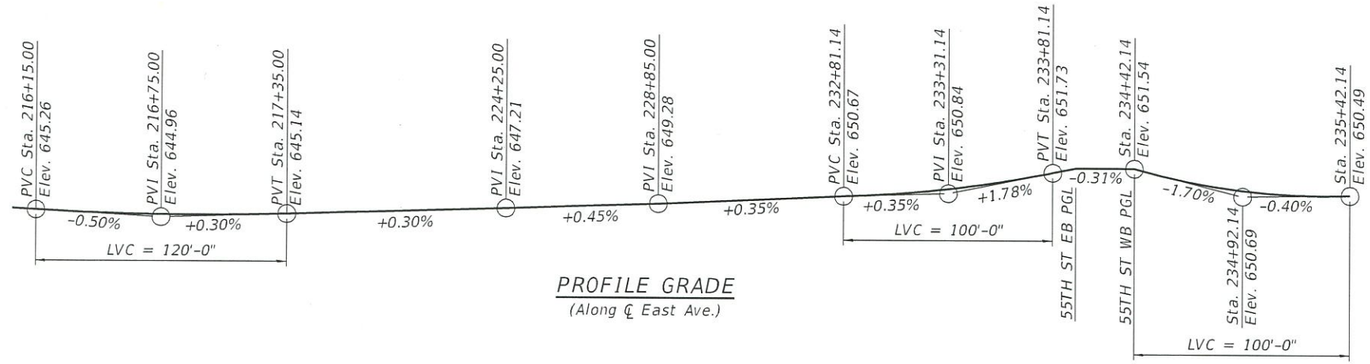
Bench Mark: Chiseled Square in traffic signal mast arm concrete foundation on south side of foundation at NE corner of East Ave. and 55th St.
Elev. = 651.55

Existing Structure: None

Traffic on East Ave. will be maintained utilizing staged construction.

APPROVED
DEC 04 2018
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

* For elevations, see Table 1 on Sheet 5 of 5.



PROFILE GRADE
(Along ℄ East Ave.)

HIGHWAY CLASSIFICATION

F.A.U. Rte. 2719 (East Ave.)
Functional Class: Collector
ADT: 24,000 (2012); (2040) 25,000
ADTT: 1,495 (2012); (2040) 1,557
DHV: 660 (2040)
Design Speed: 40 m.p.h.
Posted Speed: 40 m.p.h.
Two -Way Traffic
Directional Distribution: 50:50

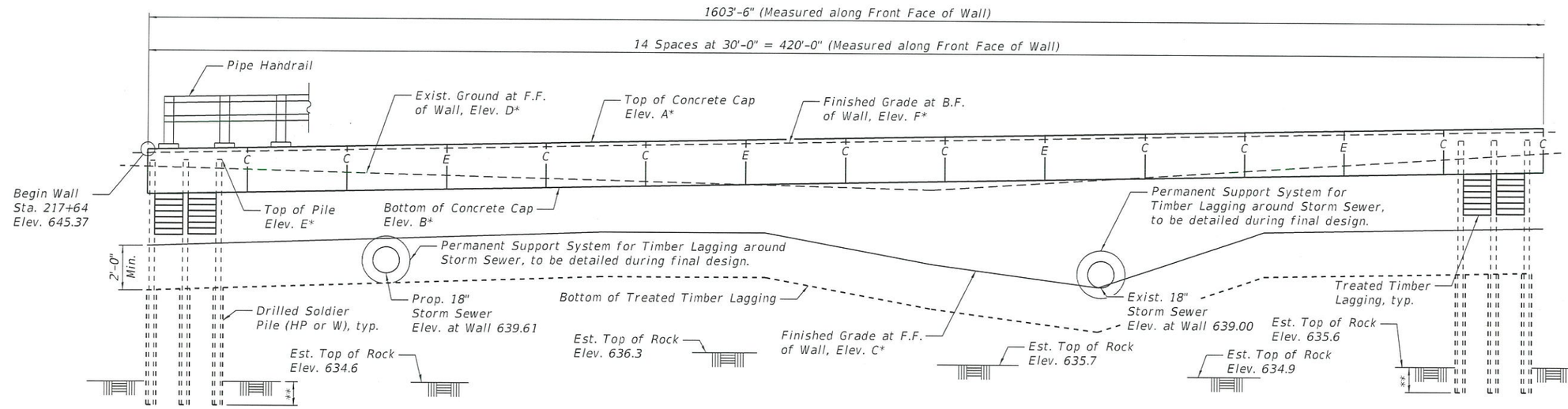
DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fb = 1,600 psi (Treated Timber Lagging)

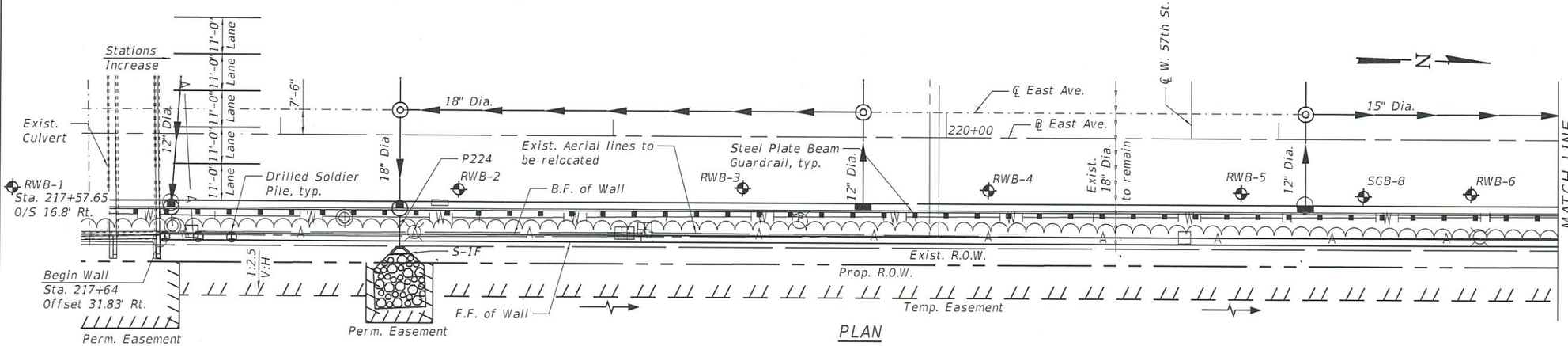


** Embedment depth in rock to be determined during final design.

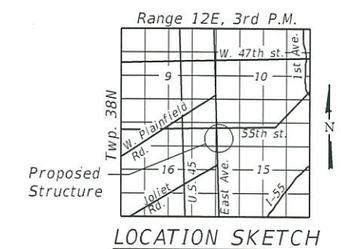
DEVELOPED ELEVATION
(Looking west at F.F. of Wall)

LEGEND:

Exist. Storm Sewer
Prop. Storm Sewer
Gas
Water
Aerial
Exist. Sanitary Sewer
Exist. Cable
Soil Boring
Exist. Manhole
Exist. Catch Basin
Prop. Manhole
Prop. Catch Basin
Prop. Inlet



PLAN



LOCATION SKETCH

GENERAL PLAN
RETAINING WALL ALONG
F.A.U. RTE. 2719 (EAST AVENUE)
SECTION 0102N&T
COOK COUNTY
STATION 217+64 TO 233+49.50
STRUCTURE NO. 016-Z022

Accurate GROUP, INC.	USER NAME = sapant	DESIGNED - SAT	REVISED -
		CHECKED - JMT	REVISED -
	PLOT SCALE = 36.0000 ' / in.	DRAWN - SAT	REVISED -
	PLOT DATE = 12/4/2018	CHECKED - SPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2719	0102N&T	COOK	5	1

CONTRACT NO. 62C25
ILLINOIS | FED. AID PROJECT

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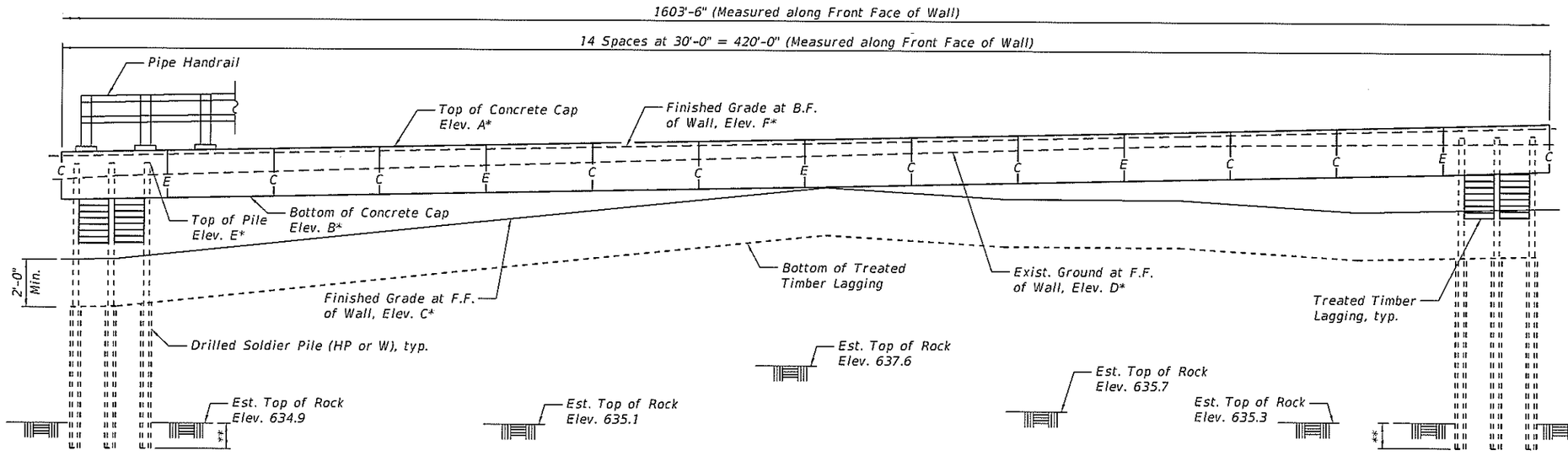
NOTES:

1. Wall offsets are measured from the ℄ of East Avenue to the front face of the concrete cap.
2. C denotes Construction Joint.
3. E denotes Expansion Joint.
4. F.F. denotes Front Face.
5. B.F. denotes Back Face.
6. Soldier Pile sections, shaft diameter, spacing and tip elevation to be determined during final design.
7. Proposed drainage and lighting information shown is conceptual and will be determined during final design.
8. Existing Aerial lines are in conflict with retaining wall and shall be relocated.

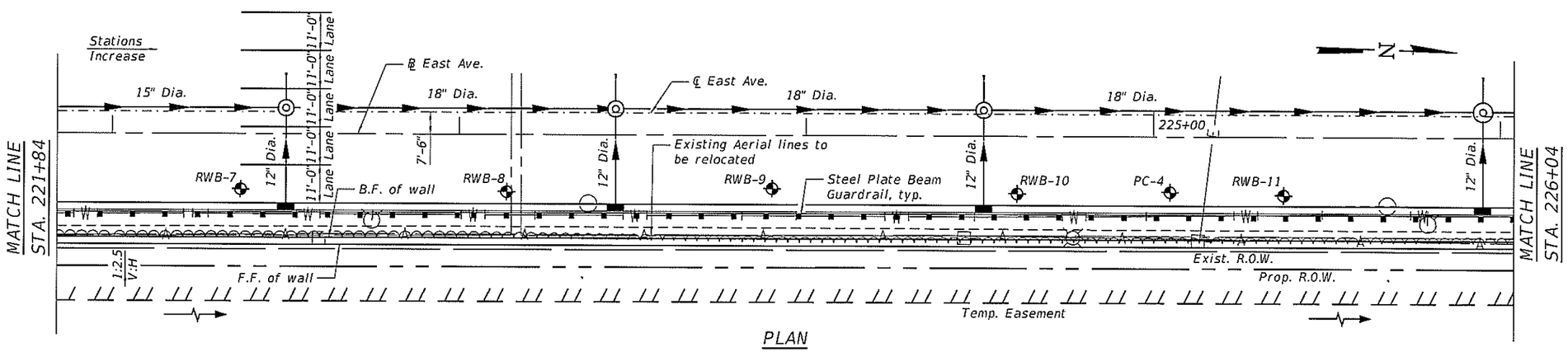


* For Elevations, See Table 1 on Sheet 5 of 5.

DEVELOPED ELEVATION

(Looking west at F.F. of Wall)

** Embedment depth in rock to be determined during final design.



PLAN

LEGEND:

- Exist. Storm Sewer
- Prop. Storm Sewer
- Gas
- Water
- Aerial
- Exist. Sanitary Sewer
- Exist. Cable
- Soil Boring
- Exist. Manhole
- Exist. Catch Basin
- Prop. Manhole
- Prop. Catch Basin
- Prop. Inlet

GENERAL PLAN
RETAINING WALL ALONG
F.A.U. RTE. 2719 (EAST AVENUE)
SECTION 0102N&T
COOK COUNTY
STATION 217+64 TO 233+49.50
STRUCTURE NO. 016-Z022

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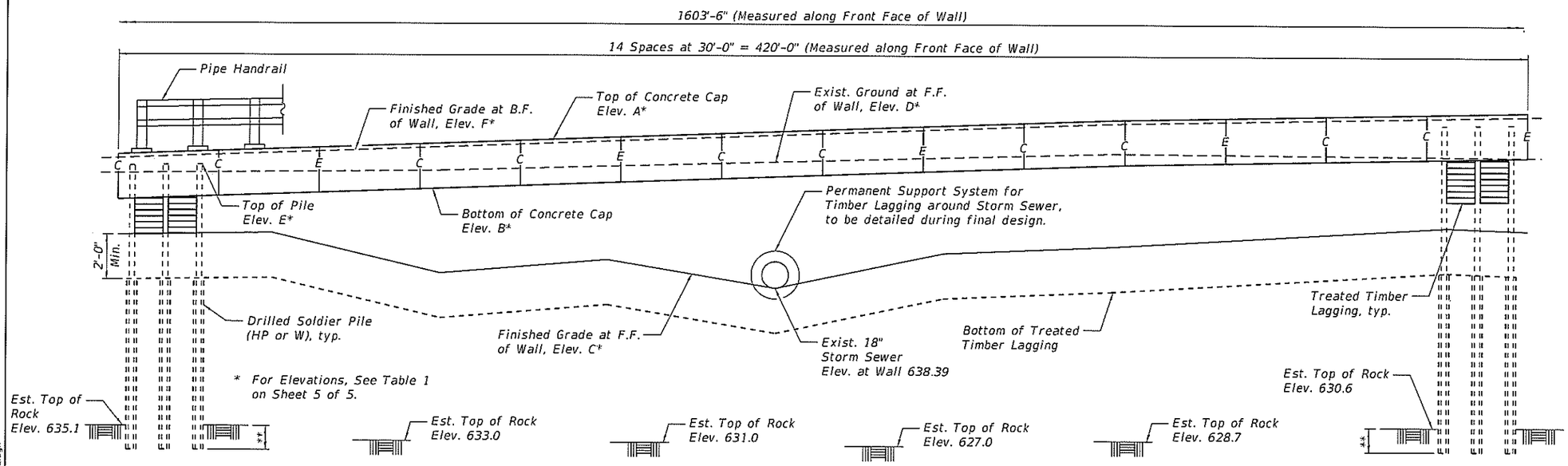
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 2 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2719	0102N&T	COOK	5	2
		CONTRACT NO. 62C25		
		ILLINOIS FED. AID PROJECT		

* For elevations, see Table 1 on Sheet 5 of 5.



Note: Top of Rock Elevations are not drawn to scale.

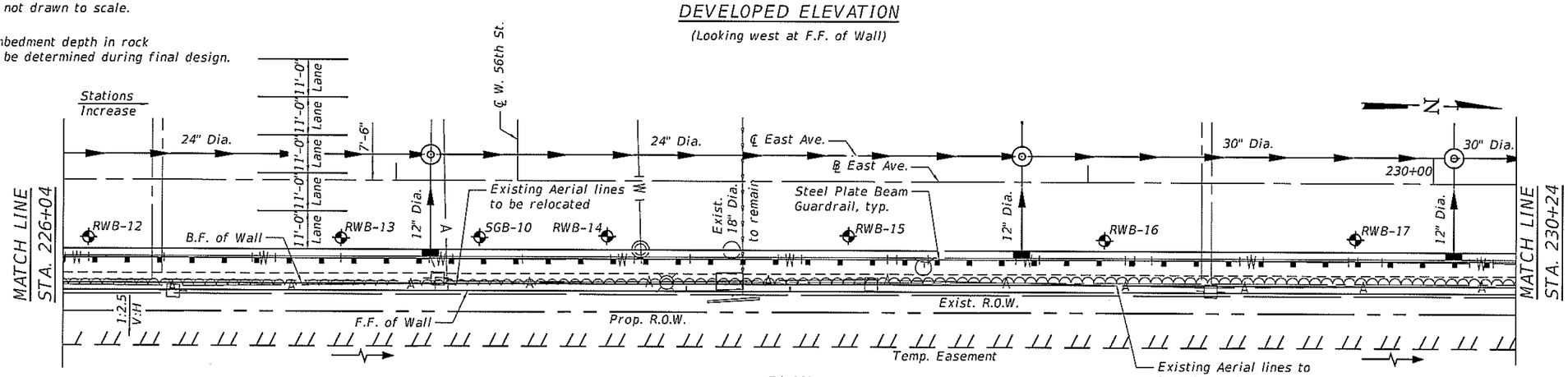
** Embedment depth in rock to be determined during final design.

DEVELOPED ELEVATION

(Looking west at F.F. of Wall)

LEGEND:

- Exist. Storm Sewer
- Prop. Storm Sewer
- Gas
- Water
- Aerial
- Exist. Sanitary Sewer
- Exist. Cable
- Soil Boring
- Exist. Manhole
- Exist. Catch Basin
- Prop. Manhole
- Prop. Catch Basin
- Prop. Inlet



PLAN

GENERAL PLAN
RETAINING WALL ALONG
F.A.U. RTE. 2719 (EAST AVENUE)
SECTION 0102N&T
COOK COUNTY
STATION 217+64 TO 233+49.50
STRUCTURE NO. 016-Z022

Accurate GROUP, INC.	USER NAME = sapant	DESIGNED - SAT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
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	PLOT DATE = 12/4/2018	CHECKED - SPS	REVISED -		SHEET 3 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2719	0102N&T	COOK	5	3
		CONTRACT NO. 62C25		
		ILLINOIS FED. AID PROJECT		

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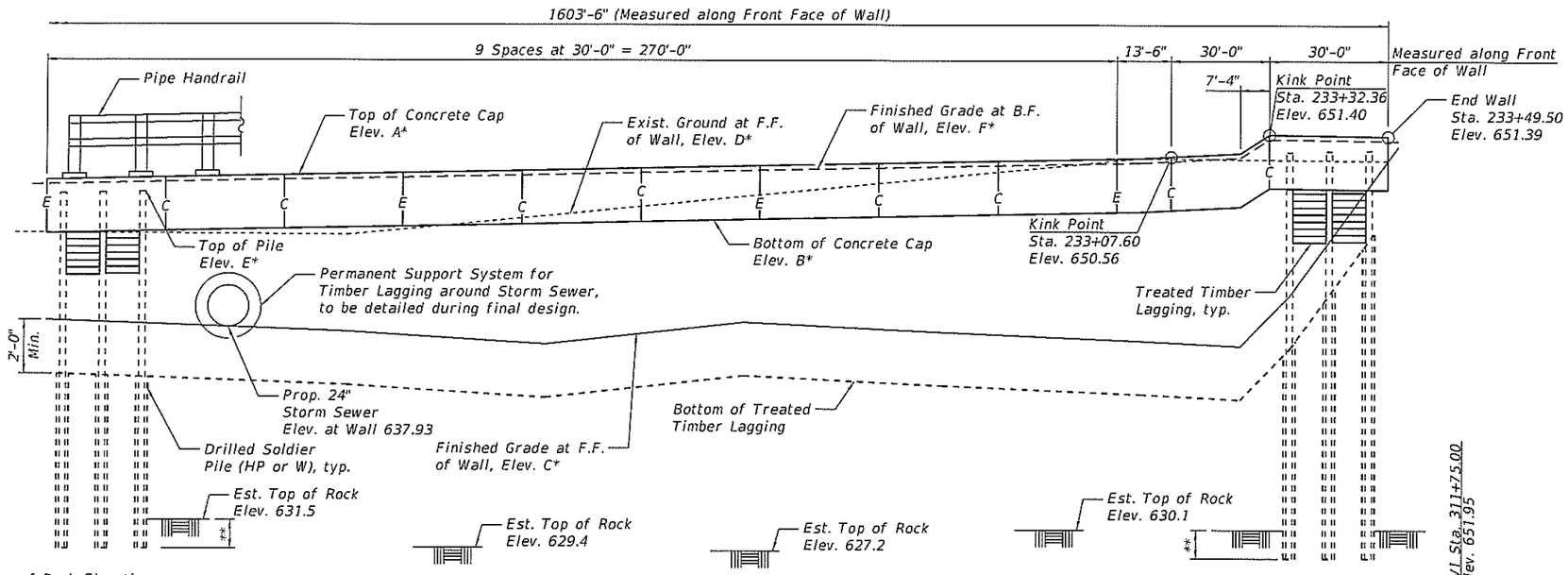

Note: Top of Rock Elevations are not drawn to scale.

* For Elevations, See Table 1 on Sheet 5 of 5.

DEVELOPED ELEVATION

(Looking west at F.F. of Wall)

LEGEND:

- Exist. Storm Sewer
- Prop. Storm Sewer
- Gas
- Water
- Aerial
- Exist. Sanitary Sewer
- Exist. Cable
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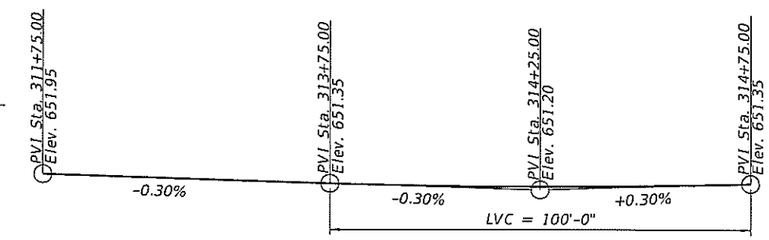
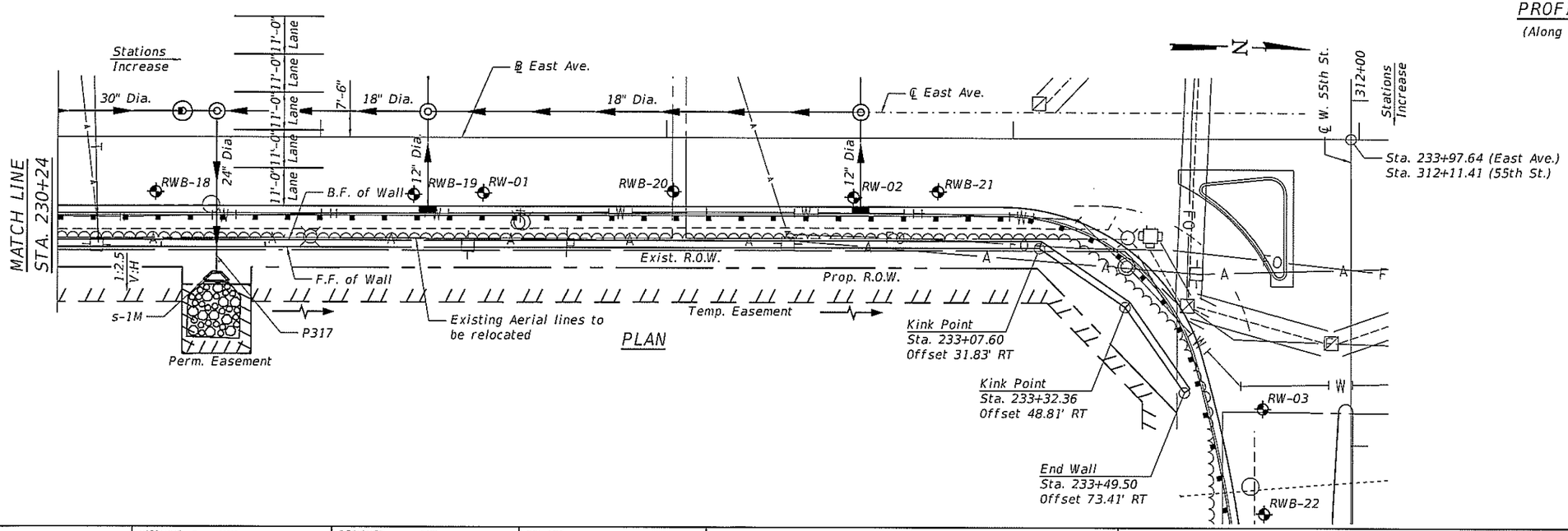
- Exist. Manhole
- Exist. Catch Basin
- Prop. Manhole
- Prop. Catch Basin
- Prop. Inlet



PROFILE GRADE

(Along ℄ W. 55th St.)



PLAN

GENERAL PLAN
RETAINING WALL ALONG
F.A.U. RTE. 2719 (EAST AVENUE)
SECTION 0102N&T
COOK COUNTY
STATION 217+64 TO 233+49.50
STRUCTURE NO. 016-Z022

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PLOT DATE = 12/4/2018	CHECKED - SPS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 4 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2719	0102N&T	COOK	5	4

CONTRACT NO. 62C25

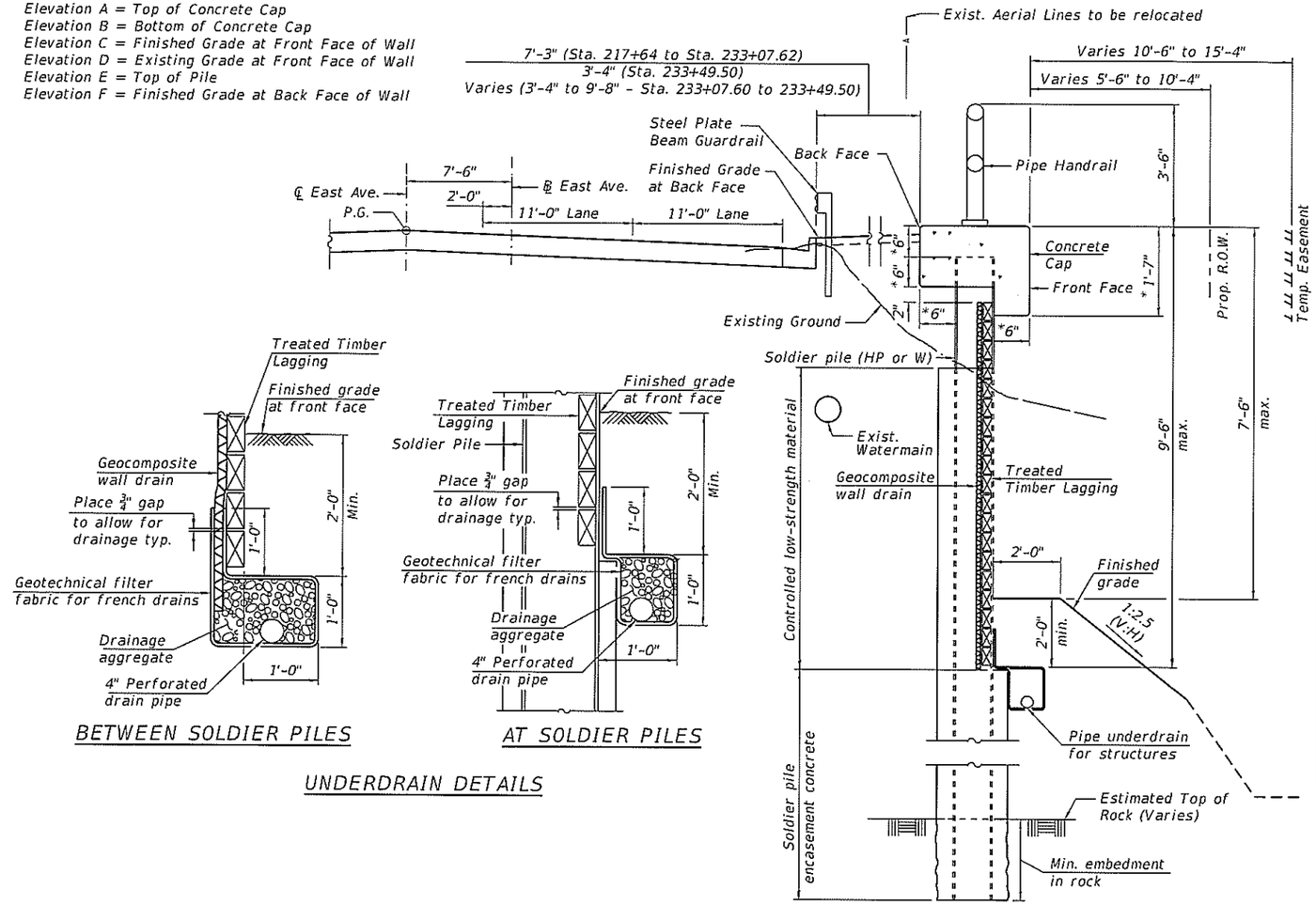
ILLINOIS | FED. AID PROJECT

TABLE 1 - WALL ELEVATIONS

Station	** Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F
217+64.00	31.83' RT	645.37	643.79	640.69	644.10	644.87	645.21
217+94.00	31.83' RT	645.46	643.88	640.82	644.10	644.96	645.30
218+00.00	31.83' RT	645.48	643.90	640.84	644.10	644.98	645.31
218+24.00	31.83' RT	645.55	643.97	640.97	644.26	645.05	645.39
218+54.00	31.83' RT	645.64	644.06	641.13	644.45	645.14	645.48
218+84.00	31.83' RT	645.73	644.15	641.29	644.65	645.23	645.57
219+00.00	31.83' RT	645.78	644.20	641.38	644.75	645.28	645.61
219+14.00	31.83' RT	645.82	644.24	641.19	644.55	645.32	645.66
219+44.00	31.83' RT	645.91	644.33	640.77	644.13	645.41	645.75
219+74.00	31.83' RT	646.00	644.42	640.36	643.70	645.50	645.84
220+00.00	31.83' RT	646.08	644.50	640.00	643.33	645.58	645.91
220+04.00	31.83' RT	646.09	644.51	639.92	643.44	645.59	645.93
220+34.00	31.83' RT	646.18	644.60	639.32	644.26	645.68	646.02
220+50.00	31.83' RT	646.23	644.65	639.00	644.70	645.73	646.06
220+64.00	31.83' RT	646.27	644.69	639.70	644.74	645.77	646.11
220+94.00	31.83' RT	646.36	644.78	641.20	644.83	645.86	646.20
221+00.00	31.83' RT	646.38	644.80	641.50	644.85	645.88	646.21
221+24.00	31.83' RT	646.45	644.87	641.57	644.95	645.95	646.29
221+54.00	31.83' RT	646.54	644.96	641.66	645.07	646.04	646.38
221+84.00	31.83' RT	646.63	645.05	641.75	645.19	646.13	646.47
222+00.00	31.83' RT	646.68	645.10	641.80	645.25	646.18	646.51
222+14.00	31.83' RT	646.72	645.14	642.02	645.29	646.22	646.56
222+44.00	31.83' RT	646.81	645.23	642.48	645.38	646.31	646.65
222+74.00	31.83' RT	646.90	645.32	642.95	645.47	646.40	646.74
223+00.00	31.83' RT	646.98	645.40	643.35	645.55	646.48	646.81
223+04.00	31.83' RT	646.99	645.41	643.41	645.57	646.49	646.83
223+34.00	31.83' RT	647.08	645.50	643.87	645.70	646.58	646.92
223+64.00	31.83' RT	647.17	645.59	644.34	645.84	646.67	647.01
223+94.00	31.83' RT	647.26	645.68	644.80	645.97	646.76	647.10
224+00.00	31.83' RT	647.28	645.70	644.89	646.00	646.78	647.12
224+24.00	31.83' RT	647.38	645.80	644.77	646.18	646.88	647.21
224+54.00	31.83' RT	647.50	645.92	644.63	646.39	647.00	647.34
224+84.00	31.83' RT	647.63	646.04	644.48	646.61	647.13	647.46
225+00.00	31.83' RT	647.69	646.11	644.40	646.73	647.19	647.53
225+14.00	31.83' RT	647.75	646.17	644.36	646.70	647.25	647.59
225+44.00	31.83' RT	647.89	646.31	644.27	646.63	647.39	647.72
225+74.00	31.83' RT	648.02	646.44	644.19	646.56	647.52	647.86
226+00.00	31.83' RT	648.14	646.56	644.11	646.50	647.64	647.98
226+04.00	31.83' RT	648.16	646.58	644.04	646.52	647.66	647.99
226+34.00	31.83' RT	648.29	646.71	643.55	646.69	647.79	648.13
226+64.00	31.83' RT	648.43	646.84	643.05	646.85	647.93	648.26
226+94.00	31.83' RT	648.56	646.98	642.55	647.02	648.06	648.39
227+00.00	31.83' RT	648.59	647.00	642.45	647.05	648.09	648.42
227+24.00	31.83' RT	648.69	647.11	642.29	646.87	648.19	648.52
227+54.00	31.83' RT	648.82	647.24	642.10	646.65	648.32	648.66
227+84.00	31.83' RT	648.96	647.37	641.90	646.42	648.46	648.79
228+00.00	31.83' RT	649.03	647.45	641.80	646.30	648.53	648.86
228+14.00	31.83' RT	649.09	647.51	642.06	646.51	648.59	648.92
228+44.00	31.83' RT	649.22	647.64	642.62	646.96	648.72	649.06
228+74.00	31.83' RT	649.36	647.77	643.18	647.41	648.86	649.19
229+00.00	31.83' RT	649.47	647.89	643.66	647.80	648.97	649.31
229+04.00	31.83' RT	649.49	647.90	643.70	647.78	648.99	649.32
229+34.00	31.83' RT	649.59	648.01	643.96	647.60	649.09	649.43
229+64.00	31.83' RT	649.70	648.12	644.23	647.42	649.20	649.53
229+94.00	31.83' RT	649.81	648.22	644.50	647.24	649.31	649.64
230+00.00	31.83' RT	649.83	648.25	644.55	647.20	649.33	649.66
230+24.00	31.83' RT	649.91	648.33	644.42	647.30	649.41	649.75
230+54.00	31.83' RT	650.02	648.44	644.25	647.42	649.52	649.86
230+84.00	31.83' RT	650.13	648.55	644.09	647.54	649.63	649.96
231+00.00	31.83' RT	650.19	648.60	644.00	647.60	649.69	650.02
231+14.00	31.83' RT	650.24	648.65	643.87	647.60	649.74	650.07
231+44.00	31.83' RT	650.34	648.76	643.60	647.60	649.84	650.18
231+50.00	31.83' RT	650.37	648.78	643.54	647.60	649.87	650.20
231+74.00	31.83' RT	650.45	648.87	643.93	647.60	649.95	650.28
232+00.00	31.83' RT	650.54	648.96	644.35	647.60	650.04	650.38
232+04.00	31.83' RT	650.56	648.98	644.32	647.72	650.06	650.39
232+34.00	31.83' RT	650.67	649.08	644.12	648.59	650.17	650.50
232+64.00	31.83' RT	650.77	649.19	643.91	649.46	650.27	650.61
232+94.00	31.83' RT	650.88	649.30	643.71	650.33	650.38	650.71
233+00.00	31.83' RT	650.90	649.32	643.67	650.50	650.40	650.74
233+07.60	31.83' RT	650.96	649.38	643.61	650.47	650.46	650.80
233+25.00	43.76' RT	651.10	649.52	643.48	650.40	650.60	650.94
233+32.36	48.81' RT	651.57	649.98	646.39	650.49	651.07	651.40
233+49.50	73.41' RT	651.56	649.97	651.39	649.74	651.06	651.39

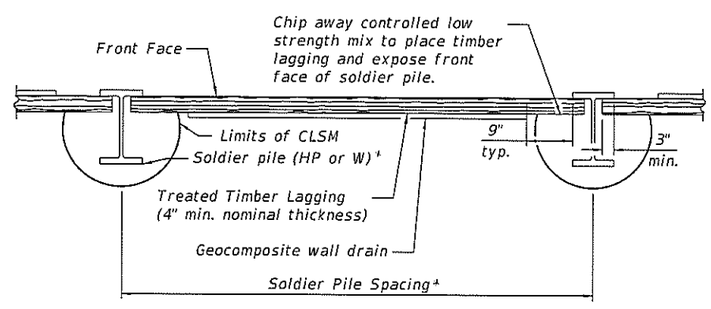
** Measured from the ℄ East Ave.

Elevation A = Top of Concrete Cap
Elevation B = Bottom of Concrete Cap
Elevation C = Finished Grade at Front Face of Wall
Elevation D = Existing Grade at Front Face of Wall
Elevation E = Top of Pile
Elevation F = Finished Grade at Back Face of Wall



Soldier Pile section, shaft diameter, spacing and tip elevation or embedment in rock, to be determined during final design.

* Concrete Cap dimensions to be finalized during final design.



SECTION THRU DRILLED SOLDIER PILE WALL WITHOUT CONCRETE FACING

* To be determined during final design

CROSS SECTION & DETAILS
RETAINING WALL ALONG
F.A.U. RTE. 2719 (EAST AVENUE)
SECTION 0102N&T
COOK COUNTY
STATION 217+64 TO 233+49.50
STRUCTURE NO. 016-Z022

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 5 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2719	0102N&T	COOK	5	5

CONTRACT NO. 62C25
ILLINOIS | FED. AID PROJECT