# 04-27-2018 LETTING ITEM 194

FOR INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS, SEE SHEET NO. 2

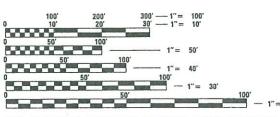
# TRAFFIC DATA:

0

0

**TAYLOR AVENUE** CURRENT ADT = 3,500 (2012)FUNCTIONAL CLASSIFICATION: LOCAL ROAD **POSTED SPEED = 30 MPH** 





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.

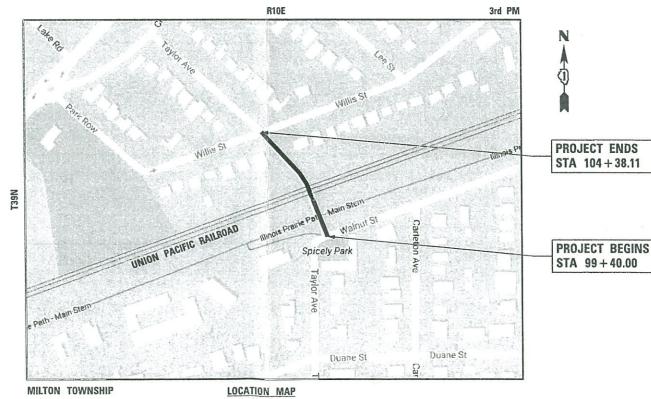
J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

# **PLANS FOR PROPOSED FEDERAL-AID HIGHWAY**

**MUN 2030 (TAYLOR AVENUE)** AT UNION PACIFIC RAILROAD **BIKE PATH TUNNEL** SECTION: 15-00079-00-BT PROJECT RXHX(086) VILLAGE OF GLEN ELLYN **DUPAGE COUNTY** 

C-91-362-15



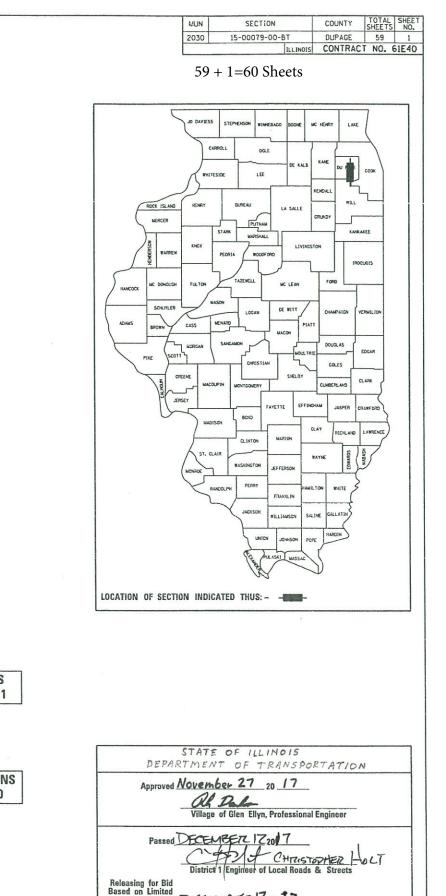
N.T.S. E½ SE¼ SEC. 11T.39N.2.10E GROSS LENGTH = 448 FT. = 0.085 MILE NET LENGTH = 448 FT. = 0.085 MILE

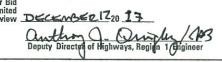


Alfred Benesch & Company Chicago, Illinois 60601 312-565-0450 Jo

0

0





**PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS** 

205 North Michigan Avenue, Suite 2400 Job No. 10507.01

# **INDEX OF SHEETS**

COVER SHEET

- 2 INDEX OF SHEETS, GENERAL NOTES AND HIGHWAY STANDARDS
- 3-10A SUMMARY OF QUANTITIES
- 11-12 SCHEDULE OF QUANTITIES
- 13-15 TYPICAL SECTIONS
- 16 ALIGNMENT. TIES AND BENCHMARKS
- 17 REMOVAL PLAN
- 18 ROADWAY PLAN
- 19 SHARED USE PATH PROFILE
- 20 PAVEMENT JOINTING PLAN
- MAINTENANCE OF TRAFFIC 21
- 22 GRADING PLAN
- 23-25 ADA PLANS
- 26-27 PLAT OF HIGHWAYS
- 28 EROSION CONTROL LANDSCAPING PLAN
- TRAFFIC SIGNAL 29-38
- 39-41 LIGHTING
- 42-53 STRUCTURAL
- 54-55 SOIL BORINGS
- 56 RAILROAD CROSS SECTION
- 57-59 DISTRICT 1 DETAILS

# **IDOT HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
420101-06	24' JOINTED PCC PAVEMENT
420111-04	PCC PAVEMENT ROUNDOUTS
424001-10	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
602001-02	CATCH BASIN, TYPE A
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND
664001-02	CHAIN LINK FENCE
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24"
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS

728001-01 TELESCOPING STEEL SIGN SUPPORT

# **DISTRICT 1 DETAILS**

- BD-24 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
- TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS TC-10

GUTTER

- TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (7 SHEETS)

# **GENERAL NOTES**

- 1. ALL ELEVATIONS REFER TO NAVD88.
- ALL DAMAGE TO TOWNSHIP, CITY, COUNTY OR STATE OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRICAL CABLE SHALL 2. NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.
- EXCEPT WHERE MODIFIED BY THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS OR THE DETAILS IN THE PLANS. ALL CONSTRUCTION SHALL BE DONE IN 3. ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016: THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2018: THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JULY 2009 SIXTH EDITION: THE "DETAILS" IN THE PLANS; AND THE "SPECIAL PROVISIONS" IN THE CONTRACT DOCUMENTS.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE. THE STRUCTURE GEOTECHNICAL REPORT IS AVAILABLE FOR REVIEW AND INFORMATION. SEE AVAILABLE REPORTS SPECIAL PROVISION.
- 5. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY 6. COMPANIES, DUPAGE COUNTY, THE VILLAGE OF GLEN ELLYN AND UPPR.
- 7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND 8. CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR 9. SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 10. THE CONTRACTOR SHALL PLACE TREE TRUNK PROTECTION AROUND TREES WITHIN THE RIGHT OF WAY. ADDITIONALLY, TREE ROOT PRUNING SHALL BE CONDUCTED AT THE DIRECTION OF THE ENGINEER.
- DRAINAGE STRUCTURE STATIONS AND OFFSETS ARE SHOWN TO THE CENTER OF THE FRAME. DRAINAGE STRUCTURE RIM ELEVATIONS ARE SHOWN TO THE TOP OF THE FRAME. 11.
- 12. THE CONTRACTOR SHALL PLACE AND MAINTAIN PERIMETER EROSION BARRIER AROUND THE EXISTING AND PROPOSED OPEN GRATES AT THE DIRECTION OF THE ENGINEER.
- 13. THE LOCATION OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE ENGINEER DOES NOT GUARANTEE ITS ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATIONS OF SUCH FACILITIES SO AS NOT TO DAMAGE THEM IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 105.07 OF THE STANDARD SPECIFICATIONS. THEIR FACILITIES MAY BE REQUIRED TO BE ADJUSTED OR RELOCATED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR DESTRUCTION OF PUBLIC OR PRIVATE PROPERTY, AND SHALL RESTORE SUCH PROPERTY AT HIS/HER OWN EXPENSE. 14.
- THE CONTRACTOR WILL BE REQUIRED TO DISPOSE OF ALL SIDEWALK, CURB AND GUITTER. 15. PAVEMENT, AND ALL OTHER MATERIAL EXCAVATED OR REMOVED DUE TO CONSTRUCTION OPERATIONS AT HIS/HER EXPENSE. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM SITE ON THE DAY IT IS EXCAVATED. NO PAYMENT WILL BE MADE FOR HAULING OR TRUCKING MATERIAL TO LOCATIONS, PROVIDED BY THE CONTRACTOR, OUTSIDE THE LIMITS OF THE IMPROVEMENT.
- 16. DURING CONSTRUCTION OPERATIONS, WHENEVER ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED. IT SHALL BE REMOVED BY THE CONTRACTOR AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS.

<b>k</b>	Alfred Benesch & Company 205 North Michlgan Avenue, Suite 2400		DESIGNED - DRAWN -	D. LEVIN D. LEVIN	REVISED - REVISED -	STATE OF ILLINOIS	INDEX OF	SHEETS, GEN	NERAL N
poenescn	Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED -	R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION	ļ		
		18.34	DATE –	12/21/2017	REVISED -		SCALE: NTS	SHEET 1	OF 1

- UPRR RESTRICTIONS.
- 19.
- DIVISION).
- 23.
- EXPECTED.

17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.

18. IN ACCORDANCE WITH LOCAL ORDINANCE, WORKING HOURS SHALL BE LIMITED BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM ON WEEKDAYS ONLY UNLESS APPROVED BY THE VILLAGE PROFESSIONAL ENGINEER. THE VILLAGE IS AWARE THAT WORK OUTSIDE OF THESE HOURS WILL BE REQUIRED PER

CONTRACTOR SHALL PROVIDE AND MAINTAIN FENCING, BARRICADES, TRAFFIC CONTROL SIGNS, AND OTHER SAFEGUARDING MEASURES DURING THE COURSE OF ALL WORK TO PROTECT THE PUBLIC FROM THE CONSTRUCTION OPERATIONS.

20. MAINTAIN ACCESS TO ADJACENT STREETS DURING CONSTRUCTION. NO CLOSING OF STREETS UNLESS APPROVAL FIRST OBTAINED FROM THE AGENCY WITH JURISDICTION (CITY ENGINEERING

21. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF CONTAMINATED SOILS ENCOUNTERED DURING CONSTRUCTION OF THIS PROJECT.

22. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INSTALL VARIABLE MESSAGE BOARDS TO ALERT THE PUBLIC OF THE UPCOMING TAYLOR AVENUE CLOSURE. LOCATIONS, MESSAGE, AND TIMING OF SIGNING SHALL BE COORDINATED WITH RICH DAUBERT, PROFESSIONAL ENGINEER OF GLEN ELLYN.

IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE UNION PACIFIC RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE UNION PACIFIC RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED.

24. THE CONTRACTOR MUST SIGN THE RAILROAD RIGHT-OF-ENTRY AGREEMENT FOR WORK WITHIN THE RALEROAD RIGHT-OF-WAY, THE CONTACT PERSON FOR THE RAILROAD IS SEAN COLLIER AT 312-496-4726. A MINIMUM OF FOUR TO SIX WEEKS ADVANCE NOTIFICATION IS REQUIRED TO OBTAIN THE RIGHT-OF-ENTRY PERMIT. THE COST TO OBTAIN THIS RIGHT-OF-ENTRY AGREEMENT SHALL BE INCLUDED FOR PAYEMENT FOR THE VARIOUS ITEMS OF WORK INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

25. WORKING HOURS FOR WORK ON OR ABOVE THE UPRR RIGHT-OF-WAY MAY BE LIMITED TO 9:00 AM TO 3:30 PM AND/OR OVERNIGHT, AND/OR WEEKENDS. THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE UPRR FOR THE ALLOWABLE WORKING HOURS. NO ADDITIONAL COMPENSATION OR TIME EXTENSION WIL BE ALLOWED FOR COMPLIANCE WITH THE WORKING HOUR REQUIREMENTS AS DICTATED BY THE RAILROAD. DELAYS, POSTPONEMENTS, AND CANCELLATIONS OF SCHEDULED WORK SHOULD BE

26. THE CONTRACTOR SHALL SAWCUT CONSTRUCTION JOINTS INTO THE PCC PATH.

	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
L NOTES AND HIGHWAY STANDARDS	2030	15-00079-00-BT	DUPAGE	59	2
			CONTRACT	Γ NO. 6	51E40
SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. AI	D PROJECT		

				80% FED	80% FED	CONSTRUC	TION CODE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	20% LOCAL ROADWAY 002 <i>8</i> URBAN	20% LOCAL SAFETY 002 <b>£</b> URBAN	80% FED 20% LOCAL NEW TUNNEL 0028 URBAN				1
× 20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	14		14					
- 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	26	-	26					
- 20101100	TREE TRUNK PROTECTION	EACH	7		7					
× 20101200	TREE ROOT PRUNING	EACH	7		7					
* 20101400	NITROGEN FERTILIZER NUTRIENT	POUND	1		1		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
- 20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1		1					
× 20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	1		1					
* 20101700	SUPPLEMENTAL WATERING	UNIT	0. 1		0.1					
20200100	EARTH EXCAVATION	CU YD	190		190					
20800150	TRENCH BACKFILL	CU YD	32		32					
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	90		90			· · · · · · · · · · · · · · · · · · ·		
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	575		575				· · · · · · · · · · · · · · · · · · ·	
* 25200100	SODDING	SO YD	1,116		1,116					
28000400	PERIMETER EROSION BARRIER	FOOT	296		296					
• SPECIALIT	Y ITEM									
Alfred Benesch & C 205 North Michigar Chicago, Illinois 60 312-565-0450	Company Averue, Suite 2400 601 Job No. 10507.01	STATE	DF ILLINOIS			SUMMARY OF Q	ANTITIES	M	NUN SECTION 030 15-00079-00-BT	COUN

				MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TITI	ES			2030	15-00079-00-BT	DUPAGE	59	3
						CONTRACT	T NO. 6	51E40
TA.	N/A	TO STA.	N/A		ILLINDIS FED. A	D PROJECT		

						CONSTRU
				80% FED	80% FED	80% FED
				20% LOCAL ROADWAY	20% LOCAL SAFETY	20% LOCAL NEW TUNNEI
CODE	ITEM	UNIT	TOTAL	0028	0028	0.028
NO.			QUANTITY	URBAN	URBAN	URBAN
28000510	INLET FILTERS	EACH	4		4	-
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	825	825		
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SO YD	437		437	
42000301	PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)	SQ YD	825	825		
42001300	PROTECTIVE COAT	SQ YD	1, 387	693.5	693.5	
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	30	30		
				· · ·		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	781.0		781.0	
42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SO FT	2,469.0		2,469.0	
42400800	DETECTABLE WARNINGS	SO FT	89		89	
	······································					
44000100	PAVEMENT REMOVAL	SQ YD	811	811		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	48	-	48	
44000600	SIDEWALK REMOVAL	SO FT	2,664		2,664	
50200100	STRUCTURE EXCAVATION	CU YD	987			987
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	201			201
	······································					
PECIALITY	ITEM		±			

 Alfed Benesch & Company 205 Mont Midligan Aroung, Suite 2400 Chicapy, Initiation Soforti 312-565-0450
 Alfed Benesch & Company 205 Mont Midligan Aroung, Suite 2400 Chicapy, Initiation Soforti 312-565-0450
 Alfed Benesch & Company 205 Mont Midligan Aroung, Suite 2400 CHECKED - R. PARKS
 REVISED STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANT

 SCALE: NTS
 SHEET 2
 OF 8
 SHEETS ST

N CODE
N CODE
N CODE
N CODE
N_CODE

				MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TITIE	:5			2030	15-00079-00-BT	DUPAGE	59	4
						CONTRAC	NO. 6	51E40
TA.	N/A	TO STA.	N/A		ILLINOIS FED. A	ID PROJECT		

						<b>.</b>			
				80% FED	80% FED	CONSTRUC 80% FED	TION CODE		4
				20% LOCAL	20% LOCAL	20% LOCAL		 	l
CODE			TOTAL	ROADWAY	SAFETY	NEW TUNNEL			l
NO.	ITEM	UNIT	QUANTITY	0028	002 <b>8</b>	0028		 	l
				URBAN	URBAN	URBAN		 	l .
									l .
									l
50300225	CONCRETE STRUCTURES	CU YD	108.1			108.1		 	1
									1
	· · · · ·							 	
50300285	FORM LINER TEXTURED SURFACE	SO FT	1,172			1.172			1
									i
								 	1
50500505	STUD SHEAR CONNECTORS	EACH	78			78			l
									l l
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	14,680			14,680			l
									ł
									I
52200700	PRECAST MODULAR RETAINING WALL	SO FT	914			914			4
								 	l
								 	l
550A0050	STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT	11		11				
								 	l
	· · · · · · · · · · · · · · · · · · ·						· · · · · · · · · · · · · · · · · · ·	 	l
55100100	STORM SEWER REMOVAL 4"	FOOT	114		114				
55100500	STORM SEWER REMOVAL 12"	FOOT	33		33				
					-			 	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	67			67			
60107600	PIPE UNDERDRAINS 4"	FOOT	114		114				
							· · · · · ·		1
								 	ł
60202405	CATCH BASINS, TYPE A, 4'-DIAMETER	EACH	2		2				
	<u></u>							 · · · · · ·	1
			M# MAT					 	1
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	9		9				1
									1
60500050	REMOVING CATCH BASINS	EACH	2	1	1				1
								 	ł
								 	1
60603800	COMBINATION CURB AND GUTTER, TYPE B-6.12	FOOT	130.5	130.5					1
								 	l
								 	j
SPECIALITY	ITEM								
				T		<u> </u>		MUN SECTION	
Alfred Benesch & Cor 205 North Michigan A	mpany June 2400 J BRAWN - D. LEVIN REVISED -		OF ILLINOIS			SUMMARY OF Q	JANTITIES	2030 15-00079-00-BT	COUNTY SI DUPAGE
Chicago Illinois 6060	Job No. 10507.01 CHECKED - R. PARKS REVISED -	DEPARTMENT OF	TRANSPORT	ΔΤΙΟΝ					CONTRACT I

	St A St	DESIGNED	- D.LEV	IN REV	SED -											N
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	1 Ba	DRAWN	- D.LEV	IN REV	SED -	STATE OF ILLINOIS			SUMI	MARY	UF UU	ANTITI	ES			2
		CHECKED	- R. PAR	KS REV	SED –	DEPARTMENT OF TRANSPORTATION										
		DATE	- 12/21/	2017 REV	SED -		SCALE: NTS	SHEET	3 0	F 8	SHEETS	STA.	N/A	TO STA.	N/A	
	1833	1 BAIL	127217				JUNELI IIIJ	Tonati			0.122.00					-

	and the	DESIGNED - D. LEVIN	REVISED -						
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	I AN	DRAWN - D. LEVIN	REVISED -	STATE OF ILLINOIS		SUMMARY OF QUA	ANTITIES		
Oenescn Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED - R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION					
		DATE - 12/21/2017	REVISED -		SCALE: NTS	SHEET 4 OF 8 SHEETS	STA. N/A	TO STA. N	N/A

				[		CONSTRUC	TION CODE		]
				80% FED	80% FED	80% FED 20% LOCAL			
	T			20% LOCAL	20% LOCAL	20% LOCAL			-
CODE	ITEM	UNIT	TOTAL	ROADWAY 00 <b>29</b>	SAFETY 002 <b>S</b>	NEW TUNNEL			-
NO.			QUANTITY	URBAN	URBAN	URBAN			-
									-
66400305	CHAIN LINK FENCE, 6'	FOOT	44	44					
									-
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	55		55				
									_
66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1		1				
									-
66900530	SOIL DISPOSAL ANALYSIS	EACH	2		2				
									-
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5		5				
									-
67100100	MOBILIZATION	L SUM	1	1					1
									-
			•						
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2					-
			-						-
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	33		33				
							"·····		1
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	313	313	· · · · · · · · · · · · · · · · · · ·				
									-
78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	278	278					
									-
78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	155	155					
				100					-
78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	20	20					
			29	20					-
80500100		EACU	1		1			······································	1
60300100	SERVICE INSTALLATION, TYPE A	EACH	1		1				-
01000000									-
01028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	94		94				
		<u> </u>		I	<u> </u>	<u> </u>	I		1
SPECIALITY									
	Designary Avenue, Suite 2400 Of Job No. 10507.01         DESIGNED         D. LEVIN         REVISED         -           DIAWN         -         D. LEVIN         REVISED         -           CHECKED         -         R. PARKS         REVISED         -		OF ILLINOIS					MUN SECTION	COUNTY S

							CONSTRUC	<u>101 T</u>
					80% FED 20% LOCAL	80% FED 20% LOCAL	80% FED 20% LOCAL	
CODE				TOTAL	ROADWAY	SAFETY	NEW TUNNEL	
NO.		ITEM	UNIT	QUANTITY	0028	0028	00:28	
				QUANTIT	URBAN	URBAN	URBAN	
66400305	CHAIN LINK FENCE. 6'		FOOT	44	44			
66900200	NON-SPECIAL WASTE DISPOSAL		CU YD	55		55		
66900450	SPECIAL WASTE PLANS AND REPORTS		L SUM	1		1		
					[		1	

						CONSTRUC
				80% FED	80% FED	80% FED
ſ	F			20% LOCAL	20% LOCAL	20% LOCAL
CODE			TOTAL	ROADWAY	SAFETY	NEW TUNNEL
NO.	ITEM	UNIT	QUANTITY	0028	0028	0028
				URBAN	URBAN	URBAN
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	11		11	
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	57	· · · · · ·	57	······································
81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	512		512	
81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	57		57	
81200210	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA., PVC	FOOT	114		114	
81400100	HANDHOLE	EACH	5		5	
81400300						
61400300	DOUBLE HANDHOLE	EACH	1		1	
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	1,671		1,671	
84200804	REMOVAL OF POLE FOUNDATION	EACH	1		1	
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	1		1	
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1	
87300305	ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	168		168	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	480		480	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	681		681	
SPECIALITY	ITEM				<u> </u>	

		1 A 14	DESIGNED -	D. LEVIN	REVISED -			MUN	SECTION	COUNTY TOTAL SHEET
benesch <sup>Alfred Belle</sup>	nesch & Company n Michigan Avenue, Suite 2400		DRAWN -	D. LEVIN	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	2030	15-00079-00-BT	DUPACE 59 7
	Illinois 60601 0450 Job No. 10507.01		CHECKED -	R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRACT NO. 61E40
			DATE –	12/21/2017	REVISED -		SCALE: NTS SHEET 5 OF 8 SHEETS STA. N/A TO STA. N/A		ILLINDIS FED. AI	D PROJECT

TTIES	MUN	SECTION	COUNTY	TOTAL SHEE SHEETS NO.
			,	
		· · · ·		
		· · · · · · · · · · · · · · · · · · ·		
······································				
N CODE				

				[			
				80% FED	80% FED	CONSTRUC 80% FED	
				20% LOCAL	20% LOCAL	20% LOCAL	
CODE			TOTAL	ROADWAY	SAFETY	NEW TUNNEL	
NO.	ITEM	UNIT	QUANTITY	0028	0028	0028	<u> </u>
				URBAN	URBAN	URBAN	-
87301295	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C	FOOT	480		480		-
			· · · · · · · · · · · · · · · · · · ·				
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	110		110		
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	395		395		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3	-	3		
							-
37502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2		2		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16		16		
			10		10		
37800200	CONCRETE FOUNDATION, TYPE D	FOOT	4		4		[
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4		4		
38500100	INDUCTIVE LOOP DETECTOR	EACH	2		2		⊢
							⊢
38600700	PREFORMED DETECTOR LOOP	FOOT	165	an 1	165		-
39500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	1		1		
							— 
39501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2		2		
39501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1		1		
							<b> </b>
39502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,273		2,273		├
					1	1	

á	Shaaaah	Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	DRAWN -	- D. LEVIN	REVISED -	STATE OF ILLINOIS
100	oenescn	Chicago, Illinois 60601 312-565-0450 Job No. 10507.01	CHECKED -	- R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION
			DATE -	- 12/21/2017	REVISED -	
						· · · · · · · · · · · · · · · · · · ·

SUMMARY OF QUANTITIES SCALE: NTS SHEET 6 OF 8 SHEETS STA, N/A TO STA, N/A

ON CODE	· ·		
	-		
		· · · · ·	
	[	CECTION	
TITIES	MUN 2030	SECTION 15-00079-00-BT	COUNTY         TOTAL SHEETS         SHEET NO.           DUPAGE         59         8           CONTENCT         NO.         CLEAD
TA. N/A TO STA. N/	/A	ILL INDIS FED.	CONTRACT NO. 61E40 AID PROJECT

				80% FFD	80% FED	CONSTRUC	TION CODE		
[]				80% FED 20% LOCAL	80% FED 20% LOCAL	80% FED 20% LOCAL			
CODE	ITEM	UNIT	TOTAL	ROADWAY 00 <b>28</b>	SAFETY 002 <b>8</b>	NEW TUNNEL			
NO.			QUANTITY	URBAN	URBAN	URBAN			
89502375 REMOVE EXISTING TRAFFIC SIGNAL EQU	IPMENT	EACH	1		1				
89502380 REMOVE EXISTING HANDHOLE		EACH	1		1	-		-	
					-				
89502382 REMOVE EXISTING DOUBLE HANDHOLE		EACH	1		1				
			•		-				
89502385 REMOVE EXISTING CONCRETE FOUNDATIO		EACH	1		1				
					-				
	K (IVORY SILK JAPANESE TREE LILAC),	each	2		2				
2" CALIPER, TREE FORM, BALLED AND	BURLAPPED								
	TUMN BRILLIANCE (AUTUMN BRILLIANCE	each	1		1				
SERVICE BERRY), 2" CALIPER, TREE F	ORM, BALLED AND BURLAPPED								
X0321865 ANTI-GRAFFITI PROTECTION SYSTEM		SQ FT	1,113			1,113			
						_			
X0322917 PROPOSED STORM SEWER CONNECTION TO	EXISTING MANHOLE	EACH	1		1				
X0324085 EMERGENCY VEHICLE PRIORITY SYSTEM	LINE SENSOR CABLE, NO. 20 3/C	FOOT	480		480				
X0324599 ROD AND CLEAN EXISTING CONDUIT		FOOT	292		292				
X0326998 FURNISH AND INSTALL HANDRAIL		FOOT	102			102			
X0327645 TEMPORARY SOIL RETENTION SYSTEM (S	PECIAL)	SQ FT	2,836			2,836			
X0327976 TRACK MONITORING		CAL DA	Y 80			80			
SPECIALITY ITEM							J	_J	
Alfred Benesch & Company 105 North Kincipan Avenue. Suite 2400 Chicage, Minolés 60001 312-565-0450 Job No. 10507.01	REVISED - REVISED -	STATE O	F ILLINOIS			SUMMARY OF Q	JANTITIES		UN SECTION
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400 Chicage, Minds 60601 312-565-0450 Job No. 10507.01			TRANSPORT	ATION				20	15-00079-00-BT

							CONSTRUC	TIC
					80% FED 20% LOCAL	80% FED 20% LOCAL	80% FED 20% LOCAL	
	CODE			TOTAL	ROADWAY	SAFETY	NEW TUNNEL	
	NO.	ITEM	UNIT	QUANTITY	0028	0028	0028	
					URBAN	URBAN	URBAN	
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	326	-		326	
	X2130010	EXPLORATION TRENCH. SPECIAL	FOOT	25	25			
	X4400500	COMBINATION CURB AND GUTTER REMOVAL (SPECIAL)	FOOT	246	246			
	X5030290	STAINING CONCRETE STRUCTURES	SQ FT	1,217			1,217	
ىد	×5620122							
*	X5620122	WATER SERVICE REMOVAL	EACH	1	1			
	X6040205	FRAMES AND LIDS. SPECIAL	EACH	2	1	. 1		
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1		1		
×	X1400014	CIRCUIT BREAKER IN STREET LIGHT CONTROLLER	EACH	1		1		
	X1400202	LUMINAIRE (SPECIAL)	EACH	4		4		
*	X8211150	LUMINAIRE, LED, CEILING MOUNT, 50 WATT	EACH	22		22		
×	X8360110	LIGHT POLE FOUNDATION, SPECIAL	FOOT	10		10		
*	x8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1		1		
	XX003668	PRECONSTRUCTION VIDEO TAPING	L SUM	1	1			<u> </u>
*	XX007943	STEEL CASING PIPE, SPECIAL, TUNNELED COMPLETE	FOOT	91.5			91.5	
*	SPECIALITY				T			
scl	Alfred Benesch & Con 205 North Michigan A Chicago, Illinois 6060 312-565-0450	DRAWN - D. LEVIN REVISED - CHECKED - R. PARKS REVISED -	STATE ( DEPARTMENT OI	DF ILLINOIS F TRANSPORT			SUMMARY OF QU	
		DATE - 12/21/2017 REVISED -				SCALE: NTS SHEE	T B OF B SHEETS	i S

		CONSTRUC	TION CODE				
	80% FED	80% FED 20% LOCAL NEW TUNNEL 0028					
•	20% LOCAL SAFETY CO28	20% LOCAL					
	SAFETY	NEW TUNNEL					
	0028	0028					
	URBAN	URBAN					
		326					
_							
		1,217					
_							
Ì							
	1						
-							
	1						
-							
	1						
_							
	4						
_							
	22						
_							
	10						
	10				_		
	1						
	1						
				1			
		91.5					
_							
				I			
				r			
		SUMMARY OF Q	IANTITIES		MUN	SECTION	COUNTY TOTAL SHEET SHEETS NO.
		SUMMANT UP U	JANTITEO	ļ	2030	15-00079-00-BT	DUPAGE 59 10
\$	CALE: NTS SHEE	T B OF B SHEET	5 STA. N/A TO	STA. N/A		ILLINOIS FED.	CONTRACT NO. 61E40
-						Inclinuta rED.	

						CONSTRUC	TI
				80% FED 20% LOCAL	80% FED 20% LOCAL	80% FED 20% LOCAL	<u> </u>
				ROADWAY	SAFETY	NEW TUNNEL	
CODE	ITEM	UNIT	TOTAL	0028	0028	0028	$\vdash$
NO.			QUANTITY	URBAN	URBAN	URBAN	
				URDAN	URDAN	- · · · · · · · · · · · · · · · · · · ·	
Z0007124	STEEL RAILING (SPECIAL)	FOOT	28			28	<u> </u>
							ļ
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	396	396			ļ
							ļ .
Z0045500	PRESSURE GROUTING	L SUM	1			1	<u> </u>
							ļ
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	66			66	
Z0048665	RAILROAD LIABILITY INSURANCE	LSUM	1		1		
							-
						· · · · · · · · · · · · · · · · · · ·	
						-	
	·						

SPECIALITY ITEM

 
 Alfred Benesch & Company 205 Morth Midliga Avanue, Skile 200 Sticage, Illingis 60001 312-650-4650 Job No. 1050701
 DE SICNED D. LEVIN
 REVISED STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTI SCALE: NTS
 SHEET
 8A
 OF
 8
 SHEETS STATE

ITITIES	2030		79-00-BT	DUPAGE	59	10A
	MUN		CTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1				TOTA	SUFET
		.,				
		-				
-						
,						
·						
						1
						1
						.
	-					
	· · · · · · · · · · · · · · · · · · ·					
		-				
4						
ON CODE						
						·

					52011011	0001111	SHEFTS	NO.
FITII	-5			2030	15-00079-00-BT	DUPAGE	59	10A
						CONTRAC	ΓNΟ.	61E40
Α.	N/A	TO STA.	N/A		ILLINDIS FED. A	ID PROJECT		
	1.0							

### TREE REMOVAL

				20100110					20100210
	LOCAT	ION		REMOVAL (6- 15 UNITS DIAMETER)	LOCATION				TREE REMOVAL (OVER 15 UNITS DIAMETER)
ROAD	ROAD STATION OFFSET SIDE				ROAD	STATION	OFFSET	SIDE	(UNIT)
TAYLOR	103+02.0	1.5	RT	14	TAYLOR	102+05.9	11.5′	RT	26
			TOTAL	14				TOTAL	26

# EROSION CONTROL

				20101100	20101200	20101400	20101500	20101600
	LOCAT	ION		TREE TRUNK PROTECTION	TREE ROOT PRUNING	NITROGEN FERTILIZER NUTRIENT	PHOSPHOROUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
ROAD	STATION	OFFSET	SIDE	(EACH)	(EACH)	(POUND)	(POUND)	(POUND)
Taylor	102+32.10	42.9	LT	1	1	0.11	0.11	0.11
Taylor	102+35.70	50.2	LT	1	1	0.12	0.12	0.12
Taylor	102+69.40	43.4	LT	1	1	0.09	0.09	0.09
Taylor	102+96.00	16.9	RT	1	1	0.14	0.14	0.14
Taylor	103+41.00	20.9	RT	1	1	0.12	0.12	0.12
Taylor	103+57.90	27	RT	1	1	0.11	0.11	0.11
Taylor	103+76.50	23.5	RT	1	1	0.11	0.11	0.11
			TOTAL	7	7	1	1	1

# EROSION CONTROL

			28000400	28000510
	LOCATION		PERIMETER EROSION BARRIER	INLET FILTERS
ROAD	START STA	END STA	(FOOT)	(EACH)
Taylor	099+95.8	100+44.0	52	
Taylor	100+75.0	101+19.3	46	
Taylor	101+68.2	101+98.5	43	
Taylor	101+98.9	102+63.0	93	
Taylor	102+33.7	102+85.2	62	
Taylor	100+05.0	-		1
Taylor	100+83.2	-		1
Taylor	100+79.4	-		1
Taylor	103+90.0	-		1
		TOTAL	296	4

# REMOVAL SCHEDULE

			44000100	44000200	44000600
	LOCATION		PAVEMENT REMOVAL	DRIVEWAY PAVEMENT REMOVAL	SIDEWALK REMOVAL
ROAD	START STA	END STA	(SQ YD)	(SQ YD)	(SQ FT)
Taylor	99+51.2	99+63.0			160
Taylor	99+77.2	103+47.8	748		
Taylor	99+90.0	100+00.0			366
Taylor	99+93.2	102+64.8			1148
Taylor	100+42.8	100+57.4			107
Taylor	102+66.0	102+95.9		48	
Taylor	102+83.2	103+94.0			773
Taylor	103+73.2	104+20.6	54		
Taylor	103+74.5	103+90.4	9		
Taylor	103+94	104+03.4			53
Taylor	104+26.2	104+38.2			57
		TOTAL	811	48	2664

# LANDSCAPING

			25200100
	LOCATION		SODDING
ROAD	START STA	END STA	(SQ YD)
Taylor	099+49.2	099+51.6	6
Taylor	099+56.2	99.62.7	7
Taylor	099+56.4	099+62.7	12
Taylor	099+90.5	100+06.6	41
Taylor	099+93.2	100+08.3	3
Taylor	100+04.0	100+19.0	26
Taylor	099+93.2	100+44.0	49
Taylor	100+05.0	101+00.0	94
Taylor	100+57.7	101+19.2	237
Taylor	101+68.0	102+64.8	304
Taylor	101+92.7	102+64.8	63
Taylor	102+33.5	102+87.6	84
Taylor	102+96.1	103+82.3	67
Taylor	102+82.6	103+73.7	97
Taylor	103+67.9	103+94.2	10
Taylor	103+85.1	103+92.4	4
Taylor	103+89.5	103+99.0	4
Taylor	104+00.6	104+02.9	2
Taylor	104+25.1	000+06.7	4
Taylor	104+29.3	104+37.8	2
		TOTAL	1116

### PAVEMENT SCHEDULE

PAVEMENI	SCHEDULI	E						
			30300112	31101200	42000301	42300200	42400200	42400300
LOCATION			AGGREGATE SUBGRADE IMPROVEMENT 12''	SUBBASE GRANULAR MATERIAL, TYPE B 4''	PORTLAND CEMENT CONCRETE PAVEMENT 8'' (JOINTED)	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	PORTLAND CEMENT CONCRETE SIDEWALKS 5'' INCH	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH
ROAD	START STA	END STA	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ FT)	(SQ FT)
Taylor	99+51.2	99+62.9		21			157	
Taylor	99+77.2	103+49.2	762		762.3			
Taylor	99+90.5	100+04.0		45			349	
Taylor	99+94.3	100+97.6		101				809
Taylor	100+75.0	102+42.0						
Taylor	100+00.0	100+98.0						
Taylor	101+88.9	103+94.2		208				1660
Taylor	103+38.0	103+81.0						
Taylor	102+64.8	102+96.1		13		14.06		
Taylor	102+64.8	102+86.4		14		15.02		
Taylor	101+89.0	102+65.0						
Taylor	102+88.9	103+92.0						
Taylor	103+37.8	103+81.1						
Taylor	103+66.8	103+77.7		21			168	
Taylor	103+73.3	104+20.6	54		53.6			
Taylor	103+74.4	103+90.4	9		9.0			
Taylor	103+95.2	104+00.6		7			52	
Taylor	104+26.4	104+38.3		7			54	
		TOTAL	825	437	825	30	781.0	2469.0

### PAVEMENT MARKING SCHEDULE 78008210 POLYUREA PAVE MARKING TYPE 1 LOCATION DOUBLE YELLOW START STA END STA (FOOT) ROAD Taylor 100+11.0 100+59.0 221 Taylor 100+06.0 103+75.5 Taylor 099+64.9 000+99.9 Taylor 099+64.9 099+64.9 099+95.9 099+95.9 Taylor 100+03.9 100+03.7 Taylor 103+95.8 104+24.0 Taylor Taylor 103+94.0 104+26.6 Taylor 103+83.1 103+94.0 Taylor 103+88.2 104+00.0 Taylor 100+00.0 100+00.0 100+58.0 Taylor 100+14.0 100+56.0 100+56.0 Taylor Taylor 102+65.5 102+65.5

221

TOTAL

Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400 Chicago, Illinois 60001 205 North Michigan Avenue, Suite 2400 Chicago, Illinois 60001	a de ta	DESIGNED - D. LEVIN	REVISED -			MUN	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	DRAWN - D. LEVIN		REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE	SCHEDULE OF QUANTITIES	2030	15-00079-00-BT	DUPAGE	59 11
		CHECKED - R. PARKS	REVISED -					CONTRACT	NO. 61E40
		DATE - 11/27/2017	REVISED -		SCALE: NTS SHEET 1 OF 2 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT	

0	78008230	7800	8250	78008270
VEMENT - LINE 4''	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 6''	POLYUREA MARKING TYPE		POLYUREA PAVEMENT MARKING TYPE 1 - LINE 24''
DOUBLE YELLOW	WHITE SOLID	YELLOW SOLID	WHITE SOLID	WHITE SOLID
(FOOT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)
92				
	28			
	31			
	54			
	39			
	29			
	33			
	30			
	34			
			114	
		40.7		
				9
				11
92	278	41	114	20

# EARTH WORK SCHEDULE

			20200100	21101505	66900200
	LOCATION		EARTH EXCAVATION	TOPSOIL EXCAVATION AND PLACEMENT	NON-SPECIAL WASTE DISPOSAL
ROAD	START STA	END STA	(CU YD)	(CU YD)	(CU YD)
Taylor	100+00	100+50	9	5	0
Taylor	100+50	100+97	112	31	0
Taylor	100+97	101+21	0	0	2
Taylor	101+66	101+89	0	0	3
Taylor	101+89	102+12	0	0	49
Taylor	102+12	102+50	63	17	0
Taylor	102+50	103+00	3	6	0
Taylor	103+00	103+50	0	15	0
Taylor	103+50	103+88	1	15	0
		TOTAL	190	90	55

# DRAINAGE SCHEDULE

					20800150	550A0050	60202405	X6040205	60300305	X0322917	60107600
		LOCATION			TRENCH BACKFILL	STORM SEWERS, CLASS A, TYPE 1, 12"	CATCH BASINS, TYPE A, 4'-DIAMETER	FRAMES AND LIDS, SPECIAL	FRAMES AND LIDS TO BE ADJUSTED	PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE	PIPE UNDERDRAINS, 4''
ROAD	START STA	END STA	OFFSET	SIDE	(CU YD)	(FOOT)	(EACH)	(EACH)	(EACH)	(EACH)	(FOOT)
Taylor	99+95.6	-	29.0	LT					1		
Taylor	100+02.5	-	34.7	LT					1		
Taylor	100+10.7	-	8.6	LT			1	1			
Taylor	100+79.5	-	25.8	LT					1		
Taylor	100+80.1	102+07.1	-	LT	24						114
Taylor	100+81.9	100+74.6	-	LT	78	11					
Taylor	100+81.9	-	11.2	LT			1	1			
Taylor	101+83.6	-	35.0	LT					1		
Taylor	102+15.0	-	23.5	LT					1		
Taylor	102+07.0	-	35.9	LT					1		
Taylor	102+30.0	-	13.2	LT					1		
Taylor	102+06.12	-	25.0	LT						1	
Taylor	103+90.7	-	2.0	LT					1		
Taylor	104+00.0	-	36.5	LT					1		
				TOTAL	32	11	2	2	9	1	114

# EXISTING AND PROPOSED SIGNING SCHEDULE

				72400500	72800100
		RELOCATE SIGN PANEL ASSEMBLY - TYPE A	TELESCOPING STEEL SIGN SUPPORT		
ROAD	START STA	END STA	SIDE	(EACH)	(FOOT)
Taylor	100+58.0	100+64.0	LT	1	16.5
Taylor	102+66.1	LT	1	16.5	
		TOTAL	2	33	

# DRAINAGE REMOVAL SCHEDULE

					55100500	60500050	55100100
		LOCATION	STORM SEWER REMOVAL 12''	REMOVING CATCH BASINS	STORM SEWER REMOVAL 4''		
ROAD	START STA	END STA	OFFSET	SIDE	(FOOT)	(EACH)	(FOOT)
Taylor	100+88.2	100+74.6	-	LT	25		
Taylor	100+75	102+08	-	LT			114
Taylor	100+11.6	100+10.6	-	LT	8		
Taylor	100+85.3	-	2.5	LT		1	
Taylor	100+11.6		7.4	LT		1	
				TOTAL	33	2	114

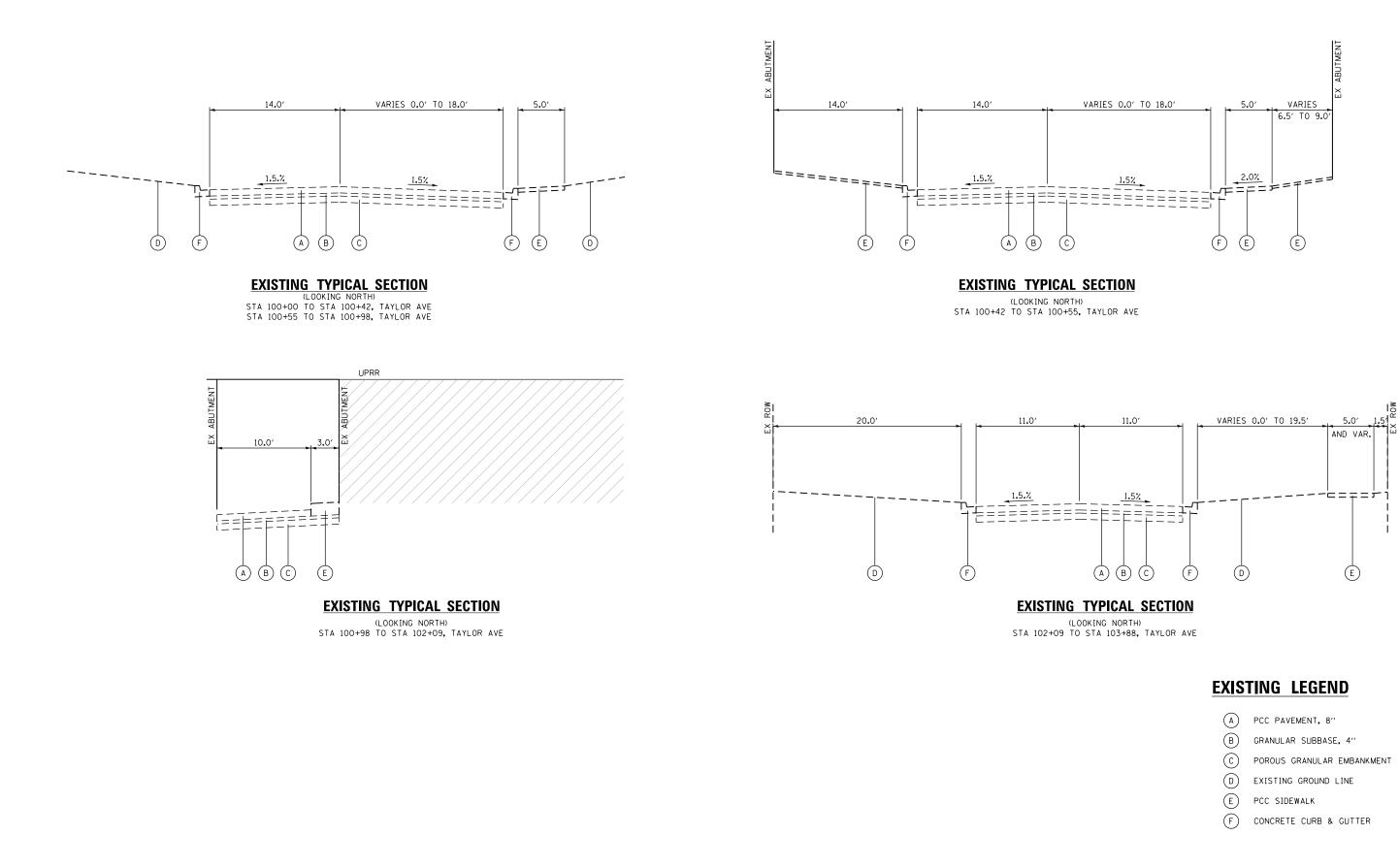
Alfred Bassesh & Company	*****	DESIGNED - D. LEVIN	REVISED -				MUN	SECTION	COUNTY TOTAL SHEET	AL SHEET TS NO.
Alfred Benesch & Company 205 North Michigan Avenue, Sulte 2400		DRAWN - D. LEVIN	REVISED -	STATE OF ILLINOIS	SCHEDULE OF QUANTITIES			15-00079-00-BT	DUPAGE 59	12
Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED - R. PARKS	REVISED - DEPARTMENT OF TRANSPORTATION		_		CONTRACT NO.	. 61E40		
	DATE - 11/27/2017 REVISED -	REVISED -		SCALE: NTS	SHEET 2 OF 2 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED.	AID PROJECT		

# CURB AND GUTTER SCHEDULE

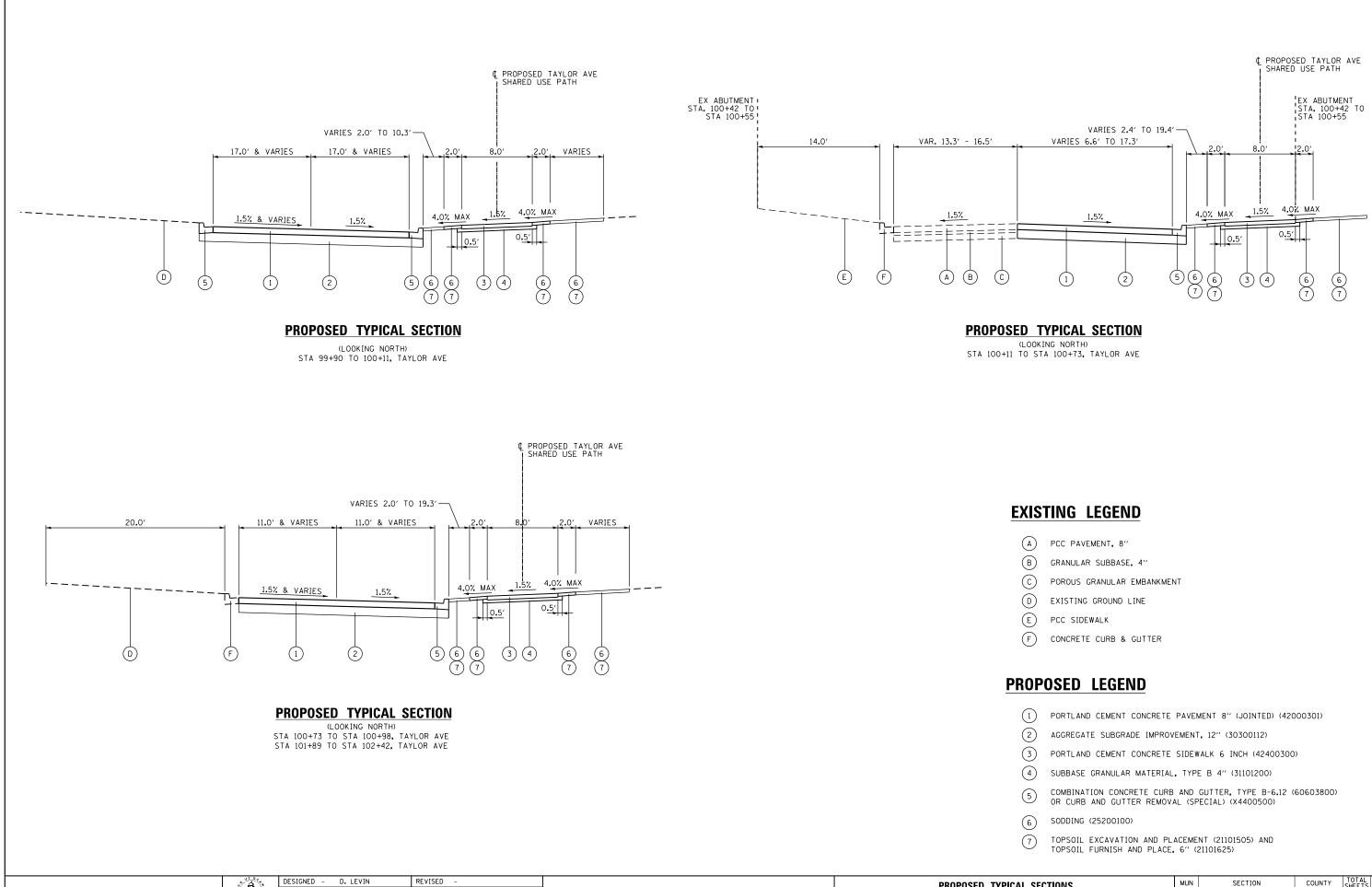
COND AND	OUTIEN	JUILDULL		
			60603800	X4400500
	LOCATION		COMBINATION CURB AND GUTTER, TYPE B-6.12	COMBINATION CURB AND GUTTER (SPECIAL)
ROAD	START STA	END STA	(FOOT)	(FOOT)
Taylor	99+63.5	099+64.2		28
Taylor	99+93.0	100+11.6		27
Taylor	99+91.1	100+89.7		114
Taylor	100+72.9	100+89.7		17
Taylor	102+28.9	102+42.0		13
Taylor	103+81.6	103+94.9		24
Taylor	103+89.7	104+01.6		12
Taylor	104+24.2	104+28.2		11
Taylor	100+89.7	102+28.9	130.5	
		TOTAL	130.5	246

# FENCE SCHEDULE

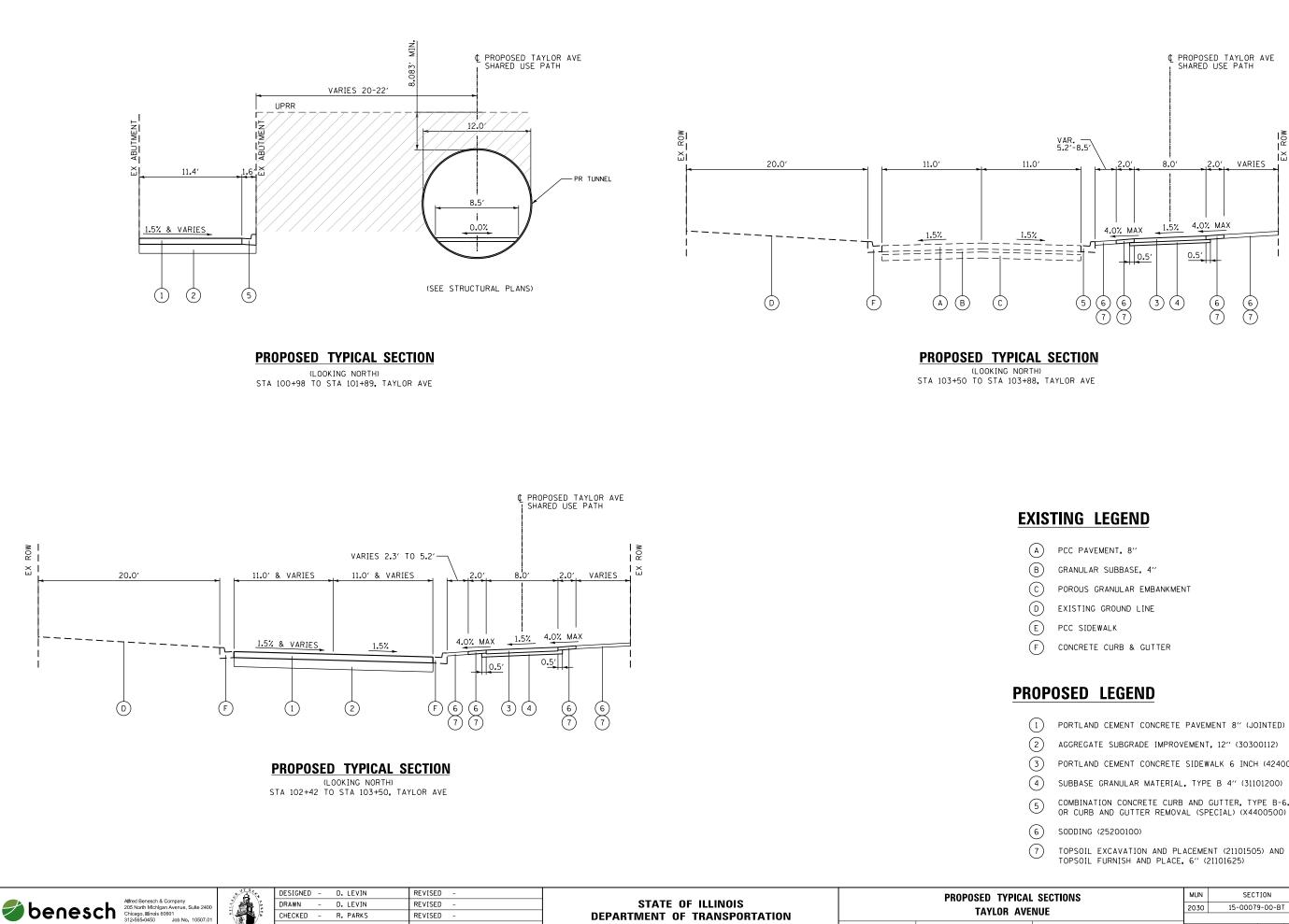
LUCE DO			
			66400305
	CHAIN LINK FENCE, 6'		
ROAD	START STA	END STA	(FOOT)
Taylor	100+76.3	100+97.3	22
Taylor	101+87.2	102+04.2	22
		TOTAL	44



Alfred Benesch & Company		DESIGNED - D. LEVIN REVISED -			EXISTING TYPICAL SECTIONS			MUN	SECTION	COUNTY	TOTAL	SHEET NO.		
hong	205 North Michigan Avenue, Suite 2400	à È -	DRAWN -	- D. LEVIN	REVISED -	VISED - STATE OF ILLINOIS TAYLOD AVENUE 2030		2030	15-00079-00-BT	DUPAGE	59	13		
Venes	Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED -	- R. PARKS - 11/27/2017	REVISED - REVISED -	DEPARTMENT OF TRANSPORTATION						T NO.	61E40	
	183	š	DATE	- 11/2//2011	REVISED -		SCALE: NTS	SHEET I OF I SHEETS STA. 100-00	10 31A. 105+88		ILLINUIS FED. 4	ND PROJECT		



Alfred Bansech & Company	a a a	DESIGNED -	D. LEVIN	REVISED -			PROPOSED TYPICAL SECTIONS	MUN	SECTION	COUNTY TOTAL SHEET SHEETS NO.
benesch beschest besc	i tên e	DRAWN     -     D.     LEVIN     REVISED     -       CHECKED     -     R.     PARKS     REVISED     -	TAYLOR AVENUE			15-00079-00-BT	DUPAGE 59 14			
	s 60601 Job No. 10507.01			TATEOR AVENUE			CONTRACT NO. 61E40			
		DATE - 11/		11/27/2017	REVISED -		SCALE: NTS	SHEET 1 OF 2 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A



11/27/2017

DATE

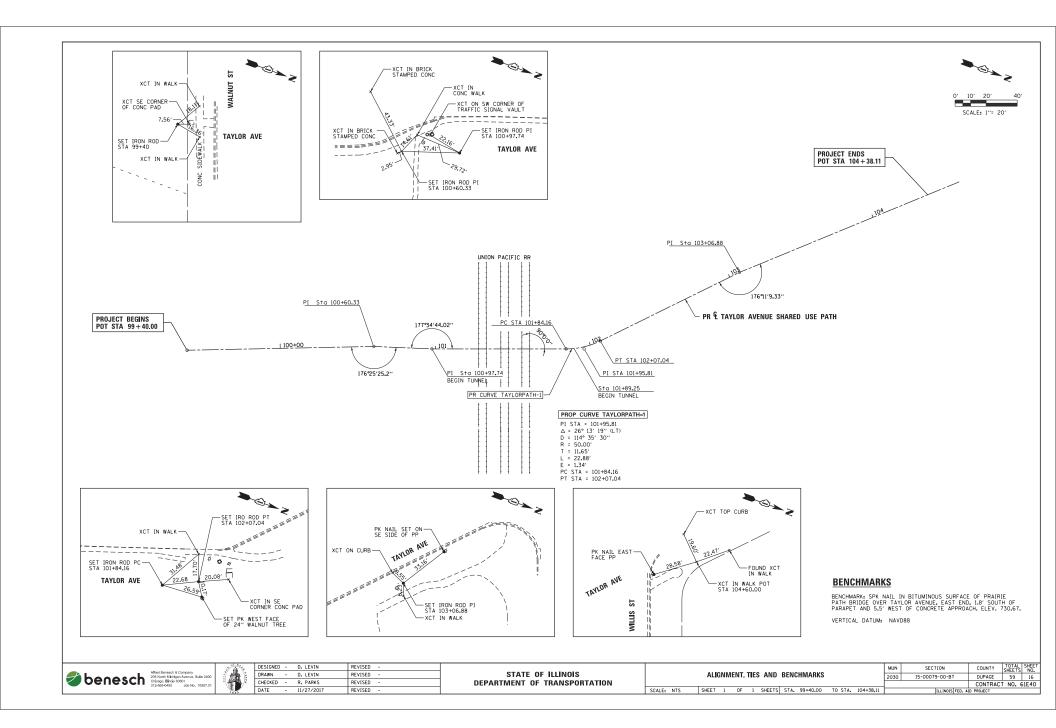
-

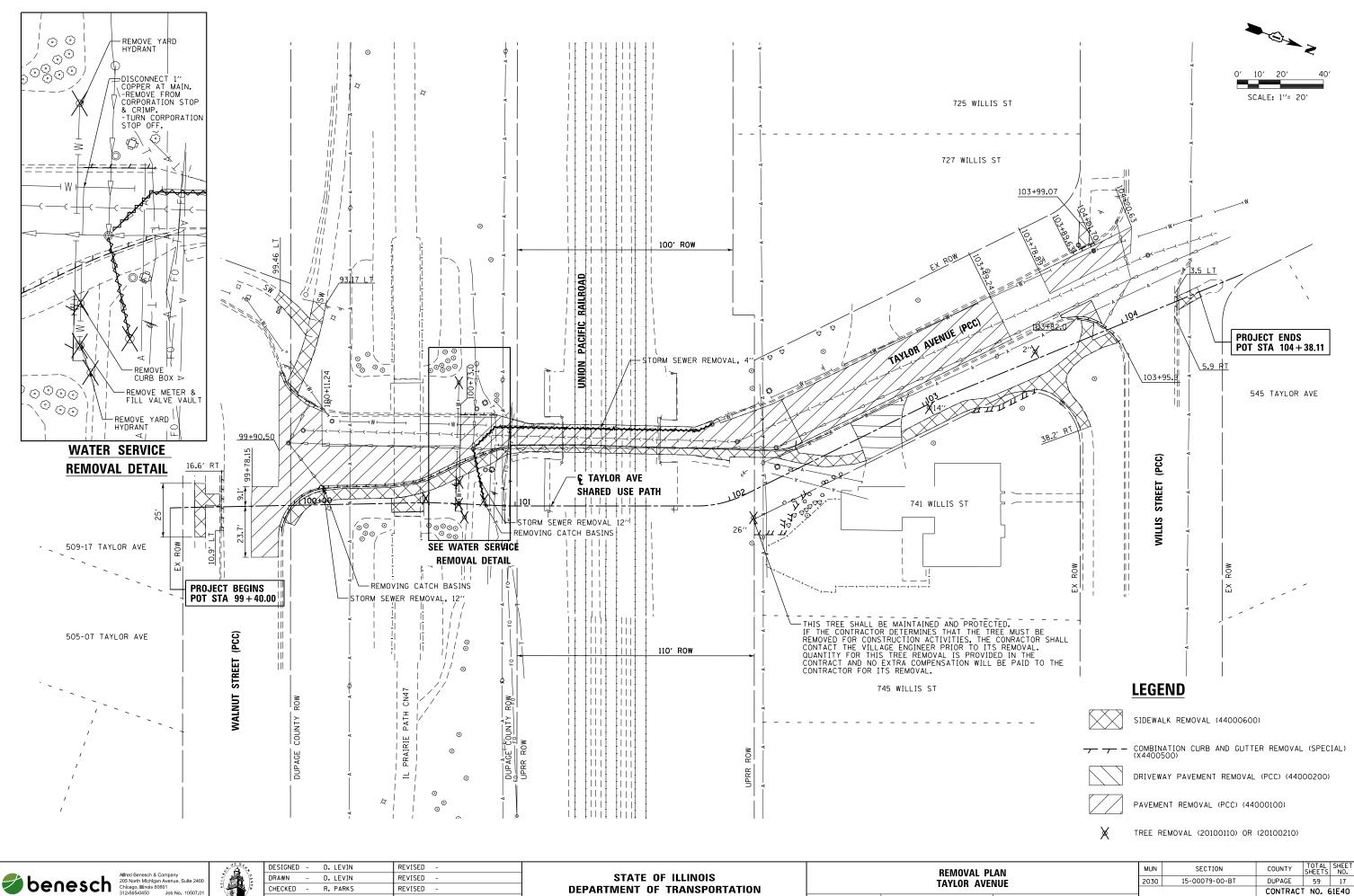
REVISED

**DEPARTMENT OF TRANSPORTATION** SCALE: NTS SHEET 2 OF 2 SHEETS

- PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) (42000301)
- PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH (42400300)
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (60603800) OR CURB AND GUTTER REMOVAL (SPECIAL) (X4400500)

AL SECT	IONS			MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
<b>ENUE</b>					15-00079-00-BT	DUPAGE	59	15				
LINOL						CONTRAC	T NO. 6	51E40				
S STA.	N/A	TO STA.	N/A	ILLINOIS FED. AID PROJECT								

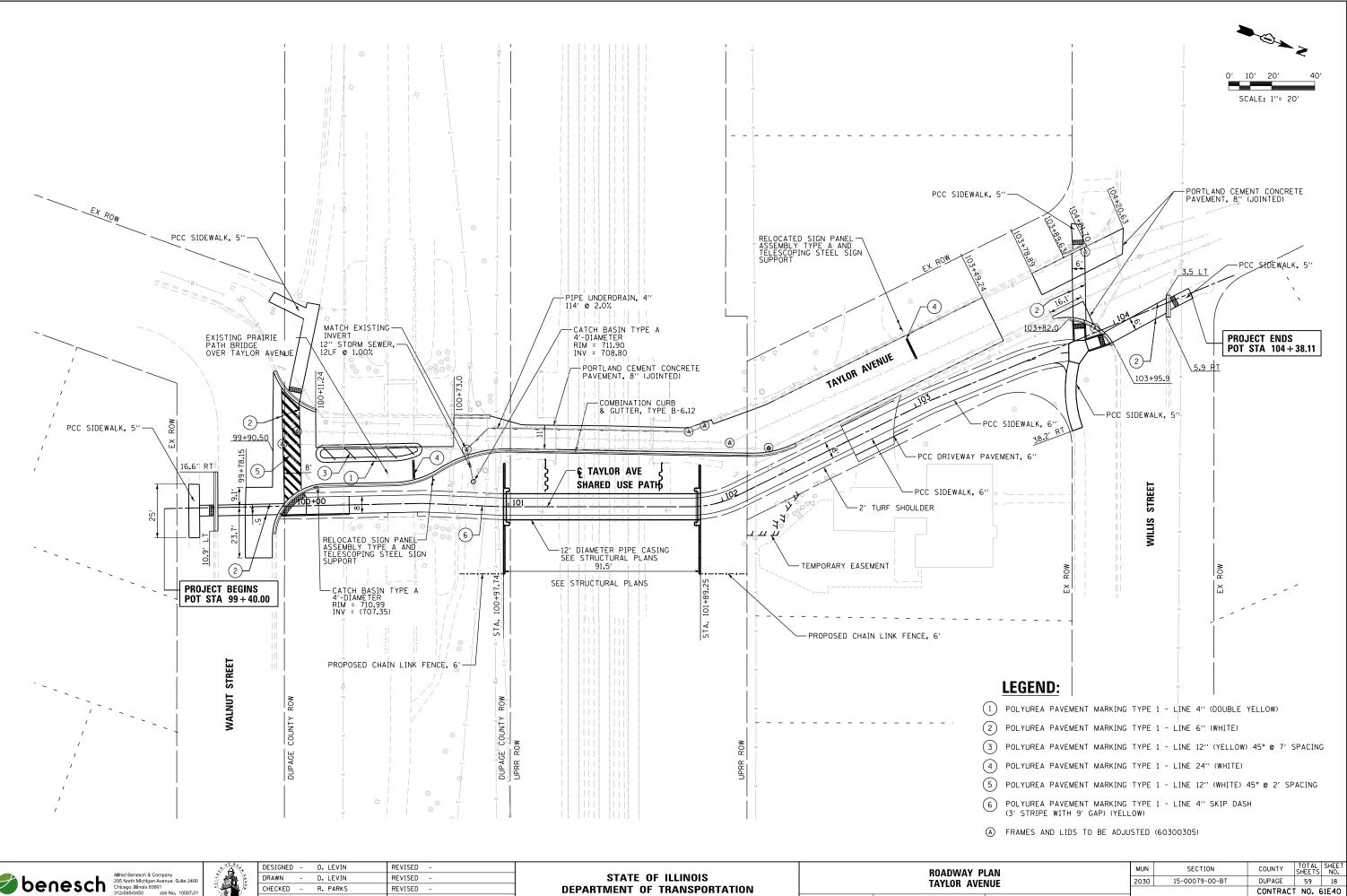




	* A **	DESIGNED -	D. LEVIN	REVISED -		
Alfred Benesch & 205 North Michig		DRAWN -	D. LEVIN	REVISED -	STATE OF ILLINOIS	
benesch <sup>205 NORM Michiel Chicago, Illinois 312-565-0450</sup>	60601 Job No. 10507.01	CHECKED -	R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION	
		DATE -	11/27/2017	REVISED -		SCALE:

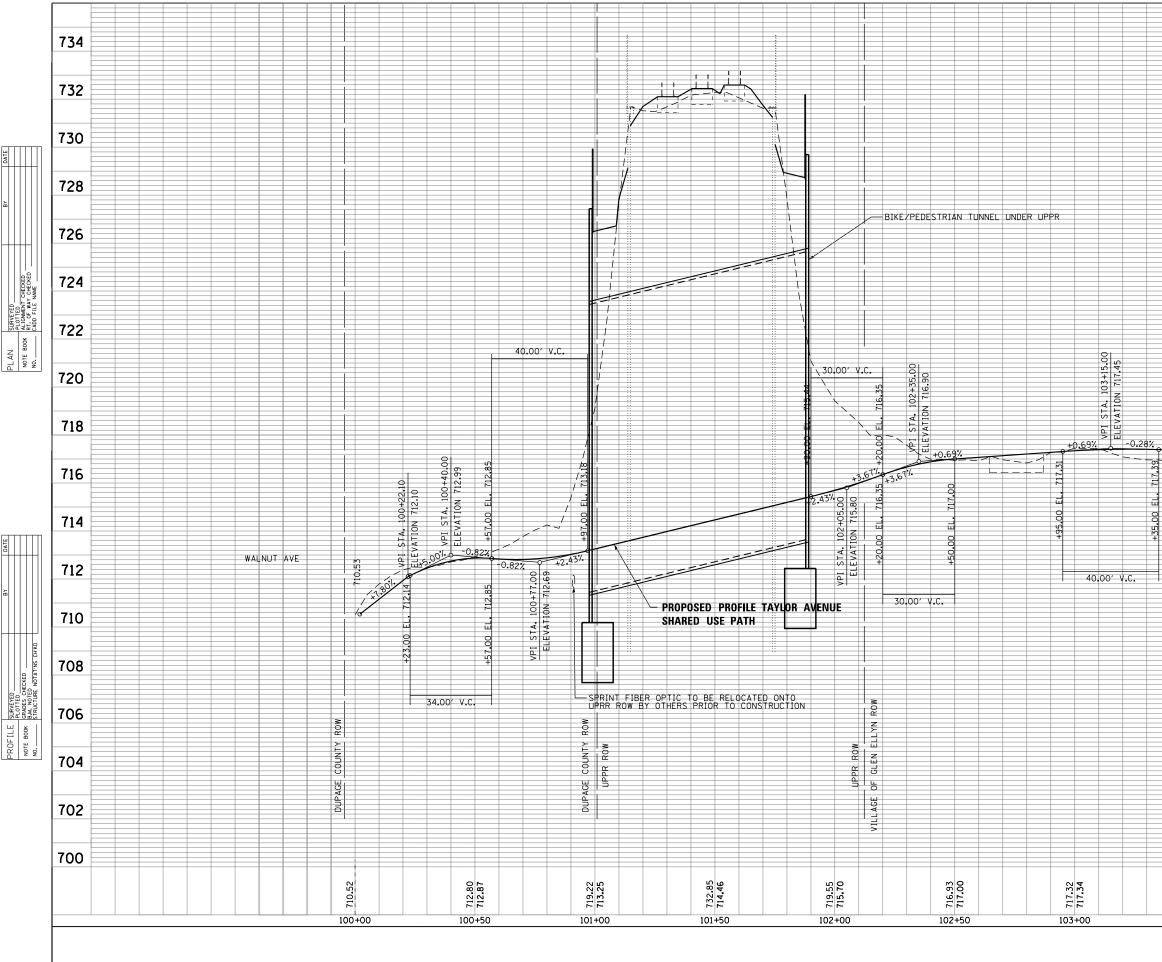
E: 1"=20' SHEET 1 OF 1 SHEETS STA. 99+40.00 TO STA. 104+38.11

TULINOIS FED ATD PROJECT



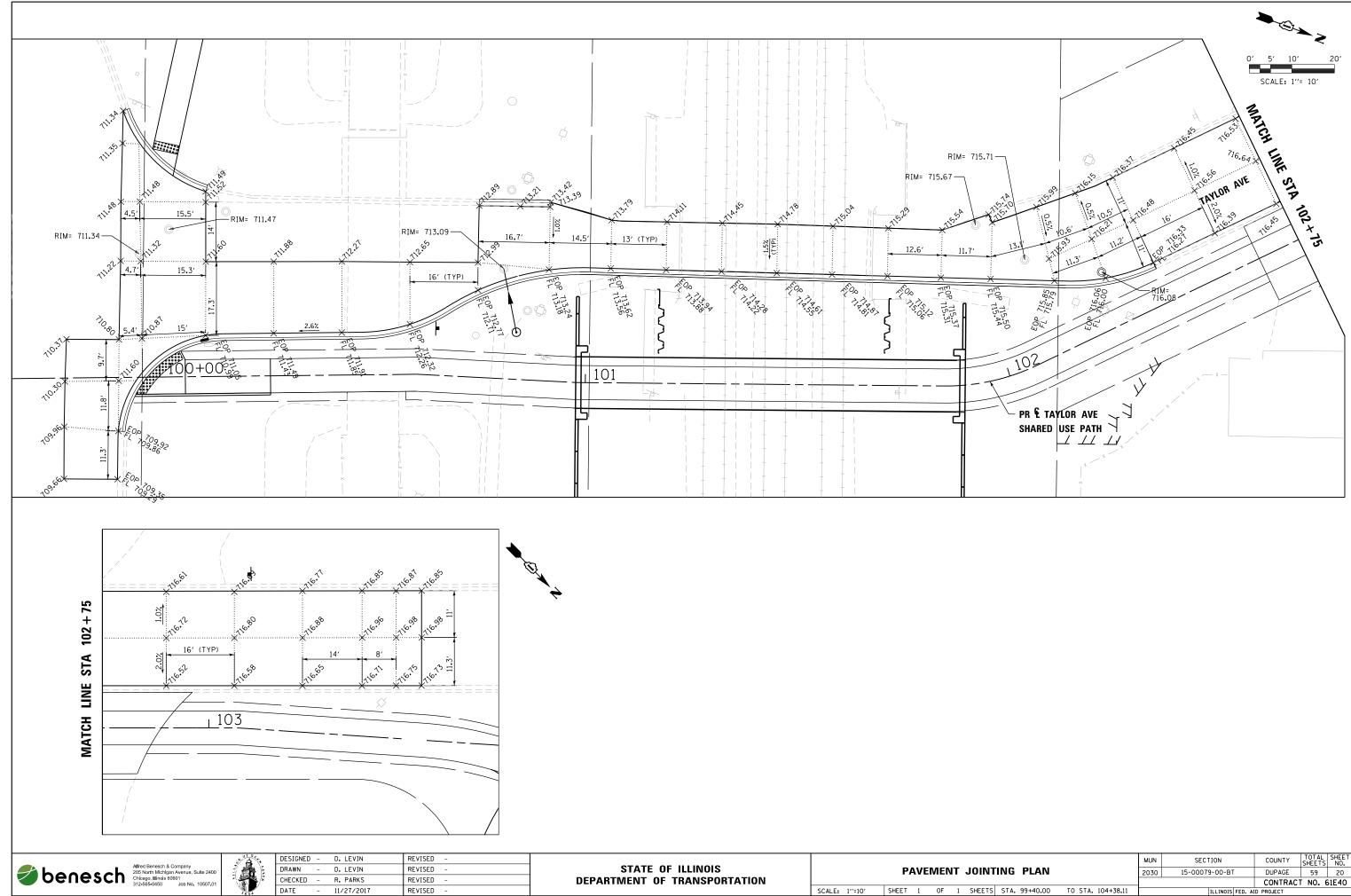
ILLINOIS FED. AID PROJECT

		DESIGNED - D. LEVIN	REVISED -		ROADWAY PLAN
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	i 👘 i	DRAWN - D. LEVIN	REVISED -	STATE OF ILLINOIS	TAYLOR AVENUE
Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED - R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION	
		DATE - 11/27/2017	REVISED -		SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 99+40.00 TO STA. 104+38.11

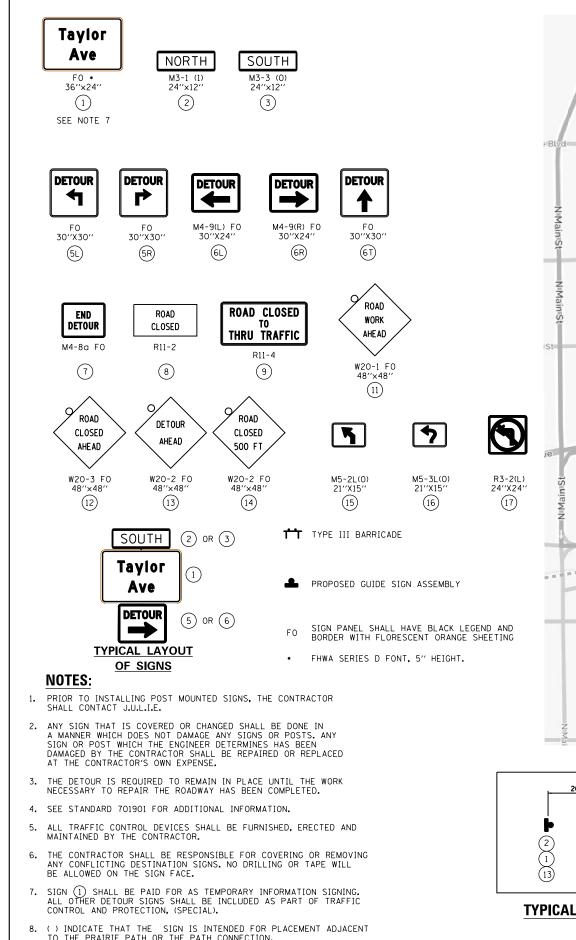


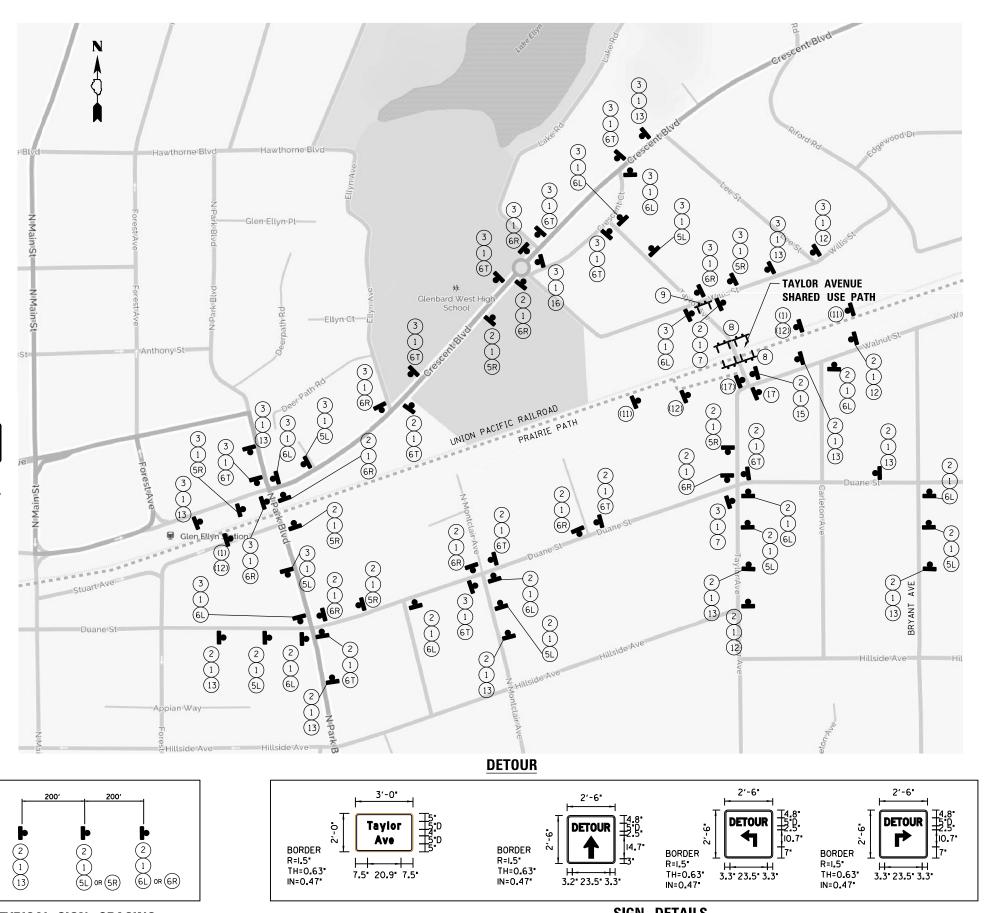
	St A to	DESIGNED -		REVISED -			
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	i da i	DRAWN -	T. BLANK	REVISED -	STATE OF ILLINOIS		SHARED USE PATH TAYLOR AVEN
OENESCN Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED -	D. LEVIN	REVISED -	DEPARTMENT OF TRANSPORTATION		TATLUN AVEN
		DATE -	12/21/2017	REVISED -		SCALE: H: 1''=20' SHEET	I OF 1 SHEETS

103	5 717.35 0												
8	35												700
													<b>.</b>
													702
													704
													706
													708
													710
													710
													712
		EX TA	ISTIN Ylor	G GF AVE	IOUN NUE	D AL Shai	ONG RED	PROI USE I	POSE Path	0			714
													716
_~ i			)										
		717.29		WIL	LIS ,	4VE							718
		~											720
													722
													724
													726
													728
													730
													732
												 	734



				MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
NTING PLAN				2030	15-00079-00-BT	DUPAGE	59	20				
						CONTRAC	T NO. 6	51E40				
TS	STA.	99+40.00	TO STA. 104+38.11	11 ILLINOIS FED. AID PROJECT								

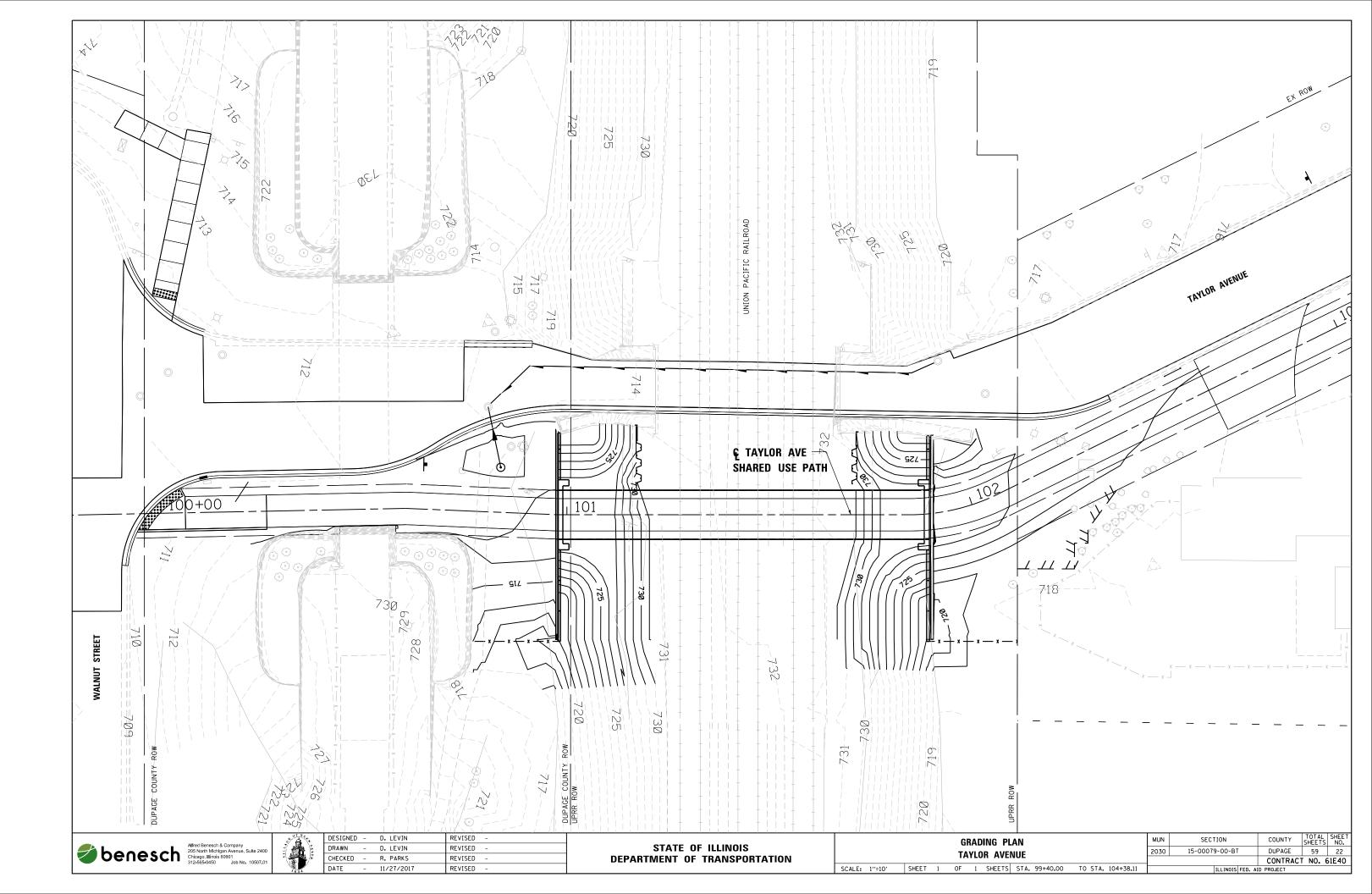


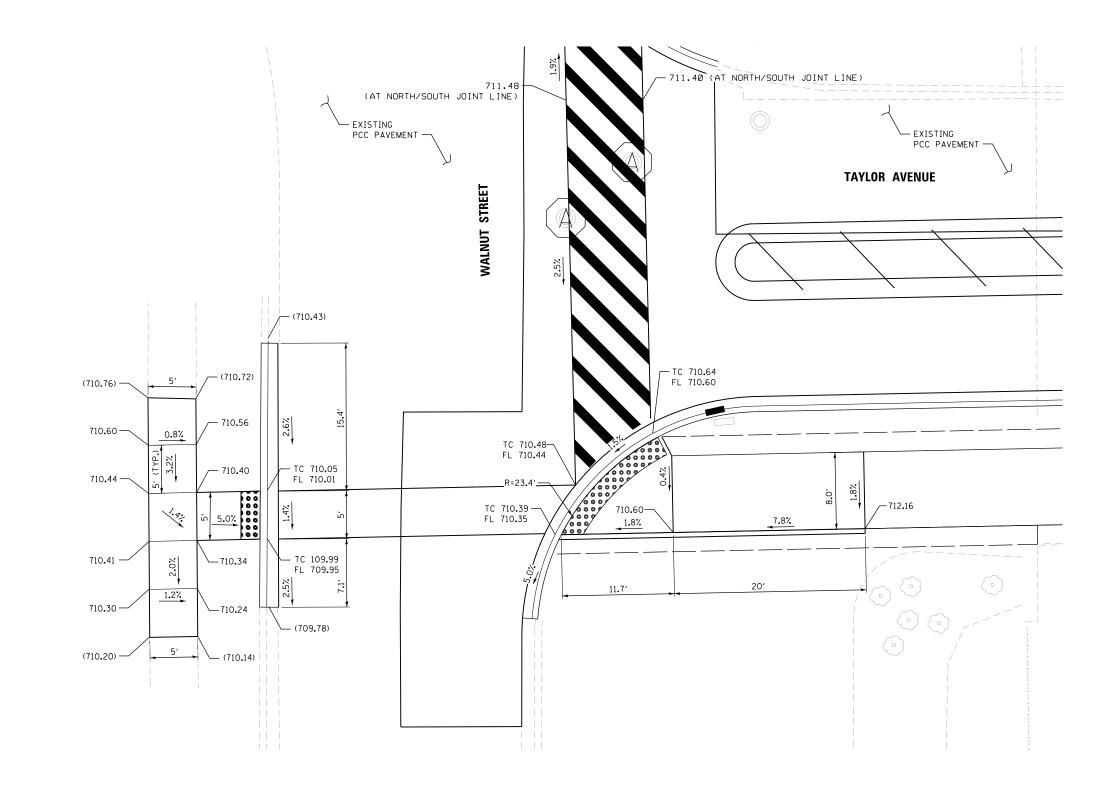


# **TYPICAL SIGN SPACING**

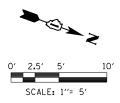
	STION.									
		DESIGNED -	D. LEVIN	REVISED -			MAINTENANCE OF TRAFFIC	MUN	SECTION	COUNTY TOTAL SHEET
Alfred Benesch & Company 205 North Michigan Avenue, Sulte 2400		DRAWN -	D. LEVIN	REVISED -	STATE OF ILLINOIS		TAYLOR AVENUE DETOUR PLAN	2030	15-00079-00-BT	DUPAGE 59 21
Oenescn Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED -	R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION		TATLOR AVENUE DETOUR FLAN			CONTRACT NO. 61E40
		DATE -	12/21/2017	REVISED -		SCALE: NTS	SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED.	AID PROJECT

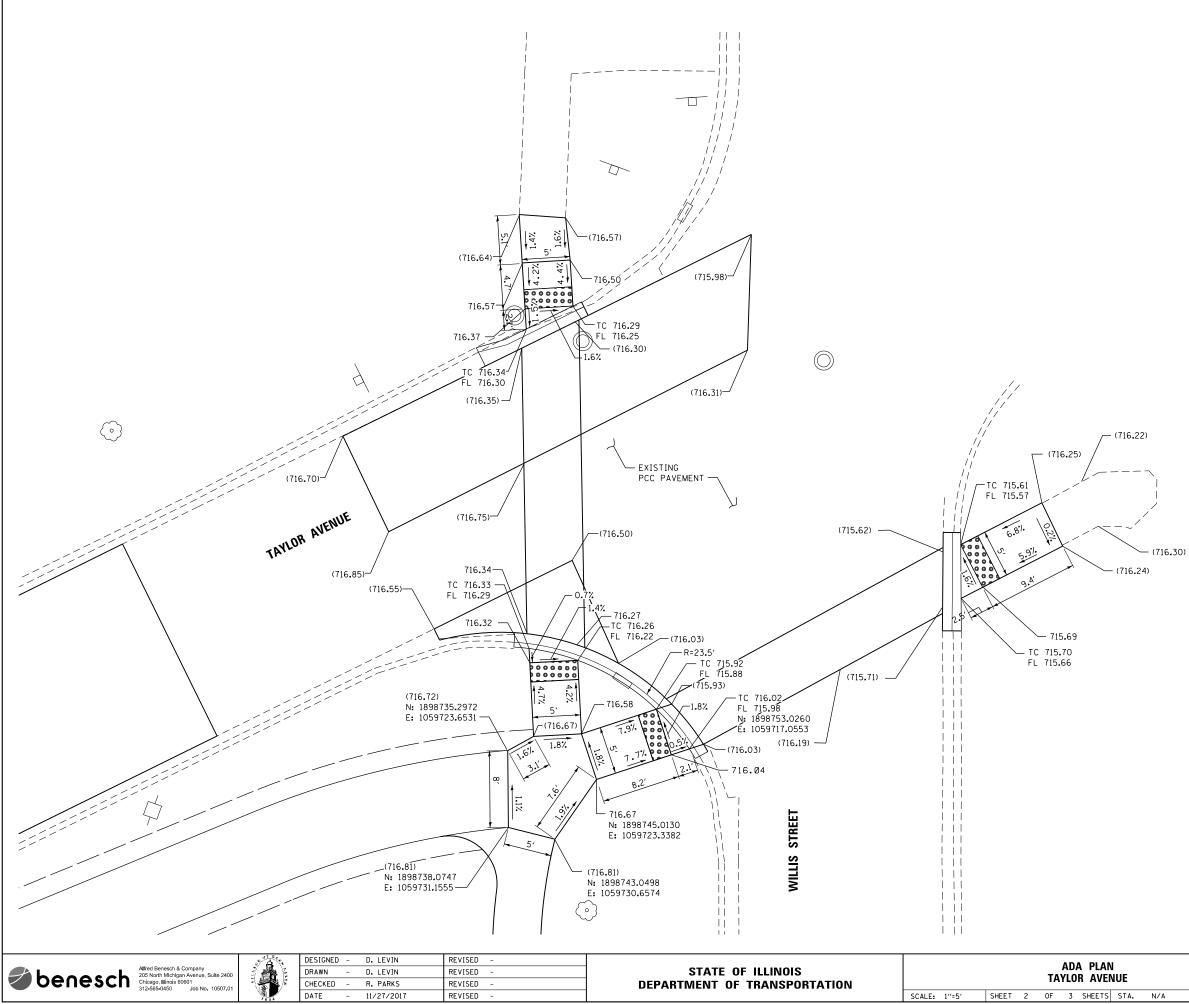
# SIGN DETAILS

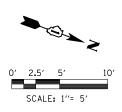




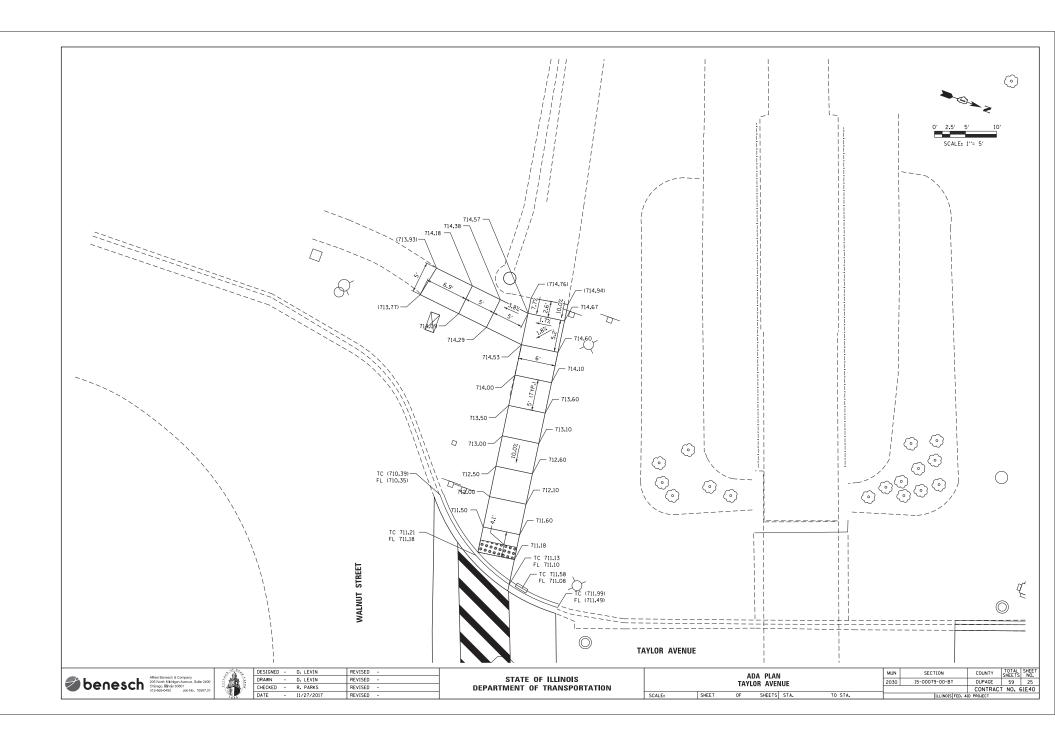
Alfred Benersch & Company	St A to	DESIGNED - D. LEVIN	REVISED -		ADA PLAN			SECTION	COUNTY TOTAL SHEET
Alfred Benesch & Company 205 North Michigan Avenue, Sulte 2400 Chicago, Illinois 60601	i da i	DRAWN - D.LEVIN	REVISED -	STATE OF ILLINOIS		TAYLOR AVENUE	2030	15-00079-00-BT	DUPAGE 59 23
Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED - R. PARKS	REVISED -	DEPARTMENT OF TRANSPORTATION			_		CONTRACT NO. 61E40
	Y. 3 5	DATE - 11/27/2017	REVISED -		SCALE: 1''=5'	SHEET 1 OF 3 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT

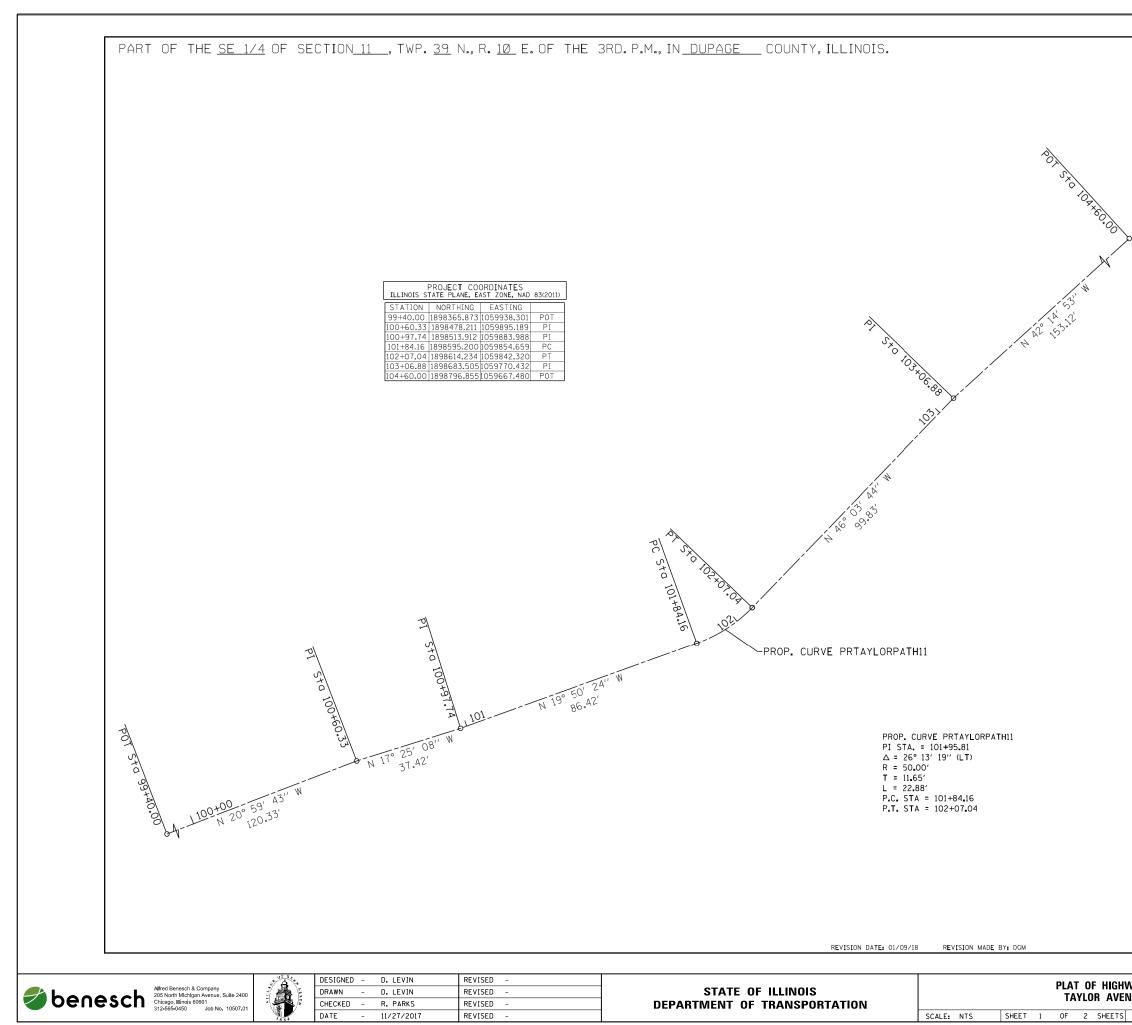




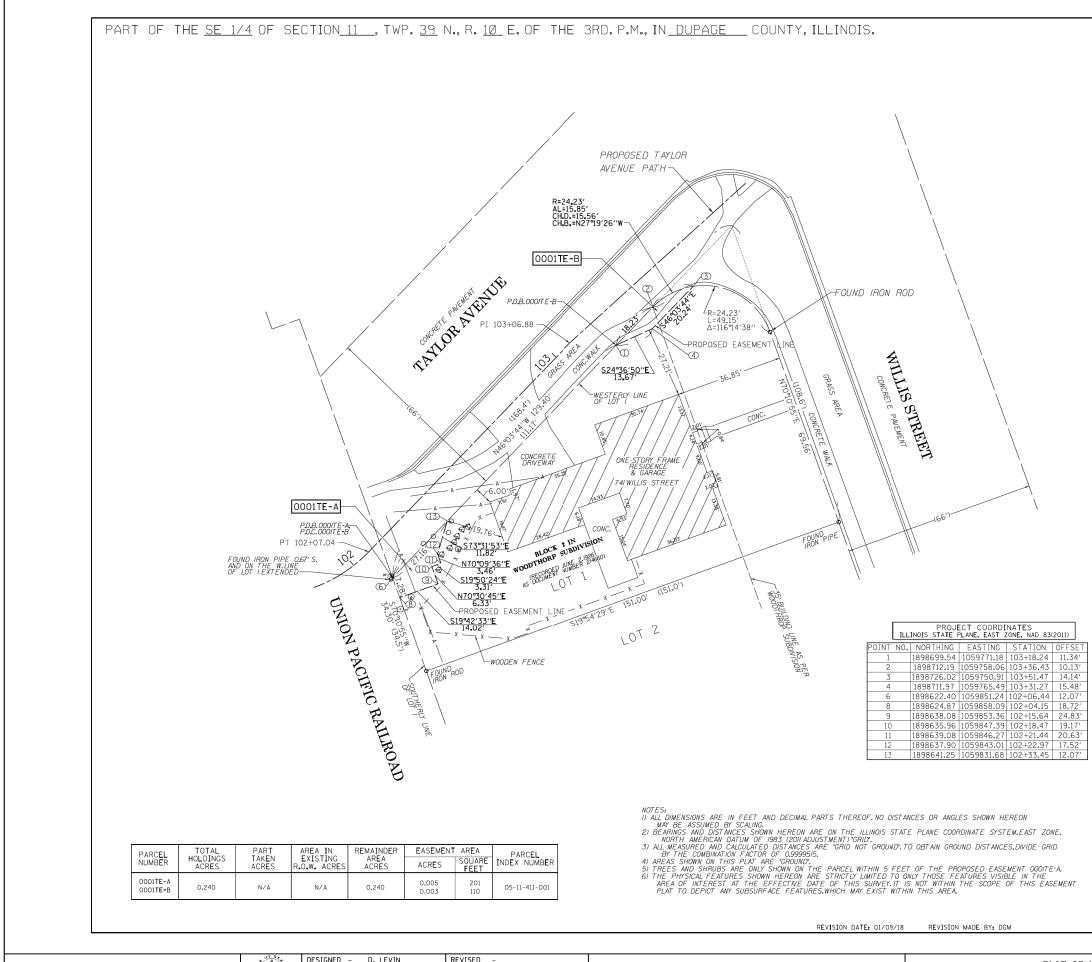


AN					MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			2030	15-00079-00-BT	DUPAGE	59	24		
							CONTRAC	T NO. 6	51E40
TS	STA.	N/A	TO STA.	N/A		ILLINOIS FED. A	ID PROJECT		



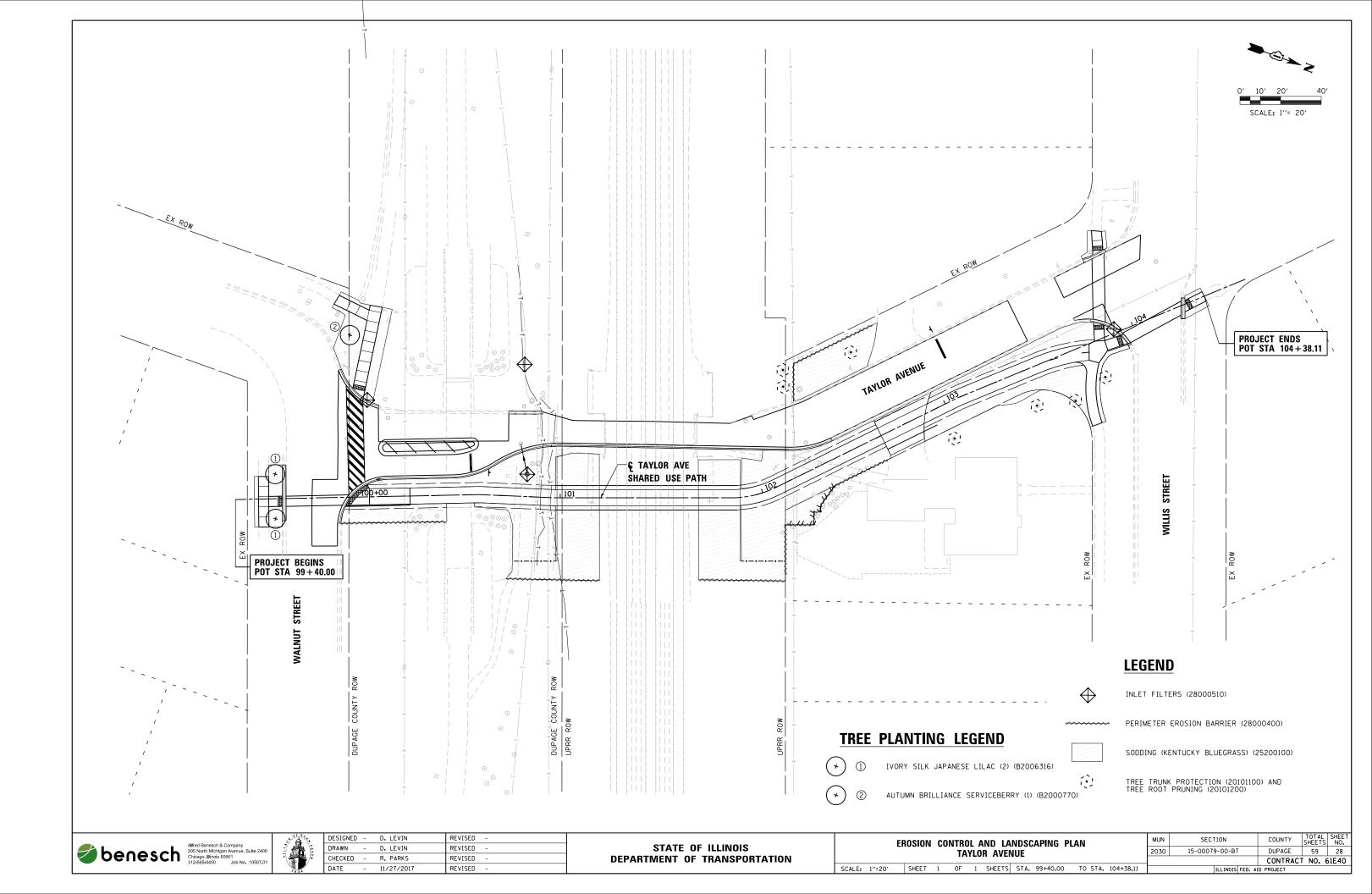


		LEGEND	)			ך
	$\frown$		-			
	9 10 16 15 SEC COR	TION 16 NER 16	(	DUARTER SECTION SORNER		
				RTER SECTION LINE		
			ED LOT LIN		⊢≙́≻Z	
			RENT PROPER		GRAPHIC SCALE FEET	
			ING CENTER		0 15	
			ING RIGHT (	F WAY LINE DF WAY LINE	SCALE: 1"= 15'	
		EXIST	ING EASEME	NΤ		
			ISED EASEME ING ACCESS	CONTROL LINE		
	129.32'		JSED ACCESS JRED DIMENS	CONTROL LINE ION		
	129.32' (COMP) (129.32')		JTED DIMENS			
			ING BUILDIN			
		ARINGS ARE REF	ERENCED TO	THE ILLINOIS STATE PL	ANE	
)	COC IRON PIPE OR RO		I.NAD83 (2011) ⊕ "MAG" NA]	NDJUSTMENT),EAST ZONE	Ξ.	
• • • T1	CUT CROSS FOUM	ND OR SET	• 5/	B"REBAR SET MONUMENTATION, SET	5/8 INCH	
T2 T3 BT1	IRON ROD FLUSH COLORED PLASTIC	WITH GROUND C CAP BEARING	O TIE FOUN SURVEYORS	RENCE FOUND OR SE	IED BY	
BT2 BT3	BURIED 5/8 INCH IRON STAKE, IDE SURVEYORS REGI	H IRON ROD 20 NTIFIED BY COL STRATION NUMB	INCHES BELO ORED PLASTI ER.	N GROUND TO TIE FOL C CAP BEARING	DNL	
	MARKER TO MONU DATA AND SURVE	JMENT THE POSI YORS REGISTRA	TION SHOWN. TION NUMBER			
M	BURIED 5/8 INCH	N IDENTIFIED BY	INCHES BEL COLORED P	JLTIVATED AREAS. OW GROUND TO MARK .ASTIC CAP BEARING	FUTURE SURVEY	
	PERMANENT SURV RIGHT OF WAY S			RD 2135 (TO BE SET 6 F	BY OTHERS)	
	STATE OF ILLINO					
	COUNTY OF DUPA	)SS GE )				
	PROFESSIONAL LA SHOWN HEREON IN THE THIRD PRINC TRUE AND COMPL BELIEF, THAT THI MONUMENTS FOUN OCCUPY THE POS:	AND SURVEYOR, N SECTION 11, T IPAL MERIDIAN, ETE AS SHOWN E PLAT CORREC 10 AND ESTABLI ITIONS SHOWN T NABLE THE SUR	HAVE SURVEY OWNSHIP 39 DUPAGE COU TO THE BEST FLY REPRESE SHED ARE OF HEREON AND VEY TO BE F	SSEY, AN ILLINOIS ED THE PLAT OF HIGH NORTH, RANGE 10 EAS NTY, THAT THE SURVE OF MY KNOWLEDGE A VTS SAID SURVEY, TH PERMANENT QUALITY THAT THE MONUMENTS ETRACED, MADE FOR 1 ILLINOIS.	T OF EY IS ND AT ALL AND S ARE	
	DATED AT NAPER	VILLE , ILL	INOIS THIS 11	THDAY OF OCTOBER	20 <u>17</u> A.D.	
	$\overline{D}$	1. H V	Maria	1		
	ILLINOIS PROFES			3685	the second second	
	LICENSE EXPIRAT FIELD WORK COMP	ION DATE: NOVE Pleted: July 19	MBERC30, 20 9, 2017	<u>18</u>	GLAS G. MASS	
	THIS PROFESSION				PROFESSIONAL LAND SURVEYOR	
	ILLINOIS MINIMUN	V STANDARDS FO	JR A BOUNDA	RY SURVEY.	LINO/S	
				Alfred Benesch		
		∕∕be	nes	C Chicago, Illinois	er Drive, Suite 3300 60601	
		engineers	<ul> <li>scientists</li> </ul>	Dianners 312-565-0450 Design Firm Lic	ense # 184.000882	
			ΡΙ ΔΤ	OF HIGHW/	AVS	
				E OF ILLINOIS		
		DEPA		GENTRANSPO DR AVENUE PATH		
		LIMITS:	IAIL		TY: DUPAGE	
IDC	DT USE ONLY	SECTION: 15-C		JOB 1		
		STA. SCALE: 1''=15'	TO STA	SHEET 2	OF 3 SHEETS	
		I		F LAND ACQUISI		1
				ST CENTER COUR Surg, Illinois 60		
1		1			-	
YS			MUN	SECTION	COUNTY	TOTAL SHEETS
E			2030	15-00079-00-BT	DUPAGE	59
	0+00.00 TO ST				CONTRACT	NO. 6



	Alfred Benesch & Company		DESIGNED -	5. 227.00	REVISED -	STATE OF HUMOIS	l .		PLA <sup>-</sup>	T OF HIG	GHW
<b>Solution</b>	205 North MIchigan Avenue, Sulte 2400 Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		DRAWN - CHECKED -	D. LEVIN R. PARKS	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	1		TA	AYLOR A	VEN
-	312-303-0430 300 No. 10307-01	ų,	DATE –	11/27/2017	REVISED -		SCALE: NTS	SHEET 2	OF	2 SHEE	ETS

							וו	
		<u>LEGEND</u>						
	9 10 16 15 SECT CORM		) 15	QUARTER SECTION CORNER				
		PROPER APL APPARE EXISTIN PROPOS - EXISTIN PROPOS - C EXISTIN - AC EXISTIN - AC PROPOS MEASUR COMPUT RECORD	D LOT LI TY (DEED) NT PROPE ED CENTEF ED CENTE ED RIGHT IG EASEME ED EASEM	LINE RTY LINE RLINE OF WAY LINE OF WAY LINE OF WAY LINE ENT CONTROL LINE S CONTROL LINE SION SION	GRA			
		RINGS ARE REFEI	RENCED TO	THE ILLINOIS STAT	e plane			
• • T1 T2 T3 • BT1 BT3 • M • M	IRON ROD FLUSH COLORED PLASTIC THESE STAKES, II BURIED 5/8 INCH IRON STAKE, IDE- SURVEYORS REGIS STAKING OF PROI MARKER TO MONU DATA AND SURVE' STAKING OF PROI BURIED 5/8 INCH MARKER POSITION SURVEYORS REGIS PERMANENT SURVE RIGHT OF WAY ST STATE OF ILLINOI COUNTY OF DUPAC THIS IS TO CERTI: BROYSENDAL LA' SHOWN HEREON IN THE THIRD PRINCE BELIEF, THAT THE MONUMENTS FOUND OCCUPY THE POSI SUFFICIENT TO EN DEPARTMENT OF 1	D OR SET EFERENCE FOUNI WITH GROUND TO CAP BEARING SI N CULTIVATED A IRON ROD 20 IN IRON ROD 20 IN IRON ROD 20 IN IRON ROD 20 IN IRON REGISTRATI POSED RIGHT OF METAL ROD 20 IDENTIFIED BY IDENTIFIED BY IDENTIFIED BY IDENTIFIED BY IDENTIFIED BY IDENTIFIED BY INTATION NUMBER EY MARKER, I.D.O AKING PROPOSED S) SS E) FY THAT I, DOUL AKING PROPOSED S) SS E) FY THAT I, DOUL S) SS E) FY THAT I, DOUL SURVEYOR, HA SECTION 11, TO DAL MERTORECTION AND ESTABLISH TONS SHOWN TH HILLE, ILLIN ILLE, ILLIN IN DATE, NOVEM LETED; JULY 19, AL SERVICE CONF STANDARDS FOR DO LOTE, OVEM IN DATE, NOVEM LETED; JULY 19, AL SERVICE CONF STANDARDS FOR	D OR SET TIE FOUN URVEYORS REAS, REF (CHES BELCHES BELCHES BELCHES BELCHES WAY. SET ON NUMBEL WAY. SET ON NUMBEL WAY. SET ON NUMBEL WAY. SET ON NUMBEL WAY. SET NO NUMBEL WAY. SET ON NUMBEL WAY. SET NO NUMBEL WAY. SET ON NUMBEL WAY. SET NO NUMBEL WAY. SET NO NUMBEL WAY. SET NO NUMBEL WAY. SET NO NUMBEL WAY. SET NO NUMBEL SET SET SET SET SET SET SET SET SET SET	B' REBAR SET MONUMENTATION. ID IRON STAKE IDE REGISTRATION NUN RENCE FOUND OR W GROUND TO THE IC CAP BEARING DIVISION OF HICH IDIVISION OF HICH IDIVISION OF HICH AUXINATED AREAS IDIVISION OF HICH ARD 2135 (TO BE S IDIVISION OF BEAR ARD 2135 (TO BE S IDIVISION OF MICH ARD 2135 (TO BE S IDIVISION OF MICH NORTH, RANGE FO NORTH, RANGE NONLY RETACED, MADE F ILLINOIS. ITHDAY OF OCTOB MALE SES IDIB IDI THE CURRENT ASSEY, AN ILLINOI SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW SUBSCIENT AND AND FOLLOW AND AND FOLLOW SUBSCIENT AND AND FOLLOW AND AND AND FOLLOW AND AND FOLLOW AND AND FOLLOW AND AND FOLLOW AND AND FOLLOW AND AND AND AND AND FOLLOW AND AND AND AND AND AND AND FOLLOW AND AND AND AND AND AND AND AND AND AND	INTERIED E WBER. E SET MON FOUND WAYS SUP INSCRIPTIC S. ARK FUTU ING SET BY 01 SET BY	3Y NUMENTATION. RE SURVEY HERS) L L A.D. 005003885 SURVEY PARA		
	DOT USE ONLY	DEPAI LIMITS: SECTION: 15-001 STA. 102+07.04 SCALE: 1''=15' BI	STA RTMEN TAYI D79-00-BT TO ST TO ST JREAU ( 201 WI		IOIS SPORT ATH COUNTY: DI JOB NO.: 3 OF JUISITION OURT	- ATION JPAGE 3 SHEETS		
								L CU 17 5
AYS			MUN	SECTION	BT		TOTAL SHEETS	NO.
UE sta.	N/A TO ST.	A. N/A	2030		DIS FED. AI	CONTRACT	59 NO.	27 61E40



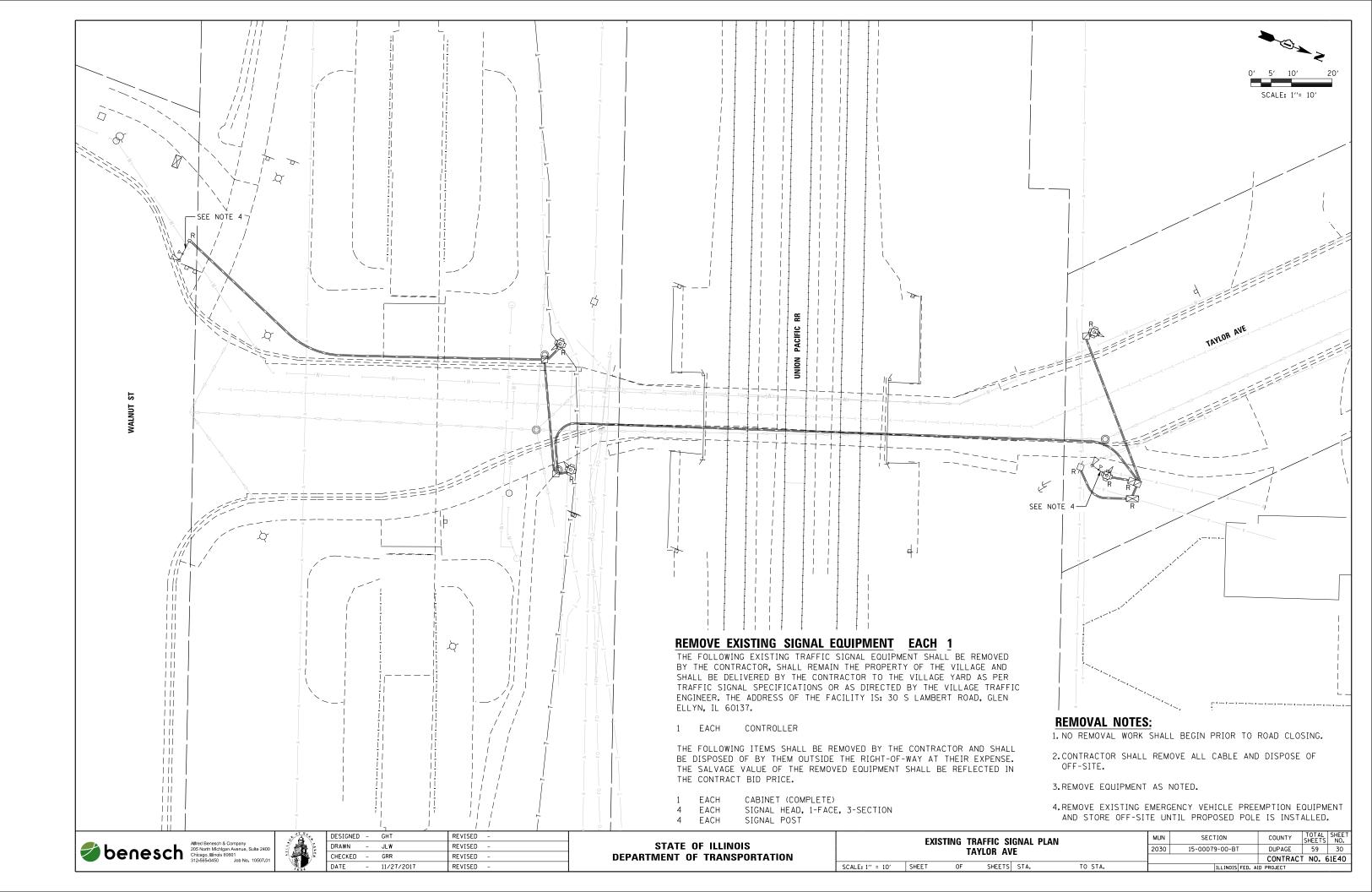
# SCHEDULE OF QUANTITIES

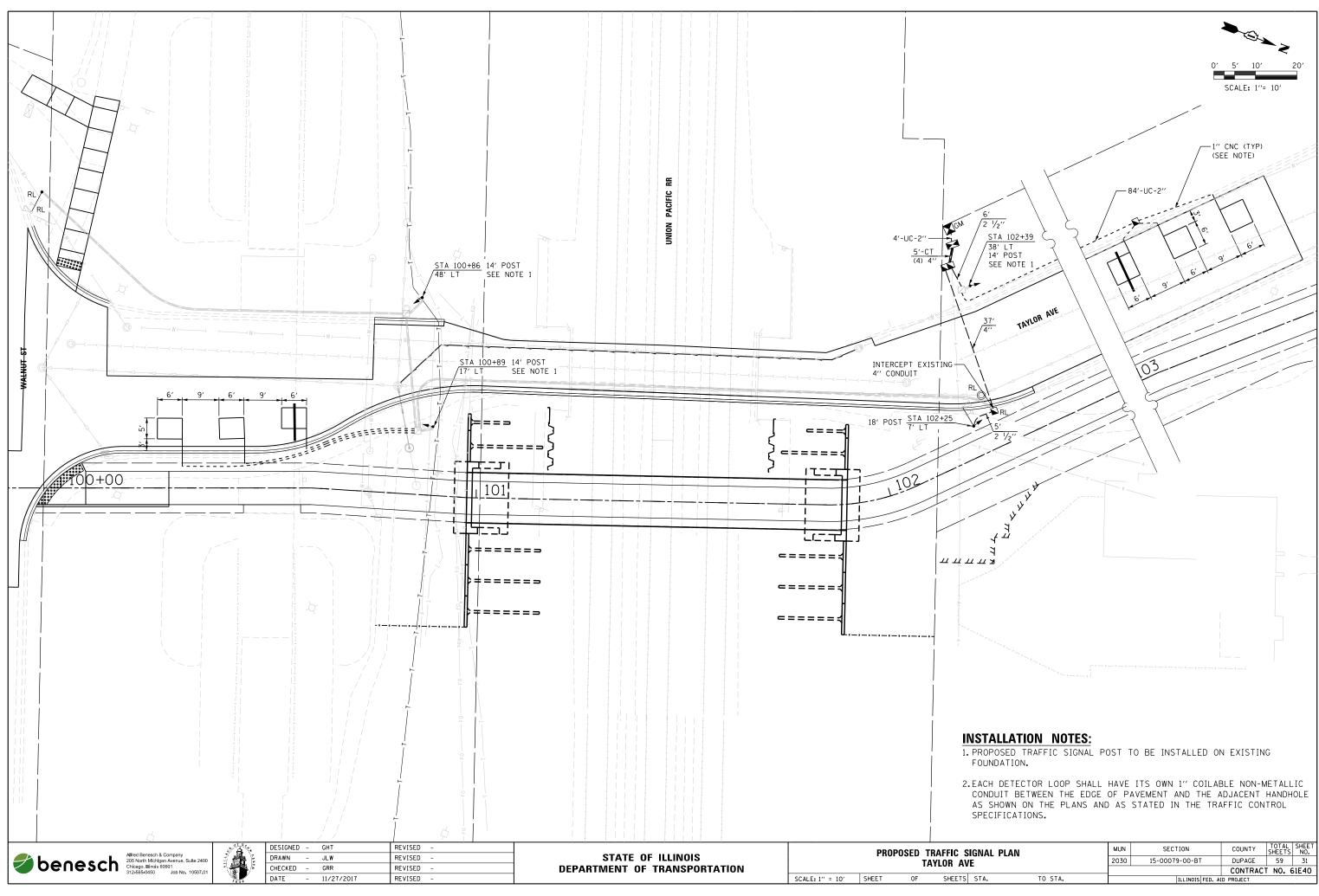
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
80500100	SERVICE INSTALLATION, TYPE A	EACH	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	94
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	11
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	57
81400100	HANDHOLE	EACH	5
81400300	DOUBLE HANDHOLE	EACH	1
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
87300305	ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	168
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	480
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	681
87301295	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C	FOOT	480
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	110
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	395
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
88500100	INDUCTIVE LOOP DETECTOR	EACH	2
88600700	PREFORMED DETECTOR LOOP	FOOT	165
89500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	1
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,273
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	1
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	480
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	292
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

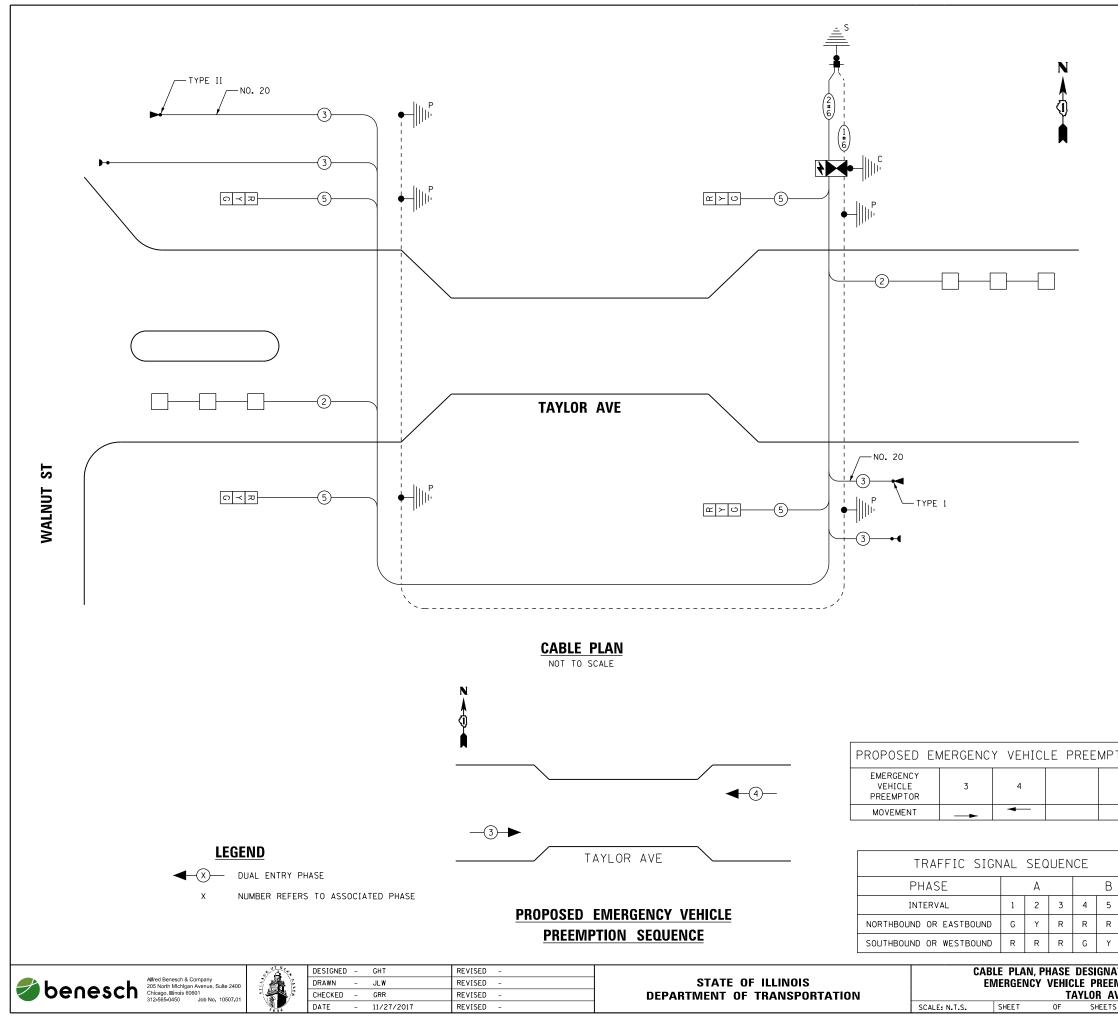
Alfred Benesch & Company 205 North Michigan Avenue, Sulte 2400 Chicase, Unitoris 60601	DESIGNED - GHT	REVISED -				TRA	FFIC SIGNALS		MUN	SECTION	COUNTY TOTAL SHEETS	SHEET NO.
205 North Michigan Avenue, Sulte 2400	DRAWN - JLW	REVISED -	STATE OF ILLINOIS			SCHEDU	LE OF QUANTITIES		2030	15-00079-00-BT	DUPAGE 59	29
Chicago, minois 80801 312-565-0450 Job No. 10507.01	K CHECKED - GRR	REVISED -	DEPARTMENT OF TRANSPORTATION								CONTRACT NO. 6	iE40
181 7834	DATE - 11/27/2017	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	

# SCHEDULE OF QUANTITIES





SIGNAL PLAN		MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
AVE			2030	15-00079-00-BT	DUPAGE	59	31			
					CONTRACT	T NO. 6	51E40			
'S	STA.	TO STA.		ILLINOIS FED. AID PROJECT						



1	RAFFI	C SIGN/	AL	
ELECTRICAI	. SERV	ICE REC	DUIREME	NTS
TYPE	NO. OF	LED	<i>%</i>	TOTAL
TYPE	LAMPS	WATTAGE	OPERATION	
SIGNAL (RED)	4	11	50	22.0
(YELLOW)	4	20	5	4.0
(GREEN)	4	12	45	21.6
PERMISSIVE ARROW	-	-	-	-
PED. SIGNAL	-	-	-	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	-	-	-
BLANK-PUT SIGN	-	-	-	-
FLASHER	-	-	-	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
			TOTAL =	438.9
ENERGY COSTS TO:				
VILLAGE OF	GLEN	ELLYN		
30 S LAMBERT RD				
GLEN ELLYN, IL 6013	57			
ENERGY SUPPLY: (	CONTACT:			
	PHONE:			
	COMPANY:			
ACCOUNT	NUMBER:			

TORS	

6	
R	
R	

ATION DIAGRAM, AND EMPTION SEQUENCE AVE		MUN	SECTION	COUNTY	TOTAL SHEET SHEETS NO.		
		2030	15-00079-00-BT	DUPAGE	59	32	
		_		CONTRAC	T NO. 6	51E40	
rs	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

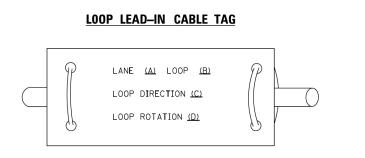
# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

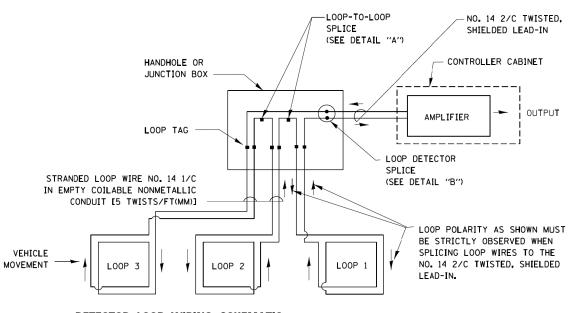
				(NOT TO SCALE)				
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET	$\boxtimes$		HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	$\left(\begin{array}{c} R\\ Y\end{array}\right)$ $\left(\begin{array}{c} R\\ Y\end{array}\right)$	R R Y Y
COMMUNICATION CABINET	ECC	CC	-ROUND HEAVY DUTY HANDHOLE					
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND	H ®	E (B)			C C 4Y 4C 4C 4C 4C 4C 4C 4C 4C 4C 4C
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE					, i
UNINTERRUPTABLE POWER SUPPLY	4	F	JUNCTION BOX		Ø	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	$\begin{array}{c c} R \\ \hline R \\ \hline Y \\ Y \\$	R Y Y
SERVICE INSTALLATION	- <b></b>	- <b>B</b> -P	RAILROAD CANTILEVER MAST ARM	X <del>OX</del> XX	<del>Iei I I</del>			G G G AY AY AY AY AY AY AY AY AY AY
-(P) POLE MOUNTED SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	XoX	X+X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G}\boxtimes^{GM}$		RAILROAD CROSSING GATE	X <del>oX</del> >	X+3-	PEDESTRIAN SIGNAL HEAD		
TELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK		*	AT RAILROAD INTERSECTIONS		<b>¥</b> <del>K</del>
STEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		<b>&gt;</b> 4	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C C C	<b>₩</b> C <b>⊼</b>
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	0-X−−	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	• • BM	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.	5	
WOOD POLE	$\otimes$	•	INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED GROUND CABLE IN CONDUIT,		
GUY WIRE	$\succ$	$\succ$	REMOVE ITEM RELOCATE ITEM		R RL	NO. 6 SOLID COPPER (GREEN)	(1#6)	(1#6)
SIGNAL HEAD	->	→	ABANDON ITEM		A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	
SIGNAL HEAD WITH BACKPLATE	+>	+►	CONTROLLER CABINET AND		RCF	COAXIAL CABLE	— <u>c</u>	— <u>C</u> —
SIGNAL HEAD OPTICALLY PROGRAMMED		→ <sup>P</sup> + <b>&gt;</b> <sup>P</sup>	FOUNDATION TO BE REMOVED MAST ARM POLE AND			VENDOR CABLE		
FLASHER INSTALLATION -(FS) SOLAR POWERED	ord F ord FS	F → FS	FOUNDATION TO BE REMOVED		RMF	COPPER INTERCONNECT CABLE,		
		<b>₽</b> ► <sup>F</sup> <b>₽</b> ► <sup>FS</sup>	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I		$\Box$ $\bigcirc$	FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	Ø Ø APS	Ø Ø APS	PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	24F	24F
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	$[\underline{s}]  (\underline{s})$	s s		36F	
VIDEO DETECTION CAMERA		V	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		IS (IS)			
RADAR/VIDEO DETECTION ZONE		<b>#</b>	QUEUE AND SAMPLING (SYSTEM) DETECTOR		as as	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	≟ <sup>C</sup> ≟ <sup>M</sup> ≟ <sup>P</sup> ≟ <sup>S</sup> T T T T	<sup>C</sup> <sup>™</sup> <sup>P</sup> <sup>S</sup>
PAN, TILT, ZOOM (PTZ) CAMERA	PTZJ	PTZ	WIRELESS DETECTOR SENSOR	Ŵ	<u> </u>	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\bigtriangledown$	•	WIRELESS ACCESS POINT					
CONFIMATION BEACON	0(]							
WIRELESS INTERCONNECT	<u>⊶++ </u> +	<del>•++   </del>						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
FILE NAME = leyse	DESIGNED -					DISTRICT ONE	MUN SECTIO	ON COUNTY SHEETS NO.
ts05.dgn PLOT SCALE = 50,0000 / / :		LP REVISED -		TE OF ILLINOIS		ANDARD TRAFFIC SIGNAL DESIGN DETAILS	2030 15-00079- <b>TS-05</b>	00-BT DUPAGE 59 33 CONTRACT NO. 61E40
Default PLOT DATE = 9/29/2016	DATE -	9/29/2016 REVISED -			SCALE: NONE	SHEET 1 OF 7 SHEETS STA. TO STA.		LINOIS FED. AID PROJECT

# LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

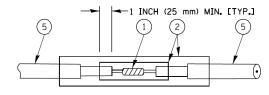


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

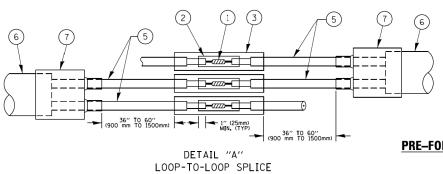


### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



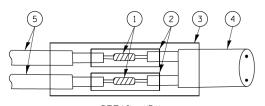
DETAIL "A" LOOP-TO-LOOP SPLICE



# LOOP DETECTOR SPLICE

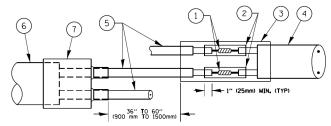
- $\fbox{(1)}$  western union splice soldered with rosin core flux. All exposed sufficient of the split of the spli OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE S
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14			DISTRICT ONE	MUN	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pw1dot\footemj\d0108315\ts05.	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS		2030	15-00079-00-BT	DUPAGE 59 34
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION				TS-05	CONTRACT NO. 61E40
	PLOT DATE = 1/13/2014	DA <b>TE</b> - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS STA. TO STA.	FED. ROAD	D DIST. NO. 1 ILLINOIS FED. A	ID PROJECT





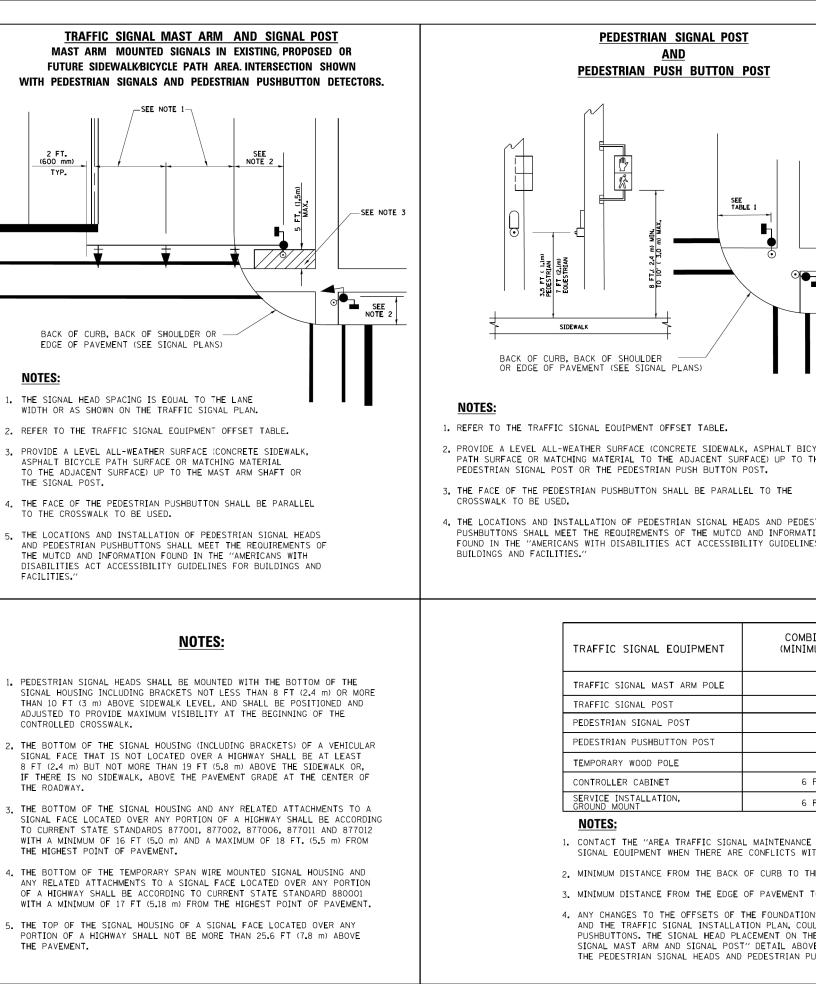
### TYPE I LOOP



### PRE-FORMED LOOP

### DETAIL "B" LOOP-TO-CONTROLLER SPLICE

	(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
STAGGERED.	6 PRE-FORMED LOOP
R GRADE.	
R GRAD <b>E.</b>	Therefore         XL POLYOLEFIN 2 CONDUCTOR           BREAKOUT SEALS.         TYCO CBR-2 OR APPROVED EQUAL



	5.0 FT. (1.5 m) MAX.
YCLE THE	
STRIAN ION ES FOR	<ul> <li>WHERE THERE ARE CONSTF BETWEEN 1.5 FT (0.45 m) IT SHOULD NOT BE FURTH</li> <li>WHERE THERE ARE CONSTR THE 10 FT (3 m) SEPERAT BE PLACED CLOSER TOGET</li> </ul>

# TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOUL
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOU
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOU
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOU
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOU
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOU
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOU

AND

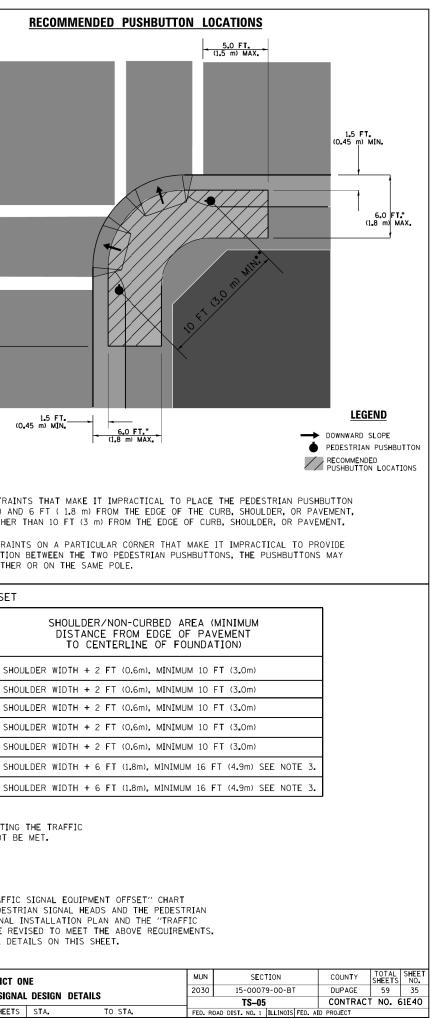
5 FT.(

SEE TABLE I

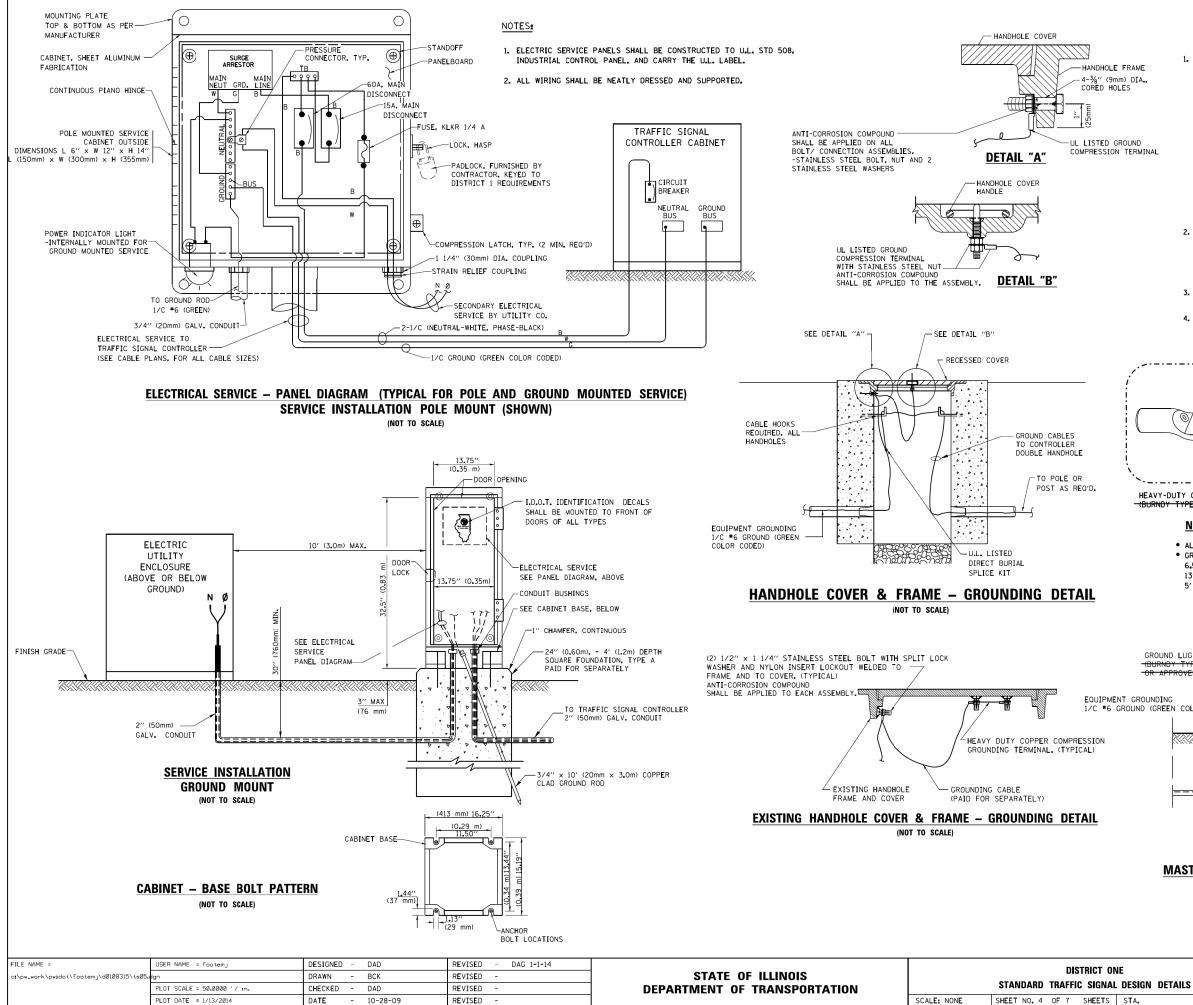
 $\odot$ 

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

- [	FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14			DISTRICT ONE
	c:\pw_work\pw1dot\footemj\d0108315\ts05.	lgn	DRAWN - BCK	REVISED - STATE OF ILLINOIS			
		PLOT SCALE = 50.0000 ' / 1n.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL D
		PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 7 SHEETS S



D PROJECT

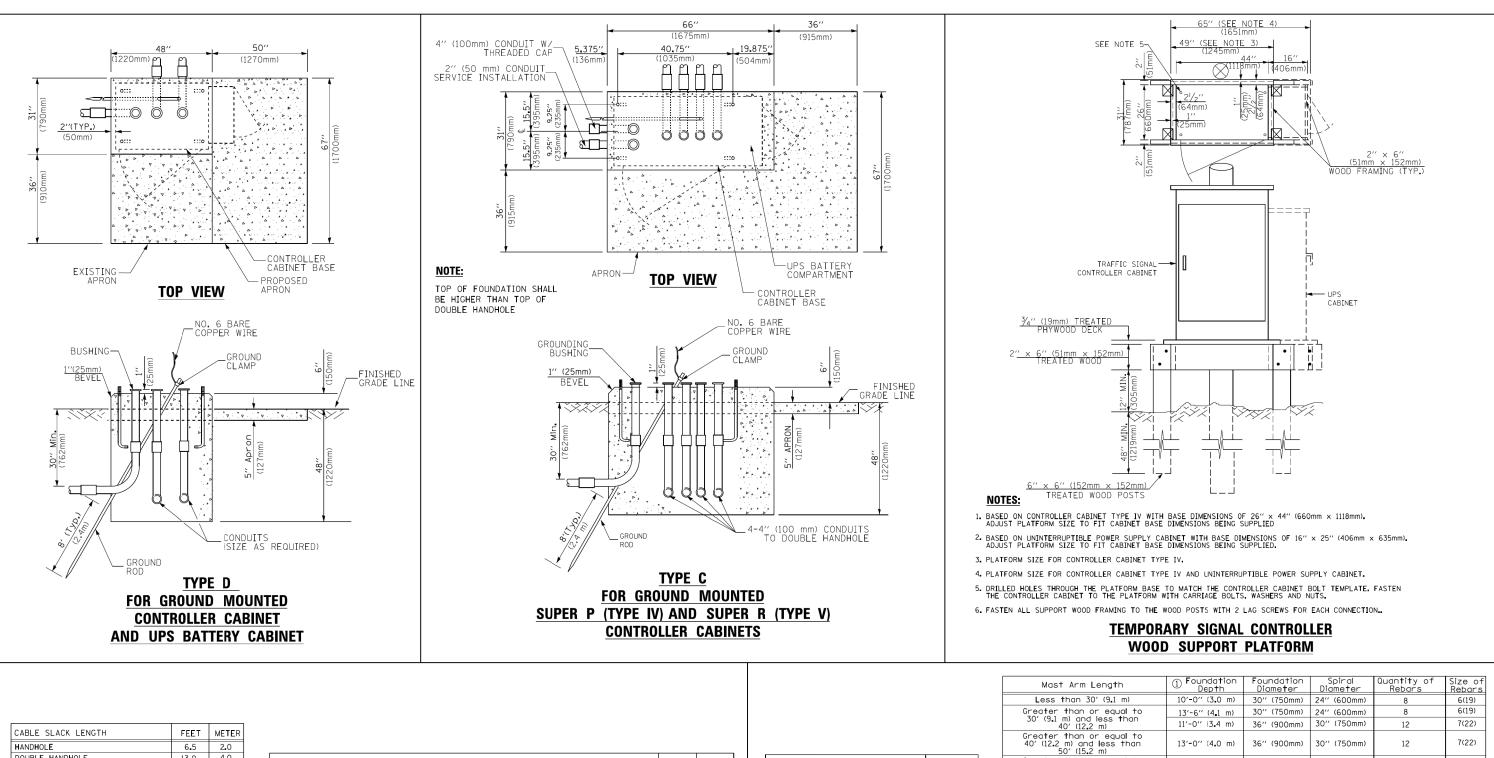


## NOTES: GROUNDING SYSTEM

LE FRAME 9mm) DIA., HOLES GROUND ION TERMINAL	1. 2. 3. 4.	TYPE XLP, NO. 6 RACEWAYS. THE C IN A CONTINUOUS ALL GROUNDING C (HANDHOLE, POST, 3/4" DIA. X 10"- SHALL BE INSTAL CONTROLLER CABI AS INDICATED ON SUCH AS SUB-SUF ENGINEER SHALL ILLINOIS DEPARTI (B4T) 705-4139. THE NEUTRAL CON CONNECTED IN TH IN THE TRAFFIC CONDUCTORS BE C ALL EQUIPMENT C IN THE CONTROLLER	A.W.G., STRAI ROUNDING CAI MANNER AS ONDUCTORS S MAST ARM1 O" (20mm x : LED AT ALL I INET FOUNDAT THE CABLE I REACE CONDIT BE NOTIFIED WENT OF TRAI NDUCTOR AND DIE SERVICE IM SIGNAL SYSTE CONNECTED. SROUNDING CO LER CABINET. SHALL PROVI	CONSIST OF AN INSULA NDED COPPER TO BE INS BLE SHALL BE INSTALLE! SHOWN ON THE CABLE PI HALL BE BONDED TO ME CONTROLLER, ETC.). GROU 3.0m) LONG, COPPER CLA POST FOUNDATIONS, POLI ION AND ELECTRICAL SE PLAN, IF THERE ARE AN IONS OR INSTALLATION I ON CONTACT THE BUREA NSPORTATION DISTRICT OF THE GROUND CONDUCTOR ISTALLATION. AT NO OT ISM SHALL THE NEUTRAL NDUCTORS SHALL TERMIN	TALLED IN AN PROVIDED TAL ENCLOSUF IND ROD SHAL D. ONE GROUND E FOUNDATION RVICE INSTAL IF SPECIAL CC PROBLEMS, TH J OF TRAFFIC DNE AT SHALL BE HER POINT AND GROUND HATE AT THE	L BE ID ROD IS, LATION DNDITION: E RESIDE	NT
				¥4″ (20mm) HEAVY-			
	• ALI • GR 6.5 13'	DTES: L CLAMPS SHALL OUND CABLE SHAL 5' (2.0m) SLACK SI (4.0m) OF SLACK	BE BRONZE C L BE LOOPED HALL BE PRO SHALL BE P	(BURNDY TYPE GRC ( IR COPPER, UL APPROVE OVER HOOKS IN THE H VIDED IN SINGLE HANDH ROVIDED IN DOUBLE HAND OVIDED BETWEEN FRAME	D. ANDHOLES OLES NDHOLES.		
<del>- (BURN</del> <del>- OR AF</del> MENT GROUNDIN 5 GROUND (GREI		ARM POLE	POST-G	ROUNDING DETA	ND (GREEN C GROUND ROD IELO, VED CONNEC ALL GROUND (20mm × 3,0 ND ROD	OLOR CO CLAMP, TOR, RODS)	DED)
			MUN	SECTION	COUNTY	TOTAL	SHEET
ONE				JECTION	COUNT	SHEETS	N0.

 AL DESIGN DETAILS
 2030
 15-00079-00-BT
 DUPAGE
 59
 36

 STA.
 TO STA.
 FED. ROAD DIST. NO. 1
 ILLINDIS FED. AID PROJECT



CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK** 

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

### VERTICAL CABLE LENGTH

	1				
FOUNDATION	DEPTH				
TYPE A - Signal Pos <b>t</b>	4'-0" (1.2m)				
TYPE C - CONTROLLER W/ UPS	4'-0'' (1.2m)				
TYPE D - CONTROLLER	4'-0'' (1.2m)				
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0'' (1.2m)				

### **DEPTH OF FOUNDATION**

NOTES:

## DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14			DISTRICT ONE	MUN	SECTION	COUNTY TOTAL SHEETS NO.
c:\pw_work\pw1dot\footemj\d0108315\ts05.	dgn	DRAWN - BCK	REVISED - STATE OF ILLINUIS			2030	15-00079-00-BT	DUPAGE 59 37	
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT NO. 61E40
	PLOT DATE = 1/13/2014	DA <b>TE</b> - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. RO.		AID PROJECT

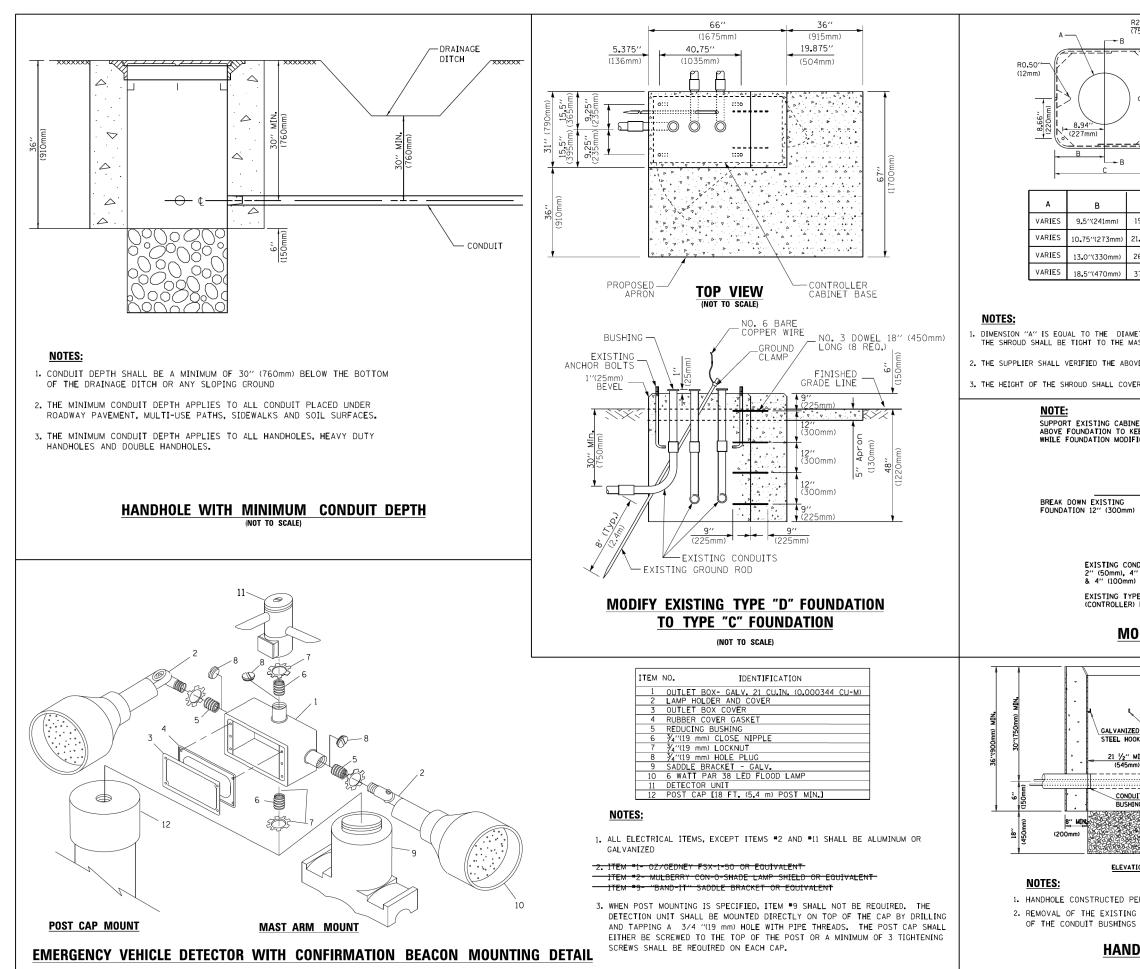
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24'' (600mm)	8	6(19)
Greater than or equal to	13'-6" (4∎1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 <b>.</b> 6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (0u) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.

2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.

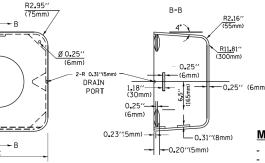
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations

4. For mast arm assemblies with dual arms refer to state standard 878001..



FILE NAME =	USER NAME = footemj	DESIGNED - DAD REVIS	SED - DAG 1-1-14
c:\pw_work\pw1dot\footemj\d0108315\ts05.	dgn	DRAWN - BCK REVIS	ED -
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD REVIS	SED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09 REVIS	SED -

		DISTRICT ONE					MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
STATE OF ILLINOIS		0741					DETAILS	2030	15-00079-00-BT	DUPAGE	59	38
DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL DESIGN DETAILS					TS-05		CONTRACT NO. 61E4		61E40	
	SCALE: NO	ONE SHEET	NO. 6 OF	7	SHEETS	STA.	TO STA.	FED. RC	AD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



### MATERIAL:

- ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED

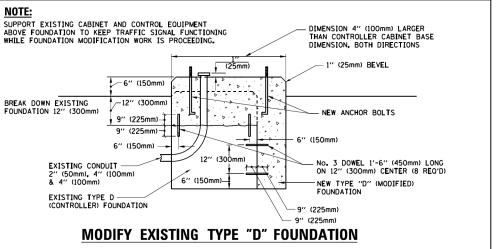
	С	HEIGHT	WEIGHT
)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
m)	21.5''(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
n)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
n)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

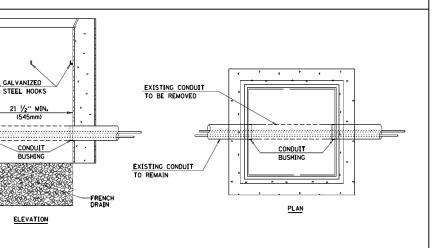
## <u>Shroud</u>

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.

2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.

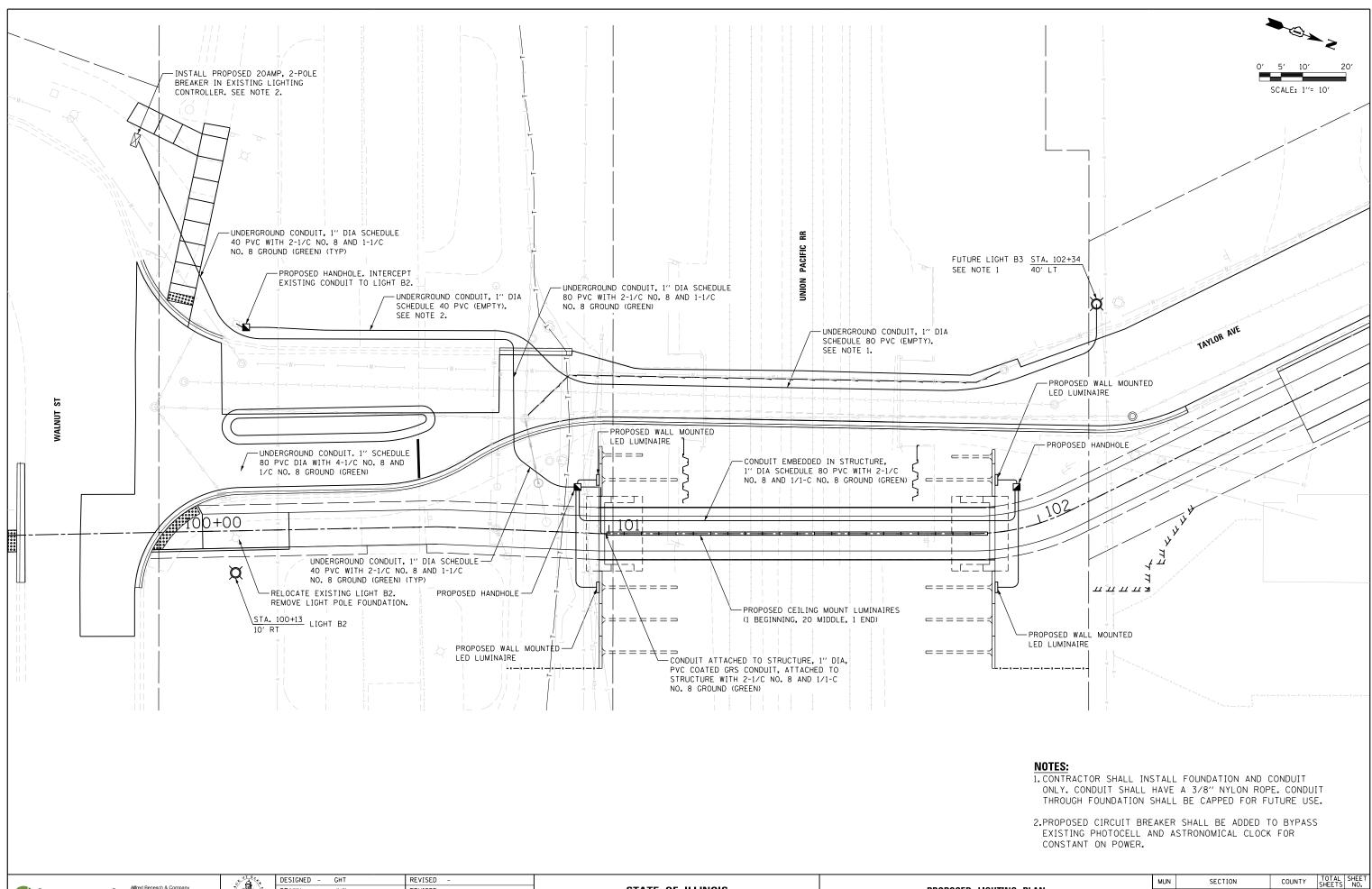
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



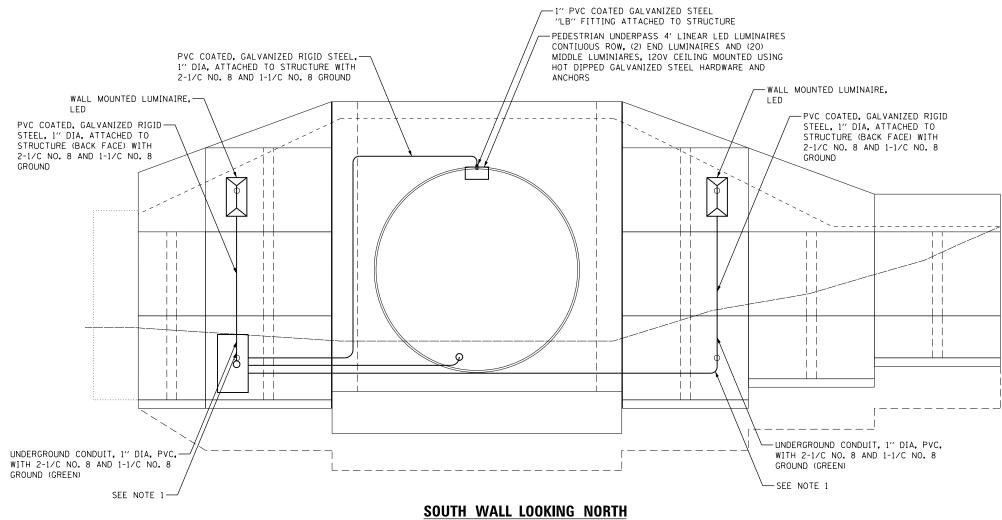


 HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

## HANDHOLE TO INTERCEPT EXISTING CONDUIT



Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400 Chicago, Mincis 60601 31:565-0450 Job No. 10507.01	* A**	DESIGNED - GHT	REVISED -							MUN	SECTION	COUNTY	TOTAL SHEET
		DRAWN - JLW	REVISED -		PROPOSED LIGHTING PLAN						15-00079-00-BT	DUPAGE	59 39
		CHECKED – GRR	REVISED -								CONTRAC	T NO. 61E40	
	Y.	DATE - 12/21/2017	REVISED -		SCALE: 1" = 10'	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	



(SIMILIAR NORTH WALL)

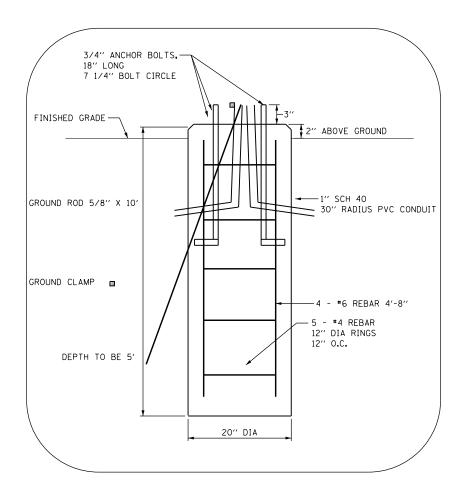
LOCATION	MANUFACTURER	MODEL NUMBER	NOTES:
CEILING MOUNT	KENALL	MLHA55-B48-20/M48-E48-SP-LG-PP-1-45L35K-DCC-1-DV-CDF-MFAD10	WITH MANUAL FIELD-ADJUSTABLE DEVICE IN FIXTURES DIMN
WALL MOUNT	KENALL	FS1224T-2TB-P1A-MB-45L35K-1-DV-PC-SCA	

Alfred Benesch & Company		DESIGNED	- GHT	REVISED -							MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
benesch Company 205 North Michigan Avenue, Sulte 2400 Chicago, Illinois 60601			- JLW	REVISED -	STATE OF ILLINOIS	LIGHTING DETAILS					2030	15-00079-00-BT	DUPAGE	59	40
	5. 10507.01	CHECKED	– GRR	REVISED -	DEPARTMENT OF TRANSPORTATION					_		CONTRAC	T NO. 6	51E40	
	18.33	DATE	- 11/27/2017	REVISED -		SCALE: N.T.S.	SHEET	OF	SHEETS STA.	TO STA.	ILLINOIS FED. AID P				

MMED TO 10%

## NOTE:

1. UNDERGROUND CONDUIT SHALL PENETRATE THROUGH THE RETAINING WALL AND RUN BEHIND THE RETAINING WALL.



**CONCRETE BASE DETAIL** 

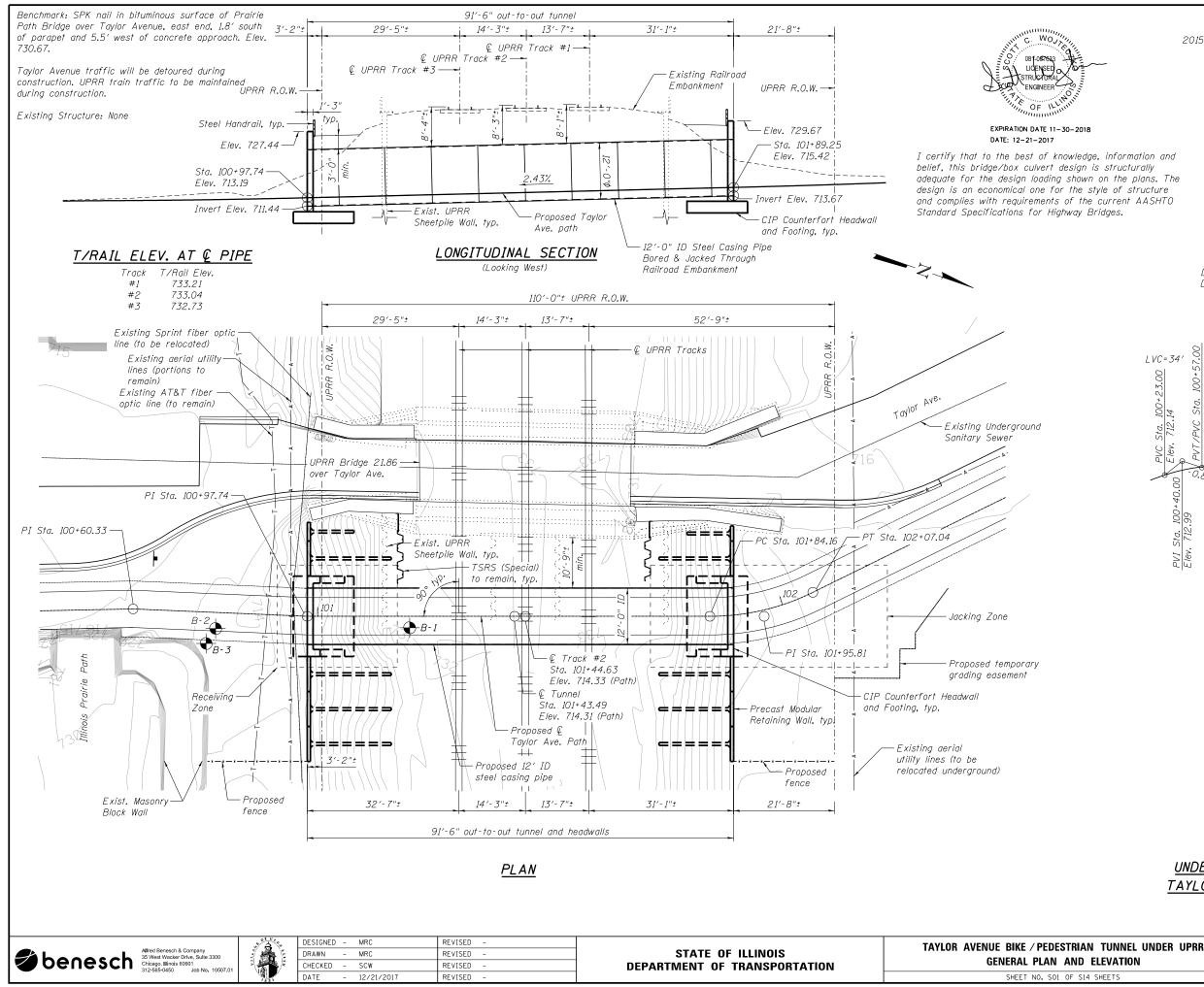
2. ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A449 OR A687 (GRADE 105) ANCHOR BOLTS SHALL HAVE A MINIMUM YIELD STRENGTH OF 55,000 PSI AND A MINIMUM ELONGATION OF 12% IN 4". HOT DIP ENTIRE ANCHOR LENGTH OF ANCHOR BOLTS, AND NUTS AND WASHERS CONFORMING TO AASHTO M232.

Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400 Chicago, Illinois 60601 312-565-0450 Job No. 10507.01	DESIGNED - GHT		GHT	REVISED -							MUN	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		CHECKED – JLW		REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING DETAILS			2030	15-00079-00-BT	DUPAGE	59 41		
	DATE -	- 12/21/2017	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: N.T.S.	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	T NO. 61E40	

## **CONCRETE BASE NOTES:**

1. REMOVE ALL CONCRETE FORMS FROM POLE BASES. FORM TOP 12" OF CONCRETE BASE.

3. REBAR SHALL CONFORM WITH AASHTO M31, GRADE 60 AND BE EPOXY COATED.





# DESIGN SPECIFICATIONS

2015 AASHTO LRFD Bridge Design Specifications. 7th Edition with 2016 Interim Revisions AREMA 2016 Manual for Railway Engineering Union Pacific Railroad Standards and Guidelines

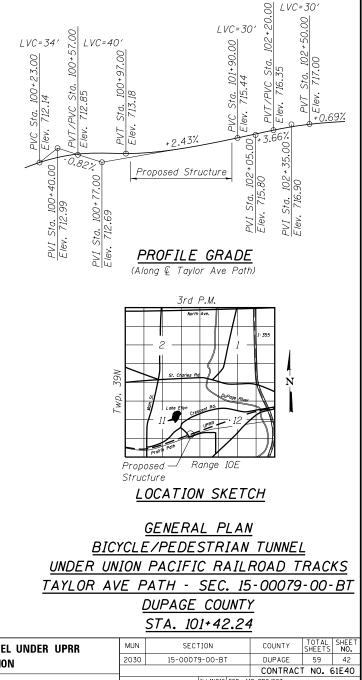
## DESIGN STRESSES FIELD UNITS

- f'c = 3,500 psi (Class SI) fy = 60,000 psi (Reinforcement)
- fy = 60,000 psi ASTM A515 or
  - = 42,000 psi ASTM A572
  - (Steel Casing Pipe)

## COOPER E80 RAILROAD LIVE LOAD

## SEISMIC DATA

Seismic Performance Zone (SPZ) = 1 Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.087g Design Spectral Acceleration at 0.2 sec.  $(S_{DS}) = 0.156g$ Soil Site Class = D



## GENERAL NOTES

- 1. All work requirements shown on these drawings and not otherwise detailed shall be accomplished as specified in the Detailed Specifications and the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering. In the event of conflicts between specifications, the more restrictive shall apply.
- 2. All information shown on these drawings regarding location of the existing tracks, existing bridge and existing ground elevations is based on information provided by the Railroad including drawings of the existing bridge and survey performed by Alfred Benesch & Co. and others.
- 3. Contractor shall perform excavation as required for construction of the new structure and replace areas removed and disturbed in the course of construction to a condition equal to or better than existing.
- 4. Subsurface exploration was performed by GSG Consultants, Inc. A copy of the Geotechnical Engineering Report has been included in the Contract Documents.
- Contact the Union Pacific "Call Before You Dig" number 90 days (not less than 60 days) prior to proposed construction start date. Prior to construction, confirm that all necessary relocations have been completed. The CBYD number is: 1-800-336-9193.

### TEMPORARY GUARDRAIL SYSTEM REQUIREMENTS

Guardrails on shoring shall include but not be limited to the following:

- 1. The top edge height of the top rail shall be 42" +/- 3" above the walking/working surface.
- 2. At least one midrail shall be provided, evenly spaced between walking/working surface and top rail.
- 3. Metal or timber posts or uprights shall be spaced at maximum intervals of 10'-0".
- 4. Entire guardrail system, including anchorages, shall be capable of withstanding without failure, a force of 200 lbs. applied in any outward or downward direction at any point.
- 5. Guardrail system shall be surfaced to prevent injuries from punctures and lacerations and prevent snagging of clothing. The ends of top rails and midrails shall not extend past the posts or uprights.

If conditions warrant, i.e. pedestrian traffic/weather, additional protection shall be provided such as screens or mesh to prevent slipping between the midrail and walking/working surface.

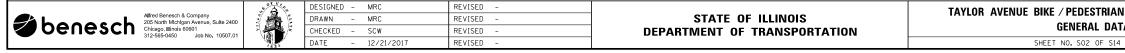
### DIVISION OF RESPONSIBILITY

### Railroad (UPRR)

1. Coordinate track outages with the Contractor. Intermittent track outages are anticipated during installation and removal of steel sheet piling.

### Contractor

- It is the Contractor's sole responsibility to coordinate with the UPRR whenever construction activity is within 25 feet of the UPRR ROW. The Contractor shall retain flagmen employed and designated by the UPRR to monitor on-coming train traffic, and advise Contractor personnel when activity on or near the railroad right-of-way may proceed. This item will be paid for according to Article 107.12 and will be reimbursed according to Article 109.05.
- 2. Coordinate all construction activities with the Village of Glen Ellyn.
- 3. Before ordering any material, the Contractor shall make a detailed field inspection of the site verifying all pertinent dimensions and elevations. Any variations in dimensions or elevations from those shown on the drawings shall be reported immediately to the Engineer.
- 4. Any modifications to this design shall be approved by the UPRR prior to construction.
- 5. Verify the location, relocation, abandonment, and/or temporary support of all utilities affected by the construction of the structure and embankment and coordinate these activities with the appropriate utility companies, agencies and/or authorities.
- 6. ComEd aerial lines may be reconfigured through the project site before work begins. These lines may be in conflict with activities required during construction of temporary and permanent structures. Contractor shall be responsible for coordinating construction equipment clearance limitations and any ComEd outage requests (if required) directly with ComEd prior to commencing work. Any revisions to the project plan or schedule shall be at no expense to the Village.
- 7. Apply for and obtain all construction permits necessary to perform the work.
- 8. Perform all work not performed by the UPRR.
- 9. Provide the Engineer and UPRR with a detailed construction plan defining the activity, schedule and procedure for each aspect of the work. Construction shall not begin until the construction plan has been approved by the Engineer and UPRR.
- 10. The temporary structures (shoring, bracing and/or falsework) shown herein are a suggested minimum for bidding purposes. The Contractor shall provide all temporary structures required to support and protect the existing embankments and structures affected by the work. Provide the Engineer and UPRR with details, design and procedure for all temporary structures. The provisions of UPRR Standard Drawing 106613 shall be met. All temporary structures shall be designed, signed and sealed by a Structural Engineer licensed in the State of Illinois. All temporary structures shall be approved by the Engineer and UPRR prior to beginning construction.
- 11. Provide temporary guardrail system as directed by the UPRR.
- 12. Coordinate with Village of Glen Ellyn for roadway closures and the UPRR for construction windows and/or track outages as required.
- 13. Provide all fill material per the UPRR Grading Specifications. Perform grading as required to drain and match the existing embankments and as shown on the plans.



Structure Exco Remov<u>al</u> and D Concrete Struc Form Liner Te Stud Shear Co. Reinforcement Precast Modula Geocomposite \ Steel Railing (S Pressure Groui Pipe Underdrai Anti-Graffiti H Furnish and In Temporary Soil Track Monitorii Porous Granula Staining Concre Steel Casing F

ITEM	UNIT	TOTAL
avation	Cu. Yd.	987
Disposal of Unsuitable Material for Structures	Cu. Yd.	201
ctures	Cu. Yd.	108.1
extured Surface	Sq. Ft.	1,172
nnectors	Each	78
Bars, Epoxy Coated	Pound	14,680
ar Retaining Wall	Sq. Ft.	914
Wall Drain	Sq. Yd.	67
Special)	Foot	28
iting	L. Sum	1
ins for Structures 4"	Foot	66
Protection System	Sq. Ft.	1,113
nstall Handrail	Foot	102
il Retention System (Special)	Sq. Ft.	2,836
'ng	Cal. Day	80
ar Embankment, Special	Cu. Yd.	326
rete Structures	Sq. Ft.	1,217
Pipe, Special, Tunneled Complete	Foot	91.5

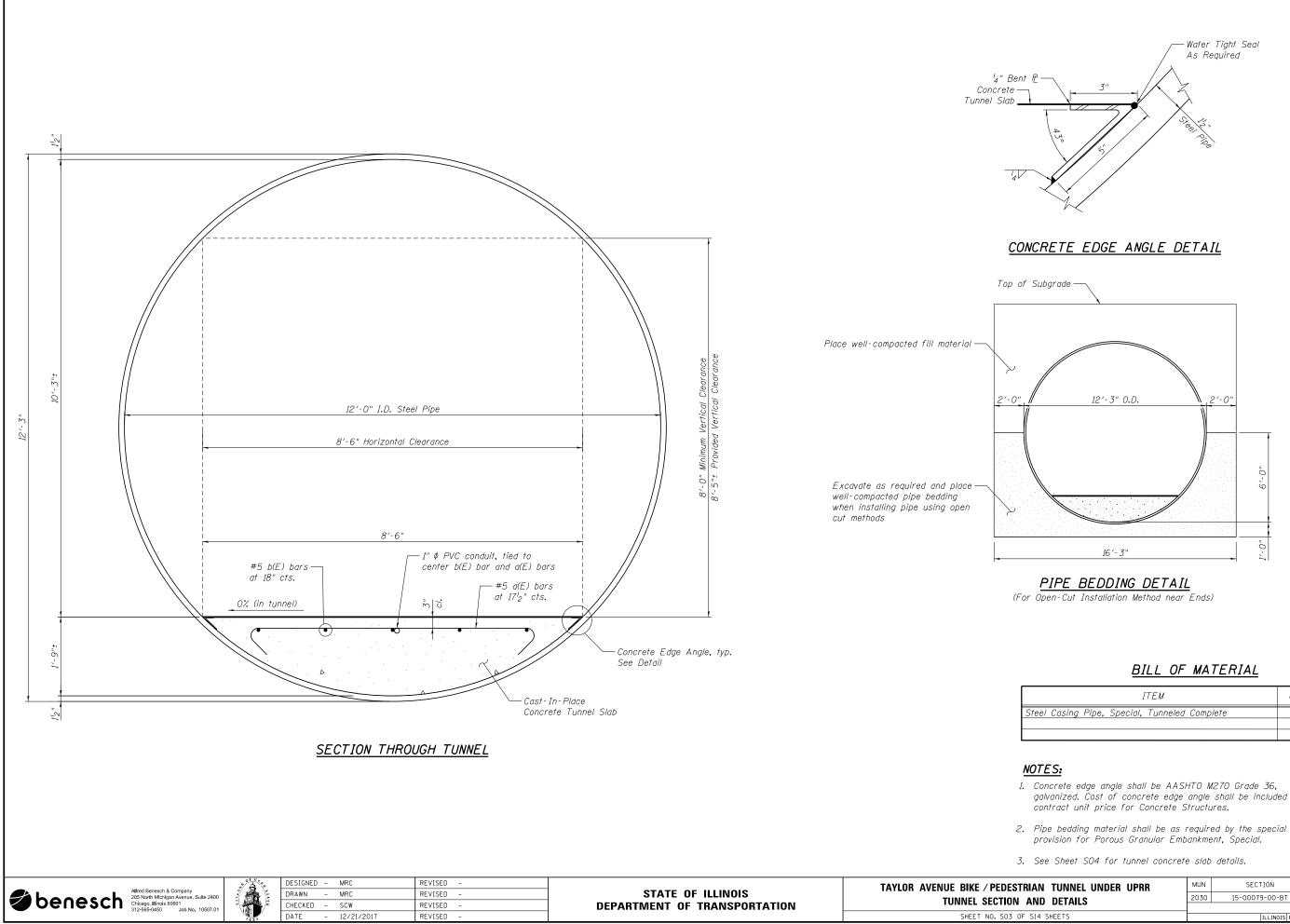
## TOTAL BILL OF MATERIAL

## INDEX OF SHEETS

S01 S02 S03 S04 S05 S06 S07 S08 S09 S10 S11 S12 S13	General Plan and Elevation General Data Tunnel Section and Details Tunnel Slab Details Earth Retention System I Earth Retention System II Tunnel Construction Schematics I Precast Modular Retaining Wall Tunnel Headwall Details I Tunnel Headwall Details II Handrail and Aesthetic Details Soil Boring Logs I
S12	Handrail and Aesthetic Details
S13	Soil Boring Logs I
S14	Soil Boring Logs II

							17
N TUNNEL UNDER UPRR	MUN	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	/20
ТА	2030	15-00079-00	-BT	DUPAGE	59	43	2
				CONTRAC	Γ NO. 6	51E40	$\sim$
1 SHEETS		ILLIN	OIS FED. A	ID PROJECT			-

10507\_002\_CenNotes.dgr

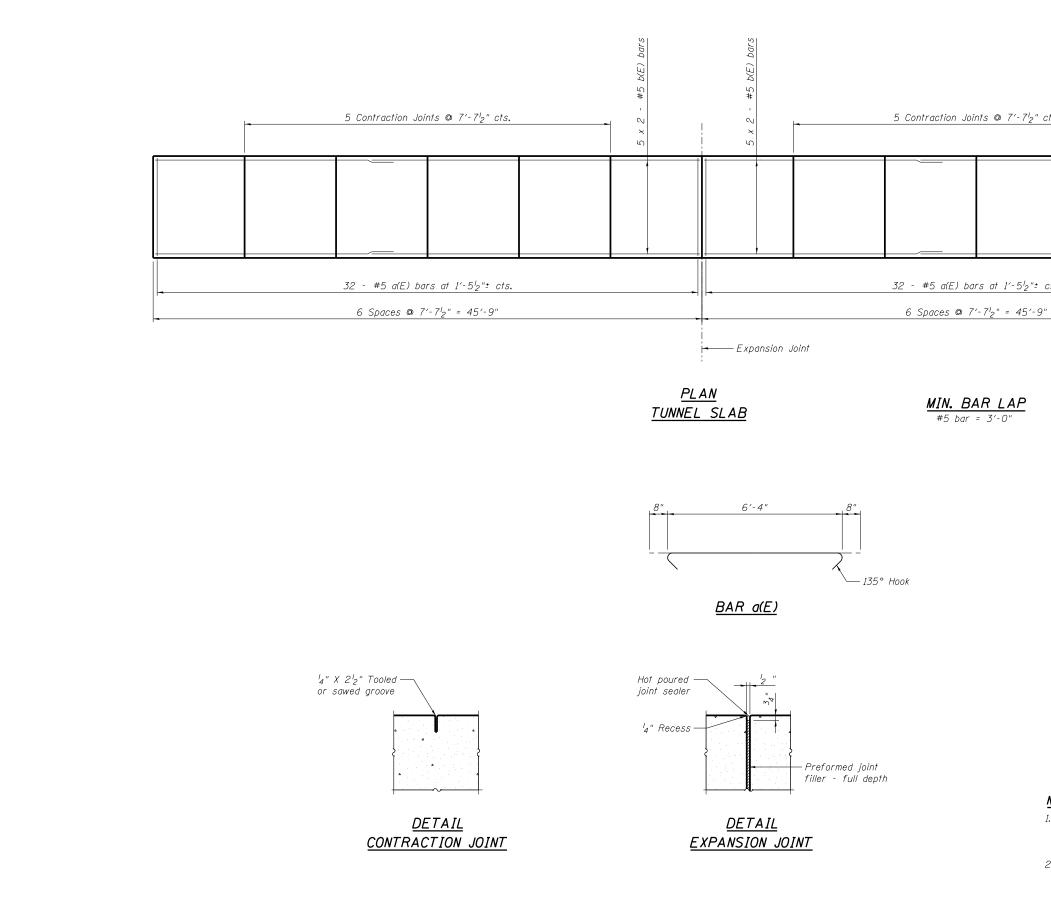


ITEM	UNIT	TOTAL
Steel Casing Pipe, Special, Tunneled Complete	Foot	91.5

galvanized. Cost of concrete edge angle shall be included in

				TOTAL	SHEET	ω	
AN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	SHEETS		0	
AND DETAILS	2030	15-00079-00-BT	DUPAGE	59	44	2/2	
AND DETAILS			CONTRACT NO. 61E40				
S14 SHEETS	ILLINOIS FED. AID PROJECT					-	

12:17:23 PM



Alfred Benesch & Company	2 4 0 C C C C C C C C C C C C C C C C C C	DESIGNED - MRC	REVISED -		TAYLOR AVENUE BIKE / PEDESTRIAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
		DRAWN – MRC CHECKED – SCW	MRC     REVISED     STATE OF ILLINOIS       - SCW     REVISED     -	TUNNEL SLAB DETAILS	2030	15-00079-00-BT	DUPAGE CONTRACT	59	45 E40	
	William .	DATE - 12/21/2017	REVISED -		SHEET NO. SO4 OF S14 SHEETS		ILLINOIS FED. 4	AID PROJECT		

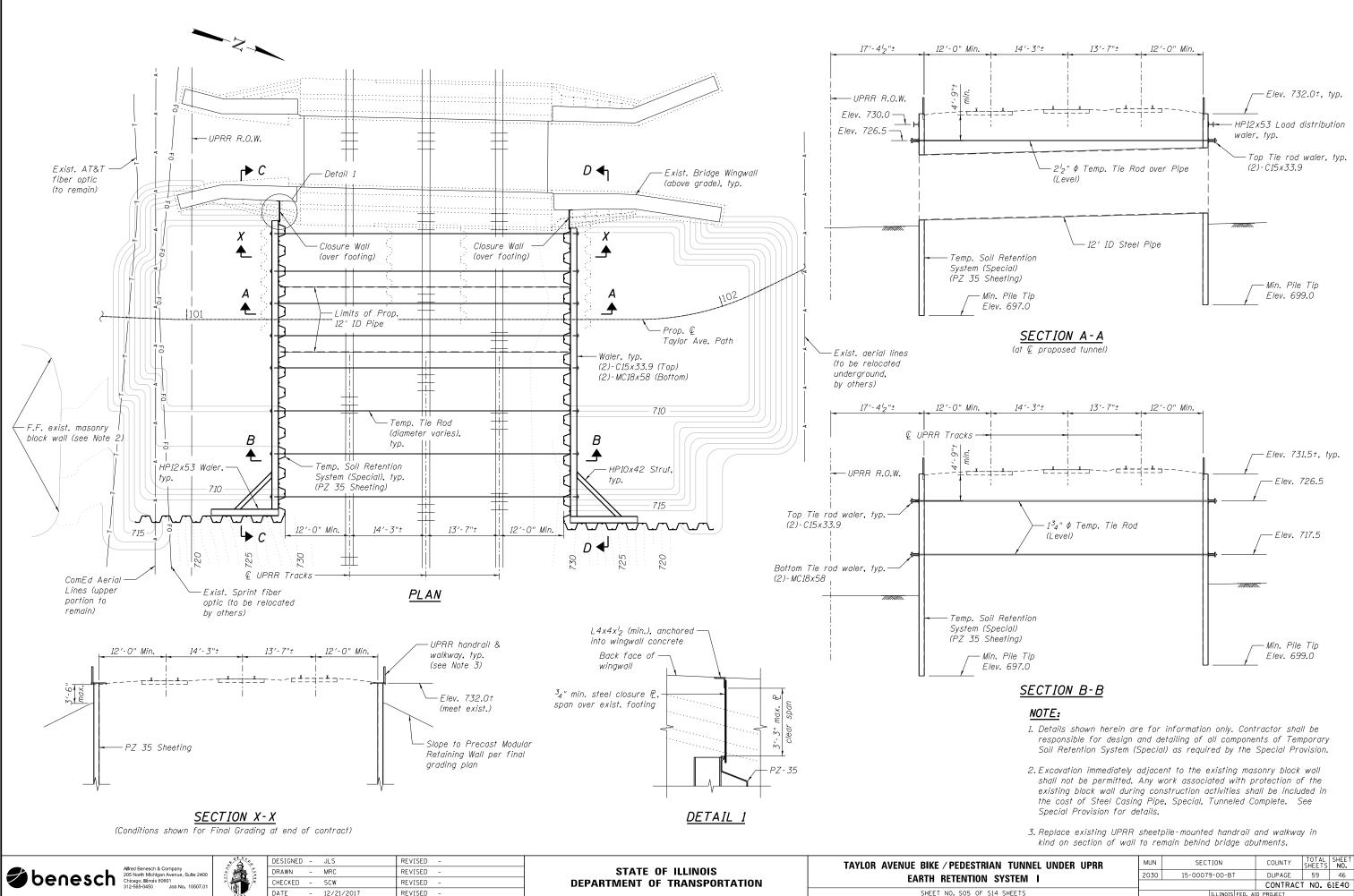
-7 <sup>1</sup> 2" cts.	-	J	
5 <sup>1</sup> 2"± cts.			
451-9"		- 1	

BILL OF MATERIAL

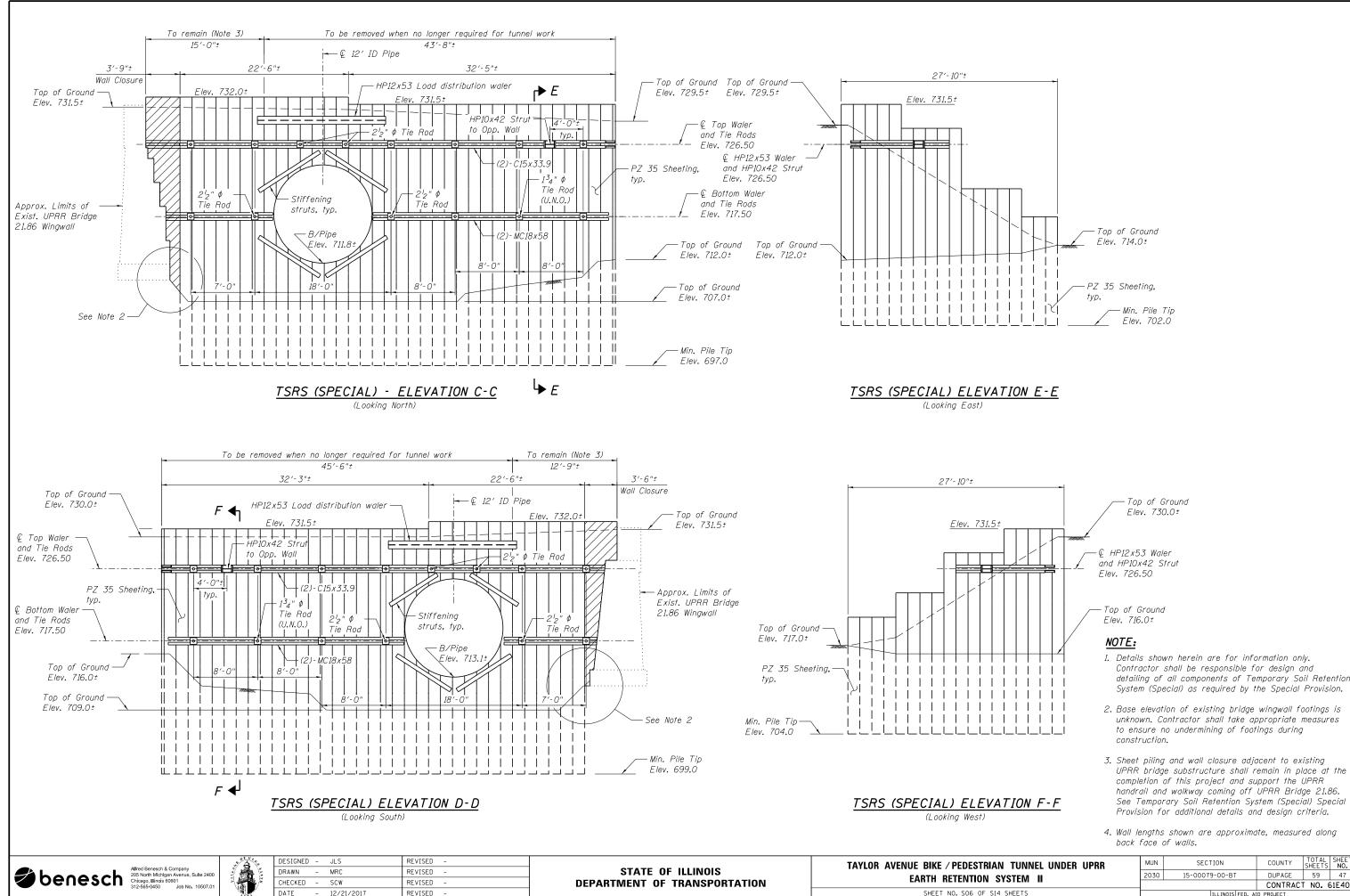
Bar	No.	Size	Length	Shape
a(E)	64	#5	7′-8″	
b(E)	20	#5	24'-3"	
Concrete	Structure	5	Cu. Yd.	35.0
Reinforce Epoxy Co		S,	Pound	1,020

## NOTES:

- 1. Bars called out as 5 x 2 #5 bars indicates 5 lines of bars with 2 lengths per line. Longitudinal bars shall not pass through the expansion joints.
- 2. Expansion joints and contraction joints will not be paid for separately, but shall be included in the Contract unit price for Concrete Structures.

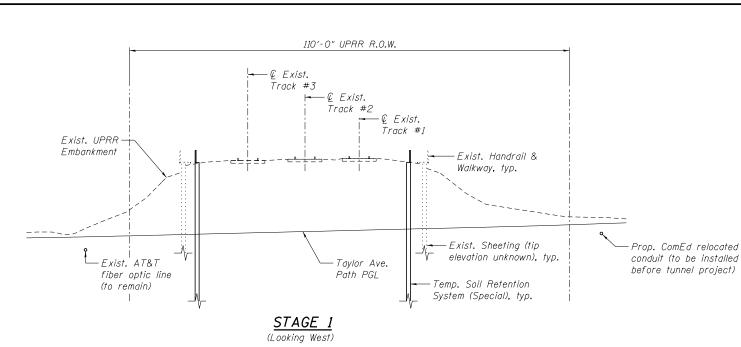


IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	120	
SYSTEM I	2030	15-00079-00-BT	DUPAGE	59	46	2	
STOTEM			CONTRACT	「 NO. (	61E40	2	
S14 SHEETS	ILLINOIS FED. AID PROJECT					-	



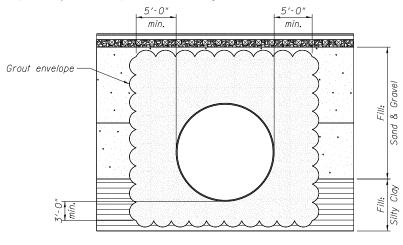
IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	0001		
SYSTEM II		15-00079-00-BT	DUPAGE	59	47	5		
			CONTRACT	NO. 6	51E40	è		
S14 SHEETS	ILLINOIS FED. AID PROJECT					-		

Ret\_El



## STAGE 1 NOTES:

- 1. Work includes, but is not limited to: mobilization, installation of remote track monitoring system, completion of exploratory boring program, installation of vertical elements for temporary soil retention systems and removal of existing sheet piling that is conflict with the proposed tunneling work.
- 2. Existing steel handrail and walkway extension off UPRR Bridge 21.86 is supported on the existing sheet piling. Handrail and walkway elements shall be replaced at the completion of this project, as approved by Engineer and UPRR. See Steel Railing (Special) Special Provision for additional details.
- 3. Contractor shall meet all pre-construction requirements noted within the General Notes and project specifications or as specifically requested by the UPRR prior to commencing construction activities.

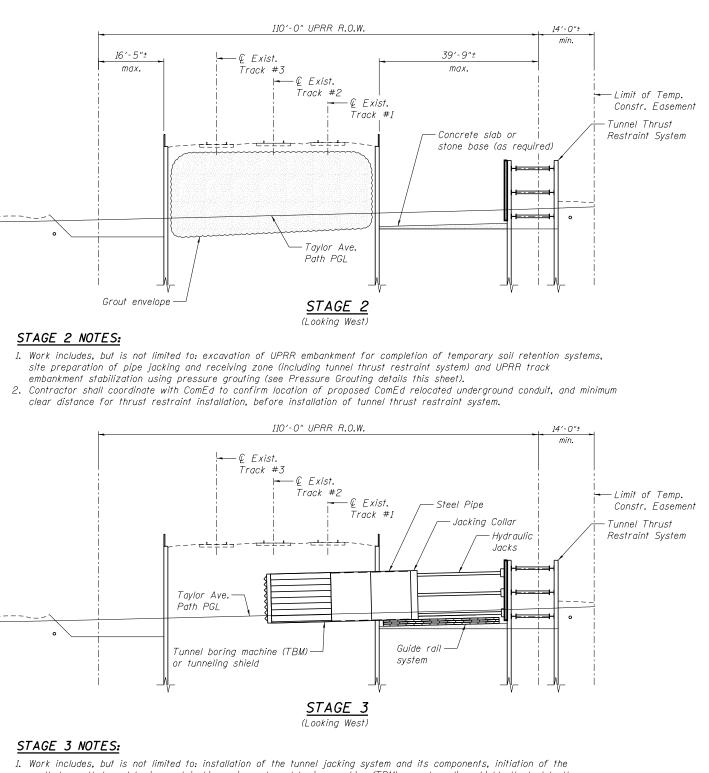


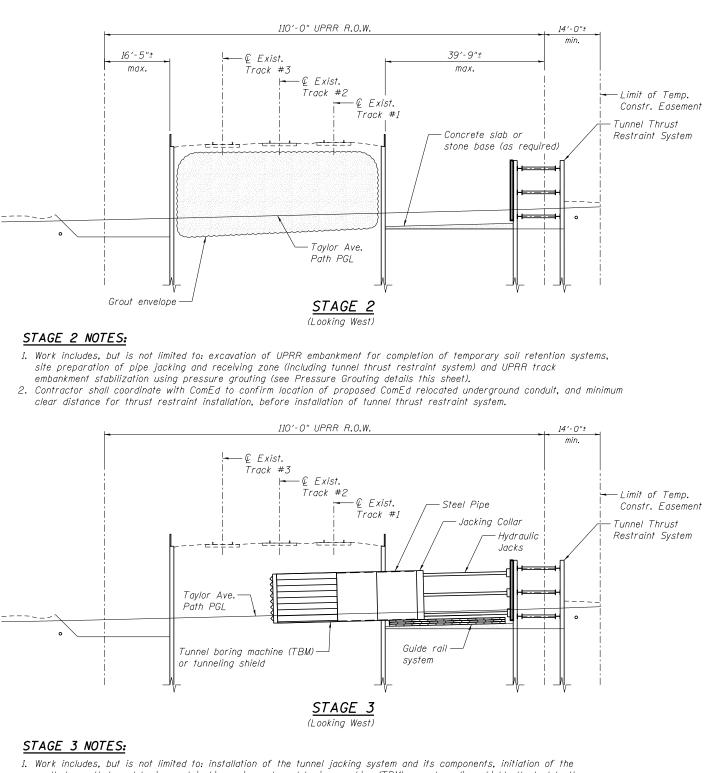
## PRESSURE GROUTING

(Looking North)

### PRESSURE GROUTING NOTES:

- 1. Based on the sand and gravel soils at the top of the embankment, grout stabilization of the existing embankment will be necessary prior to tunnel jacking activities to prevent excessive around movement.
- 2. A consolidation grouting program is expected per the soils report, with the minimum grout envelope as shown on the sections herein. 3. Grouting program must be executed without fouling the tracks.
- 4. Contractor shall install horizontal tube-a-manchette (TAM) pipes from face to face of the temporary soil retention systems around the perimeter of the 12' pipe as required to achieve the necessary grout envelope. The grout sequence shall follow a primary to secondary injection pattern to ensure uniformity in the consolidation of granular soils.
- 5. Contact grouting of the annulus between the soils and the steel casing pipe is required. Replacement grouting using the previously installed TAM pipes may be required as part of a contingency plan to fill any voids that may develop during the tunneling operations.
- 6. The grouting sub-Contractor shall be responsible for the development of the final grouting program as detailed within the Pressure Grouting Special Provision.





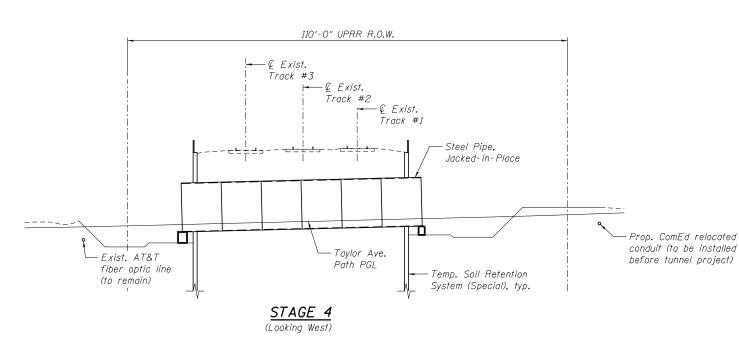
north to south tunnel boring and jacking using a tunnel boring machine (TBM) or a tunneling shield attached to the front steel casing pipe section.

NOTES:

1. Staging concepts shown herein are for reference only as one potential work plan and may not depict or discuss all detailed steps within a construction stage. The Contractor shall be responsible for the development of and adherence to a detailed tunneling work plan throughout all stages of construction. See Steel Casing Pipe, Special, Tunneled Complete Special Provision for additional information.

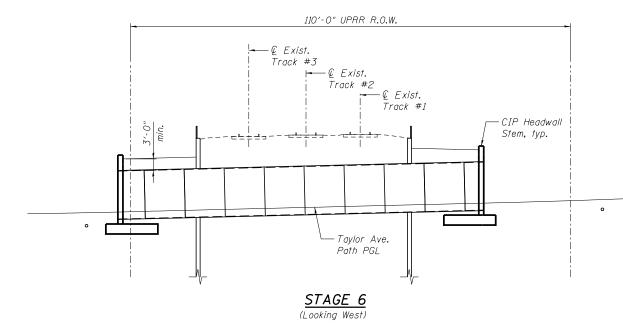
Alfred Benesch & Company		DESIGNED - MRC	REVISED -		TAYLOR AVENUE BIKE / PEDESTRIAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHE SHEETS N	ET Q		
benesch 200 North Michigan Avenue, Sulte 2400 Chicago, Illinois 60601				DRAWN – MRC CHECKED – SCW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TUNNEL CONSTRUCTION SCHEMATICS I	2030	15-00079-00-BT		59 4	18 5 40 5
		DATE - 12/21/2017	REVISED -		SHEET NO. SO7 OF S14 SHEETS		ILLINOIS FED.	AID PROJECT				

2. Utilities shown within staging concepts are for reference only and not intended to be indicative of all utilities that may remain during construction.



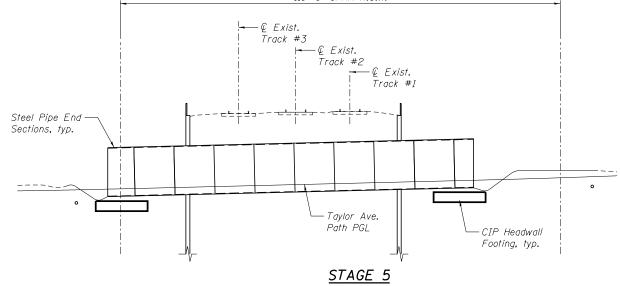


1. Work includes, but is not limited to: completion of the tunnel boring and jacking, temporary support of any steel casing sections that extend beyond the front face of the temporary soil retention systems, removal of all tunnel jacking equipment as required by the Engineer.



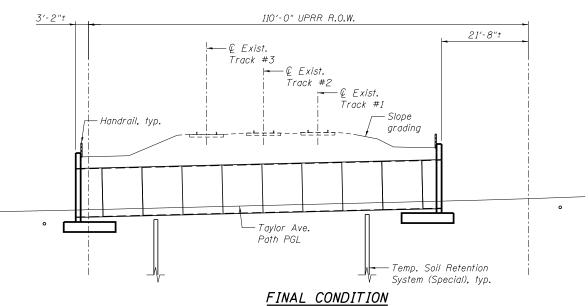
## STAGE 6 NOTES:

1. Work includes, but is not limited to: construction of the cast-in-place concrete counterfort headwall stems, erection of precast modular retaining wall units, construction of the cast-in-place concrete tunnel slab and backfilling in front of walls and behind walls to the minimum 3'-O" fill requirement over the steel pipe casing.



STAGE 5 NOTES:

1. Work includes, but is not limited to: construction of the cast-in-place concrete counterfort headwall footings, placement of pipe bedding material, erection of steel casing pipe end sections.



## FINAL CONDITION NOTES:

- 1. Work includes, but is not limited to: installation of handrail on top and/or behind walls, removal of temporary soil UPRR steel handrail and walkway on approach to UPRR Bridge 21.86.
- 2. Temporary soil retention systems shall be removed to the limits required by the Engineer. System components beneath the
- steel casing pipe may remain in place to prevent differential settlements. 3. All work shall be approved by the Village of Glen Ellyn and UPRR prior to demobilization from site.

## NOTES:

	3°	DESIGNED - MRC	REVISED -		TAYLOR AVENUE BIKE / PEDESTRIAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL S	HEET NO.
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400		DRAWN - MRC	REVISED -	STATE OF ILLINOIS	TUNNEL CONSTRUCTION SCHEMATICS II	2030	15-00079-00-BT	DUPAGE	59	49
Chicago, Illinois 60601 312-565-0450 Job No. 10507.01		CHECKED - SCW	REVISED -	DEPARTMENT OF TRANSPORTATION		_		CONTRAC	T NO. 61'	.E40 💫
	1834	DATE - 12/21/2017	REVISED -		SHEET NO. SOB OF S14 SHEETS		ILLINOIS FED. A	ID PROJECT		

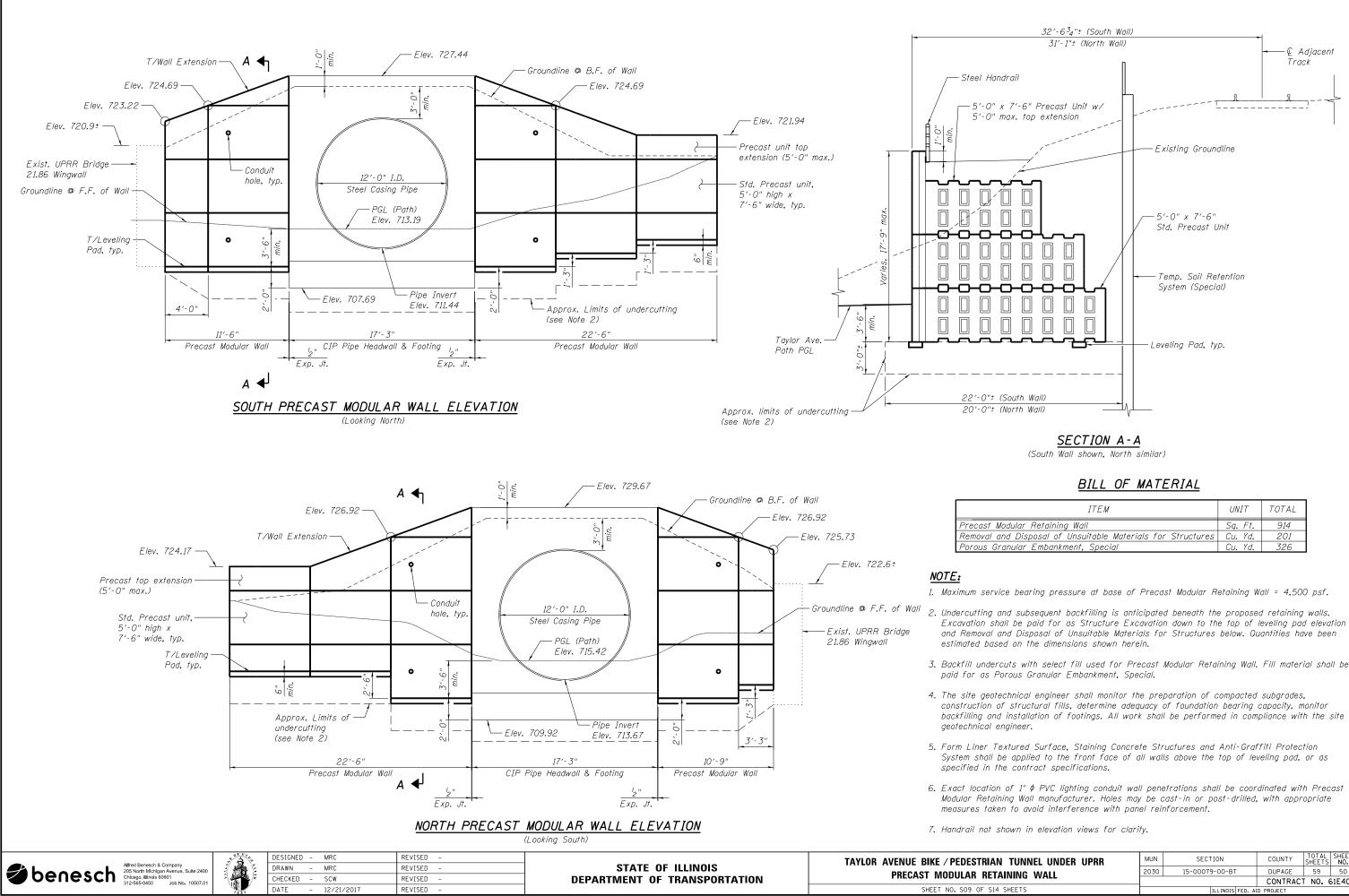
(Looking West)

(Looking West)

retention systems that are not required for final build out, UPRR embankment restoration as required, replacement of

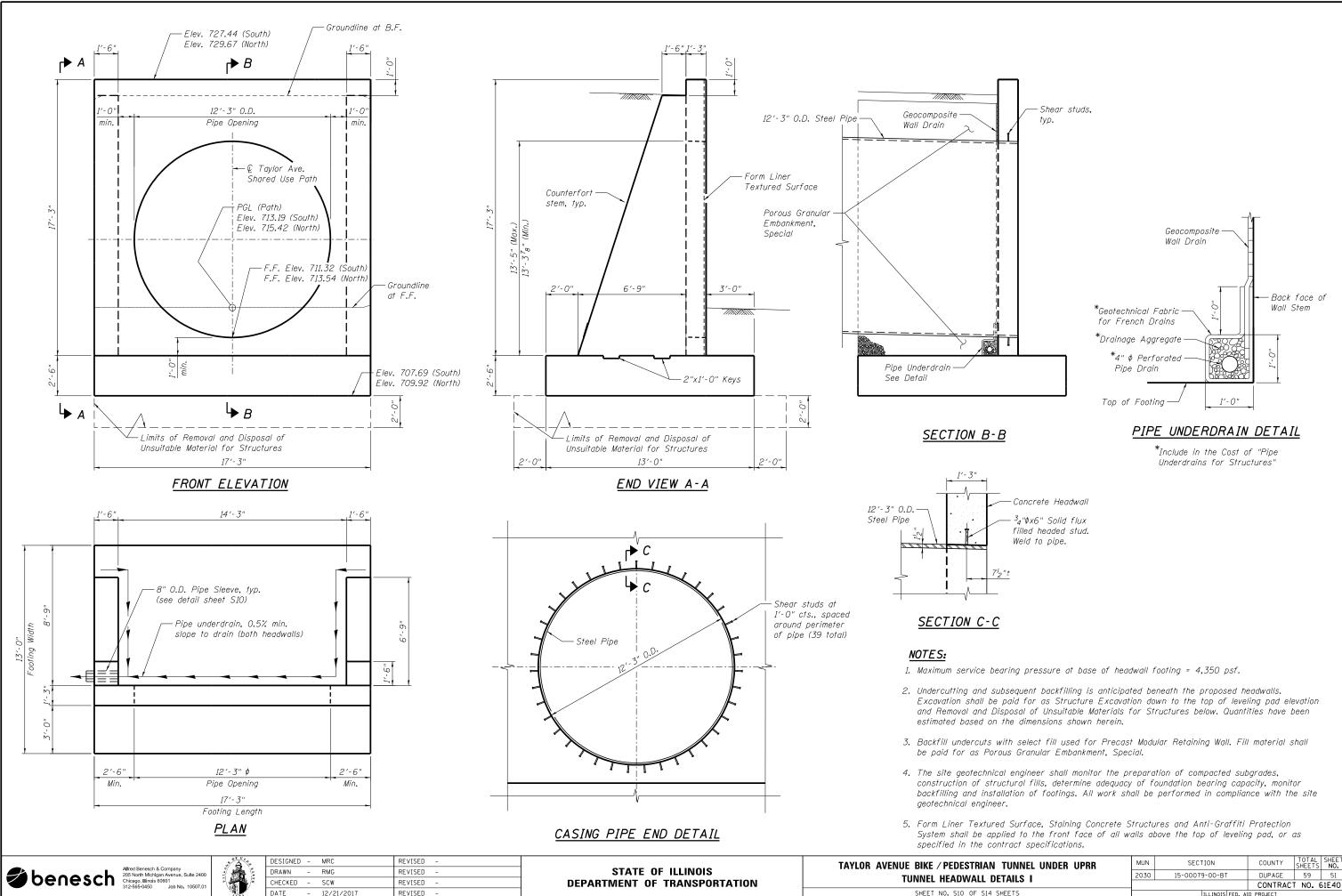
 Staging concepts shown herein are for reference only as one potential work plan and may not depict or discuss all detailed steps within a construction stage. The Contractor shall be responsible for the development of and adherence to a detailed tunneling work plan throughout all stages of construction. See Steel Casing Pipe, Special, Tunneled Complete Special Provision for additional information.

2. Utilities shown within staging concepts are for reference only and not intended to be indicative of all utilities that may remain during construction.

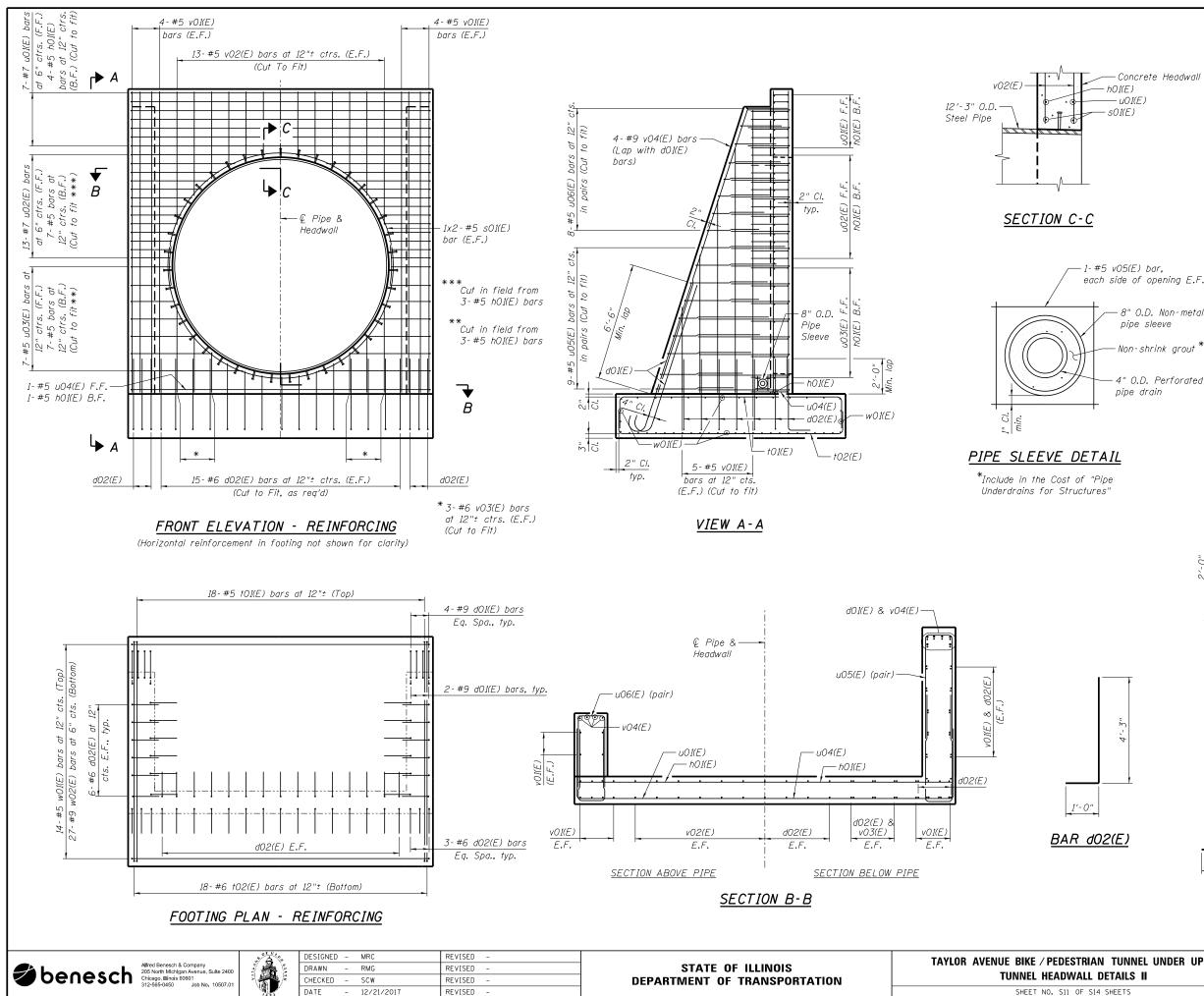


ITEM	UNIT	TOTAL
st Modular Retaining Wall	Sq. Ft.	914
al and Disposal of Unsuitable Materials for Structures	Cu. Yd.	201
Granular Embankment, Special	Cu. Yd.	326

IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	/20
ETAINING WALL	2030	15-00079-00-BT	DUPAGE	59	50	7
			CONTRAC	NO.	61E40	$\sim$
S14 SHEETS		ILLINOIS FED. AI	D PROJECT			-



IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	0001
L DETAILS I	2030	15-00079-00-BT	DUPAGE	59	51	5
			CONTRACT	NO. 6	51E40	i c
S14 SHEETS		ILLINOIS FED. AI	D PROJECT			1



Concrete	Headwall	F.F.
— h01(E)		

FO	RTWO	HEA	DWALL	S
Bar	No.	Size	Length	Shape
d01(E)	24	#9	10'-0"	c
d02(E)	120	#6	5'-3"	
002127	120		55	!
hO1(E)	22	#5	16′-11″	
s01(E)	8	#5	22'-0"	$\frown$
t01(E)	36	#5	16′-8″	
t02(E)	36	#6	16′-8″	
uOI(E)	14	#7	20'-11"	
u02(E)	26	#5	18′-10″	
u03(E)	14	#5	16′-8″	·
u04(E)	2	#5	20'-11"	
u05(E)	72	#5	11'-2"	
u06(E)	64	#5	7'-2"	
v01(E)	72	#5	17'-1"	
v02(E)	52	#5	7'-6"	
v03(E)	24	#5	5'-0"	
v04(E)	16	#9	16′-9″	
v05(E)	16	#5	1'-0"	
w01(E)	28	#5	16'-11"	
w02(E)	54	#9	20'-11"	
Concrete	Structure	C	Cu. Yd.	73.1
			<i>cu. ru.</i>	13.1
Reinforce	meni Bar.	5,	Pound	13.660

BILL OF MATERIAL

1- #5 v05(E) bar, each side of opening E.F.

> -8" O.D. Non-metallic\* pipe sleeve

-4" O.D. Perforated \*

pipe drain

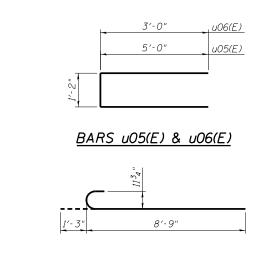
Bars indicated thus 1 x - #5 etc. indicates 1 line of bars with lengths per line.

Pound 13,660

	16'- 11"	u01(E), U04(E) & w02(E)
	14 '- 10"	u02(E)
	12′-8″	u03(E), t01(E) & t02(E)
2'-0"		

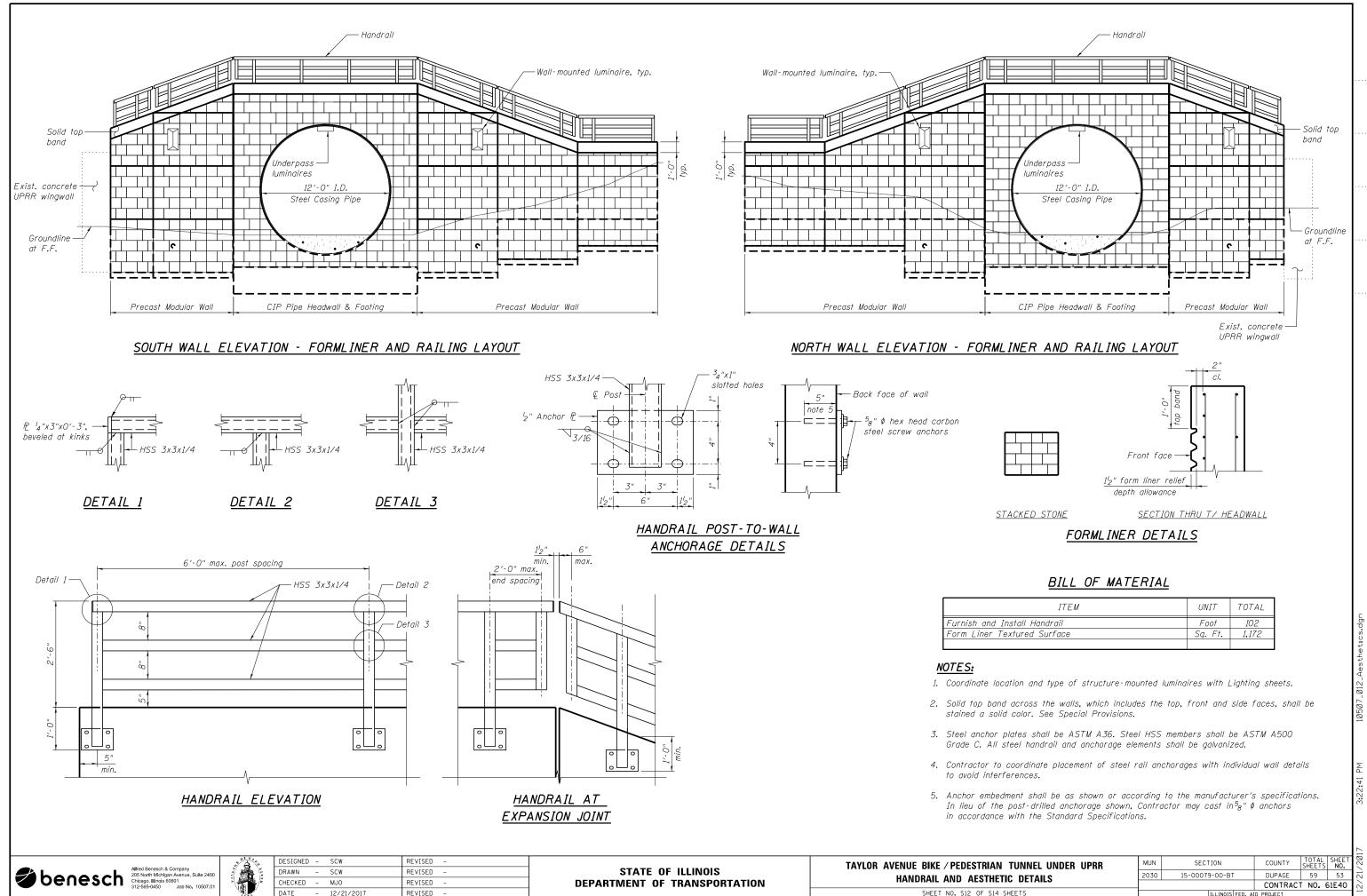
## BARS UOI(E) THRU UO4(E). t01(E), t02(E) & w02(E)

Epoxy Coated



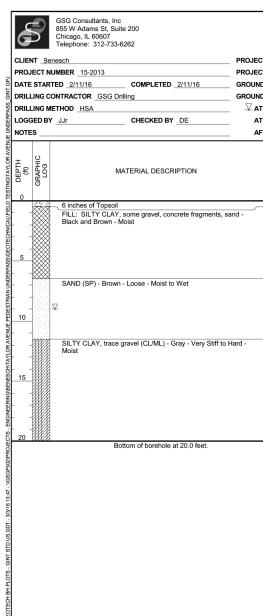
BAR dOI(E)

IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	/20
L DETAILS II	2030	15-00079-00-BT	DUPAGE	59	52	2
			CONTRACT	Γ NO. 6	51E40	2
S14 SHEETS		ILLINOIS FED. AI	D PROJECT			-



						<b>—</b>
IAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	/20
THETIC DETAILS	2030	15-00079-00-BT	DUPAGE	59	53	2
			CONTRAC	T NO. 6	51E40	2
S14 SHEETS		ILLINOIS FED. AI	D PROJECT			-

G	D	Chicago, IL 60607 Telephone: 312-733-6262								
CLIE	NT Ben	esch	PROJEC	T NAME	Taylo	or Avenue	Pedestria	an Underpass		
PROJ	JECT NU	IMBER 15-2013	PROJEC	T LOCA		Glen Ellyn	, IL			
DATE	START	ED _2/11/16 COMPLETED _2/11/16	GROUNE	ELEVA		730 ft	н	OLE SIZE 2		
DRILI	LING CO	NTRACTOR GSG Drilling	GROUND	WATER	RLEVE	LS:				
DRILI	LING ME	THOD Direct Push	AT	TIME O	F DRILI	LING [	None			
LOGO	GED BY	TC CHECKED BY DE	AT	END OF	DRILL	.ING N	lone			
NOTE	S		AF	TER DRI	LLING	NA				
				щ			QZ	▲ SPT N VALUE		
Ŧ,	GRAPHIC LOG			SAMPLE TYPE NUMBER	RECOVERY (%)	BLOW COUNTS (N VALUE)	UNCONFINED COMPRESSION (tsf)	20 40 60 80		
DEPTH (ft)	LOR	MATERIAL DESCRIPTION		UME L	00%	AN	(tst	Moisture Content 10 20 30 40		
	Ū			WW	RE	_os	NO	Unconfined Compression (tst		
0	××××	Circles of Store Ballant		0,			-0	2 4 6 8		
	-8888-	<ul> <li>6 inches of Stone Ballast FILL: SAND and GRAVEL, with urban debris, asphalt gri</li> </ul>	ndina -							
-		Black and Brown - Moist	9							
		Noted with white gravel 0.5 to 2 feet								
-										
5	-									
-		FILL: SAND and GRAVEL - Black and Brown - Moist	_							
		\Noted a 4 inch seam of clay FILL: SAND and GRAVEL, with urban debris - Black and								
_		Moist	BIOWIT							
		Noted a 2 inch seam of white gravel								
10		FILL: SAND and GRAVEL, with clay - Black and Brown -	Moist _							
		Bottom of borehole at 10.0 feet.								

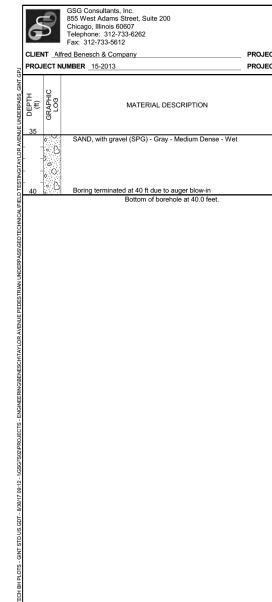


										17
		DESIGNED - MRC	REVISED -		TAYLOR AVENUE BIKE / PEDESTRIAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL SH SHEETS N	IEET
Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400	1 I 👬 🖗 🗄	DRAWN - MRC	REVISED -	STATE OF ILLINOIS		2030	15-00079-00-BT	DUPAGE	59 5	54
		CHECKED - SCW	REVISED -	DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS I			CONTRAC	T NO. 61E	40
		DATE - 12/21/2017	REVISED -		SHEET NO. S13 OF S14 SHEETS		ILLINOIS FED.	AID PROJECT		1

				BOP	RING NUMBER B-3							
				DOR	PAGE 1 OF 1							
					an Underpass							
	CT LOCATION         Glen Ellyn, IL           ND ELEVATION         714.5 ft											
ND ELEVATION _714.5 $\pi$ Hole Size _31/4 ND WATER LEVELS:												
			LING _9.00	) ft / Elev	/ 705.50 ft							
T END OF DRILLING None												
F	TER DRI	LLING	NA									
	Щ			aN	▲ SPT N VALUE							
	SAMPLE TYPE NUMBER	RECOVERY (%)	BLOW COUNTS (N VALUE)	FINE ESSIG	20 40 60 80							
		0000	N VAU	UNCONFINED COMPRESSION (tsf)	Moisture Content     10 20 30 40							
	SAN	R	02	ЯÖ	Unconfined Compression (tsf) 2 4 6 8							
					2 4 0 0							
	SS 1	33	5-6-7 (13)	2.00	<b>▲</b> □ <b>●</b>							
			(10)		/							
	X ss	67	3-3-4	2.50								
	2		(7)									
	V ss	89	1-2-2	-								
	∕ 3		(4)	-								
	V ss	83	2-3-4	1								
	4	00	(7)	-	<b>↓ ↓ /</b>							
	V ss	70	3-4-5	254								
	5	78	(9)	3.54	1							
	∕∕ ss		4-4-4									
	6	89	(8)	4.17	<b>↓</b>							
	1 66		4-5-6	-	/							
	SS 7	83	4-5-6 (11)	2.50	↑ ₱ ↑							
	1.05		150									
		89	4-5-8 (13)	2.08	L T T							

10507\_014\_Boring log l.dgn

G	3	GSG Consultants, Inc. 855 West Adams Street, Suite 200 Chicago, Illinois 60607 Telephone: 312-733-6262 Fax: 312-733-5612				BOF	RING NUM	BER B-2 PAGE 1 OF 2
		ed Benesch & Company	PROJECT NAME				an Underpass	
		MBER 15-2013	PROJECT LOCA					
		ED _7/26/17 COMPLETED _7/26/17	GROUND ELEVA	-		н	OLE SIZE _3 1/4"	
		NTRACTOR GSG Drilling						
		THOD HSA						
		JR CHECKED BY DE	AT END OF			00 ft / Ele	v 679.00 ft	
NOTE	s		AFTER DR	ILLING	NA			
			н	~	_	ΩZ	▲ SPT N	
E	GRAPHIC LOG		SAMPLE TYPE NUMBER	RECOVERY (%)	BLOW COUNTS (N VALUE)	UNCONFINED COMPRESSION (tsf)	20 40	60 80
DEPTH (ft)	Log	MATERIAL DESCRIPTION	LALE	000	VAL	(tsf	Moistur   10   20	e Content 30 40
	5		AMI	REC	"ŭz	NNO	Unconfined C	
0						٥	2 4	6 8
_		FILL: SANDY CLAY, with gravel, concrete pieces - Black a Brown - Moist		-		4		
_			X ss	33	5-4-5 (9)	3.0	<b>▲</b> • ₽	
_	***			1	,	1		
_		FILL: SILTY CLAY, trace gravel - Brown - Very Moist	∕ ss	56	2-4-5	2.08		
5			2	- 50	(9)	2.00		
_	***	CAND with group (CDC) Design Large Maint				-	<u>/</u>	
-	• 🔿	SAND, with gravel (SPG) - Brown - Loose - Moist		67	2-5-3 (8)		♦ € \	
-	and	SILTY CLAY trace group (CLAN) Drown March 1	loiet			1		
_		SILTY CLAY, trace gravel (CL/ML) - Brown - Very Stiff - N	V SS	100	2-4-6	3.75		
10			4	100	(10)	- 3.75	<b>T</b>   <b>T</b>	
_			N 1			-		
_			SS 5	100	1-3-5 (8)	3.75	.♠	
_		SILTY CLAY, trace gravel (CL/ML) - Gray - Stiff to Very Si Moist	am - <u>e s -</u>		(-/		.   <b>X</b> !	
_			∕ ss	83	3-3-5	2.92		
15			6	0.0	(8)	2.52	T 7	
_								
_								
_							-	
_			∑ ss	100	2-2-3	2.08		
20			7		(5)	-	H I I	
-								
-							-	
-								
-				100	1-2-3 (5)	2.08	<b> </b>	
25			V \ •		(3)	-		
-								
-								
-								
- 30				100	2-3-5 (8)	1.87	<b></b>	
30			/ \ 5			-		
-								
-								
	SISS							
-	XXXXX		∕∕ ss		3-2-3			

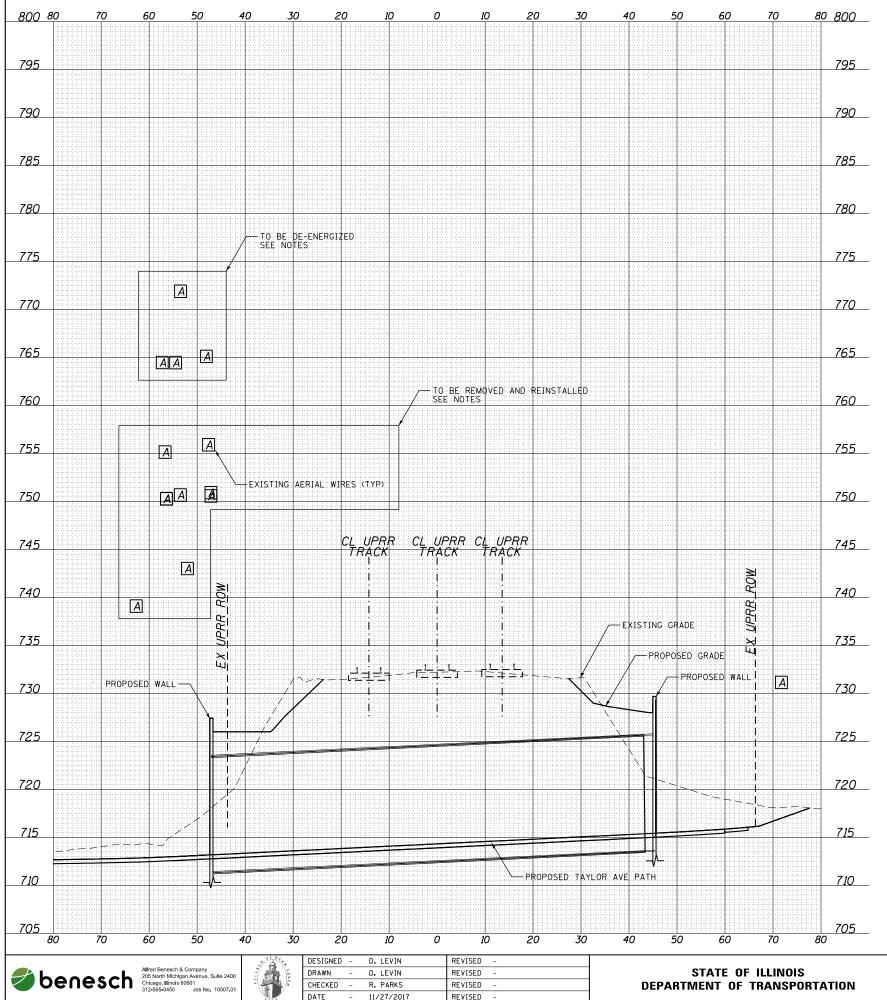


												17		
			DESIGNED -	MRC	REVISED -		TAYLOR AVENUE BIKE / PEDESTRIAN TUNNEL UNDER UPRR	MUN	SECTION	COUNTY	TOTAL	SHEET NO.		
	fred Benesch & Company 05 North Michigan Avenue, Suite 2400	1 <b>11</b>	1 <b>11</b>	1 <b>11</b>	DRAWN -	MRC	REVISED -	STATE OF ILLINOIS		2030	15-00079-00-BT	DUPAGE	59	55
l 🖉 oenesch 🤋	hicago, Illinois 60601 12-565-0450 Job No. 10507.01		CHECKED -	SCW	REVISED -	DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS II			CONTRAC	CT NO. 6	1E40		
· - · · · ·			W.	M.	DATE –	12/21/2017	REVISED -		SHEET NO. S14 OF S14 SHEETS		ILLINOIS FED. A	AID PROJECT		

			BOR	RING NUMBER B-2 PAGE 2 OF 2
		r Avenue f Glen Ellyn,	IL	an Underpass
SAMPLE TYPE NUMBER	RECOVERY (%)	BLOW COUNTS (N VALUE)	UNCONFINED COMPRESSION (tsf)	SPT N VALUE           20         40         60         80           ● Moisture Content 10         20         30         40           □ Unconfined Compression (tsf) 2         4         6         8
SS 11	83	5-7-11 (18)		
· V	1			· · · · · ·

10507\_015\_Boring log 2.dgn

3:22:49 PM



## COMED OVERHEAD TRANSMISSION LINE COORDINATION

ComEd overhead transmission lines may be in conflict with activities required during construction of the temporary and permanent structures. The following sections summarize project assumptions and general requirements related to construction beneath and adjacent to the ComEd transmission lines:

## CONTRACT ASSUMPTIONS AND REQUIREMENTS:

- Scope of Work, are based.
- 2. The highest lines will be de-energized. The lower lines will be removed and reinstalled.
- will be at no additional expense to the Village of Glen Ellyn.

## EQUIPMENT CLEARANCE LIMITATIONS:

- acceptable with a qualified and trained spotter on-site.
- enter within this 5' zone, ComEd specialty equipment will be required on-site.

## OUTAGE PLANNING REQUIREMENTS:

- 1. Outages may not be allowed during the summer construction months.
- prior to commencing work.

			RAIL	ROAD	CRO	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.						
	TAYLOR AVENUE										15-00079-00-BT	DUPAGE	59	56		
ON	сон <b>Б. Н: 1''=10'</b>	1				-						CONTRAC	T NO. 6	51E40		
	SCALE: V: 1''=10'	SHEET	1	OF	I SHEE	TS STA.	N/A	TO STA.	N/A		ILLINOIS FED. A	ID PROJECT	PROJECT			

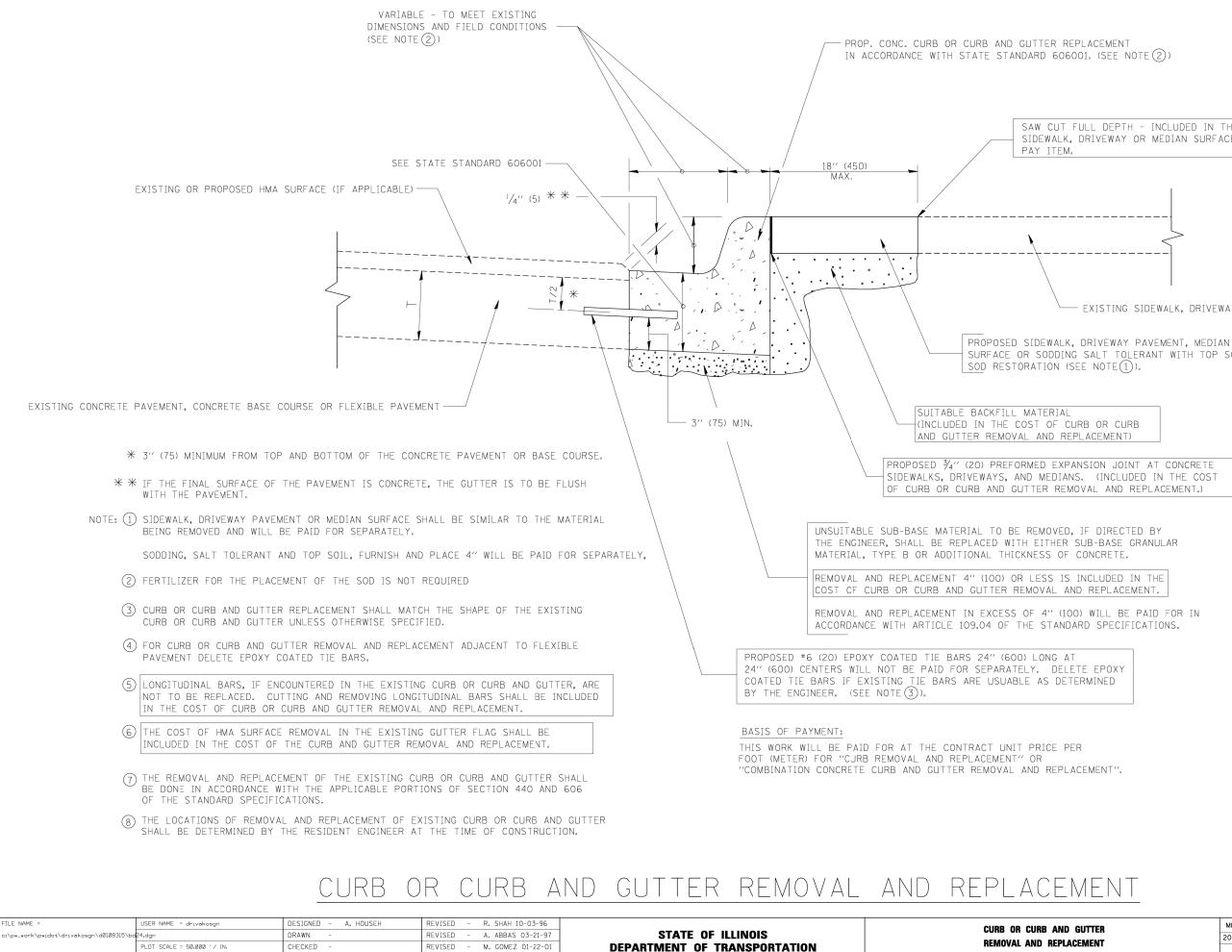
1. The ComEd transmission line coordination was not finalized at the time Contract documents were produced. Below is a summary of the assumptions upon which items including, but not limited to, the Construction Schedule and

3. If the ComEd transmission line configuration in-place at the onset of the Contract work requires a modification in the plan or schedule, the Contractor shall submit revisions to the Engineer for approval. Any change in plan

1. No construction equipment can be within 20' of an energized transmission line. Reduced clearance of 15' is

2. No construction equipment can be within 5' of a de-energized transmission line. If construction equipment must

2. The Contractor will be responsible for requesting and coordinating all required outages with ComEd and the TSO



PLOT DATE = 12/15/2009

DATE

03-11-94

REVISED

R BORO 12-15-09

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

- EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100)

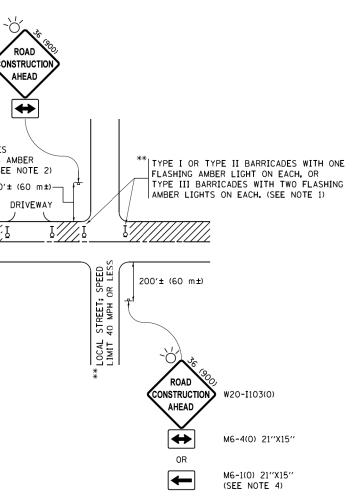
SCALE: NONE

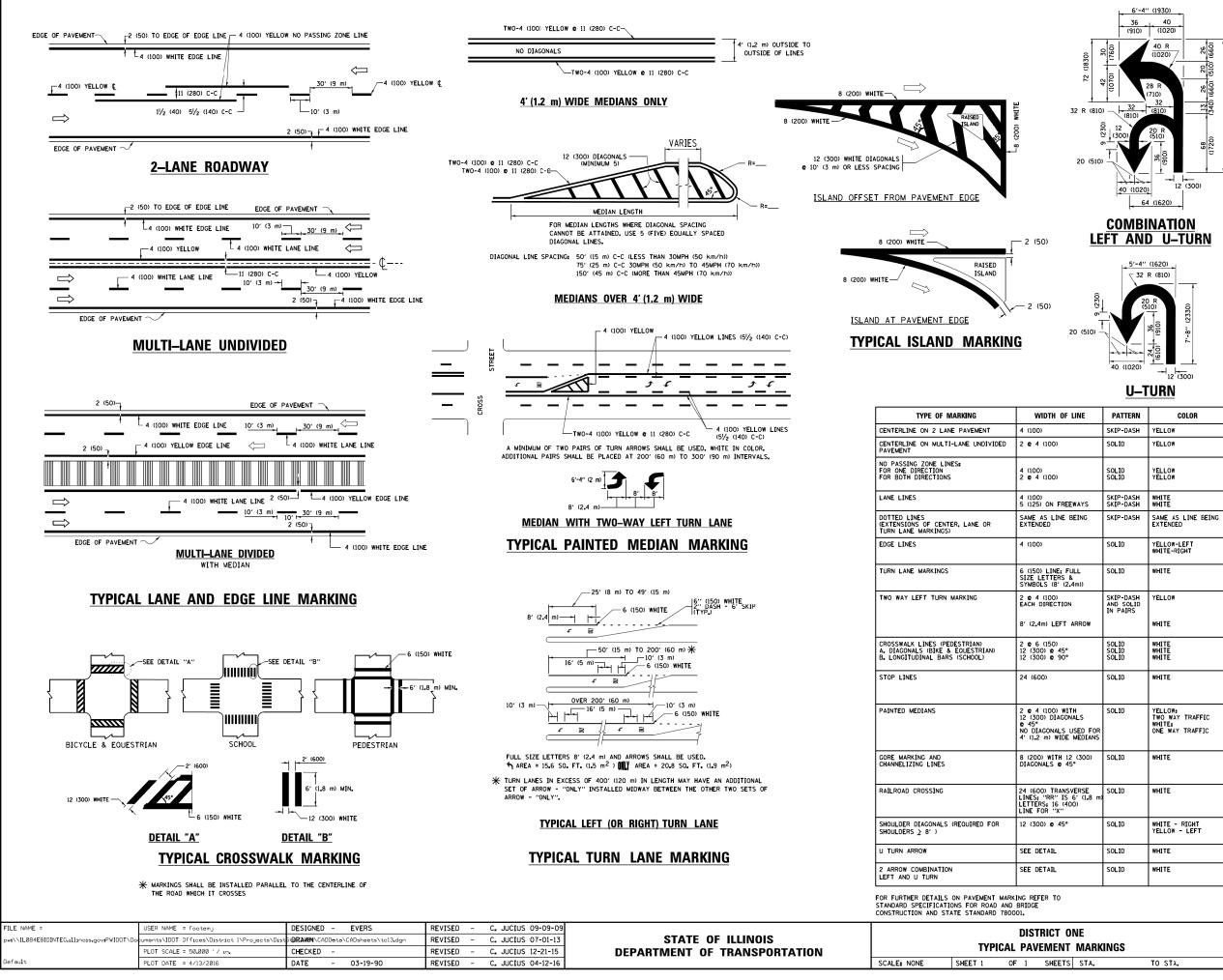
SHEET NO. 1 OF 1 SHEETS

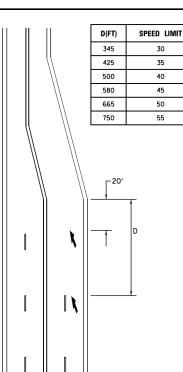
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

D GUTTER	MUN	MUN         SECTION           2030         15-00079-00-BT			COUNTY	TOTAL SHEETS	SHEET NO.
LACEMENT	2030				DUPAGE 59		57
	_	BD600-06 (	BD-24)		CONTRACT	NO.	61E40
STA. TO STA.	FED. R	ROAD DIST. NO. 1	ILLINOIS FED	. AID	PROJECT		

TYPE I DARTICADES WITH ONE 10 500 10
<ul> <li>NOTES:</li> <li>1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/rh) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENCINEER:</li> <li>a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 × 36 (900×900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.</li> <li>b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/rh) AS SHOWN ON THE DRAWING AND AS DIRECTED DIT THE INCIDERER:</li> <li>c) ONE "ROAD CONSTRUCTION AHEAD" SIGN 34 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT A PPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE SHALL BE COVERED ON A SIDE ROAD ON DRIVEWAYS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENCIDERER:</li> <li>c) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/rh) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENCIDERER:</li> <li>c) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE GLOSED FORTION.</li> <li>c) ONE GROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/rh) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENCIDERER:</li> <li>d) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE GLOSED FORTION.</li> <li>c) ONE GROAD WITH THE SUBSTITUTED FOR BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED FORTION.</li> <li>c) ONE SHOWN ON DAY OPERATIONS, CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.</li> <li>when the suber ZOAD LIES BETWEEN THE BEADED ARROW (MG-1) SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.</li> <li>when the suber ROAD LIES BETWEEN THE BEADED ARROW (MG-1) SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.</li> <li>when the suber ZOAR, A SINGLE HEADED ARROW (MG-1) SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.</li> </ul>
All dimensions are in inches (millimeters) unless otherwise shown. E OF ILLINOIS OF TRANSPORTATION SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA. All dimensions are in inches (millimeters) unless otherwise shown. MUN SECTION COUNTY TOTAL SHEETS NO. 2030 15-00079-00-BT DUPAGE 59 58 TC-10 CONTRACT NO. 61E40 ILLINOIS/FED. ALD PROJECT







## LANE REDUCTION TRANSITION

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

F LINE	PATTERN	COLOR	SPACING /REMARKS
	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	SOLID	YELLOW	11 (280) C-C
	SOLID SOLID	YELLOW YELLOW	51/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
EEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
BEING	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
FULL & 2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
ON T ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
o 0	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.
	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
USED FOR E MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
12 (300) 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (0VER 45MPH (70 km/h))
ISVERSE S 6′(1.8 m) 400)	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO, FT. (0.33 m <sup>2</sup> ) EACH "x"=54.0 SO. FT. (5.0 m <sup>2</sup> )
٥	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 (0VER 45MPH (70 km/h))
	SOLID	WHITE	16.3 SF
	SOLID	WHITE	30.4 SF

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

ONE				SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
MARKINGS			2030	15-00079-00-BT	DUPAGE	59	59				
				TC-13 CONTRACT NO.							
TS	STA.	TO STA.		ILLINOIS FED. AID PROJECT							