



June 16, 2022
Steven M. Scharf, PE
Principal Engineer, Division of Environmental Remediation
New York State Department of Environmental Conservation, Remedial Bureau A
625 Broadway, 12th Floor
Albany, New York 12233
steven.scharf@dec.ny.gov

**Re: Sub-Slab Depressurization System Remedial Design
2840 Atlantic Avenue, Brooklyn, New York 11207
NYSDEC Brownfield Cleanup Program Site #C224255**

Dear Mr. Scharf:

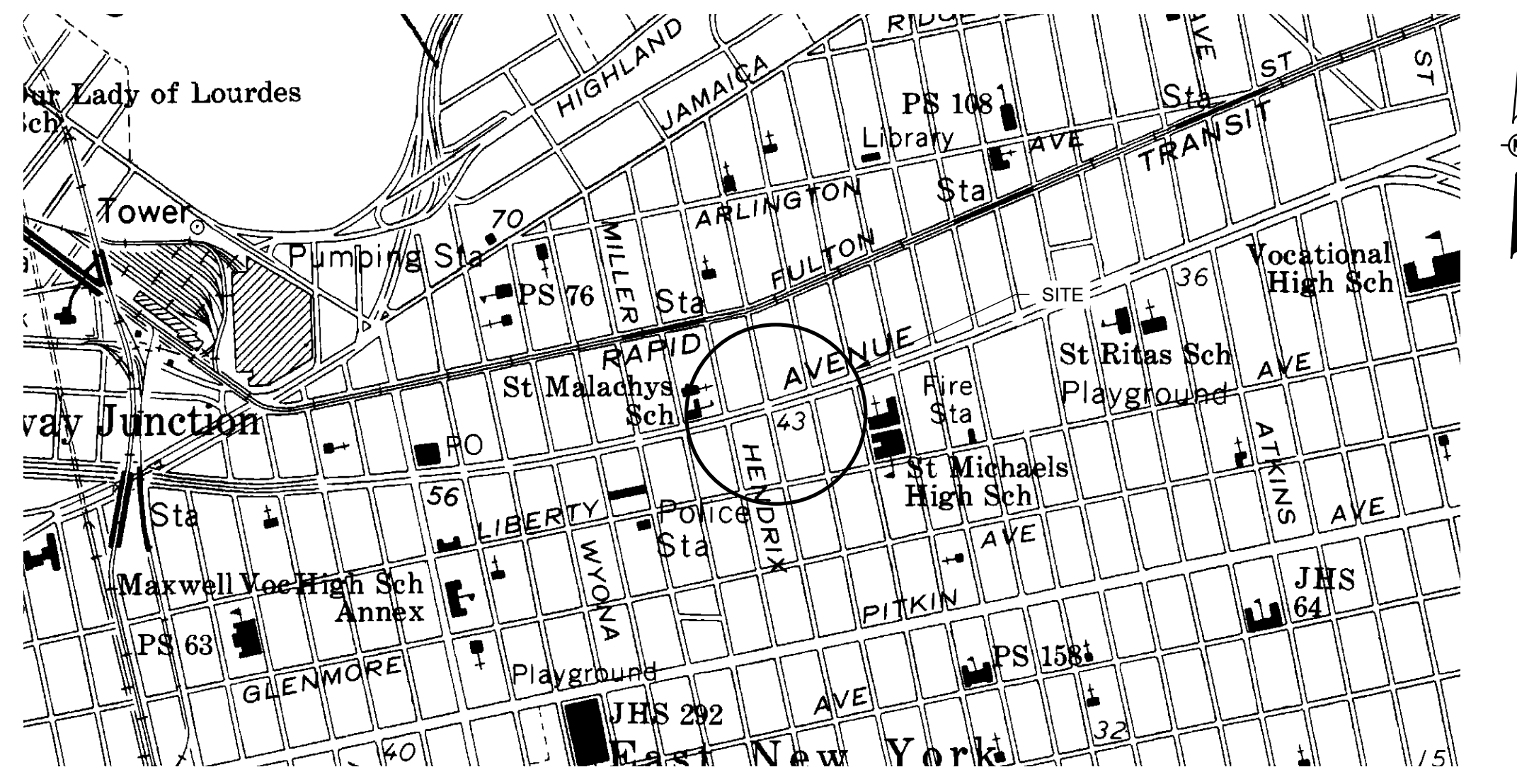
PW Grosser Consulting Engineer & Hydrogeologist, PC (PWGC) has prepared this letter to document and deliver the stamped and sealed engineering design plans for the upcoming installation of a Sub-Slab Depressurization System (SSDS) at 2840 Atlantic Avenue in Brooklyn, New York. The applicant, Empire Dairy, LLC, enrolled the site in the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP) as a volunteer on April 16, 2018. As per the March 2021 Decision Document, which was based on the approved January 2021 Remedial Action Work Plan, the components of an SSDS are to be installed beneath the bottom floor of the landmark building at the property, along with a vapor barrier system which is being placed beneath the landmark building as well as new construction at the site.

The SSDS will be installed as a contingency engineering control to address potential soil vapor intrusion as part of the conditional Track 1 cleanup objective for the site. The stamped and sealed design drawings for the SSDS are attached to this letter. Following installation of the SSDS piping and risers, installation of the building slab, and the enclosure of the renovated building, an indoor air survey will be conducted of the ground floor of the building. The indoor air survey will be performed by setting six 6-liter Summa canisters evenly spaced across the ground floor of the renovated landmark building which will be outfitted with 24-hour flow controllers. Additionally, sub-slab soil vapor samples will be collected using 6-liter Summa canisters outfitted with 24-hour flow regulators from the three vacuum monitoring points which will be installed through the slab of the building. Indoor air and soil vapor samples will be analyzed for Volatile Organic Compounds (VOCs) by United States environmental Protection Agency Method TO-15. The analytical results will be assessed in accordance with New York State Department of Health (NYSDOH) guidance and a determination will be made with NYSDEC consultation at that time regarding the activation of the SSDS.

Please feel free to contact me with questions or concerns regarding this matter.

Sincerely,
P.W. Grosser Consulting, Inc.

Ryan Morley, PG
Project Manager



VICINITY MAP
N.T.S.

Scope of Work

INSTALLATION OF PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) AT 2840 ATLANTIC AVENUE, BROOKLYN NEW YORK AS SHOWN ON THESE PLANS. THE BUILDING IS APPROXIMATELY 19,000 SF.

THE WORK INCLUDES:

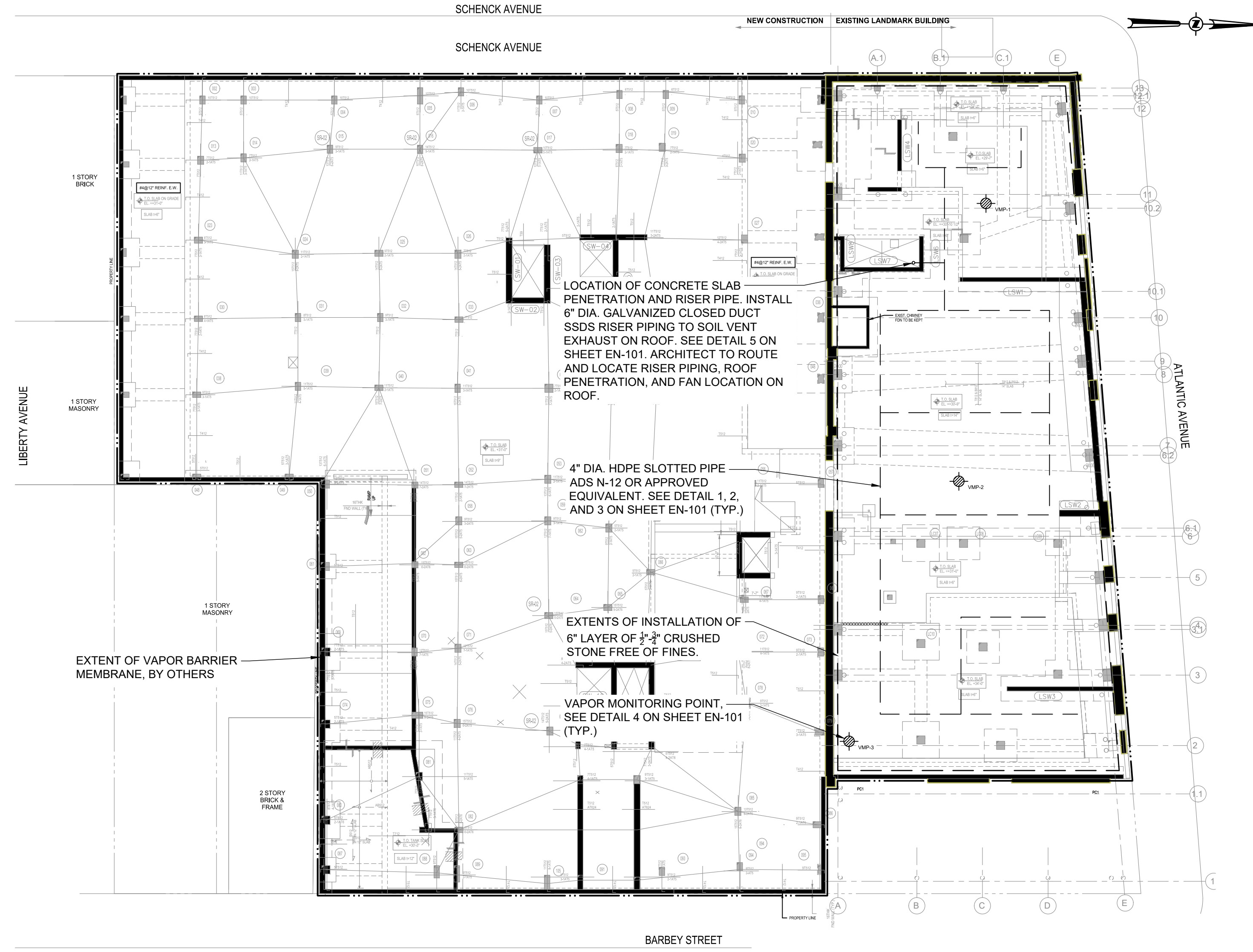
1. INSTALLATION OF PERFORATED PIPING
2. INSTALLATION OF RISER PIPING AND EQUIPMENT

Legend

- SLOTTED HDPE PIPING
- VAPOR BARRIER MEMBRANE EXTENTS
- ⊗ VMP-# VAPOR MONITORING POINT

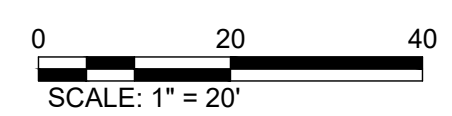
General Notes

1. DRAWING NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE EXPECT FOR SUB-SLAB DEPRESSURIZATION SYSTEM AND GAS VAPOR BARRIER.
2. COORDINATE ALL WORK FOR SUB-SLAB DEPRESSURIZATION SYSTEM, GAS VAPOR BARRIER AND ROOF PENETRATION WITH OTHER TRADES PRIOR TO INSTALLATION.
3. COORDINATE LOCATION OF RISER WITH ARCHITECT.
4. FIELD CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO ANY WORK.
5. SLOPE SOLID PIPING DOWNWARD TOWARDS SSDS SLOTTED PIPING AT 1/8" PER FT OF PIPING.
6. ALL DUCTING TO BE CLOSED DUCTING NORDFAB OR APPROVED EQUIVALENT.
7. ALL DUCTING TO BE CONNECTED UTILIZING AIR TIGHT QUICK FIT COUPLINGS. NORDFAB OR APPROVED EQUIVALENT.
8. TOP OF EFFLUENT STACK AT LEAST 10' FROM ANY WINDOWS, DOORS OR OTHER BUILDING OPENINGS, OR FROM ANY WINDOWS OR OTHER OPENINGS IN ADJACENT BUILDINGS, INCLUDING AIR INTAKES, LOUVERS, VENTS, ETC.
9. ALL ELECTRICAL TO BE INSTALLED BY LICENSED ELECTRICIAN.
10. PROVIDE DESIGNATED CIRCUIT FOR BLOWER.
11. PROVIDE MINIMUM NEMA 3R PANELS FOR EXTERIOR ELECTRICAL COMPONENTS.
12. ALL EXTERIOR PENETRATIONS FOR ELECTRICAL TO BE BOOTED AND WATER TIGHT.
13. ALL CONCRETE PENETRATIONS SHALL BE SEALED WITH LIQUID BOOT TROWEL GRADE OR ENGINEER APPROVED EQUAL.
14. COMPACT CRUSHED STONE PER GEOTECHNICAL REQUIREMENTS.
15. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ENGINEERS APPROVAL, INCLUDING BUT NOT LIMITED TO:
 - 15.1. PIPING MATERIALS AND FITTINGS
 - 15.2. FAN MAKE AND MANUFACTURER
 - 15.3. VACUUM MONITORING POINT & FITTINGS
 - 15.4. DUCT SUPPORTS



SUB-SLAB DEPRESSURIZATION SITE PLAN
SCALE: 1" = 20'

REFERENCE:
1. STRUCTURAL PLANS BY WSP USA DATED 09/24/2020 - CELLAR LEVEL AND FOUNDATION REINF. PLAN - FO-301.00



PWGC
CLIENT DRIVEN SOLUTIONS
P.W. GROSSER CONSULTING INC.

630 Johnson Avenue, Suite 7
Schenectady, NY 12116-2618
Phone: (631) 589-6353 • Fax: (631) 589-8705
E-mail: INFO@PWGROSSER.COM

CONSULTANTS

| Number | Revision Description | Revision Date |
|--------|------------------------|---------------|
| 7 | | |
| 6 | | |
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| 1 | CONSTRUCTION DOCUMENTS | 2022-06-06 |

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|-------------|-----|----------------|----------|
| Designed By | WSH | Date Submitted | |
| Drawn By | WSH | Date Created | 6/6/2022 |
| Approved By | MS | Scale | AS NOTED |

Client:
2840 ATLANTIC HOLDINGS, LLC
777 LAKE ZURICH ROAD, #195
BARRINGTON, ILLINOIS 60010

PASSIVE SSDS AND VAPOR BARRIER

Project Address:
2840 ATLANTIC AVENUE
BROOKLYN, NY 11207

County Tax Map Number: _____ Contract Number: _____
Regulatory Reference Number: _____

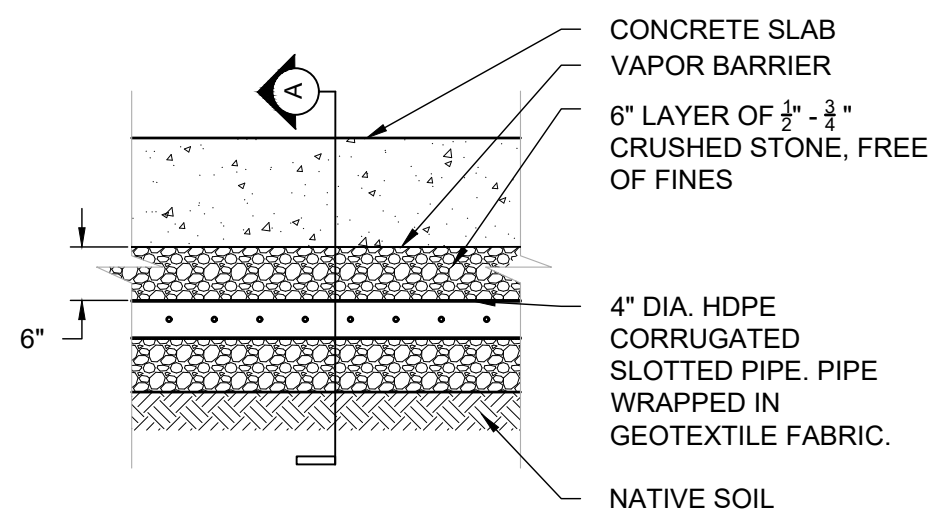
SSDS AND VAPOR BARRIER SITE PLAN

STATE OF NEW YORK
MICHAEL SCANDINO
103321
LICENSED PROFESSIONAL ENGINEER

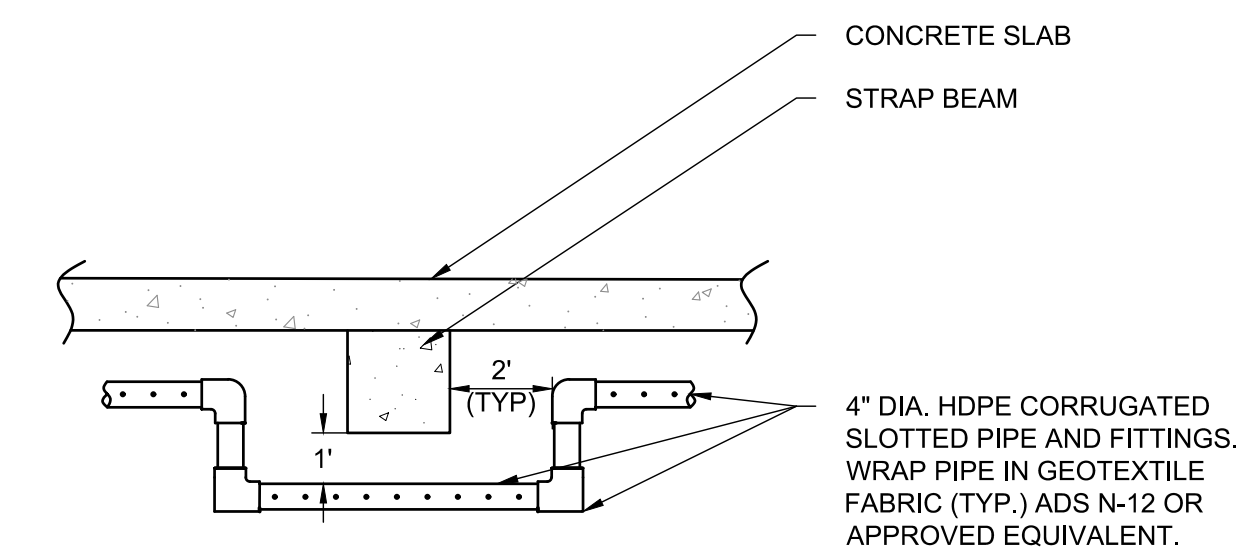
Sheet **1** of **2**

PWGC Project Number: **ZD2G2101**

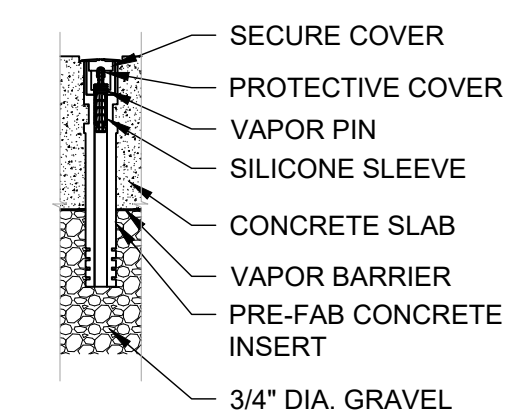
Unauthorized alteration or addition to this drawing and related documents is a violation of Section 2209 of the New York State Education Law.



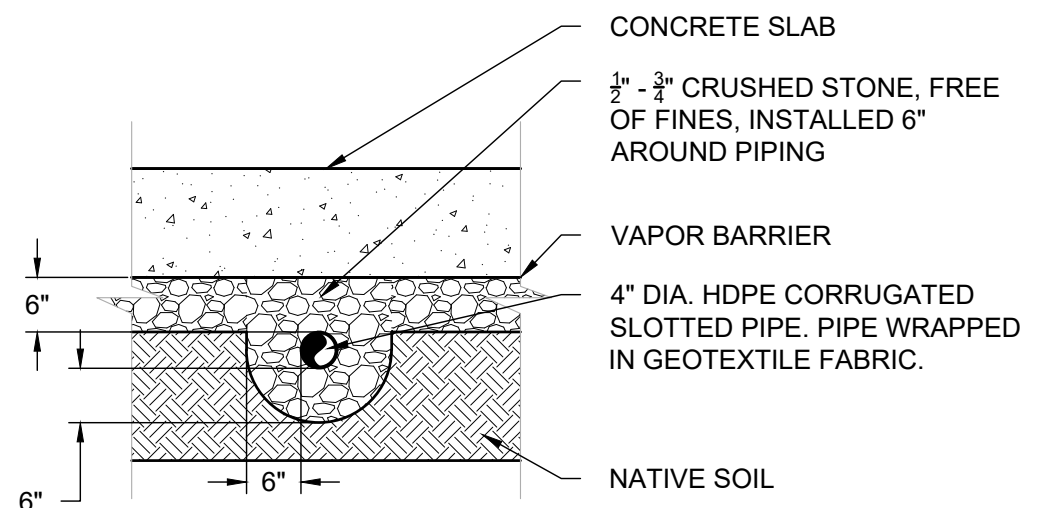
1 PERFORATED PIPE DETAIL
N.T.S.



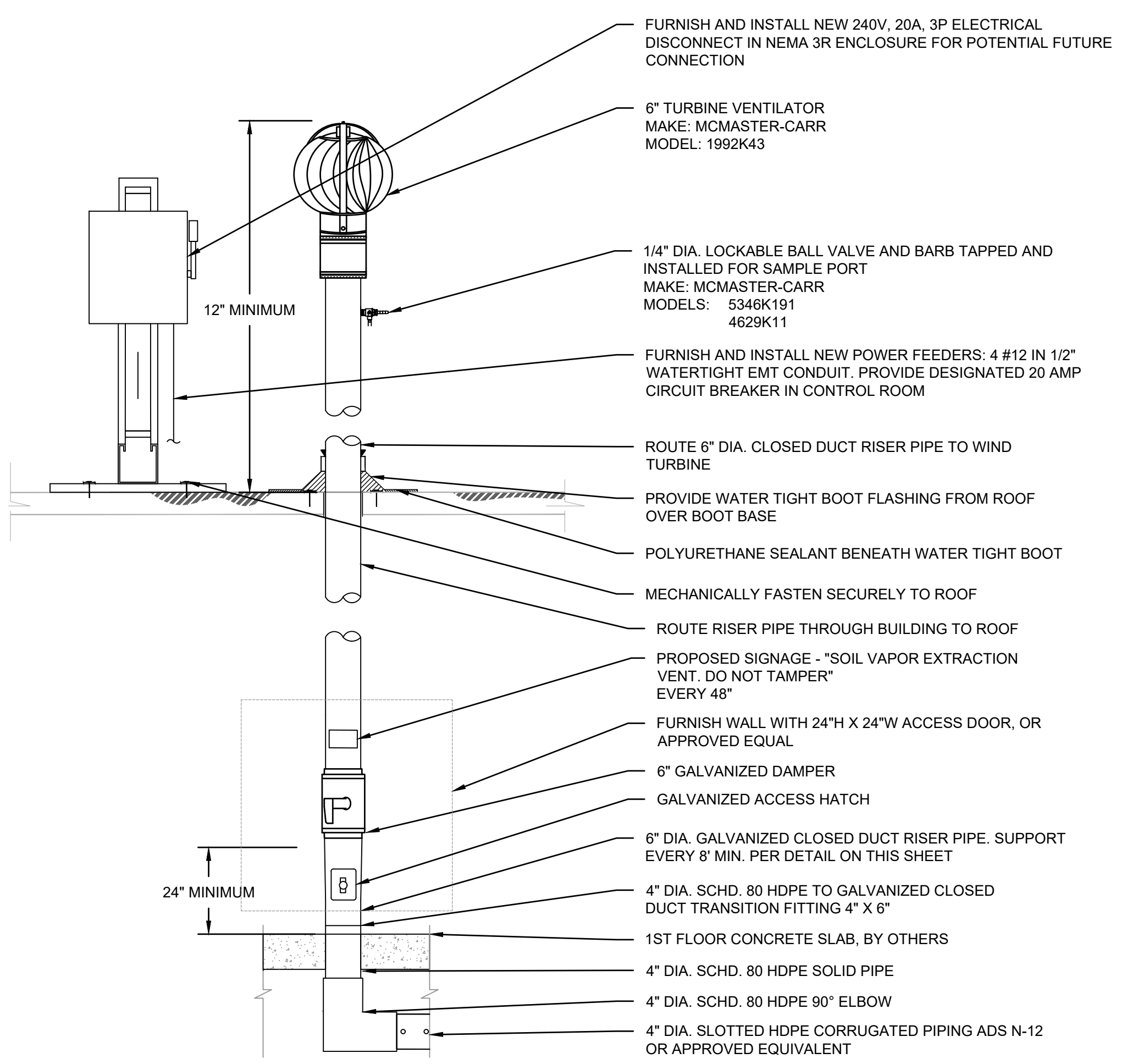
3 SSDS STRAP BEAM DETAIL
SCALE: NOT TO SCALE



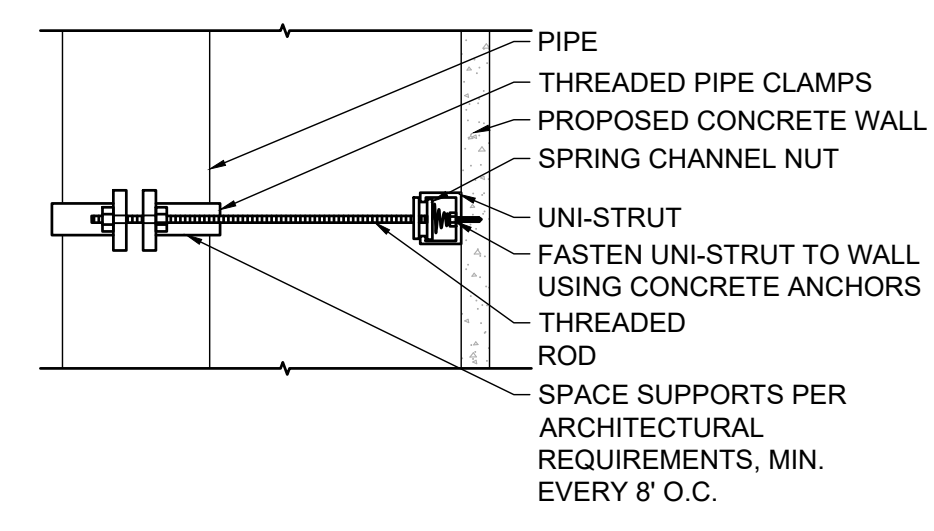
4 TYPICAL MONITORING POINT DETAIL
SCALE: NOT TO SCALE



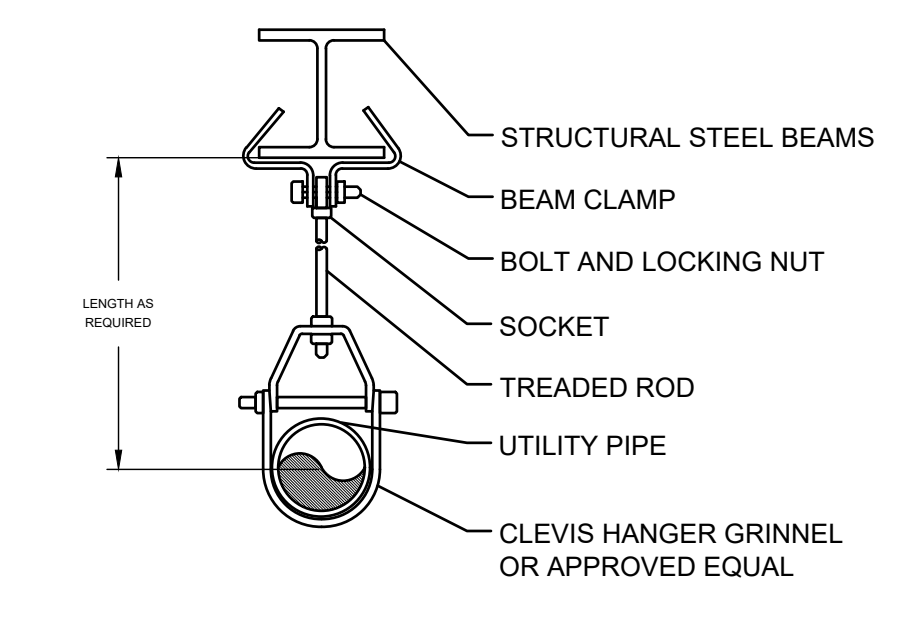
2 PERFORATED PIPE SECTION A
N.T.S.



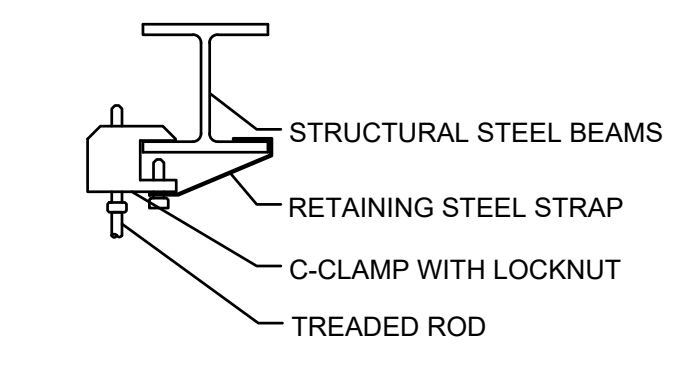
5 RISER DETAIL
SCALE: NOT TO SCALE



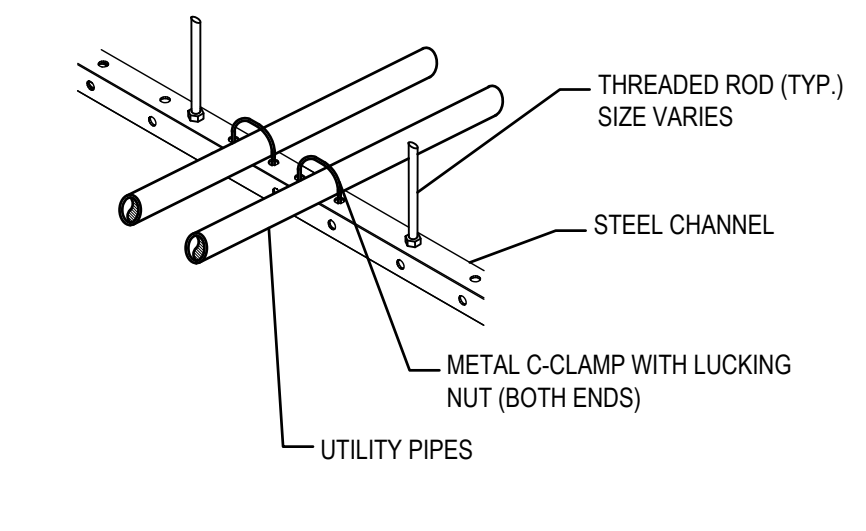
VERTICAL PIPE SUPPORT DETAIL



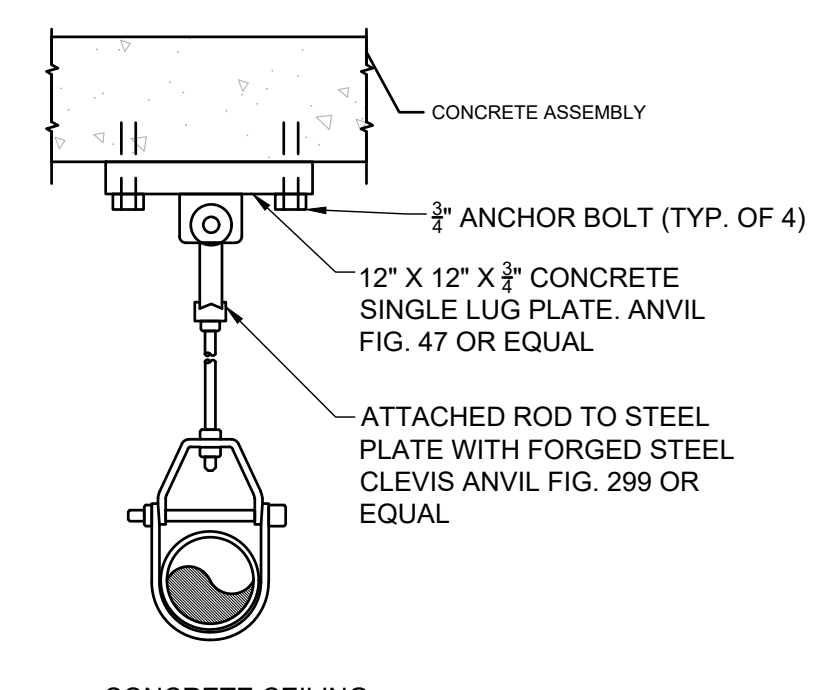
BEAM - HANGER DETAIL



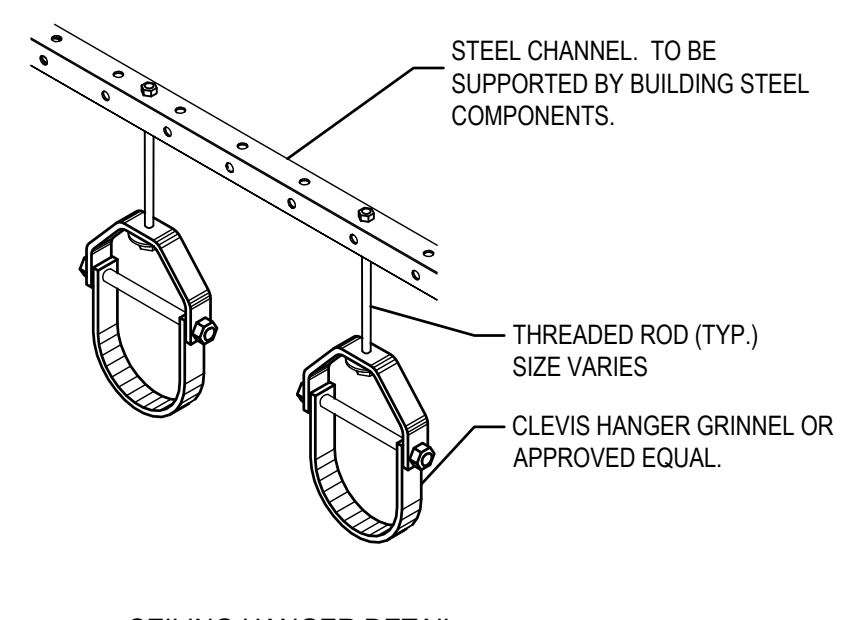
BEAM - HANGER DETAIL #2



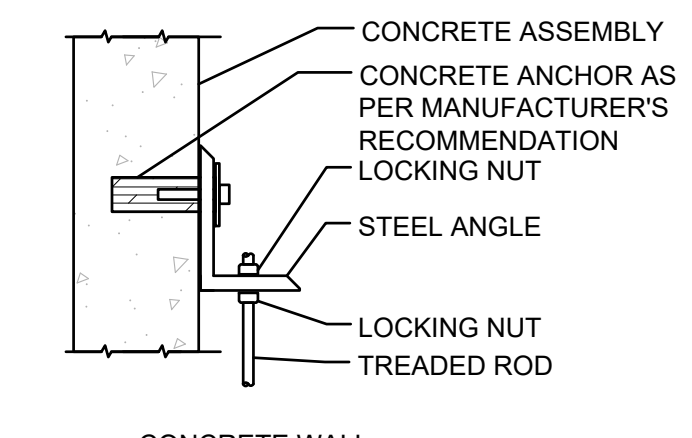
PIPE HANGER DETAIL



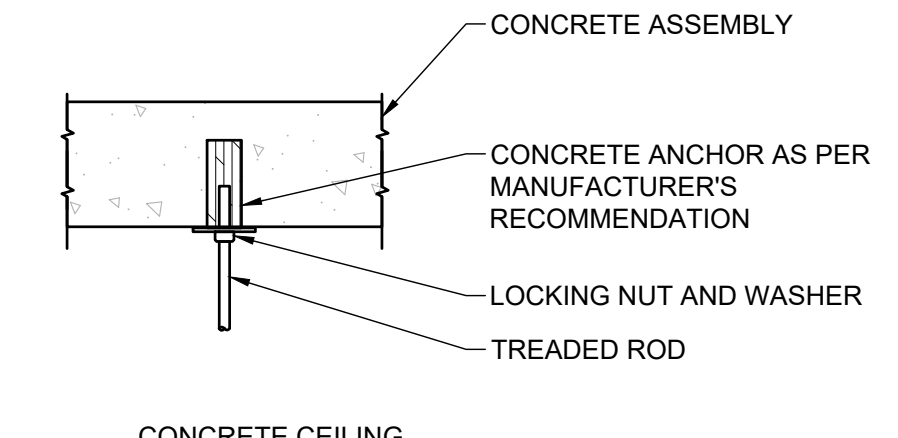
CONCRETE CEILING HANGER DETAIL



CEILING HANGER DETAIL



CONCRETE WALL HANGER DETAIL



CONCRETE CEILING HANGER DETAIL

6 TYPICAL PIPE SUPPORT DETAILS
SCALE: NOT TO SCALE

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PASSIVE SSDS AND VAPOR BARRIER

Project Address:
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 BROOKLYN, NY 11207

County Tax Map Number: Contract Number:
 Regulatory Reference Number:
 Title of Drawing:

SSDS DETAILS

Drawing Number: **EN-101**

Sheet 2 of 2

PWGC Project Number: ZDG2101

PROJECT NAME: 2840 Atlantic Avenue, Brooklyn, NY 11207
 DATE: 6/6/2022
 DRAWN BY: WSH
 CHECKED BY: MS
 PROJECT NUMBER: ZDG2101