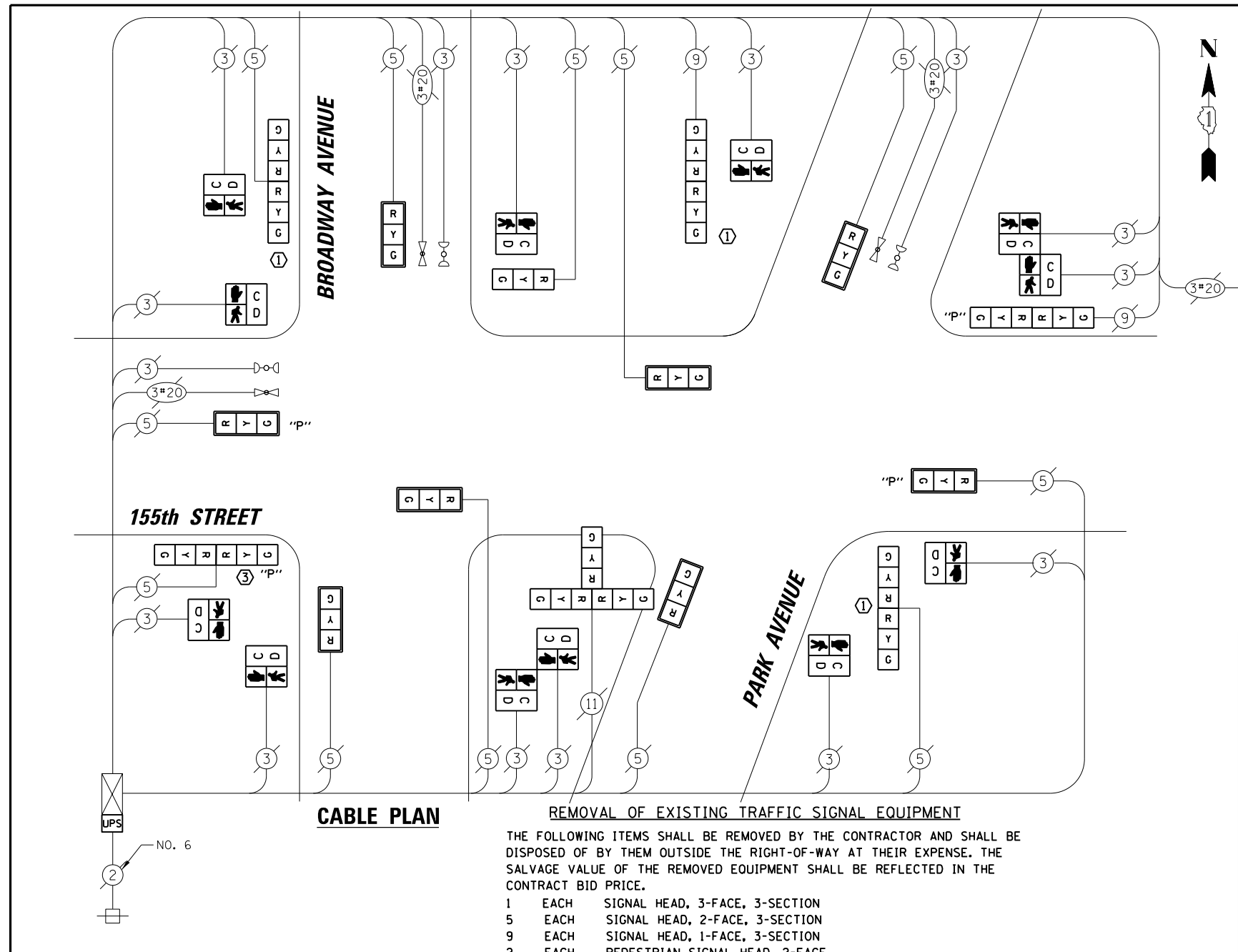


BY: DATE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000
 PLAN NO. NOTE BOOK NO. SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000
 PROFILE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000
 NOTE BOOK NO. SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000

BY: DATE: SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000
 PLAN NO. NOTE BOOK NO. SURVEYED: GRADES CHECKED: ILLINOIS PROFESSIONAL ENGINEERING LICENSE NO. 00000000

FILE NAME: N:\dot\130116\Work Order 130119 - South Cook County LED\Traffic\CAB.ParkAve-155th.sh



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	17	0.50	187.00	
(YELLOW)	22	25	0.25	137.50	
(GREEN)	22	15	0.25	82.50	
ARROW	-	12	0.10	-	
PED. SIGNAL	12	25	1.00	300.00	
CONTROLLER	1	100	1.00	100.00	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	832.00

CITY OF HARVEY
 15320 BROADWAY AVENUE
 HARVEY, IL 60426
 ENERGY SUPPLY: CONTACT: BRAD SHINABARGAR
 PHONE: (708)-235-2692
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 1 EACH SIGNAL HEAD, 3-FACE, 3-SECTION
- 5 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 9 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH STEEL POST

CONSTRUCTION NOTES:

1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED

2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION, THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT REUSABLE, REPLACE AS DIRECTED BY THE ENGINEER.

3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

DESIGNED - EAJ	REVISED -
DRAWN - FPB / FCP	REVISED -
CHECKED - GMZ	REVISED -
DATE - SEPT. , 2013	REVISED -

EXISTING SEQUENCE OF OPERATIONS

MOVEMENT	PHASE														FLASH
	1					3					4				
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
CHANGE TO	3					4					1				
155th STREET E/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
155th STREET W/B SIGNALS AT BROADWAY AVENUE	G	G	G	R	R	R	R	R	R	R	G	G	G	R	
155th STREET E/B SIGNALS AT PARK AVENUE	G	G	G	R	G	G	G	Y	R	R	R	R	R	R	
155th STREET W/B SIGNALS AT PARK AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	
PARK AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	
BROADWAY AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
PED SIGNALS X-ING BROADWAY AVE. AT 155th ST.	W	FL	D	D	D	D	D	D	D	D	D	D	D	D	D
PED SIGNALS X-ING PARK AVE. AT 155th ST.	W	W	W	W	W	W	FL	D	D	D	D	D	D	D	D
PED SIGNALS X-ING 155th ST. AT PARK AVE.	D	D	D	D	D	D	D	D	D	D	W	FL	D	D	D
PED SIGNALS X-ING 155th ST. AT BROADWAY AVE.	D	D	D	D	D	FL	D	D	D	D	D	D	D	D	D

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NO.	1																6				11				EMERGENCY VEHICLE SEQUENCE				CLEAR TO NORMAL SEQUENCE
	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1W	2	3	4	2	3	4							
EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1W	2	3	4										
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL	2	1C	1D	1E	3or4	1G	1H	1J	2	3	1G	1H	1J	4	1N	1P	1Q	2or3	4										
155th STREET E/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	R										
155th STREET W/B SIGNALS AT BROADWAY AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	R	G							
155th STREET E/B SIGNALS AT PARK AVENUE	G	G	Y	R	G	G	Y	R	G	G	Y	R	R	R	R	R	G	G	R										
155th STREET W/B SIGNALS AT PARK AVENUE	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	R										
PARK AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	G	R	R	G							
BROADWAY AVENUE SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R										
PED SIGNALS X-ING BROADWAY AVE. AT 155th ST.	FL	FL	D	D	D	D	D	D	D	D	D	D	D	D	D	FL	D	D	D	FL	D	D							
PED SIGNALS X-ING PARK AVE. AT 155th ST.	FL	FL	D	D	D	FL	D	D	D	FL	D	D	D	D	D	D	D	D	D	D	D	D							
PED SIGNALS X-ING 155th ST. AT PARK AVE.	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	DW	W	W	W	DW	W	W							
PED SIGNALS X-ING 155th ST. AT BROADWAY AVE.	D	D	D	D	D	FL	D	D	D	FL	D	D	D	D	D	D	D	D	D	D	D	D							

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE PROPER CLEARANCE TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, OR 4 IS TERMINATED.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PARK AVENUE AND 155th STREET			VARIOUS	COOK	87	69
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60X24			
		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS # 13825 HARVEY