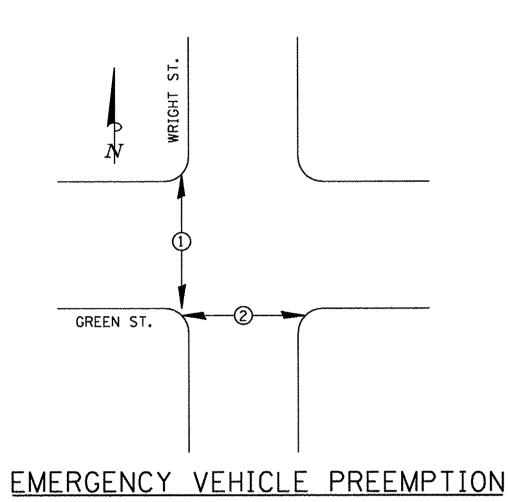


BILL OF MATERIALS

S.P.	PAYITEM	DESCRIPTION	UNIT	QUANTITY
	72000100	SIGN PANEL - TYPE 1	SQFT	5
	81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	16
	81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	140
	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2
	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	269
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	347
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	448
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	499
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	499
	87301705	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18 3 PAIR	FOOT	269
	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	224
		PEDESTRIAN PUSH-BUTTON POST, TYPE II	EACH	11
	87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
*		CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	14
	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	11
		SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	11
	88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	11
		SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	11
	88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	2
	88200100	TRAFFIC SIGNAL BACKPLATE	EACH	4
	88700090	CONFIRMATION BEACON	EACH	1
	88700200	LIGHT DETECTOR	EACH	11
	88700300	LIGHT DETECTOR AMPLIFIER	EACH	11
	89500300	RELOCATE EXISTING ILLUMINATED SIGN	EACH	1
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*	X8211285	LUMINAIRE, LED, HORIZONTAL MOUNT, 285 WATT	EACH	1
*		PEDESTRIAN PUSH-BUTTON, SPECIAL	EACH	2

TRAFFIC SIGNAL GENERAL NOTES

- 1. THE ACTUAL LOCATIONS OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND THE TRAFFIC SIGNAL CONTROLLER WILL BE VERIFIED IN THE FIELD BY THE ENGINEER.
- 2. POST MOUNTED SIGNAL HEADS SHALL BE INSTALLED SUCH THAT NO PART OF THE SIGNAL HEAD IS WITHIN TWO (2) FEET OF THE FACE OF CURB. MAST ARM POLES SHALL BE PLACED SUCH THAT A MINIMUM DISTANCE OF SIX (6) FEET IS MAINTAINED BETWEEN THE CENTER OF THE POLE AND THE FACE OF CURB (ON THE MAST ARM SIDE) UNLESS OTHERWISE SHOWN ON THE PLANS.
- 3. 12" LENSES SHALL BE USED ON ALL SIGNAL FACES.
- 4. THE LEADING BICYCLE INTERVALS AND LEADING PEDESTRIANS INTERVALS MUST BE A MINIMUM OF 3 SECONDS. THE CITY OF URBANA TRAFFIC SIGNAL TECHNICIAN MAY ALTER THE TIMINGS IN THE FIELD TO MATCH CONDITIONS.
- 5. THE NECESSARY CONNECTION FOR PROPER OPERATION OF THE EMERGENCY VEHICLE PRIORITY SYSTEM SHALL BE INCLUDED IN THE COST OF THE LIGHT DETECTOR. LIGHT CABLE TO BE PAID SEPARATELY.
- 6. THE ELECTRIC CABLE FOR THE LIGHT DETECTOR SHALL BE A CONTINUOS UNBROKEN RUN FROM THE LIGHT DETECTOR TO THE LIGHT AMPLIFIER. SPLICES SHALL NOT BE ALLOWED.
- 7. ALL PEDESTRIAN PUSH-BUTTONS SHALL BE MOUNTED A MAXIMUM OF TEN (10) INCHES FROM THE EDGE OF WALK. ALL PEDESTRIAN PUSH-BUTTON POSTS SHALL BE A MAXIMUM OF TEN (10) FEET FROM THE FACE OF CURB. THE CONTRACTOR SHALL ENSURE THESE REQUIREMENTS ARE MET AS EQUIPMENT IS LOCATED IN THE FIELD.
- 8. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- 9. A 1/4 " CONTINUOUS NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES, FOUNDATIONS, AND CONTROLLERS. THE ROPE SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONDUIT PAY ITEM.
- 10. THE TRAFFIC SIGNAL EQUIPMENT SHALL RECEIVE POWER FROM THE EXISTING ELECTRICAL SERVICE.
- 11. A PEDESTRAIN PUSH BUTTON SIGN WILL BE MOUNTED ABOVE EACH PEDESTRAIN PUSH BUTTON. THESE SIGNS WILL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND INCLUDED IN COST OF PUSH BUTTON.
- 12. THE CONCRETE FOUNDATION FOR THE PEDESTRIAN PUSH-BUTTON POST SHALL BE INCLUDED IN THE COST OF THE PEDESTRIAN PUSH-BUTTON POST, TYPE II.
- 13. EXISTING INTERCONNECT, IF PRESENT, TO REMAIN IN PLACE.
- 14. A THERMAL VEHICLE DETECTION SYSTEM (REFERRED TO AS "VIDEO" IN PLANS) SHALL BE INSTALLED AT INTERSECTIONS NOTED IN THE PLANS. THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING 4 THERMAL TRAFFIC CAMERAS, RACK MOUNTED VIDEO DETECTION SYSTEMS, A 10" COLOR VIDEO MONITOR, AND ASSOCIATED EQUIPMENT TO PROVIDE A TRAFFIC DETECTION SYSTEM FOR VEHICLES. SEE CITY OF URBANA SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 15. CONTRACTOR MUST HAVE A CITY OF URBANA ELECTRICIAN LICENSE PRIOR TO START OF WORK.
- 16. THE MINIMUM DESIGN LOADING FOR EACH PROPOSED MAST ARM IS SHOWN IN TEH IDOT STANDARD FOR THE RESPECTIVE MAST ARM LENGTH.

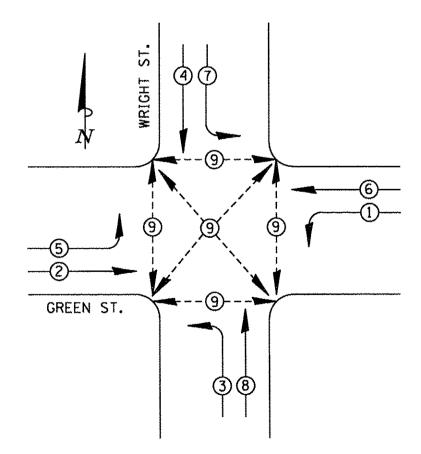


PROPOSED PRIORITY UNITS

PRIORITY LANE	INTERVAL	1	2
MOVEMEN			

1. ONCE PREEMPTION HAS BEEN CALLED, TERMINATION OF A PHASE(S) SHALL BE IDENTICAL TO NORMAL SEQUENCE OF OPERATION'S TERMINATION OF A PHASE(S) AS DESCRIBED IN STANDARD 857001.

2. ALL RED CLEARANCE INTERVALS MUST BE DISPLAYED AFTER THE YELLOW CLEARANCE INTERVAL WHEN ENTERING OR LEAVING THE PREEMPTION SEQUENCE.

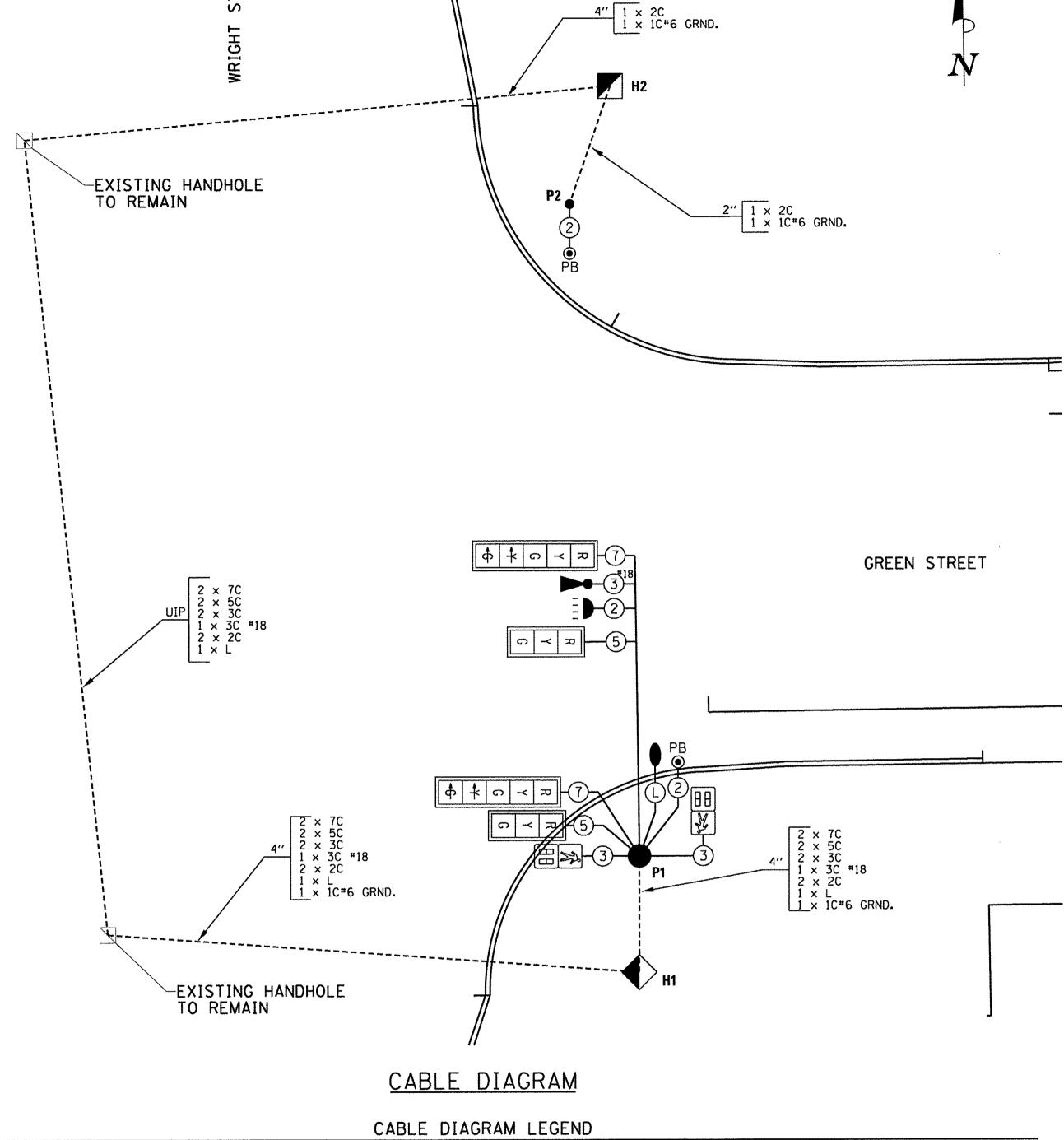


PHASE DESIGNATION DIAGRAM

PHASE DESIGNATION DIAGRAM LEGEND

DUAL ENTRY PHASE * NUMBER REFERS TO ASSOCIATED PHASE PEDESTRIAN PHASE

1. THE VEHICLE SIGNAL PHASES WILL OPERATE PRE-TIMED AFTER CONSTRUCT DUE TO OVERAL PROJECT STAGING. THE PEDESTRIAN PHASE SHALL BE PEDESTRIAN ACTIVATED.



CONDUIT SIZE CONTROLLER CABINET NUMBER OF CABLES HANDHOLE IN CONDUIT MAST ARM POLE, SIGNAL POST, OR PB POST

PEDESTRIAN PUSH-BUTTON SIGNAL FACE α > v

SIGNAL FACE AND BACKPLATE BICYCLE SIGNAL FACE AND BACKPLATE PEDESTRIAN SIGNAL FACE

ELECTRIC CABLE IN CONDUIT

DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS INDICATED

ROADWAY LIGHTING CABLE 3-1c#10

LUMINAIRE (SEE ROADWAY LIGHTING PLANS)

VIDEO COAX AND POWER CABLE

EMERGENCY VEHICLE PREEMPTION DETECTOR

TOTAL SHEE SHEETS NO.

CHAMPAIGN 236 139

CONTRACT NO. 91539

COUNTY

JOB NO. C-95-305-16 ILLINOIS FED. AID PROJECT TIG-5181(057)

THERMAL VEHICLE DETECTOR

CONFIRMATION BEACON

TRAFFIC SIGNAL PLANS - GREEN ST. & WRIGHT ST. CABLE DIAGRAM / PHASE DESIGNATION DIAGRAM /

TRAFFIC SIGNAL GENERAL NOTES / BILL OF MATERIALS SCALE : NONE

SCALE: 1"=10"

- NUMBER OF CONDUCTORS

IN EACH CABLE

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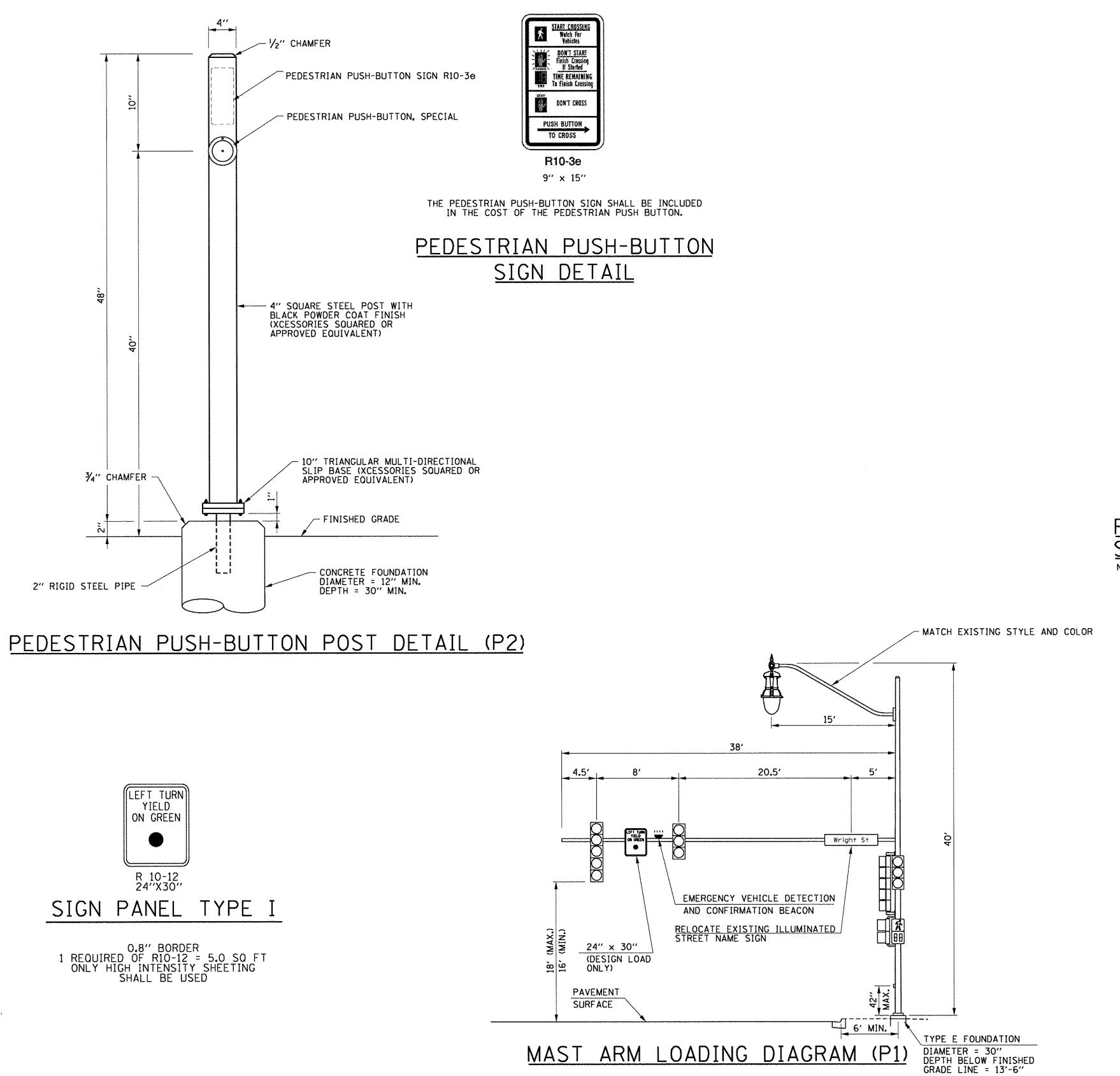
REVISED -DESIGNED - JGK REVISED -RLA DRAWN - KNB REVISED -CHECKED REVISED -- 8/26/2016

NOTES:

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

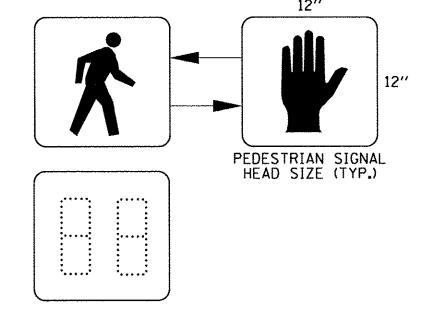
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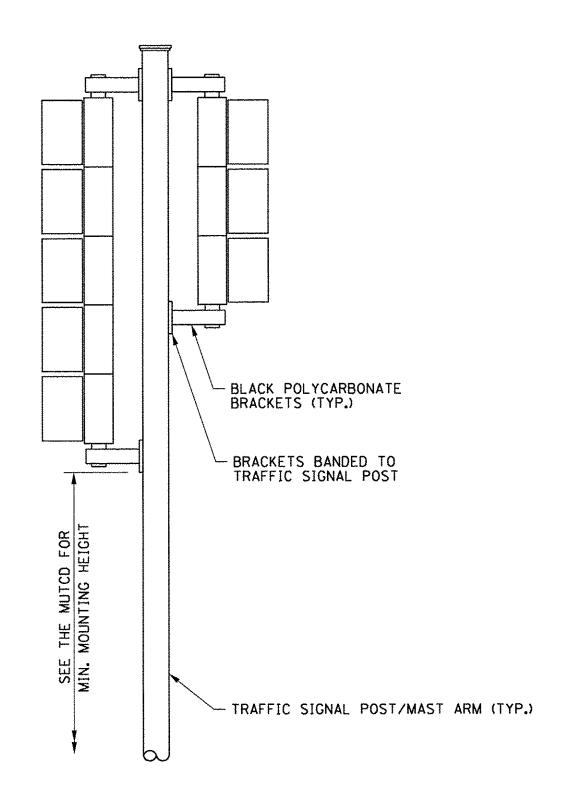


NOTES:

- 1. REFER TO THE TECHNICAL SPECIFICATIONS FOR INFORMATION ON THE COAXIAL CABLE AND FACTORY-MADE PIGTAIL CABLE.
- 2. FIELD-ASSEMBLED POWER CABLES WILL NOT BE ACCEPTED.
- 3. THE PIGTAIL AND POWER CABLES SHALL BE SPLICED AT THE MAST ARM POLE HANDHOLE.
- 4. THE COAXIAL CABLE SHALL BE A CONTINUOUS UNBROKEN RUN FROM THE VIDEO CAMERA TO THE VIDEO DETECTION PROCESSOR. SPLICES SHALL NOT BE ALLOWED.
- 5. DO NOT TWIST CABLES.



PEDESTRIAN COUNTDOWN SIGNAL DISPLAY DETAIL NO SCALE



TRAFFIC SIGNAL MOUNTING DETAILS

ONE 3-SECTION SIGNAL HEAD AND ONE 5-SECTION SIGNAL HEAD BRACKET MOUNTED WITH BOTTOM SECTIONS AT COMMON ELEVATION

FILE NAME =
<pre>Z:\Plans\sheets\Project1</pre>
DIOT DATE -

DESIGNED - JGK REVISED 1\P1-sht-MastArm01.dgn REVISED DRAWN RLA KNB REVISED CHECKED PLOT DATE = 8/25/2016 1:43:28 PM REVISED -- 8/26/2016

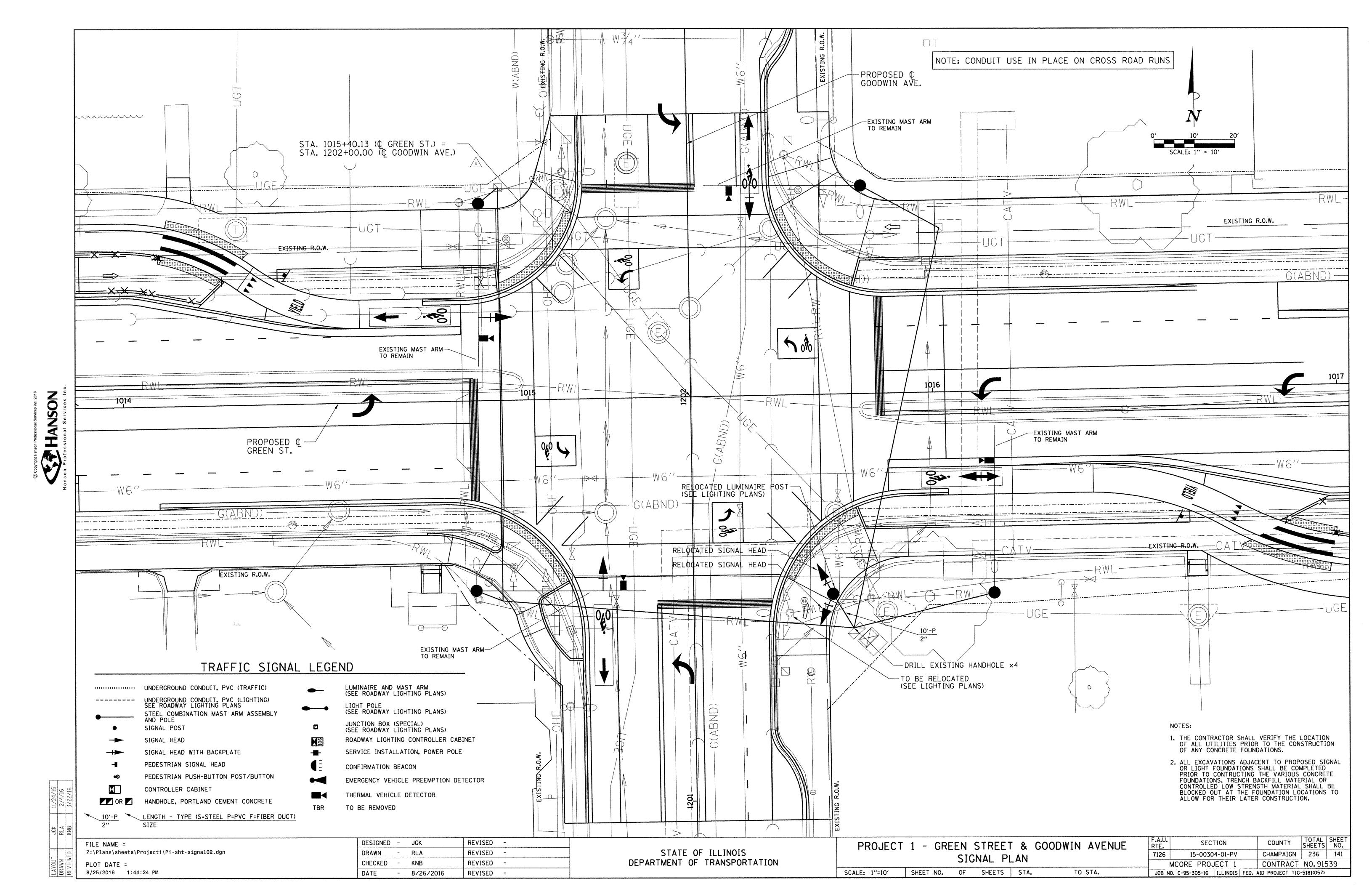
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GREEN STREET AND WRIGHT STREET SOUTHEAST QUADRANT (LOOKING EAST)

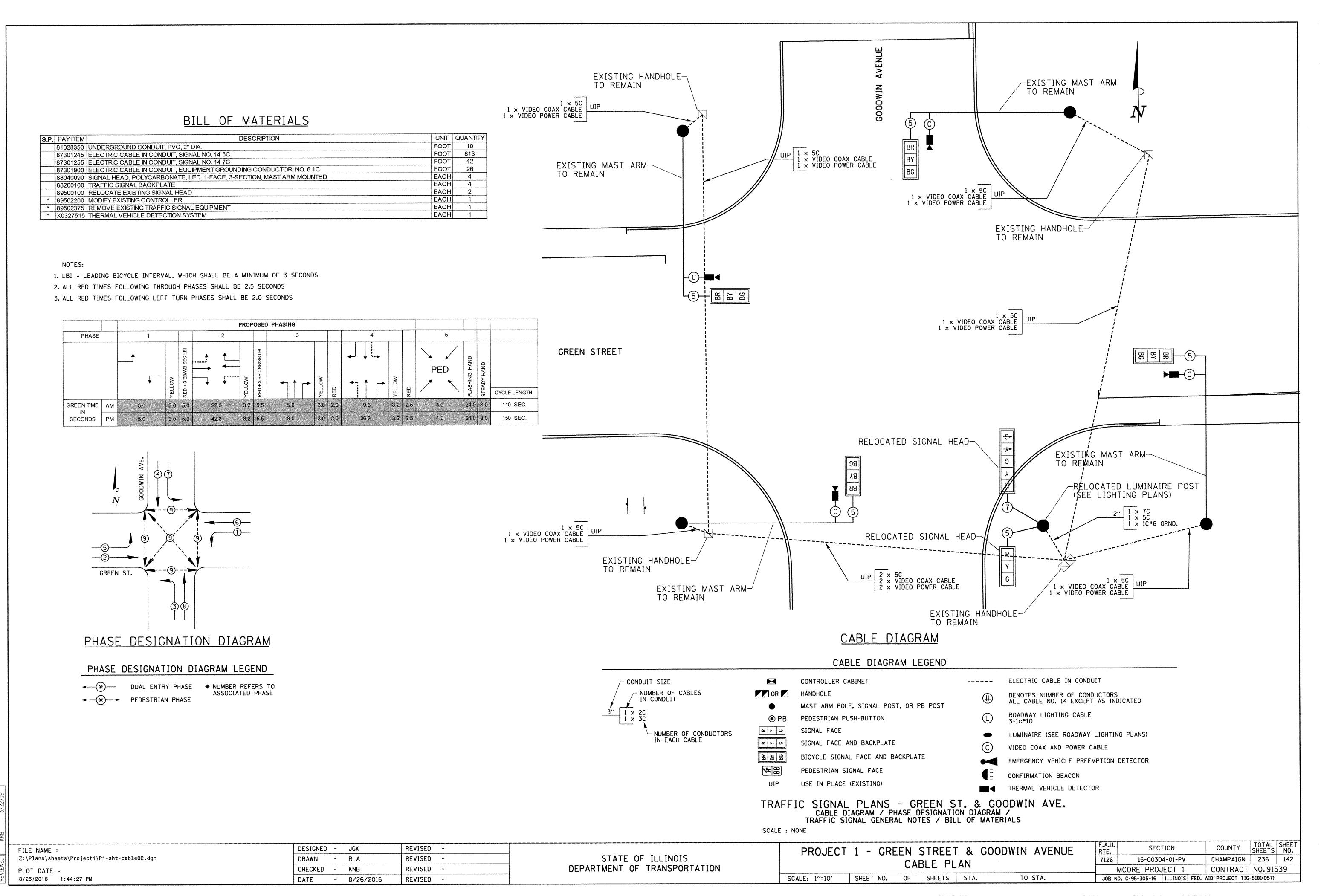
PROJECT 1 - GREEN STREET & WRIGHT STREET MAST ARM LOADING DIAGRAM SHEET NO. OF SHEETS STA. SCALE: N/A TO STA.

SECTION COUNTY CHAMPAIGN 236 140 15-00304-01-PV MCORE PROJECT 1 CONTRACT NO. 91539 JOB NO. C-95-305-16 | ILLINOIS | FED. AID PROJECT TIG-5181(057)

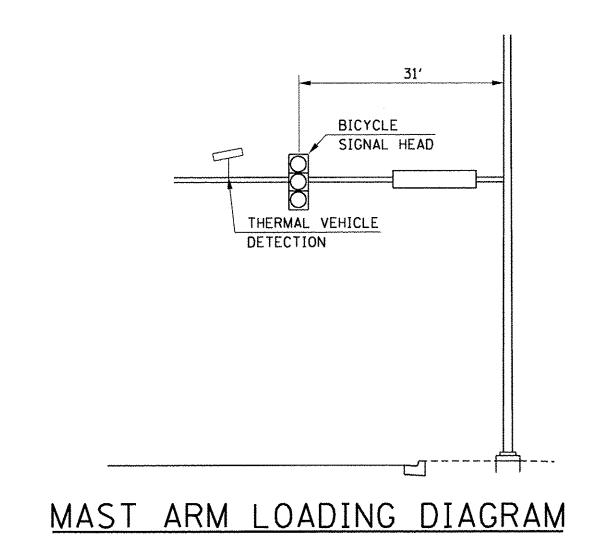
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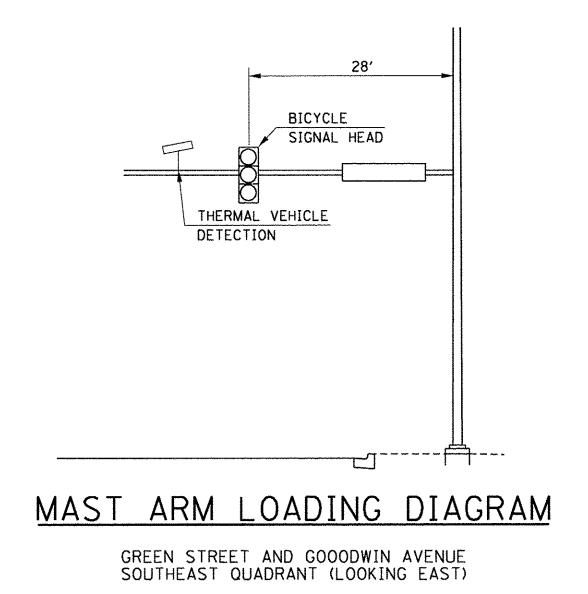


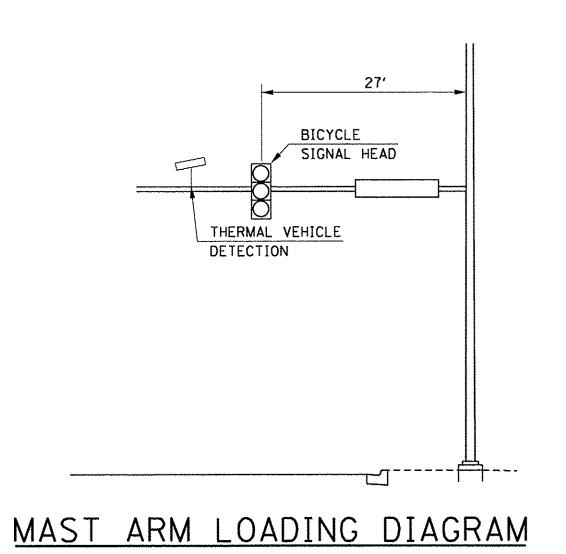




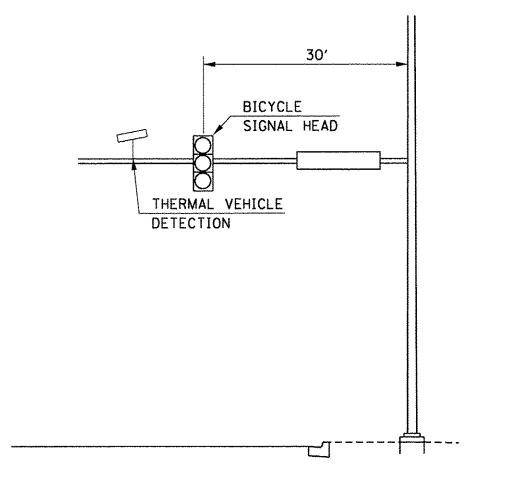
GREEN STREET AND GOODWIN AVENUE

NORTHEAST QUADRANT (LOOKING NORTH)





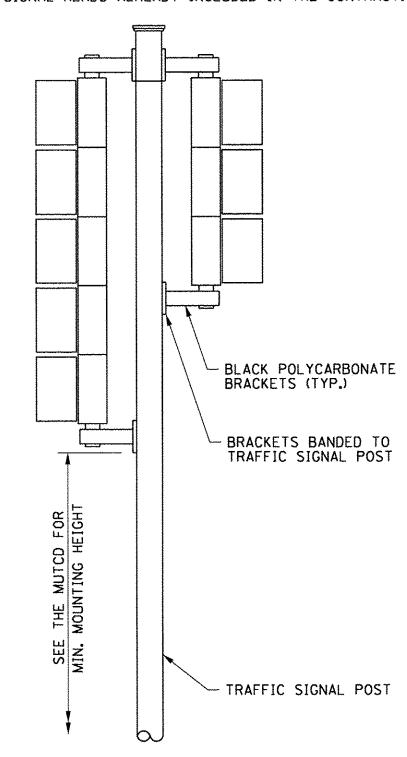
GREEN STREET AND LINCOLN AVENUE SOUTHWEST QUADRANT (LOOKING SOUTH)



MAST ARM LOADING DIAGRAM

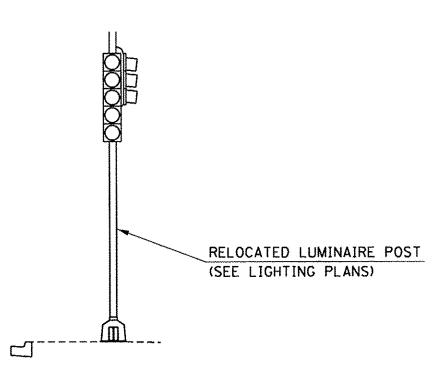
GREEN STREET AND LINCOLN AVENUE NORTHWEST QUADRANT (LOOKING WEST)

- REFER TO THE TECHNICAL SPECIFICATIONS FOR INFORMATION ON THE COAXIAL CABLE AND FACTORY-MADE PIGTAIL CABLE.
- 2. FIELD-ASSEMBLED POWER CABLES WILL NOT BE ACCEPTED.
- 3. THE PIGTAIL AND POWER CABLES SHALL BE SPLICED AT THE MAST ARM POLE HANDHOLE.
- 4. THE COAXIAL CABLE SHALL BE A CONTINUOUS UNBROKEN RUN FROM THE VIDEO CAMERA TO THE VIDEO DETECTION PROCESSOR. SPLICES SHALL NOT BE ALLOWED.
- 5. DO NOT TWIST CABLES.
- 6. ALL EXISTING MAST ARM MOUNTED SIGNAL HEAD LOCATIONS SHALL BE ADJUSTED ON THE ARM TO BE CONSISTENT WITH CONFIGURATIONS SHOWN IN THE PLANS FOR THE LINCOLN AVENUE AND GREEN STREET INTERSECTION. ALL LABOR, EQUIPMENT, AND MATERIALS TO RELOCATE THE SIGNAL HEADS, IF NECESSARY, SHALL BE INCLUDED IN THE COST OF PROPOSED MAST ARM MOUNTED SIGNAL HEADS ALREADY INCLUDED IN THE CONTRACT.



TRAFFIC SIGNAL MOUNTING DETAILS

ONE 3-SECTION SIGNAL HEAD AND ONE 5-SECTION SIGNAL HEAD BRACKET MOUNTED WITH BOTTOM SECTIONS AT COMMON ELEVATION



POST-MOUNTED SIGNAL LOADING DIAGRAM

GREEN STREET AND GOODWIN AVENUE SOUTHEAST QUADRANT

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и от	DATE	**					

	DESIGNED	-	JGK	REVISED	-
2.dgn	DRAWN	-	RLA	REVISED	-
	CHECKED	_	KNB	REVISED	-
	DATE	-	8/26/2016	REVISED	_

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PROJECT 1 - GREEN STREET & GOODWIN AVENUE MAST ARM LOADING DIAGRAM

F.A.U. RTE. COUNTY SECTION CHAMPAIGN 236 143 15-00304-01-PV MCORE PROJECT 1 CONTRACT NO. 91539

SHEET NO. OF SHEETS STA. TO STA.

JOB NO. C-95-305-16 | ILLINOIS | FED. AID PROJECT TIG-5181(057)

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SCALE: N/A

