

PENNDOT DISTRICT 8-0

GUIDELINES FOR PREPARING AND REVIEWING TRAFFIC CONTROL PLANS (TCP), SIGNING AND PAVEMENT MARKING PLANS (SPMP), AND ITEM NO. 0901-0001 MAINTENANCE AND PROTECTION OF TRAFFIC SPECIAL PROVISION (MPT NARRATIVE)

THESE GUIDELINES ARE CONSTANTLY BEING REVIEWED AND UPDATED - BE CERTAIN YOU HAVE THE CURRENT VERSION BEFORE STARTING WORK.

A) THE FOLLOWING GUIDELINES APPLY FOR PREPARING AND REVIEWING TCP (IF NECESSARY OR DIRECTED), SPMP, AND/OR MPT NARRATIVES:

- 1) Plans presentation of TCPs and SPMPs must follow DM-3 where applicable unless otherwise specified herein.
- 2) For projects on interstates and interstate look-a-likes, the TCP should have the PATA 5 Modified, PATA 18 Modified, PATA 21 Modified, PATA 22 Modified for all lane/shoulder closures as necessary and these Traffic Control Plan modified PATAs should be referenced in the MPT narrative, not the Publication 213 PATAs.
- 3) For projects on interstates and interstate look-a-likes, changeable message signs are required. Be certain to include item numbers/quantity in the TCP separate pay items tabulation and the following in the MPT narrative: CHANGEABLE MESSAGE SIGNS (PAID UNDER ITEM 0901-0205) WILL BE USED AT VARIOUS LOCATIONS ON THE PROJECT AND OUTSIDE THE PROJECT LIMITS AS INDICATED IN THE TRAFFIC CONTROL PLAN AND/OR AS DIRECTED. PROVIDE AN EXPERIENCED PERSON TO PROGRAM AND MOVE THE MESSAGE SIGNS AS INDICATED OR DIRECTED.
- 4) Be certain that the quantity of changeable message signs, additional traffic control signs is enough to meet the project needs given the location and size of the project. The message to be placed on the message signs must be indicated in the TCP or the MPT narrative. Message must be less than 3 screens of information of 8 alphanumeric characters maximum per line and 3 lines per screen.

- 5) For projects involving interstates only, be certain that the TCP contains separate pay items (special provisions) for Speed Display signs (Item no. 9901-0012) and Citizen's Band Traffic Alert Radios (Item no. 9901-0015). The MPT narrative should specify that these are to be installed at the project limits or at another acceptable location depending on the project.
- 6) All lane lines/skip lines on multilane highways must be 6 inches wide as per Pub 408 - Section 901.3 (k) on the TCP and SPMP. This includes all temporary and final markings.
- 7) Be certain that up-to-date publication references are used in the MPT narrative, TCP, and SPMP.
- 8) The District does not use Type C lights. Eliminate any separate pay items for additional warning lights, Type C in the TCP and any mention of Type C lights in the MPT narrative.
- 9) The District does not use Type B lights with the exception of the following:
 - a) All R1-1 temporary stop signs require a red Type B light.
 - b) All R1-2 temporary yield signs require a yellow Type B light.
 - c) All W21-19 active work zone signs require a white Type B light.
- 10) Pay items for guiderail mounted delineators on new guiderail and Type WZ temporary concrete barrier mounted delineators are not necessary – they are already included in contracts by District standard special provision inserted by District Contract Management Unit.
- 11) Verify all sign sizes, nomenclatures, and sign legends with Publication 236M Jan 2006 Edition.
- 12) Do not repeat information in the TCP or MPT narrative that can be found in Department publications and standard drawings. Instead, provide reference to the publications or standard drawings in the TCP or MPT if necessary.
- 13) Do not repeat any information in the TCP that is already in MPT narrative and vice versa.
- 14) Information in the MPT narrative must not conflict with information in the TCP and vice versa.
- 15) Keep the MPT narrative and TCP pertinent to the project – do not include “just in case” information.

B) THE FOLLOWING GUIDELINES APPLY FOR PREPARING AND REVIEWING MPT NARRATIVES:

- 1) All MPT narratives must begin with the following:
“IN ACCORDANCE WITH SECTION 901 AND AS FOLLOWS:”

- 2) After that, any times when lane closures will be permitted should be indicated. If there is less than 5,000 ADT, no lane closure times are necessary. However, whether a lane or lanes are permitted to be closed short-term or long-term should be indicated. If long-term closures are allowed on multilane roadway the number of calendar days for the closure should be indicated as applicable.
- 3) The following are general guidelines to determine when lane closures will be permitted based solely on Average Daily Traffic (ADT) alone in the absence of any other project information. Considerations such as noise from night work in residential areas (consult with the local government officials), local traffic volume fluctuations, types of construction operations, and/or the amount of time necessary to complete a construction operation will play a factor in determining the exact lane closure hours for a particular project. The exact lane closure hours provided in the MPT narrative should be based on Design Field View discussions for a specific project site and evaluated on a case-by-case basis.

To determine the times when short-term lane closures will be permitted using the Average Daily Traffic (ADT) for the project, if ADT in both directions for 2 or 3 lane highways or in one direction if a multilane highway is greater than 5,000 but less than 10,000, no lane closures will be allowed between 6 am and 9 am. If the ADT as defined above is greater than 10,000 but less than 20,000 no lane closures will be allowed between 6 am and 9 am and between 3 pm and 6 pm. If the ADT as defined above is over 20,000, lane closures will not be allowed between 6 am and 9 pm.

- 4) If the project involves a detour/closure of a roadway, this should be indicated after the times when lane closures are permitted along with the number of calendar days or exact dates (for example, dates during the school summer break) for the detour/closure.
- 5) The following should be included in the MPT narrative underneath the lane closure permission times for interstates and interstate look-a-like projects:
"ROAD USERS LIQUIDATED DAMAGES, AS SPECIFIED IN THE SPECIAL PROVISIONS, WILL BE CHARGED FOR EACH HOUR OR PART OF AN HOUR THAT LANES ARE NOT OPEN TO UNRESTRICTED TRAFFIC FLOW FOR THE TIMES SPECIFIED HEREIN."
- 6) For road closures/detours, the following should be included in the MPT narrative underneath the sentence indicating the number of calendar days and/or the dates that the roadway will be permitted to be closed to traffic:
"ROAD USERS LIQUIDATED DAMAGES, AS SPECIFIED IN THE SPECIAL PROVISIONS, WILL BE CHARGED FOR EACH DAY OR PART OF A DAY THAT THE ROADWAY IS NOT OPEN TO

UNRESTRICTED TRAFFIC FLOW FOR THE TIMES SPECIFIED
HEREIN.”

- 7) For MPT narratives for projects on interstates or interstate look-a-likes, include no lane closures on holidays as follows:

Easter	- April 5, 2007 at 6 a.m. until April 9, 2007 at 9 p.m. - March 20, 2008 at 6 a.m. until March 24, 2008 at 9 p.m. - April 9, 2009 at 6 a.m. until April 13, 2009 at 9 p.m. - April 1, 2010 at 6 a.m. until April 5, 2010 at 9 p.m.
Memorial Day	- May 25, 2007 at 6 a.m. until May 29, 2007 at 9 p.m. - May 23, 2008 at 6 a.m. until May 27, 2008 at 9 p.m. - May 22, 2009 at 6 a.m. until May 26, 2009 at 9 p.m. - May 28, 2010 at 6 a.m. until June 1, 2010 at 9 p.m.
Independence Day	- June 29, 2007 at 6 a.m. until July 5, 2007 at 9 p.m. - July 3, 2008 at 6 a.m. until July 7, 2008 at 9 p.m. - July 2, 2009 at 6 a.m. until July 6, 2009 at 9 p.m. - July 2, 2010 at 6 a.m. until July 6, 2010 at 9 p.m.
Labor Day	- August 31, 2007 at 6 a.m. until Sept. 4, 2007 at 9 p.m. - August 29, 2008 at 6 a.m. until Sept. 2, 2008 at 9 p.m. - Sept. 4, 2009 at 6 a.m. until Sept. 8, 2009 at 9 p.m. - Sept. 3, 2010 at 6 a.m. until Sept. 7, 2010 at 9 p.m.
Thanksgiving	- Nov. 20, 2007 at 6 a.m. until Nov. 27, 2007 at 9 p.m. - Nov. 25, 2008 at 6 a.m. until Dec. 2, 2008 at 9 p.m. - Nov. 24, 2009 at 6 a.m. until Dec. 1, 2009 at 9 p.m. - Nov. 23, 2010 at 6 a.m. until Nov. 30, 2010 at 9 p.m.
Christmas/New Years	- Dec. 20, 2007 at 6 a.m. until Jan. 2, 2008 at 9 p.m. - Dec. 23, 2008 at 6 a.m. until Jan. 5, 2009 at 9 p.m. - Dec. 23, 2009 at 6 a.m. until Jan. 4, 2010 at 9 p.m. - Dec. 23, 2010 at 6 a.m. until Jan. 4, 2011 at 9 p.m.

Eliminate any dates that are not necessary given the amount of contract time. It is not necessary to include any other holidays such as Presidents Day, Columbus Day, Veteran’s Day, etc.

- 8) If there is a winter shutdown for the project when no work, lane shifts, lane closures, or other traffic restrictions will be permitted, include the dates for the winter shutdown in the MPT narrative.
- 9) For short-term lane closures on interstates and interstate look-a-likes, be certain to specify a maximum lane closure length of 3 miles.

- 10) If there are any special events when lane closures are not allowed, specify exact dates in the MPT narrative.
- 11) For projects on interstates and interstate look-a-likes, use vertical panels for channelizing devices with the exception of those used in a taper.
- 12) For projects on interstates and interstate look-a-likes, use collapsible single-unit arrow indicator type channelizing devices with approved fluorescent orange prismatic retro-reflective sheeting in a mainline taper.
- 13) For all projects, the MPT narrative must specify using approved prismatic retroreflective sheeting on all channelizing devices, barricades, and signs. Eliminate the mentioning of sheeting types from anywhere else but in the MPT narrative.
- 14) For projects involving milling, require in the MPT narrative that the contractor pave over milled surfaces within seven days of milling.
- 15) For all projects using hot thermoplastic for legends, cross-walks, stop bars, etc. require that the contractor place the hot-thermoplastic markings with seven days of completion of the final wearing surface.
- 16) For projects that involve flagging in signalized intersections, require that the contractor place the signals on flash in cooperation with the local municipality. Indicate that the contractor is required to contact the local municipality one week in advance of placing signal on flash.
- 17) If temporary signals are used, a statement that all signal heads that are not applicable during any stage of construction must be covered. The covers must prevent motorists from viewing the signal heads.
- 18) For detours that do not have a TCP that are specified in the MPT narrative only, be certain reference is made to Pub 213 PATA 39a (numbered routes), or PATA 39b (unnumbered routes) along with advance left and advance right turn signs at all intersections where traffic is required to turn to follow the detour route.
- 19) For all detours whether specified alone in a MPT narrative or indicated on a TCP, be certain that “pull through” signs are used at any side roads with greater than 5,000 ADT or at signalized intersections where traffic is required to proceed straight ahead. Also be certain that “pull through” signs are provided at one mile intervals along the detour route. Verify that the detour route given in the narrative will work given the location of the road closure.
- 20) For detours, be certain that the MPT narrative provides the contact names as applicable and telephone numbers for the following people to be contacted 2 weeks prior to the closure:

- a) Local municipalities
 - b) Local Police and/or State Police
 - c) Fire Departments
 - d) County Control
 - e) Post Office
 - f) School District Transportation Coordinator
 - g) District 8-0 Special Hauling Permits Office (tel. 717-787-5918)
 - h) District 8-0 Community Relations Coordinator (tel. 717-787-1446)
- 21) For detours, be certain that either the MPT narrative or the TCP specifies that a W23-1 "THIS ROADWAY TO BE CLOSED FOR CONSTRUCTION <DATE>" sign, 96" x 48" is installed 10 days prior to closing the roadway to through traffic.
- 22) Verify that the Pub 213 PATAs referenced in the MPT narrative are appropriate given the cross-section of the roadway. Eliminate any unnecessary PATAs or add any necessary PATAs.
- 23) Be certain that a reference to Act 229 signs/devices (R22-1, W21-19, W21-20 and the flashing white lights) is included in the MPT narrative only for all projects in which the Act 229 signs/devices are required as per Publication 213. (Note: These signs need not be shown on the TCP if proper reference is made in the MPT narrative). Wording should be as follows:
- INSTALL AND OPERATE ALL SIGNING, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES AS PER PUBLICATION 212 SUBCHAPTER E SUBSECTION 212.419 "SPECIAL CONTROLS IN WORK ZONES" AND PUBLICATION 213 ACT 229 GUIDELINES. ALSO, COMPLY WITH INFORMATION IN PUBLICATION 236M JANUARY 2006 EDITION FOR THE R22-1, W21-19, AND W21-20 SIGNS.
- If the project is one in which the Act 229 signs and devices are not required as per Publication 213, **DO NOT** mention or show Act 229 signing in the TCP or MPT narrative.
- 24) Be certain that orange reflective fencing is required around all excavations or other hazards to delineate for pedestrians.
- 25) Place this paragraph in all MPT Narratives:
- PROVIDE A CONSECUTIVE NUMBERED IDENTIFICATION SIGN ON ALL SIGNS USED FOR MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION. PLACE NUMBERED IDENTIFICATION SIGN ON MAIN SIGN POST FACING ONCOMING TRAFFIC. PROVIDE SIGNS OF WEATHER RESISTANT MATERIAL SUCH AS PLASTIC OR METAL WITH A CONTRASTING COLOR FOR NUMBERS. MAKE IDENTIFICATION SIGN APPROXIMATELY 6" X 4" WIDE WITH A LEGEND HEIGHT SUFFICIENT TO BE SEEN FROM THE ROADWAY.

RECORD IDENTIFICATION NUMBERS ON DEPARTMENT'S FIELD PLANS FOR REFERENCE IN CASE OF ANY REQUIRED REPAIRS.

C) THE FOLLOWING GUIDELINES APPLY FOR PREPARING AND REVIEWING TCPs (****THIS SECTION APPLIES ONLY IF A TCP IS NECESSARY OR DIRECTED – THE PROJECT REQUIREMENTS AND LEVEL OF DETAIL REQUIRED FOR TCPs WILL BE DEFINED BY EACH DESIGN TEAM****):

- 1) The following are the suggested general notes to be used on the Traffic Control Plan. Eliminate or modify any notes that are not applicable or that do not pertain to the project. Add any notes that may be necessary.

GENERAL NOTES:

THIS WORK CONSISTS OF THE MAINTENANCE AND PROTECTION OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND,

1. THE SPECIAL PROVISIONS OF THE CONTRACT.
2. THE MUTCD.
3. PUBLICATION 212, OFFICIAL TRAFFIC CONTROL DEVICES, SUB-CHAPTER E.
4. PUBLICATION 213, WORK ZONE TRAFFIC CONTROL GUIDELINES.
5. PDT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15).
6. PUBLICATION 408, SPECIFICATIONS.

THE INSPECTOR-IN-CHARGE WILL INSPECT ALL TRAFFIC CONTROL DEVICES PRIOR TO THE START OF WORK AND PERIODICALLY DURING THE LIFE OF THE PROJECT.

THESE PLANS HAVE BEEN REVIEWED AND ARE IN COMPLIANCE WITH STANDARDS PRESCRIBED IN CHAPTER 212 OF THE 67 PA CODE AS CURRENTLY AMENDED. YOU ARE REMINDED THAT THIS APPROVAL IS NOT INTENDED TO RELIEVE YOU OF THE RESPONSIBILITY FOR THE PROTECTION OF THE PUBLIC AND THE CONSTRUCTION PERSONNEL. THE STANDARDS PRESCRIBED ARE MINIMUM AND ADDITIONAL PROTECTION MAY BE NEEDED IF PROBLEMS ARE ENCOUNTERED

DURING THE TERM OF THE CONTRACT. CONSTANTLY REVIEW THIS PLAN FOR THE ADEQUACY AND RECOMMEND CHANGES FOR DEPARTMENT APPROVAL WHEN INADEQUACIES ARE DISCOVERED.

THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY AS SPECIFIED IN SECTION 901.3a OF PUBLICATION 408 (CURRENT VERSION).

NOTIFY THE DISTRICT TRAFFIC ENGINEER AT LEAST TWO WEEKS PRIOR TO MODIFYING EXISTING TRAFFIC PATTERNS. ALL MODIFICATIONS MUST BE APPROVED BY THE DISTRICT.

ALL MATERIALS ARE TO CONFORM TO PADOT PUBLICATION 408 (CURRENT VERSION), THE SUPPLEMENTS THERETO AND TRAFFIC CONTROL STANDARDS (PENNDOT PUBLICATION 111M).

ALL WORK IS TO BE PERFORMED WITHIN LEGAL RIGHT-OF-WAY.

ALL SIGNS AND TRAFFIC CONTROL DEVICES ARE TO BE IN NEW CONDITION AND MAINTAINED AS SUCH.

ALL ADVANCE WARNING SIGNS AND CHANNELIZING DEVICES MAY BE ADJUSTED BACK OR FORWARD DUE TO INTERSECTING STREETS, DRIVEWAYS, ETC., AND/OR AS FIELD CONDITIONS DICTATE.

REMOVE ANY CONFLICTING PAVEMENT MARKINGS IN A MANNER APPROVED BY THE ENGINEER AND REPLACE UPON COMPLETION OF THE PROJECT.

IMMEDIATELY UPON COMPLETION OF THE WORK REMOVE THE TRAFFIC CONTROL DEVICES. THE DEPARTMENT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY DEPARTMENT FORCES.

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- 2) Each individual plan sheet must include a legend.
 - 3) The first sheet of the TCP must have recommended signature blocks for the District Traffic Engineer and ADE-Construction along with the seal and signature of the Professional Engineer that prepared the TCP. Additional sheets must have the seal and signature of the Professional Engineer that prepared the TCP.
 - 4) The District does not use W13-1 advisory speed plaques below warning signs.
 - 5) The District requires that reduced regulatory work area speed limit signs, R2-2-2, be used on interstate and interstate look-a-like projects as per the Publication 212 Subchapter E regulations during lane closures only. Design

barrier flare rates and taper lengths based on the normal speed limit for the roadway existing prior to construction, not the work area speed limit. Spacing of channelizing devices is based on the work area speed limit. Avoid using reduced regulatory speed limits on projects other than interstate and interstate look-a-like projects that involve lane closures.

- 6) Use appropriate temporary concrete barrier flare rates as per the RC-standard and indicate the flare rate on the TCP. If the blunt end of the barrier cannot be buried in a cut slope, use a Type V or Type VI attenuator. A type V attenuator needs approximately 2.5' of width and 30' of length to be installed. A type VI attenuator needs approximately 8' of width and 30' of length to be installed. If in an unpaved area, use Type VI. If used on pavement sufficient to anchor the attenuator, use Type V. Any other type of temporary impact attenuator other than Type V or VI is not acceptable and should be changed to the appropriate type. The TCP must provide for contractor access behind the barrier. If blunt end of barrier is located outside of the DM-2 clear zone and cannot be buried in a cut slope, show a sloped end section on the end of the barrier on the TCP. Be certain to follow all applicable RC-Drawings, DM-2, and AASHTO Roadside Design Guide requirements when connecting temporary concrete barrier to existing guiderail.
- 7) Verify that the TCP meets or exceeds the requirements of Publication 213.
- 8) The District prefers that typical sections are included on the plan sheet to which the typical section applies. Typical sections should include the following information:
 - a) station limits for which the typical section applies
 - b) existing (in slanted text) and proposed (in vertical text) pavement marking labels
 - c) channelizing devices and/or concrete barrier as appropriate
 - d) traffic flow arrows
 - e) clearly defined work areas
 - f) lane width requirements
 - g) pavement types (temporary, proposed, existing)
- 9) Include minimal information (speed limit and taper dimensions) for all lane shifts and tapers shown on the TCP.
- 10) Identify locations of temporary pavement markings, traffic flow arrows, temporary concrete barrier, arrow panels, changeable message signs, attenuators, etc. on the plan sheets.
- 11) Identify in the legend the symbols used on plans and the typical sections – be certain that the symbols used in the legend match the plan and/or typical sections and vice versa.
- 12) Details for special fabricated signs for temporary traffic control are not necessary. However, overall sign dimensions must be in the Item no. 0901-

0001 tabulation as well as the size, color and font of the legend and the sign message. Also, include the color of the sign background.

- 13) Use structure mounted concrete barrier at locations as per the BC standards.
- 14) Verify that item numbers, quantities, item descriptions, etc. are correct and that all appropriate separate pay items in Pub 408 Section 901 are included to construct the project as per the TCP and MPT narrative. All other Traffic Control Devices that are tabulated on the TCP that are not separate pay items in Pub 408 Section 901 should be tabulated in a table under the heading "ITEM NO. 0901-0001 - FOR INFORMATION ONLY". The tabulation of items that are incidental to the LS Item no. 0901-0001 must be on the first sheet of the traffic control plan along with the general notes. If there are too many items to list on the first sheet, additional sheets may be used as necessary.
- 15) Items for any temporary pavement must be in a separate tabulation and are separate pay items. Do not include temporary pavement in the lump sum tabulation.
- 16) For projects involving stage construction, be certain that the initial pavement marking removal for staged construction uses the S.F. item for removal, not the L.F. items. The existing line painting that has to be removed to establish Stage 1 and/or subsequent traffic patterns may be two to three times as wide as standard because of maintaining paint lines year after year and the contractor gets paid for what he actually removes. For example, edgelines are 4 inches wide by standard but may be 8-12 inches wide due to maintaining paint lines year after year. Field view the site to verify existing paint line widths before estimating the quantity. For Stages 2, 3 and so on, the L.F. pay items may be used to remove the temporary paint from the previous stage, but not the existing paint lines. However, the S.F. pay item may be used for all stages, if preferred.

D) THE FOLLOWING GUIDELINES APPLY FOR PREPARING AND REVIEWING SPMPs:

- 1) The SPMP must have a recommended signature block for the District Traffic Engineer along with the seal and signature of the Professional Engineer that prepared the SPMP on the first sheet. Additional sheets must have the seal and signature of the Professional Engineer that prepared the SPMP.
- 2) The following are suggested notes that may be included on the SPMP. Eliminate or modify any that are not necessary or pertinent to the project. Add any notes that may be necessary.

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR RECORDING, STAKING OUT AND SUPPLYING THE INSPECTOR-IN-CHARGE WITH DOCUMENTATION OF THE EXISTING TYPE, SIZE, AND LOCATION OF ALL TRAFFIC PAVEMENT MARKINGS AND LEGENDS PRIOR TO MILLING AND/OR RESURFACING. THE INSPECTOR-IN-CHARGE WILL VERIFY THAT THIS HAS BEEN DONE BEFORE ANY MILLING OR RESURFACING BEGINS.

2. ALL STATIONS ARE APPROXIMATE.

3. REMOVE EXISTING SIGNS IN ACCORDANCE WITH PUBLICATION 408 SECTIONS 930, 931, 932, 934, AND/OR 935.

4. FINAL APPLICATION OF WHITE AND YELLOW WATERBORNE PAVEMENT MARKINGS SHALL BE AFTER COMPLETION OF ALL ASSOCIATED PROJECT ROADWAY CLEAN-UP.

5. DISASSEMBLE SIGNS AND NEATLY STOCKPILE ON A SKID AND TRANSPORT TO _____ COUNTY MAINTENANCE SHED.

6. REFERENCE TC-8600 RECOMMENDED AUGUST 30, 2004 FOR PAVEMENT MARKING DETAILS.

7. REFERENCE TC-8602 RECOMMENDED AUGUST 30, 2004 FOR SNOWPLOWABLE RAISED PAVEMENT MARKER DETAILS

8. REFERENCE TC-8604 RECOMMENDED AUGUST 30, 2004 FOR DELINEATION DETAILS

9. REFERENCE TC-8700 SERIES RECOMMENDED AUGUST 1, 1997 AND ANY CHANGES/REVISIONS FOR TRAFFIC CONTROL SIGNING STANDARDS.

10. ATTACH ANY EXISTING PARKING SIGNS, BUS STOP SIGNS, SEGMENT PADDLES, AND/OR OTHER SIGNS NOT BEING REPLACED TO NEW POST AT NO ADDITIONAL COST.

11. IN ADDITION TO THE NORMAL TRAFFIC LINES AND MARKINGS IN NOTE #1 ABOVE THE CONTRACTOR IS ALSO RESPONSIBLE FOR RECORDING, STAKING OUT AND SUPPLYING THE INSPECTOR-IN-CHARGE WITH DOCUMENTATION OF THE EXISTING PARKING STALL MARKINGS. THE CONTRACTOR WILL MARK OUT THE STALLS AS THEY EXISTED AND BEFORE PAINTING BEGINS HAVE THE LAYOUT APPROVED BY A RESPONSIBLE MUNICIPAL OFFICIAL.

12. VERIFY THE LOCATIONS OF VASCAR LINES WITH THE APPROPRIATE LOCAL POLICE DEPARTMENT BEFORE INSTALLATION.

13. PROVIDE WOOD POSTS FOR TYPE C AND TYPE E INSTALLATIONS OF SUFFICIENT LENGTH TO PROVIDE 7'-0" DISTANCE BETWEEN THE BOTTOM OF THE LOWEST SIGN PANEL ELEVATION AND THE TOP OF ADJACENT PAVEMENT ELEVATION.

- 3) Be sure that existing W8-5 SLIPPERY WHEN WET (SYMBOL) signs are tabulated for removal if the area where the W8-5 signs are located is going to be resurfaced.
- 4) Sign removals must be tabulated separately if an existing sign is not going to be replaced with a new sign at the same location.
- 5) If Adopt-A-Highway litter control signs are present within the project limits, do not replace them if located within a resurfacing project. If located in an area to be widened and the sign will need to be moved to another location, include an item and special provision to reset the existing sign panels as indicated in the SPMP.
- 6) Item no. 0901-XXXX standard pavement markings, paint & beads, need to be provided as follows:
 - a) For any temporary markings for long-term operations involving stage construction
 - b) 1 application of centerline and lane lines for any milled surfaces
 - c) 1 application of centerline and lane lines for scratch or leveling courses
 - d) 1 application of centerline markings for notch-wedge (Michigan) joint for paving projects over 1/2 mile in length
 - e) 1 application of centerline, lane lines, and edgelines for final wearing surface
- 7) The District does not use tape for standard pavement markings – use paint and beads only.
- 8) Item no. 0962-XXXX pavement markings need to be provided for longitudinal markings on the final wearing surfaces after all project cleanup (there will be ultimately 2 coats of paint on the final wearing surface – 1 with Item no. 0901-XXXX paint and 1 with Item no. 0962-XXXX paint).
- 9) Item no. 0960-XXXX hot thermoplastic markings need to be provided for all transverse markings including cross-walk lines, stop bars, and turn arrows and any other legends. Be certain that pay items are included for loop sensor if milling occurs at or near a signalized intersection.
- 10) For projects on interstates and interstate look-a-likes, use Item no. 0964-XXXX epoxy pavement markings for final longitudinal pavement markings. Use hot thermoplastic for transverse markings as per #9 above.

- 11) Check all quantities and pay items in the SPMP for correctness and accuracy.
- 12) Pay for all sign panels installed on a new Type B, C, etc. post as Type B, C, etc., not Type F. Use the Type F sign item only when a new sign panel is installed on a post existing prior to construction.
- 13) Use Type C installations, in lieu of Type B installations, when installing 2 or more route markers at a location or when installing larger size signs.
- 14) For projects on interstates and interstate look-a-likes, be certain that fabrication details designed in accordance with Pub 111M are provided for all ramp directional signs being replaced using Pub 111M (Publication 236 D-series destination signs are unacceptable). Also, provide sign fabrication details for all supplemental, major guide signing, and exit gore signs that are being replaced.
- 15) All custom D-series signs and municipality I-series signs need to have a rough layout indicating the street names and/or place names and orientation of the directional arrows to be used on the sign if only a tabulation of signs is provided in lieu of an actual signing plan.
- 16) If there is more than one sign panel to be installed at a particular station, tab the sign panels in Autotab using the station followed by a suffix of .01, .02, etc for each sign panel on the installation. For instance, a confirmation route marker for EAST US 322 located at Station 502+45 LT would be tabulated as follows:

502+45.01 LT M3-2
502+45.02 LT M1-4 (322)
- 17) All TC-standards must be followed for delineation including maintenance appurtenance delineation with the red delineator post with sheeting matching the adjacent edgeline color – use Type GM-2 item. Also, provide delineator posts for all interstates and interstate look-a-likes as per the TC-standards.
- 18) Sign quantities must be tabulated to the hundredth of a S.F. – two decimal places
- 19) For Type A signs, be certain to include the separate pay items for breakaway system (each) and Steel S or W beam posts (lbs)

**IF YOU HAVE ANY COMMENTS OR QUESTIONS,
PLEASE CONTACT PHARON E. BERTSCH OF THE DISTRICT 8-0 TRAFFIC UNIT AT
717-705-6209 OR EMAIL: pbertsch@state.pa.us**