ADDENDUM NO. 3 TO CONTRACT DOCUMENTS

PROJECT:	CSO Facilities for Gowanus Canal, OH CP3	**PROJECT NO.:**	CSO-GC-SFS-OH-CP3
OWNER:	NYCDEP	**DATE:**	November 12, 2026

To All Bidders:

Contractors submitting bids for the above-named project shall take note of the following changes, additions, deletions, clarifications, etc., in the Contract Documents, which shall become a part of and have precedence over anything contrarily shown or described in the Contract Documents, and all such shall be taken into consideration and be included in the Contractor's bid proposal.

(Please see attached pages.)

Plan holders wishing to submit bids should acknowledge receipt of this and all Addenda by listing the Addendum Numbers on the appropriate line of the Bid Booklet – Section B2, Acknowledgment of Addenda.



Changes to the Bid Documents

CONTRACT TERMS

Item 1. Under Item Grid Bid Sheet, REPLACE A-10 – Expanded Work Allowance Quantity with $7,000,000.

SPECIFICATIONS

Item 2. Specification Section 01 73 12 – Maintenance of Operations and Construction Staging, DELETE paragraph 3.02.A.4 and REPLACE with the following:

4. Contractor to provide an Operator with experience and credentials as outlined in Section 01 73 14 for the operation and maintenance of the 2nd Avenue PS, until the pump station has been demolished and tributary flow diverted to the collection system. The qualifications statement submitted for the proposed Operator shall be subject to review by DEP BWT and Engineer.

Item 3. Specification Section 04 22 23.23 – Prefaced Concrete Unit Masonry, INSERT paragraph 1.03.C and renumber related sections C through G sequentially after inserted paragraph:

c. Section 04 01 20.53 Masonry Cleaning

Item 4. Specification Section 04 22 23.23 – Prefaced Concrete Unit Masonry, DELETE paragraph 3.05.A.2 and REPLACE with the following:

2. Refer to Section 04 01 20.53 Masonry Cleaning for cleaning of masonry work.

Item 5. Specification Section 04 01 20.53 - Masonry Cleaning, DELETE paragraph 2.02.A.1.a and REPLACE with the following:

Concrete Masonry and Filled Ground Face Concrete Masonry: Areas to be cleaned shall be soaked with water, then scrubbed, followed by a rinse with clean water. Fiber brushes shall be used to apply the cleaning solution and to wash the blockwork. Do not allow the acid solution to come in contact with metalwork, blockwork and stonework below the area being cleaned shall be kept wet during the cleaning process. Cleaning product shall be Custom Light Duty Masonry Concrete Cleaner (dilution one [1] to six [6]) as manufactured by Sure Clean Klean or approved equal.

Item 6. Specification Section 04 01 20.53 - Masonry Cleaning, DELETE paragraph 3.02.A. paragraphs 1 through 4 including associated subparagraphs and REPLACE with the following:

A. Cleaner shall be specially formulated to remove common construction and atmospheric staining from a variety of substrates, including smooth architectural and engineered concrete, custom masonry, concrete brick, manufactured stone and decorative pavers.

1. Clean masonry before installing non-masonry materials such as windows, doors, finished flooring, metal fixtures, hardware, light fixtures, roofing materials, etc. that the cleaner could harm. If cleaning is to be completed after installation of non-masonry materials not intended for treatment.

2. Prefaced Masonry Surfaces remove mortar residues and construction soiling within 7–14 days of tooling the mortar joints. Let mortar/grout cure at least 7 days before cleaning.
3. Clean when air and masonry surface temperatures are 40° F (4° C) or above. Do not apply when temperature is below freezing or will be overnight. If freezing conditions exist before application, let the surface thaw.
4. Apply with a soft-fiber, tampico masonry washing brush or with low-pressure (50 psi max) spray equipment fitted with acid-resistant hoses and gaskets. Do not use pressure spray above 50 psi. This drives the cleaner into the surface, making rinse difficult and may cause stains. Do not atomize. Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.
5. Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.

Item 7. Specification Section 05 52 13.05 - Collapsible Handrails, DELETE Paragraph 1.03.D in its entirety.

Item 8. Specification Section 05 52 13.05 - Collapsible Handrails, REPLACE Paragraph 2.02.O.1.c with the following:

c. Collapsible Pit Handrails shall be powder coated steel

Item 9. Specification Section 05 52 13.05 - Collapsible Handrails, DELETE Paragraph 2.02.O.1.d in its entirety.

Item 10. Specification Section 08 39 19 -Watertight Doors, DELETE Paragraph 1.01.A and REPLACE with the following:

A. The Contractor shall furnish and install all Watertight Doors, frames, and associated assemblies as a complete system. Watertight doors shall be pressure-tight up to a water gauge pressure specified herein, opening to the pressure side, to be lined on both sides, rectangular, completely made from (AISI 316 L) stainless steel, and statically certified. Frame shall be circumferential with one center and two side gaskets, face mounted with edge opening onto concrete using embedment anchoring as specified by the manufacture to conform to the pressure requirements specified herein. Watertight Doors will be installed in Combined Sewer Overflow tanks at bottom of Stairs C, D, and E, and as such will be exposed to wastewater.

Item 11. Specification Section 08 39 19 -Watertight Doors, DELETE Paragraph 3.03.A and REPLACE with the following:

A. Watertight door will be subjected to full mockup test to impose full designated design pressure. Water level for mockup test shall be at least equal to the hydraulic profile water level in the CSO tanks as indicated in Drawings. Test duration shall be a minimum of 3 days. The contractor is responsible for any corrective work or

replacement parts required to perform to the designated requirements without additional cost to the City.

Item 12. Specification Section 32 14 10 – Unit Pavers, DELETE specification entirely and REPLACE with specification section in Attachment No. 1.

Item 13. Specification Section 32 32 20 - Landscape Boulders, DELETE specification entirely and REPLACE with specification section in Attachment No. 2.

Item 14. Specification Section 32 90 05 - Soil Mixes, DELETE specification entirely and REPLACE with specification section in Attachment No. 3.

DRAWINGS

Item 15. Drawing C-121 – GRADING AND DRAINAGE PLAN AREA 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 4.

Item 16. Drawing C-124 – GRADING AND DRAINAGE PLAN TOP OF TANK AREA, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 5.

Item 17. Drawing C-313 – STORM DRAIN NETWORK PROFILES 2 OF 2, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 6.

Item 18. Drawing C-902 – SITE DETAILS 2 OF 5, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 7.

Item 19. Drawing C-904 – SITE DETAILS 4 OF 5, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 8.

Item 20. Drawing L-101 - MATERIALS PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 9.

Item 21. Drawing L-111.00 – PAVING CONDITIONS PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 10.

Item 22. Drawing L-113.00 – PAVING CONDITIONS PLAN 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 11.

Item 23. Drawing L-121.00 – LAYOUT PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 12.

Item 24. Drawing L-124.00 – PAVING FIELD LAYOUT PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 13.

Item 25. Drawing L-126.00 – PAVING FIELD LAYOUT PLAN 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 14.

Item 26. Drawing L-131.00 – FURNISHING LAYOUT PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 15.

Item 27. Drawing L-141.00 – GRADING PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 16.

Item 28. Drawing L-142.00 – GRADING PLAN 2, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 17.

Item 29. Drawing L-143.00 – GRADING PLAN 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 18.

Item 30. Drawing L-151.00 – SOILS PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 19.

Item 31. Drawing L-160.00 – PLANTING SCHEDULE, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 20.

Item 32. Drawing L-161.00 – CANOPY PLANTING PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 21.

Item 33. Drawing L-163.00 – CANOPY PLANTING PLAN 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 22.

Item 34. Drawing L-171.00 – UNDERSTORY PLANTING PLAN 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 23.

Item 35. Drawing L-173.00 – UNDERSTORY PLANTING PLAN 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 24.

Item 36. Drawing L-701 - SECTIONS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 25.

Item 37. Drawing L-702.00 – SECTIONS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 26.

Item 38. Drawing L-703.00 – SECTIONS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 27.

Item 39. Drawing L-706.00 – SECTIONS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 28.

Item 40. Drawing L-800.00 – STONE SCHEDULE, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 29.

Item 41. Drawing L-802.00 – PLAN ENLARGEMENT 2, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 30.

Item 42. Drawing L-803 - PLAN ENLARGEMENT 3, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 31.

Item 43. Drawing L-901.00 – PAVING DETAILS 01, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 32.

Item 44. Drawing L-902.00 – PAVING DETAILS 02, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 33.

Item 45. Drawing L-903.00 – PAVING DETAILS 03, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 34.

Item 46. Drawing L-904.00 – PAVING DETAILS 04, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 35.

Item 47. Drawing L-910 - RETAINING WALL DETAILS 01, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 36.

Item 48. Drawing L-911 - RETAINING WALL DETAILS 02, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 37.

Item 49. Drawing L-912 - RETAINING WALL DETAILS 03, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 38.

Item 50. Drawing L-913.00 – RETAINING WALL DETAILS 04, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 39.

Item 51. Drawing L-914.00 – RETAINING WALL ELEVATIONS 1, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 40.

Item 52. Drawing L-915.00 – RETAINING WALL ELEVATIONS 2, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 41.

Item 53. Drawing L-916.00 – RETAINING WALL AND RAILING DETAILS 01, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 42.

Item 54. Drawing L-917.00 – RETAINING WALL AND RAILING DETAILS 02, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 43.

Item 55. Drawing L-920.00 – STAIR AND RAMP DETAILS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 44.

Item 56. Drawing L-921.00 – STAIR AND SEATING STEP DETAILS 01, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 45.

Item 57. Drawing L-960.00 – SOIL DETAILS, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 46.

Item 58. Drawing S-934, ADD Note 1 to read as follows:

> "STAIR G SHALL BE GALVANIZED AND PAINTED CARBON STEEL CONCRETE PAN STAIRS. ALL STAIR METALS SHALL BE CARBON STEEL

GALVANIZED AND PAINTED IN ACCORDANCE WITH SECTIONS 05 05 13.01 GALVANIZING AND 09 91 00 PAINTING."

Item 59. Drawing A-002, ADD Note 08 13 13.54.1 CON ED LOUVER DOORS to read as follows:
08 13 13.54.1 CON ED LOUVER DOORS – DOORS TV-1, TV-2 AND TV-3 LOUVER DOORS ARE NOT BLAST RATED HOWEVER ARE CONSTRUCTED IN ACCORDANCE WITH AND AS WORK OF SECTION 08 13 13.54- BLAST DOORS. PROVIDE AND SECURE LOUVER IN ACCORDANCE WITH NOTE 08 91 20.3 CON ED LOUVERS. REFER TO DOOR SCHEDULE FOR ALL OPENINGS AT NETWORK PROTECTION COMPARTMENTS IN CON ED BLOCKHOUSE. REFER TO SPECIFICATIONS 08 13 13.54 BLAST DOOR FOR DOORS CONSTRUCTION MATERIAL REQUIREMENTS ONLY.

Item 60. Item 24. Drawing A-910 - ARCHITECTURAL DOOR SCHEDULE AND DETAILS, DELETE note Tag 08 13 14.54.0 - BLAST DOORS in the Comment column for doors TV-1, TV-2 AND V-3 and REPLACE with Note Tag: 08 13 13.54.1 CON ED LOUVER DOORS.

Item 61. Drawing A-100.00 – Overall Bottom Plan @ EL -21.50, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 47.

Item 62. New Drawing A-101.00 – Stair C – Plans and Section, ADD new drawing in Attachment No. 48 to the Contract.

Item 63. New Drawing A-102.00 – Stair D – Plans and Section, ADD new drawing in Attachment No. 49 to the Contract.

Item 64. New Drawing A-103.00 – Stair E– Plans and Section, ADD new drawing in Attachment No. 50 to the Contract.

Item 65. New Drawing A-104.00 – Stair F – Plans and Section, ADD new drawing in Attachment No. 51 to the Contract.

Item 66. Drawing E-012 - 2ND AVE PS MCC SINGLE LINE DIAGRAM AND ELEVATION, DELETE sheet in its entirety and REPLACE with attached drawing in Attachment No. 52.

EXHIBITS

None

LIST OF ATTACHMENTS

Attachment 1. Section 32 14 10 - Unit Pavers
Attachment 2. Section 32 32 20 - Landscape Boulders
Attachment 3. Section 32 90 05 - Soil Mixes
Attachment 4. C-121 – GRADING AND DRAINAGE PLAN AREA 1
Attachment 5. C-124 – GRADING AND DRAINAGE PLAN TOP OF TANK AREA
Attachment 6. C-313 – STORM DRAIN NETWORK PROFILES 2 OF 2
Attachment 7. C-902 – SITE DETAILS 2 OF 5
Attachment 8. C-904 – SITE DETAILS 4 OF 5

Attachment 9. L-101.00 – Materials Plan 1
Attachment 10. L-111.00 – Paving Conditions Plan 1
Attachment 11. L-113.00 – Paving Conditions Plan 3
Attachment 12. L-121.00 – Layout Plan 1
Attachment 13. L-124.00 – Paving Field Layout Plan 1
Attachment 14. L-126.00 – Paving Field Layout Plan 3
Attachment 15. L-131.00 – Furnishing Layout Plan 1
Attachment 16. L-141.00 – Grading Plan 1
Attachment 17. L-142.00 – Grading Plan 2
Attachment 18. L-143.00 – Grading Plan 3
Attachment 19. L-151.00 – Soils Plan 1
Attachment 20. L-160.00 – Planting Schedule
Attachment 21. L-161.00 – Canopy Planting Plan 1
Attachment 22. L-163.00 – Canopy Planting Plan 3
Attachment 23. L-171.00 – Understory Planting Plan 1
Attachment 24. L-173.00 – Understory Planting Plan 3
Attachment 25. L-701.00 – Sections
Attachment 26. L-702.00 – Sections
Attachment 27. L-703.00 – Sections
Attachment 28. L-706.00 – Sections
Attachment 29. L-800.00 – Stone Schedule
Attachment 30. L-802.00 – Plan Enlargement 2
Attachment 31. L-803.00 – Plan Enlargement 3
Attachment 32. L-901.00 – Paving Details 01
Attachment 33. L-902.00 – Paving Details 02
Attachment 34. L-903.00 – Paving Details 03
Attachment 35. L-904.00 – Paving Details 04
Attachment 36. L-910.00 – Retaining Wall Details 01
Attachment 37. L-911.00 – Retaining Wall Details 02
Attachment 38. L-912.00 – Retaining Wall Details 03
Attachment 39. L-913.00 – Retaining Wall Details 04
Attachment 40. L-914.00 – Retaining Wall Elevations 1
Attachment 41. L-915.00 – Retaining Wall Elevations 2
Attachment 42. L-916.00 – Retaining Wall and Railing Details 01
Attachment 43. L-917.00 – Retaining Wall and Railing Details 02
Attachment 44. L-920.00 – Stair and Ramp Details
Attachment 45. L-921.00 – Stair and Seating Step Details 01
Attachment 46. L-960.00 – Soil Details
Attachment 47. A-100.00 – Overall Bottom Plan @ EL -21.50
Attachment 48. New A-101.00 – Stair C – Plans and Section
Attachment 49. New A-102.00 – Stair D – Plans and Section
Attachment 50. New A-103.00 – Stair E– Plans and Section
Attachment 51. New A-104.00 – Stair F – Plans and Section
Attachment 52. E-012 - 2nd Ave PS MCC Single Line Diagram and Elevation

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Granite Cobble Unit Paver
2. Concrete Unit Paver (Types A, B, C)
3. Jointing materials
4. Setting Bed, Subbase and Base Courses
5. Edging and other accessories

B. The following index of this Section is presented for convenience:

Article	Title	Section Page
PART 1	GENERAL	1
1.01	Summary	1
1.02	Payment	2
1.03	Related Sections	2
1.04	References	2
1.05	Description	2
1.06	Quality Assurance	2
1.07	Submittals	6
1.08	Delivery, Storage, and Handling	8
1.09	Spare Parts, Special Tools, and Supplies	9
1.10	Warranty	9
PART 2	PRODUCTS	9
2.01	Manufacturers	9
2.02	Materials / Equipment	9
2.03	Fabrication / Assembling / Finishes	15
2.04	Source Quality Control / Shop Tests	15
PART 3	EXECUTION	15
3.01	Examination / Preparation	15
3.02	Installation	16
3.03	Field Testing / Quality Control	25
3.04	Startup / Demonstration	25
3.05	Adjusting / Protection / Cleanup	25

C. The Contractor shall implement practices and procedures to meet the project's sustainability goals as identified in the Contract Documents. The Contractor shall ensure that the sustainability requirements of this Section are implemented to the fullest extent.

1.02 PAYMENT

A. No separate payment shall be made for performing any Work required under this Section. All costs for Work required by this Section shall be included in the applicable lump sum, unit price(s), or allowance(s) as set forth in Section 01 27 00 – Measurement and Payment.

1.03 RELATED SECTIONS

A. Section 01 30 00 - Submittal Procedures

B. Section 01 35 63 - Sustainability Certification Project Requirements.

C. Section 03 30 00 - Cast-in-Place Concrete

1.04 REFERENCES

A. ASTM C97 - Standard Test Methods for Absorption & Bulk Specific Gravity of Dimension Stone

B. ASTM C99 - Standard Test Method for Modulus of Rupture of Dimension Stone

C. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar

D. ASTM C150 - Standard Specification for Portland Cement

E. ASTM C170 - Standard Test Method for Compressive Strength of Dimension Stone

F. ASTM C270 - Standard Specification for Mortar for Unit Masonry

1.05 DESCRIPTION

A. Sustainable Design Requirements

1. Regional Materials: Pavers shall be manufactured within the miles of the Project Site as specified in Section 01 35 63 – Sustainability Certification Project Requirements.

B. Project-specific system design requirements will be provided in the Contract, if necessary, to supplement requirements given herein or in the Contract Drawings.

1.06 QUALITY ASSURANCE

A. Items noted herein shall be installed only in the presence of the Engineer. Contractor shall schedule and coordinate installation of such items with Engineer.

B. Sources are provided for all unit pavers, joint material specified herein.

C. Comply with governing codes and regulations. Provide products from acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

D. Installer Qualifications: Use adequate numbers of skilled workers who are trained in the necessary crafts and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this Section, with a minimum 5 years of experience.

E. Source Limitations: Obtain each type of unit paver, joint material, and setting material from one source with resources to provide a sufficient quantity of materials and products of consistent quality in appearance and physical properties.

F. Critical Path Processing: The Contractor shall be responsible for recognizing that these critical project materials warrant timely attention, that the procurement process to achieve approved materials SHALL BE CONSIDERED A LONG LEAD TIME ITEM. Under no circumstance shall failure to comply with all specification requirements be a reason for a substitution of unacceptable material(s).

G. Mock-ups:

1. Mock-up for Granite Cobble Paver Band: Submit shop drawings for each granite cobble paver band mock-up to be constructed. Mockup shall include all details and elements of paving pattern, including but not limited to, paver edge restraint, granite cobble unit pavers and oversized pavers if applicable. Mockups shall include a full range of curvature conditions encountered in the permanent work, and typical paver infill conditions where paver band changes in direction and/or width, as shown on Contract Drawings. Mockups shall be sized to fully capture all layout conditions as shown on Contract Drawings to demonstrate the aesthetics effects and workmanship.

    a. Sample/mock-up shall be installed in a separate location as approved by the Engineer.

    b. Granite Cobble Paver Band, a minimum 8’-0” x 8’-0” area inclusive of joint materials, edge restraint, subbase conditions and adjacencies to be found in the finished work as shown in the contact drawings.

2. Mock-up for Paving Material Adjacencies and Assembly: Submit layout and detail shop drawings(s) for material and installation of the paving systems and adjacent work, including but not limited to, cast-in-place exposed aggregate concrete paving, granite cobble paver band, concrete unit paver field, all edging, joint fillers, setting beds, subbase and base slabs, all correctly dimensioned. Mockup shall accurately represent the paving field orientation and relationships with adjoining work.

    a. Construct representative Assemblies mockup in a location as approved by the Engineer. Mockup shall be a minimum of 10’-0” x 10’-0” area.

    b. Prepare full size field assemblies for methods to demonstrate aesthetic effects and qualities of materials and execution. The Landscape Architect must approve the visual characteristics, quality of workmanship, and methods of installation before final work is started.

    c. Assembly mockup shall be representative of the following material adjacencies at the minimum:

1) Cast-in-place exposed aggregate concrete paving adjacent to granite cobble paver band.

2) Granite cobble paver band adjacent to concrete unit paver field

3. Mock-up for Paver Field and Gradation: Submit shop drawings for each paving field and gradation sample/mock-up to be constructed. Mockup shall include examples of color transition and ratio between paver bands and paver band intersections, as shown in Contract Drawings.

   Concrete Unit Paver Field, a minimum 8'-0" x 8'-0" area inclusive of all conditions, metal edging, accessories and adjacencies to be found in the finished work. Mix Pavers A, B, and C at the percentages stated in the Contract Drawings. Mockup shall include jointing materials and sealer.

4. Mock-up for Paver Tray Access Cover: Install the first paver access cover at a location selected by Engineer and Landscape Architect as the mock-up for paver access cover work. The mock-up shall show the visual effects and workmanship to be expected, and the standard by which the Work will be judged.

   a. Mock-up Extent: One complete paver access cover, including frame, LTB, all trays with paver infill, weather seal, and adjacent unit paving extending a minimum of [3 feet] beyond frame on all sides.

   b. Mock-up shall demonstrate the following:

      1) Frame elevation, level, anchorage, mortar underfill, and concrete haunching.

      2) LTB bearing and shimming on sub-cover.

      3) Tray infill method, including filter fabric, bedding, and joint material.

      4) Paver pattern and joint alignment across frame and trays matching adjacent paving.

      5) Perimeter paver cuts at 9-degree slope with uniform gap at tray walls.

      6) Flush transition between tray infill, frame, and adjacent paving within specified tolerance.

      7) Weather seal installation.

   c. Operational Test: In presence of Engineer and Landscape Architect and Owner's representative, remove and reseat each tray using specified eyebolts and chain lifting kit. Verify that trays lift without binding, reseat level and flush, and maintain specified clearance.

d. Notify Engineer and Landscape Architect seven days in advance of mock-up installation and testing.

e. Manufacturer's Field Service: Arrange for manufacturer's technical representative to be present during mock-up installation, in person or by video, to review frame setting, LTB bearing, and tray infill.

f. Approval: Obtain Engineer and Landscape Architect's written approval of mock-up before installing remaining paver access covers.

g. Corrections: If mock-up is not approved, remove, correct, or replace it as directed by Architect, at no additional cost to Owner, until approval is obtained.

h. Approval of the mock-up does not constitute approval of deviations from the Contract Documents unless such deviations are approved in writing by Engineer and Landscape Architect.

i. Approved mock-up may become part of the completed Work if undisturbed at time of Substantial Completion.

5. Layout and Grading: Upon approval of mockups and prior to installation of the permanent work, Contractor shall stake out all Granite Cobble Paver Bands, Paver Fields and Gradation Patterns as shown on Contract Drawings for the review and approval by the Landscape Architect.

   a. The Contractor shall stake out the work in sufficient detail for evaluation by the Landscape Architect.

   b. The Landscape Architect shall be permitted to make reasonable adjustments to layout and grading at no additional cost to the Owner.

   c. The Contractor shall bring any significant discrepancies to the attention of the Notify Landscape Architect for a determination.

6. Demonstrate the proposed range of aesthetic effects and workmanship on unit paving pattern and gradation.

7. Obtain Landscape Architect's approval of field sample/mockup before starting paving installation of Project. The Landscape Architect must approve the visual characteristics, quality of workmanship, and methods of installation before final work is started.

8. If the original sample is not approved, the Contractor shall provide additional mock-ups, as required, at no cost to the Owner until an approved mock-up is obtained.

9. Maintain mockup during construction in an undisturbed condition as a standard for judging the subsequent completed work.

10. If applicable, include coordination details for related, supporting, and adjoining work. Coordination drawings will be used for installation and/or other work by a separate contractor.

11. Attic Stock: Provide 5% of total material used to Owner as Attic Stock for maintenance and repairs. Pavers shall be provided stacked on pallets and shrink wrapped along with label identifying paver name, type, size, color, and supplier.

H. Project Conditions

1. Field Measurements: Verify actual locations of curbs and other construction contiguous with paver installation prior to shop drawings.

2. Grade Control: Establish and maintain required lines and elevations. Review grades and lines with Landscape Architect prior to starting work and as work progresses.

3. Cold Weather Protection: Do not use frozen materials or build on frozen subgrade or setting beds.

4. Weather Limitations for Mortar and Grout:

a. Cold-Weather Requirements: Comply with cold-weather construction requirements per TMS 602 / ACI 530.1 / ASCE 6, or as per manufacturer's instructions, whichever is more stringent. No unit pavers shall be laid in inclement weather or when temperature is below 40 degrees F., and dropping, nor shall any work be done on rising temperatures until the temperature reaches 40 degrees F. The use of frozen materials is strictly prohibited.

b. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602 / ACI 530.1 / ASCE 6, or as per manufacturer's instructions, whichever is more stringent. Provide artificial shade and windbreaks and use cooled materials as required. Do not apply mortar to substrates with temperatures of 100 deg F and higher. When ambient temperature exceeds 100 deg, or when wind velocity exceeds 8 mph and ambient temperature exceeds 90 deg F, set pavers within 1 minute of spreading setting bed mortar.

1.07 SUBMITTALS

A. All submittals, samples and shop drawings shall comply with Section 01 30 00 - "Submittal Procedures".

B. Product Data: For each type of product indicated. Provide full range of color samples for jointing aggregates, joint filler, mortar, sealant, unit pavers, edging and other accessories.

C. Material Certificates: For unit pavers, provided by manufacturers. For granite cobble pavers, provide a letter from the granite fabricator stating the material being furnished is the specified material and there are sufficient reserves available to supply the project and furnish replacement units if needed.

D. Sieve Analyses: For aggregate materials, according to ASTM C136.

E. Maintenance Data for long term maintenance.

F. Warranty: Provide standard manufacturer warranty.

G. Samples for Verification: Submit full size samples to Landscape Architect for review and approval. Do not order materials until Landscape Architect's approval has been obtained. Submit samples of each type listed below and as specified herein. Delivered materials shall closely match the approved samples. If the original sample is not approved, the Contractor shall provide additional samples, as required, at no cost to the Owner until an approved sample is obtained. The approved sample shall become the standard for the entire job: Submittals shall include, but not be limited to:

1. Full size paver samples for each paver type and finish as specified. Label each with job name, supplier, color and finish. Compliance with all other requirements is the responsibility of the Contractor.
    a. Granite Cobble Paver
    b. Concrete Unit Paver A
    c. Concrete Unit Paver B
    d. Concrete Unit Paver C

H. Samples for Selection: Submit samples showing full range of color options, size, shape, finish and texture if applicable. Samples shall be reviewed and approved by Landscape Architect. Submit samples of each type listed below and as specified herein. Delivered materials shall closely match the approved samples. If the original sample is not approved, the Contractor shall provide additional samples at no cost to the Owner until an approved sample is obtained. Submittal shall include, but not be limited to:

1. Joint Samples: Submit samples of joint materials for color selection.
    a. Provide a minimum of 3 full sample kit for each joint material type:
        1) Grout
        2) Mortar
        3) Sealant
            a) Polymeric Sand
    b. Jointing Aggregate: One-quart bags for each stone.
2. Paver edge restraint sample: Provide 2- 12" Length of full size sample for each type consisting of typical segment connections and associated accessories:
    a. Paver edge restraint
        1) Landscape maintenance edging
        2) Path metal edging
3. Setting bed: One-pint bags for each type.

4. Filter Fabric and Geogrid: 12in x 12in square.
5. Paver Tray Access Cover Material sample

I. Shop Drawings:

1. Verify dimensions by field measurements before fabrication and indicate measurements on shop drawings.
2. Coordinate fabrication schedule with construction progress to avoid delaying the work.
3. Setting diagrams, templates, instructions, and directions as required for installation.
4. Show in-place location, manufacturing details, plans, elevations, anchorages, reinforcement, connection details and methods, dimensions, finishes, relationships to adjacent materials and framing, erection, and placement.
5. Drawings shall include layout plans with jointing, sections with connection details and elevations. Paving pattern layout and paver cutting chart shall be included. Drawings shall clearly identify the paving interface and relationship with adjoining utilities, walls and curbs elements. Coordinate with construction phasing to indicate paver locations, sizes, and cut joint locations to ensure smooth transition at the Limit of Work Line of this project.
6. Paver Tray Access Covers: manufacturer shall prepare custom CAD shop drawings based on field-verified dimensions for Engineer and Landscape Architect's review prior to fabrication.

J. Sustainable Design Submittals:

1. The Contractor shall report information pertaining to the sustainable procurement, regional sourcing, and/or recycled content of new materials to be procured during the Work, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall coordinate with their vendor on sustainable product requirements as stipulated by the Contractor's approved New Materials Sustainable Implementation Plan, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall submit vendor shop drawings for review by the Engineer that clearly illustrate the vendor is meeting the requirements as approved in the Contractor's New Materials Sustainable Implementation Plan.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in undamaged condition. Store and handle materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, corrosion, breakage, chipping, or other causes. Any such materials that are damaged on site may be rejected by the Owner or Landscape

Architect and shall be replaced in kind by the Contractor at no additional cost to the Owner.

B. Do not use pinch or wrecking bars. Lift with wide-belt-type slings where possible. Do not use wire rope or ropes containing tar or other substances which might cause staining.

C. Store pavers on wood skids or pallets, covered with non-staining, waterproof membrane. Place and stack materials to distribute weight evenly and to prevent breakage or cracking. Allow air circulation around materials. Store cementitious materials off the ground, under cover and in a dry location.

1.09 SPARE PARTS, SPECIAL TOOLS, AND SUPPLIES

A. Not Used

1.10 WARRANTY

A. Not Used

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Not used

2.02 MATERIALS / EQUIPMENT

A. Granite Cobble Unit Paving

1. General: Granite shall comply with ASTM C615 / C615M.
    a. Absorption by weight shall not exceed 0.4%.
    b. Compressive strength of not less than 19,000 psi.
    c. Minimum density of 160 pcf.
2. Dimension: Unless otherwise indicated, granite cobble unit paving shall be rectangular paving stones:
    a. Thickness: 4 inches, with a tolerance of 1/4-inch
    b. Face Size: 4 inches by 8 inches

    Cut to dimensions as shown on the Drawings. Field verifies all angles, penetrations and other site conditions prior to cutting. All radial cuts shall be made to true radii.
3. Stone type: Jet Mist paving setts with thermal top finish and tumbled edge, by Blackhill Granites, 101 E. Culpeper Street, Suite 101, Culpeper, VA 22701. Or approved equal.

B. Concrete Unit Paver

1. General: Provide pavers meeting the minimum material and physical properties set forth in ASTM C936, Standard Specification for Interlocking Concrete Paving Units. Efflorescence is not a cause for rejection.
    a. Average compressive strength: 8,000 psi with no individual units less than 7,500 ps in accordance with ASTM C140.
    b. Average water absorption: Shall be 4.5% max when tested according to ASTM C140.
    c. Flexural strength shall meet or exceed ASTM C140/C1782.
    d. Conforming to ASTM C1262 when tested for freeze-thaw requirements with less than 1% loss of dry weight.
    e. Maximum allowable breakage of product: 5%.
2. Dimension: Unless otherwise indicated, concrete unit paver shall be rectangular paving units:
    a. Face Size: 4 inches by 8 inches
    b. Thickness: 3 inches, with a tolerance of 1/4 inch
    c. Cut to dimensions as shown on the Drawings. Field verifies all angles, penetrations, and other site conditions prior to cutting. All radial cuts shall be made to true radii.
    d. Quantity: As shown in Contract Drawings
3. Product: Frontier Architectural Paver, H-Series, as manufactured by Wausau Tile, P.O. Box 1520, Wausau, WI 54402-1520, or approved equal.
    a. Paver A: Color shall be HFT-80.
    b. Paver B: Color shall be HFT-35
    c. Paver C: Color shall be HFT-10
4. Dimension: Unless otherwise indicated, concrete unit paver shall be rectangular paving units:
    a. Face Size: 4 inches by 8 inches
    b. Thickness: 3 inches, with a tolerance of 1/4 inch
    c. Cut to dimensions as shown on the Drawings. Field verify all angles, penetrations and other site conditions prior to cutting. All radial cuts shall be made to true radii.
    d. Quantity: As shown in Contract Drawings

C. Paver Edge Restraint

1. General: Provide paver edge restraint in extruded aluminum, 6063 alloy, T6 hardness, in corrugated L-shaped profile. The horizontal base shall have holes spaced 4-inch apart along its length to receive hardware anchor.

2. Dimension: 1/8” thick x 1-5/8” high. Length as shown on Contract Drawings.

3. Product: StructurEdge Paver Edge Restraint in Black DuraFlex finish, as manufactured by Permaloc Corporation, Holland MI 49424, telephone (800) 356-9660 or (616) 399-9600; or Block L-Edge in Black finish, as manufactured by Sure-loc Edging, 310 E. 64th Street, Holland, MI 49423, telephone (800) 787-3562; or approved equal. Paint finish shall comply with AAMA 2603 for electrostatically baked on paint.

4. Accessories: Sections shall be spliced together with sliding connectors. Provide washers, spiral steel spikes, concrete nails, drive pin fasteners, tapcon or other hardware for anchorage to subbase.

D. Landscape Maintenance Edging

1. General: Shall be extruded aluminum, 6063 alloy, T6 hardness, in a semi-rigid L-shape profile with loops along the face of the edging to receive tapered anchoring stakes.

2. Dimension: 3/16” thick x 6” deep. Length as shown on Contract Drawings.

3. Product: PermaStrip Maintenance Edging in Black DuraFlex finish, as manufactured by Permaloc Corporation, Holland MI 49424, telephone (800) 356-9660 or (616) 399-9600; or Aggregate L-Edge in black finish, as manufactured by Sure-loc Edging, 310 E. 64th Street, Holland, MI 49423, telephone (800) 787-3562; or approved equal. Paint finish shall comply with AAMA 2603 for electrostatically baked on paint.

4. Accessories: Sections shall be spliced together with sliding connectors. Provide tapered anchoring stakes to secure edging in place.

E. Path Metal Edging

1. General: Shall be heavy-duty steel edging with stake pockets for edging to receive tapered anchoring stakes.

2. Dimension: 1/4” thick x 5” deep. Length as shown on Contract Drawings.

3. Product: Border King steel edging, factory primed black finish, as manufactured by Border Concepts Inc., Charlotte, NC 28247, telephone (704) 541-5509; or Steel Landscape Edging in black finish, as manufactured by Sure-loc Edging, 310 E. 64th Street, Holland, MI 49423, telephone (800) 787-3562; or approved equal.

4. Accessories: Sections shall be connected using the flush overlap joint assembly as provided by the manufacturer. 15ft deep tapered steel anchoring stake shall match steel edging in material and color.

F. Setting Bed Materials:

1. Open-graded Aggregate Base: Shall be No. 57 crushed aggregates or washed gravel complying with ASTM D448. Aggregate shall be sound, free-draining and free of fines, surface coatings and deleterious materials.

2. Open-graded Aggregate Subbase: Shall be No. 2 crushed aggregates or washed gravel complying with ASTM D448. Aggregate shall be sound, free-draining and free of fines, surface coatings and deleterious materials.

3. Sand Setting Bed: Shall be #10 stone dust screening. Coarse concrete sand conforming to ASTM C33 is also acceptable.

4. Mortar Setting Bed: Shall be an engineered dry preblended mortar mix containing cementitious materials and dried aggregates that are mixed with a low water addition rate for a zero-slump dry pack base material. Preblended setting bed mortar shall have the following composition by weight: Sand and aggregates 40-70%, Portland Cement 10-30%. Odorless. Granular solid form in gray to gray-brown color. Density shall be 2.6-3.15 at 77 °F. Preblended setting bed mortar shall comply with ANSI A108.01 installation requirements.

5. Concrete Base: Refer to Section 03 30 00 Cast-in-Place Concrete.

G. Jointing Materials:

1. Sand Joint Filler: Provide fine, sharp, washed, natural sand or crushed stone with 100% passing No. 16 (1.18-mm) sieve and no more than 10% passing No. 200 (0.075-mm) sieve. Sand shall be from a single source. Source of supply shall not be changed during the course of work without approval of the Engineer. Color of Sand Joint Filler shall match adjacent paving material and shall be approved by the Landscape Architect.

2. Polymeric Sand Joint Filler: Shall be polymeric jointing sand for commercial application, “Gator Maxx Sand” as manufactured by Alliance Designer Products Inc., 1800 Berlier St., Suite 200, Lavel, Quebec, Canada H7L 4S4. Color shall be slate grey; or “HP Nextgel” as manufactured by TechniSeal, Inc., Boucherville, Canada J4B 7K2,. Color shall be grey; or approved equal.

3. Grout Joint: Shall be Laticrete Permacolor Select as manufactured by Laticrete International Inc. One Laticrete Park North, Bethany, CT. 06524 – 3423. Telephone (800) 243-4788; or Polymer Modified Setting Bed Mortar for Joint Grouting, as manufactured by Spec Mix, 4444 W 78th St, Minneapolis, MN 55435, telephone 651-994-7120; or approved equal. Colors to be selected by Landscape Architect from full range of available colors. Color to match adjacent paving materials.

4. Joint Sealant for horizontal use: Shall be a multicomponent, nonsag, urethane, elastomeric joint sealant complying with ASTM C920, Type M, Grade P, Class 25, for Use T.

   a. Color shall match the color of the adjacent materials as approved by the Architect. Sealants shall be self-leveling pour grade type for horizontal use. Application of sealant for site improvements shall be in accordance with approved manufacturer’s recommendations.

H. Accessories:

1. Filter Fabric

a. Nonwoven geotextile fabric, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1) Survivability: Class 2; AASHTO M288.

a) Apparent Opening Size: No. 40 sieve, maximum; ASTM D 4751

b) Permittivity: 0.5 per second, minimum; ASTM D 4491.

c) UV Stability: 60 percent after 500 hours of exposure; ASTM D4355.

2. Geo-grid

a. Triaxial geogrids shall be TriAX TX 140 manufactured by Tensar International Corporation, 5883 Glenridge Drive, Suite 200 Atlanta, GA 30328-5363, telephone (800) 836-7271, or approved equal.

3. Paver Sealer

a. Shall be water-based sealer composed of water- and oil repellent agents for concrete and natural stone unit pavers in vehicular application. Sealer shall preserve the natural color and finish of unit pavers. Sealer shall be in Natural Look Paver Sealer, as manufactured by Techniseal Inc., Boucherville, Canada J4B 7K2; Telephone (800) 363-7560.; or Gator Seal Natural Look Sealer, as manufactured by Alliance Designer Products Inc., 1800 Berlier St., Suite 200, Lavel, Quebec, Canada H7L 4S4; or approved equal.

4. Paver Tray Access Cover

a. Shall be custom multi-tray recessed paver access cover, Model WC340-440-12.7D-7.5F-0.375-P-SS LTB by WunderCover Group of LumeWay, 2401 Pilot Knob Road, Suite 130, Mendota Heights, MN 55120; (508) 829-2112; sales@wundercovergroup.com; www.lumeway.com or approved equal.

b. Description: Custom-fabricated recessed access cover consisting of a welded perimeter frame, removable infill trays to receive unit pavers matching adjacent paving, and a Load Transfer Beam (LTB) cross-beam assembly.

1) Nominal Cover Size: 134 by 173 inches.

2) Clear Access Opening: 129 by 168 inches.

3) Number of Trays: Four (4) per cover.

4) Mounting Depth: 5 inches (127 mm) below finished grade, with top of frame and tray infill flush with adjacent paving.

5) Locations: As indicated on Drawings.

c. Materials and Fabrication:

1) Frame, Trays, and LTB: Stainless steel, Type 316, minimum 50 ksi yield strength, raw mill finish.

2) Frame: Welded construction with external mounting flange, predrilled for anchors.

3) Trays: Welded construction with integral concrete anchors, weep holes in tray bottom, and threaded lifting points for removable eyebolts. Maximum clearance between tray and frame shall be 0.030 inch all around.

4) Load Transfer Beam: Major and minor LTB weldments designed to bear on the structure or sub-cover below. LTB shall not be designed to span unsupported.

5) Load Rating: [Pedestrian] [AASHTO H-20], as certified by manufacturer for the specified infill.

6) Lifting Weight: Each filled tray shall not exceed 2,250 lb, the rated capacity of the specified lifting hardware.

d. Accessories:

1) Weather Seal: 3-inch wide EPDM foam strip, adhesive backed, factory supplied in length required.

2) Lifting Hardware: 3/8-16 stainless steel eyebolts, quantity four (4), and one (1) manufacturer's chain lifting kit with T-handle (Mark2), [per cover] [per project].

3) Frame Anchors: Stainless steel spikes or bolts as recommended by manufacturer.

4) LTB Shims: UHMW polyethylene or polymer lumber, suitable for adhesive bonding to underside of LTB.

5) Filter Fabric: Nonwoven geotextile as specified in this Section [or Section 31 __ __].

6) Reinforcing: Welded wire mesh for concrete-filled trays, as recommended by manufacturer.

7) Tray Infill Pavers, Setting Bed, and Joint Material: Match adjacent unit paving in type, size, color, and pattern as specified in this Section. For vehicular-rated covers, provide concrete base and polymeric sand joints.

5.

2.03 FABRICATION / ASSEMBLING / FINISHES

A. Not used

2.04 SOURCE QUALITY CONTROL / SHOP TESTS

A. Not Used

PART 3 EXECUTION

3.01 EXAMINATION / PREPARATION

A. Contractor shall examine all surfaces to receive stonework and correct all conditions which are not in compliance with the requirements specified herein, or which are unsatisfactory in any way. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work. The Installer shall examine previous work, related work, and conditions under which this work is to be performed and notify the Contractor of all deficiencies and conditions detrimental to the proper completion of this work. It shall be the responsibility of the Contractor to ensure that all footings, and all subgrades, bases and surfaces to receive stonework, are clean, level and adequately prepared.

B. Clean all surfaces of stones which have become dirty or stained prior to setting.

1. Remove all soil, stains and foreign materials.

2. Clean stones by thoroughly scrubbing stones with fiber brushes followed by a thorough drenching with clear water.

3. Use only mild cleaning compounds that contain no caustic materials or abrasives.

C. Acceptability of concrete subbase

1. Examine the concrete base slab with Installer to determine its adequacy to receive Unit Pavers as specified herein. Evidence of inadequate base shall be brought to the immediate attention of the Landscape Architect.

2. Start of work in this Section shall constitute acceptance of the concrete base slab.

D. Preparation of subgrade

1. Areas to be paved shall be brought to subgrade elevation as per Contract Drawings. Final fine grading, filling, and compaction of areas to receive paving, as required to form a firm, uniform, accurate, and unyielding subgrade at required elevations and to required lines.

2. Existing subgrade material which will not be readily compact as required shall be removed and replaced with satisfactory materials. Additional materials needed to bring subgrade to required line and grade and to replace unsuitable material removed shall be material conforming to this Section.

3. Subgrade areas to be paved shall be recompacted as required to bring top 4-inch of material immediately below subbase to a compaction of at least 90% of maximum density, as determined by ASTM D1557. Subgrade compaction shall extend for a distance of at least 1ft. beyond proposed edge of unit pavers.

4. Areas being graded or compacted shall be kept shaped and drained during construction. Ruts greater than or equal to 1in. deep in subgrade shall be graded out, reshaped as required, and recompacted before placing subbase materials and Stone Unit Pavers.

5. Materials shall not be stored or stockpiled on subgrade.

6. Disposal of debris and other material excavated and/or stripped under this section, and material unsuitable for or in excess of requirements for completing work of this section shall be disposed of off-site.

E. Preparation of Concrete Subbase

1. Thoroughly vacuum clean concrete substrates to remove dirt, dust, debris, loose particles, and foreign matter.

2. Remove substances from concrete substrates that could impair mortar bond, including curing and sealing compounds, form oil and laitance.

3.02 INSTALLATION

A. General

1. All rules and regulations governing respective utilities shall be observed in executing all work under this Section. All work shall be executed in such a manner as to prevent any damage to existing trees, curbs, pavement, walls, rails, utility lines, structures, and adjoining property.

2. Do not use unit pavers and stone with chips, cracks, voids, discolorations, and other defects that might be visible or cause staining in finished work.

3. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures. Pattern shall conform to the Contract Drawings.

4. Selected items as specified herein shall be installed only in the presence of the Engineer. Contractor shall coordinate installation schedule of such work with Engineer.

5. Cut unit pavers and stone with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible.

6. Setting: All setting shall be done by competent unit paver and stone setters, in accordance with approved Shop Drawings. Before setting, all unit pavers and stone shall be clean and free of ice and frost.

7. No unit pavers shall be laid in inclement weather or when the temperature is below 40 deg F., and dropping, nor shall any work be done on rising temperatures until the temperature reaches 40 deg F. The use of frozen materials is strictly prohibited.

8. Place setting beds as described for each paver type. Hand tamp setting bed around vertical elements.

9. Filter fabric and Geogrid: Shall be installed in strict accordance with the manufacturer's instructions. Where fabric edges meet, fabric shall be overlapped a minimum of 12-inches.

B. Concrete Subbase and Base

1. Subbase, base slabs and curb footings shall be provided in accordance with the requirements of Section 03 30 00 – Cast-in-Place Concrete.

2. Slab shall have a broom finish and shall be acceptable to paving system Installer.

3. Before installing setting bed, verify slab placement to correct line and grade and with correct finish.

4. Correct any unsatisfactory conditions in the base slab prior to the installation of paving materials. Do not begin paving and surfacing work until unsatisfactory conditions have been corrected and substrate is ready to receive paving.

   a. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance.

   b. Before starting the installation in any area, the concrete slab shall be cleaned to remove solid and loose mortar.

   c. Dry or dusty concrete surfaces shall be wet down, or washed and excess water removed just prior to the application of paver systems.

5. Tolerances

   a. Variation of slope and grade: Check slope and grade of installed paving units with a 12-foot straight-edge. Surface shall be true to grades and slopes indicated within 1/8 inch in 10 feet.

   b. Offset at joints: Not to exceed 1/16 inch

C. Open-graded Aggregate Subbase and Base

1. Moisten, spread, and compact the Open-graded Subbase aggregates in 4-6inch lifts without wrinkling, folding, or otherwise damaging the underlying Filter Fabric.

2. For each lift, make at least two passes in the vibratory mode and then at least two in the static mode with a minimum 10t vibratory roller until there is no visible movement of the Open-Graded Subbase Aggregates. Do not crush aggregate with the roller. The surface tolerance of the compacted

Open-Graded Aggregate Subbase and Base shall be +/- 2-inches over a 10ft straightedge.

3. Moisten, spread, and compact the Open-graded Base aggregate in 3-in lifts over the compacted subbase aggregate. Compact each lift with a minimum 10t vibratory roller until there is no visible movement of the Open-graded Base Aggregate. Do not crush aggregate with the roller.

4. Geogrid shall be installed per manufacturer's instructions prior to the second lift of Open-Graded Base Aggregate.

5. The surface tolerance of the compacted Open-Graded Base Aggregate shall not deviate more than +/- 1-inch over a 10-foot straightedge.

D. Mortar Setting Beds

1. The area of bedding course placed in any workday shall be scheduled so that no bedding course remains at the end of the day without a paver course. After final shaping, the bedding course shall not be disturbed prior to laying paver units.

2. Bond Coat shall be applied to the concrete base slab using flat trowel. The thickness of the bond coat shall be approximately 1/16-inch.

3. Spread Mortar Setting Bed evenly over the troweled bond coat. The Mortar Setting bed shall be 1-inch thick minimum. Bond coat shall then be applied to mortar bed using flat trowel to thickness of 1/16-inch.

4. Place and shape mortar setting bed to full depth as shown on the Drawings. Screed setting mortar level. Particular care shall be exercised to equalize bed and eliminate the need for redressing of exposed surfaces.

E. Sand Setting Bed

1. Sand setting bed shall be spread, screeded, and compacted to the thickness as shown on Contract Drawings. Place sand bed material over filter fabric.

2. Compact sand bed prior to paver installation. Calculate degree of compaction and adjust bed with straight edge to bring the pavers, when laid, to proper grade.

3. Fill low areas in setting bed with additional sand to produce smooth, firm and even setting bed.

4. Install setting bed only over area which will be covered by pavers during the same day.

5. Do not subject screeded bedding material to any pedestrian or vehicular traffic prior to installation of Unit Pavers.

F. Setting of Granite Cobble Pavers

1. Setting shall be done by competent paver setters under adequate supervision and in accordance with the approved Shop Drawings.

2. Paving units with chips, cracks, stains, or other defects which might be visible in the finished work, shall not be used.

3. When ready for setting, all paving units shall be clean and free from stain, dirt, or dust. If necessary, scrub face with mild soap and clean water applied with stiff fiber brushes. Rinse well with clean water. Stone shall be dry before setting.

4. Pattern: Lay in patterns indicated on Drawings. Joints shall align or be on centerlines as indicated on Drawings. Field check all dimensions. Joint shall be uniform in thickness unless indicated otherwise on the Drawings. Direct bearing contact between Stone Unit Pavers shall be prohibited.

5. Bond coat shall be applied to concrete base slab using flat trowel. The thickness of the bond coat shall be approximately 1/16 inch.

6. Mortar Setting Bed shall be spread evenly over the troweled bond coat. The Mortar Setting Bed shall be 1-inch thick minimum. Bond coat shall then be applied to mortar bed using flat trowel to thickness of 1/16 in.

7. Before setting, the back of each paver shall be dampened and shall receive a slurry of mortar to ensure maximum contact with the mortar bed. Each piece shall be carefully bedded in a full bed of mortar and tapped home to a full and solid bearing. Particular care shall be exercised to equalize bed and joint openings and eliminate the need for redressing of exposed surfaces.

8. Where possible, layout work so that no pavers less than half size occur. Make paver cuts straight and true, discarding of improperly cut pavers. Cutting shall be performed with a high-speed masonry saw producing squared, clean, and sharp edges.

9. Maintain plumb and true finish surfaces, and maintain joints that are straight, true, level, and plumb. All joints shall be straight and continuous in both directions and maintain a consistent joint width.

10. The surface edge of one paver shall be level with the next adjacent pavers so that no voids, rocking motions, or tripping hazards are encountered. In addition, comply with specified tolerances.

11. Jointing Material

    a. Grout Joint

        1) Unit pavers shall be kept perfectly clean throughout installation, and joints between shall be raked out to a depth of ½" for joint mortar.

            a) After all paving and other surfacing materials have been set and setting bed is thoroughly cured in accordance with manufacturer’s instructions, brush joints clean.

b) Thoroughly wet raked out portion of joint, and then fill solid with colored mortar to match approved sample.

c) After initial set of grout joints shall be finished by tooling joint with a non-staining jointer to produce a dense, slightly concave surface, flush with paving unit surface.

d) Maintain exposed faces of paving units free of setting bed and/or joint mortar. Any mortar or grout which gets on exposed faces shall be immediately removed with sponge and clean water.

b. Polymeric Sand Joint

1) Fill the joints with Polymeric Sand Joint Filler before the end of each day, and activate the polymeric sand before the surface becomes wet from rainfall or irrigation. Verify that all joints are clean and dry before applying sand. Any moisture within the joint shall be dried by leaf blower or other means prior to spreading the polymeric joint sand.

a) Dry polymeric joint sand shall be brushed over the surface using a stiff bristle brush, and the pavement shall be re-compacted until all joints are completely filled with sand. Do not spread sand over areas where water has risen into the joints during compaction. Do not place polymeric joint sand until the joints have dried.

b) Great care shall be taken to ensure that the joints are filled and the sand is densely packed. Joint sand shall be constantly brushed over the surface and the pavement and the surface recompacted as necessary. Check that the sand is well settled and compacted by probing random joints with a putty knife or similar tool.

c) Remove all surplus sand and dust from the paver surface using soft bristle brushes and leaf blowers or vacuums. Joint sand levels shall be achieved that are flush with or within 1/8” of the top of the adjacent Stone Unit Pavers.

d) Follow the polymeric joint sand manufacturer’s printed instructions for activating the joint sand. Take care to avoid flushing the polymer component of the joint sand out of the top or bottom of the joint. Work in manageable areas and avoid premature

wetting of un-activated joint sand in adjacent work areas.

e) At a height of about 4 feet, use a water gun connected to a hose to direct a fine mist of water onto the surface of the pavers so as to dampen the joint sand. Continue until the water just starts to sit on top of the joint sand. Do not create standing water above the top of the joints. The water spray should not dislodge sand particles from the joints.

f) Wait 3 to 4 minutes for the water to soak into the joints, or as indicated in the manufacturer's printed directions, and repeat the process a few more times so that the full depth of the joint sand becomes moistened. Do not continue in any location where water does not drain from the joints.

g) Mist and rinse simultaneously so that any reside on the paver surface is washed back into the joints.

h) Use a leaf blower at a shallow angle to remove any excess water lying in the paver surface texture. Allow the surface to dry and the joint sand to cure for at least 24 hours before trafficking.

12. Provide complete protection against breakage, staining, and weather damage during and after installation of the paver work by use of suitable, strong, impervious film or fabric securely held in place. Pavers shall be positively protected with non-staining waterproof coverings, properly weighted, at night, during showers, and whenever paver setters are not working.

13. Upon completion of the Granite Cobble Paving, surfaces shall be left in a clean, unsoiled condition, acceptable to the Landscape Architect.

14. All work not conforming to the specification requirements shall be removed and replaced with acceptable work at no additional cost to the Owner.

G. Setting of Concrete Unit Pavers

1. Setting shall be done by competent paver setters under adequate supervision and in accordance with the approved Shop Drawings.

2. Paving units with chips, cracks, stains or other defects which might be visible in the finished work shall not be used.

3. Before setting, pavers shall be clean and free of all dirt and foreign matter on all sides. Pavers shall be dry before setting.

4. Concrete Unit Pavers shall be placed by hand in the indicated pattern. Placement of the pavers shall start from a corner or straight edge and proceed forward over the undisturbed setting bed.

5. Mortar Setting Bed shall be spread evenly over the troweled bond coat. The Mortar Setting Bed shall be 1-inch thick minimum. Bond coat shall be applied to mortar bed using flat trowel to thickness of 1/16 in.

6. Before setting, the back of each paver shall be dampened and shall receive a slurry of mortar to ensure maximum contact with the mortar bed. Each piece shall be carefully bedded in a full bed of mortar and tapped home to a full and solid bearing. Particular care shall be exercised to equalize bed and joint openings and eliminate the need for redressing of exposed surfaces.

    a. Unit pavers shall be kept perfectly clean throughout installation, and joints between shall be raked out to a depth of ½" for joint mortar.

        1) After all paving and other surfacing materials have been set and setting bed is thoroughly cured in accordance with manufacturer's instructions, brush joints clean.

        2) Thoroughly wet raked out portion of joint, and then fill solid with colored mortar to match approved sample.

        3) After initial set of grout joints shall be finished by tooling joint with a non-staining jointer to produce a dense, slightly concave surface, flush with paving unit surface.

        4) Maintain exposed faces of paving units free of setting bed and/or joint mortar. Any mortar or grout which gets on exposed faces shall be immediately removed with sponge and clean water.

7. Where possible, layout work so that no pavers less than half size occur. Make paver cuts straight and true, discarding of improperly cut pavers. Cutting shall be performed with a high-speed masonry saw producing squared, clean, and sharp edges.

8. Maintain plumb and true finish surfaces, and maintain joints that are straight, true, level, and plumb. All joints shall be straight and continuous in both directions and maintain a consistent joint width.

9. Joints shall be a uniform 1/4" in thickness unless indicated otherwise on the Drawings. Direct bearing contact between Concrete Unit Pavers shall be prohibited.

10. The surface edge of one paver shall be level with the next adjacent pavers so that no voids, rocking motions, or tripping hazards are encountered. In addition, comply with specified tolerances.

11. Concrete Unit Pavers shall be set true to the required lines and grades as indicated in the Drawings.

12. Provide complete protection against breakage, staining, and weather damage during and after installation of the paver work by use of suitable, strong, impervious film or fabric securely held in place. Pavers shall be positively protected with non-staining waterproof coverings, properly weighted, at night, during showers, and whenever paver setters are not working.

13. Upon completion of the Concrete Unit Paving, surfaces shall be left in a clean, unsoiled condition, acceptable to the Landscape Architect.

14. All work not conforming to the specification requirements shall be removed and replaced with acceptable work at no additional cost to the Owner.

H. Edging

1. Install edging at locations as shown on the Drawings. Where required, edging shall be cut square and accurately to required length.

   a. Verify the completion and correct alignment of all other edgings specified elsewhere, prior to installation of pavers.

   b. Install edging as per manufacturer's instructions and leave 3/8" between sections for expansion where needed.

I. Paver Sealer for Concrete Unit Pavers

1. Paver sealer shall be applied to bare material or to material previously sealed with paver sealer only. Surface shall be free of stains, debris or any other top coating. If recoating is needed, wait until surface is no longer water-repellent before recoating, minimum 2 years.

2. Wait 30 days after the installation of polymeric sand before sealing the pavers.

3. Protect adjacent surfaces that are not to be treated. Prepare the entire surface with efflorescence cleaner as per manufacturer's instruction. Failure to provide adequate surface cleaning can result in uneven stain and water protection.

4. Apply two coats of paver sealer with sprayer method. Saturate the surface with the first coat of protector by using a pump sprayer or low-pressure airless sprayer. Remove the excess with a dry roller. Avoid sprayer application on windy days.

5. Immediately upon completion of a section, apply a second coat following the same method. Repeat for subsequent sections, maintain a wet edge in order to avoid overlapping marks.

6. Do not allow traffic on freshly sealed paver areas for a minimum of 48 hours, up to 72 hours maximum.

J. Paver Tray Access Covers

1. General: Install paver access covers in accordance with manufacturer's written instructions and approved shop drawings
2. Examination: Verify dimensions and elevations of structure opening, sub-cover, and bearing surfaces before setting frames. Verify that the sub-cover provides continuous bearing for the Load Transfer Beam. Report discrepancies to Engineer and Landscape Architect before proceeding.
3. Preparation: Where frame bears over the structure below, cut internal wall of structure approximately 25 mm (1 inch) below base of frame
4. Frame Installation
    a. Set frame to grade so top of frame is flush with finished paving elevation.
    b. Shim frame as needed to achieve level and required elevation.
    c. Underfill frame with mortar to provide continuous bearing beneath load-bearing regions of frame.
    d. Haunch frame flange with minimum 100 mm (4 inch) concrete.
    e. Anchor frame through mounting flange to sub-surface with stainless steel spikes or bolts.
    f. Do not anchor frame on both sides of an expansion joint. Where an expansion joint crosses the frame, anchor to one side only.
    g. Construct mounting curb where indicated or required for bearing.
5. Load Transfer Beam: Set LTB to bear fully on supporting sub-cover. Shim gaps between underside of LTB and sub-cover with UHMW polyethylene or polymer lumber shims bonded to underside of LTB. No unsupported gap is permitted.
6. Adjacent Paving: Install surrounding unit pavers tight to outside face of frame wall. Protect frame from damage during paving operations
7. Tray Infill:
    a. Install concrete base in tray with polymeric sand joints between pavers to prevent spalling.
    b. Concrete Fill: Pour tray while seated in frame, with reinforcing wire mesh in place.
    c. Set pavers in tray to match pattern, joint alignment, and elevation of adjacent paving.
    d. Cut perimeter pavers at 9-degree slope to match tray wall taper, leaving a small uniform gap.
    e. Keep lifting points clear. Protect lifting points from concrete, bedding, and joint material.

8. Weather Seal: After installation is complete and concrete has cured, install EPDM foam strip to inside face of frame, 1 inch below top of frame.
9. Tolerances: Top of frame and tray infill shall be flush with adjacent paving within 1/8 inch
10. Field Quality Control: In presence of Owner's representative, remove and reseat each tray using eyebolts and chain kit to verify proper fit and operation.
11. Turnover: Deliver eyebolts and chain lifting kit to Owner and obtain receipt.
12. Protection: Protect installed covers from traffic until bedding and concrete have cured.

3.03 FIELD TESTING / QUALITY CONTROL

A. No stonework or mortar shall be installed when temperatures are at or below 40 degrees F, or during rain, sleet, or snow.

B. Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen or thawing subgrade or base course. Remove and replace work damaged by frost or freezing.

C. Tolerance: Do not exceed 1/16inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and ¼ inch in 10 feet from level, or indicated slope, for finished surface of paving.

D. The surface elevation of pavers shall be 1/8 to 1/4 inch above adjacent drainage inlets, concrete collars or channels.

3.04 STARTUP / DEMONSTRATION

A. Not Used

3.05 ADJUSTING / PROTECTION / CLEANUP

A. Adjustments

1. Replace or repair defective, broken or damaged stone units or system components, including but not limited to the following defects:
    a. Stones and joints not matching approved samples
    b. Broken, chipped, stained, or otherwise damaged stones
    c. Defective setting beds
    d. Unfilled or defective joints
    e. Uneven settling, or other evidence of improper bedding or alignment
    f. All other defects as directed by the Engineer

B. Protection

1. Protect newly installed pavers with panels of plywood on which the installer stands.
    a. Cover top of paving and other stonework with non-staining waterproof sheeting at end of each day's work. Covers shall be securely held in place.
    b. Cover partially completed paving when work is not in progress.
2. Prevent staining of stone from mortar, or other sources.
    a. Immediately remove such materials from stone without damage to latter.
    b. Protect bases of walls from rain-splashed mud and mortar splatter by means of coverings spread on ground and over wall surface.
3. The Contractor shall maintain all stonework during the life of this Contract until Final Acceptance of the work, and shall repair and replace all work that is disturbed, damaged, or destroyed without additional payment

C. Clean-Up
1. After all mortar is thoroughly set, clean all stonework to remove all mortar and stains, using mild non-corrosive materials and brushes. All surrounding paving materials or other structures shall be cleaned of all mortar and stains.
2. After completion of the work, the Contractor shall remove all debris and excess materials, restore all damaged areas and leave the area in a clean state acceptable to the Engineer.

D. Final Corrections: The Engineer and Landscape Architect reserves the right to inspect the work to determine if adjustments are necessary in grade, alignment, or layout. The Contractor shall make such adjustments without further compensation.

END OF SECTION

SECTION 32 32 20 – LANDSCAPE BOULDERS
CONTRACT CSO-GC-SFS-OH CP3

PART 1 GENERAL

1.01 SUMMARY

A. The Contractor shall provide all labor, materials, and equipment required to furnish and install seating blocks, boulder scrambles, gabion infill stones, street end boulders, decorative aggregates, choke stone and core stone for get down and all associated accessories, as shown, specified and required.

B. The following index of this Section is presented for convenience:

Article	Title	Section Page
PART 1	GENERAL	1
1.01	Summary	1
1.02	Payment	1
1.03	Related Sections	1
1.04	References	2
1.05	Description	2
1.06	Quality Assurance	2
1.07	Submittals	5
1.08	Delivery, Storage, and Handling	7
1.09	Spare Parts, Special Tools, and Supplies	7
1.10	Special Warranty Provisions / Guarantee Periods	7
PART 2	PRODUCTS	7
2.01	Manufacturers	7
2.02	Materials / Equipment	7
2.03	Fabrication / Assembling / Finishes	11
2.04	Source Quality Control / Shop Tests	11
PART 3	EXECUTION	11
3.01	Examination / Preparation	11
3.02	Installation	12
3.03	Field Testing / Quality Control	14
3.04	Startup / Demonstration	14
3.05	Adjusting / Protection / Cleanup	14

1.02 PAYMENT

A. No separate payment shall be made for performing any Work required under this Section. All costs for Work required by this Section shall be included in the applicable lump sum, unit price(s), or allowance(s) as set forth in Section 01 27 00 – Measurement and Payment.

1.03 RELATED SECTIONS

A. Section 01 35 63 - Sustainability Certification Project Requirements

B. Section 32 90 05 – Soil Mixes

1.04 REFERENCES

A. ANSI: American National Standards Institute

B. American Society for Testing and Materials

C. Building Stone Institute

D. Federal Specifications

1.05 DESCRIPTION

A. The Contractor shall provide labor, materials, and equipment necessary to complete the Work of this Section, including but not limited to providing and installing the following:

1. Seating Blocks
2. Boulder Scramble
3. Gabion Infill Stones
4. Decorative Aggregates
5. Choke Stone and Core Stone for Get Down
6. all associated accessories

1.06 QUALITY ASSURANCE

A. All references to "Landscape Architect" in the Contract Documents shall be synonymous with "Engineer" for Contract purposes.

B. Items noted herein shall be installed only in the presence of the Engineer and Landscape Architect. The Contractor shall schedule and coordinate installation of such items with Engineer and Landscape Architect suppliers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

C. Supplier Qualifications: Use a firm or firms that have successfully supplied natural stonework of each material type and condition, similar to the quality specified, and in quantity shown for a period of not less than 10 years. Stone shall be obtained from quarries or suppliers capable of furnishing quantity, sizes and character of the stone required. Contractor shall be responsible for any delay in the completion of the Work due to his failure to supply satisfactory stone in ample quantities and proper sequence.

D. Installer Qualifications: Use adequate numbers of skilled workers who are trained in the necessary crafts and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this Section, with a minimum 5 years of experience.

1. Stonework Foreman: Installation firm for stonework shall have on staff a Supervising Foreman assigned full time to this Project, from time of mock-up installation, who shall have at least 10 years total in stonework installation experience equivalent or more extensive in type and scope to

this Project. Provide resume of past experience with dates, duration and scope identification, project name and location, and work function of previous projects worked on.

2. Use numbers of skilled workmen equal to work requirement. The skilled workmen shall be thoroughly trained and experienced in the necessary crafts and shall be completely familiar with the specific requirements and methods needed for performance of the work in this Section.

E. Source Limitations: Obtain each type of Seating Blocks, Boulder Scramble, Gabion Infill Stones, Decorative Aggregates, joint material, and setting material from sources as specified herein, with resources to provide a sufficient quantity of materials and products of consistent quality in appearance and physical properties.

F. Quarry Inspection: The Landscape Architect shall inspect all stone materials at the quarry prior to ordering for compliance with the project requirements for variety, size, and quality. Landscape Architect retains the right to inspect and reject materials for damage, fissures, cleavage, or staining at any time during progress of the work even if previously inspected and approved. Remove and replace rejected materials immediately from Project Site at no additional cost to the DEP.

1. Stone selection: All stone color variations shall be identified in the quarry by the Landscape Architect. The Landscape Architect shall make his or her own travel arrangements.

2. Photographs: At the Landscape Architect's option and/or request, the Contractor shall supply the Landscape Architect with photographs of stone for the project.

G. Critical Path Processing: The Contractor shall be responsible for recognizing that these critical project materials warrant timely attention, that the procurement process to achieve approved materials SHALL BE CONSIDERED A LONG LEAD TIME ITEM. Under no circumstance shall failure to comply with all specification requirements be a reason for a substitution of unacceptable material(s).

H. Mock-ups: Upon approval of all materials, the Contractor shall construct mock-ups of each type listed in Part (1)(A)(1) at the quarry. After quarry mock-ups are approved by the Landscape Architect, the Contractor shall construct mock-ups on site. Each mock-up shall be large enough to display typical characteristics of each item and type of work. Construct mock-ups concurrently to aid in review of all materials. The Landscape Architect must approve the visual characteristics, quality of workmanship, and methods of installation, before shipping and before the final work is started. If the original mock-up is not approved, the Contractor shall provide additional mock-up, as required, at no cost to the DEP until an approved mock-up is obtained. The approved mock-up shall become the standard for the entire job. For the mock-ups on site, they may become part of the finished work, upon approval of the Landscape Architect. Sample mock-ups shall be constructed in a location approved by the Landscape Architect and Engineer.

1. Provide mock-ups for the following:

Seating Block, All Types: For placement of elements before final installation.

Boulder Scramble, All Types: For placement of elements before final installation, including stone-soil planting mix, choke stone and core stone at get down.

Gabion Infill Stone in Gabion Baskets: Coordinate with Section 323221 Gabion Wall Cladding. For placement of elements before final installation.

2. Build mockups in the location and of the size indicated or, if not indicated, as directed by Landscape Architect.
3. Notify Landscape Architect seven days in advance of dates and times when mockups will be constructed.
4. Demonstrate the proposed range of aesthetic effects and workmanship.
5. Obtain Landscape Architect's approval of mockups before starting stone installation.
6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
7. Mock-ups shall include all components and materials indicated in the drawings.

I. Layout and Grading: After staking out the work, and before beginning final construction, obtain the Landscape Architect's approval for layout and grades.

1. The Contractor shall stake out the work in sufficient detail for evaluation by the Landscape Architect.
2. The Landscape Architect shall be permitted to make reasonable adjustments to layout and grading without further compensation to the Contractor.

J. Project Conditions

1. Grade Control: Establish and maintain required lines and elevations. Review grades and lines with Landscape Architect prior to starting work and as work progresses.
2. Installation: Landscape Architect shall be notified in advance of installation date and time. Landscape Architect shall observe placement of Natural Stone Boulders and shall be permitted to make reasonable adjustments to placement without further compensation to the contractors.
3. Cold-Weather Protection: Do not use frozen materials or materials mixed with or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace work damaged by frost or freezing.
4. Weather Limitations for Mortar and Grout: Comply with the following requirements:

Cold-Weather Requirements: Protect unit paver work against freezing when atmospheric temperature is 40 deg F (4 deg C) and falling. Heat materials to provide mortar and grout

temperatures between 40 and 120 deg F (4 and 49 deg C). Provide the following protection for completed portions of work for 24 hours after installation when the mean daily air temperature is as indicated:

1) below 40 deg F (4 deg C), cover with weather-resistant membrane

2) below 25 deg F (minus 4 deg C), cover with insulating blankets

3) below 20 deg F (minus 7 deg C), provide enclosure and temporary heat to maintain temperature above 32 deg F (0 deg C)

1.07 SUBMITTALS

A. Product Data: Provide manufacturer's product data showing installation and limitations in use. Supply Certificates of Compliance for all materials required for fabrication and installation, certifying that each material item complies with, or exceeds specific requirements. Provide product data for all items in this specification.

B. Samples: Prior to ordering the below listed materials, submit design samples to the Engineer or Landscape Architect for selection and approval as follows. Do not order materials until Landscape Architect's approval has been obtained. Delivered materials shall closely match the approved samples. Submit duplicate samples of each type listed below showing full range of color variation, finish and texture that can be expected in the permanent work. If the original sample is not approved, the Contractor shall provide additional samples, as required, at no cost to the DEP until an approved sample is obtained. The approved samples shall become the standard for the entire job. Samples shall include:

1. For all quarry-sourced stones provide samples with specified finish adequately sized to represent the qualities and characteristics of the specified stone. Label each sample with job name, supplier, color and finish.

2. Seating Block, Each type: 18" x 12" x 12" samples showing the full range of color, shape, and finish expected in the final work. Label each sample with job name, supplier, color, and finish.

3. Boulder Scramble, Each type: 18" x 12" x 12" samples showing the full range of color, shape, and finish expected in the final work. Label each sample with job name, supplier, color, and finish.

4. Gabion Infill Stone, Each Type: One (1) One-Pint bag showing full range of color, shape and the full range of color, shape, and finish expected in the final work. Label each sample with job name, supplier, color, and finish.

5. Street End Boulders, Each Type: 18" x 12" x 12" samples showing the full range of color, shape, and finish expected in the final work. Label each sample with job name, supplier, color, and finish.

6. Decorative Aggregate: One (1) One-Pint bag showing full range of color, shape and finish expected in the final work. Label each sample with job name, supplier, color, and finish.
7. Geogrid: 12in x 12in square.
8. Field Selection
9. Seating Blocks: The Landscape Architect shall select all Seating Blocks at the quarry and clearly mark each for distribution and orientation on site, prior to commencement of work.
10. Boulder Scramble: The Landscape Architect shall select all Boulder Scramble stones at the quarry and clearly mark each for distribution and orientation on site, prior to commencement of work.
11. Street End Boulders: The Landscape Architect shall select all Boulder Scramble stones at the quarry and clearly mark each for distribution and orientation on site, prior to commencement of work.

C. Shop Drawings: Submit Shop Drawings for the items indicated below. Shop Drawings shall include materials, profiles, plans, elevations, sections, details, method of assembly, connections, and installation. Shop Drawings shall show true profiles, methods of anchoring, hardware, if any, and all other necessary information. Take accurate field measurements before preparation of shop drawings. Verify dimensions by field measurements before fabrication and indicate measurements on shop drawings.

1. Verify dimensions by field measurements before indicating measurements on shop drawings.
2. Show identification marks, coordinated to Shop Drawings.
3. Setting diagrams, templates, instructions, and directions as required for installation.
4. Show in-place location, fabrication details, plans, elevations, anchorages, reinforcement, connection details and methods, dimensions, finishes, relationships to adjacent materials and framing, erection, and placement.
5. Stone unit layout drawing.
6. Stone unit profile drawing indicating adjacent finished grades.
7. All associated foundations, where applicable, clearly indicating extents of the wall and locations of control and pour joints.

D. Sustainable Design Submittals:

1. The Contractor shall report information pertaining to the sustainable procurement, regional sourcing, and/or recycled content of new materials to be procured during the Work, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall coordinate with their vendor on sustainable product requirements as

stipulated by the Contractor's approved New Materials Sustainable Implementation Plan, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall submit vendor shop drawings for review by the Engineer that clearly illustrate the vendor is meeting the requirements as approved in the Contractor's New Materials Sustainable Implementation Plan.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Protect stone during storage and construction against soiling, cracking, breakage, or marring.

B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become dam.

C. Stonework damaged in any manner will be rejected and replaced with new materials at no additional cost to the DEP.

1.09 SPARE PARTS, SPECIAL TOOLS, AND SUPPLIES

A. Not Used

1.10 WARRANTY

A. Not Used

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Seating Blocks, Stepping Blocks, Boulders and Gabion infill Stone:

1. Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com.

2. Or approved equal.

B. Decorative Aggregate:

1. Schofield Stone, 831 East Main St., Bridgewater, NJ 08807

2. Champlain Stone Ltd., 27 Elm Street, Warrensburg, NY 12885

3. Kafka Granite, 550 East Hwy 153, Mosinee, WI 54455

4. Or approved equal.

2.02 MATERIALS / EQUIPMENT

A. STONE – GENERAL

1. The Contractor's bid shall account for the total quantity of stones by dimension.

2. Provisions for Examinations at the Quarry: The Landscape Architect shall "tag" all stones at the source. If so requested, the Contractor shall accompany the Landscape Architect and assist in the tagging procedure.

Contractor shall provide removable marking paint. Contractor shall coordinate and facilitate all stone tagging trips with quarries including arrangement for equipment to be present to move stockpiled stone.

3. All stone shall be carefully selected from sound stock and shall be free from defects impairing strength, durability, or function, such as cracks, holes, flaws or imperfections which have been patched or filled.

4. Unless otherwise approved or directed by the Landscape Architect, provide matched blocks from a single quarry / supplier. Site Stonework materials shall be from a single location within the quarry especially reserved for Project, unless stones from randomly selected blocks are acceptable to the Landscape Architect and DEP for aesthetic effect.

B. Compacted Aggregate Subbase

1. Shall be Size No. 57 crushed stone, ASTM D488.

C. Seating Blocks:

1. General: Provide roughly block-shaped Granite stone. Stone shall be select hard and free of cracks, seams, scars, reeds, or other defects that may impair its strength, durability, or appearance. Pattern and sizes shall conform to the Drawings. All calcite deposits on the surface of the stone shall be removed before installation. Stone shall comply with ASTM C615/C615M.

2. Stone Type: Woodbridge Granite, as supplied by Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com. Or approved equal.

3. Face: Split Finish

4. Seating Surface: Sawn with Thermal Finish

5. Sides: Sawn finish

6. Size: As shown on Contract Drawings, tolerance plus 6” all sides.

7. Offcuts shall be provided by quarry for infill between blocks.

D. Stepping Blocks:

1. General: Provide roughly block-shaped Granite stone. Stone shall be select hard and free of cracks, seams, scars, reeds, or other defects that may impair its strength, durability, or appearance. Pattern and sizes shall conform to the Drawings. All calcite deposits on the surface of the stone shall be removed before installation. Stone shall comply with ASTM C615/C615M.

2. Stone Type: Woodbridge Granite, as supplied by Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com. Or approved equal. .

3. Stepping Surface: Natural finish

4. All Sides: Split finish

5. Size: As shown on Contract Drawings, tolerance plus 6” all sides.

6. Offcuts shall be provided by quarry for infill between blocks.

E. Boulders Scramble:

1. General: Provide roughly block-shaped Granite stone. Stone shall be select hard and free of cracks, seams, scars, reeds, or other defects that may impair its strength, durability, or appearance. Pattern and sizes shall conform to the Drawings. All calcite deposits on the surface of the stone shall be removed before installation. Stone shall comply with ASTM C615/C615M.

2. Stone Type: Woodbridge Granite, as supplied by Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com. Or approved equal.

3. Finish: Natural finish all faces

4. Size: As shown on Contract Drawings, tolerance plus 6” all sides.

F. Gabion Infill Stone:

1. General: Provide hard, heavy, roughly angular-shaped Granite infill stone. Stone shall be free of cracks, seams, scars, reeds, or other defects that may impair its strength, durability, or appearance. Stone shall comply with ASTM C615/C615M.

2. Stone Type: Woodbridge Granite, as supplied by Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com. Or approved equal.

3. Finish: Mixed natural and split faces; with rustic appearances, full color range.

4. Size: 4-6 inches

G. Street End Boulders

1. General: Provide roughly block-shaped Granite stone. Stone shall be select hard and free of cracks, seams, scars, reeds, or other defects that may impair its strength, durability, or appearance. Pattern and sizes shall conform to the Drawings. All calcite deposits on the surface of the stone shall be removed before installation. Stone shall comply with ASTM C615/C615M.

2. Stone Type: Woodbridge Granite, as supplied by Saracino Industries, Inc, (845) 628-0400 mark@yonkersgranite.com. Or approved equal.

3. Face, Top and Sides: Split Finish

4. Size: As shown on Contract Drawings, tolerance plus 6” all sides

H. Decorative Aggregate:

1. General: Shall be coarse, clean, washed, angular, crushed aggregate.

2. Source: As supplied by Schofield Stone, 831 East Main St., Bridgewater, NJ 08807; Champlain Stone Ltd., 27 Elm Street, Warrensburg, NY 12885; Kafka Granite, 550 East Hwy 153, Mosinee, WI 54455; or approved equal

3. Color: To match Granite Cobble Paving, see Section 32 14 10 - Unit Pavers.

4. Size: ASTM C33 #8 Stone.

5. Stabilizer for Decorative Aggregate: Gravel-lok, as manufactured by Paramount Materials, 800-748-5647, www.paramountmaterials.com; or Organic-Lock, 2100 Bloor St.W, Suite 6191, Toronto, ON, Canada, 866-636-8476; or approved equal.

6. Edging: As shown in Contract Drawings. See Section 321410 Unit Pavers.

I. Core Stone at Get Down

1. General: shall be clean, hard, angular quarry stone, free of soil, organics and debris. Less than 20% of stones may have a maximum-to-minimum dimension ratio greater than 3. The material must contain enough stones smaller than the average size to fill voids between the larger stones. Core stone is placed first, with the top surface well chinked before the stone-soil planting mix is installed.:

Stone Weight/Size	Approx. Weight	Percent of Total Weight
Larger than 18”	-	0
12” to 18”	100-400 lb	50-60
4” to 12”	5-100 lb	30-50
Smaller than 4”	Under 5 lb	0-10

2. Core stone shall meet the following minimum standards:

   a. Specific gravity greater than 2.6 (ASTM C97)
   b. Abrasion Resistance less than 50 percent after 500 revolutions (AASHTO T96)
   c. Durability – aggregate loss due to freeze thaw shall not exceed 10% after 12 cycles (AASHTO T103)
   d. Soundness – aggregate loss shall not exceed 10 percent after five cycles using sodium sulphate (AASHTO T104)

J. Choke Stone at Get Down

General: Clean, angular crushed stone (not RCA or recycled material) meeting ASTM D448 Size No. 1. Same durability requirements as core stone: abrasion, sodium sulfate soundness and freeze-thaw.

Sieve	Percent Passing
4”	100
3-1/2”	90-100

2-1/2”	25-60
1-1/2”	0-15
3/4"	0-5

K. Geo-grid

1. Triaxial geogrids shall be TriAX TX 140 manufactured by Tensar International Corporation, 5883 Glenridge Drive, Suite 200 Atlanta, GA 30328-5363, telephone (800) 836-7271
2. Or approved equal.

2.03 FABRICATION / ASSEMBLING / FINISHES

A. Not Used

2.04 SOURCE QUALITY CONTROL / SHOP TESTS

A. Not Used

PART 3 EXECUTION

3.01 EXAMINATION / PREPARATION

A. Examine the areas and conditions where stones are to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

B. The installer shall examine previous work, related work, and conditions under which this Work is to be performed and notify the Contractor in writing of all deficiencies and conditions detrimental to the proper completion of this Work.

C. Beginning work means installer accepts substrates, subgrades, previous work, and conditions.

D. Vacuum clean concrete substrates to remove dirt, dust, debris, and loose particles.

E. Remove substances from concrete substrates, which could impair mortar bond, including curing and sealing compounds, form oil, and laitance.

F. Packing and Loading: Boulders shall be carefully packed and loaded for shipment using all reasonable and customary precautions against damage in transit. No material that may cause staining or discoloration shall be used for blocking or packing.

G. Site Storage: Upon receipt at the building site or storage yard, the boulders shall be placed at least 4” above ground, and extreme care should be taken to prevent staining during storage. If storage is to be for a prolonged period, protection shall be placed between boulders and finished surfaces. Do not put salt on or allow it to contact boulders for any reason.

3.02 INSTALLATION

A. General:

1. The Contractor shall prepare the subgrade and foundation material as indicated.
2. Place boulders in accordance with the drawings, true to line and grade, and as approved in the field by Landscape Architect.
3. Allow for review and adjustment to placement of each boulder by Landscape Architect at time of installation.
4. Size and placement of all boulders, as indicated on plans, shall be approved in the field by Landscape Architect.
5. Geogrid: Shall be installed in strict accordance with the manufacturer's instructions. Where fabric edges meet, fabric shall be overlapped a minimum of 12-inches.

B. Placement of Core Stone:

1. Stone fill shall be placed by excavator or clamshell bucket to the indicated limits and to the indicated minimum thicknesses shown on the Contract Drawings
2. Stone fill shall be placed in a manner that will produce a reasonable well-graded mass of stone with smaller stone fragments filling the space between larger ones, so as to result in the minimum practicable percentage of voids.
3. The stone shall be placed so as to form a compact uniformly graded mass and to prevent separation of constituent materials.

C. Placement of Choke Stone:

1. Place choke stone over the chinked lower lift of core stone to the limits shown on the Contract Drawings, in a layer not less than [6] inches thick. Extend choke stone tight against adjacent walls, bulkheads and structures, and a minimum of [2 feet] beyond the limits of planting areas.
2. Place choke stone by excavator bucket in a manner that prevents segregation. Work the choke stone into the surface voids of the lower lift by bucket tamping or by hand until it is seated and locked into the lower lift, with no loose, bridged or uncovered areas.
3. Finish the top of the choke stone layer to within plus or minus 2 inches of the elevation shown.
4. Do not operate tracked or wheeled equipment directly on the completed choke stone layer unless approved by the Engineer.
5. Keep the choke stone layer free of soil, sediment and debris until the upper lift of core stone is placed. Remove and replace any choke stone that becomes contaminated.

6. Construct the choke stone layer and upper lift of core stone as part of the mockup required under 1.06. The approved mockup shall establish the standard for placement.

D. Placement of Stone-Soil Planting Mix:

1. Do not place Stone-Soil Planting Mix until the upper lift of core stone has been completed and reviewed by the Engineer and Landscape Architect. Do not place Stone-Soil Planting Mix under paving, steps or other hardscape. In those areas, provide geotextile and base material as shown on the Contract Drawings.

2. Schedule placement so that the tide level is below the bottom of the upper lift of core stone during placement and wetting. Do not place Stone-Soil Planting Mix when heavy rain, storm surge or tides above [MHW] are forecast within [48] hours, or when the mix or the core stone is frozen.

3. Deliver Stone-Soil Planting Mix pre-blended, uniform and moist, as specified in Section 32 90 05. Do not blend or amend the mix on site. Reject any material that has separated during delivery or handling.

4. Fill the voids of the upper lift of core stone with Stone-Soil Planting Mix for the full depth of the lift, down to the top of the choke stone. Place the mix in lifts not exceeding 6 inches. Work each lift into the voids with hand tools, rodding and light water application before placing the next lift.

5. Apply water as a light spray only, in the amount needed to settle the mix into the voids. Do not use water volumes or pressure that wash soil from the stone, separate the mix, or carry soil or sediment off site or into the canal.

6. Continue placing and working the mix until the voids of the upper lift are filled flush with the tops of the core stones and the mix shows no further settlement when wetted. Bridged areas or unfilled pockets found by probing shall be opened and refilled.

7. Do not place the finish layer until the Landscape Architect has reviewed and approved the void filling.

8. Place the finish layer of Stone-Soil Planting Mix to the depth and grades shown on the Contract Drawings, plus or minus 1 inch. Firm the finish layer by light tamping or hand rolling only. Do not use vibratory or heavy compaction equipment on the Stone-Soil Planting Mix.

9. Do not operate tracked or wheeled equipment on placed Stone-Soil Planting Mix.

10. Provide sediment and erosion controls in accordance with Section 31 25 10 – Dust, Soil Erosion and Sediment Control to prevent soil from washing into the canal during placement and plant establishment.

11. The quantity of Stone-Soil Planting Mix per square foot shall be established in the mockup required under 1.05. Production quantities that exceed the

mockup quantity by more than 10 percent shall be reported to the Engineer and Landscape Architect before work continues.

12. During the plant establishment period, inspect planting areas monthly and after storm events. Top up any settlement greater than 1 inch with Stone-Soil Planting Mix, and repair any erosion and damaged blanket, without disturbing plantings.

E. Installation, Stabilized Decorative Aggregate:

1. Install as per manufacturer's instructions in locations as indicated on Contract Drawings.

2. See Section 32 14 10 - Unit Pavers for edging type.

F. Grades and Elevations

1. The Drawings indicate, in general, the alignment and finish grade elevations. The Landscape Architect may make such adjustments in grades and alignments as are found necessary to properly complete the work. The Contractor shall not receive further compensation for adjustments.

3.03 FIELD TESTING / QUALITY CONTROL

A. Not Used.

3.04 STARTUP / DEMONSTRATION

A. Not Used.

3.05 ADJUSTING / PROTECTION / CLEANUP

A. Protection

1. All rules and regulations governing respective utilities shall be observed in executing all Work under this Section. All Work shall be executed in such a manner as to prevent any damage to existing trees, curbs, pavement, walls, rails, utility lines, structures, and adjoining property.

2. After the Work is installed, it shall be the responsibility of the Contractor to see that the Work is properly and adequately protected from damage. Suitable protection shall be required wherever necessary.

B. Final Corrections

1. The Engineer and Landscape Architect reserve the right to inspect the work to determine if adjustments are necessary in grade, alignment, or layout. The Contractor shall make such adjustments without further compensation.

END OF SECTION

SECTION 32 90 05 - SOIL MIXES
CONTRACT CSO-GC-SFS-OH CP3

PART 1 GENERAL

1.01 SUMMARY

A. The work of this Section includes but is not limited to the following:

1. Subgrade preparations.
2. Supply of component materials and soil amendments for soil mixes or supply of blended soil mixes from approved off-site sources. Soil mixes include:
    a. Planting Soil Mix
    b. Bioretention Soil Mix
    c. Intertidal Soil Mix
    d. Structural Soil Mix
    e. Stone-Soil Mix
3. Testing and analysis for specification conformance.
4. Preparation of soil mixes and testing for conformance.
5. Installation, placement, spreading, and fine grading of soil mixes and associated drainage layer.
6. Testing of all soil component materials, soil amendments, and soil mixes.
7. De-compaction and re-compaction of soils as needed for specification conformance.
8. Coordination with other contractors and trades.
9. Clean-up.

B. The Contractor shall report information pertaining to the sustainable procurement, regional sourcing, and/or recycled content of new materials to be procured during the Work, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall coordinate with their vendor on sustainable product requirements as stipulated by the Contractor's approved New Materials Sustainable Implementation Plan, in accordance with Section 01 35 63 – Sustainability Certification Project Requirements. The Contractor shall submit vendor shop drawings for review by the Engineer that clearly illustrate the vendor is meeting the requirements as approved in the Contractor's New Materials Sustainable Implementation Plan.

C. The following index of this Section is presented for convenience:

Article	Title	Section Page
PART 1	GENERAL	1
1.01	Summary	1
1.02	Payment	2
1.03	Related Sections	2
1.04	References	2

1.05 Description 3
1.06 Quality Assurance 4
1.07 Submittals 6
1.08 Delivery, Storage, and Handling 7
1.09 Spare Parts, Special Tools, and Supplies 7
1.10 Warranty 7
PART 2 PRODUCTS 8
2.01 Manufacturers 8
2.02 Materials / Equipment 8
2.03 Fabrication / Assembling / Finishes 17
2.04 Source Quality Control / Shop Tests 18
PART 3 EXECUTION.....18
3.01 Examination / Preparation 18
3.02 Implementation 20
3.03 Field Testing / Quality Control 22
3.04 Startup / Demonstration 22
3.05 Adjusting / Protection / Cleanup.....22

1.02 PAYMENT

A. No separate payment shall be made for performing any Work required under this Section. All costs for Work required for this Section shall be included in the applicable lump sum, unit price(s), or allowance(s) as set forth in Section 01 27 00 – Measurement and Payment.

1.03 RELATED SECTIONS

A. Section 01 35 63 - Sustainability Certification Project Requirements

B. Section 02 24 20 - Soil Sampling and Analysis

C. Section 31 23 16 - Excavation

D. Section 31 23 23 - Fill

E. Section 31 25 10 - Dust, Soil Erosion and Sediment Control

F. Section 32 14 10 - Unit Pavers

G. Section 32 90 00 - Planting

1.04 REFERENCES

A. ASTM International (ASTM) Standards

1. ASTM D1556 -- Standard Test Method for Density and Unit Weight of Soil in Place by Sand Cone Method

2. ASTM D1557 -- Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))

3. ASTM D3385 -- Standard Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometers
4. ASTM D4318 -- Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils
5. ASTM D6938 -- Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
6. ASTM F1647 -- Standard Test Methods for Organic Matter Content of Athletic Field Rootzone Mixes

B. The Northeast Coordinating Committee for Soil Testing

1. NEC-1012 -- Recommended soil testing procedures for the Northeast United States, Northeastern Regional Publication Number 493

C. The New York City Department of Health and Mental Hygiene

1. Local Law 37 Pesticides Use by City Agencies – Pesticide Product Search Local Law 37 - NYC Health

D. The New York State Department of Environmental Conservation Bureau of Pesticide Management

1. Pesticide Product Information Portal
2. https://www.dec.ny.gov/nyspad/products?0

E. New York State Department of Environmental Conservation (NYSDEC)

1. 6NYCRR Subpart 360-5, Composting Facilities
2. 6NYCRR Subpart 375-6, Remedial Program Soil Cleanup Objectives
3. 6NYCRR Part 360 Part 360, Solid Waste Management Facilities

F. Soil Science Society of America, Methods of Soil Analysis (SSSA)

G. American Association for Laboratory Accreditation (A2LA)

H. US Composting Council (USCC)

I. NYC DOT Standard Highway Specifications

1. Section 4.15 SS – Structural Soil Foundation Material

1.05 DESCRIPTION

A. System Design Requirements

1. All soil mix components shall be tested and approved prior to incorporation into blended soil mixes.
2. Provide adequate quantities of all soil mix materials to attain, after compaction and natural settlement, all design-finished grades.
3. Sustainable Design Requirements

a. Regional Materials: Soil shall be extracted within 250 miles of the project site.

1.06 QUALITY ASSURANCE

A. Contractor shall submit written test reports as required in this Section.

1. Testing shall be carried out by an independent testing laboratory. Testing laboratory shall be in independent, state-operated, or university-operated laboratory recognized by the SSSA; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated, and that specializes in types of tests to be performed.

2. Engineer or Landscape Architect's approval of the testing laboratory shall be obtained by the Contractor before it is given any work of this Section.

3. Contractor shall be responsible for timely submittal of samples to the testing laboratory.

B. Each test shall be carried out using the categories and sieve sizes as specified herein. Failure to include any of the required criteria will be sufficient cause for rejection of the test.

C. Each test report shall include the following information:

1. Project title

2. Name of Contractor

3. Name of material supplier and location where material is extracted from

4. Testing laboratory name, address and telephone number

5. Type of test

6. Date of test: Testing must be for samples taken within the prior 6 months.

7. Test results, including identification of deviations from acceptable ranges.

D. Each sample shall be tested, as applicable, for the following:

1. Mechanical analysis: Sieve method, using sieve sizes specified.

2. Textural Class: As determined by combined hydrometer and wet sieving in compliance with ASTM F1632.

3. pH should be measured according to Recommended Soil Testing Procedures for the Northeastern United States (NEC-1012). Where soil will be used to support plant growth, lab analysis results must include corrective recommendations.

4. Organic matter content: Percentage of oven-dry weight of soil, determined by loss on ignition of moisture-free sample, in accordance with Method A of ASTM F1647.

5. Electrical conductivity (soluble salts): Test by saturated paste method in deciSiemens per meter (dS/m).

6. Soil Fertility Analysis: Analysis for available macronutrients including, at a minimum, phosphorus and potassium in parts per million according to methods as specified in NEC-1012. Test methods and fertility recommendations must be included with results.

7. Chemical Analyses shall include the 6 NYCRR Part 375-6 compounds detailed in Section 02 24 20 - Soil Sampling and Analysis. All analyses shall be performed by a testing laboratory certified by the New York State Department of Health Environmental Laboratory Accreditation Program (NYSDOH-ELAP). The frequency of testing per volume of fill shall be in accordance with 6 NYCRR Part 360.13 (e)(1), Table 1, Minimum Analysis Frequency for Fill Material.

E. Provide 1 test for every 100 cubic yards delivered to the site.

F. The Engineer or Landscape Architect may take and analyze at any time, such additional samples of materials as deemed necessary for verification of conformance to specification requirements. Contractor shall furnish samples for this purpose upon request and shall perform testing as requested at no additional cost to the City.

G. No component bulk material for soil mix shall be used or blended into a mix, until test reports have been received and approved by the Engineer or Landscape Architect. As necessary, make any and all soil mix amendments and resubmit test reports indicating amendments, until approved.

H. Comply with all rules, regulations, laws and ordinances of local, state and federal authorities having jurisdiction. Provide labor, materials, equipment and services necessary for work to comply with such requirements at no additional cost to City.

I. Soil Mixing Supplier Qualifications: Shall be an experienced supplier / manufacturer able to provide soil mixes that meet the specifications within the performance criteria and tolerances assigned. Supplier shall be able to produce enough consistently uniform and homogeneously blended material for the project to meet scheduled demands.

J. Installer Qualifications: Engage an experienced installer who has completed landscaping and soil supply work similar in material, design, and extent to that indicated for this project with a record of successful landscape establishment. Installer shall maintain an experienced full-time supervisor on Project Site when planting is in progress.

K. Procure and pay for all permits and licenses required for the Work of this Section.

1.07 SUBMITTALS

A. The Contractor shall submit Shop Drawings and material specifications for the approval of the Engineer or Landscape Architect. Submittals shall include, but not be limited to:

1. Manufacturer's technical information, including application instructions where relevant, for all soil amendment materials required.
    a. Fertilizers
    b. Soil Inoculants
    c. Herbicides
    d. Water-absorbent Polymer
2. Samples of Blended Soil Mixes (1-pound package each):
    a. Planting Soil Mix
    b. Bioretention Soil Mix
    c. Intertidal Soil Mix
    d. Stone-soil Mix
    e. Structural Soil Mix
3. Test Results for Blended Soil Mix Components (written report for each bulk component):
    a. Planting Soil Mix -- offsite imported material for typical topsoil.
    b. Bioretention Soil Mix – offsite imported material for stormwater planting areas.
    c. Intertidal Soil Mix – offsite imported material for intertidal planting area as shown on Contract Drawings.
    d. Structural Soil -- offsite imported material for areas identified for structural soil, as shown on Contract Drawings.
        1) Submit license and separate test results for clay loam and crushed stone, in accordance with NYCDOT Standard Highway Specification 4.15SS.
    e. Sand
    f. Compost
4. Sources and Manufacturers List: Submit a full list of sources and manufacturers of soil mixes, including component materials and soil amendments.
    a. Supplier shall provide certifications on the key physical and chemical properties describing the component materials and final soil mixes.

B. Sustainable Design Submittals:

1. Regional Materials: Provide the information as required in Section 01 35 63 – Sustainability Certification Project Requirements.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Conform to all governmental regulations in regard to the transportation of materials to, from, and at the job site, and secure in advance such permits as may be necessary.

B. Packaged Materials: Deliver packaged materials to the location where planting soil mixes are to be installed, in unopened bags or containers, each bearing the name and trademark of the producer, material composition, manufacturers' certified analysis, and the weight of the material.

1. All bags shall be protected from water and contamination with other materials. Store packaged material off the ground and covered in a manner to prevent materials from getting wet or damp and in such manner that material effectiveness will not be impaired.

2. Retain packages for inspection by the Engineer or Landscape Architect.

3. All packaged materials shall be stored, handled and applied in strict accordance with manufacturer’s instructions.

C. Stockpiles

1. Contractor shall employ all means necessary for stockpile maintenance to prevent unstable, noxious or anaerobic conditions including, but not exclusive to, temperature monitoring, planting, stockpile repacking, and runoff control.

2. All stockpiled materials shall be adequately handled as required in Section 31 25 10 – Dust, Soil Erosion and Sediment Control. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.

3. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing planting areas or plants.

4. Do not move or handle materials when they are wet or frozen.

1.09 SPARE PARTS, SPECIAL TOOLS, AND SUPPLIES

A. Not Used

1.10 WARRANTY

A. The Contractor shall obtain from the manufacturer and provide to DEP the manufacturer’s standard warranty, in an acceptable form, warranting against defects in design, materials, abnormal aging, and workmanship.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Fertilizer shall be as manufactured by:

1. Osmocote®, The Scotts Company, Marysville, OH;
2. Meister®, The Scotts Company, Marysville, OH;
3. Or approved equal.

B. Planting Soil, Bioretention Soil, Stone-Soil Mix and Intertidal Soil Mix sources are:

1. East Coast Mines & Materials, Inc., East Quogue, NY 11959.
2. The Dirt Company – Northeast, PO Box 156, Jamesburg, NJ 08831.
3. George Schofield Company, Inc. PO Box 110, Bound Brook, NJ 08805.
4. Or approved equal.

C. Structural soil and Stone-Soil Mix shall be licensed providers by:

1. East Coast Mines & Materials, Inc., East Quogue, NY 11959
2. Long Island Compost, Yaphank, NY 11590
3. Ascape Landscape, Blauvelt, NY 10913
4. Or approved equal.

2.02 MATERIALS / EQUIPMENT

A. Planting Soil

1. Imported topsoil or soil blends may not be mined from soils defined by the Natural Resources Conservation Service as prime farmland, unique farmland, or farmland of statewide importance. Imported topsoil shall be:
   a. Of uniform quality, free from hard clods, stiff clay, hardpan, sods, roots, chips, sticks, partially disintegrated stone, cement, ashes, slag, concrete, tar residues, tarred paper, boards, or any other undesirable material. No topsoil shall be delivered in a frozen or muddy condition.
   b. Free from refuse, material toxic or otherwise deleterious to plant growth, seeds, or other viable propagules of invasive plants. Construction and demolition debris as classified under 6 NYCRR Part 360, other than uncontaminated land clearing debris, shall not be used to amend topsoil.
   c. Free of stones over 1 ½ inches in diameter, and will have less than 10 percent gravel.
2. Topsoil shall conform to the following requirements:
   a. pH 6.0 to 7.0.

b. Organic content 4 - 6%

3. Topsoil shall conform to the following mechanical analysis:

Sieve Size	Percent Passing
1"	100
1/4"	90 - 99
# 10	80 - 100
# 40	40 - 60
# 60	30 - 40
# 100	10 - 30
# 200	10 - 20

4. Planting soil shall be of textural class, as determined by combined hydrometer and wet sieving in compliance with ASTM F1632:
   a. Sand (0.05 – 2.0mm dia. range): 45-85% total weight
   b. Silt (0.002 – 0.05mm dia. range): 6-12% total weight
   c. Clay (less than 0.002mm dia. range): 3-6% total weight
5. Rate of Percolation: Between 2” and 4” per hour as determined by ASTM F1815-97.
6. Salinity / Electrical conductivity: 0.7 to 2.0 mmhos/cm
7. Phosphorous: 20-100 PPM using extract method.
8. Potassium: 200-600 PPM using extract method.
9. Cation Exchange Capacity (CEC): Greater than or equal to 8 Meq/110g using extract method.
10. Planting soil blend shall consist of the following proportions by volume:
    a. Six parts topsoil
    b. Two parts compost
11. When the topsoil otherwise complies with the requirements of the specification but shows a deficiency of not more than one percent (1%) organic matter content; then humus, compost, or other approved organic matter may be incorporated when or as permitted by the Engineer or Landscape Architect.
12. Topsoil shall not contain hazardous waste, petroleum spills or other chemical releases, or industrial waste. Any shipment of topsoil that does

not meet this requirement will be rejected by the Engineer or Landscape Architect and shall not be brought on site.

13. Topsoil being brought on site shall be sampled and must meet the definition of General Fill as defined in NYSDEC 6 NYCRR Part 360.13 (f), Table 2: Fill Material Beneficial Use, unless otherwise approved by the Engineer. Topsoil to be used in ecologically sensitive sites (e.g., wetlands) shall meet the SCOs for the protection of Ecological Resources, unless otherwise approved. See Section 31 23 23 – Fill.

14. The following items shall be added to the planting soil mix if specified in contract drawings or approved in writing by the Engineer or Landscape Architect:

    a. Five pounds bonemeal per cubic yard of soil mixture

    b. One pound commercial fertilizer per cubic yard of soil mixture

    c. One pound controlled release fertilizer per cubic yard of soil mixture

    d. Two pounds water absorbent polymer per cubic yard of soil mixture, or as recommended by manufacturer

    e. Ground limestone as required for specified pH

B. Bioretention Soil Mix: Sandy loam, friable soil of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, paper, board chips, sticks, or an other undesirable material.

1. Marginal Mix shall conform to the following requirements:

    a. Organic Matter: 3 % minimum, 12% maximum

    b. pH: 5.5 to 7.0

    c. Electrical Conductivity (soluble salts): 0.8 - 4.0 dS/m

2. Mix shall consist of the following proportions by volume:

    a. Sand (0.05 to 2mm) 75% to 85%

    b. Silt (0.002 to 0.05 mm) 10 to 25%

    c. Clay (<0.002 mm) 10% maximum

3. Electrical conductivity shall be a maximum of 1.0 mmhos/cm. A higher level would indicate excessive salt content.

4. Nutrients: Bioretention soil test results shall show recommendations for soil additives or fertilizers to correct nutrient deficiencies as necessary.

Magnesium	Min 200lbs/acre
Phosphorous	Min 10lbs/acre

Potassium Min 30lbs/acre

5. Material must be sampled and analyzed by a New York State Department of Health Environmental Laboratory Approval Program certidied laboratory in accordance with the New York State Department of Environmental Conservation (NYSDEC) DER-10 protocols

C. Intertidal Soil Mix

1. Shall be comprised of clean sand conforming to the following requirements:

a. Textural Class shall be:

1) Sand (0.05-2.0mm dia. range): 70-85%

2) Silt (0.002-0.05mm dia. range): 10-15%

3) Clay (Less than 0.002mm dia. range): 5-15%

4) Gravel (2.0mm to 2” dia. range): 0-8%

2. pH: Between 5.5 to 7.2.

3. Organic Content (Loss on ignition): 3% maximum.

4. Particle size shall conform to the following mechanical analysis:

Sieve Size	Accepted range
# 10	0%
# 18	< 10%
# 35	< 20%
# 60	> 70%
# 100	< 20%
# 270	< 3%
0.002mm	< 10%

5. Salinity / Electrical conductivity: 1 mmhos/cm maximum.

6. Total nitrogen (TKN): 200 ppm maximum.

7. Nitrate: 1 ppm maximum.

8. No stones or coarse fragments over 1” in size.

9. Intertidal soil mix shall be the product of a commercial processing facility specializing in production of clean sand for intertidal wetland application. Material shall be free of hazardous waste, petroleum spills or other chemical releases, or industrial waste. Any shipment of intertidal soil mix that does

not meet this requirement will be rejected by the Engineer and shall not be brought on site.

10. Unless otherwise directed by the Engineer or the Engineer or Landscape Architect, soil amendment and fertilizer application shall be prohibited in the intertidal planting area due to potential addition of unnecessary nutrient loads to waterways.

D. Structural Soil

1. Shall conform to the latest NYCDOT Standard Highway Specification 4.15SS Structural Soil Foundation Material and specified herein.

2. Shall conform to CU-Soil™, as patened by Cornell University, patent #5,849,069. Structural soil shall contain the following proportion:

   a. Crushed stone: 83% dry weight

   b. Clay loam: 17% dry weight

   c. Hydrogel: 1 ounce per 200 pounds of stone

3. Requirement for Crushed Stone:

   a. Crushed stone shall be crushed granite or traprack, no limestone or sandstone shall be accepted. No recycled material shall be accepted. Stone shall meet the ASTM C33 requirements for #4 crushed angular stone graded within the following limits:

Sieve Size	Percent Passing
2"	100
1-1/2"	90 - 100
1”	20 - 55
3/4”	0 - 15
3/8”	0 - 5

4. Requirement for Clay Loam:

   a. Shall conform to ASTM D422. Clay loam shall be uniform composition, without admixture of subsoil, and free of stones greater than 1/2” diameter, leaves, roots, debris, toxic materials, or lumps or clods over 1” diameter.

   b. Material shall have been obtained from naturally well drained areas which have never been previously stripped for topsoil and shall have a history of supporting satisfactory vegetative growth. Material shall be the product of a commercial processing facility specializing in

production of stripped natural topsoil. No clay loam shall come from USDA classified prime farmland.

c. It shall contain not less than 2% nor more than 5% organic matter, as determined by loss on ignition of oven-dried samples, dried to a constant weight at a temperature of 230 deg F, plus or minus 9 deg F. Mechanical analysis for clay loam shall be as follows:

1) Sand: 20-45% total dry weight

2) Silt: 20-50% total dry weight

3) Clay: 20-40% total dry weight

4) Gravel: Less than 5% total dry weight

d. Clay loam small meet or be amended to meet the following chemical analysis criteria:

1) pH: Between 5.5 and 6.5.

2) Organic matter: 2-5% by dry weight

3) Soluble salts less than 1.0 mmhos/cm.

4) Cation exchange capacity (CEC): Greater than 10.

5) Carbon / Nitrogen ratio: Less than 33:1.

5. Requirement for Hydrogel: Shall be Gelscape, a potassium propenoate-propenamide copolymer hydrogel, as manufactured by Amereq, Inc. New City, NY, or approved tested equivalent. No substitution is recommended, since small changes in the hydrogel structure greatly change the quality of the structural soil.

6. pH Adjustment:

a. To lower the clay loam pH to acceptable levels, commercial granular ferrous sulfate, 90% pure sulfur may be added to lower soil pH above 6.5. To raise pH levels, the manufacturer may add agricultural limestone containing a minimum of 85% carbonates. Minimum gradation: 100% passing 10 mesh sieve, 98% passing 20 mesh sieve, 55% passing 60 mesh sieve, and 40% passing 100 mesh sieve.

E. Stone-soil Mix

1. General: Stone-Soil Planting Mix shall be a uniform, pre-blended mixture of crushed stone and soil, proportioned so the stones remain in contact with each other and the soil partially fills the voids between them. Stone-Soil Planting Mix is for use in the voids of core stone and as a finish layer in planting areas, as specified in Section 32 32 20 – Landscape Boulders. It shall not be used under paving or other hardscape.

2. Soil Component:

a. Soil shall be Intertidal Soil Mix conforming to Article 2.02C, with the following additional requirements:

1) Sand material only. Peat is not permitted.

2) Combined silt and clay content (finer than 0.05 mm): not less than 20 percent by dry weight.

3) No particles larger than 1/2 inch.

3. Stone Component:

a. Clean, hard, durable, angular crushed stone, free of clay, organic matter and deleterious material. Recycled concrete aggregate, slag, and other recycled or manufactured materials are not permitted.

b. Drainage Fill as described in Section 31 23 23 – Fill.

4. Blend:

a. Proportion: approximately 80 percent stone to 20 percent soil by dry weight. Adjust the final proportion based on the trial blend so that the soil fills the voids without separating the stones, subject to approval by the Engineer and Landscape Architect.

b. Mixing: Blend at an approved facility on a paved surface using a front-end loader, pugmill or similar method that produces a uniform mixture without crushing the stone. Moisture at mixing shall be sufficient to keep the soil adhered to the stone without free water.

c. Production testing: Test the blend for percentage of stone by dry weight (wash-and-sieve method) at a frequency of one test per 100 cubic yards, and not less than one test per day of production. Stone content shall be within plus or minus 5 percent of the approved blend.

d. No fertilizers or soil amendments shall be added to Stone-Soil Planting Mix unless approved by the Engineer and Landscape Architect.

F. Compost

1. Shall conform to the following requirements:

a. Material shall be capable of sustaining the growth of vegetation, with no admixture of refuse or material toxic to plant growth.

b. Material shall be derived from organic wastes such as food and agriculture residues, composted cow or other animal manures, sewage sludge or other materials that meet the specified requirements.

c. Material shall be screened, and shall be free of any stones, branches, roots, brush, weeds, or wood chips, and all debris such as plastic fragments, glass, and metal fragments.

d. Materials shall produce a maturity index result equal to or greater than 7 using the Solvita Compost Maturity Index procedure or approved equal.

e. Organic content: 50% minimum.

f. pH: 5.5 to 8.0.

g. Carbon/nitrogen ratio: 25:1 to 35:1.

h. 100% passing 1/2" screen .

2. Compost shall meet the requirements for "Monthly Average Concentration" pollutant limits, except where the Engineer specifically allows the use of the "Maximum Concentration" pollutant limits, as stated in the current version of 6 NYCRR Part 360.

3. No compost shall be delivered until the approval of samples by the Engineer or Landscape Architect, but such approval does not constitute final acceptance. The Engineer or Landscape Architect reserves the right to reject, on or after delivery, any material which does not, in their opinion, meet these specifications. When compost is stored on the job, it shall be done as directed by the Engineer.

4. Certification: Only facilities permitted to compost biosolids under 6 NYCRR Part 360, will be allowed to furnish finished compost for use in topsoil. The certification shall be supplied by the Contractor prior to the delivery of any composted biosolids, topsoil containing sewage sludge, or other such regulated material to the site.

G. Soil Amendment Materials: Within the watershed, fertilizers shall not be used unless a soil test indicating a need for soil amendment is provided. Recommended materials below may not be used except where they fulfill amendment requirements. Where authorized for use in the Contract Documents, or by written direction of the Engineer or Engineer or Landscape Architect, Soil Amendment Materials shall have the following compositions:

1. Soil Fertility Analysis: Available macronutrients including Phosphorus and Potassium should be adequate to support the intended plant community. Available macronutrients shall not be at excessive levels that could potentially impair plant growth or impact water quality. The determination as to whether available nutrients are low, optimum, or excessive shall be made and reported by the soil testing laboratory based on extraction and test methods used.

a. Only when soil analysis indicates a need and if approved in advance by the Engineer, apply commercial fertilizer and uniformly work in

to top one inch of seedbed. The rate of application shall be determined by soil analysis.

b. Do not apply superphosphate except where specifically indicated and as approved by the Engineer. Where required, uniformly work in to top one inch of seedbed. The rate of application shall be determined by soil analysis.

2. In addition to obtaining the Engineer's approval of the type(s) and N-P-K (Nitrogen-Phosphorus-Potassium) analyses of soil amendment materials, proposed based on soil test results, the Contractor shall meet the following requirements:

   a. Bonemeal: Shall be finely ground.

   b. Commercial Fertilizer: A minimum of 50% of the nitrogen shall be derived from organic sources.

   c. Controlled-release Fertilizer: Shall be in granular form.

3. Limestone: Shall be granular limestone, produced from Dolomitic limestone specifically for use in planting, with a minimum of 88% of calcium and magnesium carbonates, conforming to the following requirements:

Sieve Size	Percent Passing
# 10	100
# 20	90 minimum
# 100	60 minimum

4. Only when chemical analysis indicates a need and where approved by the Engineer, apply ground limestone and uniformly work in to top one inch of seedbed. The rate of limestone application shall be dependent on the pH of the soil, as determined by chemical analysis, and shall be as follows:

pH of Soil	Rate: Pounds/1000 Square Feet
5.0 to 5.5	100
5.5 to 6.0	50
6.0 to 6.8	25
over 6.8	0

5. Sulfur: Lower pH if required, by use of elemental sulfur product.

   a. Peat moss or copper sulfate may not be used to lower pH.

6. Mycorrhizal Fungi Inoculant

   a. For tree plantings, the Contractor shall supply Mycorrhizal Fungi Inoculant, if specified, in granular form such as by means of a three ounce (3 oz.) premeasured dry formulation packet, such as Mycor Tree Saver Transplant®, as manufactured by Plant Health Care, Inc., Pittsburgh, PA, or approved equal.

7. Water Retention Additive

   a. Water Retention Additives for tree plantings shall be a granular polyacrylamide polymer of a potassium base and not a sodium base that slowly releases moisture into the root zone such as Terra Sorb, as manufactured by Plant Health Care, Inc., 440 William Pitt Way, Pittsburgh, Pa., or approved equal.

H. Herbicides and Pesticides shall be in compliance with NYC Local Law 37 of 2005 and in conformance with the guidelines of NYC Department of Health for determining whether a pesticide or herbicide is prohibited by the Law.

I. The following items shall be added to the Planting Soil Mix if specified in contract drawings or approved in writing by the Engineer or Landscape Architect:

1. Five pounds bonemeal per cubic yard of soil mixture
2. One pound commercial fertilizer per cubic yard of soil mixture
3. One pound controlled release fertilizer per cubic yard of soil mixture
4. Two pounds water absorbent polymer per cubic yard of soil mixture, or as recommended by manufacturer
5. Ground limestone as required for specified pH

J. Miscellaneous Accessories

1. Drainage aggregate: Shall be No. 57 crushed aggregates or washed gravel complying with ASTM D448. Aggregate shall be sound, free-draining and free of fines, surface coatings and deleterious materials.
2. Filter Fabric: See Section 32 14 10 Unit Pavers.
3. Geo-grid: See Section 32 14 10 Unit Pavers.
4. Erosion control blanket: See 32 90 00 Planting.

2.03 FABRICATION / ASSEMBLING / FINISHES

A. Structural Soil Mixing

1. Structural soil must be mixed in the presence of the licensee, and no soil shall be placed until inspected by the licensee. All structural soil shall be mixed using appropriate soil measuring, mixing, and shredding equipment of sufficient capacity and capability to assure proper quality control and consistent mix ratios.

2. No mixing of Structural Soil at the Project Site shall be permitted unless a large paved area is available for mixing and the site has been pre-approved for use by the Engineer or Landscape Architect.

3. No structural soil shall be mixed or placed in air temperatures below 40 deg F or delivered or placed in frozen, wet, or muddy conditions.

4. Material shall be delivered at or near optimal compaction moisture content, as determined by AASHTO T99 / ASTM D698. No material shall be delivered or placed in an excessively moist condition, beyond 2% above optimal compaction moisture content per AASHTO T99 / ASTM D698.

5. Structural soil mixing and quality control shall be in strict accordance with NYCDOT Standard Highway Specification 4.15SS.

2.04 SOURCE QUALITY CONTROL / SHOP TESTS

A. Not Used

PART 3 EXECUTION

3.01 EXAMINATION / PREPARATION

A. Pre-installation Conference: Conduct conference at project site prior to the start of any work in this Section and shall meet the requirements of this Specification.

B. Layout and Grading

1. Permanent benchmarks shall be established by a registered land surveyor or professional civil engineer, at the Contractor's expense. The Contractor shall maintain established bounds and benchmarks and replace them, if any are destroyed or disturbed.

2. The Contractor shall maintain at the site, sufficient surveying equipment to accurately excavate to the required subgrade and install soil to the required finish grade. The Contractor shall be responsible to install soil profiles at the elevations and thickness shown on the Plans.

C. Examination

1. Prior to all soil mix placement, the Contractor shall examine the site to determine the status of construction and existing condition in and near the areas to be planted.

2. The Contractor shall ascertain the location of all existing and proposed electric cables, conduits, irrigation, under-drainage systems and all other underground or at grade utilities, by contacting the appropriate utility company. The Contractor shall comply with the requirements of Section 31 23 16 - Excavation prior to any excavation work.

a. Contractor shall take proper precautions so as not to disturb or damage any sub-surface elements.

b. Contractor shall be liable for and all damage to such utilities during the course of construction, and shall be responsible for making requisite repairs to damaged utilities at Contractor's own expense.

c. Contractor shall be liable for any and all damage to surrounding areas caused by planting operations and shall be required to restore or replace damaged areas to original conditions, to the satisfaction of the Engineer or Landscape Architect.

3. The Contractor shall comply with the requirements of Section 31 25 10 - Dust, Soil Erosion and Sediment Control.

4. The Contractor shall coordinate, adjust, and relate together, work of this Section with other work of the Project and with work of other Contractors. Such coordination shall include but not be limited to the following:

a. Scheduling of planting operations

b. Scheduling of maintenance operations

5. The Contractor shall also:

a. Verify that all work requiring access through or adjacent to areas where soil mixes are to be placed has been completed and no further access (other than landscape installation) will be required. In the event that access will be required, this must be coordinated with the Engineer or Landscape Architect.

b. Perform soil mix blending and site soil work only during suitable weather conditions. Do not handle, haul, place, work, disc or rototill soil when frozen, excessively wet, or in otherwise unsatisfactory condition.

D. Preparation of Soil Mixes

1. Excavation of subgrade shall conform to the applicable requirements of Section 31 23 16 - Excavation.

2. Uniformly blend all ingredients as required for each soil mix type, by wind rowing and/or tilling on a hard surfaced area.

a. The components of all soil mixes shall be blended so that ingredients are thoroughly incorporated into the mixture to assure uniform distribution.

b. Do not over-mix, mix shall remain friable and well aerated.

c. Organic matter shall be maintained moist, not wet, during blending.

d. Delay mixing of any approved fertilizers if planting will not follow within a few days.

e. Add mycorrhizal fungi inoculant, if specified, to each tree planting at rate specified by approved manufacturer.

f. Apply water retention additive as per approved manufacturer's instructions.

E. Preparation of Sub-Grade

1. Verify as-constructed or existing sub-grade elevation and perform additional grading operations as necessary to bring the sub-grade to a true, smooth, slope parallel to the finished grade, at all areas to receive soil mixes.

2. Any sub-grades or soils polluted by gasoline, oil, plaster, construction debris, unacceptable soils, or other substances which would render material unsuitable for plant growth, shall be removed from the premises, at no additional cost to the City, whether or not such pollution occurred or existed prior to or during the Contract period. In the event that such material is placed, this material shall be removed and replaced with approved material. All remedial operations associated with soil mixes shall be reviewed and approved by the Engineer or Landscape Architect.

3. Clean sub-grade and dispose of all debris prior to placement of soil mixes.

a. Remove all large clods, lumps, brush, roots, stumps, litter, trash, and other foreign material and stones one-half inch in diameter or larger.

b. Dispose of removed material legally off-site in accordance with the applicable laws and regulations and the requirements for waste disposal under the Contract.

4. Where specified in contract drawings or approved in writing by the Engineer or Landscape Architect, spray all vegetation on sub-grade with a pre-emergent weed killer at the rate of application recommended by the manufacturer.

5. Protect adjacent pavements, walls, utilities and other construction from damage or staining by any soil mix placement operations.

3.02 IMPLEMENTATION

A. Placement of Soil Mixes

1. Do not place any muddy or wet Soil Mixes.

2. Place and spread soil mix over sub-grade, to a depth sufficiently greater than the depth required for planting areas so that after settlement the completed work will conform to the lines, grades, and elevations shown or otherwise indicated.

3. Place and spread soil mix over the approved sub-grade, in 6-inch lifts, or as directed by the Engineer or Landscape Architect, and settle to eliminate air pockets and minimize settlement. Lightly scarify previously placed surfaces prior to placing subsequent lifts.

4. Compact to 85% maximum, Standard Proctor, uniform in any defined area unless otherwise specified in the Contract Documents.
    a. Provide compaction testing to conform with the specified compaction density.
    b. Fills shall not be so compacted as to restrict the flow of air or water through the soil.
5. After completion of compaction operations, protect the installation from additional compaction from vehicular traffic, contamination by toxic materials or trash, and from water containing cement, clay, silt or any other materials.
6. Any soils that are over-compacted or contaminated after placement or otherwise made unsuitable for plant growth shall be removed from the premises and replaced with approved material or satisfactorily remediated at no additional cost to the City.
7. The Contractor shall also meet the applicable requirements on placement of soil mixes for different planting operations in Section 32 90 00 – Planting.

B. Placement of Intertidal Soil Mix:

1. The Contractor shall determine the Bulk Density of all in-place topsoil on a 100-ft by 100-ft grid or equivalent area. Bulk Density shall be in the range of 1.0 to 1.4 g/cubic cm. If the bulk density is greater than 1.4 g/cubic cm, the Contractor shall thoroughly disc the area to a depth of 6-in. or as is required to reduce the compaction. This work shall be conducted at no extra cost to DEP.
2. The spreading shall be performed in such a manner that planting can proceed with little additional soil preparation. Irregularities in the soil surface resulting from spreading or other operations which persist following two tidal flushings shall be corrected so as to prevent the formation of depressions where water will stand.
3. Placement of topsoil shall be performed only when it can be followed within 5 days by planting. After topsoil placement and final grading, no equipment shall be permitted to travel on these completed areas. The Contractor shall, through mechanical raking and hand grading with rakes and shovels, grade all areas around goose exclusion fences as needed in preparation for planting.
4. The Contractor shall, as part of the topsoil spreading operation, mechanically rake and clean all undesirable materials from the topsoil prior to planting operations. The soil shall be allowed to be flowed by the tide for two tidal cycles prior to planting operations. Any ponded or mounded areas which are present following the tidal flushing shall be mechanically raked or hand graded with rakes and shovels to facilitate proper drainage, as determined by the Construction Manager.

C. Placement of Stone-Soil Planting Mix: shall be as specified in Section 32 32 20 – Landscape Boulders. The placement, lift thickness, compaction and subgrade preparation requirements of this Section do not apply to Stone-Soil Planting Mix.

D. Placement of Structural Soil: Shall be in strict accordance with NYCDOT Standard Specification 4.15SS Structural Soil for Foundation Material.

E. Grading of Soil Mixes

1. After settlement has occurred, add soil to maintain finished grades. If for any reason soil is left exposed for a long duration prior to planting, add soil and regrade as required.

2. Protect placed soil mixes against construction activity with snow fencing or by other acceptable methods.

3. Protect from the eroding effects of wind and rain with filter fabric, as necessary.

3.03 FIELD TESTING / QUALITY CONTROL

A. Not Used

3.04 STARTUP / DEMONSTRATION

A. Not Used

3.05 ADJUSTING / PROTECTION / CLEANUP

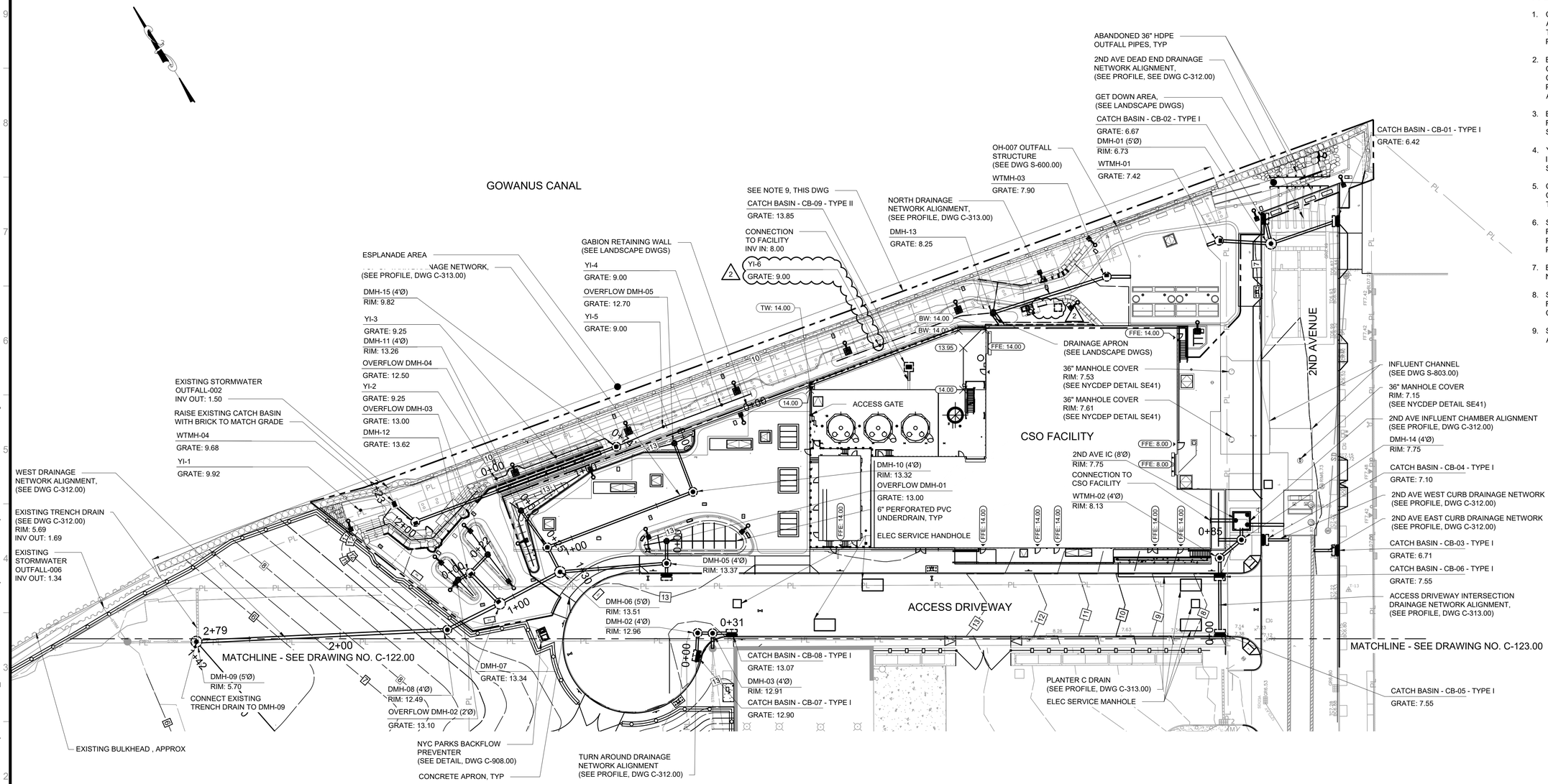
A. Clean up

1. At the end of each work day the Contractor shall broom-clean the site, to remove all trash, debris, and loose soil materials.

2. Immediately following the completion of soil mix installation operations, the Contractor shall remove all excess materials, stock piles, waste material, tools and equipment, and leave the site in a clear and clean condition.

3. All waste materials shall be disposed offsite by the Contractor in accordance with the applicable laws and regulations and the requirements for waste disposal under the Contract.

END OF SECTION



NOTES:

1. CONTRACTOR SHALL MAINTAIN ALL EXISTING AND NEW HYDRODYNAMIC SEPARATORS THROUGH SUBSTANTIAL COMPLETION OF THE PROJECT.
2. BULKHEAD ELEVATIONS PROVIDED FROM CONTRACT DRAWING SET TITLED CSO-GC-SFS-OH-BH OH-007 BULKHEAD, PREPARED BY HAZEN AND SAWYER / BROWN AND CALDWELL DATED NOVEMBER 2021.
3. EXISTING SUPPORT OF EXCAVATION SYSTEM FOR CSO FACILITY NOT SHOWN FOR CLARITY. SEE DWG C-101.
4. YARD PIPING AND BURIED UTILITY INFRASTRUCTURE NOT SHOWN FOR CLARITY. SEE DWG C-131.
5. CONTRACTOR SHOULD REFER TO DETAIL M1001 ON DWG M-900.00 FOR COUPLING CONNECTION THROUGH CSO FACILITY WALL.
6. SEE STRUCTURES TABLE ON DWG C-904.00 FOR STAKING COORDINATES. INVERTS AND PIPE CONNECTIONS ARE SHOWN ON THE PROFILE DRAWINGS C-312.00 AND C-313.00.
7. BRICK UP EXISTING STRUCTURES TO MATCH NEW GRADE.
8. SEE DRAWINGS C-124.00, C-201.00 AND C-202.00 FOR SPOT ELEVATIONS AND TOP AND BOTTOM OF CURB ELEVATIONS.
9. SEE LANDSCAPE DRAWINGS FOR GRADING AND SPOT ELEVATIONS FOR THIS AREA.

1"=30' 0 30 60 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	ADDENDUM NO. 3	DS
1	10/2026	ADDENDUM NO. 2	DS

DESIGNED BY: J. PERRUZZA | DRAWN BY: K. ROBBINS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: D. SHEERAN | DESIGN LEAD: D. SHEERAN | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

STATE OF NEW YORK DANIEL JAMES SHEERAN 088955 LICENSED PROFESSIONAL ENGINEER

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

CIVIL

GRADING AND DRAINAGE PLAN

AREA 1

DATE: SEPTEMBER 2026

SHEET NO: 62 OF 723

DRAWING NO. C-121.02

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: Lwallace
Last Date Saved: 11/11/2026 3:55 PM
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\lwallace\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseCivil\CP-03\C-121.dwg
Date & Time Plotted: 11/11/2026 4:10 PM
Plot Style Table: HS-FWS.ctb
Plot Scale: 1:1

GOWANUS CANAL

EXISTING CATCH BASIN
GRATE: 9.90

WTMH-04
GRATE: 9.68

YI-1
GRATE: 9.92

OVERFLOW DMH-04
GRATE: 12.50

YI-2
GRATE: 9.25

YI-3
GRATE: 9.25

OVERFLOW DMH-03
GRATE: 13.00

OVERFLOW DMH-02
GRATE: 13.10

DMH-12
GRATE: 13.62

DMH-08 (4'Ø)
RIM: 12.49

DMH-07
GRATE: 13.34

SEE LANDSCAPE DWGS
FOR GRADING DESIGN
FOR THIS AREA

DMH-15 (4'Ø)
RIM: 9.82

~~REINFORCED CONCRETE DROP CURB, TYP (SEE DETAIL, DWG C-905.00)~~

REINFORCED CONCRETE DROP CURB, TYP (SEE DETAIL, DWG C-905.00)

YI-5
GRATE: 9.00

YI-4
GRATE: 9.00

DMH-11 (4'Ø)
RIM: 13.26

DMH-06 (5'Ø)
RIM: 13.51

OVERFLOW DMH-01
GRATE: 13.00

DMH-05 (4'Ø)
RIM: 13.37

OVERFLOW DMH-05
GRATE: 12.70

DMH-10 (4'Ø)
RIM: 13.32

ACCESS DRIVEWAY
(SEE DWG C-201.00)

CATCH BASIN - CB-10 - TYPE I
GRATE: 12.83

6" PERFORATED PVC
UNDERDRAIN, TYP

DMH-02 (4'Ø)
RIM: 12.96

DMH-03 (4'Ø)
RIM: 12.91

CATCH BASIN - CB-08 - TYPE I
GRATE: 13.07

CATCH BASIN - CB-07 - TYPE I
GRATE: 12.90

PLAN - TOP OF TANK
SCALE: 1"=10'

1"=10' 0 10 20 FT.

NOTES:

1. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) WHICH IS 1.447 FEET BELOW THE BROOKLYN BOROUGH SEWER DATUM.
2. EXISTING SUPPORT OF EXCAVATION SYSTEM FOR CSO FACILITY NOT SHOWN FOR CLARITY. SEE DWG C-101.
3. YARD PIPING AND BURIED UTILITY INFRASTRUCTURE NOT SHOWN FOR CLARITY. SEE DWG C-131.
4. CP-3 CONTRACTOR TO MAINTAIN EXISTING HYDRODYNAMIC SEPARATOR THROUGHOUT THE COURSE OF CONSTRUCTION.
5. CONTOURS ROUNDED TO THE NEAREST TENTH SHOWN FOR THE TOP OF TANK AREA DUE TO THE SMALL VARIATIONS IN GRADE. ONE-FOOT CONTOURS USED IN ALL OTHER AREAS.

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	ADDENDUM NO. 3	DS
1	10/2026	ADDENDUM NO. 2	DS

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
J. PERRUZZA	K. ROBBINS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
D. SHEERAN	D. SHEERAN	G. DEREAMER

Hazen | Brown AND Caldwell

STATE OF NEW YORK · MICHAEL JAMES SHEERAN · 088955 · LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

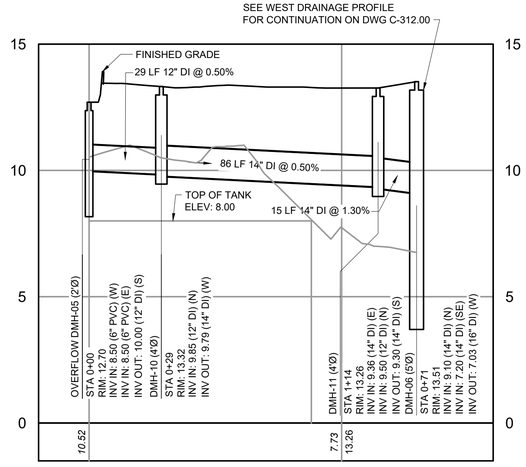
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

CIVIL
GRADING AND DRAINAGE PLAN
TOP OF TANK AREA

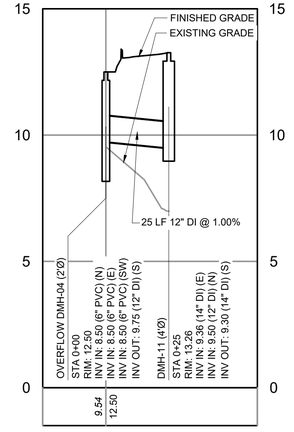
DATE: SEPTEMBER 2026
SHEET NO: 65 OF 723
DRAWING NO. C-124.02

Last Saved By: Lwallace
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 inches)
Drawing File Name & Drive Location: C:\Users\lwallace\DOCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Civil\CP-03\C-124.dwg
Last Date Saved: 11/4/2026 2:23 PM
Date & Time Plotted: 11/6/2026 6:02 AM
Plot Style Table: HS-FWS.ctb
Plot Scale: 1:1



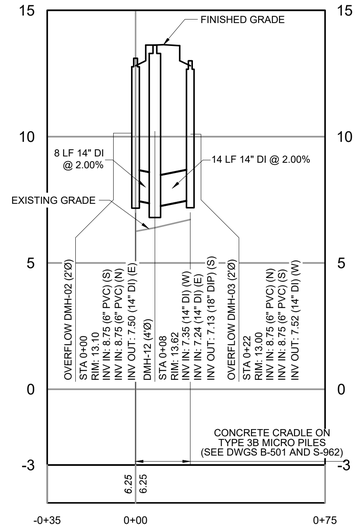
TOP OF TANK DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



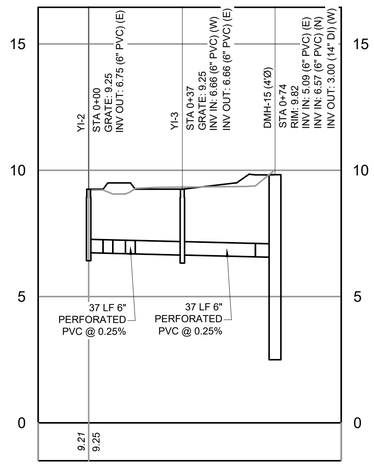
TOP OF TANK OVERFLOW CONNECTION

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



PLANTER A TO B DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

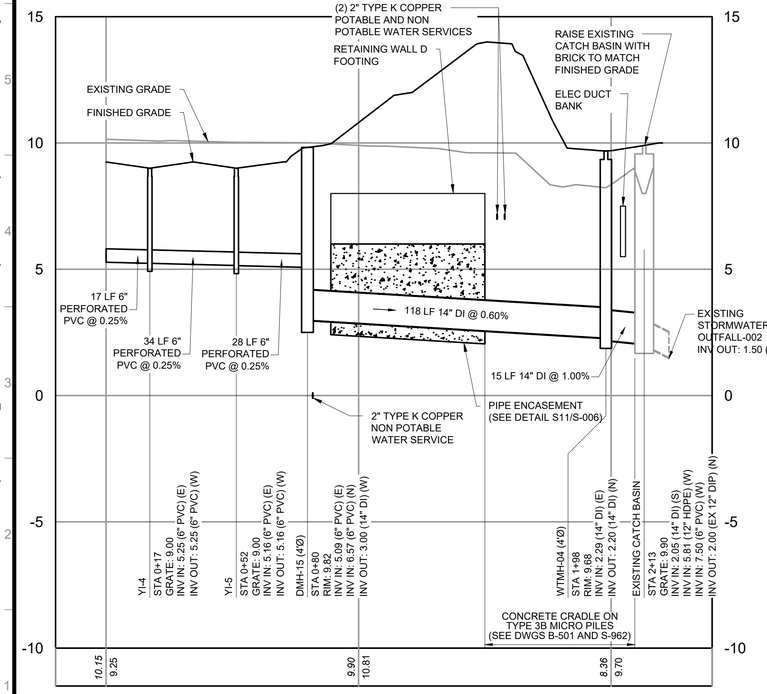


YI-2 TO DMH-15 NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

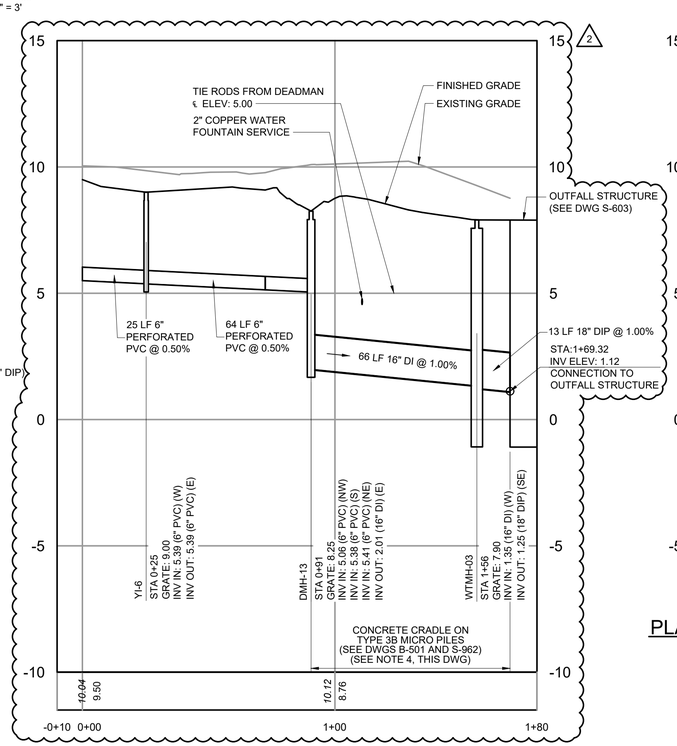
NOTES:

1. REFER TO DRAWINGS C-902.00 AND C-905.00 FOR DETAILS REGARDING TRENCH, MANHOLE, OVERFLOW MANHOLE, AND CATCH BASIN STRUCTURES.
2. SEE CONNECTION DETAILS ON M-900.00 FOR THE CSO FACILITY AND OUTFALL.
3. WTMH-## DENOTES HYDRODYNAMIC SEPARATOR (SEE DETAIL, DWG C-904.00).
4. DEADMAN AND TIE RODS SHALL BE EXPOSED PRIOR TO LAYOUT AND INSTALLATION OF MICRO PILES.



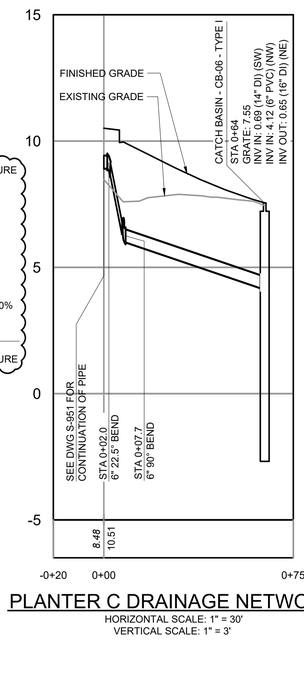
STORMWATER OUTFALL-002 DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



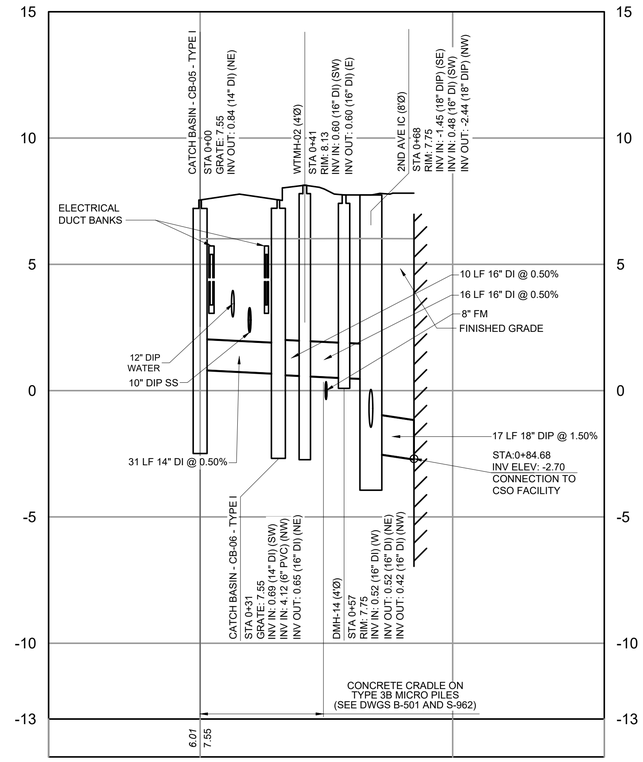
NORTH DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



PLANTER C DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



ACCESS DRIVEWAY INTERSECTION DRAINAGE NETWORK

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

1"=3' 0 3 6 FT.
1"=30' 0 30 60 FT.

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	ADDENDUM NO. 3	DS
1	10/2026	ADDENDUM NO. 2	DS

DESIGNED BY: J. PERRUZZA | DRAWN BY: J. TANNER | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: D. SHEERAN | DESIGN LEAD: D. SHEERAN | DESIGN MANAGER: G. DEREAMER

Hazen and Brown and Caldwell

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

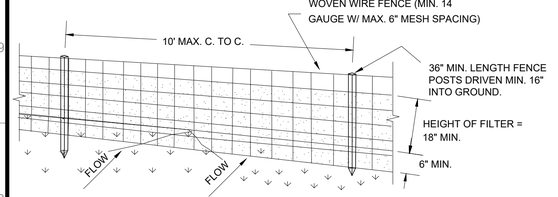
CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

CIVIL
STORM DRAIN NETWORK PROFILES
2 OF 2

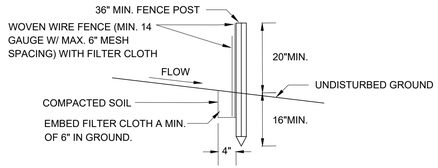
DATE: SEPTEMBER 2026
SHEET NO: 83 OF 723
DRAWING NO. C-313.02

Last Saved By: Lwallace
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\lwallace\DCACDDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\Wisel\CivilCP-03\C-313.dwg
Last Date Saved: 11/6/2026 5:38 AM
Date & Time Plotted: 11/6/2026 6:04 AM
Plot Scale: 1:1
Plot Style Table: HS-FWS.ctb

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



PERSPECTIVE VIEW



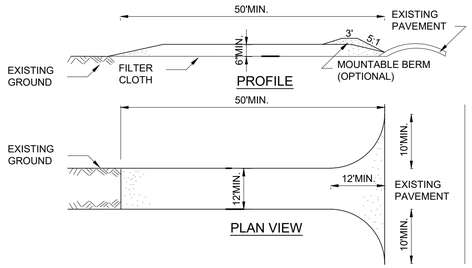
SECTION VIEW

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

REINFORCED SILT FENCE

NTS

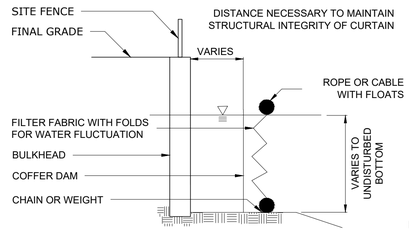


CONSTRUCTION SPECIFICATIONS

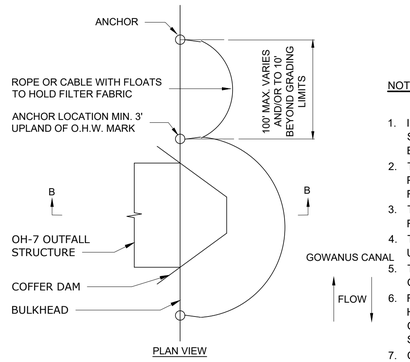
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ACCESS

NTS



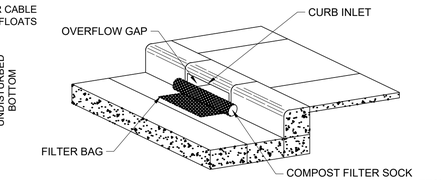
SECTION B-B



PLAN VIEW

TURBIDITY CURTAIN

NTS



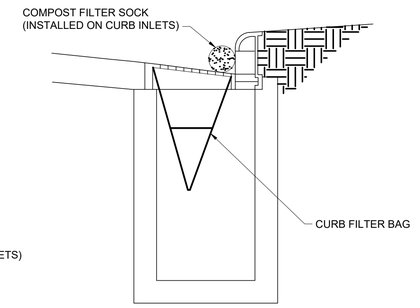
ISOMETRIC

NOTES:

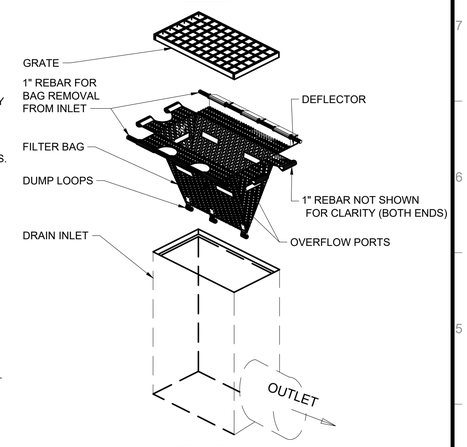
1. INSTALL COMPOST FILTER SOCK AT ALL CURB INLETS TO KEEP SILT, SEDIMENT, AND CONSTRUCTION DEBRIS FROM BYPASSING THE FILTER BAG INTO THE STORM SYSTEM
2. THE CURB FILTER SHALL BE DANDY CURB AS MANUFACTURED BY DANDY PRODUCTS INC., OR EQUAL. SUBMIT SHOP DRAWING FOR THE CURB FILTERS.
3. THE CURB FILTER SHALL FORM OF A CYLINDRICAL TUBE PLACED IN FRONT OF AND EXTENDING BEYOND THE INLET OPENING ON BOTH SIDES.
4. THE CURB FILTER SHALL HAVE A POUCH ON THE STREET SIDE OF THE UNIT FOR STONE AGGREGATE TO HOLD THE FILTER IN PLACE.
5. THE CURB FILTER SHALL BE CONSTRUCTED OF A HIGH VISIBILITY ORANGE MONOFILAMENT FABRIC.
6. FILL POUCH WITH #57 STONE AGGREGATE TO A LEVEL (AT LEAST HALF-FULL) THAT WILL KEEP UNIT IN PLACE DURING A RAIN EVENT AND CREATE A SEAL BETWEEN THE CURB FILTER AND THE SURFACE OF THE STREET.
7. CENTER THE UNIT AGAINST CURB OR MEDIAN INLET OPENING SO THAT THE CURB SIDE OF THE UNIT CREATES A SEAL WITH THE CURB OR MEDIAN BARRIER AND INLET STRUCTURE. THERE WILL BE APPROXIMATELY TWELVE (12) INCHES OF THE INLET PROTECTION UNIT OVERHANGING ON EACH SIDE OF THE OPENING.
8. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH RAIN EVENT.
9. PREFABRICATED FILTER INSERTS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
10. FILTER BAGS SHALL BE INSPECTED FOLLOWING EACH RAINFALL EVENT AND SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS. FILTER BAGS SHALL NOT BE MORE THAN HALF FULL AT ANY TIME.

INLET PROTECTION

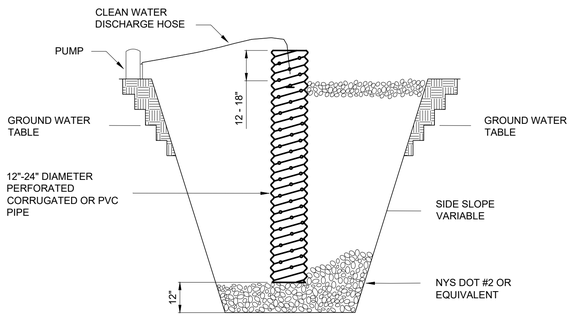
NTS



SECTION



INSTALLATION



CONSTRUCTION SPECIFICATIONS

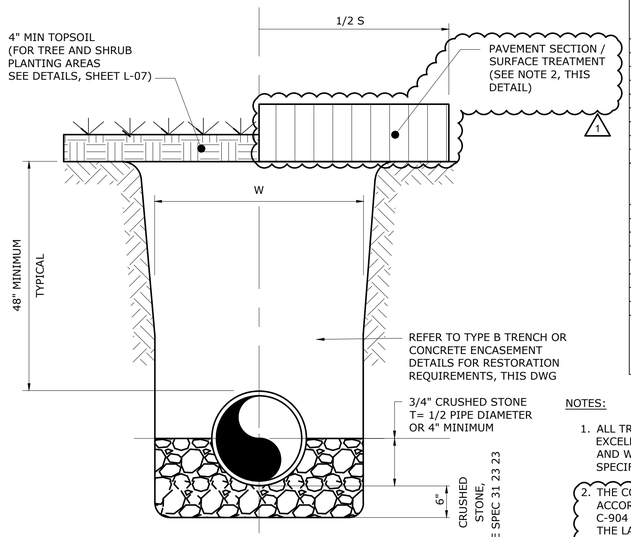
1. PIT DIMENSIONS ARE VARIABLE.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12-24" DIAMETER CORRUGATED OR PVC PIPE.
3. A BASE OF NYS DOT #2 OR EQUIVALENT AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH NYS DOT #2 OR EQUIVALENT AGGREGATE.
4. THE STANDPIPE SHOULD EXTEND 12-18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IT IS RECOMMENDED THAT 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE, PRIOR TO ATTACHING THE FILTERCLOTH.

DEWATERING SUMP PIT

NTS

FOR LANDSCAPED AREA

FOR ASPHALT PAVEMENT



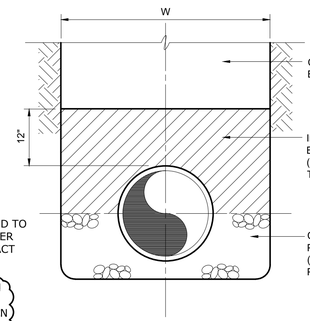
TRENCH EXCAVATION LIMITS		
INTERNAL DIAMETER OF PIPE	W WIDTH OF TRENCH MAX	W=MIN
4"-6"	3'-9"	O.D.+20"
8"-10"	3'-9"	O.D.+20"
12"	3'-9"	O.D.+20"
14"-16"	4'-2"	O.D.+20"
18"	4'-4"	O.D.+20"
20",21"	4'-8"	O.D.+20"
24"	4'-11"	O.D.+20"
27"	5'-9"	O.D.+24"
30"	6'-7"	O.D.+24"
DEPTH OF CUT	S MAXIMUM PAVEMENT REPLACEMENT WIDTH	
0-6'	S=W+4'	
>6-8'	S=W+8'	
>8-10'	S=W+12'	
>10-12'	S=W+16'	
>12-14'	S=W+20'	
>14-16'	S=W+24'	
>16-18'	S=W+28'	
>18'	S=W+32'	
W = TRENCH WIDTH AT BOTTOM OF PIPE. TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.		

NOTES:

1. ALL TRENCHES SHALL BE BACKFILLED WITH GOOD TO EXCELLENT FILL AS PER NYCDEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS AND CONTRACT SPECIFICATIONS.
2. THE CONTRACTOR SHALL RESTORE PAVEMENT IN ACCORDANCE WITH THE DETAILS ON DRAWING C-904 AND THE SURFACE TREATMENT DETAILS ON THE LANDSCAPE DRAWINGS.
3. FOR TRENCHES IN THE NYC RIGHT-OF-WAY, THE TRENCHES SHALL BE RESTORED IN ACCORDANCE WITH NYCDOT DETAIL H-1042. 1

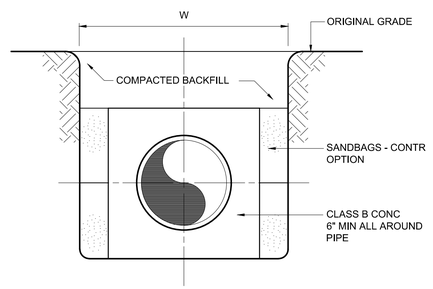
TYPICAL TRENCH

NTS



TRENCH TYPE B

NTS



CONCRETE ENCASEMENT

NTS

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/26/2026	ADDENDUM NO. 3	DS

DESIGNED BY: J. PERRUZZA | DRAWN BY: J. TANNER | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: D. SHEERAN | DESIGN LEAD: D. SHEERAN | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

STATE OF NEW YORK — DANIEL JAMES SHEERAN — 088955 — LICENSED PROFESSIONAL ENGINEER

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007
CIVIL
SITE DETAILS
2 OF 5

DATE: SEPTEMBER 2026
SHEET NO: 113 OF 723
DRAWING NO. C-902.01

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: KRobbins
Paper Size Printed/Plotted: PAPPER_SIZE_PRINTED|PLOTTED
Drawing File Name & Drive Location: DWGFILE&DRIVE_LOCATION
Last Date Saved: DATE&TIME_DWG_SAVED
Date & Time Plotted: DATE&TIME_PLOTTED
Plot Scale: PLOT_SCALE
Plot Style Table: PLOT_STYLE_TABLE

STORM STRUCTURE SCHEDULE

STRUCTURE NAME:	DIAMETER	LENGTH x WIDTH	RIM / GRATE EL:	COORDINATES:	DETAIL
2ND AVE IC	N/A	96" X 96"	R: 7.75	N: 185248.98 E: 986635.02	SEE DETAIL, DWG C-905.00
CATCH BASIN - CB-01 - TYPE I	N/A	48" X 42"	G: 6.42	N: 185359.77 E: 986767.81	NYCDEP CB - SE47
CATCH BASIN - CB-02 - TYPE I	N/A	48" X 42"	G: 6.67	N: 185381.99 E: 986735.73	NYCDEP CB - SE47
CATCH BASIN - CB-03 - TYPE I	N/A	48" X 42"	G: 6.71	N: 185207.15 E: 986669.80	NYCDEP CB - SE47
CATCH BASIN - CB-04 - TYPE I	N/A	48" X 42"	G: 7.10	N: 185233.02 E: 986640.18	NYCDEP CB - SE47
CATCH BASIN - CB-05 - TYPE I	N/A	48" X 42"	G: 7.55	N: 185203.12 E: 986591.66	NYCDEP CB - SE47
CATCH BASIN - CB-06 - TYPE I	N/A	48" X 42"	G: 7.55	N: 185229.30 E: 986608.22	NYCDEP CB - SE47
CATCH BASIN - CB-07 - TYPE I	N/A	48" X 42"	G: 12.90	N: 185348.11 E: 986342.19	NYCDEP CB - SE47
CATCH BASIN - CB-08 - TYPE I	N/A	48" X 42"	G: 13.07	N: 185348.23 E: 986365.21	NYCDEP CB - SE47
CATCH BASIN - CB-09 - TYPE II	N/A	48" X 42"	G: 13.85	N: 185419.01 E: 986526.45	NYCDEP CB - SE48
CATCH BASIN - CB-10 - TYPE I	N/A	48" X 42"	G: 12.83	N: 185393.76 E: 986351.76	NYCDEP CB - SE47
DMH-01	60" ∅	N/A	R: 6.73	N: 185368.64 E: 986731.03	NYCDEP MH SE-29A - SE-29D
DMH-02	48" ∅	N/A	R: 12.96	N: 185358.38 E: 986349.45	NYCDEP MH SE-28A - SE-28D
DMH-03	48" ∅	N/A	R: 12.91	N: 185353.81 E: 986356.30	NYCDEP MH SE-28A - SE-28D
DMH-05	48" ∅	N/A	R: 13.37	N: 185399.92 E: 986355.73	NYCDEP MH SE-28A - SE-28D
DMH-06	60" ∅	N/A	R: 13.51	N: 185427.57 E: 986303.79	NYCDEP MH SE-29A - SE-29D
DMH-07	60" ∅	N/A	G: 13.34	N: 185430.78 E: 986266.48	NYCDEP MH SE-29A - SE-29D
DMH-08	48" ∅	N/A	R: 12.49	N: 185434.21 E: 986234.33	NYCDEP MH SE-28A - SE-28D
DMH-09	60" ∅	N/A	R: 5.70	N: 185503.27 E: 986114.46	NYCDEP MH SE-29A - SE-29D
DMH-10	48" ∅	N/A	R: 13.32	N: 185425.24 E: 986389.21	NYCDEP MH SE-28A - SE-28D

STORM STRUCTURE SCHEDULE

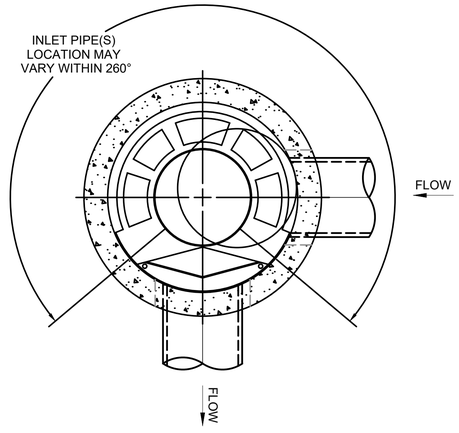
STRUCTURE NAME:	DIAMETER	LENGTH x WIDTH	RIM / GRATE EL:	COORDINATES:	DETAIL
DMH-11	48" ∅	N/A	R: 13.26	N: 185442.76 E: 986305.20	NYCDEP MH SE-28A - SE-28D
DMH-12	48" ∅	N/A	G: 13.62	N: 185453.79 E: 986261.86	NYCDEP MH SE-28A - SE-28D
DMH-13	30" ∅	N/A	G: 8.25	N: 185419.14 E: 986581.65	SEE YARD INLET DETAIL, THIS DWG
DMH-14	48" ∅	N/A	R: 7.75	N: 185240.04 E: 986629.28	NYCDEP MH SE-28A - SE-28D
DMH-15	48" ∅	N/A	R: 9.82	N: 185468.94 E: 986367.09	NYCDEP MH SE-28A - SE-28D
OVERFLOW DMH-01	30" ∅	N/A	G: 13.00	N: 185410.26 E: 986362.35	SEE YARD INLET DETAIL, THIS DWG
OVERFLOW DMH-02	30" ∅	N/A	G: 13.10	N: 185454.23 E: 986254.23	SEE YARD INLET DETAIL, THIS DWG
OVERFLOW DMH-03	30" ∅	N/A	G: 13.00	N: 185457.11 E: 986275.45	SEE YARD INLET DETAIL, THIS DWG
OVERFLOW DMH-04	30" ∅	N/A	G: 12.50	N: 185467.64 E: 986303.92	SEE YARD INLET DETAIL, THIS DWG
OVERFLOW DMH-05	30" ∅	N/A	G: 12.70	N: 185453.25 E: 986395.05	SEE YARD INLET DETAIL, THIS DWG
WTMH-01	48" ∅	N/A	G: 7.42	N: 185385.44 E: 986707.79	SEE HYDRODYNAMIC SEPARATOR DETAIL, THIS DWG
WTMH-02	48" ∅	N/A	R: 8.13	N: 185238.11 E: 986613.86	SEE HYDRODYNAMIC SEPARATOR DETAIL, THIS DWG
WTMH-03	48" ∅	N/A	G: 7.90	N: 185402.10 E: 986645.03	SEE HYDRODYNAMIC SEPARATOR DETAIL, THIS DWG
WTMH-04	48" ∅	N/A	G: 9.68	N: 185493.82 E: 986251.56	SEE HYDRODYNAMIC SEPARATOR DETAIL, THIS DWG
YI-1	12" ∅	N/A	G: 9.92	N: 185515.49 E: 986229.65	SEE YARD INLET DETAIL, THIS DWG
YI-2	6" ∅	N/A	G: 9.25	N: 185489.71 E: 986301.93	SEE YARD INLET DETAIL, THIS DWG
YI-3	6" ∅	N/A	G: 9.25	N: 185482.30 E: 986335.98	SEE YARD INLET DETAIL, THIS DWG
YI-4	6" ∅	N/A	G: 9.00	N: 185457.08 E: 986428.36	SEE YARD INLET DETAIL, THIS DWG
YI-5	6" ∅	N/A	G: 9.00	N: 185464.30 E: 986394.88	SEE YARD INLET DETAIL, THIS DWG
YI-6	6" ∅	N/A	G: 9.00	N: 185437.66 E: 986519.47	SEE YARD INLET DETAIL, THIS DWG

SANITARY STRUCTURE SCHEDULE

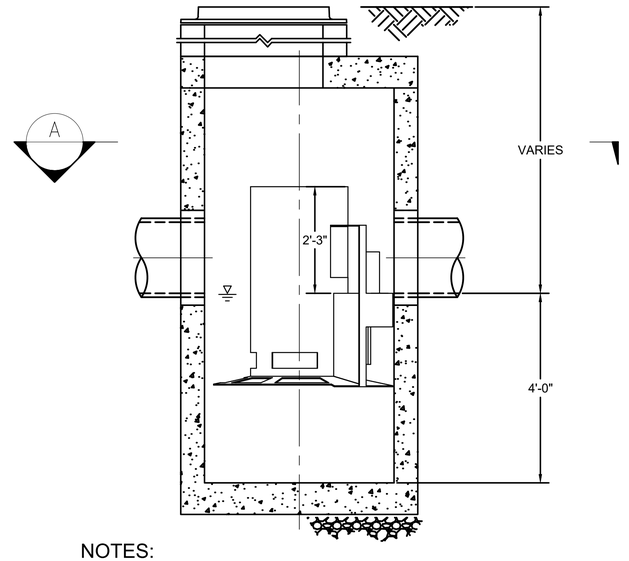
STRUCTURE NAME:	DIAMETER	RIM EL:	COORDINATES:	DETAIL
SMH-01	48" ∅	R: 7.88	N: 185222.63 E: 986597.54	DEP MH SE-28A - SE-28D
SMH-02	48" ∅	R: 13.22	N: 185296.34 E: 986483.25	DEP MH SE-28A - SE-28D
SMH-03	48" ∅	R: 13.56	N: 185333.51 E: 986425.31	DEP MH SE-28A - SE-28D
SMH-04	48" ∅	R: 13.08	N: 185395.68 E: 986328.37	DEP MH SE-28A - SE-28D
SMH-05	48" ∅	R: 14.13	N: 185414.54 E: 986262.67	DEP MH SE-28A - SE-28D

TABLE NOTES:

1. REFER TO NYC DEP SEWER DESIGN STANDARDS FOR DETAILS
2. R = RIM
3. G = GRATE
4. MANHOLES 36" IN DIAMETER AND SMALLER SHALL BE NYLOPLAST DRAIN BASINS AS MANUFACTURED BY ADS, OR APPROVED EQUAL. SEE YARD INLET DETAIL, THIS DWG.



SECTION A-A

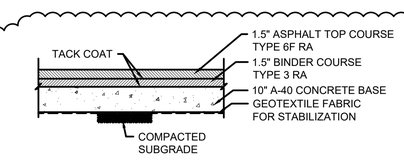


NOTES:

1. THE CASCADE CS-4 ARE DETAILS THAT WERE PROVIDED BY CONTECH ENGINEERING SOLUTIONS.
2. SEE STRUCTURE TABLE, THIS SHEET, MANHOLE DIAMETERS AND COVER TYPE.

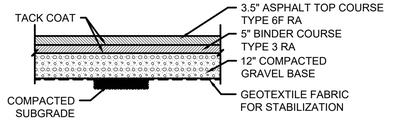
HYDRODYNAMIC SEPARATOR (WTMH-0X)

NTS



ASPHALT PAVEMENT SECTION - NYCDOT ROW

NTS

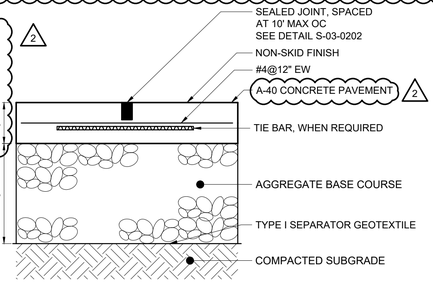


ASPHALT PAVEMENT SECTION - NON-NYCDOT ROW

NTS

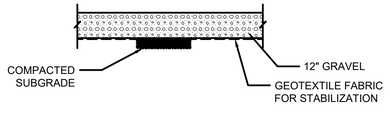
PAVEMENT NOTES:

1. FOR TRENCH RESTORATION, SEE NYCDOT STANDARD DETAIL #H-1042. LIMITS OF TOP COURSE RESTORATION SHALL BE IN ACCORDANCE WITH THE FINAL SITE PLANS C-141.00 THROUGH C-143.00 AND C-330.00.
2. TEMPORARY PAVEMENT FOR TRENCHES SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.



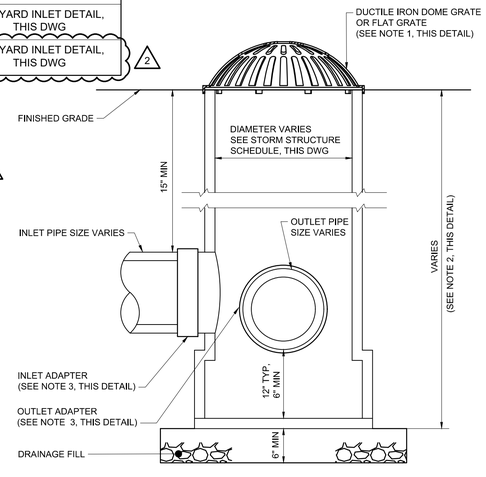
CONCRETE PAVEMENT

NTS



GRAVEL CONSTRUCTION ACCESS ROAD / LAYDOWN AREA

NTS



NOTES:

1. FLAT GRATES SHALL BE PROVIDED WITHIN PAVED LOCATIONS. DOME GRATES SHALL BE PROVIDED WITHIN GRASS AREAS. DOME GRATE SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. DOME GRATES HAVE NO LOAD RATING.
2. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" IN DEPTH.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE.

YARD INLET

NTS

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	ADDENDUM NO. 3	DS
1	10/2026	ADDENDUM NO. 2	DS

DESIGNED BY: J. PERRUZZA | DRAWN BY: J. TANNER | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: D. SHEERAN | DESIGN LEAD: D. SHEERAN | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

STATE OF NEW YORK — MICHAEL JAMES SHEERAN — LICENSED PROFESSIONAL ENGINEER — 088955

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

CIVIL
SITE DETAILS
4 OF 5

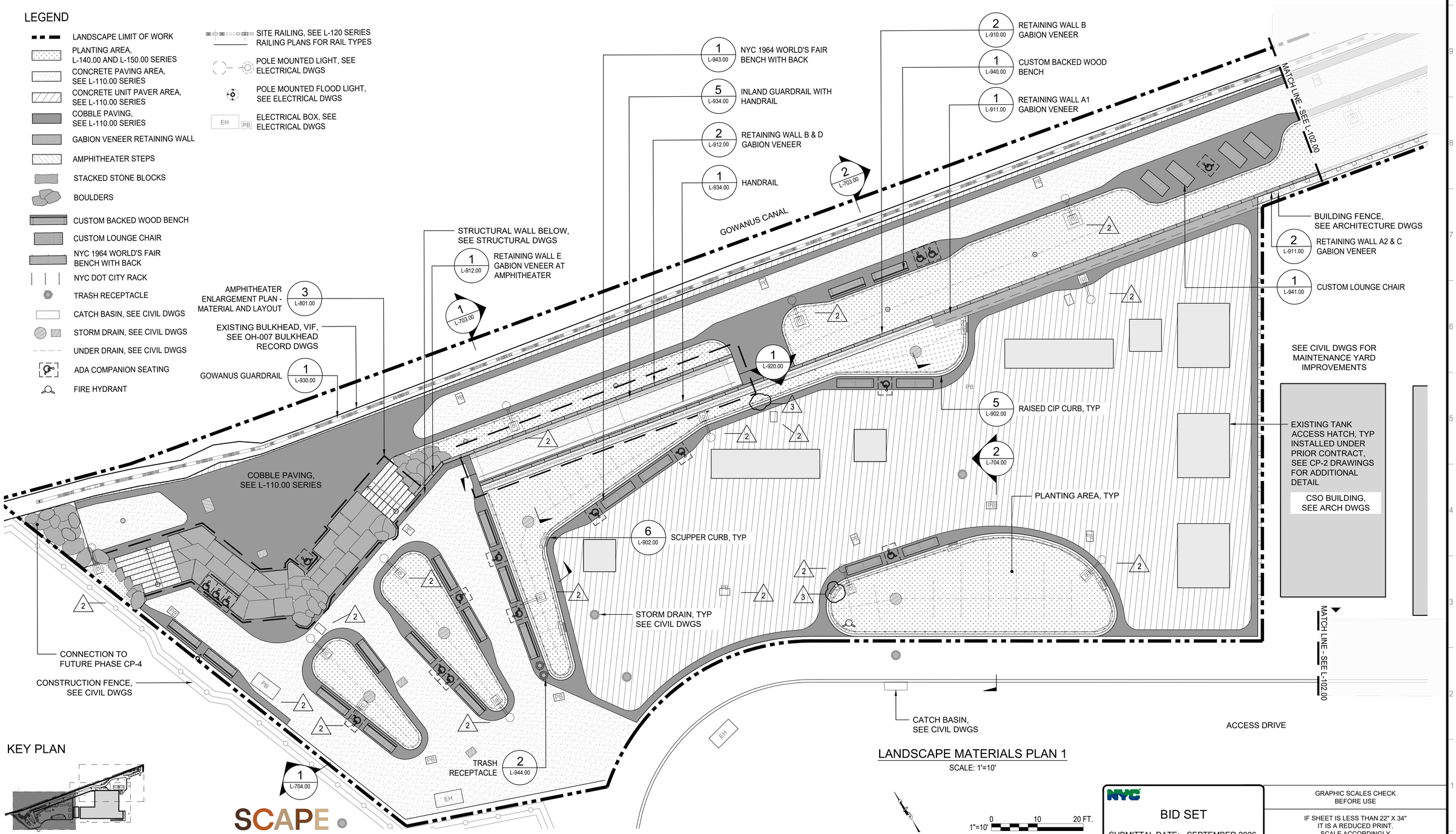
DATE: SEPTEMBER 2026
SHEET NO: 115 OF 723
DRAWING NO. C-904.01

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Last Saved By: Lwallace
Paper Size Printed/Plotted:
Drawing File Name & Drive Location: DWGFILE&DRIVE_LOCATION
Last Date Saved: DATE&TIME_DWG_SAVED
PAPPER_SIZE_PRINTED/PLOTTED
Date & Time Plotted: DATE&TIME_PLOTTED
Plot Scale: PLOT_SCALE
Plot Style Table: PLOT_STYLE_TABLE

LEGEND

- LANDSCAPE LIMIT OF WORK
- PLANTING AREA, L-140.00 AND L-150.00 SERIES
- CONCRETE PAVING AREA, SEE L-110.00 SERIES
- CONCRETE UNIT PAVER AREA, SEE L-110.00 SERIES
- COBBLE PAVING, SEE L-110.00 SERIES
- GABION VENEER RETAINING WALL
- AMPHITHEATER STEPS
- STACKED STONE BLOCKS
- BOULDERS
- CUSTOM BACKED WOOD BENCH
- CUSTOM LOUNGE CHAIR
- NYC 1964 WORLD'S FAIR BENCH WITH BACK
- NYC DOT CITY RACK
- TRASH RECEPTACLE
- CATCH BASIN, SEE CIVIL DWGS
- STORM DRAIN, SEE CIVIL DWGS
- UNDER DRAIN, SEE CIVIL DWGS
- ADA COMPANION SEATING
- FIRE HYDRANT
- SITE RAILING, SEE L-120 SERIES RAILING PLANS FOR RAIL TYPES
- POLE MOUNTED LIGHT, SEE ELECTRICAL DWGS
- POLE MOUNTED FLOOD LIGHT, SEE ELECTRICAL DWGS
- EH PB ELECTRICAL BOX, SEE ELECTRICAL DWGS



KEY PLAN

LANDSCAPE MATERIALS PLAN 1

SCALE: 1"=10'

1"=10' 0 10 20 FT.

NYC BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No. 3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen and Brown and Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE MATERIALS PLAN 1

DATE: SEPTEMBER 2026

SHEET NO: 136 OF 719

DRAWING NO. L-101.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\Wise\Landscape\CP-03303_PLTIL-101.00 MATERIALS PLAN 1.dwg
Last Date Saved: 11/11/2026 8:02 PM
Date & Time Plotted: 11/11/2026 8:49 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

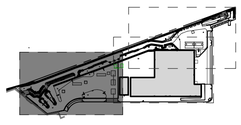
LEGEND

- LIMIT OF WORK
- STRUCTURE UNDERNEATH, SEE CIVIL
- PLANTING AREA, L-150.00 AND L-160.00 SERIES
- GRANITE PAVERS, TYP
- GRANITE PAVERS ON CONCRETE
- GRANITE PAVERS ON STRUCTURE
- GRANITE PAVERS ON STRUCTURAL WALL
- CONCRETE UNIT PAVERS, TYP
- CONCRETE UNIT PAVERS ON STRUCTURE
- CONCRETE UNIT PAVERS ON PAVER TRAYS
- CONCRETE PAVING
- CONCRETE PAVING ON STRUCTURE
- CONCRETE AT BULKHEAD
- STONE BLOCKS
- BOULDERS
- 8 / L-903.00 — PAVER EDGE RESTRAINT
- 7 / L-903.00 — PATH METAL EDGING
- 3 / L-902.00 — LANDSCAPE MAINTENANCE EDGING

NOTE:
FURNISH PAVING MATERIALS UP TO THE CLOSEST JOINT AND COORDINATE PAVING TRANSITION WITH FUTURE PHASE DEVELOPMENT WITH LANDSCAPE ARCHITECT.

PATH METAL EDGING 7 / L-903.00
GRANITE PAVERS 6 / L-901.00
CONCRETE PAVING 1 / L-901.00
CUSTOM LOUNGE CHAIR 1 / L-941.00
CONCRETE UNIT PAVERS 3 / L-901.00
GRANITE PAVERS ON CONCRETE 7 / L-901.00
PLANTING AREA, TYP
MATCH LINE - SEE L-112.00
PEDESTRIAN RAMP WITH HANDRAIL ENLARGEMENT PLAN 2 / L-920.00
GRANITE PAVERS ON CONCRETE AT BULKHEAD, WIDTH VARIES, SEE LAYOUT PLANS AND SPECIFICATIONS FOR PIGMENT DETAILS 8 / L-904.00
PAVER EDGE RESTRAINT 8 / L-903.00
GRANITE PAVERS ON STRUCTURAL WALL 7 / L-904.00
AMPHITHEATER STEPS, SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION
AMPHITHEATER ENLARGEMENT PLAN - MATERIAL AND LAYOUT 3 / L-801.00
5 / L-901.00 — CONCRETE UNIT PAVER AT GATE SECURITY LOOP
SEE CIVIL DWGS FOR MAINTENANCE YARD IMPROVEMENTS
6 / L-903.00 — ARCHITECTURE SLAB TO GRANITE PAVERS ON CONCRETE TO CONCRETE UNIT PAVERS
4 / L-904.00 — CONCRETE UNIT PAVERS AT ACCESS HATCHES AND UTILITY BOXES
CSO BUILDING, SEE ARCH DWGS
EXISTING TANK ACCESS HATCH, TYP INSTALLED UNDER PRIOR CONTRACT, SEE CP-2 DRAWINGS FOR ADDITIONAL DETAIL
2 / L-903.00 — GRANITE PAVERS ON CONCRETE TO CONCRETE PAVING
6 / L-902.00 — SCUPPER CURB, TYP
4 / L-902.00 — FLUSH CIP CURB, TYP
7 / L-902.00 — CONCRETE UNIT PAVERS ON PAVER GRATE
MATCH LINE - SEE L-112.00
CONCRETE SIDEWALK, SEE CIVIL DRAWINGS
CONNECTION TO FUTURE PHASE CP-4
GRANITE PAVERS TO CONCRETE PAVING 1 / L-903.00
4 / L-903.00 — CONCRETE PAVING TO GRANITE PAVERS ON CONCRETE TO CONCRETE UNIT PAVERS
3 / L-903.00 — GRANITE PAVERS TO GRANITE PAVERS ON CONCRETE

KEY PLAN



SCAPE

PAVING CONDITIONS PLAN 1

SCALE: 1'=10'

1"=10' 0 10 20 FT.

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING CONDITIONS PLAN 1

DATE: SEPTEMBER 2026
SHEET NO: 139 OF 719
DRAWING NO. L-111.00

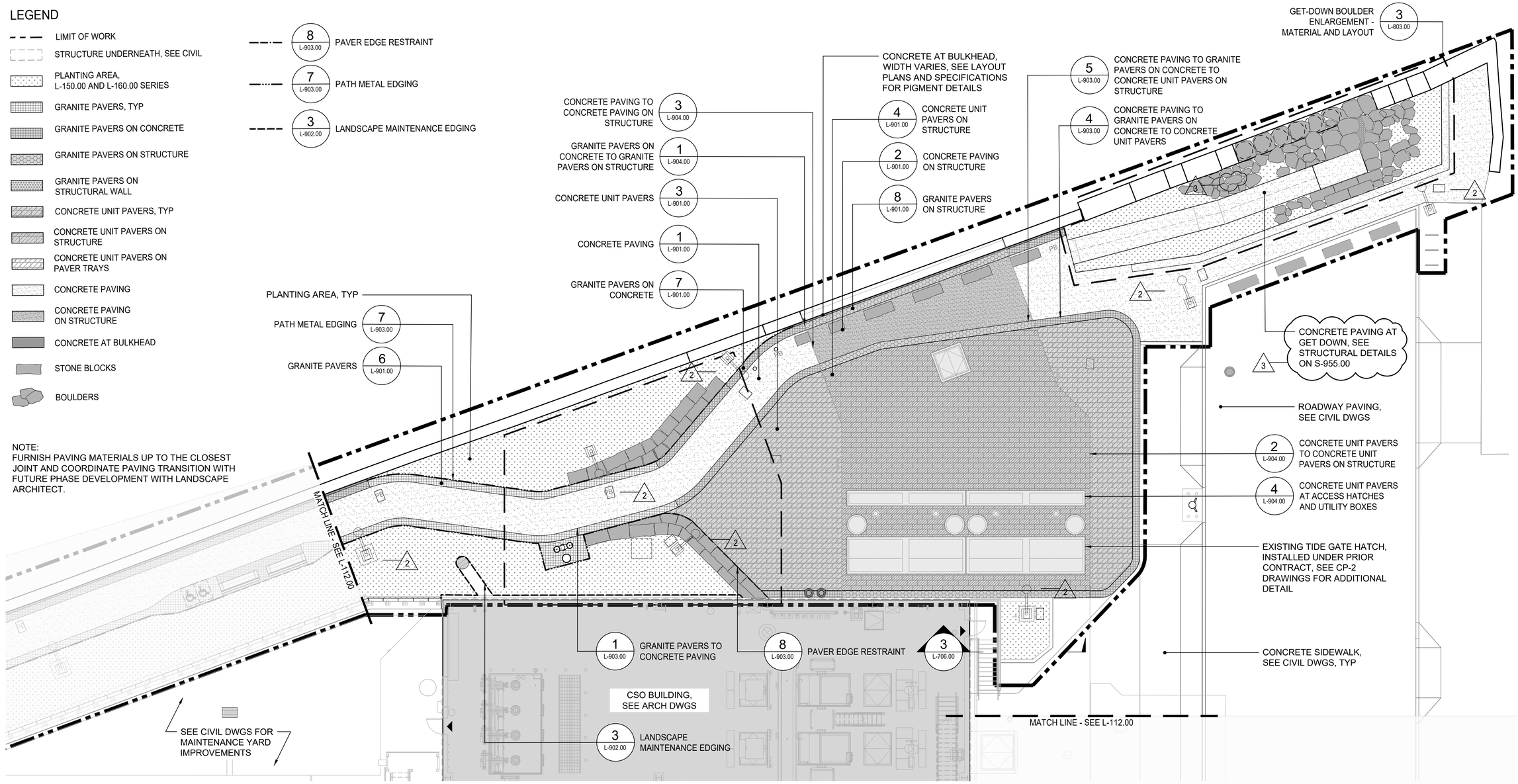
Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscape\CP-03303_PLTIL-111.00 PAVING CONDITIONS PLAN 1.dwg
Last Date Saved: 11/11/2026 8:10 PM
Date & Time Plotted: 11/11/2026 8:51 PM
Plot Scale: 1.0'=1.0'
Plot Style Table: BEDC_Acad_2021.ctb

LEGEND

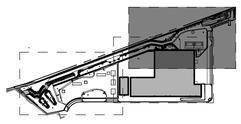
- LIMIT OF WORK
- STRUCTURE UNDERNEATH, SEE CIVIL
- PLANTING AREA, L-150.00 AND L-160.00 SERIES
- GRANITE PAVERS, TYP
- GRANITE PAVERS ON CONCRETE
- GRANITE PAVERS ON STRUCTURE
- GRANITE PAVERS ON STRUCTURAL WALL
- CONCRETE UNIT PAVERS, TYP
- CONCRETE UNIT PAVERS ON STRUCTURE
- CONCRETE UNIT PAVERS ON PAVER TRAYS
- CONCRETE PAVING
- CONCRETE PAVING ON STRUCTURE
- CONCRETE AT BULKHEAD
- STONE BLOCKS
- BOULDERS

- 8 / L-903.00 — PAVER EDGE RESTRAINT
- 7 / L-903.00 — PATH METAL EDGING
- 3 / L-902.00 — LANDSCAPE MAINTENANCE EDGING

NOTE:
FURNISH PAVING MATERIALS UP TO THE CLOSEST JOINT AND COORDINATE PAVING TRANSITION WITH FUTURE PHASE DEVELOPMENT WITH LANDSCAPE ARCHITECT.



KEY PLAN



SCAPE

PAVING CONDITIONS PLAN 3

SCALE: 1"=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	Addendum No.3	JD
3	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING CONDITIONS PLAN 3

DATE: SEPTEMBER 2026
SHEET NO: 141 OF 719
DRAWING NO. L-113.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscape\CP-03\03_PLTIL-113.00 PAVING CONDITIONS PLAN 3.dwg
Last Date Saved: 11/11/2026 8:22 PM
Date & Time Plotted: 11/11/2026 8:52 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS
- BUILDING ENTRANCE
- ALIGN — ALIGN INDICATED FEATURES
- CENTERLINE
- RX" — CATCH BASIN, SEE CIVIL DWGS
- PLANTING AREA, SEE L-140.00 AND L-150.00 SERIES
- STACKED STONE BLOCKS, SEE LANDSCAPE MATERIALS PLANS
- BOULDERS
- STORM DRAIN, SEE CIVIL DWGS

PAVING LAYOUT			PI 263	185471.85'	986372.71'
NUMBER	NORTHINGS	EASTINGS	PI 264	185475.22'	986379.89'
PI 227	185488.12'	986295.18'	PI 265	185472.85'	986384.48'
PI 228	185468.30'	986249.53'	PI 266	185472.40'	986385.71'
PI 229	185463.17'	986246.88'	PI 267	185466.85'	986411.22'
PI 230	185440.96'	986254.48'	PI 268	185466.74'	986412.52'
PI 231	185441.60'	986259.34'	PI 269	185466.94'	986416.70'
PI 232	185465.58'	986257.23'	PI 270	185466.83'	986418.00'
PI 233	185469.06'	986252.11'	PI 271	185459.77'	986450.45'
PI 234	185474.79'	986271.39'	PI 272	185456.41'	986454.15'
PI 235	185470.21'	986268.60'	PI 273	185454.89'	986454.63'
PI 236	185438.23'	986274.68'	PI 274	185451.53'	986458.33'
PI 237	185438.60'	986279.63'	PI 275	185446.52'	986481.34'
PI 238	185472.17'	986281.23'	PI 276	185448.04'	986486.10'
PI 239	185476.19'	986276.09'	PI 277	185449.22'	986487.17'
PI 240	185478.32'	986299.09'	PI 278	185450.74'	986491.93'
PI 241	185438.00'	986289.98'	PI 334	185526.95'	986211.67'
PI 242	185436.34'	986295.91'	PI 335	185498.12'	986224.66'
PI 243	185459.29'	986303.54'	PI 336	185497.38'	986222.51'
PI 244	185462.71'	986308.05'	PI 337	185427.48'	986246.40'
PI 245	185464.43'	986346.11'	PI 338	185411.22'	986287.58'
PI 246	185464.21'	986348.69'	PI 352	185460.93'	986304.45'
PI 247	185458.06'	986376.90'	PI 353	185462.17'	986306.01'
PI 248	185457.39'	986378.54'			
PI 249	185446.56'	986395.43'			
PI 250	185448.82'	986405.79'	PI 356	185450.72'	986407.01'
PI 251	185453.73'	986408.94'	PI 357	185452.41'	986408.09'
PI 252	185413.39'	986381.14'	PI 358	185419.09'	986350.79'
PI 253	185408.51'	986391.49'	PI 359	185419.85'	986352.63'
PI 254	185389.82'	986402.83'	PI 360	185414.08'	986378.41'
PI 255	185382.64'	986401.76'	PI 361	185413.59'	986380.35'
PI 256	185380.05'	986394.33'	PI 362	185387.75'	986402.79'
PI 257	185408.05'	986350.65'	PI 363	185442.98'	986298.11'
PI 258	185419.83'	986355.75'	PI 364	185444.88'	986298.75'
PI 259	185495.34'	986287.06'			
PI 260	185479.99'	986357.58'			
PI 261	185474.49'	986360.98'			
PI 262	185467.40'	986359.44'			

PI 542	185485.89'	986300.73'
PI 543	185480.44'	986299.55'
PI 544	185481.14'	986327.29'
PI 545	185475.03'	986325.96'
PI 546	185479.58'	986334.46'
PI 547	185473.47'	986333.13'

GRANITE PAVER BAND LAYOUT			PI 430	185453.88'	986490.12'	PI 490	185469.94'	986267.19'	PI 512	185461.38'	986341.99'	PI 530	185422.39'	986357.25'
NUMBER	NORTHINGS	EASTINGS	PI 466	185495.49'	986234.32'	PI 491	185467.89'	986267.58'	PI 513	185461.61'	986343.27'	PI 531	185417.93'	986347.55'
PI 401	185523.04'	986222.53'	PI 467	185480.11'	986239.57'	PI 492	185466.59'	986267.65'	PI 514	185462.57'	986346.30'	PI 532	185416.04'	986340.68'
PI 402	185521.71'	986226.80'	PI 468	185473.76'	986251.89'	PI 493	185462.44'	986267.34'	PI 515	185462.69'	986348.88'	PI 539	185459.27'	986237.05'
PI 403	185516.79'	986239.18'	PI 469	185486.64'	986295.23'	PI 494	185461.14'	986267.42'	PI 516	185457.58'	986372.36'	PI 540	185458.81'	986235.69'
PI 404	185516.01'	986239.93'	PI 470	185485.77'	986299.24'	PI 495	185438.70'	986271.68'	PI 517	185456.91'	986374.00'	PI 541	185447.75'	986406.81'
PI 405	185509.88'	986242.02'	PI 471	185481.68'	986298.35'	PI 496	185435.32'	986279.11'	PI 518	185444.73'	986393.00'	PI 548	185448.24'	986427.01'
PI 406	185507.79'	986240.06'	PI 472	185480.43'	986297.89'	PI 497	185438.53'	986281.06'	PI 519	185449.19'	986407.73'	PI 549	185447.77'	986428.30'
PI 407	185513.30'	986219.79'	PI 473	185476.81'	986296.00'	PI 498	185444.18'	986281.33'	PI 520	185451.38'	986413.01'	PI 550	185445.96'	986431.70'
PI 408	185524.42'	986222.91'	PI 474	185475.59'	986295.55'	PI 499	185445.47'	986281.57'	PI 521	185439.36'	986468.23'	PI 551	185445.49'	986432.99'
PI 409	185523.06'	986227.28'	PI 475	185440.08'	986287.52'	PI 500	185449.43'	986282.83'	PI 522	185434.81'	986470.12'	PI 552	185445.05'	986435.02'
PI 410	185515.55'	986246.20'	PI 476	185436.22'	986288.23'	PI 501	185450.71'	986283.06'	PI 523	185365.35'	986425.60'	PI 553	185444.95'	986436.38'
PI 411	185511.12'	986262.67'	PI 477	185418.07'	986300.24'	PI 502	185471.74'	986284.07'	PI 524	185364.43'	986421.37'	PI 554	185445.18'	986440.23'
PI 412	185502.63'	986301.14'	PI 478	185469.44'	986248.32'	PI 503	185477.77'	986276.36'	PI 525	185376.03'	986403.26'	PI 555	185445.07'	986441.59'
PI 413	185495.09'	986294.94'	PI 479	185461.75'	986244.35'	PI 504	185420.55'	986303.28'	PI 526	185379.86'	986402.17'			
PI 414	185498.96'	986294.79'	PI 480	185441.10'	986251.41'	PI 505	185422.02'	986299.35'	PI 527	185393.23'	986403.88'			
PI 415	185500.66'	986300.51'	PI 481	185438.80'	986259.24'	PI 506	185426.72'	986296.24'	PI 528	185408.66'	986393.63'			
PI 416	185500.70'	986303.41'	PI 482	185442.23'	986260.72'	PI 507	185431.05'	986295.67'	PI 529	185417.70'	986375.74'			
PI 417	185481.95'	986355.30'	PI 483	185450.62'	986259.99'	PI 508	185458.84'	986304.90'						
PI 418	185481.84'	986356.60'	PI 484	185451.92'	986260.04'	PI 509	185461.30'	986308.67'						
PI 419	185482.04'	986360.72'	PI 485	185456.02'	986260.76'	PI 510	185460.29'	986314.03'						
PI 420	185481.93'	986362.03'	PI 486	185457.32'	986260.82'	PI 511	185460.18'	986315.33'						
PI 421	185471.09'	986411.85'	PI 487	185465.43'	986260.10'									
PI 422	185470.65'	986413.07'	PI 488	185470.66'	986252.41'									
PI 423	185468.75'	986416.74'	PI 489	185476.17'	986270.98'									
PI 424	185468.31'	986417.97'												
PI 425	185461.78'	986447.95'												
PI 426	185461.68'	986449.25'												
PI 427	185461.87'	986453.43'												
PI 428	185461.76'	986454.71'												
PI 429	185454.32'	986488.89'												

GOWANUS CANAL

REFER TO SECTIONS FOR PATHWAY DIMENSIONS

BULKHEAD AND PILE CAP; SEE OH-007 BULKHEAD RECORD DWGS

MATCH LINE - SEE L-132.00

PARALLEL TO SEA WALL

EDGE OF GRANITE PAVER BAND

EDGE OF CONCRETE BAND

EXISTING TANK ACCESS HATCH, TYP INSTALLED UNDER PRIOR CONTRACT, SEE CP-2 DRAWINGS FOR ADDITIONAL DETAIL

CONNECTION TO FUTURE PHASE CP-4

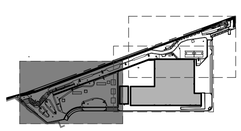
AMPHITHEATER ENLARGEMENT PLAN - MATERIAL AND LAYOUT — 3 / L-801.00

CONSTRUCTION FENCE

ALL LAYOUT COORDINATES SHALL BE IN ACCORDANCE WITH LAYOUT NOTES AS OUTLINED ON L-001.00 GENERAL NOTES

REFER TO CIVIL DWGS FOR SIDEWALK AND ROADWAY LAYOUT

KEY PLAN



SCAPE

LANDSCAPE LAYOUT PLAN 1

SCALE: 1"=10'

1"=10' — 0 — 10 — 20 FT.

NYC

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen and Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT — JOHN DONNELLY — 2368-1 — STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE LAYOUT PLAN 1

DATE: SEPTEMBER 2026

SHEET NO: 144 OF 719

DRAWING NO. L-121.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\IDC\ACDDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\Wise\Landscape\CP-03303_PLTL-121.00 LAYOUT PLAN 1.dwg
Last Date Saved: 11/11/2026 8:23 PM
Date & Time Plotted: 11/11/2026 8:54 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

LEGEND

- PAVING ZONE BOUNDARY
- PAVING ZONE 01 COLOR MIX (Z1)
  - 75% CONCRETE UNIT PAVER A
  - 25% CONCRETE UNIT PAVER B
  - 00% CONCRETE UNIT PAVER C
- PAVING ZONE 02 COLOR MIX (Z2)
  - 28% CONCRETE UNIT PAVER A
  - 50% CONCRETE UNIT PAVER B
  - 22% CONCRETE UNIT PAVER C
- PAVING ZONE 03 COLOR MIX (Z3)
  - 00% CONCRETE UNIT PAVER A
  - 30% CONCRETE UNIT PAVER B
  - 70% CONCRETE UNIT PAVER C
- STORM DRAIN, SEE CIVIL DWGS
- SITE RAILING, SEE L-120 SERIES RAILING PLANS FOR RAIL TYPES
- EXPOSED AGGREGATE CONCRETE
- PT POINT OF TANGENCY
- PI POINT OF INTERSECTION NUMBER
- R XXX' RADIUS
- CONCRETE ISOLATION JOINT (1 / L-902.00)
- CONCRETE SAW CUT JOINT (2 / L-902.00)

CONCRETE PAVER LAYOUT			PI 28	185409.60'	986453.96'	PI 58	185426.50'	986395.10'
NUMBER	NORTHINGS	EASTINGS	PI 29	185402.34'	986449.31'	PI 59	185435.82'	986391.34'
PI 1	185432.58'	986296.17'	PI 30	185403.01'	986445.83'	PI 60	185431.85'	986402.00'
PI 2	185436.40'	986312.61'	PI 32	185416.25'	986428.27'	PI 61	185429.41'	986421.48'
PI 3	185436.19'	986334.84'	PI 33	185410.91'	986415.37'	PI 62	185428.57'	986426.89'
PI 4	185442.92'	986339.13'	PI 34	185389.81'	986422.31'	PI 63	185430.18'	986431.46'
PI 5	185451.49'	986327.68'	PI 35	185380.64'	986415.10'	PI 64	185442.37'	986425.63'
PI 6	185460.52'	986322.89'	PI 36	185373.28'	986407.56'	PI 65	185439.81'	986421.09'
PI 7	185422.03'	986310.81'	PI 37	185436.69'	986297.54'	PI 66	185437.45'	986413.03'
PI 8	185431.38'	986325.82'	PI 38	185441.23'	986305.87'	PI 67	185440.46'	986394.97'
PI 9	185429.65'	986335.04'	PI 39	185444.87'	986317.90'	PI 68	185444.96'	986392.64'
PI 10	185431.98'	986348.75'	PI 40	185439.15'	986334.40'	PI 69	185441.39'	986410.53'
PI 11	185431.87'	986359.38'	PI 41	185442.71'	986336.13'	PI 70	185443.05'	986416.03'
PI 12	185419.67'	986367.96'	PI 42	185452.35'	986321.51'	PI 71	185448.83'	986424.30'
PI 13	185417.17'	986377.66'	PI 43	185460.25'	986314.27'	PI 72	185432.46'	986468.61'
PI 14	185431.69'	986378.29'	PI 44	185421.22'	986327.05'	PI 73	185429.96'	986452.88'
PI 15	185439.35'	986359.64'	PI 45	185427.46'	986331.95'	PI 74	185421.40'	986445.84'
PI 16	185443.73'	986352.57'	PI 46	185426.97'	986347.38'	PI 75	185416.19'	986446.92'
PI 17	185449.76'	986340.04'	PI 47	185420.74'	986363.76'	PI 76	185413.04'	986456.17'
PI 18	185461.46'	986342.80'	PI 48	185442.56'	986363.37'	PI 77	185398.56'	986446.88'
PI 19	185377.99'	986401.96'	PI 49	185435.57'	986371.29'	PI 78	185399.84'	986442.11'
PI 20	185413.37'	986408.11'	PI 50	185440.45'	986381.25'	PI 79	185409.06'	986428.55'
PI 21	185424.52'	986423.32'	PI 51	185455.67'	986370.08'	PI 80	185404.58'	986420.81'
PI 22	185426.57'	986436.80'	PI 52	185457.72'	986348.67'	PI 81	185385.90'	986427.05'
PI 23	185433.21'	986439.41'	PI 53	185424.08'	986390.47'	PI 82	185375.45'	986420.65'
PI 24	185444.95'	986436.38'	PI 54	185419.45'	986388.50'	PI 83	185370.18'	986412.40'
PI 25	185443.12'	986450.57'	PI 55	185413.55'	986390.54'			
PI 26	185424.49'	986441.66'	PI 56	185405.59'	986401.80'			
PI 27	185411.81'	986444.00'	PI 57	185406.88'	986406.52'			

2 / L-920.00 PEDESTRIAN RAMP WITH HANDRAIL ENLARGEMENT PLAN

AMPHITHEATER COBBLE ENLARGEMENT PLAN 1 / L-804.00

3 / L-804.00 COBBLE PAVING CORNER ENLARGEMENT DETAIL

2 / L-804.00 COBBLE PAVING ENLARGEMENT DETAIL

FURNISHING, ABOVE ANCHOR BOLT, TYP

SEE CIVIL DWGS FOR MAINTENANCE YARD IMPROVEMENTS

4 / L-904.00 CONCRETE UNIT PAVERS AT ACCESS HATCHES AND UTILITY BOXES

7 / L-902.00 CONCRETE UNIT PAVERS ON PAVER GRATE

5 / L-904.00 CONCRETE UNIT PAVERS AT MANHOLE, TYP

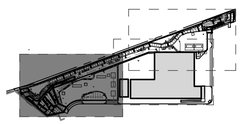
CONNECTION TO FUTURE PHASE CP-4

MATCH LINE - SEE L-115.00

MATCH LINE - SEE L-115.00

PI CORNER OF SIDEWALK

KEY PLAN



PAVING FINISHES PLAN 1

SCALE: 1"=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING FIELD LAYOUT PLAN 1

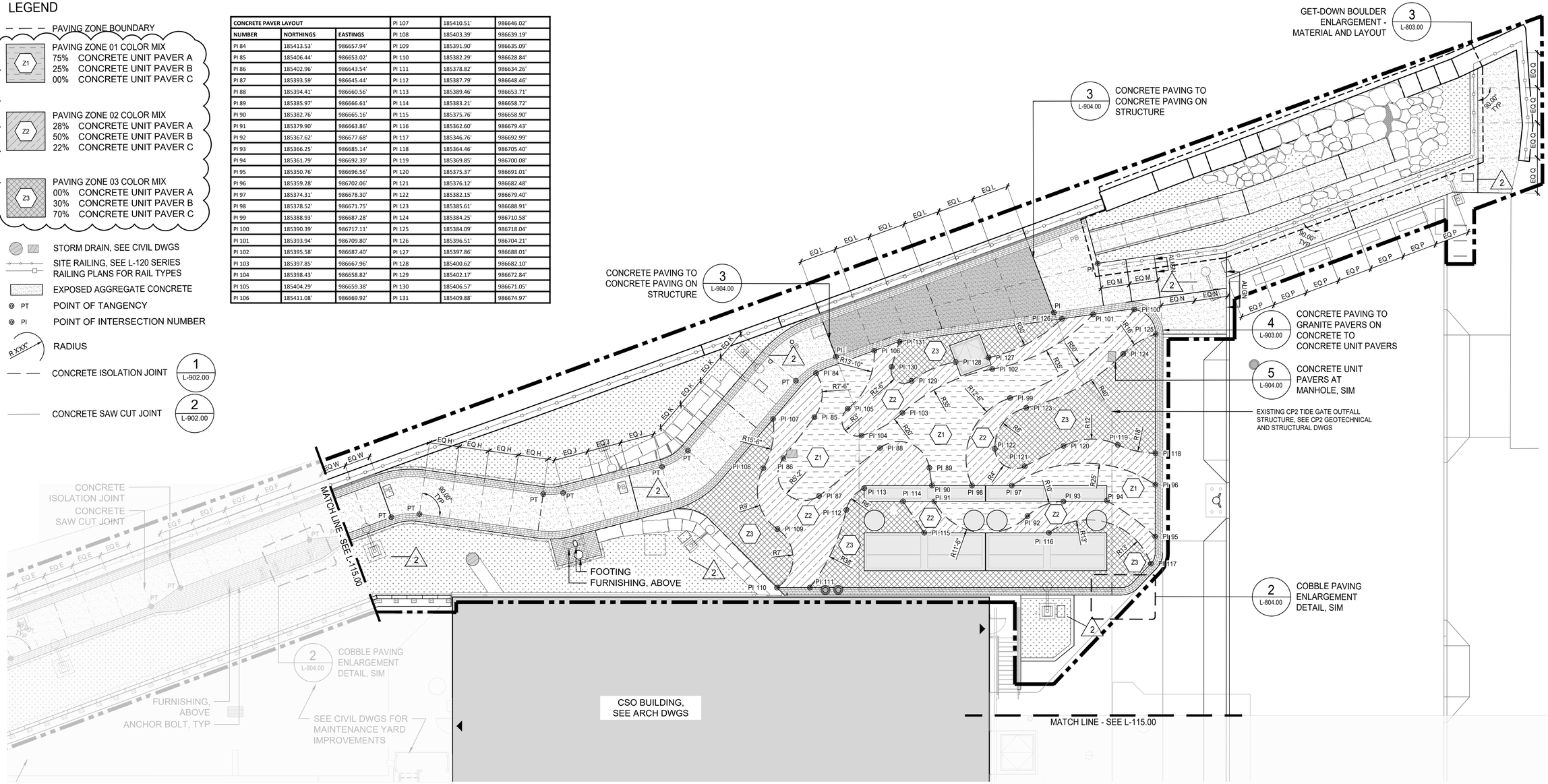
DATE: SEPTEMBER 2026
SHEET NO: 147 OF 719
DRAWING NO. L-124.00

Last Saved By: Sylvia
Last Date Saved: 11/11/2026 8:38 PM
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\02_PLT\L-124.00 PAVING FIELD LAYOUT PLAN 1.dwg
Date & Time Plotted: 11/11/2026 8:56 PM
Plot Style Table: BEDC Acad_2021.ctb
Plot Scale: 1:1

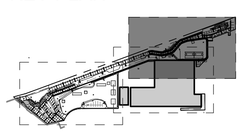
LEGEND

- PAVING ZONE BOUNDARY
- 3 — PAVING ZONE 01 COLOR MIX (Z1)
  - 75% CONCRETE UNIT PAVER A
  - 25% CONCRETE UNIT PAVER B
  - 00% CONCRETE UNIT PAVER C
- PAVING ZONE 02 COLOR MIX (Z2)
  - 28% CONCRETE UNIT PAVER A
  - 50% CONCRETE UNIT PAVER B
  - 22% CONCRETE UNIT PAVER C
- PAVING ZONE 03 COLOR MIX (Z3)
  - 00% CONCRETE UNIT PAVER A
  - 30% CONCRETE UNIT PAVER B
  - 70% CONCRETE UNIT PAVER C
- STORM DRAIN, SEE CIVIL DWGS
- SITE RAILING, SEE L-120 SERIES RAILING PLANS FOR RAIL TYPES
- EXPOSED AGGREGATE CONCRETE
- PT — POINT OF TANGENCY
- PI — POINT OF INTERSECTION NUMBER
- R XXX" — RADIUS
- CONCRETE ISOLATION JOINT — 1 / L-902.00
- CONCRETE SAW CUT JOINT — 2 / L-902.00

CONCRETE PAVER LAYOUT			PI 107	185410.51'	986646.02'
NUMBER	NORTHINGS	EASTINGS	PI 108	185403.39'	986639.19'
PI 84	185413.53'	986657.94'	PI 109	185391.90'	986635.09'
PI 85	185406.44'	986653.02'	PI 110	185382.29'	986628.84'
PI 86	185402.96'	986643.54'	PI 111	185378.82'	986634.26'
PI 87	185393.59'	986645.44'	PI 112	185387.79'	986648.46'
PI 88	185394.41'	986660.56'	PI 113	185389.46'	986653.71'
PI 89	185385.97'	986666.61'	PI 114	185383.21'	986658.72'
PI 90	185382.76'	986665.16'	PI 115	185375.76'	986658.90'
PI 91	185379.90'	986663.86'	PI 116	185362.60'	986679.43'
PI 92	185367.62'	986677.68'	PI 117	185346.76'	986692.99'
PI 93	185366.25'	986685.14'	PI 118	185364.46'	986705.40'
PI 94	185361.79'	986692.39'	PI 119	185369.85'	986700.08'
PI 95	185350.76'	986696.56'	PI 120	185375.37'	986691.01'
PI 96	185359.28'	986702.06'	PI 121	185376.12'	986682.48'
PI 97	185374.31'	986678.30'	PI 122	185382.15'	986679.40'
PI 98	185378.52'	986671.75'	PI 123	185385.61'	986688.91'
PI 99	185388.93'	986687.28'	PI 124	185384.25'	986710.58'
PI 100	185390.39'	986717.11'	PI 125	185384.09'	986718.04'
PI 101	185393.94'	986709.80'	PI 126	185396.51'	986704.21'
PI 102	185395.58'	986687.40'	PI 127	185397.86'	986688.01'
PI 103	185397.85'	986667.96'	PI 128	185400.62'	986682.10'
PI 104	185398.43'	986658.82'	PI 129	185402.17'	986672.84'
PI 105	185404.29'	986659.38'	PI 130	185406.57'	986671.05'
PI 106	185411.08'	986669.92'	PI 131	185409.88'	986674.97'



KEY PLAN



PAVING FINISHES PLAN 3

SCALE: 1"=10'

1"=10' 0 10 20 FT.

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING FIELD LAYOUT PLAN 3

DATE: SEPTEMBER 2026
SHEET NO: 149 OF 719
DRAWING NO. L-126.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03\03_PLT\L-126.00 PAVING FIELD LAYOUT PLAN 3.dwg
Last Date Saved: 11/11/2026 8:42 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1
Date & Time Plotted: 11/11/2026 8:58 PM

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- RAIL TYPE 1: GOWANUS GUARDRAIL (A POST, V POST)
- RAIL TYPE 2A: INLAND GUARDRAIL
- RAIL TYPE 2B: INLAND HANDRAIL
- RAIL TYPE 3: PLANT RAIL
- BUILDING ENTRANCE
- ALIGN — ALIGN INDICATED FEATURES
- ℄ — CENTERLINE
- STORM DRAIN, SEE CIVIL DWGS

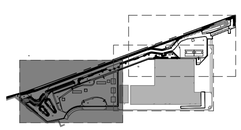
NOTE:
SEE L-930.00 - L936.00 RAILING DETAILS FOR TYPICAL LENGTHS UNLESS OTHERWISE NOTED.

FURNISHINGS LAYOUT

NUMBER	NORTHINGS	EASTINGS
PI 601	185491.49'	986227.19'
PI 602	185483.26'	986227.86'
PI 603	185482.03'	986230.43'
PI 604	185473.80'	986231.09'
PI 605	185461.17'	986244.88'
PI 606	185454.27'	986249.40'
PI 607	185449.53'	986251.02'
PI 608	185441.31'	986251.69'
PI 609	185457.45'	986258.45'
PI 610	185465.60'	986259.77'
PI 611	185460.86'	986267.80'
PI 612	185453.38'	986271.29'
PI 613	185446.02'	986272.69'
PI 614	185437.78'	986272.19'
PI 615	185451.08'	986282.77'
PI 616	185459.16'	986281.11'
PI 617	185464.15'	986281.35'
PI 618	185472.04'	986283.77'
PI 619	185475.19'	986295.77'
PI 620	185466.93'	986296.00'
PI 621	185462.06'	986294.90'
PI 622	185454.70'	986291.15'
PI 623	185449.38'	986292.03'
PI 624	185442.02'	986288.29'
PI 625	185439.85'	986289.15'
PI 626	185437.64'	986288.75'
PI 627	185460.87'	986319.65'
PI 628	185463.09'	986327.56'
PI 629	185463.18'	986329.55'
PI 630	185461.68'	986337.63'
PI 631	185455.97'	986376.38'
PI 632	185453.21'	986384.12'
PI 633	185450.51'	986388.33'
PI 634	185444.63'	986394.06'
PI 635	185422.00'	986356.77'
PI 636	185418.23'	986364.06'
PI 637	185417.01'	986368.91'
PI 638	185416.84'	986377.12'
PI 639	185474.87'	986386.26'
PI 640	185471.17'	986393.65'
PI 641	185470.76'	986395.60'
PI 642	185471.06'	986403.85'
PI 643	185458.56'	986456.67'
PI 644	185453.46'	986460.96'
PI 645	185457.30'	986462.37'
PI 646	185452.19'	986466.66'
PI 647	185454.65'	986474.28'
PI 648	185449.55'	986478.57'
PI 649	185453.39'	986479.98'
PI 650	185448.28'	986484.27'
PT 685	185466.74'	986477.30'
PT 686	185512.89'	986264.03'
PT 687	185525.62'	986228.15'
PT 688	185529.37'	986216.04'
PT 695	185510.73'	986218.74'
PT 696	185508.29'	986220.16'
PT 697	185467.87'	986250.24'
PT 698	185466.45'	986252.68'
PT 699	185454.09'	986250.77'
PT 700	185452.88'	986253.32'
PT 701	185439.55'	986276.04'
PT 702	185437.75'	986278.22'
PT 703	185473.93'	986273.14'
PT 704	185472.51'	986275.59'
PT 705	185453.46'	986296.61'
PT 706	185451.09'	986298.15'
PT 707	185487.98'	986311.74'
PT 708	185485.61'	986313.29'
PT 709	185474.60'	986375.96'
PT 710	185470.46'	986378.67'
PT 711	185460.22'	986438.74'
PT 712	185457.85'	986440.29'
PT 727	185448.10'	986433.59'
PT 728	185445.73'	986435.13'
PT 729	185393.35'	986400.80'
PT 730	185390.96'	986399.29'
PT 731	185418.52'	986354.40'
PT 732	185416.15'	986355.95'
PT 733	185467.52'	986347.64'
PT 734	185465.15'	986349.18'

GUARDRAIL CORNER TRUSS — 1 / L-931.00
PLANT RAIL — 1 / L-936.00
PLANT RAIL SPACING 6'-0" OC, 3'-0" OC AT CURVES, TYP
ALIGN POSTS ACROSS PATHWAYS AND RAMP, TYP
INLAND GUARDRAIL WITH HANDRAIL — 5 / L-934.00
MATCH LINE - SEE L-122.00
FENCING AT CSO YARD, SEE ARCH DWGS
GOWANUS CANAL
2'-BALEL TO SEE WALL
5'-6" OC, VIF
173' VIF
7'-0 7/8" VIF
176' VIF
7'-10 1/4" VIF
6'-5 3/4" VIF
7'-6" VIF
EQ. EQ.
HANDRAIL — 1 / L-934.00
INLAND GUARDRAIL — 3 / L-934.00
TRASH RECEPTACLE — 2 / L-944.00
PLANT RAIL, TYP — 1 / L-936.00
AMPHITHEATER ENLARGEMENT PLAN - 3 / L-801.00
1 / L-920.00
2 / L-934.00
3 / L-934.00

KEY PLAN



SCAPE

FURNISHING LAYOUT PLAN 1

SCALE: 1'=10'

1"=10' 0 10 20 FT.

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen and Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT — JOHN DONNELLY — 2368-1 — STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
FURNISHING LAYOUT PLAN 1

DATE: SEPTEMBER 2026
SHEET NO: 150 OF 719
DRAWING NO. L-131.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03303_PLTIL-131.00 FURNISHING LAYOUT PLAN 1.dwg
Last Date Saved: 11/11/2026 8:43 PM
Date & Time Plotted: 11/11/2026 8:47 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STRUCTURE UNDERNEATH
- ELECTRICAL BOX, SEE ELECTRICAL DWGS
- UNDER DRAIN, SEE CIVIL DWGS
- STORM DRAIN, SEE CIVIL DWGS
- BUILDING ENTRANCE
- EL 00.00 + — PROPOSED SPOT ELEVATION
- FS 00.00 / FG 00.00 + — FINISH SURFACE ELEVATION / FINISH GRADE ELEVATION
- TC 00.00 — TOP OF CURB ELEVATION
- BC 00.00 + — BOTTOM OF CURB ELEVATION
- TS 00.00 — TOP OF STAIR ELEVATION
- BS 00.00 + — BOTTOM OF STAIR ELEVATION
- 3 TW 00.00 + — FINISHED TOP OF WALL ELEVATION, SEE DETAILS L-910 - L-920 FOR VENEER OR PAVER CAP THICKNESS
- BW 00.00 + — BOTTOM OF WALL ELEVATION
- TR 00.00 + — TOP OF RAMP ELEVATION
- BR 00.00 + — BOTTOM OF RAMP ELEVATION
- TD 00.00 + — TOP OF DRAIN ELEVATION
- HP 00.00 + — HIGH POINT ELEVATION
- LP 00.00 + — LOW POINT ELEVATION
- XX.XX% — PROPOSED SLOPE
- CATCH BASIN, SEE CIVIL DWGS
- POLE MOUNTED LIGHT, SEE ELECTRICAL DWGS
- POLE MOUNTED FLOOD LIGHT, SEE ELECTRICAL DWGS

NOTE:
HARDSCAPE GRADING IS SHOWN AT 0.10 FT INTERVALS
SOFTSCAPE GRADING IS SHOWN AT 0.25 FT INTERVALS

PEDESTRIAN RAMP WITH HANDRAIL ENLARGEMENT PLAN — 2 / L-920.00

3 MATCH FINISHED TOP OF WALL ELEVATION WITH ADJACENT FINISHED GRADE

EXISTING CONCRETE DEADMAN, SEE OH-007 BULKHEAD RECORD DWGS

AMPHITHEATER ENLARGEMENT PLAN - GRADING — 1 / L-801.00

SLOPE STORM DRAIN WITH PROPOSED GRADE, TYP

CONNECTION TO FUTURE PHASE CP-4

ADJACENT GRADING, SEE CIVIL DWGS

SEE CIVIL DWGS FOR TOP-OF-TANK GRADING

6 SCUPPER CURB, TYP — L-902.00

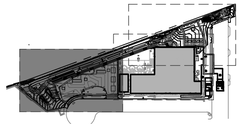
STORAGE TANK, SEE CP-2 STRUCTURAL DWGS

SOE WALL, SEE CP2 GEOTECHNICAL DWGS

MATCH LINE - SEE L-142

MATCH LINE - SEE L-142

KEY PLAN



LANDSCAPE GRADING PLAN 1

SCALE: 1"=10'

1"=10' 0 10 20 FT.

SCAPE

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT — JOHN DONNELLY — 2368-1 — STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NYC

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE GRADING PLAN 1

DATE: SEPTEMBER 2026

SHEET NO: 153 OF 719

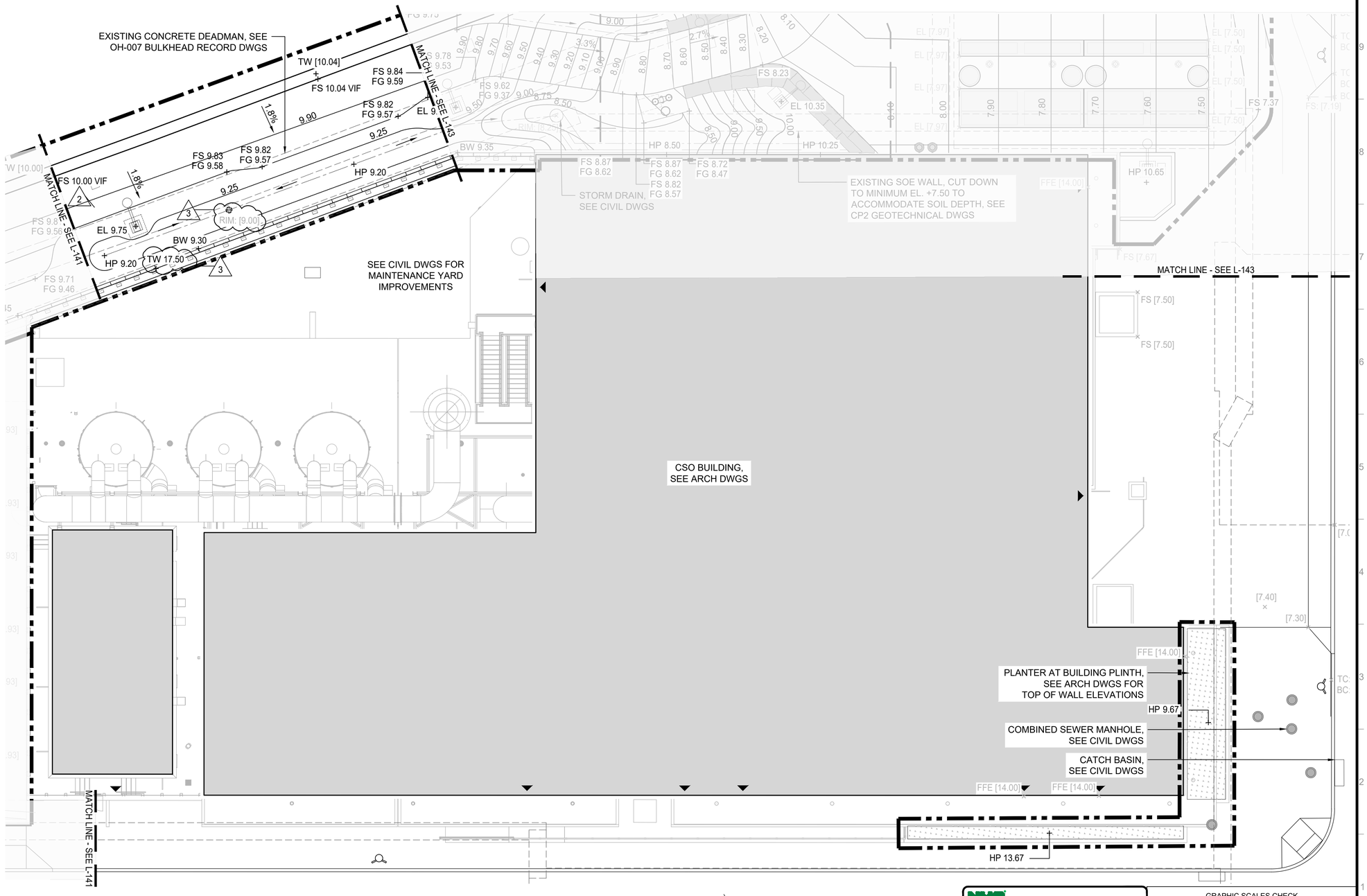
DRAWING NO. L-141.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sysvalDC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\WiseLandscapeCP-03303_PLTIL-141.00 GRADING PLAN 1.dwg
Last Date Saved: 11/11/2026 7:32 PM
Date & Time Plotted: 11/11/2026 9:02 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1

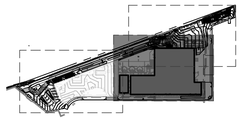
LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STRUCTURE UNDERNEATH
- ELECTRICAL BOX, SEE ELECTRICAL DWGS
- UNDER DRAIN, SEE CIVIL DWGS
- STORM DRAIN, SEE CIVIL DWGS
- BUILDING ENTRANCE
- EL 00.00 + PROPOSED SPOT ELEVATION
- FS 00.00 FINISH SURFACE ELEVATION
- FG 00.00 + FINISH GRADE ELEVATION
- TC 00.00 TOP OF CURB ELEVATION
- BC 00.00 + BOTTOM OF CURB ELEVATION
- TS 00.00 TOP OF STAIR ELEVATION
- BS 00.00 + BOTTOM OF STAIR ELEVATION
- TW 00.00 + FINISHED TOP OF WALL ELEVATION, SEE DETAILS L-910 - L-920 FOR VENEER OR PAVER CAP THICKNESS
- BW 00.00 + BOTTOM OF WALL ELEVATION
- TR 00.00 + TOP OF RAMP ELEVATION
- BR 00.00 + BOTTOM OF RAMP ELEVATION
- TD 00.00 + TOP OF DRAIN ELEVATION
- HP 00.00 + HIGH POINT ELEVATION
- LP 00.00 + LOW POINT ELEVATION
- XX.XX% PROPOSED SLOPE
- CATCH BASIN, SEE CIVIL DWGS
- POLE MOUNTED LIGHT, SEE ELECTRICAL DWGS
- POLE MOUNTED FLOOD LIGHT, SEE ELECTRICAL DWGS

NOTE:
HARDSCAPE GRADING IS SHOWN AT 0.10 FT INTERVALS
SOFTSCAPE GRADING IS SHOWN AT 0.25 FT INTERVALS



KEY PLAN



SCAPE

LANDSCAPE GRADING PLAN 2

SCALE: 1"=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE GRADING PLAN 2

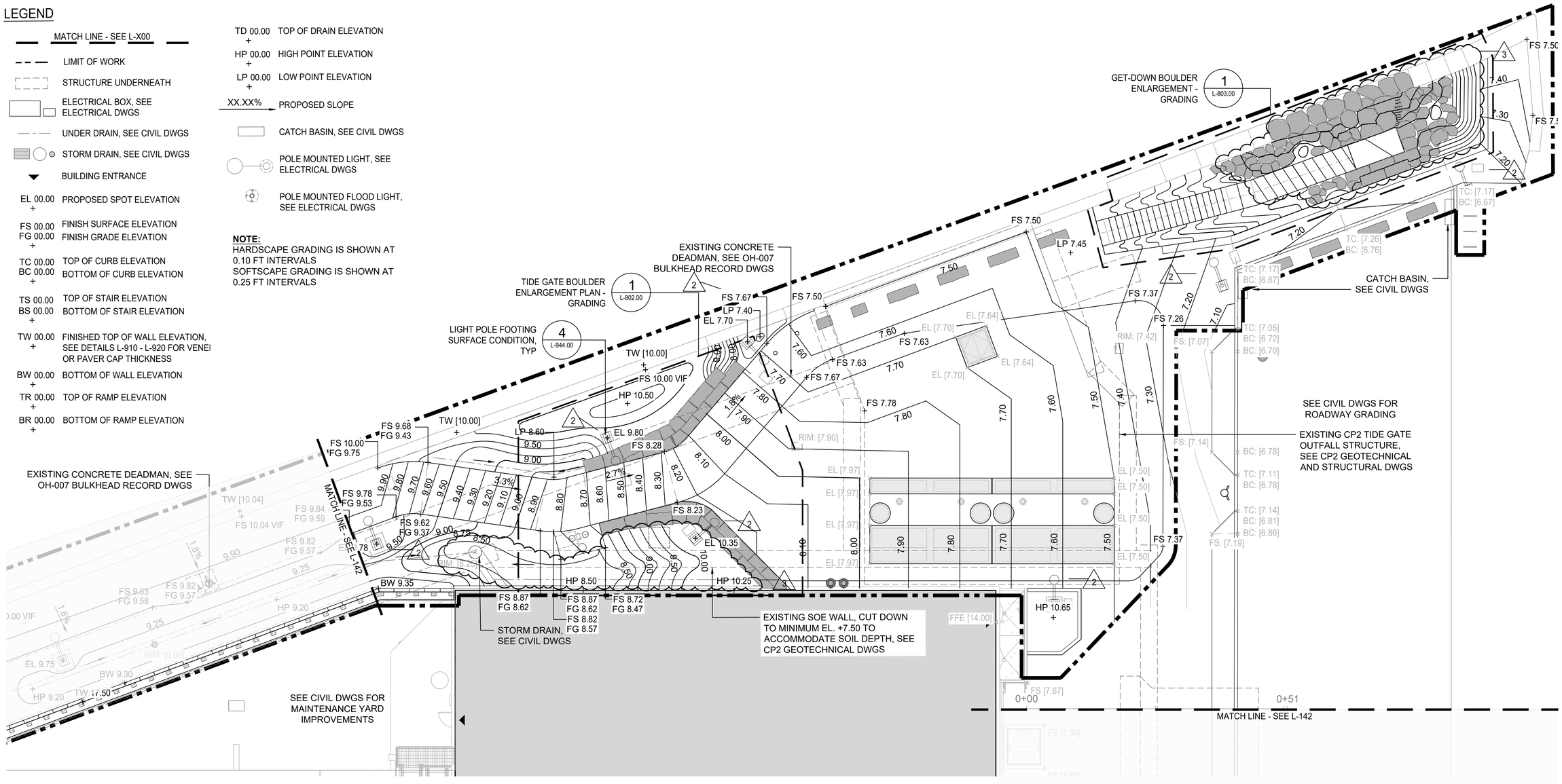
DATE: SEPTEMBER 2026
SHEET NO: 154 OF 719
DRAWING NO. L-142.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03\03_PLTL-142.00 GRADING PLAN 2.dwg
Last Date Saved: 11/11/2026 6:41 PM
Date & Time Plotted: 11/11/2026 6:03 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

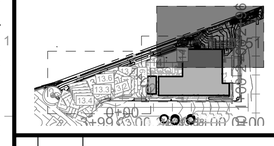
LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STRUCTURE UNDERNEATH
- ELECTRICAL BOX, SEE ELECTRICAL DWGS
- UNDER DRAIN, SEE CIVIL DWGS
- STORM DRAIN, SEE CIVIL DWGS
- BUILDING ENTRANCE
- EL 00.00 PROPOSED SPOT ELEVATION
- FS 00.00 FINISH SURFACE ELEVATION
- FG 00.00 FINISH GRADE ELEVATION
- TC 00.00 TOP OF CURB ELEVATION
- BC 00.00 BOTTOM OF CURB ELEVATION
- TS 00.00 TOP OF STAIR ELEVATION
- BS 00.00 BOTTOM OF STAIR ELEVATION
- TW 00.00 FINISHED TOP OF WALL ELEVATION, SEE DETAILS L-910 - L-920 FOR VENEE OR PAVER CAP THICKNESS
- BW 00.00 BOTTOM OF WALL ELEVATION
- TR 00.00 TOP OF RAMP ELEVATION
- BR 00.00 BOTTOM OF RAMP ELEVATION
- TD 00.00 TOP OF DRAIN ELEVATION
- HP 00.00 HIGH POINT ELEVATION
- LP 00.00 LOW POINT ELEVATION
- XX.XX% PROPOSED SLOPE
- CATCH BASIN, SEE CIVIL DWGS
- POLE MOUNTED LIGHT, SEE ELECTRICAL DWGS
- POLE MOUNTED FLOOD LIGHT, SEE ELECTRICAL DWGS

NOTE:
HARDSCAPE GRADING IS SHOWN AT 0.10 FT INTERVALS
SOFTSCAPE GRADING IS SHOWN AT 0.25 FT INTERVALS



KEY PLAN



SCAPE

LANDSCAPE GRADING PLAN 3

SCALE: 1"=10'

1"=10' 0 10 20 FT.

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE GRADING PLAN 3

DATE: SEPTEMBER 2026
SHEET NO: 155 OF 719
DRAWING NO. L-143.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\slyvia\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTL-143.00 GRADING PLAN 3.dwg
Last Date Saved: 11/11/2026 6:36 PM
Plot Style Table: BEDC Acad_2021.ctb
Plot Scale: 1:1
Date & Time Plotted: 11/11/2026 9:04 PM

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STANDARD GOWANUS GUARDRAIL SEE LANDSCAPE MATERIALS PLANS
- HANDRAIL AT STEPS, SEE LANDSCAPE MATERIALS PLANS
- PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS
- UNDER DRAIN, SEE CIVIL DWGS
- BUILDING ENTRANCE
- PLANTING SOIL
- STORMWATER PLANTING SOIL
- INTERTIDAL SOIL
- STRUCTURAL SOIL
- RAISED PLANTER SOIL

STRUCTURAL SOIL PROFILE, TYP — 5 / L-960.00

PLANTING SOIL PROFILE TYP — 1 / L-960.00

STORMWATER PLANTING SOIL PROFILE, TYP — 2 / L-960.00

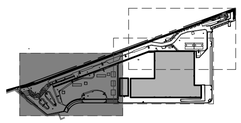
GOWANUS CANAL

MATCH LINE - SEE L-172.00

CSO TANK BELOW, SEE CIVIL DWGS

MATCH LINE - SEE L-172.00

KEY PLAN



SCAPE

SOILS PLAN 1

SCALE: 1"=10'

1"=10' 0 10 20 FT.

NYC

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION

BUREAU OF ENGINEERING DESIGN & CONSTRUCTION

96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
SOILS PLAN 1

DATE: SEPTEMBER 2026

SHEET NO: 156 OF 719

DRAWING NO. L-151.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DC-ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03303_PLTIL-151.00 SOILS PLAN 1.dwg
Last Date Saved: 11/11/2026 5:42 PM
Date & Time Plotted: 11/11/2026 9:06 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1

TREES							
CANOPY TREES							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
2	AR	ACER RUBRUM	RED MAPLE	5" CAL	AS SHOWN	B&B	
1	MV	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	14-16' HT	AS SHOWN	B&B	MULTI-STEM, LOW GROWTH
5	NS	NYSSA SYLVATICA	TUPELO	3" CAL	AS SHOWN	B&B	
3	PS	PRUNUS SEROTINA	BLACK CHERRY	3" CAL	AS SHOWN	B&B	
5	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	5" CAL	AS SHOWN	B&B	
2	QP	QUERCUS PALUSTRIS	PIN OAK	5" CAL	AS SHOWN	B&B	
4	TD	TAXODIUM DISTICHUM 'EMERALD SHADOW'	BALD CYPRESS EMERALD SHADOW	8-10' HT.	AS SHOWN	B&B	
2	TG	TAXODIUM DISTICHUM 'EMERALD SHADOW'	BALD CYPRESS EMERALD SHADOW	16-18' HT.	AS SHOWN	B&B	
UNDERSTORY TREES							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
3	AC	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY	8-10' HEIGHT	AS SHOWN	B&B	MULTI-STEM SPECIMEN
3	BN	BETULA NIGRA	RIVER BIRCH	12-14' HT.	AS SHOWN	B&B	
5	CE	CERCIS CANADENSIS	EASTERN REDBUD	8-10' HT.	AS SHOWN	B&B	MULTI-STEM SPECIMEN
7	PT	POPULUS TREMULOIDES	QUAKING ASPEN	3" CAL	AS SHOWN	B&B	
12	SA	SASSAFRAS ALBIDUM	SASSAFRAS	6-8' HT.	AS SHOWN	CONTAINER	
EVERGREEN TREES							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
1	IA	ILEX OPACA	AMERICAN HOLLY	8-10' HT.	AS SHOWN	CONTAINER	30% MALE, 70% FEMALE
8	PR	PINUS RIGIDA	PITCH PINE	6-7' HT.	AS SHOWN	CONTAINER	
SHRUBS							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
8	Aa	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	BRILLIANT RED CHOKEBERRY	3 GAL	AS SHOWN	CONTAINER	
54	Am	ARONIA MELANOCARPA 'SMNAMPEM'	LOW SCAPE SNOWFIRE BLACK CHOKEBERRY	3 GAL	AS SHOWN	CONTAINER	
18	Ae	ARONIA MELANOCARPA 'UCONNAM165'	LOW SCAPE MOUND BLACK CHOKEBERRY	3 GAL	AS SHOWN	CONTAINER	
9	Bh	BACCHARIS HALIMIFOLIA	GROUNDSEL BUSH	7 GAL	AS SHOWN	CONTAINER	
15	Cb	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	5 GAL	AS SHOWN	CONTAINER	
10	Cs	CLETHRA ALNIFOLIA	SUMMERSWEET	3 GAL	AS SHOWN	CONTAINER	
43	Cc	CLETHRA ALNIFOLIA 'COMPACTA'	COMPACT SUMMERSWEET	3 GAL	AS SHOWN	CONTAINER	
14	Hm	HIBISCUS MOSCHEUTOS	ROSE MALLOW	5 GAL	AS SHOWN	CONTAINER	
16	Ig	ILEX GLABRA 'ILEXFARROWTRACEY'	STRONGBOX INKBERRY HOLLY	5 GAL	AS SHOWN	CONTAINER	30% MALE, 70% FEMALE
37	Is	ITEA VIRGINICA 'SPRICH'	LITTLE HENRY SWEETSPIRE	5 GAL	AS SHOWN	CONTAINER	
7	If	IVA FRUTESCENS	MARSH ELDER	3 GAL	AS SHOWN	CONTAINER	
13	Mp	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	7 GAL	AS SHOWN	CONTAINER	
4	Pm	PRUNUS MARITIMA	BEACH PLUM	4-5' HT. 7 GAL	AS SHOWN	CONTAINER	FULL, HEAVY SPECIMENS
49	Rg	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	3 GAL	AS SHOWN	CONTAINER	
7	Va	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	7 GAL	AS SHOWN	CONTAINER	

GREEN ROOF PLANT MIX					
GRASSES					
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**
1493	ss	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 QUART	12"
3327	df	DESCHAMPSIA FLEXUOSA	WAVY HAIR GRASS	1 QUART	9"
1899	es	ERAGROSTIS SPECTABILIS	PURPLE LOVE GRASS	1 QUART	12"
347	cp	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE	1 QUART	9"
1415	km	KOELERIA MACRANTHA	PRAIRIE JUNEGRASS	1 QUART	12"
PLANT MIXES					
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**
MIX A					
126	df	DESCHAMPSIA FLEXUOSA	WAVY HAIR GRASS	1 QUART	35% @ 9" O.C.
126	cp	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE	1 QUART	35% @ 9" O.C.
61	ob	OENOTHERA BIENNIS	COMMON EVENING PRIMROSE	1 QUART	30% @ 12" O.C.
MIX B					
146	es	ERAGROSTIS SPECTABILIS	PURPLE LOVE GRASS	1 QUART	35% @ 12" O.C.
259	df	DESCHAMPSIA FLEXUOSA	WAVY HAIR GRASS	1 QUART	35% @ 9" O.C.
125	cq	COREOPSIS VERTICILLATA	WHORLED TICKSEED	1 QUART	30% @ 12" O.C.
MIX C					
127	km	KOELERIA MACRANTHA	PRAIRIE JUNEGRASS	1 QUART	35% @ 12" O.C.
127	ss	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 QUART	35% @ 12" O.C.
108	at	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1 QUART	30% @ 12" O.C.
MIX D					
285	df	DESCHAMPSIA FLEXUOSA	WAVY HAIR GRASS	1 QUART	35% @ 9" O.C.
161	ss	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 QUART	35% @ 12" O.C.
137	rh	RUDBECKIA HIRTA	BLACK EYED SUSAN	1 QUART	30% @ 12" O.C.
MIX E					
273	km	KOELERIA MACRANTHA	PRAIRIE JUNEGRASS	1 QUART	35% @ 12" O.C.
273	es	ERAGROSTIS SPECTABILIS	PURPLE LOVE GRASS	1 QUART	35% @ 12" O.C.
234	sh	SYMPHYOTRICHUM ERICOIDES	WHITE WREATH ASTER	1 QUART	35% @ 12" O.C.

PERENNIALS							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
171	ap	ANTENNARIA PLANTAGINIFOLIA	PUSSYTOES	1 GAL	12" O.C.	CONTAINER	
40	cl	COREOPSIS LANCEOLATA	LANCE-LEAF TICKSEED	1 GAL	12" O.C.	CONTAINER	
167	cr	COREOPSIS ROSEA	PINK TICKSEED	1 GAL	12" O.C.	CONTAINER	
126	ls	LIATRIS SPICATA	DENSE BLAZING STAR	1 GAL	12" O.C.	CONTAINER	
42	mf	MONARDA FISTULOSA	WILD BERGAMOT	1 GAL	12" O.C.	CONTAINER	
155	rh	RUDBECKIA HIRTA	BLACK-EYED SUSAN	1 GAL	12" O.C.	CONTAINER	
58	rt	RUDBECKIA TRILOBA	BROWN-EYED SUSAN	1 GAL	12" O.C.	CONTAINER	
40	se	SOLIDAGO NEMORALIS	GRAY GOLDENROD	1 GAL	12" O.C.	CONTAINER	
82	sr	SOLIDAGO RUGOSA	WRINKLY LEAF GOLDENROD	1 GAL	12" O.C.	CONTAINER	
72	sv	SOLIDAGO SEMPERVIRENS	SEASIDE GOLDENROD	1 GAL	12" O.C.	CONTAINER	
142	sa	SYMPHYOTRICHUM NOVAE ANGLIAE	NEW ENGLAND ASTER	1 GAL	12" O.C.	CONTAINER	
146	sb	SYMPHYOTRICHUM NOVI-BELGII	NEW YORK ASTER	1 GAL	12" O.C.	CONTAINER	
87	so	SYMPHYOTRICHUM OBLONGIFOLIUM	AROMATIC ASTER	1 GAL	12" O.C.	CONTAINER	
170	za	ZIZIA AUREA	GOLDEN ALEXANDER	1 GAL	12" O.C.	CONTAINER	
9	Pq	PARTHENOCISSUS QUINQUEFOLIA	VIRGINA CREEPER	2 GAL	AS SHOWN	CONTAINER	STAKED, 6' HT.

PERENNIAL PLANT MIXES							
QTY	**SYMBOL**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**	**FORM**	**NOTES**
BASE MIX A							
607	av	ANDROPOGON VIRGINICUS	BROOMSEDGE	1 GAL	37.5% @ 12" O.C.	CONTAINER	
413	cv	CAREX VULPINOIDEA	FOX SEDGE	1 GAL.	25% @ 12" O.C.	CONTAINER	
607	pv	PANICUM VIRGANTUM	SWITCHGRASS	1 GAL	37.5% @ 12" O.C.	CONTAINER	
BASE MIX B							
4060	ca	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE	1 GAL	12" O.C.	CONTAINER	
2070	jt	JUNCUS TENUIS	LESSER POVERTY RUSH	1 GAL	12" O.C.	CONTAINER	
TIDAL MIX A							
230	pv	PANICUM VIRGANTUM	SWITCHGRASS	1 GAL	33% @ 12" O.C.	CONTAINER	
115	jg	JUNCUS GERARDII	SALTMARSH RUSH	2" PLUG	67% @ 12" O.C.	CONTAINER	
TIDAL MIX B							
29	ds	DISTICHLIS SPICATA	SALT GRASS	2" PLUG	25% @ 6" O.C.	CONTAINER	
29	sn	SPARTINA ALTERNIFLORA	SALT MARSH GRASS	2" PLUG	25% @ 6" O.C.	CONTAINER	
29	sp	SPARTINA PATENS	SALTMEADOW CORDGRASS	2" PLUG	25% @ 6" O.C.	CONTAINER	
7	st	SYMPHYOTRICHUM TENUIFOLIUM	SALT MARSH ASTER	1 GAL	25% @ 12" O.C.	CONTAINER	

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen and Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PLANTING SCHEDULE

DATE: SEPTEMBER 2026
SHEET NO: 159 OF 719
DRAWING NO. L-160.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03303_PLTL-160.00 PLANTING SCHEDULE.dwg
Last Date Saved: 11/11/2026 9:07 PM
Date & Time Plotted: 11/11/2026 9:07 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STANDARD GOWANUS GUARDRAIL SEE LANDSCAPE MATERIALS PLANS
- HANDRAIL AT STEPS, SEE LANDSCAPE MATERIALS PLANS
- PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS
- BUILDING ENTRANCE
- DECIDUOUS TREE ROOTBALL,TYP
- EVERGREEN TREE ROOTBALL,TYP

SYMBOL	BOTANICAL NAME
AR	ACER RUBRUM
AC	AMELANCHIER CANADENSIS
BL	BETULA LENTA
CE	CERCIS CANADENSIS
IA	ILEX OPACA
MV	MAGNOLIA VIRGINIANA
NS	NYSSA SYLVATICA
PR	PINUS RIGIDA
PT	POPULUS TREMULOIDES
PW	PRUNUS SEROTINA
QB	QUERCUS BICOLOR
QP	QUERCUS PALUSTRIS
SA	SASSAFRAS ALBIDUM
TE	TAXODIUM DISTICHUM , 16-18' HT.
TA	TAXODIUM DISTICHUM, 6-7' HT.
TD	TAXODIUM DISTICHUM, 8-10' HT.

UNDERSTORY PLANTING AREAS, SEE L-161 - L-163

NOTE: FOR PLANTING SCHEDULE, SEE L-150

GOWANUS CANAL

MATCH LINE - SEE L-152.00

(9) - Sassafras albidum

(2) - Acer rubrum

(1) - Cercis canadensis

(1) - Nyssa sylvatica

(1) - Prunus serotina

EXISTING CONCRETE DEADMAN, SEE OH-007 BULKHEAD RECORD DWGS

(3) - Cercis canadensis

LIGHTPOLE, TYP; SEE ELECTRICAL DWGS

(2) - Prunus serotina

(1) - Cercis canadensis

(1) - Nyssa sylvatica

(3) - Populus tremuloides

(3) - Populus tremuloides

LIGHTPOLE, TYP; SEE ELECTRICAL DWGS

(1) - Nyssa sylvatica

(1) - Betula nigra

(2) - Nyssa sylvatica

(2) - Quercus palustris

(1) - Populus tremuloides

(2) - Betula nigra

HYDRANT, TYP; SEE CIVIL DWGS

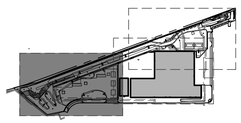
SOE WALL, SEE CP2 GEOTECHNICAL DWGS

MATCH LINE - SEE L-152.00

(3) - Quercus bicolor

(2) - Quercus bicolor

KEY PLAN



SCAPE

CANOPY PLANTING PLAN 1

SCALE: 1'=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.

PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
CANOPY PLANTING PLAN 1

DATE: SEPTEMBER 2026
SHEET NO: 160 OF 719
DRAWING NO. L-161.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03\03_PLTL-161.00 CANOPY PLANTING PLAN 1.dwg
Last Date Saved: 11/11/2026 7:47 PM
Plot Style Table: BEDC_Acad_2021.ctb
Date & Time Plotted: 11/11/2026 9:09 PM
Plot Scale: 1:1

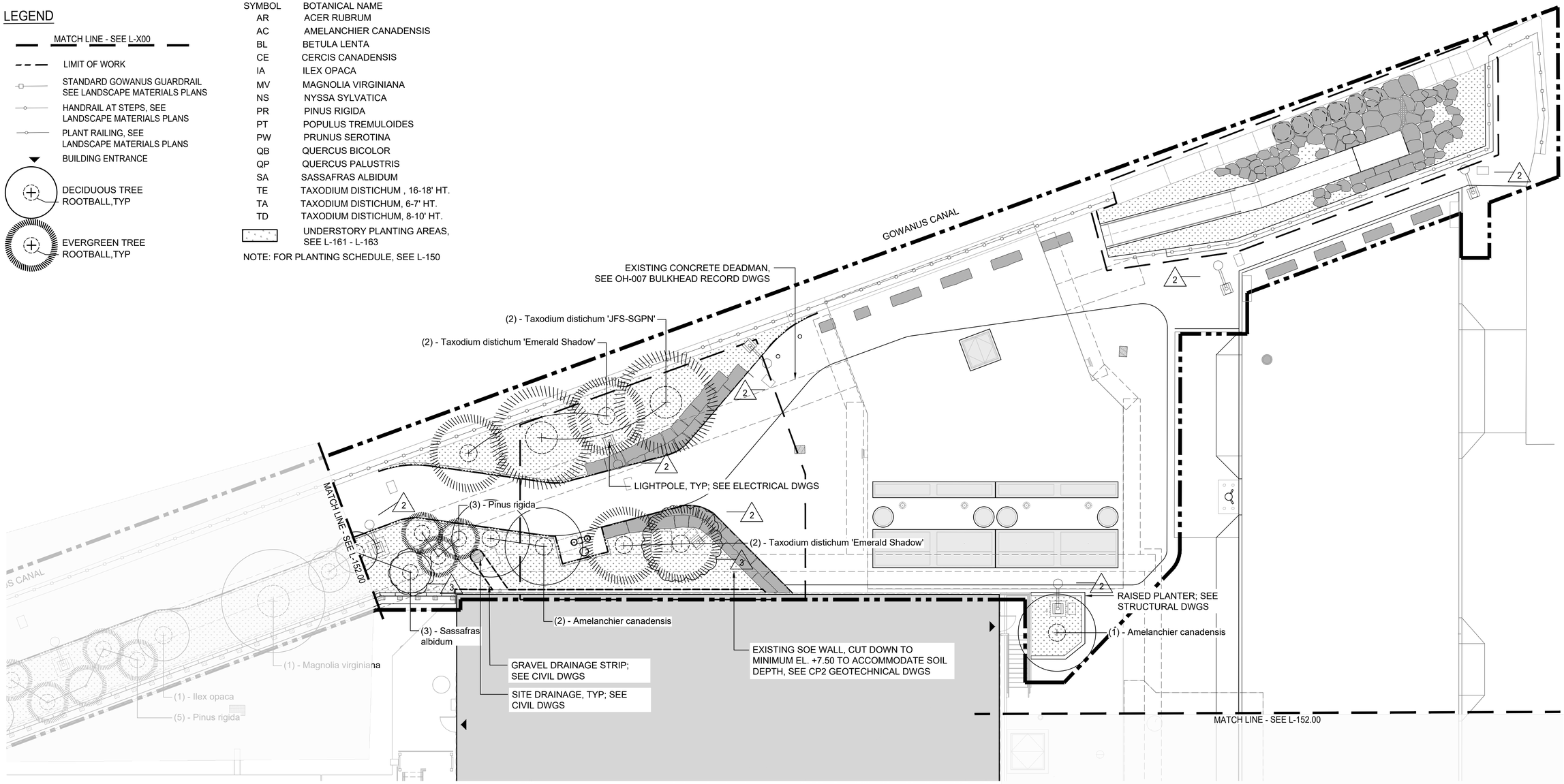
LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STANDARD GOWANUS GUARDRAIL SEE LANDSCAPE MATERIALS PLANS
- HANDRAIL AT STEPS, SEE LANDSCAPE MATERIALS PLANS
- PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS
- BUILDING ENTRANCE
- DECIDUOUS TREE ROOTBALL,TYP
- EVERGREEN TREE ROOTBALL,TYP

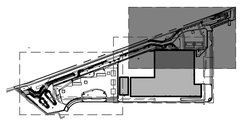
SYMBOL	BOTANICAL NAME
AR	ACER RUBRUM
AC	AMELANCHIER CANADENSIS
BL	BETULA LENTA
CE	CERCIS CANADENSIS
IA	ILEX OPACA
MV	MAGNOLIA VIRGINIANA
NS	NYSSA SYLVATICA
PR	PINUS RIGIDA
PT	POPULUS TREMULOIDES
PW	PRUNUS SEROTINA
QB	QUERCUS BICOLOR
QP	QUERCUS PALUSTRIS
SA	SASSAFRAS ALBIDUM
TE	TAXODIUM DISTICHUM , 16-18' HT.
TA	TAXODIUM DISTICHUM, 6-7' HT.
TD	TAXODIUM DISTICHUM, 8-10' HT.

UNDERSTORY PLANTING AREAS, SEE L-161 - L-163

NOTE: FOR PLANTING SCHEDULE, SEE L-150



KEY PLAN



SCAPE

CANOPY PLANTING PLAN 3

SCALE: 1"=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.

PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
CANOPY PLANTING PLAN 3

DATE: SEPTEMBER 2026

SHEET NO: 162 OF 719

DRAWING NO. L-163.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTL-163.00 CANOPY PLANTING PLAN 3.dwg
Last Date Saved: 11/11/2026 9:11 PM
Plot Style Table: BEDC_Acad_2021.ctb
Date & Time Plotted: 11/11/2026 9:11 PM
Plot Scale: 1:1

LEGEND

- MATCH LINE - SEE L-X00
- LIMIT OF WORK
- STANDARD GOWANUS GUARDRAIL SEE LANDSCAPE MATERIALS PLANS
- HANDRAIL AT STEPS, SEE LANDSCAPE MATERIALS PLANS
- PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS
- BUILDING ENTRANCE

NOTE: FOR PLANTING SCHEDULE, SEE L-150

SHRUBS

SYMBOL	BOTANICAL NAME
Aa	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'
Am	ARONIA MELANOCARPA 'SMNAMPEM'
Ae	ARONIA MELANOCARPA 'UCONNAM165'
Bh	BACCHARIS HALIMIFOLIA
Cb	CEPHALANTHUS OCCIDENTALIS
Cs	CLETHRA ALNIFOLIA
Cc	CLETHRA ALNIFOLIA 'COMPACTA'
Hm	HIBISCUS MOSCHEUTOS
Ig	ILEX GLABRA 'ILEXFARRPWTRACEY'
Iv	ITEA VIRGINICA 'SPRICH'
If	IVA FRUTESCENS
Mp	MYRICA PENSYLVANICA
Pm	PRUNUS MARITIMA
Rg	RHUS AROMATICA 'GRO-LOW'
Rw	RHUS COPALLINA
Va	VIBURNUM DENTATUM 'CHICAGO LUSTRI

VINES

SYMBOL	
Pq	PARTHENOCISSUS QUINQUEFOLIA
Mc	MENISPERMUM CANADENSE

PERENNIALS

SYMBOL	BOTANICAL NAME
ap	ANTENNARIA PLANTAGINIFOLIA
cl	COREOPSIS LANCEOLATA
cr	COREOPSIS ROSEA
ls	LIATRIS SPICATA
mf	MONARDA FISTULOSA
rh	RUDBECKIA HIRTA
rt	RUDBECKIA TRILOBA
se	SOLIDAGO NEMORALIS
sr	SOLIDAGO RUGOSA
sv	SOLIDAGO SEMPERVIRENS
sa	SYMPHYOTRICHUM NOVAE ANGLIAE
sb	SYMPHYOTRICHUM NOVI-BELGII
so	SYMPHYOTRICHUM OBLONGIFOLIUM
za	ZIZIA AUREA
Pq	PARTHENOCISSUS QUINQUEFOLIA

PLANT MIXES

SYMBOL	BOTANICAL NAME
BASE MIX A	
av	ANDROPOGON VIRGINICUS
cv	CAREX VULPINOIDEA
pv	PANICUM VIRGANTUM
BASE MIX B	
ca	CAREX PENSYLVANICA
jt	JUNCUS TENUIS
TIDAL MIX A	
pv	PANICUM VIRGANTUM
jg	JUNCUS GERARDII
TIDAL MIX B	
ds	DISTICHLIS SPICATA
sn	SPARTINA ALTERNIFOLIA
sp	SPARTINA PATENS
st	SYMPHYOTRICHUM TENUIFOLIUM

GOWANUS CANAL

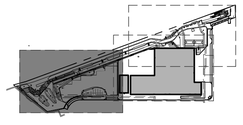
MATCH LINE - SEE L-162.00

SITE DRAINAGE, TYP; SEE CIVIL DWGS

HYDRANT, TYP; SEE CIVIL DWGS

LIGHTPOLE, TYP; SEE ELECTRICAL DWGS

KEY PLAN



UNDERSTORY PLANTING PLAN 1

SCALE: 1'=10'

1"=10' 0 10 20 FT.

SCAPE

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NYC BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
UNDERSTORY PLANTING PLAN 1

DATE: SEPTEMBER 2026
SHEET NO: 163 OF 719
DRAWING NO. L-171.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DOCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscapeICP-03003_PLTIL-171.00 UNDERSTORY PLANTING PLAN 1.dwg
Date & Time Plotted: 11/11/2026 9:17 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1
Last Date Saved: 11/11/2026 9:16 PM

LEGEND

MATCH LINE - SEE L-X00

LIMIT OF WORK

STANDARD GOWANUS GUARDRAIL SEE LANDSCAPE MATERIALS PLANS

HANDRAIL AT STEPS, SEE LANDSCAPE MATERIALS PLANS

PLANT RAILING, SEE LANDSCAPE MATERIALS PLANS

BUILDING ENTRANCE

NOTE: FOR PLANTING SCHEDULE, SEE L-150

SHRUBS

SYMBOL	BOTANICAL NAME
Aa	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'
Am	ARONIA MELANOCARPA 'SMNAMPEM'
Ae	ARONIA MELANOCARPA 'UCONNAM165'
Bh	BACCHARIS HALIMIFOLIA
Cb	CEPHALANTHUS OCCIDENTALIS
Cs	CLETHRA ALNIFOLIA
Cc	CLETHRA ALNIFOLIA 'COMPACTA'
Hm	HIBISCUS MOSCHEUTOS
Ig	ILEX GLABRA 'ILEXFARRPWTRACEY'
Iv	ITEA VIRGINICA 'SPRICH'
If	IVA FRUTESCENS
Mp	MYRICA PENSYLVANICA
Pm	PRUNUS MARITIMA
Rg	RHUS AROMATICA 'GRO-LOW'
Rw	RHUS COPALLINA
Va	VIBURNUM DENTATUM 'CHICAGO LUSTF

VINES

SYMBOL	
Pq	PARTHENOCISSUS QUINQUEFOLIA
Mc	MENISPERMUM CANADENSE

VINES

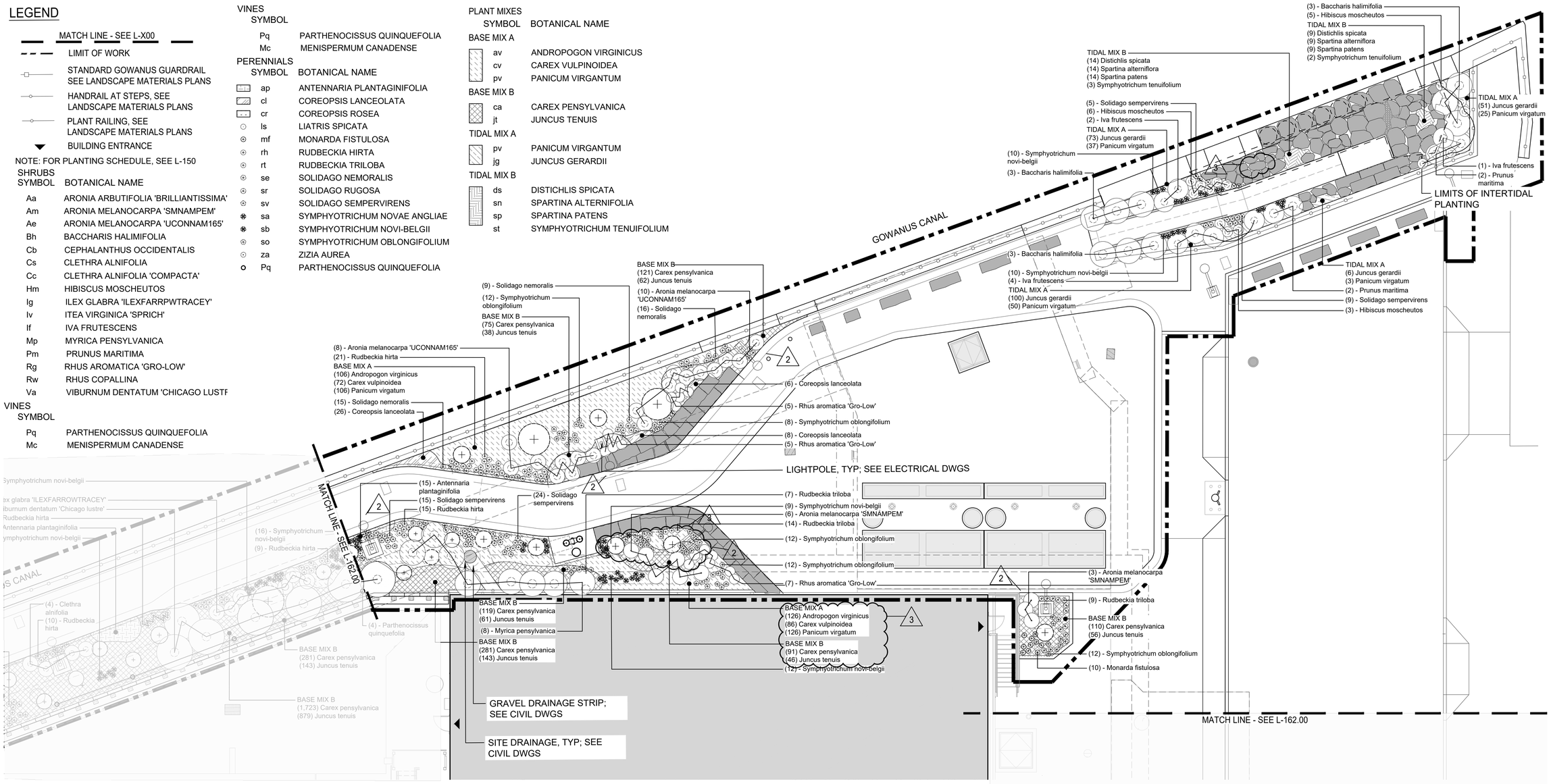
SYMBOL	
Pq	PARTHENOCISSUS QUINQUEFOLIA
Mc	MENISPERMUM CANADENSE

PERENNIALS

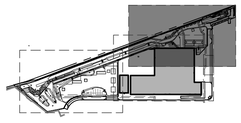
SYMBOL	BOTANICAL NAME
ap	ANTENNARIA PLANTAGINIFOLIA
cl	COREOPSIS LANCEOLATA
cr	COREOPSIS ROSEA
ls	LIATRIS SPICATA
mf	MONARDA FISTULOSA
rh	RUDBECKIA HIRTA
rt	RUDBECKIA TRILOBA
se	SOLIDAGO NEMORALIS
sr	SOLIDAGO RUGOSA
sv	SOLIDAGO SEMPERVIRENS
sa	SYMPHYOTRICHUM NOVAE ANGLIAE
sb	SYMPHYOTRICHUM NOVI-BELGII
so	SYMPHYOTRICHUM OBLONGIFOLIUM
za	ZIZIA AUREA
Pq	PARTHENOCISSUS QUINQUEFOLIA

PLANT MIXES

SYMBOL	BOTANICAL NAME
BASE MIX A	
av	ANDROPOGON VIRGINICUS
cv	CAREX VULPINOIDEA
pv	PANICUM VIRGANTUM
BASE MIX B	
ca	CAREX PENSYLVANICA
jt	JUNCUS TENUIS
TIDAL MIX A	
pv	PANICUM VIRGANTUM
jg	JUNCUS GERARDII
TIDAL MIX B	
ds	DISTICHLIS SPICATA
sn	SPARTINA ALTERNIFOLIA
sp	SPARTINA PATENS
st	SYMPHYOTRICHUM TENUIFOLIUM



KEY PLAN



SCAPE

UNDERSTORY PLANTING PLAN 3

SCALE: 1'=10'

1"=10' 0 10 20 FT.

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No.3	JD
2	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

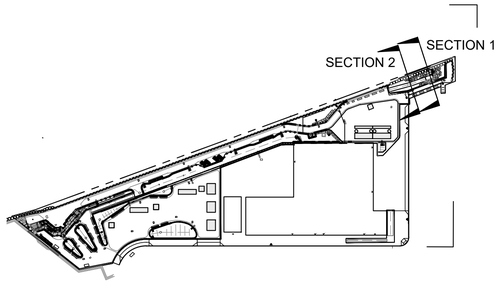
LANDSCAPE
UNDERSTORY PLANTING PLAN 3

DATE: SEPTEMBER 2026

SHEET NO: 165 OF 719

DRAWING NO. L-173.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DOCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscapeCP-03003_PLTIL-173.00 UNDERSTORY PLANTING PLAN 3.dwg
Last Date Saved: 11/11/2026 9:20 PM
Date & Time Plotted: 11/11/2026 9:20 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

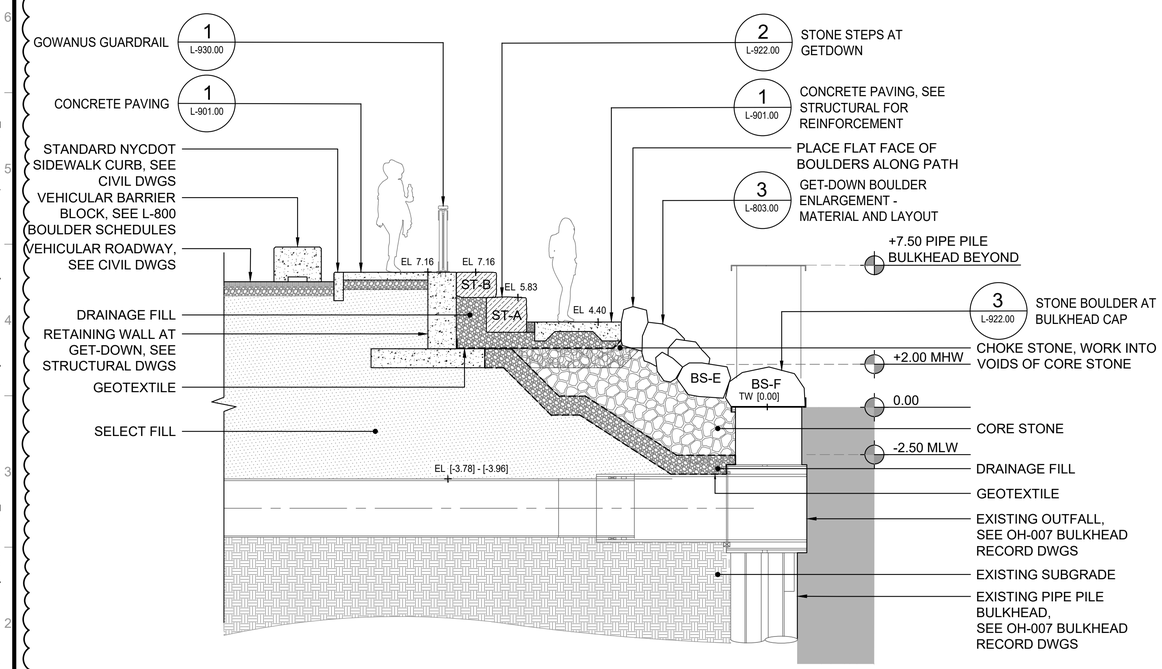


KEY PLAN

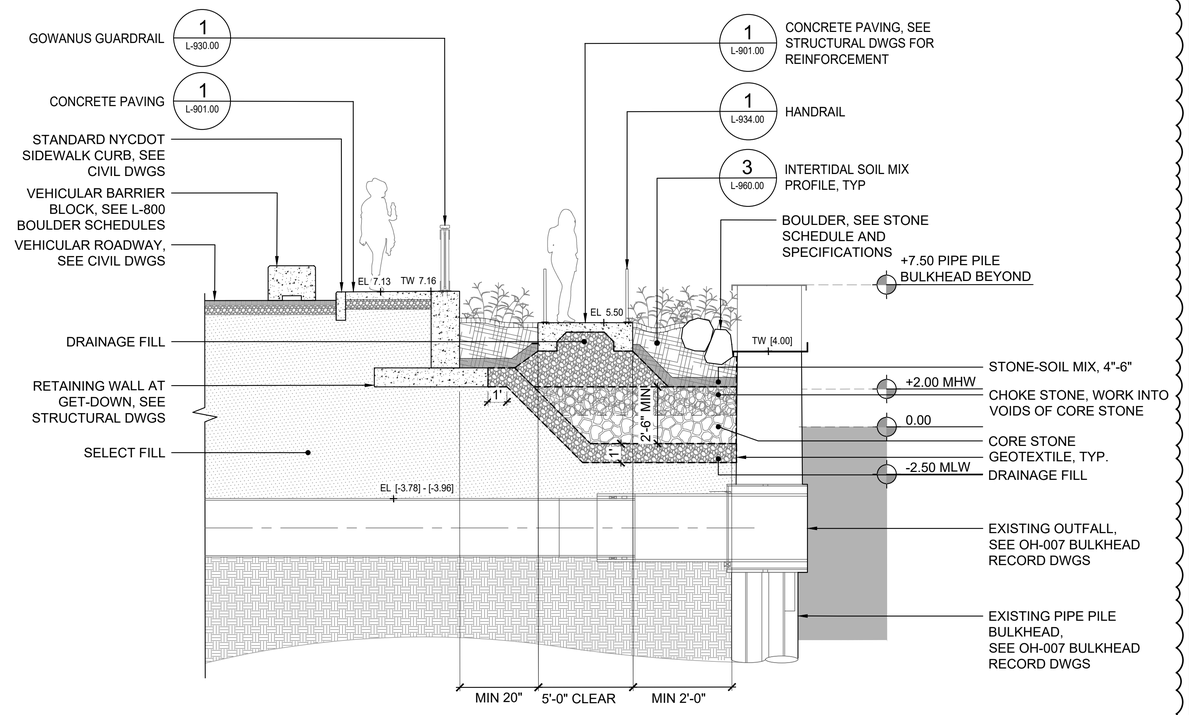
NOTES:

SECTIONS ARE SHOWN TO DEPICT RELATIONSHIPS BETWEEN PROPOSED ELEMENTS. REFER TO ASSEMBLY AND DETAIL DRAWINGS FOR MORE INFORMATION. THE SECTIONS AND DETAILS ARE TO BE UTILIZED IN CONCERT TO FULLY INTERPRET THE DESIGN INTENT. THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE LANDSCAPE ARCHITECT IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE SECTIONS AND DETAILS.

1



2 L-701.00 **GET-DOWN LANDING**
SCALE: 1/4" = 1'-0"



1 L-701.00 **GET-DOWN RAMP**
SCALE: 1/4" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No.3	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen and Brown and Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

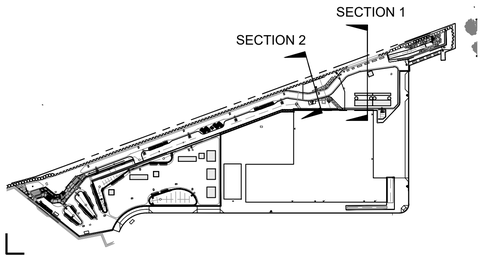
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE SECTIONS

DATE:	SEPTEMBER 2026
SHEET NO:	167 OF 719
DRAWING NO.	L-701.00

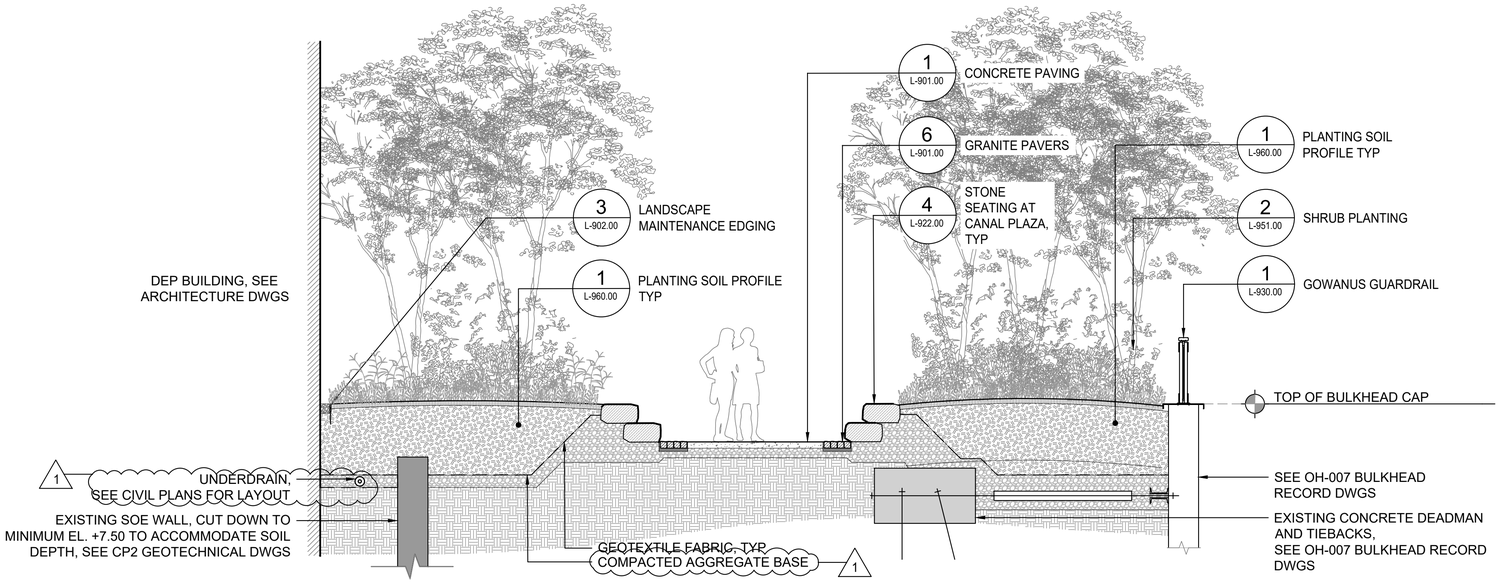
Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\IDC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03303_PLTIL-701.00 SECTIONS.dwg
Last Date Saved: 11/11/2026 9:22 PM
Date & Time Plotted: 11/11/2026 9:32 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1



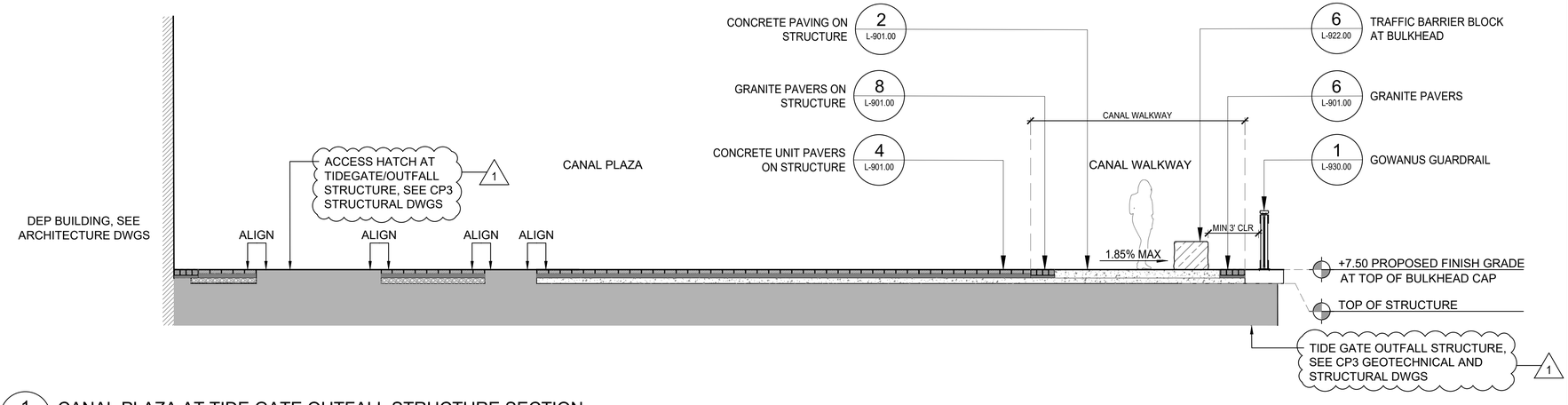
KEY PLAN

NOTES:

SECTIONS ARE SHOWN TO DEPICT RELATIONSHIPS BETWEEN PROPOSED ELEMENTS. REFER TO ASSEMBLY AND DETAIL DRAWINGS FOR MORE INFORMATION. THE SECTIONS AND DETAILS ARE TO BE UTILIZED IN CONCERT TO FULLY INTERPRET THE DESIGN INTENT. THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE LANDSCAPE ARCHITECT IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE SECTIONS AND DETAILS.



2 L-702.00 STONE SEATING AT CANAL PLAZA ENTRANCE SECTION
SCALE: 1/4" = 1'-0"



1 L-702.00 CANAL PLAZA AT TIDE GATE OUTFALL STRUCTURE SECTION
SCALE: 1/4" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

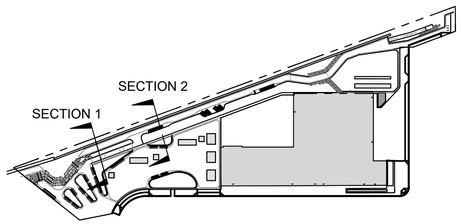
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE SECTIONS

DATE: SEPTEMBER 2026
SHEET NO: 168 OF 719
DRAWING NO. L-702.00

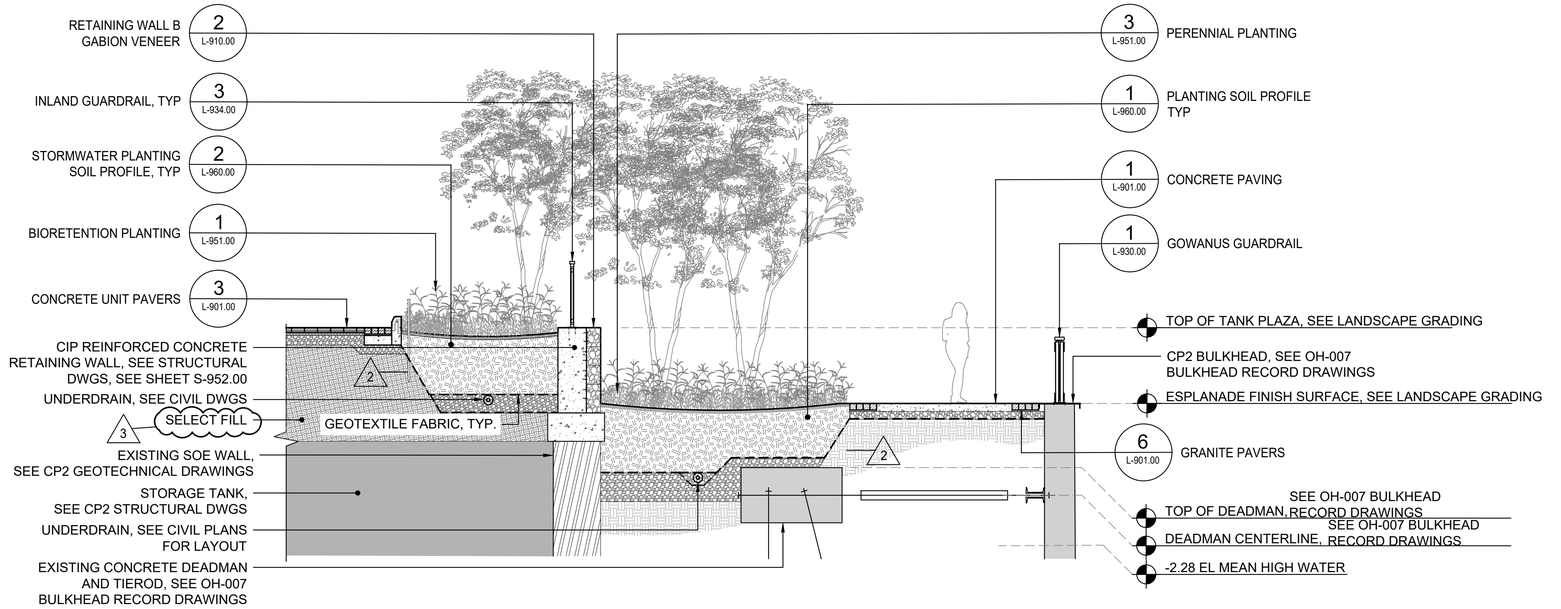
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\Kelly\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTIL-702.00 -SECTIONS.dwg
Last Date Saved: 11/11/2026 3:06 PM
Date & Time Plotted: 11/11/2026 4:22 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



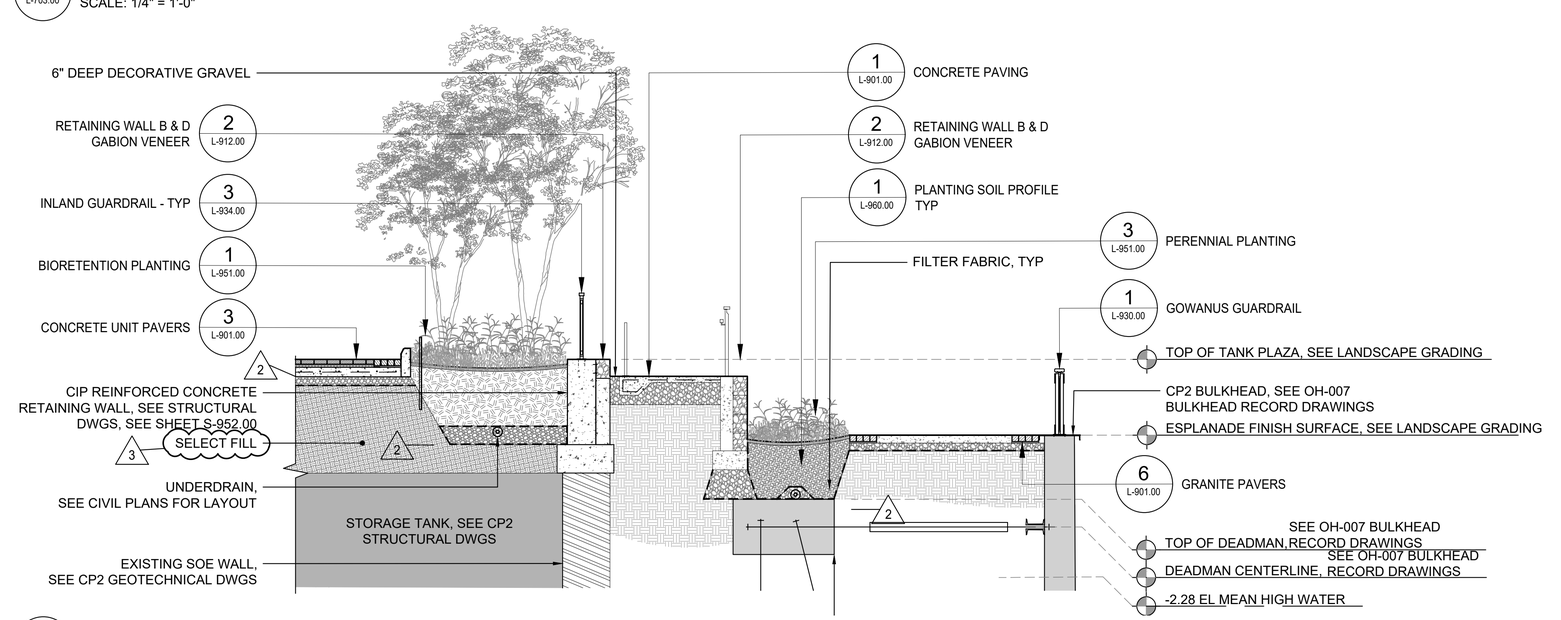
KEY PLAN

NOTES:

SECTIONS ARE SHOWN TO DEPICT RELATIONSHIPS BETWEEN PROPOSED ELEMENTS. REFER TO ASSEMBLY AND DETAIL DRAWINGS FOR MORE INFORMATION. THE SECTIONS AND DETAILS ARE TO BE UTILIZED IN CONCERT TO FULLY INTERPRET THE DESIGN INTENT. THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE LANDSCAPE ARCHITECT IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE SECTIONS AND DETAILS.



2 L-703.00 SECTION AT TOP TANK OF RETAINING WALL
SCALE: 1/4" = 1'-0"



1 L-703.00 SECTION AT AMPHITHEATER RAMP
SCALE: 1/4" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
3	11/2026	Addendum No. 3	JD
2	10/2026	Addendum No. 2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen and Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

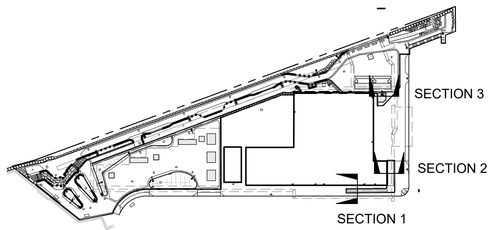
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE SECTIONS

DATE: SEPTEMBER 2026
SHEET NO: 169 OF 719
DRAWING NO. L-703.00

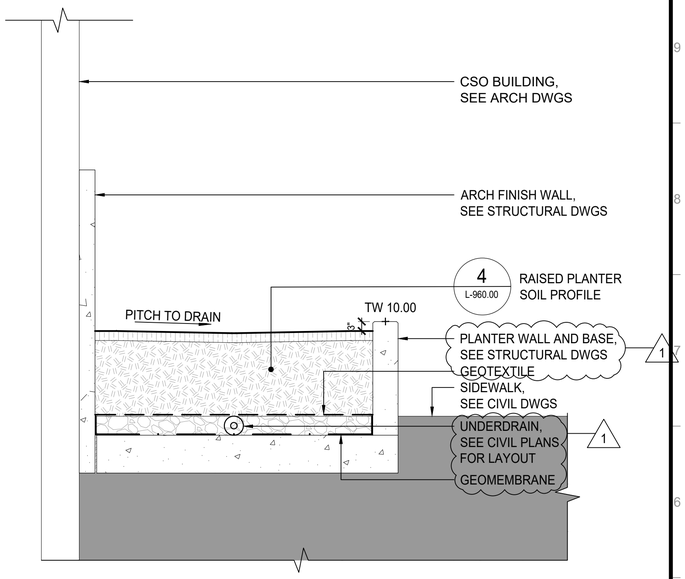
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sys\val\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\Wise\Landscape\CP-03103_PLTL-703.00 SECTIONS.dwg
Last Date Saved: 10/30/2026 1:39 PM
Date & Time Plotted: 11/11/2026 9:48 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



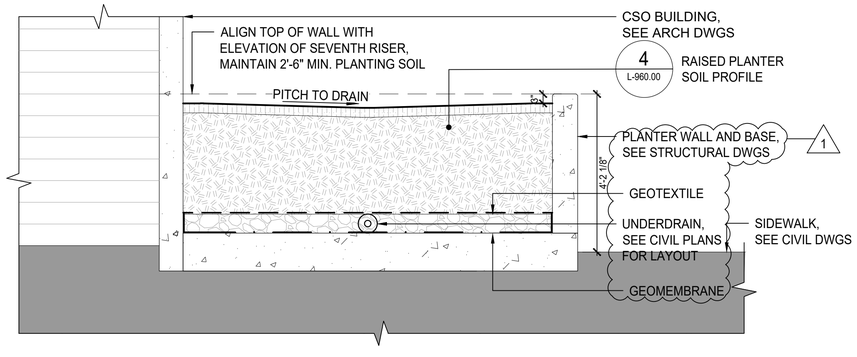
KEY PLAN

NOTES:

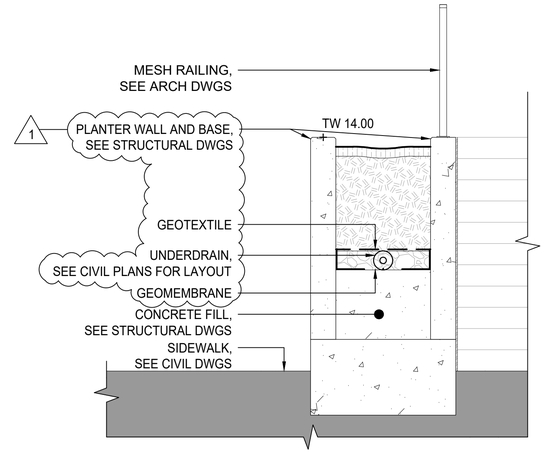
SECTIONS ARE SHOWN TO DEPICT RELATIONSHIPS BETWEEN PROPOSED ELEMENTS. REFER TO ASSEMBLY AND DETAIL DRAWINGS FOR MORE INFORMATION. THE SECTIONS AND DETAILS ARE TO BE UTILIZED IN CONCERT TO FULLY INTERPRET THE DESIGN INTENT. THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE LANDSCAPE ARCHITECT IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE SECTIONS AND DETAILS.



2 L-706.00 LOW PLANTER AT SE CORNER
SCALE: 1/2" = 1'-0"



3 L-706.00 NE CORNER LOW PLANTER
SCALE: 1/2" = 1'-0"



1 L-706.00 HIGH PLANTER AT SE CORNER
SCALE: 1/2" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE SECTIONS

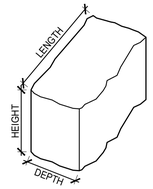
DATE: SEPTEMBER 2026
SHEET NO: 172 OF 719
DRAWING NO. L-706.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCA\CCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTIL-706.00 SECTIONS.dwg
Last Date Saved: 11/11/2026 3:23 PM
Date & Time Plotted: 11/11/2026 4:22 PM
Plot Scale: 1:1
Plot Style Table: SCAPE.ctb

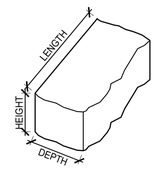
AMPHITHEATER BOULDER SCHEDULES				
SEATING BLOCKS				
QTY		DEPTH	LENGTH	HEIGHT
1	SB-A	4'-6"	5'-6"	1'-9" MIN
2	SB-B	4'-6"	7'-0"	2'-0" MIN
1	SB-C	4'-0"	5'-2"	2'-0" MIN
2	SB-D	4'-0"	6'-0"	2'-0" MIN
4	SB-E	4'-0"	4'-0"	1'-6"
4	SB-F	4'-0"	7'-0"	1'-6"
1	SB-G	4'-0"	5'-0"	1'-6"
1	SB-H	4'-0"	4'-8"	1'-6"
1	SB-I	4'-0"	8'-6"	1'-0"
1	SB-J	4'-0"	4'-3"	1'-6"
1	SB-K	2'-0"	5'-2"	1'-9" MIN
2	SB-L	4'-6"	6'-0"	1'-9" MIN
1	SB-M	4'-0"	3'-0"	1'-9" MIN
1	SB-N	3'-6"	3'-0"	1'-6"
3	SB-O	3'-6"	6'-0"	1'-6"
1	SB-P	4'-6"	5'-0"	1'-6"
1	SB-Q	4'-6"	7'-0"	1'-6"
1	SB-R	3'-6"	4'-6"	1'-6"
1				
BOULDER SCRAMBLE				
QTY		WIDTH	LENGTH	HEIGHT
14	BS-A	2'-0" MIN - 3'-0" MAX	2'-0" MIN - 3'-0" MAX	2'-0" MIN - 3'-0" MAX
11	BS-B	3'-0" MIN - 4'-0" MAX	3'-0" MIN - 4'-0" MAX	2'-0" MIN - 3'-0" MAX
18	BS-C	4'-0" MIN - 5'-0" MAX	4'-0" MIN - 5'-0" MAX	2'-0" MIN - 3'-0" MAX

TIDE GATE BOULDER SCHEDULES				
SEATING BLOCKS				
QTY		DEPTH	LENGTH	HEIGHT
1	SB-V	2'-6"	5'-0"	2'-1" MIN
3	SB-W	3'-0"	4'-0"	2'-3" MIN
4	SB-X	2'-6"	5'-0"	1'-3"
5	SB-Y	2'-6"	3'-6"	1'-3"
5	SB-Z	2'-6"	3'-0"	1'-3"
8	SB-AA	2'-6"	3'-6"	1'-3" MIN
1	SB-AB	2'-6"	6'-0'	1'-3" MIN
3	SB-AC	2'-6"	6'-0'	1'-6" MIN
2	SB-AD	1'-9"	3'-6"	1'-3"
2	SB-AE	1'-9"	5'-0"	1'-3"

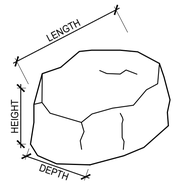
GET-DOWN BOULDER SCHEDULES				
STEPPING BLOCKS				
QTY		DEPTH	LENGTH	HEIGHT
3	ST-A	2'-2"	5'-0"	2'-0"
2	ST-B	2'-2"	5'-0"	1'-4"
BOULDER SCRAMBLE				
QTY		DEPTH	LENGTH	HEIGHT
30	BS-D	2'-0" MIN - 3'-0" MAX	2'-0" MIN - 3'-0" MAX	1'-0" MIN - 2'-0" MAX
25	BS-E	3'-0" MIN - 4'-0" MAX	3'-0" MIN - 4'-0" MAX	1'-0" MIN - 2'-0" MAX
15	BS-F	4'-0" MIN - 5'-0" MAX	4'-0" MIN - 5'-0" MAX	1'-0" MIN - 2'-0" MAX
TRAFFIC BARRIER BLOCKS				
QTY		DEPTH	LENGTH	HEIGHT
8	ST-C	2'-0"	6'-0"	1'-8" MAX
2	ST-D	2'-0"	3'-0"	1'-8" MAX



STONE SEATING BLOCK (SB)
FACE: SPLIT FINISH
SEATING SURFACE: SAWN WITH THERMAL FINISH
SIDES: SAWN FINISH



STONE STEPPING BLOCK (ST)
STEPPING SURFACE: NATURAL FINISH
SIDES: SPLIT FINISH



BOULDER SCRAMBLE (BS)

NOTE
1. BOULDER AND STONE BLOCK SELECTON AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE
2. SEE SPECIFICATIONS FOR CUT FACES OF EACH STONE TYPE

SCAPE

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NYC BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE
IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
STONE SCHEDULE

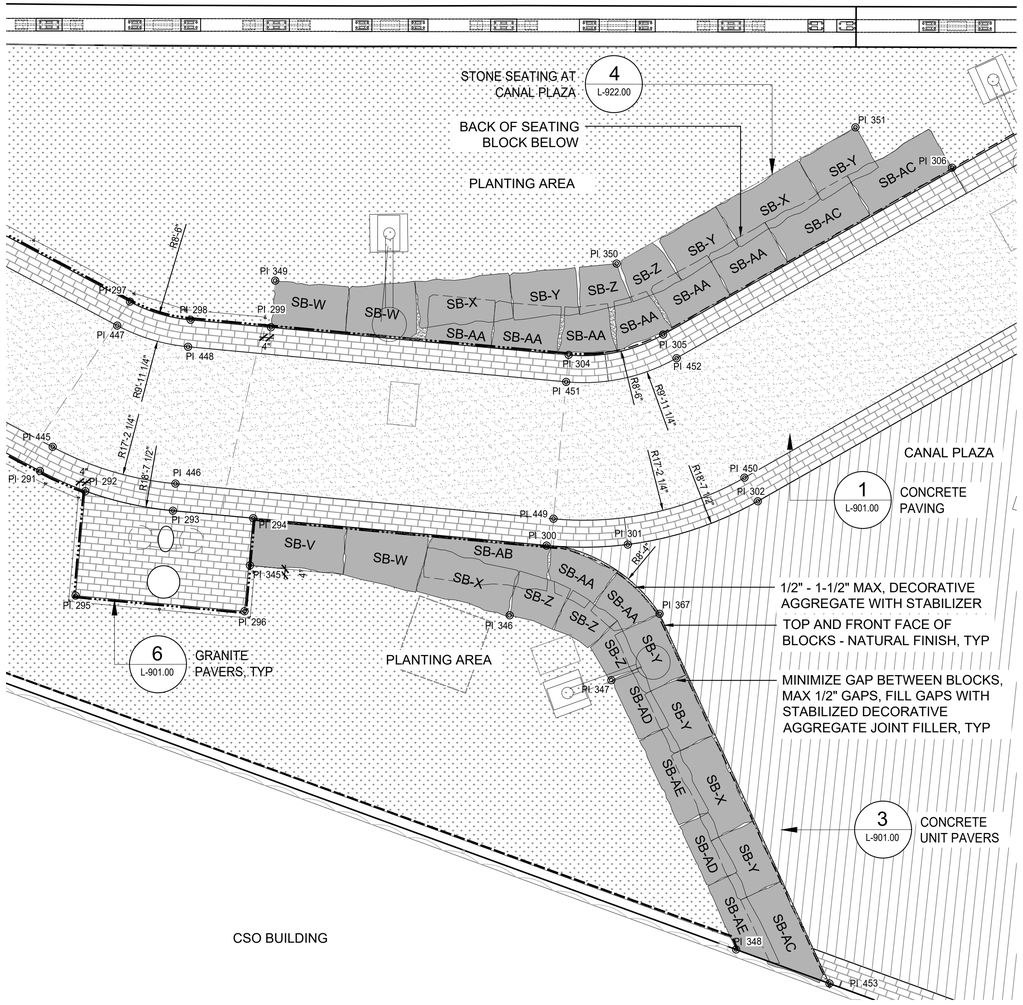
DATE: SEPTEMBER 2026
SHEET NO: 173 OF 719
DRAWING NO. L-800.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\Kelly\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03303_PLTIL-800.00 STONE SCHEDULE.dwg
Last Save Date: 11/11/2026 2:35 PM
Date & Time Plotted: 11/11/2026 4:23 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

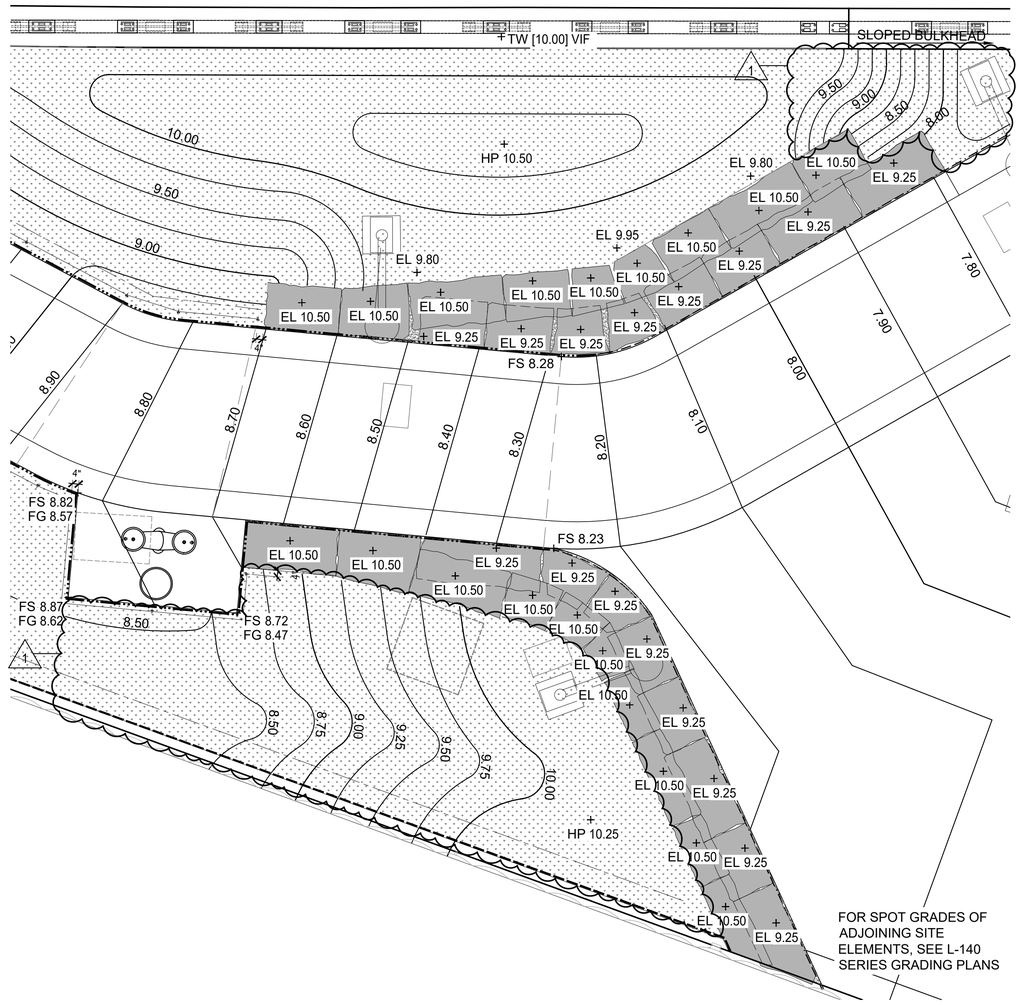
CANAL PLAZA ENLARGEMENT LAYOUT		
NUMBER	NORTHINGS	EASTINGS
PI 291	185415.82'	986594.51'
PI 292	185414.25'	986596.62'
PI 293	185412.23'	986600.91'
PI 294	185410.92'	986604.96'
PI 295	185408.98'	986594.91'
PI 296	185406.23'	986603.43'
PI 297	185423.50'	986601.11'
PI 298	185421.87'	986604.02'
PI 299	185420.56'	986608.07'
PI 300	185406.13'	986619.75'
PI 301	185405.24'	986623.95'
PI 302	185405.97'	986631.15'
PI 303	185413.33'	986342.42'
PI 304	185415.70'	986623.09'
PI 305	185415.66'	986628.19'
PI 306	185420.92'	986645.00'
PI 345	185408.52'	986604.24'
PI 346	185402.96'	986617.05'
PI 347	185398.45'	986621.54'
PI 348	185383.13'	986624.86'
PI 349	185422.91'	986608.83'
PI 350	185419.85'	986626.61'
PI 351	185424.11'	986640.49'
PI 367	185401.31'	986624.79'
PI 445	185416.91'	986595.45'
PI 446	185413.60'	986601.35'
PI 447	185422.41'	986600.17'
PI 448	185420.50'	986603.58'
PI 449	185407.43'	986620.42'
PI 450	185407.35'	986630.73'
PI 451	185414.33'	986622.65'
PI 452	185414.28'	986628.61'
PI 453	185380.31'	986629.27'

NOTE

1. BOULDER AND STONE BLOCK SELECTION AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE
2. TOP OF STONE SPOT ELEVATIONS ARE APPROXIMATE



2 L-802.00 TIDE GATE BOULDER ENLARGEMENT PLAN - MATERIAL AND LAYOUT
SCALE: 1/4" = 1'-0"



1 L-802.00 TIDE GATE BOULDER ENLARGEMENT PLAN - GRADING
SCALE: 1/4" = 1'-0"

SCAPE

NYC
BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE
IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen and Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PLAN ENLARGEMENT 2

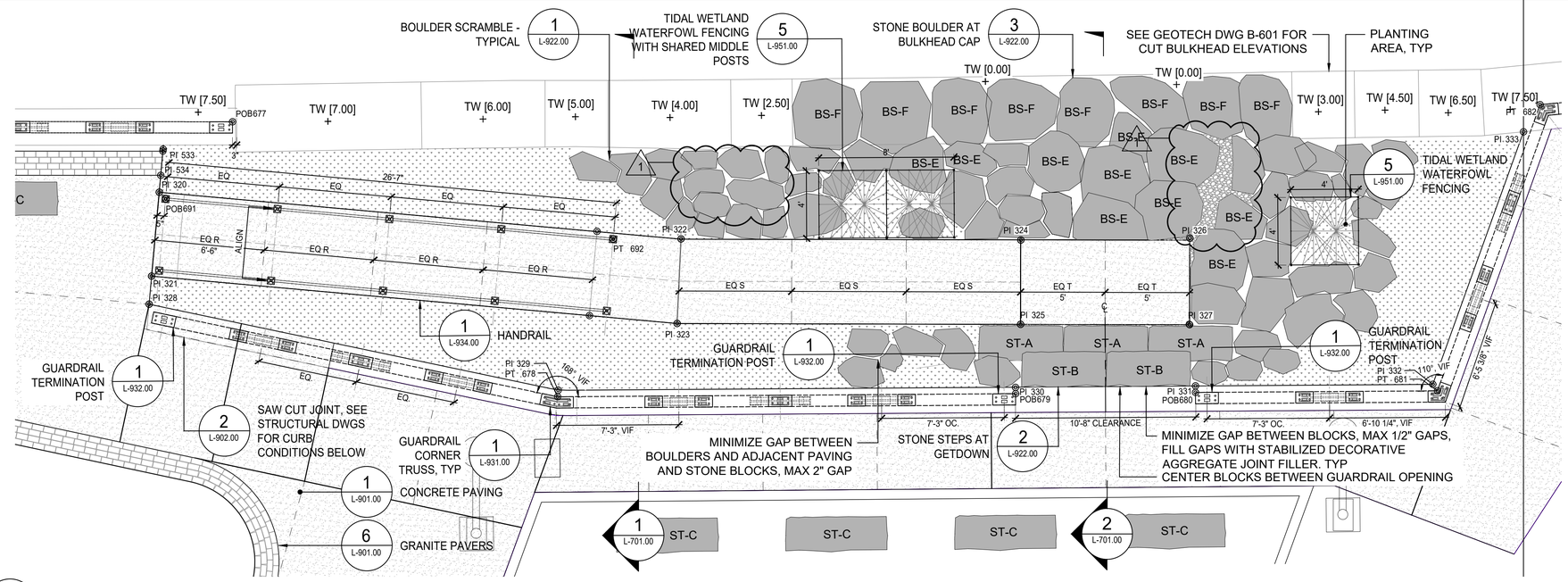
DATE: SEPTEMBER 2026
SHEET NO: 175 OF 719
DRAWING NO. L-802.00

Last Saved By: Kelly | Last Date Saved: 11/11/2026 7:38 PM | Paper Size Printed To: ANSI full bleed D (34.00 x 22.00 inches) | Drawing File Name & Drive Location: C:\Users\sysvalDCAD\Docs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\WiseLandscape\CP-03303_PLTIL-802.00 PLAN ENLARGEMENT.dwg | Date & Time Plotted: 11/11/2026 9:54 PM | Plot Scale: 1:1 | Plot Style Table: BEDC_Acad_2021.ctb

GET-DOWN ENLARGEMENT LAYOUT		
NUMBER	NORTHINGS	EASTINGS
PI 320	185410.62'	986718.72'
PI 321	185403.46'	986716.43'
PI 322	185398.77'	986747.47'
PI 323	185393.94'	986746.15'
PI 324	185394.31'	986767.07'
PI 325	185389.45'	986765.97'
PI 326	185392.24'	986776.85'
PI 327	185387.24'	986775.72'
PI 328	185401.87'	986715.92'
PI 329	185391.62'	986738.43'
PI 330	185386.08'	986763.94'
PI 331	185382.83'	986778.36'
PI 332	185380.66'	986788.99'
PI 333	185393.73'	986797.28'
PI 533	185400.43'	986715.46'
PI 534	185390.52'	986737.22'
PI 535	185390.02'	986738.74'
PI 536	185378.97'	986789.70'
PI 537	185393.85'	986799.13'
PI 538	185410.53'	986718.72'
POB 677	185411.32'	986723.09'
PT 678	185391.25'	986738.30'
POB 679	185385.51'	986764.78'
POB 680	185383.26'	986775.19'
PT 681	185380.22'	986789.18'
PT 682	185395.41'	986798.80'
POB 691	185407.74'	986718.23'
PT 692	185399.63'	986743.55'

NOTE

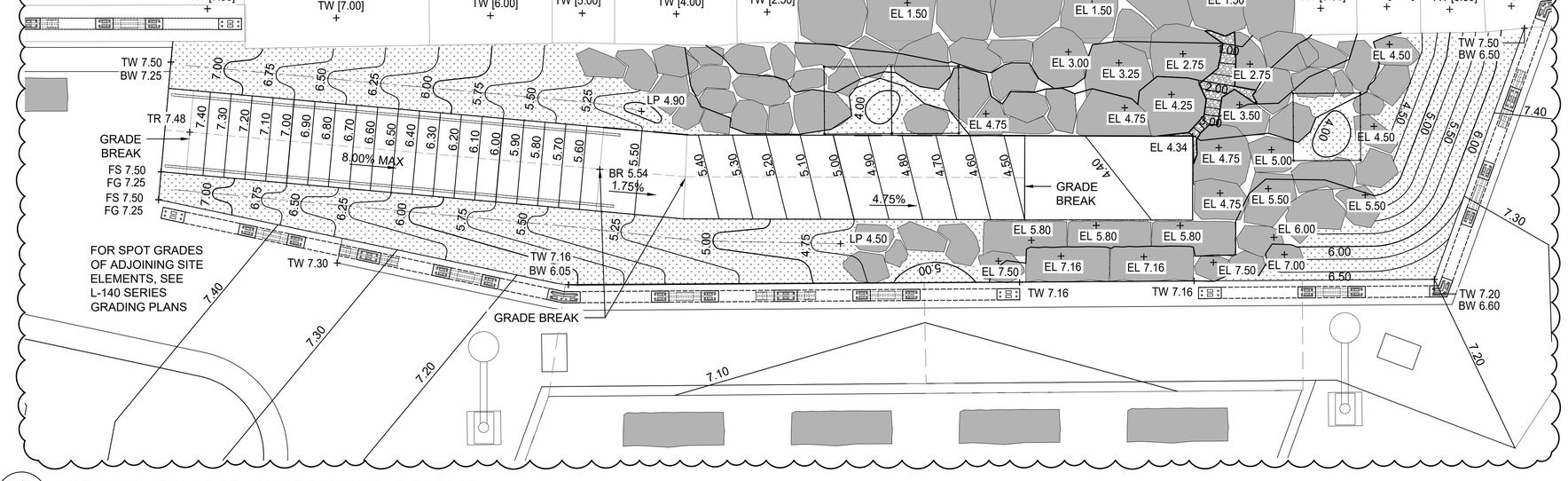
3. ALL UNLABELED BOULDERS ARE BS-D, REFER TO L-800.00 STONE SCHEDULE
4. BOULDER AND STONE BLOCK SELECTON AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE
5. TOP OF STONE SPOT ELEVATIONS ARE APPROXIMATE
6. SEE L-930.00 - L-936.00 RAILING DETAILS FOR TYPICAL LENGTHS UNLESS OTHERWISE NOTED



3 L-803.00 GET-DOWN BOULDER ENLARGEMENT - MATERIAL AND LAYOUT
SCALE: 1/4" = 1'-0"



2 L-803.00 STEPPING BLOCK PRECEDENT IMAGE
SCALE: NTS



1 L-803.00 GET-DOWN BOULDER ENLARGEMENT - GRADING
SCALE: 1/4" = 1'-0"

SCAPE

NYC BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE
IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No.3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

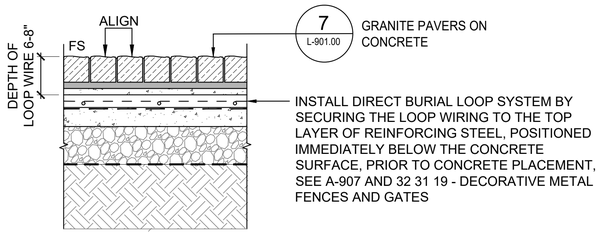
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PLAN ENLARGEMENT 3

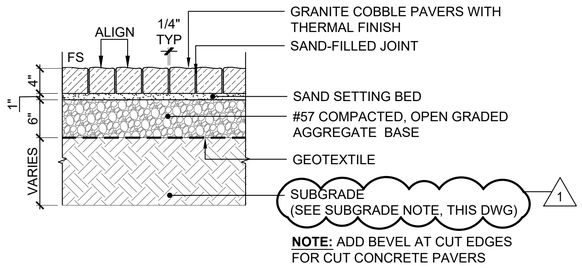
DATE: SEPTEMBER 2026
SHEET NO: 176 OF 719
DRAWING NO. L-803.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 X 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sysWatDC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\
Last Date Saved: 11/11/2026 6:58 PM
Date & Time Plotted: 11/11/2026 9:55 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



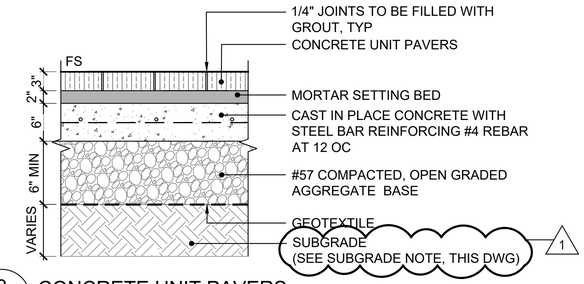
9 L-901.00 GRANITE PAVERS ON CONCRETE AT SECURITY GATE LOOP

SCALE: 1" = 1'-0"



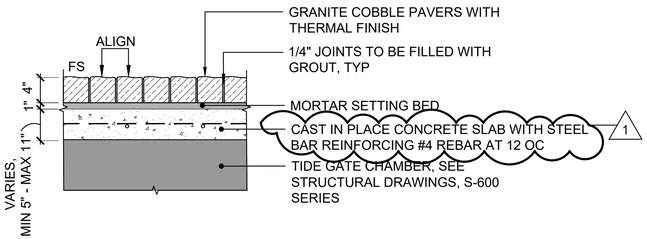
6 L-901.00 GRANITE PAVERS

SCALE: 1" = 1'-0"



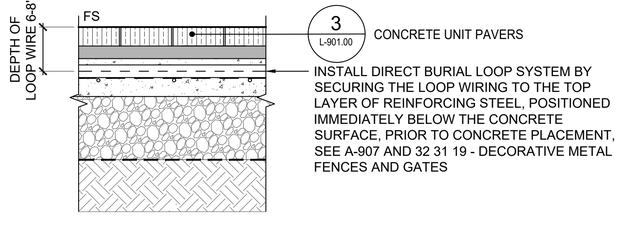
3 L-901.00 CONCRETE UNIT PAVERS

SCALE: 1" = 1'-0"



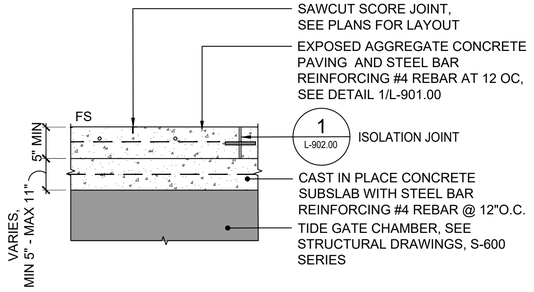
8 L-901.00 GRANITE PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"



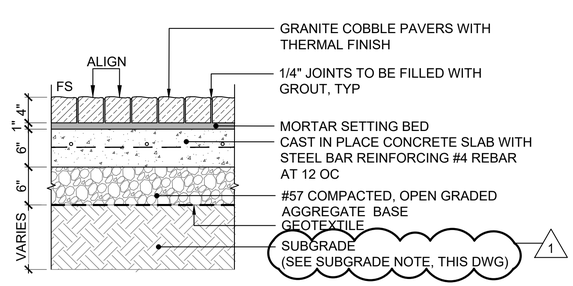
5 L-901.00 CONCRETE UNIT PAVER AT GATE SECURITY LOOP

SCALE: 1" = 1'-0"



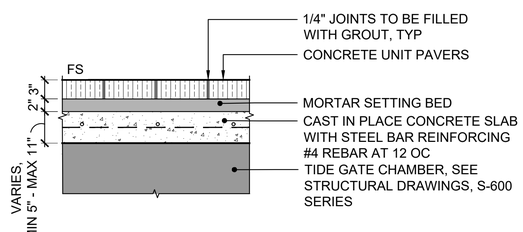
2 L-901.00 CONCRETE PAVING ON STRUCTURE

SCALE: 1" = 1'-0"



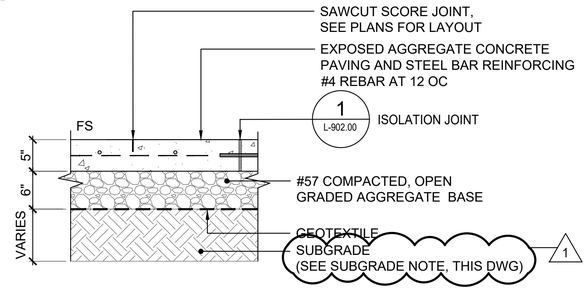
7 L-901.00 GRANITE PAVERS ON CONCRETE

SCALE: 1" = 1'-0"



4 L-901.00 CONCRETE UNIT PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"



1 L-901.00 CONCRETE PAVING

SCALE: 1" = 1'-0"

1 **SUBGRADE NOTE:** WHERE SUBGRADE IS BELOW THE BOTTOM OF THE PAVER SECTION, SELECT FILL SHALL BE PROVIDED.

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

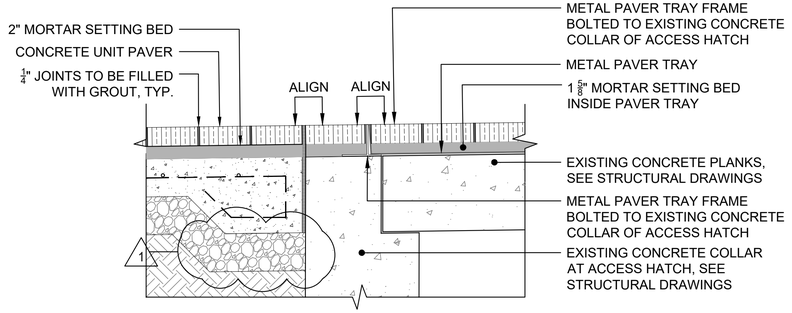
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING DETAILS 01

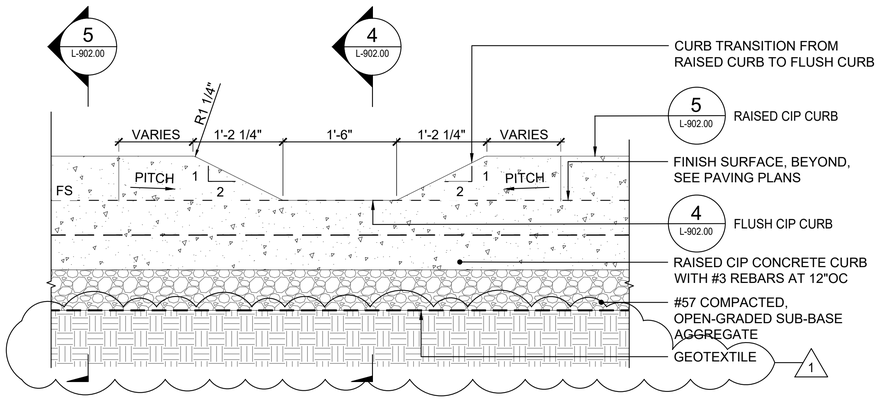
DATE: SEPTEMBER 2026
SHEET NO: 178 OF 719
DRAWING NO. L-901.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DOACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTL-901.00 PAVING DETAILS 01.dwg
Last Date Saved: 11/11/2026 2:45 PM
Date & Time Plotted: 11/11/2026 4:24 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



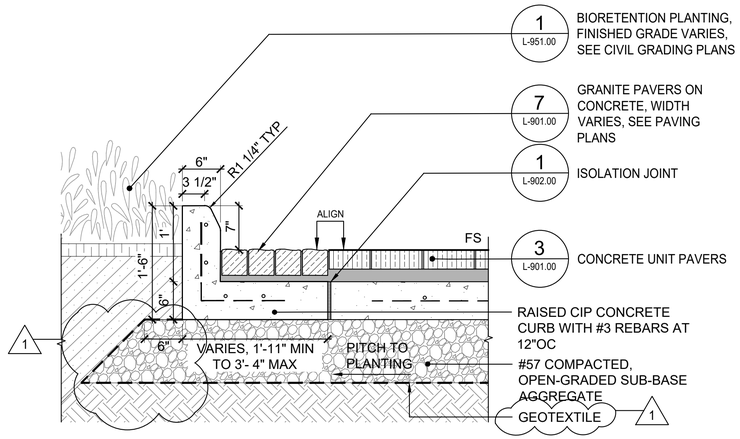
7 L-902.00 CONCRETE UNIT PAVERS ON PAVER GRATE

SCALE: 1" = 1'-0"



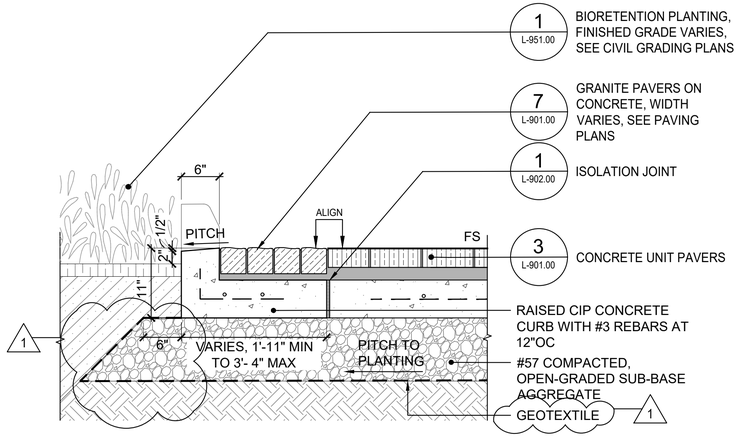
6 L-902.00 SCUPPER CURB

SCALE: 1" = 1'-0"



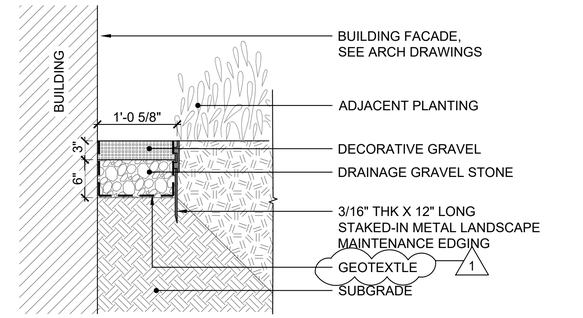
5 L-902.00 RAISED CIP CURB

SCALE: 1" = 1'-0"



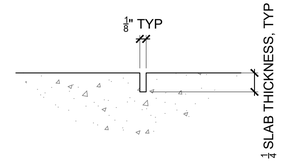
4 L-902.00 FLUSH CIP CURB

SCALE: 1" = 1'-0"



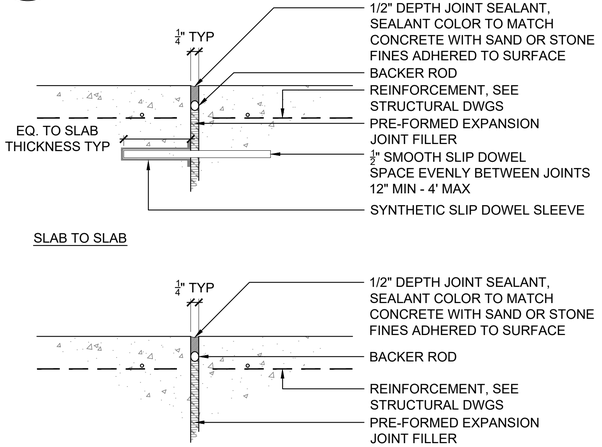
3 L-902.00 LANDSCAPE MAINTENANCE EDGING

SCALE: 1" = 1'-0"



2 L-902.00 SAW CUT JOINT

SCALE: NTS



1 L-902.00 ISOLATION JOINT

SCALE: NTS

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

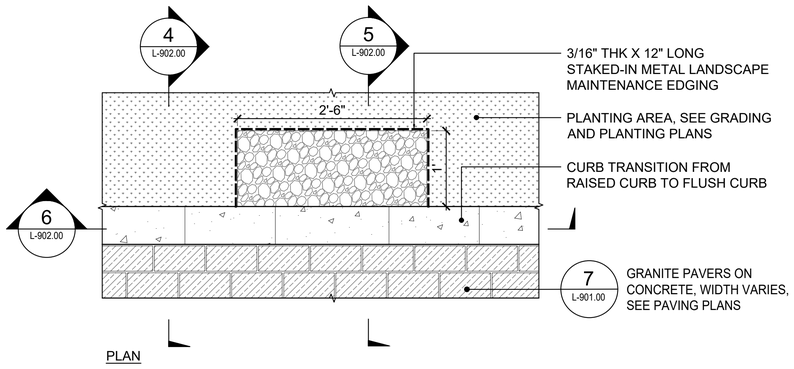
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

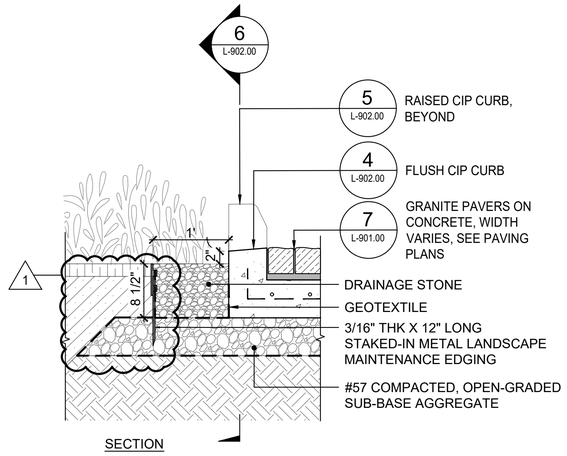
LANDSCAPE
PAVING DETAILS 02

DATE: SEPTEMBER 2026
SHEET NO: 179 OF 719
DRAWING NO. L-902.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03003_PLTIL-902.00 PAVING DETAILS 02.dwg
Last Saved Date Saved: 11/11/2026 5:47 PM
Date & Time Plotted: 11/11/2026 10:01 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



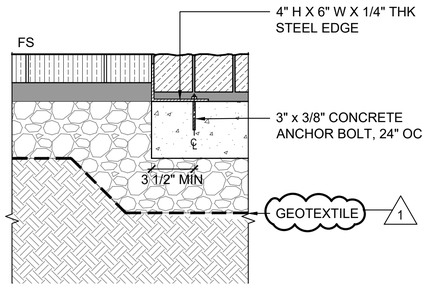
PLAN



SECTION

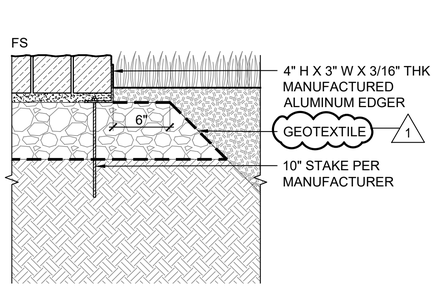
9 L-903.00 DRAINAGE STONE AT SCUPPER

SCALE: 1" = 1'-0"



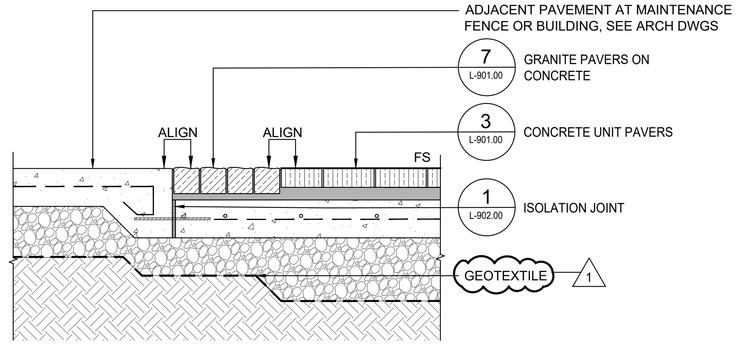
8 L-903.00 PAVER EDGE RESTRAINT

SCALE: 1 1/2" = 1'-0"



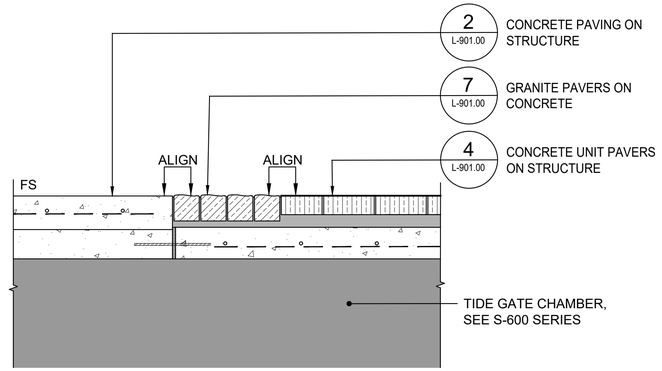
7 L-903.00 PATH METAL EDGING

SCALE: 1 1/2" = 1'-0"



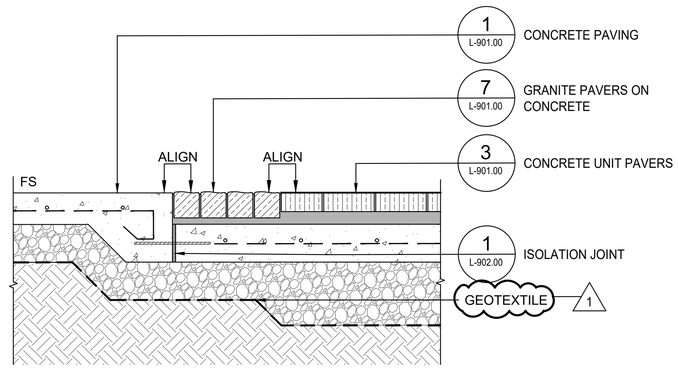
6 L-903.00 ARCHITECTURE SLAB TO GRANITE PAVERS ON CONCRETE TO CONCRETE UNIT PAVERS

SCALE: 1" = 1'-0"



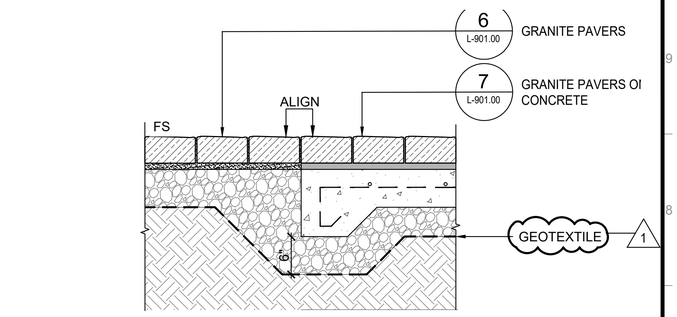
5 L-903.00 CONCRETE PAVING TO GRANITE PAVERS ON CONCRETE TO CONCRETE UNIT PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"



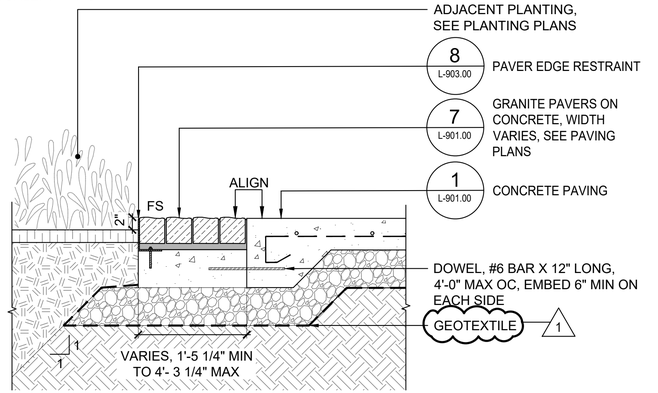
4 L-903.00 CONCRETE PAVING TO GRANITE PAVERS ON CONCRETE TO CONCRETE UNIT PAVERS

SCALE: 1" = 1'-0"



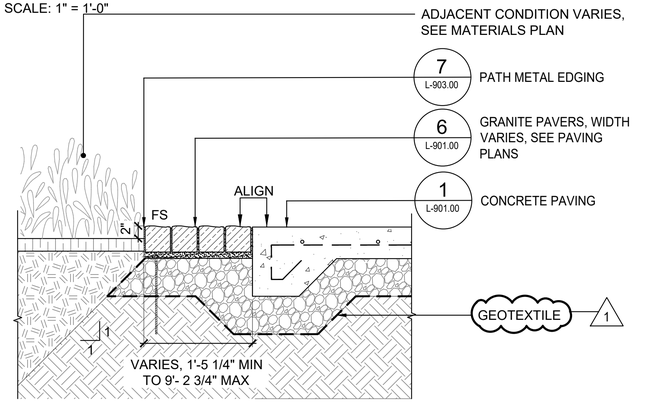
3 L-903.00 GRANITE PAVERS TO GRANITE PAVERS ON CONCRETE

SCALE: 1" = 1'-0"



2 L-903.00 GRANITE PAVERS ON CONCRETE TO CONCRETE PAVING

SCALE: 1" = 1'-0"



1 L-903.00 GRANITE PAVERS TO CONCRETE PAVING

SCALE: 1" = 1'-0"

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

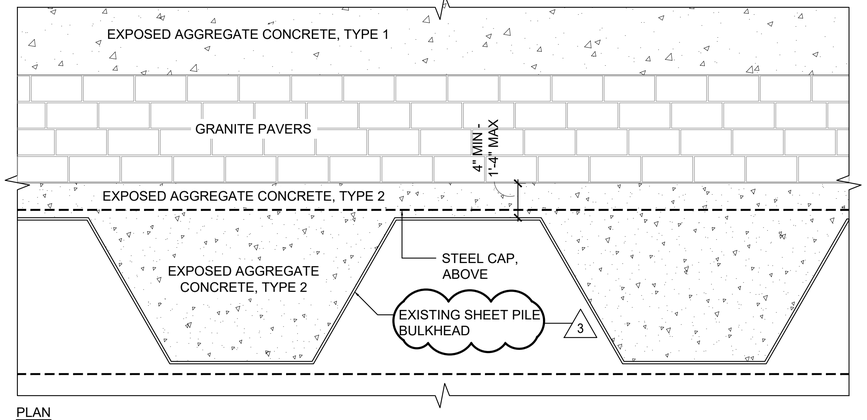
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

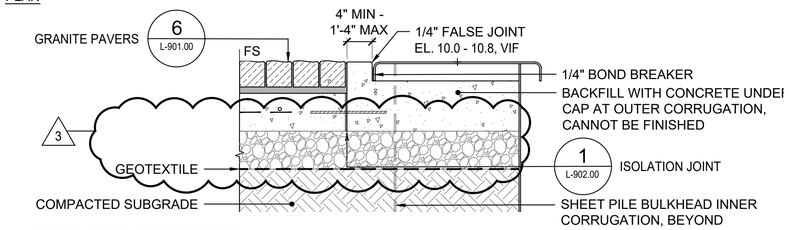
LANDSCAPE
PAVING DETAILS 03

DATE: SEPTEMBER 2026
SHEET NO: 180 OF 719
DRAWING NO. L-903.00

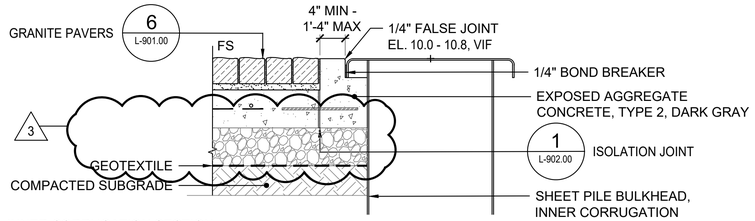
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACDocs\Hazen and Sawyer\90409-000_CSO-SC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTL-903.00 PAVING DETAILS 03.dwg
Last Date Saved: 11/11/2026 2:48 PM
Date & Time Plotted: 11/11/2026 4:24 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1



PLAN



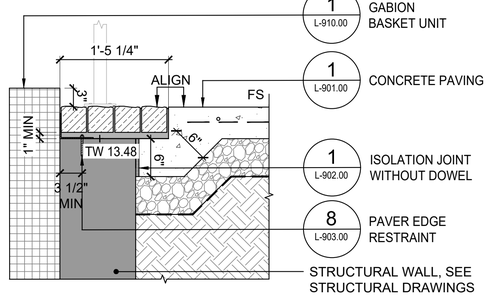
OUTER CORRUGATION SECTION



INNER CORRUGATION SECTION

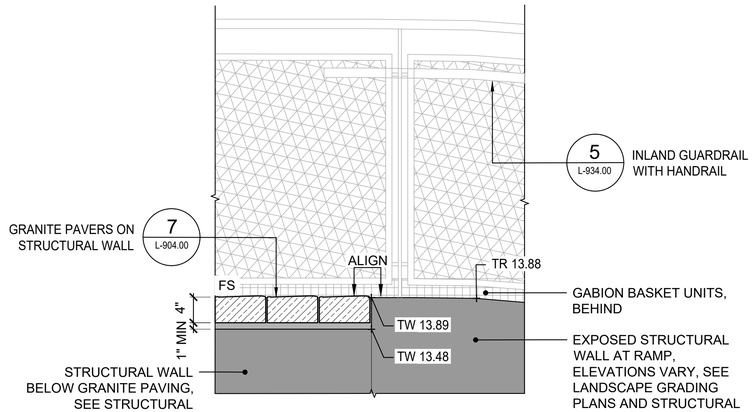
8 L-904.00 GRANITE PAVERS ON CONCRETE AT BULKHEAD

SCALE: 1" = 1'-0"



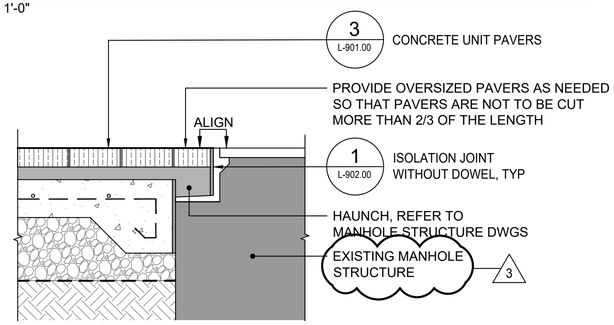
7 L-904.00 GRANITE PAVERS ON STRUCTURAL WALL

SCALE: 1" = 1'-0"



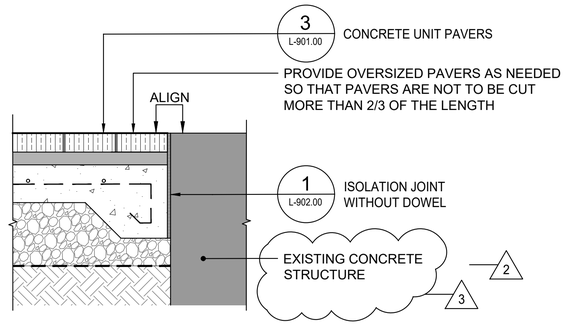
6 L-904.00 EXPOSED STRUCTURAL WALL TO GRANITE PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"



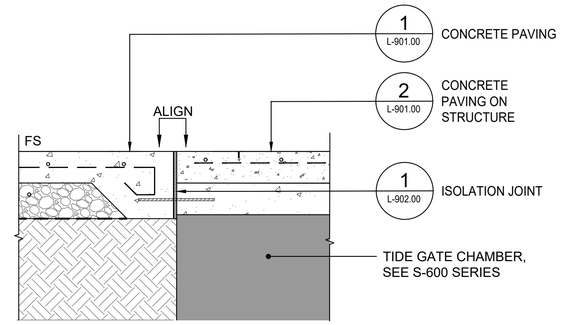
5 L-904.00 CONCRETE UNIT PAVERS AT MANHOLE

SCALE: 1" = 1'-0"



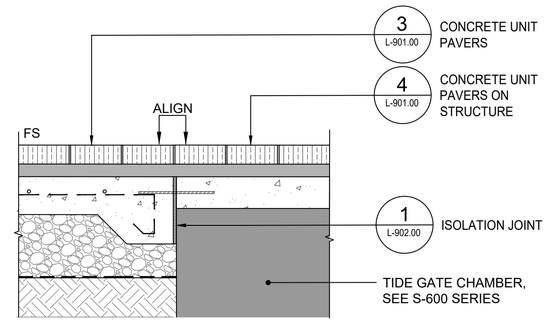
4 L-904.00 CONCRETE UNIT PAVERS AT ACCESS HATCHES AND UTILITY BOXES

SCALE: 1" = 1'-0"



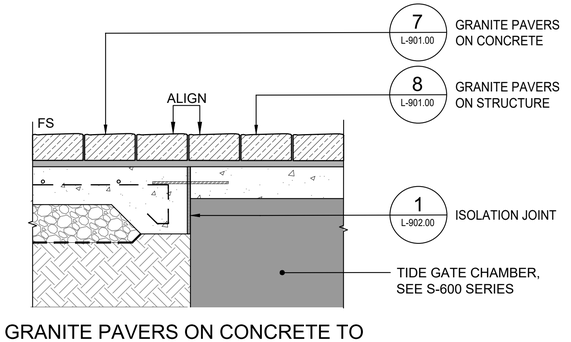
3 L-904.00 CONCRETE PAVING TO CONCRETE PAVING ON STRUCTURE

SCALE: 1" = 1'-0"



2 L-904.00 CONCRETE UNIT PAVERS TO CONCRETE UNIT PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"



1 L-904.00 GRANITE PAVERS ON CONCRETE TO GRANITE PAVERS ON STRUCTURE

SCALE: 1" = 1'-0"

2

SCAPE

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
2	11/2026	Addendum No.3	JD
1	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
PAVING DETAILS 04

DATE: SEPTEMBER 2026
SHEET NO: 181 OF 719
DRAWING NO. L-904.00

NYC

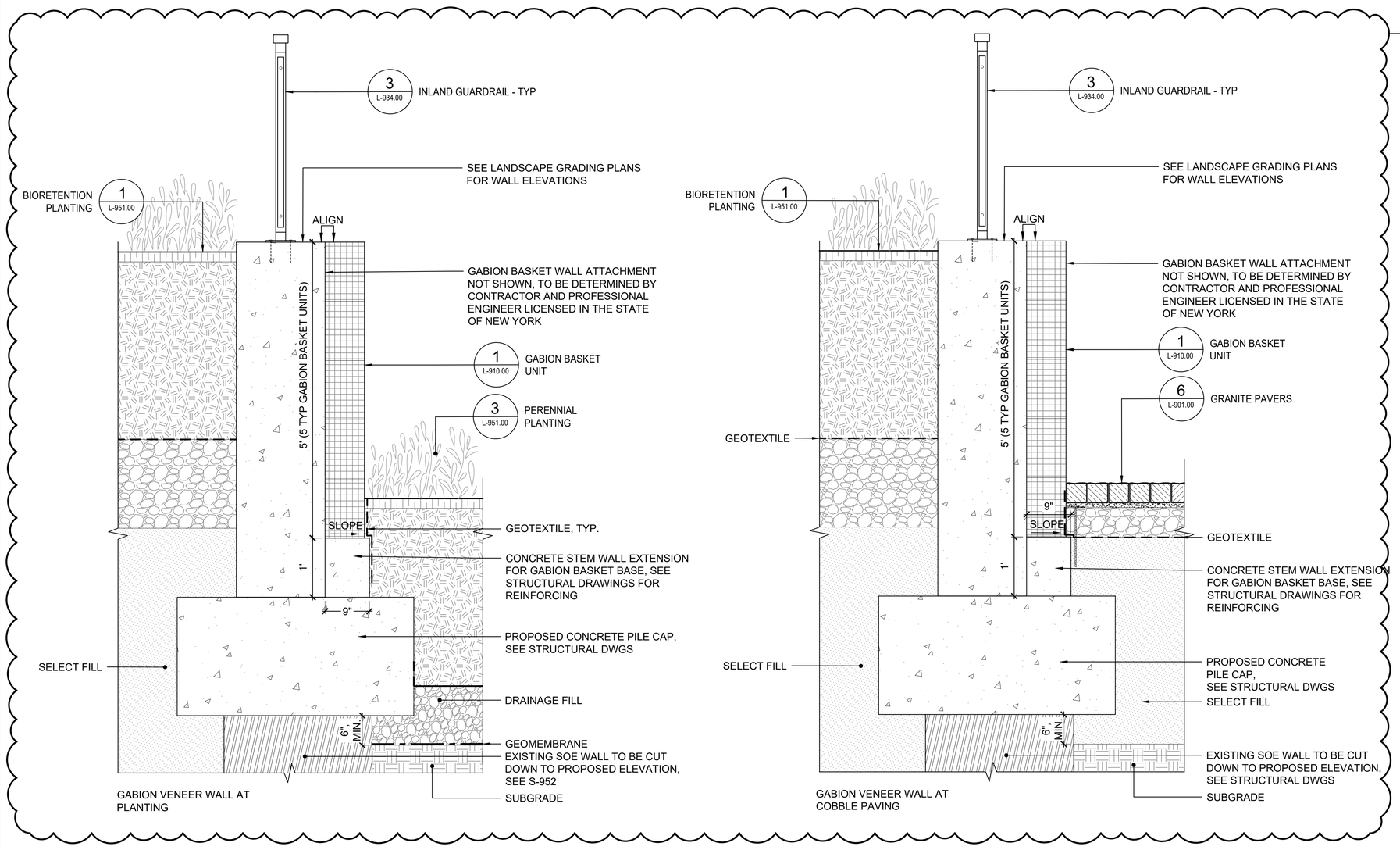
BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\WiseLandscape\CP-03\03_PLTL-904.00 PAVING DETAILS 04.dwg
Last Date Saved: 11/11/2026 2:51 PM
Date & Time Plotted: 11/11/2026 4:25 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1



2 L-910.00 RETAINING WALL B GABION VENEER
SCALE: 1" = 1'-0"

1 L-910.00 GABION BASKET UNIT
SCALE: 1" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen Brown AND Caldwell

JOHN DONNELLY REGISTERED LANDSCAPE ARCHITECT 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

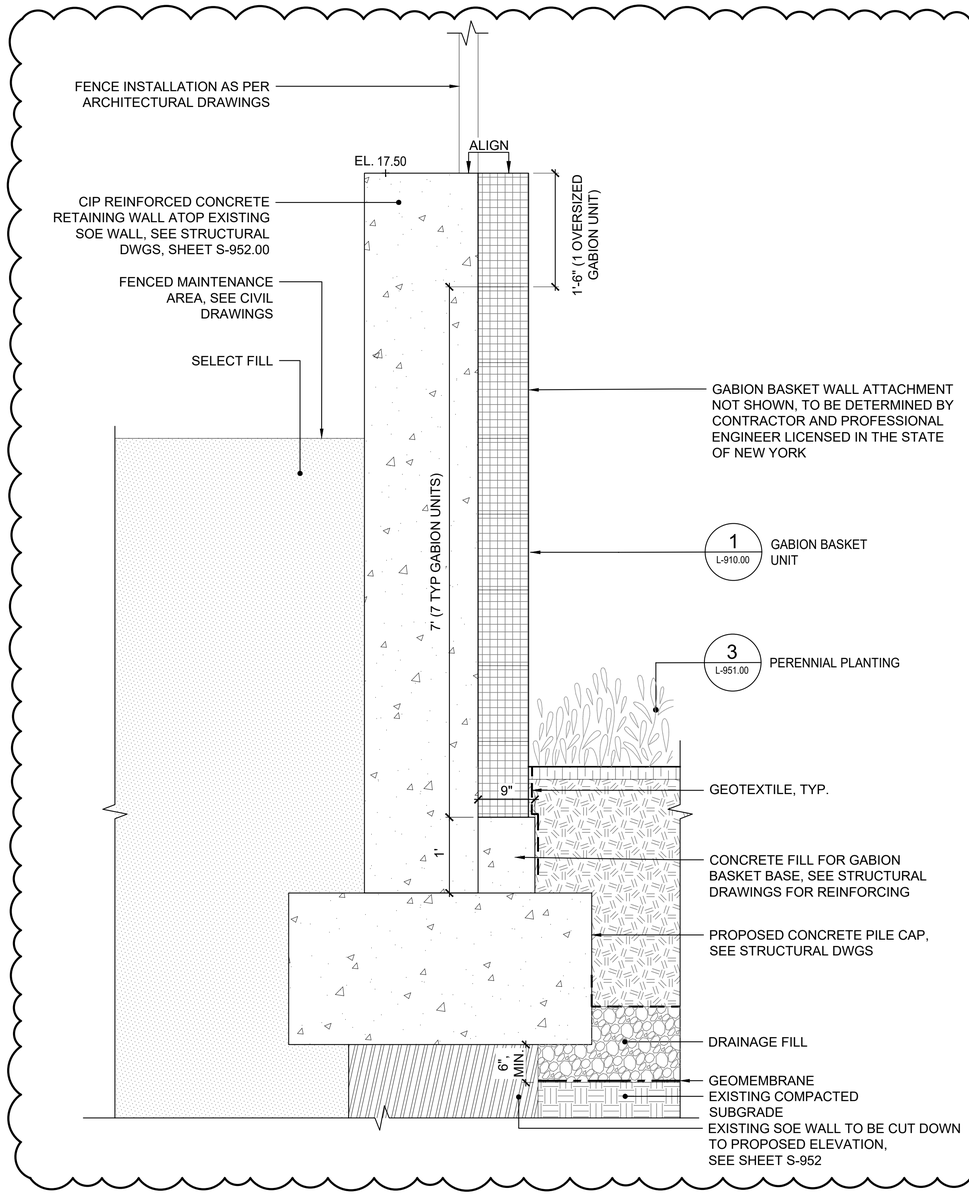
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

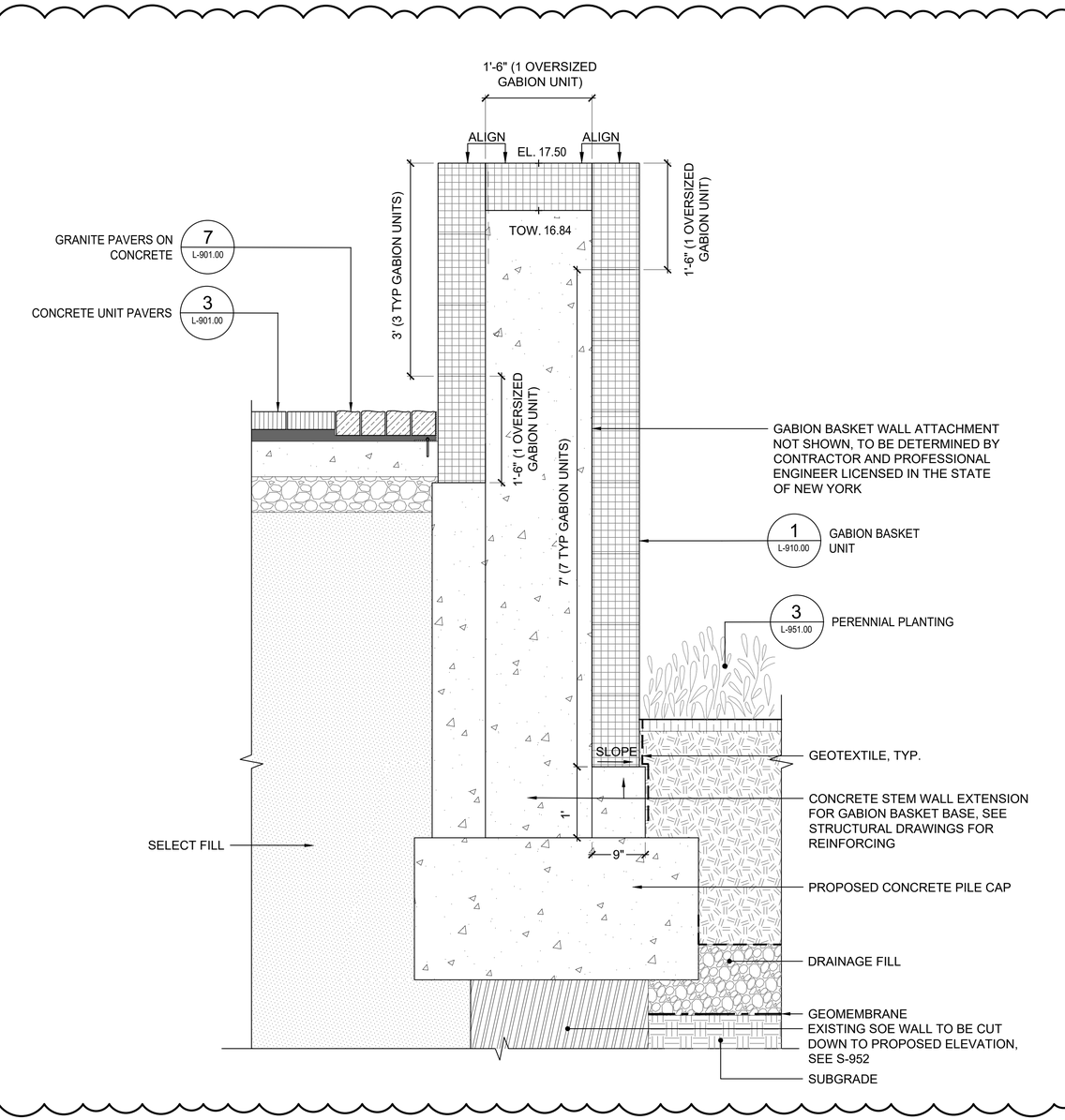
LANDSCAPE
RETAINING WALL DETAILS 01

DATE: SEPTEMBER 2026
SHEET NO: 182 OF 719
DRAWING NO. L-910.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\Wise\Landscape\CP-03\03_PLTL-910.00 RETAINING WALL DETAILS 01.dwg
Last Date Saved: 11/11/2026 11:49 AM
Date & Time Plotted: 11/11/2026 4:25 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



2 L-911.00 RETAINING WALL A2 & C GABION VENEER
SCALE: 1" = 1'-0"



1 L-911.00 RETAINING WALL A1 GABION VENEER
SCALE: 1" = 1'-0"

SCAPE

NYC BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No.3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

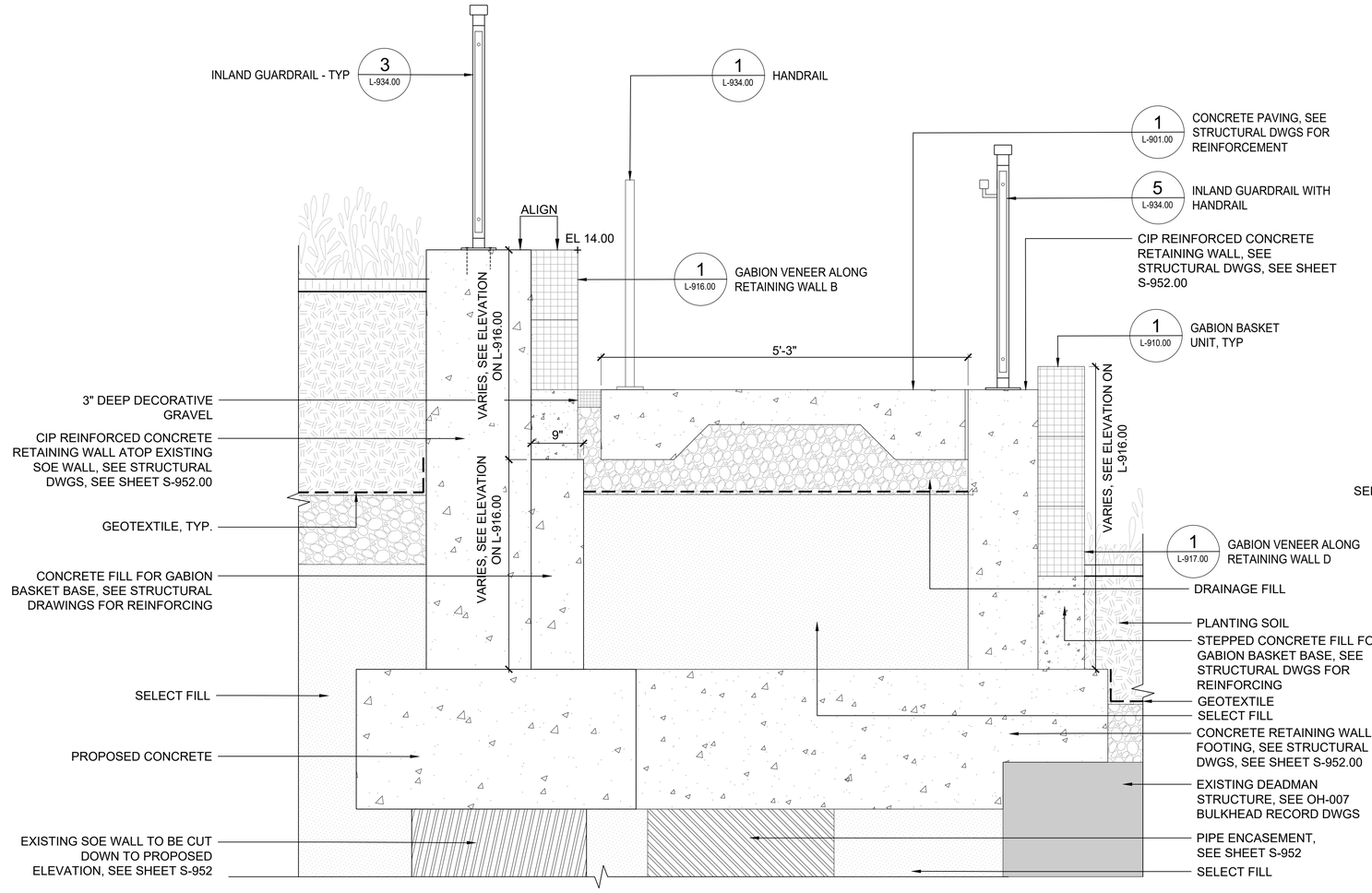
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

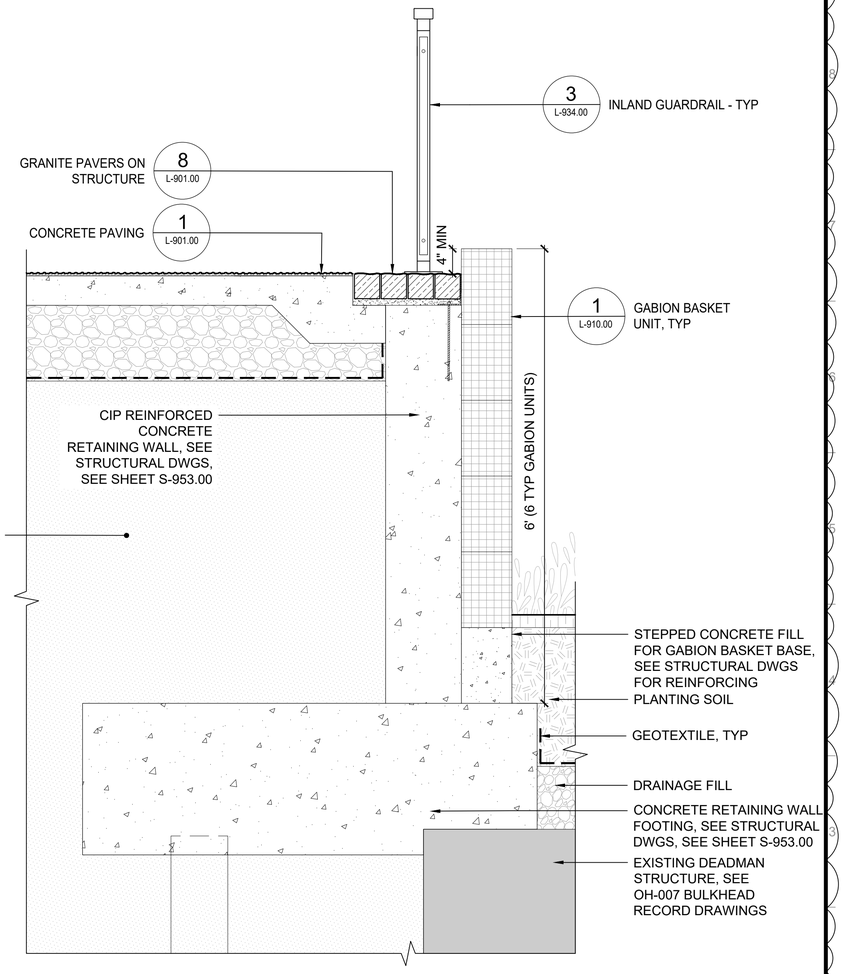
LANDSCAPE
RETAINING WALL DETAILS 02

DATE: SEPTEMBER 2026
SHEET NO: 183 OF 719
DRAWING NO. L-911.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\Kelly\DOCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise Landscape\CP-03103_PLTIL-911.00 RETAINING WALL DETAILS 02.dwg
Last Date Saved: 11/11/2026 11:52 AM
Date & Time Plotted: 11/11/2026 4:25 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



2 L-912.00 RETAINING WALL B & D GABION VENEER
SCALE: 1" = 1'-0"



1 L-912.00 RETAINING WALL E GABION VENEER AT AMPHITHEATER
SCALE: 1" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
##	####	#######	##
##	####	#######	##
##	#####	#######	##
##	####	#######	##
##	####	######	##
1	10/2026	Addendum No.2	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.
PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

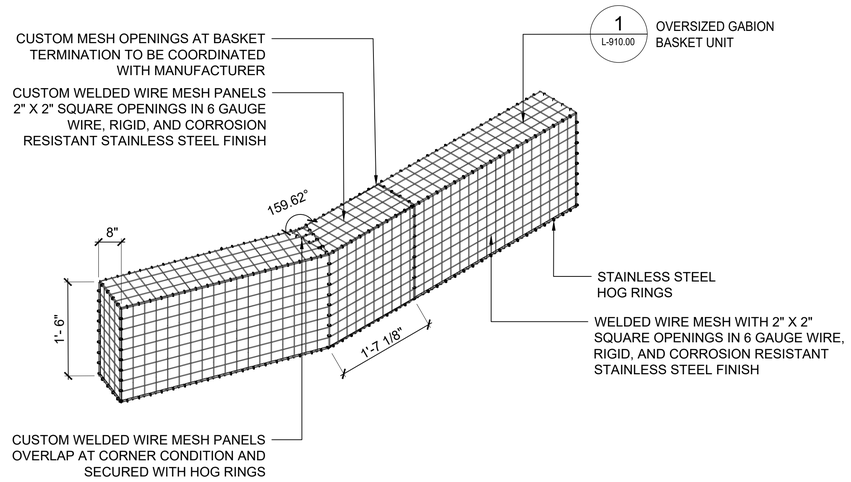
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

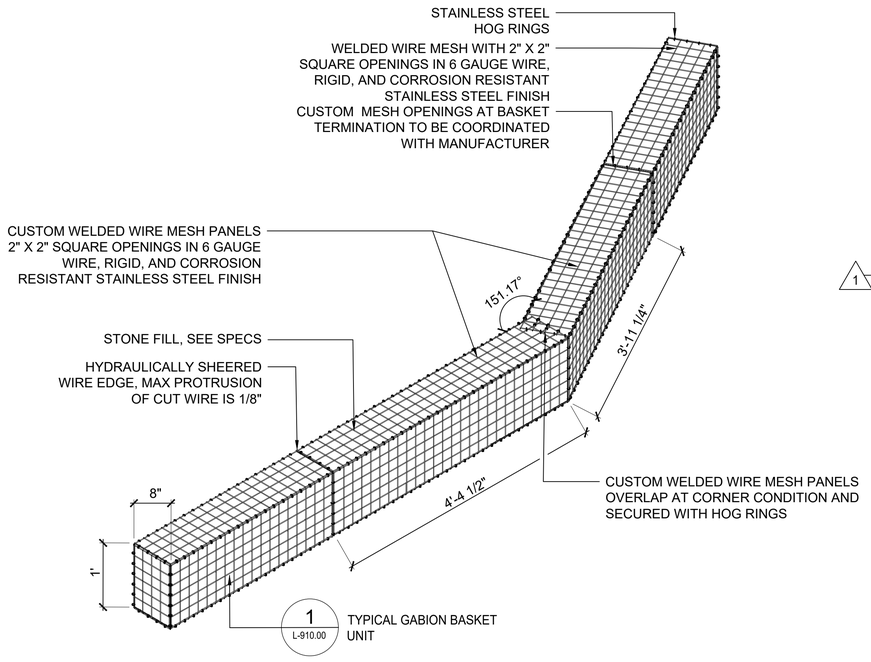
LANDSCAPE
RETAINING WALL DETAILS 03

DATE: SEPTEMBER 2026
SHEET NO: 184 OF 719
DRAWING NO. L-912.00

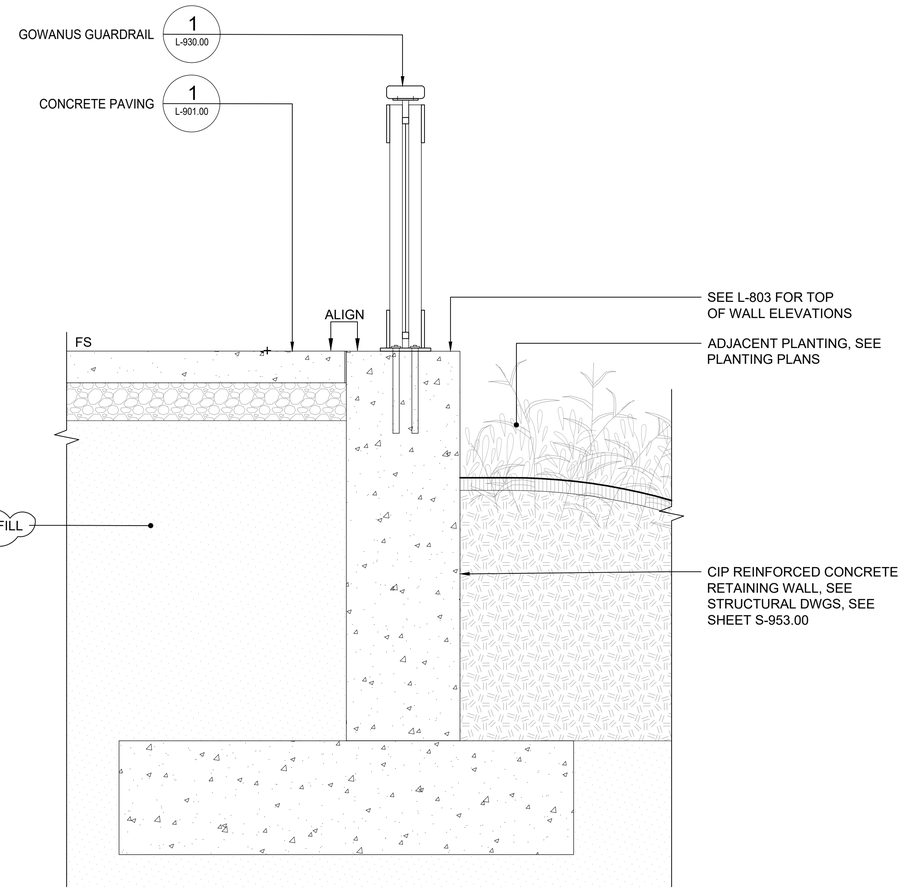
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\OneDrive - CDM Smith\Documents\Hazen and Sawyer\90409.000_CSO-GC_SFS-DES-OH\Project Files\00_Project\Revit Landscape\CP-03\03_PLTL_912.00 RETAINING WALL DETAILS 03.dwg
Last Date Saved: 11/10/2026 8:59 PM
Date & Time Plotted: 11/11/2026 9:21 AM
Plot Scale: 1:1
Plot Style Table: SCAPE.ctb



3 L-913.00 GABION VENEER BASKET UNITS AT BUILDING CORNER
SCALE: 1" = 1'-0"



2 L-913.00 GABION VENEER BASKET UNITS AT AMPHITHEATER CORNER
SCALE: 1" = 1'-0"



1 L-913.00 CONCRETE RETAINING WALL AT GET DOWN
SCALE: 1" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

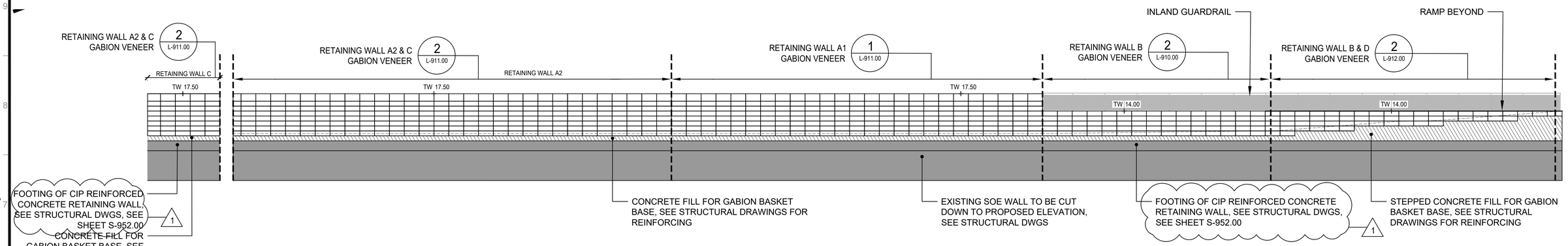
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
RETAINING WALL DETAILS 04

DATE: SEPTEMBER 2026
SHEET NO: 185 OF 719
DRAWING NO. L-913.00

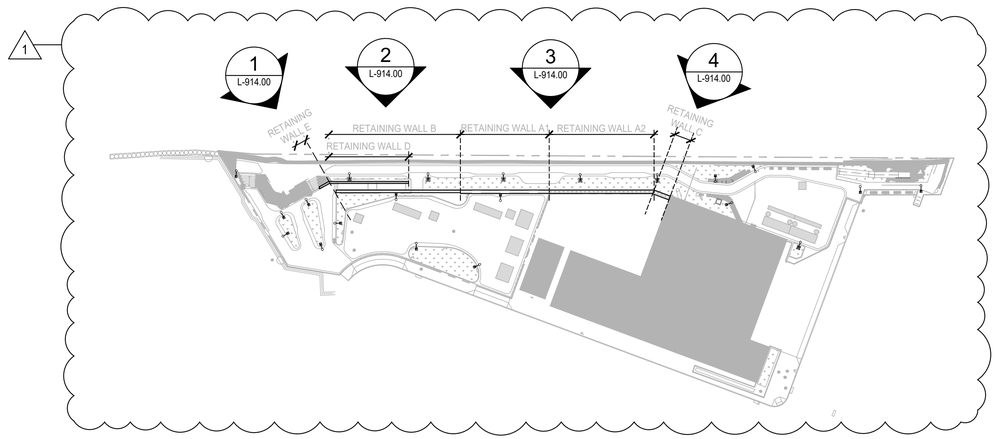
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03\03_PLTL-913.00 RETAINING WALL DETAILS 04.dwg
Last Date Saved: 11/11/2026 11:58 AM
Date & Time Plotted: 11/11/2026 4:25 PM
Plot Scale: 1:1
Plot Style Table: SCAPE.ctb



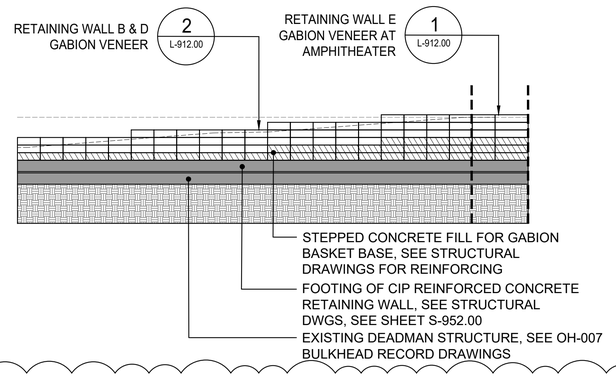
4 L-914.00 RETAINING WALL C GABION VENEER ELEVATION
SCALE: 1"=10'

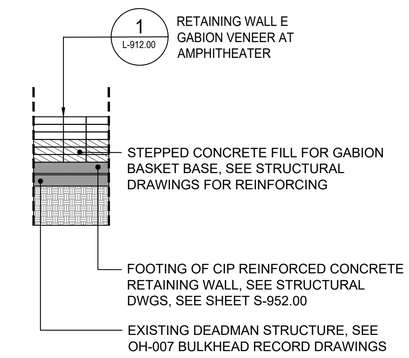
3 L-914.00 RETAINING WALL B-A1-A2 GABION VENEER WALL ELEVATION
SCALE: 1"=10'

1



KEY PLAN: NOT TO SCALE





1

2 L-914.00 RETAINING WALL D GABION VENEER AT RAMP ELEVATION
SCALE: 1"=10'

1 L-914.00 RETAINING WALL E GABION VENEER AT AMPHITHEATER ELEVATION
SCALE: 1"=10'

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

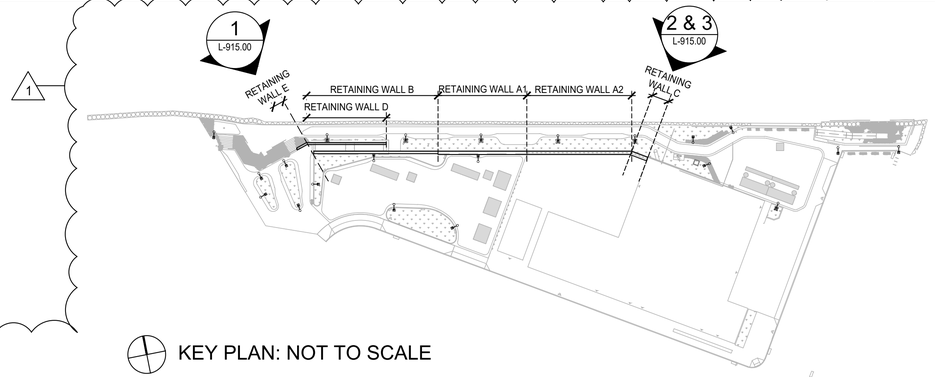
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

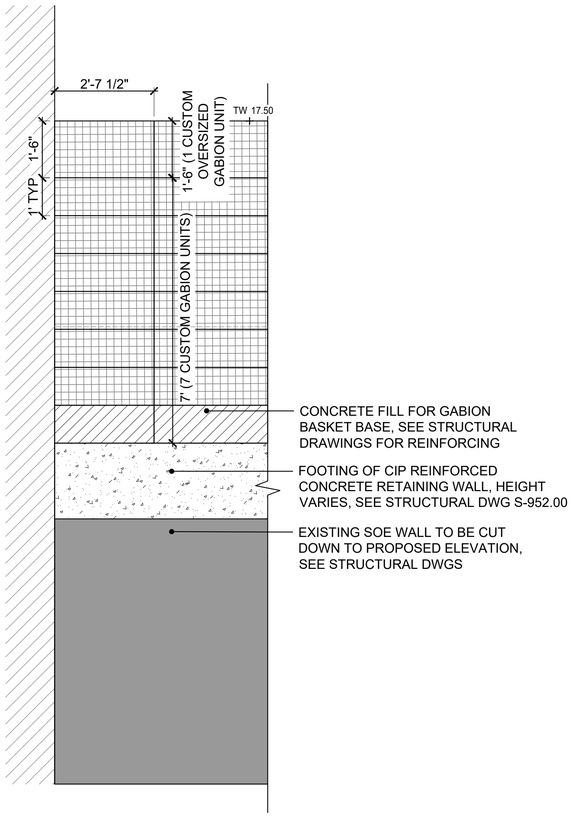
LANDSCAPE
RETAINING WALL ELEVATIONS 1

DATE: SEPTEMBER 2026
SHEET NO: 186 OF 719
DRAWING NO. L-914.00

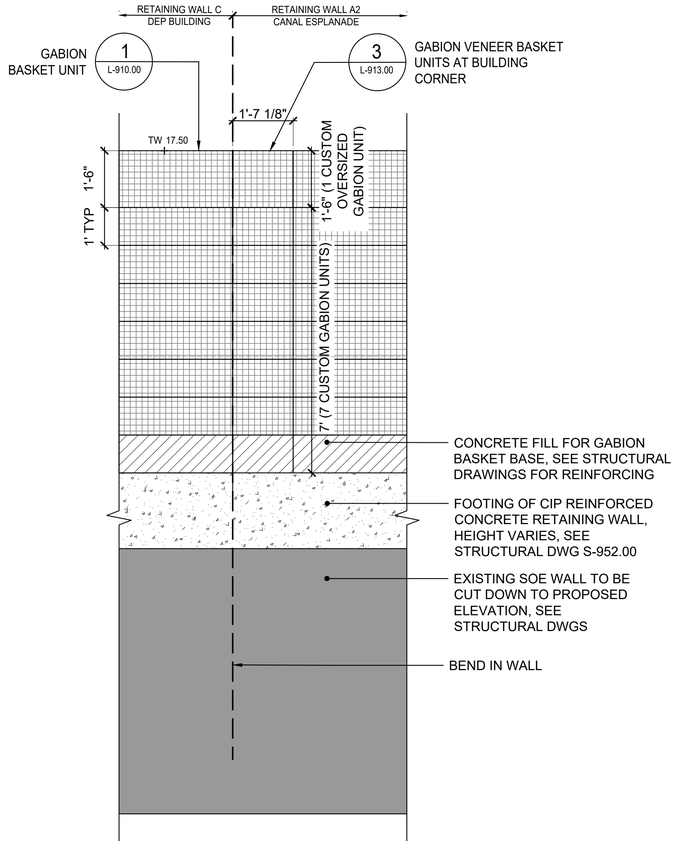
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscapeICP-03103_PLTIL-914.00 RETAINING WALL ELEVATIONS 1.dwg
Last Date Saved: 11/11/2026 12:37 PM
Date & Time Plotted: 11/11/2026 4:25 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



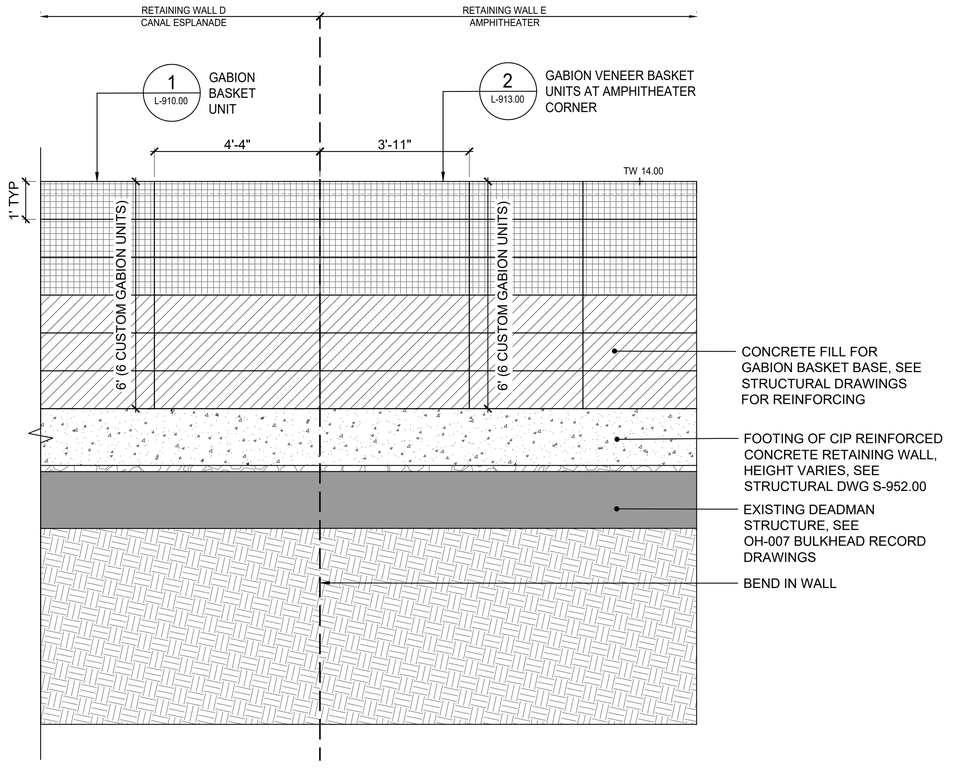
KEY PLAN: NOT TO SCALE



3 L-915.00 RETAINING WALL C GABION VENEER ELEVATION AT TERMINATION
SCALE: 1/2" = 1'-0"



2 L-915.00 RETAINING WALL A2 & C GABION VENEER ELEVATION AT CORNER
SCALE: 1/2" = 1'-0"



1 L-915.00 RETAINING WALL D GABION VENEER ELEVATION AT AMPHITHEATER CORNER
SCALE: 1/2" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY:	DRAWN BY:	PROJECT MANAGER:
S. BARNETT	G. MORGIS	E. CAMILLERI
CHECKED BY:	DESIGN LEAD:	DESIGN MANAGER:
T. MEAD	J. DONNELLY	G. DEREAMER

Hazen Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

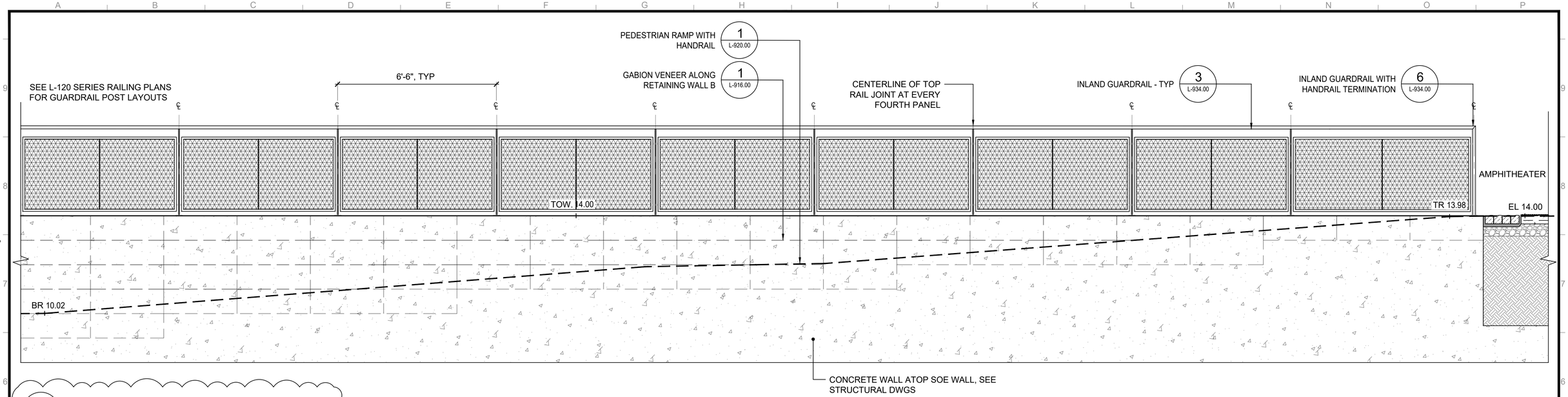
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
RETAINING WALL ELEVATIONS 2

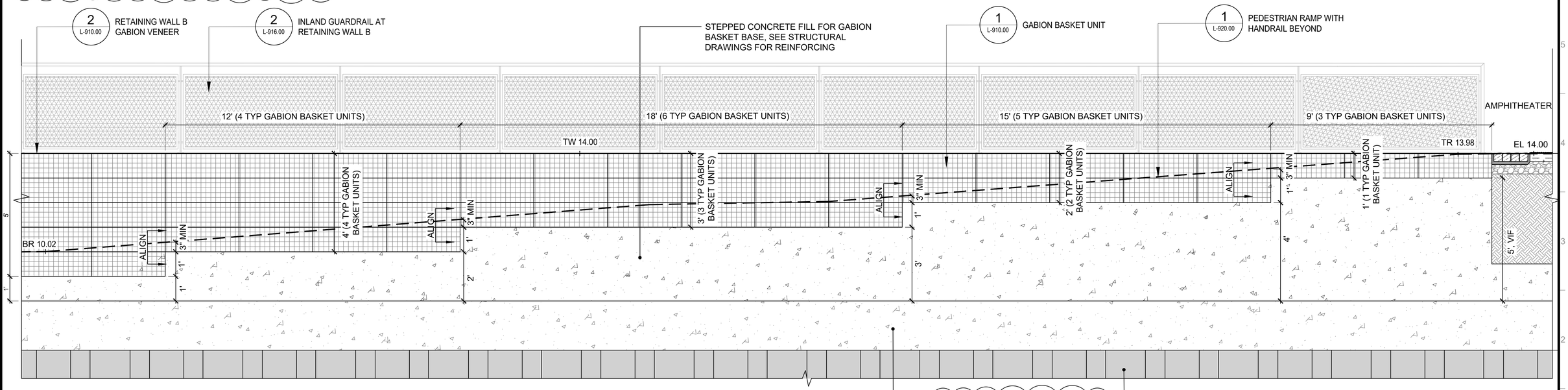
DATE: SEPTEMBER 2026
SHEET NO: 187 OF 719
DRAWING NO. L-915.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-Project\WiseLandscape\CP-03\03_PLTL-915.00 RETAINING WALL ELEVATIONS 2.dwg
Last Date Saved: 11/11/2026 12:47 PM
Date & Time Plotted: 11/11/2026 4:26 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



2 L-916.00 INLAND GUARDRAIL AT RETAINING WALL B

SCALE: 1/2" = 1'-0"



1 L-916.00 GABION VENEER ALONG RETAINING WALL B

SCALE: 1/2" = 1'-0"

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

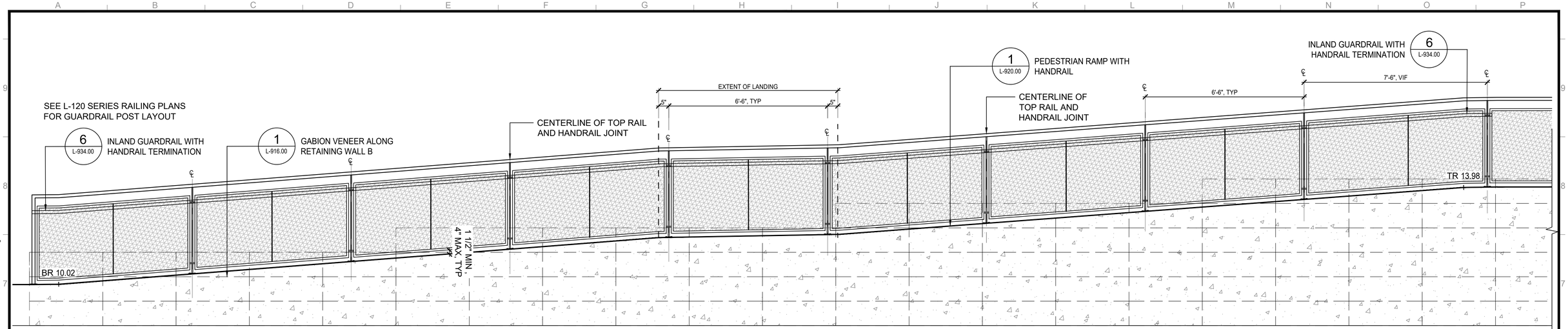
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
RETAINING WALL AND RAILING DETAILS 01

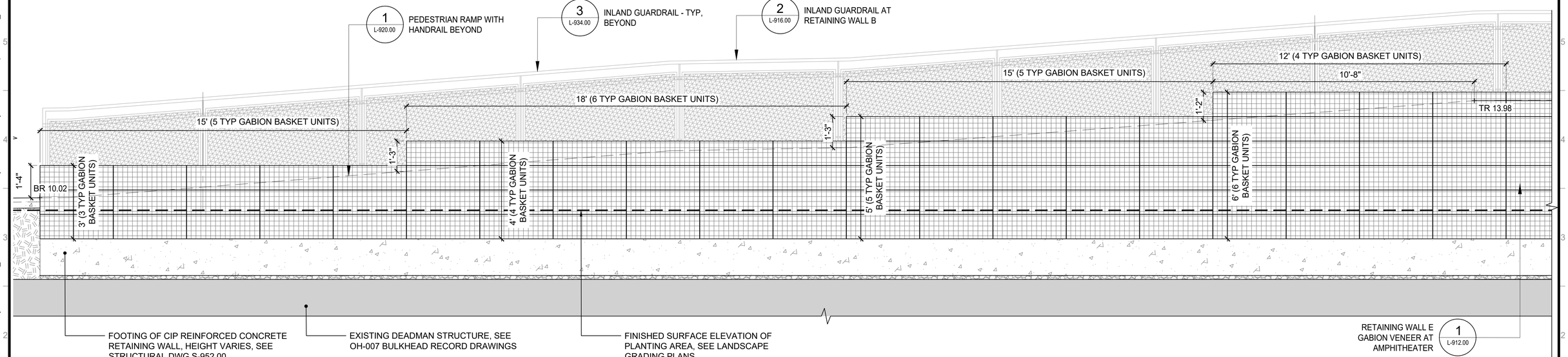
DATE: SEPTEMBER 2026
SHEET NO: 188 OF 719
DRAWING NO. L-916.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DC\ACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWiseLandscape\CP-03\03_PLTL-916.00 RETAINING WALL AND RAILING DETAILS 01.dwg
Last Date Saved: 11/11/2026 2:04 PM
Date & Time Plotted: 11/11/2026 4:26 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1



2 L-917.00 INLAND GUARDRAIL AT RETAINING WALL D

SCALE: 1/2" = 1'-0"



1 L-917.00 GABION VENEER ALONG RETAINING WALL D

SCALE: 1/2" = 1'-0"

SCAPE

BID SET

SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen and Brown and Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

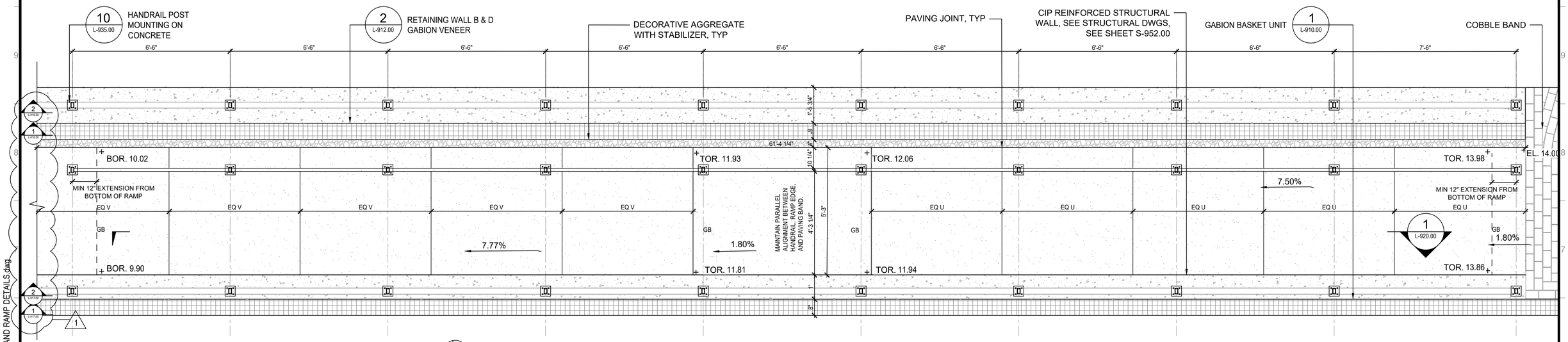
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

LANDSCAPE
RETAINING WALL AND RAILING DETAILS 02

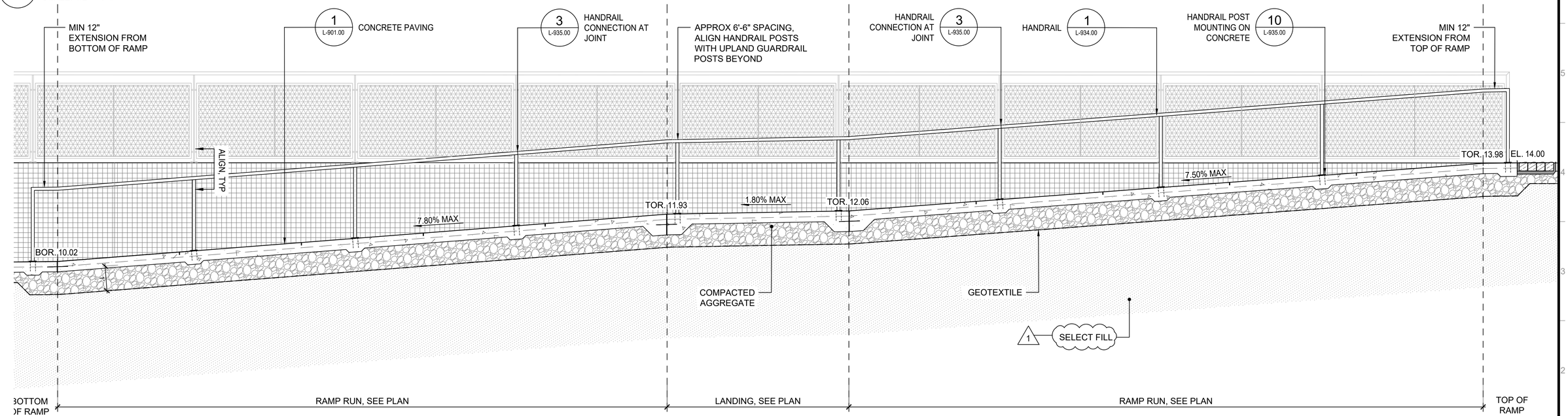
DATE: SEPTEMBER 2026
SHEET NO: 189 OF 719
DRAWING NO. L-917.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 X 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03103_PLTL-917.00 RETAINING WALL AND RAILING DETAILS 02.dwg
Last Date Saved: 11/11/2026 12:51 PM
Date & Time Plotted: 11/11/2026 4:26 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb



2 L-920.00 PEDESTRIAN RAMP WITH HANDRAIL ENLARGEMENT PLAN

SCALE: 1/2" = 1'-0"



1 L-920.00 PEDESTRIAN RAMP WITH HANDRAIL SECTION

SCALE: 1/2" = 1'-0"

SCAPE

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

NYC BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

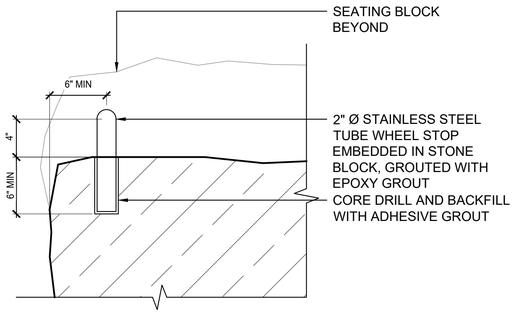
IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

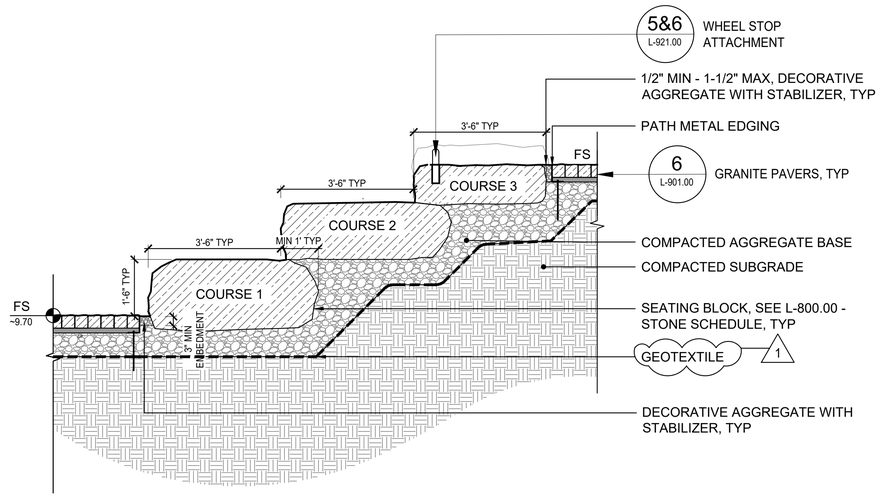
LANDSCAPE
STAIR AND RAMP DETAILS

DATE: SEPTEMBER 2026
SHEET NO: 190 OF 719
DRAWING NO. L-920.00

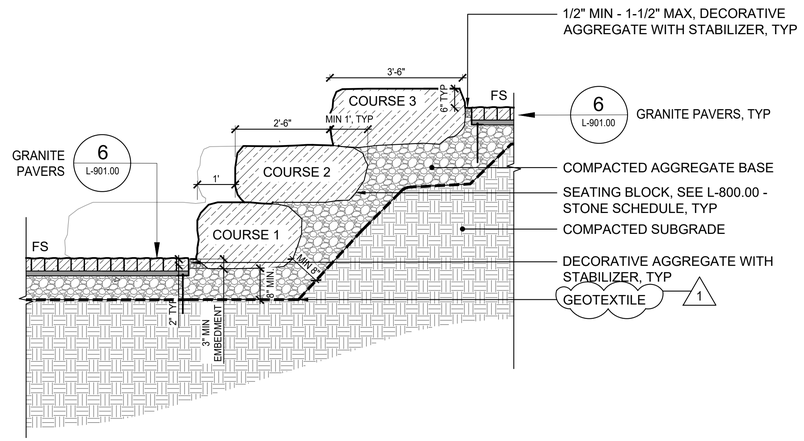
Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\syivia\DCACCDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03303_PLTIL-920.00 STAIR AND RAMP DETAILS.dwg
Last Date Saved: 11/11/2026 7:39 PM
Plot Style Table: BEDC_Acad_2021.ctb
Plot Scale: 1:1
Date & Time Plotted: 11/11/2026 10:11 PM



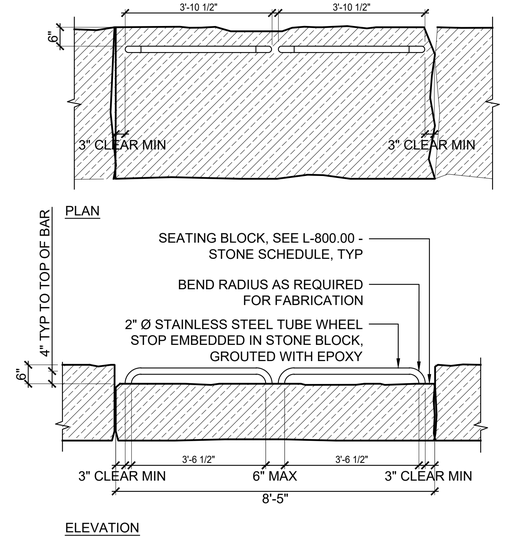
6 WHEEL STOP ATTACHMENT
6 / L-921.00
SCALE: 1 1/2" = 1'-0"



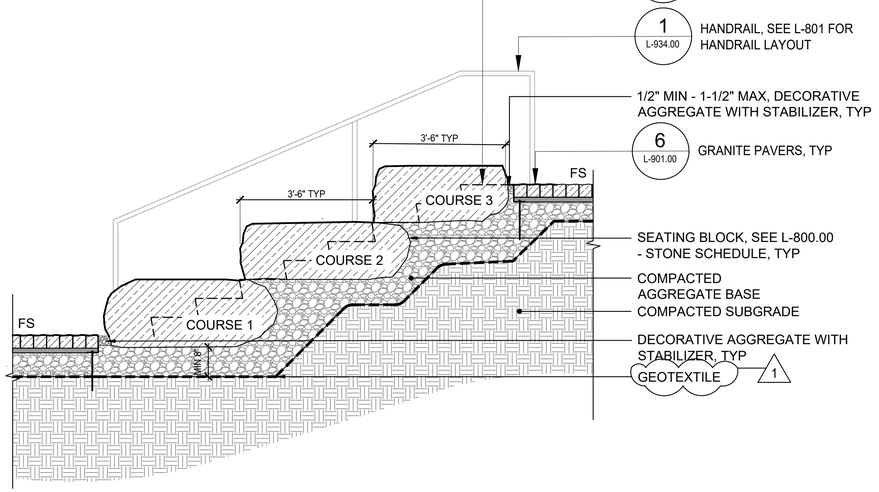
4 AMPHITHEATER SEATING BLOCK WITH WHEEL STOP AT UPPER COMPANION SEATING
4 / L-921.00
SCALE: 1/2" = 1'-0"



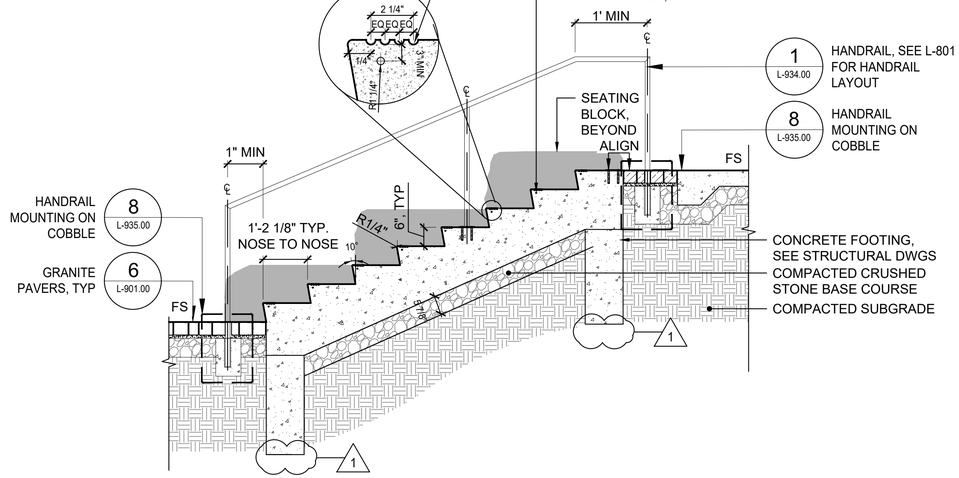
2 AMPHITHEATER SEATING BLOCK AT LOWER COMPANION SEATING
2 / L-921.00
SCALE: 1/2" = 1'-0"



5 WHEEL STOP
5 / L-921.00
SCALE: 1/2" = 1'-0"



3 AMPHITHEATER SEATING BLOCK - TYPICAL
3 / L-921.00
SCALE: 1/2" = 1'-0"



1 AMPHITHEATER STEPS AND HANDRAIL TYP OF (2)
1 / L-921.00
SCALE: 1/2" = 1'-0"

SCAPE

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT	DRAWN BY: G. MORGIS	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD	DESIGN LEAD: J. DONNELLY	DESIGN MANAGER: G. DEREAMER

Hazen and Brown and Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

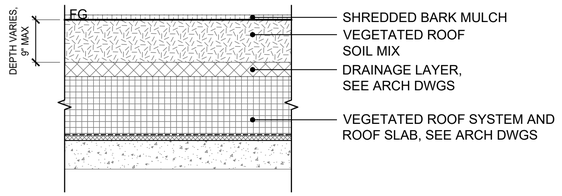
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

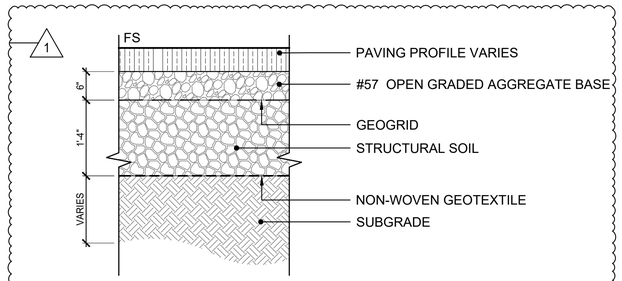
LANDSCAPE
STAIR AND SEATING STEP DETAILS 01

DATE: SEPTEMBER 2026
SHEET NO: 191 OF 719
DRAWING NO. L-921.00

Last Saved By: Kelly
Paper Size Printed/Plotted: ANSI D (22.00 x 34.00 Inches)
Drawing File Name & Drive Location: C:\Users\kelly\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03103_PLTL-921.00 STAIR AND SEATING STEP DETAILS 01.dwg
Last Date Saved: 11/11/2026 3:00 PM
Date & Time Plotted: 11/11/2026 4:26 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

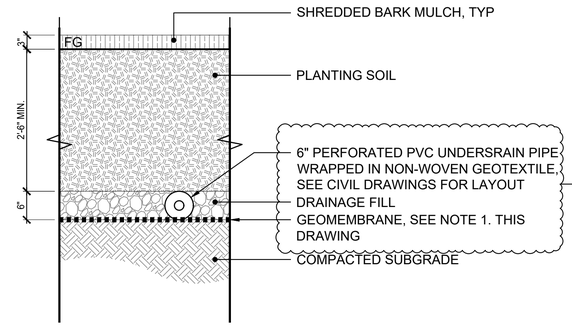


6 L-960.00 ROOF PLANTING SOIL
SCALE: 3/4" = 1'-0"

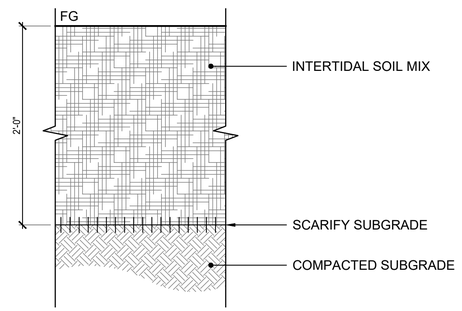


5 L-960.00 STRUCTURAL SOIL PROFILE
SCALE: 3/4" = 1'-0"

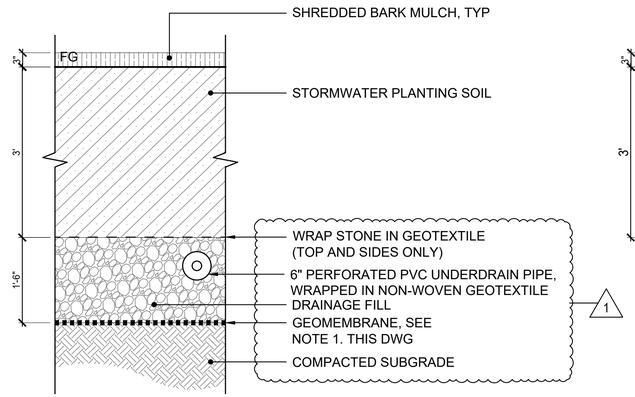
NOTES:
1. GEOMEMBRANE SHALL LINE THE OUTER SIDES OF EACH PLANTED AREA, LINER SHALL EXTEND TO THE SHREDDED BARK MULCH LAYER



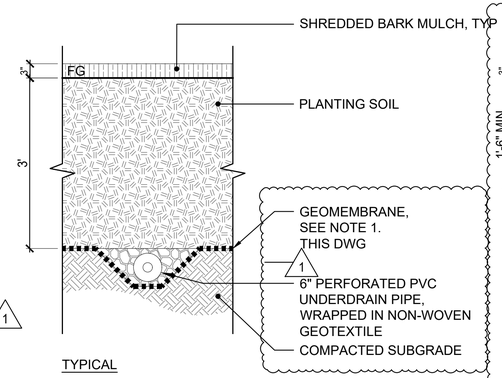
4 L-960.00 RAISED PLANTER SOIL PROFILE
SCALE: 3/4" = 1'-0"

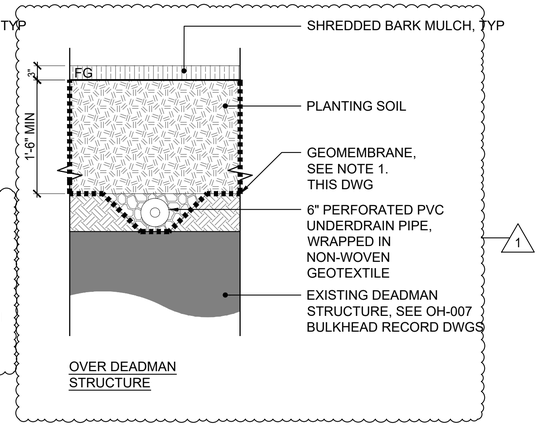


3 L-960.00 INTERTIDAL SOIL MIX PROFILE
SCALE: 3/4" = 1'-0"



2 L-960.00 STORMWATER PLANTING SOIL PROFILE
SCALE: 3/4" = 1'-0"





1 L-960.00 PLANTING SOIL PROFILE TYP
SCALE: 3/4" = 1'-0"

BID SET
SUBMITTAL DATE: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	Addendum No. 3	JD

DESIGNED BY: S. BARNETT | DRAWN BY: G. MORGIS | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: T. MEAD | DESIGN LEAD: J. DONNELLY | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED LANDSCAPE ARCHITECT JOHN DONNELLY 2368-1 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.
PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

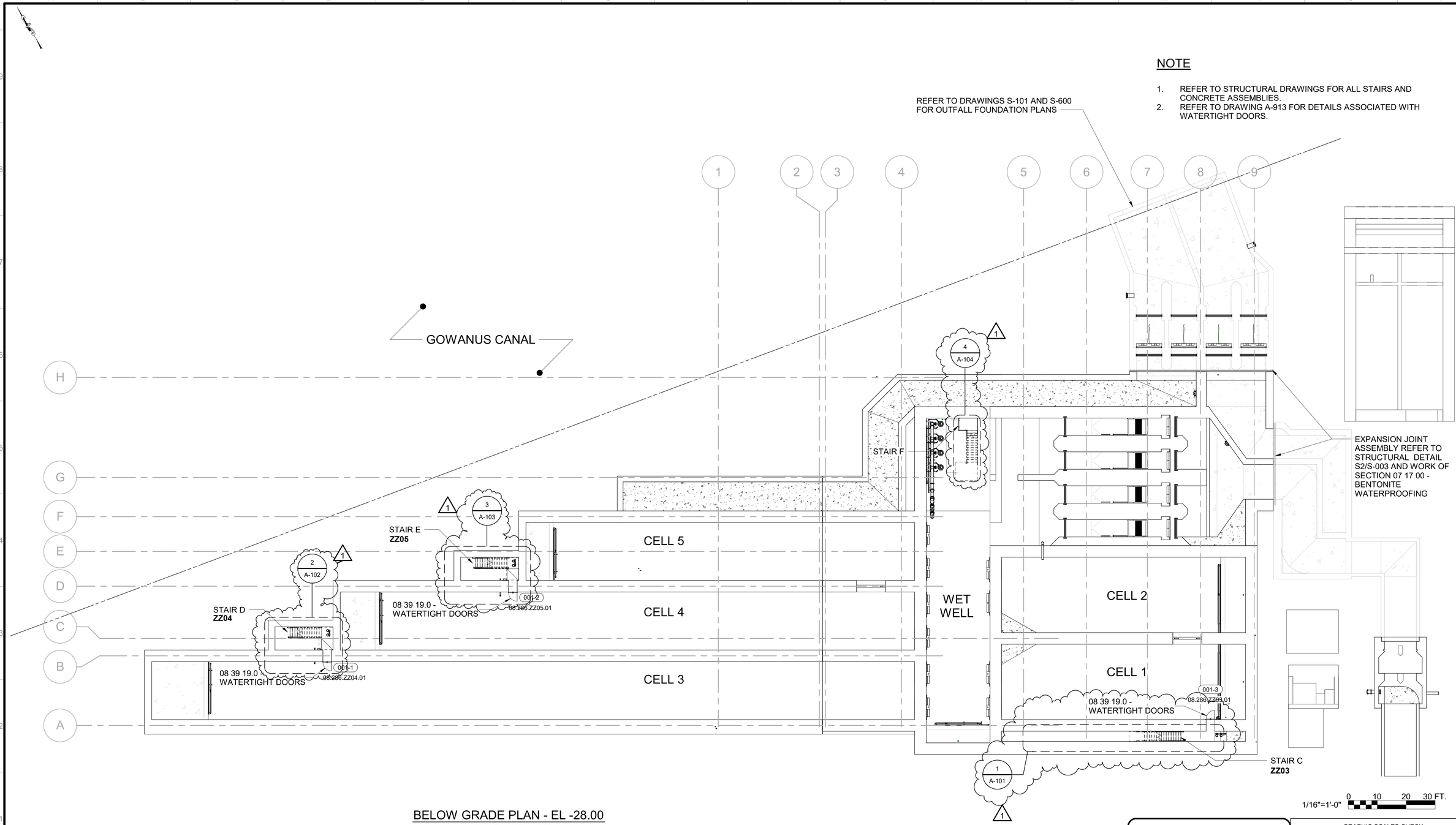
LANDSCAPE
SOIL DETAILS

DATE: SEPTEMBER 2026
SHEET NO: 207 OF 719
DRAWING NO. L-960.00

Last Saved By: Sylvia
Paper Size Printed/Plotted: ANSI full bleed D (34.00 x 22.00 Inches)
Drawing File Name & Drive Location: C:\Users\sylvia\DCACDocs\Hazen and Sawyer\90409-000_CSO-GC-SFS-DES-OH\Project Files\000-ProjectWise\Landscape\CP-03103_PLTIL-960.00 SOIL DETAILS.dwg
Last Date Saved: 11/11/2026 3:27 PM
Date & Time Plotted: 11/11/2026 10:15 PM
Plot Scale: 1:1
Plot Style Table: BEDC_Acad_2021.ctb

NOTE

1. REFER TO STRUCTURAL DRAWINGS FOR ALL STAIRS AND CONCRETE ASSEMBLIES.
2. REFER TO DRAWING A-913 FOR DETAILS ASSOCIATED WITH WATERTIGHT DOORS.



0 10 20 30 FT.
1/16"=1'-0"

BELOW GRADE PLAN - EL -28.00

SCALE: 1/16" = 1'-0"

NYC

BID SET

DATE ISSUED: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	ADDENDUM NO. 3	GD

DESIGNED BY: M. STALLONE	DRAWN BY: J.MARTINEZ / H.JIN	PROJECT MANAGER: E. CAMILLERI
CHECKED BY: W. RUSSELL	DESIGN LEAD: J.WOJCIESKI	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED ARCHITECT JENNIFER WOJCIESKI 034146 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

ARCHITECTURAL
OVERALL BOTTOM PLAN @ EL -21.50

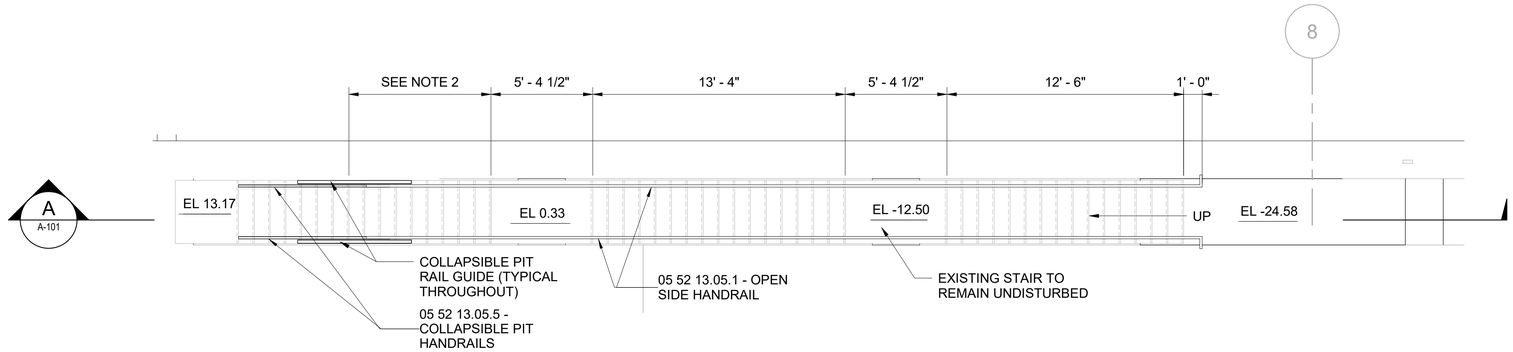
DATE: SEPTEMBER 2026

SHEET NO: 223 OF 719

DRAWING NO. A-100.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_A.rvt
11/13/2026 11:12:33 AM

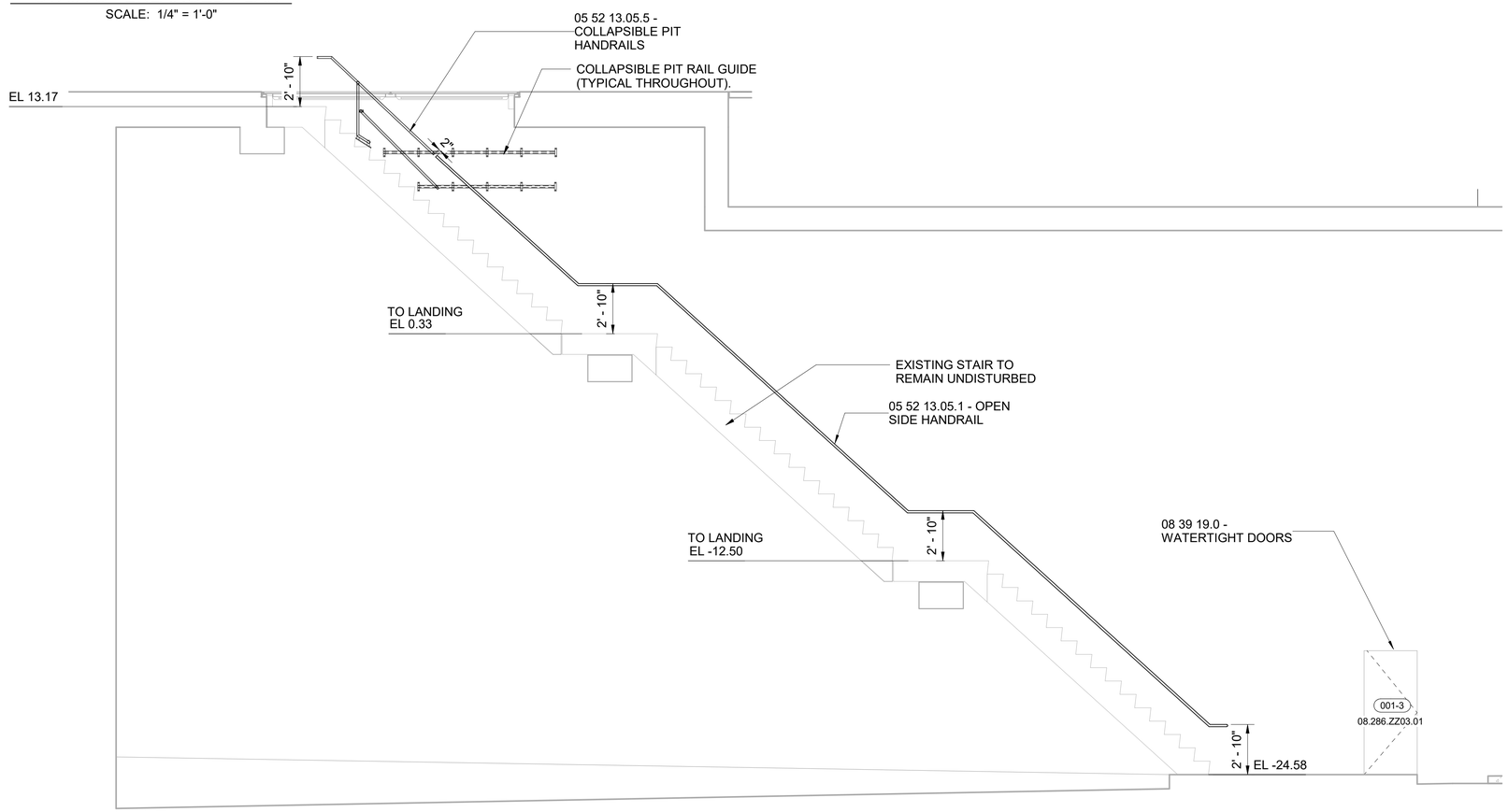


A
A-101

8

STAIR C - ENLARGED PLAN

SCALE: 1/4" = 1'-0"



A
A-101

STAIR C - SECTION

SCALE: 1/4" = 1'-0"

NOTE:

1. REFER TO DRAWINGS A-002 AND A-003 IN ARCHITECTURAL DRAWING SET FOR TEXT ASSOCIATED WITH ALL NOTE TAGS.

2. CONTRACTOR TO COORDINATE LOCATION OF COLLAPSIBLE PIT RAILS WITH LOCATION OF WELDED PIPE RAILING TO AVOID PINCH POINT BETWEEN RAILING AND COLLAPSIBLE HANDRAIL ASSEMBLY.

3. CONTRACTOR SHALL COORDINATE COLLAPSIBLE PIT RAILS WITH EXISTING STRUCTURE AND ACCESS HATCH.

BID SET
DATE ISSUED:

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	NEW-ISSUED FOR ADDENDUM #3	GD

DESIGNED BY: Designer | DRAWN BY: Author | PROJECT MANAGER:
CHECKED BY: Checker | DESIGN LEAD: | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED ARCHITECT JENNIFER WOJCIESKI 034146 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

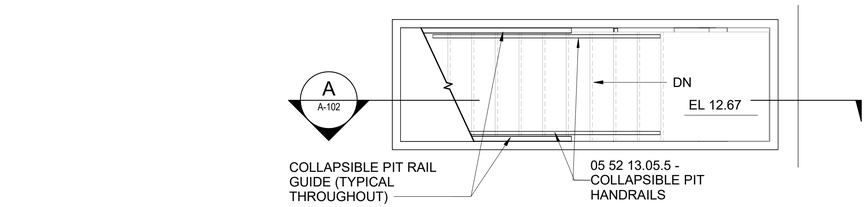
CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

ARCHITECTURAL
STAIR C - PLANS AND SECTION

DATE: SEPTEMBER 2026
SHEET NO: OF 719
DRAWING NO. A-101.00

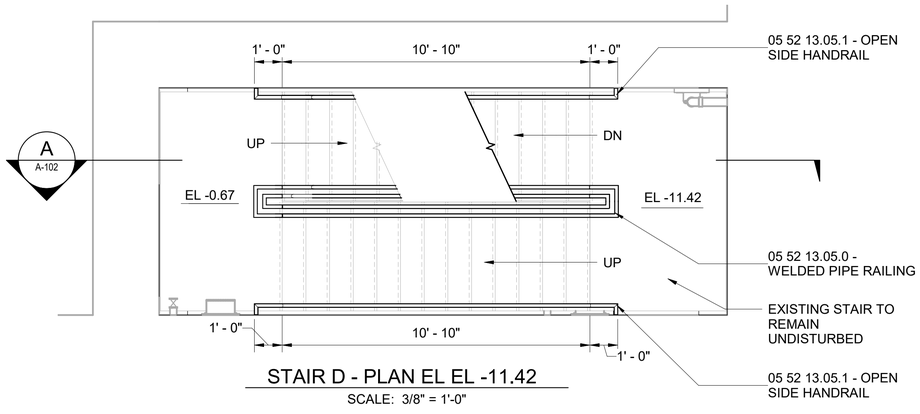
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_A.rvt
11/13/2026 11:12:35 AM



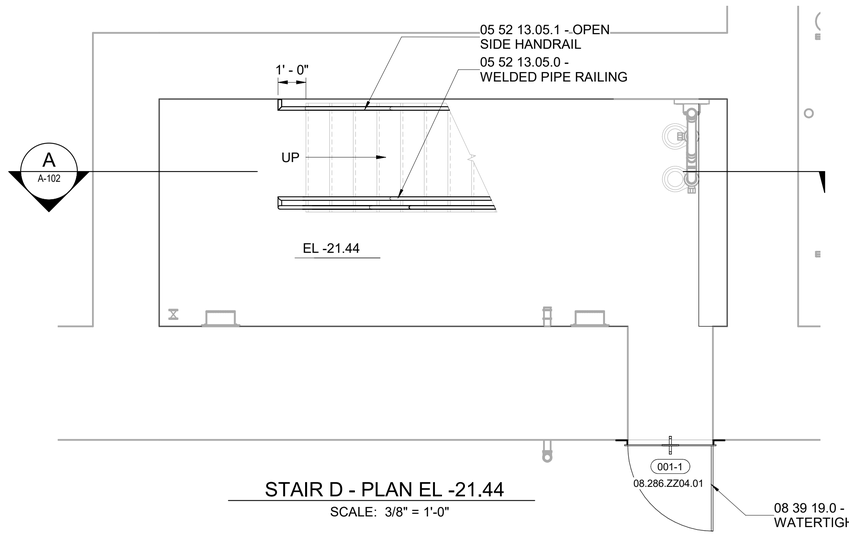
STAIR D - PLAN EL 12.67

SCALE: 3/8" = 1'-0"



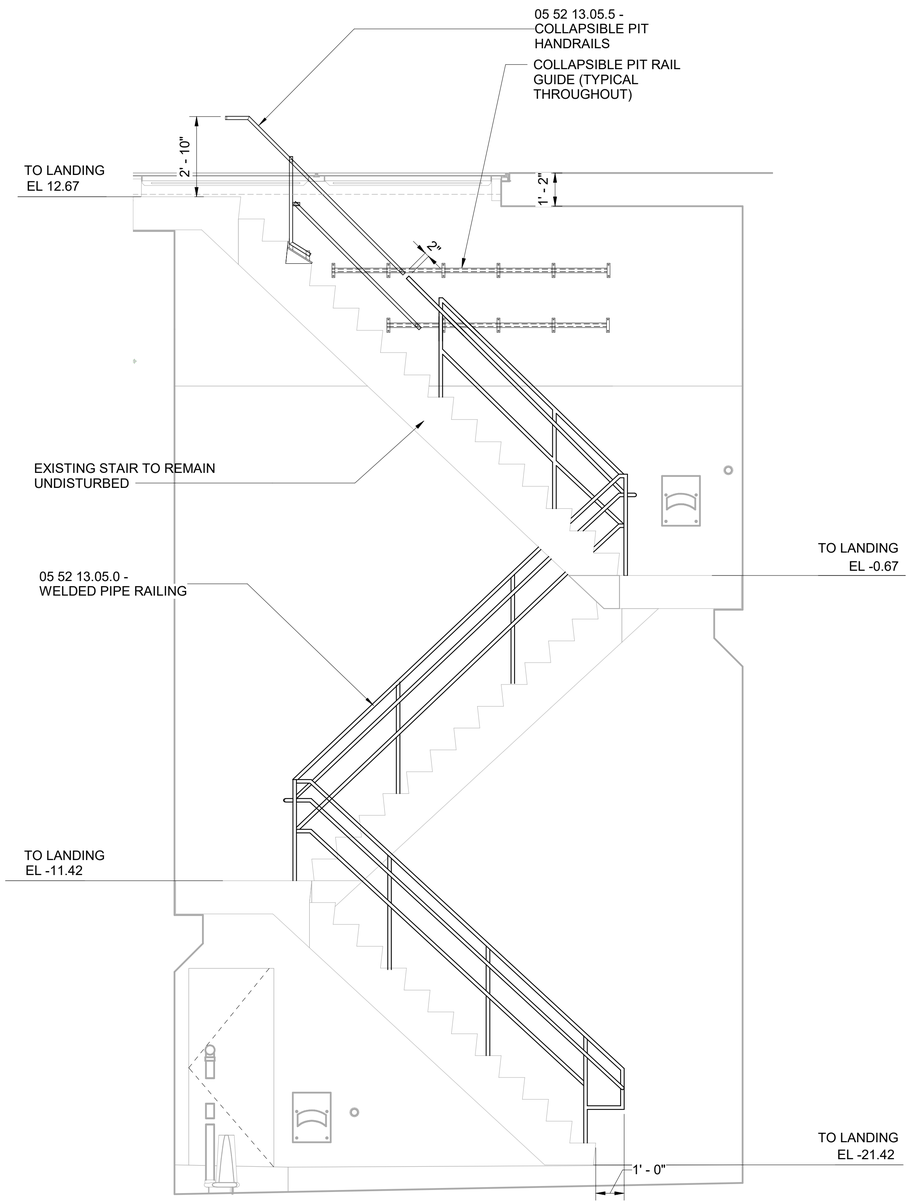
STAIR D - PLAN EL EL -11.42

SCALE: 3/8" = 1'-0"



STAIR D - PLAN EL -21.44

SCALE: 3/8" = 1'-0"



A
A-102
STAIR D - SECTION

SCALE: 3/8" = 1'-0"

NOTE:

1. REFER TO DRAWINGS A-002 AND A-003 IN ARCHITECTURAL DRAWING SET FOR TEXT ASSOCIATED WITH ALL NOTE TAGS.

2. CONTRACTOR TO COORDINATE LOCATION OF COLLAPSIBLE PIT RAILS WITH LOCATION OF WELDED PIPE RAILING TO AVOID PINCH POINT BETWEEN RAILING AND COLLAPSIBLE HANDRAIL ASSEMBLY.

3. CONTRACTOR SHALL COORDINATE COLLAPSIBLE PIT RAILS WITH EXISTING STRUCTURE AND ACCESS HATCH.

BID SET

DATE ISSUED:

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	NEW-ISSUED FOR ADDENDUM #3	GD

DESIGNED BY: Designer | DRAWN BY: Author | PROJECT MANAGER:

CHECKED BY: Checker | DESIGN LEAD: | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED ARCHITECT JENNIFER WOJCIESKI 034146 STATE OF NEW YORK

Environmental Protection

ACCOUNTABLE MANAGER: JESSE GOLDIN, P.E.

PORTFOLIO MANAGER: KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

ARCHITECTURAL
STAIR D - PLANS AND SECTION

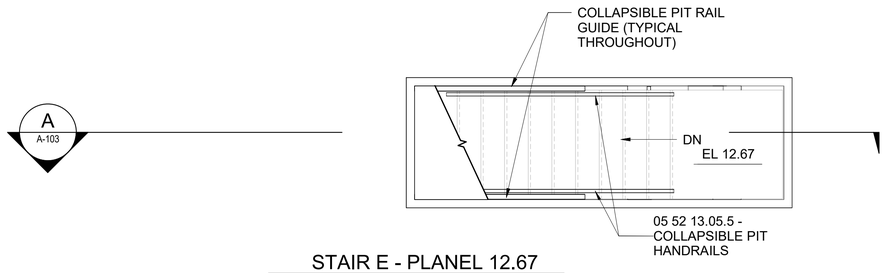
DATE: SEPTEMBER 2026

SHEET NO: OF 719

DRAWING NO. A-102.00

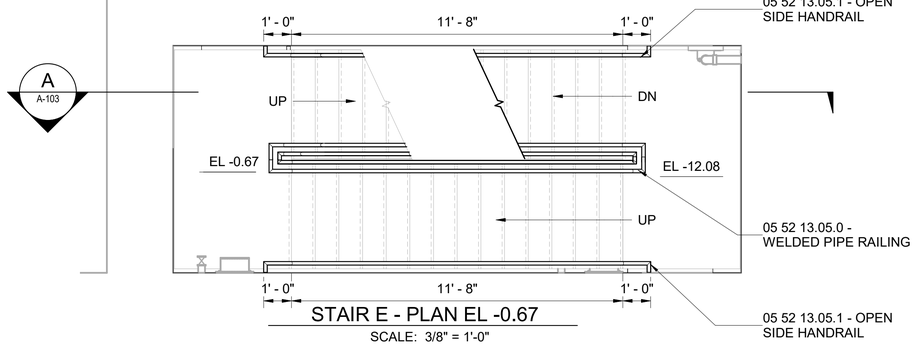
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_A.rvt
11/13/2026 11:12:37 AM



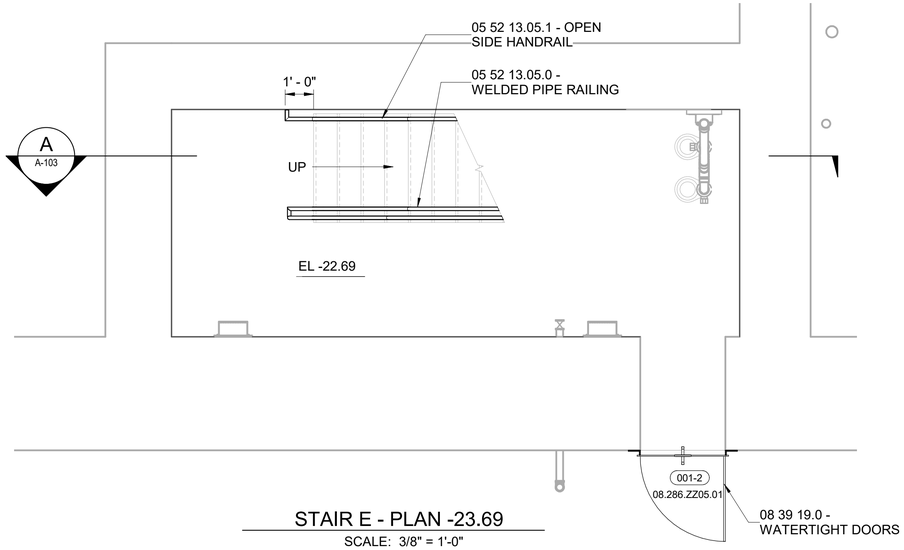
STAIR E - PLANEL 12.67

SCALE: 3/8" = 1'-0"



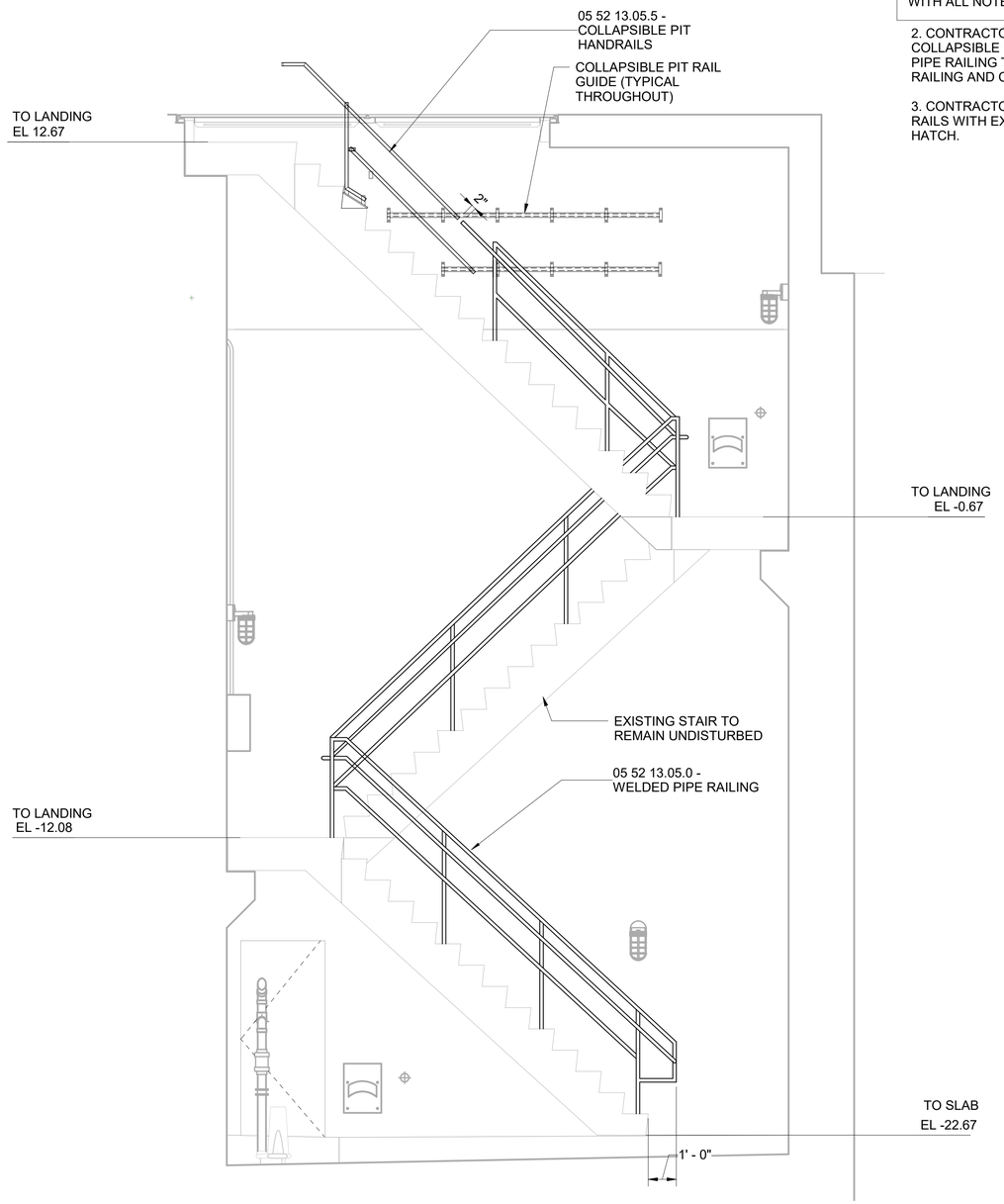
STAIR E - PLAN EL -0.67

SCALE: 3/8" = 1'-0"



STAIR E - PLAN -23.69

SCALE: 3/8" = 1'-0"



A
A-103
STAIR E SECTION

SCALE: 3/8" = 1'-0"

NOTE:

1. REFER TO DRAWINGS A-002 AND A-003 IN ARCHITECTURAL DRAWING SET FOR TEXT ASSOCIATED WITH ALL NOTE TAGS.

2. CONTRACTOR TO COORDINATE LOCATION OF COLLAPSIBLE PIT RAILS WITH LOCATION OF WELDED PIPE RAILING TO AVOID PINCH POINT BETWEEN RAILING AND COLLAPSIBLE HANDRAIL ASSEMBLY.

3. CONTRACTOR SHALL COORDINATE COLLAPSIBLE PIT RAILS WITH EXISTING STRUCTURE AND ACCESS HATCH.

NYC

BID SET

DATE ISSUED:

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	NEW-ISSUED FOR ADDENDUM #3	GD

DESIGNED BY: Designer	DRAWN BY: Author	PROJECT MANAGER:
CHECKED BY: Checker	DESIGN LEAD:	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED ARCHITECT JENNIFER WOJCIESKI 034146 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL CONSTRUCTION PACKAGE 3 - OH-007

ARCHITECTURAL
STAIR E - PLANS AND SECTION

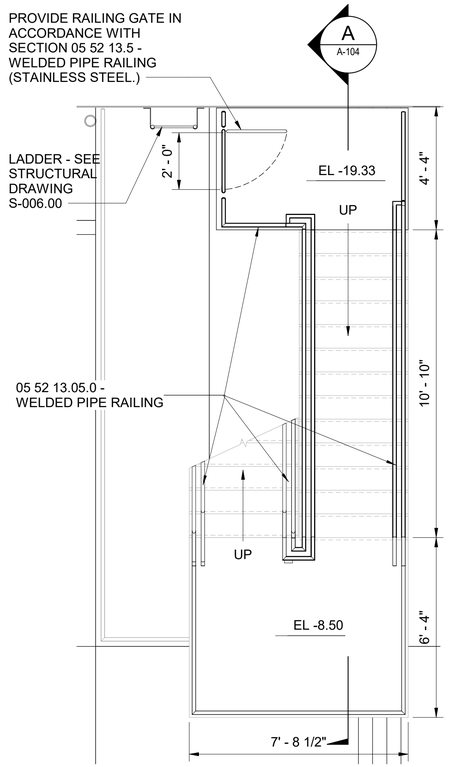
DATE: SEPTEMBER 2026

SHEET NO: OF 719

DRAWING NO. A-103.00

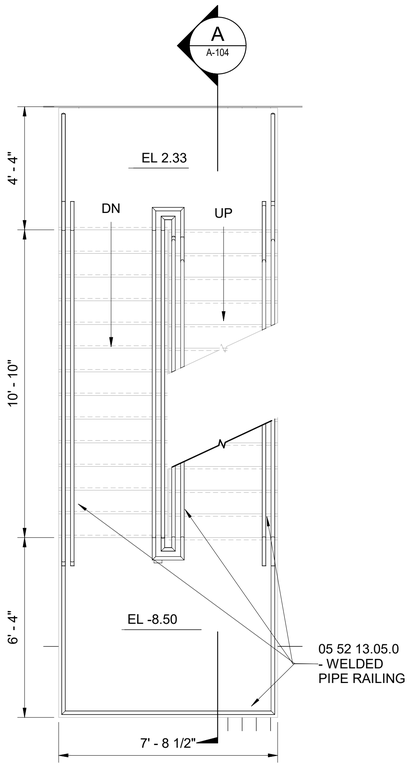
All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_A.rvt
11/13/2026 11:24:52 AM



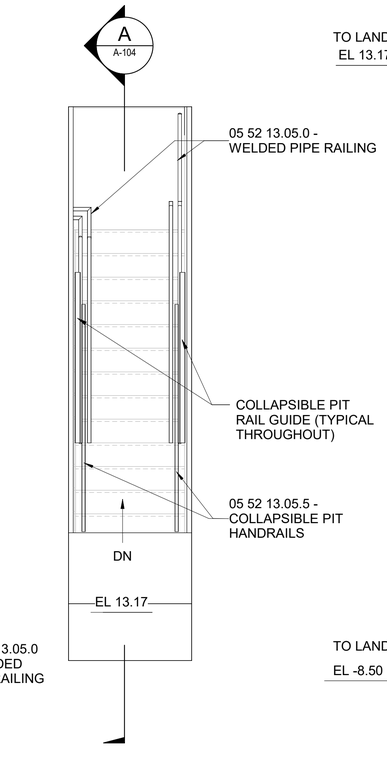
STAIR F - PLAN EL -19.33

SCALE: 3/8" = 1'-0"



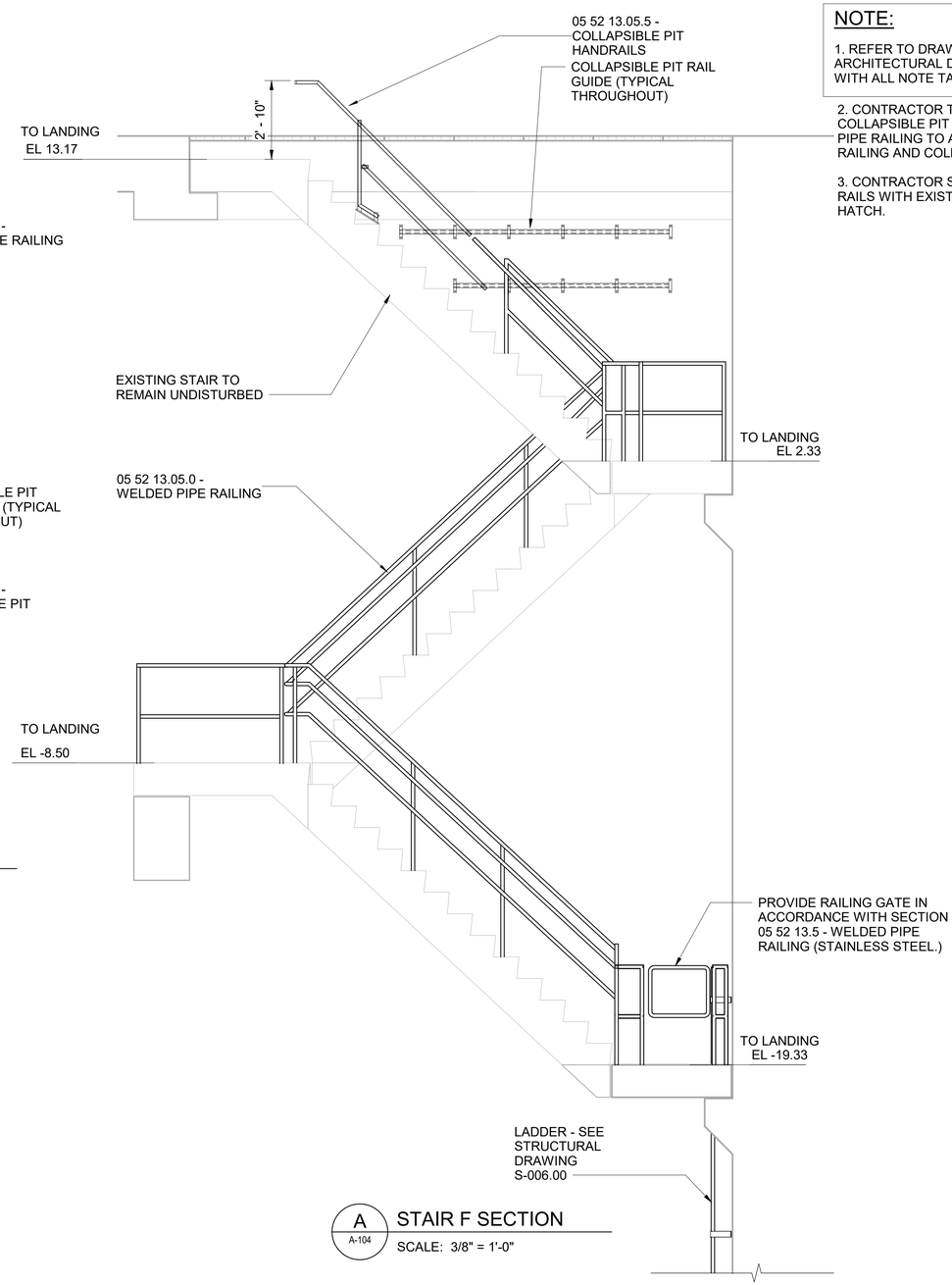
STAIR F - PLAN EL 2.33

SCALE: 3/8" = 1'-0"



STAIR F - PLAN EL 13.17

SCALE: 3/8" = 1'-0"



A A-104 STAIR F SECTION

SCALE: 3/8" = 1'-0"

NOTE:

1. REFER TO DRAWINGS A-002 AND A-003 IN ARCHITECTURAL DRAWING SET FOR TEXT ASSOCIATED WITH ALL NOTE TAGS.
2. CONTRACTOR TO COORDINATE LOCATION OF COLLAPSIBLE PIT RAILS WITH LOCATION OF WELDED PIPE RAILING TO AVOID PINCH POINT BETWEEN RAILING AND COLLAPSIBLE HANDRAIL ASSEMBLY.
3. CONTRACTOR SHALL COORDINATE COLLAPSIBLE PIT RAILS WITH EXISTING STRUCTURE AND ACCESS HATCH.

NYC

BID SET

DATE ISSUED:

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/2026	NEW-ISSUED FOR ADDENDUM #3	GD

DESIGNED BY: Designer	DRAWN BY: Author	PROJECT MANAGER:
CHECKED BY: Checker	DESIGN LEAD:	DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

REGISTERED ARCHITECT JENNIFER WOJCIESKI 034146 STATE OF NEW YORK

NYC Environmental Protection

ACCOUNTABLE MANAGER	JESSE GOLDIN, P.E.
PORTFOLIO MANAGER	KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

ARCHITECTURAL
STAIR F - PLANS AND SECTION

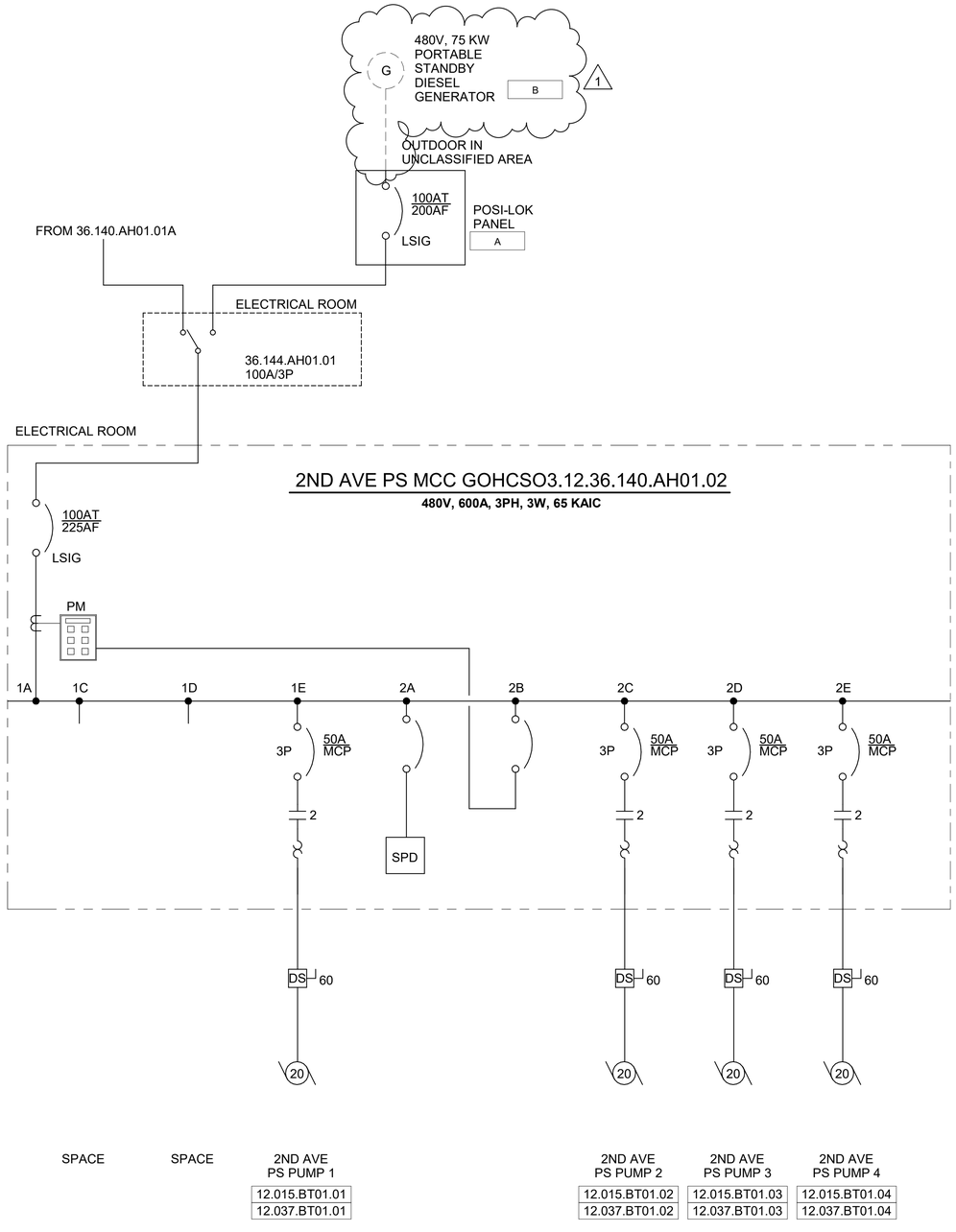
DATE: SEPTEMBER 2026

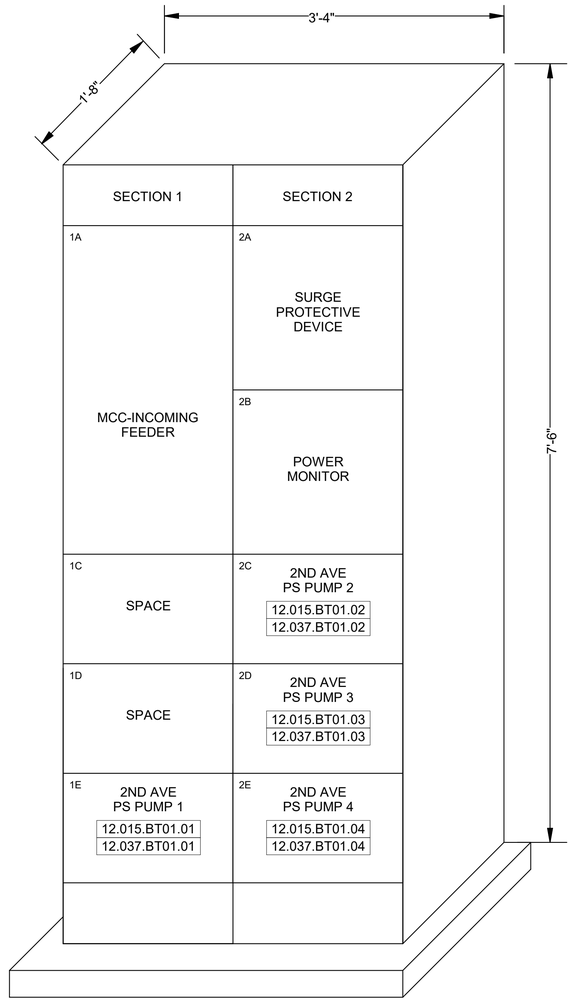
SHEET NO: OF 719

DRAWING NO. A-104.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_A.rvt
11/13/2026 11:12:44 AM





MOTOR CONTROL CENTER
GOHCSO3.12.36.140.AH01.02
ELEVATION

SCALE: NTS

NOTE

1. MAXIMUM OF TWO PUMPS SHALL BE OPERATING AT ONE TIME WITH THE OTHER TWO AS SPARES. HENCE THE MCC AND GENERATOR ARE SIZED FOR OPERATING ONLY TWO PUMPS.

KEYNOTE

A. EATON NEMA 4X, POSI-LOK E0200 PM3 SERIES WITH MALE PANELS AND FEMALE PLUGS SHALL BE PROVIDED. TYPE W CABLE SHALL BE PROVIDED WITH MALE/FEMALE END-CONNECTORS AND SIZED FOR 200A (3/0 AWG OR LARGER). PROVIDE ALUMINUM STORAGE ENCLOSURE FOR PORTABLE CABLE NEARBY POSI-LOK PANEL.

1 B. PORTABLE STANDBY GENERATOR IS NOT PROVIDED UNDER THIS CONTRACT.

BID SET
DATE ISSUED: SEPTEMBER 2026

GRAPHIC SCALES CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.
1	11/26	ADDENDUM NO. 3	AV

DESIGNED BY: D. JOSEPH | DRAWN BY: W. SCHRUPP | PROJECT MANAGER: E. CAMILLERI
CHECKED BY: W. DICKERSON | DESIGN LEAD: W. DICKERSON | DESIGN MANAGER: G. DEREAMER

Hazen | Brown AND Caldwell

ACCOUNTABLE MANAGER
JESSE GOLDIN, P.E.

PORTFOLIO MANAGER
KEVIN CLARKE, P.E.

"WARNING-IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2."

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR
CORONA, NEW YORK 11368
www.nyc.gov/dep

CSO FACILITIES FOR GOWANUS CANAL
CONSTRUCTION PACKAGE 3 - OH-007

ELECTRICAL
2ND AVE PS MCC SINGLE LINE DIAGRAM AND ELEVATION

DATE: SEPTEMBER 2026
SHEET NO: OF 723
DRAWING NO. E-012.00

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.

Autodesk Docs://90409-000_CSO-GC-SFS-DES-OH/CSO-GC-SFS-DES-OH_E-CP3.rvt
11/12/2026 11:46:46 AM