

PHASE 2A TYPICAL ROADWAY SECTION
NOT TO SCALE

LEGEND

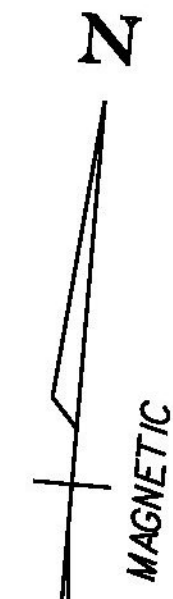
- ▬ TEMPORARY TRAFFIC BARRIER
- REFLECTORIZED PLASTIC DRUM
- TRAFFIC FLOW
- SL TEMPORARY STOP LINE
- SWEL SOLID WHITE EDGE LINE
- B-B MOUNTED BACK TO BACK
- DYCL DOUBLE YELLOW CENTERLINE
- ⊕ TRAFFIC SIGN
- ⊙ VIDEO DETECTION CAMERA
- TEMPORARY SPAN WIRE POLE (WOOD UTILITY POLE)
- I PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- OVERHEAD WIRES
- ⊕ TEMPORARY TRAFFIC SIGNAL HEAD
- ▨ WORK AREA
- ▩ VIDEO DETECTION ZONE

TEMPORARY 4 INCH WHITE LINE, PAINT
31+66.7 - 35+46.7 LT, 388 LF (SWEL)
31+91.6 - 34+87.2 LT - RT, 306 LF (SWEL)

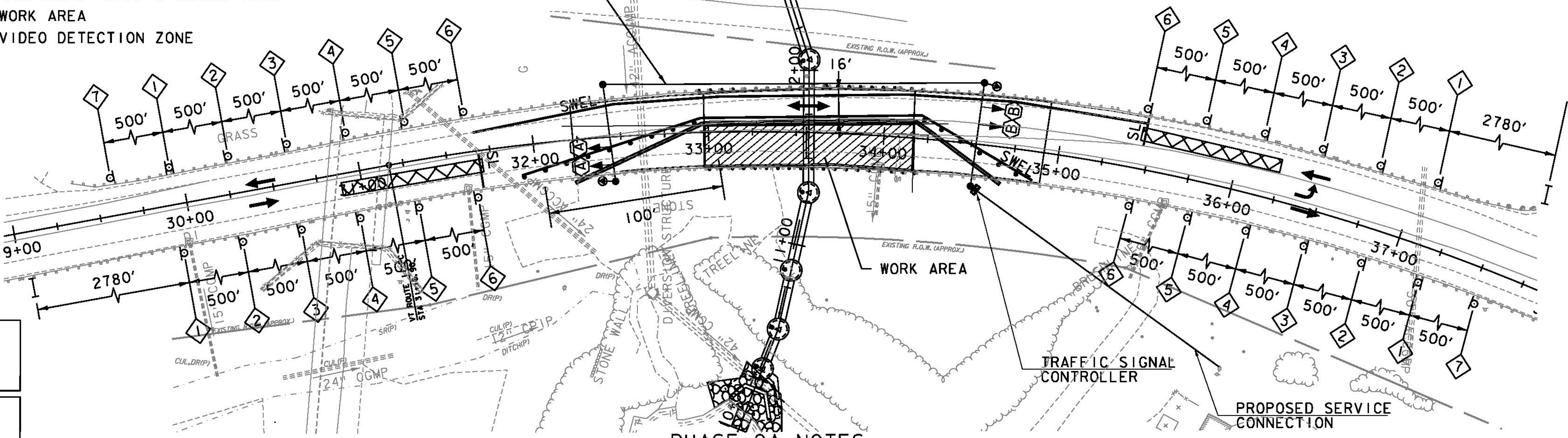
TEMPORARY 24 INCH STOP BAR, PAINT
31+66.8 RT, 20 LF (SL)
35+46.1 LT, 17 LF (SL)

TEMPORARY TRAFFIC SIGNAL SYSTEM NOTES

1. THE TIMING OF THE TEMPORARY SIGNAL SHALL BE SUBJECT TO FIELD ADJUSTMENTS AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY ADJUSTMENTS TO TIMINGS APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO ITEM 678.40, TEMPORARY TRAFFIC SIGNAL SYSTEM.
2. UNIFORMED TRAFFIC OFFICERS SHALL BE NOTIFIED IMMEDIATELY AND SHALL PERFORM TRAFFIC CONTROL IN THE EVENT THAT THE TEMPORARY TRAFFIC SIGNAL IS OUT OF ORDER.
3. TEMPORARY TRAFFIC CONTROL SIGNAL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 678.40 TEMPORARY TRAFFIC SIGNAL SYSTEM AND SHALL INCLUDE ALL TEMPORARY TRAFFIC CONTROL ITEMS INCLUDING BUT NOT LIMITED TO TEMPORARY SIGNALS, VIDEO DETECTION SYSTEM, SERVICE CONNECTION, SIGNAL HEADS, REMOVING SIGNALS AT THE COMPLETION OF WORK AND ALL OTHER INCIDENTALS NECESSARY TO FURNISH, INSTALL AND MAINTAIN THE TEMPORARY TRAFFIC SIGNAL SYSTEM.
4. DESIGN OF THE SIGNAL SUPPORTS AND ANY REQUIRED GUYING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. SIGNAL FACES SHALL BE L.E.D AND CONSIST OF 12" LENSES (RED, YELLOW AND GREEN).
6. THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16.5 FEET NOR MORE THAN 19.0 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8.0 FEET NOR MORE THAN 15.0 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO ENSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROADWAY GRADE.
7. SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
8. SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. HOWEVER, THE USE OF PORTABLE SIGNALS IS ENCOURAGED. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE OF 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
9. SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
10. THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGNS, LUMINAIRES, FLASHING BEACONS, ASSOCIATED PAVEMENT MARKINGS AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
11. INSTALL WIRING BETWEEN SIGNAL POLES TO PROVIDE FOR A SAFE INSTALLATION. ATTACHMENT TO UTILITY POLES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY.
12. PLACE TEMPORARY POLES BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE.
13. POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELING PUBLIC.
14. LUMINAIRES SHALL BE INSTALLED AT EACH OF THE APPROACHES TO ADEQUATELY LIGHT THE STOP BAR AREAS. HIGH PRESSURE SODIUM OR L.E.D. LUMINAIRES ARE ACCEPTABLE FORMS OF LAMPS. THE MOUNTING HEIGHT OF THE LUMINAIRES SHALL BE DETERMINED BY THE CONTRACTOR. ILLUMINANCE SHALL BE MEASURED AT NIGHTTIME AFTER INSTALLATION AND AT EACH STOP BAR SHALL BE NO LESS THAN 1.0 FOOT-CANDLES AND NOT TO EXCEED 2.0 FOOT-CANDLES.
15. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.

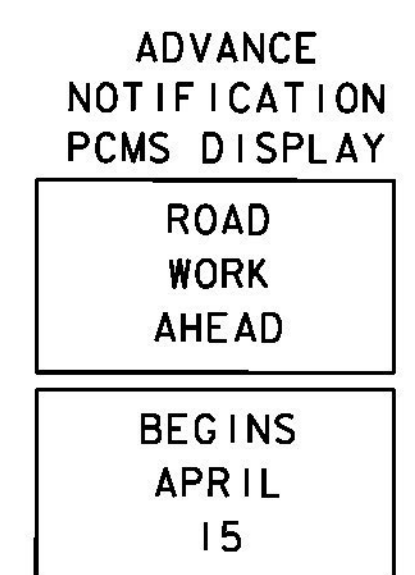


TEMPORARY AERIAL POWER AND COMMUNICATION WIRING



PHASE 2A NOTES

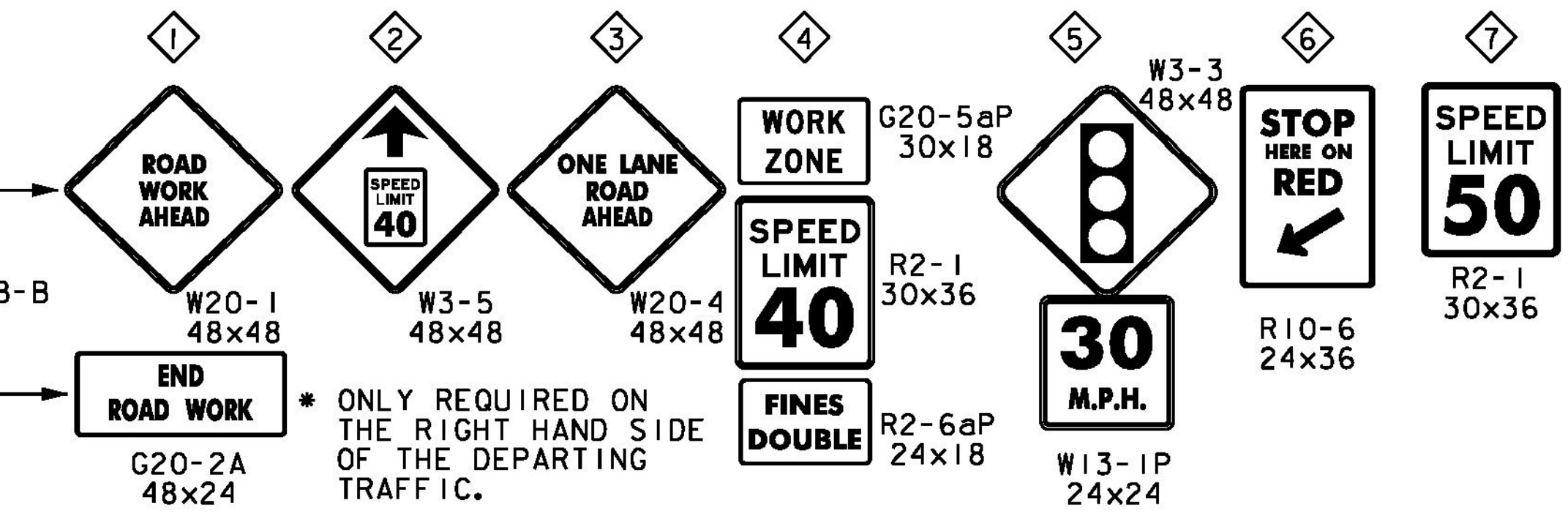
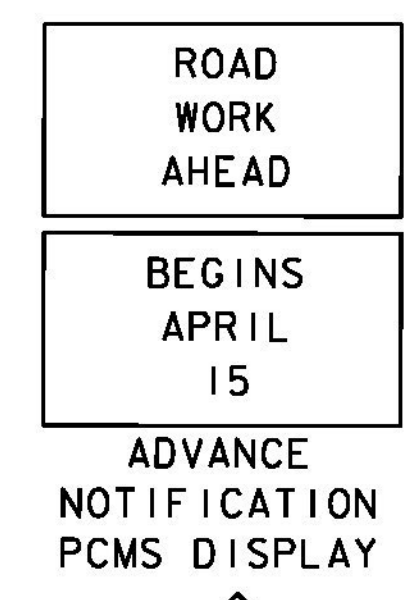
1. INSTALL TEMPORARY TRAFFIC CONTROL SIGNS, SIGNALS, AND BARRIERS AS SHOWN ON THIS PLAN.
2. MASK EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS SHOWN ON THIS PLAN. MASK SHALL BE DONE WITH TRAFFIC TAPE OR REMOVE PAVEMENT MARKINGS VIA GRINDING ONLY. PAINT OR ASPHALT CEMENT ARE NOT ALLOWED. MATCH PROPOSED PAVEMENT MARKINGS WITH EXISTING PAVEMENT MARKINGS AT LIMIT OF WORK.
3. INSTALL TEMPORARY PAVEMENT MARKINGS, AND MAINTAIN ONE LANE ALTERNATING TRAFFIC WITH A MINIMUM OF 12 FOOT WIDE TRAVEL LANE WITH 2 FOOT SHOULDER ON EACH SIDE.
4. REMOVE EXISTING GUARDRAIL AS NEEDED TO INSTALL PROPOSED DRAINAGE. PERFORM EXCAVATION, COLD PLANING, INSTALL PROPOSED DRAINAGE, PAVEMENT, TIMBER CURB AND RESET EXISTING HIGHWAY GUARDRAIL. THE DRAINAGE PIPE INSTALLED ON THIS PHASE SHALL BE SUFFICIENT TO ALLOW ONE 12 FOOT LANE WITH 2 FOOT SHOULDERS ON BOTH SIDES FOR ALTERNATING TRAFFIC AS SHOWN ON PHASE 2B.
5. REMOVE TEMPORARY BARRIERS AND TEMPORARY PAVEMENT MARKINGS AFTER COMPLETION OF PHASE 2A WORK AND RESET TO LOCATION FOR PHASE 2B. RETAIN TEMPORARY SIGNAL AND SIGNS FOR USE IN PHASE 2B.



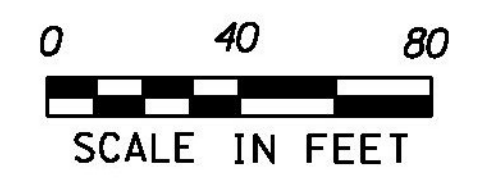
MONTH AND DATE SHOWN ON PCMS ARE FOR ILLUSTRATION ONLY

NOTE

SEE PHASE 2B PLAN SHEET FOR PROPOSED SIGNAL FACE ARRANGEMENT, MAJOR EQUIPMENT LIST, PROPOSED SIGNAL PHASING, TABLE OF CHANGE SEQUENCE, AND CONTROLLER TIMING CHART.



* ONLY REQUIRED ON THE RIGHT HAND SIDE OF THE DEPARTING TRAFFIC.



GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

PHASE 2A

PROJECT NAME: PERU	PLOT DATE: 12/31/2014
PROJECT NUMBER: STP SCR(4)	DRAWN BY: D. VERTIYEV
FILE NAME: z07bi06+mpbdr.dgn	CHECKED BY: E. ATKINS
PROJECT LEADER: E. ATKINS	SHEET 42 OF 45
DESIGNED BY: A. ACHARYA	
STAGING AND TRAFFIC CONTROL SHEET 2	