

▶ ASHE / D9 JOINT VIRTUAL WORKSHOP

District 9 Plans Unit Update

Presented to:



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Portfolio Manager/Plans Engineer

July 13th, 2020



AGENDA

- Line, Grade and Typical Section Checklist
- ECMST Form
- District Mailbox Guidance
- Minimum Use Driveway Openings
- D9 PCSM Process
- ROW Process Improvements
- CADD Files
- Guide Rail
- Miscellaneous

▶ LINE, GRADE & TYPICAL SECTION CHECKLIST

- Complete, sign and include as the second page of the Line and Grade Submission (following approval sheet)
- District PM will verify and sign the checklist
- Organize and bookmark the submission as indicated in the LG&T Checklist

County:		SR:		Sec:		Let Date:	
Remarks/Comments:							
Signatures							
Prepared By:							
Checked By:							
Line, Grade, and Typical Section Submission							
Requirement						Yes	N/A
Project Narrative:							
<ul style="list-style-type: none"> • Project Overview • Horizontal/Vertical Alignments • Traffic Control • Design Criteria • Crash History • Location Map • Design Exceptions • Utilities • ROW Summary and Anticipated Appraisal Type (Waiver, B&A, Relocation, etc.) 							
Appendix A – Design Criteria Matrix (Include back-up plus Intersection and Driveway Sight Distance Comps) Note: There may be more than 1 matrix.							
Appendix B – Cost Estimate							
<ul style="list-style-type: none"> • Refer to District 9 Cost Estimating Guidelines 							
Appendix C – Cost Driver Analysis							
Appendix D – Bicycle and Pedestrian Checklist (with Scoping Checklist Complete)							
Appendix E – 3D Design Files Memo							
Appendix F – Signed Scoping Field View Minutes							
Appendix G – PennDOT Connects Follow Up Form							
Appendix H - Construction Plan and Cross Sections							
<ul style="list-style-type: none"> • See sections below for requirements 							

Construction Plan Requirements, Continued

Requirement	Yes	N/A
<i>Cross Sections</i>		
Existing and Proposed Surfaces		
Proposed Elevation		
Label cross slopes and cut/fill slopes		
Proposed Guiderail		
Grade Point		
Stations		
Existing and Proposed Right-of-Way Line and Easements		
Existing Utilities		
Existing Drainage		
Pavement Base Drain Locations		
Superelevation Transitions		
<i>Supplemental Plans (as needed)</i>		
Conceptual Traffic Control Plan		
Contour Grading Plan		
Drainage Plan		
Project Development Process		
Requirement	Yes	N/A
Scoping Field View Minutes Signed		
SUE Impact Form Completed		
Design Criteria Matrix Pre-Approved		
Send Line & Grade Submission to Survey Unit for Review		
Follow-up after Line & Grade Submission Approval		
Requirement		
Send Plan Sheet to Utility and Environmental Units		
Pavement Design Request		
Resubmissions:		
Requirement	Yes	No
Attach Greenlines		
Signatures		
Revised By:		
Verified By:		

ECMTS FORMS IN ECMS

- Excel matrix and Word signature ECMTS documents are replaced with ECMTS in ECMS
- District Environmental Unit will populate mitigation measures from the CE, Permit, etc. into ECMS
- Required for all lettings beginning September 17, 2020
- Consultants will draft responses to mitigations in ECMS
- Your firm's BP Security Administrator must add the [\$ECMSBP CONSULTANT MITIGATION ENTRY] role to staff

ECMTS FORMS IN ECMS

The screenshot shows the top navigation bar of the ECMS system. The main header includes the Pennsylvania Department of Transportation logo, the ECMS logo, and the text "ENGINEERING AND CONSTRUCTION MANAGEMENT SYSTEM". Below this is a secondary navigation bar with links for "Business Partner", "Solicitation", "Engineering Agreements", "Construction Projects", "References", "Administration", "Work Queue", and "Bidding Help". A dropdown menu is open under "Construction Projects", listing "Projects", "Estimates", "Work Orders", "Site Activities", "Source of Supply", "Certifications", "Visual Site Inspections", "Mitigation", and "Resources". The "Mitigation" option is highlighted with a red circle. The background of the page features a collage of construction-related images.

The screenshot shows the "ECMTS PORTAL" section of the ECMS system. It features a search bar with the text "ECMTS Search" and a "GO" button. Below the search bar, there are two search options: "Show Mitigation for Project:" and "Create Mitigation for Project:", each with an input field and a "GO" button. The "Show Mitigation for Project:" option is circled in red. At the bottom of the page, there is a login status message: "You are currently logged in as John A. Ames. If this is incorrect, please [login](#). Your session will timeout in 29 minutes." The footer contains release and session information: "Release: 72.0 Session size: 0.1k" and copyright information: "PennDOT | Home | Site Map | Help | Pennsylvania Copyright © 2009 Pennsylvania Department of Transportation. All Rights Reserved. PennDOT Privacy Policy".

ECMTS FORMS IN ECMS

Back New Delete Push to PDC Help

MITIGATION ITEMS

Project: 13 **Go** Municipal / PENNDOT Oversight NHS Design

Short Description: Test - Notarangelo
 County: Dauphin
 District: 99

SR: 0000
 Group ID: Test

Org Code: 4300
 Section: ---
 Municipality: HARRISBURG

Mitigation Tracking Matrix List

Filter: MPMS **Go** Status: Pending Mitigation to Publish

Records 1 to 2 of 2 Page 1 of 1 Records Per Page: 100

Activity Description	MPMS	Activity Status	Activity Phase	Resource Category	PS&E Reference	Start Date	End Date	Spec Prov
Do not stage in the public park adjacent to the project area. It is a Section 4(f) resource.	13	Active	Final Design	Land - Parks (including recreation grants)	Park location noted on E&S Plan			
Do not work in the stream from March 6 through June 30, 2020.	13	Active	Final Design	Aquatic Resources - Streams	E&S Plan	03/06/2020	06/30/2020	

Records 1 to 2 of 2 Page 1 of 1 Records Per Page: 100

Back Delete Help

MITIGATION ITEM DETAIL

Project: 13 Municipal / PENNDOT Oversight NHS Design

Short Description: Test - Notarangelo
 County: Dauphin
 District: 99

SR: 0000
 Group ID: Test

Org Code: 4300
 Section: ---
 Municipality: HARRISBURG

Mitigation Detail

EDIT

ECMS: 13
 MPMS: 13

Activity Type: Avoidance / Minimization during construction
 Do not stage in the public park adjacent to the project area. It is a Section 4

Activity Description: (f) resource.

Activity Status: Active
 Activity Phase: Final Design
 Source Document: CE Evaluation
 Resource Category: Land - Parks (including recreation grants)
 Specific Resource Impacted: Anytown Park
 Describe Impact: N/A

Begin Station: 10-135
 End Station: 10-140
PS&E Reference: Park location noted on E&S Plan
 Special Provision (LINK):

ECMTS FORMS IN ECMS

- Add the following note to all Construction Plans
"Contractor must comply with the environmental commitments and mitigation for this project described in the Environmental Commitments and Mitigation Tracking System (ECMTS) and complete the ECMTS Signature Sheet of this contract."
- Eliminates the need to copy notes from the ECMTS onto the construction plans
- The permitting agency may require more descriptive notes be added to the construction plans

DISTRICT MAILBOX GUIDANCE

- Projects with guiderail installation/reset, ditch grading, drainage or minor widening, cross slope adjustment, raising the profile, etc., the contractor will notify the property owner to relocate mailbox
- Projects where construction activities require the mailbox to be placed in a different or temporary location due to widening, multi-year projects, long term traffic control, etc. item & special provision #9000-1045 Temporary Mailbox Reset should be include in the plans.

▶ MINIMUM USE DRIVEWAY OPENINGS

Adhere to Title 67, Chapter 441 for newly constructed driveways or modified curbed roadways

Passenger Cars / Single Unit Trucks		
Posted Speed	Shoulder Width	Minimum Depressed Curb Opening*
< 45mph	<5'	20'
< 45mph	≥ 5'	10'
≥ 45mph	<5'	30'
≥ 45mph	≥ 5'	10'

Based on Chapter 441, Figure 7

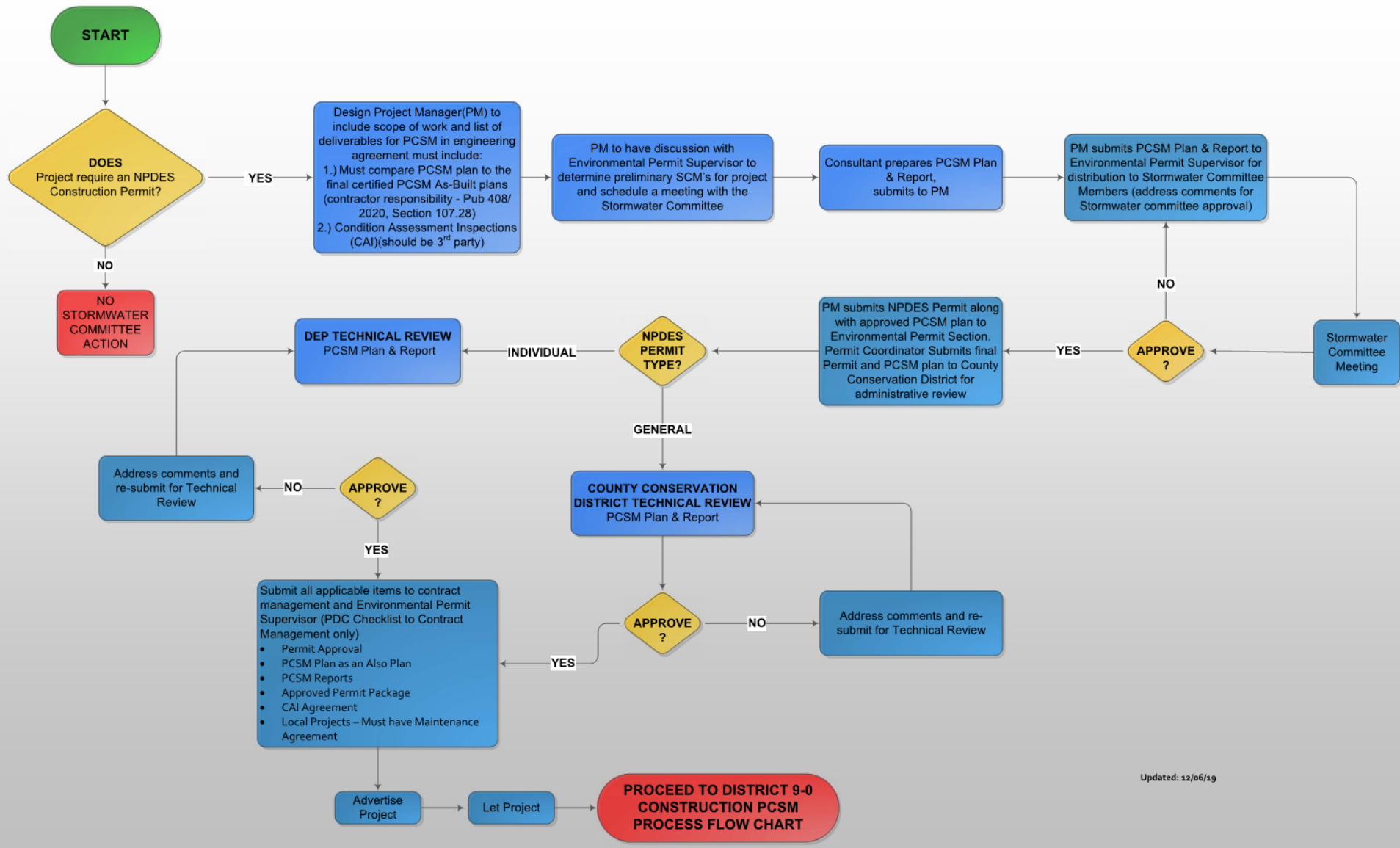
MINIMUM DRIVEWAY OPENINGS

- If larger or smaller openings are warranted due to site conditions or design vehicle, justification must be provided
 - Existing/proposed turning movements and comparison of Chapter 441 requirements and ROW impacts
 - District approval is required and documented in the DFV
- Existing driveway widths must be documented in the DFV
- Depressed curb cannot encroach onto adjacent property frontage

DISTRICT 9-0 PCSM PROCESS

- Flow charts to establish the responsibility's of the design, construction and maintenance teams in the PCSM process are available
- Any changes to the PCSM plan during design and construction require approval from the County Conservation and/or DEP

DISTRICT 9-0 DESIGN PCSM PROCESS



ROW PROCESS IMPROVEMENTS

- Timeframes for design schedule
 - Complexity will be determined at SFV and follow the District's "ROW Process for Design Schedules"
 - Corridor projects (>15 parcels): increase ROW plan development and appraisals (waivers only) by 3 months
- ROW Revision Goals
 - Three days for CADD revisions
 - Two weeks for more complex revisions
- If changes to the final ROW plan are identified, notify your PM with an explanation, impacted parcels and anticipated resubmission

MISCELLANEOUS

- Highway Lighting and Guide Rail
 - Add the District special provision to the contract for all projects that have guiderail work in the vicinity of highway lighting
 - Intent is to avoid damaging subsurface highway lighting elements.
- Recessed wet reflective pavement markings such as recessed epoxy or polyurea will not longer be used in District 9
 - 3M StaMARK Tape recessed into the pavement surface should be called for on projects requiring durable pavement markings (on skip lines)
 - Does not require proprietary item approval

CADD FILES

- For projects following minor project review guidelines, a single, consolidated .pdf of the final structure plans will be submitted
 - File to be prepared following the District 9-0 FSP Consultant Design Minor Project Guidelines
 - File to be bookmarked, fit to page and digital signatures removed
 - Ask your PM for guidelines
- Final project CADD files, in accordance with DM-3 should be submitted to your PM for archiving purposes

BRIDGE BARRIER TRANSITIONS

- When a bridge barrier is replaced as part of a project the transition is required to meet the standards that are applicable at the letting
- When a bridge barrier remains, the transition does not need to meet standards if it is in good condition, firmly attached, provides a smooth transition and eliminates potential snag point
- If the above cannot be met, the transition must be updated as much as feasible

TYPE II ATTENUATORS

- When near a utility pole remember...
 - Pole should not be within the runout path
 - If the attenuator is within the clear zone, check that opposing traffic will not be redirected into the utility pole if it is struck
- When used with curbing....
 - Recommend removing ~100 feet of curb or tapered away from the attenuator
 - Depressed curb of <math>< 2''</math> can be used



MISCELLANEOUS

- Provide a response to comments on all submissions (email or greenlines)
- Show SUE test holes on cross sections
- If you have a new PM, reach out to the District PM or manager to see how things are going
- E-mail Subject Line Format:
 - MPMS ##### | SR XXXX-XXX Project Title, County | Submission Type | FOR INFORMATION / REVIEW / APPROVAL