

CONSULTANTS:

143RD STREET IMPROVEMENTS



REVISIONS:

NO.	DATE	DESCRIPTION

PROJ NO: 87 N-0614-01
 SCALE: 1" = 20'
 DATE: 5/26/2017
 DESIGNED BY: CCB
 DRAWN BY: CCB
 CHECKED BY: SGE

SHEET TITLE:
**WIRING DIAGRAM
 143RD STREET &
 US-54 (KELLOGG)**

DETECTOR NUMBER	LOOP OR DETECTION ZONE SIZE	VIDEO DETECTION	RADAR DETECTION	TIMINGS (SEC)		MODE		PHASE CALLED	NO. OF CHANNELS	COMMENTS
				STRETCH	DELAY	PULSE	PRESENCE			
11	6'x55'	X					X	1	1	
12	6'x6'		X				X	1	1	260' From Stop Bar
13	6'x6'		X				X	1	1	420' From Stop Bar
21, 22	6'x55'	X					X	2	2	
23	6'x55'	X			12.0		X	2	1	
24, 25	6'x6'		X				X	2	2	260' From Stop Bar
26, 27	6'x6'		X				X	2	2	420' From Stop Bar
28, 29	6'x6'		X				X	2	2	610' From Stop Bar
31	6'x55'	X			2.0		X	3	1	
32	6'x6'		X				X	3	1	260' From Stop Bar
41	6'x55'	X					X	4	1	
42	6'x55'	X			12.0		X	4	1	
43, 44	6'x6'		X				X	4	1	
45, 46	6'x6'		X				X	4	1	260' From Stop Bar
51	6'x55'	X					X	5	1	
52	6'x6'		X				X	5	1	260' From Stop Bar
53	6'x6'		X				X	5	1	420' From Stop Bar
61, 62	6'x55'	X					X	6	2	
63	6'x55'	X			12.0		X	6	1	
64, 65	6'x6'		X				X	6	2	260' From Stop Bar
66, 67	6'x6'		X				X	6	2	420' From Stop Bar
68, 69	6'x6'		X				X	6	2	610' From Stop Bar
71, 72	6'x55'	X			2.0		X	7	2	
81	6'x55'	X					X	8	1	
82	6'x55'	X			6.0		X	8	1	
83	6'x6'		X				X	8	1	260' From Stop Bar

PHASE	MINIMUM INITIAL	UNIT EXTENSION	*MAXIMUM GREEN		**PEDESTRIAN			CLEARANCE	
			A.M.	P.M.	WALK	FDW	SDW	YELLOW	ALL RED
			1	6	2.0	10	12		
2	10	2.0	82	70				5.4	1.9
3	6	2.0	10	16				4.3	2.6
4	10	2.0	18	22				3.8	2.4
5	6	2.0	16	34				5.4	1.8
6	10	2.0	78	50	12	33	3	5.4	1.9
7	6	2.0	18	20				3.8	2.6
8	10	2.0	10	18				4.3	2.6

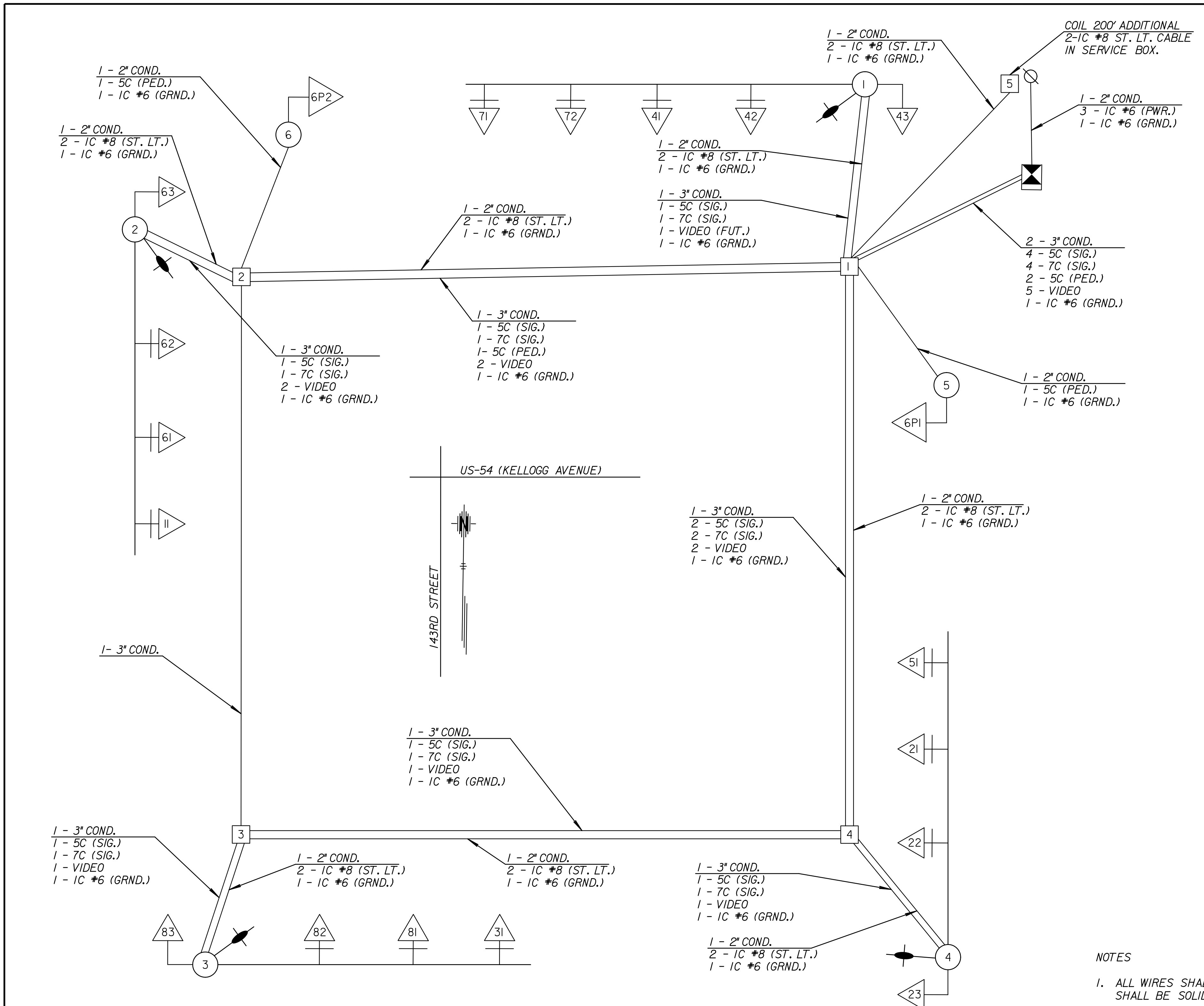
CLEARANCE DESIGN SPEEDS:
 US-54 (KELLOGG AVENUE) = 60 MPH
 143RD STREET = 40 MPH

*MAXIMUM GREEN IS FOR NON-PEDESTRIAN CALLS ONLY.
 **PEDESTRIAN PHASING SHALL EXTEND PHASE WHEN CALLED IF APPROPRIATE. PEDESTRIAN CLEARANCE TIMES SHALL FOLLOW MUTCD GUIDELINES FOR PHASES, SEE FIGURE 4B-2 FOR MORE INFORMATION.

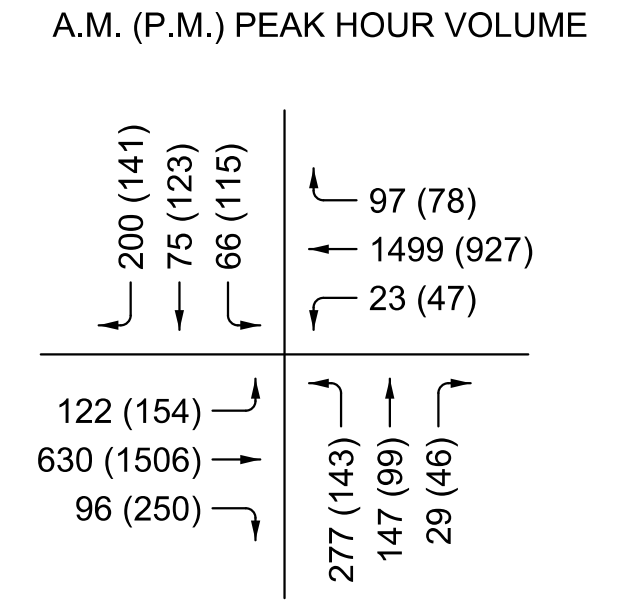
EMERGENCY FLASH	
PHASE	INDICATION
1	Red
2	Yellow
3	Red
4	Red
5	Red
6	Yellow
7	Red
8	Red
Pedestrian	Dark

NOTES

- ALL WIRES SHALL BE AWG #14 UNLESS SPECIFIED OTHERWISE. ALL WIRE SHALL BE SOLID WIRE. STRANDED WIRE IS NOT ALLOWED.
- IC GROUND WIRE SHALL BE #6 AWG GREEN SOLID COPPER WIRE IN ACCORDANCE WITH ASTM B-3, BONDED TO CONDUIT.
- VIDEO CABLES SHALL RUN CONTINUOUS. NO SPICES WILL BE ALLOWED.
- IN NO CASE SHALL MORE THAN 60% OF AN CONDUIT BE FILLED.
- FUTURE VIDEO WIRES SHALL BE TERMINATED AS DIRECTED BY THE ENGINEER. AT A MINIMUM, THE WIRES SHALL BE TERMINATED AT THE TERMINAL BLOCK IN POLE AND CONTROLLER END AND CLEARLY LABELED TO FACILITATE EASY RETROFIT.
- LUMINAIRES WILL BE INSTALLED BY OTHERS (WESTAR). CONTRACTOR SHALL PROVIDE LUMINAIRE ARMS AND WIRING AS SHOWN ON THE WIRING DIAGRAM. AN ADDITIONAL 200' OF IC #8 STREET LIGHT CABLE SHALL BE COILED IN SERVICE BOX #5 LOCATED NEAR THE SERVICE POINT.
- ALL CONDUIT SHALL BE HOT DIPPED GALVANIZED RIGID STEEL AS SHOWN IN THE PROJECT SPECIFICATIONS.



PEAK HOUR VOLUMES



A.M. Peak Hour = 7:15 - 8:15 AM
 P.M. Peak Hour = 4:30 - 5:30 PM
 Counts Conducted 4/24/14

LEGEND

COND.	CONDUIT
SIG.	SIGNAL CABLE
PED.	PEDESTRIAN SIGNAL CABLE
DET.	DETECTOR LEAD-IN CABLE
VIDEO	VIDEO POWER & COMMUNICATION CABLE
ST. LT.	STREET LIGHTING CABLE
INT.	SIGNAL INTERCONNECT CABLE
GRND.	WIRE FOR POLE GROUND
COAX.	COAXIAL CABLE
FUT.	FUTURE CABLE