

VIRGINIA DEPARTMENT OF TRANSPORTATION

LOCATION AND DESIGN DIVISION

INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: Title Sheets	NUMBER: IIM-LD-204.25
SPECIFIC SUBJECT: Plan Notes and Approval Signatures on Title Sheets Highway Capital Outlay Codes Copyrights	DATE: December 12, 2016
	SUPERSEDES: IIM-LD-204.24
APPROVAL:	B. A. Thrasher, P.E. State Location and Design Engineer Approved December 12, 2016

Changes are shaded.

CURRENT REVISION

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- This memorandum was revised to update references to the Road and Bridge Standards and the CADD Cell Library.
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EFFECTIVE DATE

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- VDOT's 2016 Road and Bridge Standards are in effect on all Tier 1 projects with an advertisement date of November 22, 2016 and later (Non-Federally Eligible), December 13, 2016 and later (Federally Eligible) and Tier 2 projects with an advertisement date of February 14, 2017 and later.
 - VDOT's 2016 Road and Bridge Specifications were in effect on all projects with an advertisement date of July 1, 2016 and later.
 - Effective July 16, 2012, VDOT adopted the 2011 AASHTO Green Book.
 - VDOT Road and Bridge Standard TC-5.11 was effective on all projects with an advertisement date of August 13, 2013 and later.
 - Tier 1 and Tier 2 Title Sheets were effective on July 1, 2011.
 - The Title Sheet note referencing the updated MUTCD and Work Area Protection Manual was effective on projects advertised on or after January 2012.

NOTES ON TITLE SHEET

- The following Notes are included on the various Title Sheet cells (located in the CADD Cell Library sheet 2015.cel) in the lower left portion of the Title Sheet:
 - Cell Name **COMPLN** - THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.
 - Cell Name **DGNFEAT** - DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.
 - THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.
- For all projects:
 - ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD (see note below) EXCEPT WHERE OTHERWISE NOTED.

(Note - Show appropriate designation, TC-5.01U, TC-5.01R, or TC-5.04ULS, TC-5.11U, TC-5.11R, or TC-5.11ULS)
- For all projects:
 - THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

**CRITICAL INFRASTRUCTURE (CII) / SENSITIVE SECURITY INFORMATION (SSI)
PLAN NOTATION**

- Projects that contain information designated as CII/SSI must contain a notation on each appropriate sheet as well a note on the Title Sheet.
- The following note, available in the 2015.cel CADD Cell Library, is to be shown below the note that reads “THE ORIGINAL APPROVED TITLE SHEET(S)” on the Project Title Sheet of CII/SSI projects:

PORTIONS OF THESE PLANS CONTAIN CRITICAL INFRASTRUCTURE INFORMATION/SENSITIVE SECURITY INFORMATION (CII/SSI). UNAUTHORIZED RELEASE OR REPRODUCTION OF THESE DOCUMENTS MAY RESULT IN CIVIL PENALTY OR OTHER ACTION.

- The following note, available in the sheet 2015.cel CADD Cell Library, is to be shown on each plan sheet containing CII/SSI:

**— RESTRICTED —
Critical Infrastructure Information
Sensitive Security Information**

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA

- The Functional Classification, Design Traffic Volumes, etc., are to be placed directly under the project number block as shown in the following example:

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA			
a) RURAL MINOR ARTERIAL-DIVIDED-ROLLING-55 MPH MIN. DESIGN SPEED			
	Fr: Rte. 1	Fr: Rte. 640	Fr: Rte. 660
	To: Rte. 640	To: Rte. 660	To: Rte. 301
b)ADT 2015	1840	2700	4180
c)ADT 2037	5080	7320	11300
d)DHV	620	790	1140
e)D (%) (design hour)	55	58	58
f) T (%) (design hour)	5	5	5
g) V (MPH)	*	*	*

* See Plan and Profile Sheets for horizontal and vertical curve design speeds.

Explanations of the foregoing abbreviations:

- a) Road Functional Classification and Minimum Design Speed for this classification.
 - b) ADT = Current Year (existing) Average Daily Traffic (for informational purposes and Maintenance of Traffic)
 - c) ADT = Design Average Daily Traffic anticipated in the Design Year (See Form LD-104).
 - d) DHV = Design Hour Volume
 - e) D = Directional Distribution Factor (%) for design hour
 - f) T = Percent of trucks (2 axles – 6 tires/3 axles or more) for design hour
 - g) V = Design Speed (As shown on the plans by the Location and Design Division to determine the posted speed limit and/or the advisory speed.)
- The following note(s) shall be placed under the Functional Classification and Traffic Data block (when applicable):
 - NOTE: THESE PLANS WERE DESIGNED IN ACCORDANCE WITH VIRGINIA RRR GUIDELINES.
 - NOTE: THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE AASHTO GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT \leq 400).
 - The following notes are included on the various title sheet cells (located in the CADD cell library sheet2015.cel) in the upper left portion of the title sheet:
 - For Index of Sheets see Sheet 1B.
 - THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
 - GEOPAK Computer Identification No. (UPC number)

HIGHWAY CAPITAL OUTLAY CODES

- As part of the cooperative effort between the Federal Highway Administration and VDOT an annual project expenditure data report stratified by the area, Functional Classification, Federal-aid system, and type of improvement was developed.
- All projects shall have a five (5) digit number assigned. No project will be open to accept charges until funding allocations have been verified. The number is to be shown on the title sheet in the upper right-hand corner to the left of the project number block.
- The FHWA 534 Data number is assigned by the Project Sponsor and reviewed by the DPEM or DPIM during Project Initiation and verified / updated during scoping by the Project Manager and Scoping Team as necessary.
- Instructions for code assignments are shown as taken from the Highway Capital Outlay Code Manual.

FHWA 534 CODES

Digit 1 – Area Location – This item is used to identify the type of area in which the roadway is located. Roadway location information is available using the Virginia State Map at:

<http://www.arcgis.com/home/item.html?id=3eca6c9adb6649c988d98734f85baddb>

Population information is available at:

<http://www.census.gov/quickfacts/table/PST045216/00>

Note: Towns are included within the drop-down menu for cities.

CODE	DESCRIPTION
1	Rural
2	Small Urban (Population of 5,000 to 49,999)
3	Urbanized (Population of 50,000 to 199,999)
4	Urbanized (Population of 200,000 and Over)

Digit 2 – Functional Class – This item is used to identify the Functional Classification of the roadway. This information is available at the following web site:

http://www.vdot.virginia.gov/projects/fxn_class/home.asp

Note:

All functional classification categories now exist in both urban and rural areas.

CODE	DESCRIPTION	GEOMETRIC STANDARDS	
		Rural	Urban
1	Interstate	GS-1	GS-5
2	Freeway and Expressway	GS-1	GS-5
3	Other Principal Arterial	GS-1	GS-5
4	Minor Arterial	GS-2	GS-6
5	Major Collector	GS-3	GS-7
6	Minor Collector	GS-3	GS-7
7	Local	GS-4	GS-8

Digit 3 – Federal-Aid System – This item identifies roadways on the NHS system. This information is available at the FHWA NHS web site at:

<http://www.fhwa.dot.gov/planning/nhs/maps/va/index.htm>

CODE	DESCRIPTION
0	Non NHS
1	NHS

Digits 4-5 – Type of Improvement – Use one of the two-digit codes (01-45 available at the site below) to identify type of improvement. Each project must have the type of improvement coded, as this is a major control for expenditure reporting to FHWA. The predominant type of improvement for the project must be determined from the following and coded accordingly.

- Copyright Dates are applicable to all highway plan assemblies that require an approval signature block as follows:
 - Complete Plan Projects
 - Minimum Plan Projects
 - No Plan Projects
 - Each Bridge Title Sheet
 - Projects such as Landscaping, Lighting, Maintenance, Signs, Signals, etc. developed by a division other than Location and Design with an approval signature block.
 - Each Advance Right of Way Acquisition Sheet
 - Publications (by Location and Design), i.e. Road and Bridge Standards, Volumes I & II (each volume), Survey Manual, Drainage Manual, Road Design Manual, etc.
 - Computer Software or databases
 - Cover page of written documentation
 - Title screen of any software created

- The copyright notice shall be shown on the title sheet at the following applicable stage of development as follows:

Plan Assemblies:

- Location and Design Division's policy is to place the copyright date on the title sheet at the time the title sheet is created (usually prior to R/W stage) and this date is to be left on the sheet permanently.

Publications:

- Completion Stage prior to distribution (inside title sheet of hardbound copies)

Computer Software or databases

- The copyright notice is included upon creation of the computer program.

Example:

	RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
	DATE _____ PROGRAMMING DIVISION DIRECTOR _____
	DATE _____ STATE LOCATION AND DESIGN ENGINEER _____
	DATE _____ STATE STRUCTURE AND BRIDGE ENGINEER _____
	DATE _____ CHIEF OF PROGRAMMING AND PLANNING _____
	APPROVED FOR CONSTRUCTION
	DATE _____ CHIEF ENGINEER _____
	APPROVED
	DATE _____ DIVISION ADMINISTRATOR _____ FEDERAL HIGHWAY ADMINISTRATION U.S. DEPARTMENT OF TRANSPORTATION
REVISED	
	Copyright 20____, Commonwealth of Virginia
	PROJECT SHEET NO. 0651-080-305 /

Example:

2016 ROAD AND BRIDGE STANDARDS

Copyright 2016 COMMONWEALTH OF VIRGINIA

VDOT APPROVAL SIGNATURES ON TITLE SHEETS FOR RIGHT OF WAY AND CONSTRUCTION PROJECTS

- Consultants should always check the Sheet 2015 cell library on the VDOT FTP Server for current signature blocks.
- For **VDOT Design Bid Build** plans developed In-House and by Consultants (Tier 1 and Tier 2) instructions for obtaining approval signatures and electronic plan submittal are available at: <http://www.virginiadot.org/business/locdes/reference-guides.asp>
 - **For Tier 1 Projects - Right of Way and Construction Submittals:**
 - Title Sheet can be paper or mylar.
 - In-House and consultants shall use the cell named TIER 1 TITLE located in the sheet2015 cell library for the title sheet for each submittal.
 - **For Tier 2 Projects - Right of Way and Construction Submittals:**
 - Title Sheet will be produced by the Plan Coordination Section.
 - In-House and consultants shall use the cell named TIER 2 TITLE located in the sheet2015 cell library for the Title Sheet for each submittal.
- **For Design-Build and PPTA Projects - Right of Way Submittal:**
 - The consultant shall use the cell TITLEPPTARW located in the sheet2015 cell library for the Title Sheet for each right of way submittal.
 - * The VDOT Project Manager and PPTA Program Manager signing the title sheet shall be PE licensed in the Commonwealth of Virginia.
 - A mylar sheet with the original signatures of the Design-Build Firm Design Manager and Design-Build Firm Project Manager shall be submitted to the VDOT District Project Manager.
 - The time frame to obtain signatures is consistent with the provisions as defined in the Design-Build Contract.
 - The VDOT Project Manager and the VDOT District Construction Engineer or PPTA Program Manager will review and sign.

- The signature provided by the VDOT Project Manager constitutes that the plans have been received and are consistent with the design builder's contract, schedule, and budget. It also constitutes that all environmental and public participation requirements have been followed as set forth in the contract. The signature of VDOT District Construction Engineer or PPTA Program Manager constitutes confirmation that the plans have been received and are consistent with accepted construction industry practices and that construction impacts to the traveling public have been reviewed, assessed and fully coordinated with VDOT local offices and municipalities. The review and signature of the plans by VDOT does not constitute Quality Control (QC) or Quality Assurance (QA). The Design-Builder is responsible for performing QC and QA in accordance with Minimum Requirements for Quality Assurance and Quality Control on Design-Build and Public Private Transportation Act Projects Dated August 2008. VDOT is responsible for performing an Independent Assurance (IA) / Independent Verification (IV) review in accordance with the above defined guidance document. Signature by VDOT personnel constitutes that IA and IV has been performed.
 - The original signed mylar sheet will be submitted to the Right of Way and Utilities Division contact person. The Right of Way and Utilities Division contact person will be responsible for obtaining the additional signatures.
 - Immediately upon signing, the original signed mylar sheet will be filed in the VDOT Central Office Plan Library. The VDOT Project Manager will be notified by email that the plans have been signed (by whom and the date signed).
 - The **type written** names of the signers, and date signed (i.e. John W. Doe, signed October 29, 2003), are to then be inserted into the signature blocks of the .dgn version of the sheet. Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
 - **The electronic .dgn version of the Title Sheet will depict the latest version of the sheet.** This PDF file shall not have signatures (only typed names and dates). Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
 - **The designer will create a PDF file to be placed by the VDOT Project Manager in the Archive environment of Falcon.**
- **For Design-Build and PPTA Projects - Construction Submittals:**
 - The consultant shall use the cell TITLEPPTACON located in the sheet2015 cell library for the title sheet. For bridge projects include the sheet cell FSHT located in the BDETAILS1, which includes the additional signatures. (For additional bridge information see Structure and Bridge Manual, Volume V, Part 2 - Design Aids / Typical Details, Chapter 2: Title Sheet, Title Block, File No. 02.04-7)
 - * The VDOT Project Manager and PPTA Program Manager signing the title sheet shall be PE licensed in the Commonwealth of Virginia.

A mylar sheet with the original signatures of the Design-Build Firm Design Manager and Design-Build Firm Project Manager shall be submitted to the VDOT Project Manager.

- The time frame to obtain signatures is consistent with the provisions as defined in the Design-Build Contract.
- The VDOT Project Manager and the VDOT District Construction Engineer or-PPTA Program Manager will review and sign.
- The signature provided by the VDOT Project Manager and VDOT District Construction Engineer or PPTA Program Manager constitutes confirmation that the plans have been received and conform to the Standards, Specifications and Reference Manuals cited in the Design-Build Contract. The review and signature of the plans by VDOT does not constitute Quality Control (QC) or Quality Assurance (QA). The Design-Builder is responsible for performing QC and QA in accordance with Minimum Requirements for Quality Assurance and Quality Control on Design-Build and Public Private Transportation Act Projects Dated January 2012. VDOT is responsible for performing an Independent Assurance (IA) / Independent Verification (IV) review in accordance with the above defined guidance document. Signature by VDOT personnel constitutes that IA and IV has been performed.
- The original signed mylar sheet will be submitted to the Alternate Project Delivery (APD) office contact person. The APD contact person will be responsible for obtaining the additional signatures.
- Immediately upon signing, the original signed mylar sheet will be filed in the VDOT Central Office Plan Library. The VDOT Project Manager will be notified by email that the plans have been signed (by whom and the date signed).
- The **type written** names of the signers, and date signed (i.e. John W. Doe, signed October 29, 2003), are to then be inserted into the signature blocks of the .dgn version of the sheet. Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
- **The electronic .dgn version of the Title Sheet will depict the latest version of the sheet.** This PDF file shall not have signatures (only typed names and dates).
- Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
- **The designer will create a PDF file to be placed by the VDOT Project Manager in the Archive environment of Falcon.**

- **For Design-Build and PPTA Projects – “As-Built” Title Sheet:**

- The consultant shall use the cell TITLEPPTAAB located in the sheet2015 cell library for the As-Built Title Sheet. This Title Sheet has signature blocks for the Design-Build Firm Design Manager, Design-Build Firm Project Manager, VDOT Project Manager and the VDOT District Construction Engineer or PPTA Program Manager, Chief of Policy and Environment and the Chief Engineer. For bridge projects, include the sheet cell FSHT located in BDETAILS1, which includes the additional signatures. (For additional bridge information, see Structure and Bridge Manual, Volume V, Part 2 - Design Aids / Typical Details, Chapter 2: Title Sheet, Title Block, File No. 02.04-7).
- * The VDOT Project Manager and PPTA Program Manager signing the title sheet shall be PE licensed in the Commonwealth of Virginia.
- A mylar sheet with the original signatures of the Design-Build Firm Design Manager and Design-Build Firm Project Manager shall be submitted to the VDOT Project Manager.
- The time frame to obtain signatures is to be consistent with the provisions as defined in the Design-Build Contract.
- The VDOT Project Manager and the VDOT District Construction Engineer will review and sign.
- The original signed mylar sheet will be submitted to the Alternate Project Delivery (APD) office contact person. The APD contact person will be responsible for obtaining the additional signatures.
- Immediately upon signing, the original signed mylar sheet will be filed in the VDOT Central Office Plan Library. The VDOT Project Manager will be notified by email that the plans have been signed (by whom and the date signed).
- The **type written** names of the signers, and date signed (i.e. John W. Doe, signed October 29, 2003), are to then be inserted into the signature blocks of the .dgn version of the sheet. Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
- **The electronic .dgn version of the Title Sheet will depict the latest version of the sheet.** This PDF file shall not have signatures (only typed names and dates).
- Any scanned signatures (inserted into a .dgn file or attached as a reference file to any .dgn Title Sheet) must be removed.
- **The designer will create a PDF file to be placed by Central Office Plan Coordination Section in the Plan File Room environment of Falcon.**

- **For Locally Administered Projects:**

- For instructions on Plan Submittals, see the Locally Administered Projects Manual, Chapter 12.5.3 at:
http://www.virginiadot.org/business/locally_administered_projects_manual.asp
- See the Electronic Plan Submittal Process Flow Chart at:
http://www.extranet.vdot.state.va.us/locdes/reference-guides/ElectronicPlan_Submission.pdf
- The following title sheet cells are available in the sheet2015 cell library:
 - For Federally Funded Locally Administered Projects:
 - TIER_1_TITLE_LAP_FED
 - TIER_2_TITLE_LAP_FED
 - For State Funded Locally Administered Projects:
 - TITLE_LAP_STA
 - For Design-Build and PPTA Locally Administered Projects:
 - TITLE_LAP_DB
 - TITLE_LAP_DB_ROW
 - TITLE_LAP_DB_CONST
 - TITLE_LAP_DB_ASB

APPROVAL SIGNATURES ON TITLE SHEETS FOR TIER 1 “NO PLAN” CONSTRUCTION AND MAINTENANCE PROJECTS

- For current versions of title sheets, see the Falcon No Plan Directory under Engineering Services (eng-ser).
- The District will be responsible for printing the title sheet, which will be the Original Title Sheet for signatures.
- Instructions for the Electronic Plan Submission Process for Tier 1 No Plan RAAP projects are available at:
http://www.virginiadot.org/business/resources/LocDes/2Tier_ProcessReview/Advertisement_Submission/Tier1/Electronic_Plan_Submission_for_No-Plan_Projects-T1.pdf
- Title Sheets for Tier 1 No Plan RAAP and Tier 1 No Plan SAAP Projects are located in FALCON at http://0501cocadd/falcon/eng_ser2.htm.
 - Under “Folders” select “No Plan (RAPP & SAPP)”, “OK” and “Submit Search”
 - Click on RAAP Tier 1 Title Sheet or SAAP Tier 1 Title Sheet