

ITEM 614, MAINTAINING TRAFFIC: I-480 AND GRAYTON ROAD

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING OR THE COMPLETED PAVEMENT.

THE MAINTENANCE OF TRAFFIC CONSISTS OF THREE PHASES FOR GRAYTON ROAD AND TWO PHASES FOR I-480.

GRAYTON ROAD PHASE 1:

PRIOR TO CROSSOVER CONDITION, REMOVE RAISED MEDIAN ON GRAYTON ROAD FROM STA. 25+40 TO STA. 27+50 AND PLACE TEMPORARY PAVEMENT USING LEFT LANE CLOSURES IN ACCORDANCE WITH ODOT SCD MT-95.30.

REDUCE TRAFFIC TO ONE LANE IN EACH DIRECTION ON GRAYTON ROAD. SHIFT TRAFFIC TO THE EAST SIDE OF THE BRIDGE FROM BROOKPARK ROAD TO STA. 27+50. ADJUST PLACEMENT OF SIGNAL HEADS AT THE INTERSECTION OF GRAYTON ROAD AND BROOKPARK ROAD TO MATCH TEMPORARY LANE ALIGNMENT ON GRAYTON ROAD.

DETOUR GRAYTON ROAD SOUTHBOUND TRAFFIC WISHING TO ACCESS RAMP G-4 TO I-480 EASTBOUND TO THE BROOKPARK ROAD ENTRANCE.

PERFORM WORK ON THE WEST SIDE OF THE EXISTING BRIDGE.

GRAYTON ROAD PHASE 2:

REDUCE TRAFFIC TO ONE LANE IN EACH DIRECTION ON GRAYTON ROAD. SHIFT TRAFFIC TO THE WEST SIDE OF THE BRIDGE FROM BROOKPARK ROAD TO STA. 27+50. ADJUST PLACEMENT OF SIGNAL HEADS AT THE INTERSECTION OF GRAYTON ROAD AND BROOKPARK ROAD TO MATCH TEMPORARY LANE ALIGNMENT ON GRAYTON ROAD.

REOPEN RAMP G-4 ENTRANCE FROM GRAYTON ROAD.

PERFORM WORK ON THE EAST SIDE OF THE EXISTING BRIDGE.

GRAYTON ROAD PHASE 3:

REDUCE TRAFFIC TO ONE LANE IN EACH DIRECTION ON GRAYTON ROAD AND MAINTAIN TRAFFIC IN THE OUTSIDE LANE OF EACH DIRECTION FROM BROOKPARK ROAD TO STA. 28+00.

ADJUST PLACEMENT OF SIGNAL HEADS AT THE INTERSECTION OF GRAYTON ROAD AND BROOKPARK ROAD BACK TO THEIR ORIGINAL CONFIGURATION.

REMOVE TEMPORARY PAVEMENT FROM STA. 25+40 TO STA. 27+50. CONSTRUCT RAISED MEDIAN FROM STA. 19+65 TO STA. 27+50.

I-480 PHASE A:

CLOSE RIGHT LANE IN EACH DIRECTION ON I-480 WITHIN PERMITTED LANE CLOSURE TIMES, MAINTAINING THREE LANES IN EACH DIRECTION. TEMPORARY PAVEMENT TO BE INSTALLED ON OUTSIDE SHOULDER FROM STA. 472+00 TO 496+82.

CLOSE A PORTION OF THE WESTBOUND RAMP G-3 EXIT LANE FROM STATION 485+50 TO 482+00. EXIT RAMP WILL REMAIN OPEN. CONSTRUCT OUTSIDE (RIGHT) PIER.

SHIFT RAMP G-4 ONTO SHOULDER AROUND STATION 483+50. TEMPORARY PAVEMENT MAY BE REQUIRED. MAINTAIN 12' RAMP LANE ALONG EDGE LINE FOR EASTBOUND I-480 TO STATION 487+00. ORIGINAL MERGE WILL BE IN PLACE.

PERFORM WORK ON OUTSIDE (NORTH AND SOUTH) PIERS FOR GRAYTON ROAD WITH SHOULDER CLOSURES IN ACCORDANCE WITH STANDARD DRAWING MT-95.45.

I-480 PHASE B:

IMPLEMENT A 6' TRAFFIC SHIFT ON BOTH EASTBOUND AND WESTBOUND I-480 FROM STA. 480+93 TO STA. 487+90.

INSTALL TEMPORARY CONCRETE BARRIER WALL NEAR THE MEDIAN ON EASTBOUND I-480 FROM STA. 482+21 TO STA. 485+88 AND ON WESTBOUND I-480 FROM STA. 482+93 TO STA. 486+60.

PERFORM WORK ON THE CENTER PIER FOR GRAYTON ROAD.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE PER LANE CLOSURE SCHEDULE. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL I-480 EXISTING LANES AND MINIMUM OF ONE LANE EACH DIRECTION ON GRAYTON ROAD SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
(OTHER HOLIDAY OR EVENT)	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL I-480 LANES AND MINIMUM ONE LANE EACH DIRECTION ON GRAYTON ROAD MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 622, PORTABLE BARRIER, UNANCHORED, AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 32-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS, SEE SCD RM-4.2.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 32". AS PER PLAN

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 2 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 20 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS WEB PAGE FOR ROADWAY STANDARDS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

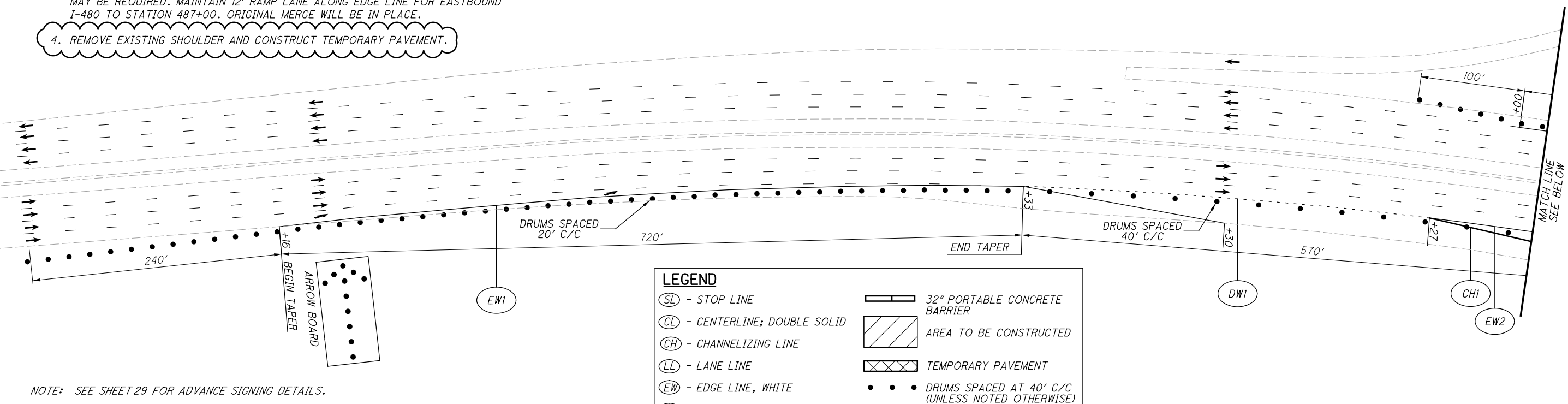
ITEM 616, WATER 2.5 M. GAL

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PHASE A MAINTENANCE OF TRAFFIC (I-480)

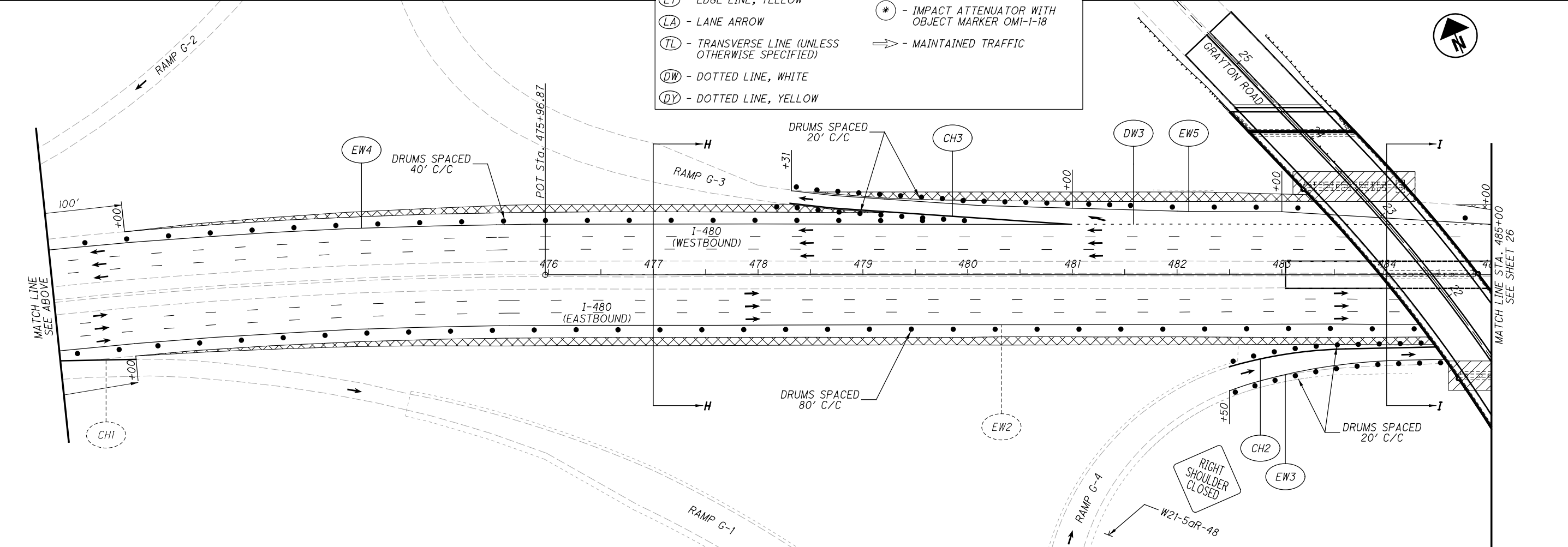
1. CLOSE RIGHT LANE IN EACH DIRECTION ON I-480 WITHIN PERMITTED LANE CLOSURE TIMES, MAINTAINING THREE LANES IN EACH DIRECTION.
2. CLOSE A PORTION OF THE WESTBOUND RAMP G-3 EXIT LANE FROM STATION 485+50 TO 482+00. EXIT RAMP WILL REMAIN OPEN. CONSTRUCT OUTSIDE (RIGHT) PIER.
3. SHIFT RAMP G-4 ONTO SHOULDER AROUND STATION 483+50. TEMPORARY PAVEMENT MAY BE REQUIRED. MAINTAIN 12' RAMP LANE ALONG EDGE LINE FOR EASTBOUND I-480 TO STATION 487+00. ORIGINAL MERGE WILL BE IN PLACE.
4. REMOVE EXISTING SHOULDER AND CONSTRUCT TEMPORARY PAVEMENT.

4. PERFORM WORK ON OUTSIDE (NORTH AND SOUTH) PIERS FOR GRAYTON ROAD USING SHOULDER CLOSURE (MT-95.45).
5. FOR LANE CLOSURES WITH A DURATION OF 72 HOURS OR LESS, INSTALLATION OF TEMPORARY PAVEMENT MARKINGS IS NOT REQUIRED.



NOTE: SEE SHEET 29 FOR ADVANCE SIGNING DETAILS.

LEGEND	
(SL) - STOP LINE	[Symbol] 32" PORTABLE CONCRETE BARRIER
(CL) - CENTERLINE; DOUBLE SOLID	[Symbol] AREA TO BE CONSTRUCTED
(CH) - CHANNELIZING LINE	[Symbol] TEMPORARY PAVEMENT
(LL) - LANE LINE	[Symbol] DRUMS SPACED AT 40' C/C (UNLESS NOTED OTHERWISE)
(EW) - EDGE LINE, WHITE	[Symbol] * - IMPACT ATTENUATOR WITH OBJECT MARKER OMI-1-18
(EY) - EDGE LINE, YELLOW	[Symbol] → - MAINTAINED TRAFFIC
(LA) - LANE ARROW	
(TL) - TRANSVERSE LINE (UNLESS OTHERWISE SPECIFIED)	
(DW) - DOTTED LINE, WHITE	
(DY) - DOTTED LINE, YELLOW	



MAINTENANCE OF TRAFFIC - PHASE A

I-480

25
114

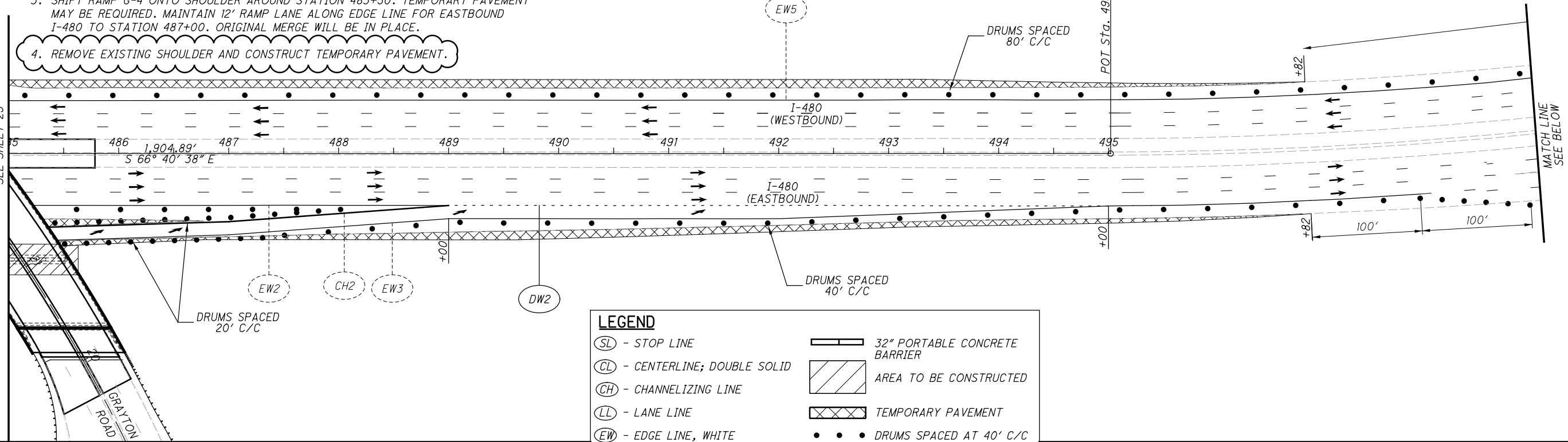
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PHASE A MAINTENANCE OF TRAFFIC (I-480)

1. CLOSE RIGHT LANE IN EACH DIRECTION ON I-480 WITHIN PERMITTED LANE CLOSURE TIMES, MAINTAINING THREE LANES IN EACH DIRECTION.
2. CLOSE A PORTION OF THE WESTBOUND RAMP G-3 EXIT LANE FROM STATION 485+50 TO 482+00. EXIT RAMP WILL REMAIN OPEN. CONSTRUCT OUTSIDE (RIGHT) PIER.
3. SHIFT RAMP G-4 ONTO SHOULDER AROUND STATION 483+50. TEMPORARY PAVEMENT MAY BE REQUIRED. MAINTAIN 12' RAMP LANE ALONG EDGE LINE FOR EASTBOUND I-480 TO STATION 487+00. ORIGINAL MERGE WILL BE IN PLACE.
4. REMOVE EXISTING SHOULDER AND CONSTRUCT TEMPORARY PAVEMENT.

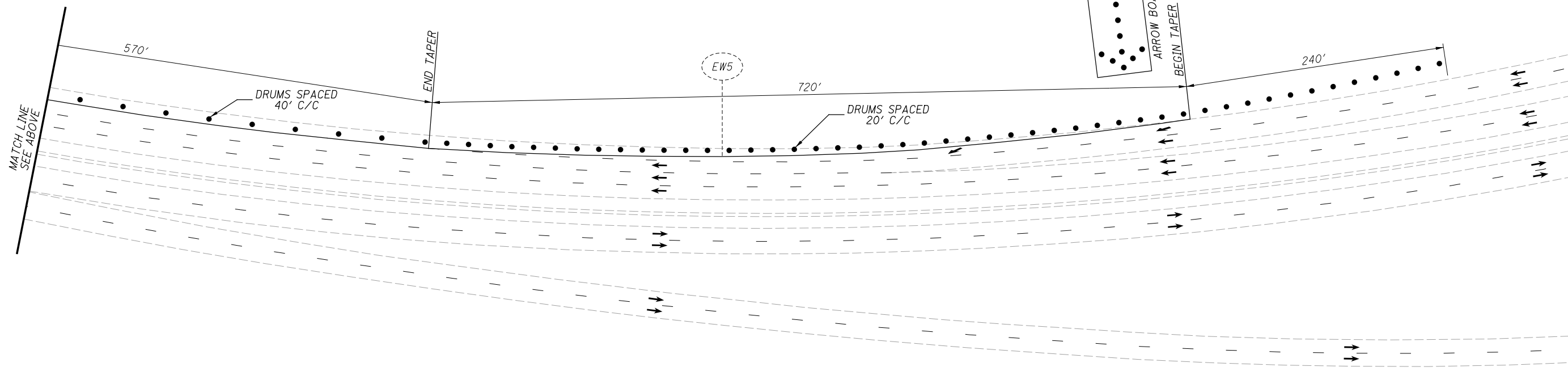
4. PERFORM WORK ON OUTSIDE (NORTH AND SOUTH) PIERS FOR GRAYTON ROAD USING SHOULDER CLOSURE (MT-95.45).
5. FOR LANE CLOSURES WITH A DURATION OF 72 HOURS OR LESS, INSTALLATION OF TEMPORARY PAVEMENT MARKINGS IS NOT REQUIRED.

MATCH LINE STA. 485+00
SEE SHEET 25



LEGEND

(SL) - STOP LINE	[Symbol] 32" PORTABLE CONCRETE BARRIER
(CL) - CENTERLINE; DOUBLE SOLID	[Symbol] AREA TO BE CONSTRUCTED
(CH) - CHANNELIZING LINE	[Symbol] TEMPORARY PAVEMENT
(LL) - LANE LINE	[Symbol] DRUMS SPACED AT 40' C/C (UNLESS NOTED OTHERWISE)
(EW) - EDGE LINE, WHITE	[Symbol] * - IMPACT ATTENUATOR WITH OBJECT MARKER OMI-1-18
(EY) - EDGE LINE, YELLOW	[Symbol] => - MAINTAINED TRAFFIC
(LA) - LANE ARROW	
(TL) - TRANSVERSE LINE (UNLESS OTHERWISE SPECIFIED)	
(DW) - DOTTED LINE, WHITE	
(DY) - DOTTED LINE, YELLOW	



CALCULATED LJS
CHECKED MSD

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HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC - PHASE A
I-480

CUY - 480 - 07.27

NOTE: SEE SHEET 29 FOR ADVANCE SIGNING DETAILS.

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