

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	1
		ILLINOIS	CONTRACT NO. 62C18	

# PROPOSED HIGHWAY PLANS

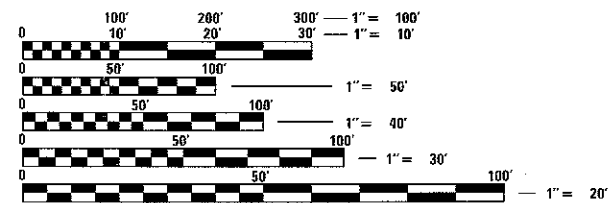
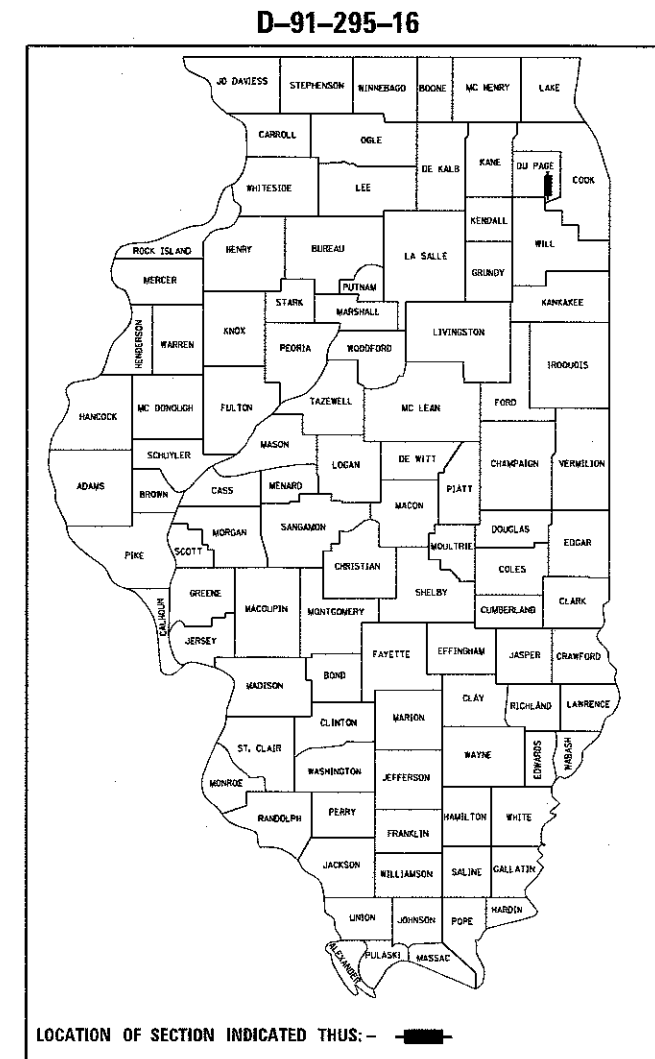
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN UNINCORPORATED WOODRIDGE

**TRAFFIC DATA**

FUNCTIONAL CLASSIFICATION  
OTHER PRINCIPAL ARTERIAL  
2013 ADT = 27500  
POSTED SPEED = 45 MPH

FAP ROUTE 870: IL 53 (LINCOLN AVE)  
HOBSON RD TO 71ST  
SECTION 543R-1  
RETAINING WALL  
DUPAGE COUNTY  
C-91-295-16  
PROJECT NHPP-0870(018)



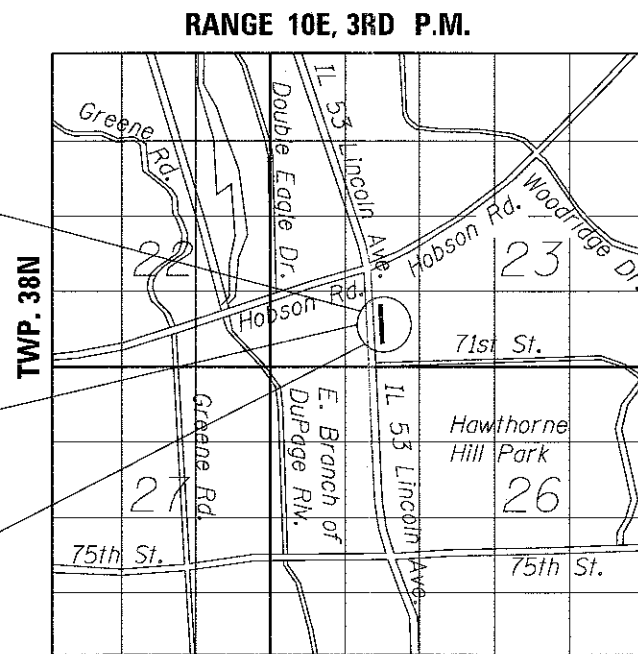
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

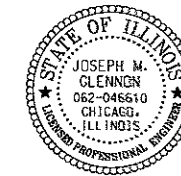
BEGIN IMPROVEMENT  
STA. 1184 + 00.00

RETAINING WALL  
ALONG EAST SIDE OF IL 53  
S.N. 022-2035  
STA. 1185 + 01.00 TO  
STA. 1191 + 21.39

END IMPROVEMENT  
STA. 1192 + 75.00

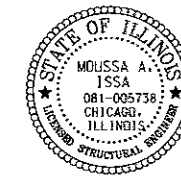


LISLE TOWNSHIP  
LOCATION MAP  
NOT TO SCALE



Signed Joseph Glennon  
Joseph Glennon, P.E.  
Il. Lic. No. 062-046610  
Expires 11-30-2017

Date 5/25/2017  
For Sheets 1 Thru 14  
For Sheet 18  
For Sheets 39 Thru 48



Signed Moussa A. Issa  
Dr. Moussa A. Issa, S.E.  
Il. Lic. No. 081-005738  
Expires 11-30-2018

Date 05/25/2017  
For Sheets 19 Thru 33

PROJECT MANAGER: ISSAM RAYYAN, P.E. (847) 705-4178  
PROJECT ENGINEER: RAGHAD ADEIS-DAHMAN (847) 705-5183

CONTRACT NO. 62C18

GROSS LENGTH = 875 FT. = 0.166 MILE  
NET LENGTH = 875 FT. = 0.166 MILE

PREPARED BY

**HBM**  
ENGINEERING GROUP, LLC.  
CONSULTING & DESIGN  
INSPECTION & RATING  
RESEARCH & TESTING  
4415 WEST HARRISON ST.  
SUITE 231  
HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED MAY 21st 2017

Anthony J. Quigley REGIONAL ENGINEER

\_\_\_\_\_  
20 \_\_\_\_\_  
ENGINEER OF DESIGN AND ENVIRONMENT

\_\_\_\_\_  
20 \_\_\_\_\_  
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
3-5	SUMMARY OF QUANTITIES
6	EXISTING AND PROPOSED TYPICAL SECTION
7	SCHEDULE OF QUANTITIES AND DETAILS
8	ALIGNMENT AND TIE, BENCHMARK
9-10	EXISTING CONDITIONS AND REMOVAL PLAN
11-12	PLAN AND PROFILE
13	MAINTENANCE OF TRAFFIC
14	EROSION CONTROL PLAN
15-17	SUBSURFACE UTILITY INVESTIGATION
18	LANDSCAPING PLAN AND DETAILS
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35	TRAFFIC CONTROL & PROTECTION FOR SIDEROADS, INTERSECTIONS & DRIVEWAYS (TC-10)
36	TYPICAL PAVEMENT MARKINGS (TC-13)
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**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
602001-02	CATCH BASIN, TYPE A
602011-02	CATCH BASIN TYPE C
602301-04	INLET - TYPE A
604001-04	FRAME AND LIDS, TYPE 1
604091-03	FRAME AND GRATE, TYPE 24
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606401-02	PAVED DITCH
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24' (60 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS >= 45 MPH
701602-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701901-06	TRAFFIC CONTROL DEVICES

**GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, CABLE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGE OF WOODRIDGE.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- ALL ELEVATIONS SHOWN ARE BASED ON THE NAVD88.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT 1 TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.

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4415 WEST HARRISON ST.  
SUITE 231  
HILLSDALE, IL 60152  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = Kenndrobant	DESIGNED - DA	REVISED -
	DRAWN - EAH	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES  
IL 53 (LINCOLN AVE)

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1		47	02
CONTRACT NO. 62C18			ILLINOIS FED. AID PROJECT	

REV

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY	WALL
				URBAN	
				0004	0004
				RURAL	S. N. 022-2035
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	12	12	
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	13	13	
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	13	13	
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	13	13	
20200100	EARTH EXCAVATION	CU YD	150	150	
20400800	FURNISHED EXCAVATION	CU YD	13	13	
20800150	TRENCH BACKFILL	CU YD	53	53	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	668	668	
25000210	SEEDING, CLASS 2A	ACRE	0.14	0.14	
25100630	EROSION CONTROL BLANKET	SQ YD	647	647	
25200200	SUPPLEMENTAL WATERING	UNIT	5	5	
28000400	PERIMETER EROSION BARRIER	FOOT	737	737	
28000500	INLET AND PIPE PROTECTION	EACH	6	6	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	10	10	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY	WALL
				URBAN	
				0004	0004
				RURAL	S. N. 022-2035
44004000	PAVED DITCH REMOVAL	FOOT	592	592	
44201835	CLASS D PATCHES, TYPE I, 16 INCH	SQ YD	12	12	
44201843	CLASS D PATCHES, TYPE III, 16 INCH	SQ YD	19	19	
50102400	CONCRETE REMOVAL	CU YD	52		52
50200100	STRUCTURE EXCAVATION	CU YD	125		125
50300225	CONCRETE STRUCTURES	CU YD	131		131
50300300	PROTECTIVE COAT	SQ YD	534	172	362
50500505	STUD SHEAR CONNECTORS	EACH	763		763
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	14910		14910
51500100	NAME PLATES	EACH	1		1
52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	2052		2052
52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	9120		9120
52200250	UNTREATED TIMBER LAGGING	SQ FT	2394		2394
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	42	42	

14

19

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USER NAME = Kerndraent	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
PLOT SCALE = 0:2.0000' = 1" = 1'	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
IL 53 (LINCOLN AVE)

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE. 870	SECTION 543R-1	COUNTY	TOTAL SHEETS 47	SHEET NO. 03
DU PAGE			CONTRACT NO. 62C18	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY	WALL
				0004	0004
				RURAL	S. N. 022-2035
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	4	4	
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	31	31	
55100500	STORM SEWER REMOVAL 12"	FOOT	32	32	
59100100	GEOCOMPOSITE WALL DRAIN	SO YD	266		266
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1	
60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1	
60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	3	3	
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	2	2	
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2	
60500060	REMOVING INLETS	EACH	3.0	3	
60615400	PAVED DITCH, TYPE A-15	FOOT	603	603	
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SO FT	270	270	
64300750	IMPACT ATTENUATORS (SEVERE USE, NARROW), TEST LEVEL 2	EACH	1	1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY	WALL
				0004	0004
				RURAL	S. N. 022-2035
67100100	MOBILIZATION	LSUM	1		1
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	1092	1092	
* 78000200	THERMOPLASTIC PAVEMENT MARKING -LINE 4"	FOOT	540	540	
X0322906	WEEP HOLES CORED	EACH	21		21
X0327980	PAVEMENT MARKING REMOVAL -WATER BLASTING	SO FT	179	179	
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	66	66	
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	218		218
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	361	361	
X7040010	TEMPORARY CONCRETE BARRIER (SPECIAL)	FOOT	113	113	
Z0004562	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	514	514	
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2	
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51	51	

14

14

<b>HBM</b> ENGINEERING GROUP, LLC CONSULTING & DESIGN INSPECTION & TESTING RESEARCH & TESTING 4415 WEST HARRISON ST. SUITE 231 MOLLISIDE, IL 60162 PHONE: (708) 238-0900 FAX: (708) 238-0901	USER NAME = Kandrabant	DESIGNED - KJD	REVISED -
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		DATE - 06/01/2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 53 (LINCOLN AVE)				870	543R-I		47	04
SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.				CONTRACT NO. 62C18				
				ILLINOIS FED. AID PROJECT				

NON-PARTICIPATING

REV

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				ROADWAY	WALL
				0004	0004
				RURAL	S. N. 022-2035
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	429		429
Z0056608	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	18	18	

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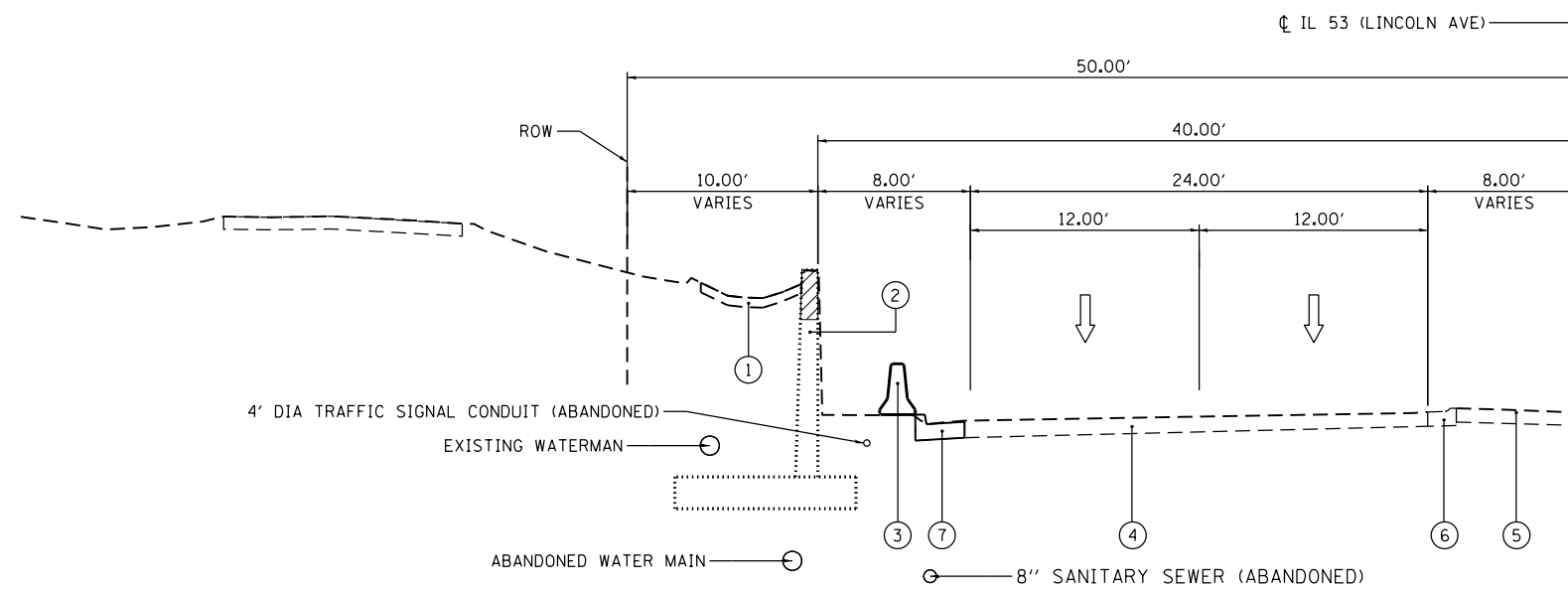
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

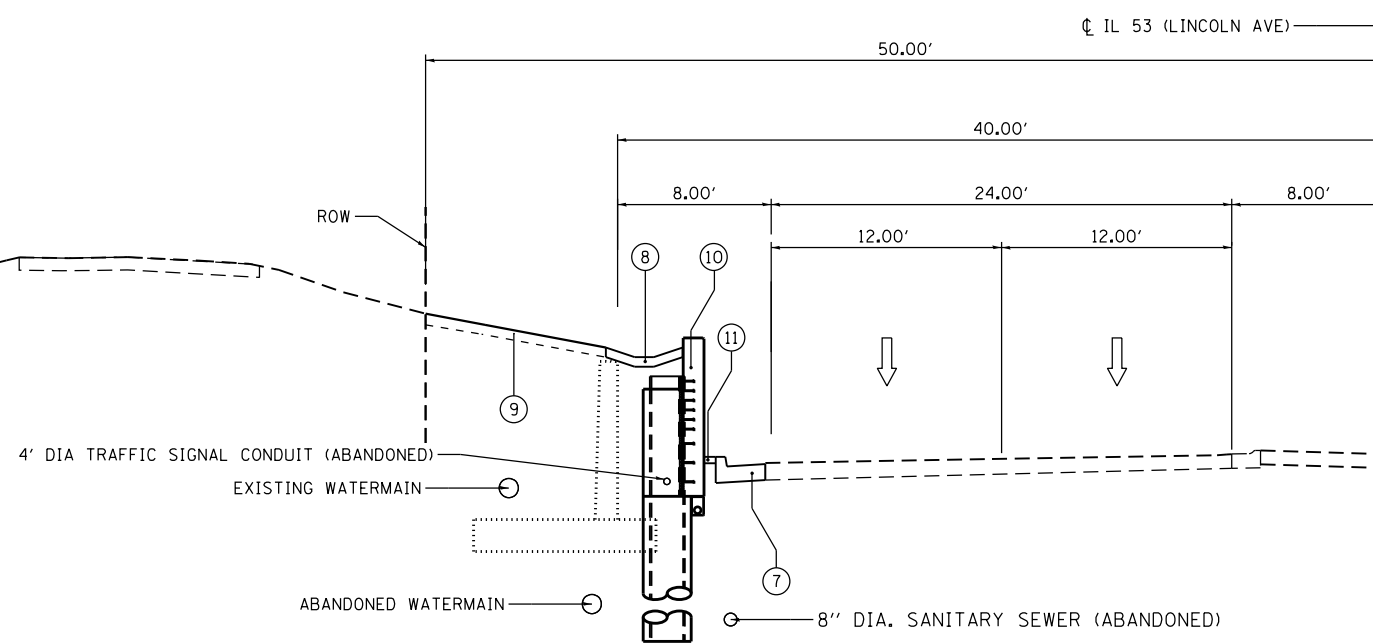
<b>SUMMARY OF QUANTITIES</b>			
<b>IL 53 (LINCOLN AVE)</b>			
SCALE:	SHEET 3 OF 3 SHEETS	STA.	TO STA.

F.A.P. RTE. 870	SECTION 543R-1	COUNTY	TOTAL SHEETS 47	SHEET NO. 05
			DU PAGE	CONTRACT NO. 62C18
ILLINOIS FED. AID PROJECT				

2



**EXISTING TYPICAL SECTION**  
LOOKING SOUTH



**PROPOSED TYPICAL SECTION**  
LOOKING SOUTH

**LEGEND**

- ① PAVED DITCH REMOVAL (EXISTING PAVED DITCH, TYPE C IS A NOMINAL 6 INCH THICK BY 6 FT WIDE REINFORCED CONCRETE)
- ② EXISTING RETAINING WALL TO REMAIN
- ③ EXISTING TEMPORARY CONCRETE BARRIER STATE OWNED (SEE NOTE 1)
- ④ EXISTING HMA SURFACE COURSE 1 1/2" BINDER COURSE 2 1/2" AND HMA BASE COURSE 11 1/2"
- ⑤ EXISTING STABILIZED MEDIAN SURFACE 12"
- ⑥ EXISTING COMBINATION CURB AND GUTTER M2:12
- ⑦ COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT
- ⑧ PROPOSED PAVED DITCH, TYPE A-15
- ⑨ PROPOSED FURNISHING AND PLACING TOPSOIL, 4" AND SEEDING
- ⑩ PROPOSED SOLDIER PILE RETAINING WALL, SEE STRUCTURAL DRAWINGS
- ⑪ PROPOSED CONCRETE MEDIAN SURFACE, 4 INCH

**NOTES**

1. SEE SPECIAL PROVISION "SALVAGE OF TEMPORARY CONCRETE BARRIER".

**HMA MIXTURE REQUIREMENTS TABLE**

PAY ITEM OR DESCRIPTION	MIX TYPE	% AIR VOIDS @ Ndes	QMP DESIGNATION
CLASS D PATCHES	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm); TOP 2"	4%@70 Gyr	QC/OA
	(HMA BINDER IL-19 mm)	4%@70 Gyr	QC/OA

QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA); QUALITY CONTROL FOR PERFORMANCE (QCP)

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIX QUANTITIES IS 112 LBS/SOYD/IN. THE AC TYPE FOR POLYMERIZED HMA MIXTURES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLE MATERIALS SEE SPECIAL PROVISIONS.

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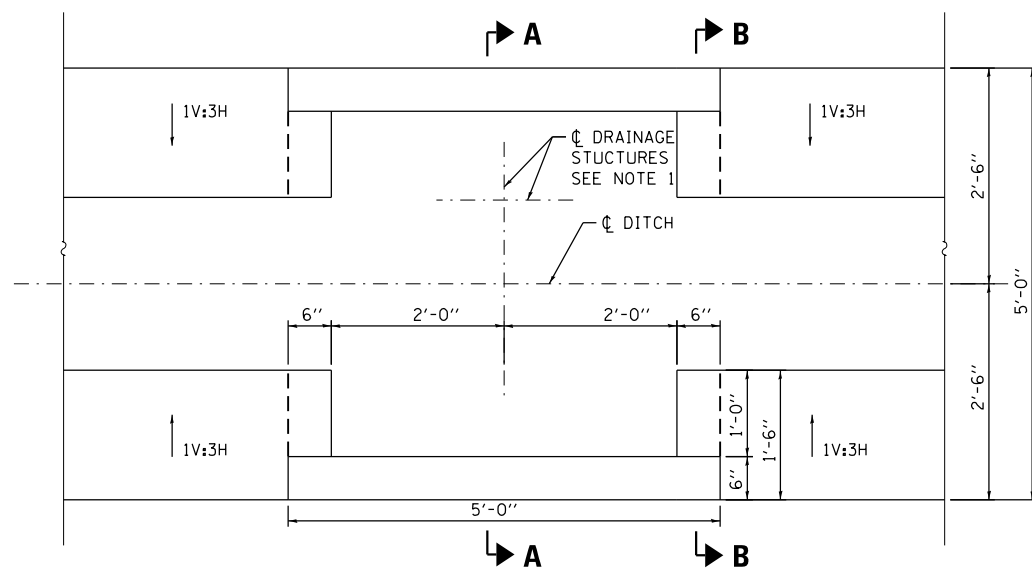
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EXISTING AND PROPOSED TYPICAL SECTION**  
**IL 53 (LINCOLN AVE)**

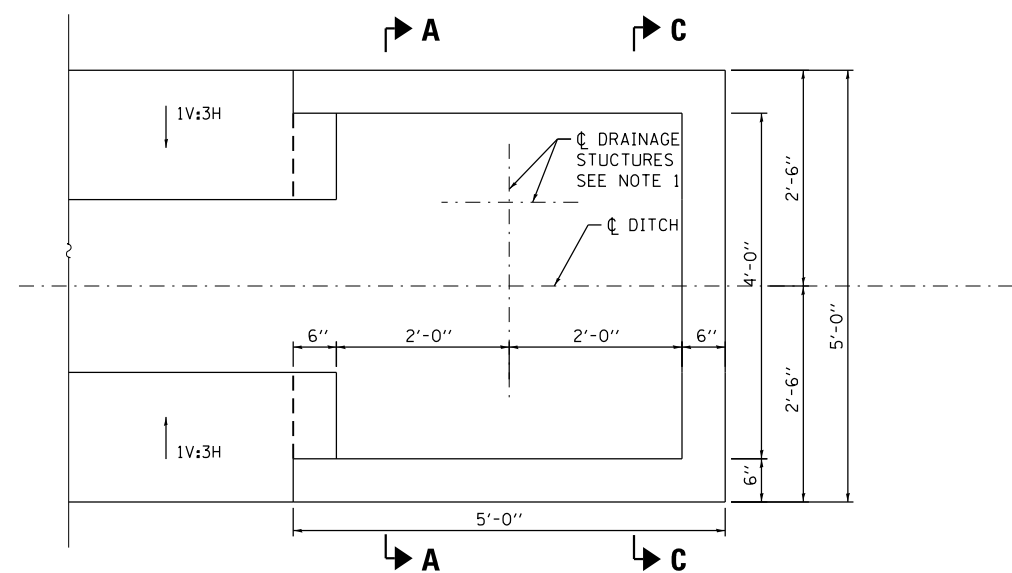
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-I	DU PAGE	47	06
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



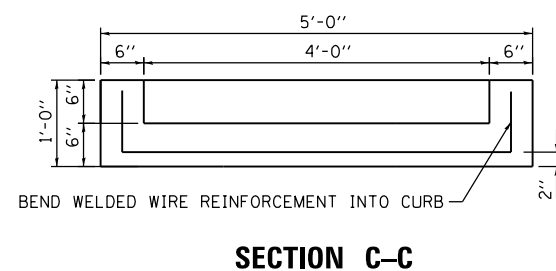
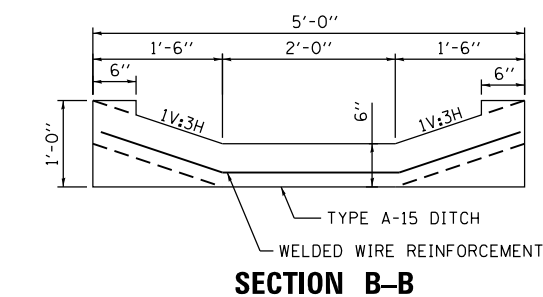
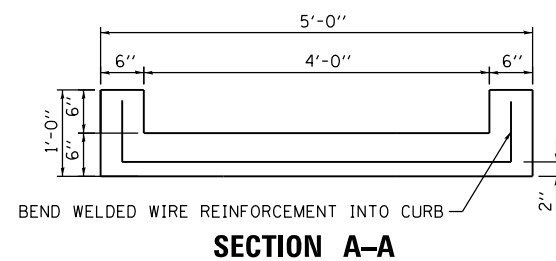
**DETAIL 1-PARTIAL PAVED DITCH PLAN AT DRAINAGE STRUCTURES**

AT STATIONS 1187+33.14 AND 1189+50.64  
SEE NOTE 2



**DETAIL 2-PARTIAL PAVED DITCH PLAN AT DRAINAGE STRUCTURES**

AT STATION 1191+15.64  
SEE NOTE 2



TEMPORARY TRAFFIC CONTROL					
STATION	TO	STATION	PAVEMENT MARKING REMOVAL - WATER BLASTING (SQ FT)	TEMPORARY PAVEMENT MARKING REMOVAL (SQ FT)	PAVEMENT MARKING TAPE, TYPE IV 4" (FOOT)
1186+79.89		1192+31.39		182	552
1192+31.39		1197+71.39	179	179	540

THERMOPLASTIC PAVEMENT MARKING - LINE 4"			
STATION	TO	STATION	LENGTH (FOOT)
1192+31.39		1197+71.39	540

COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT			
STATION	TO	STATION	LENGTH (FOOT)
1186+79.89		1191+93.81	514

EARTHWORK SCHEDULE							
STATION	TO	STATION	EARTH EXCAVATION (CU YD)	STRUCTURE EXCAVATION (CU YD)	EARTH AND STRUCTURE EXCAVATION ADJUSTED FOR SHRINKAGE (15%) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
1184+75.00		1191+25.00	150	125	234	247	-13

**NOTES**

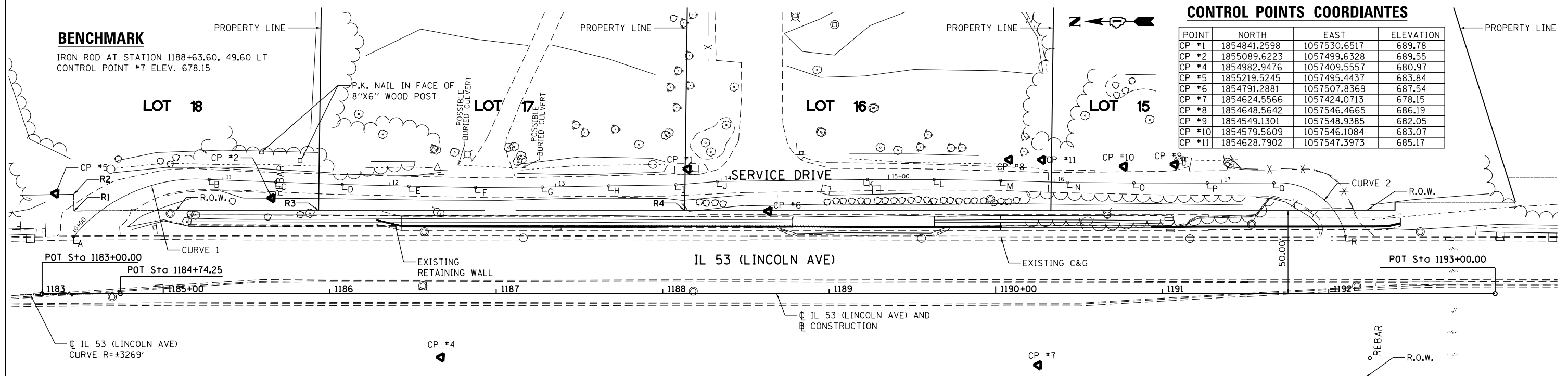
- FOR DRAINAGE STRUCTURES IN PAVED DITCH LOCATIONS, SEE SHEETS 11 AND 12.
- INCLUDE COST OF MODIFIED DITCH WITH PAY ITEM PAVED DITCH, TYPE A-15

**BENCHMARK**

IRON ROD AT STATION 1188+63.60, 49.60 LT  
CONTROL POINT #7 ELEV. 678.15

**CONTROL POINTS COORDIANTES**

POINT	NORTH	EAST	ELEVATION
CP #1	1854841.2598	1057530.6517	689.78
CP #2	1855089.6223	1057499.6328	689.55
CP #4	1854982.9476	1057409.5557	680.97
CP #5	1855219.5245	1057495.4437	683.84
CP #6	1854791.2881	1057507.8369	687.54
CP #7	1854624.5566	1057424.0713	678.15
CP #8	1854648.5642	1057546.4665	686.19
CP #9	1854549.1301	1057548.9385	682.05
CP #10	1854579.5609	1057546.1084	683.07
CP #11	1854628.7902	1057547.3973	685.17



**TABLE**

POINT	STATION	OFFSET	SERVICE DRIVE #	STATION	COMMENT
A	1184+46.17	34.42 LT	10+00.00	PC	
B	1185+27.62	68.61 LT	10+91.81	PT	
C	1185+67.60	67.10 LT	11+31.81	POT	
D	1186+07.58	65.69 LT	11+71.82	POT	
E	1186+47.59	64.66 LT	12+11.84	POT	
F	1186+87.60	63.88 LT	12+51.86	POT	
G	1187+27.62	64.13 LT	12+91.88	POT	
H	1187+67.71	64.83 LT	13+31.98	POT	
I	1188+07.81	65.48 LT	13+72.08	POT	
J	1188+32.65	67.42 LT	13+97.00	POT	
K	1189+22.96	68.61 LT	14+87.31	POT	
L	1189+63.02	68.61 LT	15+27.37	POT	
M	1190+03.04	67.96 LT	15+67.40	POT	
N	1190+43.04	66.84 LT	16+07.41	POT	
O	1190+83.08	66.61 LT	16+47.46	POT	
P	1191+27.11	66.55 LT	16+91.49	POT	
Q	1191+67.17	66.59 LT	17+31.55	PC	
R	1192+10.21	34.63 LT	17+89.90	PT	

**CURVE DATA**

SERVICE DRIVE BASELINE

<b>CURVE_1</b> PI STA. = 10+49.77 Δ = 54° 53' 50" (RT) D = 59° 47' 42" R = 95.82' T = 49.77' L = 91.81' E = 12.16' P.C. STA. = 10+00.00 P.T. STA. = 10+91.81	<b>CURVE_2</b> PI STA. = 17+66.81 Δ = 81° 04' 22" (RT) D = 138° 56' 18" R = 41.24' T = 35.27' L = 58.35' E = 13.02' P.C. STA. = 17+31.55 P.T. STA. = 17+89.90
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**ALIGNMENT PLAN**

STA. 1183+00.00 TO STA. 1192+00.00

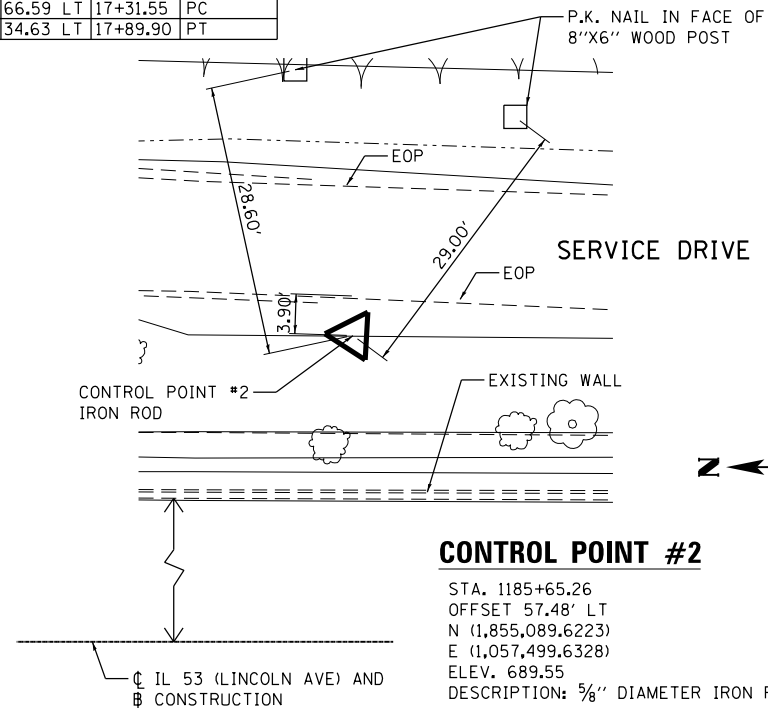
**RIGHT OF WAY AND EASEMENT OFFSETS**

POINT	STATION	OFFSET
R1	1184+46.32	49.77' LT
R3	1184+46.32	59.77' LT
R6	1185+93.33	50.00' LT
R8	1188+13.19	50.00' LT

**CONSTRUCTION BASELINE**

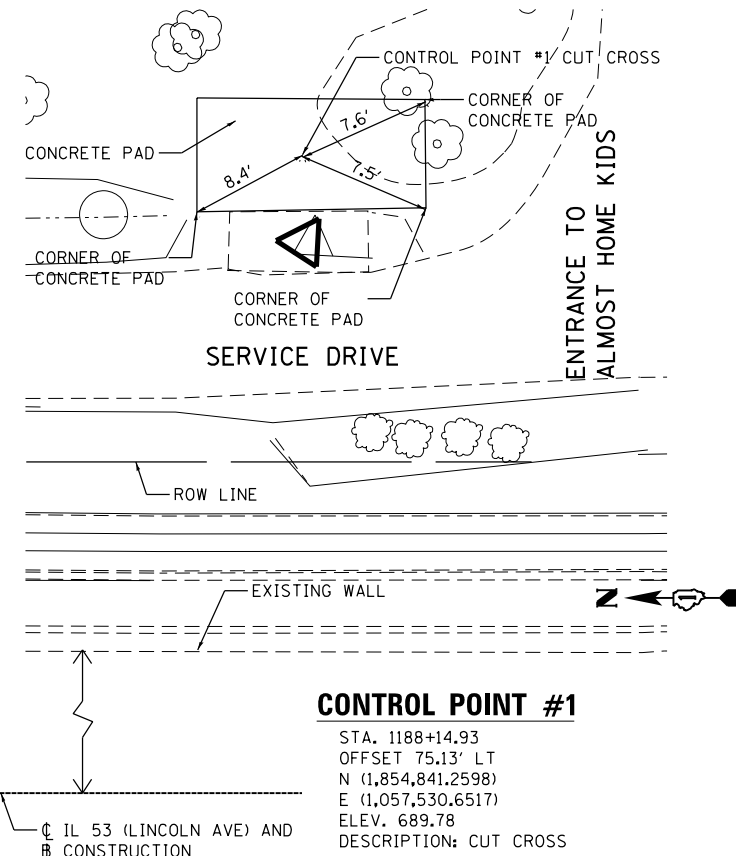
IN TANGENT

POT-3 STA. 1183+00.00 OFFSET 0' RT N (1,855,351.4125) E (1,057,427.9909)	POT-1 STA. 1184+74.25 OFFSET 0' RT N (1,855,177.4138) E (1,057,437.3451)	POT-2 STA. 1193+00.00 OFFSET 0' RT N (1,854,352.8546) E (1,057,481.6751)
--	--	--



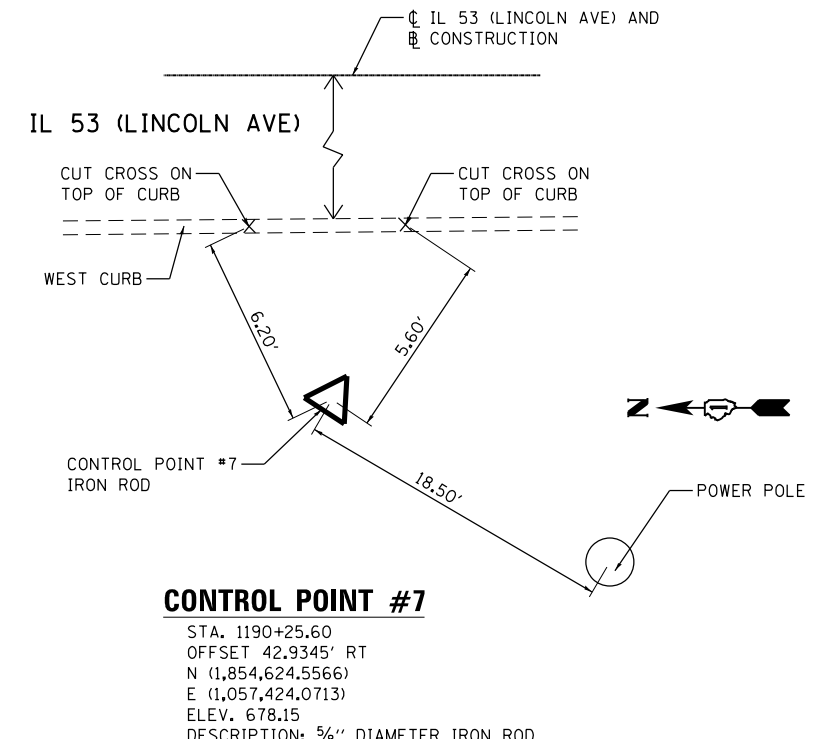
**CONTROL POINT #2**

STA. 1185+65.26  
OFFSET 57.48' LT  
N (1,855,089.6223)  
E (1,057,499.6328)  
ELEV. 689.55  
DESCRIPTION: 5/8" DIAMETER IRON ROD



**CONTROL POINT #1**

STA. 1188+14.93  
OFFSET 75.13' LT  
N (1,854,841.2598)  
E (1,057,530.6517)  
ELEV. 689.78  
DESCRIPTION: CUT CROSS



**CONTROL POINT #7**

STA. 1190+25.60  
OFFSET 42.9345' RT  
N (1,854,624.5566)  
E (1,057,424.0713)  
ELEV. 678.15  
DESCRIPTION: 5/8" DIAMETER IRON ROD

**HBM**  
ENGINEERING GROUP, LLC  
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4415 WEST HARRISON ST.  
SUITE 231  
HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = KenDrabant	DESIGNED - DA	REVISED -
PLOT SCALE = 60.0000' / in.	DRAWN - EAH	REVISED -
PLOT DATE = 6/1/2017	CHECKED - JMG	REVISED -
	DATE - 06/01/2017	REVISED -

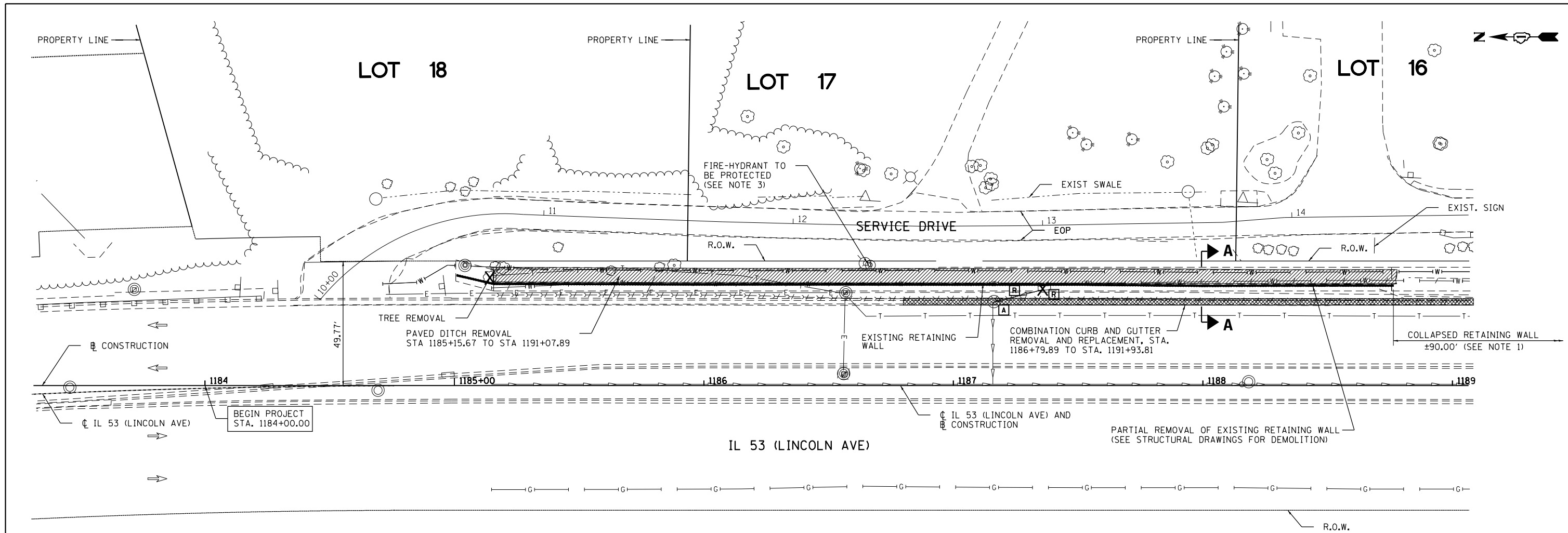
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARK PLAN  
IL 53 (LINCOLN AVE)

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

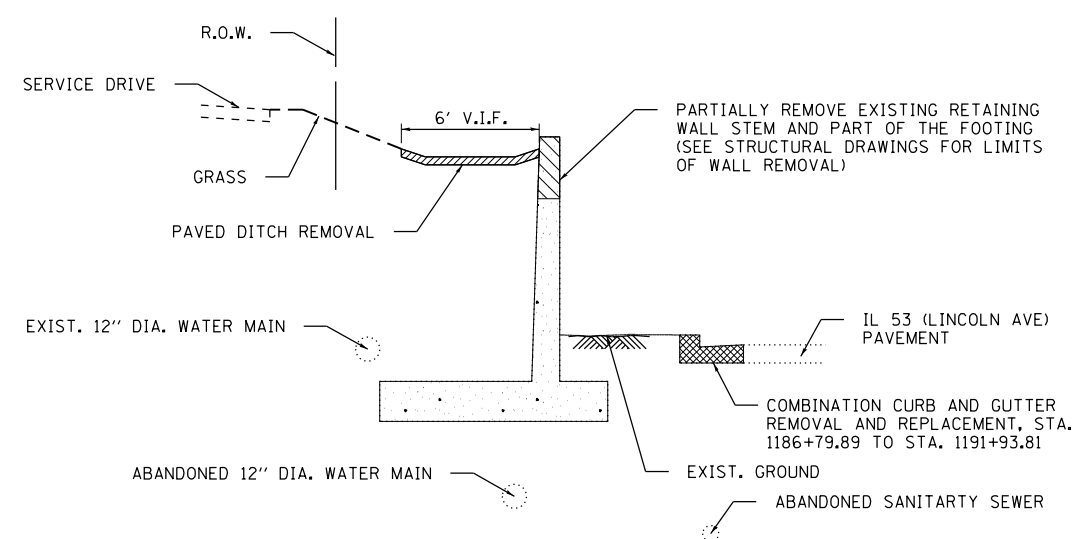
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-I	DU PAGE	47	08
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				





**REMOVAL PLAN**

STA. 1184+00.00 TO STA. 1189+00.00








**SECTION A-A**

STA. 1186+95.68 TO STA. 1191+21.39  
(PROPOSED WALL NOT SHOWN FOR CLARITY)

**NOTES**

1. AT THE LOCATION WHERE THE EXISTING WALL HAS COLLAPSED, REMOVE PORTIONS OF BROKEN CONCRETE DITCH - PAID FOR AS PAVED DITCH REMOVAL.

**LEGEND**

-  COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT
-  PAVED DITCH REMOVAL
-  DRAINAGE STRUCTURE TO BE ADJUSTED
-  DRAINAGE STRUCTURE OR PIPE TO BE REMOVED
-  TREE REMOVAL

**HBM**  
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HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = KenDrabant	DESIGNED - DA	REVISED -
PLOT SCALE = 48.0000' / in.	DRAWN - EAH	REVISED -
PLOT DATE = 6/1/2017	CHECKED - JMG	REVISED -
	DATE - 06/01/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

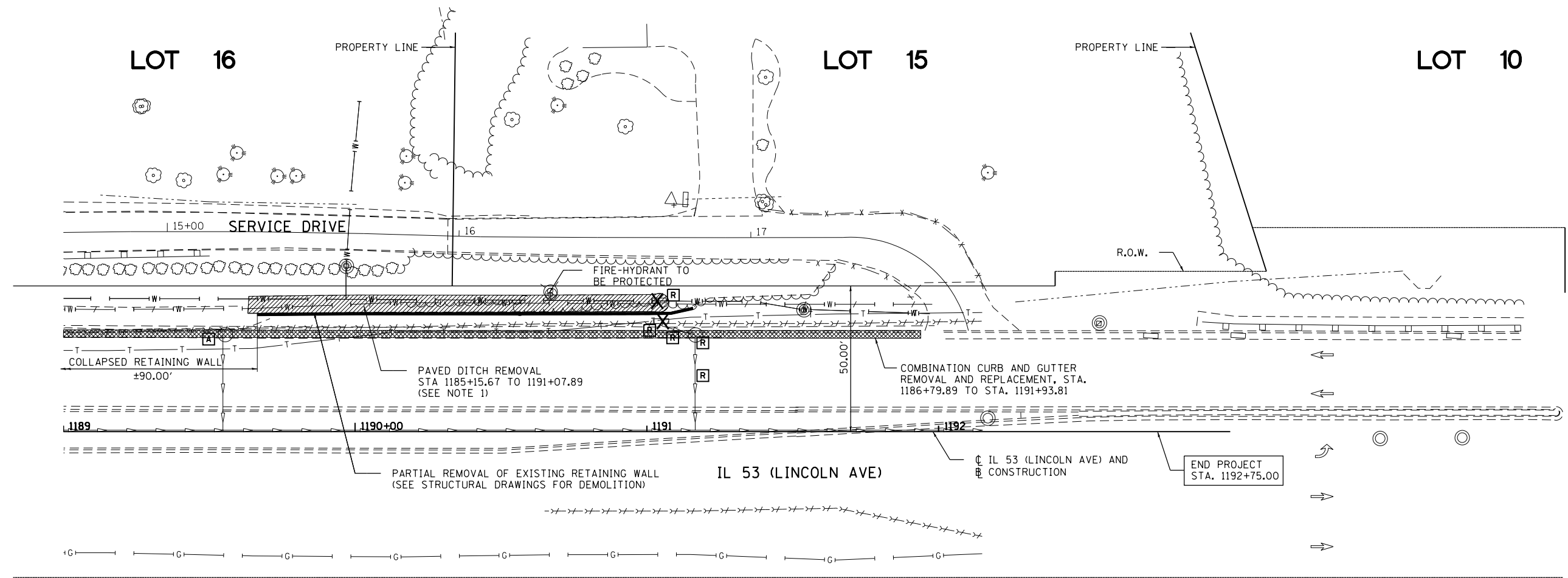
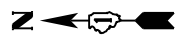
<b>EXISTING CONDITIONS AND REMOVAL PLAN</b>	
<b>IL 53 (LINCOLN AVE)</b>	
SCALE:	SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	09
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				

LOT 16

LOT 15

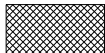




LOT 10



### REMOVAL PLAN

STA. 1189+00.00 TO STA. 1192+75.00

### LEGEND

-  COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT
-  PAVED DITCH REMOVAL
-  DRAINAGE STRUCTURE TO BE ADJUSTED
-  DRAINAGE STRUCTURE TO FILLED
-  DRAINAGE STRUCTURE OR PIPE TO BE REMOVED

### NOTE

1. AT THE LOCATION WHERE THE EXISTING WALL HAS COLLAPSED, REMOVE PORTIONS OF BROKEN CONCRETE DITCH - PAID FOR AS PAVED DITCH REMOVAL.

**HBM**  
 ENGINEERING GROUP, LLC  
 4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSDALE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME = KenDrabant	DESIGNED - DA	REVISED -
	DRAWN - EAH	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

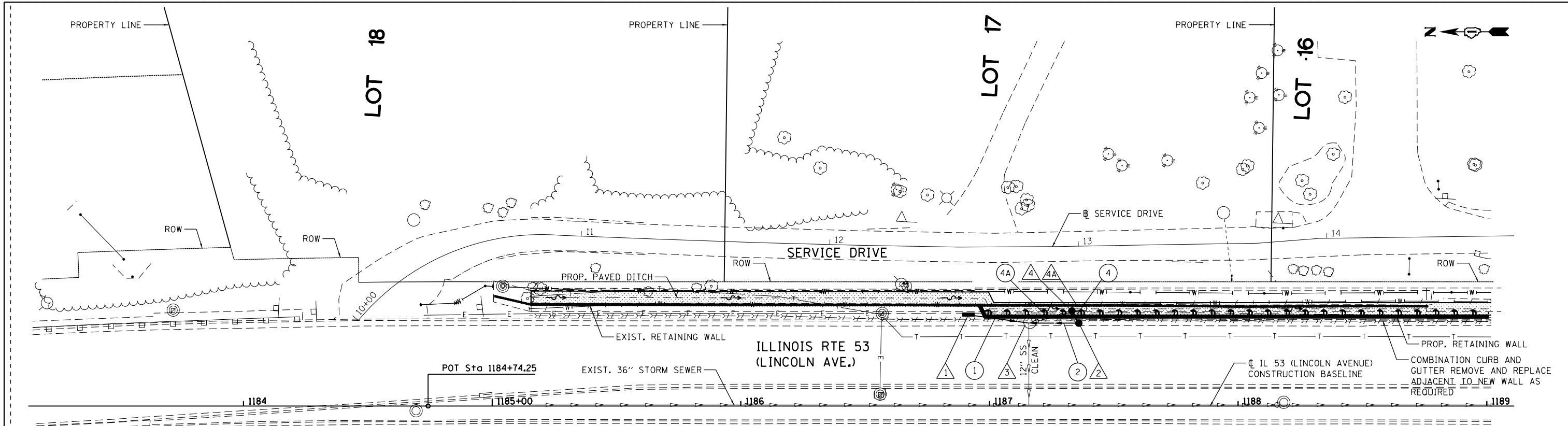
EXISTING CONDITIONS AND REMOVAL PLAN  
 IL 53 (LINCOLN AVE)

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	10
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	
	BY	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	NO.	
	BY	



- 1 PROP. INLET, TYPE A, TYPE 1 FRAME, OPEN LID STA. 1186+91.50, 36.74' LT T.G. 680.13 INV. 675.84
- 2 PROP. CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE STA. 1187+35.89, ±32.3' LT\* T.G. 679.25 INV. 675.45 (N) INV. 676.12 (E) INV. 676.37 (NE) 4" UNDERDRAIN
- 3 EXISTING CATCH BASIN TO BE ADJUSTED AND CLEANED STA. 1187+15.81, 33.39' LT T.G. 679.41 VIF INV. 675.62 (N), NEW INV. 675.29 (S), NEW INV. 675.62 (W), EXIST. NOTE 1
- 4 PROP. CATCH BASIN TYPE C, TYPE 1 FRAME, OPEN LID STA. 1187+33.14, 38.42' LT T.G. 684.89 INV. 676.15 (W) NO SUMP
- 4A EXIST. INLET TO BE REMOVED
- 1 PROP. 12" STORM SEWER, CLASS A, TYPE 1, 22', 1% SLOPE
- 2 PROP. 12" STORM SEWER, CLASS A, TYPE 1, 16', 1% SLOPE
- 4 PROP. 12" STORM SEWER, CLASS A, TYPE 1, 3', 1% SLOPE
- 4A EXIST. STORM SEWER REMOVAL, 12"

**LEGEND**

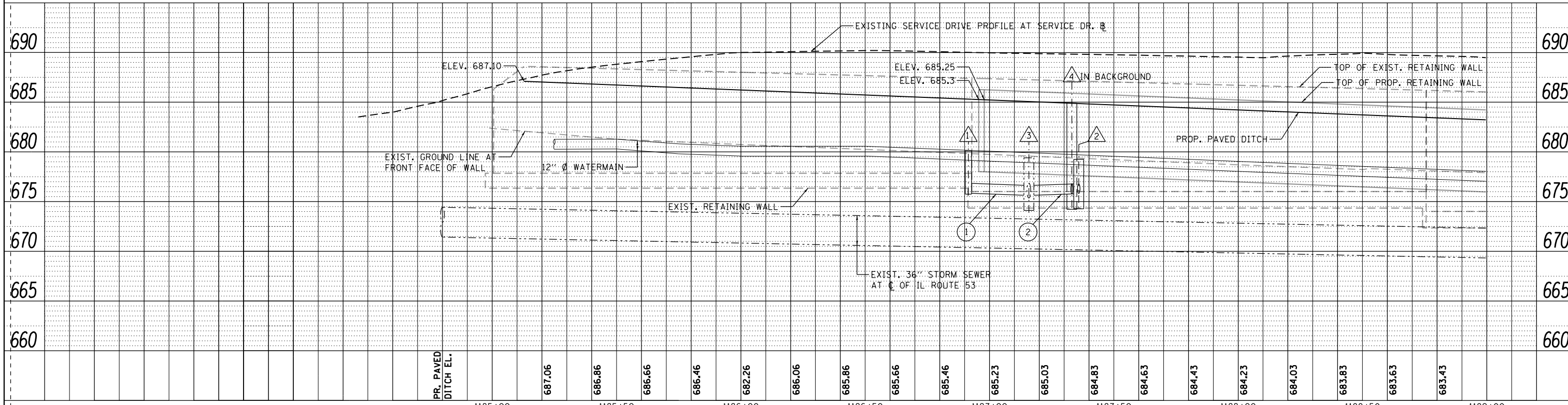
PROPOSED PAVED DITCH- A-15, HIGHWAY STANDARD 606401

**NOTES**

1. PROVIDE NEW PENETRATION FOR STORM SEWER INTO EXISTING DRAINAGE STRUCTURE. INCLUDE COST WITH PAY ITEM, CATCH BASIN TO BE ADJUSTED

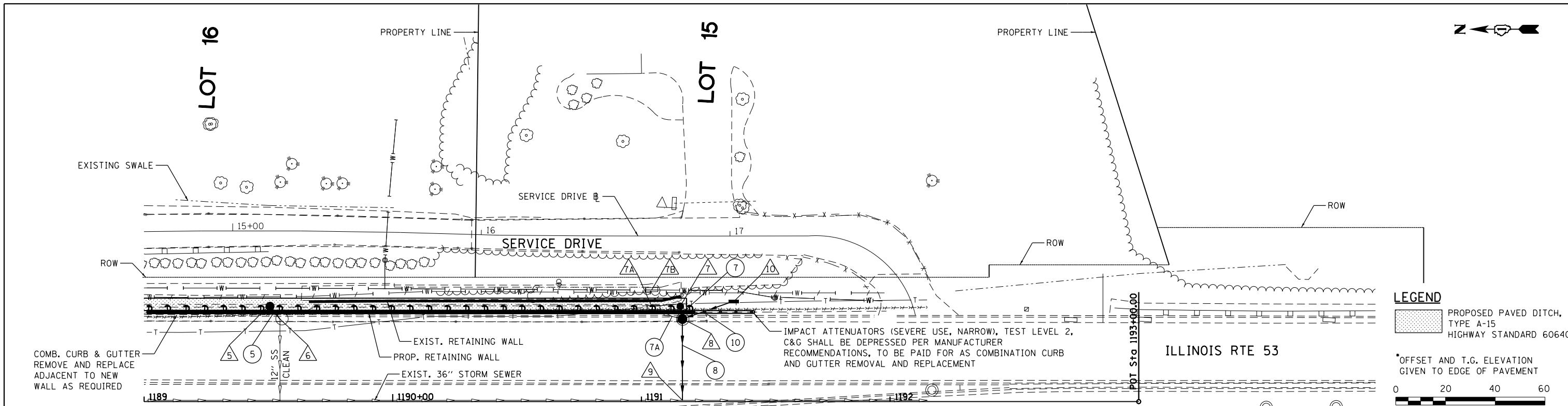
\* OFFSET AND T.G. ELEVATION GIVEN TO EDGE OF PAVEMENT

0 20 40 60  
SCALE IN FEET



<b>HBM</b> ENGINEERING GROUP, LLC 4415 WEST HARRISON ST. SUITE 231 HILLSIDE, IL 60162 PHONE: (708) 236-0900 FAX: (708) 236-0901	USER NAME = KenDrabant	DESIGNED - DA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN AND PROFILE</b> <b>IL 53 (LINCOLN AVE)</b>	F.A.P. RTE. 870	SECTION 543R-1	COUNTY DU PAGE	TOTAL SHEETS 47	SHEET NO. 11
	PLOT SCALE = 48.0003' / in.	CHECKED - JMG	REVISED -			SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.	CONTRACT NO. 62C18			ILLINOIS FED. AID PROJECT
	PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -							

PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	NO.	
BY		



**LEGEND**

PROPOSED PAVED DITCH, TYPE A-15 HIGHWAY STANDARD 606401

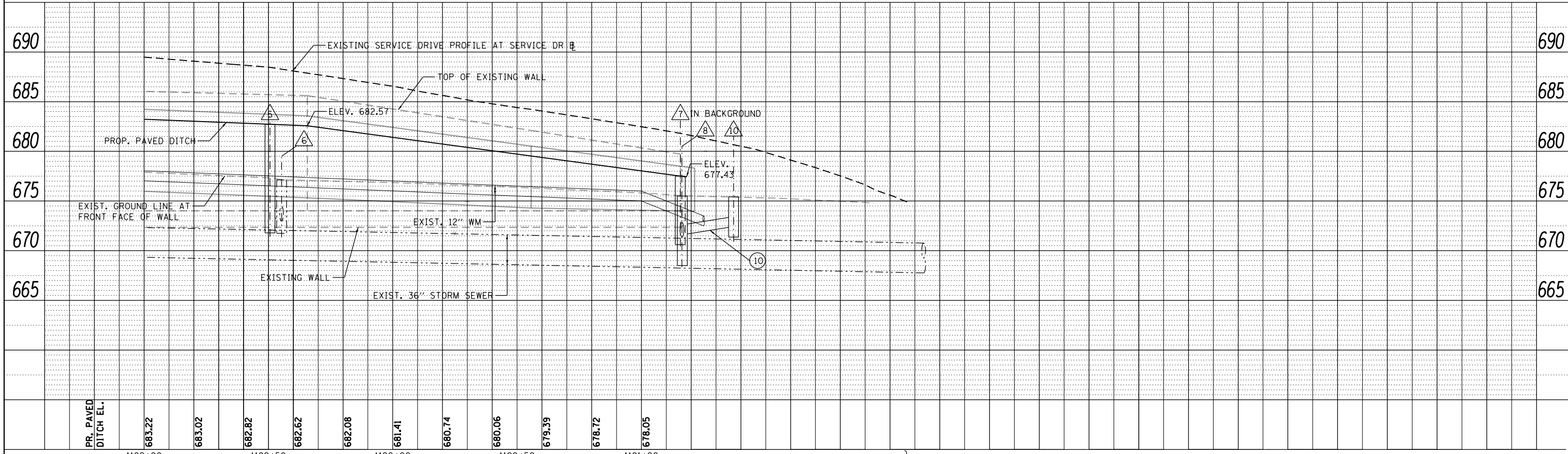
\*OFFSET AND T.G. ELEVATION GIVEN TO EDGE OF PAVEMENT

0 20 40 60  
SCALE IN FEET

- 5 PROP. CATCH BASIN, TYPE C, TYPE 1 FRAME, OPEN LID STA. 1189+50.64, 38.42' LT T.G. 682.72 INV. 673.30
- 6 EXIST. CATCH BASIN TO BE ADJUSTED AND CLEANED STA. 1189+54.64, 33.20' LT T.G. 677.13 INV. 673.26 (N), NEW INV. 673.26 (W), EXIST. INV. 674.18 (NE) 4" UNDERDRAIN NOTE 1
- 7A PROP. CATCH BASIN, TYPE C, TYPE 1 FRAME, OPEN LID STA. 1191+15.64, 38.29' LT T.G. 677.51 INV. 672.19
- 7B EXIST. INLET TO BE REMOVED
- 7A EXIST. INLET TO BE REMOVED
- 7B EXIST. INLET TO BE REMOVED
- 8 PROP. CATCH BASIN, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE REMOVE EXIST. CATCH BASIN STA. 1191+16.47, ±32' LT\* T.G. 675.53 INV. 672.18 (S) INV. 672.18 (E) INV. 671.68 (W) INV. 672.76 (NE) 4" UNDERDRAIN
- 9 EXIST. 36" SEWER STA. 1191+16.47, 0.51' LT 677.50 GRND INV. 668.27 (N AND S) VIF INV. MATCH EXISTING (E)
- 10 PROP. INLET, TYPE A, TYPE 1 FRAME, OPEN LID STA. 1191+37.11, 40.21' LT T.G. 675.21 INV. 672.36 GRADE TO DRAIN
- 5 PROP. 12" STORM SEWERS, CLASS A, TYPE 2, 4', 1% SLOPE
- 7 PROP. 12" STORM SEWER CLASS A, TYPE 1, 1', 1% SLOPE
- 7A EXIST. STORM SEWER REMOVAL, 12"
- 8 PROP. 18" STORM SEWERS, CLASS A, TYPE 2, 31' (INCLUDE COST OF REMOVAL OF EXIST PIPE WITH NEW PIPE)
- 10 PROP. 12" STORM SEWER (WATERMAIN QUALITY), 18', 1% SLOPE

- NOTES**
1. PROVIDE NEW PENETRATION FOR STORM SEWER INTO DRAINAGE STRUCTURE. INCLUDE COST WITH PAY ITEM CATCH BASIN TO BE ADJUSTED.
  2. THE INSTALLATION OF THE CATCH BASIN IN FRONT AND BACKFILLING IN FRONT OF THE WALL SHOULD BE COMPLETED BEFORE THE WALL IS FINISHED BEING BACKFILLED FROM BEHIND.
  3. DRAINAGE STRUCTURES NO. 8 AND 9 AND STORM SEWER NO. 8 SHALL BE PLACED DURING PRESTAGE

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	NO.	
BY		

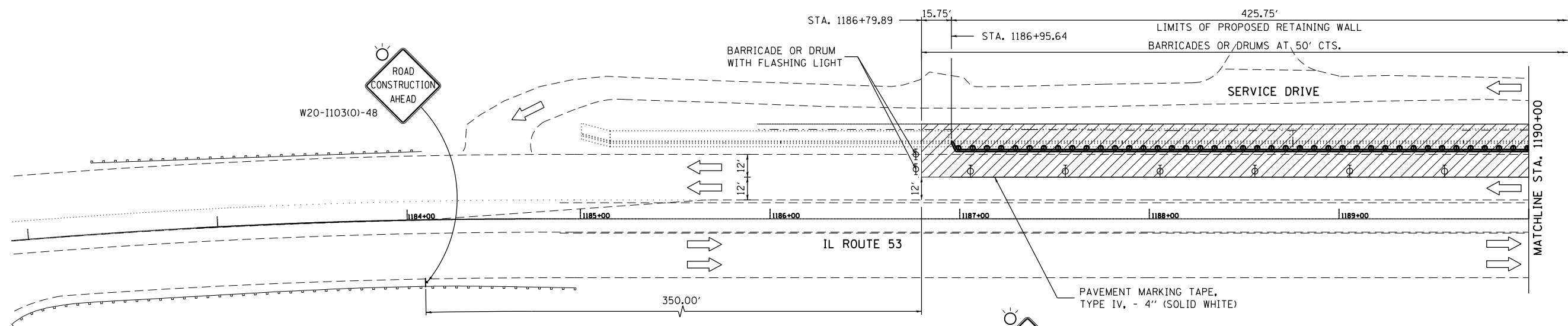
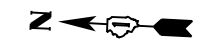


<b>HBM</b> ENGINEERING GROUP, LLC 4415 WEST HARRISON ST. SUITE 231 HILLSIDE, IL 60162 PHONE: (708) 236-0900 FAX: (708) 236-0901	USER NAME = KenDrabant	DESIGNED - DA	REVISED -
	PLOT SCALE = 40.0000' / in.	DRAWN - MAA	REVISED -
	PLOT DATE = 6/1/2017	CHECKED - JMG	REVISED -
		DATE - 06/01/2017	REVISED -

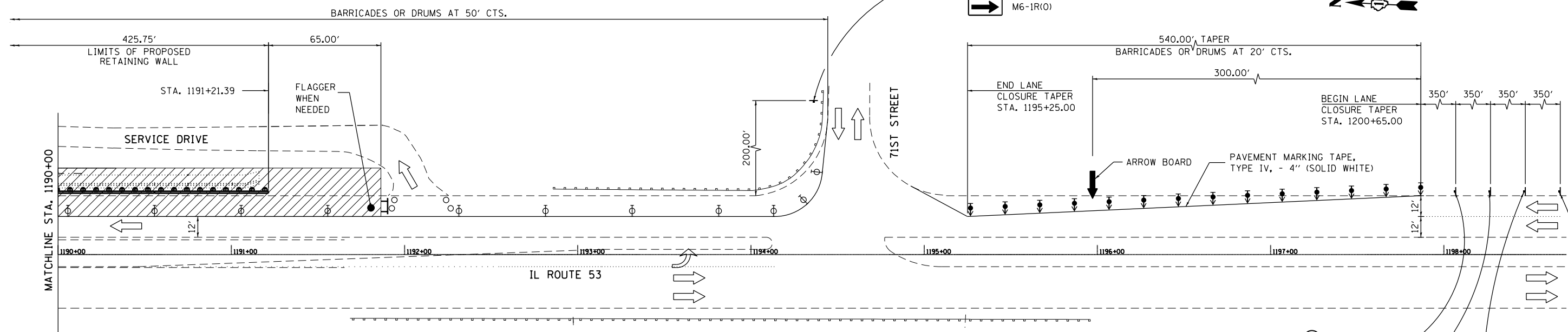
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET 2 OF 2 SHEETS	STA.	TO STA.
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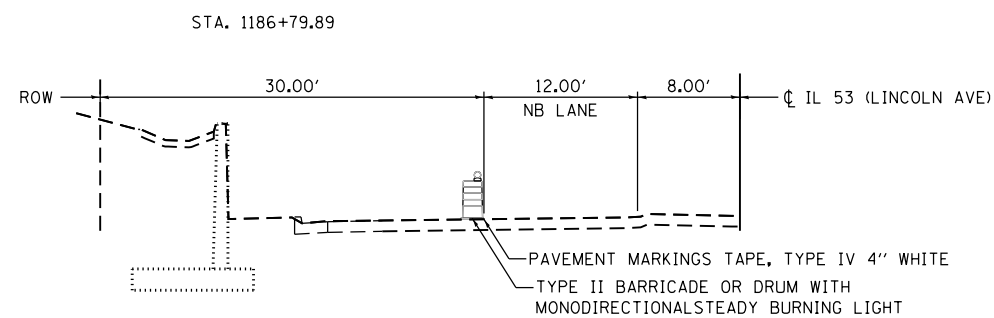
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	12
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



**TRAFFIC CONTROL PLAN**



**TRAFFIC CONTROL PLAN**



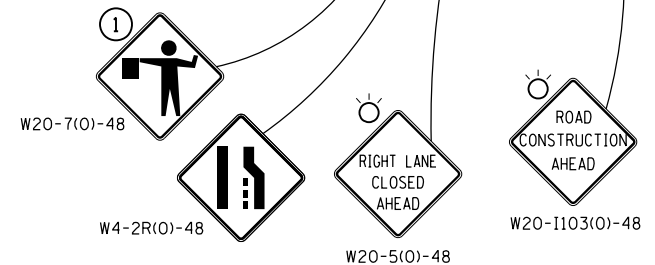
**TYPICAL STAGING SECTION**  
(STA. 1186+79.89 TO STA. 1194+15.00)

**STAGING NOTES:**  
PRE-STAGE -DRAINAGE STRUCTURES NO 8 AND 9 ,  
STORM SEWER NO. 8 IN MEDIAN AND UNDER NB LANE  
TO BE INSTALLED USING STANDARD 701602 DURING  
ALLOWABLE HOURS AS SPECIFIED IN THE SP  
'KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC'  
PRIOR TO STAGING SHOWN ON THIS SHEET.

① THIS SIGN SHALL BE TAKEN DOWN WHEN  
WORKER/FLAGGER IS NOT PRESENT

**SYMBOLS**

- ARROW BOARD
- TRAFFIC DIRECTION
- TYPE II BARRICADE OR DRUM WITH MONODIRECTIONAL STEADY BURNING LIGHT
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN.
- WORK AREA
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT @ 20' CENTERS
- BARRICADE TYPE III
- DRUMS



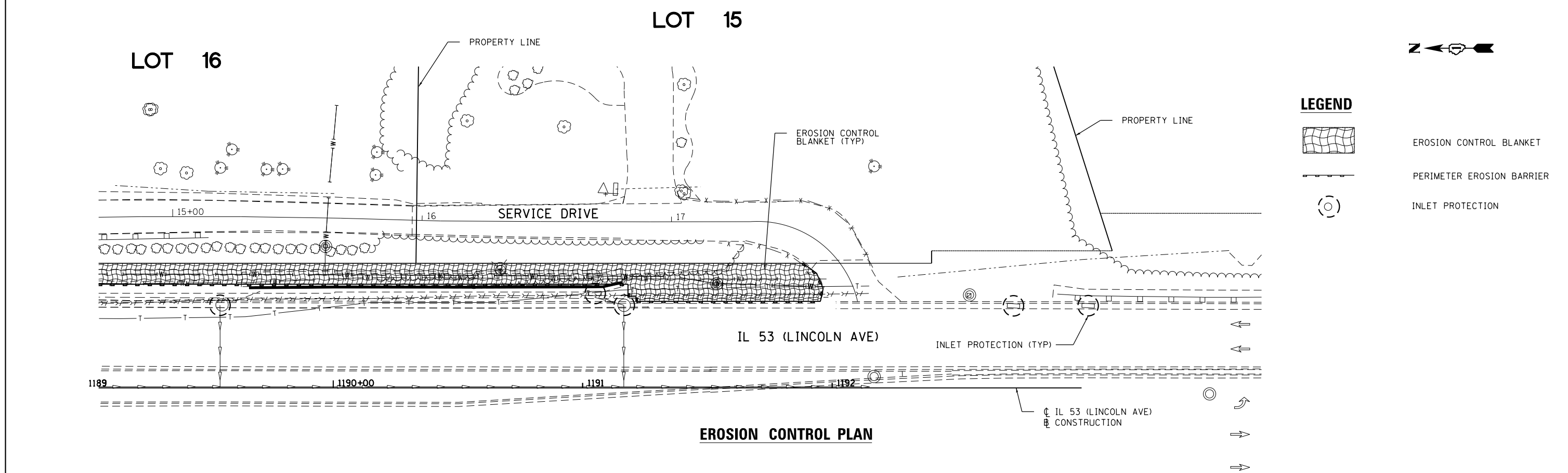
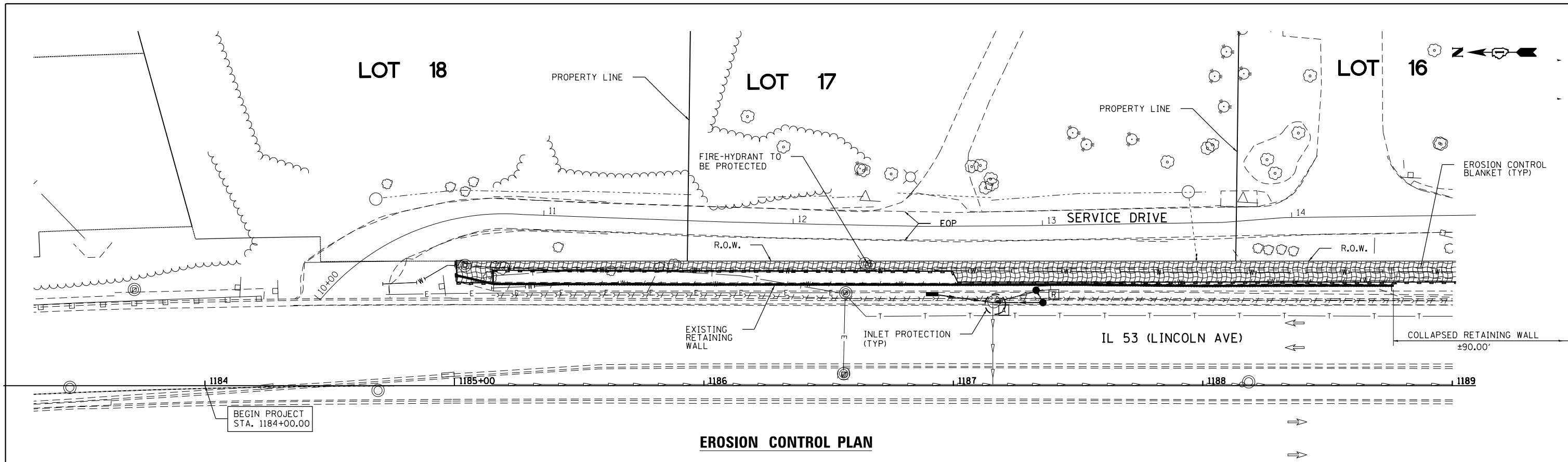
**HBM**  
ENGINEERING GROUP, LLC  
CONSULTING & DESIGN  
INSPECTION & RATING  
RESEARCH & TESTING

USER NAME = Ken-drabant	DESIGNED - KJD	REVISED - 6/28/2017
DRAWN - KJD	REVISIONS -	
CHECKED - JMG	REVISIONS -	
DATE - 06/01/2017	REVISIONS -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MAINTENANCE OF TRAFFIC</b>	
<b>IL 53 (LINCOLN AVE)</b>	
SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	13
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



**LEGEND**

	EROSION CONTROL BLANKET
	PERIMETER EROSION BARRIER
	INLET PROTECTION

**HBM**  
ENGINEERING GROUP, LLC  
CONSULTING & DESIGN  
INSPECTION & RATING  
RESEARCH & TESTING

4415 WEST HARRISON ST.  
SUITE 231  
HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

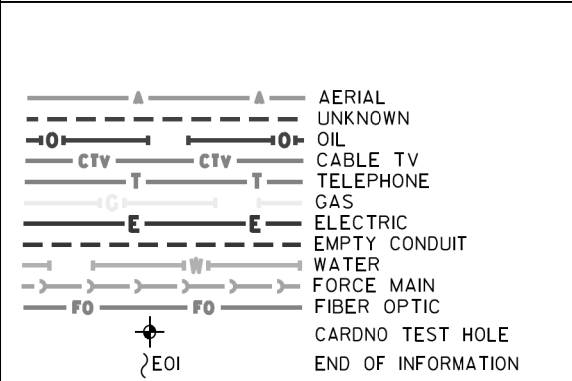
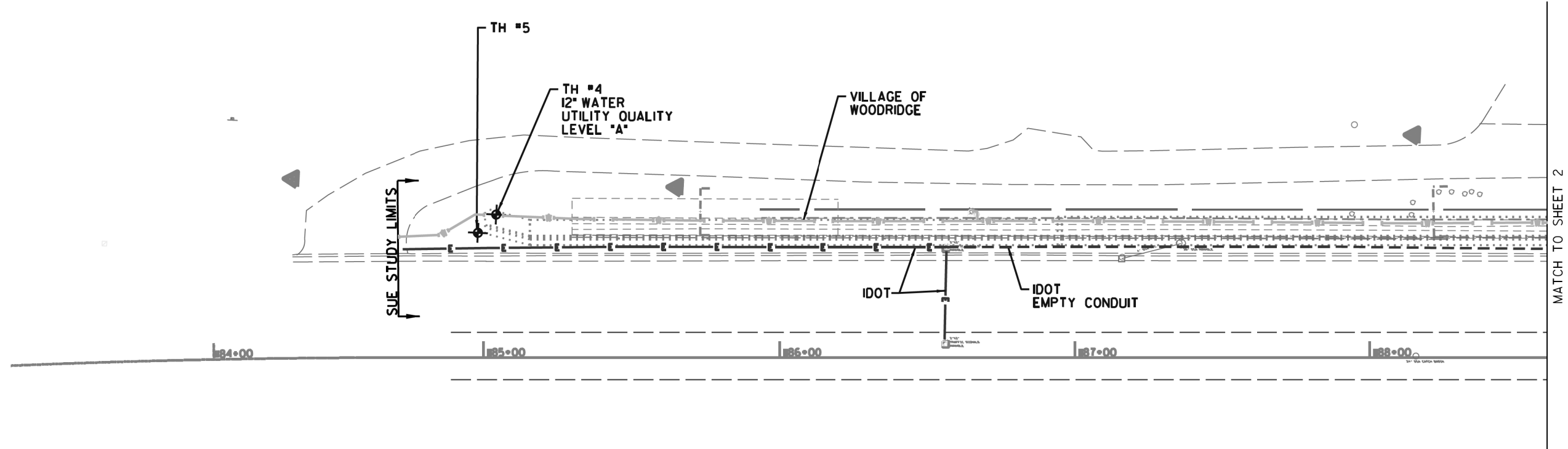
USER NAME = Kendrabant	DESIGNED - DA	REVISED -
	DRAWN - EAH	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN**  
**IL 53 (LINCOLN AVE)**

SCALE:      SHEET 1 OF 1 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	14
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



UTILITY OWNERS	
VILLAGE OF WOODRIDGE - WATER	
IDOT - TRAFFIC SIGNAL	

Utilities shown on these plans as depicted in the legend have been investigated by Cardno in accordance with SUE Industry Standards. All other information shown has been provided to Cardno by others. Cardno's SUE field investigation was performed 3/28/16 through 4/06/16. Changes to utilities after 4/06/16 may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN QUALITY LEVEL "B"  
UNLESS NOTED OTHERWISE.



**CWA**  
SURVEY  
CLAASSEN, WHITE & ASSOCIATES, P.C.  
LAND SURVEYORS  
12 AIRPORT DRIVE, UNIT L, JOLIET, ILLINOIS 60431  
(815) 744-3720 [claassenwhite.com/survey](http://claassenwhite.com/survey)

TBE Job No. IL09510723  
SUE Plan Page: 1 of 2

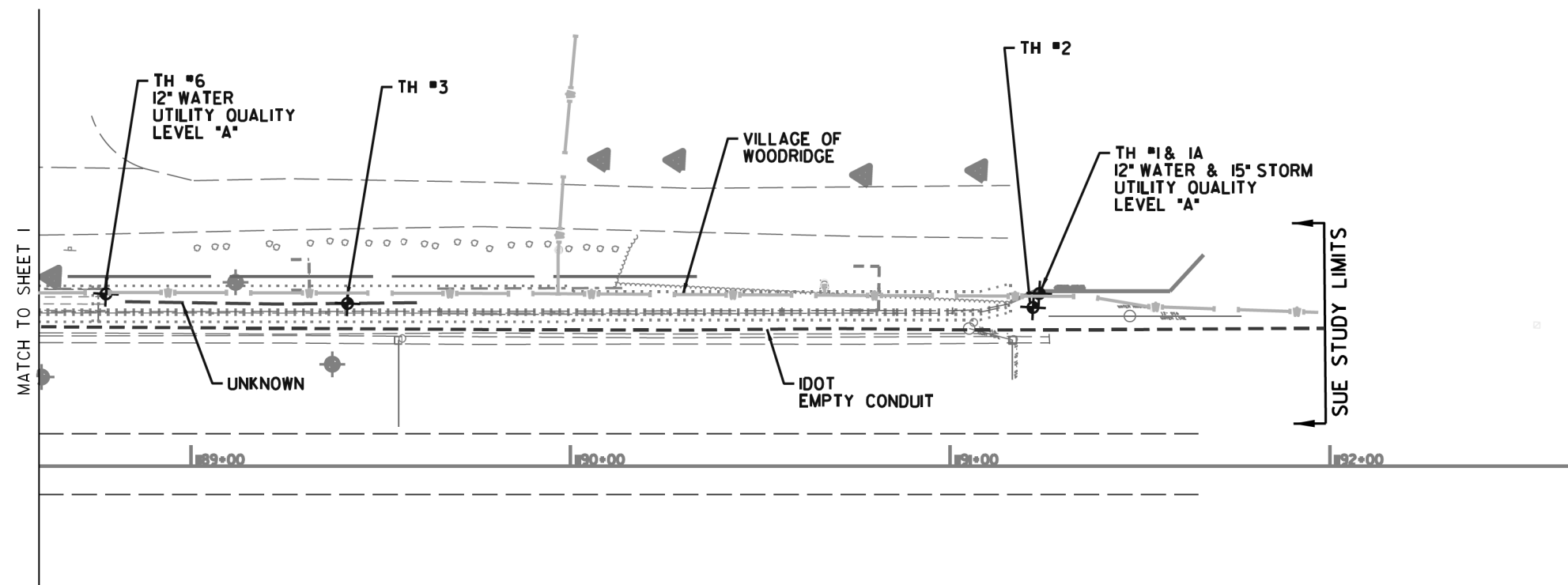
Utility Quality Level "A": Visually Verified Test Hole  
Utility Quality Level "B": Designating/non Visually Verified Test Hole  
Utility Quality Level "C": Research with Survey  
Utility Quality Level "D": Records Research

DESIGNED	EG	REVISED	
DRAWN	KLC	REVISED	
CHECKED	MGR	REVISED	
DATE	4/11/16	REVISED	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL RT. 53 North of 71st Street in**  
**Woodridge, IL**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DuPage	47	15
Contract No. 62C18				
FED. ROAD DIST. NO.	ILLINOIS	IDOT Project No.		



- ▲—▲— AERIAL
- UNKNOWN
- O— OIL
- CTV— CTV— CABLE TV
- T— T— TELEPHONE
- G— GAS
- E— E— ELECTRIC
- — — EMPTY CONDUIT
- W— WATER
- >—>— FORCE MAIN
- FO— FO— FIBER OPTIC
- ◆ CARDNO TEST HOLE
- ∟EOI END OF INFORMATION

UTILITY OWNERS

VILLAGE OF WOODRIDGE - WATER  
IDOT - TRAFFIC SIGNAL

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ALL UTILITIES SHOWN QUALITY LEVEL "B"  
UNLESS NOTED OTHERWISE.



**CWA**  
SURVEY  
CLAASSEN, WHITE & ASSOCIATES, P.C.  
LAND SURVEYORS  
12 AIRPORT DRIVE, UNIT L, JOLIET, ILLINOIS 60431  
(815) 744-3720 [claassenwhite.com/survey.com](http://claassenwhite.com/survey.com)

TBE Job No. IL09510723  
SUE Plan Page: 2 of 2

Utility Quality Level "A": Visually Verified Test Hole  
Utility Quality Level "B": Designating/non Visually Verified Test Hole  
Utility Quality Level "C": Research with Survey  
Utility Quality Level "D": Records Research

DESIGNED	EG	REVISED
DRAWN	KLC	REVISED
CHECKED	MGR	REVISED
DATE	4/11/16	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL RT. 53 North of 71st Street in  
Woodridge, IL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DuPage	47	16
Contract No. 62C18		ILLINOIS DOT Project No.		



VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	EXISTING TOP ELEVATION	EXISTING CUT	REFERENCE ELEVATION	SUE QUALITY LEVEL	COMMENTS
1	12" WATER	1854531.515	1057517.594	673.83'	3.82'	677.65'	A	
1A	15" STORM	1854531.515	1057517.594	676.16'	1.49'	677.65'	A	
2	SEE NOTES EXPLORATORY	1854532.959	1057513.850	670.90'	6.08'	676.98'	N/A	
3	SEE NOTES EXPLORATORY	1854713.427	1057505.202	674.13'	7.02'	681.15'	N/A	
4	12" WATER	1855150.027	1057487.195	680.45'	5.05'	685.50'	A	
5	SEE NOTES EXPLORATORY	1855155.863	1057480.705	675.06'	9.00'	684.06'	N/A	
6	12" WATER	1854777.053	1057504.302	676.89'	8.22'	685.11'	A	

NOTES

TH #1 - FOUND WATER MAIN DIRECTLY UNDER A 15' STORM PIPE (TH# 1A).

TH #1A - FOUND STORM PIPE WHILE EXCAVATING FOR WATER MAIN (TH# 1). STORM PIPE WAS DIRECTLY OVER WATER MAIN. SAME REFERENCE POINT WAS USED FOR BOTH UTILITIES.

TH #2 - EXPLORATORY TEST HOLE SEARCHING FOR ABANDONED WATER MAIN BUT DID NOT FIND IT. WE WERE NOT ABLE TO EXCAVATE ANY DEEPER AS WE RAN INTO LOOSE GRAVEL AND EXCAVATED HOLE STARTED TO BELL OUT.

TH #3 - EXCAVATED ON WHAT WE ORIGINALLY THOUGHT TO BE THE ACTIVE WATER MAIN AS WE ELECTRONICALLY DESIGNATED IT TO THIS LOCATION BUT FOUND A FLAT CONCRETE SLAB BELIEVED TO BE THE RETAINING WALL FOOTING.

TH #4 - FOUND WATER MAIN MANHOLE BURIED 6" DOWN. DEPTH RECORDED FROM MANHOLE RIM TO TOP OF PIPE.

TH #5 - EXPLORATORY TEST HOLE SEARCHING FOR ABANDONED WATER MAIN BUT DID NOT FIND IT.

TH #6 - FOUND WHAT IS BELIEVED TO BE THE ACTIVE 12" WATER MAIN DIRECTLY UNDER THE EAST EDGE OF THE EXISTING CONCRETE PAVED DITCH. DEPTH WAS RECORDED FROM THE PAVED DITCH TO TOP OF PIPE.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.


**CLAASSEN, WHITE & ASSOCIATES, P.C.**  
**LAND SURVEYORS**  
 121 AIRPORT DRIVE, UNIT 1, JOLIET, ILLINOIS 60431  
 (815) 744-3720 classenwhite@cwasurevey.com



CIVIL ENGINEERING \* TRANSPORTATION \* ENVIRONMENTAL  
 \* PLANNING \* UTILITY ENGINEERING/LOCATING

Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

TBE Job No. IL09510723  
SHEET 1 OF 1

DESIGNED EG	REVISED		
DRAWN KC	REVISED		
CHECKED MGR	REVISED		
DATE 4/11/16	REVISED		

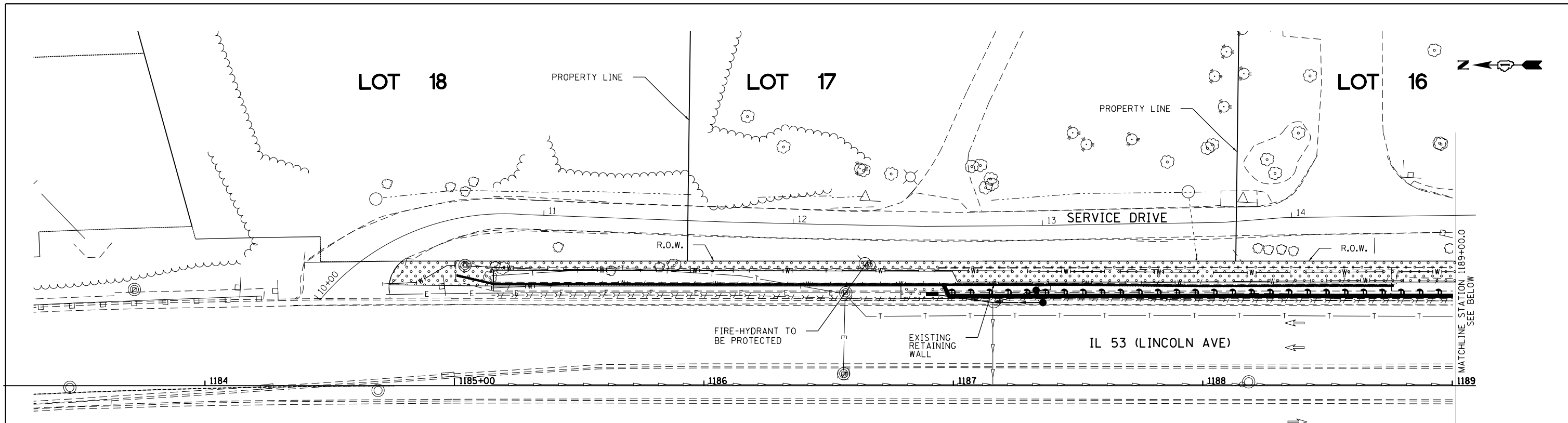
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL RT. 53 North of 71st Street in  
Woodridge, IL**

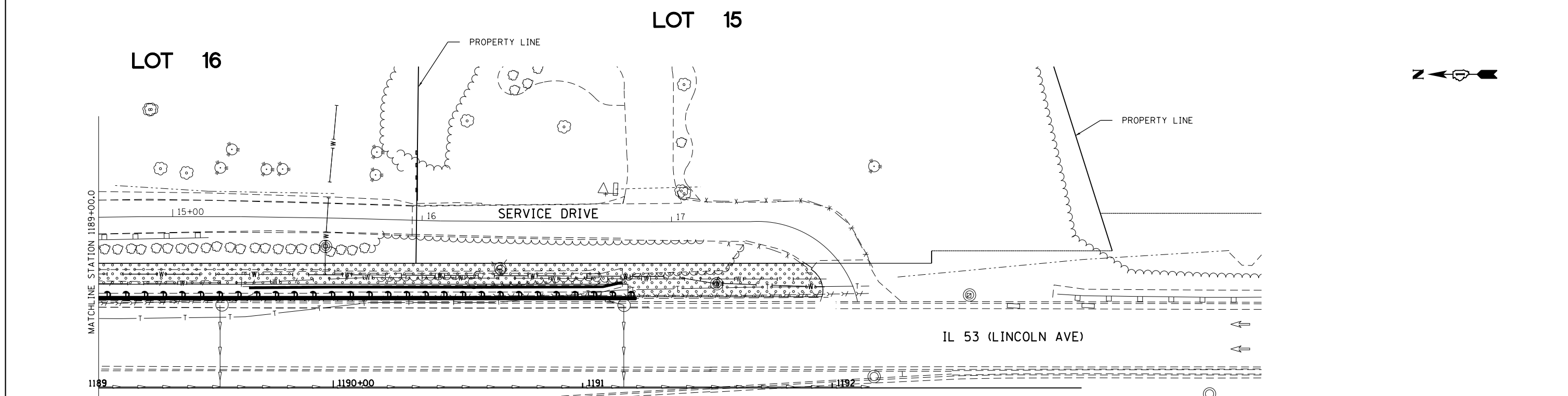
SHEET NO. \_\_\_\_\_ STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DuPage	47	17
Contract No. 62C18				

FED. ROAD DIST. NO. \_\_\_\_\_ ILLINOIS \_\_\_\_\_




**LANDSCAPING PLAN**



**LANDSCAPING PLAN**

**LEGEND**

 SEEDING CLASS 2A

**HBM**  
 ENGINEERING GROUP, LLC  
 4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME = Kendrabant	DESIGNED - DA	REVISED -
	DRAWN - EAH	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN  
 IL 53 (LINCOLN AVE)**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	18
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				

Benchmark: Iron rod at station 1188+63.60, 49.60 Lt control point #7 elev. 678.15

Existing Structure: The existing retaining wall is a reinforced concrete cantilever wall supported on spread footings. The total length of the retaining wall is 620'-10 1/8" with an exposed height that varies from approximately 1'-8 1/4" to 8'-7 1/2" (measured from grade at front face of wall). The retained height varies from approximately 7'-5" to 13'-10 1/4". A concrete ditch is present on the top of the wall. A 90'-0" long portion of the wall has failed.

Traffic Control: IL 53 SB traffic to be maintained on two lanes, and NB traffic to be maintained on one lane.

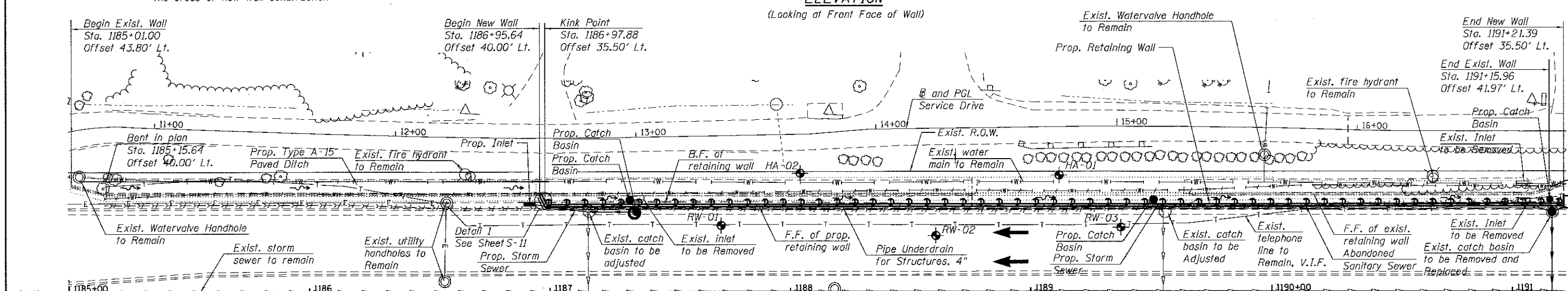
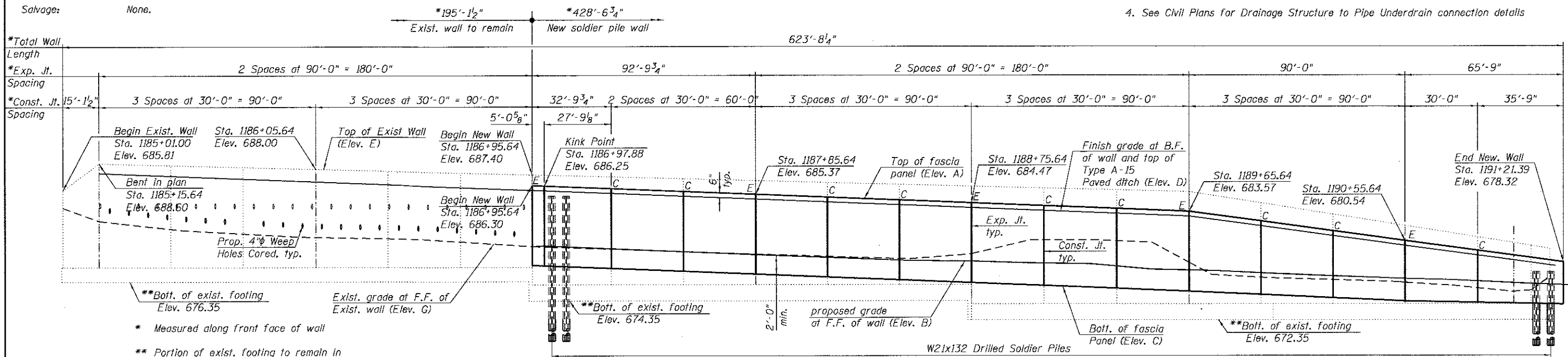
Salvage: None.

**SOIL BORING LOCATION**

Boring Log No.	Station	Offset
RW-01	1187+70.95	27.80' Lt.
RW-02	1188+60.66	23.48' Lt.
RW-03	1189+37.19	26.86' Lt.

**NOTES:**

- For General notes, Index of Sheets, Total Bill of Material, Wall Elevations Table, Scope of work and Profile Grade Line, See Sheet S-02.
- Stations and offsets for the wall are given from @ IL 53 to the front face of wall.
- Wall to be built along straight chords between construction joints.
- See Civil Plans for Drainage Structure to Pipe Underdrain connection details.



**DESIGN SPECIFICATIONS**

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 and 2016 Interm Revisions

**DESIGN STRESSES**

**FIELD UNITS (Existing Construction)**  
 f'c = 3,000 psi  
 fy = 40,000 psi (Reinforcement)

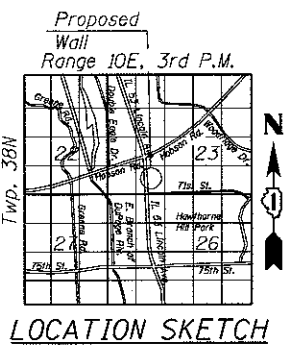
**FIELD UNITS (New Construction)**  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)  
 fy = 50,000 psi (M270 Grade 50)  
 Soldier piles

**LEGEND:**

Front Face	F.F.	Abandoned Sanitary Sewer	---x---x---
Back Face	B.F.	Exist. Telephone Line	---T---
Boring Log	+	Exist. Storm Sewer	---S---
Exist. Fire Hydrant	⊙	Exist. Water Main	---W---
Exist. Inlet	□	Abandoned Water Main	---Wt---
Exist. Catch Basin	○	Exist. Electric	---E---
Exist. Utility handhole	⊙	Prop. Storm Sewer	---S---
Prop. Inlet	■	Prop. Catch Basin	●



Signed *Moussa A. Issa*  
 Dr. Moussa A. Issa, S.E.  
 Il. Lic. No. 081-005738  
 Expires 11-30-2018  
 Date *May 25, 2017*  
 For Sheets S-01 Thru S-15  
 (Total of 15 Sheets)



**GENERAL PLAN & ELEVATION**  
**RETAINING WALL ALONG**  
**IL ROUTE 53**  
**PARTIAL REPLACEMENT**  
**SECTION 543R-I**  
**DU PAGE COUNTY**  
**STA. 1185+01.00 TO STA. 1191+21.39**  
**STRUCTURE NO. 022-2035**

**GENERAL NOTES:**

- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Reinforcement bars designated (E) shall be epoxy coated.
- Existing utilities in conflict with retaining wall construction shall be abandoned or relocated according to directions given on the Civil plans.
- Any portions of existing retaining wall foundations interfering with the new construction shall be removed.
- Wall to be built along straight chords between joints.
- The Contractor shall exercise extreme caution during existing wall removal and proposed wall construction to make certain that removal/construction activities and loads will not have detrimental effects on the existing 12"φ water main and other utilities.
- The Contractor shall provide a method to assure the soldier piles achieve at least the plan tip elevations. The soldier pile locations and elevations shall meet the tolerances provided in the Special Provisions. Any additional measures required to satisfy the construction tolerances will not be paid for separately but shall be included in Drilling and Setting Soldier Piles (in Soil).
- Protective Coat shall be applied to all exposed surfaces of the new wall.
- The cost for removal and disposal of portions of the existing retaining wall footing to accommodate installation of the piles shall be included in the cost of the pay item for "Drilling and Setting Soldier Piles (In Soil)".
- The installation of the catch basin in front and backfilling in front of the wall should be completed before the wall is finished being backfilled from behind.
- The wall shall be backfilled prior to placing the concrete facing.
- Saturated sand and sandy gravel layers were encountered in Borings RWB-01 and RWB-02. The drilled shafts for the soldier piles shall use slurry per IDOT Standard Specifications Article 516.07 in order to install the encasement concrete and W-sections in these soil susceptible to caving.

**INDEX OF SHEETS**

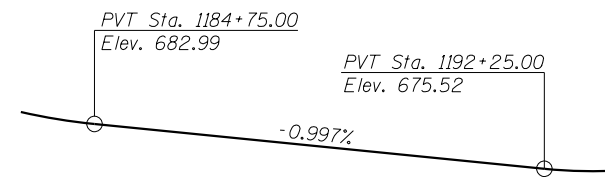
- S-01 General Plan and Elevation
- S-02 General Notes, Index of Sheets, and Total Bill of Material
- S-03 Wall Removal Details
- S-04 Plan and Elevation (sta. 1186+95.64 to sta. 1187+85.64)
- S-05 Plan and Elevation (sta. 1187+85.64 to sta. 1188+75.64)
- S-06 Plan and Elevation (sta. 1188+75.64 to sta. 1189+65.64)
- S-07 Plan and Elevation (sta. 1189+65.64 to sta. 1190+55.64)
- S-08 Plan and Elevation (sta. 1190+55.64 to sta. 1191+21.39)
- S-09 Soldier Pile Wall Section, Pile Layout, and Details
- S-10 Wall Cross Sections and Details (Sheet 1 of 4)
- S-11 Wall Cross Sections and Details (Sheet 2 of 4)
- S-12 Wall Cross Sections and Details (Sheet 3 of 4)
- S-13 Wall Cross Sections and Details (Sheet 4 of 4)
- S-14 Boring Logs (Sheet 1 of 2)
- S-15 Boring Logs (Sheet 2 of 2)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	CU YD	52
Structure Excavation	CU YD	125
Concrete Structures	CU YD	131
Protective Coat	SQ YD	362
Stud Shear Connectors	EACH	763
Reinforcement Bars, Epoxy Coated	POUND	14,910
Name Plates	EACH	1
Furnishing Soldier Piles (W Section)	FOOT	2,052
Drilling and Setting Soldier Piles (in Soil)	CU FT	9,120
Untreated Timber Lagging	SQ FT	2,394
Geocomposite Wall Drain	SQ YD	266
Weep Holes Cored	EACH	21
Granular Backfill For Structures	CU YD	218
Pipe Underdrains for Structures, 4"	FOOT	429

**WALL ELEVATIONS TABLE**

Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G
1185+01.00	43.80 Lt.					685.81	684.65	684.00
1185+15.64	40.00 Lt.				687.60	688.60	687.69	682.64
1185+45.64	40.00 Lt.				687.30	688.40	687.61	681.82
1185+75.64	40.00 Lt.				687.00	688.20	687.47	681.33
1186+05.64	40.00 Lt.				686.70	688.00	687.31	680.97
1186+35.64	40.00 Lt.				686.40	687.80	687.16	680.82
1186+65.64	40.00 Lt.				686.10	687.60	686.98	680.49
1186+95.64	40.00 Lt.	686.30	680.09	678.05	685.80	687.40	686.78	680.00
1186+97.88	35.50 Lt.	686.25	680.07	678.00	685.75	687.39	686.76	679.96
1187+25.64	35.50 Lt.	685.97	679.76	677.72	685.47	687.20	686.62	679.71
1187+55.64	35.50 Lt.	685.67	679.44	677.42	685.17	687.00	686.41	679.46
1187+85.64	35.50 Lt.	685.37	679.14	677.12	684.87	686.80	685.97	679.19
1188+15.64	35.50 Lt.	685.07	678.85	676.82	684.57	686.60	685.72	678.96
1188+45.64	35.50 Lt.	684.77	678.56	676.52	684.27	686.40	685.66	678.72
1188+75.64	35.50 Lt.	684.47	678.45	676.22	683.97	686.20	685.39	679.22
1189+05.64	35.50 Lt.	684.17	678.24	675.92	683.67	686.00	681.32	680.64
1189+35.64	35.50 Lt.	683.87	677.92	675.62	683.37	685.80	681.25	680.53
1189+65.64	35.50 Lt.	683.57	677.51	675.32	683.07	685.60	684.47	678.29
1189+95.64	35.50 Lt.	682.56	677.20	674.98	682.06	684.43	683.66	676.75
1190+25.64	35.50 Lt.	681.55	676.90	674.64	681.05	683.27	682.43	676.51
1190+55.64	35.50 Lt.	680.54	676.63	674.30	680.04	682.10	681.19	676.23
1190+85.64	35.50 Lt.	679.53	676.37	674.15	679.03	680.91	680.01	675.64
1191+21.39	35.50 Lt.	678.32	675.98	673.98				



**PROFILE GRADE**

(Along  $\square$  and PGL IL 53)

- Elevation A- Top of Fascia Panel Elevation
- Elevation B- Proposed Grade at Front Face of Fascia Panel
- Elevation C- Bottom of Fascia Panel / Top of Encasement Concrete
- Elevation D- Finish Grade at Back Face of Fascia Panel and Top of Paved ditch
- Elevation E- Top of Existing Wall
- Elevation F- Existing Grade at Back Face of Existing Wall
- Elevation G- Existing Grade at Front Face of Existing Wall

FILE NAME = S-02\_GenNotes&BOM.dgn

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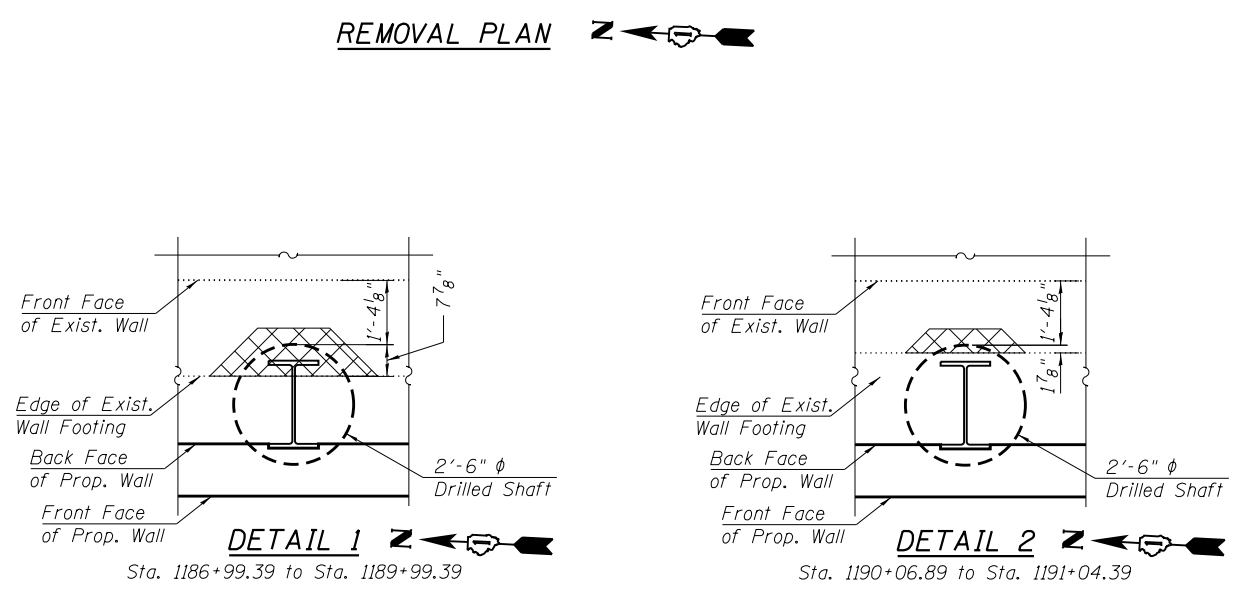
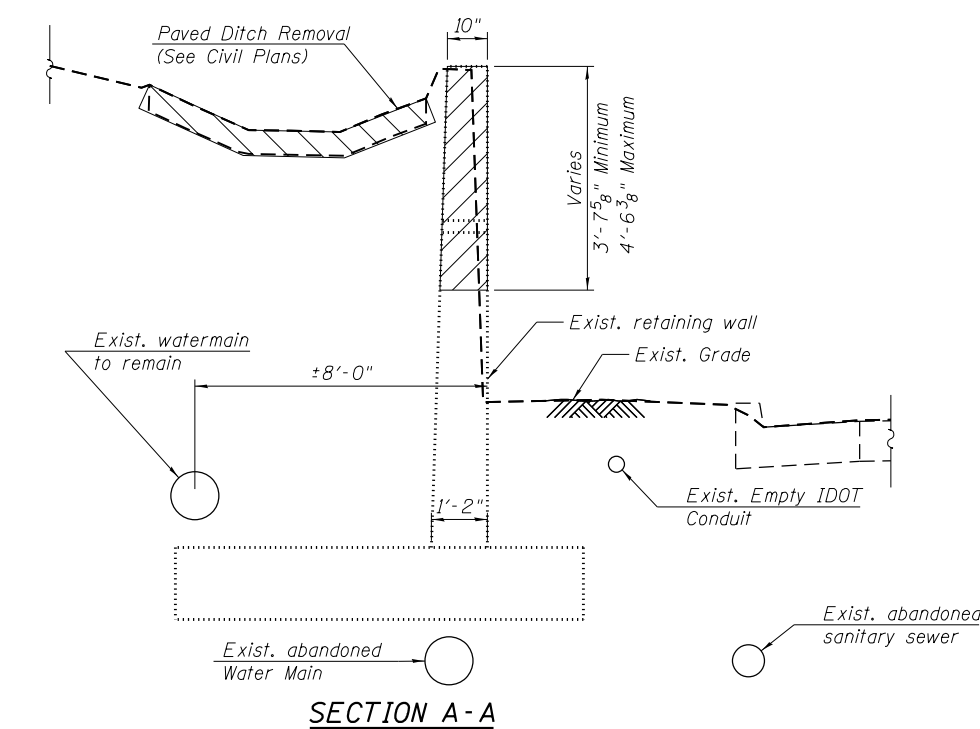
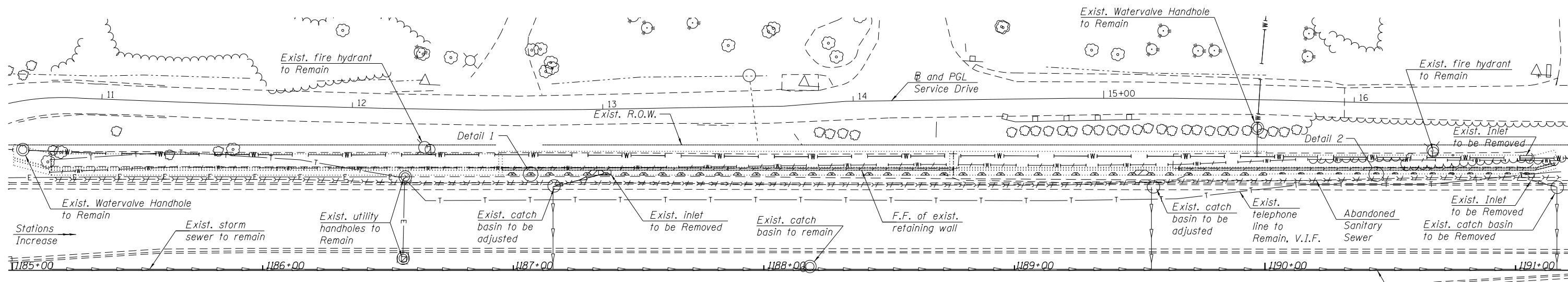
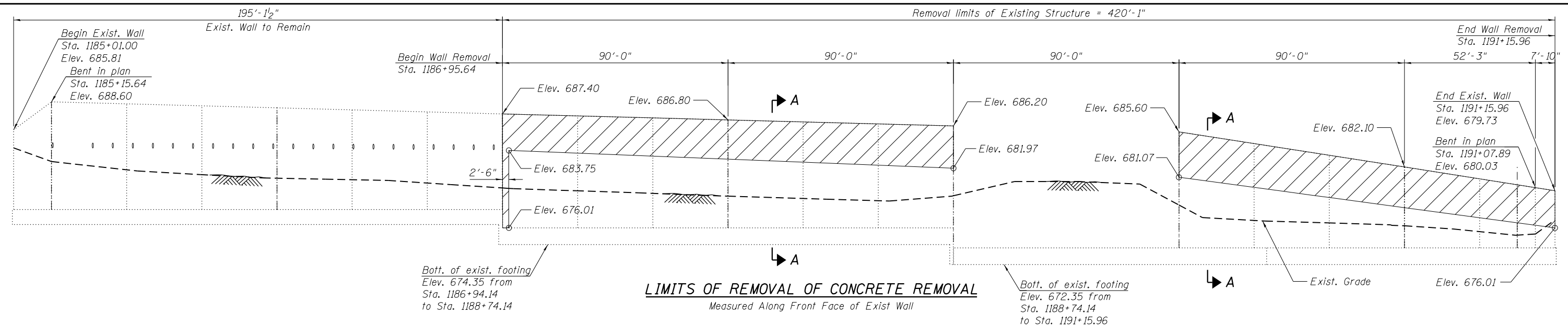
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL  
STRUCTURE NO. 022-2035**

SHEET S-02 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-I	DUPAGE	47	20
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



- NOTES**
1. During removal of the existing retaining wall and footing, soil disturbance shall be kept at a minimum, and coordinated and approved by the Engineer.
  2. Dimensions shown have been taken from historical design drawing and may not represent "as built" conditions. The Contractor must verify all dimensions in the field.
  3. Remove and dispose of existing wall footing to accommodate installation of the pile. Cost included in Pay Item for "Drilling and Setting Soldier Piles (In Soil), typ.

**LEGEND**

- Concrete Removal
- Remove and Dispose of Existing Wall Footing (See Note 3)
- Paved Ditch Removal (See Civil Plans)

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	52

FILE NAME = S-03 WallDemoDet.dgn

**HBM**  
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CONSULTING & DESIGN  
INSPECTION & TESTING  
RESEARCH & TESTING

4415 WEST HARRISON ST.  
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HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
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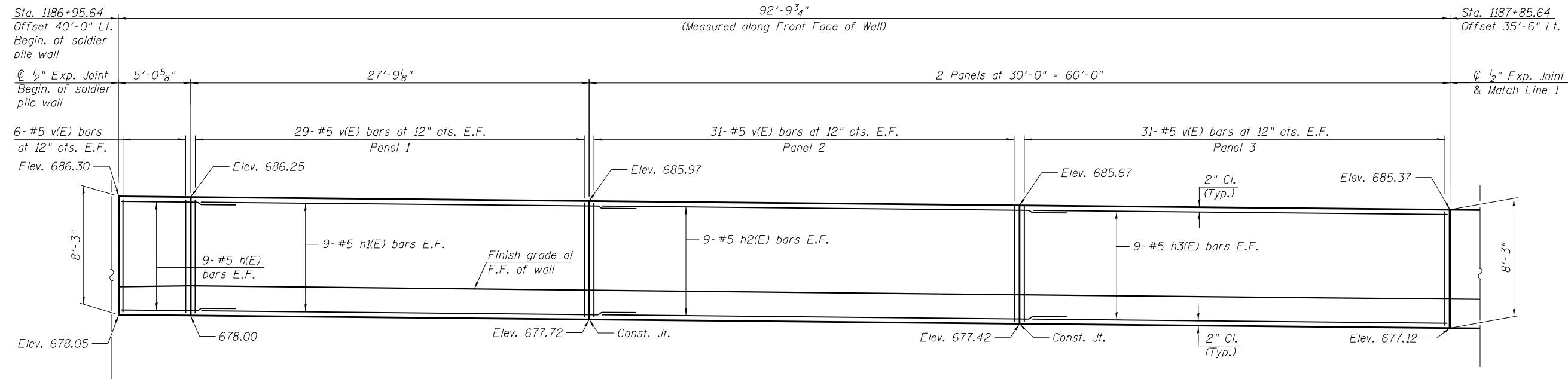
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	DATE - 06/01/2017	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

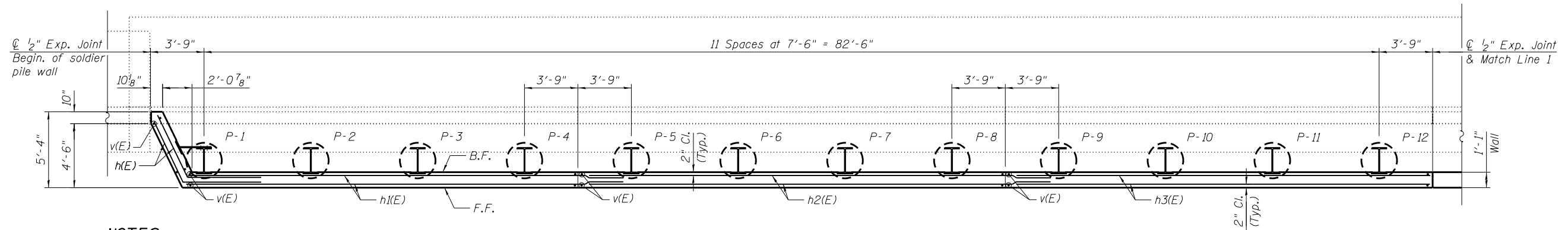
WALL REMOVAL DETAILS  
STRUCTURE NO. 022-2035  
SHEET S-03 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	21

CONTRACT NO. 62C18  
ILLINOIS FED. AID PROJECT



**ELEVATION**



**PLAN**

**LEGEND:**

- B.F. - Back Face
- F.F. - Front Face
- E.F. - Each Face

**NOTES:**

1. Work this sheet with sheets S-09 thru S-13 .
2. Pile Spacing measured along front face of wall
3. For soldier pile wall typical cross section, soldier pile layout, minimum bar laps, bar diagrams, and Bill of Material, see Sheet S-09 .
4. For soldier pile wall cross sections and details, see Sheets S-10 thru S-13 .
5. Drilling thru Abandoned 4"  $\phi$  conduit and 8"  $\phi$  Sanitary sewer will not be paid separately and shall be included with the Pay Item "Drilling and Setting Soldier Piles (in soil).

FILE NAME = S-04\_PlanElev1.dgn

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HILLSIDE, IL 60162  
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USER NAME = Ken.drabant	DESIGNED - SK, KJD	REVISED
	DRAWN - SK, KJD	REVISED
PLOT SCALE =	CHECKED - MAI, MI	REVISED
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

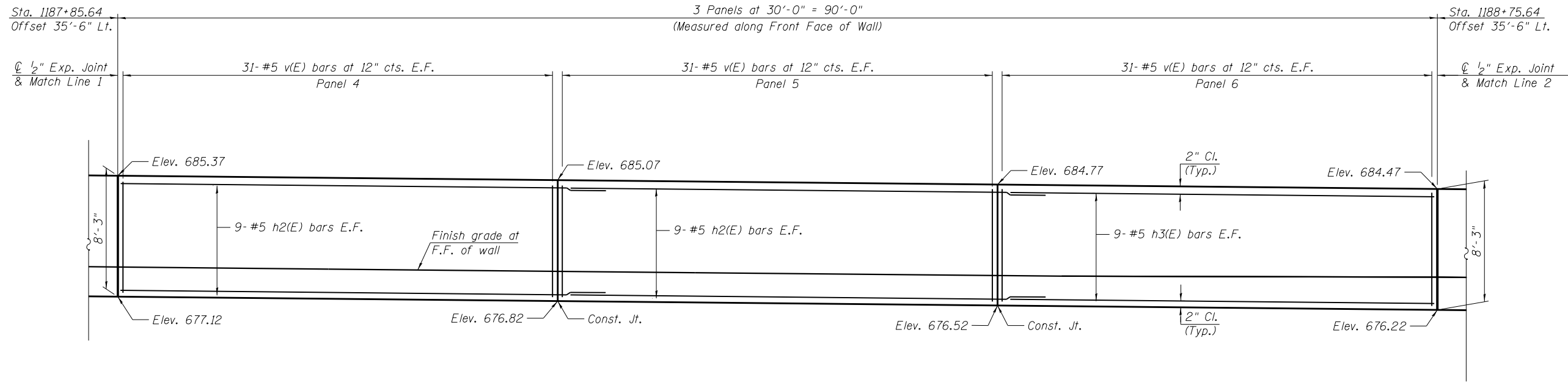
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION (STA. 1186 + 95.64 TO STA. 1187 + 85.64)  
STRUCTURE NO. 022-2035**

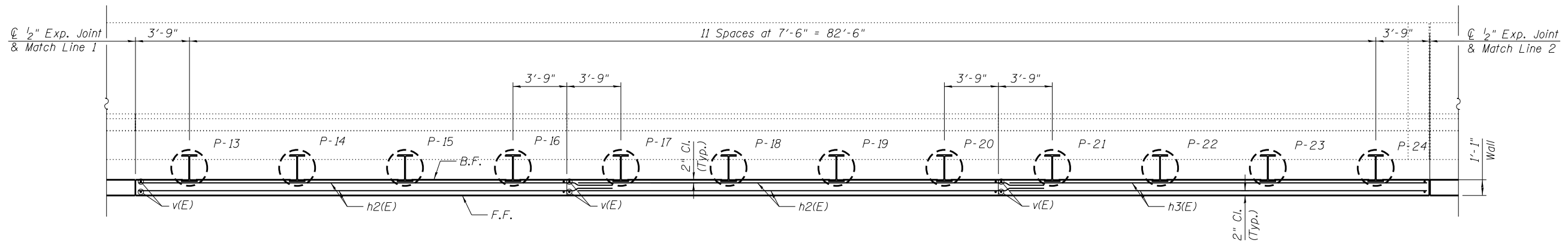
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	22
CONTRACT NO. 62C18				

SHEET S-04 OF S-15 SHEETS

ILLINOIS FED. AID PROJECT



**ELEVATION**



**PLAN**

**LEGEND:**  
 B.F. - Back Face  
 F.F. - Front Face  
 E.F. - Each Face

**NOTE:**  
 1. For Notes, See Sheet S-04.

FILE NAME = S-05 PlanElev2.dgn

**HBM**  
 ENGINEERING GROUP, LLC  
 CONSULTING & DESIGN  
 INSPECTION & TESTING  
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 HILLSIDE, IL 60162  
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 FAX: (708) 236-0901

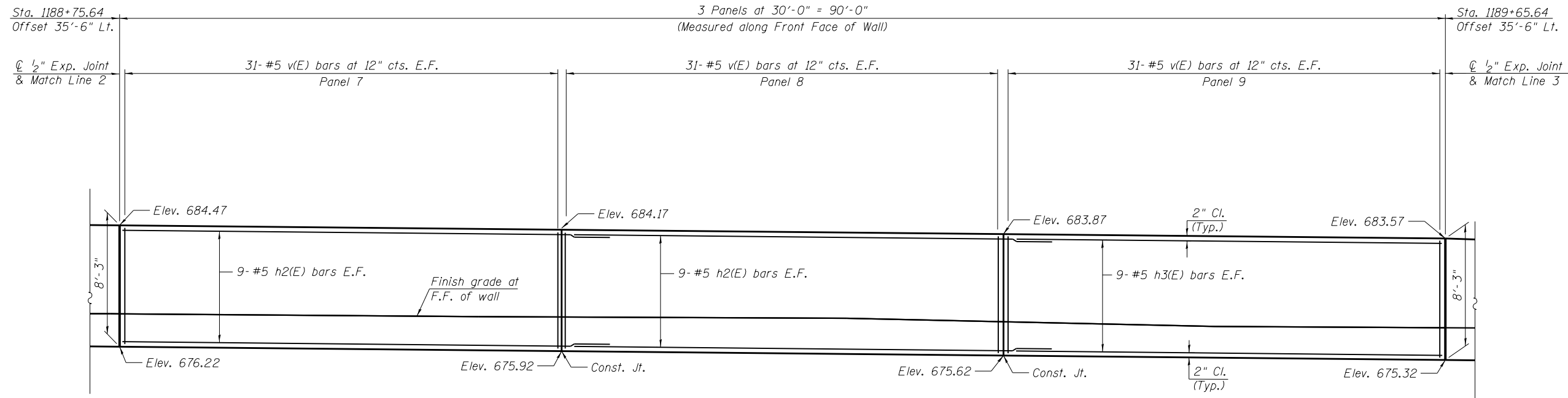
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PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

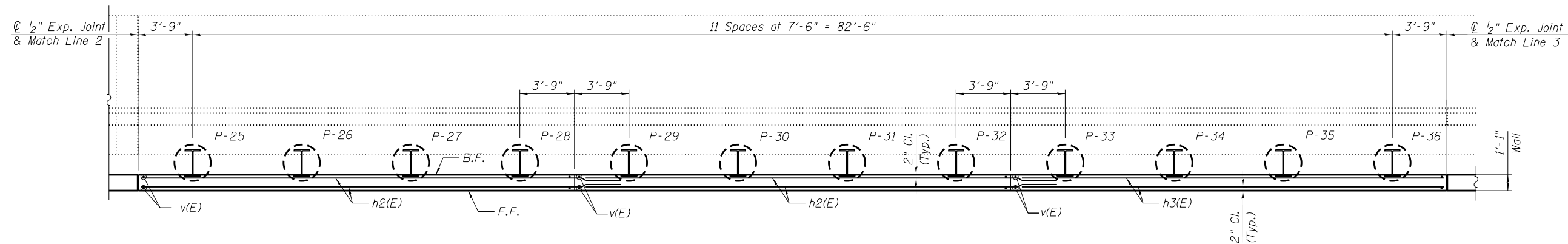
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 STRUCTURE NO. 022-2035**

SHEET S-05 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	23
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



**ELEVATION**



**PLAN**

**LEGEND:**  
 B.F. - Back Face  
 F.F. - Front Face  
 E.F. - Each Face

**NOTES:**

1. For Notes, See Sheet S-04.

FILE NAME = S-06 PlanElev3.dgn

**HBM**  
 ENGINEERING GROUP, LLC  
 4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
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USER NAME = Ken.drabant	DESIGNED - SK, KJD	REVISED
	DRAWN - SK, KJD	REVISED
PLOT SCALE =	CHECKED - MAI, MI	REVISED
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

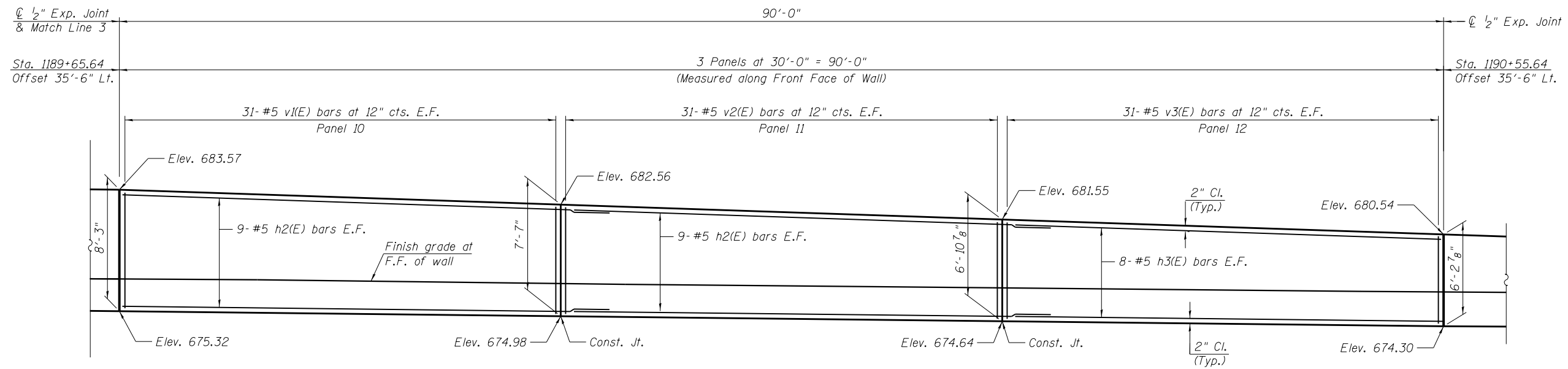
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION (STA. 1188 + 75.64 TO STA. 1189 + 65.64)  
 STRUCTURE NO. 022-2035**

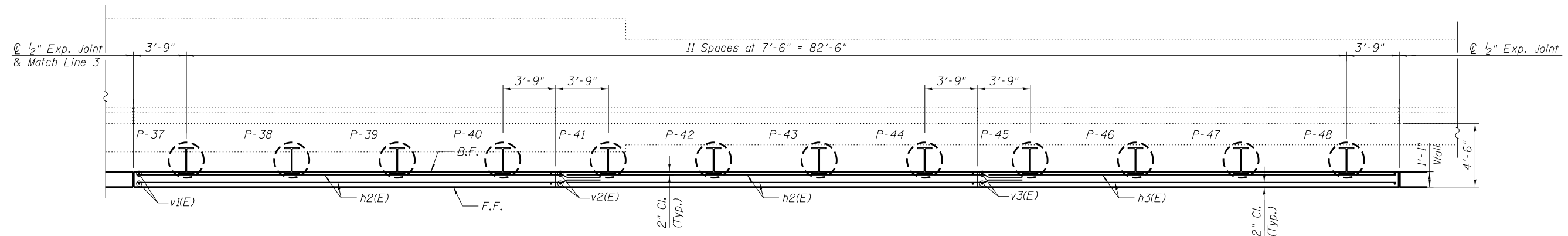
SHEET S-06 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	24
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				





**ELEVATION**



**PLAN**

**LEGEND:**

- B.F. - Back Face
- F.F. - Front Face
- E.F. - Each Face

**NOTES:**

1. For Notes, See Sheet S-04.

FILE NAME = S-07\_PlanElev4.dgn

**HBM**  
ENGINEERING GROUP, LLC  
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DESIGNED - SK, KJD  
DRAWN - SK, KJD  
CHECKED - MAI, MI  
DATE - 06/01/2017

REVISOR  
REVISION  
REVISOR  
REVISION  
REVISOR

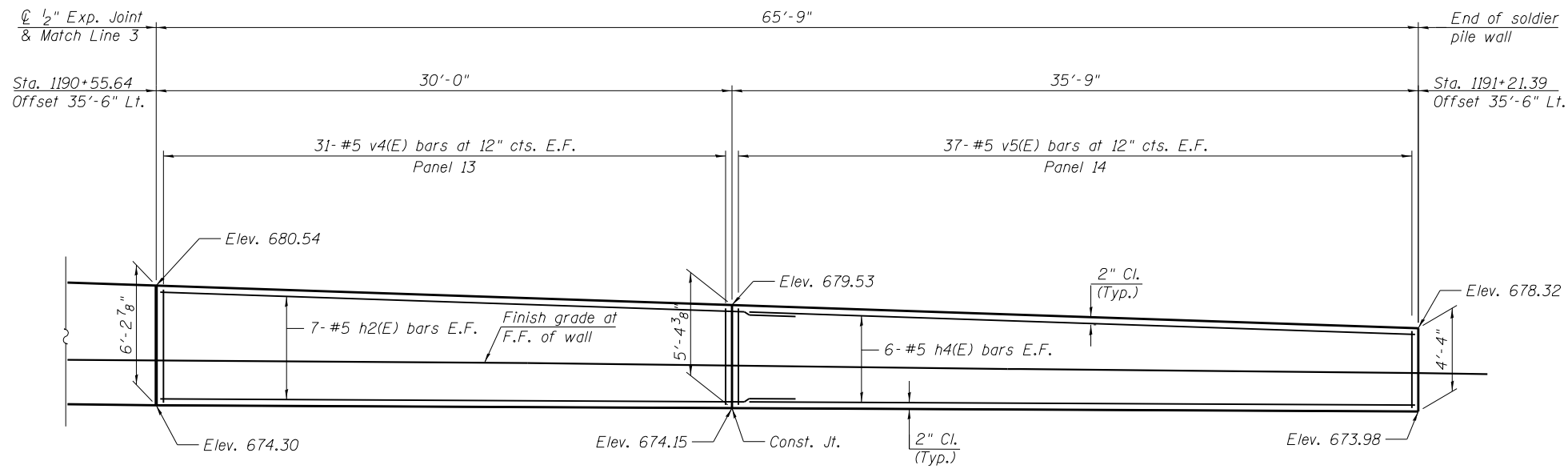
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION (STA. 1189 + 65.64 TO STA. 1190 + 55.64)  
STRUCTURE NO. 022-2035**

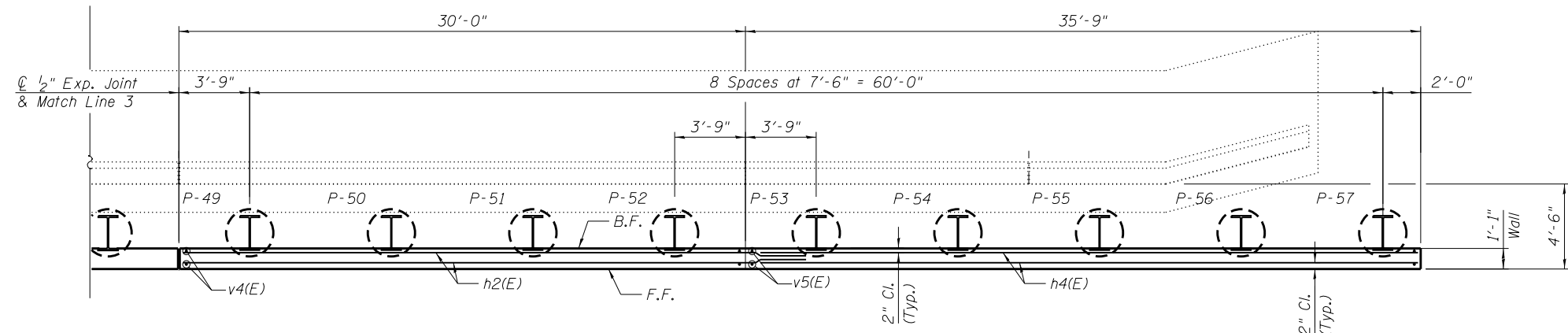
SHEET S-07 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	25
CONTRACT NO. 62C18				

ILLINOIS FED. AID PROJECT



**ELEVATION**



**PLAN**

**LEGEND:**  
 B.F. - Back Face  
 F.F. - Front Face  
 E.F. - Each Face

**NOTES:**  
 1. For Notes, See Sheet S-04.

FILE NAME = S-07\_PlanElev5.dgn

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PLOT SCALE =	CHECKED - MAI, MI	REVISED
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION (STA. 1190 + 55.64 TO STA. 1191 + 21.39)  
 STRUCTURE NO. 022-2035**

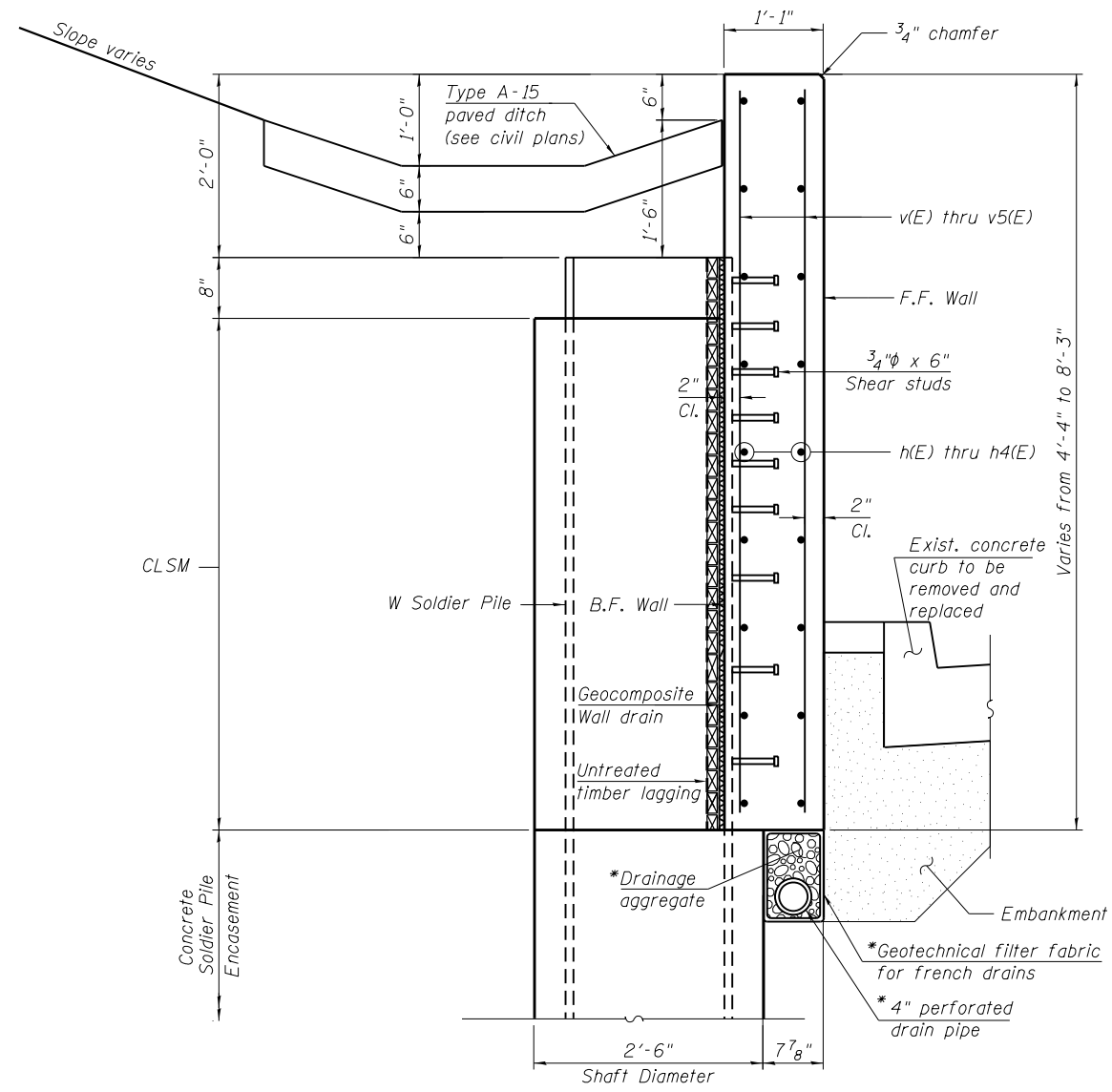
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	26
CONTRACT NO. 62C18				

SHEET S-08 OF S-15 SHEETS

ILLINOIS FED. AID PROJECT

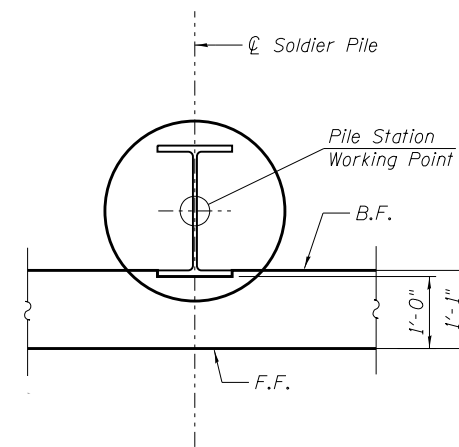
**PILE LAYOUT**

Pile	Station at Working Point	Offset	Top of Pile El.	Bot. of Wall El.	Section	Auger $\phi$	Pile Tip El.	Pile Length
P-1	1186+99.39	37'-4 7/8"	684.23	677.98	W21x132	2'-6"	648.23	36'-0"
P-2	1187+06.89	37'-4 7/8"	684.16	677.91	W21x132	2'-6"	648.16	36'-0"
P-3	1187+14.39	37'-4 7/8"	684.08	677.83	W21x132	2'-6"	648.08	36'-0"
P-4	1187+21.89	37'-4 7/8"	684.01	677.76	W21x132	2'-6"	648.01	36'-0"
P-5	1187+29.39	37'-4 7/8"	683.93	677.68	W21x132	2'-6"	647.93	36'-0"
P-6	1187+36.89	37'-4 7/8"	683.86	677.61	W21x132	2'-6"	647.86	36'-0"
P-7	1187+44.39	37'-4 7/8"	683.78	677.53	W21x132	2'-6"	647.78	36'-0"
P-8	1187+51.89	37'-4 7/8"	683.71	677.46	W21x132	2'-6"	647.71	36'-0"
P-9	1187+59.39	37'-4 7/8"	683.63	677.38	W21x132	2'-6"	647.63	36'-0"
P-10	1187+66.89	37'-4 7/8"	683.56	677.31	W21x132	2'-6"	647.56	36'-0"
P-11	1187+74.39	37'-4 7/8"	683.48	677.23	W21x132	2'-6"	647.48	36'-0"
P-12	1187+81.89	37'-4 7/8"	683.41	677.16	W21x132	2'-6"	647.41	36'-0"
P-13	1187+89.39	37'-4 7/8"	683.33	677.08	W21x132	2'-6"	647.33	36'-0"
P-14	1187+96.89	37'-4 7/8"	683.26	677.01	W21x132	2'-6"	647.26	36'-0"
P-15	1188+04.39	37'-4 7/8"	683.18	676.93	W21x132	2'-6"	647.18	36'-0"
P-16	1188+11.89	37'-4 7/8"	683.11	676.86	W21x132	2'-6"	647.11	36'-0"
P-17	1188+19.39	37'-4 7/8"	683.03	676.78	W21x132	2'-6"	647.03	36'-0"
P-18	1188+26.89	37'-4 7/8"	682.96	676.71	W21x132	2'-6"	646.96	36'-0"
P-19	1188+34.39	37'-4 7/8"	682.88	676.63	W21x132	2'-6"	646.88	36'-0"
P-20	1188+41.89	37'-4 7/8"	682.81	676.56	W21x132	2'-6"	646.81	36'-0"
P-21	1188+49.39	37'-4 7/8"	682.73	676.48	W21x132	2'-6"	646.73	36'-0"
P-22	1188+56.89	37'-4 7/8"	682.66	676.41	W21x132	2'-6"	646.66	36'-0"
P-23	1188+64.39	37'-4 7/8"	682.58	676.33	W21x132	2'-6"	646.58	36'-0"
P-24	1188+71.89	37'-4 7/8"	682.51	676.26	W21x132	2'-6"	646.51	36'-0"
P-25	1188+79.39	37'-4 7/8"	682.43	676.18	W21x132	2'-6"	646.43	36'-0"
P-26	1188+86.89	37'-4 7/8"	682.36	676.11	W21x132	2'-6"	646.36	36'-0"
P-27	1188+94.39	37'-4 7/8"	682.28	676.03	W21x132	2'-6"	646.28	36'-0"
P-28	1189+01.89	37'-4 7/8"	682.21	675.96	W21x132	2'-6"	646.21	36'-0"
P-29	1189+09.39	37'-4 7/8"	682.13	675.88	W21x132	2'-6"	646.13	36'-0"
P-30	1189+16.89	37'-4 7/8"	682.06	675.81	W21x132	2'-6"	646.06	36'-0"
P-31	1189+24.39	37'-4 7/8"	681.98	675.73	W21x132	2'-6"	645.98	36'-0"
P-32	1189+31.89	37'-4 7/8"	681.91	675.66	W21x132	2'-6"	645.91	36'-0"
P-33	1189+39.39	37'-4 7/8"	681.83	675.58	W21x132	2'-6"	645.83	36'-0"
P-34	1189+46.89	37'-4 7/8"	681.76	675.51	W21x132	2'-6"	645.76	36'-0"
P-35	1189+54.39	37'-4 7/8"	681.68	675.43	W21x132	2'-6"	645.68	36'-0"
P-36	1189+61.89	37'-4 7/8"	681.61	675.36	W21x132	2'-6"	645.61	36'-0"
P-37	1189+69.39	37'-4 7/8"	681.44	675.28	W21x132	2'-6"	645.44	36'-0"
P-38	1189+76.89	37'-4 7/8"	681.19	675.19	W21x132	2'-6"	645.19	36'-0"
P-39	1189+84.39	37'-4 7/8"	680.94	675.11	W21x132	2'-6"	644.94	36'-0"
P-40	1189+91.89	37'-4 7/8"	680.69	675.02	W21x132	2'-6"	644.69	36'-0"
P-41	1189+99.39	37'-4 7/8"	680.43	674.94	W21x132	2'-6"	644.43	36'-0"
P-42	1190+06.89	37'-4 7/8"	680.18	674.85	W21x132	2'-6"	644.18	36'-0"
P-43	1190+14.39	37'-4 7/8"	679.93	674.77	W21x132	2'-6"	643.93	36'-0"
P-44	1190+21.89	37'-4 7/8"	679.68	674.68	W21x132	2'-6"	643.68	36'-0"
P-45	1190+29.39	37'-4 7/8"	679.42	674.60	W21x132	2'-6"	643.42	36'-0"
P-46	1190+36.89	37'-4 7/8"	679.17	674.51	W21x132	2'-6"	643.17	36'-0"
P-47	1190+44.39	37'-4 7/8"	678.92	674.43	W21x132	2'-6"	642.92	36'-0"
P-48	1190+51.89	37'-4 7/8"	678.67	674.34	W21x132	2'-6"	642.67	36'-0"
P-49	1190+59.39	37'-4 7/8"	678.41	674.28	W21x132	2'-6"	642.41	36'-0"
P-50	1190+66.89	37'-4 7/8"	678.16	674.24	W21x132	2'-6"	642.16	36'-0"
P-51	1190+74.39	37'-4 7/8"	677.91	674.21	W21x132	2'-6"	641.91	36'-0"
P-52	1190+81.89	37'-4 7/8"	677.66	674.17	W21x132	2'-6"	641.66	36'-0"
P-53	1190+89.39	37'-4 7/8"	677.40	674.13	W21x132	2'-6"	641.40	36'-0"
P-54	1190+96.89	37'-4 7/8"	677.15	674.10	W21x132	2'-6"	641.15	36'-0"
P-55	1191+04.39	37'-4 7/8"	676.90	674.06	W21x132	2'-6"	640.90	36'-0"
P-56	1191+11.89	37'-4 7/8"	676.64	674.03	W21x132	2'-6"	640.64	36'-0"
P-57	1191+19.39	37'-4 7/8"	676.39	673.99	W21x132	2'-6"	640.39	36'-0"

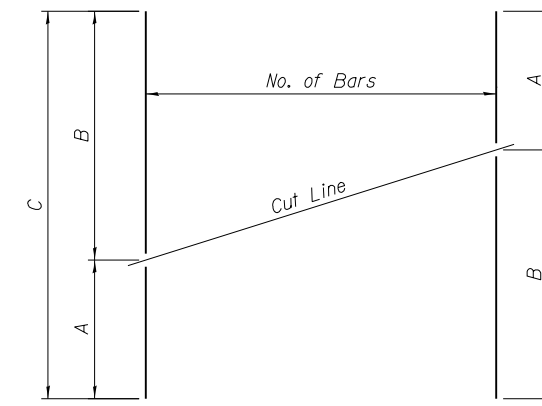


**TYPICAL SOLDIER PILE WALL CROSS SECTION**

\* Cost included with "Pipe Underdrains for Structures, 4".



**SOLDIER PILE WORKING POINT**



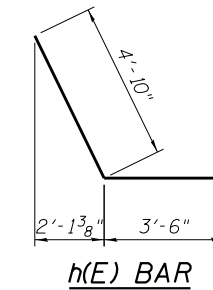
**SERIES OF BAR CUTTING DIAGRAM**

See table for dimensions. Make all cuts normal to bar axis

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	18	#5	8'-4"	
h1(E)	18	#5	30'-10"	
h2(E)	140	#5	33'-2"	
h3(E)	70	#5	29'-8"	
h4(E)	12	#5	35'-5"	
v(E)	566	#5	7'-11"	
v1(E)	31	#5	15'-2"	
v2(E)	31	#5	13'-10"	
v3(E)	31	#5	12'-6"	
v4(E)	31	#5	10'-11"	
v5(E)	37	#5	9'-0"	
Concrete Structures			CU YD	131
Protective Coat			SQ YD	362
Reinforcement Bars, Epoxy Coated			POUND	14,910
Furnishing Soldier Piles (W Section)			FOOT	2,052
Drilling and Setting Soldier Piles (in Soil)			CU FT	9,120

Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-2"
#6	3'-10"



**BAR TABLE SCHEDULE**

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
v1(E)	1	#5	31	7'-11"	7'-3"	15'-2"
v2(E)	1	#5	31	7'-3"	6'-7"	13'-10"
v3(E)	1	#5	31	6'-7"	5'-11"	12'-6"
v4(E)	1	#5	31	5'-11"	5'-0"	10'-11"
v5(E)	1	#5	37	5'-0"	4'-0"	9'-0"

**NOTE:**  
1. For Notes, see Sheet S-04.

**LEGEND:**  
B.F. - Back Face  
F.F. - Front Face

FILE NAME = S-08 PileLayout1.dgn

**HBM**  
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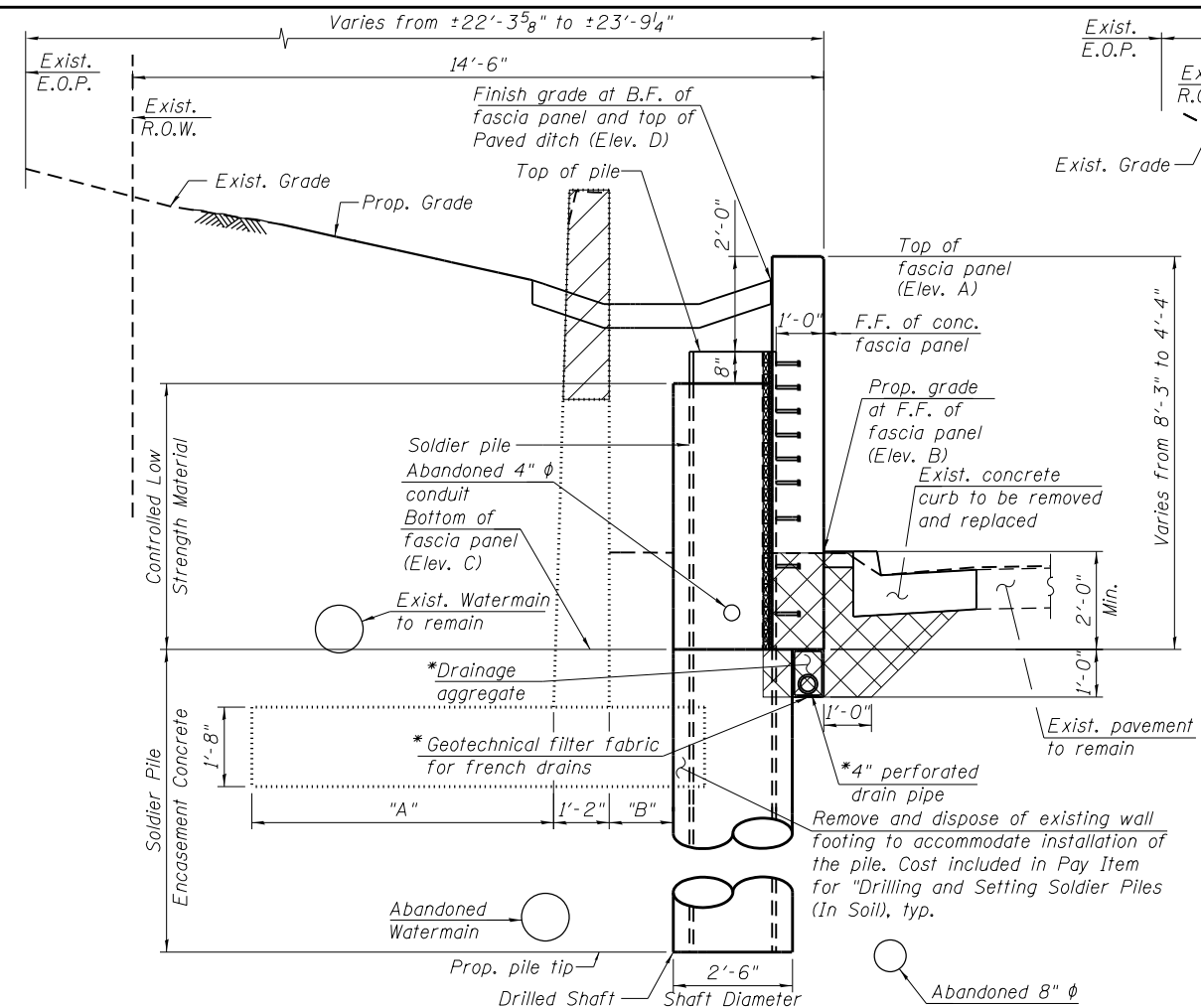
USER NAME = Ken.drabant	DESIGNED - MA, FA	REVISED
PLOT SCALE =	DRAWN - MA, FA	REVISED
PLOT DATE = 6/1/2017	CHECKED - MAI, MI	REVISED
	DATE - 06/01/2017	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOLDIER PILE WALL SECTION, PILE LAYOUT AND DETAILS  
STRUCTURE NO. 022-2035**

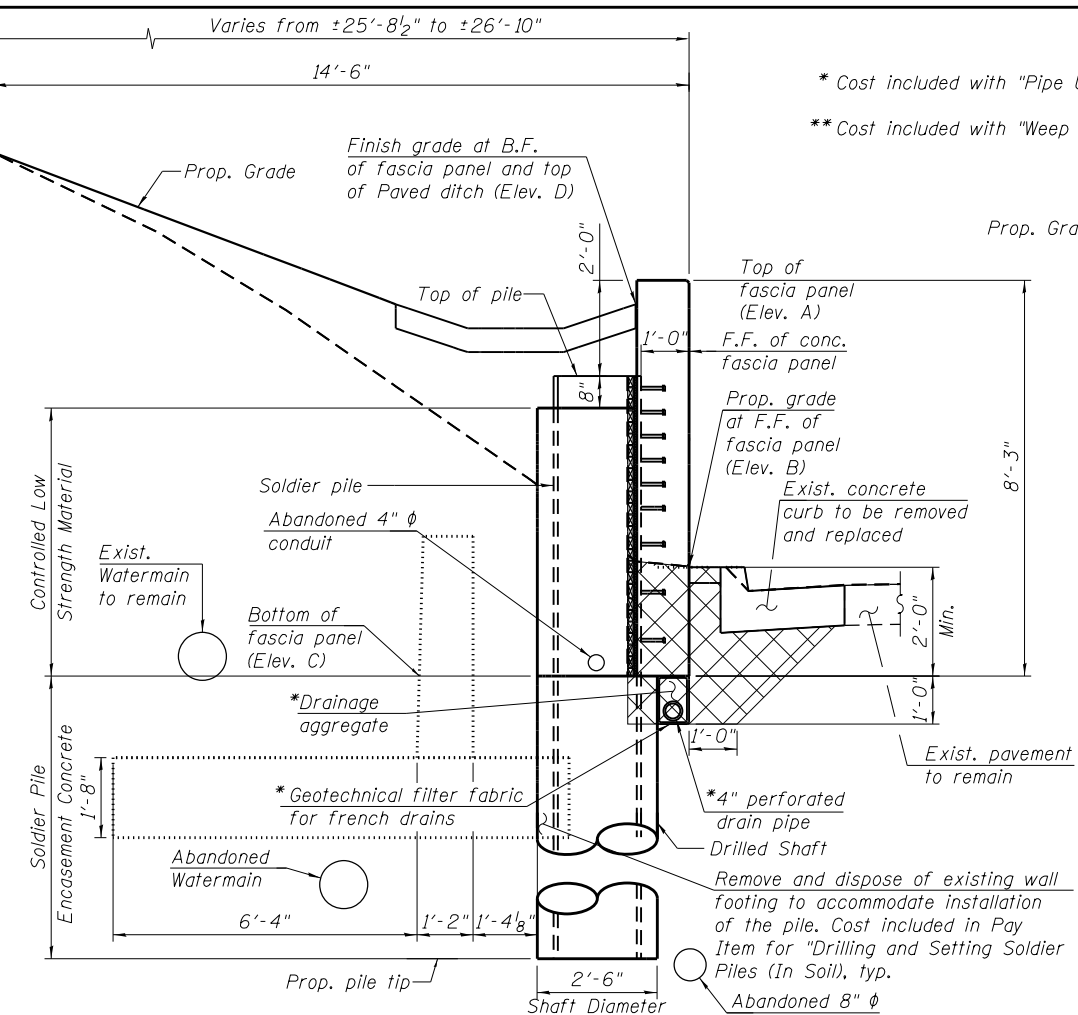
SHEET S-09 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	27
CONTRACT NO. 62C18				ILLINOIS FED. AID PROJECT



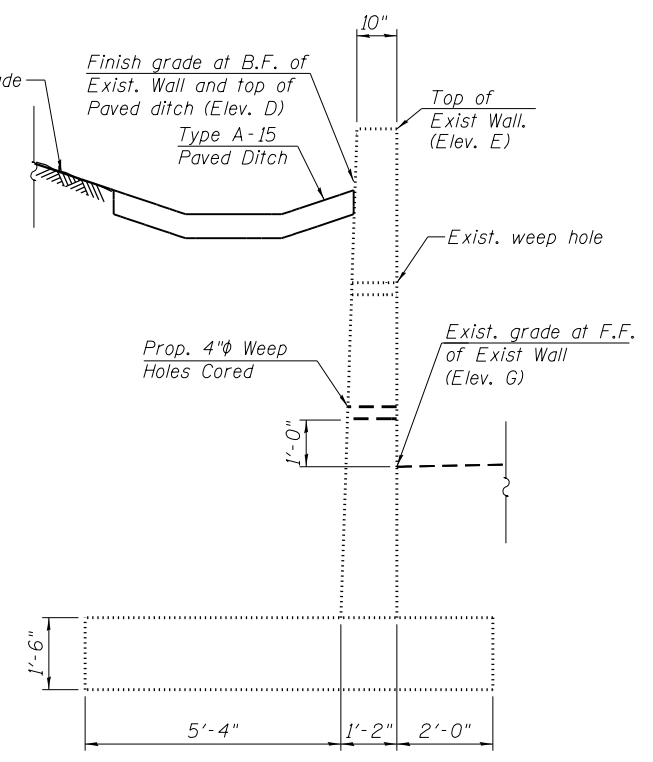
**STRUCTURAL EXCAVATION**

(Looking Upstation)  
 (From Sta. 1186+95.64 to Sta. 1188+75.64)  
 (From Sta. 1189+65.64 to Sta. 1191+21.39)



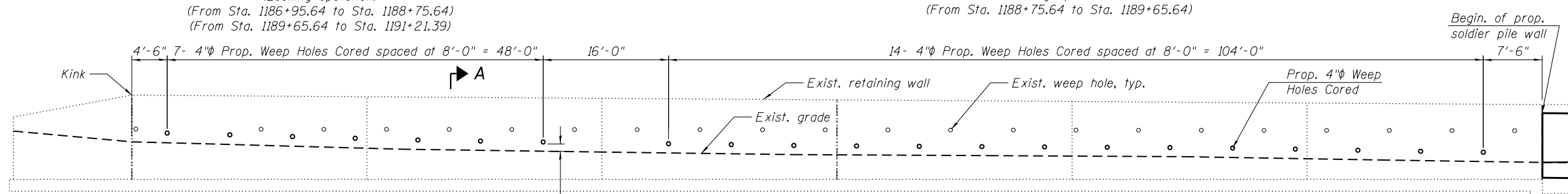
**STRUCTURAL EXCAVATION**

(Looking Upstation)  
 (From Sta. 1188+75.64 to Sta. 1189+65.64)



**SECTION A-A**

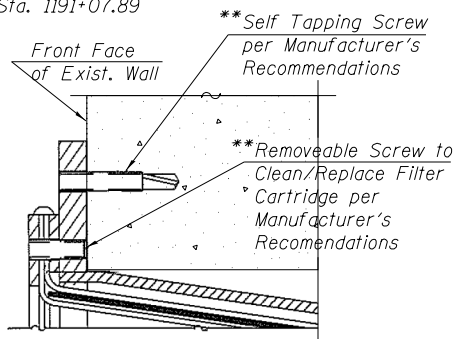
(Looking Upstation)  
 (From Sta. 1185+15.64 to Sta. 1186+95.64)



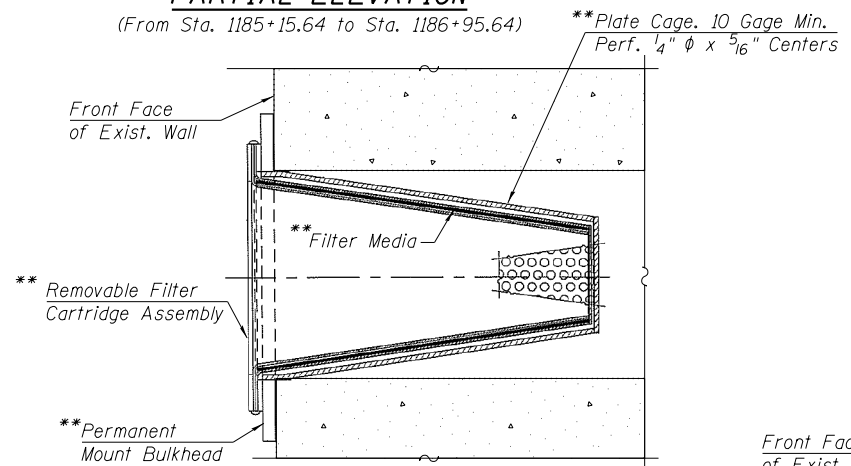
**PARTIAL ELEVATION**

(From Sta. 1185+15.64 to Sta. 1186+95.64)

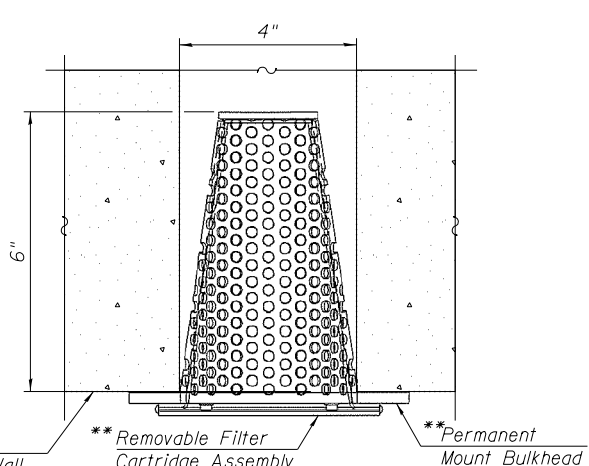
"A" : 6'-4" from Sta. 1186+95.64 to Sta. 1190+00.64  
 4'-10" from Sta. 1190+00.64 to Sta. 1191+21.39  
 "B" : 1'-4 1/8" at piles from Sta. 1186+95.64 to Sta. 1191+07.89  
 2'-4 1/2" at pile located at Sta. 1191+11.89  
 N/A at pile located at Sta. 1191+19.39



**WEEP HOLE ASSEMBLY MOUNTING DETAIL**



**SECTION THRU WEEP HOLE ASSEMBLY**



**WEEP HOLE ASSEMBLY PLAN VIEW**

**NOTE:**

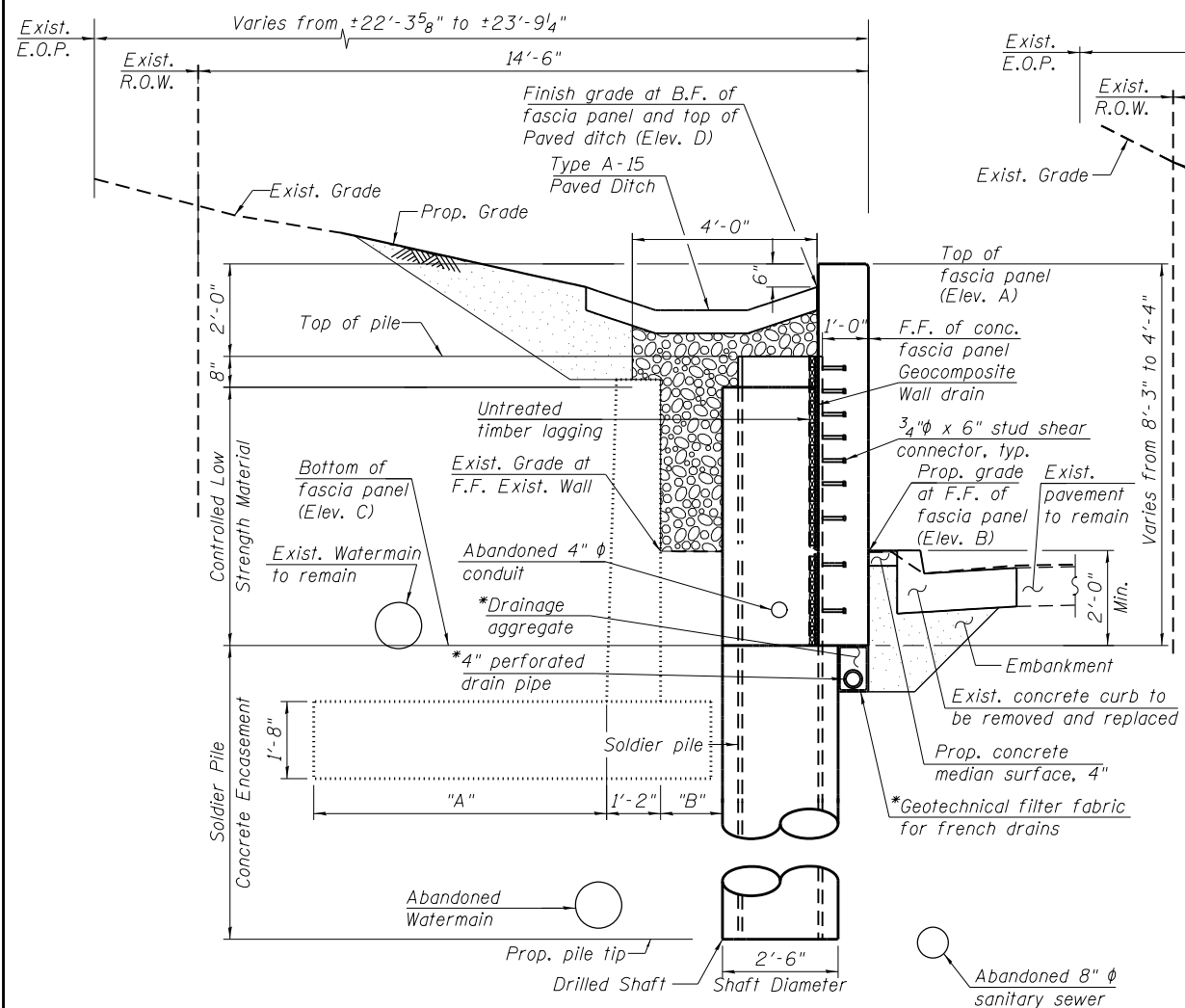
1. For Notes, see Sheet S-13.

**LEGEND**

- Concrete Removal
- Structure Excavation
- B.F. - Back Face
- F.F. - Front Face

FILE NAME = S-09 WallSecDet1.dgn

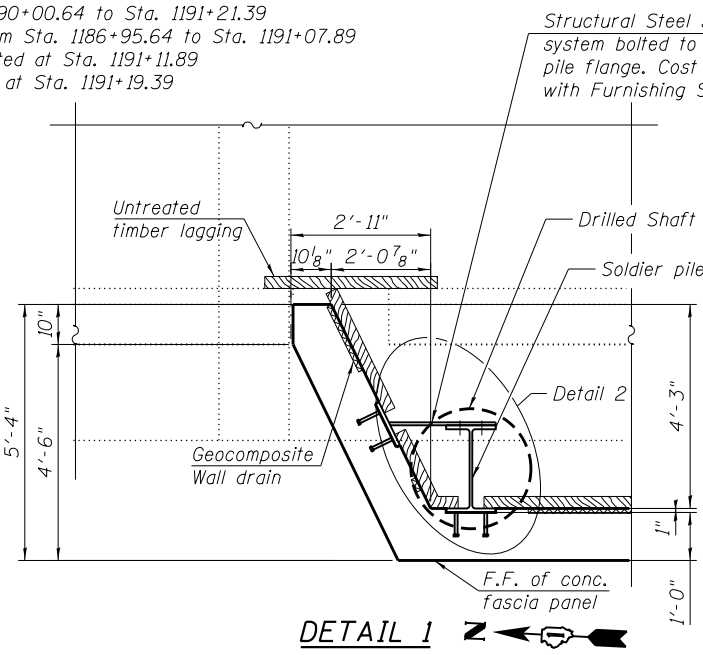
<b>HBM</b> ENGINEERING GROUP, LLC CONSULTING & DESIGN INSPECTION & RATING RESEARCH & TESTING 4415 WEST HARRISON ST. SUITE 231 HILLSIDE, IL 60162 PHONE: (708) 236-0900 FAX: (708) 236-0901	USER NAME = Ken.drabant	DESIGNED - KJD, FA	REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b> WALL CROSS SECTIONS AND DETAILS (SHEET 1 OF 4) <b>STRUCTURE NO. 022-2035</b> SHEET S-10 OF S-15 SHEETS	F.A.P. RTE. 870	SECTION 543R-1	COUNTY DUPAGE	TOTAL SHEETS 47	SHEET NO. 28
	PLOT SCALE =	CHECKED - MAI, MI	REVISED		CONTRACT NO. 62C18 ILLINOIS FED. AID PROJECT				
	PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED						
	CONTRACT NO. 62C18								



**TYPICAL CROSS SECTION**  
(Looking Upstation)

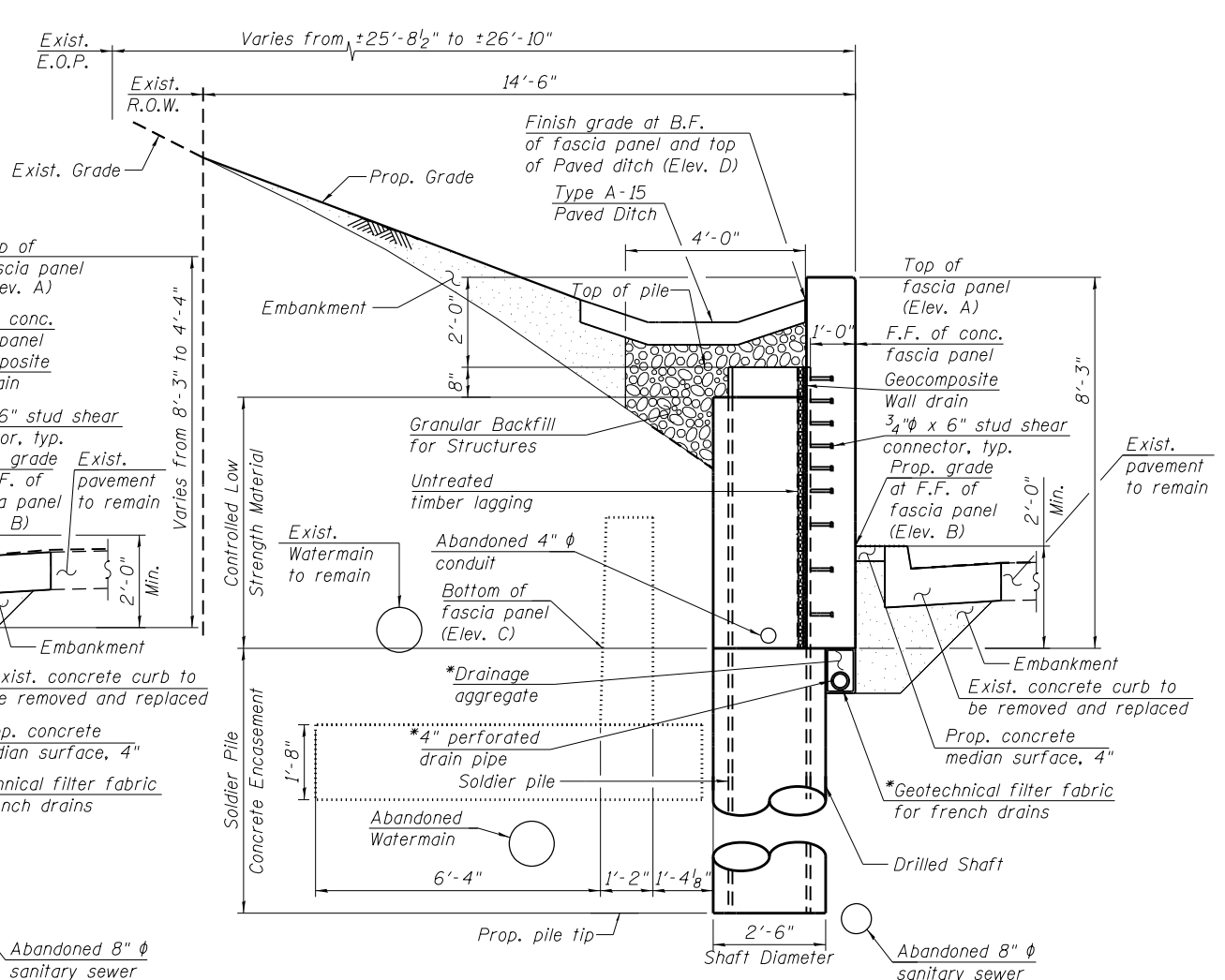
(From Sta. 1186+95.64 to Sta. 1188+75.64)  
(From Sta. 1189+65.64 to Sta. 1191+21.39)

"A" : 6'-4" from Sta. 1186+95.64 to Sta. 1190+00.64  
4'-10" from Sta. 1190+00.64 to Sta. 1191+21.39  
"B" : 1'-4 1/2" at piles from Sta. 1186+95.64 to Sta. 1191+07.89  
2'-4 1/2" at pile located at Sta. 1191+11.89  
N/A at pile located at Sta. 1191+19.39



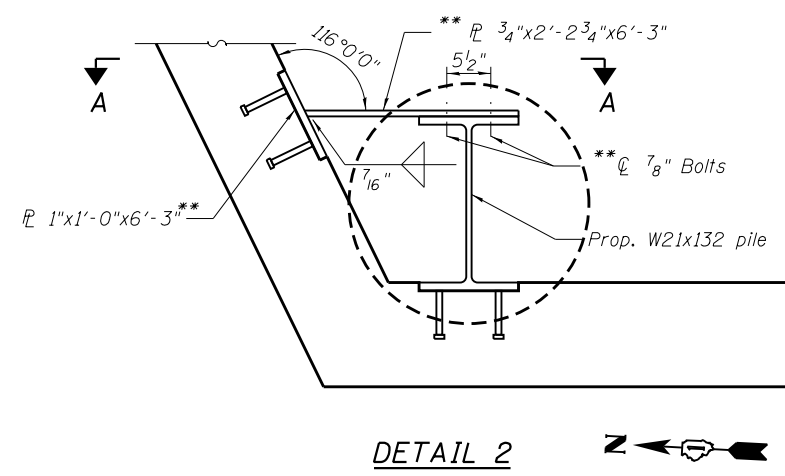
**DETAIL 1**

Structural Steel supporting system bolted to the soldier pile flange. Cost included with Furnishing Soldier Pile



**TYPICAL CROSS SECTION**  
(Looking Upstation)

(From Sta. 1188+75.64 to Sta. 1189+65.64)

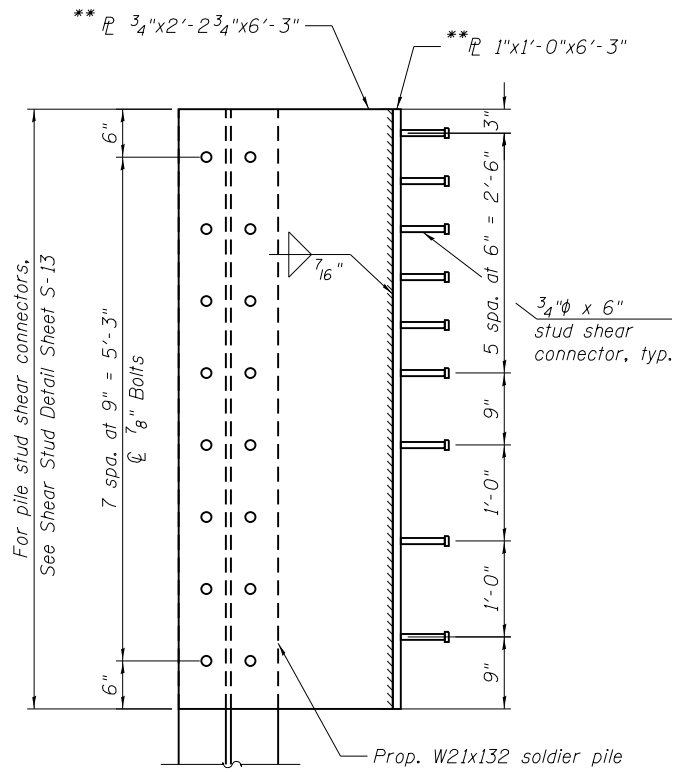


**DETAIL 2**

**BILL OF MATERIAL**

Item	Unit	Quantity
Structure Excavation	CU YD	125
Stud Shear Connectors	EACH	763
Untreated Timber Lagging	SQ FT	2,394
Geocomposite Wall Drain	SQ YD	266
Weep Holes Cored	EACH	21
Granular Backfill for Structures	CU YD	218
Pipe Underdrains for Structures, 4"	FOOT	429

\* Cost included with "Pipe Underdrains for Structures, 4"  
\*\* Cost included with Furnishing Soldier Piles (W Section)



**VIEW A-A**

Wall not shown for clarity

**NOTE:**

1. For Notes, see Sheet S-13.

**LEGEND**

- Concrete Structures
- Granular Backfill for Structures
- Embankment
- B.F. - Back Face
- F.F. - Front Face

FILE NAME = S-10 WallSecDet2.dgn

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DRAWN - LAB, FA  
CHECKED - MAI, MI  
DATE - 06/01/2017

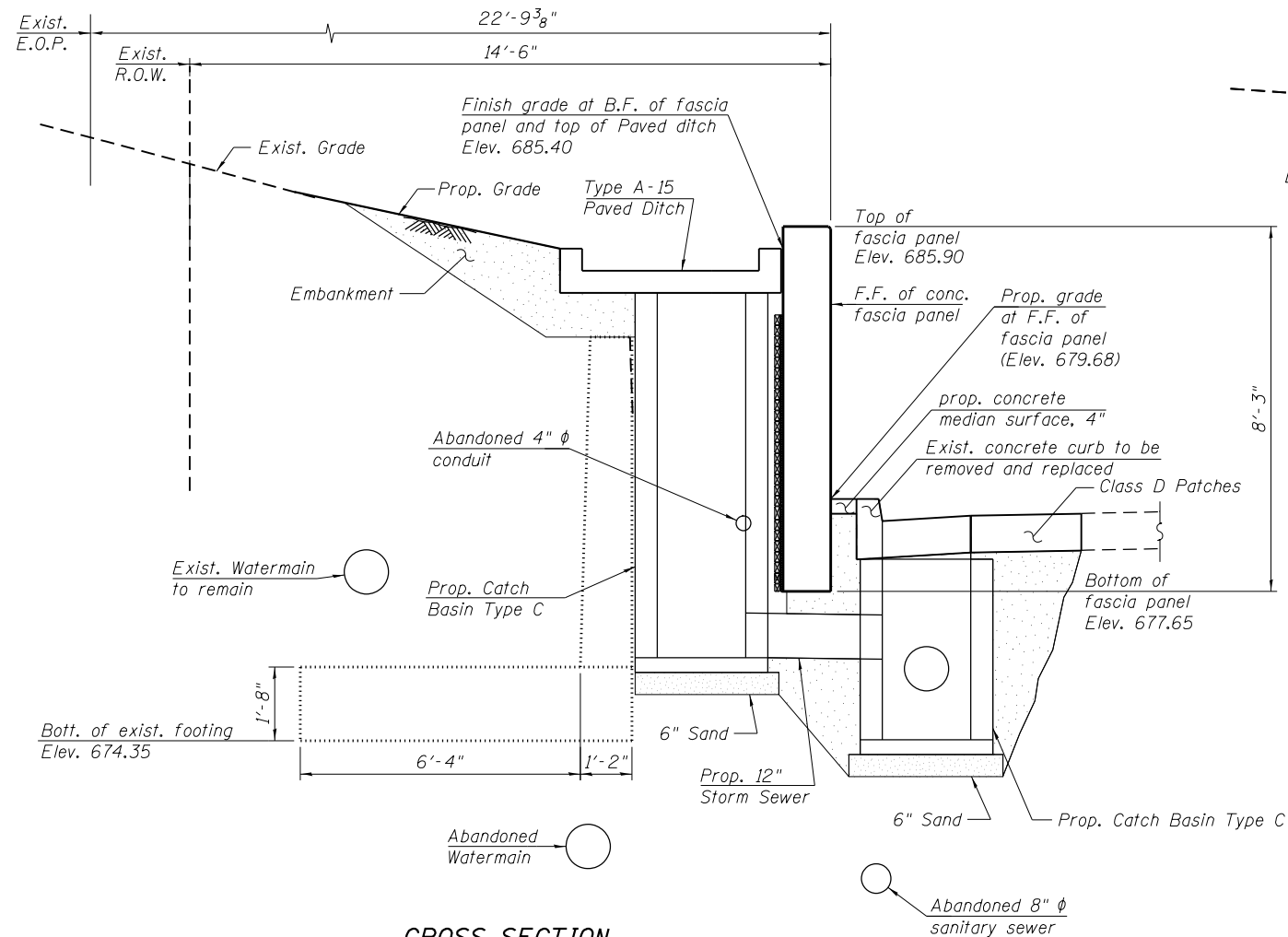
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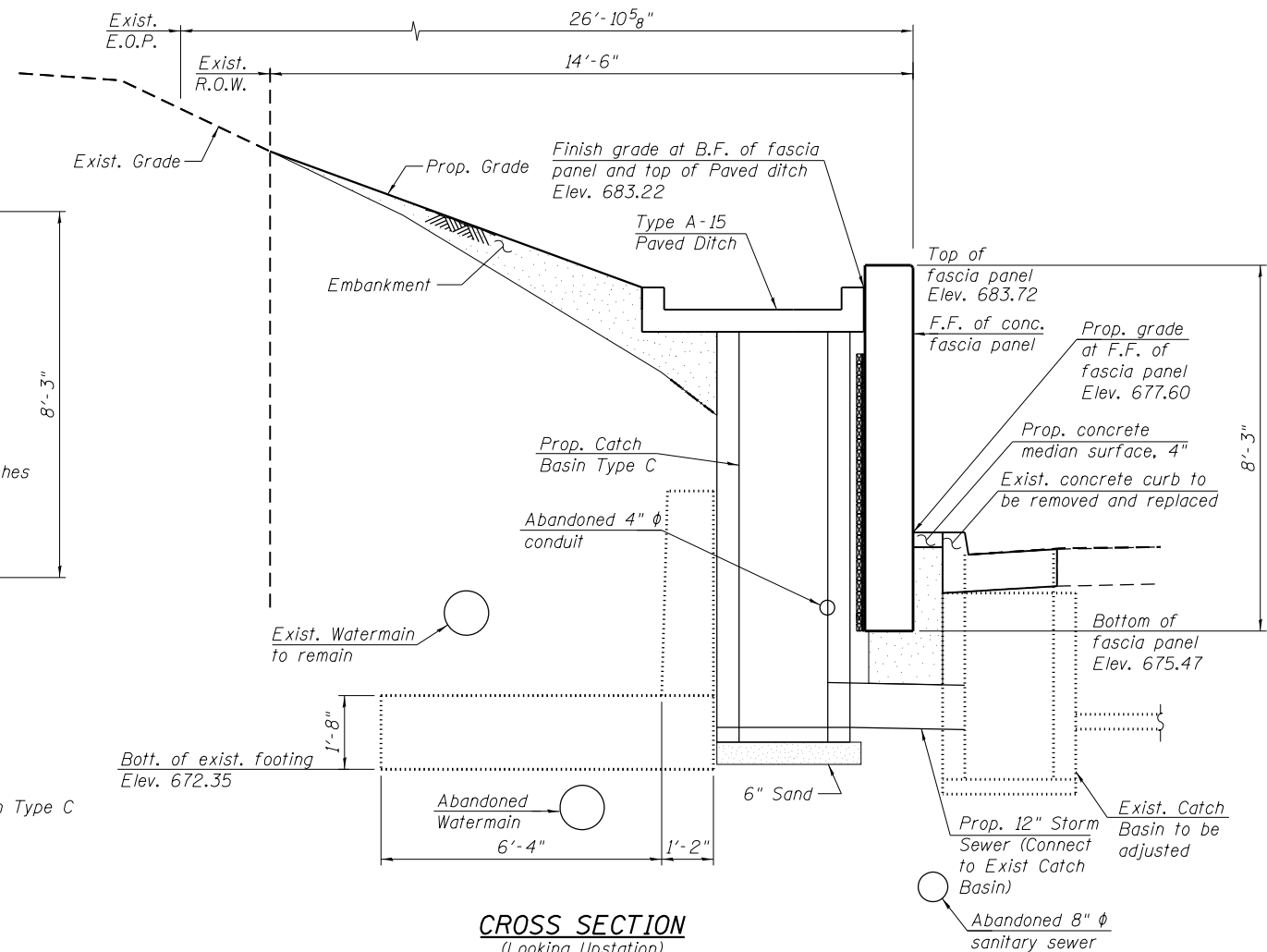
WALL CROSS SECTIONS AND DETAILS (SHEET 2 OF 4)  
STRUCTURE NO. 022-2035  
SHEET S-11 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	29

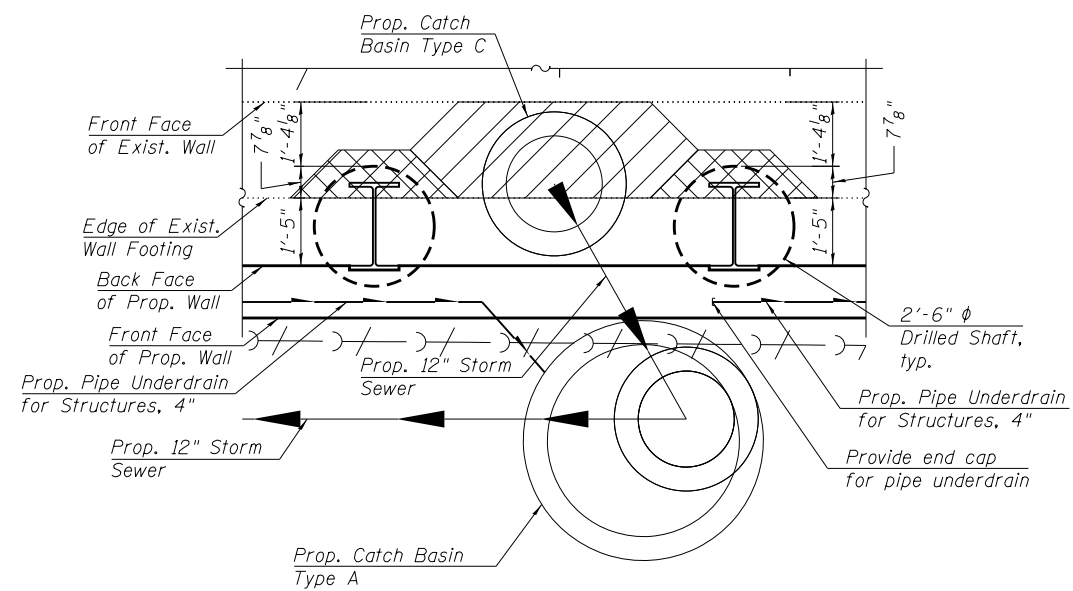
CONTRACT NO. 62C18  
ILLINOIS FED. AID PROJECT



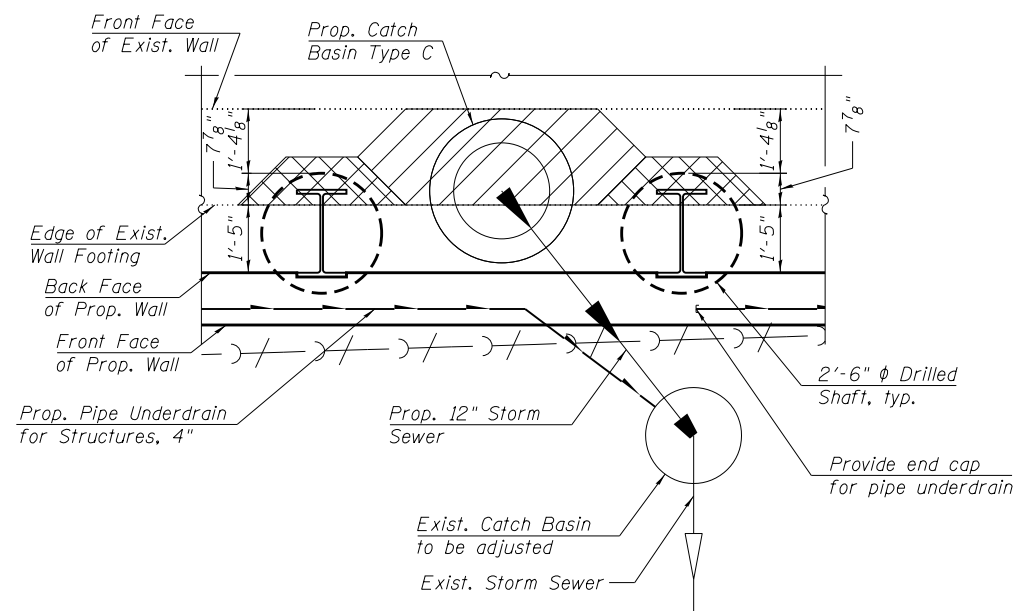
**CROSS SECTION**  
(Looking Upstation)  
(Sta. 1187+33.14)



**CROSS SECTION**  
(Looking Upstation)  
(Sta. 1189+50.64)



**PARTIAL PLAN**  
(Sta. 1187+33.14)



**PARTIAL PLAN**  
(Sta. 1189+50.64)

**NOTES:**

1. For wall Elevations Table, see Sheet S-02.
2. For additional Notes, see Sheet S-13.

**LEGEND**

- Concrete Removal
- Remove and Dispose of Existing Wall Footing
- Embankment

- B.F. - Back Face
- F.F. - Front Face

S-11 WallSecDet3.dgn

**HBM**  
ENGINEERING GROUP, LLC  
CONSULTING & DESIGN  
INSPECTION & TESTING  
RESEARCH & TESTING  
4415 WEST HARRISON ST.  
SUITE 231  
HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = Ken.drabant	DESIGNED - LAB, FA	REVISED
	DRAWN - LAB, FA	REVISED
PLOT SCALE =	CHECKED - MAI, MI	REVISED
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

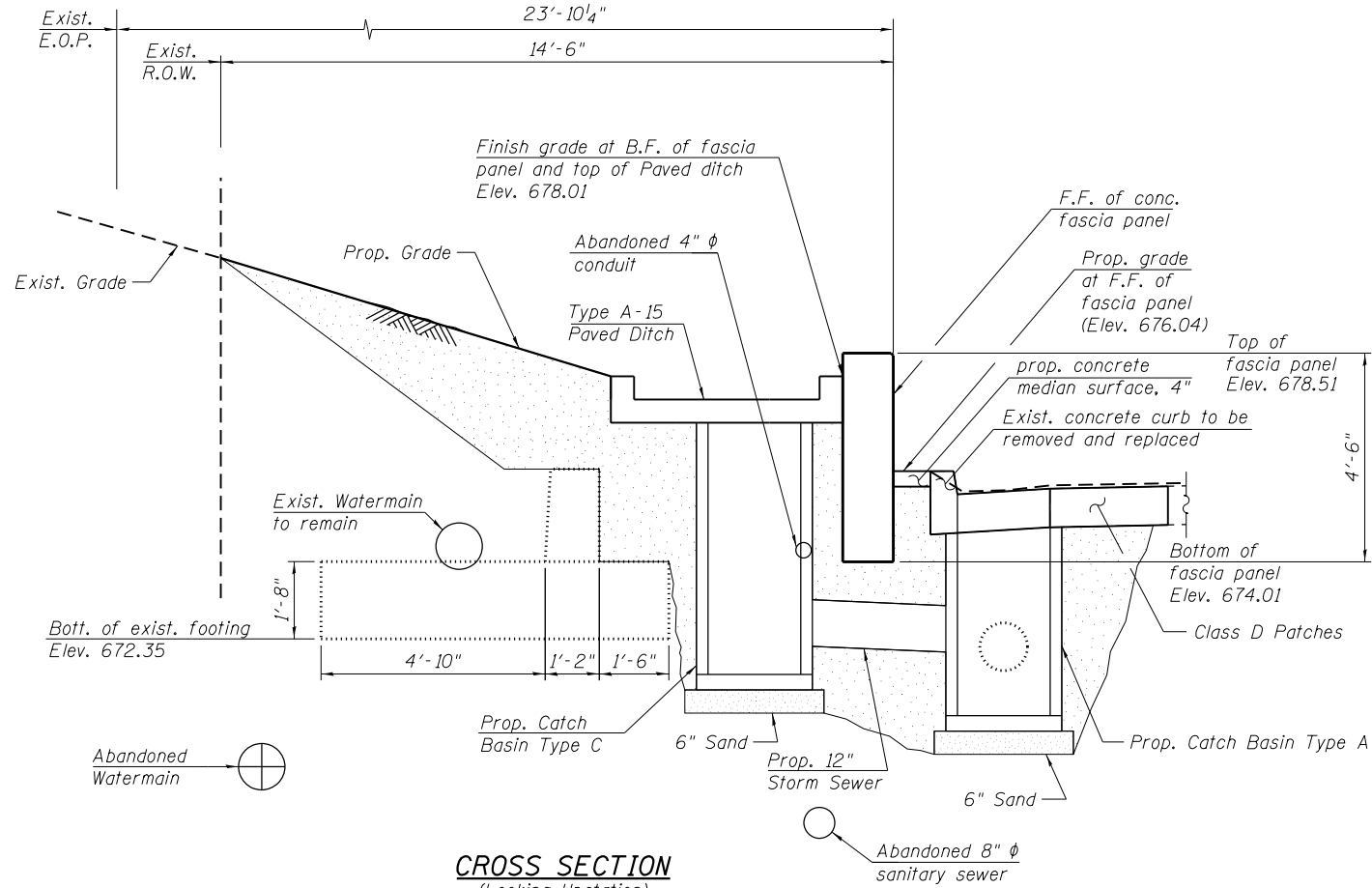
**WALL CROSS SECTIONS AND DETAILS (SHEET 3 OF 4)**  
**STRUCTURE NO. 022-2035**

SHEET S-12 OF S-15 SHEETS

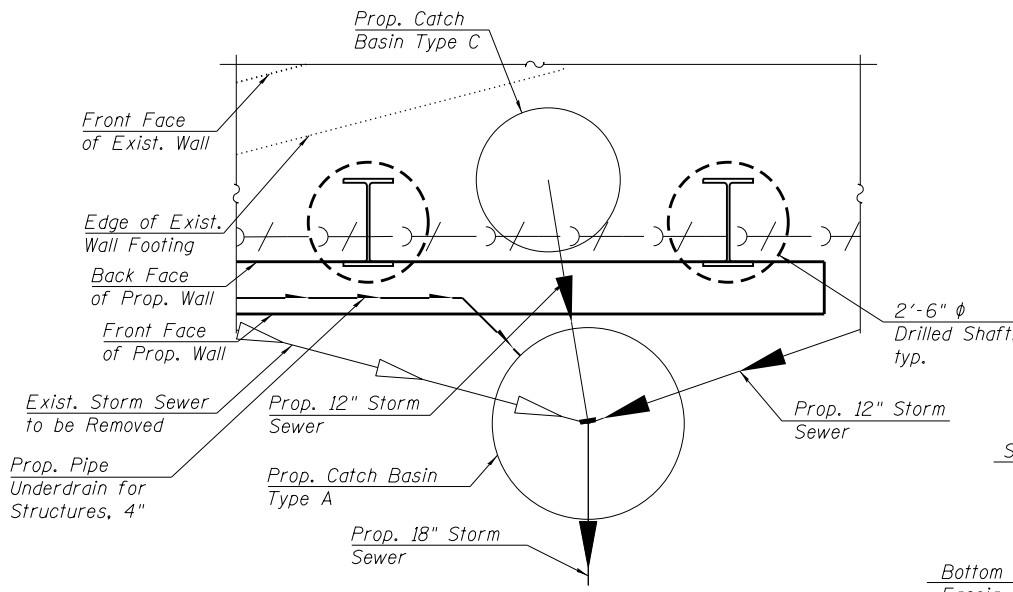
F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	30
CONTRACT NO. 62C18				

ILLINOIS FED. AID PROJECT

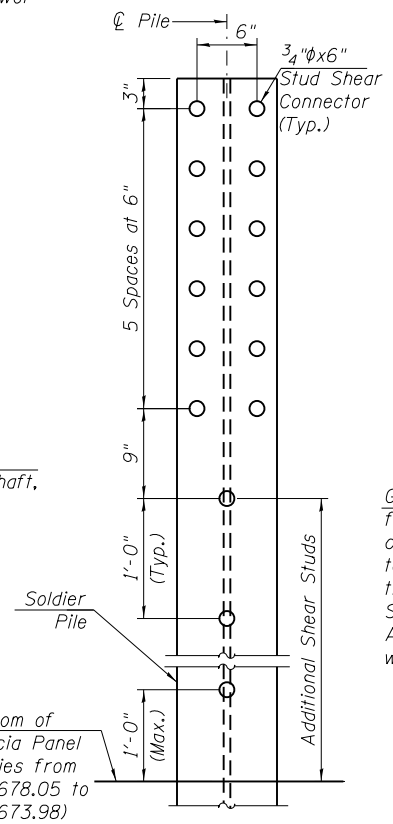
\* Cost included with "Pipe Underdrains for Structures, 4".  
 \*\* Geocomposite wall drain thickness shall not exceed 1 1/16".



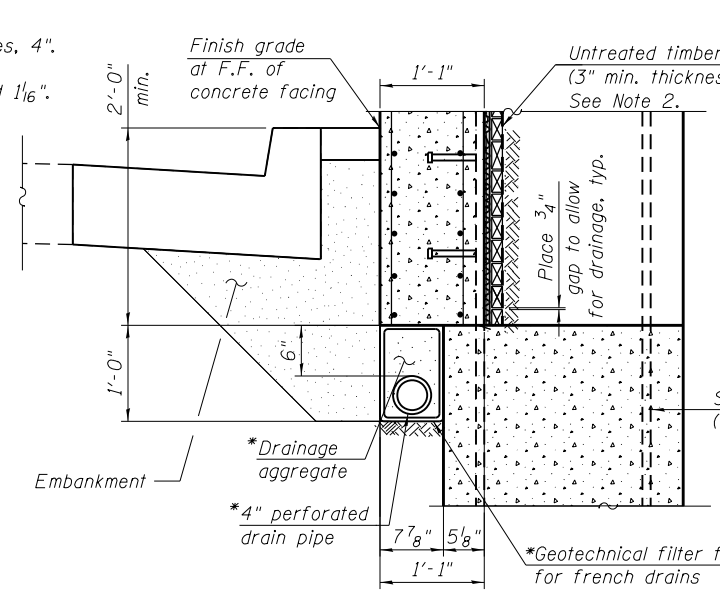
**CROSS SECTION**  
 (Looking Upstation)  
 (Sta 1191+15.64)



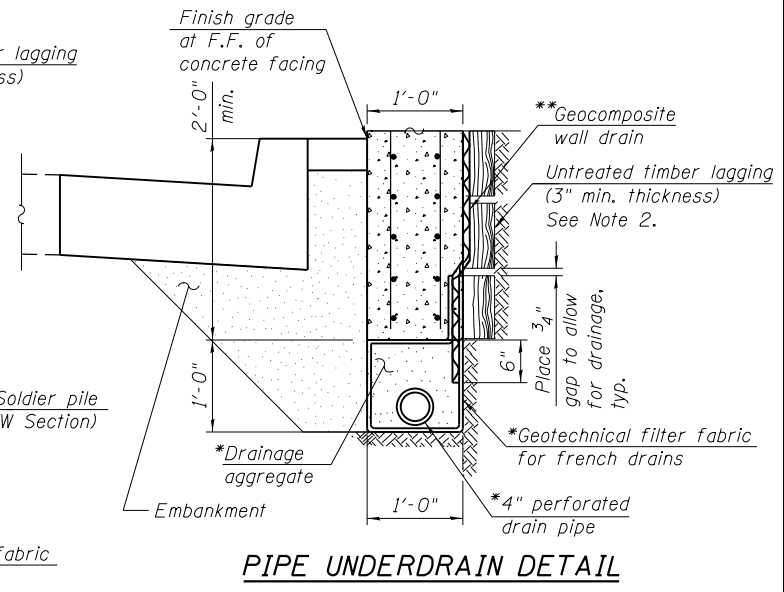
**PARTIAL PLAN**  
 (Sta 1191+15.64)



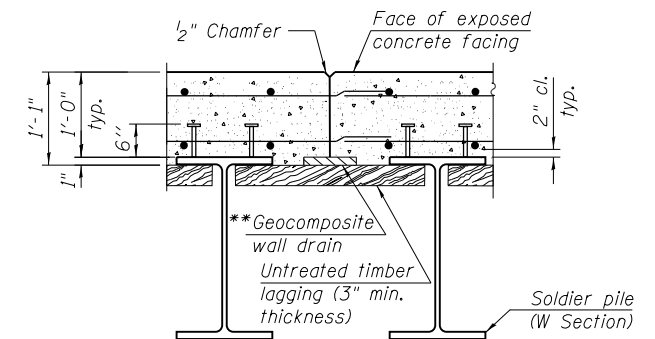
**SHEAR STUD DETAIL**



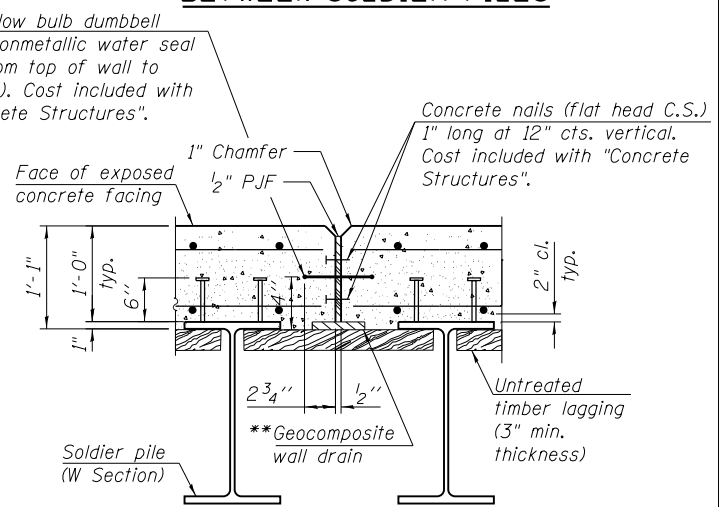
**PIPE UNDERDRAIN DETAIL AT SOLDIER PILE**



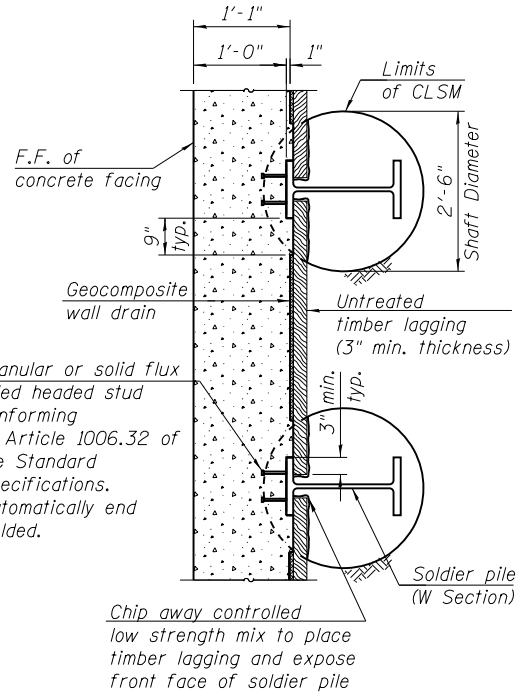
**PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES**



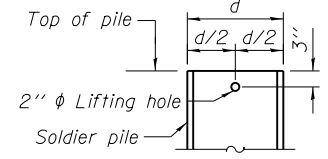
**CONSTRUCTION JOINT DETAILS**



**EXPANSION JOINT DETAILS**



**SECTION A-A**



**LIFTING HOLE DETAIL**

**LEGEND**

- Concrete Structures
- Embankment
- B.F. - Back Face
- F.F. - Front Face

**NOTES:**

1. Structure Excavation is measured 2'-0" from front face of wall to back of soldier pile timber lagging.
2. The Contractor is responsible for the design and performance of the lagging system, using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi, until the concrete facing is installed. The Contractor shall submit design calculations and details prepared by an Illinois Licensed Structural Engineer for approval by the Engineer.
3. The drain shall be placed behind the lagging with the pervious side toward the soil according to Section 591 of the Standard Specifications and shall be centered between the piles. The drain shall be installed in stages as the excavation proceeds downward making sure that drain splices as well as the top side edges are covered as required to protect the drain.
4. Stud shear connectors shall be 3/4" x 6" granular or solid flux filled headed studs, automatically end welded to the front flange of the soldier piles.
5. Drilling thru Abandoned 4" φ conduit and 8" φ Sanitary sewer will not be paid separately and shall be included with the Pay Item "Drilling and Setting Soldier Piles (in soil)".

FILE NAME = S-12-WallSecDet4.dgn

**HBM**  
 ENGINEERING GROUP, LLC  
 CONSULTING & DESIGN  
 INSPECTION & TESTING  
 RESEARCH & TESTING

4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME = Ken.drabant	DESIGNED - KJD, FA	REVISED
	DRAWN - KJD, FA	REVISED
PLOT SCALE =	CHECKED - MAI, MI	REVISED
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**WALL CROSS SECTIONS AND DETAILS (SHEET 4 OF 4)**  
**STRUCTURE NO. 022-2035**  
 SHEET S-13 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	31
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				



### BORING LOG RWB-01

wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

Client  
Project  
Location

WEI Job No.: 486-17-04  
Collins Engineers, Inc.  
IL Route 53 East Wall Replacement  
Woodridge, DuPage County, IL

Datum: NAVD 88  
Elevation: 680.93 ft  
North: 1854868.41 ft  
East: 1057481.80 ft  
Station: NA  
Offset: NA

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
679.4	18-inch thick ASPHALT -PAVEMENT-														
675.2	3-inch thick CRUSHED STONE -BASE COURSE-	1	X	1	4 5 5	4.50	13	652.9	Stiff, gray SILTY CLAY, trace gravel	11	X	11	5 7 7	NP	15
677.7	Hard, brown SILTY CLAY, trace gravel -FILL-	2	X	2	8 7 6	2.62	19	650.9	Boring terminated at 30.00 ft	12	X	12	4 4 5	1.39	15
	Very stiff, gray CLAY, trace gravel	5	X	3	4 5 7	2.62	18								
		10	X	4	3 5 5	2.46	19								
670.4	Very stiff, gray SILTY CLAY, trace gravel	5	X	5	5 6 7	2.87	17								
667.9	Stiff to very stiff, gray CLAY, trace gravel	15	X	6	6 6 7	2.21	18								
		20	X	7	3 4 5	2.13	19								
		25	X	8	3 7 7	2.38	19								
658.9	Gray SILTY LOAM	9	X	9	6 11 15	1.72	18								
657.9	Medium dense, gray, coarse SAND, trace gravel -Saturated-	10	X	10	7 10 8	NP	19								

#### GENERAL NOTES

Begin Drilling 08-07-2015 Complete Drilling 08-07-2015  
 Drilling Contractor Wang Testing Services Drill Rig CME 55  
 Driller K&R Logger A. Tomaras Checked by C. Marin  
 Drilling Method 2.25" IDA HSA; boring backfilled upon completion

#### WATER LEVEL DATA

While Drilling 22.00 ft  
 At Completion of Drilling 25.00 ft  
 Time After Drilling NA  
 Depth to Water NA

The stratification lines represent the approximate boundary between soil types. The actual transition may be gradual.



### BORING LOG RWB-02

wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

Client  
Project  
Location

WEI Job No.: 486-17-04  
Collins Engineers, Inc.  
IL Route 53 East Wall Replacement  
Woodridge, DuPage County, IL

Datum: NAVD 88  
Elevation: 679.90 ft  
North: 1854778.60 ft  
East: 1057482.30 ft  
Station: NA  
Offset: NA

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
679.4	18-inch thick ASPHALT -PAVEMENT-							654.4	Stiff to very stiff, gray SILTY CLAY, trace gravel						
675.2	3-inch thick CRUSHED STONE -BASE COURSE-	1	X	1	5 5 6	4.50	13								
676.7	Hard, brown CLAY LOAM, trace gravel -FILL-	2	X	2	3 3 10	1.50	16								
	Stiff, gray SILTY CLAY, trace gravel	5	X	3	5 6 7	3.28	20	648.2	Dense to very dense, gray, fine to medium SAND, trace gravel -Saturated-						
674.4	Very stiff, gray CLAY, trace gravel	10	X	4	4 6 7	2.87	17								
		15	X	5	4 4 6	2.62	17								
		20	X	6	3 4 5	2.13	19								
		25	X	7	3 4 8	2.79	18	638.2	Medium dense, gray SILTY LOAM, trace gravel -Saturated-						
660.0	Gray SILT -Saturated-	8	X	8	3 4 6	2.54	18								
659.4	Medium dense to dense, brown to gray SANDY GRAVEL -Saturated-	9	X	9	2 4 11	NP	7	634.9	Boring terminated at 45.00 ft						
		10	X	10	14 15 13	NP	15								

#### GENERAL NOTES

Begin Drilling 08-07-2015 Complete Drilling 08-07-2015  
 Drilling Contractor Wang Testing Services Drill Rig CME 55  
 Driller K&R Logger A. Tomaras Checked by C. Marin  
 Drilling Method 2.25" IDA HSA; boring backfilled upon completion

#### WATER LEVEL DATA

While Drilling 19.90 ft  
 At Completion of Drilling 30.00 ft  
 Time After Drilling NA  
 Depth to Water NA

The stratification lines represent the approximate boundary between soil types. The actual transition may be gradual.



USER NAME = Ken.drabant  
 DESIGNED - KJD  
 DRAWN - KJD  
 CHECKED - MAI, MI  
 DATE - 06/01/2017

REVISOR  
 REVISION  
 REVISION  
 REVISION

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 1 OF 2)  
STRUCTURE NO. 022-2035

SHEET S-14 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	32
CONTRACT NO. 62C18				





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 1145 N Main Street  
 Lombard, IL 60148  
 Telephone: 630 953-9928  
 Fax: 630 953-9938

### BORING LOG RWB-03

**WEI Job No.: 486-17-04**  
**Client: Collins Engineers, Inc.**  
**Project: IL Route 53 East Wall Replacement**  
**Location: Woodridge, DuPage County, IL**

Datum: NAVD 88  
 Elevation: 678.72 ft  
 North: 1854702.36 ft  
 East: 1057489.78 ft  
 Station: NA  
 Offset: NA

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	
		18-inch thick ASPHALT --PAVEMENT--								653.2	Stiff, gray SILTY CLAY LOAM, trace gravel --Wet sand layer--							
	677.2	3-inch thick, gray CRUSHED STONE --BASE COURSE--			1	3 6 7	4.02 S	14						11	3 3 6	1.25 P	13	
	675.5	Hard, brown SILTY CLAY LOAM, trace gravel --FILL--			2	4 5 6	3.85 B	19		650.7	Dense, gray DOLOSTONE fragments			12	4 36 28	NP	3	
		Very stiff, gray CLAY, trace gravel	5							648.7	Boring terminated at 30.00 ft	30						
					3	3 4 6	3.44 B	17										
	670.7	Very stiff, gray SILTY CLAY, trace gravel	10		4	6 7 7	2.21 B	13										
	668.2	Stiff to very stiff, gray CLAY, trace gravel			5	3 4 5	2.30 B	19										
			15		6	3 4 5	1.31 B	20										
		--L <sub>c</sub> (%)=31, P <sub>L</sub> (%)=17-- --%Gravel=0.8-- --%Sand=3.5-- --%Silt=65.6-- --%Clay=30.0-- --A-6(13)--			7	3 4 4	1.07 B	20										
			20		8	3 3 4	1.48 B	20										
					9	3 3 5	1.39 B	20										
			25		10	3 4 5	1.89 B	20										

**GENERAL NOTES**

Begin Drilling **08-07-2015** Complete Drilling **08-07-2015**  
 Drilling Contractor **Wang Testing Services** Drill Rig **CME 55**  
 Driller **K&R** Logger **A. Tomaras** Checked by **C. Marin**  
 Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

**WATER LEVEL DATA**

While Drilling **26.50 ft**  
 At Completion of Drilling **28.50 ft**  
 Time After Drilling **NA**  
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



USER NAME = Ken.drabant  
 DESIGNED - KJD  
 DRAWN - KJD  
 CHECKED - MAI, MI  
 DATE - 06/01/2017

REVISOR  
 REVISION  
 REVISION  
 REVISION

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BORING LOGS (SHEET 2 OF 2)  
 STRUCTURE NO. 022-2035**

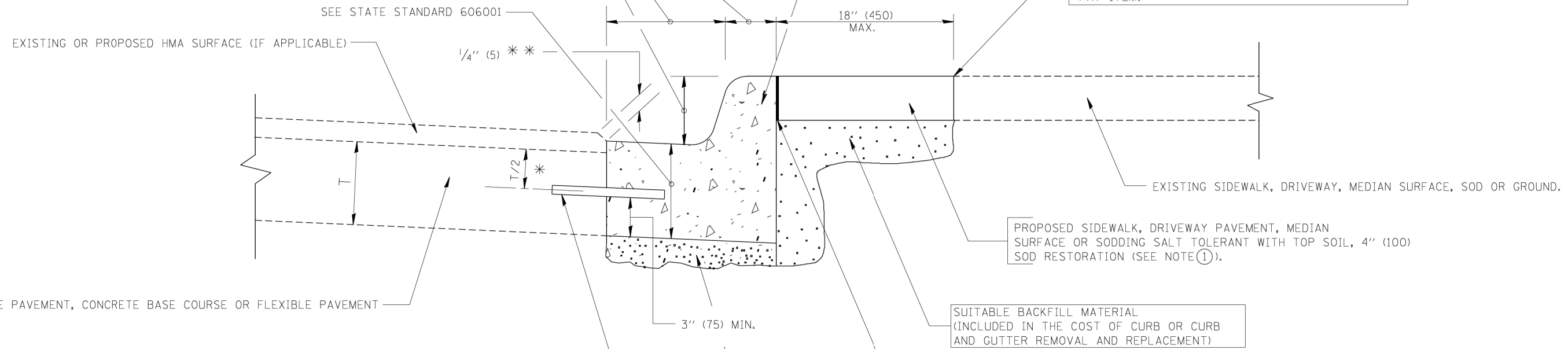
SHEET S-15 OF S-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DUPAGE	47	33
CONTRACT NO. 62C18				
ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.



\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY. SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

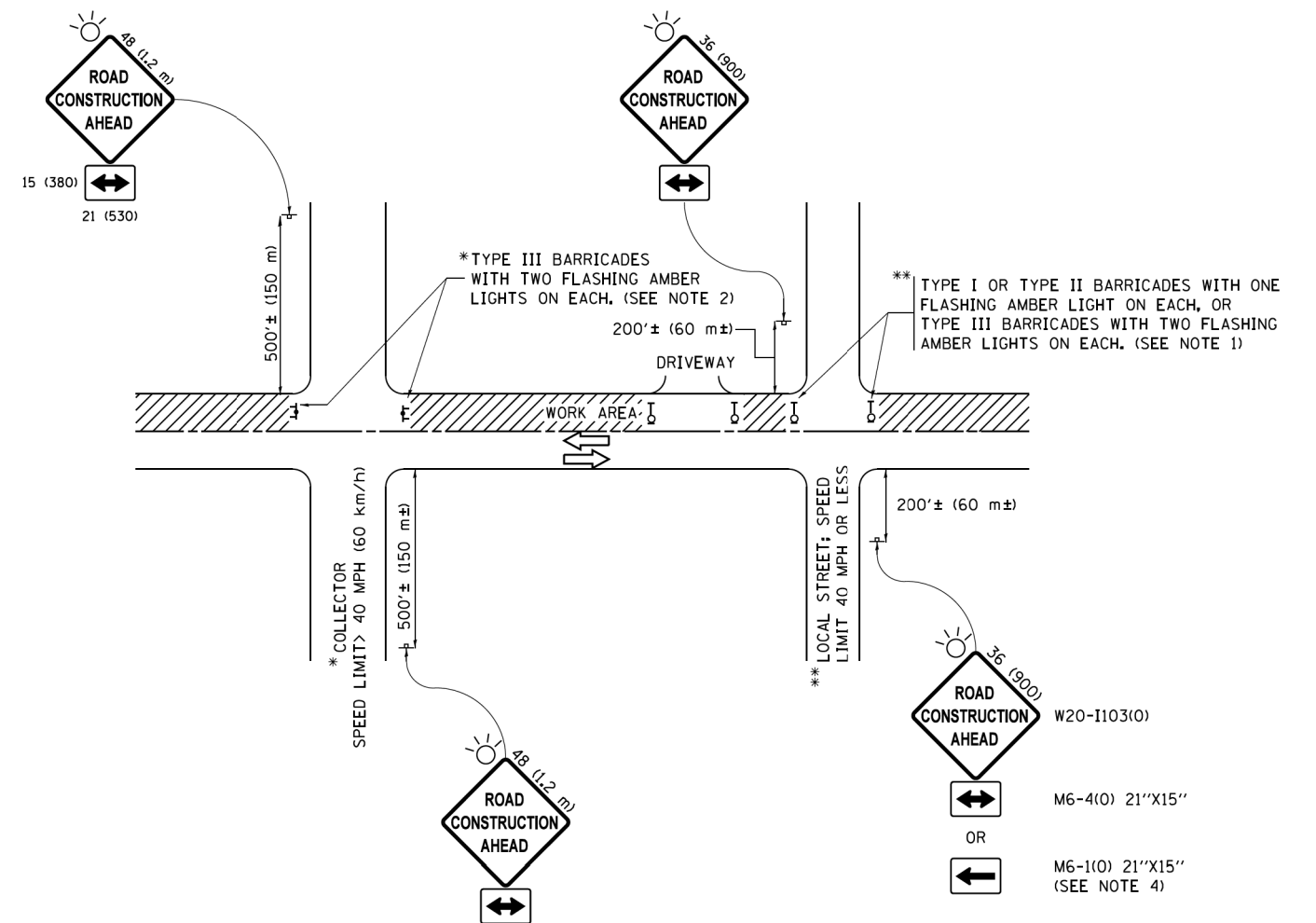
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\p\work\p\dot\drivakosgn\d0108315\bc24.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	REVISED - M. GOMEZ 01-22-01			870	543R-1	DU PAGE	47	34
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. BORO 12-15-09				<b>BD600-06 (BD-24)</b>		CONTRACT NO. 62C18		
PLOT DATE = 12/15/2009	DATE - 03-11-94					SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.

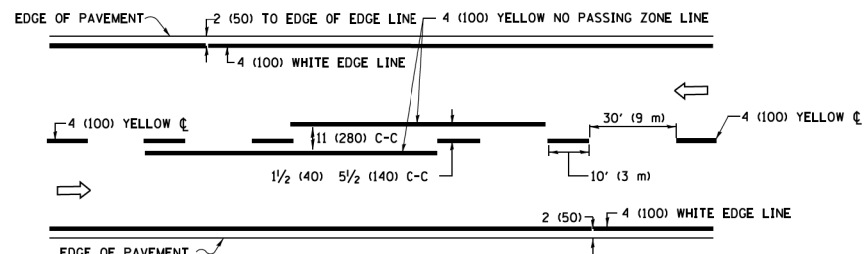


**NOTES:**

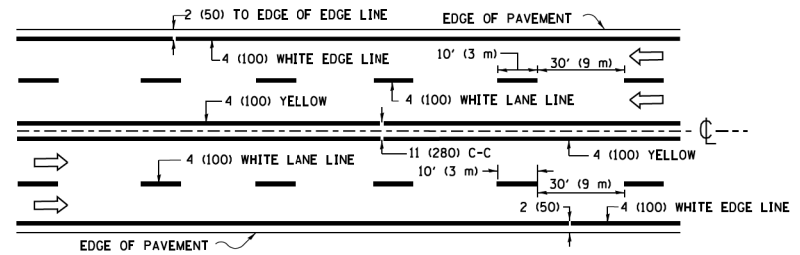
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

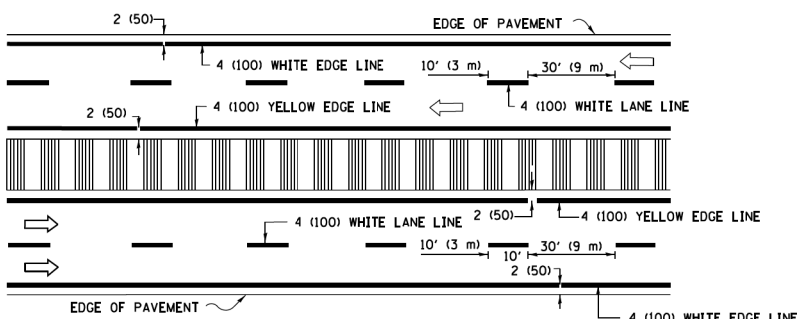
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw1\11084EBID\INTEG\illinois.gov\FWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\CADD\cadd\CADsheets\ct10.dgn	DRAWN	REVISED - T. RAMMACHER 01-06-00	870			543R-1	DU PAGE	47	35	
PLOT SCALE = 50,000' / 1" =	CHECKED -	REVISED - A. SCHUETZE 07-01-13	<b>TC-10</b>			<b>CONTRACT NO. 62C18</b>				
Default	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16	SCALE: NONE			SHEET 1 OF 1 SHEETS STA. TO STA.				
						ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

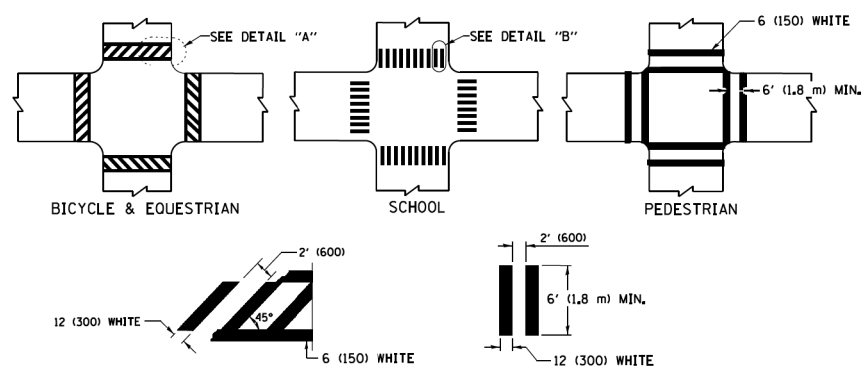


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

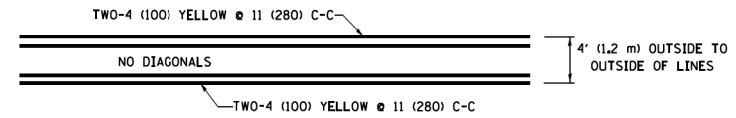


**DETAIL "A"**

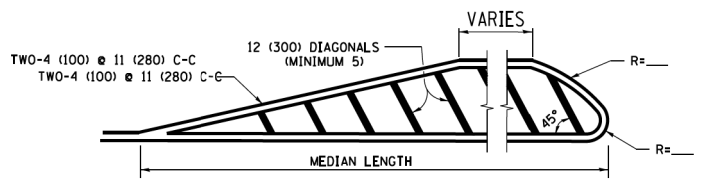
**DETAIL "B"**

**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



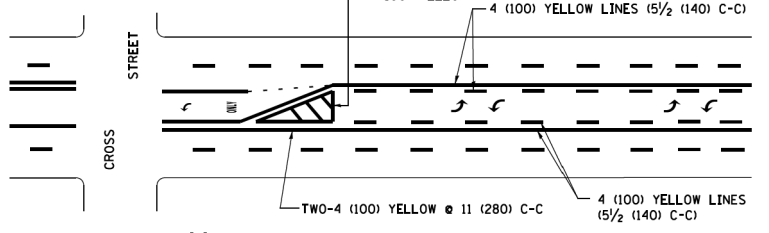
**4' (1.2 m) WIDE MEDIANS ONLY**



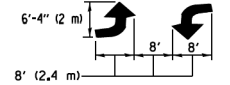
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

**MEDIANS OVER 4' (1.2 m) WIDE**

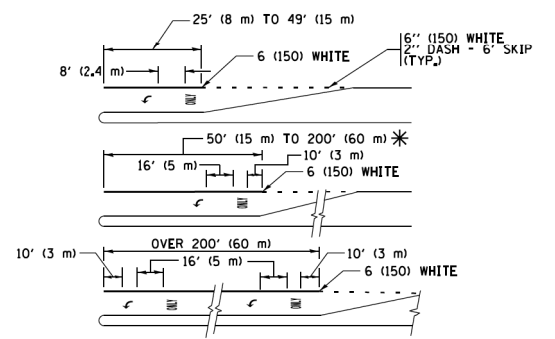


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

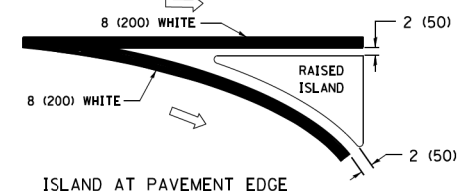
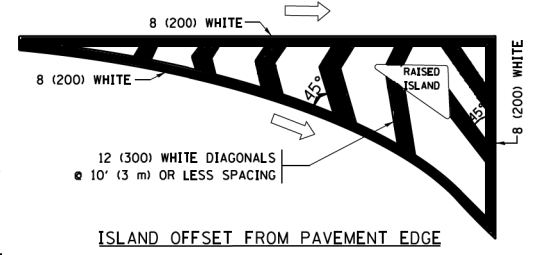


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

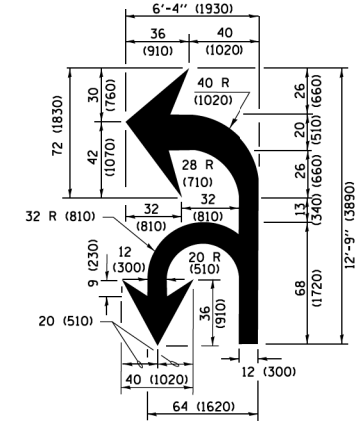
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL LEFT (OR RIGHT) TURN LANE**

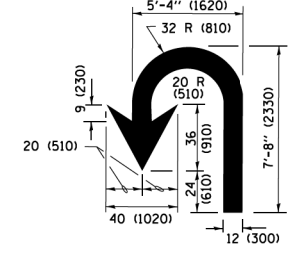
**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

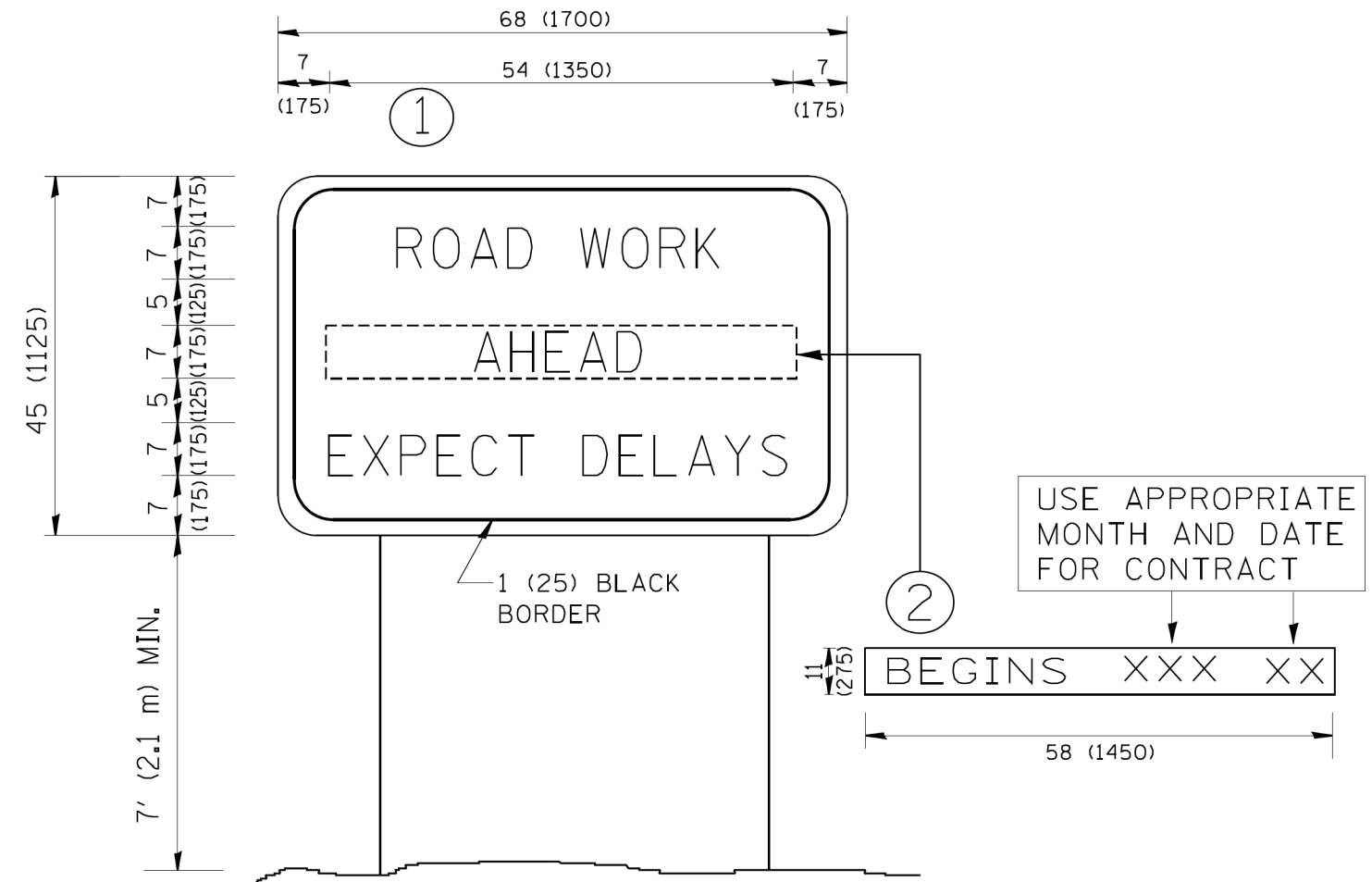
\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = geglanoht	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

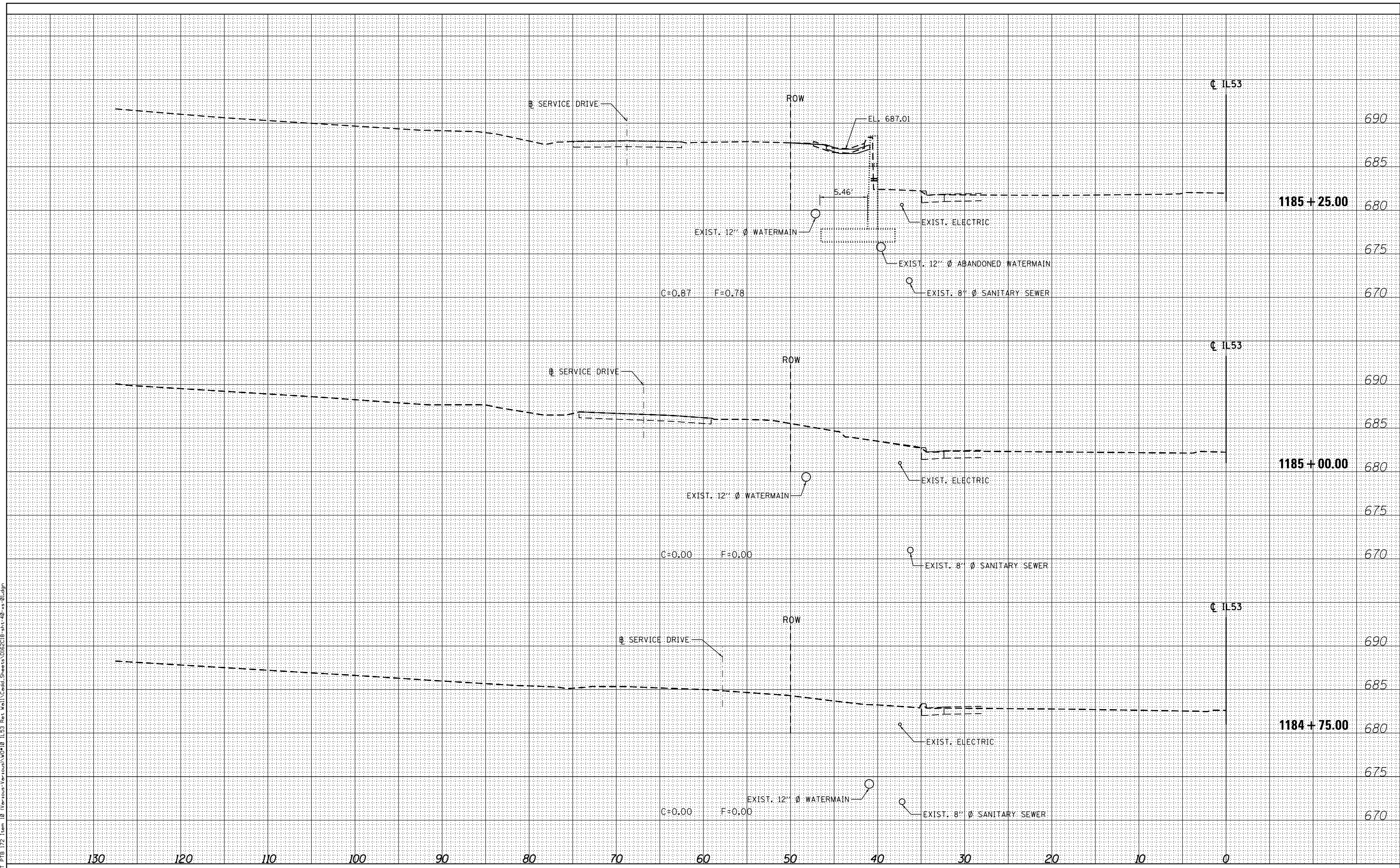
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-22			DU PAGE	CONTRACT NO. 62C18
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINISH	
NO.	

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 ENGINEERING GROUP, LLC  
 CONSULTING & DESIGN  
 INSPECTION & RATING  
 RESEARCH & TESTING

4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME	= Ken.drabant
DESIGNED	- DA
DRAWN	- EAH
CHECKED	- JMG
DATE	- 06/01/2017
PLOT SCALE	= 10x0.0000 '1' = 1"
PLOT DATE	= 6/1/2017

DESIGNED	- DA
DRAWN	- EAH
CHECKED	- JMG
DATE	- 06/01/2017

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS**

SCALE: \*SCALE\* SHEET 1 OF 10 SHEETS STA. 1184+75.00 TO STA. 1185+25.00

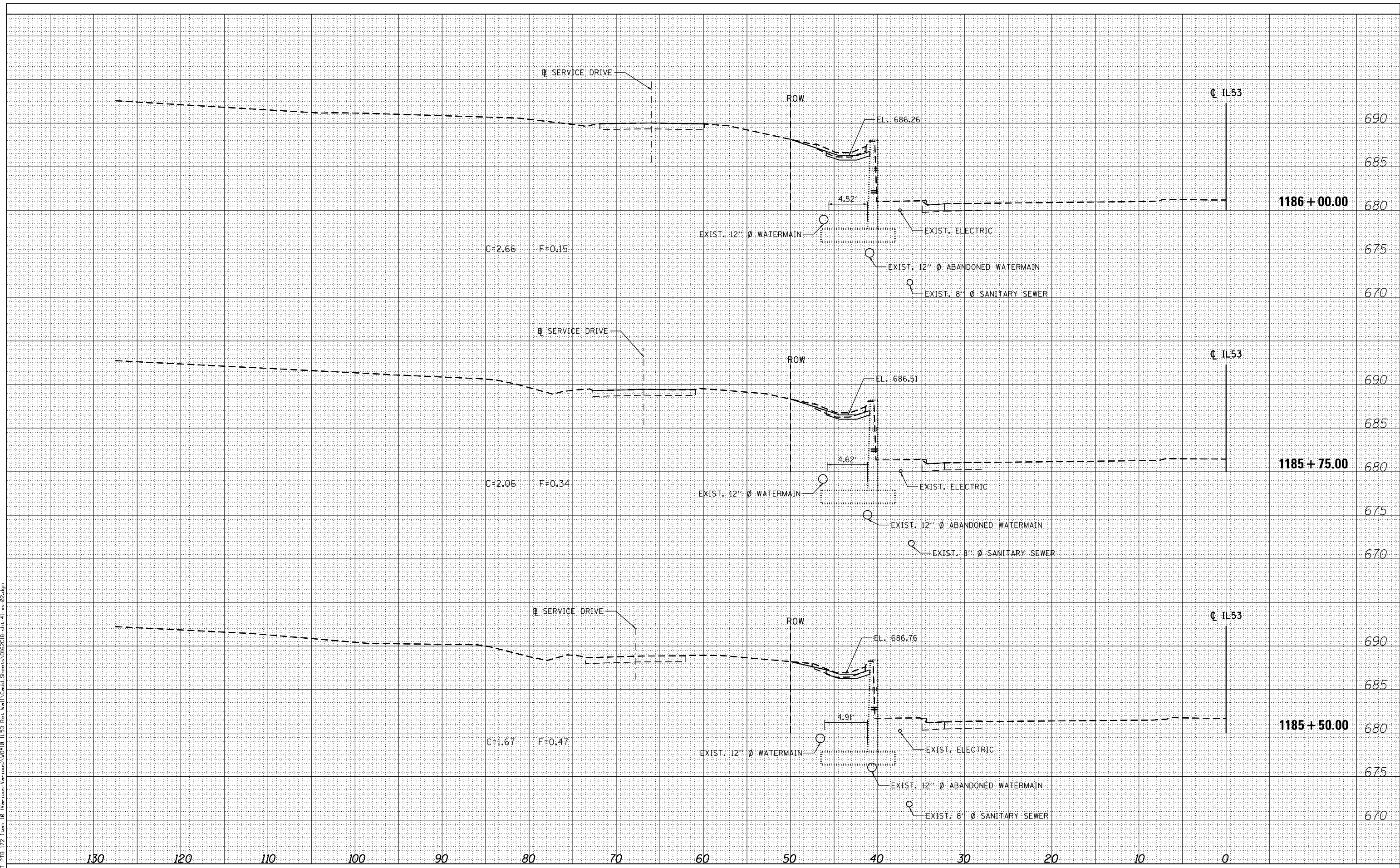
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870	543R-1	DU PAGE	47	38
				CONTRACT NO. 62C18
ILLINOIS				

BY	DATE
NO.	
FINISH SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

BY	DATE
NO.	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

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4415 WEST HARRISON ST.  
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 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME = Ken.draabert	DESIGNED - DA	REVISED -
PLOT SCALE = 10.0000' / 1"	DRAWN - EAH	REVISED -
PLOT DATE = 6/1/2017	CHECKED - JMG	REVISED -
	DATE - 06/01/2017	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

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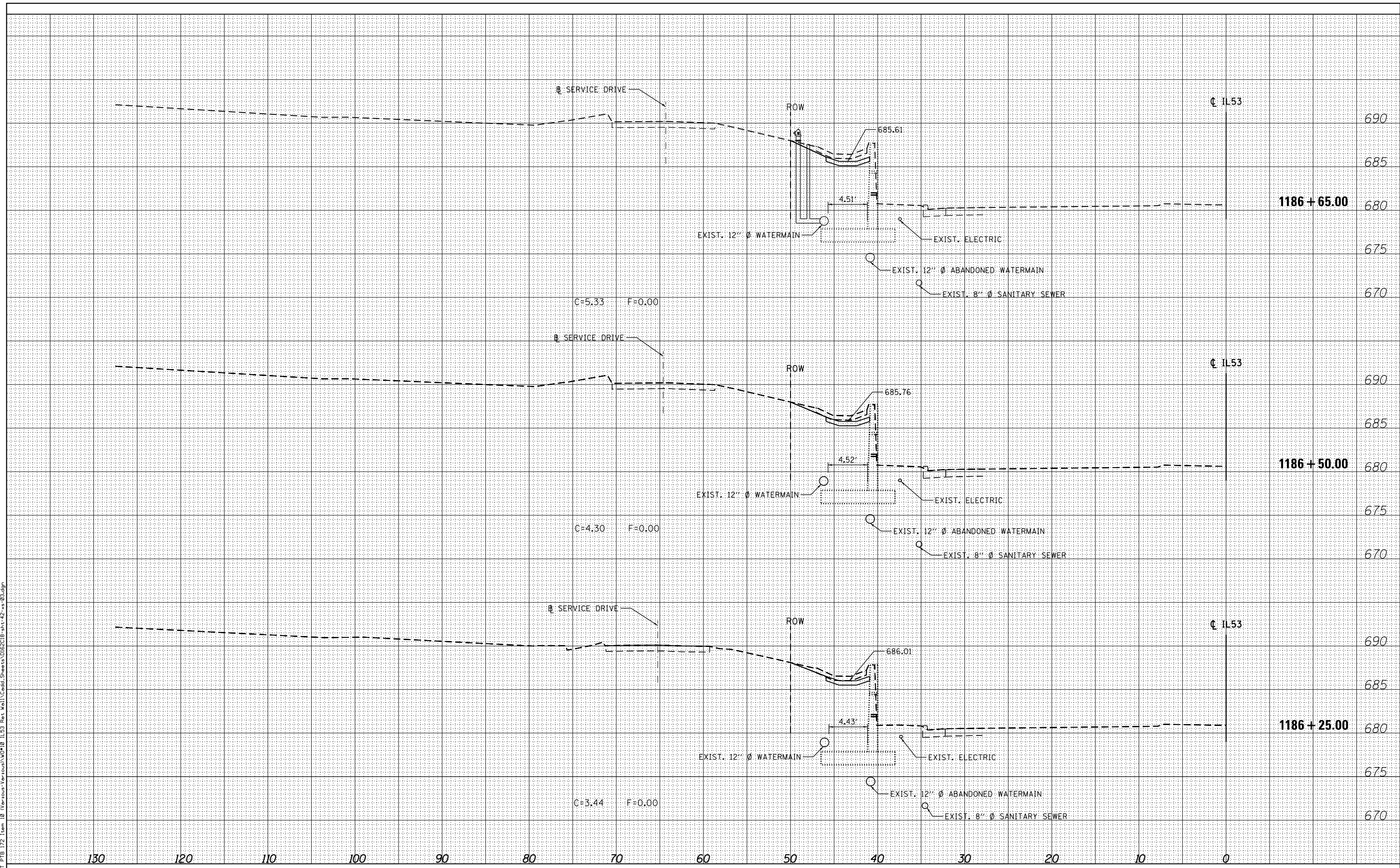
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ILLINOIS

BY	DATE
SURVEYED	
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TEMPLATE	
AREAS CHECKED	
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BY	DATE
SURVEYED	
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 4415 WEST HARRISON ST.  
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 PHONE: (708) 236-0900  
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USER NAME =	Kendrabart
DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017
REVISIONS	
REVISION	
REVISION	
REVISION	
REVISION	

DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017

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CROSS SECTIONS

SCALE: \*SCALE\* SHEET 3 OF 10 SHEETS STA. 1186+25.00 TO STA. 1186+65.00

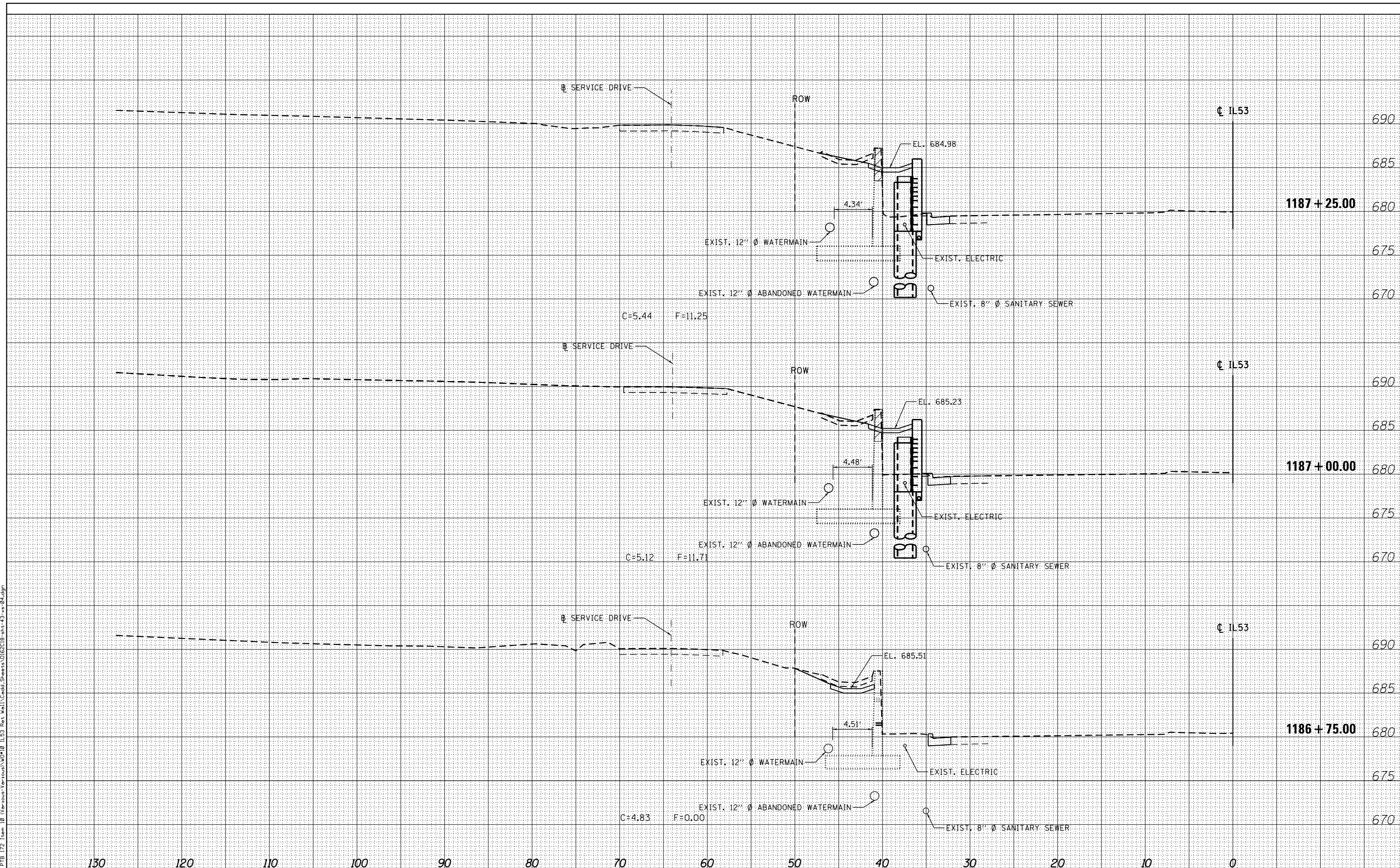
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CONTRACT NO. 62C18				
ILLINOIS				



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AREAS	
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4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME = Ken.drabant	DESIGNED - DA	REVISED -
PLOT SCALE = 10x0.0000 '1' = 1"	DRAWN - EAH	REVISED -
PLOT DATE = 6/1/2017	CHECKED - JMG	REVISED -
	DATE - 06/01/2017	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

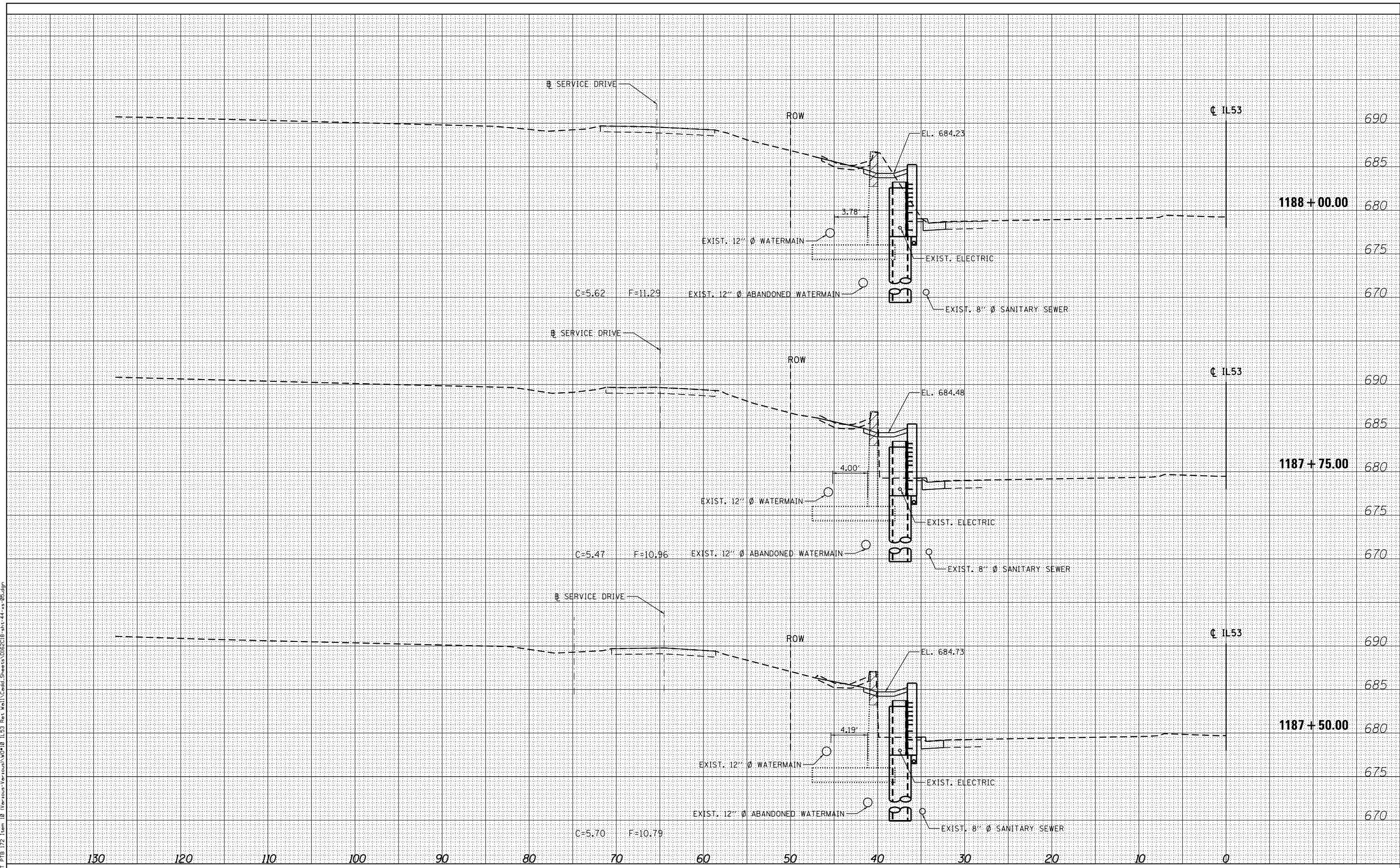
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C18				ILLINOIS

BY	DATE
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4415 WEST HARRISON ST.  
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USER NAME =	Kendrabant
DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017
REVISIONS	
REVISED -	
REVISED -	
REVISED -	
REVISED -	

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CROSS SECTIONS  
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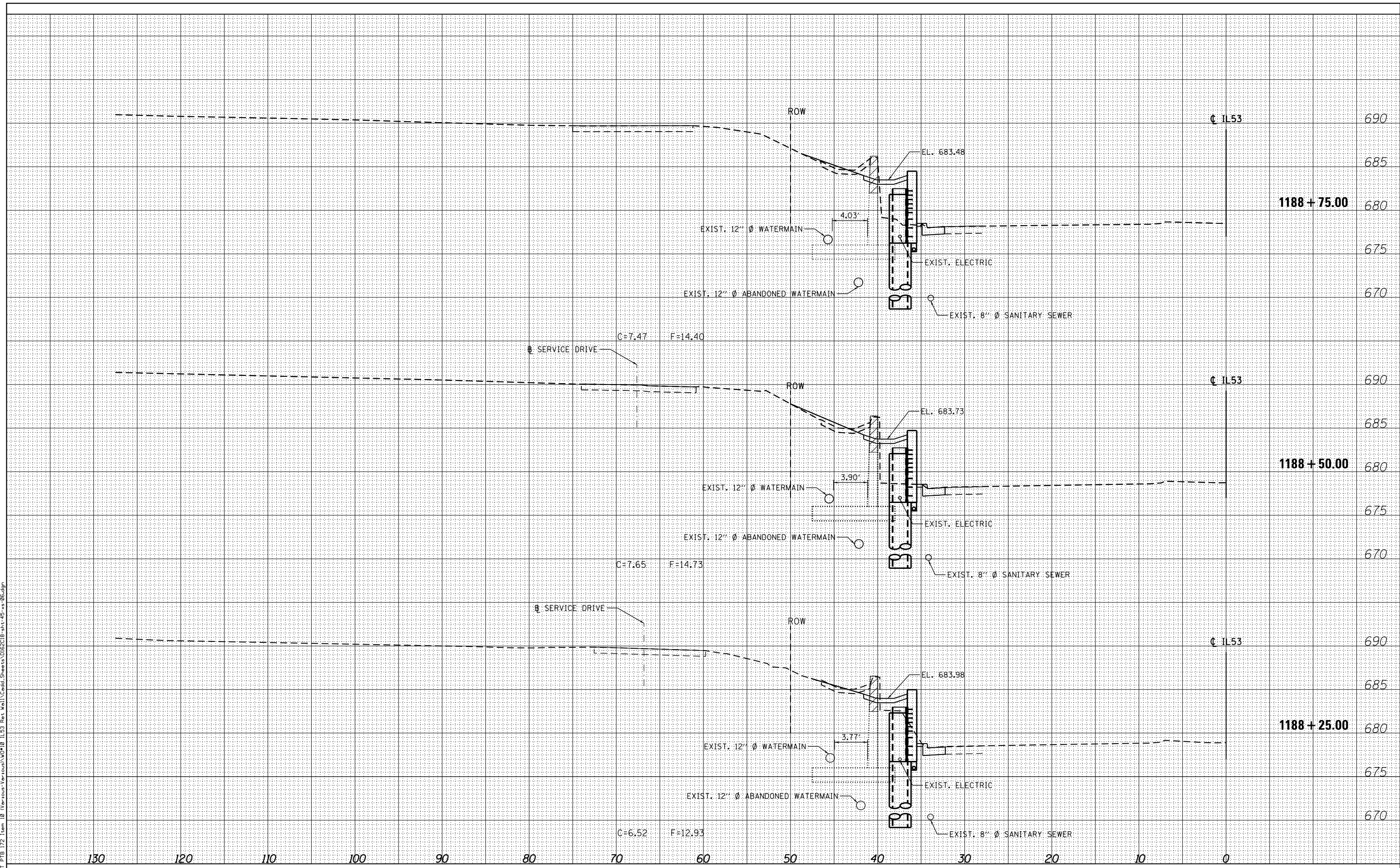
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CONTRACT NO. 62C18				
ILLINOIS				

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DATE	
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4415 WEST HARRISON ST.  
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PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = Ken.drabant  
DESIGNED - DA  
DRAWN - EAH  
CHECKED - JMG  
DATE - 06/01/2017

DESIGNED - DA  
DRAWN - EAH  
CHECKED - JMG  
DATE - 06/01/2017

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

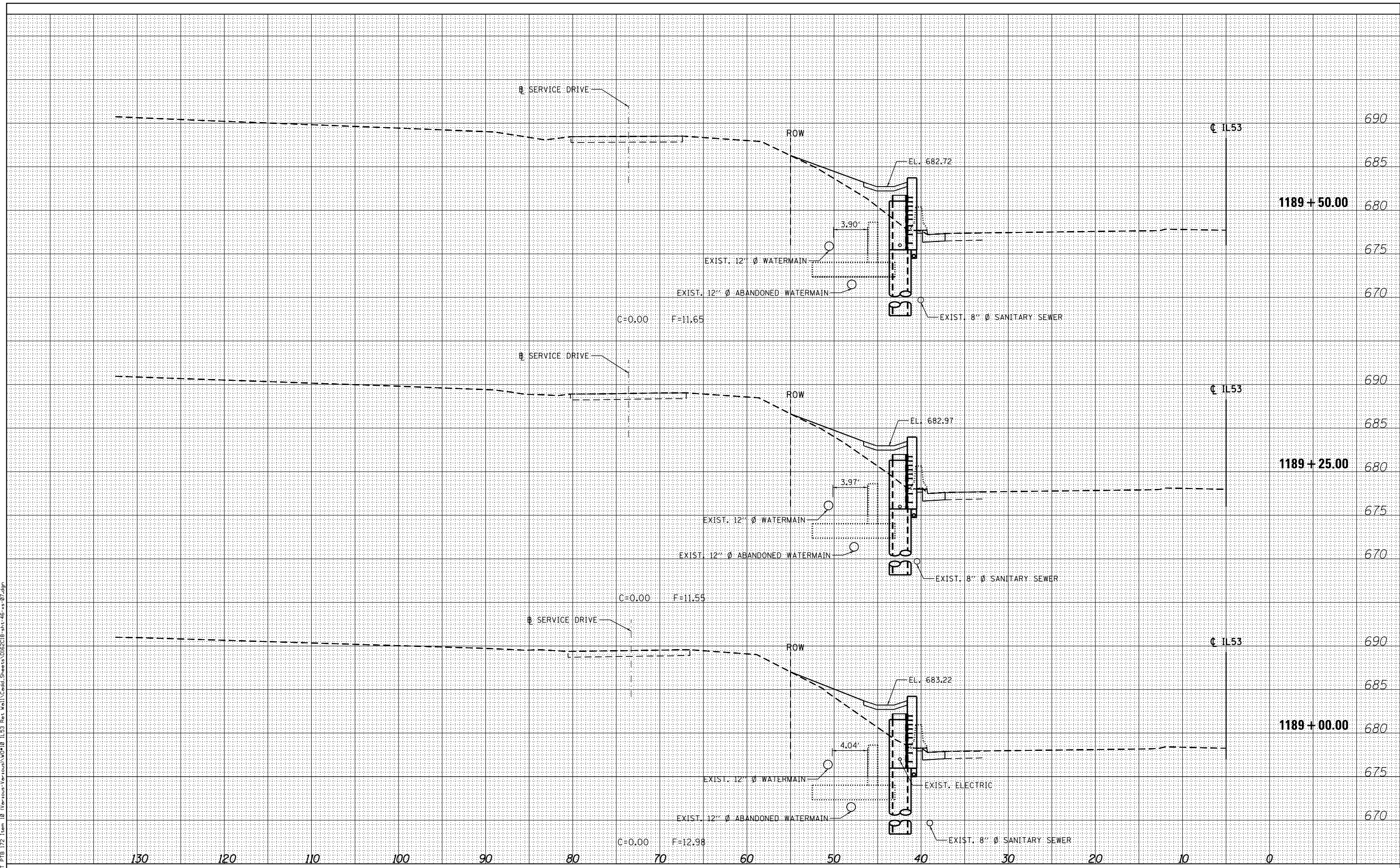
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C18				ILLINOIS

DATE	
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ORIGINAL SURVEY	
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NOTE BOOK	
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4415 WEST HARRISON ST.  
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 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME =	Kendrabant
DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017
REVISIONS	
REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
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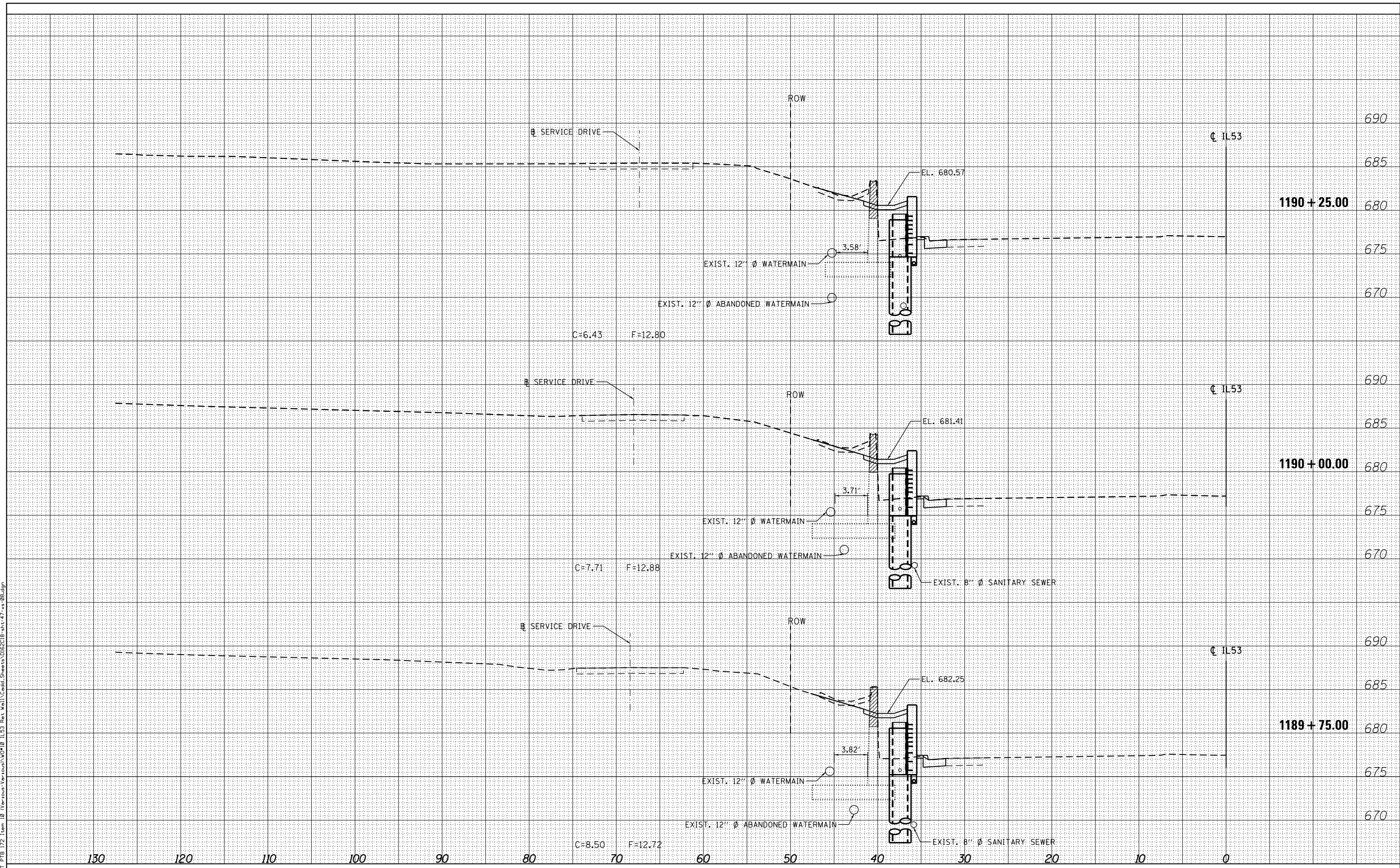
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870	543R-1	DU PAGE	47	44
CONTRACT NO. 62C18				ILLINOIS

DATE	
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4415 WEST HARRISON ST.  
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 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
 FAX: (708) 236-0901

USER NAME =	Kendrabant
DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017
REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: *SCALE*	SHEET 8 OF 10 SHEETS	STA. 1189+75.00 TO STA. 1190+25.00
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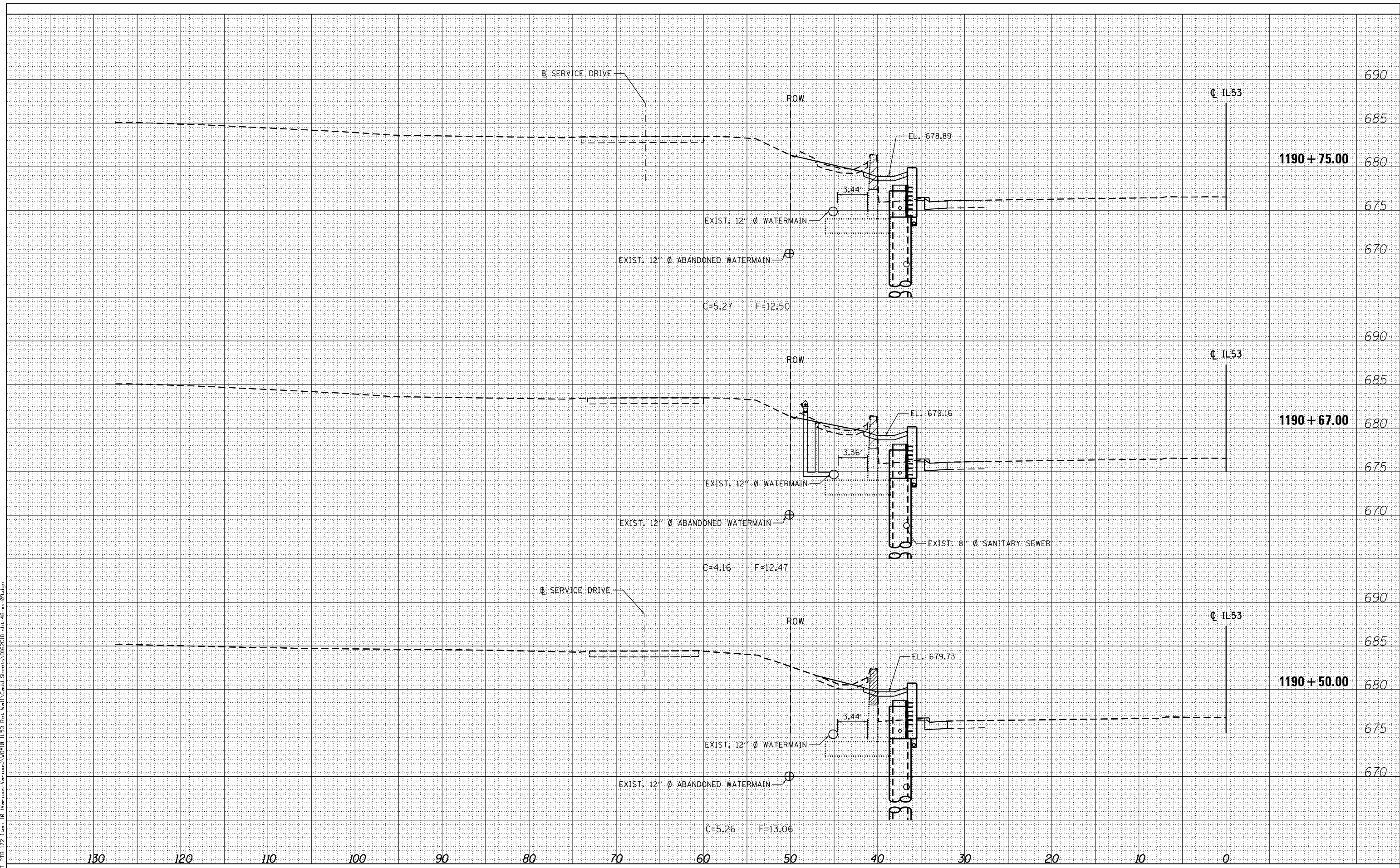
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CONTRACT NO. 62C18				
ILLINOIS				

DATE	
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FINAL SURVEY	
NOTE BOOK	
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DATE	
BY	
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INSPECTION & RATING  
RESEARCH & TESTING

4415 WEST HARRISON ST.  
SUITE 231  
HILLSDALE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

USER NAME = Ken.drabant	DESIGNED - DA	REVISED -
	DRAWN - EAH	REVISED -
PLOT SCALE = 10x0.0000 '1' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 6/1/2017	DATE - 06/01/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

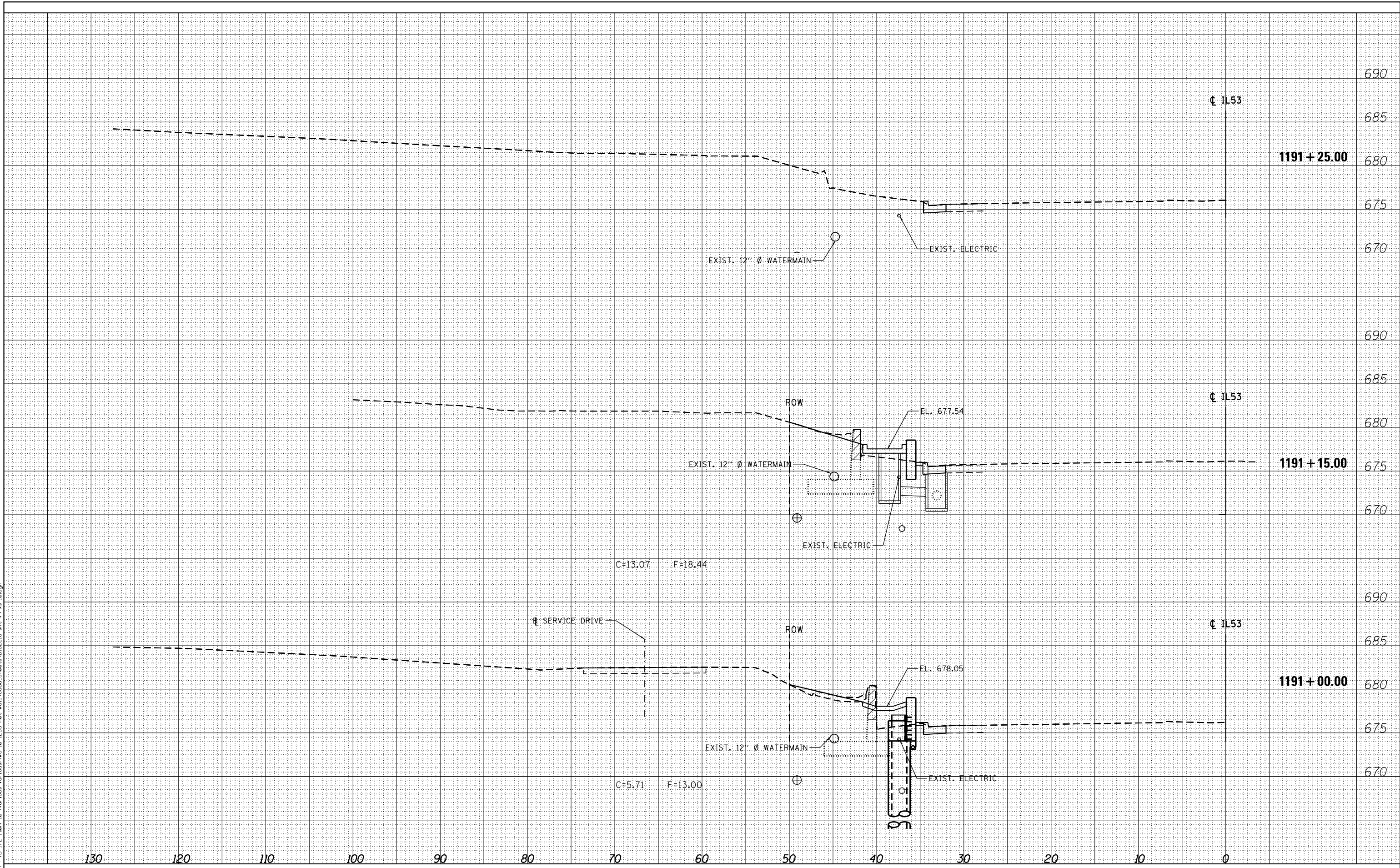
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STA. 1190+50.00 TO STA. 1190+75.00	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	46
CONTRACT NO. 62C18				
ILLINOIS				

BY	DATE

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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	AREAS	
	CHECKED	

6/1/2017 11:26:35 AM  
 P:\1501-630 IDOT PTB 172 Team 10\Verbus-Vorpus\W0110\1531 Res Mill\Cadd\Sheets\1191+00.00-1191+25.00.dgn



**HBM**  
 ENGINEERING GROUP, LLC  
 CONSULTING & DESIGN  
 INSPECTION & RATING  
 RESEARCH & TESTING

4415 WEST HARRISON ST.  
 SUITE 231  
 HILLSIDE, IL 60162  
 PHONE: (708) 236-0900  
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USER NAME =	Kendrabent
DESIGNED -	DA
DRAWN -	EAH
CHECKED -	JMG
DATE -	06/01/2017
REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SCALE: *SCALE*	SHEET 10 OF 10 SHEETS	STA. 1191+00.00 TO STA. 1191+25.00
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	543R-1	DU PAGE	47	47
CONTRACT NO. 62C18				ILLINOIS