



LOCATION MAP
NOT TO SCALE

BUFFALO SEWER AUTHORITY

ROOM 1038
BUFFALO CITY HALL
65 NIAGARA SQUARE
BUFFALO, NEW YORK 14202



CSO 053 EDISON-MARTHA OFFLINE STORAGE TANK QUEEN CITY CLEAN WATER PROJECT OCTOBER 2024

GENERAL MANAGER
OLUWOLE A. MCFOY, P.E.

**TREATMENT PLANT
ADMINISTRATOR**
ROBERTA L. GAIEK, P.E.

PRINCIPAL SANITARY ENGINEER
ROSALEEN B. NOGLE, P.E.

BYRON W. BROWN
MAYOR

MEMBERS OF THE BUFFALO SEWER AUTHORITY BOARD

HERBERT L. BELLAMY, JR.
CHRISTOPHER ROOSEVELT
ELEANOR PETRUCCI

CHAIRMAN
VICE CHAIRMAN
SECRETARY

SHEET INDEX

G-00	COVER SHEET
G-01	LEGEND AND SYMBOLS
G-02	OVERALL PROPOSED SITE
G-03	EXISTING ENLARGED SITE PLAN
G-04	PROPOSED ENLARGED SITE PLAN
G-05	HYDRAULIC PROFILE
G-06	PROCESS FLOW DIAGRAM AND CONTROL SCHEMATIC
G-07	STORAGE TANK PLAN
G-08	STORAGE TANK SECTION
G-09	STORAGE TANK SECTION
G-10	STORAGE TANK SECTION
G-11	DIVERSION CHAMBER PLAN AND SECTION

30% SUBMITTAL

APPROVED

LEGAL ENTITY: ARCADIS-U.S., INC.

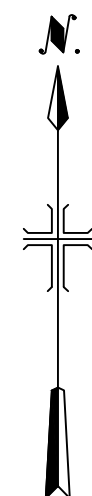




PROPOSED PARK IMPROVEMENT PLAN

OVERALL PROPOSED SITE PLAN

SCALE: 1" = 50' 0 50' 100'



NOTES:

- COORDINATION OF ALL ABOVE GRADE FEATURES REQUIRED BETWEEN FINAL DESIGNER, PARKS DEPARTMENT AND SEWER AUTHORITY FOR MAINTENANCE, OPERATION, AND ACCESS TO THE SITE.

BUFFALO
SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED KZS
DRAWN CRE
CHECKED BB

NO.	DATE	APPD	REVISION DESCRIPTION
-	-	-	-

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

OVERALL PROPOSED SITE PLAN

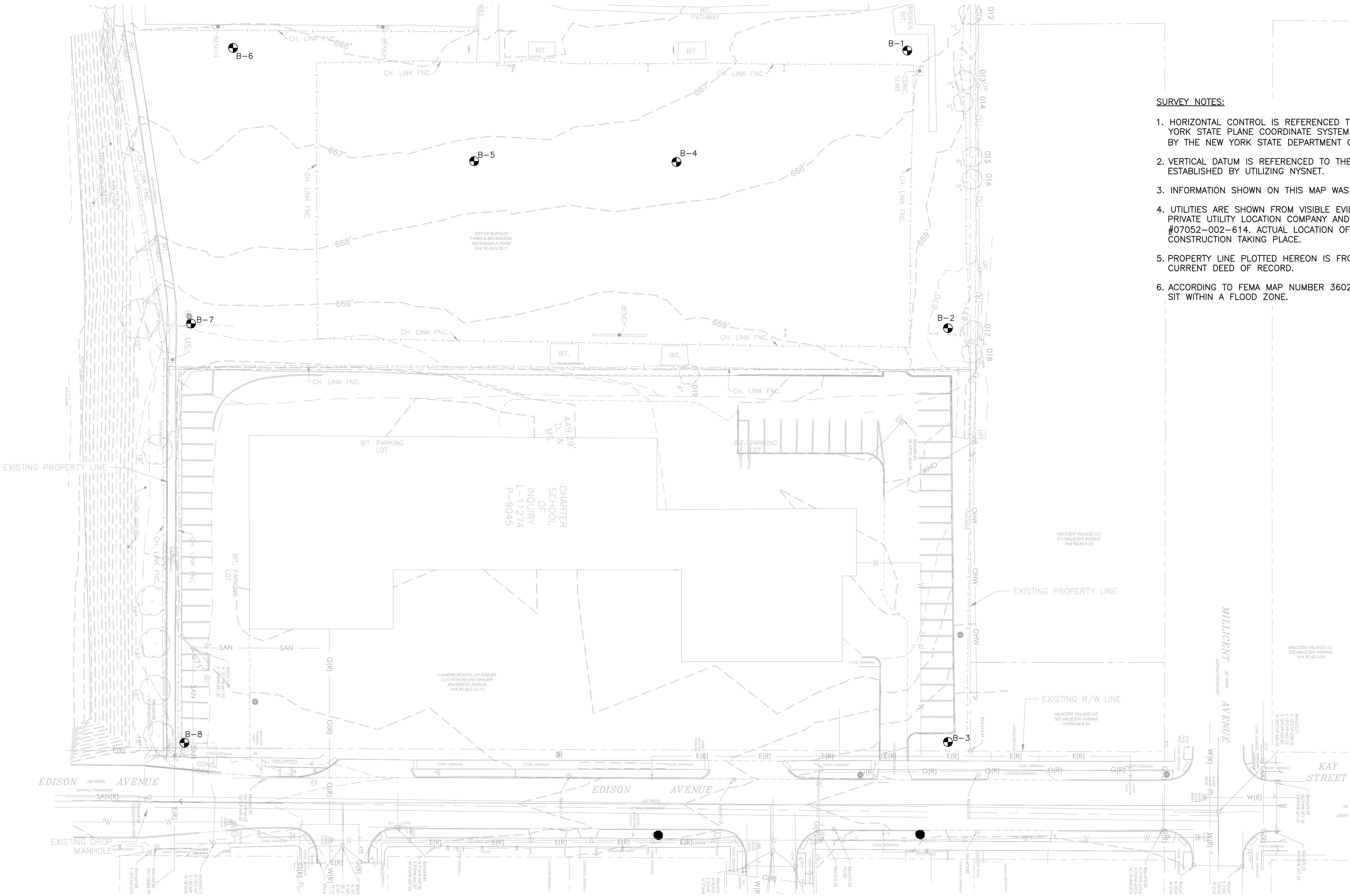
30% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NO.: 82000075

DWG: G-02

SHEET: 03 OF 09

DATE: OCTOBER 2024 REV: REV



SURVEY NOTES:

- HORIZONTAL CONTROL IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), NEW YORK STATE PLANE COORDINATE SYSTEM, WESTERN ZONE, U.S. SURVEY FEET, AS ESTABLISHED BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REAL TIME NETWORK (NYSNet).
- VERTICAL DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS ESTABLISHED BY UTILIZING NYSNET.
- INFORMATION SHOWN ON THIS MAP WAS GATHERED BY WENDEL IN JULY 2022.
- UTILITIES ARE SHOWN FROM VISIBLE EVIDENCE LOCATED IN THE FIELD, AS MARKED BY A PRIVATE UTILITY LOCATION COMPANY AND INFORMATION PROVIDED AS PART OF U DIG NY TICKET #07052-002-614. ACTUAL LOCATION OF ALL UTILITIES SHOULD BE VERIFIED PRIOR TO ANY CONSTRUCTION TAKING PLACE.
- PROPERTY LINE PLOTTED HEREON IS FROM VISIBLE FIELD EVIDENCE LOCATED IN THE FIELD AND CURRENT DEED OF RECORD.
- ACCORDING TO FEMA MAP NUMBER 36029C0216H, PANEL 0216H, THE PROJECT SITE DOES NOT SIT WITHIN A FLOOD ZONE.

Boring Number	Approximate Boring Locations GPS Coordinates		Approximate Ground Surface Elevation (feet)
	Latitude (Northing)	Longitude (Easting)	
B-1	42° 56' 04.77"	78° 48' 13.10"	668.2
B-2	42° 56' 04.82"	78° 48' 11.25"	670.7
B-3	42° 56' 04.79"	78° 48' 08.02"	673.5
B-4	42° 56' 03.45"	78° 48' 12.32"	667.6
B-5	42° 56' 02.30"	78° 48' 12.35"	667.4
B-6	42° 56' 00.98"	78° 48' 13.24"	666.3
B-7	42° 56' 00.69"	78° 48' 11.23"	669.4
B-8	42° 56' 00.72"	78° 48' 08.11"	670.0

BUFFALO
SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS
DRAWN	CRE
CHECKED	BB

NO.	DATE	APPD	REVISION DESCRIPTION

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

EXISTING ENLARGED SITE PLAN

30% SUBMITTAL
NOT FOR CONSTRUCTION

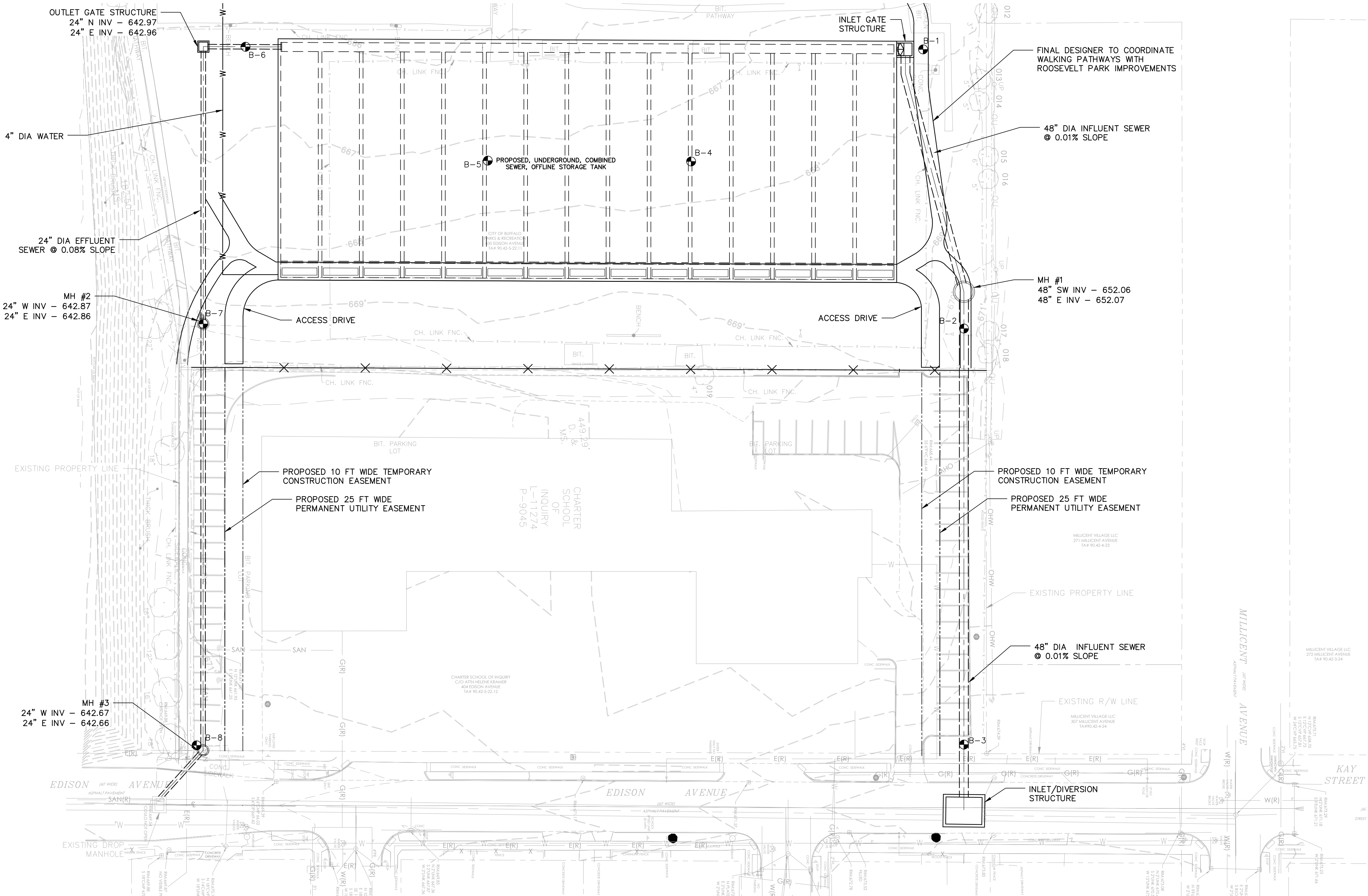
PROJECT NO.: 82000075

DWG: G-03

SHEET: 03 OF 09

DATE: OCTOBER 2024 REV: REV

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-04.DWG PTTMAN, STEVE 2025/01/10 9:06 AM BSA\MEASURES - 1 - UTILITY SIZE SHEETS



- NOTES:
- COORDINATION OF ALL ABOVE GRADE FEATURES REQUIRED BETWEEN FINAL DESIGNER, PARKS DEPARTMENT AND SEWER AUTHORITY FOR MAINTENANCE, OPERATION, AND ACCESS TO THE SITE.

BUFFALO

SEWER AUTHORITY

ARCADIS

LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS
DRAWN	CRE
CHECKED	BB

NO.	DATE	APPD	REVISION DESCRIPTION

SCALE	

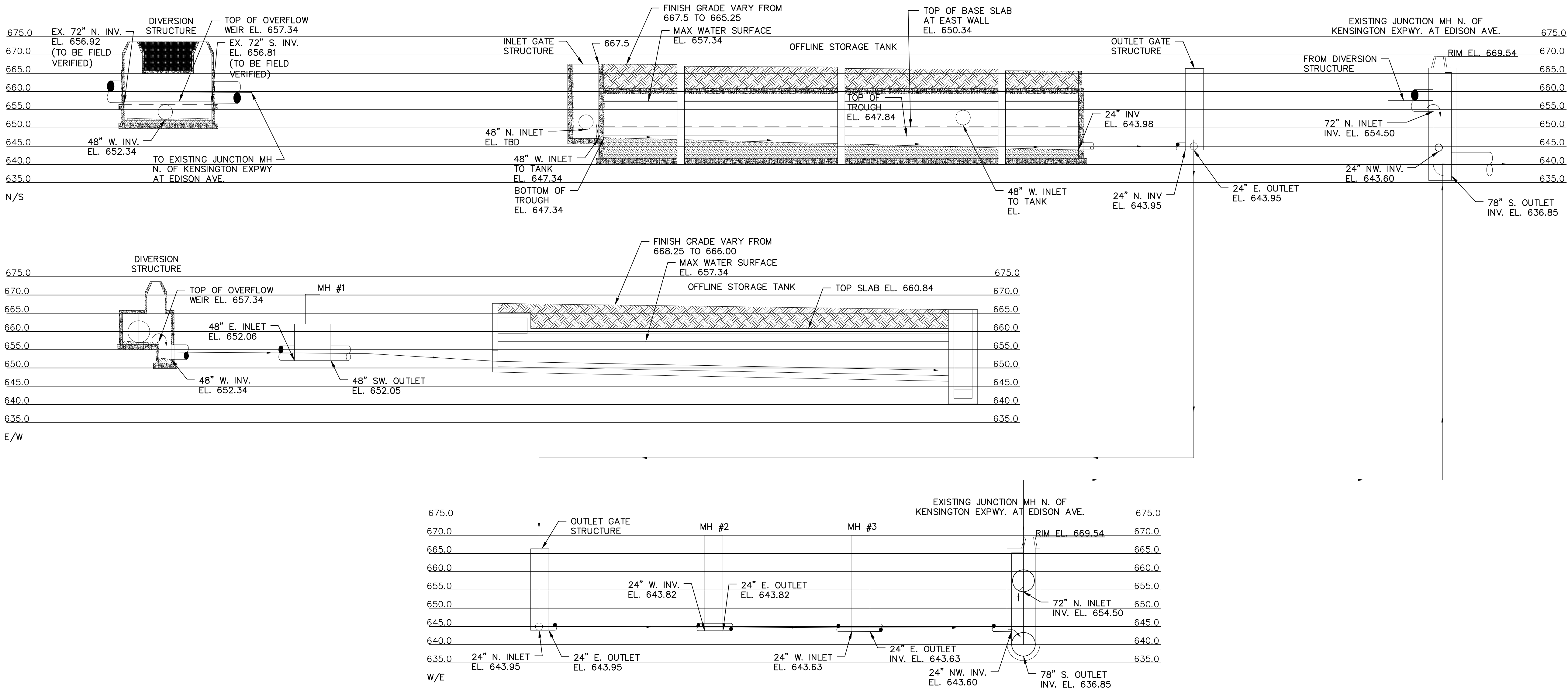
DISCIPLINE	

PROJECT NO. : 82000075
DWG: G-04
SHEET: 03 OF 09
DATE: OCTOBER 2024 REV:REV

EDISON-MARTHA OFFLINE STORAGE TANK	PROPOSED ENLARGED SITE PLAN

30% SUBMITTAL
NOT FOR CONSTRUCTION

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-IMP\GENERAL\G-05.DWG PTTMAN, STEVE 2025/01/03 1:46 PM BSA MEASURES IN 1"=40' UNITS SEE SHEET 1



BUFFALO
SEWER AUTHORITY



DESIGNED KZS
DRAWN SRP
CHECKED BB

NO.	DATE	APPD	REVISION DESCRIPTION

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

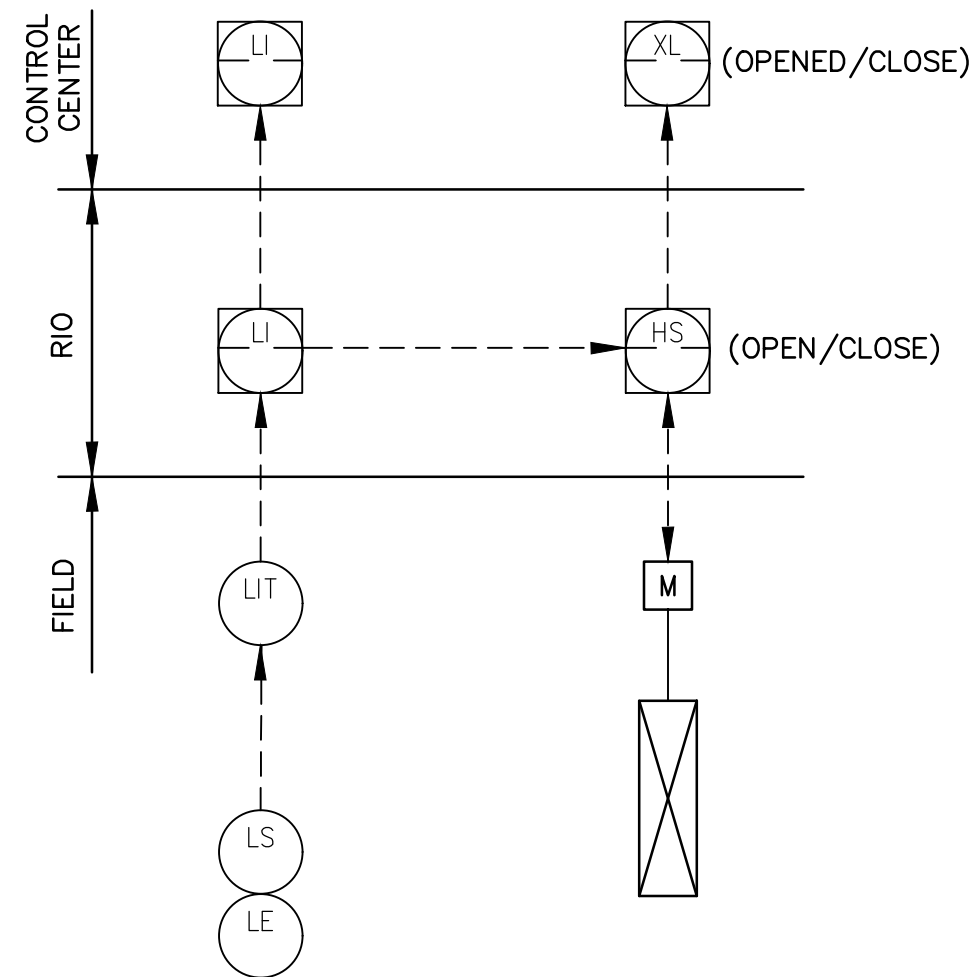
HYDRAULIC PROFILE

30% SUBMITTAL
NOT FOR CONSTRUCTION

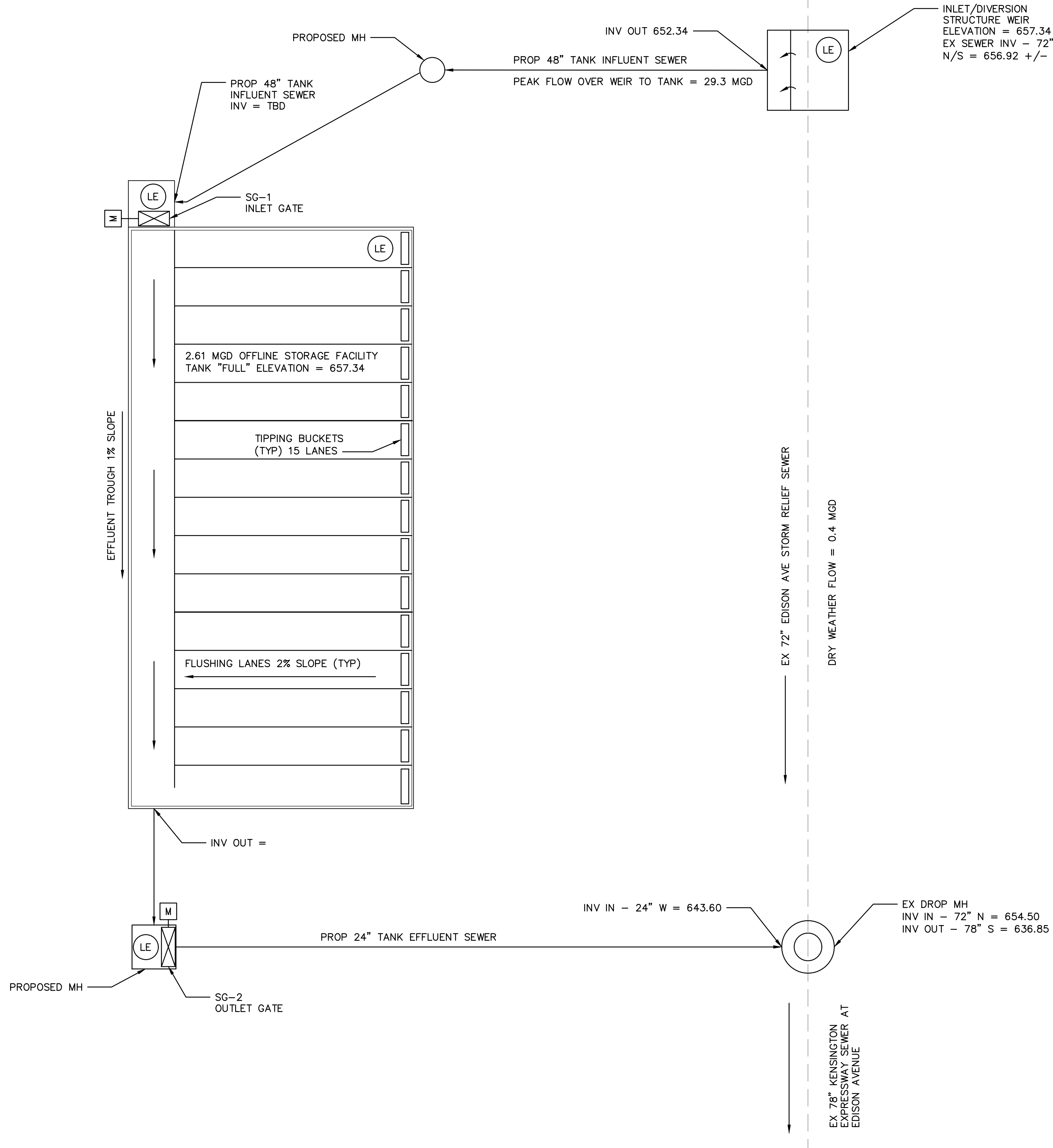
PROJECT NO.: 82000075

DWG: G-05
SHEET: 05 OF 09
DATE: OCTOBER 2024 REV: REV

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-06.DWG PTTMAN, STEVE 2025/01/03 1:18 PM BSA MESURES - 1' BY 1' SCALE SHEETS



TYPICAL INSTRUMENTATION AND CONTROL DETAIL



NOTE:

- ELEVATIONS ON THIS FIGURE ARE RELATIVE TO THE NAVD88 DATUM. NAVD88 DATUM - 574.90 = CITY DATUM NAVD88 DATUM + 0.55 = CSS MODEL DATUM.

BUFFALO
SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED KZS
DRAWN ORE
CHECKED BB

NO.	DATE	APPD	REVISION DESCRIPTION
-	-	-	-

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

PROCESS FLOW DIAGRAM AND CONTROL SCHEMATIC

PROJECT NO.: 82000075

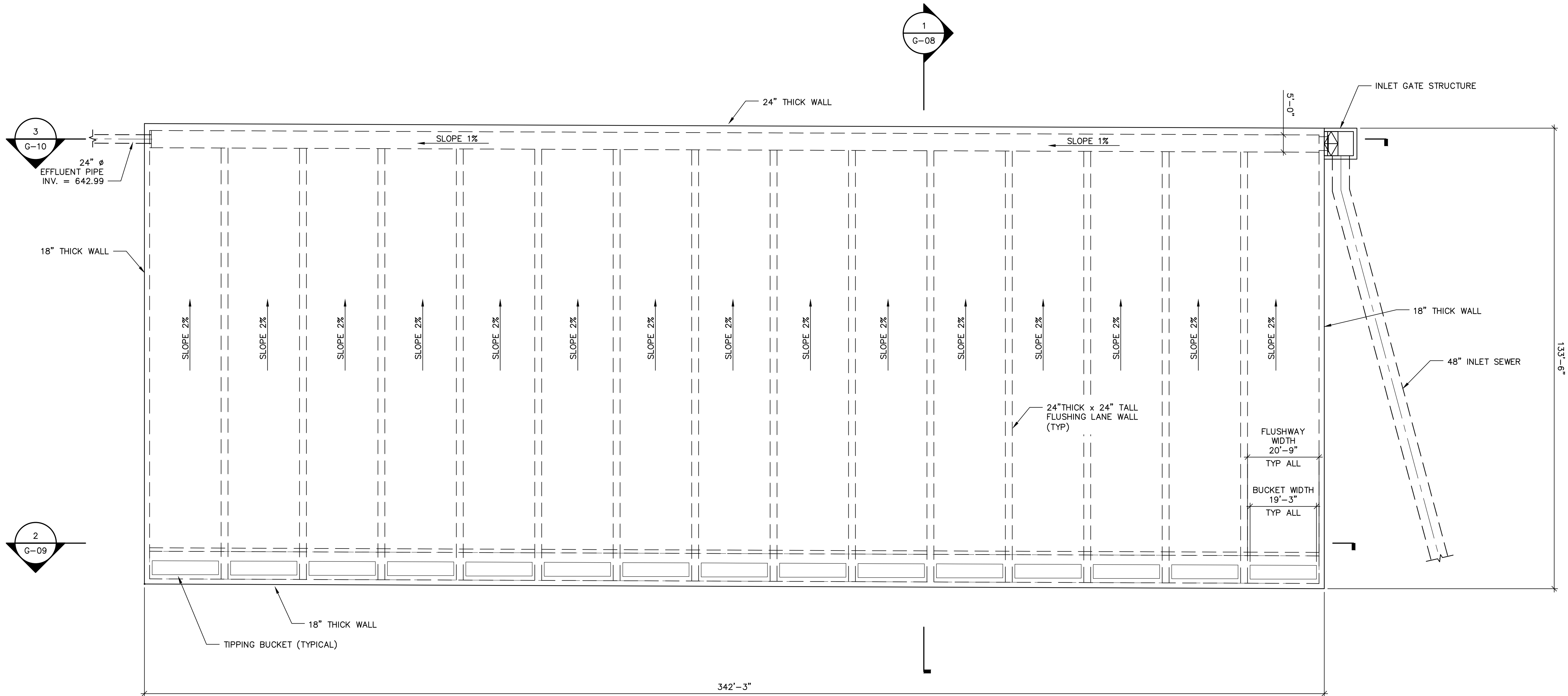
DWG: G-06

SHEET: 04 OF 09

DATE: OCTOBER 2024 REV: REV

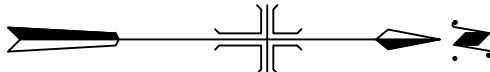
30% SUBMITTAL
NOT FOR CONSTRUCTION

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-IMP\GENERAL\G-07.DWG PTTMAN, STEVE 2025/01/02 3:07 PM BSA\MSSES - LAYOUT SHEETS



BASIN PLAN

SCALE: 3/4" = 1'-0"



BUFFALO
SEWER AUTHORITY



DESIGNED KZS
DRAWN ORE
CHECKED BB

NO.	DATE	APPD	REVISION DESCRIPTION
-	-	-	-

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

STORAGE TANK PLAN

30% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NO.: 82000075

DWG: G-07

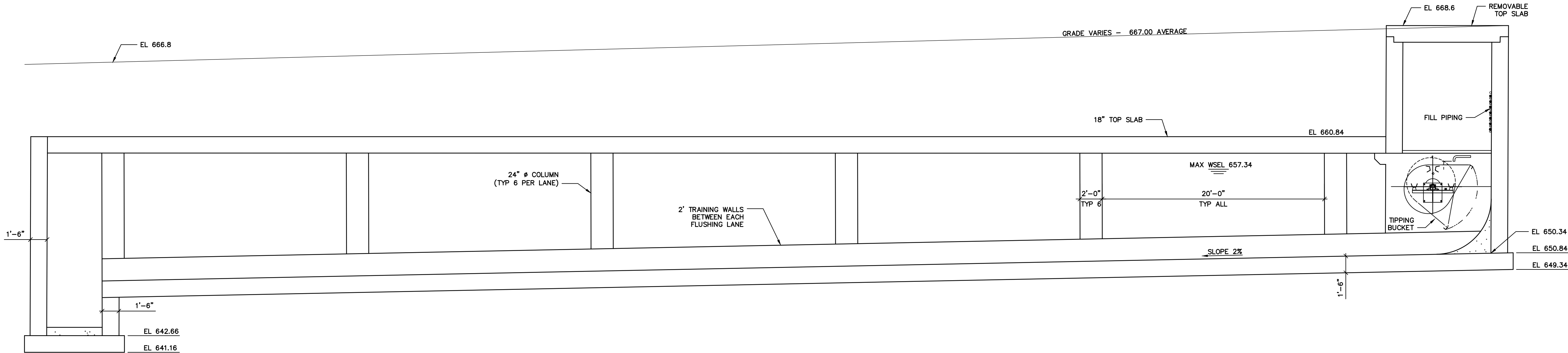
SHEET: 05 OF 09

DATE: OCTOBER 2024 REV: REV

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-08 DWG PITTMAN STEVE

2025/01/03 1:22 PM

BAW MEASURES -
ANYL SIZE SHEETS



1 SECTION
G-07
SCALE: 3/16" = 1'-0"
0 4' 8' 12'

BUFFALO

SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS
DRAWN	ORE
CHECKED	BB

NO.	DATE	APPD	REVISION DESCRIPTION
-	-	-	-

SCALE

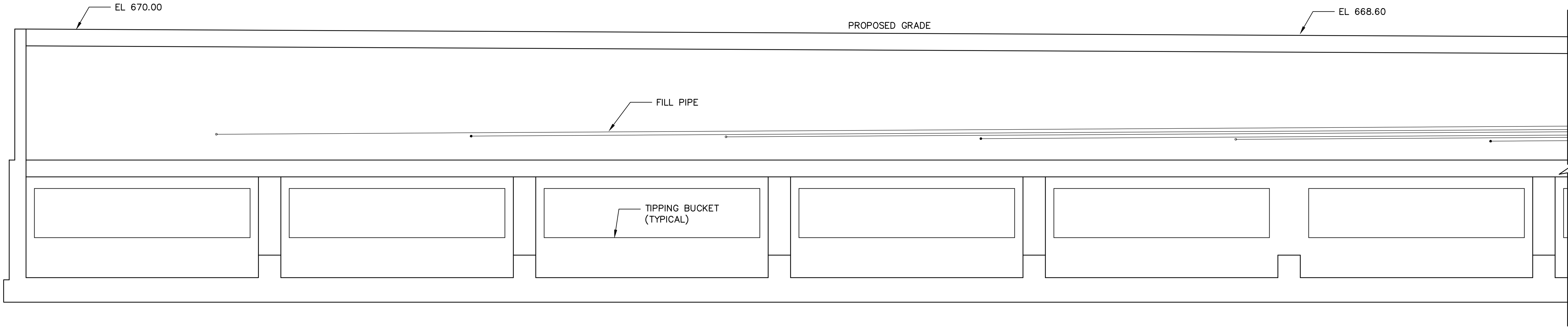
DISCIPLINE
EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE
STORAGE TANK SECTION

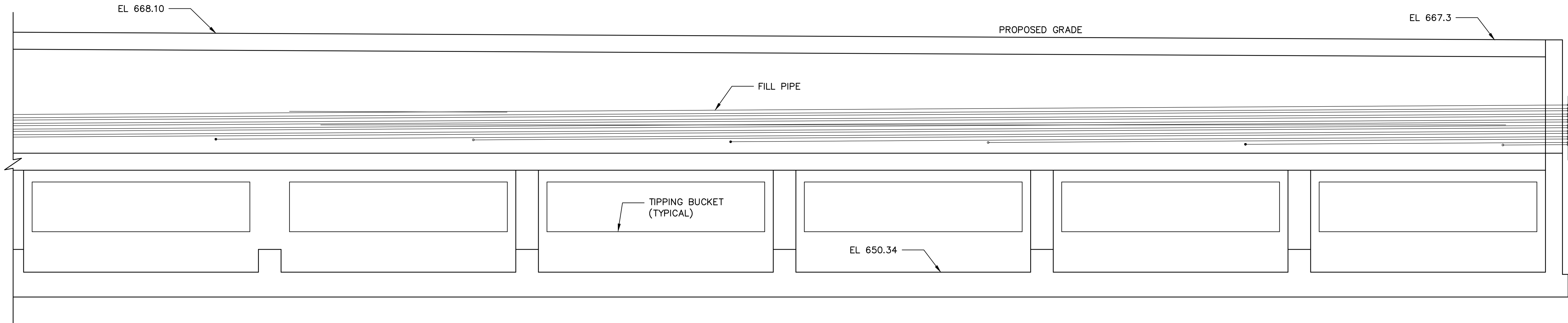
PROJECT NO.: 82000075		
DWG:	G-08	
SHEET:	06	OF 09
DATE:	OCTOBER 2024	REV: REV

30% SUBMITTAL
NOT FOR CONSTRUCTION

C:\USERS\PTTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-09.DWG PTTMAN, STEVE 2025/01/02 2:02 PM BSA\MS\RES - UNTITLE SHEETS



2 SECTION — NORTH END
G-07 SCALE: 3/16" = 1'-0" 0 4' 8' 12'



2 SECTION — SOUTH END
G-07 SCALE: 3/16" = 1'-0" 0 4' 8' 12'

BUFFALO

SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS	<table><tr><th>NO.</th><th>DATE</th><th>APPD</th><th>REVISION DESCRIPTION</th></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td>—</td><td>—</td><td>—</td><td>—</td></tr></table>	NO.	DATE	APPD	REVISION DESCRIPTION													—	—	—	—
NO.	DATE		APPD	REVISION DESCRIPTION																		
—	—	—	—																			
DRAWN	CRE																					
CHECKED	BB																					

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

STORAGE TANK SECTION

PROJECT NO.: 82000075

DWG: G-09

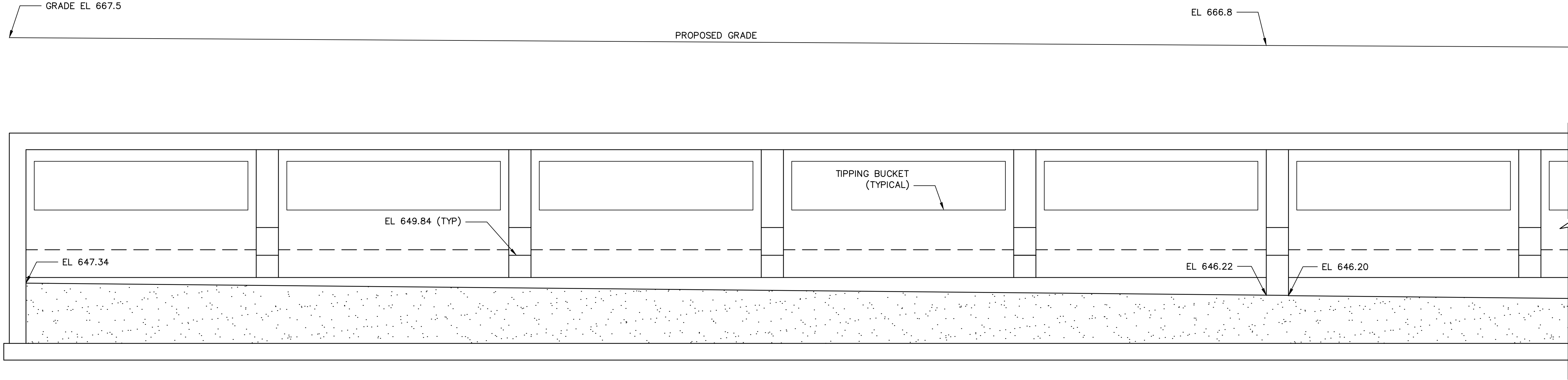
SHEET: 07 OF 09

DATE: OCTOBER 2024 | REV: REV

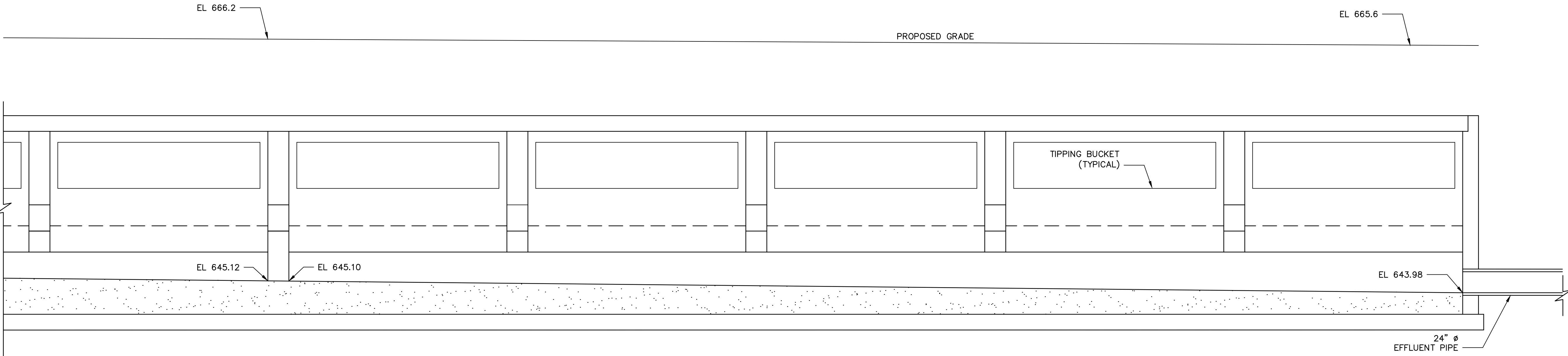
30% SUBMITTAL

NOT FOR CONSTRUCTION

C:\USERS\SPITTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-10.DWG PTTMAN, STEVE 2025/01/03 11:48 AM BSA MEASURES IN
INCHES UNITS FEET



3 SECTION — NORTH END
G-07 SCALE: 3/16" = 1'-0" 0 4' 8' 12'



3 SECTION — SOUTH END
G-07 SCALE: 3/16" = 1'-0" 0 4' 8' 12'

BUFFALO
SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS
DRAWN	ORE
CHECKED	BB

NO.	DATE	APPD	REVISION DESCRIPTION
—	—	—	—

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE

STORAGE TANK SECTION

30% SUBMITTAL
NOT FOR CONSTRUCTION

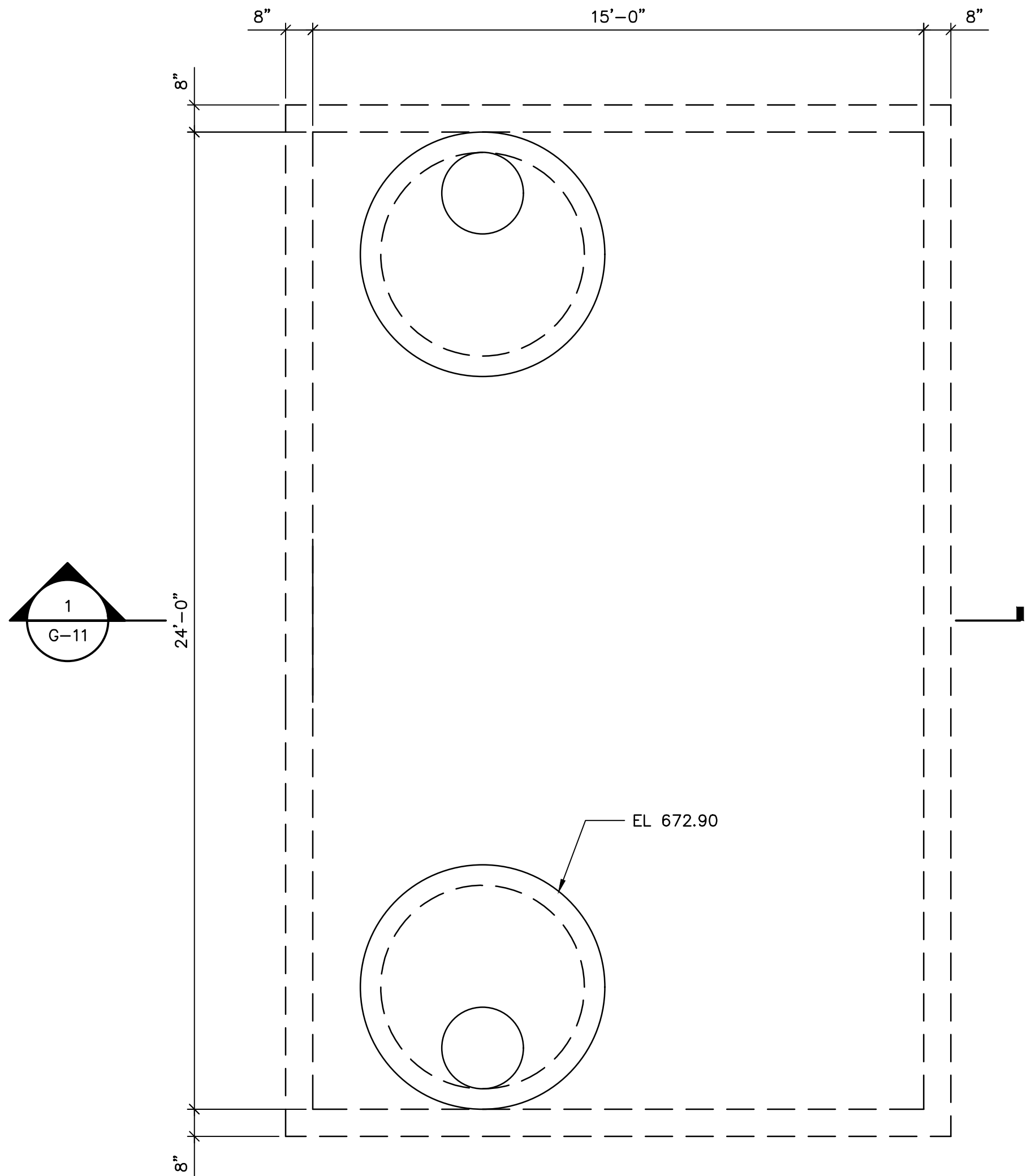
PROJECT NO.: 82000075

DWG: G-10

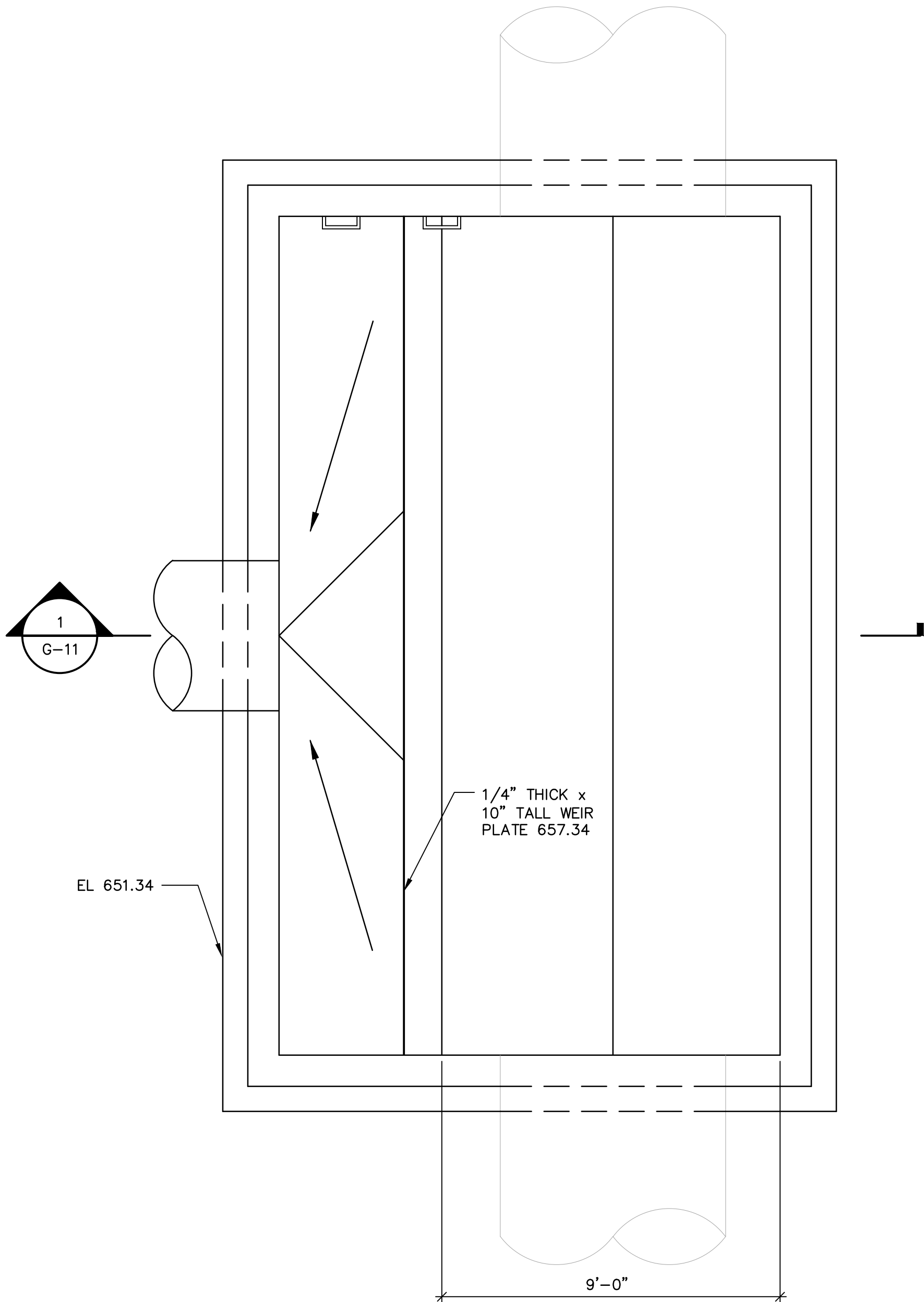
SHEET: 08 OF 09

DATE: OCTOBER 2024 REV: REV

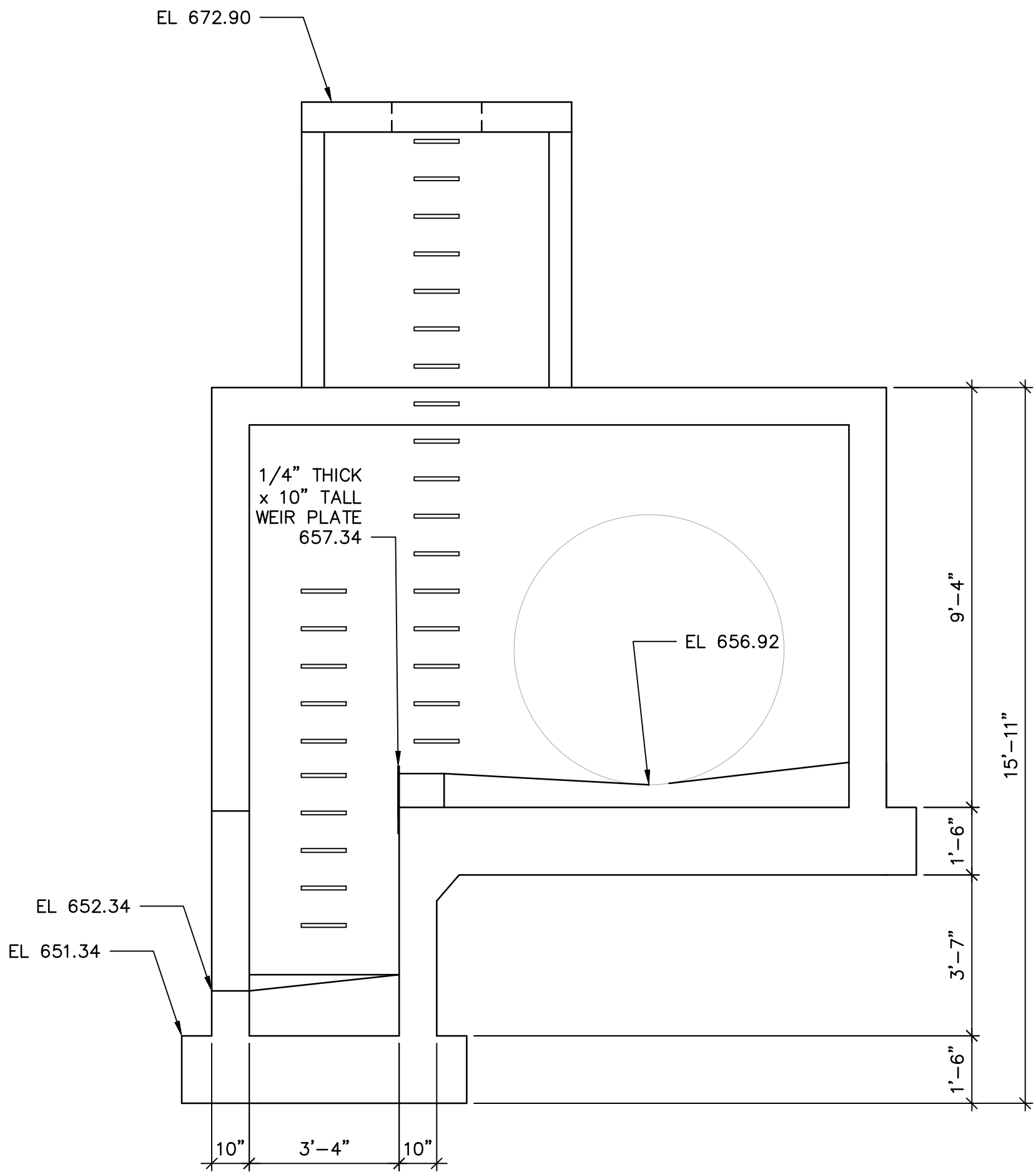
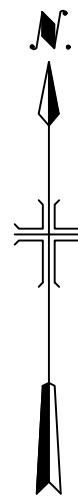
C:\USERS\PTTMAN\ARCADIS\30228371 - BSA CAPITAL PROJECTS - GENERAL PROGRAM MANAGEMENT - 05 - TASK 02.001 EDISON MARTHA06 - DISCIPLINE SPECIFIC DESIGN & VENDOR INFO\DESIGN\01-WIP\GENERAL\G-11.DWG PTTMAN, STEVE 2025/01/10 2:10 PM BSA\MSSES - LAYOUT SIZE SHEETS



PLAN VIEW
SCALE: 3/8" = 1'-0"



SECTIONAL PLAN
SCALE: 3/8" = 1'-0"



1 SECTION
SCALE: 3/8" = 1'-0"



FOR REFERENCE ONLY
NOTE 1: DIVERSION STRUCTURE WAS ORIGINALLY DESIGNED AS A STATIC WEIR--AS CURRENTLY SHOWN ON THIS DRAWING. FINAL DESIGNER SHALL COORDINATE WITH MODELING TO PROVIDE A DYNAMIC WEIR. THIS WILL ALLOW A REDUCTION IN BASIN ACTIVATIONS.

30% SUBMITTAL
NOT FOR CONSTRUCTION

BUFFALO

SEWER AUTHORITY



LEGAL ENTITY:
ARCADIS OF NEW YORK, INC.

DESIGNED	KZS
DRAWN	CRE
CHECKED	BB

NO.	DATE	APPD	REVISION DESCRIPTION
-	-	-	-

SCALE

EDISON-MARTHA OFFLINE STORAGE TANK

DISCIPLINE
DIVERSION CHAMBER PLAN AND SECTION

PROJECT NO.: 82000075		
DWG:	G—11	
SHEET:	09	OF 09
DATE:	OCTOBER 2024	REV: REV