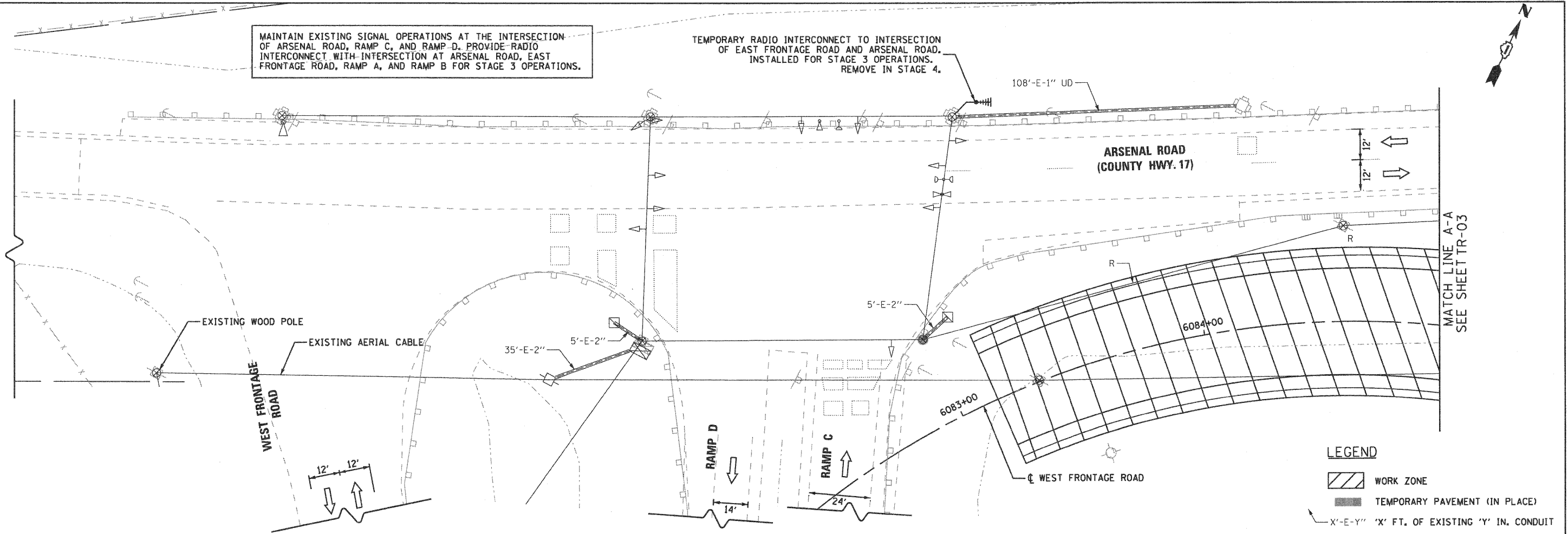


MAINTAIN EXISTING SIGNAL OPERATIONS AT THE INTERSECTION OF ARSENAL ROAD, RAMP C, AND RAMP D. PROVIDE RADIO INTERCONNECT WITH INTERSECTION AT ARSENAL ROAD, EAST FRONTAGE ROAD, RAMP A, AND RAMP B FOR STAGE 3 OPERATIONS.

TEMPORARY RADIO INTERCONNECT TO INTERSECTION OF EAST FRONTAGE ROAD AND ARSENAL ROAD, INSTALLED FOR STAGE 3 OPERATIONS. REMOVE IN STAGE 4.



**ARSENAL ROAD, RAMP C AND RAMP D  
MAINTAIN EXISTING SIGNAL INSTALLATION  
STAGE 3**

- LEGEND**
- WORK ZONE
  - TEMPORARY PAVEMENT (IN PLACE)
  - 'X'-E-'Y"' 'X' FT. OF EXISTING 'Y' IN. CONDUIT

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEM SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS.
8. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE IN THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATION OF DISTRICT 1 AND CONTRACTORS SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

9. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND AGENCY RESPONSIBLE FOR THE CAMERAS.

**REMOVAL SCHEDULE**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATION

AGENCY: WILL COUNTY

- 4 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH PAN TILT ZOOM CAMERA

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 1-FACE 1-SECTION
- 19 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH OPTICALLY PROGRAMMED SIGNAL HEAD 3-SECTION
- 2 EACH OPTICALLY PROGRAMMED SIGNAL HEAD 5-SECTION
- 18 EACH WOOD POLE
- 2 EACH ELECTRIC SERVICE
- 6 EACH REMOVE EXISTING HANDHOLES
- 2 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH SIGN PANEL ON WOOD POST MOUNTING

**CONSTRUCTION SEQUENCE**

**STAGES 1 AND 2**

MAINTAIN EXISTING INTERCONNECT AND TRAFFIC SIGNAL EQUIPMENT AT THE INTERSECTIONS OF EXISTING ARSENAL ROAD WITH EAST FRONTAGE ROAD, RAMP A, RAMP B, RAMP C, AND RAMP D.

**STAGE 3**

MAINTAIN EXISTING SIGNAL EQUIPMENT AT THE INTERSECTION OF EXISTING ARSENAL ROAD AND RAMP C & D. INSTALL RADIO INTERCONNECT EQUIPMENT ON EXISTING SIGNAL.

INSTALL TEMPORARY TRAFFIC SIGNAL AT EAST FRONTAGE ROAD AND EXISTING ARSENAL ROAD PER INSTALLATION PLAN. INSTALL RADIO INTERCONNECT EQUIPMENT AT THE EXISTING SIGNAL AT RAMP C & D.

CLOSE EXISTING RAMPS A AND B. COVER AND DE-ENERGIZE EXISTING SIGNAL HEADS AT INTERSECTION OF ARSENAL ROAD WITH EXISTING RAMPS A, B, AND EAST FRONTAGE ROAD. DE-ACTIVATE EXISTING INTERCONNECT. ACTIVATE NEW TEMPORARY TRAFFIC SIGNALS AND RADIO INTERCONNECT EQUIPMENT. INTERCONNECT OPERATIONS BETWEEN RAMPS C & D AND EAST FRONTAGE ROAD SHALL BE IMPLEMENTED AS DIRECTED BY THE ENGINEER (PAID FOR AS "RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 1").

REMOVE EXISTING SIGNAL EQUIPMENT AT EAST FRONTAGE ROAD, RAMPS A AND B. REMOVE EXISTING INTERCONNECT EQUIPMENT.

CONSTRUCT TEMPORARY PAVEMENT AS SHOWN ON MAINTENANCE OF TRAFFIC PLANS.

**STAGES 4, 4B, AND 4C**

REMOVE EXISTING SIGNAL EQUIPMENT AT RAMPS C & D. REMOVE RADIO INTERCONNECT EQUIPMENT.

MOVE SIGNAL HEADS FOR STAGE 4, 4B, AND 4C PER TEMPORARY TRAFFIC SIGNAL INSTALLATION PLANS.

OPERATIONS AT EAST FRONTAGE ROAD AND ARSENAL ROAD SHALL BE IMPLEMENTED AS DIRECTED BY THE ENGINEER (PAID FOR AS "TEMPORARY TRAFFIC SIGNAL TIMING").



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



FILE NAME =	USER NAME = gr01	DESIGNED - GR	REVISED -
...ND160F12-SHT-TR01-3B.dgn		DRAWN - GR	REVISED -
	PLOT SCALE = 1:20	CHECKED - RY	REVISED -
	PLOT DATE = 2/3/2011	DATE - 02/04/2011	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN  
STAGE 3  
EXISTING ARSENAL ROAD, RAMP C AND RAMP D**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	99-2HB-2B-1	WILL	756	339
CONTRACT NO. 60F12			FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT	

SCALE: 1"=20' SHEET NO. 2 OF 9 SHEETS