

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				HSIP	ITEP	CMAQ
				90% FED 10% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY
				0021 URBAN	0028 URBAN	0021 URBAN
67100100	MOBILIZATION	L SUM	1	1		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.5	0.5	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.5	0.5	
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0.5	0.5	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.5	0.5	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.5	0.5	
# 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2,125	1058		1067
# 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	215	173		42
# 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	306	306		
# 78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	434	350		84
# 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1	
# 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1	
# 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	187	131		56
# 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	102	52	50	
# 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	2,092		2092	
# 81400100	HANDHOLE	EACH	1	1		
# 81603598	UNIT DUCT, 600V, 6-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	9,473		9,473	
# 81702460	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	100		100	

SPECIALTY ITEM

Δ CONSTRUCTION CODE 0042



HRG PROJECT NO. 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-sht-500-51.dgn
 C:\Users\lucio\OneDrive\Documents\200452\200452.dwg
 PEN TABLE: 200452.tbl



USER NAME = bhartma	DESIGNED -	REVISED -	09-04-2024
	DRAWN - WJH	REVISED -	
PLOT SCALE = 2.0000' / in.	CHECKED - BDH	REVISED -	
PLOT DATE = 9/4/2024	DATE -	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 3 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	5
CONTRACT NO. 61J74			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				HSIP	ITEP	CMAQ
				90% FED 10% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY
				0021 URBAN	0028 URBAN	0021 URBAN
# 88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	2	2		
# 88500100	INDUCTIVE LOOP DETECTOR	EACH	10	6		4
# 88600100	DETECTOR LOOP, TYPE I	FOOT	1,349	872		477
# 89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	3	2		1
# 89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1	1		
# 89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2	1		1
# 89502200	MODIFY EXISTING CONTROLLER	EACH	5	3		2
# 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,617	1297		320
# 89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	422	337		85
# 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3			3
# 89502376	REBUILD EXISTING HANDHOLE	EACH	26	17		9
# 89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2	2		
# 89502380	REMOVE EXISTING HANDHOLE	EACH	1	1		
# 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	3	2		1
# K0012990	PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT	UNIT	29			29
# K1001988	IRRIGATION SYSTEM SPECIAL	L SUM	1			1
# K1005875	TREE TRANSPLANT	EACH	12			12
# X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	12	6		6

1

1

1

1

1

SPECIALTY ITEM
 Δ CONSTRUCTION CODE 0042

HRG PROJECT NO. 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-sht-500-51.dgn
 CLOTHER: L:\200452\18-00131-00-51.rvt
 PEN TABLE: 18-00131-00-51.tbl



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	DRAWN - WJH	REVISED -	
PLOT SCALE = 2.0000' / in.	CHECKED - BDH	REVISED -	
PLOT DATE = 9/4/2024	DATE -	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS
	5	OF	6
	STA.	TO	STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	7
			CONTRACT NO. 61J74	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				HSIP	ITEP	CMAQ
				90% FED 10% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY	80% FED 20% LOCAL ROADWAY
				0021 URBAN	0028 URBAN	0021 URBAN
# X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2	1		1
X1700067	STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	4,568			4568
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	10	5	5	
X4240800	DETECTABLE WARNINGS (SPECIAL)	SQ FT	258	258		
# X8140238	REBUILD EXISTING DOUBLE HANDHOLE	EACH	2	1		1
# X8250500	LIGHTING UNIT COMPLETE (SPECIAL)	EACH	60		60	
# X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	26	12		14
# X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	56	22		34
# X8891009	VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	7	5		2
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1.0		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	208	208		
# Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	5	3		2
Δ Z0076600	TRAINEES	HOUR	500			
Δ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500			
# XX009442	WIRELESS LIGHTING CONTROL SYSTEM	EACH	1		1	
#	SPECIALTY ITEM					
Δ	CONSTRUCTION CODE 0042					



HRG PROJECT NO. 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-sht-800-81.dgn
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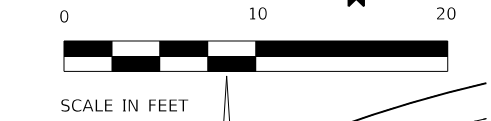
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	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 9/4/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:		SUMMARY OF QUANTITIES	
		SHEET 6 OF 6 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	8
CONTRACT NO. 61174			ILLINOIS FED. AID PROJECT	

	STATION	OFFSET	ELEVATION
A	906+15.91	6.09 LT	652.00
B	906+15.04	2.51 RT	(651.92)
C	906+05.63	6.03 LT	651.87
D	906+13.86	2.11 LT	651.81
E	906+05.70	0.11 LT	651.78
F	906+04.59	2.54 RT	(651.78)
G	905+99.57	6.00 LT	651.80
H	905+99.69	2.00 LT	651.74
I	905+99.75	0.00 LT	651.71
J	905+99.77	2.51 RT	(651.69)

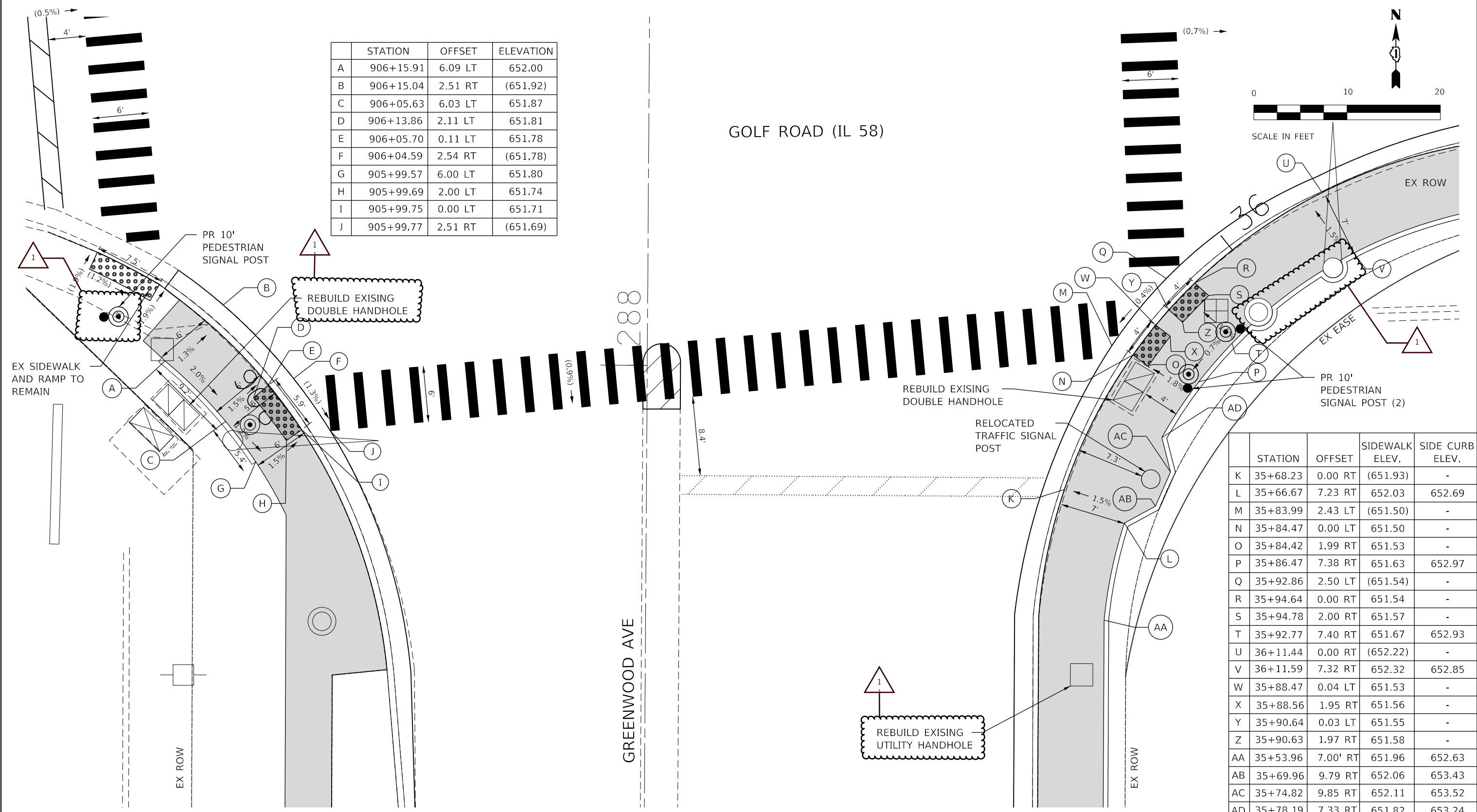


PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO. _____	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO. _____	

GOLF ROAD (IL 58)

GREENWOOD AVE



	STATION	OFFSET	SIDEWALK ELEV.	SIDE CURB ELEV.
K	35+68.23	0.00 RT	(651.93)	-
L	35+66.67	7.23 RT	652.03	652.69
M	35+83.99	2.43 LT	(651.50)	-
N	35+84.47	0.00 LT	651.50	-
O	35+84.42	1.99 RT	651.53	-
P	35+86.47	7.38 RT	651.63	652.97
Q	35+92.86	2.50 LT	(651.54)	-
R	35+94.64	0.00 RT	651.54	-
S	35+94.78	2.00 RT	651.57	-
T	35+92.77	7.40 RT	651.67	652.93
U	36+11.44	0.00 RT	(652.22)	-
V	36+11.59	7.32 RT	652.32	652.85
W	35+88.47	0.04 LT	651.53	-
X	35+88.56	1.95 RT	651.56	-
Y	35+90.64	0.03 LT	651.55	-
Z	35+90.63	1.97 RT	651.58	-
AA	35+53.96	7.00' RT	651.96	652.63
AB	35+69.96	9.79 RT	652.06	653.43
AC	35+74.82	9.85 RT	652.11	653.52
AD	35+78.19	7.33 RT	651.82	653.24

REFERENCE BENCHMARK ELEV 652.17
 BENCHMARK : CHISELED CROSS ON NORTH SIDE SIGNAL POST FOUNDATION
 LOCATION : SOUTHWEST CORNER GOLF ROAD AND GREENWOOD AVE

LEGEND

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- () EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS

HRG PROJECT NO.: 200442
 HRG PROJ. CONTACT: 200442-sh-ramps-golf-03.dgn
 FILE NAME: 200442-sh-ramps-golf-03.dgn
 PEN TABLE: pof/ob/br/br



USER NAME = bhar-ma	DESIGNED - CL	REVISED - A 09-04-2024
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
GOLF ROAD AT GREENWOOD AVENUE

SCALE: 1"=20' SHEET 3 OF 17 SHEETS STA. TO STA.

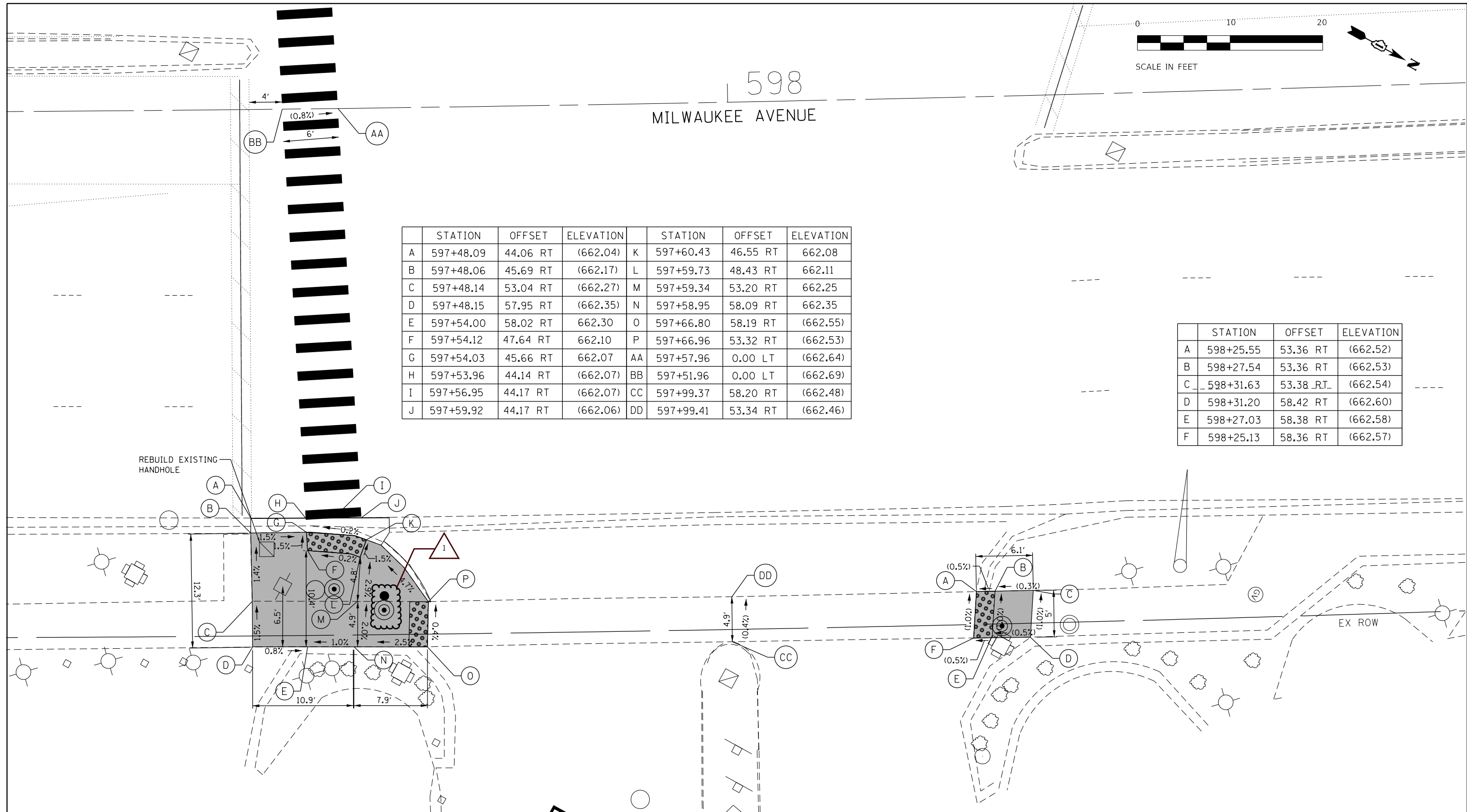
F.A.U. R.E.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	57
CONTRACT NO. 61J74			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



598
MILWAUKEE AVENUE

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	597+48.09	44.06 RT	(662.04)	K	597+60.43	46.55 RT	662.08
B	597+48.06	45.69 RT	(662.17)	L	597+59.73	48.43 RT	662.11
C	597+48.14	53.04 RT	(662.27)	M	597+59.34	53.20 RT	662.25
D	597+48.15	57.95 RT	(662.35)	N	597+58.95	58.09 RT	662.35
E	597+54.00	58.02 RT	662.30	O	597+66.80	58.19 RT	(662.55)
F	597+54.12	47.64 RT	662.10	P	597+66.96	53.32 RT	(662.53)
G	597+54.03	45.66 RT	662.07	AA	597+57.96	0.00 LT	(662.64)
H	597+53.96	44.14 RT	(662.07)	BB	597+51.96	0.00 LT	(662.69)
I	597+56.95	44.17 RT	(662.07)	CC	597+99.37	58.20 RT	(662.48)
J	597+59.92	44.17 RT	(662.06)	DD	597+99.41	53.34 RT	(662.46)

	STATION	OFFSET	ELEVATION
A	598+25.55	53.36 RT	(662.52)
B	598+27.54	53.36 RT	(662.53)
C	598+31.63	53.38 RT	(662.54)
D	598+31.20	58.42 RT	(662.60)
E	598+27.03	58.38 RT	(662.58)
F	598+25.13	58.36 RT	(662.57)



REBUILD EXISTING HANDHOLE

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION/SLOPE
- ===== PROPOSED SIDE CURB
- [Grey Box] PROPOSED SIDEWALK
- [Dark Grey Box] PROPOSED STAMPED COLORED PCC SIDEWALK
- [Dotted Box] DETECTABLE WARNINGS

REFERENCE BENCHMARK ELEV 682.386

BENCHMARK : SET NAIL

LOCATION : SOUTHWEST CORNER OF HANDHOLE IN SOUTHWEST CORNER OF INTERSECTION MILWAUKEE AVENUE AND GOLF MILL MAIN ENTRANCE

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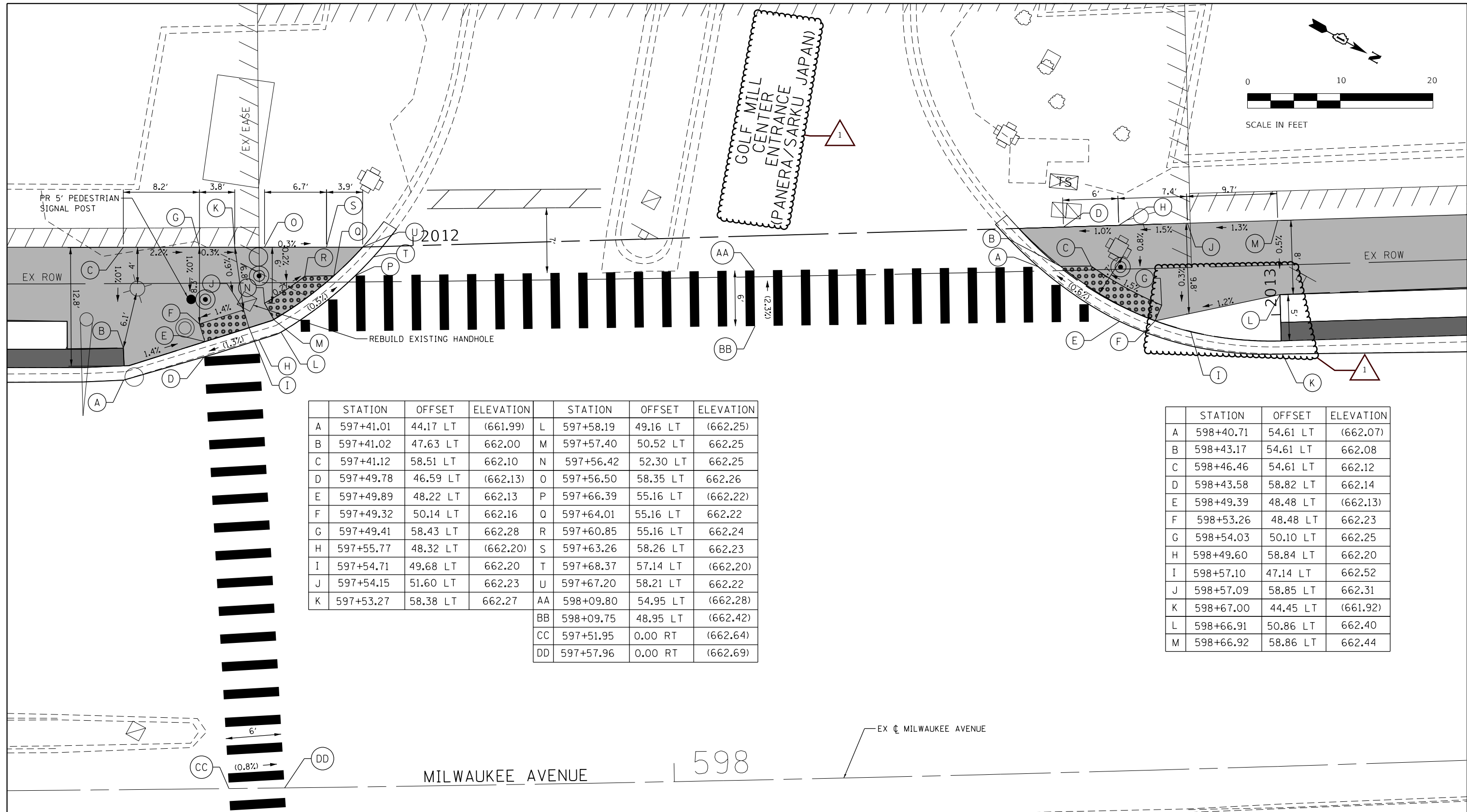
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PLOT SCALE = 10.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SIDEWALK RAMP DETAILS
MILWAUKEE AVENUE**

SCALE: 1"=20' SHEET 14 OF 17 SHEETS STA. 593+13 TO STA. 594+70

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	68
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				



STATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION		
A	597+41.01	44.17 LT	(661.99)	L	597+58.19	49.16 LT	(662.25)
B	597+41.02	47.63 LT	662.00	M	597+57.40	50.52 LT	662.25
C	597+41.12	58.51 LT	662.10	N	597+56.42	52.30 LT	662.25
D	597+49.78	46.59 LT	(662.13)	O	597+56.50	58.35 LT	662.26
E	597+49.89	48.22 LT	662.13	P	597+66.39	55.16 LT	(662.22)
F	597+49.32	50.14 LT	662.16	Q	597+64.01	55.16 LT	662.22
G	597+49.41	58.43 LT	662.28	R	597+60.85	55.16 LT	662.24
H	597+55.77	48.32 LT	(662.20)	S	597+63.26	58.26 LT	662.23
I	597+54.71	49.68 LT	662.20	T	597+68.37	57.14 LT	(662.20)
J	597+54.15	51.60 LT	662.23	U	597+67.20	58.21 LT	662.22
K	597+53.27	58.38 LT	662.27	AA	598+09.80	54.95 LT	(662.28)
				BB	598+09.75	48.95 LT	(662.42)
				CC	597+51.95	0.00 RT	(662.64)
				DD	597+57.96	0.00 RT	(662.69)

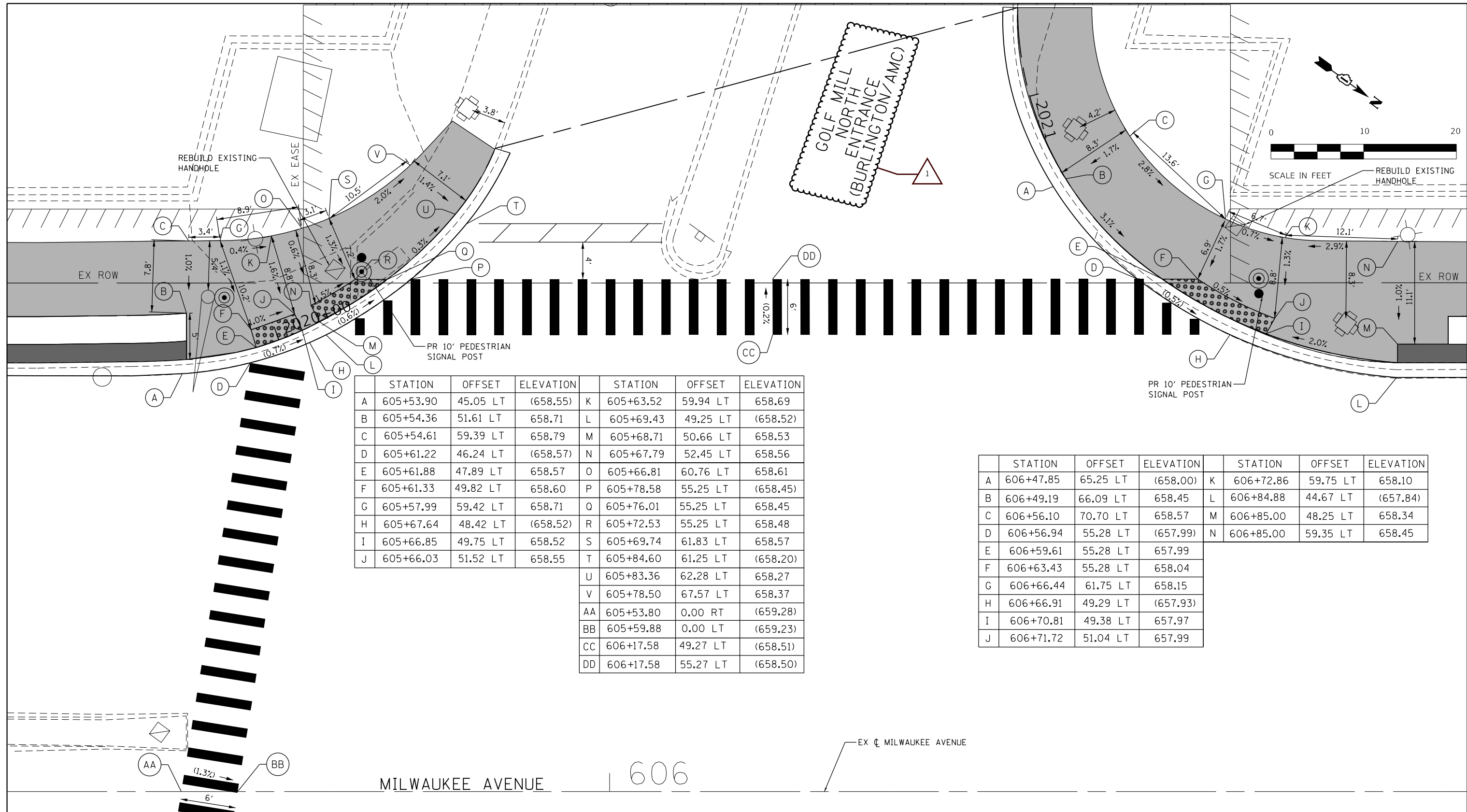
STATION	OFFSET	ELEVATION	
A	598+40.71	54.61 LT	(662.07)
B	598+43.17	54.61 LT	662.08
C	598+46.46	54.61 LT	662.12
D	598+43.58	58.82 LT	662.14
E	598+49.39	48.48 LT	(662.13)
F	598+53.26	48.48 LT	662.23
G	598+54.03	50.10 LT	662.25
H	598+49.60	58.84 LT	662.20
I	598+57.10	47.14 LT	662.52
J	598+57.09	58.85 LT	662.31
K	598+67.00	44.45 LT	(661.92)
L	598+66.91	50.86 LT	662.40
M	598+66.92	58.86 LT	662.44

REFERENCE BENCHMARK ELEV 682.386
 BENCHMARK : SET NAIL
 LOCATION : SOUTHWEST CORNER OF HANDHOLE IN SOUTHWEST CORNER OF INTERSECTION MILWAUKEE AVENUE AND GOLF MILL MAIN ENTRANCE

LEGEND

xx.xx' EXISTING LENGTH	PROPOSED SIDEWALK
() EXISTING ELEVATION/SLOPE	PROPOSED STAMPED COLORED PCC SIDEWALK
PROPOSED SIDE CURB	DETECTABLE WARNINGS

MODEL: Dwg.rvt
 FILE NAME: 200152-rh-comp-smlk04.dgn



	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	605+53.90	45.05 LT	(658.55)	K	605+63.52	59.94 LT	658.69
B	605+54.36	51.61 LT	658.71	L	605+69.43	49.25 LT	(658.52)
C	605+54.61	59.39 LT	658.79	M	605+68.71	50.66 LT	658.53
D	605+61.22	46.24 LT	(658.57)	N	605+67.79	52.45 LT	658.56
E	605+61.88	47.89 LT	658.57	O	605+66.81	60.76 LT	658.61
F	605+61.33	49.82 LT	658.60	P	605+78.58	55.25 LT	(658.45)
G	605+57.99	59.42 LT	658.71	Q	605+76.01	55.25 LT	658.45
H	605+67.64	48.42 LT	(658.52)	R	605+72.53	55.25 LT	658.48
I	605+66.85	49.75 LT	658.52	S	605+69.74	61.83 LT	658.57
J	605+66.03	51.52 LT	658.55	T	605+84.60	61.25 LT	(658.20)
				U	605+83.36	62.28 LT	658.27
				V	605+78.50	67.57 LT	658.37
				AA	605+53.80	0.00 RT	(659.28)
				BB	605+59.88	0.00 LT	(659.23)
				CC	606+17.58	49.27 LT	(658.51)
				DD	606+17.58	55.27 LT	(658.50)

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	606+47.85	65.25 LT	(658.00)	K	606+72.86	59.75 LT	658.10
B	606+49.19	66.09 LT	658.45	L	606+84.88	44.67 LT	(657.84)
C	606+56.10	70.70 LT	658.57	M	606+85.00	48.25 LT	658.34
D	606+56.94	55.28 LT	(657.99)	N	606+85.00	59.35 LT	658.45
E	606+59.61	55.28 LT	657.99				
F	606+63.43	55.28 LT	658.04				
G	606+66.44	61.75 LT	658.15				
H	606+66.91	49.29 LT	(657.93)				
I	606+70.81	49.38 LT	657.97				
J	606+71.72	51.04 LT	657.99				

MILWAUKEE AVENUE

606

EX MILWAUKEE AVENUE

LEGEND

- xx.xx' EXISTING LENGTH
- () EXISTING ELEVATION/SLOPE
- ===== PROPOSED SIDE CURB
- █ PROPOSED SIDEWALK
- █ PROPOSED STAMPED COLORED PCC SIDEWALK
- █ DETECTABLE WARNINGS

REFERENCE BENCHMARK ELEV 655.273
 BENCHMARK : NILES MONUMENT #23
 LOCATION : SOUTHWEST CORNER OF MILWAUKEE AVENUE AT GOLF ROAD

MODEL: D:\p1\11111111\11111111.dwg
 FILE NAME: 20041212-rh-comp-mil05.dgn

USER NAME = bhartma	DESIGNED - CL	REVISED - 09-04-2024
PLOT SCALE = 10.0000' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SIDEWALK RAMP DETAILS
 MILWAUKEE AVENUE**

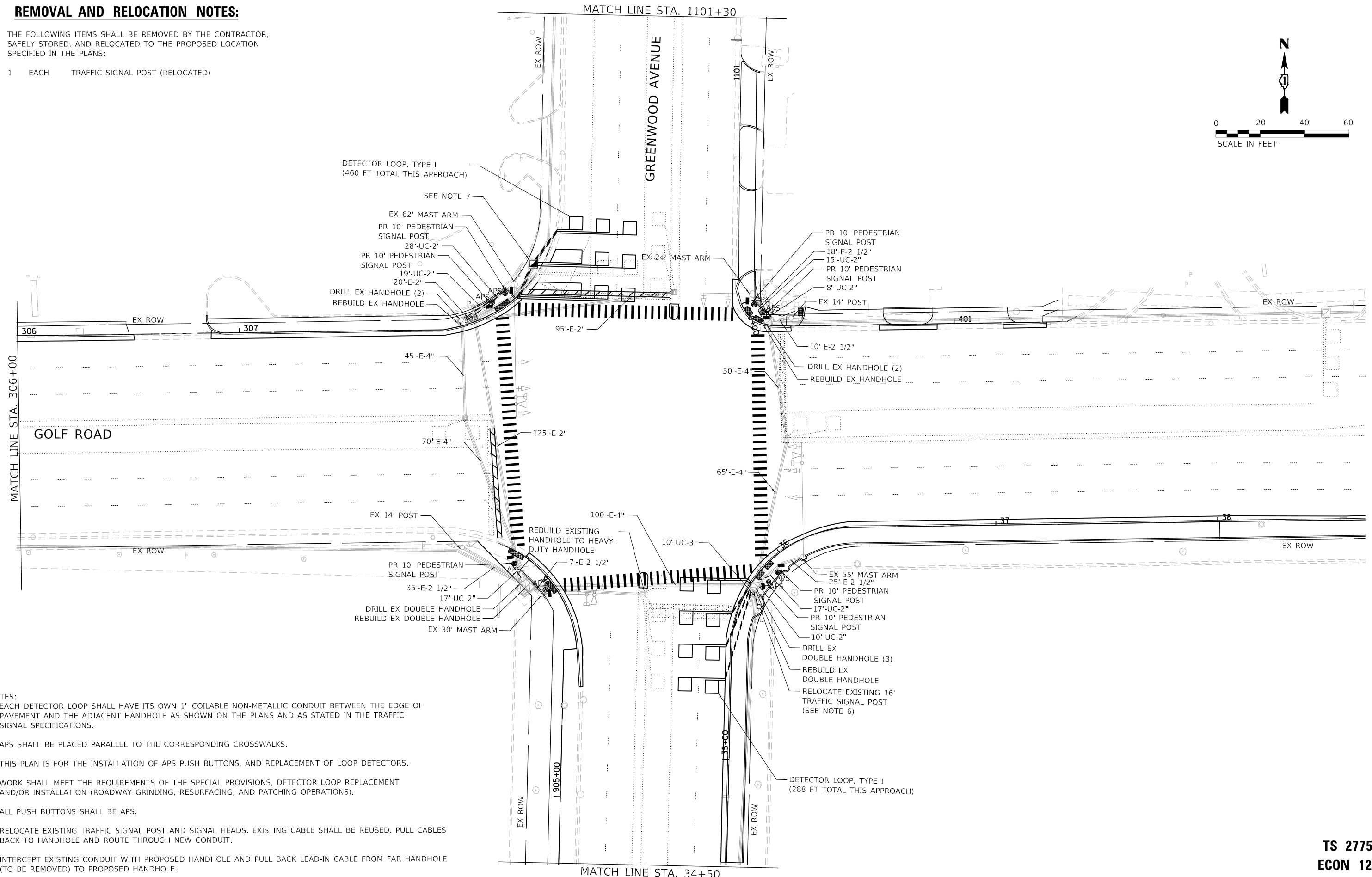
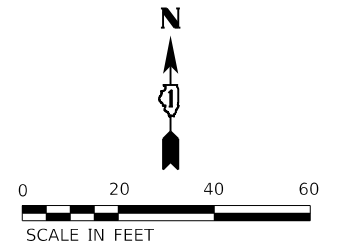
SCALE: 1"=20' SHEET 16 OF 17 SHEETS STA. 605+35 TO STA. 606+92

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	70
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED, AND RELOCATED TO THE PROPOSED LOCATION SPECIFIED IN THE PLANS:

- 1 EACH TRAFFIC SIGNAL POST (RELOCATED)



- NOTES:
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 2. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALKS.
 3. THIS PLAN IS FOR THE INSTALLATION OF APS PUSH BUTTONS, AND REPLACEMENT OF LOOP DETECTORS.
 4. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
 5. ALL PUSH BUTTONS SHALL BE APS.
 6. RELOCATE EXISTING TRAFFIC SIGNAL POST AND SIGNAL HEADS. EXISTING CABLE SHALL BE REUSED. PULL CABLES BACK TO HANDHOLE AND ROUTE THROUGH NEW CONDUIT.
 7. INTERCEPT EXISTING CONDUIT WITH PROPOSED HANDHOLE AND PULL BACK LEAD-IN CABLE FROM FAR HANDHOLE (TO BE REMOVED) TO PROPOSED HANDHOLE.

**TS 2775
ECON 12**

HRG PROJECT No: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SHT-18-00131-01.dgn
 PEN TABLE: 18-00131.tbl



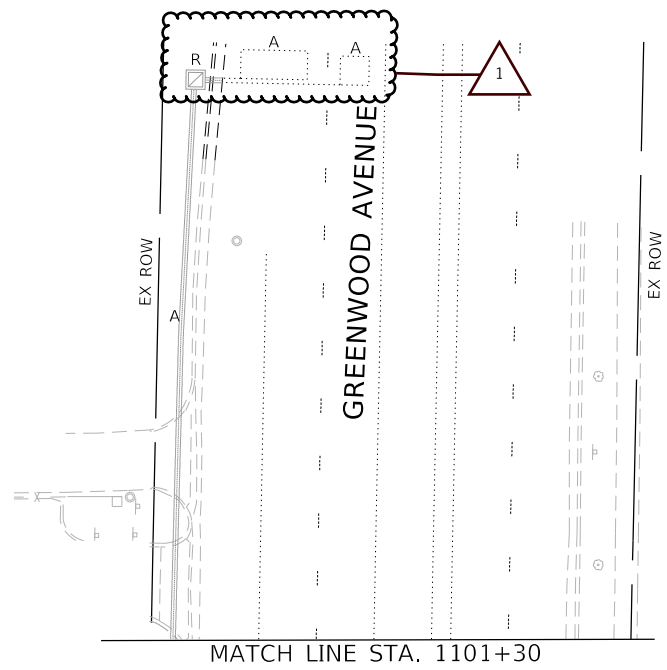
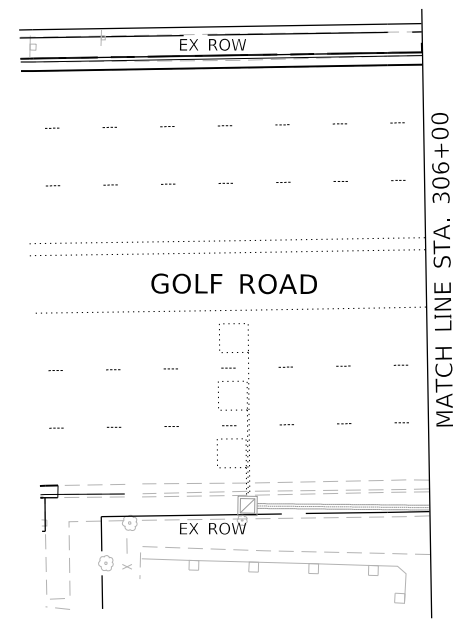
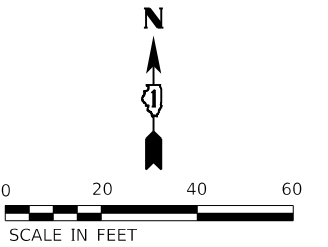
USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - W/JH	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 1 OF 2)
GOLF ROAD AND GREENWOOD AVENUE**

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	88
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				



HRG PROJECT NO: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SHT-115-GOLF-02.dgn
 PEN TABLE: 11/10/2024



USER NAME = tyeRton	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - W/JH	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

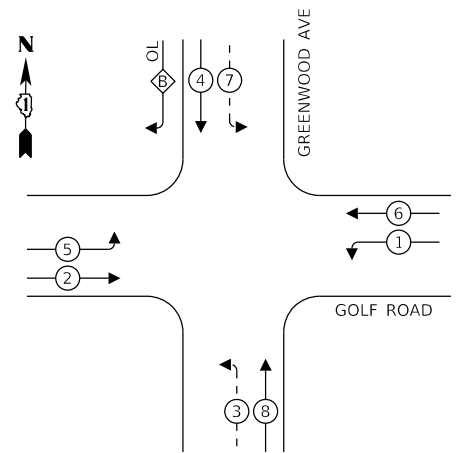
TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2)
GOLF ROAD AND GREENWOOD AVENUE

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

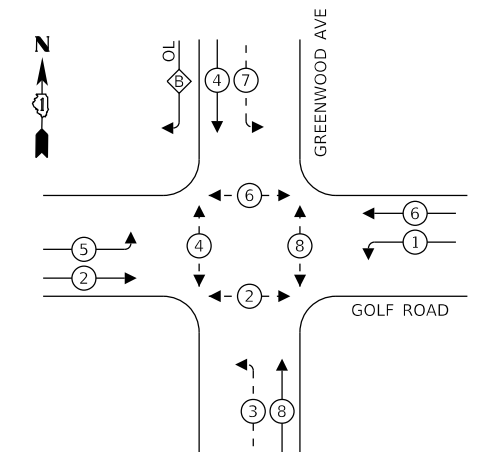
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	89
CONTRACT NO. 61174			ILLINOIS FED. AID PROJECT	

TS 2775
ECON 12

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

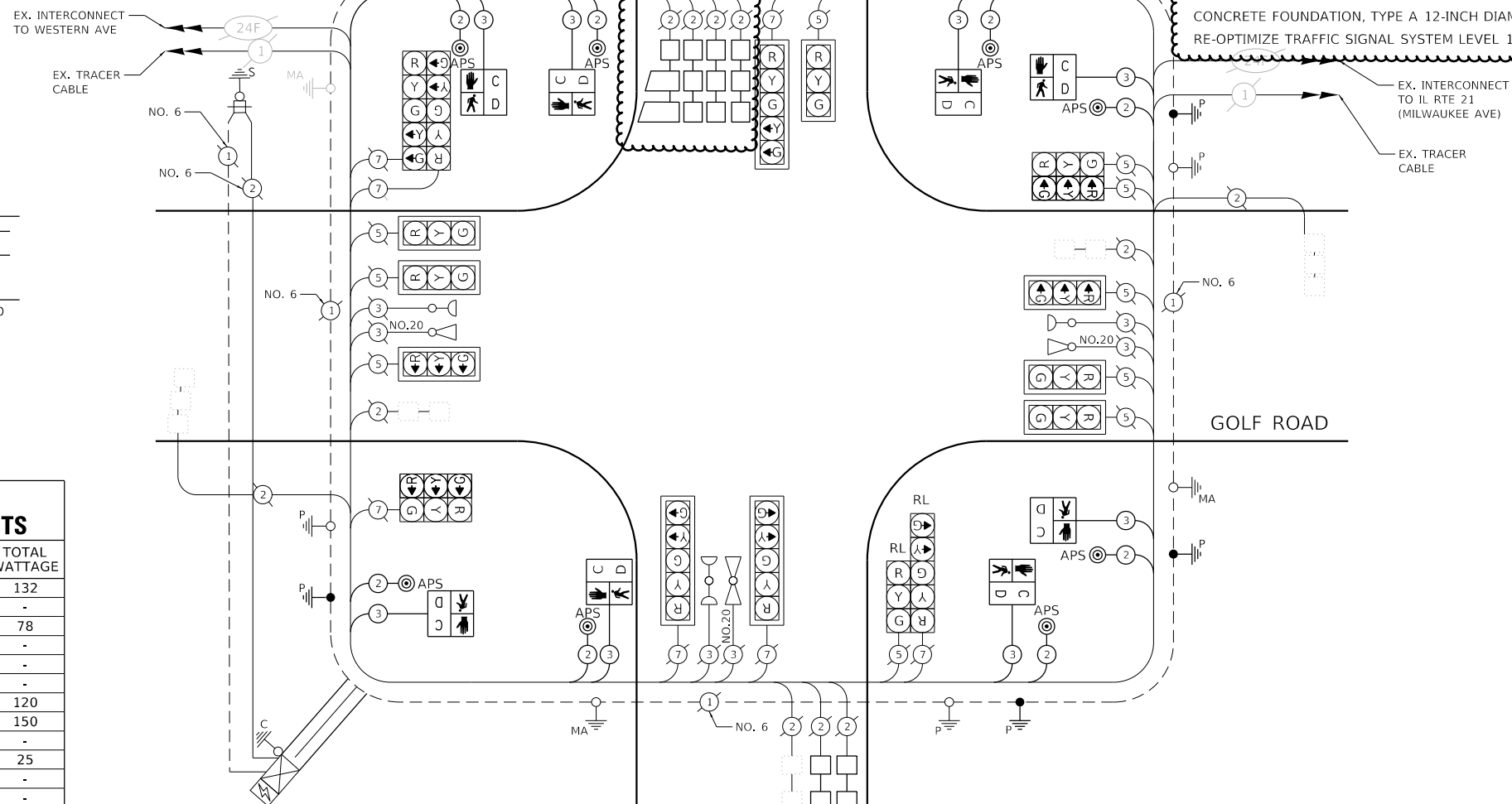
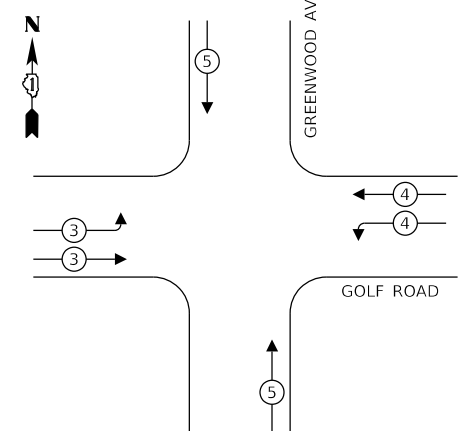
- ← * → PROTECTED PHASE
- ← * - - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER = PERMISSIVE PHASE + PROJECTED PHASE
 B = 4 + 5

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	114
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	10
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,381
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,437
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,297
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
DETECTOR LOOP, TYPE I	FOOT	748
RELOCATE EXISTING SIGNAL HEAD	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	337
REBUILD EXISTING HANDHOLE	EACH	2
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	7
REBUILD EXISTING DOUBLE HANDHOLE	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	28
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING	555		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1,160		

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W CENTER COURT
 SCHAUMBURG, IL 60196
 ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPARTMENT
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 73888-42222
 METER NUMBER: ---

HRG PROJECT NO.: 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-SHT-1-1-1.dgn
 PEN TABLE: 1/10/2024



USER NAME = tyeRon	DESIGNED - CL	REVISED - A 09-04-2024
PLOT SCALE = 40.0000 ' / in.	DRAWN - W/JH	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GOLF ROAD AND GREENWOOD AVENUE

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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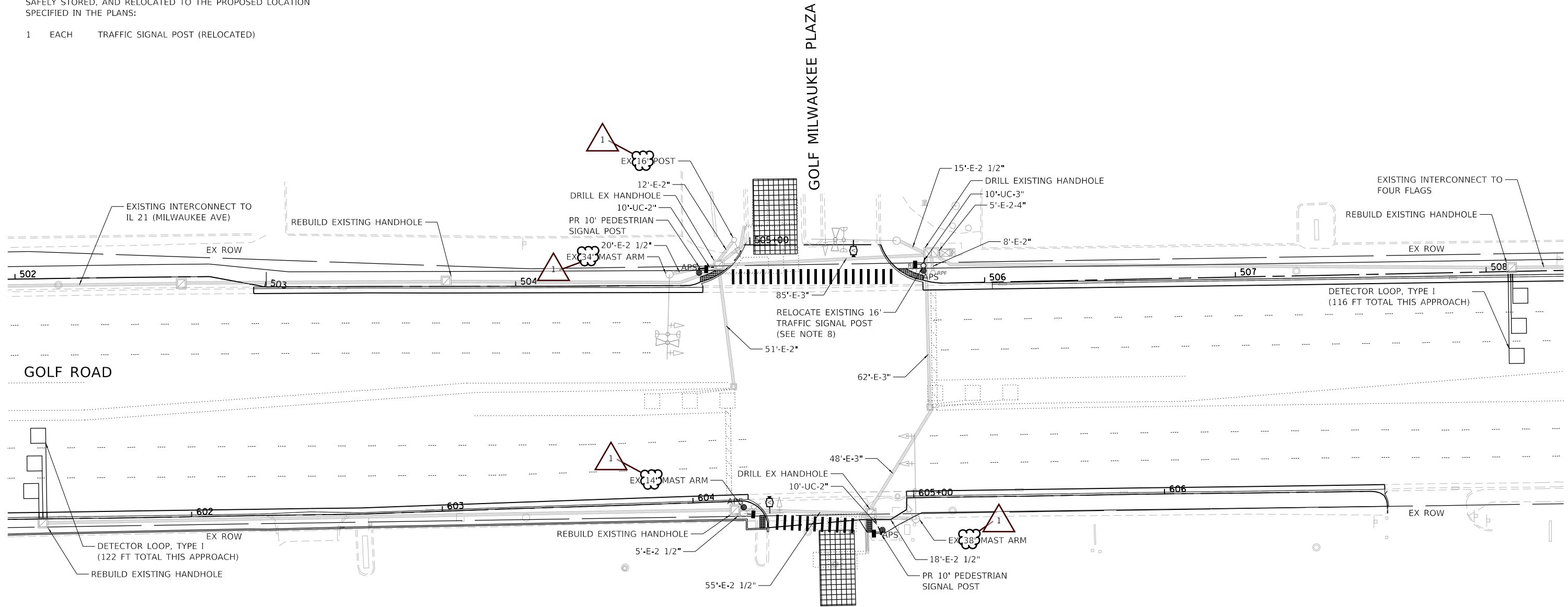
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	90
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				

TS 2775
 ECON 12

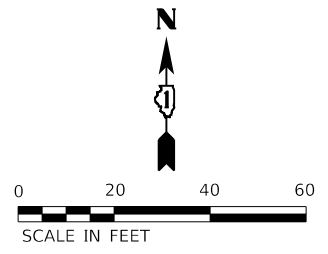
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED, AND RELOCATED TO THE PROPOSED LOCATION SPECIFIED IN THE PLANS:

- 1 EACH TRAFFIC SIGNAL POST (RELOCATED)



- NOTES:
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 2. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALKS.
 3. THIS PLAN IS FOR THE INSTALLATION OF APS PUSH BUTTONS, INSTALLATION OF VIDEO DETECTION SYSTEM, AND REPLACEMENT OF LOOP DETECTORS.
 4. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
 5. ALL PUSH BUTTONS SHALL BE APS.
 6. VIDEO DETECTION SYSTEMS SHALL BE MOUNTED ON RISER BRACKETS AT THE LENGTH DETERMINED BY THE MANUFACTURER. FINAL CAMERA LOCATIONS SHALL BE OPTIMAL TO MINIMIZE OCCLUSION-BASED FALSE CALLS FROM TRAFFIC IN ADJACENT LANES.
 7. EXISTING LOOPS IN THE DRIVEWAYS SHALL BE ABANDONED AND REPLACED WITH VIDEO DETECTION, AND LEAD-IN CABLE SHALL BE REMOVED.
 8. RELOCATE EXISTING TRAFFIC SIGNAL POST AND SIGNAL HEADS ON NEW FOUNDATION. EXISTING CABLE SHALL BE REUSED. PULL CABLES BACK TO HANDHOLE AND ROUTE THROUGH NEW CONDUIT.



**TS 11210
ECON 12**

HRG PROJECT No: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SM-TS-Golf-04.dgn
 PEN TABLE: Golf.tbl



USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - W/JH	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
GOLF ROAD AND GOLF MILWAUKEE PLAZA**

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

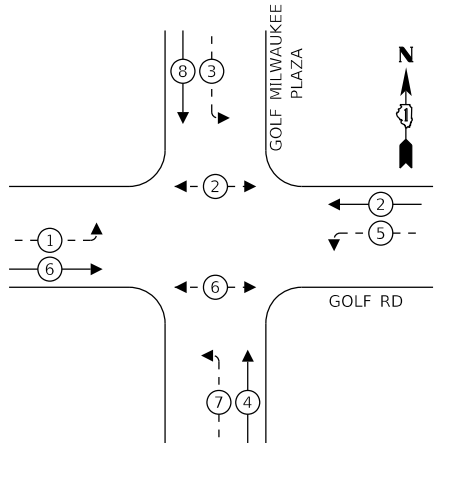
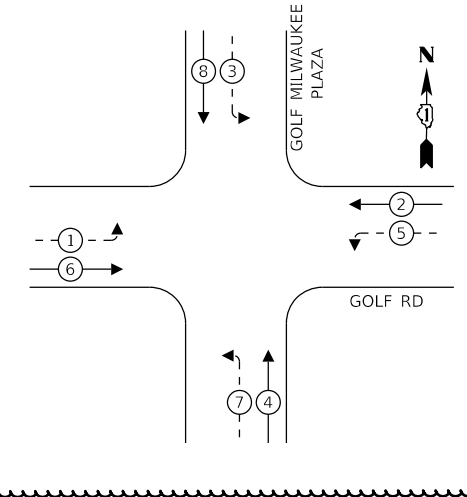
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	91
CONTRACT NO. 61174			ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE

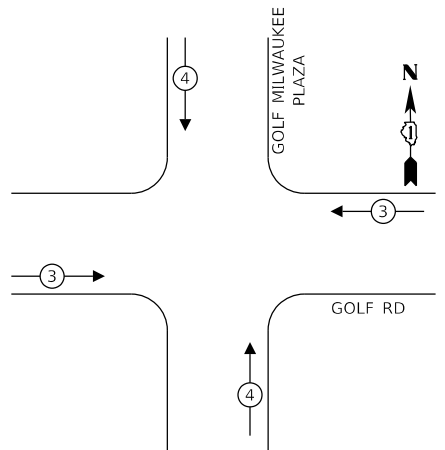
PROPOSED CONTROLLER SEQUENCE

LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ → OL OVERLAP



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



ITEM DESCRIPTION

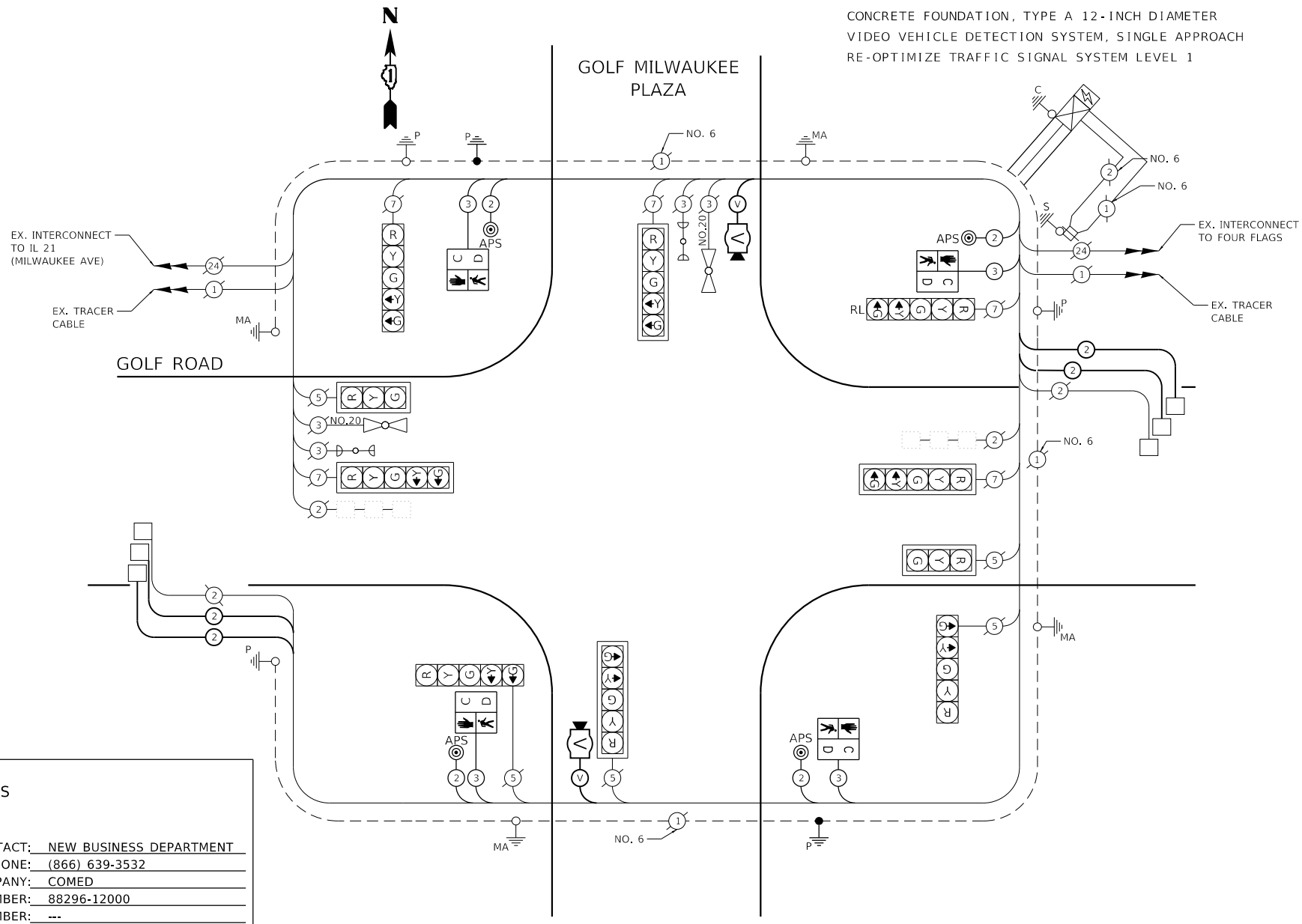
ITEM DESCRIPTION	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	574
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	612
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,509
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	294
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE I	FOOT	238
RELOCATE EXISTING SIGNAL HEAD	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	529
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	45
REBUILD EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	2	11	22
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING	451		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1056		

ENERGY COSTS TO:
 THE VILLAGE OF NILES
 1000 CIVIC CENTER DRIVE
 NILES, IL 60714

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPARTMENT
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 88296-12000
 METER NUMBER: ---



**TS 11210
 ECON 12**

HRG PROJECT No: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SHT-1-18-05.dgn
 PLOT DATE: 8/26/2024
 PEN TABLE: n:\p\table.tbl



USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
PLOT SCALE = 40.0000' / in.	DRAWN - W/JH	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GOLF ROAD AND GOLF MILWAUKEE PLAZA**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-00131-00-SW	COOK	146	92
			CONTRACT NO. 61174	
		ILLINOIS	FED. AID PROJECT	

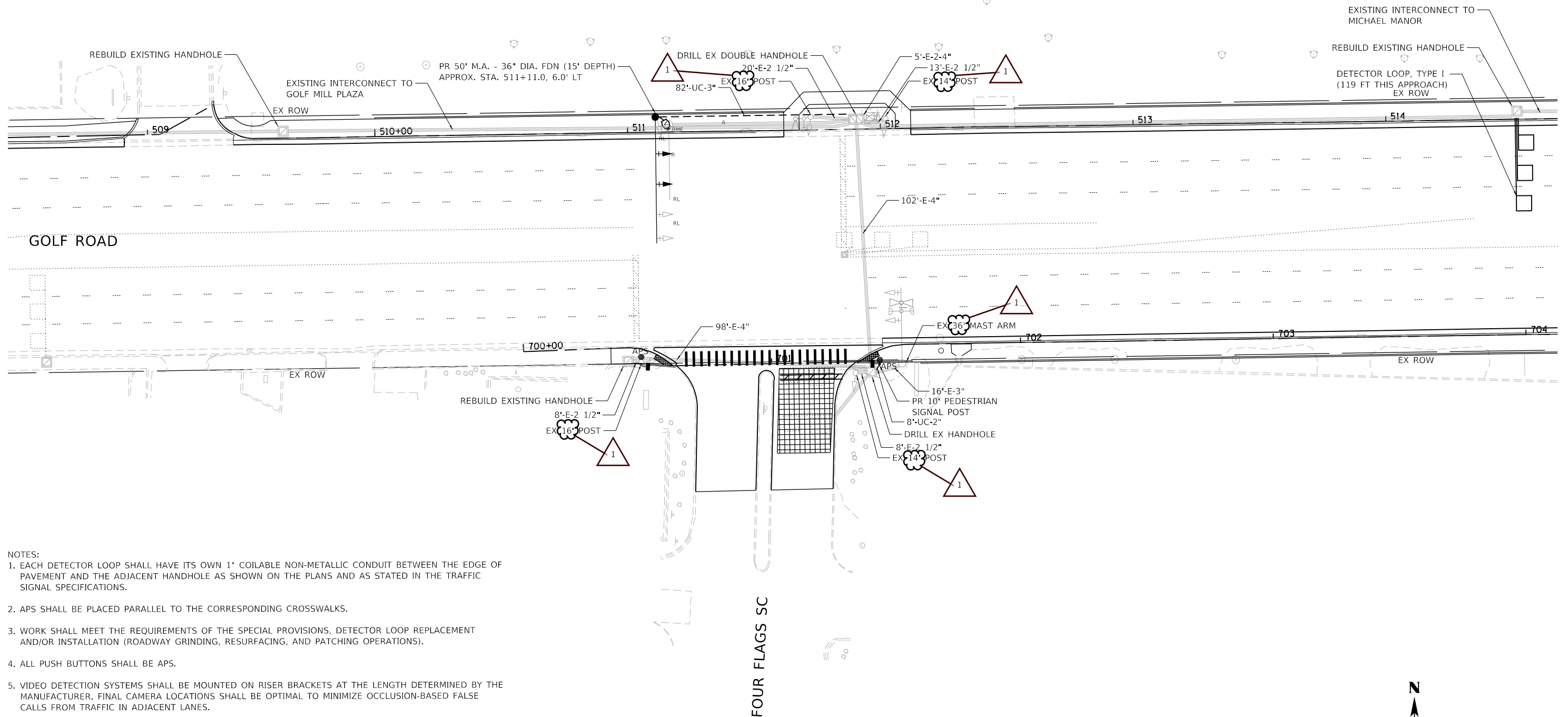
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SAFELY RELOCATED TO THE PROPOSED MAST ARM:

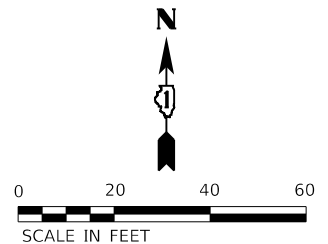
- 2 EACH 3-SECTION SIGNAL HEADS
- 1 EACH 5-SECTION SIGNAL HEAD

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE:

- 1 EACH STEEL MAST ARM ASSEMBLY AND POST



- NOTES:
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 2. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALKS.
 3. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
 4. ALL PUSH BUTTONS SHALL BE APS.
 5. VIDEO DETECTION SYSTEMS SHALL BE MOUNTED ON RISER BRACKETS AT THE LENGTH DETERMINED BY THE MANUFACTURER. FINAL CAMERA LOCATIONS SHALL BE OPTIMAL TO MINIMIZE OCCLUSION-BASED FALSE CALLS FROM TRAFFIC IN ADJACENT LANES.
 6. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
 7. PROPOSED MAST ARM AND POLE, FOUNDATION, AND CONDUIT WILL BE CONSTRUCTED PRIOR TO THE RELOCATION OF THE EXISTING TRAFFIC SIGNAL HEADS. TRAFFIC SIGNAL DOWN TIME SHALL BE MINIMIZED AND NO TEMPORARY TRAFFIC SIGNALS SHALL BE USED.
 8. EXISTING LOOPS IN THE FOUR FLAGS ACCESS DRIVEWAY SHALL BE ABANDONED AND REPLACED WITH VIDEO DETECTION, AND LEAD-IN CABLE SHALL BE REMOVED.



**TS 2885
ECON 12**

HRG PROJECT NO: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SM-TS-Golf-06.dgn
 PEN TABLE: 1/10/2024



USER NAME = tyeRton	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - W/JH	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
GOLF ROAD AND FOUR FLAGS**

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	93
CONTRACT NO. 61174			ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE

PROPOSED CONTROLLER SEQUENCE

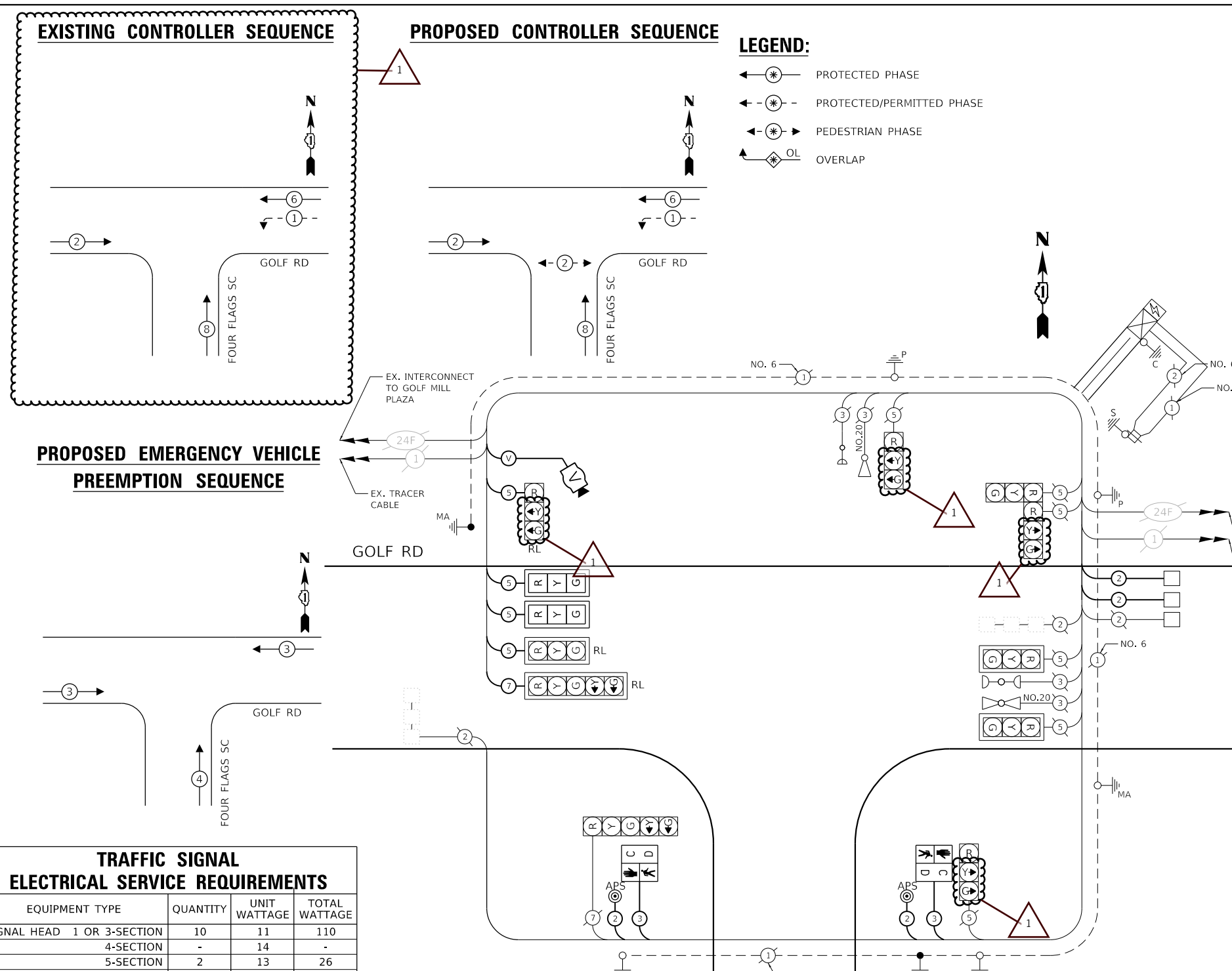
LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	8
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	82
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	401
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	423
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	523
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	173
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	589
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	248
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	119
RELOCATE EXISTING SIGNAL HEAD	EACH	3
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	514
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	2
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	4
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING	411		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1016		

ENERGY COSTS TO:
 THE VILLAGE OF NILES
 1000 CIVIC CENTER DRIVE
 NILES, IL 60714

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPARTMENT
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 88296-12000
 METER NUMBER: ---

HRG PROJECT NO.: 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-SHT-1-S-Genf-07.dgn
 PEN TABLE: 01010404.dtl



USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
PLOT SCALE = 40.0000' / in.	DRAWN - W/JH	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GOLF ROAD AND FOUR FLAGS**

SCALE: SHEET OF SHEETS STA. TO STA.

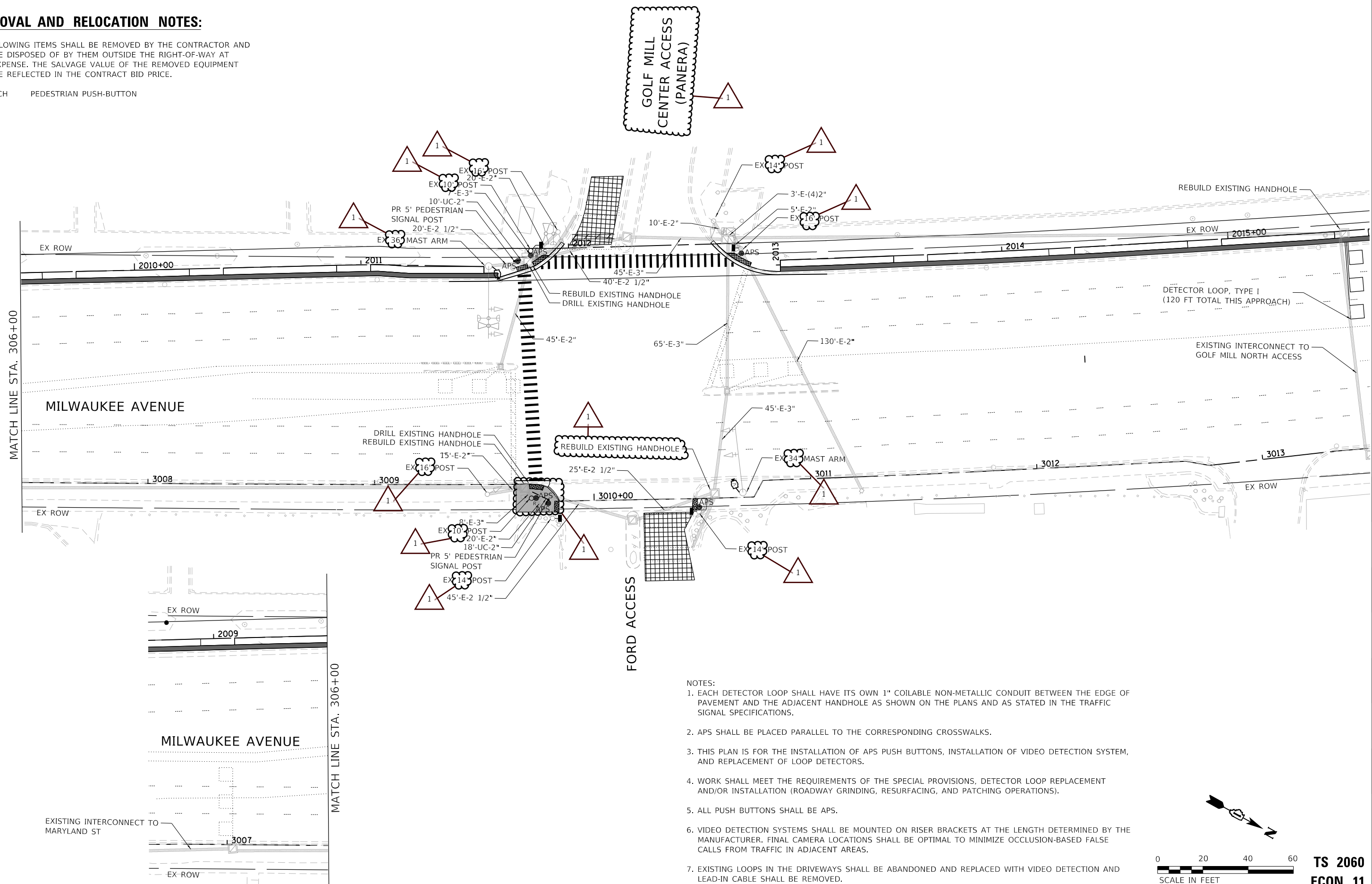
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	94
CONTRACT NO. 61174				
ILLINOIS FED. AID PROJECT				

**TS 2885
 ECON 12**

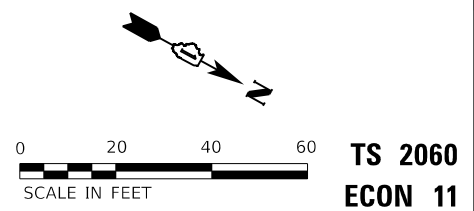
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2 EACH PEDESTRIAN PUSH-BUTTON



- NOTES:
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 2. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALKS.
 3. THIS PLAN IS FOR THE INSTALLATION OF APS PUSH BUTTONS, INSTALLATION OF VIDEO DETECTION SYSTEM, AND REPLACEMENT OF LOOP DETECTORS.
 4. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
 5. ALL PUSH BUTTONS SHALL BE APS.
 6. VIDEO DETECTION SYSTEMS SHALL BE MOUNTED ON RISER BRACKETS AT THE LENGTH DETERMINED BY THE MANUFACTURER. FINAL CAMERA LOCATIONS SHALL BE OPTIMAL TO MINIMIZE OCCLUSION-BASED FALSE CALLS FROM TRAFFIC IN ADJACENT AREAS.
 7. EXISTING LOOPS IN THE DRIVEWAYS SHALL BE ABANDONED AND REPLACED WITH VIDEO DETECTION AND LEAD-IN CABLE SHALL BE REMOVED.



HRG PROJECT NO. 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-SHT-15-MP-01.dgn
 PEN TABLE: 10/10/2024



USER NAME = tyeikon	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - WJH	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

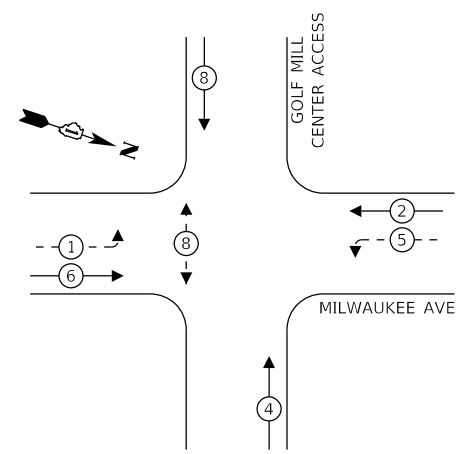
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
MILWAUKEE AVENUE AND GOLF MILL CENTER ACCESS

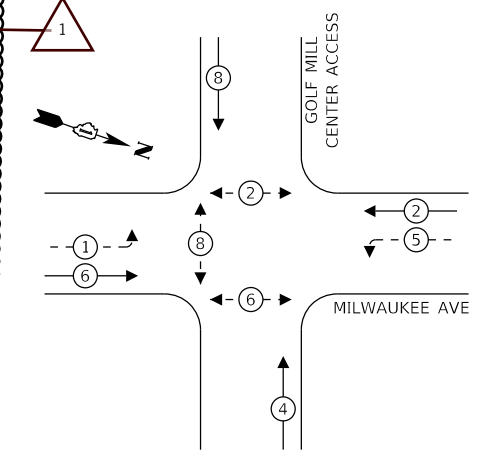
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	95
CONTRACT NO. 61174				
ILLINOIS		FED. AID PROJECT		

TS 2060
ECON 11

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE

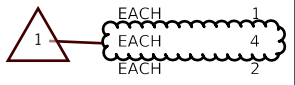


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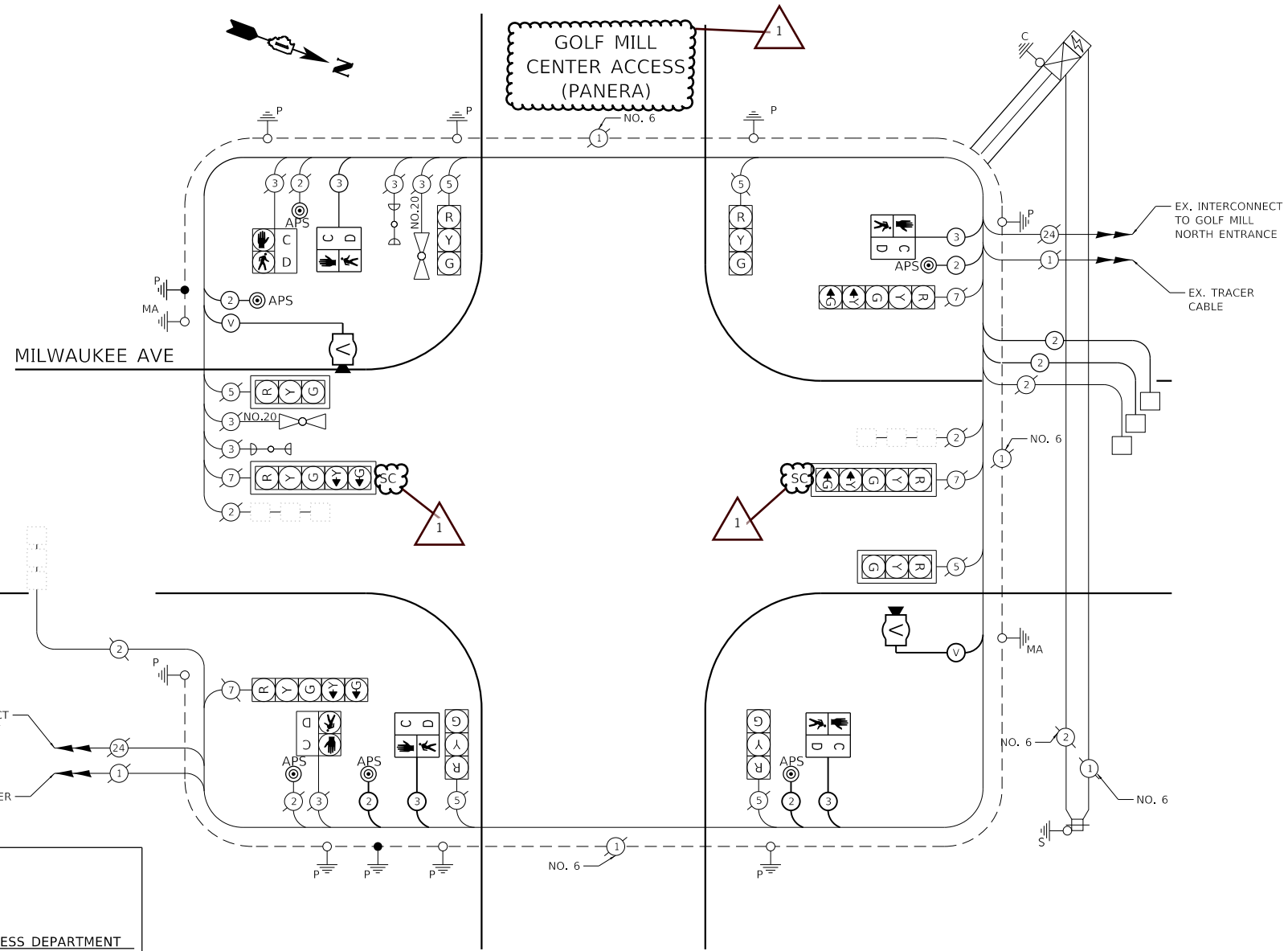
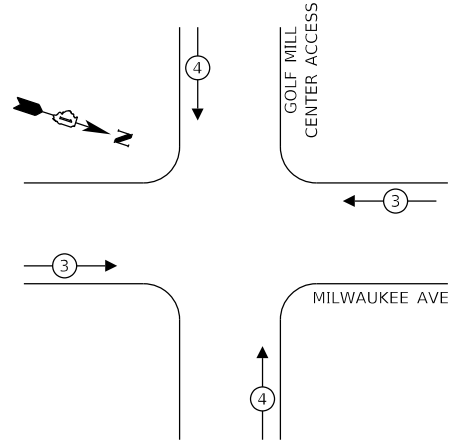
- ⊙ - PROTECTED PHASE
- ⊙ - PROTECTED/PERMITTED PHASE
- ⊙ - PEDESTRIAN PHASE
- ⊙ - OVERLAP

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	28
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	631
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	671
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	601
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	407
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	120
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	275
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	4
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	6	11	66
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING		473	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1078	

ENERGY COSTS TO:
 THE VILLAGE OF NILES
 1000 CIVIC CENTER DRIVE
 NILES, IL 60714

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPARTMENT
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 88296-12000
 METER NUMBER: ---

HRG PROJECT NO.: 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-SHT-15-MF-02.dgn
 PEN TABLE: 1/10/2024



USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
	DRAWN - W/JH	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - BDH	REVISED -
PLOT DATE = 8/26/2024	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE MILWAUKEE AVENUE AND GOLF MILL CENTER ACCESS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-00131-00-5W	COOK	146	96
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				

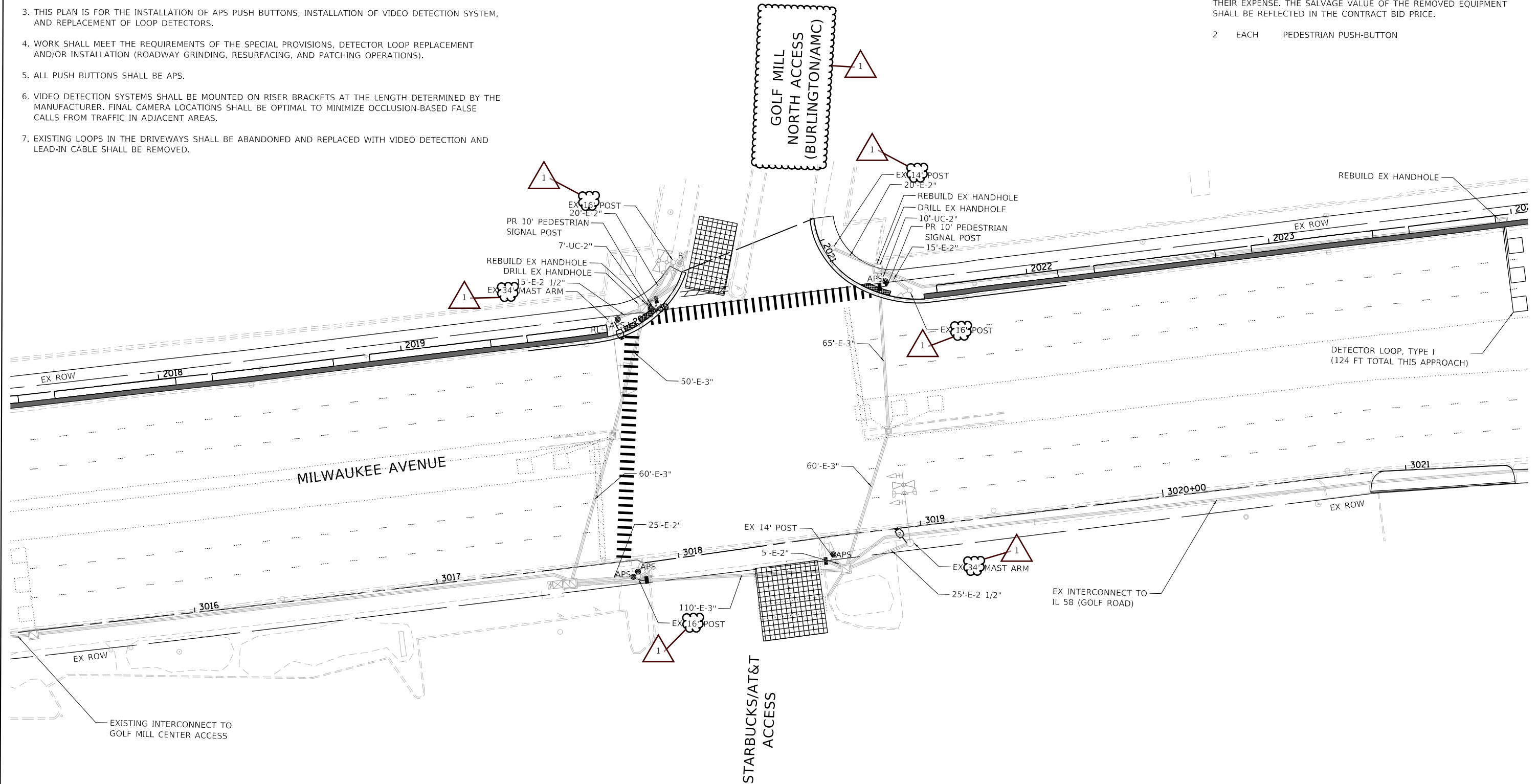
**TS 2060
 ECON 11**

- NOTES:
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
 2. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALKS.
 3. THIS PLAN IS FOR THE INSTALLATION OF APS PUSH BUTTONS, INSTALLATION OF VIDEO DETECTION SYSTEM, AND REPLACEMENT OF LOOP DETECTORS.
 4. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
 5. ALL PUSH BUTTONS SHALL BE APS.
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 7. EXISTING LOOPS IN THE DRIVEWAYS SHALL BE ABANDONED AND REPLACED WITH VIDEO DETECTION AND LEAD-IN CABLE SHALL BE REMOVED.

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN PUSH-BUTTON



HRG PROJECT NO.: 200452
 HRG PROJ. CONTACT:
 FILE NAME: 200452-sht-1s-Mil-03.dgn
 PLOT DRIVER: IL...pdf_dw.plt
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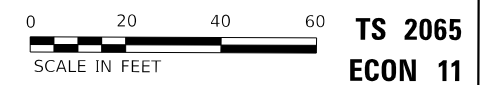


USER NAME = tyelton	DESIGNED - CL	REVISED - 09-04-2024
PLOT SCALE = 40,2216" / in.	DRAWN - WJH	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
MILWAUKEE AVENUE AND GOLF MILL NORTH ACCESS**

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

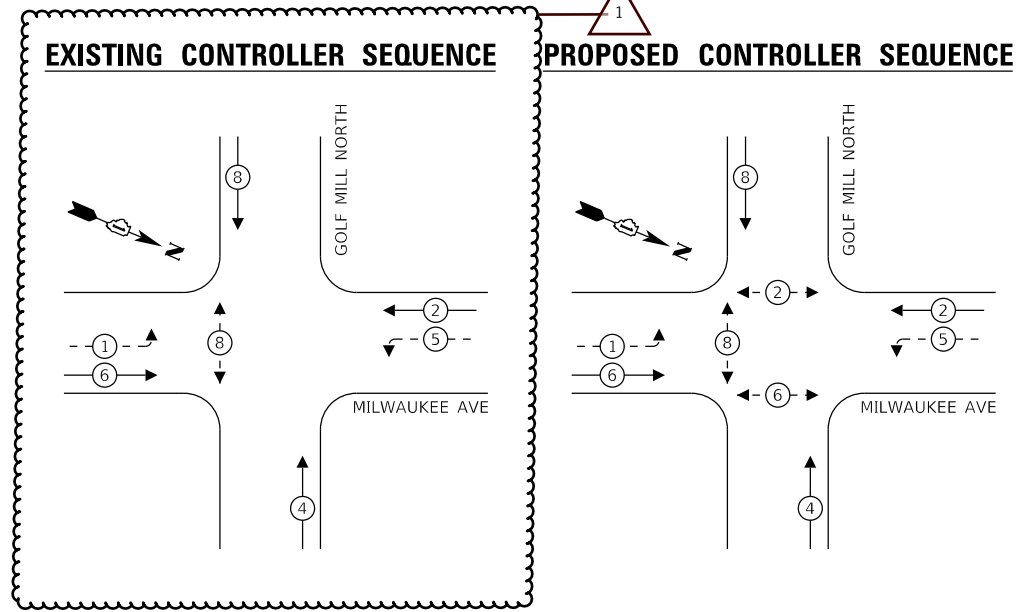


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	97
			CONTRACT NO.	61174
ILLINOIS FED. AID PROJECT				

**TS 2065
ECON 11**

SCHEDULE OF QUANTITIES

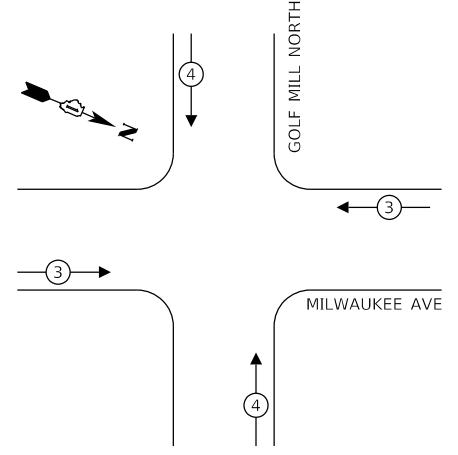
ITEM DESCRIPTION	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	17
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	886
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	732
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,096
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	464
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	124
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	299
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	40
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1



LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

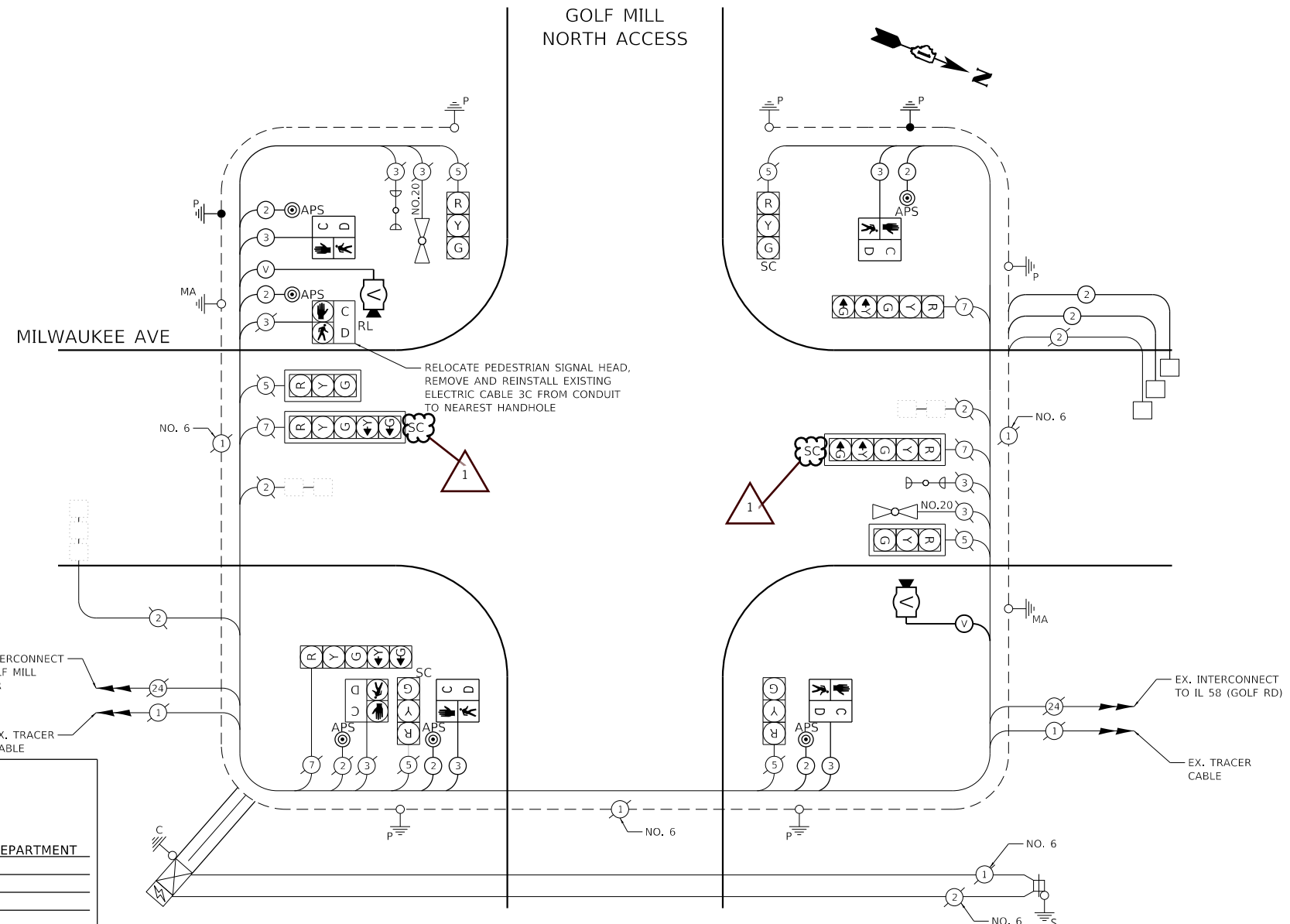


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	6	11	66
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING	443		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1,048		

ENERGY COSTS TO:
 THE VILLAGE OF NILES
 1000 CIVIC CENTER DRIVE
 NILES, IL 60714

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPARTMENT
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 88296-12000
 METER NUMBER: ---



HRG PROJECT No: 200452
 HRG PROJ CONTACT:
 FILE NAME: 200452-SHT-1-S-MP-04.dgn
 PEN TABLE: 10/10/2024



USER NAME = tyeRon	DESIGNED - CL	REVISED - 09-04-2024
PLOT SCALE = 40.0000 ' / in.	DRAWN - W/JH	REVISED -
PLOT DATE = 8/26/2024	CHECKED - BDH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 MILWAUKEE AVENUE AND GOLF MILL NORTH ACCESS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00131-00-SW	COOK	146	98
			CONTRACT NO. 61174	
ILLINOIS FED. AID PROJECT				

**TS 2065
 ECON 11**

GENERAL NOTES:

- THIS PROJECT INCLUDES THE INSTALLATION OF A NEW LIGHTING SYSTEM ALONG GOLF ROAD FROM DEE ROAD TO GREENWOOD ROAD. THE PROPOSED LIGHTING SHALL BE OWNED AND MAINTAINED BY THE VILLAGE OF NILES.
- THE QUANTITIES OF RACEWAYS WHEREVER INDICATED IN THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
- THE ELECTRICAL CONTRACTOR LOCATES IDOT AND NILES ELECTRICAL EQUIPMENT AND UNDERGROUND CABLE.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE OTHER UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF TRAFFIC SIGNAL INDICATIONS, UNDERGROUND/OVERHEAD UTILITIES AND TREES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE TRAFFIC SIGNALS OR LIGHT POLES/CONDUITS AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING WORK.
- TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
- LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND VILLAGE OF NILES.
- ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.
- GROUND RODS SHALL BE INSTALLED AT EACH LIGHTING UNIT.
- THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES AND TREES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AS DETERMINED BY THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WITH ComEd REGARDING THE REMOVAL OF EXISTING MAST ARMS WITH LUMINAIRES ATTACHED TO ComEd POLES.



BILL OF MATERIALS

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	100
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	2092
ELECTRIC CABLE IN CONDUIT, 600V XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	100
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	60
LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 200 AMP	EACH	1
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	600
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	60
WIRELESS LIGHTING CONTROL SYSTEM	L SUM	1
UNIT DUCT, 600V, 6-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1½" DIA. POLYETHYLENE	FOOT	9473
LIGHTING UNIT COMPLETE, SPECIAL	EACH	60

LEGEND

- EXISTING LIGHTING UNIT TO REMAIN
- PROPOSED LIGHTING UNIT 35 FT. POLE, 6 FT. MAST ARM, 240V (LINE TO LINE) LED LUMINAIRE OUTPUT DESIGNATION G WITH BREAKAWAY DEVICE, FESTOON OUTLET, BREAKAWAY BANNER SUPPORT ARMS AND PLANT SUPPORT ARM
- UNIT DUCT, 600V, 6-1C NO. 6, 1/C NO. 8 GROUND (XLP-TYPE USE) 1½" DIA. POLYETHYLENE
- ComEd ELECTRIC SERVICE
- PROPOSED LIGHTING CONTROLLER, 240V, 1Ø, 3 WIRE, 200 AMP, BASE MOUNTED
- UNDERGROUND CONDUIT, GALVANIZED STEEL
- GROUND ROD 5/8" DIA. X 10 FT.
- ELECTRIC CABLE IN CONDUIT 3-1/C NO. 3/0 (XLP-TYPE USE)

HRG PROJECT NO.: #PROJECT008
 HRG PROJ. CONTACT: #HRGPM8
 FILE NAME: 20240527-017-017-017-017-017-017.dgn
 PEN TABLE: #PEN_TABLE\$

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = srahman	DESIGNED - MH	REVISED - 09-04-2024
PLOT SCALE = 100,0000 ' / in.	DRAWN - MD / SR	REVISIED -
PLOT DATE = 6/5/2024	CHECKED - BL	REVISIED -
	DATE - 04-11-2024	REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, LEGEND AND BILL OF MATERIALS
GOLF ROAD – VILLAGE OF NILES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	18-00130-00-L5	COOK	146	99
			CONTRACT NO. 61174	
		ILLINOIS	FED. AID PROJECT	

EL-01