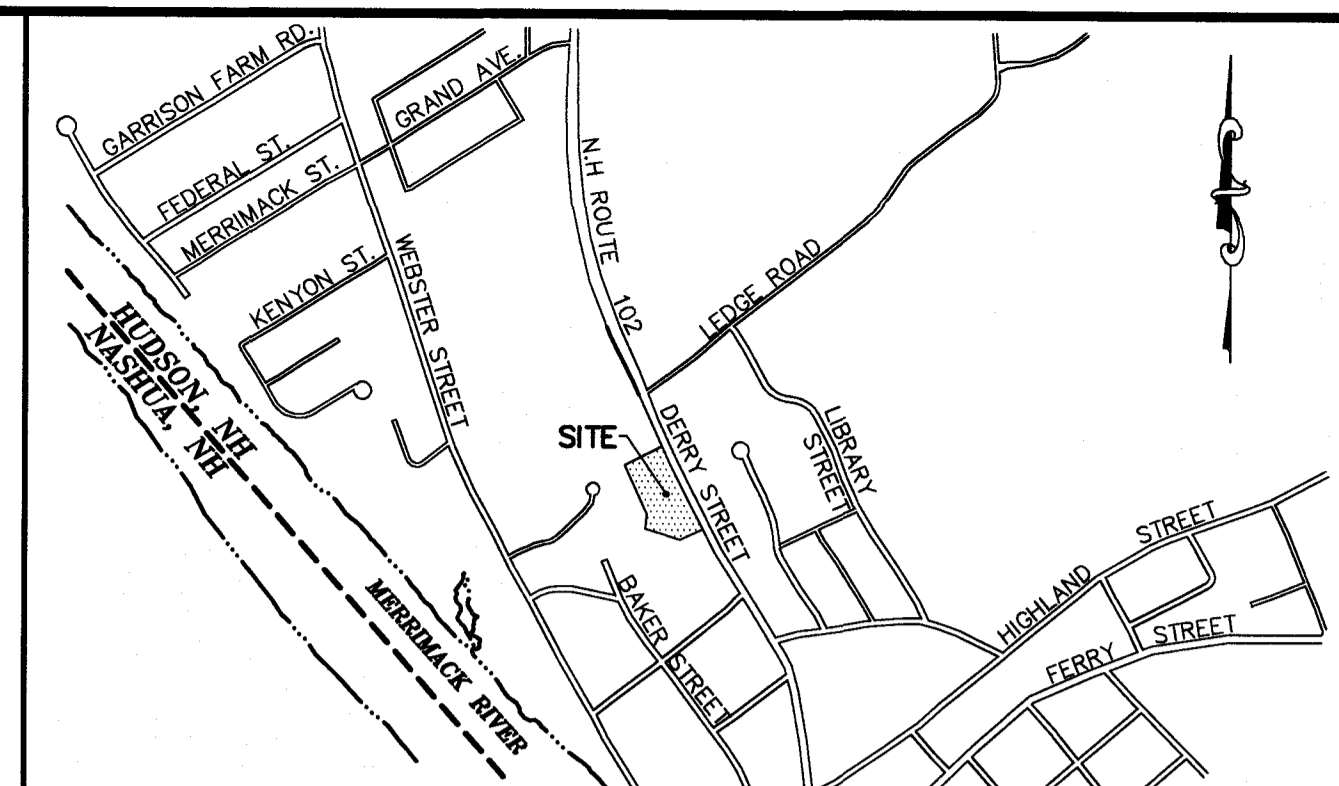
MAP 174 LOT 30  
DERRY ROAD HUDSON, LLC.  
49 DERRY STREET  
HUDSON, N.H. 03051  
BK. 8810 PG. 1533

MAP 173 LOT 33  
HERS OF ELIZABETH G. CENTER  
C/O BARBARA MANN  
8718 FAIRSTONE LANE  
ALEXANDRIA, VA. 22309  
TEST-98

CB  
RIM=166.08  
INV. IN=160.68(NW)  
INV. IN=162.17(SW)  
INV. IN=160.49(W)  
INV. OUT=136.83

CB  
RIM=167.24  
INV. IN=161.64(NW)  
INV. IN=161.14(NE)  
INV. OUT=161.04

CB  
RIM=167.41  
INV. IN=163.2

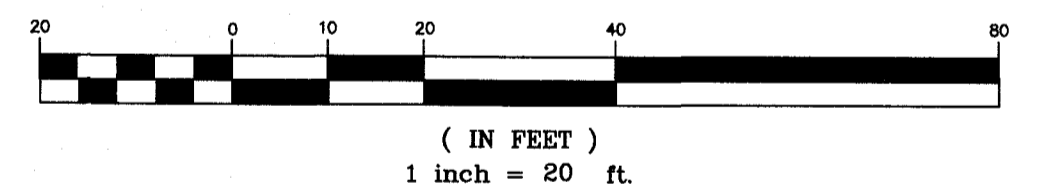


**VICINITY PLAN**  
SCALE: 1" = 1000'

**NOTES:**

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS PRESENT ON MAP 173 LOT 29 IN THE TOWN OF HUDSON, NEW HAMPSHIRE AS SHOWN HEREON.
- EXISTING AREA OF PARCEL = 40,793 S.F. OR 0.935 ACRES.
- OWNER OF RECORD:  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776
- THE SUBJECT PARCEL IS LOCATED ENTIRELY WITHIN BUSINESS (B) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:  
- FRONT 50 FT  
- SIDE 15 FT  
- REAR 15 FT
- TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON ARE BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN APRIL OF 2021.
- HORIZONTAL DATUM IS NAD83, VERTICAL DATUM IS NAVD29 FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF MERRIMACK N.H., HILLSBOROUGH COUNTY, MAP NUMBER 33011C0514E, PANEL 501 OF 701, EFFECTIVE DATE: APRIL 18, 2011 INDICATES THAT NO PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.

**GRAPHIC SCALE**



**EXISTING CONDITIONS PLAN**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

**OWNER OF RECORD:**  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

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

**REFERENCE PLANS**

- "PLAN OF DAW ACRES," HUDSON, N.H. SCALE: 1"=50'. DATED: JUNE, 1960. PREPARED BY: NED SPAULDING H.C.R.D. PLAN #2473
- "CONSOLIDATION & SUBDIVISION PLAN," DERRY STREET, HUDSON, N.H. SCALE: 1"=20'. DATED: JUNE, 1978. PREPARED BY: A.E. MAYNARD CIVIL ENGINEER. H.C.R.D. PLAN #11484
- "THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLANS FEDERAL AID PROJECT STP-X-0005(216) N.H. PROJECT NO. 12460. N.H. ROUTE 102" REVISED ROW PURCHASE PLANS DATED SEPT. 09, 2005, REVISION No. 7 ON FILE WITH NHDOT, NOT RECORDED.
- "BOUNDARY & CONSOLIDATION PLAN, HUDSON ELDERLY HOUSING." SCALE: 1"=50'. DATED: SEPTEMBER 12, 1979. PREPARED BY: ALLAN H. SWANSON, INC. H.C.R.D. PLAN #12828
- "SITE PLAN, PROPOSED RESTAURANT," PIZZA HUT INC. 62 DERRY ROAD HUDSON, N.H. SCALE: 1"=20'. DATED: JUNE, 1978. PREPARED BY: MAYNARD & PAQUETTE, INC. H.C.R.D. PLAN #15190
- "SITE PLAN, GREEN TEA, 56 DERRY STREET, HUDSON, NEW HAMPSHIRE." SCALE: 1"=20'. DATED: JUNE 7, 2002. PREPARED BY: MAYNARD & PAQUETTE ENGINEERING ASSOCIATES, LLC. H.C.R.D. PLAN #32223

**UTILITY NOTE**

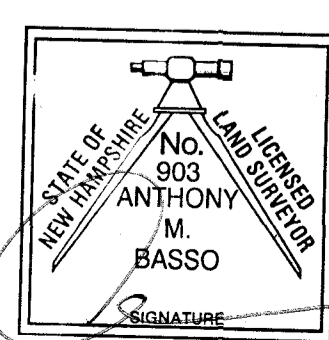
THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER,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



**SURVEYOR'S CERTIFICATION:**

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING APRIL OF 2021. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.

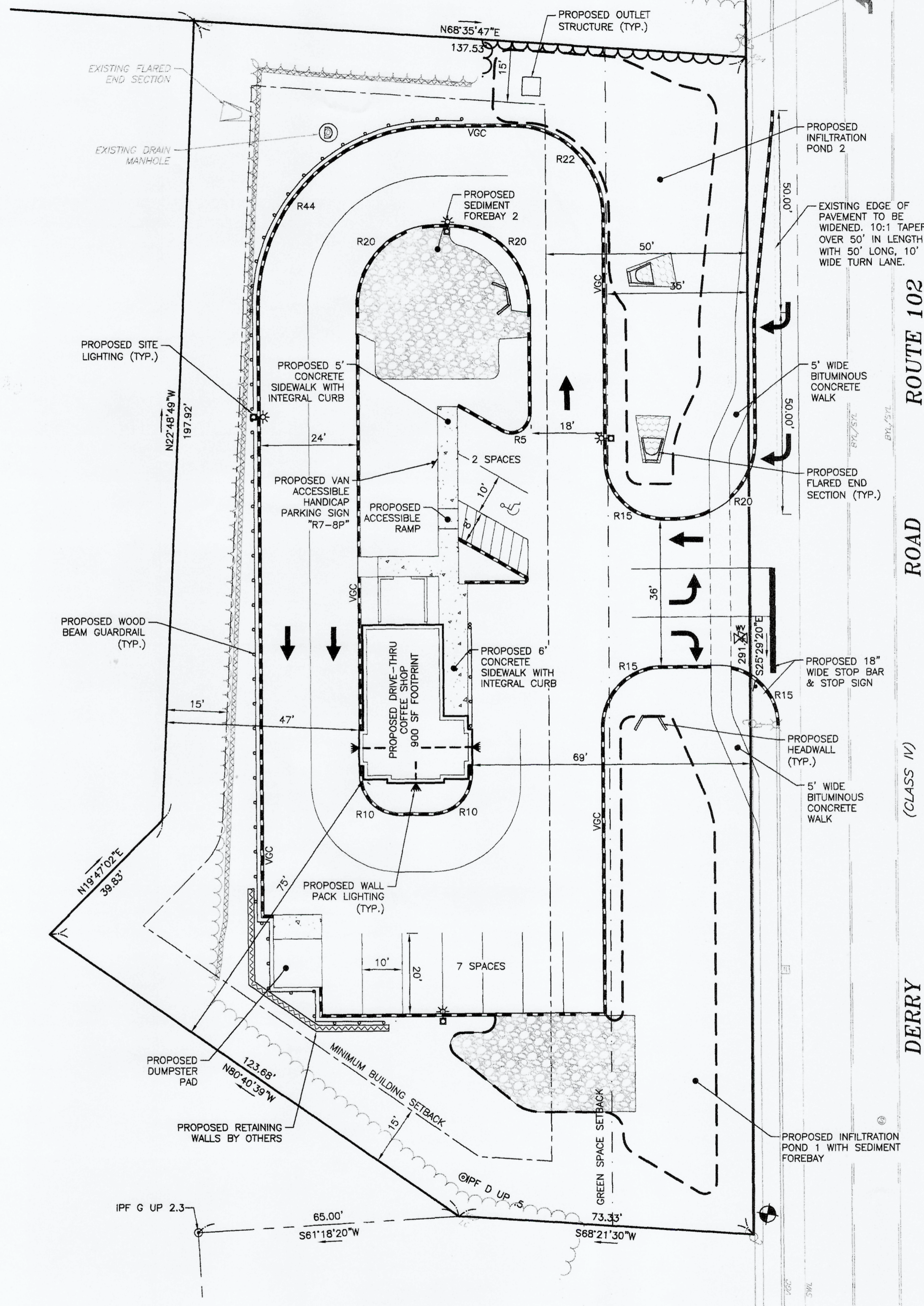
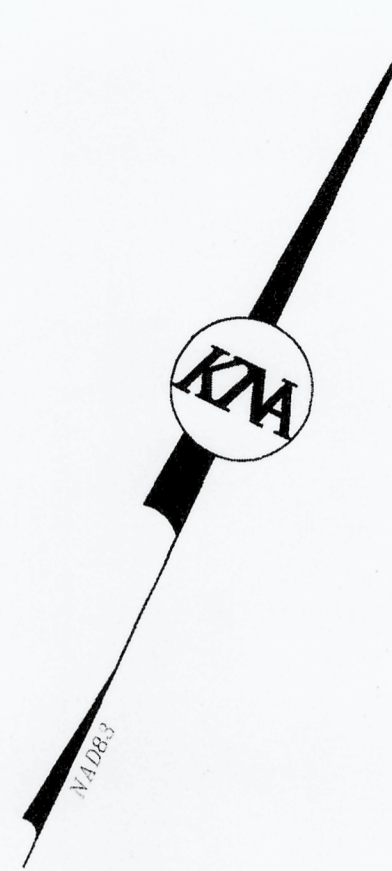
*[Signature]*  
LICENSED LAND SURVEYOR  
DATE: 6/2/21



REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021  
PROJECT NO: 21-0311-1  
SCALE: 1"=20'  
SHEET 1 OF 12





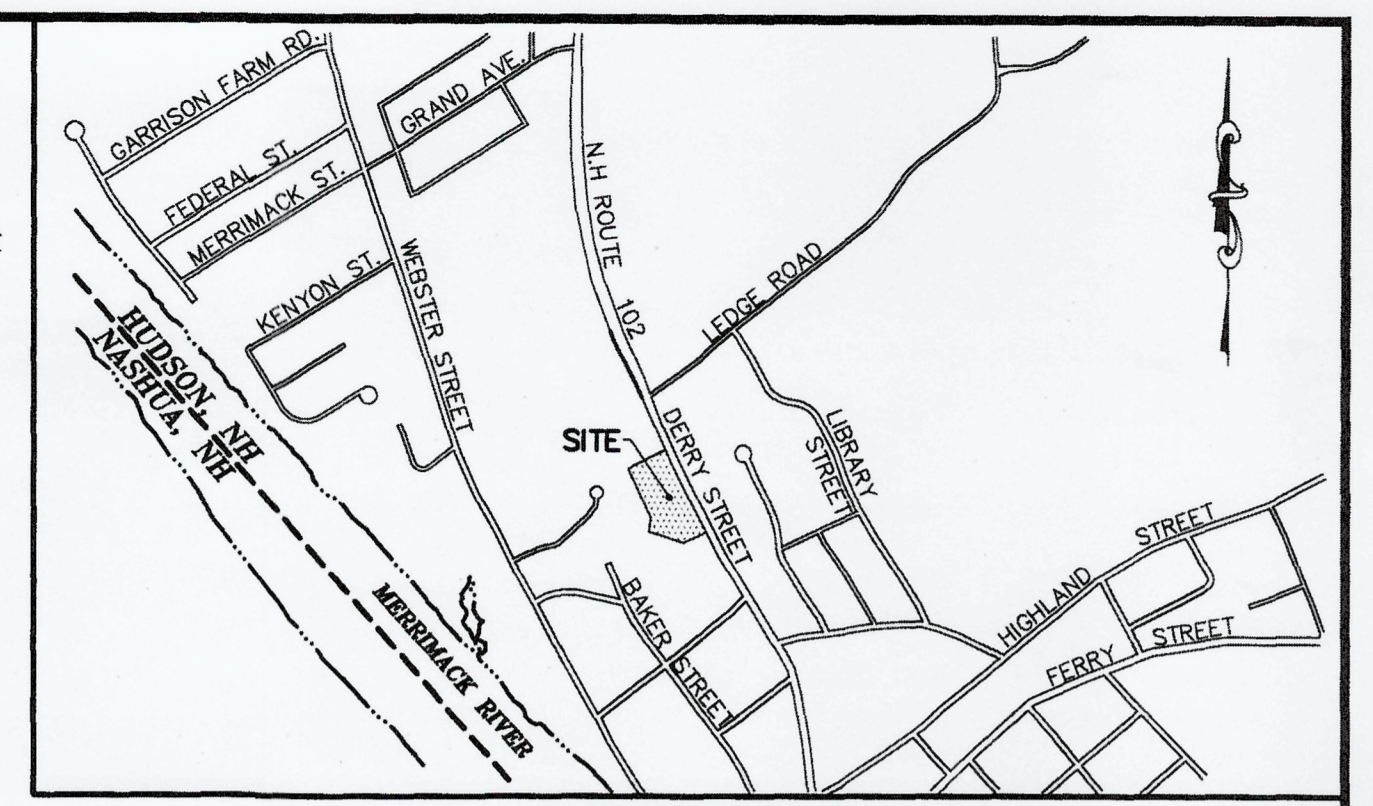
**REFERENCE PLANS:**

1. "EXISTING CONDITIONS PLAN, AROMA JOE'S, MAP 173 LOT 29, 56 DERRY STREET, HUDSON, NEW HAMPSHIRE, DATED MAY 7, 2021," PREPARED BY KEACH-NORDSTROM ASSOCIATES, INC.

**NOTES:**

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED SITE LAYOUT ON MAP 173 LOT 29 IN THE TOWN OF HUDSON, NEW HAMPSHIRE AS SHOWN HEREON.
- OWNER OF RECORD:  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776
- AREA OF SUBJECT PARCEL = 40,793 SF, OR 0.935 ACRES
- TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON ARE BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN APRIL OF 2021.
- HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NGVD29 FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS.
- THE SUBJECT PARCEL IS LOCATED WITHIN THE BUSINESS (B) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS FOR LOTS SERVICED WITH MUNICIPAL SEWER AND WATER:  

MINIMUM LOT AREA	30,000 SF	40,793 SF
MINIMUM LOT FRONTAGE	150 FT	291.47 FT
MINIMUM BUILDING SETBACKS:		
FRONT	50 FT	69 FT
SIDE	15 FT	75 FT
REAR	15 FT	47 FT
- PARCEL WILL BE SERVICED BY MUNICIPAL WATER & SEWER.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF MERRIMACK N.H., HILLSBOROUGH COUNTY, MAP NUMBER 33011C0514E, PANEL 501 OF 701, EFFECTIVE DATE: APRIL 18, 2011 INDICATES THAT NO PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
- OPEN SPACE REQUIRED = 40%  
OPEN SPACE PROPOSED = 58.6%
- PARKING CALCULATIONS:  
PARKING REQUIRED = 1 SPACE / 100 SF X 900 SF = 9 SPACES  
TOTAL PARKING PROVIDED = 9 SPACES
- SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO SITE, AND SHALL CONFORM WITH ALL APPLICABLE TOWN OF HUDSON ZONING REGULATIONS.
- CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7:00 AM & 7:00 PM, MONDAY THROUGH SATURDAY. NO EXTERIOR CONSTRUCTION ACTIVITIES SHALL OCCUR ON SUNDAY.
- HOURS OF OPERATION: 6:00 AM TO 6:00 PM, MONDAY THROUGH SATURDAY.
- APPROVAL OF THIS PLAN SHALL BE SUBJECT TO FINAL ENGINEERING REVIEW.
- SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
- IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE TOWN OF HUDSON PLANNING BOARD.
- PRIOR TO THE ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY, AN L.L.S. CERTIFIED "AS-BUILT" SITE PLAN SHALL BE PROVIDED TO THE TOWN OF HUDSON COMMUNITY DEVELOPMENT DEPARTMENT CONFIRMING THAT THE SITE CONFORMS WITH THE PLANNING BOARD APPROVED SITE PLAN.
- IDENTIFICATION SIGNAGE SHALL NOT BE ERRECTED UNTIL APPROVED BY THE BUILDING INSPECTOR AND ZONING ADMINISTRATOR.
- FLOWED SNOW FROM THE FACILITIES, DRIVEWAY, PARKING LOTS AND SIDEWALK SHALL BE STORED IN THE DESIGNATED AREAS SHOWN IN THIS PLAN SET. NO SNOW MAY BE PLOWED OR STORED ON THE ADJUTING PARCELS. WHEN THE SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF-SITE AND DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- ONSITE DRAINAGE SYSTEM SHALL BE CONSTRUCTED AND MAINTAINED IN COMPLIANCE WITH NHDES REQUIREMENTS FOR SUCH SYSTEMS.
- THE APPLICANT'S ENGINEER AND/OR CONTRACTOR SHALL CONTACT THE TOWN OF HUDSON TO SCHEDULE A PRE-CONSTRUCTION MEETING, WHICH WILL BE HELD WITH STAFF PRIOR TO STARTING CONSTRUCTION.
- ALL STIPULATIONS OF APPROVAL SHALL BE INCORPORATED INTO THE DEVELOPMENT AGREEMENT, WHICH SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS, TOGETHER WITH THE SITE PLAN-OF-RECORD AND ALL AGREED UPON EASEMENT DEEDS, WHICH SHALL BE FAVORABLY REVIEWED BY TOWN COUNSEL PRIOR TO PLANNING BOARD ENDORSEMENT OF PLAN.
- ALL IMPROVEMENTS SHOWN ON THE SITE PLAN-OF-RECORD, INCLUDING NOTES 1-29, SHALL BE COMPLETED IN THEIR ENTIRETY AND AT THE EXPENSE OF THE APPLICANT OR HIS ASSIGNS.
- THE TOWN OF HUDSON SHALL RESERVE THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES DURING CONSTRUCTION.
- AFTER ISSUANCE OF THE FOUNDATION PERMIT FOR THE PROPOSED BUILDING, AND PRIOR TO THE ISSUANCE OF THE FRAMING PERMIT THEREOF, THE APPLICANT SHALL SUBMIT TO THE HUDSON COMMUNITY DEVELOPMENT DEPARTMENT A FOUNDATION "AS-BUILT" PLAN ON A TRANSPARENCY AND TO THE SAME SCALE AS THE APPROVED SITE PLAN. THE FOUNDATION "AS-BUILT" PLAN SHALL INCLUDE ALL STRUCTURAL DIMENSIONS AND LOT LINE SETBACK MEASUREMENTS TO THE FOUNDATION AND BE STAMPED BY A LICENSED LAND SURVEYOR. ANY DISCREPANCY BETWEEN THE APPROVED SITE PLAN AND FOUNDATION "AS-BUILT" PLANS SHALL BE DOCUMENTED BY THE APPLICANT AND BE PART OF THE FOUNDATION "AS-BUILT" SUBMISSION.
- THE PROPOSED PROJECT HAS BEEN DESIGNED TO MEET 2018 MS4 REQUIREMENTS.
- ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION.



VICINITY PLAN  
SCALE: 1" = 1000'

**LEGEND**

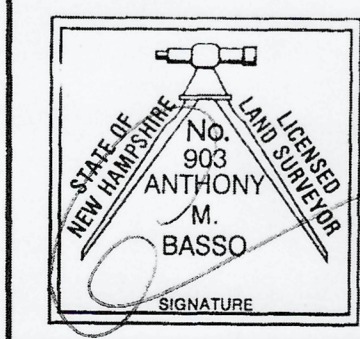
- GB-F GRANITE BOUND FOUND
- ⊙ IP-F IRON PIN FOUND
- ⊙ IP-S IRON PIN SET WITH CAP
- ⊙ U/P UTILITY POLE
- ⊙ S/L STREET LIGHT
- ⊙ G/V GAS VALVE
- ⊙ W/V WATER VALVE
- ⊙ S/M SEWER MANHOLE
- ⊙ D/M DRAINAGE MANHOLE
- ⊙ C/B CATCH BASIN
- ⊙ A/L ABUTTER LINE
- ⊙ P/L PROPERTY LINE
- ⊙ O/U OVERHEAD UTILITIES
- ⊙ D/L DRAINAGE LINE
- ⊙ T/L TREELINE
- ⊙ R/W RETAINING WALL
- ⊙ E/P EDGE OF PAVEMENT
- ⊙ V/C VERTICAL GRANITE CURB
- ⊙ S/B SETBACK
- ⊙ G/SB GREEN SPACE BUFFER
- ⊙ P/S PROPOSED SIGN
- ⊙ P/L PROPOSED LIGHT
- ⊙ P/GV PROPOSED GAS VALVE
- ⊙ P/WV PROPOSED WATER VALVE
- ⊙ P/WG PROPOSED WOOD GUARDRAIL
- ⊙ P/TL PROPOSED TREELINE
- ⊙ P/EP PROPOSED EDGE OF PAVEMENT
- ⊙ P/RW PROPOSED RETAINING WALL
- ⊙ P/VCG PROPOSED VERTICAL GRANITE CURB
- ⊙ P/OS PROPOSED OUTLET STRUCTURE

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL

APPROVED BY THE HUDSON, NH PLANNING BOARD  
DATE OF MEETING: \_\_\_\_\_

SIGNATURE DATE: \_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_  
SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

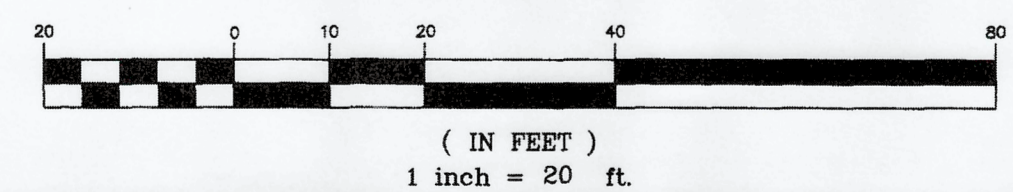
OWNER OF MAP 173 LOT 29  
SIGNATURE: *Steve S. & Hsiang Hwa W. Pan*  
DATE: 6-16-2021



**SURVEYOR'S CERTIFICATION:**  
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING APRIL OF 2021. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.  
LICENSED LAND SURVEYOR  
DATE: 6/21/21

LOAM & SEED ALL DISTURBED AREAS (TYP.)

**GRAPHIC SCALE**

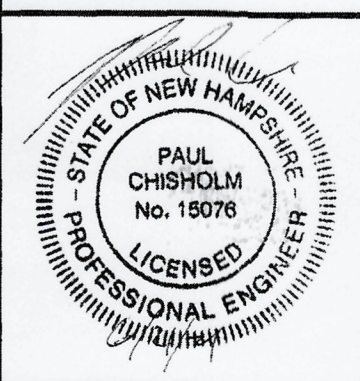


**NON RESIDENTIAL SITE PLAN**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

OWNER OF RECORD:  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

APPLICANT:  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

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



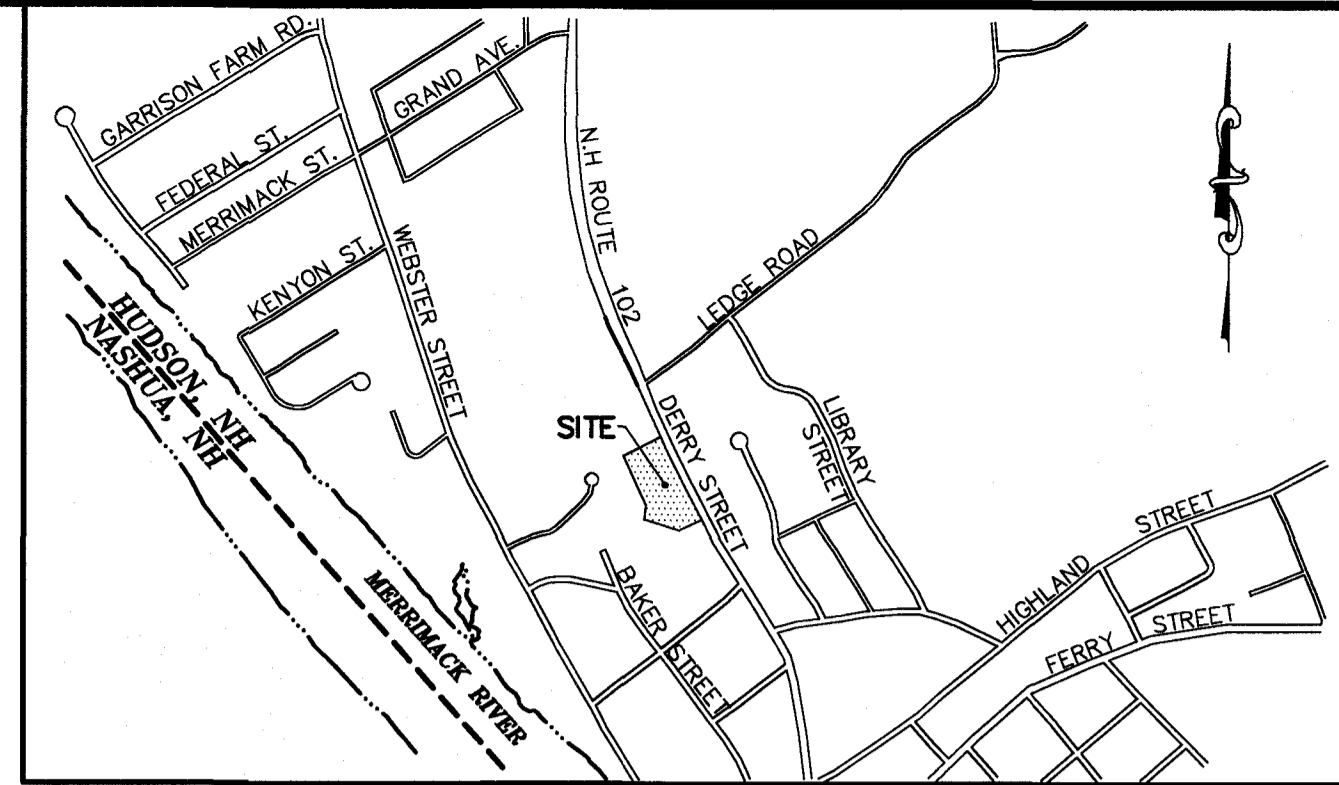
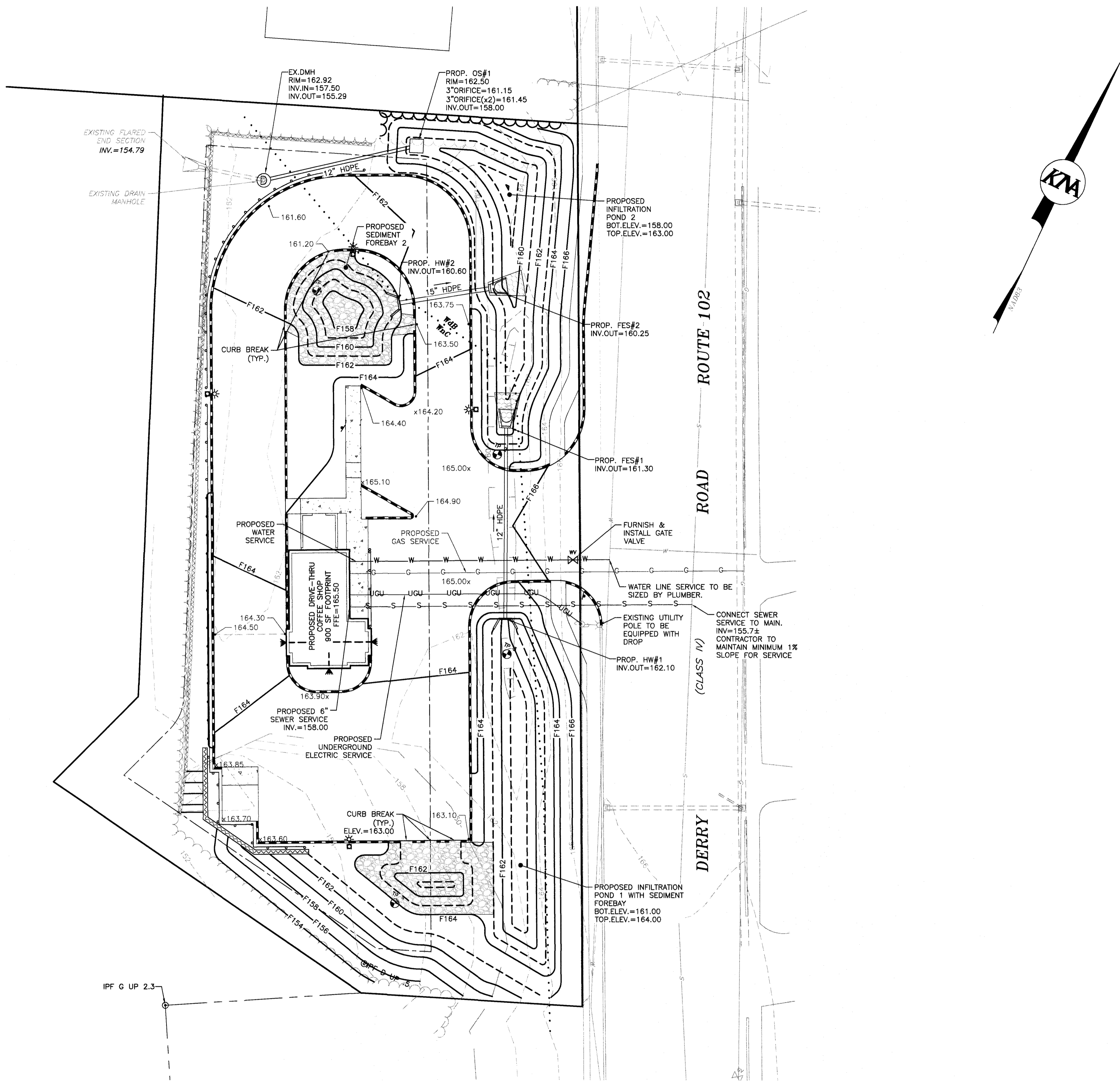
REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021 SCALE: 1"=20'  
PROJECT NO: 21-0311-1 SHEET 2 OF 12



**LEGEND**

- GB-F GRANITE BOUND FOUND
- IP-F IRON PIN FOUND
- ⊙ IP-S IRON PIN SET WITH CAP
- W/CAP UTILITY POLE
- ⊕ STREET LIGHT
- ⊕ GAS VALVE
- ⊕ WATER VALVE
- ⊕ SEWER MANHOLE
- ⊕ DRAINAGE MANHOLE
- ⊕ CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- GAS LINE
- WATER LINE
- SEWER LINE
- OHU OVERHEAD UTILITIES
- DRAINAGE LINE
- TREELINE
- RETAINING WALL
- EOP EDGE OF PAVEMENT
- VGC VERTICAL GRANITE CURB
- SETBACK
- GREEN SPACE BUFFER
- PROPOSED SIGN
- PROPOSED LIGHT
- PROPOSED GAS VALVE
- PROPOSED WATER VALVE
- PROPOSED WOOD GUARDRAIL
- PROPOSED TREELINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED RETAINING WALL
- PROPOSED VERTICAL GRANITE CURB
- PROPOSED OUTLET STRUCTURE
- UGU PROPOSED UNDERGROUND UTILITIES
- G PROPOSED GAS LINE
- W PROPOSED WATER LINE
- S PROPOSED SEWER LINE
- PROPOSED DRAINAGE LINE
- 10' CONTOUR
- 2' CONTOUR
- SOIL LINE



**VICINITY PLAN**  
SCALE: 1" = 1000'

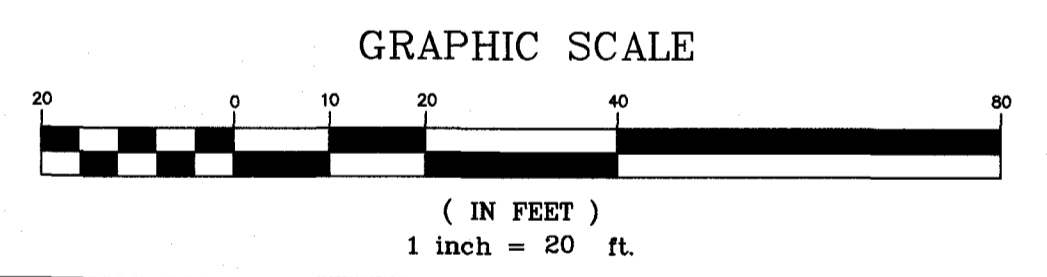
- CONSTRUCTION NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING, DRAINAGE, AND UTILITY SYSTEMS FOR THIS SITE.
  - ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF HUDSON, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK PERFORMED IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.
  - CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT, HUDSON, NEW HAMPSHIRE. ALL DRAINAGE PIPES SHOWN SHALL BE HDPE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
  - ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  - THE WATER, SANITARY SEWER, AND ELECTRICAL UTILITIES SHOWN HERE SHALL BE COORDINATED WITH THE FINAL BUILDING PLANS PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
  - PLANS TO COMPLY WITH THE TOWN OF HUDSON'S MS4 PERMIT.

**SCS SOIL MAP UNIT KEY**

SYMBOL	MAP UNIT	SLOPE CLASS
Wab	WINDSOR-LOAMY-SAND	3-8%
Wac	WINDSOR-URBAN	3-15%

SOURCE: WEB SOIL SURVEY, WWW.WEBSOILSURVEY.SC.egov.usda.gov

**LOAM & SEED ALL DISTURBED AREAS (TYP.)**



**GRADING, DRAINAGE & UTILITY PLAN**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

**OWNER OF RECORD:**  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

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

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021      SCALE: 1"=20'  
PROJECT NO: 21-0311-1      SHEET 3 OF 12



**UTILITY NOTE**

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

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL

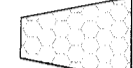


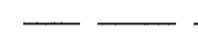



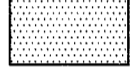

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

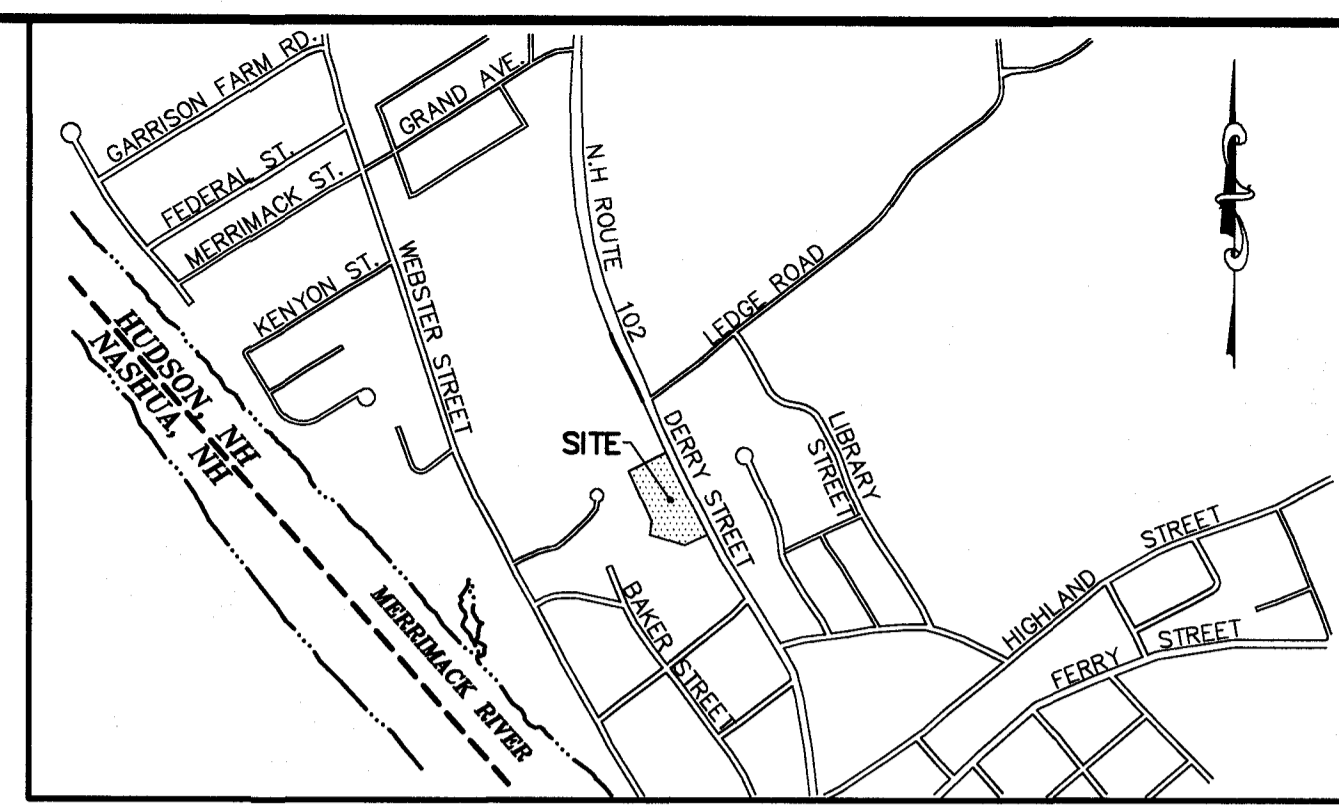
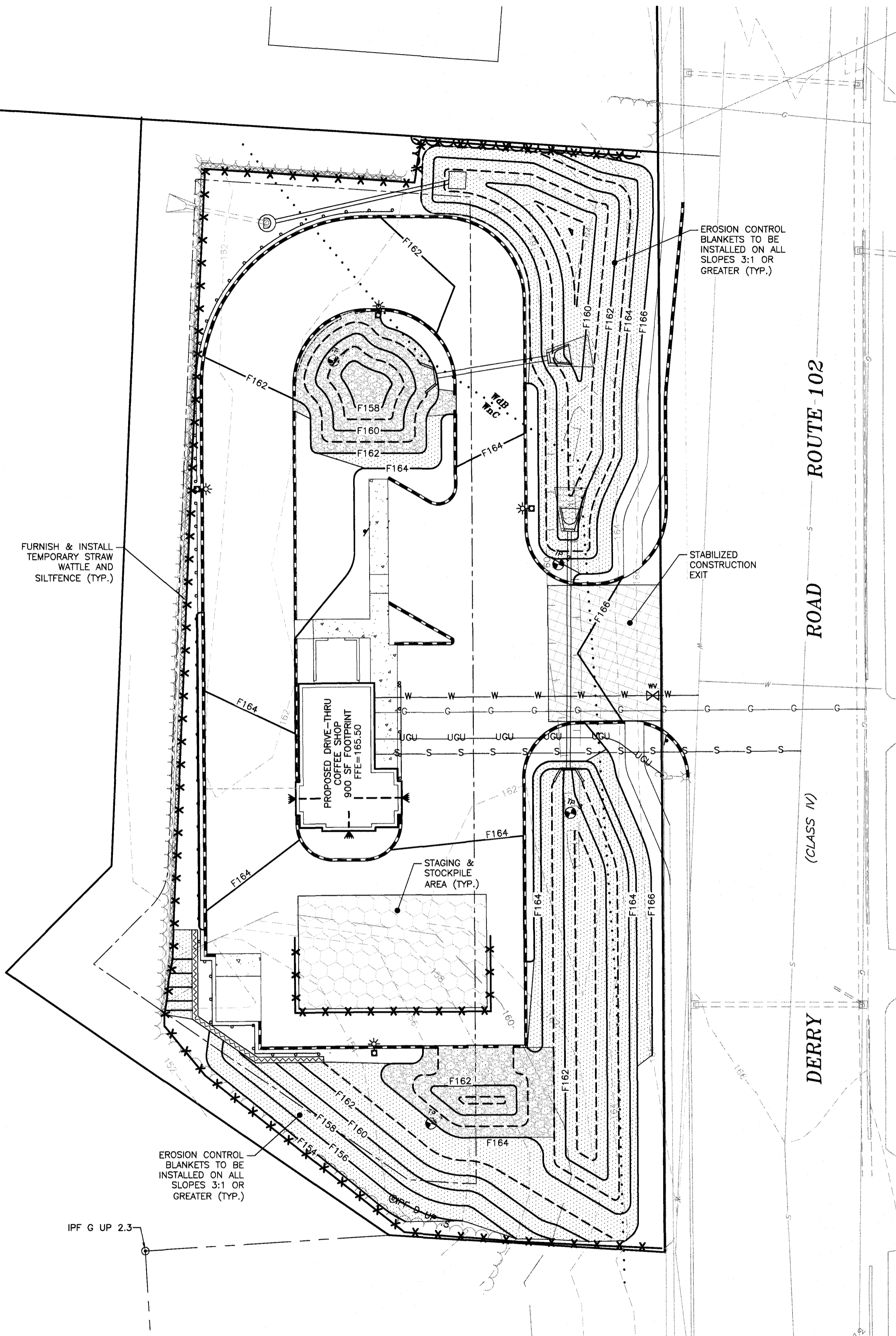
\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**EROSION & SEDIMENT CONTROL LEGEND**

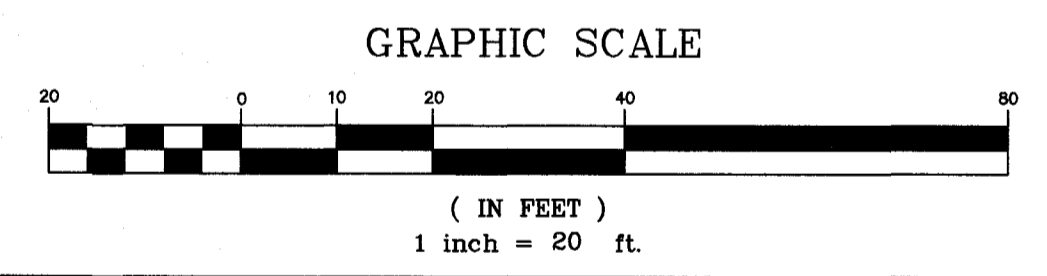
-  PERMANENT OUTLET PROTECTION APRON (RIP RAP)
-  INLET PROTECTION
-  SILT FENCE
-  ORANGE CONSTRUCTION FENCING
-  TEMPORARY STONE CHECK DAM
-  STABILIZED CONSTRUCTION EXIT
-  STAGING AND STOCKPILE AREA
-  EROSION CONTROL BLANKETS
-  NON DISTURBANCE AREA



**VICINITY PLAN**  
SCALE: 1" = 1000'

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

LOAM & SEED ALL DISTURBED AREAS (TYP.)



**UTILITY NOTE**

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

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**EROSION CONTROL PLAN**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

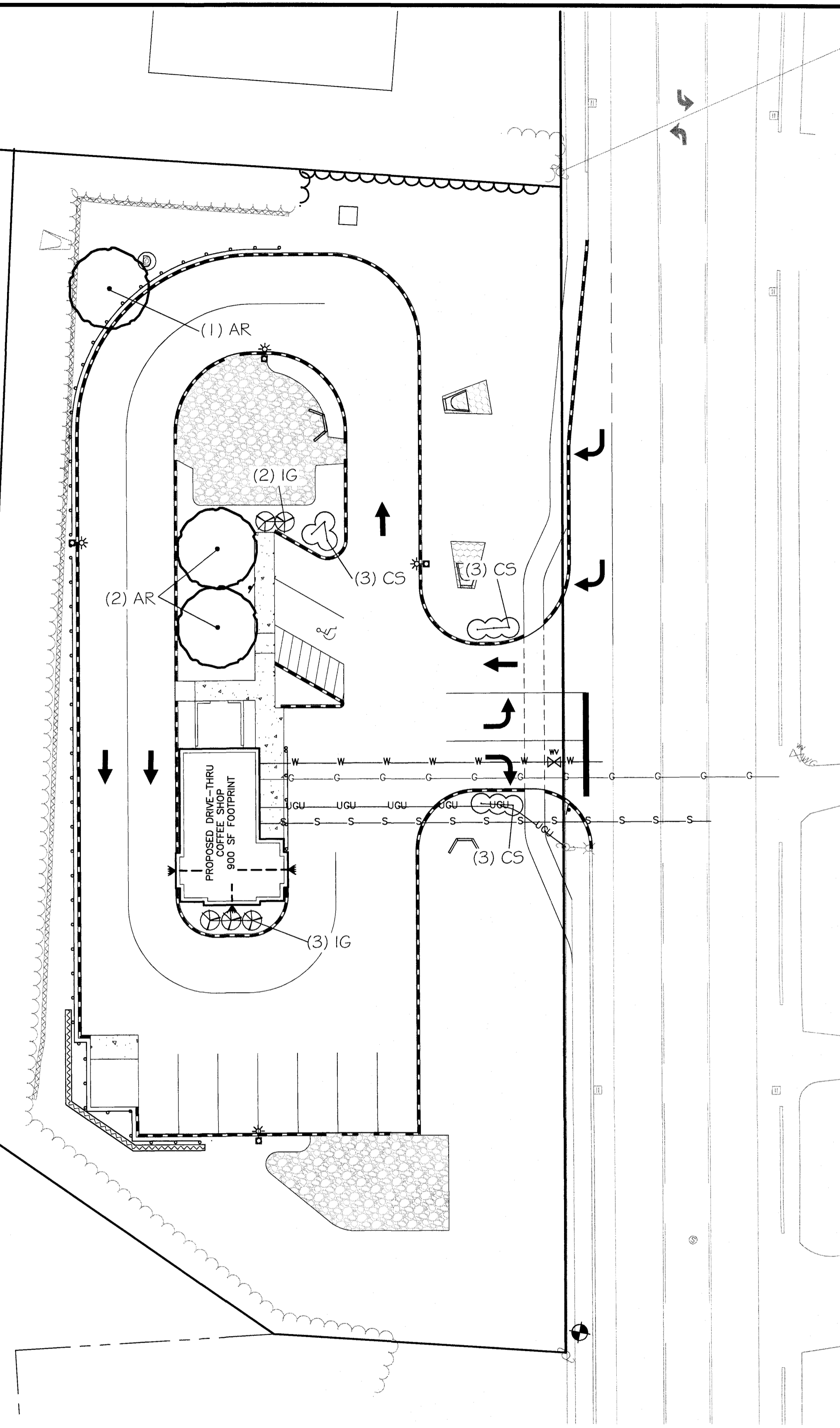
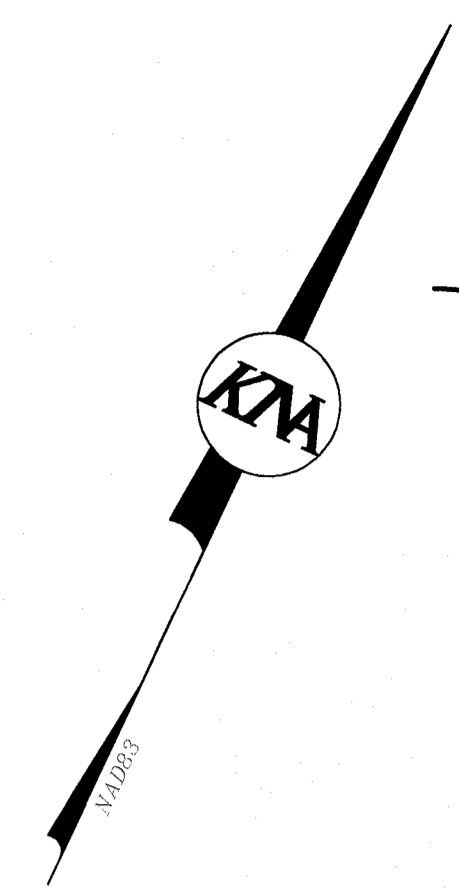
<p><b>OWNER OF RECORD:</b> STEVE S. &amp; HSIANG HWA W. PAN 13 KING HENRY DRIVE LONDONDERRY, N.H. 03053 BK. 6281 PG. 776</p>	<p><b>APPLICANT:</b> SCOTT ZIEFELDER 169 CANAAN BACK ROAD BARRINGTON, NH 03825</p>
--	--

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

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021      SCALE: 1"=20'  
PROJECT NO: 21-0311-1      SHEET 4 OF 12

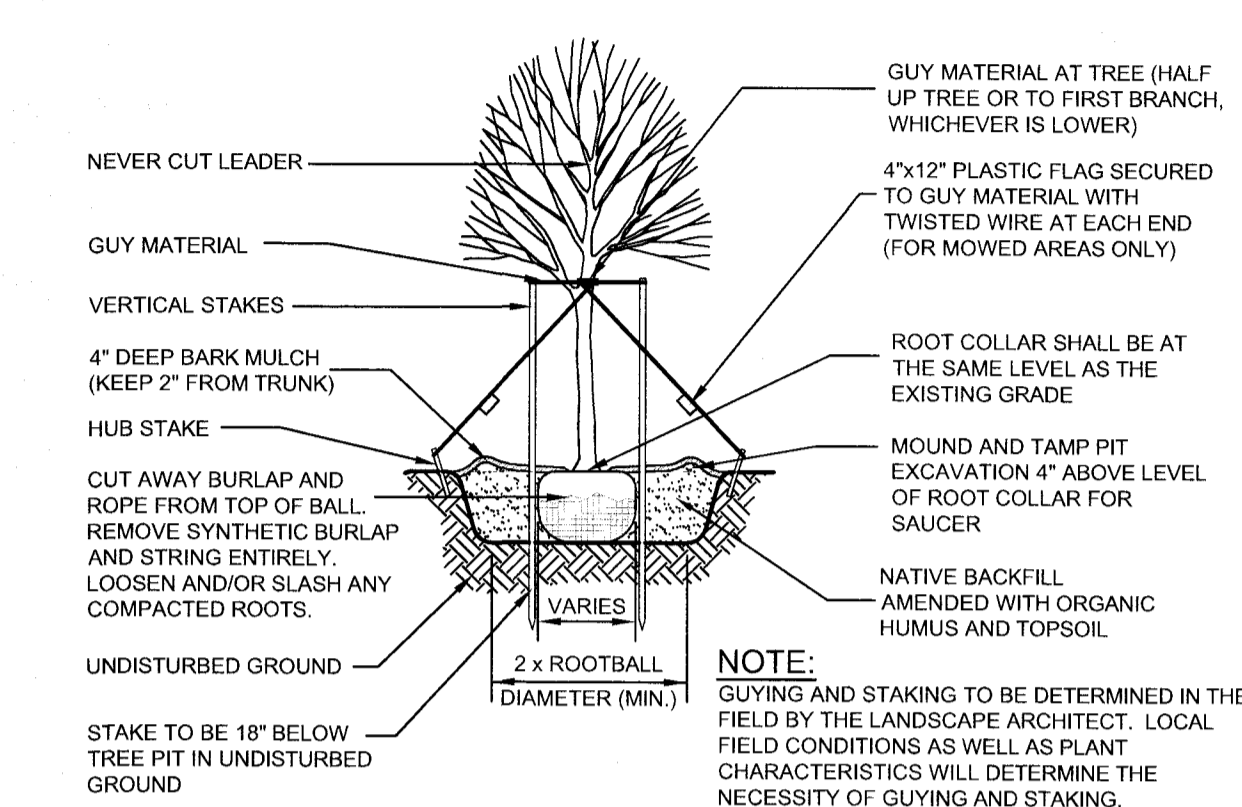




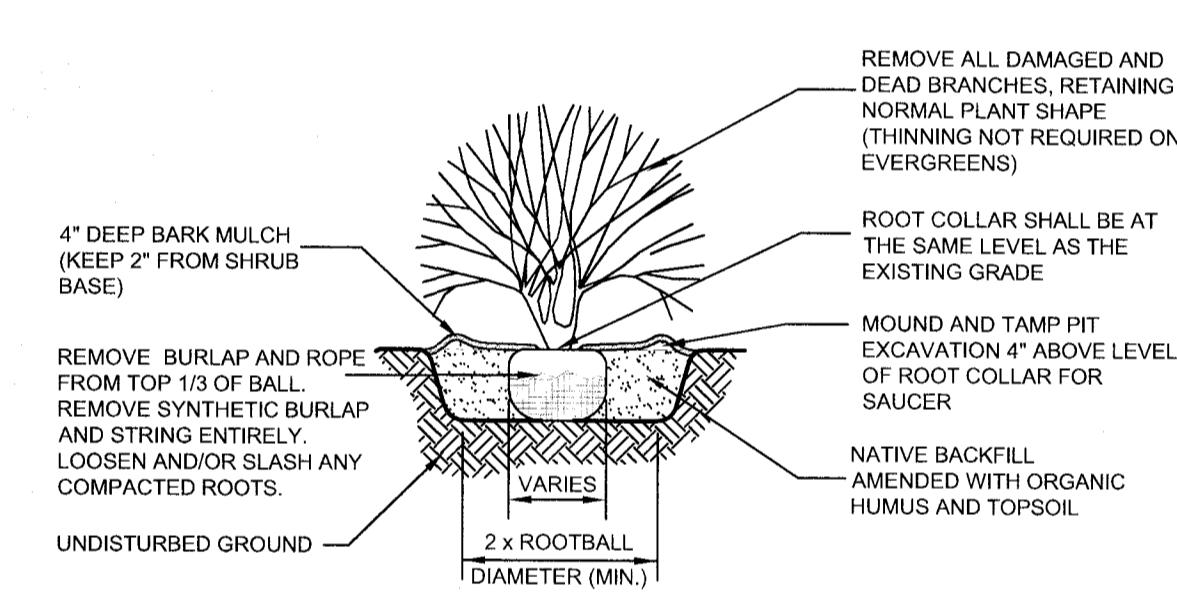
**PLANTING SCHEDULE**

Botanical Name/ Common Name	Size	Label	Quantity	Mature Height
<b>Trees</b>				
<i>Acer rubrum</i> 'Redpointe' / Redpointe Red Maple	3-3.5" CAL.	AR	7	40-60'
<b>Shrubs</b>				
<i>Cornus sericea</i> 'Arctic Fire' / Arctic Fire Red-Osier Dogwood	#3	CS	102	5-6'
<i>Ilex glabra</i> 'Compacta' / Compact Inkberry	#3	IG	72	5-6'

- LANDSCAPE NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE LANDSCAPE WHICH PROVIDES CLIMATIC RELIEF AND AESTHETIC APPEAL.
  - ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOW HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL. WARRANTIES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
  - IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS: ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% PEATMOSS AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN WATER.
  - PLANTING BEDS AND SAUCERS SHALL RECEIVE A 4" MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 5oz. POLYPROPYLENE WEED CONTROL FABRIC.
  - PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED IN THE TURF ESTABLISHMENT SCHEDULE.
  - PLANT TYPES SHOWN ARE SUBJECT TO AVAILABILITY. SUBSTITUTE MATERIALS CAN BE IMPLEMENTED WITH APPROVAL FROM KEACH NORDSTROM ASSOCIATES PRIOR TO CONSTRUCTION.



**DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE  
(JANUARY 2012)



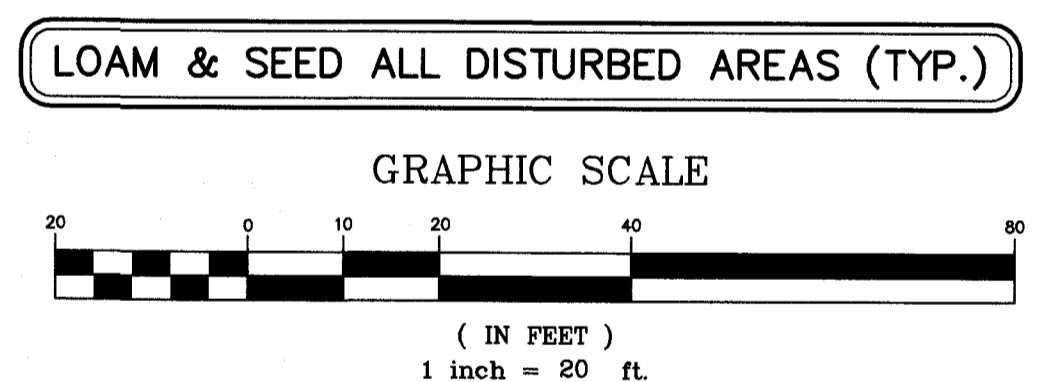
**BALLED & BURLAP SHRUB PLANTING DETAIL**  
NOT TO SCALE  
(JANUARY 2012)

**LANDSCAPE CALCULATIONS**

REQUIRED PARKING LOT INTERIOR LANDSCAPE AREA	
PROPOSED PARKING AREA PAVED:	5,151 SF
10% REQUIRED LANDSCAPE AREA:	515 SF
PROVIDED LANDSCAPE AREA:	1,496 SF

REQUIRED PARKING LOT SHADE TREES AND SHRUBS	
PROPOSED PAVED AREA:	5,151 SF
SHADE TREES REQUIRED (5,151/1,600):	3 TREES REQUIRED
(OR 1 TREE/5 PROP. PARKING SPACES)	2 TREES REQUIRED
SHADE TREES PROVIDED:	3 TREES PROPOSED
SHRUBS REQUIRED (5,151/200):	26 SHRUBS, OR
(OR 1.6 x 9 PROP. PARKING SPACES)	14 SHRUBS REQUIRED
SHRUBS PROVIDED:	14 SHRUBS PROPOSED



- LEGEND**
- ▣ GB-F GRANITE BOUND FOUND
  - IPIN-F IRON PIN FOUND
  - ⊙ DH-F DRILL HOLE FOUND
  - ⊙ UTILITY POLE
  - ⬇ PROPOSED SIGN
  - ⬆ PROPOSED LIGHT
  - ⊕ PROPOSED HYDRANT
  - ⊙ PROPOSED WELL
  - ⊙ PROPOSED SEWER MANHOLE
  - ⊙ PROPOSED DRAINAGE MANHOLE
  - ⊙ PROPOSED CATCH BASIN
  - PROPOSED OUTLET STRUCTURE
  - ABUTTER LINE
  - PROPERTY LINE
  - OVERHEAD UTILITIES
  - TREELINE
  - EDGE OF PAVEMENT
  - BUILDING SETBACK
  - ZONE LINE
  - PROPOSED TREELINE
  - PROPOSED EDGE OF PAVEMENT
  - PROPOSED BITUMINOUS CURB
  - PROPOSED SWALE
  - EASEMENT

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD  
DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**LANDSCAPE PLAN**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

**OWNER OF RECORD:**  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

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

**DIG SAFE**  
811 CALL TOLL FREE  
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

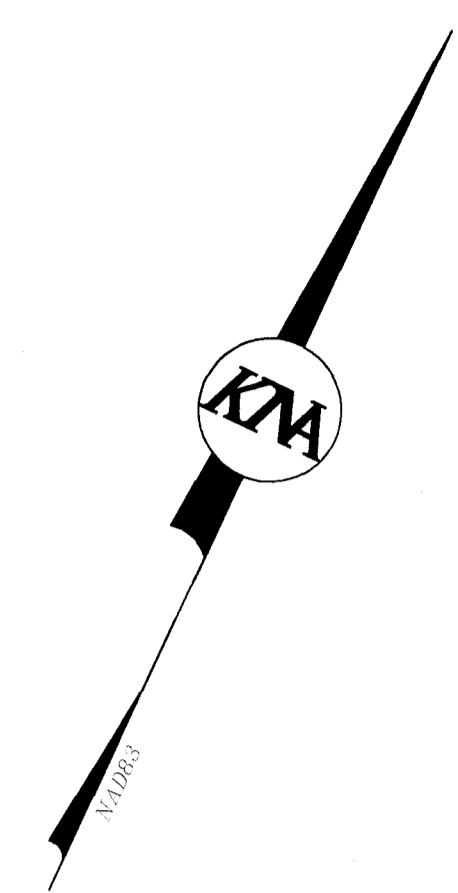
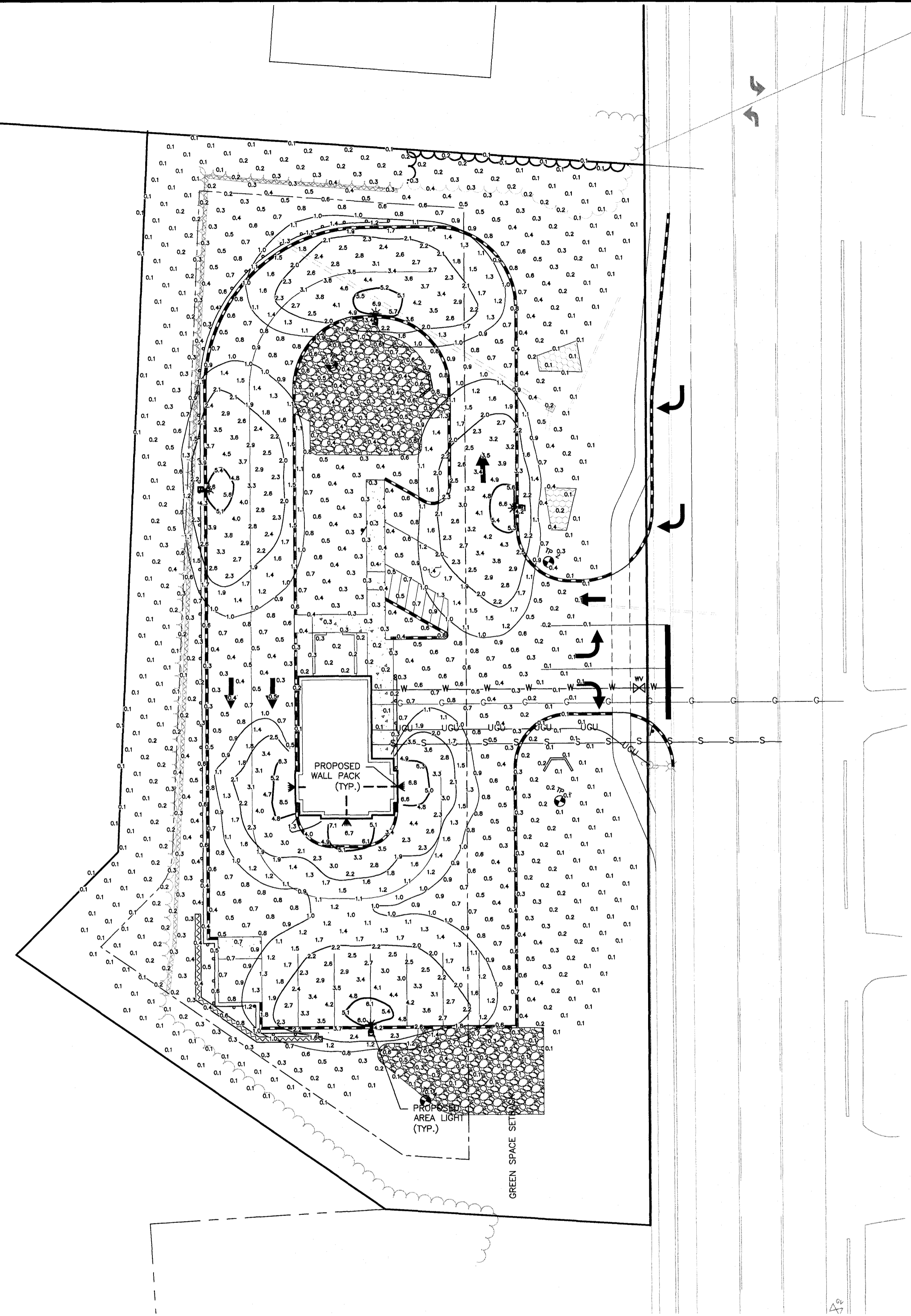
STATE OF NEW HAMPSHIRE  
PAUL CHISHOLM  
No. 15076  
LICENSED PROFESSIONAL ENGINEER

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021 SCALE: 1"=20'  
PROJECT NO: 21-0311-1 SHEET 5 OF 12

**LEGEND**

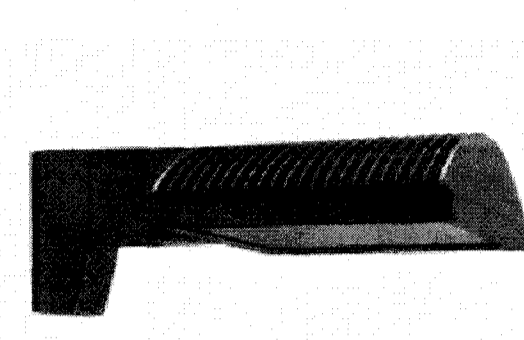
- GB-F GRANITE BOUND FOUND
- ⊙ IP-F IRON PIN FOUND
- ⊙ IP-S IRON PIN SET WITH CAP
- ⊙ W/CAP
- ⊙ UTILITY POLE
- ⊙ STREET LIGHT
- ⊙ GAS VALVE
- ⊙ WATER VALVE
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- OHU OVERHEAD UTILITIES
- G GAS LINE
- W WATER LINE
- S SEWER LINE
- DRAINAGE LINE
- TREELINE
- RETAINING WALL
- ECP EDGE OF PAVEMENT
- VGC VERTICAL GRANITE CURB
- 10' CONTOUR
- 2' CONTOUR
- SOIL LINE
- SETBACK
- ⊙ PROPOSED UTILITY POLE
- ⊙ PROPOSED SIGN
- ⊙ PROPOSED LIGHT
- ⊙ PROPOSED GAS VALVE
- ⊙ PROPOSED WATER VALVE
- ⊙ PROPOSED HYDRANT
- PROPOSED CHAIN LINK FENCE
- PROPOSED BARBED WIRE FENCE
- OHU PROPOSED OVERHEAD UTILITIES
- UGU PROPOSED UNDERGROUND UTILITIES
- G PROPOSED GAS LINE
- W PROPOSED WATER LINE
- S PROPOSED SEWER LINE
- PROPOSED DRAINAGE LINE
- PROPOSED TREELINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED VERTICAL GRANITE CURB



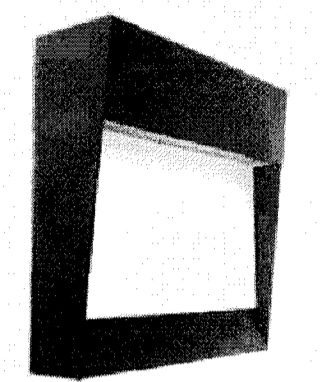
**LIGHTING NOTES:**

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

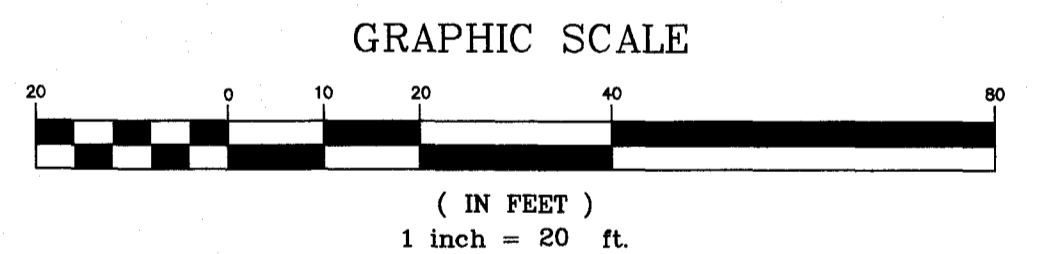
LUMINAIRE SCHEDULE				
SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION
⊙*	4	P1	SINGLE	RAB ALED3750NK AREA LIGHT (15' AFG)
⊙	3	W1	SINGLE	RAB W17-30L WALL PACK (15' AFG)



RAB AREA LIGHT



RAB WALL PACK



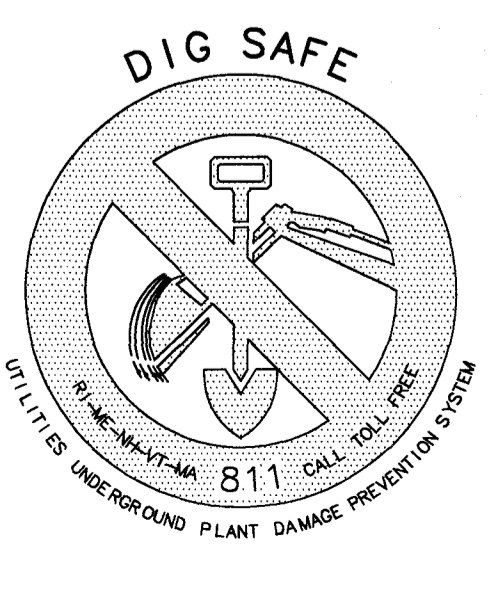
**LIGHTING PLAN**  
**AROMA JOE'S**  
 MAP 173 LOT 29  
 56 DERRY STREET  
 HUDSON, NEW HAMPSHIRE  
 HILLSBOROUGH COUNTY

<p><b>OWNER OF RECORD:</b>                  STEVE S. &amp; HSIANG HWA W. PAN                  13 KING HENRY DRIVE                  LONDONDERRY, N.H. 03053                  BK. 6281 PG. 776</p>	<p><b>APPLICANT:</b>                  SCOTT ZIEFELDER                  169 CANAAN BACK ROAD                  BARRINGTON, NH 03825</p>
--	---

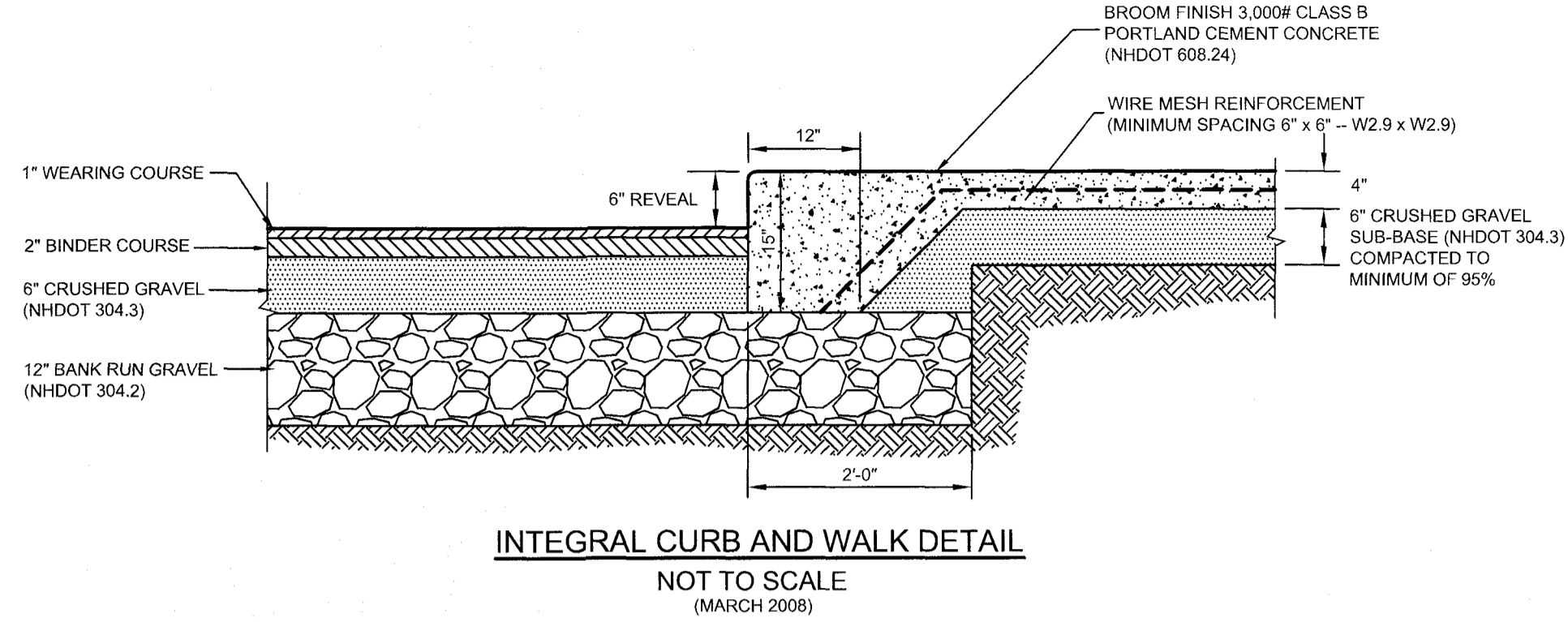
**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
 Civil Engineering Land Surveying Landscape Architecture  
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY

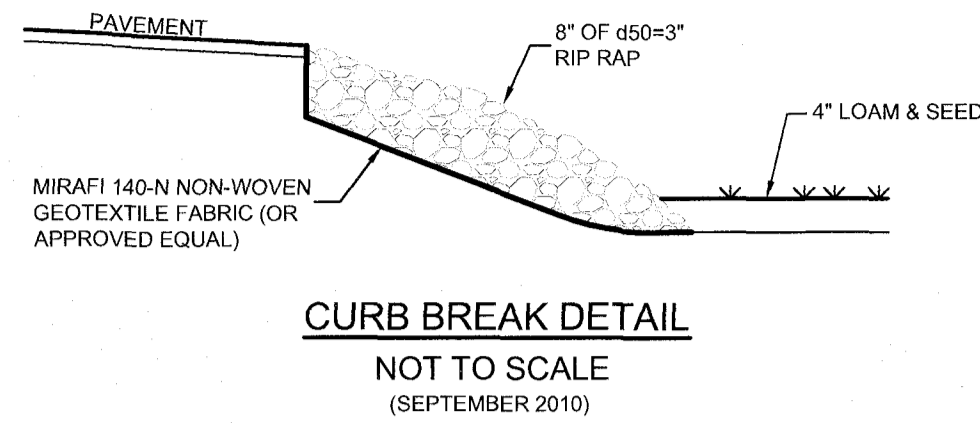
DATE: JUNE 22, 2021      SCALE: 1"=20'  
 PROJECT NO: 21-0311-1      SHEET 6 OF 12



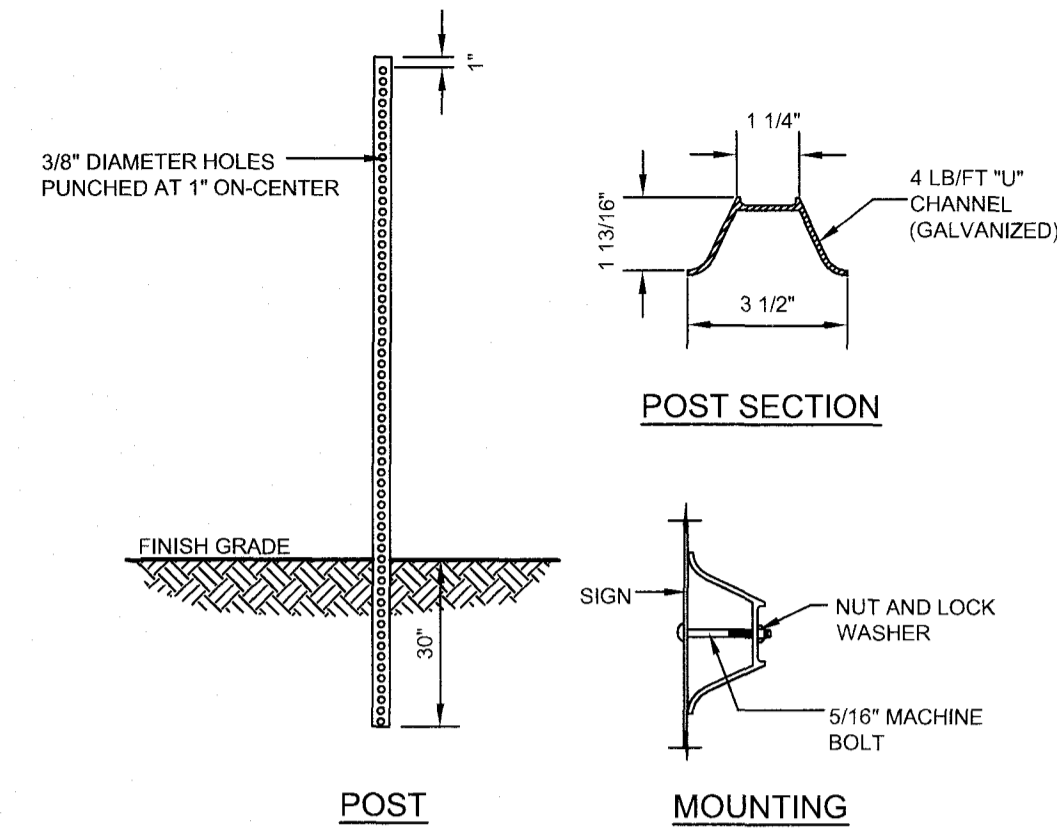




**INTEGRAL CURB AND WALK DETAIL**  
NOT TO SCALE  
(MARCH 2008)



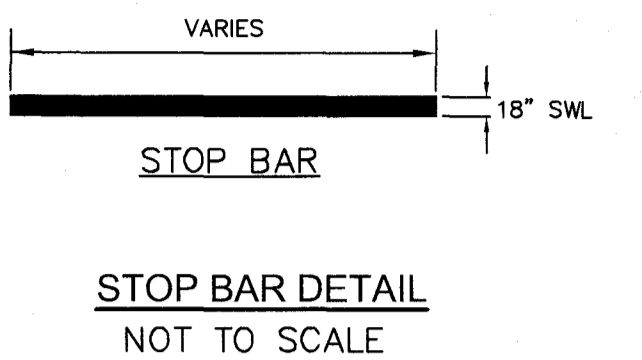
**CURB BREAK DETAIL**  
NOT TO SCALE  
(SEPTEMBER 2010)



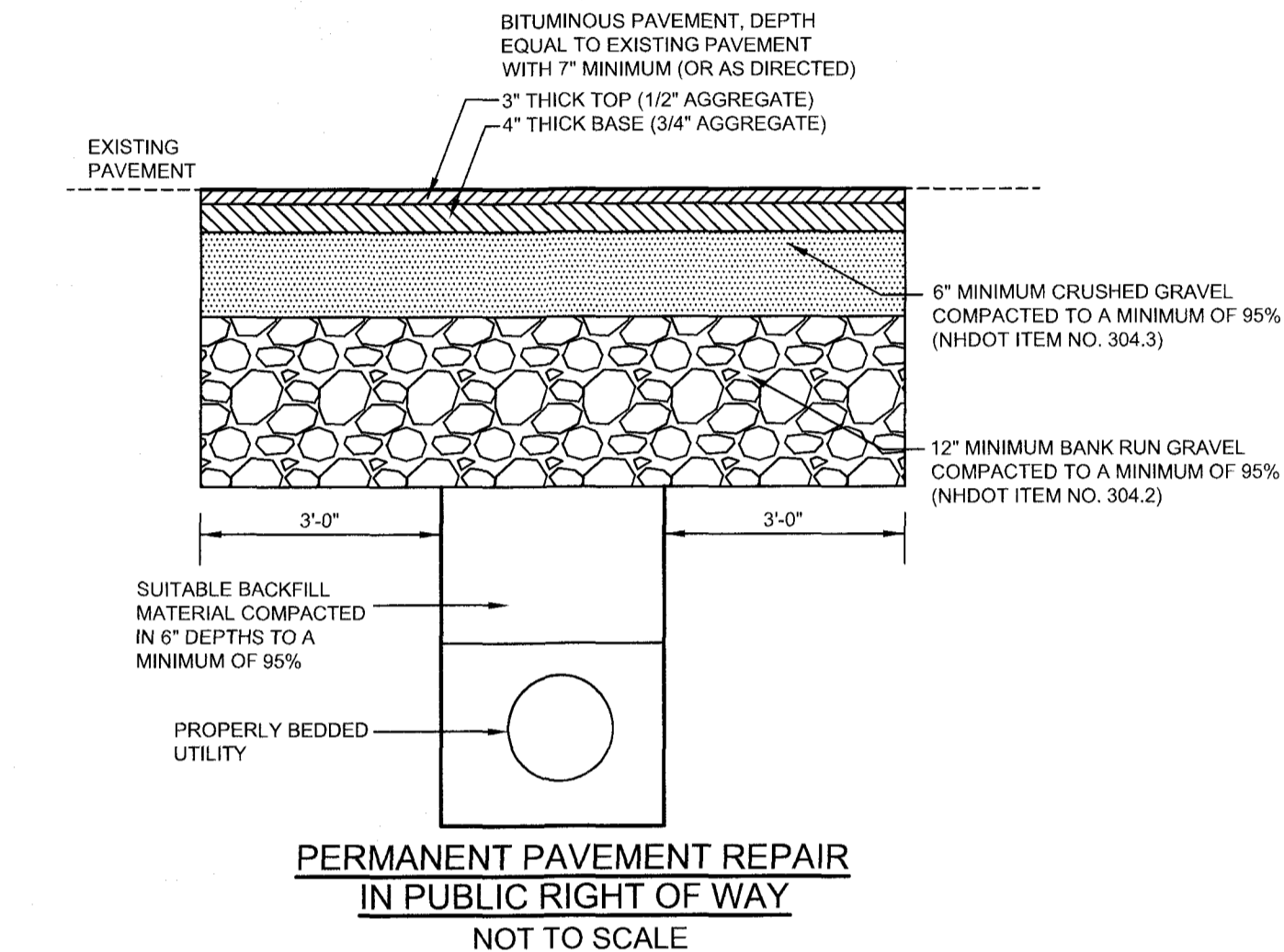
**STEEL SIGN POST DETAIL**  
NOT TO SCALE  
(MARCH 2008)



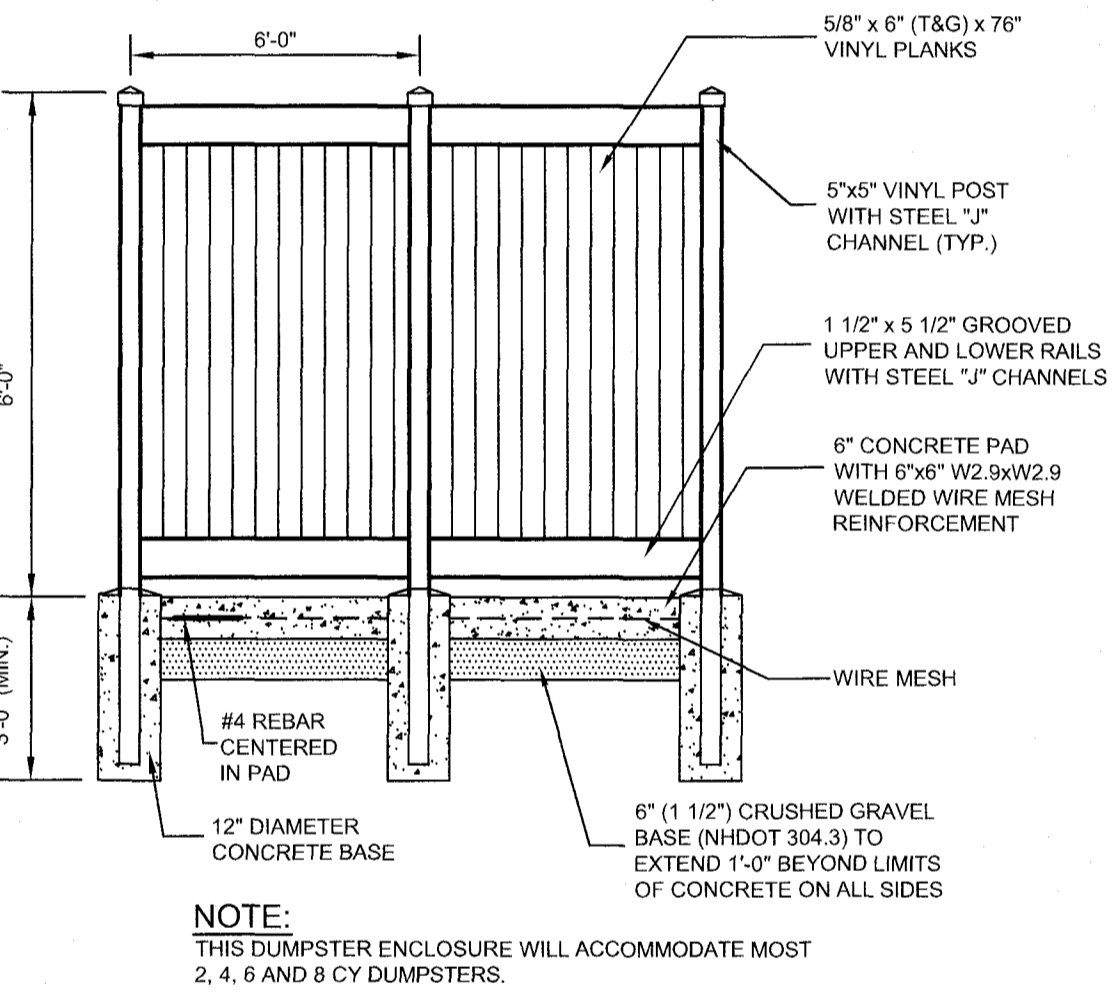
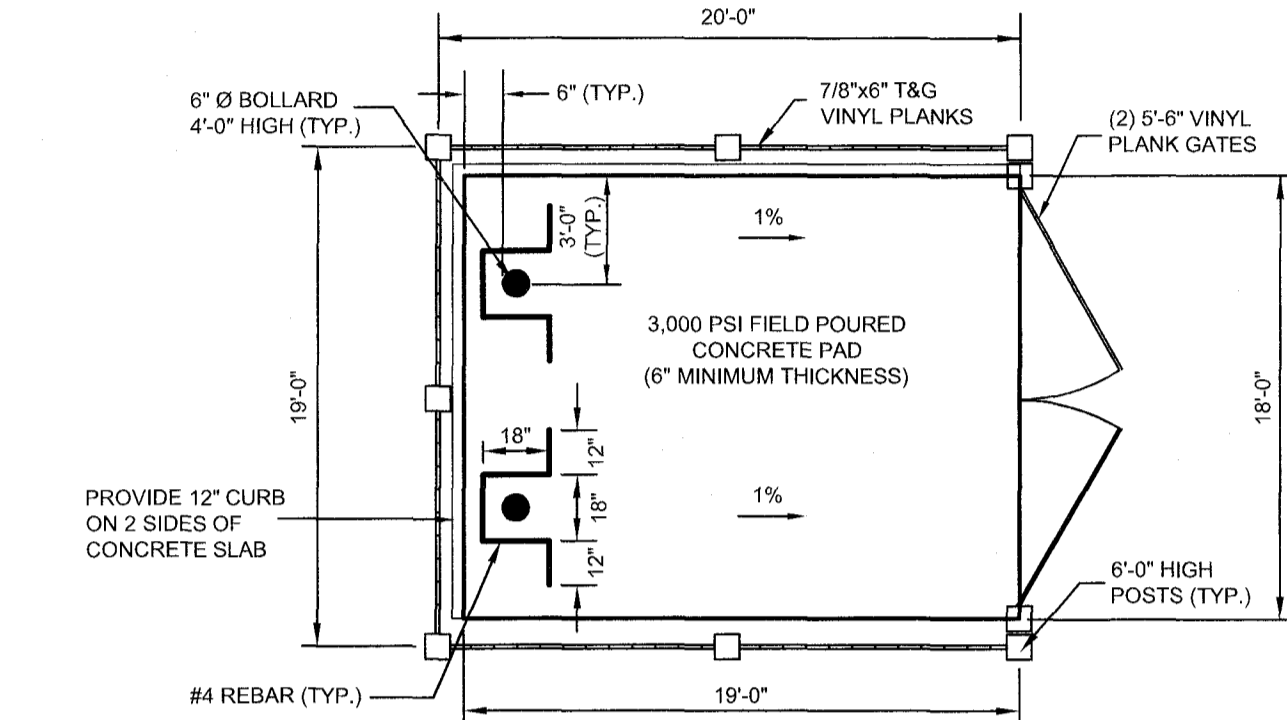
**STOP SIGN DETAIL**  
NOT TO SCALE



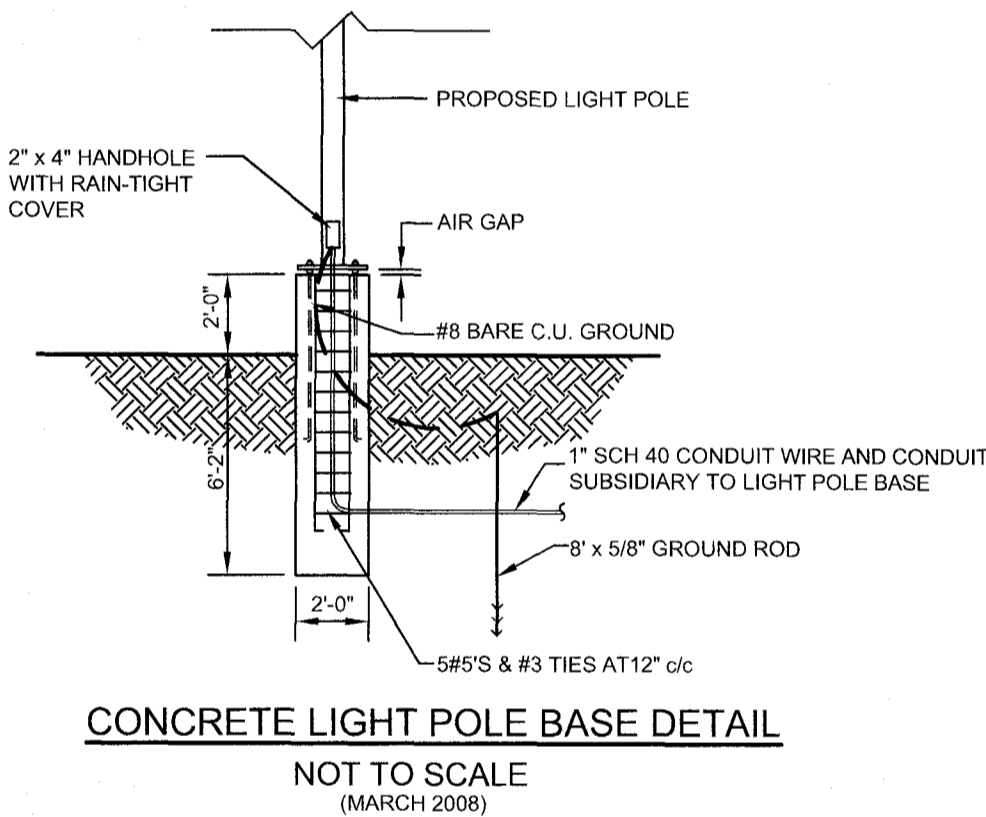
**STOP BAR DETAIL**  
NOT TO SCALE



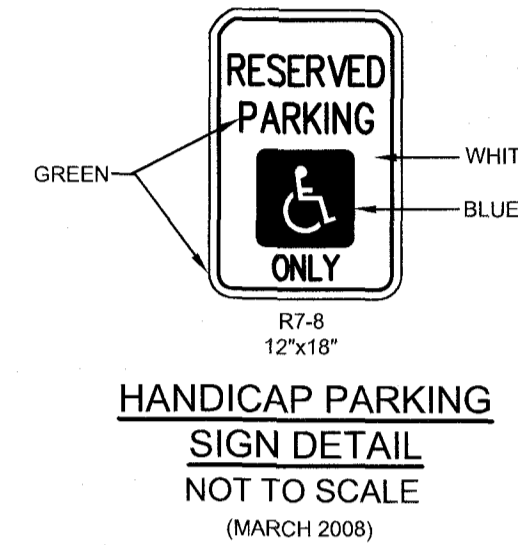
**PERMANENT PAVEMENT REPAIR  
IN PUBLIC RIGHT OF WAY**  
NOT TO SCALE



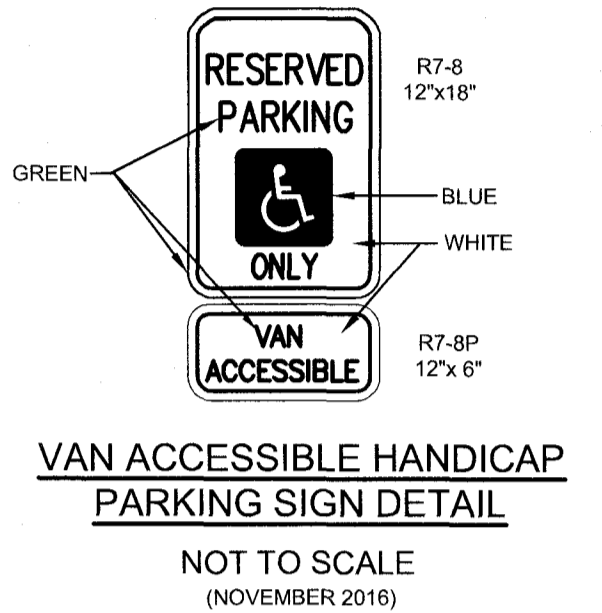
**VINYL STOCKADE TRASH ENCLOSURE DETAIL**  
NOT TO SCALE



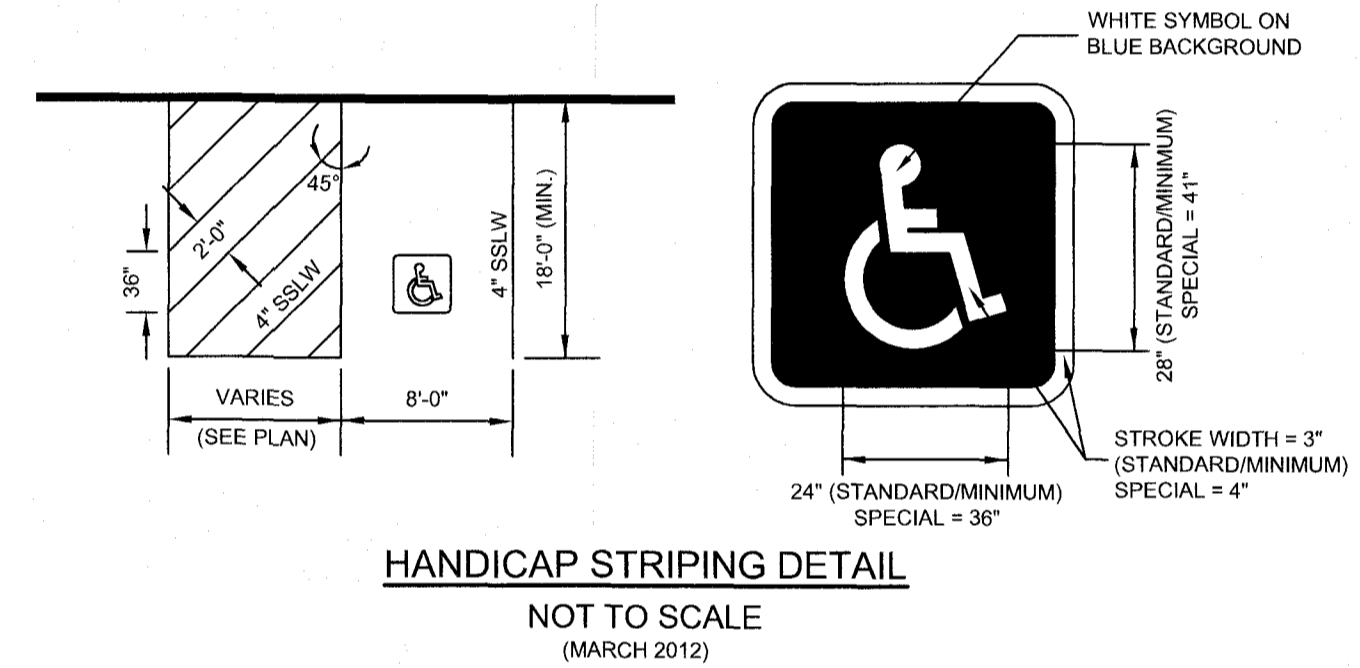
**CONCRETE LIGHT POLE BASE DETAIL**  
NOT TO SCALE  
(MARCH 2008)



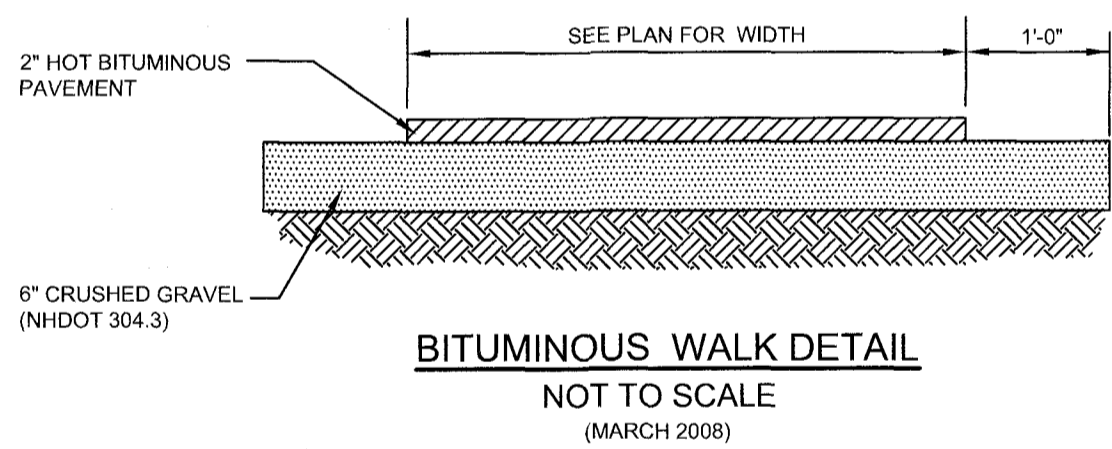
**HANDICAP PARKING  
SIGN DETAIL**  
NOT TO SCALE  
(MARCH 2008)



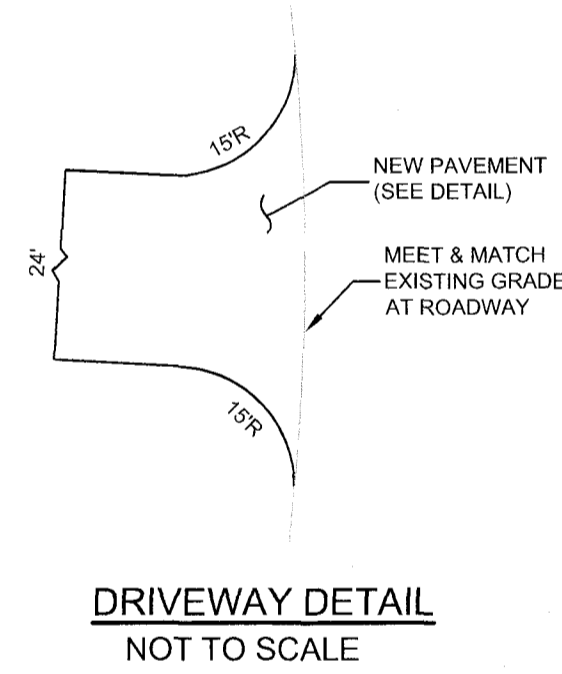
**VAN ACCESSIBLE HANDICAP  
PARKING SIGN DETAIL**  
NOT TO SCALE  
(NOVEMBER 2018)



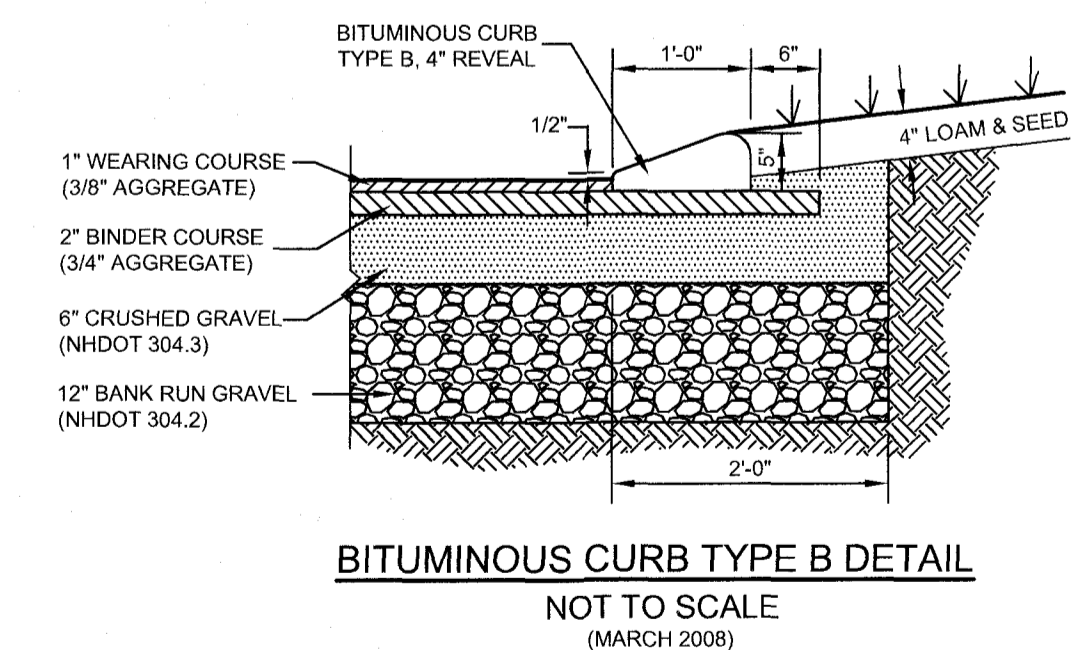
**HANDICAP STRIPING DETAIL**  
NOT TO SCALE  
(MARCH 2012)



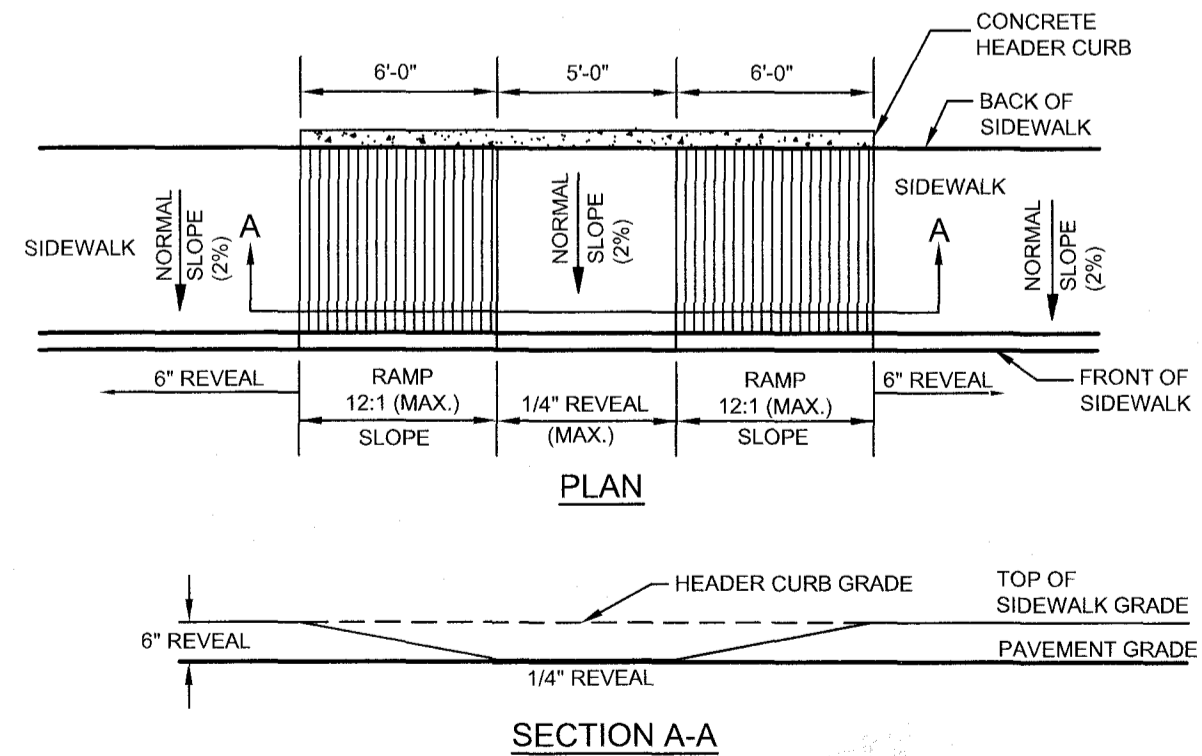
**BITUMINOUS WALK DETAIL**  
NOT TO SCALE  
(MARCH 2008)



**DRIVEWAY DETAIL**  
NOT TO SCALE

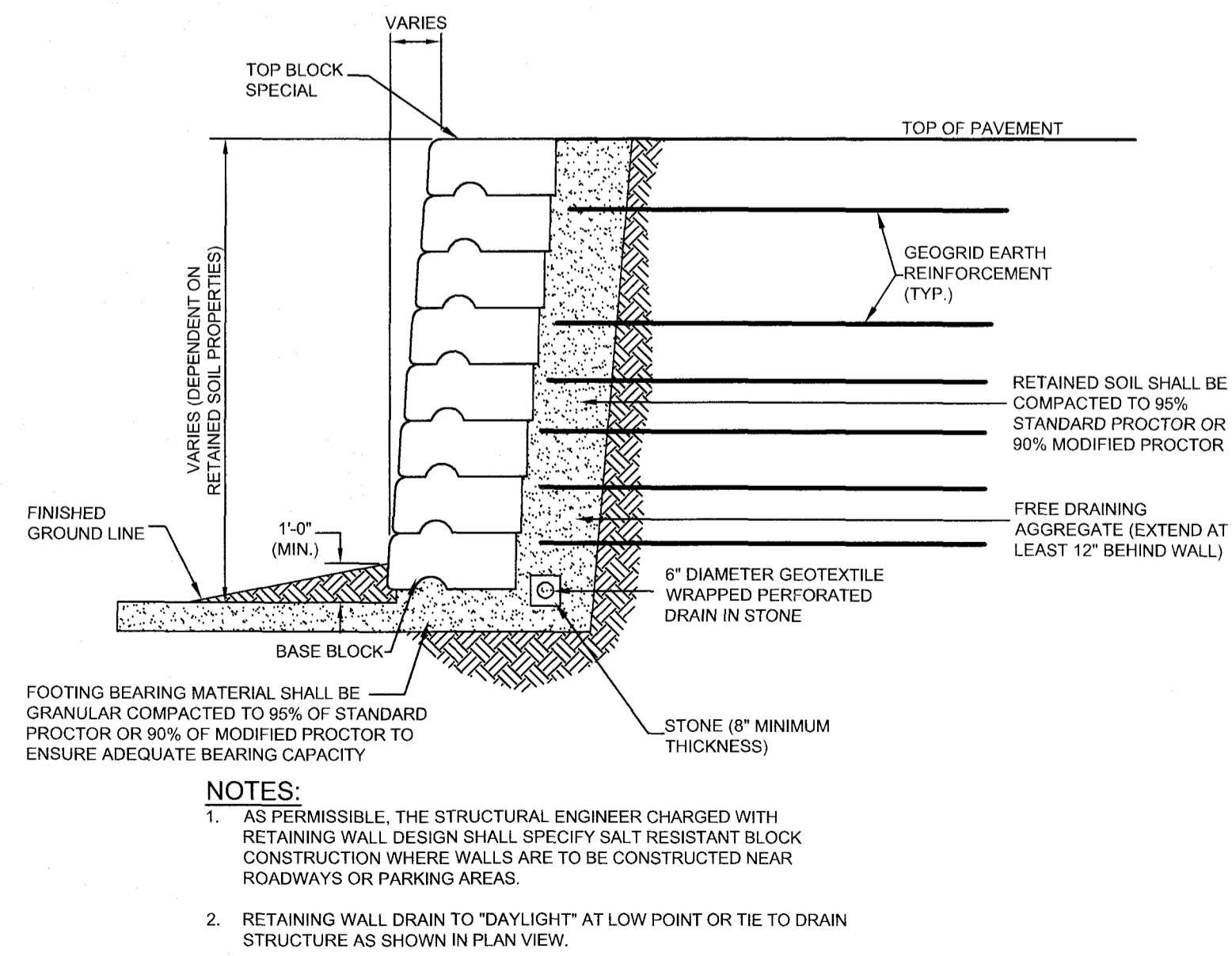


**BITUMINOUS CURB TYPE B DETAIL**  
NOT TO SCALE  
(MARCH 2008)



- NOTES:**
1. A BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP SHALL BE USED ON PORTLAND CEMENT CONCRETE RAMPS.
  2. MAINTAIN THE NORMAL PAVEMENT PROFILE THROUGHOUT THE RAMP AREA.
  3. MAINTAIN A MAXIMUM 1/4" OF CURB REVEAL AT THE RAMP, SEE SECTION A-A

**SIDEWALK RAMP**  
NOT TO SCALE  
(JUNE 2012)



- NOTES:**
1. AS PERMISSIBLE, THE STRUCTURAL ENGINEER CHARGED WITH RETAINING WALL DESIGN SHALL SPECIFY SALT RESISTANT BLOCK CONSTRUCTION WHERE WALLS ARE TO BE CONSTRUCTED NEAR ROADWAYS OR PARKING AREAS.
  2. RETAINING WALL DRAIN TO "DAYLIGHT" AT LOW POINT OR TIE TO DRAIN STRUCTURE AS SHOWN IN PLAN VIEW.

**REDI-ROCK RETAINING WALL WITH GUARDRAIL**  
(TO BE DESIGNED BY OTHERS)  
NOT TO SCALE  
(SEPTEMBER 2010)

PURSUANT TO THE REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

**APPROVED BY THE HUDSON, NH PLANNING BOARD**

DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**CONSTRUCTION DETAILS**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

**OWNER OF RECORD:**  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

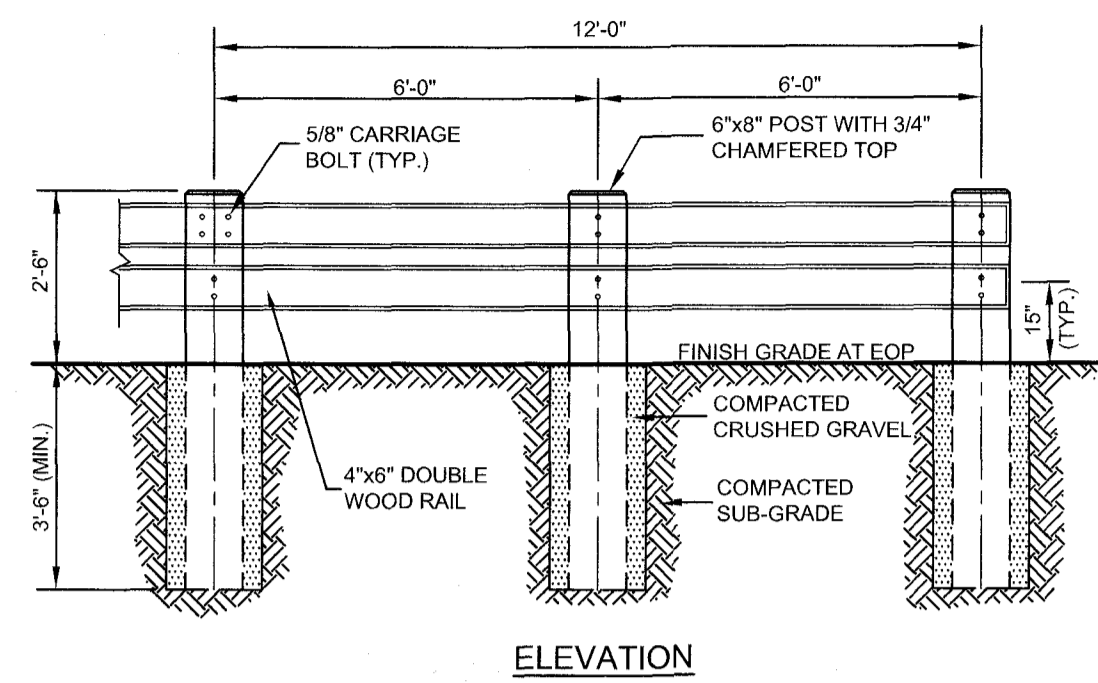
**KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

**PAUL CHISHOLM**  
No. 15078  
LICENSED PROFESSIONAL ENGINEER

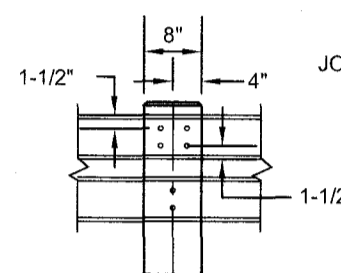
REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021 SCALE: AS SHOWN  
PROJECT NO: 21-0311-1 SHEET 7 OF 12

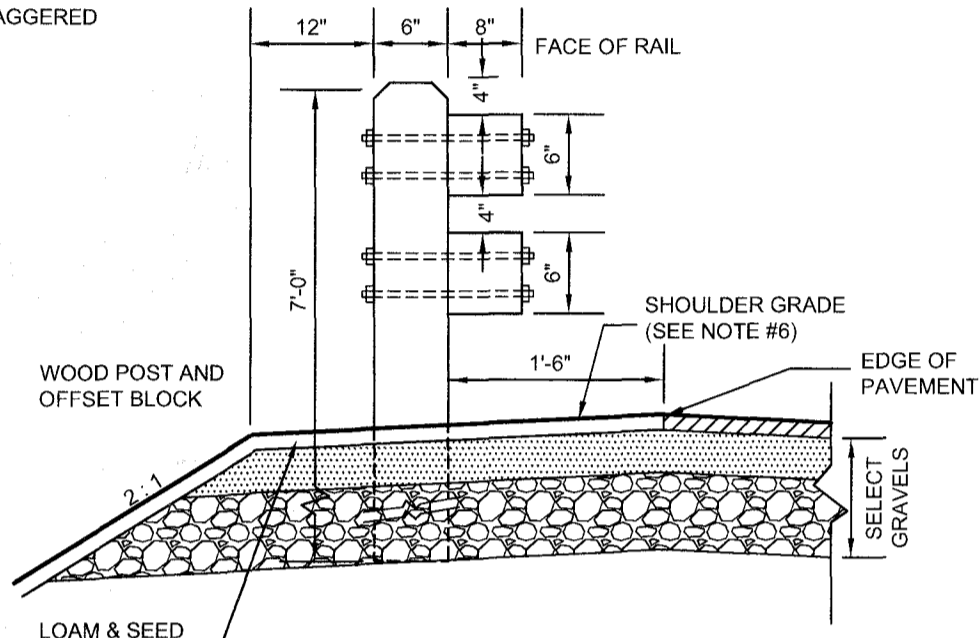




ELEVATION



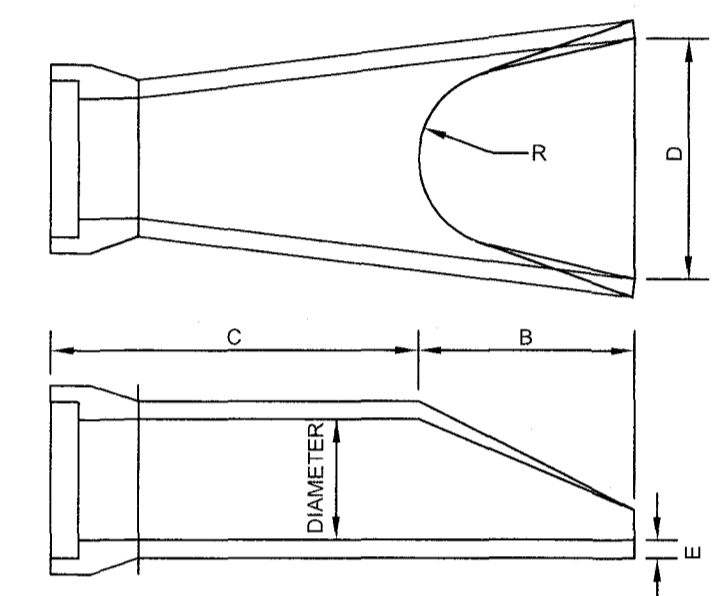
BOLT DETAIL



SIDE VIEW

- NOTES:**
1. ALL TIMBERS SHALL BE PRESSURE TREATED.
  2. PAY LIMIT = PER LINEAR FOOT INCLUDING END SECTION.
  3. ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED.

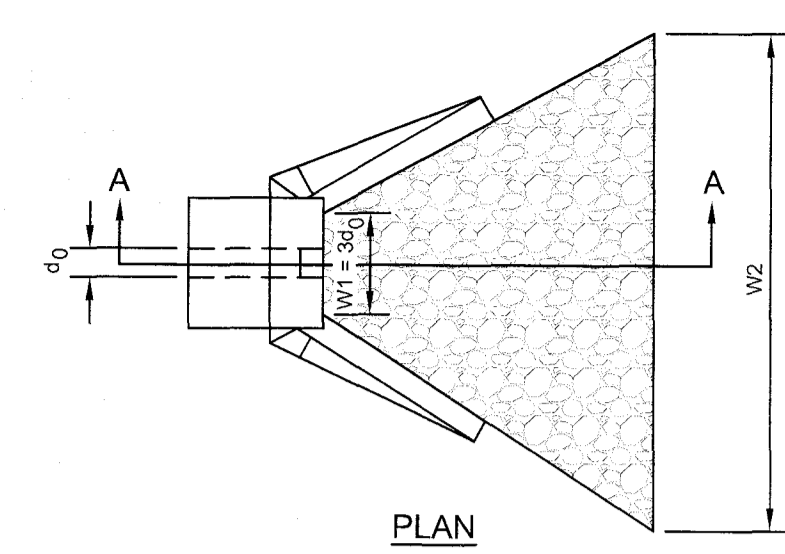
**WOOD BEAM GUARDRAIL**  
NOT TO SCALE  
(AUGUST 2011)



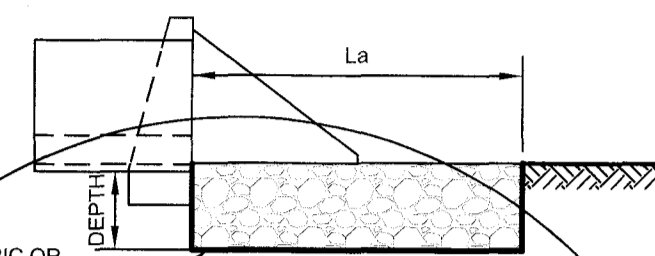
DIAMETER	A	B	C	D	E	R
12"	4"	2'-0"	4'-0 7/8"	2'-0"	2"	9"
15"	6"	2'-3"	3'-10"	2'-6"	2 1/4"	11"
18"	9"	2'-3"	3'-10"	3'-0"	2 1/2"	12"
21"	9"	2'-11"	3'-2"	3'-6"	2 3/4"	13"
24"	9 1/2"	3'-7 1/2"	2'-8"	4'-0"	3"	14"
30"	12"	4'-6"	1'-7 3/4"	5'-0"	3 1/2"	15"
36"	15"	5'-3"	2'-10 3/4"	6'-0"	4"	20"

**RCP FLARED END SECTION DETAIL**  
NOT TO SCALE  
(MARCH 2008)

- NOTES:**
1. CONCRETE STRENGTH SHALL BE 4000 PSI AT 28 DAYS.
  2. REINFORCING IN ACCORDANCE WITH ASTM C-76, CLASS III.
  3. INLET END SECTIONS AND OUTLET END SECTIONS AVAILABLE (OUTLET SHOWN).
  4. OTHER DIAMETERS AVAILABLE UPON REQUEST.



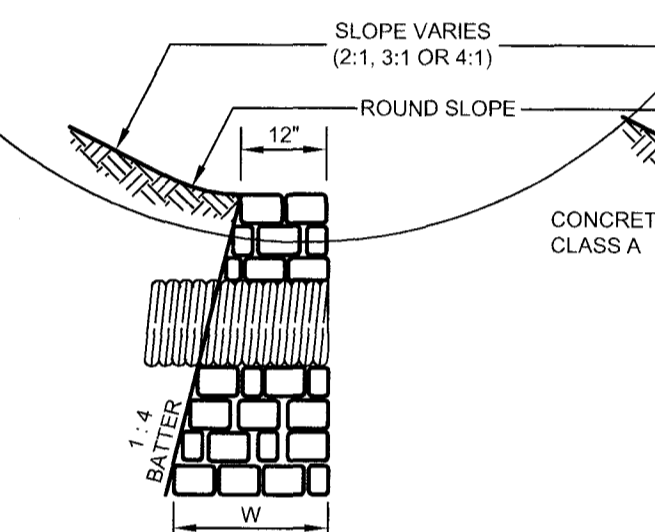
PLAN



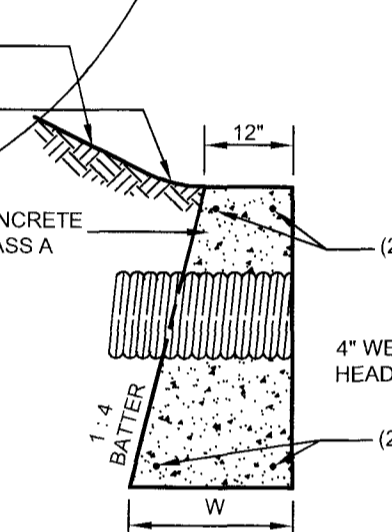
SECTION A-A

**PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL**  
NOT TO SCALE

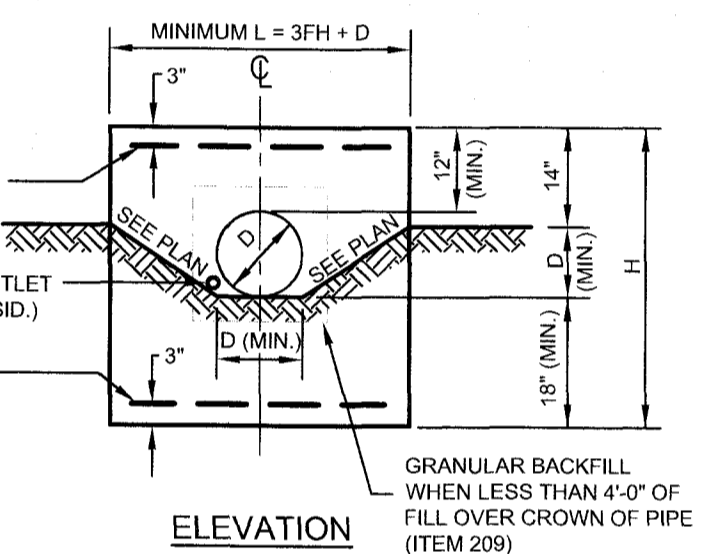
LOCATION	La	W1	W2	d50	DEPTH
N. PIPE	30'	9'	21'	4"	10"
S. PIPE	35'	9'	23'	4"	10"
HW#31	15'	10'	10'	4"	10"
HW#14	30'	10'	10'	4"	10"
HW#16	31'	4'	4'	4"	10"



**MORTAR RUBBLE MASONRY SECTION ON CENTERLINE**



**CONCRETE SECTION ON CENTERLINE**



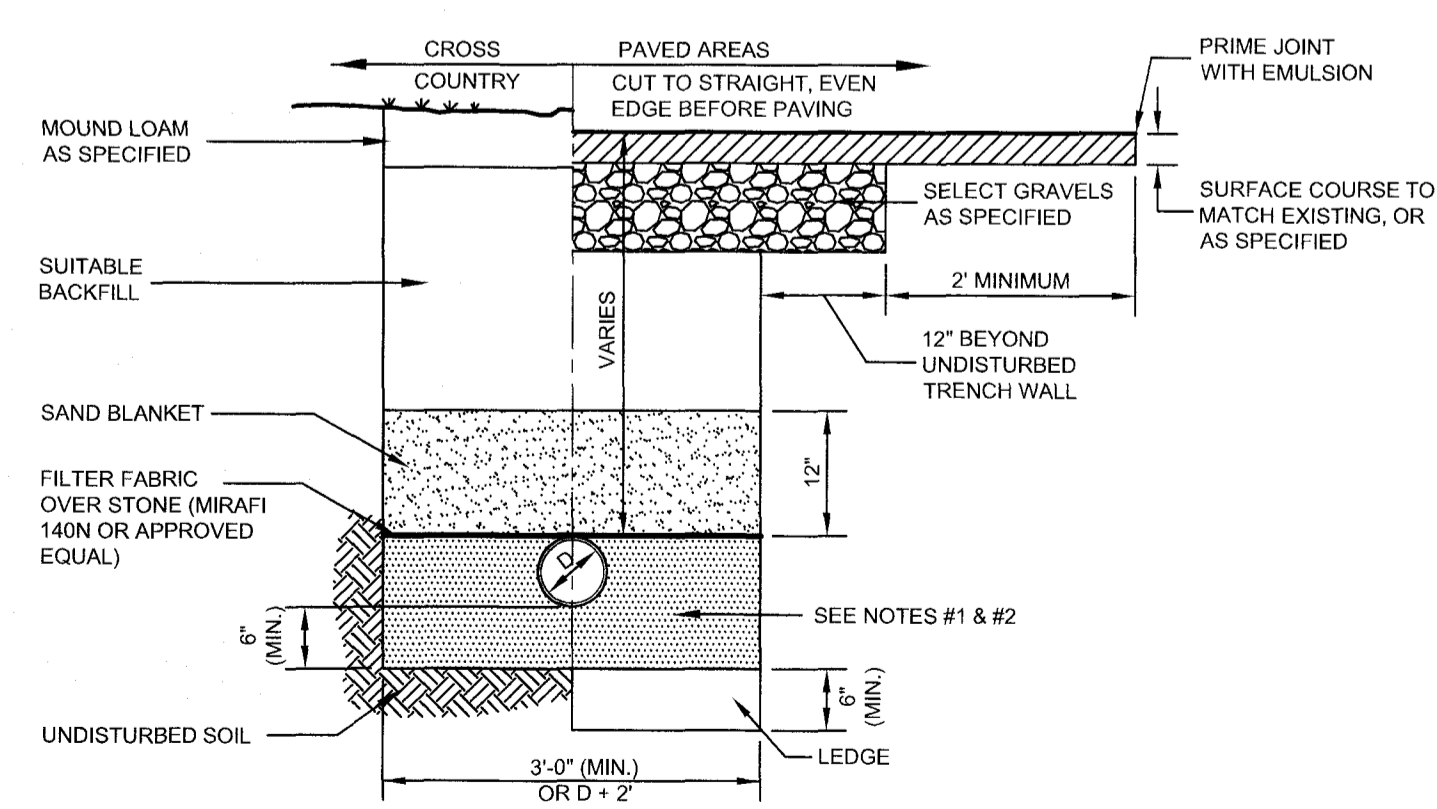
**ELEVATION**

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

DIAMETER D (INCH)	AREA OF PIPE (SF)	MASONRY PER FOOT OF WALL (CU. YD.)	MASONRY PER HOLE (CU. FT.)	MASONRY PER STANDARD HEADER (CU. YD.)	STEEL PER STANDARD HEADER (LB)	LENGTH OF BARS	PIPE EXC. 1' DEPTH (CU. YD.)	HEADER EXC. PER HEADER 1' DEPTH (CU. YD.)	ITEM 209 PER LINEAR FOOT	HEADER LENGTH L	HEADER HEIGHT H	FILL HEIGHT FH	1" HEADWALL		
													MASONRY IN CORNER FRUSTRUM (CU. YD.)	HEADER EXC. PER HEADER 1' DEPTH (CU. YD.)	
15"	1.23	0.202	1.73	0.85	11	3'-10"	0.120	0.947	0.35	4'-6"	3'-9"	1'-1"	1'-11 1/4"	0.31	1.232
18"	1.77	0.222	2.52	1.13	14	5'-2"	0.130	1.111	0.39	5'-6"	4'-0"	1'-4"	2'-0"	0.35	1.406
30"	4.91	0.301	7.67	2.58	25	9'-2"	0.185	1.610	0.65	9'-6"	5'-0"	2'-4"	2'-3"	0.51	2.164

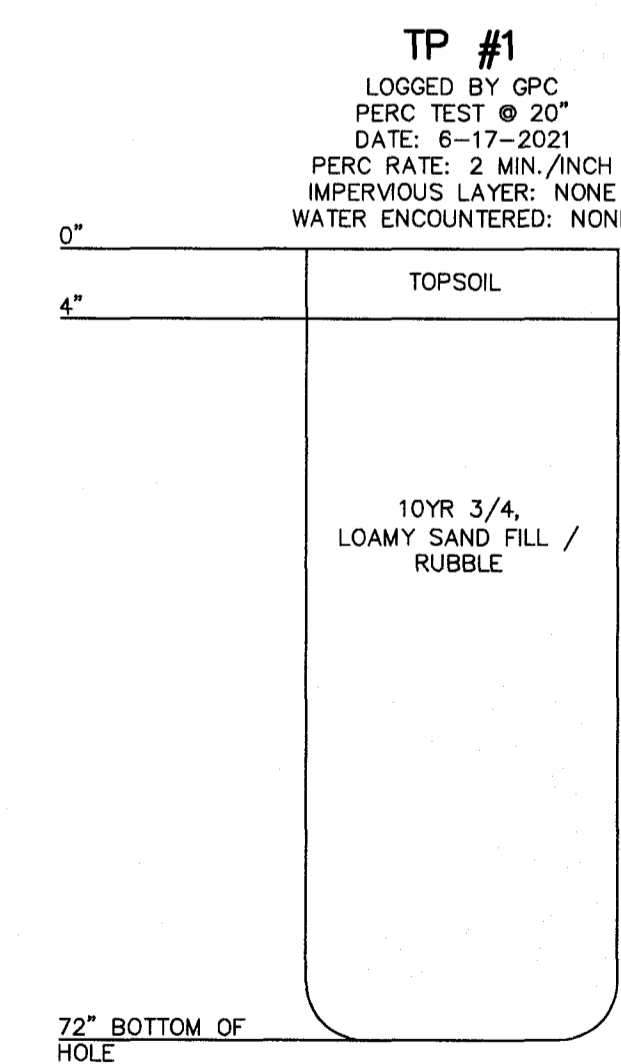
NOTE: STEEL QUANTITIES ARE FOR CONCRETE HEADWALLS ONLY.

**CONCRETE HEADWALLS**



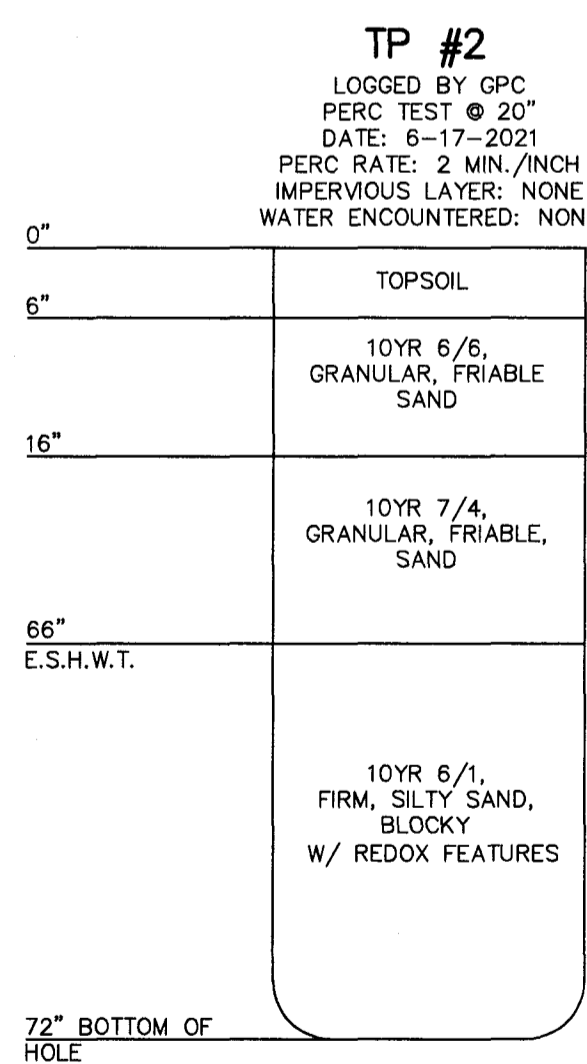
- NOTES:**
1. THOROUGHLY COMPACTED SCREENED GRAVEL FOR RCP PIPE. SCREENED GRAVEL TO EXTEND TO SELECT FILL LINE.
  2. FOR HDPE OR PVC PIPE, BEDDING SHALL BE 3/4" STONE TO THE TOP OF THE PIPE.

**STORM DRAINAGE TRENCH DETAIL**  
NOT TO SCALE  
(MARCH 2008)



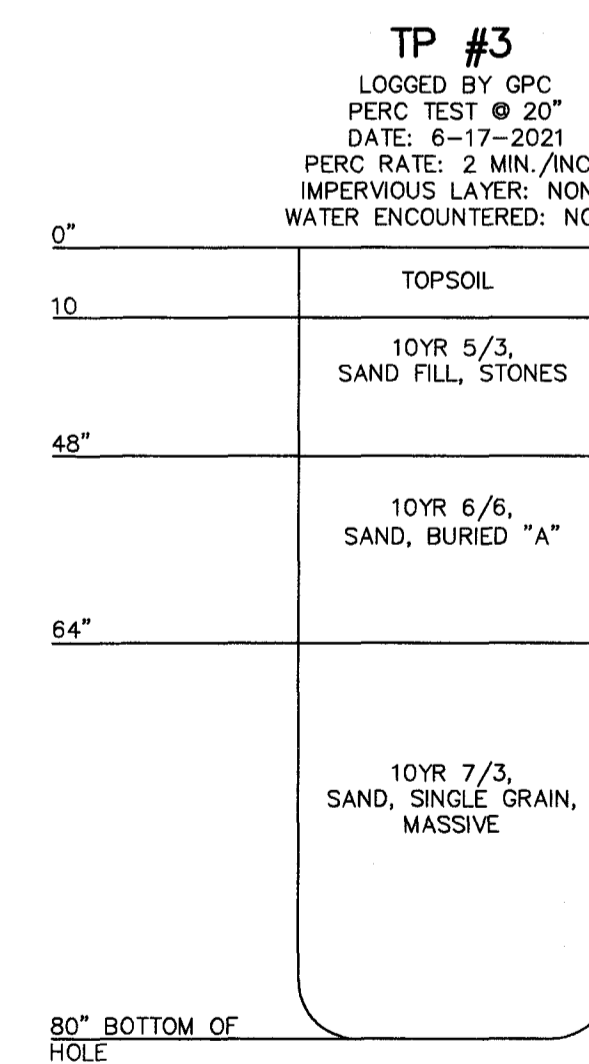
**TP #1**

LOGGED BY GPC  
PERC TEST @ 20"  
DATE: 6-17-2021  
PERC RATE: 2 MIN./INCH  
IMPERVIOUS LAYER: NONE  
WATER ENCOUNTERED: NONE



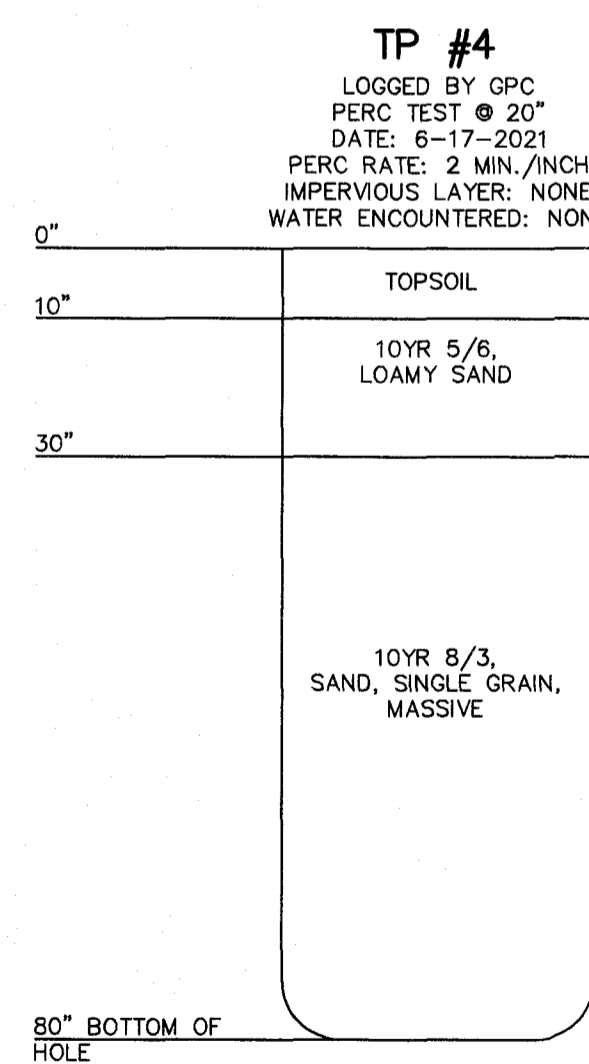
**TP #2**

LOGGED BY GPC  
PERC TEST @ 20"  
DATE: 6-17-2021  
PERC RATE: 2 MIN./INCH  
IMPERVIOUS LAYER: NONE  
WATER ENCOUNTERED: NONE



**TP #3**

LOGGED BY GPC  
PERC TEST @ 20"  
DATE: 6-17-2021  
PERC RATE: 2 MIN./INCH  
IMPERVIOUS LAYER: NONE  
WATER ENCOUNTERED: NONE



**TP #4**

LOGGED BY GPC  
PERC TEST @ 20"  
DATE: 6-17-2021  
PERC RATE: 2 MIN./INCH  
IMPERVIOUS LAYER: NONE  
WATER ENCOUNTERED: NONE

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**CONSTRUCTION DETAILS**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

**OWNER OF RECORD:**  
STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**  
SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

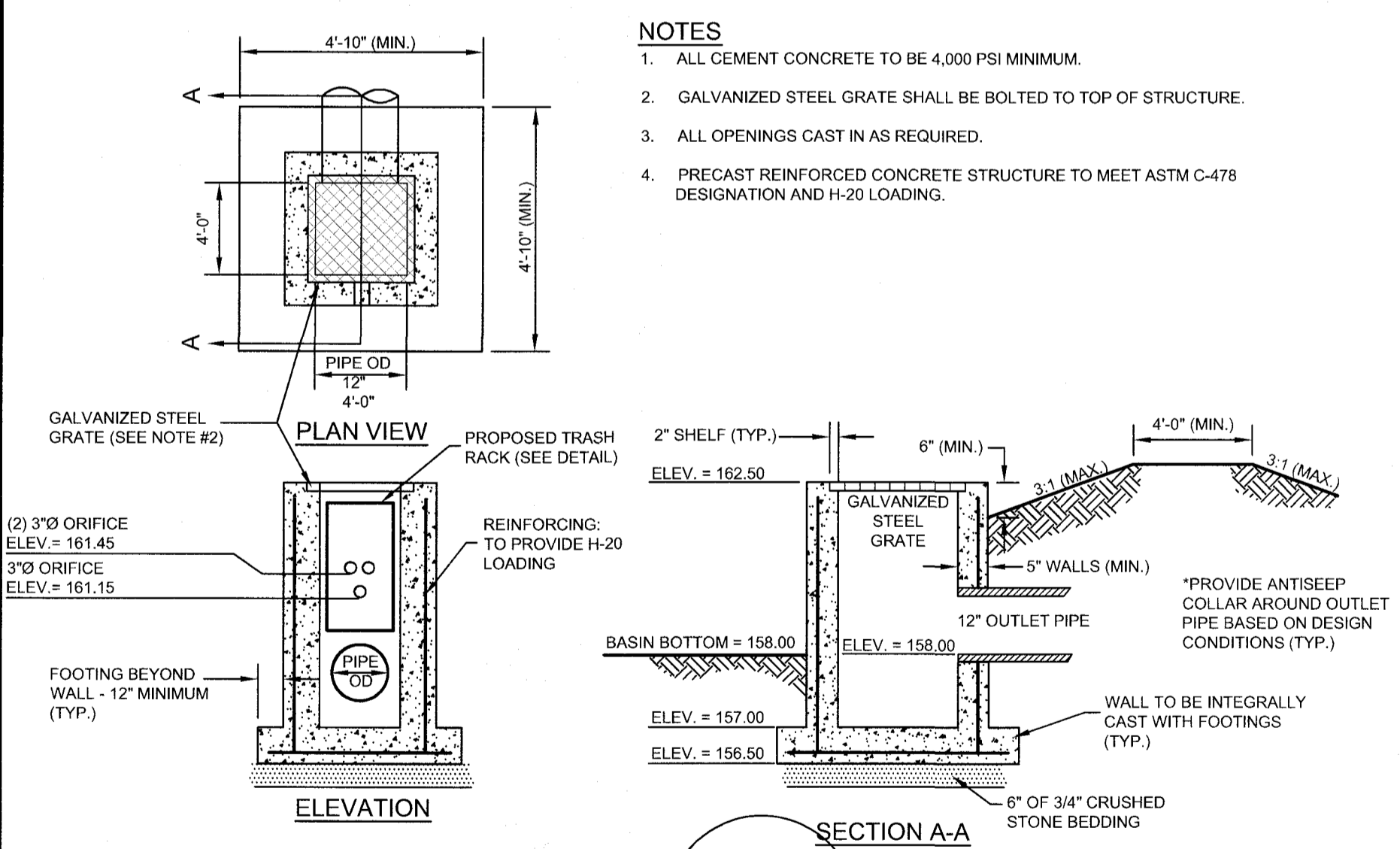
**KM KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

**REVISIONS**

No.	DATE	DESCRIPTION	BY

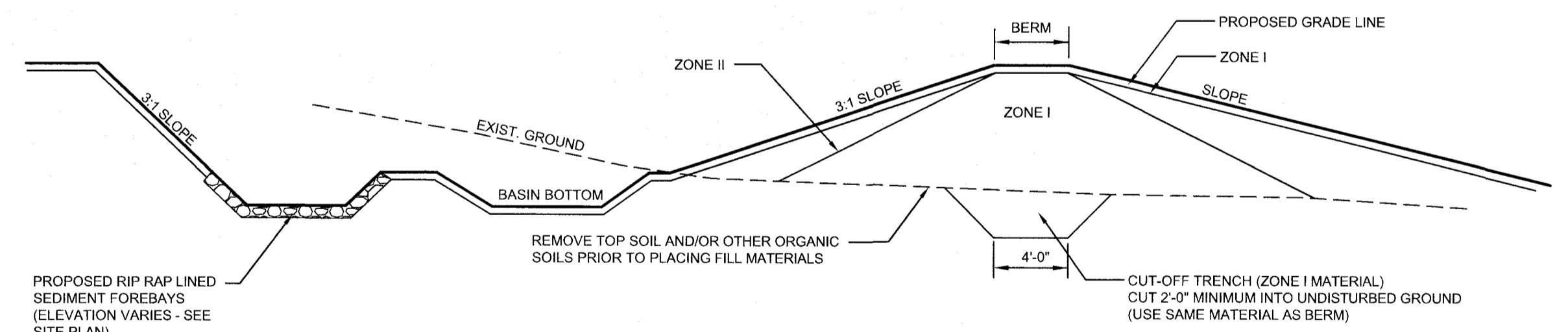
**DATE:** JUNE 22, 2021 **SCALE:** AS SHOWN  
**PROJECT NO:** 21-0311-1 **SHEET:** 8 OF 12

PAUL CHISHOLM  
No. 15076  
LICENSED PROFESSIONAL ENGINEER



- NOTES**
1. ALL CEMENT CONCRETE TO BE 4,000 PSI MINIMUM.
  2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE.
  3. ALL OPENINGS CAST IN AS REQUIRED.
  4. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.

**OUTLET STRUCTURE #1**  
NOT TO SCALE



- STORMWATER PONDS CONSTRUCTION SEQUENCE**
1. CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  2. CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERLY DISPOSED OF BY CONTRACTOR.
  3. PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT PLANS.
  4. COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR DEBRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR. ORGANIC MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SEEDED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH HAY BALES IN ORDER TO PREVENT LOSS DUE TO EROSION.
  5. CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. ALL SUCH CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.
  6. CONSTRUCT CUT-OFF TRENCH (PART OF ZONE I).
  7. CONSTRUCT BROAD CRESTED WEIR, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.
  8. CONSTRUCT ZONE I PORTION OF EARTH EMBANKMENT.
  9. CONSTRUCT ZONE II PORTION OF EARTH EMBANKMENT.
  10. APPLY TOPSOIL TO SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL SCREENED SO AS TO BE FREE OF ROOTS, BRANCHES, STONES, AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF 4-INCH COMPACTED THICKNESS. UPON COMPLETION OF TOPSOILING, FINISHED SECTIONS ARE TO BE LIMED, SEEDED AND MULCHED. CONSTRUCTION PERSONNEL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME ESTABLISHED.
  11. MAINTAIN, REPAIR, AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE CONSTRUCTION AREA HAS BEEN STABILIZED (A MINIMUM OF ONE WINTER SHALL HAVE PASSED).
  12. AFTER STABILIZATION, REMOVE AND SUITABLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES.
  13. MONITOR CONSTRUCTION ACTIVITIES TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF EARTH EMBANKMENTS, STORMWATER CONTROL STRUCTURE, CULVERT AND RIP RAP OUTLET PROTECTION.
  14. THE CONTRACTOR SHALL STAKE OUT AND PROTECT THE PROPOSED INFILTRATION AREA DURING ALL CONSTRUCTION ACTIVITIES. NO SOIL COMPACTION OF ANY KIND SHALL TAKE PLACE WITHIN THE INFILTRATION AREA IN ORDER TO MAINTAIN CURRENT SOIL INFILTRATION QUALITIES.

**MATERIAL TYPE/SPECIFICATIONS**

**ZONE I**  
WELL GRADED MIXTURE OF GRAVEL, SAND, SILT OR CLAY WITH MAX. 6-INCH SIZE STONE AND GEADATION AS INDICATED BELOW. PLACE IN MAX. 12-INCH THICK LIFTS TO 95% OF MAX. DRY DENSITY IN ACCORDANCE WITH ASTM D1557.  
SCARIFY SURFACE PRIOR TO PLACING SUBSEQUENT LIFT. IN ADDITION, REMOVE ORGANIC SOILS.

SIEVE SIZE	PERCENT BY WEIGHT PASSING
8-INCH	100
NO. 4	50 TO 100
NO. 40	30 TO 70
NO. 200	20 TO 40

**ZONE II**  
DRAINAGE LAYER: PLACE IN MAX. 12-INCH THICK LIFTS TO 95% OF MAX. DRY DENSITY IN ACCORDANCE WITH ASTM D1557.

SIEVE SIZE	PERCENT BY WEIGHT PASSING
1-INCH	100
NO. 4	70-100
NO. 200	0-12 (IN SAND PORTION ONLY)

**INFILTRATION POND DETAIL**  
NOT TO SCALE

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**CONSTRUCTION DETAILS**  
**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

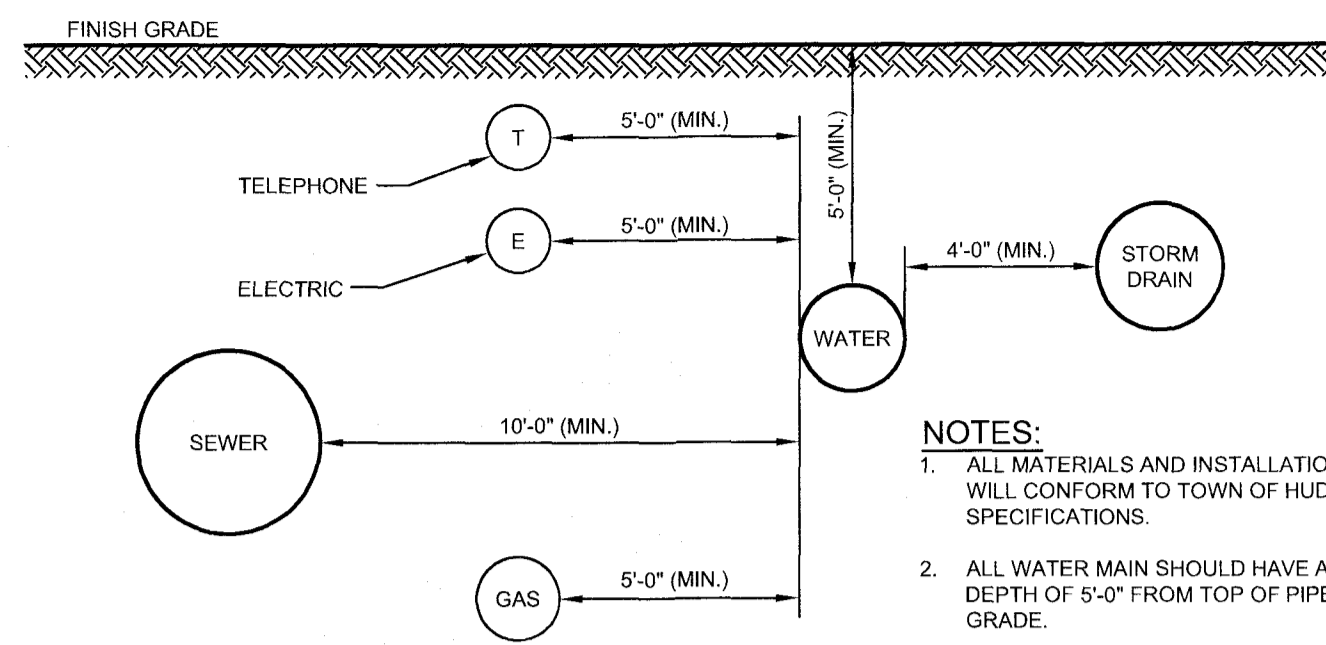
<b>OWNER OF RECORD:</b> STEVE S. & HSIANG HWA W. PAN 13 KING HENRY DRIVE LONDONDERRY, N.H. 03053 BK. 6281 PG. 776	<b>APPLICANT:</b> SCOTT ZIEFELDER 169 CANAAN BACK ROAD BARRINGTON, NH 03825
---	--

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

REVISIONS			
No.	DATE	DESCRIPTION	BY

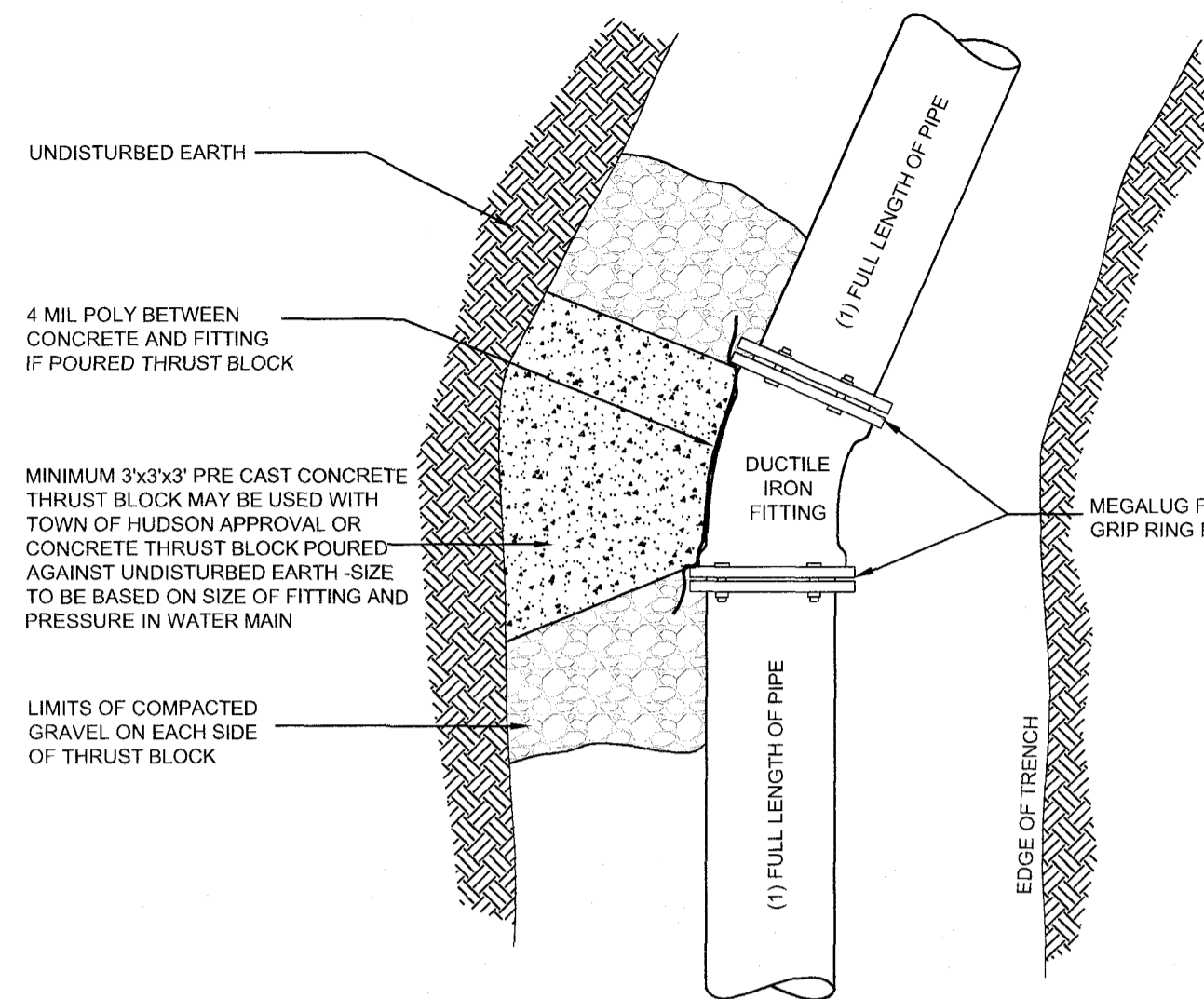
**DATE:** JUNE 22, 2021 **SCALE:** AS SHOWN  
**PROJECT NO:** 21-0311-1 **SHEET** 9 OF 12





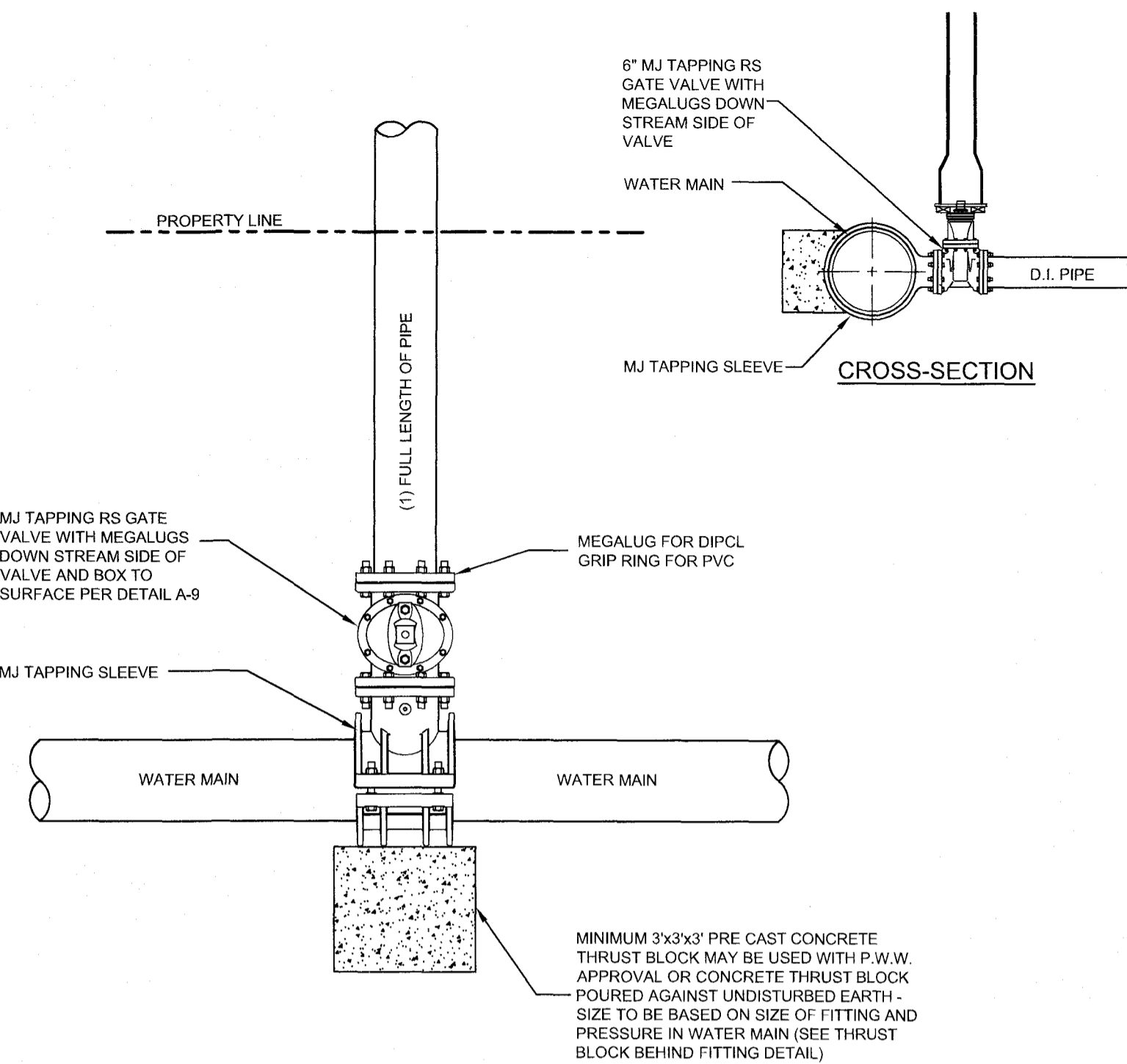
**UTILITY SEPARATION (MAIN) DETAIL**  
(A-01)  
NOT TO SCALE  
(MARCH 2008)

- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TOWN OF HUDSON TECHNICAL SPECIFICATIONS.
  2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
  3. SEE DETAIL FOR TRENCH SPECIFICATIONS.
  4. SEE DETAIL FOR OUTSIDE SERVICE ENTRANCE SPECIFICATIONS.



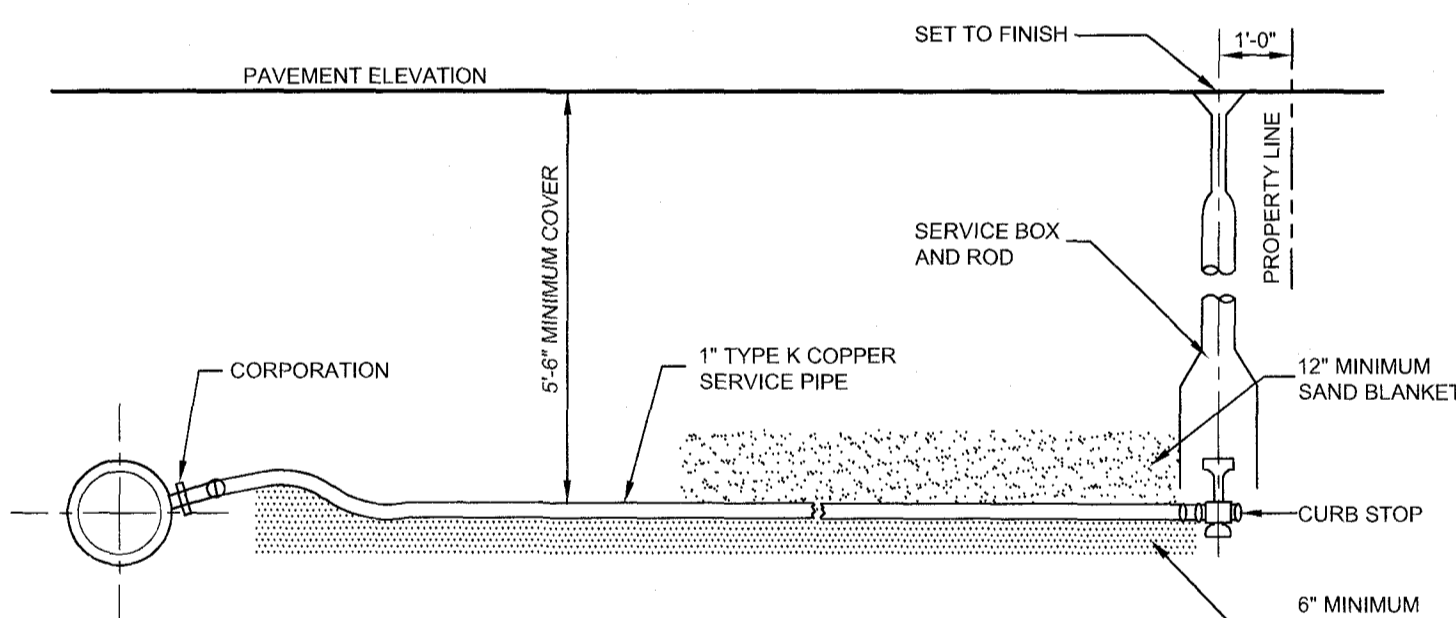
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TOWN OF HUDSON TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
  3. 3/4" Ø S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.  
10" FITTING OR SMALLER = (2) 3/4" Ø S.S. RODS & ASSOCIATED HARDWARE.  
12" FITTING OR LARGER = (4) 3/4" Ø S.S. RODS & ASSOCIATED HARDWARE.
  4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH TOWN OF HUDSON APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

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

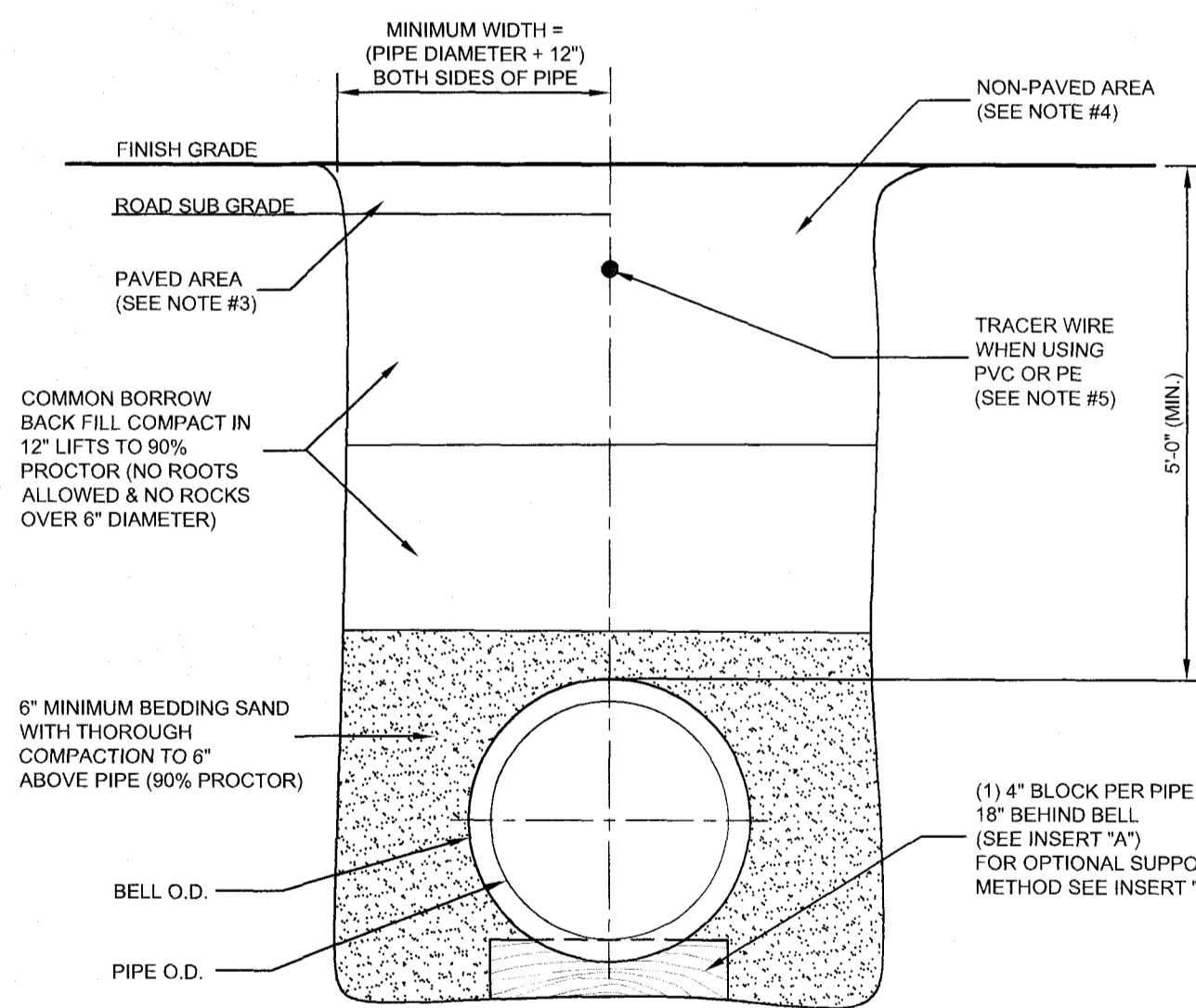


- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TOWN OF HUDSON TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

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

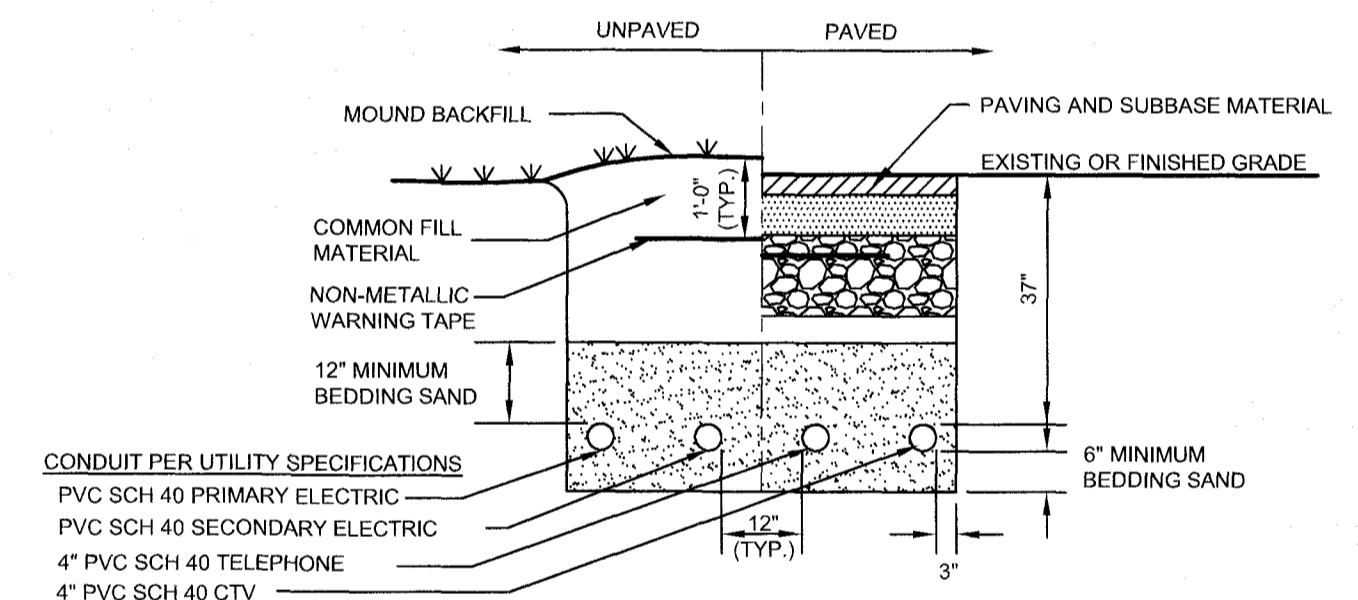


**WATER SERVICE CONNECTION**  
NOT TO SCALE  
(MARCH 2008)



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

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



**NOTE:**  
INSTALLATION AND MATERIALS OF UNDERGROUND UTILITIES SHALL CONFORM TO LOCAL UTILITY COMPANY SPECIFICATIONS.

**UTILITY TRENCH DETAIL**  
NOT TO SCALE  
(MARCH 2008)

**CONSTRUCTION NOTES:**

1. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT THAT A DISCREPANCY FROM THE INFORMATION SHOWN ON THESE PLANS IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO RESOLVE THE SITUATION.
2. PRIOR TO CONSTRUCTION, CONTACT DIG SAFE CENTER, TOLL FREE 811. NEW HAMPSHIRE STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE DIGGING OPERATIONS START. IF AN EMERGENCY, CALL IMMEDIATELY.
3. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF ROADS AND DRAINAGE SHOWN HEREON SHALL CONFORM WITH THE STANDARDS OF THE TOWN OF HUDSON ENGINEERING DEPARTMENT AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS PUBLISHED AND AMENDED BY THE N.H.D.O.T.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES, AS SHOWN IN THESE PLANS, THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THE EROSION CONTROL MEASURES PROVIDED SERVE AS A GUIDE ONLY AND SHALL BE CONSIDERED A MINIMUM STANDARD. CONTRACTOR SHALL IMPLEMENT ANY AND ALL ADDITIONAL MEASURES AS FIELD CONDITIONS DICTATE OR AS REQUIRED BY LOCAL OR STATE GUIDELINES. ALL EROSION CONTROL SHALL BE MAINTAINED AND/OR REPLACED IF DAMAGED.
5. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES AND PONDS PRIOR TO DIRECTING STORM WATER RUN-OFF TO THEM.
6. SILT SOXX TO BE CONSTRUCTED AS IDENTIFIED ON THIS PLAN. SILT SOXX BARRIERS TO BE CHECKED WEEKLY AND/OR AFTER LARGE STORM EVENTS. ALL SILT MATERIAL TO BE REMOVED. ANY DAMAGED SILT SOXX SHALL BE REINSTALLED IMMEDIATELY.
7. SLOPE STABILIZATION METHODS SHALL BE PROVIDED IN ACCORDANCE WITH THE NHDES SITE SPECIFIC PERMIT OR AS FIELD CONDITIONS DICTATE. SLOPE STABILIZATION SHALL BE PROVIDED ON ALL SLOPES 3:1 AND GREATER AS A MINIMUM STANDARD. PROVIDE SLOPE STABILIZATION ON SLOPES LESS THAN 3:1 IF WARRANTED, AS FIELD CONDITIONS DICTATE.
8. THE DRAINAGE DESIGN AND EROSION CONTROL MEASURES AS PROPOSED MEET ALL TOWN AND STATE REQUIREMENTS AND BEST MANAGEMENT PRACTICES AS PROMULGATED BY THE NHDES.
9. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
10. TOPSOIL SHALL BE REMOVED FOR ITS TOTAL DEPTH WITHIN THE LIMITS OF GRADING, UNLESS OTHERWISE DIRECTED. THE TOPSOIL SHALL BE STOCKPILED AND USED IN ITS ENTIRETY. STOCKPILE SOIL IN ACCORDANCE WITH NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION).
11. UNSUITABLE MATERIAL, ROOTS, AND STUMPS WITHIN THE LIMITS OF WORK SHALL BE REMOVED FROM THE SITE AS ORDERED. DISPOSAL OF SUCH MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES AS APPLICABLE OR AS DIRECTED.
12. THE SUBGRADE SHALL BE SCARIFIED TO ASSURE THAT ALL BOULDERS AND COBBLES OVER 6" ARE REMOVED PRIOR TO SHAPE, GRADE, AND COMPACTION ACTIVITIES.
13. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF ELECTRIC LINES SHALL CONFORM WITH THE STANDARDS OF THE OWNING UTILITY COMPANY.
14. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF TELEPHONE LINES SHALL CONFORM WITH THE STANDARDS OF THE OWNING TELEPHONE COMPANY.
15. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
16. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES AND ARRANGE FOR ALL INSPECTIONS.
17. UTILITY STUB CONNECTIONS SHOWN TO PROPOSED LOTS ARE APPROXIMATE AND INTENDED TO ILLUSTRATE FEASIBILITY OF CONSTRUCTING CONNECTIONS. THE CONTRACTOR SHALL PROVIDE SERVICE STUBS AS DIRECTED BY THE OWNING UTILITY COMPANY AND LOCAL AUTHORITY.
18. CONTRACTOR SHALL COORDINATE WITH PHONE, CABLE, AND ELECTRIC COMPANIES FOR POTENTIAL NEED OF INDIVIDUAL SECTORS AT EACH LOT SERVICE CONNECTION.
19. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
20. THE CONTRACTOR SHALL VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.

**CONSTRUCTION DETAILS**

**AROMA JOE'S**  
MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

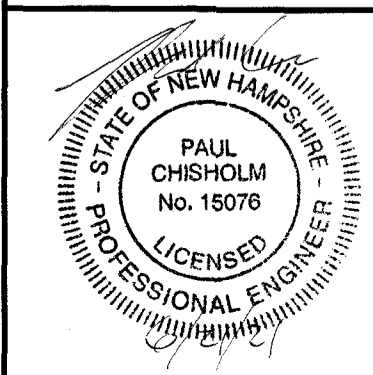
**OWNER OF RECORD:**

STEVE S. & HSIANG HWA W. PAN  
13 KING HENRY DRIVE  
LONDONDERRY, N.H. 03053  
BK. 6281 PG. 776

**APPLICANT:**

SCOTT ZIEFELDER  
169 CANAAN BACK ROAD  
BARRINGTON, NH 03825

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



**REVISIONS**

No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021 SCALE: AS SHOWN  
PROJECT NO: 21-0311-1 SHEET 10 OF 12

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

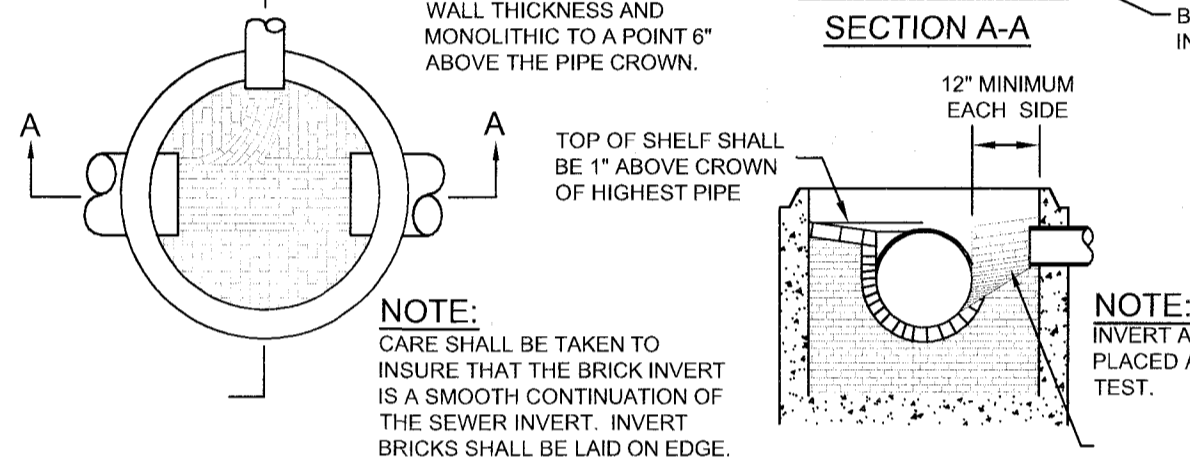
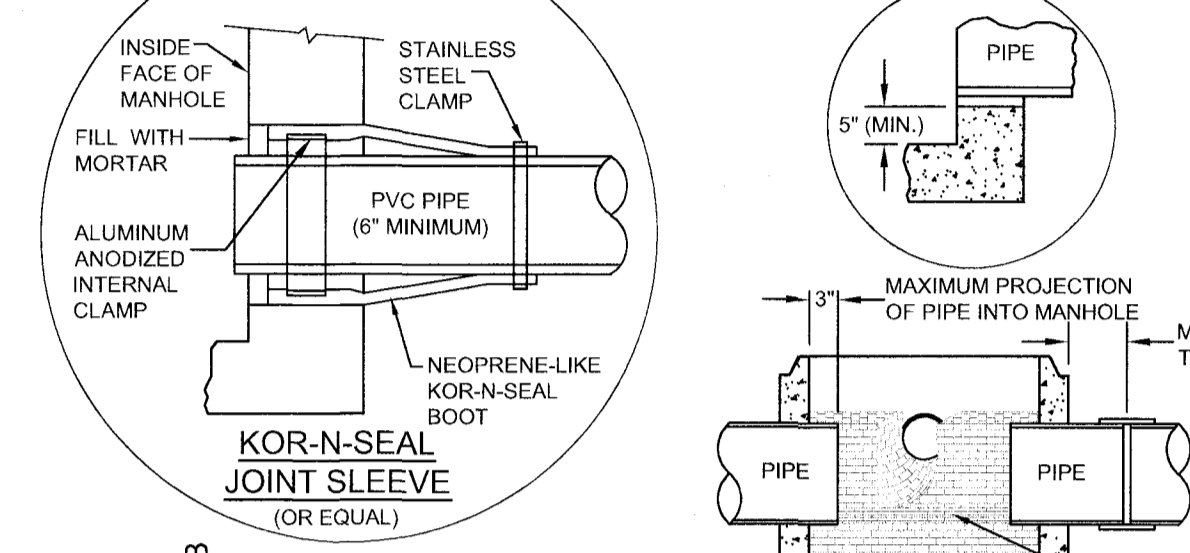
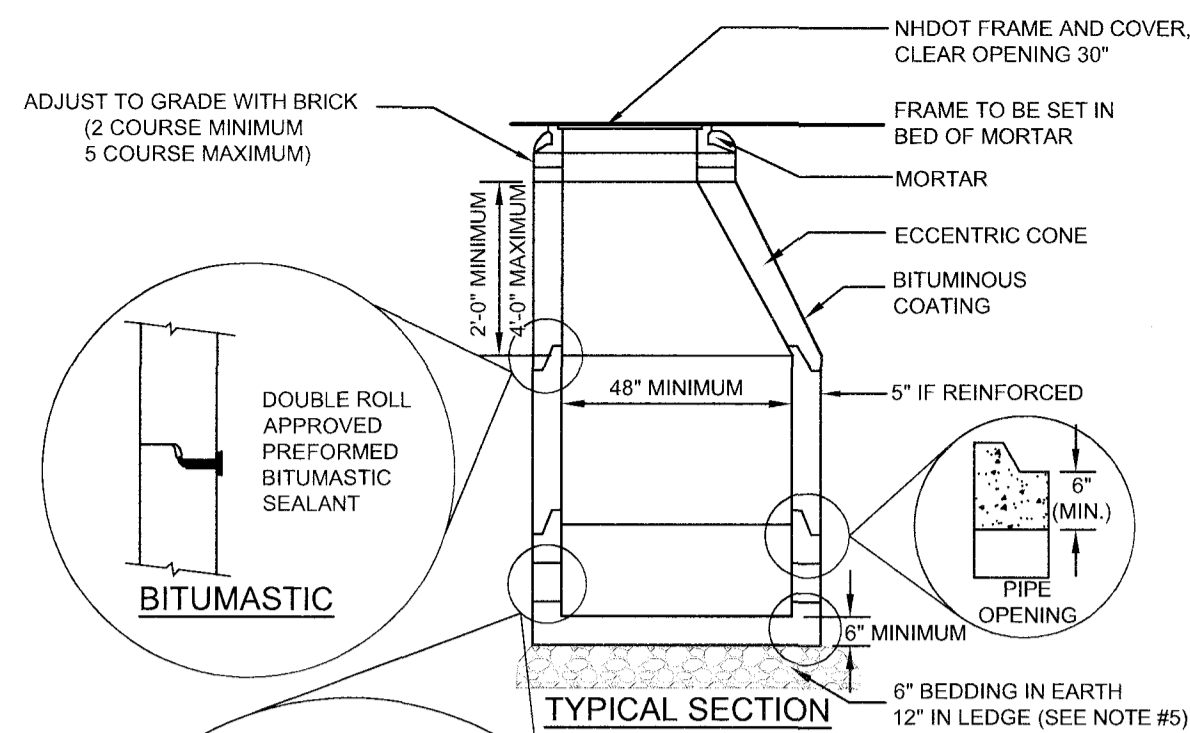
\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



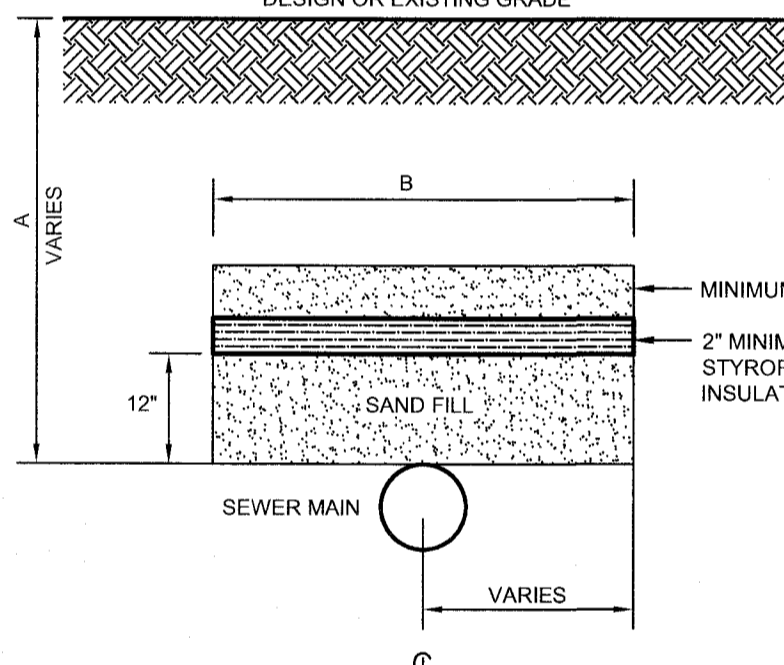
**NOTES: (NHDES ENV WQ700 - 2015)**

- ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
- MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.
- MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
- BARRELS, CONCRETE GRADE RINGS AND CONE SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE AND SHALL CONFORM TO ASTM C478.
- BEDDING:** CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33  
100% PASSING 1 INCH SCREEN  
90% PASSING 3/4 INCH SCREEN  
20-55% PASSING 3/8 INCH SCREEN  
0-10% PASSING #4 SIEVE  
0-5% PASSING #8 SIEVE
- WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
- PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:  
A. ELASTOMERIC RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;  
B. CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;  
C. ELASTOMERIC SEALING RINGS IN THE MANHOLE OPENINGS WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND  
D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
- MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
- ALL PRECAST AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
- ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
- MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
- MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS:**  
A. CONCRETE FOR PRECAST BASES OR GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";  
B. REINFORCING FOR PRECAST CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";  
C. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C478;  
D. THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING;  
E. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE;  
F. THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS;  
G. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;  
H. CASTINGS SHALL BE EQUAL TO CLASS 30, BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM A484/48M;  
I. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C32, CLAY OR SHALE, FOR GRADE SS HARD BRICK;  
J. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;  
K. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:  
1. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR  
2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;  
L. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150/C150M;  
M. HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";  
N. SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";  
O. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";  
P. SUBJECT TO (Q) BELOW, A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION:  
1. WITHIN 48 INCHES FOR REINFORCED CONCRETE (RC) PIPE; AND  
2. WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15-INCH DIAMETER;  
Q. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR D.I. PIPE OR FOR PVC PIPE UP THROUGH 15-INCH DIAMETER; AND  
R. WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING H-20 LOADS.
- MANHOLE TESTING:**  
15. MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.  
16. THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:  
17. 1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg; AND  
18. 2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCH Hg SHALL BE:  
a. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;  
b. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND  
c. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.  
19. THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.  
20. FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENTS TO GRADE.



**NOTES:**

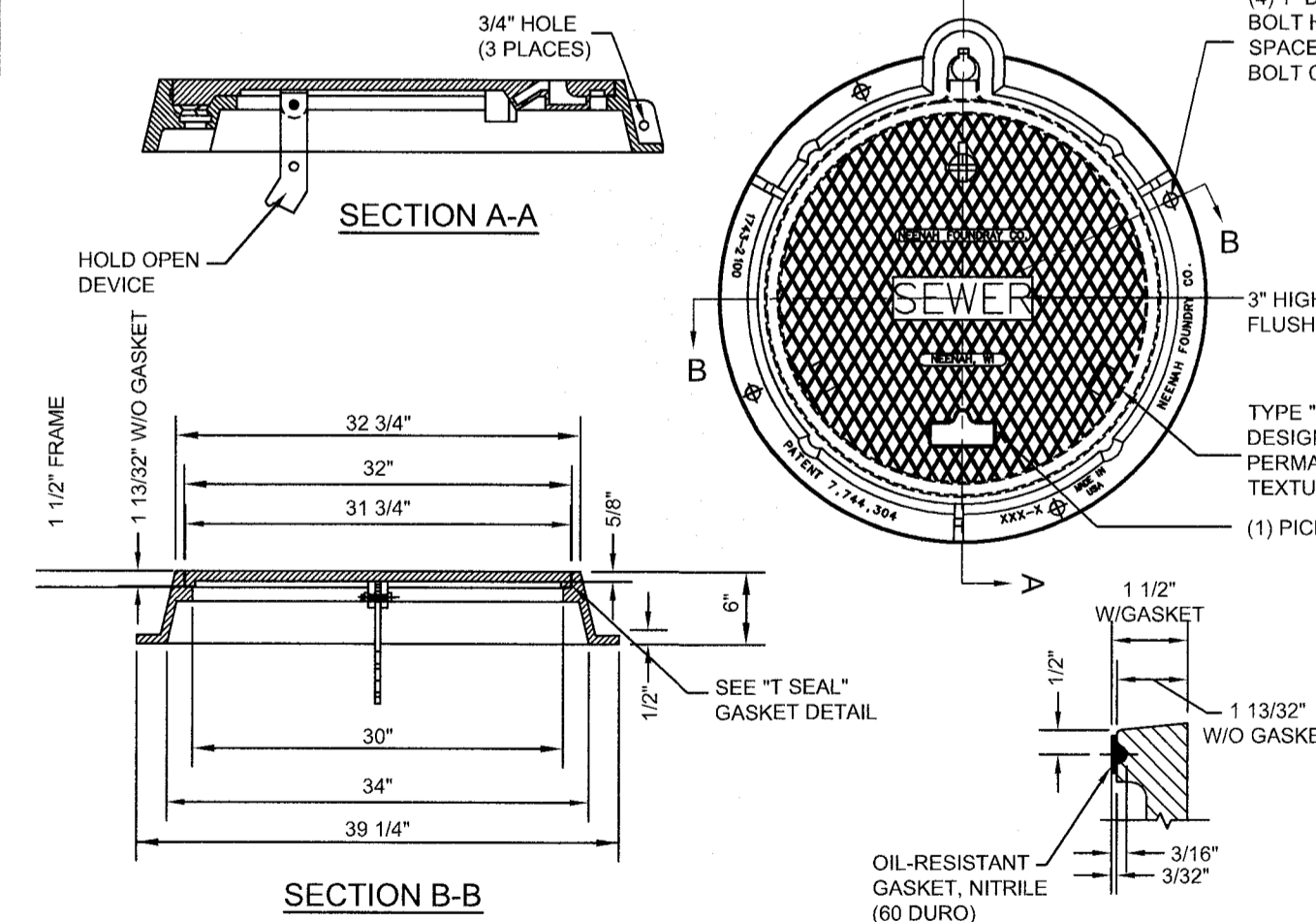
- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. ALSO SEE NOTE #7.  
BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33-03 STONE SIZE NO. 67.  
100% PASSING 1 INCH SCREEN  
90 - 100% PASSING 3/4 INCH SCREEN  
20 - 55% PASSING 3/8 INCH SCREEN  
0 - 10% PASSING #4 SIEVE  
0 - 5% PASSING #8 SIEVE
- WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED CRUSHED STONE 1/2 INCH TO 1-1/2 INCHES SHALL BE USED.
- SAND BLANKET: GRADED CLEAN SAND FREE FROM ORGANIC MATTER, SO THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A # 200 SIEVE. BLANKET MAY BE OMITTED FOR CAST IRON, DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED, HOWEVER, THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.



NOTE: PIPE SHALL BE CENTERED UNDER INSULATION UNLESS OTHERWISE SPECIFIED.

COVER OVER PIPE - A	WIDTH OF INSULATING BOARD - B
2"	11"
3"	9"
4"	7"
5"	5"
6"	3"

**SEWER MAIN INSULATION DETAIL NOT TO SCALE**



- NOTES:**  
SPECIFICATIONS:  
• MEETS H-20 LOADING REQUIREMENTS  
• COMPONENT #: FRAME 1743-2100, LID 1743-5317  
• MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B  
• FINISH: NO PAINT  
• WEIGHT: FRAME 149#, LID 162#

**SEWER MANHOLE FRAME AND LID DETAIL**

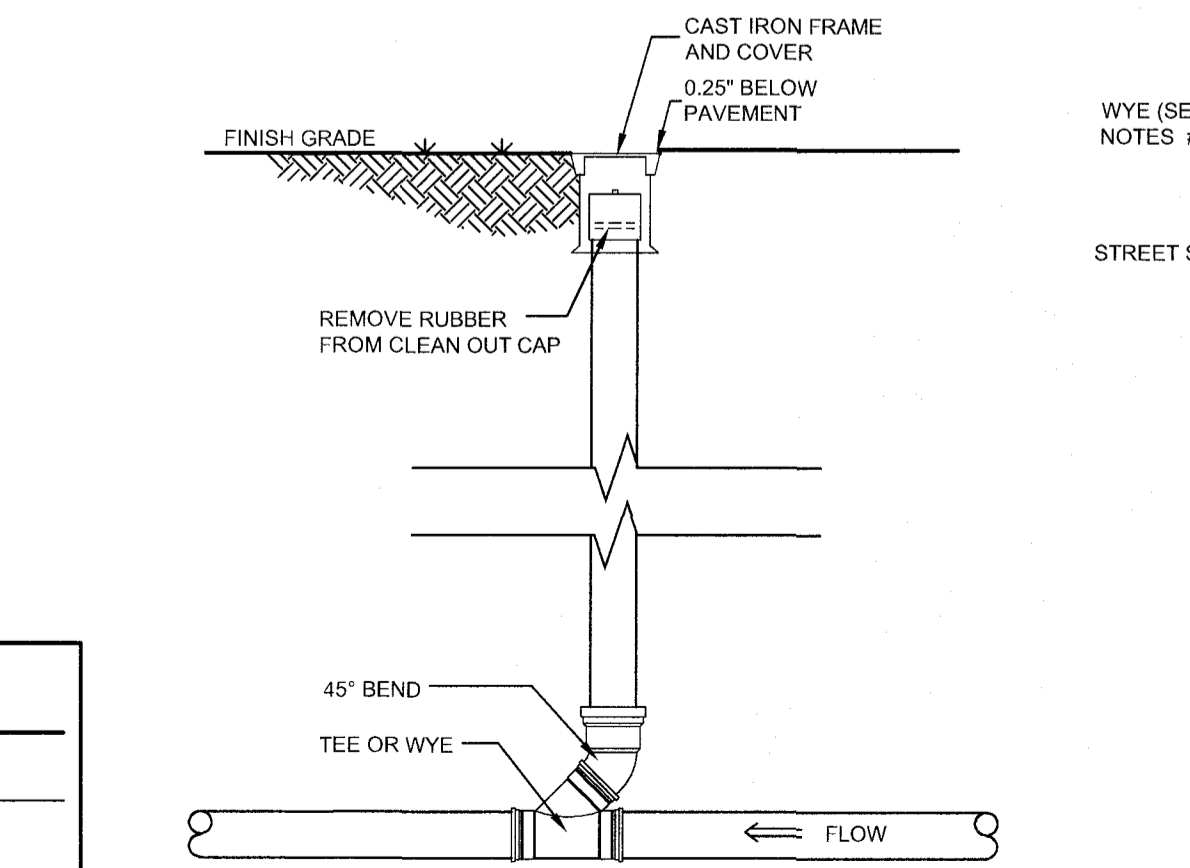
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD  
DATE OF MEETING: \_\_\_\_\_

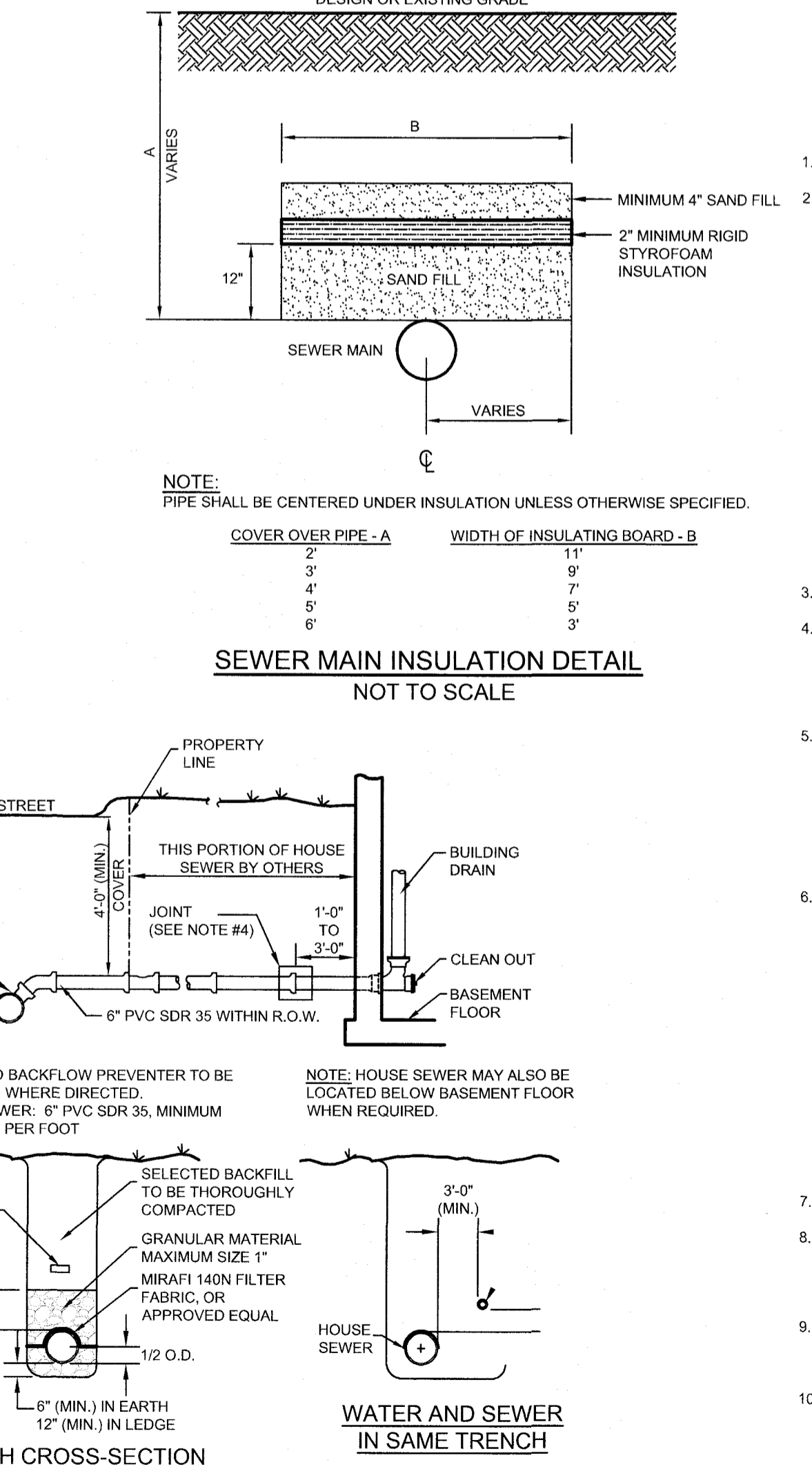
\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



**CLEANOUTS ON SERVICE LATERALS (4" OR 6") NOT TO SCALE (MARCH 2006)**



**SANITARY SEWER SERVICE DETAIL NOT TO SCALE**

**CROSS COUNTRY EARTH CONSTRUCTION WITH SHEETING**

- W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE 10 FEET OF SEPARATION BETWEEN WATER AND SEWER. HOWEVER, SHOULD CONSTRUCTION REVEAL OR EXPOSE A WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL AND LESS THAN 10 FEET HORIZONTALLY FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICAL TO RELOCATE THE SEWER, A DEVIATION MAY BE GRANTED PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENT SPECIFIED BELOW:  
A. FORCE MAINS SHALL BE CONSTRUCTED FROM DUCTILE IRON, HIGH DENSITY POLYETHYLENE, OR PVC PER ENV-WO 704.06(a).  
PVC SHALL CONFORM TO ASTM D2241-05 OR ASTM D1785-05 HDPE SHALL CONFORM TO ASTM D3035-03a  
DI SHALL BE CORROSION PROTECTED IN CORROSIVE ENVIRONMENTS
- WHERE WATER LINES AND SEWER LINES CROSS, THEY SHOULD CROSS AS PERPENDICULAR AS POSSIBLE AND THE WATER MAIN SHALL CROSS AT LEAST 18" INCHES ABOVE THE SEWER. FURTHER, THE SEWER JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.
- ALL SEWERS AT 8 PERCENT SLOPE, OR GREATER, SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET.
- UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST.
- WHERE WATER MAINS CROSS UNDER SEWER MAINS, BOTH THE SEWER AND WATER MAINS SHALL BE PRESSURE RATED PIPE PER ENV-WO 704.06 AND TESTED PER AWWA C600-05 AT 1.5 TIMES DESIGN PRESSURE OR 100 PSI, WHICHEVER IS GREATER, WITH NO JOINTS WITHIN 9 FEET OF THE CROSSING POINT AND 18" MINIMUM VERTICAL SEPARATION. GRAVITY PIPE SEWER TESTING:  
A. ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.  
B. LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:  
1. ASTM 1417-02/2008 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR" OR  
2. UNI-BELL PVC PIPE ASSOCIATION UNI-B-6 "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" (1998).  
C. ALL NEW GRAVITY SEWERS SHALL BE DEFLECTED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.  
D. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.  
E. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 7-1/2 PERCENT OF AVERAGE INSIDE DIAMETER.

- MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 6 INCHES.
- MINIMUM SIZE FOR STREET SEWER LINES SHALL BE 8 INCHES.
- PIPE AND JOINT MATERIALS:  
A. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA)  
1. AWWA C151/A21.51-02 - FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS, FOR WATER OR OTHER LIQUIDS;  
2. AWWA C150/A21.50-02 - FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A536-84 (2004) DUCTILE IRON CASTINGS;  
3. JOINTS SHALL BE MECHANICAL, PUSH-ON OR BALL-AND-SOCKET TYPE.  
B. PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL COMPLY WITH THE FOLLOWING STANDARDS:  
1. ASTM D3034-04A - PVC, SOLID WALL;  
2. AT LEAST 46 PSI AT 5% PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2414-02 DURING MANUFACTURING; AND  
3. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-96A(2003)E1 AND SHALL BE PUSH-ON OR BELL-AND-SPIGOT TYPE.  
C. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
- JOINTS SHALL BE DEPENDENT UPON PROPER MATERIALS (SEE NOTE #2) FOR WATER TIGHTNESS, AND ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
- SERVICE CONNECTIONS SHALL USE SANITARY FITTINGS FOR ALL NEW CONSTRUCTION. THE CENTERLINE OF ALL BUILDING CONNECTIONS SHALL ENTER THE TOP HALF OF THE SEWER, IF A CHECK VALVE IS USED AT THE PROPERTY LINE, THE VALVE SHALL BE INSTALLED WITHIN A VAULT TO FACILITATE MAINTENANCE. ROOF DOWNSPOUTS, EXTERIOR OR INTERIOR FOUNDATION DRAINS, SUMP PUMPS OR OTHER SOURCE OF SURFACE WATER RUN-OFF OR GROUND WATER SHALL NOT BE DIRECTLY OR INDIRECTLY CONNECTED TO A PUBLIC SEWER PIPE INSTALLATION:  
A. THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER.  
B. PIPES SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL.  
C. BEDDING AND RE-FILL, FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE, SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES.  
D. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT.  
E. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
- TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO VACUUM TESTING.
- ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER, SHALL NOT BE PERMITTED.
- WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE. WHEN NECESSARY, THE WATER SERVICE SHALL BE PLACED ABOVE AND TO ONE SIDE OF THE SEWER SERVICE, AS SHOWN.
- LOCATION: THE LOCATION OF THE WYE BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS MATERIAL ROD OR PIPE SHALL BE PLACED OVER THE WYE TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPE FINDER.
- UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST DENSITY.

## CONSTRUCTION DETAILS

### AROMA JOE'S

MAP 173 LOT 29  
56 DERRY STREET  
HUDSON, NEW HAMPSHIRE  
HILLSBOROUGH COUNTY

<b>OWNER OF RECORD:</b> STEVE S. & HSIANG HWA W. PAN 13 KING HENRY DRIVE LONDONDERRY, N.H. 03053 BK. 6281 PG. 776	<b>APPLICANT:</b> SCOTT ZIEFELDER 169 CANAAN BACK ROAD BARRINGTON, NH 03825
---	--

**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2861

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JUNE 22, 2021

SCALE: AS SHOWN

PROJECT NO: 21-0311-1

SHEET 11 OF 12



