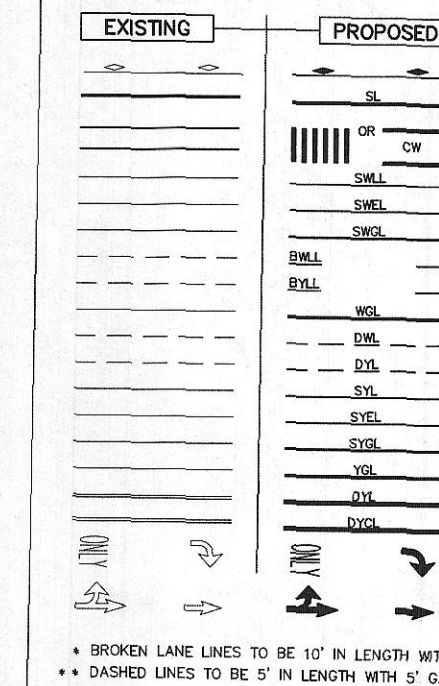


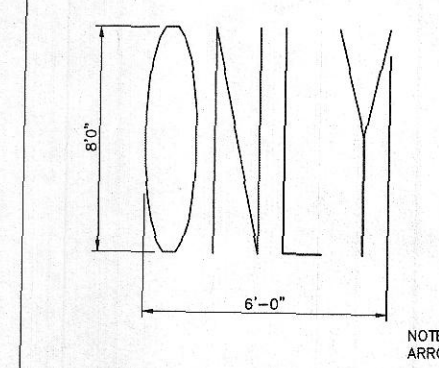
TRAFFIC SIGNAL LEGEND

CONTROL CABINET GROUND MOUNTED (WITH & WITHOUT CONC. PAD)
CONTROL CABINET POLE MOUNTED
FLASHING BEACON CONTROL & METER PEDESTAL
PULL BOX (12" x 12" OR AS NOTED)
MAST ARM, SHAFT & BASE (ARM LENGTH AS NOTED)
SIGNAL POST & BASE (ALPHA-NUMERIC DESIGNATION NOTED)
VEHICULAR SIGNAL HEAD (ALPHA-NUMERIC DESIGNATION NOTED)
VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED (ALPHA-NUMERIC DESIGNATION NOTED)
FLASHING BEACON (ALPHA-NUMERIC DESIGNATION NOTED)
PEDESTRIAN SIGNAL HEAD (ALPHA-NUMERIC DESIGNATION NOTED)
EMERGENCY PREEMPTION DETECTOR (OPTICOM)
PEDESTRIAN PUSH BUTTON, SIGN & SADDLE
WIRE LOOP DETECTOR (6' x 6' OR AS NOTED)
HIGH MAST POLE OR TOWER
MAGNETOMETER
RADAR DETECTOR
SIGNAL & LIGHTING MAST ARM
TRAFFIC SIGN & POST
CONTROLLER PHASE ACTUATED
ZONE OF DETECTION FOR SPECIAL DETECTORS
ZONE OF VISIBILITY FOR PROGRAMMED SIGNAL
TRAFFIC SIGNAL HEAD (12" LENSES OR AS NOTED)
OVERHEAD WIRE(S)
DIRECT BURIAL CABLE
TRAFFIC SIGNAL CONDUIT
CONDUIT CROSSING ROADWAY WITH FLOWABLE FILL



PAVEMENT MARKING LEGEND

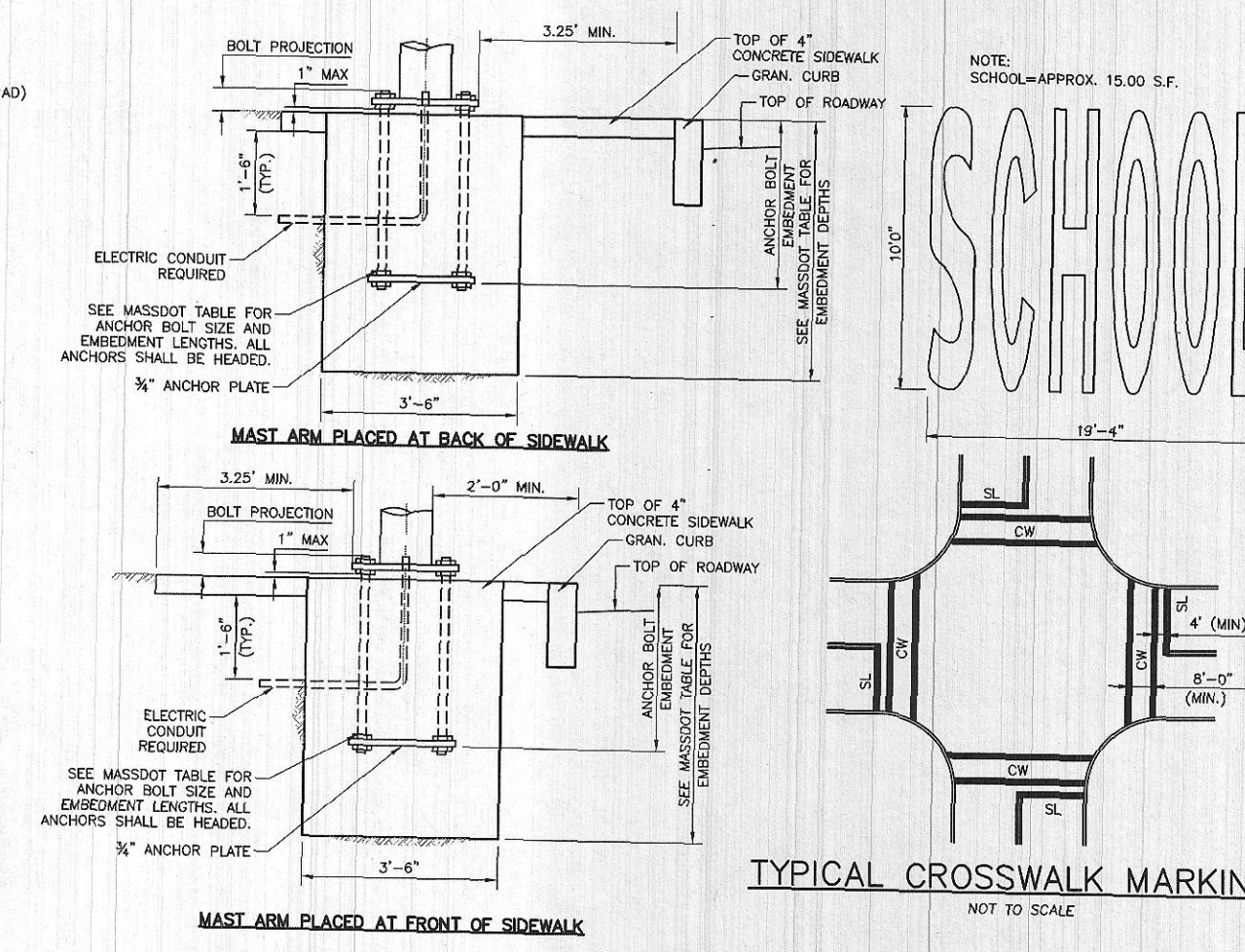
REFLECTORIZED PAVEMENT MARKER
STOP LINE - 12"
CROSSWALK - 2x12" WHITE LINES
SOLID WHITE LANE LINE - 4" UNLESS NOTED OTHERWISE
SOLID WHITE EDGE LINE - 4" UNLESS NOTED OTHERWISE
SOLID WHITE GORE LINE - 8"
BROKEN WHITE LANE LINE - 4" UNLESS NOTED OTHERWISE
BROKEN WHITE EDGE LINE - 4" UNLESS NOTED OTHERWISE
BROKEN WHITE GORE LINE - 8"
DASHED WHITE LANE LINE - 4"
DASHED WHITE EDGE LINE - 4"
DASHED WHITE GORE LINE - 8"
SOLID YELLOW LANE LINE - 4" UNLESS NOTED OTHERWISE
SOLID YELLOW EDGE LINE - 4" UNLESS NOTED OTHERWISE
SOLID YELLOW GORE LINE - 8"
DOUBLE YELLOW LANE LINE - 2x4" UNLESS NOTED OTHERWISE
DOUBLE YELLOW EDGE LINE - 2x4" UNLESS NOTED OTHERWISE
DOUBLE YELLOW CENTER LINE - 2x4" UNLESS NOTED OTHERWISE
PAVEMENT ARROW & LEGEND
PAVEMENT ARROWS
BROKEN LANE LINES TO BE 10' IN LENGTH WITH 30' GAP (TYP.)
DASHED LINES TO BE 5' IN LENGTH WITH 5' GAP (TYP.)



TRAFFIC SIGNAL CONDUIT TRENCH DETAIL

NOT TO SCALE

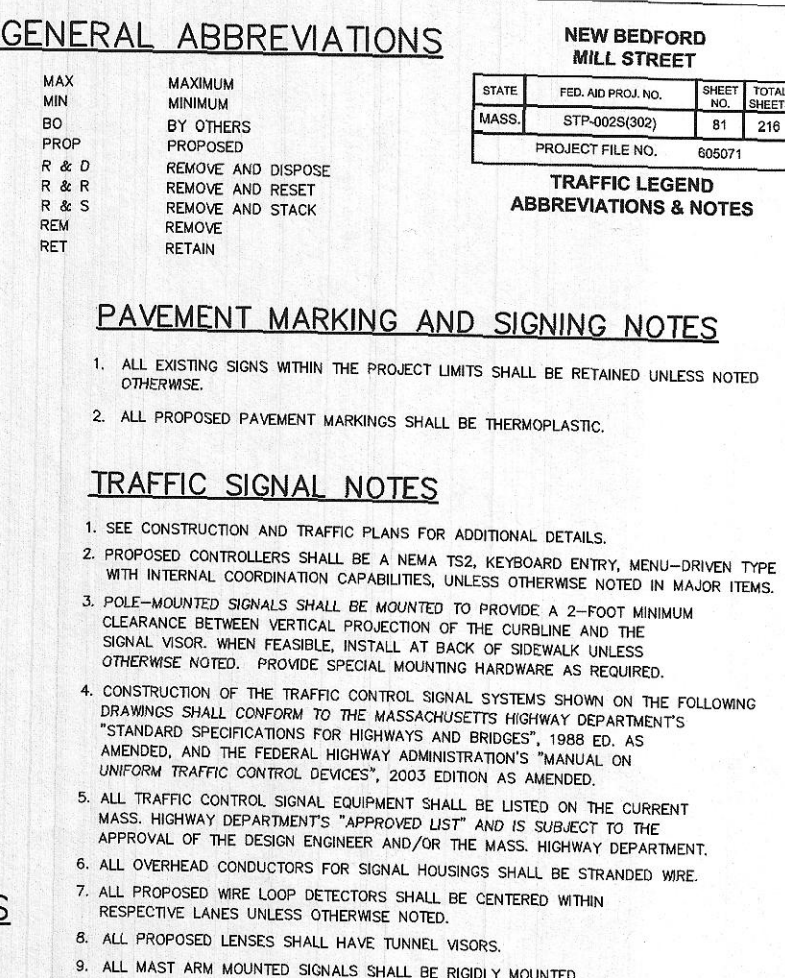
NOTE:
FLOWABLE MIX TRENCH REQ'D ONLY IN AREAS OF EXIST. ROADWAY PAVEMENT THAT DO NOT REQUIRE FULL DEPTH CONSTRUCTION.



TYPICAL CROSSWALK MARKINGS

NOT TO SCALE

NOTE:
SCHOOL=APPROX. 15.00 S.F.



TRAFFIC ABBREVIATIONS

ONLY SHOWN ON PHASING DIAGRAMS

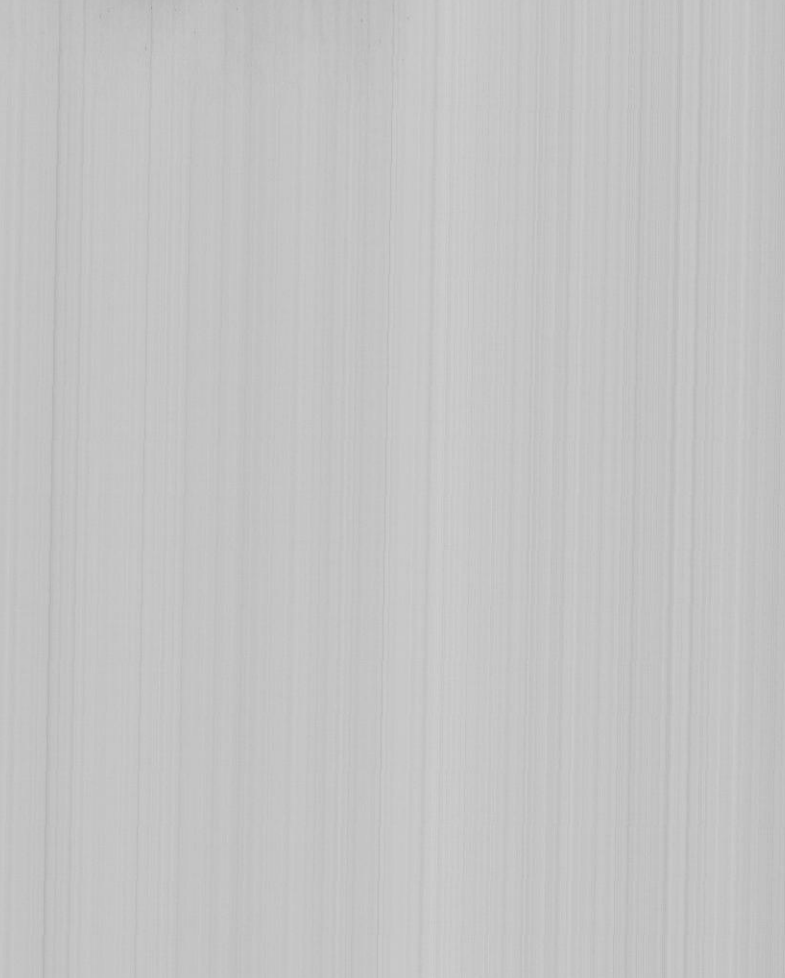
R STEADY CIRCULAR RED
Y STEADY CIRCULAR AMBER
G STEADY CIRCULAR GREEN
RL STEADY RED LEFT ARROW
YL STEADY AMBER LEFT ARROW
GL STEADY GREEN LEFT ARROW
GV STEADY GREEN VERTICAL ARROW
RR STEADY RED RIGHT ARROW
YR STEADY AMBER RIGHT ARROW
GR STEADY GREEN RIGHT ARROW
FR FLASHING CIRCULAR RED
FRL FLASHING CIRCULAR AMBER
FRR FLASHING RED LEFT ARROW
W WALK - LUNAR WHITE
DW DON'T WALK - PORTLAND ORANGE
L DETECTOR - LOCK
NL DETECTOR - NON-LOCK
V VEHICLE MOVEMENT
P PEDESTRIAN MOVEMENT
PV PERMISSIVE VEHICULAR MOVEMENT
D DETECTOR CONTROLLING PHASE



GENERAL ABBREVIATIONS

TRAFFIC LEGEND ABBREVIATIONS & NOTES

MAX
MIN
BO BY OTHERS
PROP PROPOSED
R & D REMOVE AND DISPOSE
R & R REMOVE AND RESET
R & S REMOVE AND STACK
REL REMOVE
RET RETAIN



PAVEMENT MARKING AND SIGNING NOTES

1. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.
2. ALL PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.



TRAFFIC SIGNAL NOTES

1. SEE CONSTRUCTION AND TRAFFIC PLANS FOR ADDITIONAL DETAILS.
2. PROPOSED CONTROLLERS SHALL BE A NEMA TS2 KEYBOARD ENTRY, MENU-DRIVEN TYPE WITH INTERNAL COORDINATION CAPABILITIES, UNLESS OTHERWISE NOTED IN MAJOR ITEMS.
3. POLE-MOUNTED SIGNALS SHALL BE MOUNTED TO PROVIDE A 2-FOOT MINIMUM CLEARANCE BETWEEN VERTICAL PROJECTION OF THE CURBLINE AND THE SIGNAL VISOR WHEN FEASIBLE, INSTALL AT BACK OF SIDEWALK UNLESS OTHERWISE NOTED. PROVIDE SPECIAL MOUNTING HARDWARE AS REQUIRED.
4. CONSTRUCTION OF THE TRAFFIC CONTROL SIGNAL SYSTEMS SHOWN ON THE FOLLOWING DRAWINGS SHALL CONFORM TO THE MASSACHUSETTS HIGHWAY DEPARTMENT'S 'STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES', 1988 ED. AS AMENDED, AND THE FEDERAL HIGHWAY ADMINISTRATION'S 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', 2003 EDITION AS AMENDED.
5. ALL TRAFFIC CONTROL SIGNAL EQUIPMENT SHALL BE LISTED ON THE CURRENT MASS. HIGHWAY DEPARTMENT'S 'APPROVED LIST' AND IS SUBJECT TO THE APPROVAL OF THE DESIGN ENGINEER AND/OR THE MASS. HIGHWAY DEPARTMENT.
6. ALL OVERHEAD CONDUCTORS FOR SIGNAL HOUSINGS SHALL BE STRANDED WIRE.
7. ALL PROPOSED WIRE LOOP DETECTORS SHALL BE CENTERED WITHIN RESPECTIVE LANES UNLESS OTHERWISE NOTED.
8. ALL PROPOSED LENSES SHALL HAVE TUNNEL VISORS.
9. ALL MAST ARM MOUNTED SIGNALS SHALL BE RIGIDLY MOUNTED.
10. FLASHING OPERATION PER 2003 M.U.T.C.D., SECTION 40.12.
11. IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT SHALL NOT CHANGE DURING THE CHANGE INTERVAL(S).
12. ALL NEW TRAFFIC CONTROLLER CABINETS SHALL BE EQUIPPED WITH A LEVER-TYPE METER BY-PASS. SPECIFICATIONS FOR THE BY-PASS MUST BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.
13. WHERE CALLED FOR ON THE PLANS, THE PROPOSED LOCATIONS OF THE PREEMPTION RECEIVER UNITS AND CONFIRMATION BEACON ARE PERCEIVED BEST BUT NOT FINAL. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE OPTIMUM PLACEMENT IN COOPERATION WITH THE LOCAL MUNICIPALITY'S PUBLIC SAFETY DEPARTMENTS. THE OPTICAL UNITS SHALL HAVE AN UNOBSTRUCTED LINE-OF-SIGHT VIEW ALONG THE ROUTE OF APPROACHING PRIORITY VEHICLE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND VERIFYING THAT THERE IS SUFFICIENT CLEARANCE BETWEEN ALL PROPOSED TRAFFIC SIGNAL POLES AND EXISTING AND RELOCATED OVERHEAD UTILITY LINES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH THE AFFECTED UTILITY COMPANIES RELATIVE TO THE SCOPE OF ANY REQUIRED RELOCATIONS. THIS SHALL BE PERFORMED WITHIN TEN DAYS AFTER AWARD OF THE CONTRACT. THE COST FOR RELOCATION OF UTILITIES SHALL BE BORNE BY THE OWNER.
15. THE CONTRACTOR SHALL REMOVE AND STACK ALL EXISTING TRAFFIC SIGNAL EQUIPMENT WITHIN THE PROJECT LIMITS EXCEPT FOR LOCATIONS NOTED ON THE PLANS.
16. WIRING FROM EACH INDIVIDUAL PEDESTRIAN HOUSING SHALL BE A CONTINUOUS RUN AND NOT SPLICED UNTIL REACHING THE CONTROLLER CABINET.



LOOP DETECTOR NOTES

1. SEE LOOP DETECTOR DETAIL SHEET FOR SPLICE PATTERN AND OTHER INFORMATION.
2. DELAY AND EXTENSION TIMES ARE IN SECONDS.
3. DELAY TIME SHALL BE EFFECTIVE ONLY DURING THE RED PORTION OF THE PHASE THAT IS CALLED BY A DETECTOR.