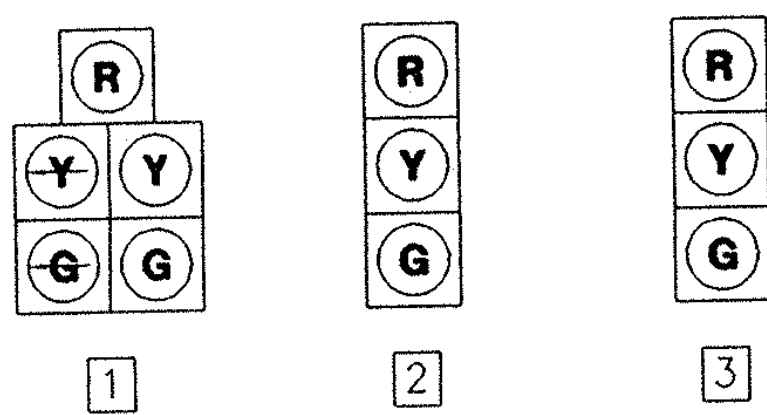
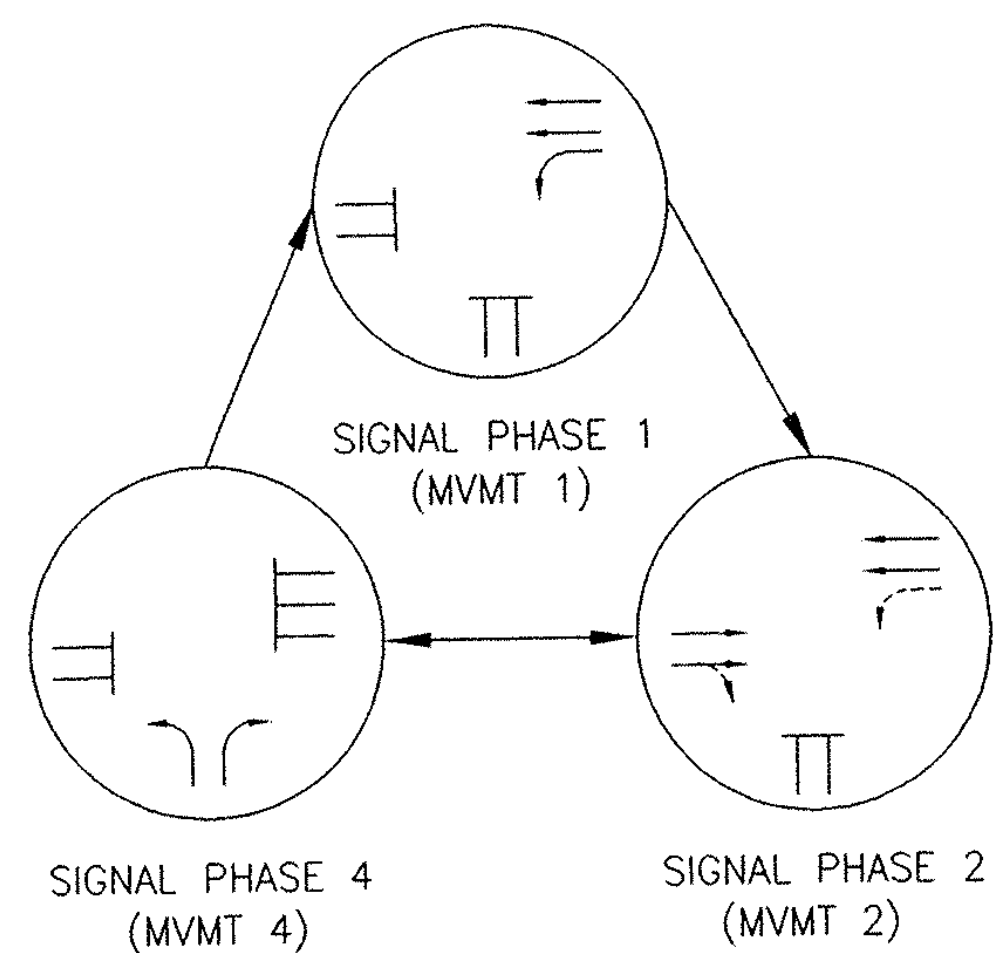


SIGNAL HEAD DETAILS

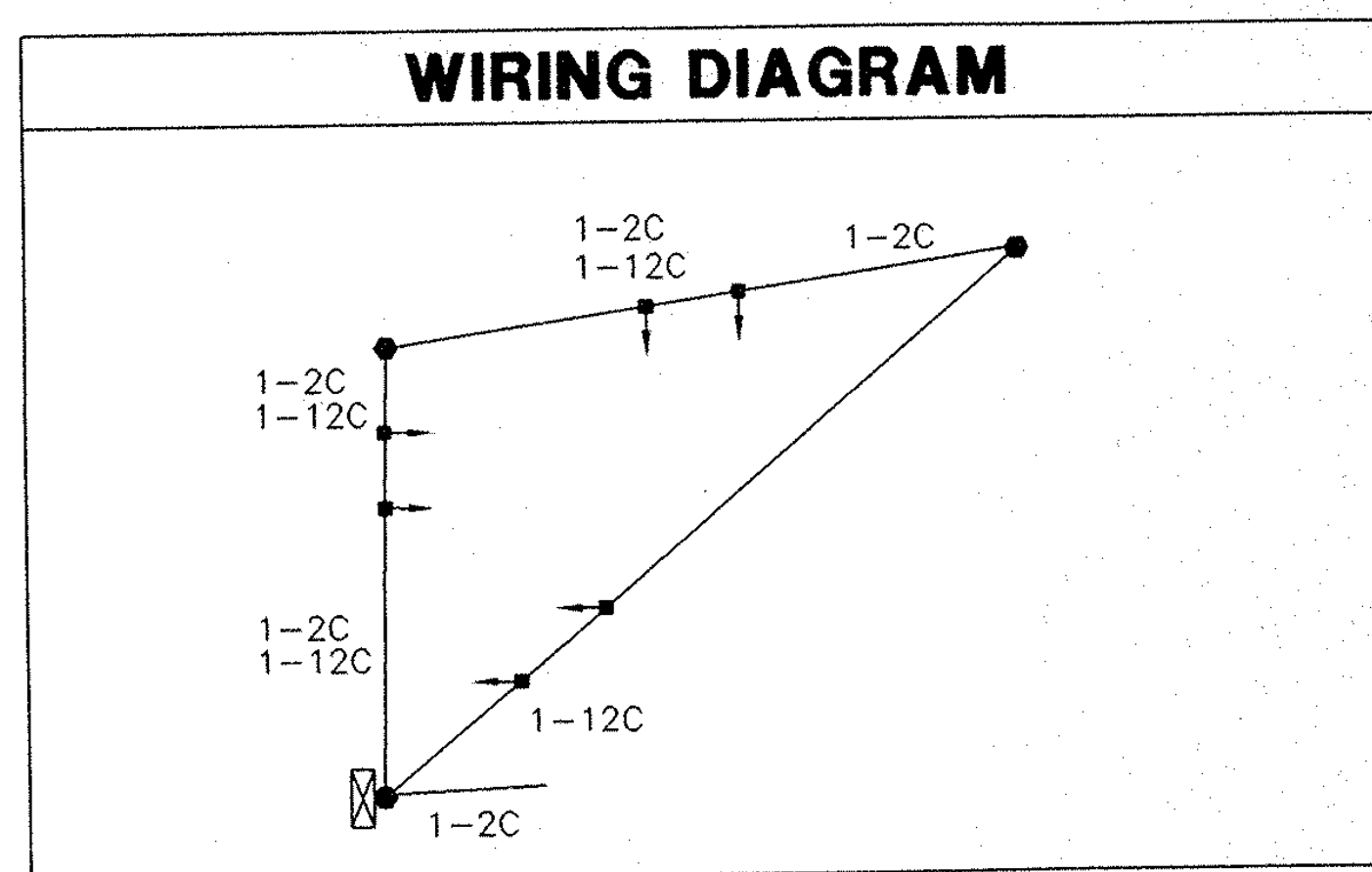
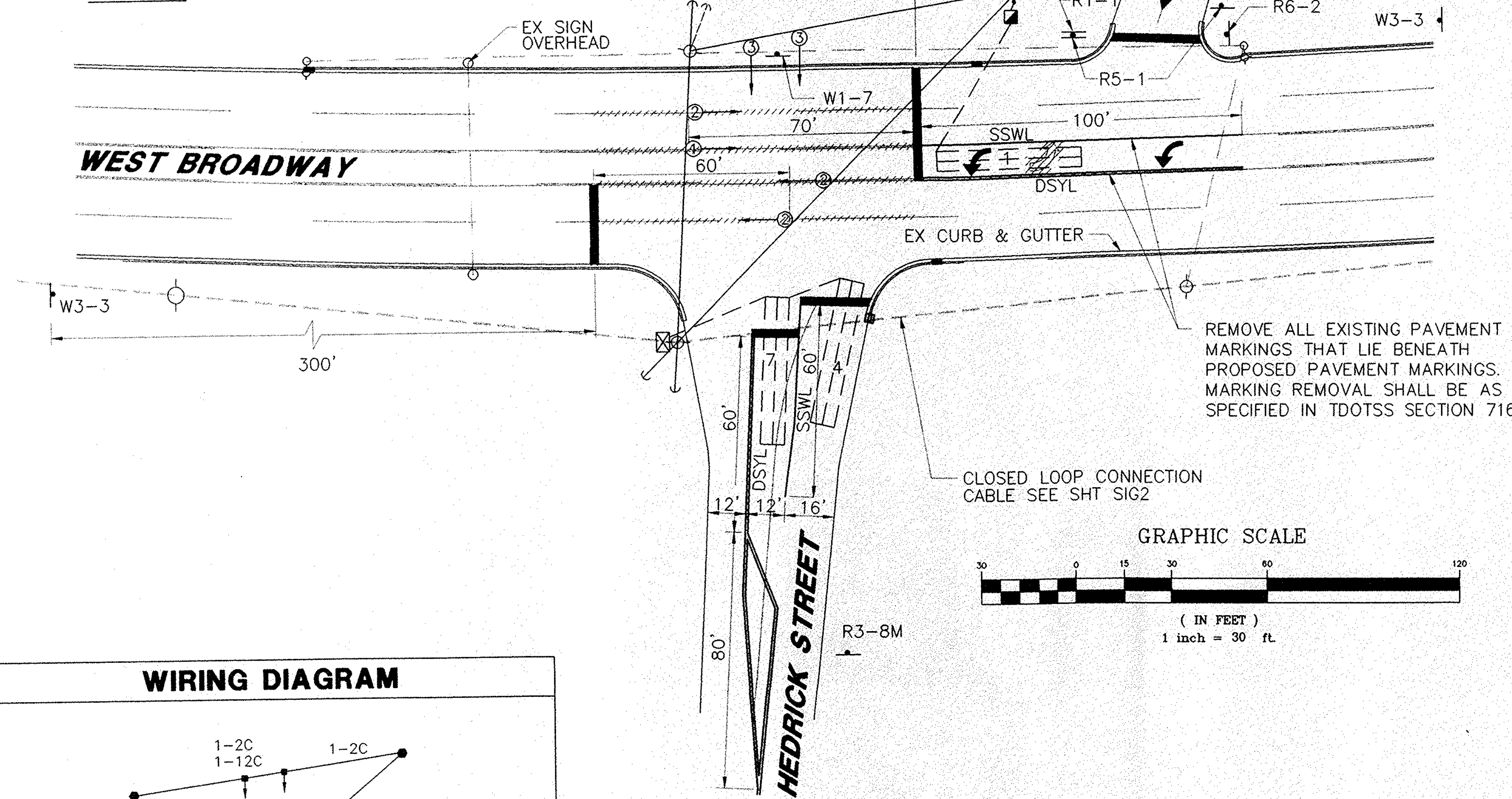
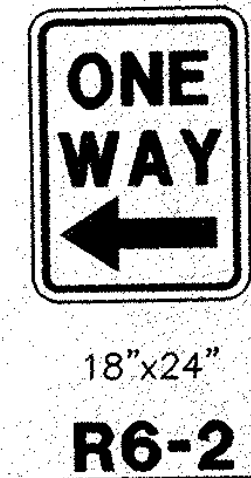
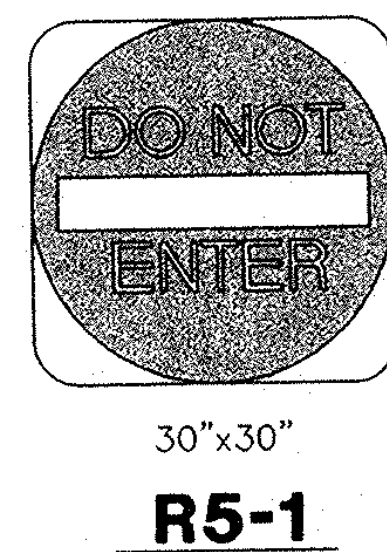
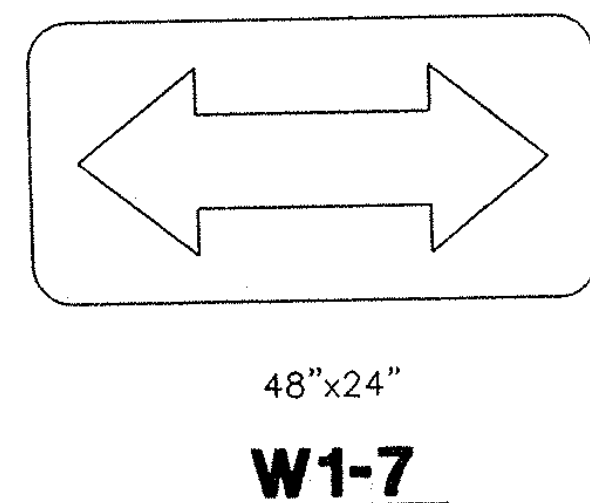
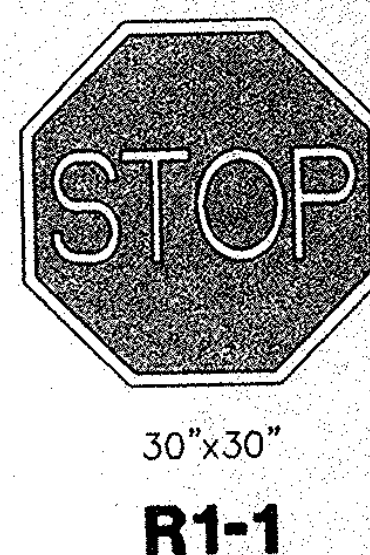
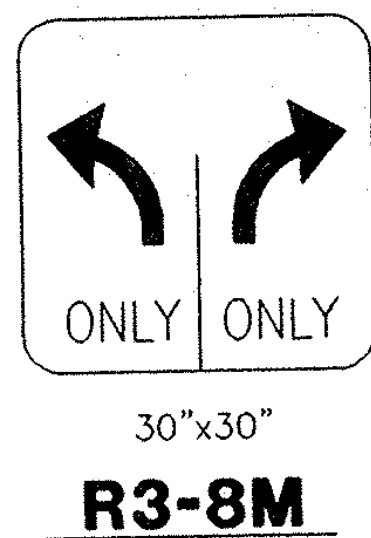
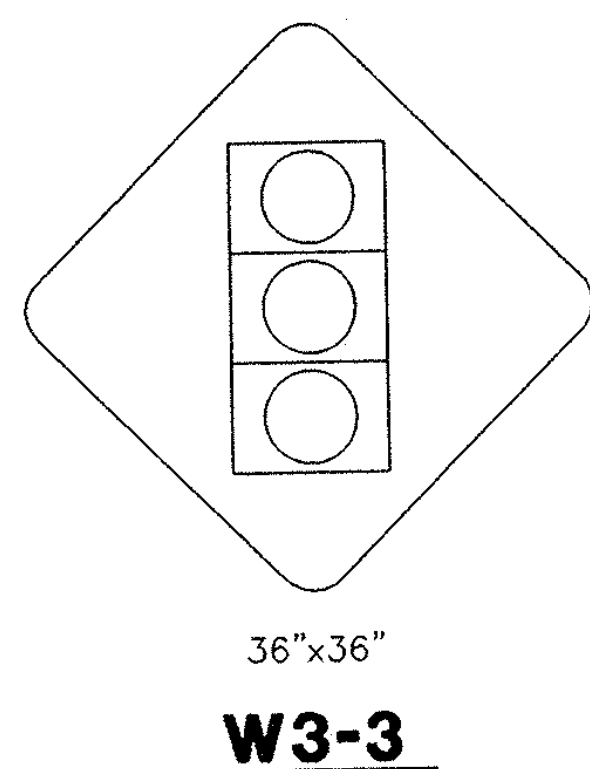


ALL SIGNAL HEADS SHALL BE POLYCARBONATE WITH 12" DIAMETER LENSES.

PHASING DIAGRAM



- CONTROLLER SHALL BE 4 PHASE UTILIZING STANDARD DUAL RING OPERATION. ACTIVE TIMING PHASES SHALL BE 1, 2, AND 4, WITH MOVEMENT ASSIGNMENTS AS FOLLOWS:
TIMING PHASE 1 - MOVEMENT 1
TIMING PHASE 2 - MOVEMENT 2
TIMING PHASE 4 - MOVEMENT 4
- PERMITTED, BUT NOT PROTECTED VEHICULAR MOVEMENT.
- ALL CLEARANCES SHALL BE IN ACCORDANCE WITH THE MUTCD.
- FLASHING OPERATION: YELLOW BALL FOR HEADS 1 2
RED BALL FOR HEADS 3

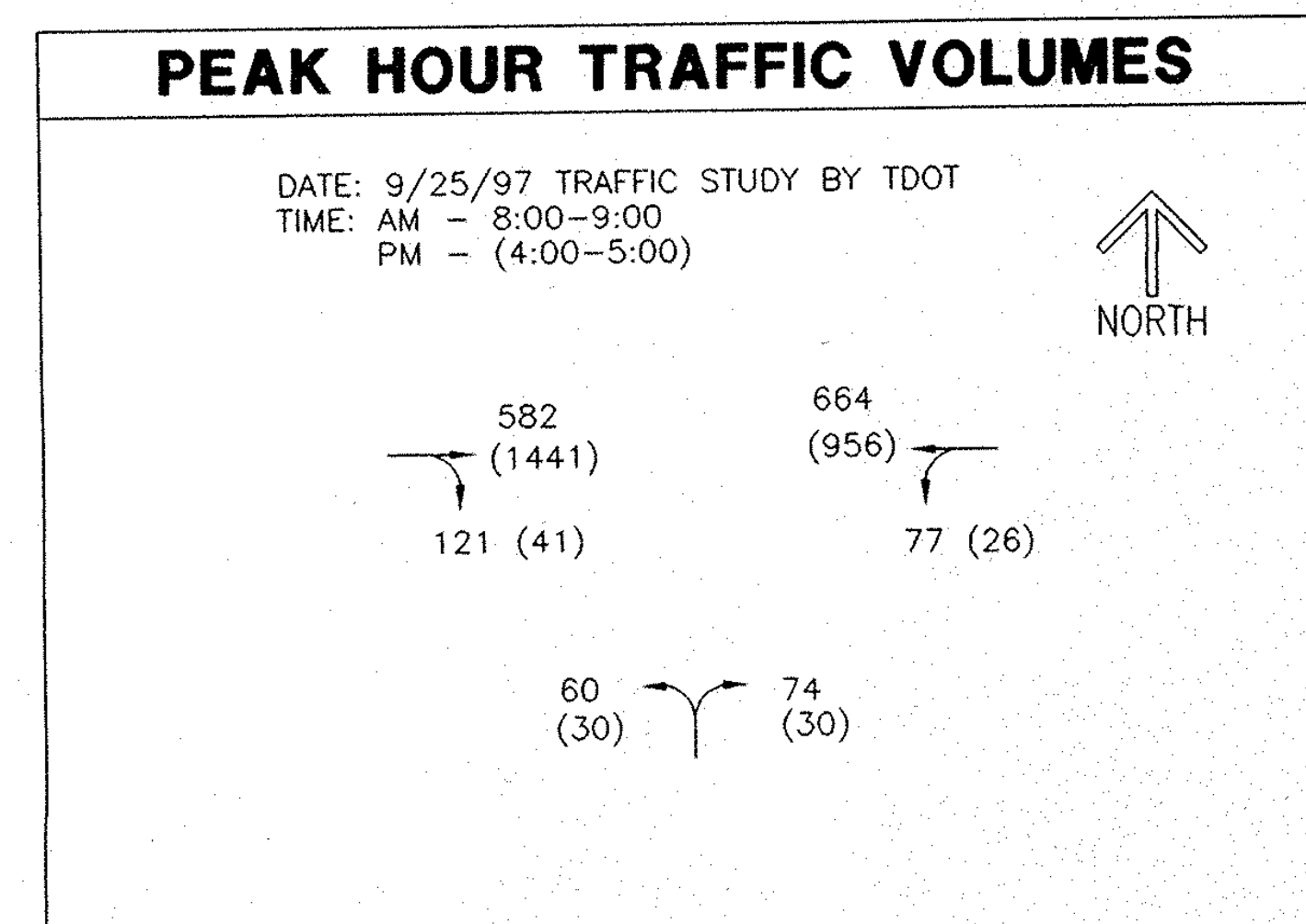


SIGNAL LEGEND

- PROPOSED SPAN WIRE WITH SIGNAL HEADS
- PROPOSED SIGNAL HEAD AND NUMBER
- PROPOSED LOOP DETECTOR WITH LEAD-IN
- PROPOSED POLE MOUNTED CONTROLLER AND CABINET
- PROPOSED UNDERGROUND CONDUIT - SCHEDULE 80
- PROPOSED GUY CABLE WITH ANCHOR
- PROPOSED PULL BOX

PAVEMENT MARKING LEGEND

- PROPOSED 24" STOP BAR
- PROPOSED TURN LANE ARROW
- PROPOSED 4" SINGLE SOLID WHITE LINE
- PROPOSED 4" DOUBLE SOLID YELLOW LINE
- REMOVE EXISTING PAVEMENT MARKINGS BY GRINDING
- EXISTING TURN LANE ARROW
- EXISTING PAVEMENT STRIPING



VEHICLE DETECTOR CONNECTION

DETECTOR UNIT NO.	CONNECTED TO LOOP	CONNECTED TO TIMING PHASE	DETECTOR OUTPUT	DELAY SETTING
1	4 & 7	4	PRESENCE	10 SEC
2	1	1	PRESENCE	10 SEC

1. ALL LOOPS SHALL BE 6'x45' WITH 2 RUNS OF WIRE.

INITIAL CONTROLLER TIMING

TIMING PHASE	MOVEMENTS	MIN GREEN	PASS	YELL	RED	MAX 1	MAX 2	RECALL
1	1	6.0	2.0	3.0	15	20.0	20.0	NO
2	2	6.0	2.0	4.5	1.0	45.0	45.0	YES
4	4	6.0	2.0	4.0	1.5	25.0	25.0	NO

SPAN AND POLE DATA

SPAN	POINT OF ATTACHMENT	POLE	POLE CLASS
ALL	26.5'		EXISTING

- POINT OF ATTACHMENT IS ELEVATION DIFFERENCE BETWEEN SPAN TIE-IN POINT ON POLE AND MAXIMUM PAVEMENT ELEVATION UNDER SPAN. THE LOCATION OF THE TIE-IN POINT ON AN INDIVIDUAL POLE MAY VARY DEPENDING UPON EXISTING UTILITIES LOCATION. THE CONTRACTOR SHALL DETERMINE GROUND ELEVATIONS AND ESTABLISH ACTUAL POLE TIE-IN POINT.
- VERTICAL CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEAD HOUSING:
MIN.=16.5' MAX.=19.0'
- SPAN WIRE SUPPORT CABLE SHALL PROVIDE MINIMUM TENSILE STRENGTH OF 12,000 L.B.

UTILITY NOTES

- LOCATION OF UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL OF THE EXISTING UTILITIES AND STRUCTURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXACT LOCATION AND EXISTENCE OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
- SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
- THE CONTRACTOR SHALL PROVIDE COMPLETE ELECTRIC SERVICE CONNECTION AND SHALL COORDINATE THIS ACTIVITY WITH NEWPORT UTILITY BOARD (423-625-2800), INCLUDING THE PROVISION OF ANY REQUIRED METERING OR OTHER SPECIAL EQUIPMENT.

WORK ZONE TRAFFIC CONTROL NOTES

- WORK ZONE AREA TRAFFIC CONTROL SHALL BE PROVIDED AS REQUIRED IN COMPLETE ACCORDANCE WITH THE CURRENT EDITION OF THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MUTCD).
- WORK ZONE AREA DEVICES SHALL INCLUDE AS A MINIMUM THE PLACEMENT OF 'ROAD WORK AHEAD' ADVANCE WARNING SIGNS ON ALL APPROACHES. ADDITIONAL SIGNS, CONES, BARRICADES AND FLAGMEN SHALL BE PROVIDED AS REQUIRED IN THE MUTCD.
- ALL SIGNS SHALL BE REMOVED OR FULLY COVERED WHEN CONDITIONS NECESSITATING THEIR USE ARE NOT PRESENT.
- NOTHING IN THIS PLAN OR NOTES SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS IN THE CONSTRUCTION AREA.

GENERAL NOTES

- EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE T.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (MARCH 1, 1995)" AND THE APPLICABLE STANDARD ROADWAY AND STRUCTURE DRAWINGS, EXCEPT AS OTHERWISE NOTED OR INDICATED ON THIS PLAN. SPECIFIC SPECIFICATION SECTIONS ARE AS FOLLOWS:
 - A) SECTION 604 - CONCRETE STRUCTURES
 - B) SECTION 712 - TEMPORARY TRAFFIC CONTROL
 - C) SECTION 713 - HIGHWAY SIGNAGE
 - D) SECTION 716 - PAVEMENT MARKINGS
 - E) SECTION 730 - TRAFFIC SIGNALS
 - F) SECTION 916 - HIGHWAY SIGNING MATERIALS
- EQUIPMENT AND INSTALLATION, INCLUDING TEMPORARY TRAFFIC CONTROL, SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- SIGNAL HEADS SHALL BE 12" POLYCARBONATE, COMPLYING WITH I.T.E. "ADJUSTABLE FACE VEHICULAR TRAFFIC CONTROL SIGNAL HEADS"
- EACH HEAD SHALL BE SUPPLIED WITH A 12 POSITION QUICK DISCONNECT, WITH ALL TERMINAL POSITIONS FULLY WIRED IN AN IDENTICAL FASHION FOR ALL DISCONNECTS.
- LOOPS AND LEAD-IN CABLE SHALL BE ONE CONTINUOUS LENGTH. SPLICES SHALL BE PERMITTED ONLY IN PULL BOXES OR AT CONTROLLER CABINET.
- POLE LOCATIONS ARE SUBJECT TO MINOR CHANGES AS APPROVED BY THE CITY OF NEWPORT.
- CONTROLLER SHALL BE 4# EAGLE EPAC 360. CABINET SHALL BE POLE MOUNT.
- SIGNAL HEADS WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.
- ELECTRICAL SERVICE CONNECTION SHALL INCLUDE A MINIMUM 1" STEEL CONDUIT RISER WITH WEATHERHEAD, ALL NECESSARY MATERIALS, LABOR, WIRING AND ALL INCIDENTALS NECESSARY TO RENDER A COMPLETE AND OPERABLE SYSTEM.
- SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS AND A MAXIMUM OF FOURTEEN DAYS PRIOR TO ACTIVATION TO STOP AND GO OPERATION.
- PLACE ONE STANDARD SIGNAL AHEAD (W3-3) SYMBOL SIGN 250 FT +/- IN ADVANCE OF STOP BAR ON ALL THREE STREET APPROACHES, IMMEDIATELY PRIOR TO SIGNAL ACTIVATION.
- REMOVE EXISTING STOP SIGN ON HEDRICK STREET IMMEDIATELY AFTER SIGNAL ACTIVATION.
- NEW AND REFURBISHED PAVEMENT MARKINGS SHALL BE PERFORMED PLASTIC OR THERMOPLASTIC TYPE MARKINGS.
- HIGHWAY SIGNING MATERIALS SHALL BE AS FOLLOWS:
 - A) FLAT SHEET ALUMINUM SIGN BLANKS (0.100" THICK)
 - B) HIGH INTENSITY GRADE REFLECTIVE SHEETING
 - C) SIGN POSTS DESIGNATION P8 (14 GAUGE)

