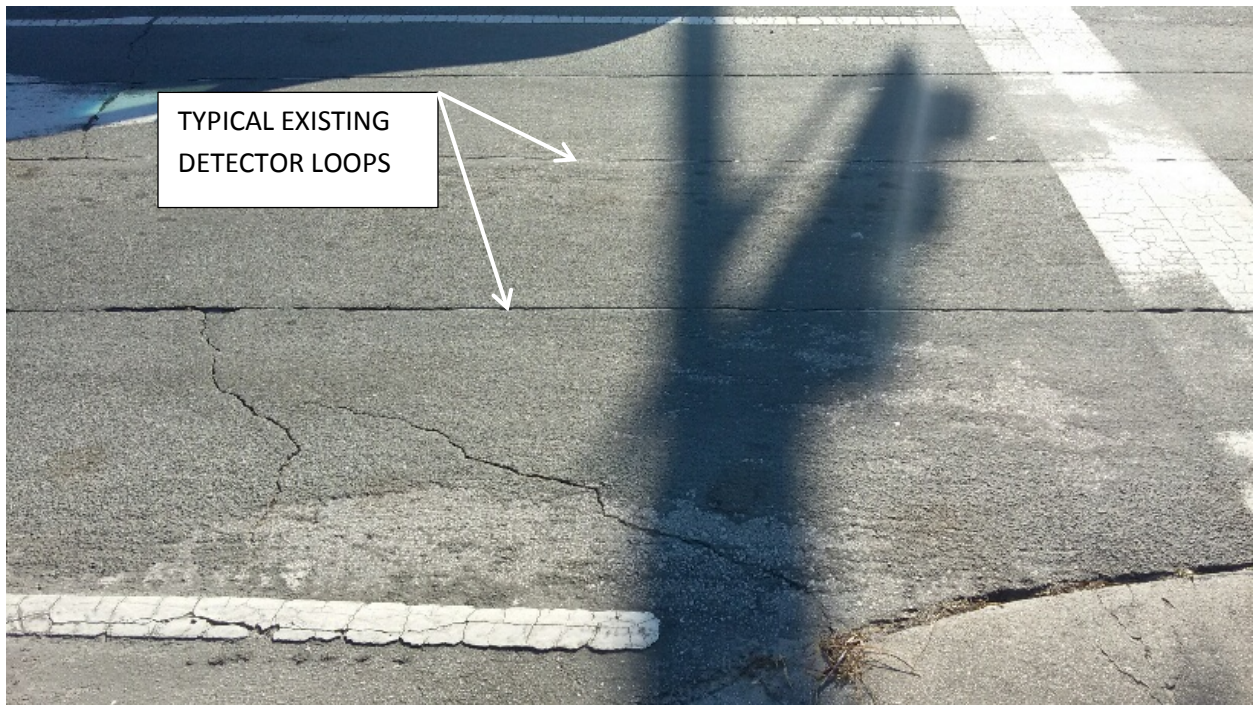
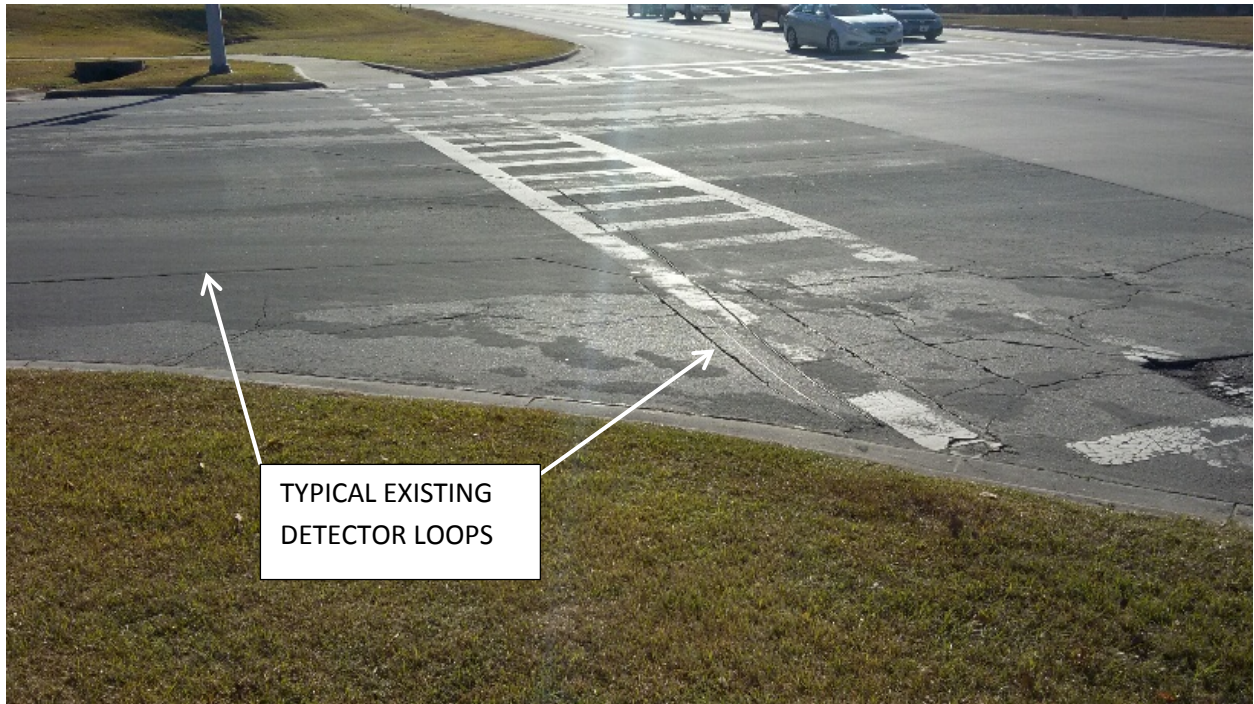
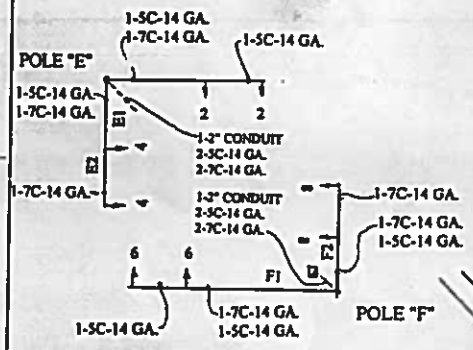
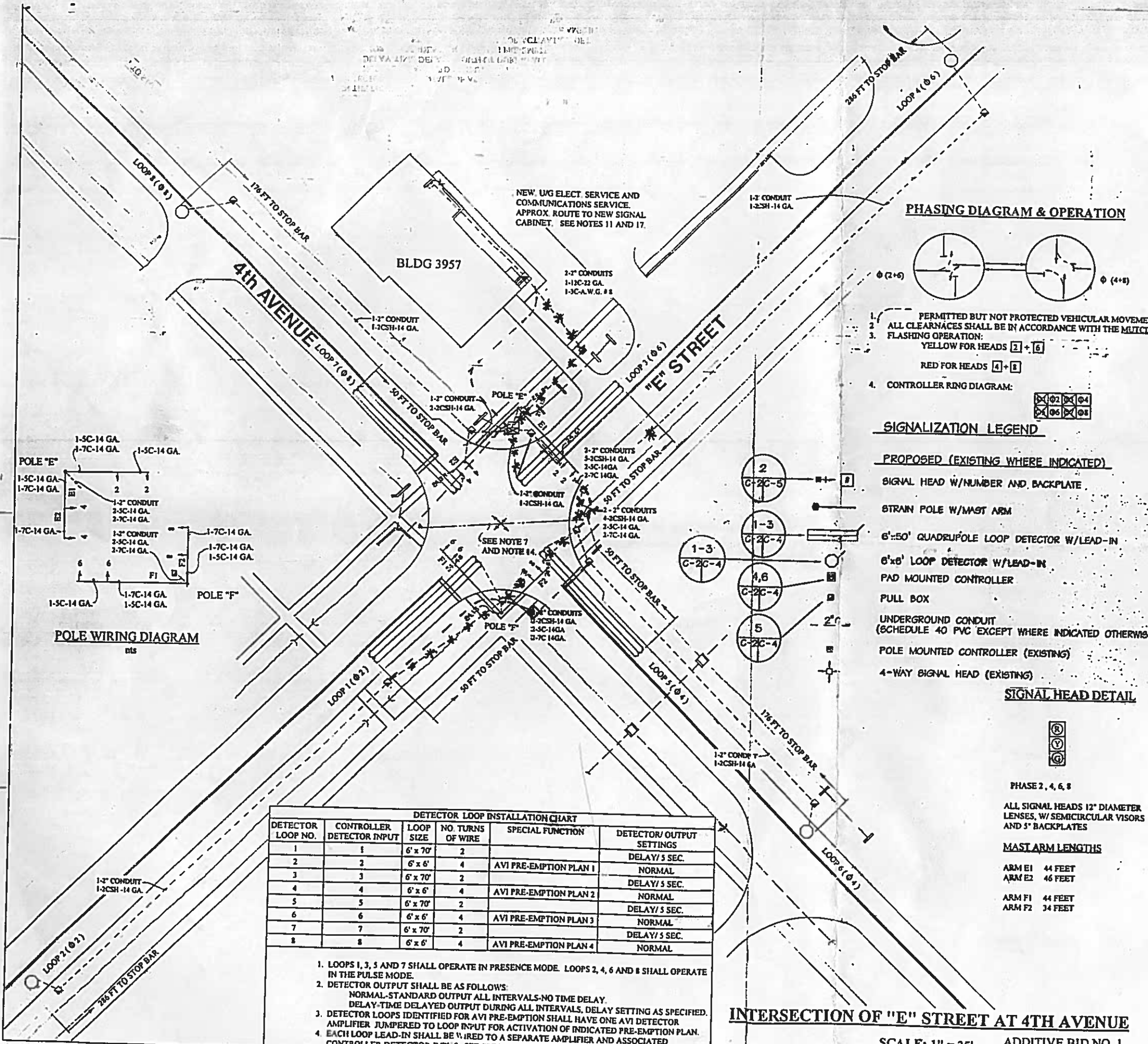
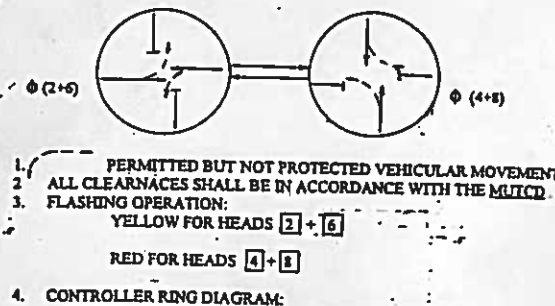


Typical Existing Pavement and Loop Condition Photos





PHASING DIAGRAM & OPERATION



SIGNALIZATION LEGEND

- PROPOSED (EXISTING WHERE INDICATED)**
- SIGNAL HEAD W/NUMBER AND BACKPLATE
 - STRAIN POLE W/MAST ARM
 - 6'-50" QUADRUPOLE LOOP DETECTOR W/LEAD-IN
 - 6'x6' LOOP DETECTOR W/LEAD-IN
 - PAD MOUNTED CONTROLLER
 - PULL BOX
 - UNDERGROUND CONDUIT (SCHEDULE 40 PVC EXCEPT WHERE INDICATED OTHERWISE)
 - POLE MOUNTED CONTROLLER (EXISTING)
 - 4-WAY SIGNAL HEAD (EXISTING)

SIGNAL HEAD DETAIL



PHASE 2, 4, 6, 8
 ALL SIGNAL HEADS 12" DIAMETER LENSES, W/ SEMICIRCULAR VISORS AND 5" BACKPLATES

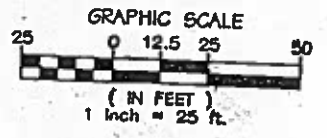
MAST ARM LENGTHS

- ARM E1 44 FEET
- ARM E2 46 FEET
- ARM F1 44 FEET
- ARM F2 34 FEET

DETECTOR LOOP INSTALLATION CHART					
DETECTOR LOOP NO.	CONTROLLER DETECTOR INPUT	LOOP SIZE	NO TURNS OF WIRE	SPECIAL FUNCTION	DETECTOR/ OUTPUT SETTINGS
1	1	6' x 70'	2		DELAY/ 5 SEC.
2	2	6' x 6'	4	AVI PRE-EMPTION PLAN 1	NORMAL
3	3	6' x 70'	2		DELAY/ 5 SEC.
4	4	6' x 6'	4	AVI PRE-EMPTION PLAN 2	NORMAL
5	5	6' x 70'	2		DELAY/ 5 SEC.
6	6	6' x 6'	4	AVI PRE-EMPTION PLAN 3	NORMAL
7	7	6' x 70'	2		DELAY/ 5 SEC.
8	8	6' x 6'	4	AVI PRE-EMPTION PLAN 4	NORMAL

1. LOOPS 1, 3, 5 AND 7 SHALL OPERATE IN PRESENCE MODE. LOOPS 2, 4, 6 AND 8 SHALL OPERATE IN THE PULSE MODE.
2. DETECTOR OUTPUT SHALL BE AS FOLLOWS:
 NORMAL-STANDARD OUTPUT ALL INTERVALS-NO TIME DELAY.
 DELAY-TIME DELAYED OUTPUT DURING ALL INTERVALS, DELAY SETTING AS SPECIFIED.
3. DETECTOR LOOPS IDENTIFIED FOR AVI PRE-EMPTION SHALL HAVE ONE AVI DETECTOR AMPLIFIER JUMPED TO LOOP INPUT FOR ACTIVATION OF INDICATED PRE-EMPTION PLAN.
4. EACH LOOP LEAD-IN SHALL BE WIRED TO A SEPARATE AMPLIFIER AND ASSOCIATED CONTROLLER DETECTOR INPUT. SEE SPECIFICATIONS FOR DETAILED EXPLANATION.

- NOTES**
1. ALL ASPECTS OF SIGNAL INSTALLATION AND OPERATION SHALL BE IN FULL COMPLIANCE WITH THE APPLICABLE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CONTRACT SPECIFICATIONS AND DRAWINGS.
 2. THE LOCATIONS OF OVERHEAD UTILITIES ARE APPROXIMATE. UNDERGROUND UTILITIES ARE NOT SHOWN FOR CLARITY. EXPECT TO ENCOUNTER HIGH VOLTAGE ELECTRIC IN DUCTS, TELEPHONE AND FIBER OPTICS IN DUCTS, CABLE TV IN DUCTS, WATER, STORM WATER AND SANITARY SEWER LINES. SCAN PLANNED UTILITY ROUTES AND POLE LOCATIONS IN COORDINATION WITH THE GOVERNMENT BEFORE DIGGING. ALLOW ADEQUATE TIME FOR THE GOVERNMENT TO MARK KNOWN UTILITIES. HAND DIG WHEN CROSSING EXISTING UTILITIES.
 3. THE CONTRACTOR SHALL HAND DIG PILE FOUNDATIONS TO A MINIMUM DEPTH OF 3 FEET.
 4. PROVIDE CONSTRUCTION TRAFFIC CONTROL MAINTAINED IN COMPLIANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR SINGLE LANE, TWO-WAY TRAFFIC IS REQUIRED. SEE NOTE 5 BELOW. RESTORE TRAFFIC TO TWO LANE, TWO WAY TRAFFIC DURING THE FOLLOWING: PEAK RUSH HOURS 0630-0900, 1130-1300, 1600- 1730, MONDAY THRU FRIDAY.
 5. COORDINATE WITH THE GOVERNMENT WITH A MINIMUM 24 HOURS ADVANCE NOTICE WHERE TEMPORARY LANE CLOSURES ARE REQUIRED.
 6. DETECTOR LOOP WIRES AND LEAD-IN WIRES SHALL ONLY BE SPLICED AT A PULL BOX. SPLICES SHALL BE WEATHER TIGHT IN ACCORDANCE WITH THE SPECIFICATIONS. ALL CONDUITS SHOWN SHALL BE 2 INCH PVC UNLESS OTHERWISE NOTED.
 7. MAINTAIN THE EXISTING TRAFFIC SIGNAL IN OPERATION DURING CONSTRUCTION.
 8. CHANGE-OVER PERIOD BETWEEN EXISTING AND NEW TRAFFIC SIGNALS SHALL BE SHORT. COORDINATE PERIOD WITH THE CONTRACTING OFFICER.
 9. ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE NEW.
 10. COVER NONOPERATIONAL TRAFFIC SIGNAL HEADS COMPLETELY WHERE HEADS ARE VISIBLE TO DRIVERS. MAINTAIN COVERS UNTIL NEW HEADS ARE ENERGIZED.
 11. PROVIDE NEW SIX-PAIR TELEPHONE CABLE AND ELECTRIC SERVICE IN CONDUITS FROM THE NEW CONTROLLER CABINET TO BUILDING 3957. REQUIRED ROUTING IS SHOWN ON THE PLANS. PROVIDE WEATHER TIGHT STUB-UPS AND LB FIXTURES FOR PENETRATION THROUGH 12 INCH MASONRY WALL AT APPROXIMATELY FLOOR LEVEL. PROVIDE INTERIOR LB FIXTURES AND STEEL CONDUIT RISERS TO A HEIGHT OF APPROXIMATELY 12 FEET ABOVE FLOOR LEVEL. CONTINUE CONDUIT RUNS SUSPENDED FROM EXISTING PRECAST CONCRETE RAFTERS SPACED APPROXIMATELY 4 FEET ON-CENTER. PROVIDE ADDITIONAL FIXTURES AS NECESSARY TO PENETRATE WALL MOUNTED ELECTRICAL PANEL FOR CONNECTION TO AN EXISTING BREAKER. NEW TELEPHONE CONDUIT SHALL TERMINATE ABOVE THE EXISTING TELEPHONE TERMINAL BOARD. INCLUDE A MINIMUM OF EIGHT FEET OF EXCESS CABLE INSIDE BUILDING 3957 FOR CONNECTIONS TO THE EXISTING TELEPHONE SYSTEM BY THE GOVERNMENT. WATERPROOF ALL WALL PENETRATIONS. ALL CONDUIT BENDS SHALL BE LARGE RADIUS SWEEPS. LABEL ALL CONDUITS, CABLES AND EXISTING BREAKER WITH PERMANENT IDENTIFICATION MARKING.
 12. SET TO OF THE CONCRETE PILE FOUNDATION EQUAL TO THE EXISTING ROADWAY CROWN ELEVATIONS SHOWN ON THE DRAWING. PROVIDE ROADWAY CLEARANCES SHOWN ON DETAIL 2, SHEET C-3. FINALIZE POLE FOUNDATION LOCATIONS TO DETERMINE ACTUAL POLE AND MAST ARM LENGTHS BEFORE THESE ITEMS ARE ORDERED.
 13. VERIFY MAST ARM WIRING PORTS LOCATIONS BEFORE DRILLING.
 14. REMOVE EXISTING SIGNAL EQUIPMENT INCLUDING SIGNAL HEADS AND SPAN WIRE, POLES, CABINET AND CONTROLLER AFTER COMPLETION OF THE NEW TRAFFIC SIGNAL. REMOVE 1300 LF EXISTING UNDERGROUND ELECTRICAL SERVICE WIRE (CONDUIT MAY REMAIN). ON THE EXTERIOR OF BLDG 193, REMOVE EXTERIOR DISCONNECT SWITCH, F.O.X, ABOVE GROUND CONDUIT. REMOVE INTERIOR WIRING TO ELECTRICAL PANEL AND TERMINATE DEMOLITION IN AN APPROVED MANNER. SEAL EXTERIOR WALL PENETRATION.
 15. REFERENCE FOR ALL ELEVATIONS IS BENCHMARK 11-93)MOR, ELEV. 21.23.
 16. ASSUME CURB AND GUTTER PRESENT AT ALL PAVEMENT RADII AND DRIVEWAY ENTRANCES. JACK CONDUITS UNDER ALL ROADWAYS AND DRIVEWAYS. AT THE CONTRACTOR'S OPTION, JACK CONDUITS UNDER SIDEWALKS OR SIDEWALKS MAY BE REMOVED AND REPLACED.
 17. CONDUIT RUNS ARE SHOWN FOR BIDDING PURPOSES. ADJUSTMENTS MAY BE MADE BY THE CONTRACTOR TO MISS UTILITIES IDENTIFIED DURING CONSTRUCTION. THE GOVERNMENT SHALL APPROVE CHANGES OR MAKE ADJUSTMENT TO CHANGES PROPOSED BY THE CONTRACTOR IN ADVANCE OF CONSTRUCTION.



INTERSECTION OF "E" STREET AT 4TH AVENUE

SCALE: 1" = 25' ADDITIVE BID NO. 1

REVISIONS

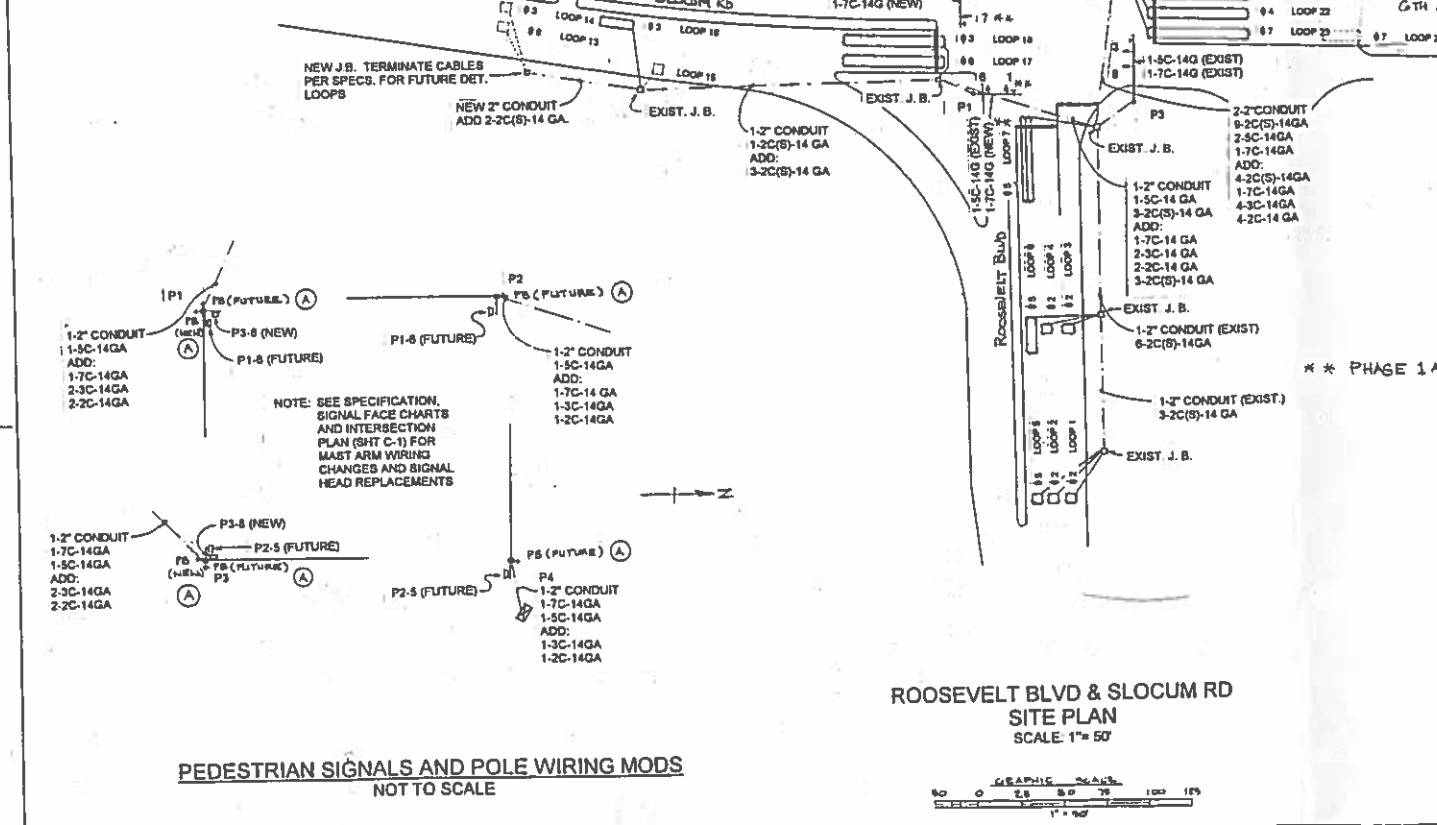
NO.	DATE	DESCRIPTION	BY	APP'D

DRAWN BY: [Name] DATE: 8/10/11
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 APPROVED BY: [Name] DATE: [Date]

MARINE CORPS AIR STATION, CHERRY POINT, N.C.
 REPLACE TRAFFIC SIGNALS
 TRAFFIC SIGNAL LAYOUT PLAN
 INTERSECTION OF "E" ST. AT 4th AVE

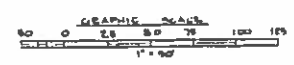
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 STA PROJ. NO. CP6163M
 SPEC. NO. 03-96-3288
 GENERAL CONTRACT NO. N6747D-98-C-3881
 DRAWING NO. 4343330A
 SHEET 1A OF 5

- NOTES:
1. PERFORM PREBID SITE VISIT TO INVENTORY AND TAG UNDERGROUND CABLES FOR SALVAGE AND REUSE. SUBMIT RESULTS TO THE GOVERNMENT PRIOR TO SUBMITTING THE BID.
 2. OBTAIN APPROVAL FOR ALL SUBMITTALS BEFORE BEGINNING WORK.
 3. THE NEW TRAFFIC SIGNAL CABINET AND CONCRETE FOUNDATION SHALL CONFORM TO THE SPECS AND DETAILS, SHT C-2.
 4. REMOVE EXISTING UNDERGROUND WIRING AND MAST ARM SIGNAL POLE WIRING. MODIFY POLES PER THE SPECIFICATIONS.
 5. UNLESS NOTED SPECIFICALLY, JUNCTION BOXES AND UG CONDUITS ARE EXISTING. REMOVE NINE ABOVE GROUND TERMINAL BOXES AND CONCRETE FOUNDATIONS. TURN OVER BOXES TO THE GOVERNMENT FOR SALVAGE. NEW BOXES SHALL BE SET AT GRADE LEVEL.
 6. ALL UG CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE.
 7. INSTALL ALL UG WIRING AND CONNECT TO THE CABINET EXCEPT FOR WIRING INDICATED BY LEGEND AS "FUTURE". TERMINATE AND LABEL ALL UNUSED SIGNAL CABLES ON THE NEW SIGNAL MAST ARM POLE TERMINAL STRIPS. LABELS SHALL INDICATE FUNCTION AND SHALL BE NUMBERED.
 8. NEW VEHICLE DETECTOR LOOPS AND SIGNAL HEADS FOR PHASES 1 AND 7 PER ADDITIVE BID 1. INSTALL ALL FIELD WIRING FOR THESE PHASES PER BID ITEM 1.
 9. ADJUST SIGNAL HEAD LOCATIONS FOR PHASES 4 AND 8. OBTAIN APPROVAL FROM THE FACILITIES ENGINEERING DEPARTMENT BEFORE HANGING SIGNALS AND TRIMMING FIELD WIRING TO LENGTH.
 10. PROVIDE NEW SIGNAL HEADS PER THE SPECIFICATION. ALL SIGNAL HEADS SHALL BE PROVIDED WITH NEW ASTROBRAC SIGNAL MOUNTS.
 11. MANUFACTURER SHALL PROVIDE REQUIRED WIRING FOR PRE-EMPTION USAGE COUNT, PRE-EMPTION STATUS AND PRE-EMPTION STATUS CALL. LABEL WIRING FOR FUTURE CONNECTIONS TO AVI AMPLIFIERS. PRE-EMPTION PLAN 1 SHALL BE SERVICED BY DETECTOR AMPLIFIERS L-1, L-2 AND L-3. PRE-EMPTION PLAN 2 SHALL BE SERVICED BY AMPLIFIER L-8. PRE-EMPTION PLAN 3 SHALL BE SERVICED BY AMPLIFIER L-18 AND PRE-EMPTION PLAN 4 SHALL BE SERVICED BY AMPLIFIERS L-13, L-14 AND L-15. PROVIDE A SEPARATE TERMINAL STRIP ON THE CABINET SIDE PANEL FOR SWITCHING PRE-EMPTION INPUT JUMPER WIRES. PROVIDE JUMPER WIRES TO ALL 8 PRE-EMPTION INPUTS ON THE MSD CONNECTOR. LABEL EACH JUMPER WIRE WITH PERMANENT LABELS FOR EACH SIDE OF THE TERMINAL STRIP.
 12. PROVIDE WIRING FROM CABINET DOOR SENSOR TO AC VOLTAGE (VD1) USER DEFNCD INPUT VIA THE MSD CONNECTOR. PROVIDE DC VOLTAGE (VD2) THROUGH VD3 THROUGH DETECTOR INPUTS FROM DETECTOR LOOPS 7, 12, 18 AND 21 RESPECTIVELY. CONTRACTOR SHALL COORDINATE WIRING OF CIRCUITS BY THE CABINET MANUFACTURER.



PEDESTRIAN SIGNALS AND POLE WIRING MODS
NOT TO SCALE

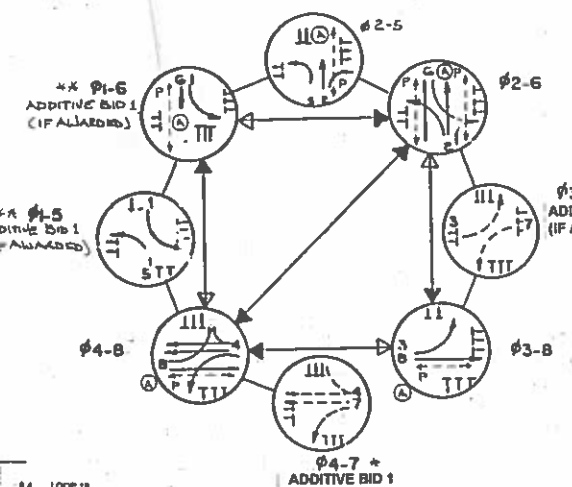
ROOSEVELT BLVD & SLOCUM RD
SITE PLAN
SCALE: 1" = 50'



PHASE SIGNAL	PHASE								COMBINATIONS								FLASH
	1	2	3	4	5	6	7	8	1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	
#1		R	R	R	R	K	K	R	-R	-G	R	G	R	R	R	R	Y
#2	R	G	R	R	R	R	R	R	R	R	G	G	R	R	R	R	Y
#3	R	R	R	R	K	K	R	R	R	R	G	R	R	R	R	R	Y
#4	R	R	R	G	R	R	R	R	R	R	R	R	R	R	R	G	G
#5	R	R	R	R	R	R	R	R	-R	-R	-R	-R	-R	-R	-R	-R	Y
#6	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	R	Y
#7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
#8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
#P1-C	W	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
#P2-S	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
#P3-B	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
#P4-T																	

* WIRE CABINET FOR FUTURE SIGNAL INDICATIONS (BID ITEM 1)

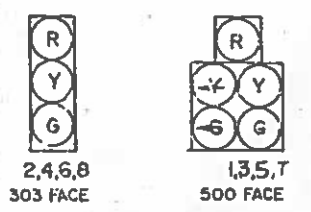
COLOR SEQUENCE CHART
@ (REVISED)



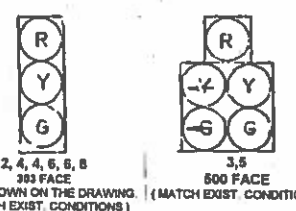
PHASING DIAGRAM
(REVISED)

Φ1	Φ2	Φ3	Φ4
Φ5	Φ6	Φ7	Φ8

CLEARANCE CHART



SIGNAL FACES
ADDITIVE BID 1 *
(IF AWARDED)



SIGNAL FACES
BID ITEM 1

DETECTOR ASSIGNMENT CHART

LOOP NO./ DET. INPUT	LOOP SIZE	DISTANCE TO STOP BAR FROM LOOP CENTERLINE	SIGNAL HEAD FUNCTION
NORTHBOUND ROOSEVELT BOULEVARD			
1	6'x6'	NA	2
2	6'x6'	NA	2
3	6'x6'	NA	2
4	6'x6'	NA	2
5	6'x6'	NA	5
6	6'x20'	NA	5
7	6'x50' (NEW)	20'	(ADDITIVE BID 1) 5
SOUTHBOUND ROOSEVELT BOULEVARD			
8	6'x10'	NA	6
9	6'x6'	NA (FUTURE)	COUNT
10	6'x6'	NA	6
11	6'x6'	NA	1
12	6'x50' (NEW)	20'	(ADDITIVE BID 1) 1
EASTBOUND SLOCUM ROAD			
13	6'x6'	265' (FUTURE)	6
14	6'x6'	265' (FUTURE)	3
15	6'x6'	NA (FUTURE)	COUNT
16	6'x20'	NA	3
17	6'x50'	NA	8
18	6'x50'	NA	3
WESTBOUND SIXTH AVENUE			
19	6'x15'	265' (FUTURE)	4
20	6'x20'	110' (FUTURE)	7
21	6'x20'	NA	4
22	6'x20'	NA	4
23	6'x20'	NA	7
24	RESERVED		

LEGEND

- 2-2C-14 GA NUMBER OF CABLES, CONDUCTORS AND WIRE GAUGE
- 2-2C(S)-14 GA NUMBER OF SHIELDED INDUCTIVE SHIELDED LOOP LEAD-IN CABLES
- PP #XXX POWER POLE W/ NUMBER DESIGNATION
- J.B. JUNCTION BOX
- EXIST. UNDERGROUND CONDUIT
- - - - NEW UNDERGROUND CONDUIT
- P4 EXIST. SIGNAL POLE
- EXIST. / NEW INDUCTIVE DETECTOR LOOP
- FUTURE DETECTOR LOOP, LEAD-INS JUNCTION BOXES AND CONDUITS
- CA&G EXIST. CURB AND GUTTER

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.	APP'D.

DATE: 5/26/24

PROJECT: MARINE CORPS AIR STATION, CHERRY POINT, N.C.

INSTALL SIGNALIZED CROSSWALK AT ROOSEVELT BLVD AND SLOCUM RD INTERSECTION

SITE PLAN - ROOSEVELT BLVD AND SLOCUM RD

CODE NO. 8881 8881 8881 8881

SCALE: NOTED

PROJ. NO. CP23-40 CP23-40

SPEC. NO. 105-88-8881

CONTR. NO. 105-88-8881

MARK NO. 4367392

SHEET 11 OF 12