



October 7, 2022

Javier Perez-Maldonado New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233

Re: Billboard Foundation Installation Work Plan Brooklyn, New York

NYSDEC Site No. C224036 Langan Project No.: 170519402

Dear Mr. Perez-Maldonado:

Per your request, this Billboard Foundation Installation Work Plan (Work Plan) was prepared by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) on behalf of 74 Bogart LLC for the property located at 2 Ingraham Street in the East Williamsburg section of Brooklyn, New York (the "site"). The site is enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program, pursuant to a November 10, 2010 Brownfield Site Cleanup Agreement (BCA), and identified by the NYSDEC as Site No. C224036. 74 Bogart LLC (the owner of the site) and Bogart Holdings LLC (the previous site owner) are named as Volunteers on the BCA, pursuant to a January 18, 2019 BCA amendment.

74 Bogart LLC will implement this Work Plan during installation of an 48 feet by 8 feet (384 square feet) billboard foundation in the northwestern part of the site. The proposed work is further described below.

Site Description

The site is located in East Williamsburg and identified on the Brooklyn Borough Tax Map as Block 3084, Lot 1. The site is approximately 80,000 square feet (1.8 acres) in area and encompasses an entire city block bounded by Ingraham Street to the north, Morgan Avenue to the east, Harrison Place to the south, and Bogart Street to the west. The site is currently improved with:

- A seven-story storage building with an about 34,000-square-foot cellar and an about 27,000-square-foot ground-floor footprint in the eastern part of the site, facing Morgan Avenue (hereafter referred to as the "storage building development"); and
- An at-grade asphalt-paved logistics company parking lot in the western part of the site, facing Bogart Street (hereafter referred to as the "parking lot development").

Part of the parking lot development is temporarily fenced off to allow for implementation of an in-situ stabilization/solidification (ISS) remedy, as per the NYSDEC-approved Remedial Action Work Plan (RAWP) dated June 2022.

Remediation Status

An NYSDEC-approved Interim Remedial Measures Work Plan (IRMWP), dated September 2019 and amended on March 1, 2021, was implemented between 2019 and May 2022. IRMWP implementation in the location of the proposed billboard included:

- Grading and removal of surficial historic fill
- Installation of a composite cover system comprising (in ascending order):
 - o A demarcation barrier consisting of orange snow fencing
 - At least 4 inches of recycled concrete aggregate (RCA) blend, imported from Evergreen Recycling of Corona Inc. of Flushing, New York, as pavement subbase
 - o About 4 inches of asphalt pavement

Implementation of the RAWP includes ISS of chromium- and nickel-impacted soil in the northwestern part of the site (within the parking lot development). RAWP implementation is ongoing and anticipated to be complete by the end of October 2022. The billboard installation work described herein is located outside of the ISS work area.

The proposed remedy is fully described under separate cover in the IRMWP and the RAWP, and the completed remedy will be documented in a forthcoming Final Engineering Report (FER).

Billboard Installation Plan

According to design drawings prepared by MJ Engineering & Design (MJE&D) and dated September 27, 2022 (see Attachment A), the billboard foundation will consist of helical piles keyed into an about 384-square-foot, 12-inch-thick reinforced concrete mat slab in the northwestern corner of the site, adjoining the north and west property lines. The top of the mat slab will be flush with the surrounding asphalt pavement. The proposed location of the mat slab is shown on Figure 1. The area of cap disturbance constitutes about 0.5% of the overall site area.

Billboard foundation construction will include:

- removal of the asphalt cap,
- excavation of previously installed RCA blend,
- removal of the demarcation barrier (if necessary),
- installation of helical piles, and



• installation of steel reinforcement and placement of concrete for the 12-inch-thick mat slab.

The proposed work will be completed in accordance with applicable parts of the June 2022 RAWP, as detailed in the following sub-sections.

Site-Specific Construction Health and Safety Plan (CHASP)

The proposed work will be performed in accordance with applicable federal, state, and city regulations and the site-specific CHASP, which was provided as Appendix C of the RAWP.

Community Air Monitoring Plan (CAMP)

Community air monitoring will be conducted in compliance with the site-specific CAMP and Section 5.4.12 of the RAWP. The CAMP includes real-time continuous monitoring for volatile organic compounds (VOC), mercury vapor, and particulates at the downwind and upwind site perimeter, and mercury monitoring immediately downwind of the work zone, when ground-intrusive activities are in progress.

Soil/Materials Management Plan (SMMP)

Material disturbed during billboard installation will be managed in accordance with Sections 4.1.5 and 5.4 of the RAWP via:

- Monitoring of ground-intrusive work by field personnel under Remedial Engineer (RE) supervision;
- Visual, olfactory, photoionization detector (PID), and Jerome J405 mercury vapor analyzer (or equivalent) soil screening, if necessary; and
- Stockpiling/segregation of excavated material, and covering of stockpiles when not in use.

The work is not anticipated to generate excess RCA blend or soil requiring off-site disposal. Helical piles are displacement piles and do not generate cuttings during installation and segregated RCA blend will be reused onsite before the asphalt cover. However, if off-site disposal is required, it will include:

- Reporting of proposed disposal facility(ies) approval letters to the NYSDEC Project Manager;
- Monitoring of excavated material load-out; and
- Handling, transportation by licensed haulers, and disposal of materials in accordance with all local, State, and Federal regulations.



Materials Reuse on-Site

Previously imported RCA blend excavated from above the demarcation layer may be reused as backfill above or below the demarcation layer as part of the final site cover; excess RCA blend is anticipated to be used as subbase in the ISS area before re-installation of the asphalt pavement composite cover in October 2022.

Demarcation

A previously installed demarcation barrier (orange snow fencing) may be removed before helical pile installation. If the demarcation barrier is removed, after helical pile installation and before placement of the 12-inch-thick reinforced concrete mat slab, the demarcation barrier will be replaced in-kind.

Odor, Dust, and Nuisance Control Plan

Dust, odor, and nuisance control will be accomplished by the contractor as described in Section 5.4.13 of the RAWP. Invasive development work will be conducted in accordance with dust and odor suppression methodology defined in the RAWP.

Engineering Control: Composite Cover System

Exposure to residual contaminated soil in the billboard work area will be prevented by an engineered composite cover consisting of 12 inches of reinforced concrete. The composite cover design will be documented in a forthcoming Site Management Plan (SMP) and FER; the change in composite cover design from asphalt pavement to concrete slab is a deviation from the RAWP and will be documented as such in the FER. Maintenance of the composite cover system will be described in the SMP.

Reporting

Daily Reports

In accordance with Section 4.4 of the RAWP, daily reports will be submitted to NYSDEC and New York State Department of Health (NYSDOH) Project Managers by the end of the following day.

Final Engineering Report

An FER will be submitted to NYSDEC after installation of the billboard foundation and in accordance with Section 10.0 of the RAWP. The FER will document that the work was completed and performed in compliance with the RAWP and this Work Plan.



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Schedule

Demolition of the asphalt pavement in the billboard work area began on September 26, 2022. Billboard foundation installation is anticipated to be completed by the end of October 2022. A draft FER will be submitted to the NYSDEC in late October.



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Closing

Should you have any questions regarding this work plan, please feel free to call us at 212-479-5400.

Sincerely,

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

Gerald Nicholls, PE, CHMM

Gerald F. Nicholls

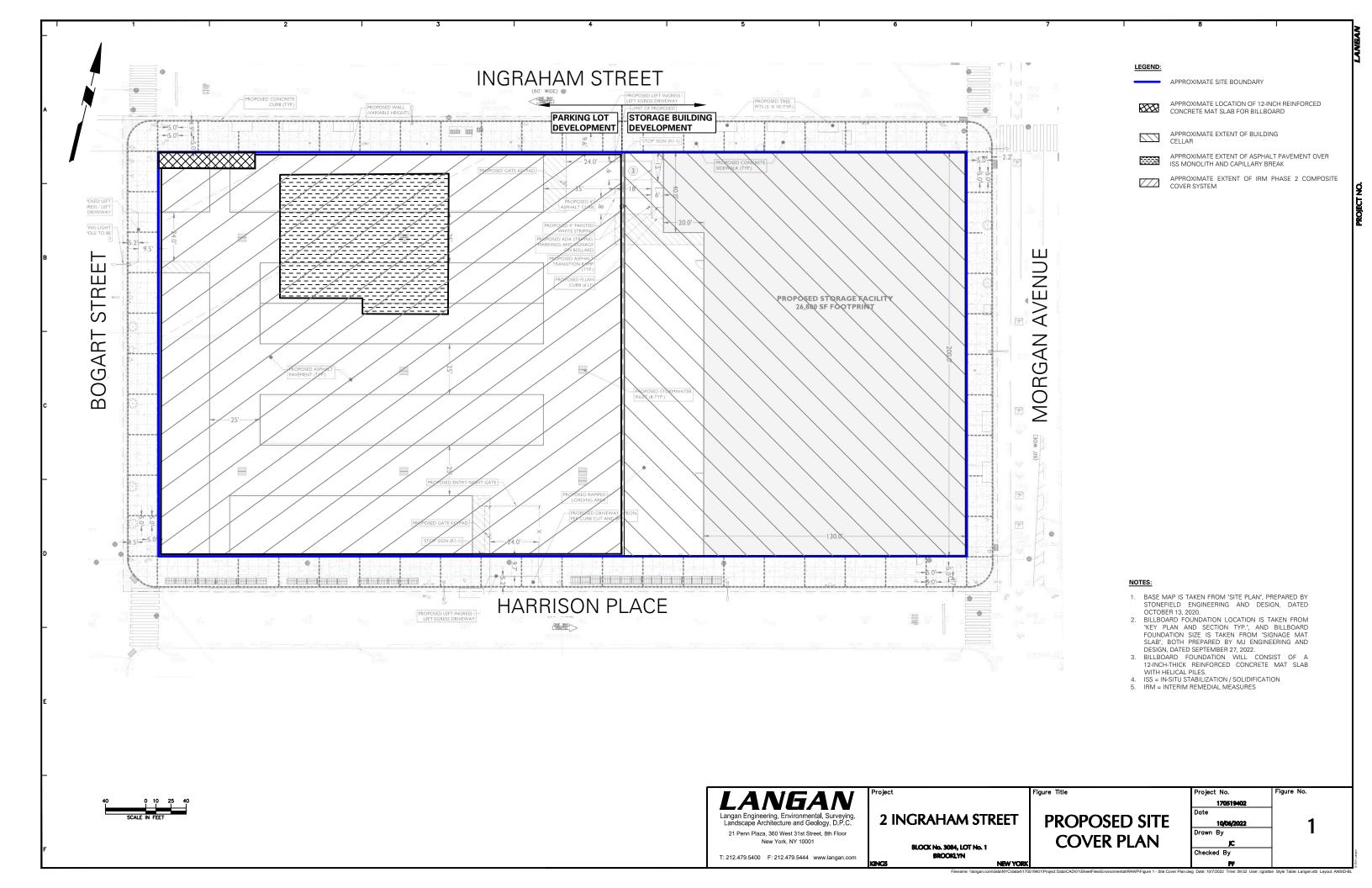
Associate

Patrick Farnham, PE Senior Project Manager

Attachments: Figure 1 – Proposed Site Cover Plan Attachment A – Design Drawings

cc: C. Lynch, T. Yule, J. Cunetta (74 Bogart LLC) M. Burke, K. Nagotko, T. Herold

FIGURE



ATTACHMENT A DESIGN DRAWINGS



CODES AND STANDARDS

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "BUILDING CODE OF THE CITY OF NEW YORK" LATEST EDITION, WITH THE SPECIFICATION AND WITH THE REGULATIONS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- 2 NEW YORK CITY FIRE PREVENTION AND BUILDING CODE
- WHERE MORE STRINGENT, THE LATEST EDITION OF THE FOLLOWING CODES SHALL APPLY TO WORK:
 - A ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS"
 - AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS
 - ALLOWABLE STRESS DESIGN, NINTH EDITION
 LOAD RESISTANCE FACTOR DESIGN, THIRD FOITION
 - C AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" LATEST EDITION EXCEPT THAT SECTION 6, 7, 8, AND 10 ONLY, SHALL APPLY TO THE WORK
 - D "STRUCTURAL WELDING CODE—STEEL"

 ANSI/AWS D1.1, BY THE AMERICAN WELDING
 SOCIETY
 - E BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318
 - F "STRUCTURAL WELDING CODE—STEEL",
 ANSI/AWSD1.3, BY THE AMERICAN WELDING
 SOCIETY
 - G "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES", ACI 53 AND "SPECIFICATIONS FOR MASONRY STRUCTURES"
- 4 AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM)

GENERAL NOTES

CONTRACTOR RESPONSIBILITY WILL CONSIST OF BUT NOT BE LIMITED TO THE FOLLOWING:

- 1 ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING CODES SHOWN ABOVE.
- THE CONTRACTOR SHALL REVIEW THE REQUIREMENTS OF THE BUILDING WITH THE OWNER TO DETERMINE THE USE OF AREA, RAMPS, ETC. ANY RELATED COSTS OR CHARGES THERETO SHALL BE INCLUDED IN THE COST OF THE WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, AND FOR THE COORDINATION OF ALL PORTIONS OF THE WORK.
- 4 THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND SAFETY OF ALL PERSONS, EXISTING FACILITIES AND EXISTING EQUIPMENT AND DISPLAYS AT THE CONSTRUCTION SITE AND THROUGHOUT ALL AREAS AFFECTED BY THE NEW CONSTRUCTION.
- 5 THE CONTRACTOR SHALL THOROUGHLY VERIFY ALL DIMENSIONS AND FIELD CONDITIONS AT THE JOB SITE. ANY AND ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER; OTHERWISE, THE CONTRACTOR SHALL BEAR ALL COSTS TO COMPLETE THE WORK AS INTENDED ON THE DRAWINGS.
- 6 MAINTAIN, PROTECT AND RELOCATE (IF REQUIRED)
 LIGHTING AND POWER CONDUITS, DUCTS, PIPES, WIRES
 (EXPOSED AND CONCEALED), DURING CONSTRUCTION.
 INSULATE ALL CONSTRUCTION EQUIPMENT FROM THE
 GROUND TO AVOID ACCIDENTAL GROUNDING.
- 7 THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROVISIONS OF ALL CONTRACT DOCUMENTS (THE SPECIFICATIONS, ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ETC.)
- 8 THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE DESIGN DRAWINGS WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- 9 IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE THAT EXISTING ADJOINING STRUCTURES ARE NOT DISTURBED AND UNDERMINED DURING ENTIRE CONSTRUCTION PERIOD. TEMPORARY BRACING AND/OR SHORING SHALL BE INTRODUCED WHERE NECESSARY TO SUPPORT ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED. SUCH BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LEFT IN PLACE AS LONG AS REQUIRED FOR SAFETY AND IS SUBJECT TO CONTROLLED INSPECTION. CONTRACTOR SHALL SUBMIT PROCEDURE, DESIGN CALCULATIONS AND DETAILED DRAWINGS FOR THE COMPLETE PROPOSED SUPPORT SYSTEM TO ENGINEER FOR APPROVAL.
- 10 COORDINATE WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR CLEARANCES, DIMENSIONS, EQUIPMENT LOCATIONS, OPENING LOCATIONS AND PIPE PENETRATIONS PRIOR TO COMMENCING CONSTRUCTION WORK.

CONCRETE REINFORCEMENT

- 1. ALL CONCRETE DETAILS AND CONSTRUCTION ARE TO COMPLY WITH THE LATEST EDITION OF THE ACI 301 & ACI 318 CODE AND LOCAL CODE.
- 2. REINFORCING TO BE DEFORMED BARS, NEW BILLET STEEL A.S.T.M. A— 615 DESIGNATION GRADE 60. ALL BARS ARE TO BE WIRED IN PLACE.
- 3. WELDED WIRE MESH SHALL CONFORM TO A.S.T.M. A-185.
- 4. PLACE, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. DO NOT DEVIATE FROM REQUIRED POSITION.
- 5. MAINTAIN CONCRETE CLEAR COVER AROUND REINFORCING AS FOLLOWS.

ITEM	COVERAGE
BEAMS	1.5 INCH
COLUMN TIES	1.0 INCH
SUPPORTED SLAB	1.0 INCH
WALLS	3.0 INCH
(EXPOSED TO WEATHER OR B	BACKFILL)
FOOTINGS AND CONCRETE	,
FORMED AGAINST EARTH	3.0 INC
	BEAMS COLUMN TIES SUPPORTED SLAB WALLS (EXPOSED TO WEATHER OR E FOOTINGS AND CONCRETE

CONCRETE FORMWORK

- ALL CONCRETE FORMWORK SHALL COMPLY WITH THE LATEST EDITION OF ACI 347 (RECOMMENDED PRACTICE FOR CONCRETE FORMWORK) PS-1 (CONSTRUCTION AND INDUSTRIAL PLYWOOD) AND 301 AND BRACING.
- 2 PROVIDE BRACING TO ENSURE STABILITY OF FORMWORK. SHORE OR STRENGTHEN FORMWORK SUBJECT TO OVER STRESSING BY CONSTRUCTION LOADS.
- THE FORMWORK DESIGN SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.
- 4 ALIGN JOINTS AND MAKE WATERTIGHT. KEEP FORM JOINTS TO A MINIMUM.
- 5 OBTAIN APPROVAL BEFORE FRAMING OPENINGS IN STRUCTURAL MEMBERS WHICH ARE NOT INDICATED ON DRAWINGS.
- 6 APPLY FORM RELEASE AGENT ON FORMWORK IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 7 APPLY FORM RELEASE AGENT PRIOR TO PLACEMENT OF REINFORCING STEEL, ANCHORING DEVICES, AND EMBEDDED ITEMS.
- 8 PROVIDE FORMED OPENINGS WHERE REQUIRED FOR ITEMS TO BE EMBEDDED IN OR PASSING THROUGH CONCRETE WORK
- 9 LOCATE AND SET IN PLACE ITEMS WHICH WILL BE CAST DIRECTLY INTO CONCRETE.
- 10 INSTALL WATER STOPS CONTINUOUS WITHOUT DISPLACING REINFORCEMENT.

CONCRETE TESTING EXEMPTION

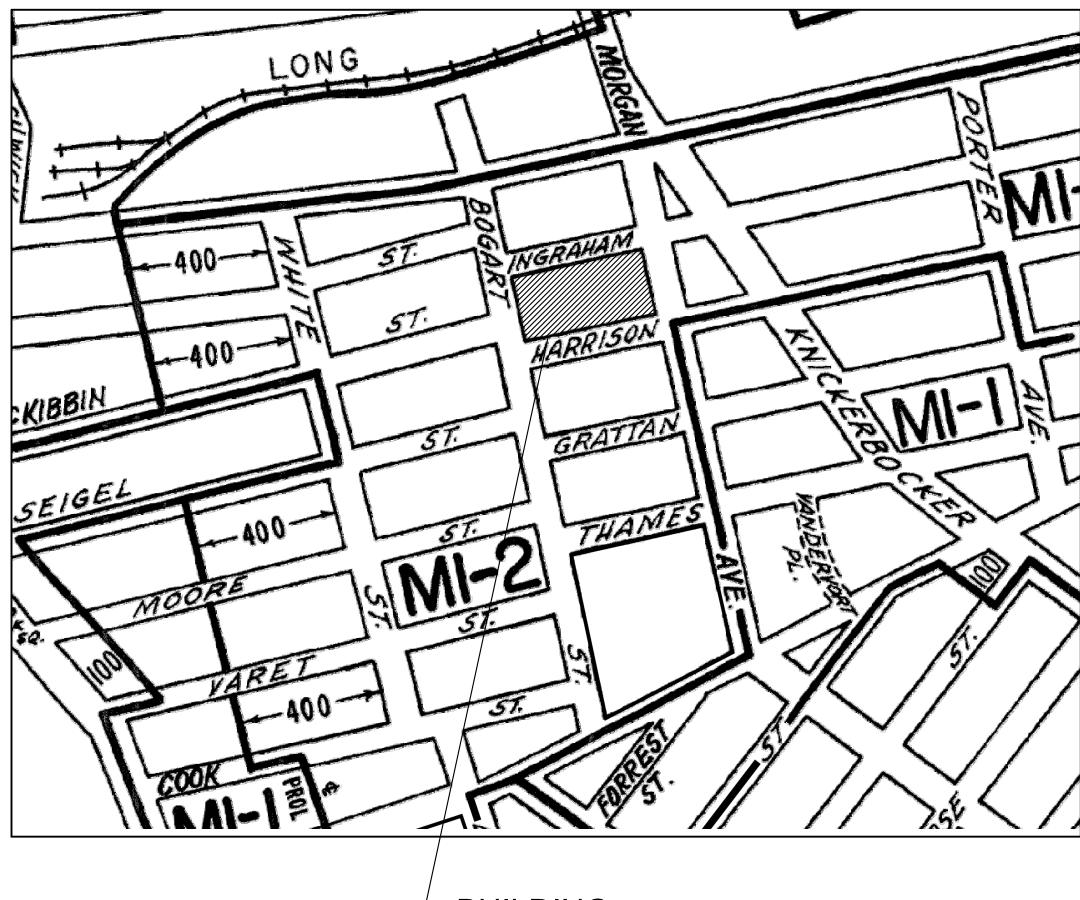
THE WORK MEETS THE EXPANSION CRITERIA OF BUILDINGS BULLETIN 2014-026 ITEM IV AND I HEREBY ELECT TO WAIVE THE REQUIREMENTS OF CONCRETE TESTING AND OF THE TR-2 FORM AND / OR TR-3 FORM.

CAST-IN-PLACE CONCRETE

- 1 ALL CONCRETE DETAILS AND CONSTRUCTION ARE TO COMPLY WITH THE LATEST EDITION OF ACI 301, ACI 318, ACI 614.
- 2 CONFORM TO ACI 305R WHEN CONCRETING DURING HOT WEATHER.
- 3 CONFORM TO ACI 306R WHEN CONCRETING DURING COLD WEATHER.
- 4 CEMENT ASTM C150 TYPE I.
- 5 JOINT FILLER TYPE ASTM D1752; PRE MOLDED SPONGE RUBBER, FULLY COMPRESSIBLE WITH RECOVERY RATE OF MINIMUM 95 PERCENT.
- 6 MIX CONCRETE IN ACCORDANCE WITH ACI 304.
 DELIVERY CONCRETE IN ACCORDANCE WITH ASTM C94.
- 7 PROVIDE CONCRETE TO MEET THE FOLLOWING CRITERIA:
 - a) COMPRESSIVE STRENGTH 28 DAYS: 1. FOOTING AND GRADE BEAMS AND PIERS 6000 PSI.
 - b) SLUMP: ±6 INCHES.
 - c) MAXIMUM WATER/CEMENT RATIO: 0.45
- ENSURE REINFORCEMENT, INSERTS, EMBEDDED PARTS, FORMED JOINT FILLERS AND ANCHORS ARE NOT DISTURBED DURING CONCRETE PLACEMENT.
- 9 VERIFY REQUIREMENTS FOR CONCRETE COVER OVER REINFORCEMENT.
- 10 NOTIFY THE ENGINEER MINIMUM 24 HOURS PRIOR TO COMMENCEMENT OF OPERATIONS.
- 11 VERIFY THAT ANCHORS, SEATS, PLATES, REINFORCEMENT AND OTHER ITEMS TO BE CAST INTO CONCRETE ARE ACCURATELY PLACED, POSITIONED SECURELY, AND WILL NOT CAUSE HARDSHIP IN PLACING CONCRETE.
- 12 MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.
- 13 DO NOT PATCH, FILL, TOUCH—UP, REPAIR, OR REPLACE EXPOSED CONCRETE EXCEPT UPON EXPRESS DIRECTION OF ENGINEER FOR EACH INDIVIDUAL AREA.
- 14 REPAIR OR REPLACEMENT OF DEFECTIVE CONCRETE WILL BE DETERMINED BY THE ENGINEER.

FOUNDATION WORK

- F.2 ELEVATIONS OF THE BOTTOM OF THE FOOTINGS ARE INDICATED ON THE FOUNDATION PLAN, BUT ARE SUBJECT TO REVISION WHEN THE TRUE CONDITIONS ARE REVEALED BY THE EXCAVATIONS.
- F.3 THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER AND/OR THE FOUNDATION CONTRACTOR SHALL BE SOLELY AND FULLY RESPONSIBLE FOR ALL EXCAVATION WORK INCLUDING BUT NOT LIMITED TO THE DESIGN, INSTALLATION AND MAINTENANCE OF SHEETING AND SHORING, PROTECTION OF SLOPES, UNDERPINNING AND DEWATERING.
- F.4 THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER AND/OR THE FOUNDATION CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN NEW YORK STATE IN WHICH THE PROJECT IS LOCATED TO DESIGN ALL SHEETING AND SHORING, UNDERPINNING AND DEWATERING SYSTEMS.
- F.5 THE SLOPE BETWEEN ADJACENT FOOTING BOTTOMS SHALL NOT EXCEED 1 VERTICAL TO 2 HORIZONTAL.
- F.6 FOUNDATION WALLS AND/OR GRADE BEAMS SHALL BE CAST IN ALTERNATE PANELS NOT TO EXCEED 60 FEET IN LENGTH. CONSTRUCTION JOINTS SHALL BE PLACED AT POINTS OF MINIMUM SHEAR, GENERALLY AT MIDSPAN. ALLOW 7 DAYS MINIMUM BETWEEN ADJACENT POURS. SUBMIT LOCATION OF CONSTRUCTION JOINTS FOR REVIEW AND APPROVAL BEFORE POURING CONCRETE, SEE TYP. DETAIL.
- F.7 HORIZONTAL JOINTS IN WALLS OR GRADE BEAMS WILL BE PERMITTED ONLY IF AND AS SHOWN.
- F.8 FOUNDATION WALLS AND/OR GRADE BEAMS, SHALL BE TEMPORARILY BRACED LATERALLY TO RESIST EARTH PRESSURE, WIND, CONSTRUCTION LOADS AND OTHER LATERAL LOADS UNTIL FRAMED SLABS AND SLABS ON GRADE THAT PERMANENTLY BRACE THESE WALLS AND/OR GRADE BEAMS HAVE BEEN IN PLACE 28 DAYS (MINIMUM).
- F.9 TRUCKS, BULLDOZERS OR OTHER HEAVY EQUIPMENT SHALL NOT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION WALL BEFORE THE COMPLETE STRUCTURAL FRAME IS IN PLACE.



BUILDING LOCATION

CONTROLLED INSPECTION

ΥN	SPECIAL INSPECTIONS ITEMS	CODE SECTION
X	CONCRETE - CAST-IN-PLACE	BC 1704.4
X	SUBGRADE INSPECTION	BC 1704.7.1
\overline{X}	SUBSURFACE CONDITIONS - FILL PLACEMENT & IN-PLACE DENSIT	Y BC 1704.7.2
X	HELICAL PILES (BB # 2014-020) TR5H	BC 1704.7.3 BC 1704.8.5
ΥN	PROGRESS INSPECTIONS ITEMS	CODE SECTION
X	FOOTING AND FOUNDATION	BC 109.3.1
	Directive 14 of 1975, and	1 RCNY §101-10

CONSULTANTS: MJ ENGINEERING & DESIGN 3 Battista CT Savreville. NJ 08872 & Phone: (201) 365-8065 www.mjengineering.org NO. DATE REVISION DESIGNER: M.Y. DRAWN BY: F.I. CHECKED BY: MY. MJE&D NO.: AS NOTED 09-27-2022 PROJECT: 74 BOGART STREET BROOKLYN, NY DRAWING TITLE: **GENERAL NOTE** DRAWING NO.: S - 070.00 PROJECT NO.:

