

The County of DuPage  
Finance – Procurement 3-400  
421 North County Farm Road  
Wheaton, Illinois 60187-3978

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MAIN STREET BASIN FLOOD CONTROL PROJECT 23-107-SWM  
ADDENDUM 1

**SUPPLEMENTAL INFORMATION**

1. Structural drawings are provided with this addendum.

**Benchmark:** Cut square on southeast backwall of Main St. Bridge over St. Joseph's Creek, approximately 200-ft. south of Middleton & Main St. intersection (El. 673.85 NAVD88)

**Existing Structure:** None

**Traffic Control:** None

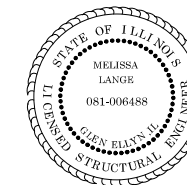
**Salvage:** None

**INDEX OF SHEETS**

- S1 General Plan
- S2 Spillway & Footing Plan
- S3 Wall Elevation I
- S4 Wall Elevation II
- S5 Structure Details
- S6 Soil Borings

**GENERAL NOTES**

1. Reinforcement bars designated (E) shall be epoxy coated.
2. All fill and backfill shall be compacted to 95% standard proctor density.
3. Compaction of soil and granular material located within 4'-0" from the back of the wall shall be compacted to the satisfaction of the Engineer using a suitable, mechanical hand tamper.



MAY 19TH, 2023

*Melissa Lange*

MELISSA F. LANGE, S.E.  
ILLINOIS REG. STRUCTURAL ENGINEER NO. 081-006488  
EXPIRATION DATE 11-30-2024  
SHEETS S1 - S6

I certify to the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with the requirements of the 2020 AASHTO LRFD Bridge Design Specifications.

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

**DESIGN LOADING**

3,000 psf Net Allowable Bearing Pressure

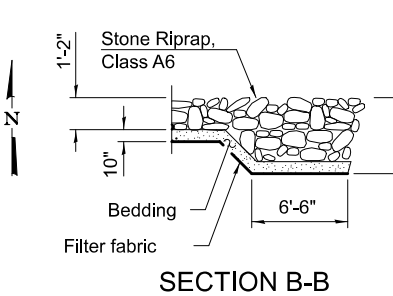
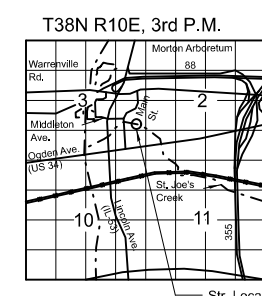
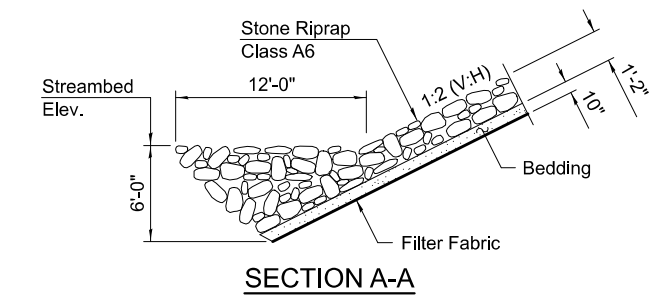
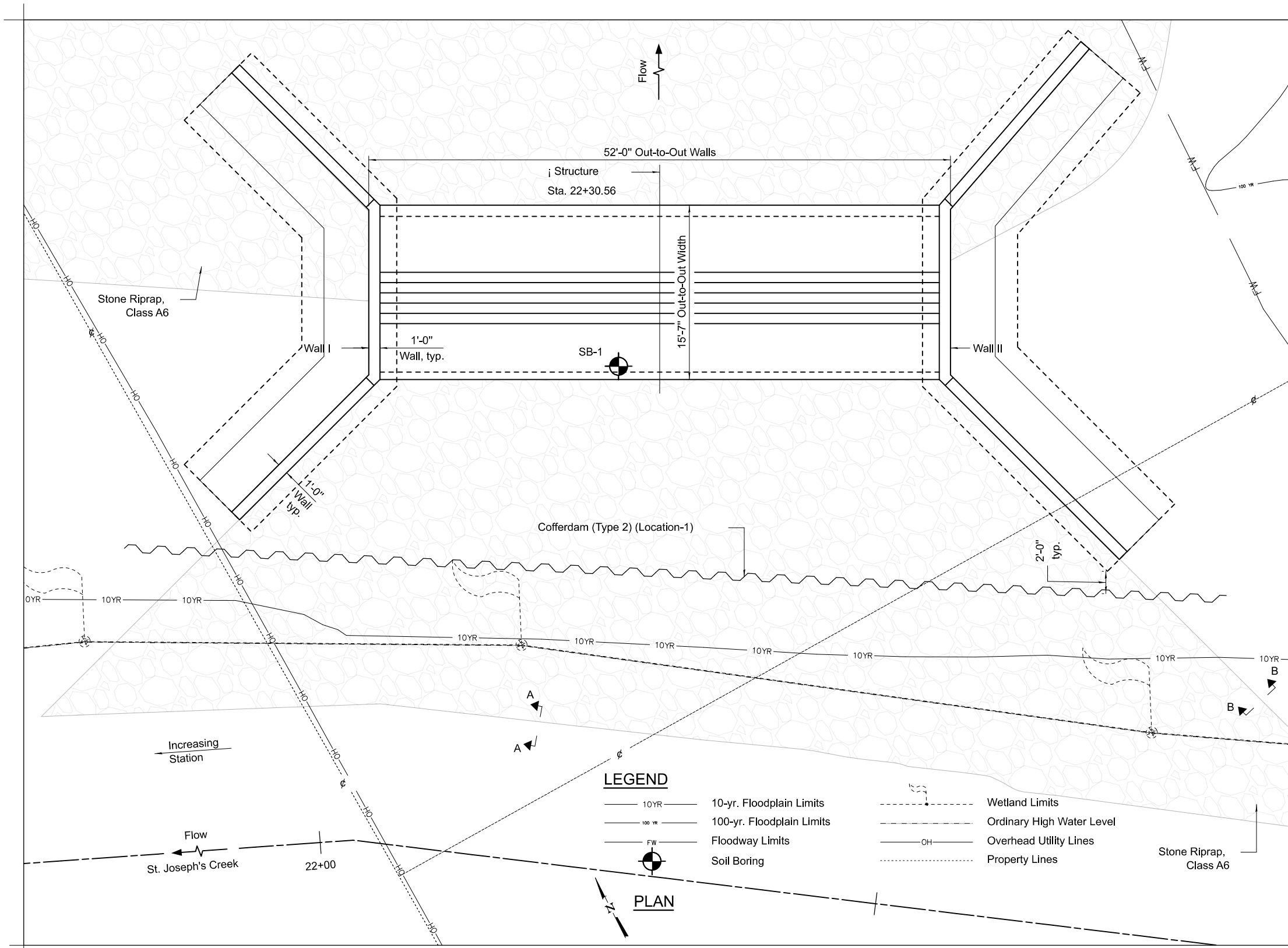
**DESIGN STRESSES**

**FIELD UNITS**

$f_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	1,280
Cofferdam (Type 2) (Location -1)	Each	1
Protective Coat	Sq. Yd.	183
Reinforcement Bars, Epoxy Coated	Pound	14,110
Concrete Structures (Retaining Wall)	Cu. Yd.	95.0
Concrete Box Culverts	Cu. Yd.	40.0
Granular Backfill for Structures	Cu. Yd.	50
Geocomposite Wall Drain	Sq. Yd.	37



**LEGEND**

- 10YR 10-yr. Floodplain Limits
- 100 yr 100-yr. Floodplain Limits
- FW Floodway Limits
- Soil Boring
- Wetland Limits
- Ordinary High Water Level
- OH Overhead Utility Lines
- Property Lines

**PLAN**

**GENERAL PLAN**  
**MAIN STREET SPILLWAY (ST. JOSEPH'S CREEK)**  
**DUPAGE COUNTY**  
**STA. 22+30.56**

MODEL: Master Model  
FILE NAME: V:\DUPAGE\CO\W22044.00 On-Call Design Engineering\BO - Main Street\CADD\Structural\03 Sheets\S1 W22044.BO General Plan.dgn  
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DRAWN BY: KLK  
CHECKED BY: MFL  
APPROVED BY: MFL



35701 WEST AVENUE, SUITE 150  
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10 S. RIVERSIDE PLAZA, SUITE 875  
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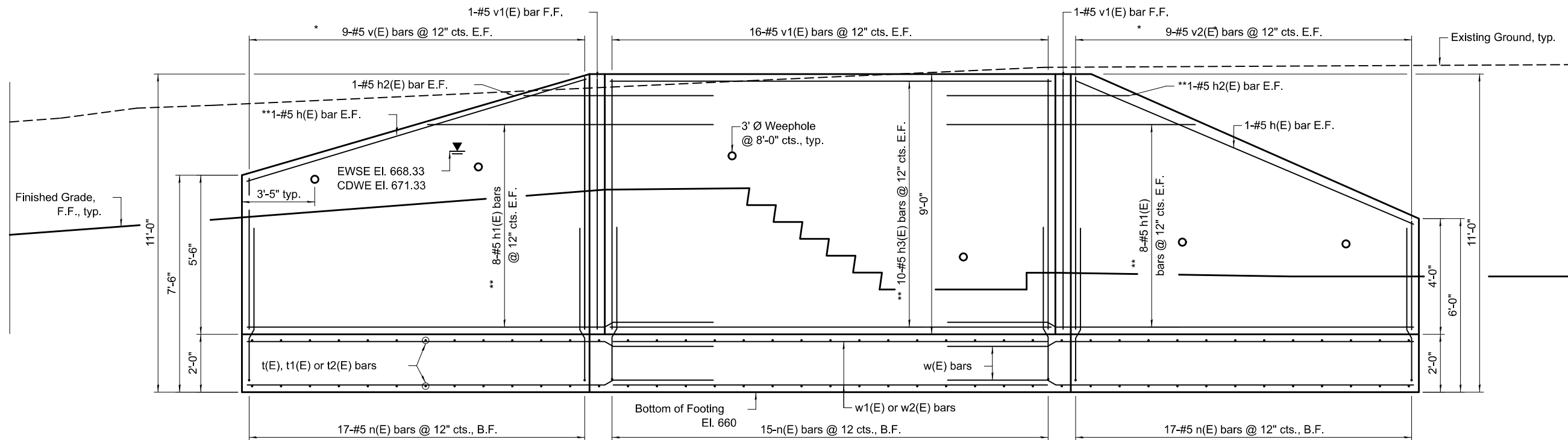
2416 GALEN DRIVE  
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PHONE (217) 351-6268  
FAX (217) 355-1902

DUPAGE COUNTY  
MAIN STREET STORAGE  
LISLE, ILLINOIS

TITLE:	GENERAL PLAN
SCALE:	N.T.S.
DATE:	May 2023
JOB NO:	W22044.BO
SHEET:	S1



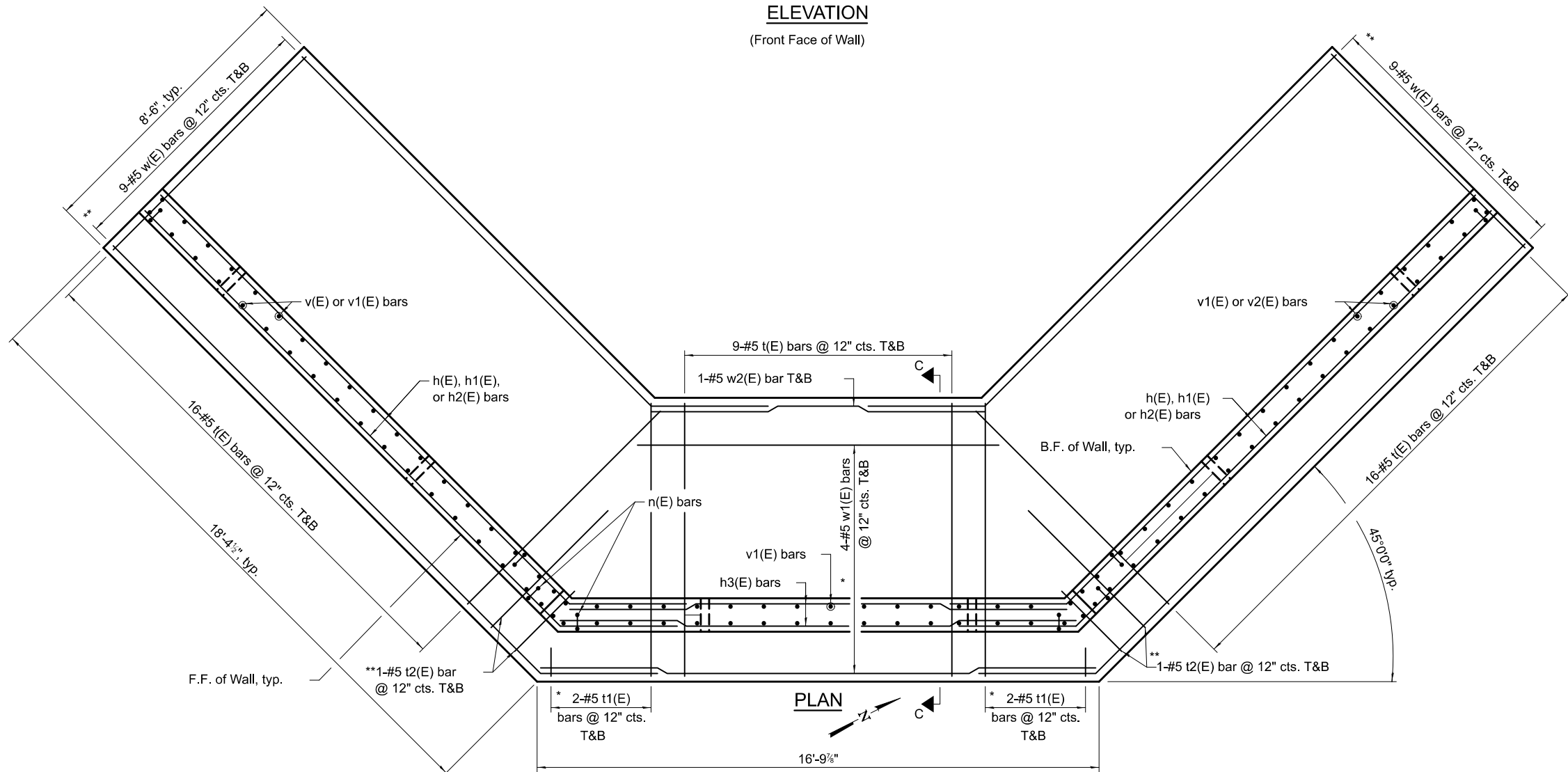
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**ELEVATION**  
 (Front Face of Wall)

**MINIMUM LAP LENGTH**  
 #5 bar = 3'-6"

\*See Field Cutting Diagram  
 \*\* Order Full Length & Cut to Fit



**PLAN**

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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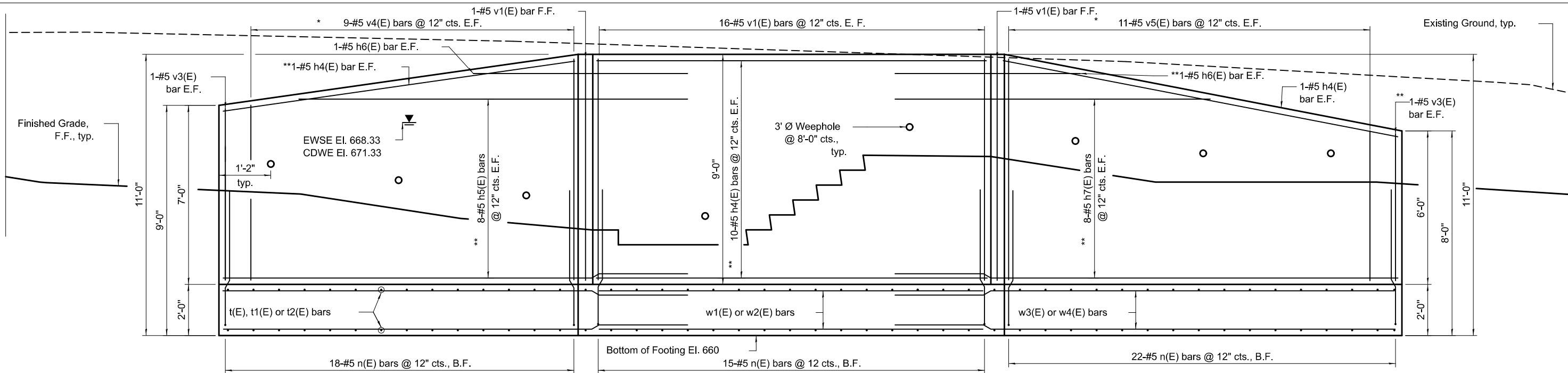
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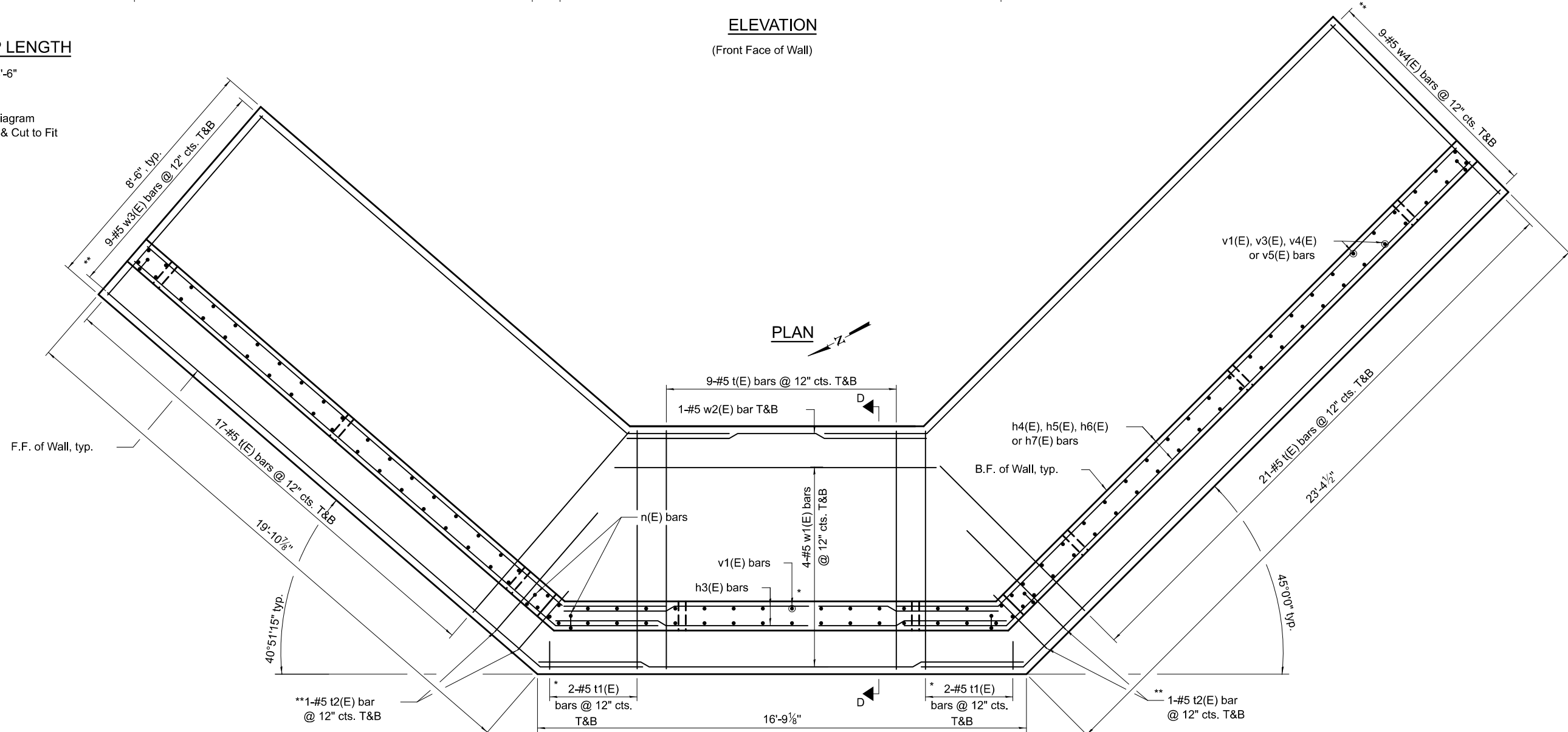
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 DATE: May 2023  
 JOB NO: W22044.BO  
 SHEET: S3



**ELEVATION**  
(Front Face of Wall)

**MINIMUM LAP LENGTH**  
#5 bar = 3'-6"

\*See Field Cutting Diagram  
\*\* Order Full Length & Cut to Fit



**PLAN**

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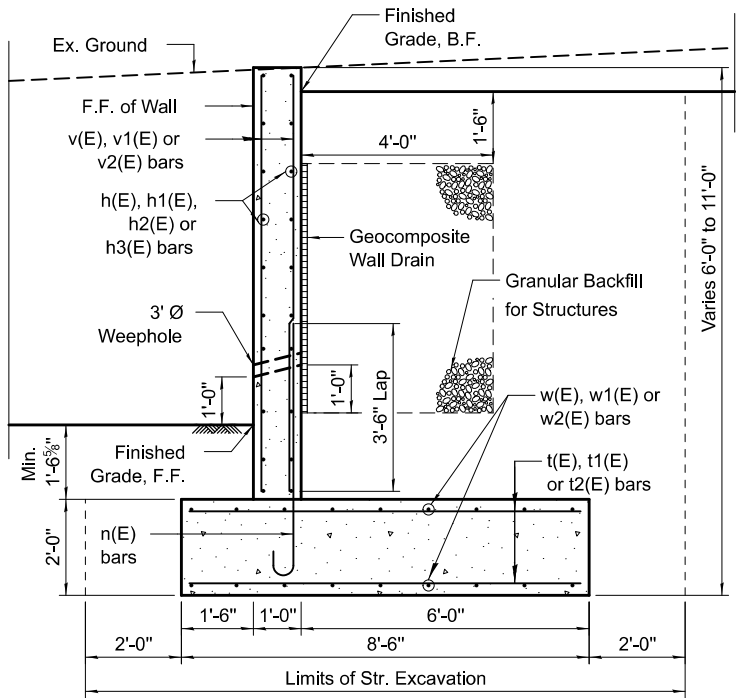
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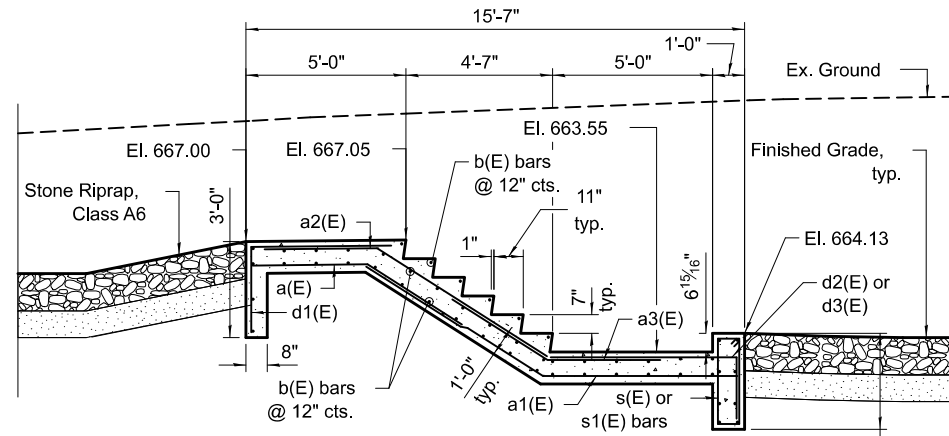
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SCALE:	N.T.S.
DATE:	May 2023
JOB NO:	W22044.BO
SHEET:	S4

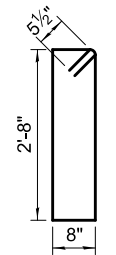


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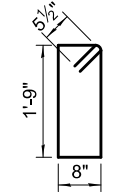


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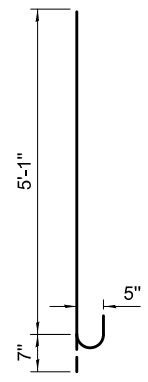
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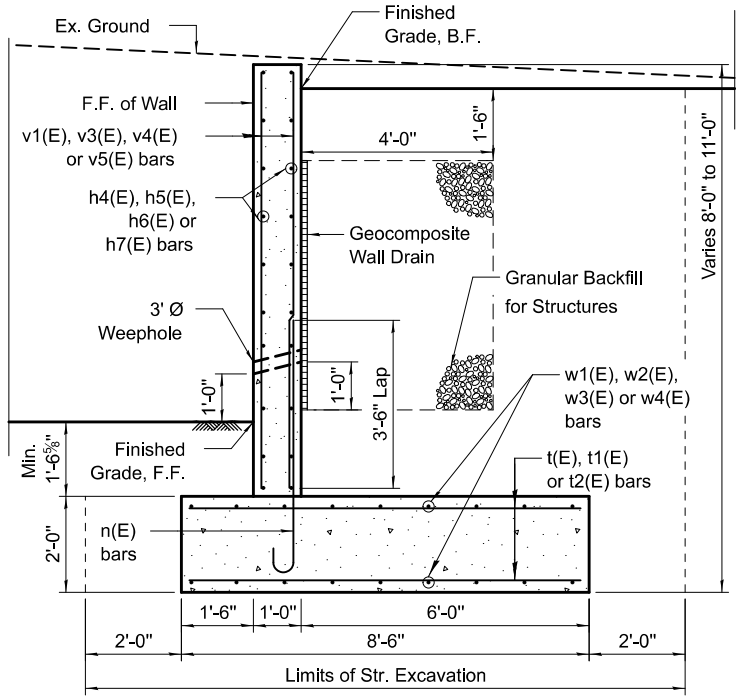
s(E) bar



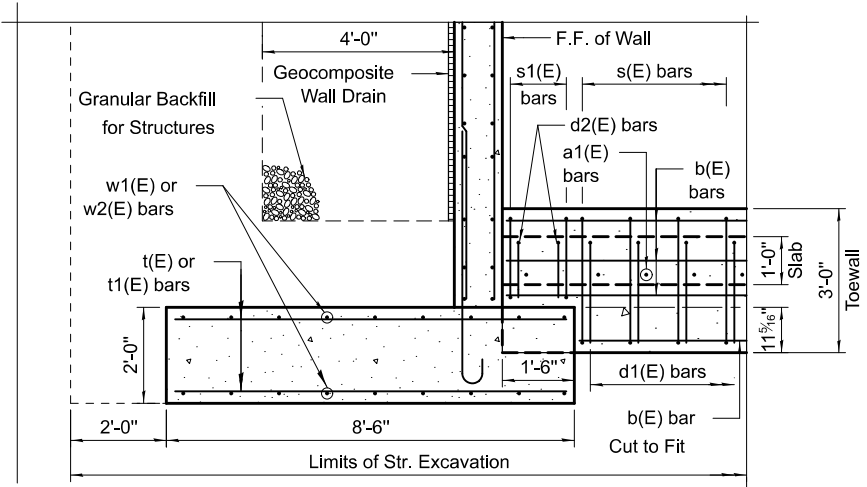
s1(E) bar



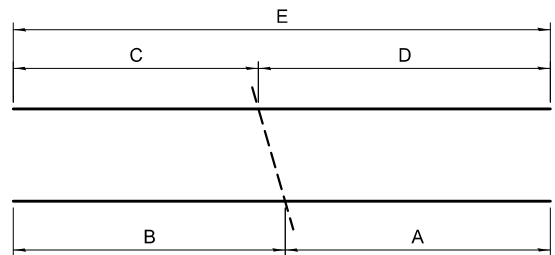
BAR n(E)



SECTION D-D

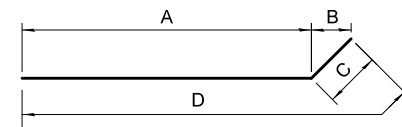


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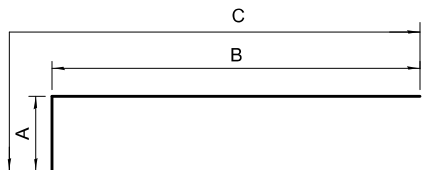
Bar	No.	A	B	C	D	E
t1(E)	4	3'-3"	5'-8"	0'-9"	8'-2"	8'-11"
v(E)	18	6'-9"	7'-1"	5'-2"	8'-8"	13'-10"
v2(E)	18	6'-3"	6'-1"	3'-8"	8'-8"	12'-4"
v4(E)	18	7'-8"	7'-9"	6'-10"	8'-7"	15'-5"
v5(E)	22	7'-2"	7'-4"	5'-10"	8'-8"	14'-6"
w1(E)	8	13'-0"	13'-11"	10'-5"	16'-6"	26'-11"

FIELD CUTTING DIAGRAM



Bar	No.	A	B	C	D
a(E)	50	3'-6"	2'-11 1/4"	3'-7"	7'-1"
a1(E)	50	6'-6"	5'-5 7/8"	6'-0"	12'-6"
a2(E)	50	6'-3"	5'-2 7/8"	3'-6"	9'-9"
a3(E)	50	3'-6"	2'-11 3/8"	3'-6"	7'-0"
h1(E)	32	17'-6"	2'-5 3/4"	3'-6"	21'-0"
h5(E)	16	22'-6"	2'-7 3/4"	3'-6"	26'-0"
h7(E)	16	19'-1"	2'-5 3/4"	3'-6"	22'-7"
w(E)	36	18'-1"	2'-5 3/4"	3'-6"	21'-7"
w3(E)	18	19'-7"	2'-7 3/4"	3'-6"	23'-1"
w4(E)	18	23'-1"	2'-5 3/4"	3'-6"	26'-7"

h1(E), h5(E), h7(E), w(E), w3(E), w4(E) & a BARS



Bar	No.	A	B	C
d(E)	47	2'-8"	4'-4"	7'-0"
d1(E)	47	2'-1"	5'-9"	7'-10"
d2(E)	4	1'-2"	5'-9"	6'-11"

d(E), d1(E) or d2(E) BARS

BILL OF MATERIAL

(Spillway Slab)

Bar	No.	Size	Length	Shape
d(E)	47	#5	7'-0"	┌
d1(E)	47	#5	7'-10"	┌
d2(E)	4	#5	6'-11"	┌
a(E)	51	#5	7'-1"	└
a1(E)	51	#5	12'-6"	└
a2(E)	51	#5	9'-9"	└
a3(E)	51	#5	7'-0"	└
b(E)	50	#5	49'-8"	—
s(E)	47	#5	7'-7"	□
s1(E)	4	#5	5'-9"	□
Structure Excavation			Cu. Yd.	355
Protective Coat			Sq. Yd.	110
Concrete Box Culverts			Cu. Yd.	40.0
Reinforcement Bars, Epoxy Coated			Pound	5,680

BILL OF MATERIAL

(Wall I & Wall II)

Bar	No.	Size	Length	Shape
h(E)	4	#5	17'-4"	—
h1(E)	32	#5	21'-0"	—
h2(E)	4	#5	7'-7"	—
h3(E)	20	#5	15'-3"	—
h4(E)	4	#5	21'-10"	—
h5(E)	16	#5	26'-0"	—
h6(E)	4	#5	8'-10"	—
h7(E)	16	#5	22'-7"	—
n(E)	104	#5	5'-8"	└
t(E)	184	#5	8'-2"	—
t1(E)	16	#5	8'-11"	—
t2(E)	8	#5	7'-4"	—
v(E)	18	#5	13'-10"	—
v1(E)	68	#5	8'-8"	—
v2(E)	18	#5	12'-4"	—
v3(E)	4	#5	6'-8"	—
v4(E)	18	#5	15'-5"	—
v5(E)	22	#5	14'-6"	—
w(E)	36	#5	21'-7"	└
w1(E)	8	#5	26'-11"	└
w2(E)	2	#5	10'-3"	└
w3(E)	18	#5	23'-1"	└
w4(E)	18	#5	26'-7"	└

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	545
Protective Coat	Sq. Yd.	73
Reinforcement Bars, Epoxy Coated	Pound	8,430
Concrete Structures (Retaining Wall)	Cu. Yd.	95.0
Granular Backfill for Structures	Cu. Yd.	50.0
Geocomposite Wall Drain	Sq. Yd.	37

MODEL: Master  
FILE NAME: V:\DUPAGE\COV\W22044.00 On-Call Design Engineering\BO - Main Street\CADD\Structural\03 Sheets\SS W22044.BO Structure Details.dgn

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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DUPAGE COUNTY  
MAIN STREET STORAGE  
LISLE, ILLINOIS

TITLE: STRUCTURE DETAILS  
SCALE: N.T.S.  
DATE: May 2023  
JOB NO: W22044.BO  
SHEET: S5

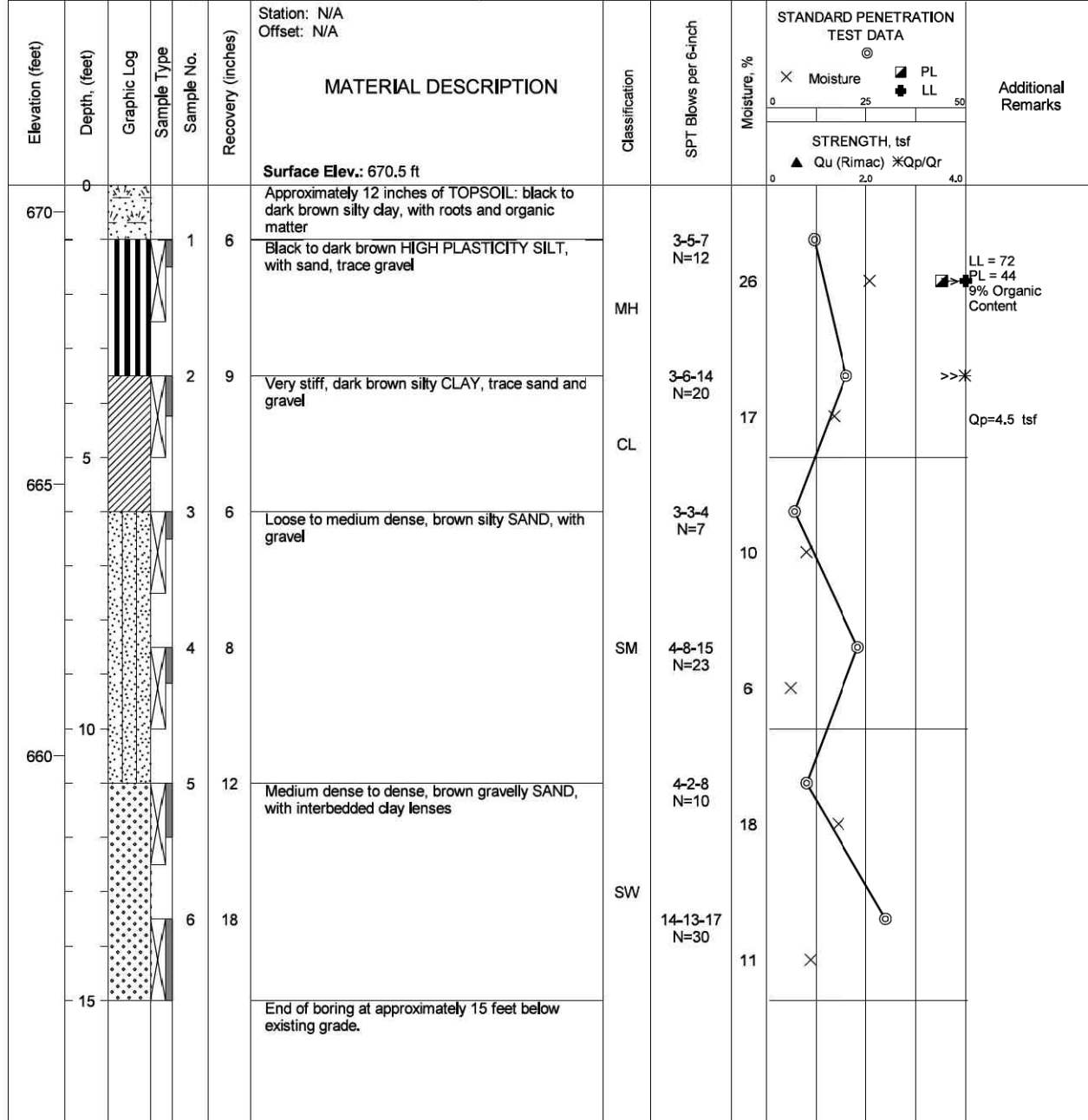


Rubino Engineering, Inc.  
425 Shepard Drive  
Elgin, IL 60123  
Telephone: 847-931-1555  
Fax: 847-931-1560

# LOG OF BORING SSB-01

Sheet 1 of 1

Rubino Job No.:	G22.181	Drilling Method:	3 1/4 Hollow Stem Auger	WATER LEVELS***	
Project:	St. Joseph Creek Overflow Detention Basin	Sampling Method:	Split Spoon	▽ While Drilling	N/A
Location:	Main Street and Middleton Avenue	Hammer Type:	Automatic	▼ Upon Completion	N/A
City, State:	Lisle, Illinois	Boring Location:	Proposed Stepped Spillway	▽ 24-hr Delay	Dry
Client:	County of DuPage				



Completion Depth:	15.0 ft	Sample Types:	Pressuremeter	Latitude: 41.804135
Date Boring Started:	10/24/22	Auger Cutting	Shelby Tube	Longitude: -88.072430
Date Boring Completed:	10/24/22	Split-Spoon	Grab Sample	Drill Rig: Geoprobe 7822DT
Logged By:	J.W.	Rock Core	No Recovery	Remarks: Boring left open for 24-hours
Drilling Contractor:	Rubino Engineering, Inc.			Log Entry: J. Ignarski
				Checked By: A. Tomaras

The stratification lines represent approximate boundaries. The transition may be gradual.  
\*\*\*Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

MODEL: Master V:\DUPAGE\CO\W22044.00 On-Call Design Engineering\BO - Main Street\CADD\Structural\03 Sheets\SE W22044.BO Soil Boring.dgn

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DUPAGE COUNTY  
MAIN STREET STORAGE  
LISLE, ILLINOIS

TITLE:	SOIL BORING LOG
SCALE:	N.T.S.
DATE:	May 2023
JOB NO.:	W22044.BO
SHEET:	S6