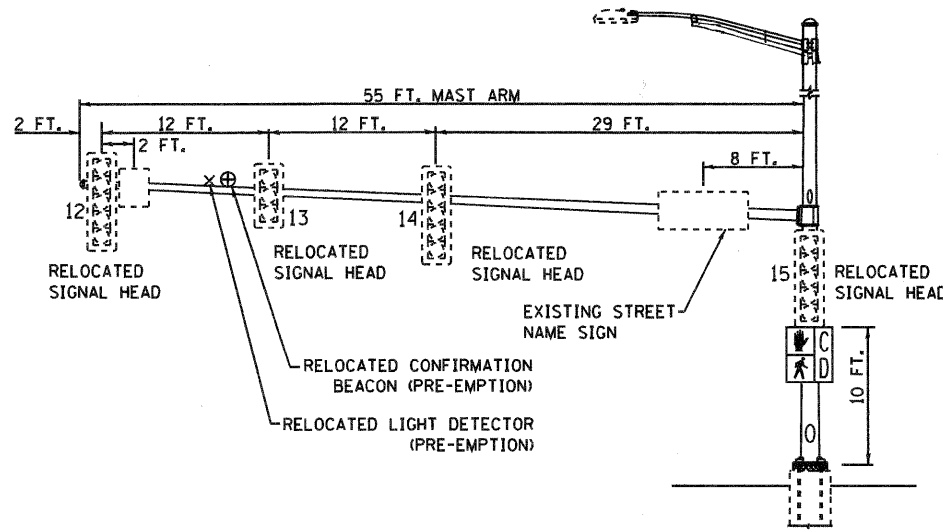
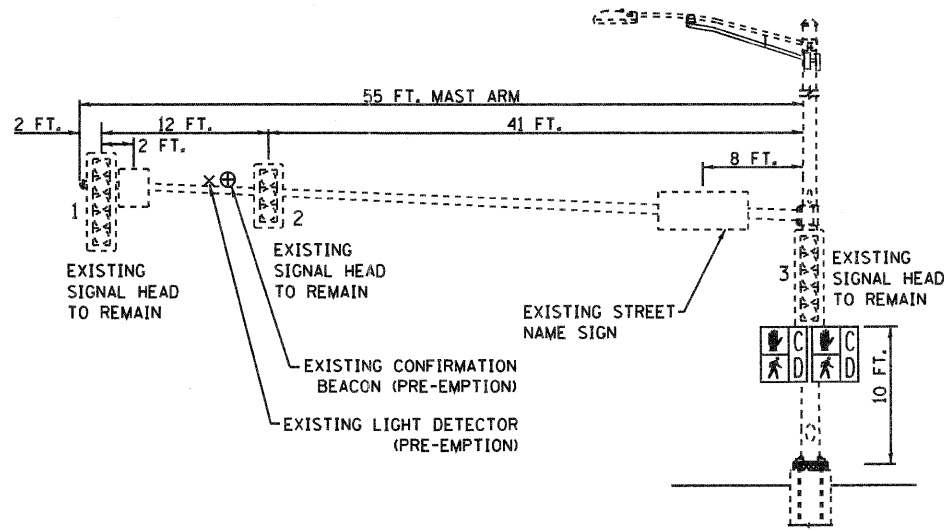


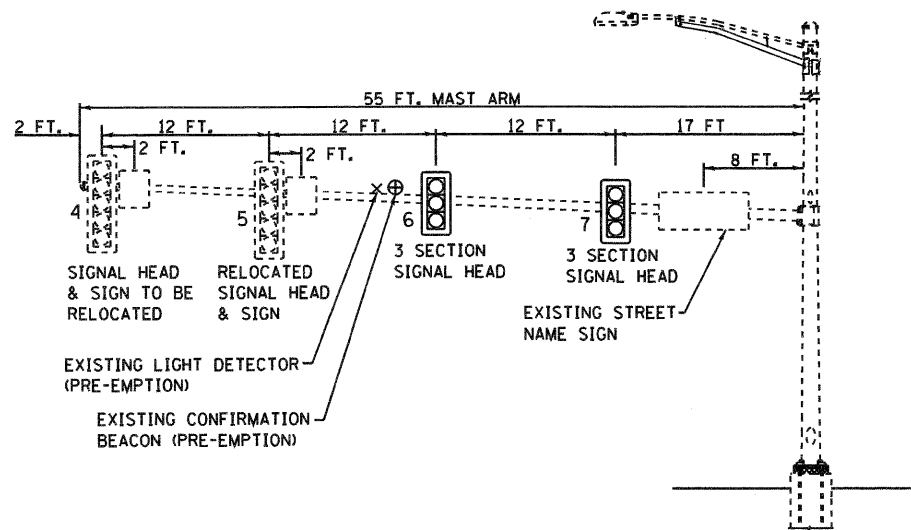
EJM ENGINEERING, INC.
411 South Wells Street Suite 800
Chicago, Illinois 60607



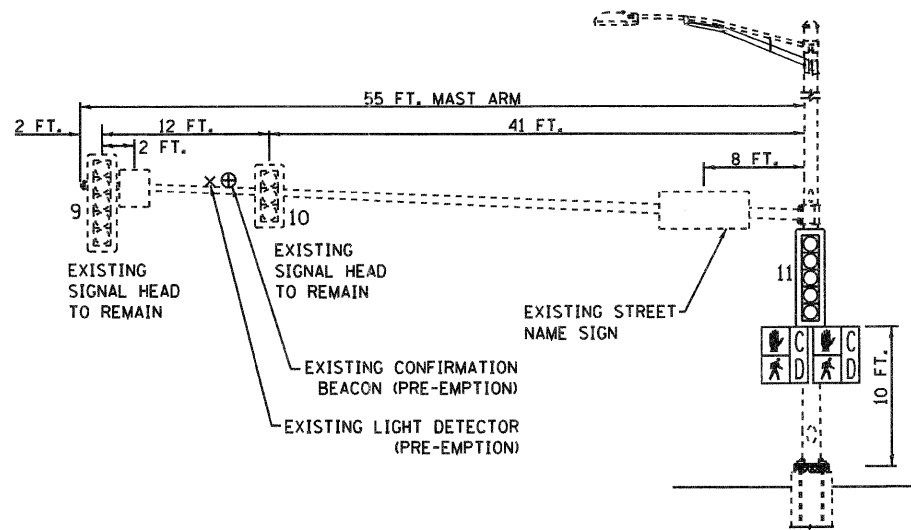
MAST ARM NORTHWEST QUADRANT (A)



MAST ARM NORTHEAST QUADRANT (B)



MAST ARM SOUTHEAST QUADRANT (C)



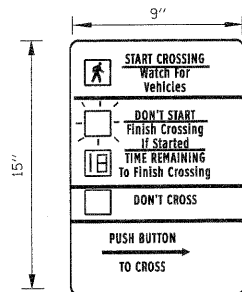
MAST ARM SOUTHWEST QUADRANT (D)

GENERAL NOTES:

1. THE TRAFFIC SIGNAL SECTION AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, SHALL BE NOTIFIED AT 815-434-8506 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNITS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCED NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.
3. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS.
4. ALL TRAFFIC SIGNAL HEADS SHALL BE 12-INCH POLYCARBONATE.
5. TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
6. A 1/4-INCH DIAMETER CONTINUOUS RODENT RESISTENT NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OF CONTROLLERS. THIS COST SHALL BE INCLUDED IN THE COST OF CONDUIT PAY ITEMS.
7. THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNAL IS TURNED ON. COST TO BE INCLUDED WITH THE TRAFFIC SIGNAL CONTROLLER PAY ITEM.
8. ALL CONDUIT IN TRENCH SHALL BE PVC. ALL PUSHED CONDUIT MAY BE PVC OR GALVANIZED STEEL. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.
9. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT A GREATER THAN 2-FOOT MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
10. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
11. ALL THREADS OF BOLTS USED IN THE ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SIEZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.
12. ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED, CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.
13. ALL TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN JUNCTION BOXES WILL NOT BE ALLOWED.
14. THE CONTROLLER CABINET SHALL BE PLACED SO THAT A TECHNICIAN MAY SEE THE INTERSECTION OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET.
15. THE PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE FURNISHED WITH A MANUAL CONTROL SWITCH AND MANUAL CONTROL CHORD WITHIN THE POLICE DOOR COMPARTMENT. THIS WORK SHALL BE INCLUDED IN THE CONTROLLER CABINET PAY ITEM.
16. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY REQUIREMENTS FOR THE SERVICE INSTALLATION.
18. THE ELEVATION OF THE TOP OF THE DOUBLE HANDHOLE SHALL BE LESS THAN THE ELEVATION OF THE TOP OF THE CONTROLLER FOUNDATION.
19. ALL UNINTERRUPTIBLE POWER SUPPLIES SHALL BE EQUIPPED WITH BATTERY EQUALIZATION MONITORS.
20. ALL GROUNDING MATERIALS FOR CONCRETE FOUNDATIONS SHALL REFER TO SECTION 806 OF THE STANDARD SPECIFICATIONS.
21. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED WITH SEED OR SOD TO THE SATISFACTION OF THE ENGINEER. SEEDING OR SODDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTELLABLE CONDITION.
22. THE FIBER OPTIC CABLE SHALL BE LABELED WITH DIRECTION AND ASSIGNMENT NUMBER.
23. THE SURGE PROTECTOR IN THE CONTROLLER CABINET SHALL HAVE AN INDICATOR LIGHT.
24. THE MAST ARM FOUNDATIONS SHALL BE LOCATED A MINIMUM 6 FEET FROM THE FACE OF CURB OR A MINIMUM 18 FEET FROM THE EDGE OF PAVEMENT TO THE FACE OF FOUNDATION WHERE THERE IS NO CURB, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IN CURB AREA, GET MORE THAN 6 FEET IF POSSIBLE IF THE SIGNAL HEAD STILL LINES UP IN CENTER OF LANE.
25. IF THERE IS A PAY ITEM, CHANGEABLE MESSAGE BOARDS AREA REQUIRED FOR BOTH/ALL DIRECTIONS, ONE WEEK PRIOR TO SIGNAL TURN-ON, THE MESSAGE SHOULD READ "NEW SIGNAL AHEAD/TURN ON DATE". FOR THREE WEEKS AFTER, THE MESSAGE SHOULD READ "NEW SIGNAL AHEAD/BE PREPARED TO STOP".
26. LOCATIONS OF TRAFFIC SIGNAL POSTS AND MAST ARM ASSEMBLIES MAY BE CHANGED IN THE FIELD AS NECESSARY TO AVOID UTILITIES. THE NEW LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER AND APPROVED BY THE DISTRICT TRAFFIC SIGNAL SECTION TO ENSURE THE NEW LOCATIONS MEET OPERATIONAL OFFSET/CLEAR ZONE REQUIREMENTS AND MAINTAIN PROPER POSITION OF SIGNAL HEADS IN RELATION TO THE TRAVELED LANES.

PEDESTRIAN SIGN DETAIL

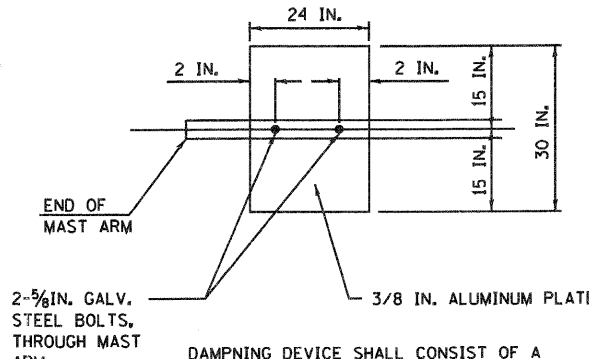
PEDESTRIAN PUSH BUTTON SIGN



R10-3e

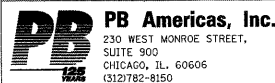
PEDESTRIAN PUSH BUTTON SIGN NOTES:

1. ORIENTATION OF DIRECTIONAL ARROWS TO BE DETERMINED BY PUSH-BUTTON LOCATION.
2. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL CONSTRUCTION, ALL MOUNTING BOLTS SHALL BE HEX HEAD.
3. MATERIALS AND INSTALLATION OF THIS SIGN SHALL BE INCLUDED IN THE COST OF PEDESTRIAN PUSH-BUTTON.
4. THE CONTRACTOR SHALL SUPPLY AND MOUNT ONE SIGN WITH EACH PEDESTRIAN PUSH-BUTTON AND SHALL BE INCLUDED IN THE COST OF PEDESTRIAN PUSH-BUTTON PAY ITEM.



DAMPENING DEVICE SHALL CONSIST OF A 24"x30" TYPE I, UNPAINTED ALUMINUM SIGN STOCK MOUNTED HORIZONTALLY ON TOP OF MAST ARM WITH THE 30" LENGTH PERPENDICULAR TO THE ARM. COST OF THE DAMPENING DEVICE IS INCLUDED IN THE MAST ARM PAY ITEM.

DAMPENING PLATE DETAIL
(TOP VIEW)



FILE NAME =	DESIGNED - GR	REVISED -
PLOT SCALE = 1/20	DRAWN - GR	REVISED -
PLOT DATE = 4/12/2011	CHECKED - BS	REVISED -
	DATE - 4/8/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
US RTE 34 AND WAUBONSEE DRIVE

SCALE: 1"=20' SHEET NO. 4 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
591	13R-2;14R-1 & BR-1(1);15R-1	KENDALL	429	238
				CONTRACT NO. 66985
[ILLINOIS] FED. AID PROJECT				