
VDOT
Virginia Department of Transportation

VIRGINIA DEPARTMENT OF TRANSPORTATION

Local Assistance Division

Locally Administered Projects

Lloyd B. Arnold, PMP, SSGB/Lean

February 11, 2020

Virginia's Highway System

95 Counties, 39 Cities, 45 Towns

VDOT Maintains Roads for all but 2 Counties

State-maintained System = 57,867 miles

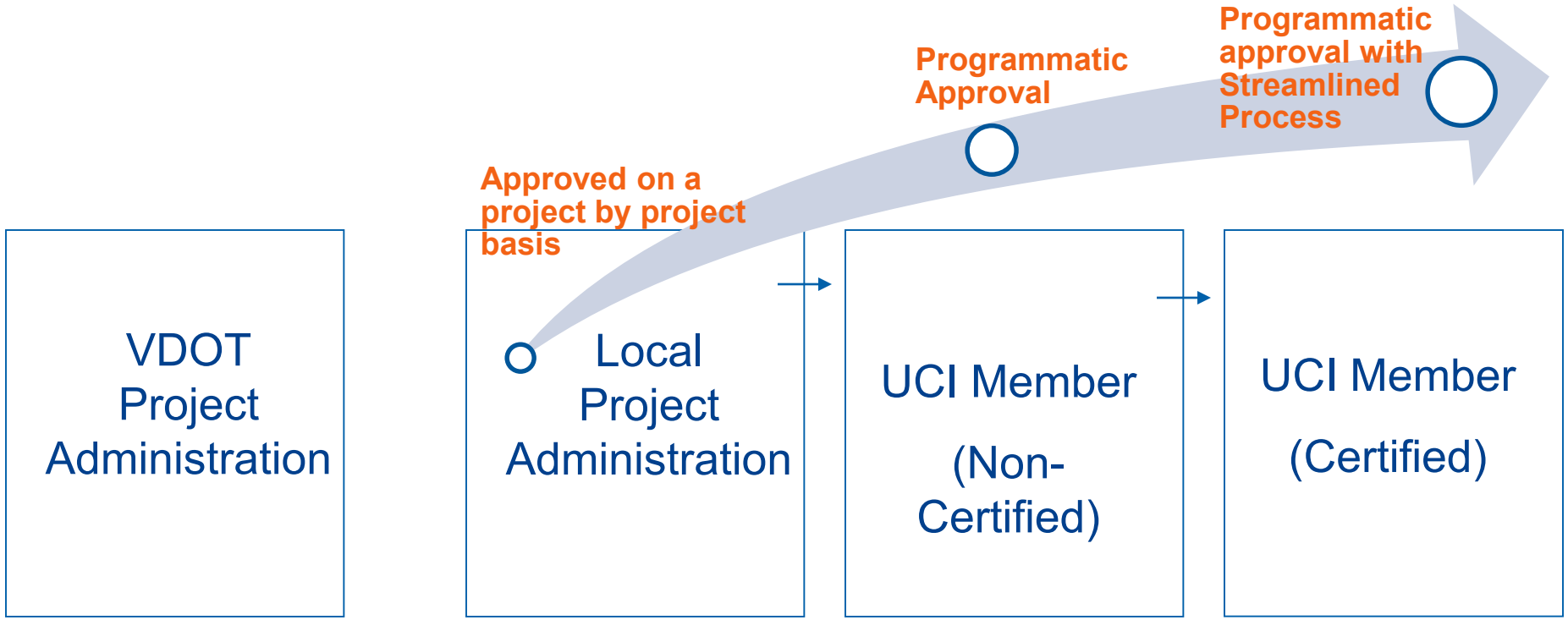
Locality Maintained Roads = 12,238 miles

- **Cities/Towns = 10,561 miles**
- **Henrico and Arlington County = 1,638 miles**
- **Toll roads, maintained by others = 39 miles**

Virginia is 3rd largest state-maintained highway system in the country

Note: VDOT provides state funds to assist localities in maintaining qualifying streets

Local Project Delivery Available Options



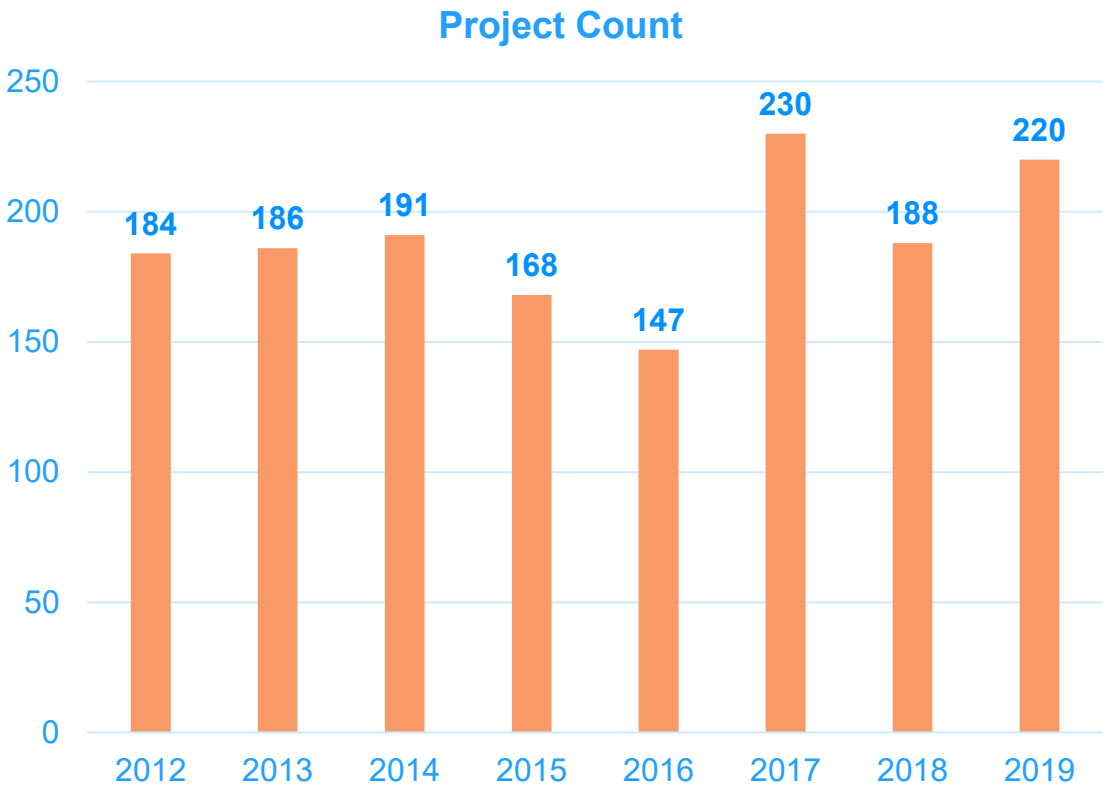
VDOT administers individual **Project** on behalf of locality (VDOT Road & Design Manual)

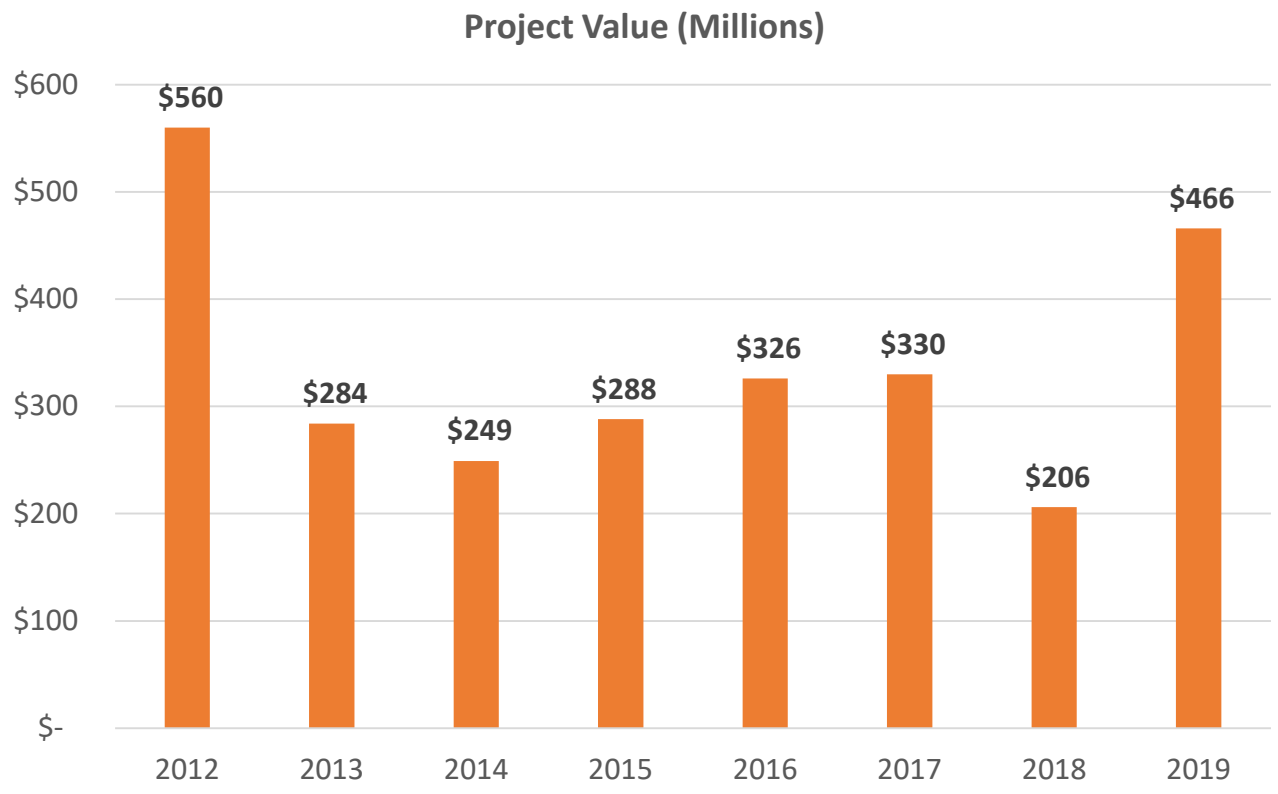
Locality administers individual **Project –** (VDOT LAP Manual)

Locality administers **Urban Program** (VDOT UCI Guide)

Locality administers **Urban Program using Streamlined Project Delivery Process** (VDOT UCI Guide)

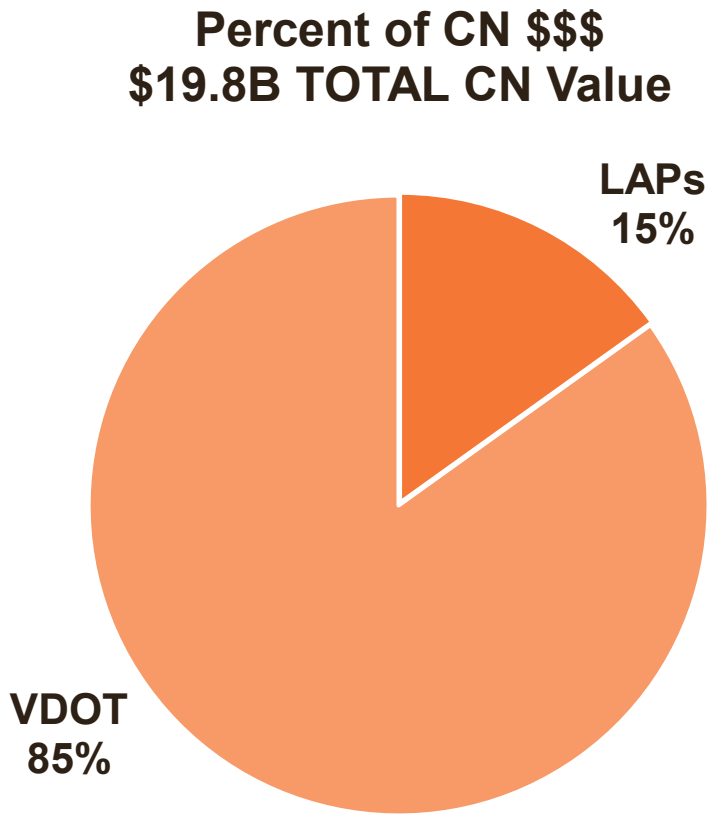
LAP Construction Advertisements 2012-2019 (Calendar Year)

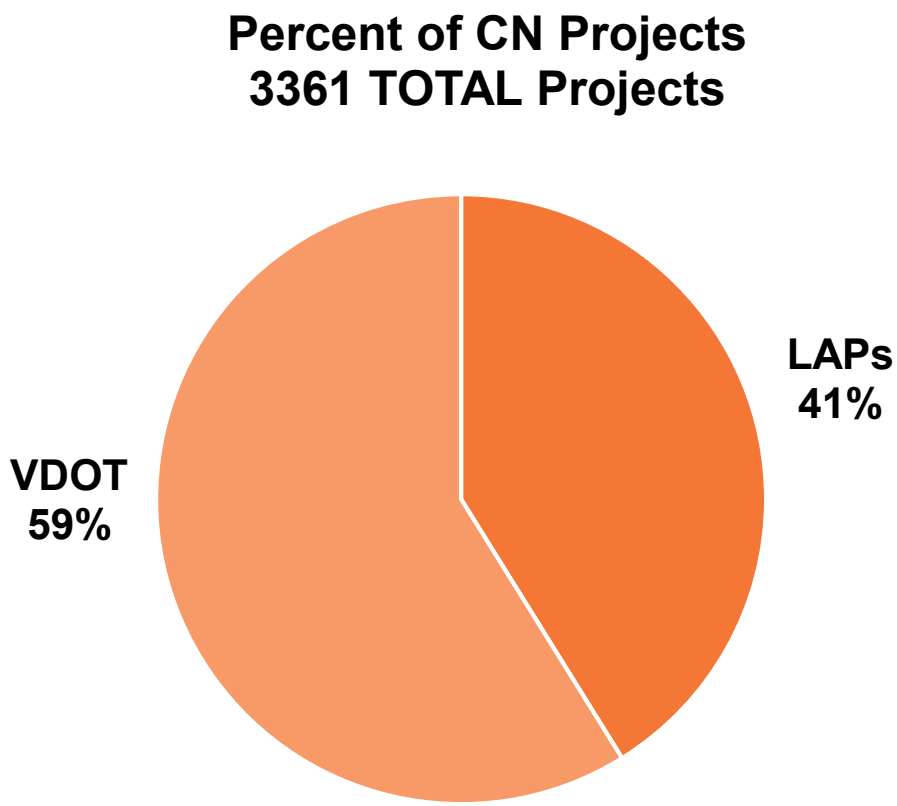




As of End of Quarter Dec. 31, 2019

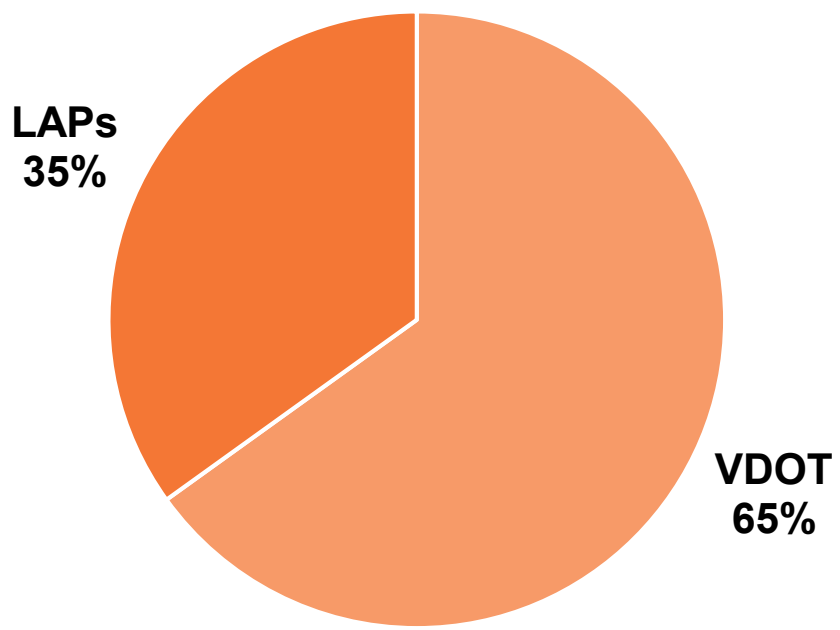
Active VDOT vs LAP Projects



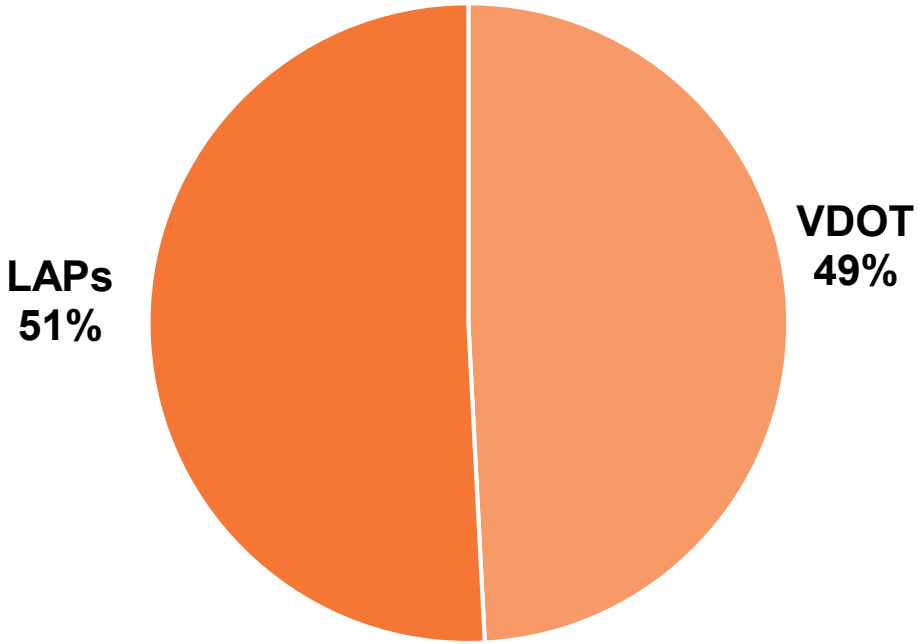


36-month Ad Jan. 2020 – Dec. 2023

36 Month AD-SCH CN $$
Jan 1, 2020 thru Dec 31, 2023
LAP's > $749 M



36 Month AD-SCH Projects
Jan 1, 2020 thru Dec 31, 2023
LAP's = 248 Projects



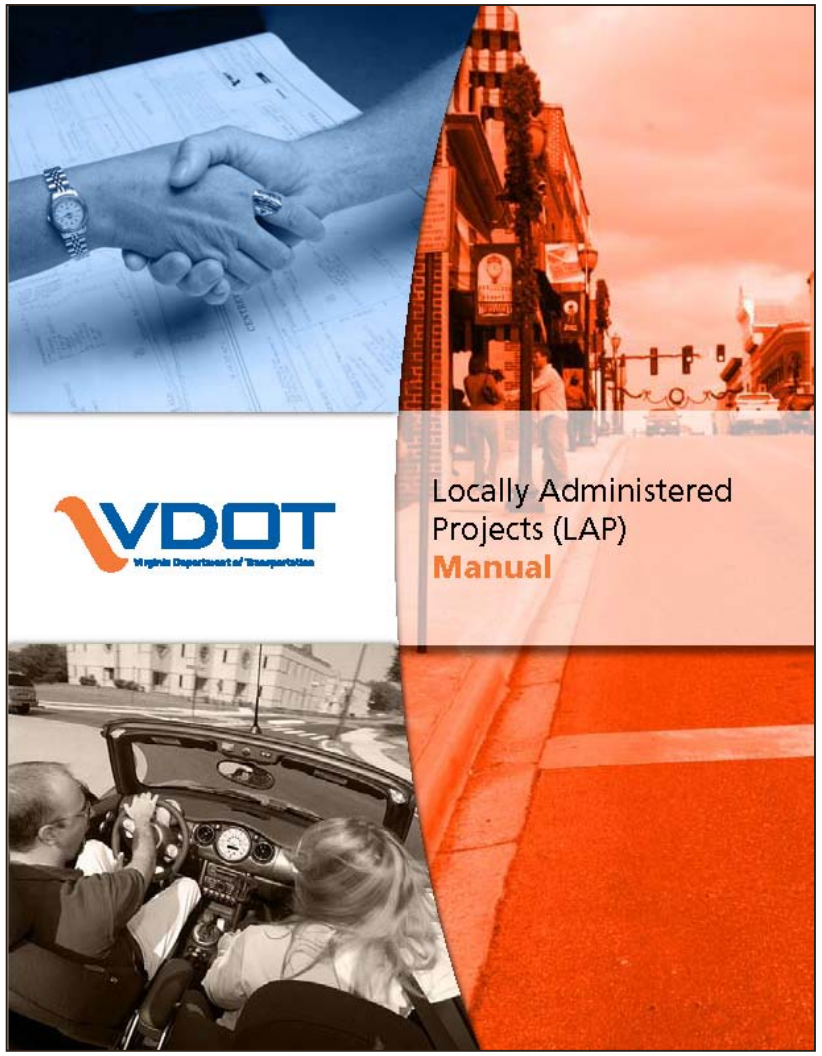
Locally Administered Projects

A Locally Administered Project (LAP) is defined as local government administration and management of a transportation project.

- **Transfer of transportation project development to localities**
- **Transfer of transportation project delivery to localities**
- **Agree to VDOT oversight to ensure applicable laws / regulations met**

Note: Projects 100% locally funded are not a part of the LAP program

Locally Administered Projects (LAP) Manual



- The LAP Manual was reviewed and approved by the FHWA – Virginia Division and VDOT in July 2009
- The primary source of guidance for local governments in Virginia administering locally administered projects
- Outlines federal requirements for localities choosing to administer VDOT funded projects, with an emphasis on federal-aid

LAP Manual Chapter 3 – Roles and Responsibilities

VDOT and Locality Expectations

Local Public Agency (LPA) must provide:

- ✓ **A full-time local government employee responsible for the project.**
- ✓ **A Virginia licensed professional engineer (may be contracted) to be in responsible charge during design and construction engineering of the project.**
- ✓ **The LPA must be diligent to insure compliance with all applicable federal and state requirements.**

Project Manager and Project Coordinator

Teamwork and Collaboration are essential…

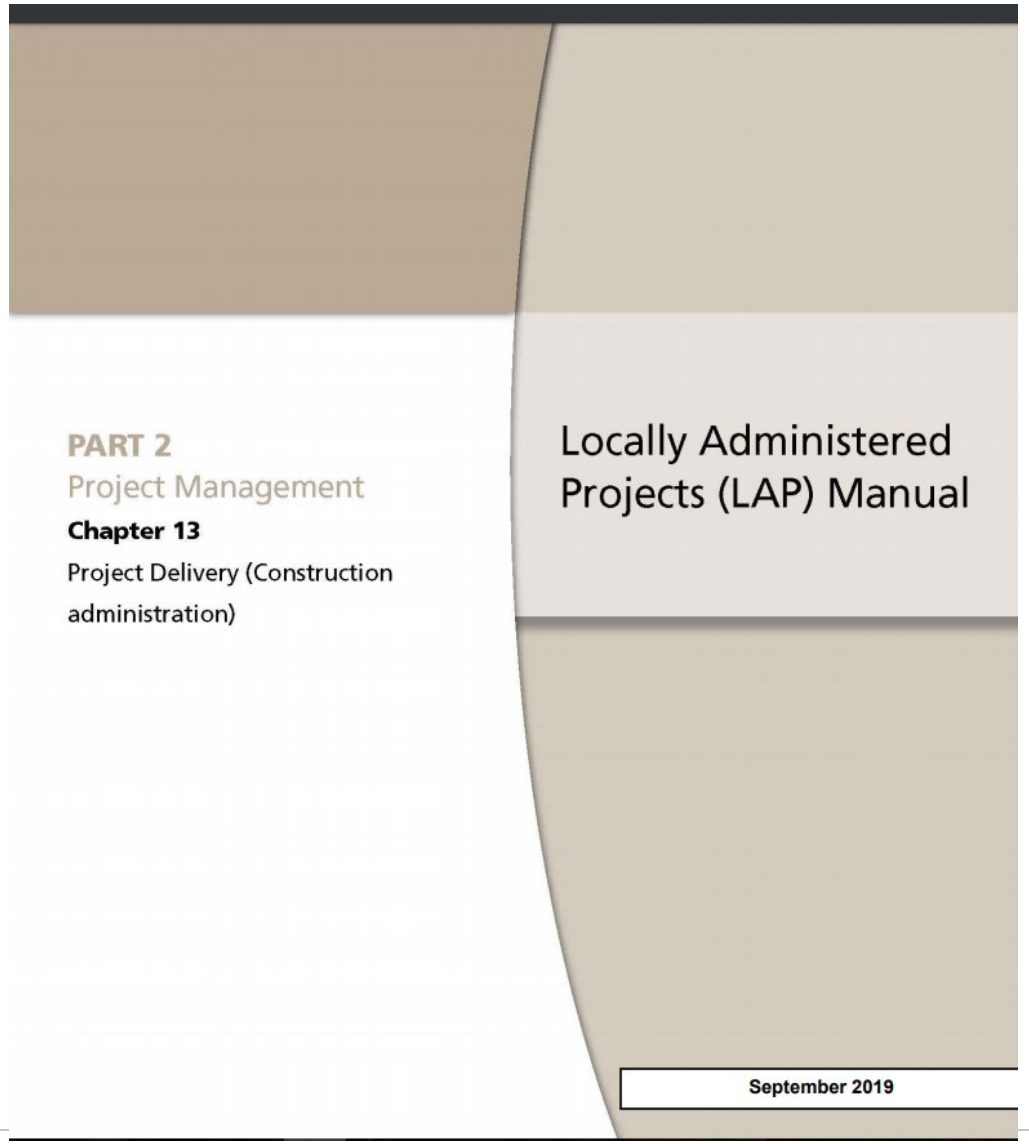
- **The LPA Project Manager guides the project through the process to ensure successful project delivery**

…and develops a partnership with…

- **The VDOT Project Coordinator who guides the locality through the process to ensure successful project delivery and authorization/obligation of funds**

Working together = Project success!

LAP Manual – Chapter 13 (Project Delivery)



13.2 MATERIAL QUALITY ASSURANCE

APPENDICES

Quality Management

Quality Assurance Plan (QAP) required by LAP Manual on Federal Aid projects or projects that will be maintained by VDOT (Section 13.1.5.3)

Plan to set testing and inspection frequencies and requirements for the project and who will perform the test

Defines Acceptance testing and inspections

Addresses deviations from these frequencies and requirements, and defines comparison testing

Addresses actions taken for Non-Compliant tests and inspections

Construction Quality Assurance Plan (CQAP)

for
Local Programs Workshop Road Improvements
UPC #XXXXX

Cover Sheet

I. Date of Original CQAP Submittal: September 11, 2019

II. CQAP Revision Date (if applicable): N/A

III. Owner's Name and Physical Address:

Virginia County
Department of Transportation

IV. Responsible Charge Engineer and Contact Person for CQAP:

Printed Name: Julie Hartman, PE
Consulting Firm: Stantec Consulting Services Inc.
Signature of Responsible Charge Person: Julie W Hartman, P.E.
Contact Information: julie.hartman@stantec.com
804-267-1829

V. Locality Responsible Charge Person:

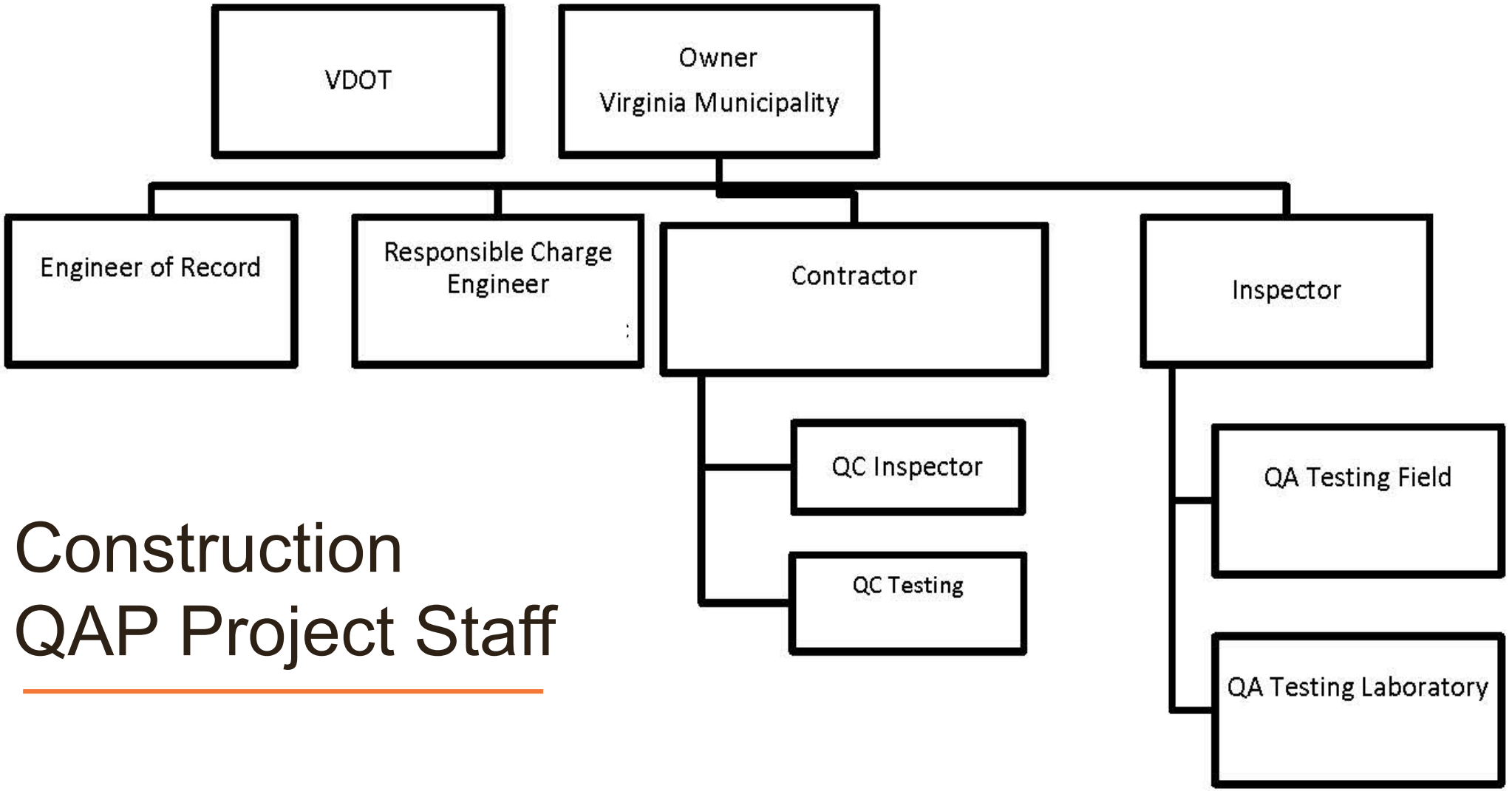
Printed Name: John Doe
Signature of Responsible Charge Person: _____
Contact Information:
555-555-5555

VI. Organizational Chart:
a. See Appendix A

Table of Contents

Construction QAP

Construction
QAP Project Staff



Construction QAP Components: Staff Matrix

Inspector Name	Firm	Experience	Asphalt Concrete Field	VDOT Concrete Field	ACI Concrete	Soils & Aggregate	Nuclear Safety	Pavement Marking	OSHA 10-HR	DEQ E&S Inspector	DEQ SWM Inspector	Flagger	Work Zone Training (Intermediate)
James Braddy (QA Inspector)	Stantec	51	Exp. 12/31/2018	Exp. 12/31/2020	Exp. 12/31/20		Exp. 1/26/2020	Exp. 12/31/2024	Completed 3/16/2011	Exp. 5/31/2020		Exp. 2/28/21	Exp. 2/28/2021
Mike Elmore (QA Inspector)	Stantec	36	Exp. 12/31/19			Exp. 12/31/2019	Exp. 2/6/2020		Completed 3/23/2010	Exp. 5/31/2021		Exp. 2/28/2021	Exp. 2/28/2021
Sebastian Vera-Brain (QA Inspector)	Stantec	2.5	Exp. 6/14/2023		Exp. 10/27/2021	Exp. 5/24/2022	Exp. 8/5/2019	Exp. 3/31/2023	Completed 3/20/2018	Exp. 5/9/2021	Exp. 4/25/2021	Exp. 3/7/2022	Exp. 3/7/2022
Chase Lambert (QC Testing)	ECS Mid-Atlantic LLC	1		Exp. 1/1/2025	Exp. 10/25/2023	Exp. 12/31/2023	Completed 09/10/2018						
Greg Bodenhamer (QC Testing)	ECS Mid-Atlantic LLC	8		Exp. 12/31/2023	Exp. 8/9/2023	Exp. 12/21/2023	Completed 1/24/2018						
Jason West (QC Supt.)	Branscome									Exp. 4/15/2022 RLD #12157			Exp. 3/31/2021 Cert. # 030217017
Danny Edwards (QC Paving)	Branscome		12/31/2019										
Joseph Pazera (QC Paving)	Branscome		12/31/2020										
Sam Fleshman (QC Paving)	Branscome		12/31/2022										
Jamie Wyche (QC Paving)	Branscome		1/1/2024										

VDOT requires materials testing be performed by trained and qualified technicians/inspectors with valid certifications

Proficiency Examination Requirements

Materials Certification Title	School	Proficiency Requirements	Contact Information
Asphalt Field Level I Technician	Asphalt Field Level I	No proficiency examination required	No proficiency examination required
Asphalt Field Level II Technician	Asphalt Field Level II	No proficiency examination required	No proficiency examination required
Asphalt Plant Level I Technician	Asphalt Plant Level I	Road & Bridge Specification 211.05, AASHTO R47	MCS Program Office
Asphalt Plant Level II Technician	Asphalt Plant Level II	AASHTO T30, AASHTO T166, AASHTO T209, AASHTO T269, AASHTO T312, VTM-102	MCS Program Office
Asphalt Plant Mix Design Technician	Asphalt Plant Mix Design	ASTM D4791, ASTM D5821, AASHTO T176, AASHTO T304, AASHTO T84, AASHTO T85, AASHTO T19, AASHTO T30, AASHTO T312, VTM-102, AASHTO T209, AASHTO T166, AASHTO T283	MCS Program Office
Central Mix Aggregate Technician	Central Mix Aggregate Plant	AASHTO T2, AASHTO T11, AASHTO T27, AASHTO T248, AASHTO T255, AASHTO T89, AASHTO T90	MCS Program Office
Concrete Field Technician	Concrete Field	ACI Concrete Field Level I (ASTM C172, ASTM C1064, ASTM C143, ASTM C31, ASTM C231, ASTM C173, ASTM C138)	Virginia Ready-Mix Concrete Association (VRMCA) (434) 977-3716
Concrete Plant Technician	Concrete Plant	Written proficiency examination required.	Part of written examination
Pavement Marking Technician	Pavement Marking	Written proficiency examination required.	Part of written examination
Slurry Surfacing Technician	Slurry Surfacing	No proficiency examination required	No proficiency examination required
Soils Compaction Technician	Soils and Aggregate Compaction	AASHTO T217, VTM-10, VTM-12, ASTM D4959	MCS Program Office
Surface Treatment Technician	Surface Treatment	No proficiency examination required	No proficiency examination required

Materials Certifications Schools

VDOT info link	http://www.virginiadot.org/business/matschools.asp
Asphalt Field Level 1 and 2	Virginia Education Center for Asphalt Technology (VECAT) with Germanna Community College (GCC)
Soils & Aggregate Compaction & VDOT Concrete Field	Community College Workforce Alliance (CCWA)
American Concrete Institute (ACI) Concrete Field Level 1	Provided thru Virginia Redi-Mix Concrete Association (VRMCA). VDOT Concrete Field also requires this certification
Pavement Marking	Courses are only online thru VDOT
Guardrail Installation Training (GRIT)	Certification thru VDOT's Location & Design section http://www.virginiadot.org/business/locdes/standards_and_special_design.asp
Nuclear Radiation Safety	Provided online by vendors http://www.virginiadot.org/VDOT/Business/asset_upload_file92_3529.pdf

All Certifications are valid for five (5) years and must be retaken every five (5) years to stay certified

Materials Sampling & Testing Frequency

Locally Administered Projects using:

- Locality inspection and testing staff
- Requesting VDOT to provide inspection and testing or
- Hiring an Engineering consultant firm for inspection and testing, who is independent from the contractor performing the construction work

➢ Then use the Acceptance/VST/IA Frequency tables included in Appendix 13.2-G of LAP Manual for acceptance and Independent Assurance (IA) testing.

Appendix 13.2-G
Acceptance/VST/IA Frequency

Acceptance/VST/IA Frequency - Soil & Aggregate

Material Type	Spec Section	Test Reference	Acceptance Testing	VST	IA
Backfill	Contract Special Provisions				
Moisture Density Relations-Standard Proctor, Atterberg Limits & Grain Size Analysis (All Backfill Types)		VTM-1, VTM-7, & VTM-25	Done during project development	NA	Non required if performed in VDOT or AMRL accredited laboratory
One Point Proctor Check Compare to Nuclear Gauge		VTM 012	As needed.	NA	Run split sample when needed. 1 test per project to check procedure and equipment.
In Place Density Tests:					
Box Culverts, Pipes & other Drainage Structures	302,303	VTM-10	A minimum of one (1) test shall be performed per lift on alternating sides of the structure for each 300 linear ft. or portion thereof in structure length. This test pattern shall begin after the first 4-in. compacted layer above the structure's bedding and shall continue to one (1) foot above the top of the structure.	NA	One IA shall be conducted on each compaction technician once per project regardless of the structure or material type (box culvert, pipe, Abutment, retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations.
Abutments, Retaining Walls and MSE Walls	Sections 303,401	VTM-10	A minimum of two (2) tests every other lift up to 100 linear ft. shall be performed. Testing shall be performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall be performed.	NA	One IA shall be conducted on each compaction technician once per project regardless of the structure or material type (box culvert, pipe, Abutment, retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations.
SOILS/ EMBANKMENT					

Materials Sampling & Testing Frequency

Locally Administered Projects using:

- Design-Build model
- Public-Private Partnership delivery model or
- Contractor performs testing (QC testing)

➢ Then use the Tables of Minimum Requirements for Quality Assurance and Quality Control on Design-Build and P3 Projects. This was updated July 2018 and is located on VDOT's website at: http://www.virginiadot.org/business/resources/APD_Docs/APD_Office_Page/2018_DB-PPTA_QAQC_Guide_-_Final_Clean_Copy.pdf

Construction QAP: Reporting

Daily Diary

NAME OF INSPECTOR WRITING THIS REPORT:

PROJECT NAME:
JOB NUMBER:
DATE:
WEATHER:
PRECIPITATION AMOUNT:
HIGH TEMPERATURE:
HOURS WORKED BY CONTRACTOR:

VISITORS ON SITE (County, State, Contractor, etc.):

NAME OF CONTRACTOR SUPERINTENDENT:
LABOR ON SITE:

EQUIPMENT ON SITE:

OVERVIEW OF WORK PERFORMED TODAY:
Maintenance of Traffic:
Environmental:
Utilities:
Grade:
Drainage:
Paving:
Materials Testing and Inspection:
Issues and Resolutions:

ALLOWANCE ITEMS:

	Quantity Today
Excess Excavation	**C.Y.**
Borrow Excavation	**C.Y.**

SUMMARY OF INSPECTION SERVICES TODAY:

Name	Title	Hours Today
	Inspector	
	Inspector	

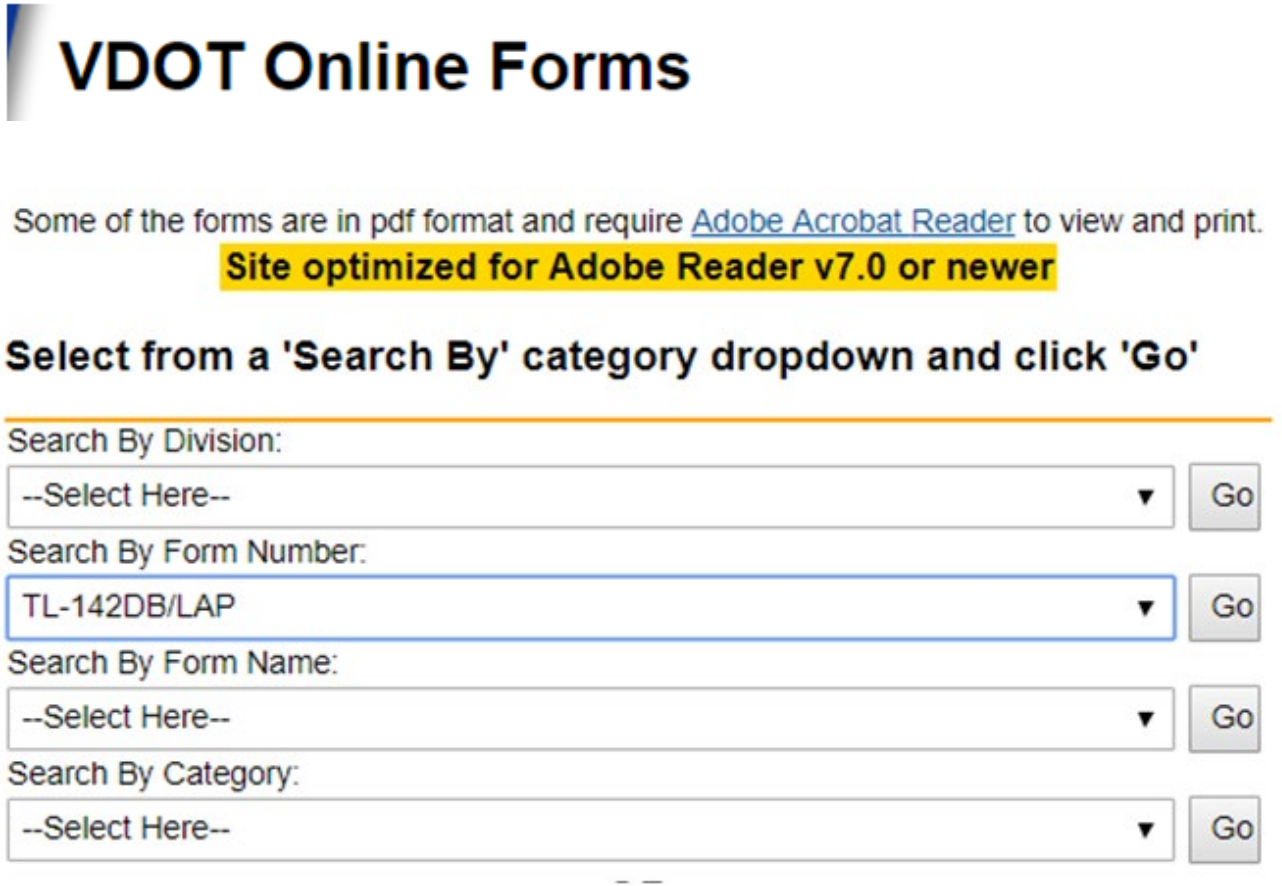
Reporting: Materials Notebook (TL-142 LAP)

13.2.6 Materials Notebook

When construction begins, a materials notebook must be initiated. This notebook must be a separate document and not part of the projects Daily Work Reports or Diary, this will allow for easier completion and reconciliation. It is recommended that a TL-142 (available on the Department's website) be used for this purpose. As materials are accepted within the project, the quantity of each material and the method of measurement shall also be documented within the materials notebook. The Materials Notebook is also used to furnish the list of estimated quantities together with the specification designation and test report for each material placed on

Reporting: Materials Notebook (TL-142 LAP)

- Materials Notebook VDOT website link: http://vdotforms.vdot.virginia.gov/



Buy America

LAP Manual 13.1.5.6 Project Reimbursement Requests

- The LPA must submit a certification along with each monthly payment voucher
- Including Civil Rights / DBE, Environmental Controls, Stockpile, Updated Schedule
- All iron and steel fabricated materials used on the project during the pay period meet Buy America (23 CFR 635.410) as applicable to federal aid projects

https://www.virginiadot.org/business/resources/const/S102CF2_Domestic_Material_FedFunds.pdf

Buy America - VDOT Special Provision

S102CF2-0813

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
USE OF DOMESTIC MATERIAL

July 26, 2013

SECTION 102.05 PREPARATION OF BID of the Specifications is amended to include the following:

In accordance with the provisions of Section 635.410(b) of Title 23 CFR, hereinafter referred to as "Buy America", except as otherwise specified, all iron and steel products (including miscellaneous steel items such as fasteners, nuts, bolts and washers) to be permanently incorporated for use on federal aid projects shall be produced in the United States of America regardless of the percentage they exist in the manufactured product or final form they take. Therefore, "Domestically produced in the United States of America" means all manufacturing processes must occur in the United States of America, to mean, in one of the 50 States, the District of Columbia, Puerto Rico or in the territories and possessions of the United States. Manufacturing processes are defined as any process which alters or modifies the chemical content, physical size or shape or final finish of iron or steel material) such as rolling, extruding, bending, machining, fabrication, grinding, drilling, finishing, or coating whereby a raw material or a reduced iron ore material is changed, altered or transformed into a steel or iron item or product which, because of the process, is different from the original material. For the purposes of satisfying this requirement "coating" is defined as the application of epoxy, galvanizing, painting or any other such process that protects or enhances the value of the material. Materials used in the coating process need not be domestic materials.

Materials Approval: Source of Materials (C-25)

Form C-25
Rev. 11/29/2018

VIRGINIA DEPARTMENT OF TRANSPORTATION
SOURCE OF MATERIALS

SUBMITTAL NO. 1 **SUBMITTED** 09-11-2019

PROJECT NUMBER Local Programs Workshop **CONTRACT ID NO.**

PROJECT LOCATION Williamsburg, VA **DISTRICT** Hampton Roads **COUNTY**

PRIME CONTRACTOR with ADDRESS	SUBCONTRACTOR with ADDRESS	NAME and PHONE NO. of CONTACT PERSON
Prime Contractor		John Doe
Anywhere, VA		555-555-5555

LINE ITEM NO.	CONTRACT ITEM NO.	SPEC. NO.	MATERIAL DESCRIPTION	SUPPLIER and COMPLETE ADDRESS (Supplier Location)	MANUFACTURER and COMPLETE ADDRESS (Plant Location)	VDOT/LOCALITY USE INSP./TEST BY:
15,16,17,18,19 21,22,23	1152, 1180, 1210, 1240, 1300, 6150, 6180, 6240, 571	302	Concrete Pipe:15",18",21",24",30" ES-1:15", 18", 24" 24" EW-11[a]	Concrete Pipe and Precast Co 10364 Design Rd. Ashland, VA 23005	Concrete Pipe and Precast Co 10364 Design Rd. Ashland, VA 23005	Concrete Pipe and ES-1: Certified Delivery Ticket / VCPQAP QA List #26 EW-11A: Mill Analysis / Certification
20,24	2190	302	Elliptical Concrete Pipe, ES-1A 30"x19"	Concrete Pipe and Precast Co 7955 Dorsey Run Rd. Jessup, MD 20794	Concrete Pipe and Precast Co 7955 Dorsey Run Rd. Jessup, MD 20794	Certified Delivery Ticket / VCPQAP QA List #26
29,63	9056, 27550	302	Precast Structures MH-1, SWM-1	Concrete Pipe and Precast Co 10364 Design Rd. Ashland, VA 23005	Concrete Pipe and Precast Co 10364 Design Rd. Ashland, VA 23005	Certified Delivery Ticket / VCPQAP QA List #34
10,25,26,27,28	525, 6740, 6818, 6827, 7508	302	Concrete CL A3: Misc. Cast in place DI Storm Structures Mix Design No. 4023-5-19	Vulcan Materials Corp. 12020 Old Stage Rd. Chester, VA 23831	Vulcan Materials Corp. 12020 Old Stage Rd. Chester, VA 23831	Approved Mix Design
25,26,27	6740, 6818, 6827	302	Frame and Grate/Cover DI-1, IC-2	Ferguson Waterworks 1895 South Creek 1 Powhatan, VA 23139	US Foundry 8351 NW 93rd St. Miami, FL 33166	Certified Delivery Ticket / QA List #61
28	7508	302	Fabricated Grates: DI-7	Ferguson Waterworks 1895 South Creek 1 Powhatan, VA 23139	Capitol Foundry of VA 2856 Crusader Cir. Virginia Beach, VA 23453	Certified Delivery Ticket / QA List #44

Items listed are for materials quality acceptance and do not ensure compliance with contract requirements such as BUY AMERICA Provisions. To ensure compliance please consult the VDOT Special Provision for Domestic Materials.

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Materials Approval: Source of Materials (C-25) - cont.

CONTRACT LINE ITEM NUMBER	LINE ITEM DESCRIPTION	MATERIAL TYPE or SIZE	LINE ITEM SUB-COMPONENTS	PAY UNIT	ROAD & BRIDGE SECTION	MANUAL of INSTRUCTIONS METHOD OF ACCEPTANCE
1156	PIPE CULVERT	15"		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1161	JACKED PIPE	16"		L.F.	SEC. 302	VISUAL
1180	PIPE CULVERT	18"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1181	JACKED PIPE	18"		L.F.	SEC. 302	VISUAL
1182	PIPE CULVERT	18" (CONC.)		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1185	PIPE CULVERT	18" (CONC.)		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1186	PIPE CULVERT	18"		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1210	PIPE CULVERT	21"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1211	JACKED PIPE	21"		L.F.	SEC. 302	VISUAL
1212	PIPE CULVERT	21" (CONC.)		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1240	PIPE CULVERT	24"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1241	JACKED PIPE	24"		L.F.	SEC. 302	VISUAL
1242	PIPE CULVERT	24" (CONC.)		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1245	PIPE CULVERT	24" (CONC.)		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1246	PIPE CULVERT	24"		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1270	PIPE CULVERT	27"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1271	JACKED PIPE	27"		L.F.	SEC. 302	VISUAL
1272	PIPE CULVERT	27" (CONC.)		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1275	PIPE CULVERT	27" (CONC.)		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1276	PIPE CULVERT	27"		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1300	PIPE CULVERT	30"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1301	JACKED PIPE	30"		L.F.	SEC. 302	VISUAL
1302	PIPE CULVERT	30" (CONC.)		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1305	PIPE CULVERT	30" (CONC.)		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1306	PIPE CULVERT	30"		L.F.	SPEC. PROV.	CERTIFIED DELIVERY TICKET (vcmpqap) VDOT CORRUGATED METAL PIPE QUALITY ASSURANCE PROGRAM / (vcpqap) VDOT CONCRETE PIPE QUALITY ASSURANCE PROGRAM
1330	PIPE	33"		L.F.	SEC. 302	CERTIFIED DELIVERY TICKET
1331	JACKED PIPE	33"		L.F.	SEC. 302	VISUAL

Materials Approval: Source of Materials (C-25) - cont.

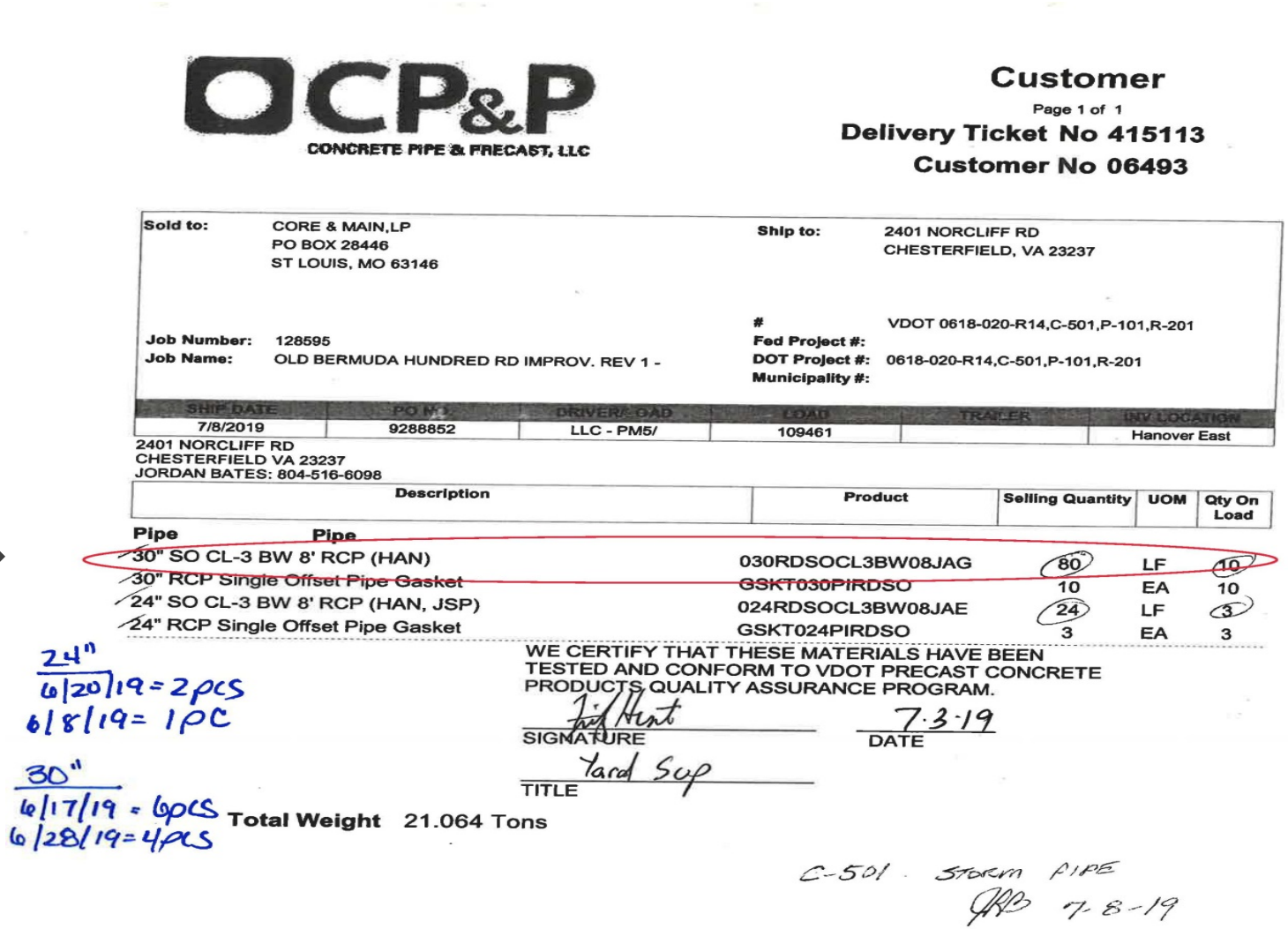
(26) CONCRETE PIPE PRODUCERS ON QA/QC PROGRAM– (Quality Assurance)

The following manufacturers of concrete culvert pipe have VDOT approved Quality Assurance programs as outlined in the instructions. For additions and deletions to this list contact the Materials Division Quality Assurance Section.

Manufacturer	Plant Location	Monitored By	Next Review Date
Concrete Pipe & Precast	Chesapeake, VA		
Concrete Pipe & Precast	Design Rd. Ashland, VA		
Concrete Pipe & Precast	Jessup, MD		
Concrete Pipe & Precast	Roanoke, VA		
Concrete Pipe & Precast	Salem, VA		
Concrete Pipe & Precast	Manassas, VA		
Foltz Concrete Pipe Co.	Winston –Salem, NC		
Oldcastle Precast	Fayetteville, NC		
Oldcastle Precast	Raleigh, NC	Central Office	
Permatile Concrete Pipe Co.	Bristol, VA		
Rinker Materials	Frederick, MD		
Rinker Materials	Middletown, DE		
Rinker Materials	Thomasville, NC		
Rinker Materials	Wilson, NC		
Smith Setzer & Sons, Inc.	Catawba, NC		
Smith Setzer & Sons, Inc.	Stoney Creek, VA		

(*P) = Probationary

Materials Approval: Verify Delivery Tickets



CP&P
CONCRETE PIPE & PRECAST, LLC

Customer

Page 1 of 1

Delivery Ticket No 415113

Customer No 06493

Sold to: CORE & MAIN,LP
PO BOX 28446
ST LOUIS, MO 63146

Ship to: 2401 NORCLIFF RD
CHESTERFIELD, VA 23237

Job Number: 128595
Job Name: OLD BERMUDA HUNDRED RD IMPROV. REV 1 -

VDOT 0618-020-R14,C-501,P-101,R-201
Fed Project #:
DOT Project #: 0618-020-R14,C-501,P-101,R-201
Municipality #:

SHIP DATE	PO NO.	DRIVER/PAD	LOAD	TRAILER	INV LOCATION
7/8/2019	9288852	LLC - PM5/	109461		Hanover East

2401 NORCLIFF RD
CHESTERFIELD VA 23237
JORDAN BATES: 804-516-6098

Description	Product	Selling Quantity	UOM	Qty On Load
Pipe Pipe				
30" SO CL-3 BW 8' RCP (HAN)	030RDSOCL3BW08JAG	80	LF	10
30" RCP Single Offset Pipe Gasket	GSKT030PIRDSO	10	EA	10
24" SO CL-3 BW 8' RCP (HAN, JSP)	024RDSOCL3BW08JAE	24	LF	3
24" RCP Single Offset Pipe Gasket	GSKT024PIRDSO	3	EA	3

24"
6/20/19 = 2pcs
6/8/19 = 1pc

30"
6/17/19 = 6pcs
6/28/19 = 4pcs

WE CERTIFY THAT THESE MATERIALS HAVE BEEN TESTED AND CONFORM TO VDOT PRECAST CONCRETE PRODUCTS QUALITY ASSURANCE PROGRAM.

SIGNATURE

7.3.19
DATE

Yard Sup
TITLE

Total Weight 21.064 Tons

C-501 STORM PIPE
7-8-19

Use of untested and unauthorized lift pins or lifting equipment could result in injury. CP&P will not be responsible for damages to property or persons from the use of untested and unauthorized use of lift pins or lifting equipment. Please contact CP&P if you should have any questions or concerns regarding proper lifting equipment and/or lifting procedures.

Our liability ceases with delivery to the customer. In no case will credit be allowed unless damage is noted on Delivery Ticket and damaged material returned.

Driver: _____ Customer: _____

CONCRETE PIPE - Concrete Pipe QA Program (Approved List #26)

Item Number	Date Material Received	Shipping Ticket Number	Quantity (Liner Feet- LF)								Manufacturer	Comments
			Size									
			15"	18"	21"	24"	30"					
1300	7/8/2019	415113					80 LF				Concrete Pipe & Precast (CP&P)	

Materials Approval: Sampling & Testing

VDOT Specification Section	Material Type	Test Reference	QC Frequency – Contractor	QAM IA & VST Frequency - Consultant	OIA &OVST Frequency – VDOT
303	Backfill				
	Moisture density relations – standard proctor, Atterberg limits and grain size analysis	VTM-1, VTM-7 and VTM-25	One (1) test per soil type and with change in material. The Contractor shall provide borrow source test results as per VDOT 2016 Road and Bridge Specifications Section 106.03	Verify Lab accreditation of the QC laboratory to AASHTO test methods by looking at AASHTO Re: Source website	Compare all QC borrow submittals against specifications
	In place density tests – pipes	VTM-10	One (1) test per 100 LF, each lift, alternating sides	One (1) test per 1000 LF; One (1) test per 1000 LF	One (1) test per 10,000 LF
	In place density tests - drainage structures	VTM-10	One (1) test, every other lift around perimeter after bedding layer	One (1) test per five (5) drainage structure; One (1) test per drainage structure	One (1) test per ten (10) drainage structures
315	Asphalt Concrete Pavement				
ADT < 5000	Pavement density	VTM-76, VTM-6, VTM-22	Establish roller pattern, control strips and test sections. Ten (10) stratified random density test sites per test section (5000 LF)	Observe one (1) control strip per ten (10) control strips established by the QC technician. Reweigh the 3 cores or 6 plugs taken from this control strip Minimum of one (1) control strip per project ; Two (2) stratified random cores	Two (2) stratified random cores per 25,000 LF of paver width. Both cores obtained from the same test section Minimum two (2) cores per project

Materials Approval: Sampling & Testing

VIRGINIA TEST METHOD - 10

Virginia Test Method – 10

Determining Percent of Moisture and Density of Soils, Aggregate, and Full-Depth Reclamation Courses, and Density of Cold In-Place Recycling and Cold Plant Recycling (Nuclear Method) - (Soils Lab)

June 25, 2013

AASHTO T 310 shall be followed, except as modified below:

3. **Scope**

This test method covers the procedure to be used in determining the percent of moisture and density of embankment, base, subbase, subgrade, backfill, and Full-Depth Reclamation (FDR) courses, and the percent density of Cold In-Place Recycling (CIR) and Cold Plant Recycling (CPR).

4. **Apparatus**

The apparatus required shall consist of the following:

A. Portable Nuclear Moisture-Density Gauge (nuclear gauge or gauge)
B. Transport case (blue)
C. Charger
D. Reference Standard Block
E. Transport Documents (Bill of Lading)
F. Leveling Plate / Drive Pin Guide
G. Drive Pin w/ extraction tool
H. 4 lb Hammer used for Driving the Pin
I. Safety Glasses
J. Square-Point Shovel
K. No. 4 (4.75 mm) sieve
L. Set Balance Scales
M. Drying Apparatus
N. Miscellaneous Tools such as Mixing Pans and Spoons

5. **Direct Transmission and Backscatter Procedures**

There are two (2) different methods to determine percent density and percent moisture using the nuclear gauge. The methods are the direct transmission and backscatter.

The direct transmission method requires punching a hole into the surface of the material being tested and lowering the source rod to the desired depth of test. This method is used to test natural soil materials, aggregate backfill, FDR, CIR, and CPR courses, and as verification testing for aggregate base and subbase as it is more representative over the compacted layer than the backscatter method. It is also used as acceptance testing for those projects not having a sufficient quantity of aggregate base and/or subbase to run a roller pattern and control strip.

REPORT OF NUCLEAR EMBANKMENT DENSITIES (UNIT MASSES)

(Rev. 4/20)

VIRGINIA DEPARTMENT OF TRANSPORTATION
MATERIALS DIVISION
REPORT OF NUCLEAR EMBANKMENT DENSITIES (UNIT MASSES)

English ☐ Type II
Report No.: _____ Date: _____ Sheet No. _____ of _____
Route No.: _____ County: _____
Project No.: _____
F.H.W.A. No.: _____
Test For: _____
Gauge Model: _____ Serial No: _____ Calibration Date: _____

STANDARD COUNT
DENSITY _____ MOISTURE _____

Test No.					
Location	Station ft. (m)				
of	Ref. to center line ft. (m)				
Test	Elevation				
Compacted Depth of Lift in. (mm)					
Method of Compaction					
A. Wet Density (lbs/ft³), Wet Unit Mass (kg/m³)	=				
B. Moisture Unit Mass (lbs/ft³), Moisture Unit Mass (kg/m³)	=				
C. Dry Density (lbs/ft³), Dry Unit Mass (kg/m³) (A-B)	=				
D. Moisture Content (B÷C) x 100	=				
E. Maximum Dry Density (lbs/ft³), Dry Unit Mass (kg/m³) Lab Proctor or One Point Proctor	=				
F. Percent Optimum Moisture	=				
G. Percent of plus #4, (plus 4.75 mm)	=				
H. Corrected Maximum Dry Density (lbs/ft³), Dry Unit Mass (kg/m³)	=				
I. Corrected Optimum Moisture	=				
J. Percent Dry Density (lbs/ft³), Dry Mass (kg/m³) (C÷E) x 100 or (C÷H) X 100	=				
K. Percent Minimum Density Required	=				

Remarks:

CC:
District Materials Engineer
Project File

By: _____
Title: _____

Quality Management: Materials Approval Summary

Review Source of Materials (C-25 form)

VDOT Approved Lists

VDOT Quick Reference Materials Acceptance

Materials Delivery

Verify delivery tickets/invoices match approved C-25

Materials Notebook

Record material delivered & testing

Inspections / Materials Sampling & Testing

Certified Technician(s)

Manual of Instructions (MOI)

Virginia Test Method (VTM)

Risk-Based Oversight

Not every project requires the same level of review and oversight

Non-PODI	**FHWA**	PODI
Non-NHS	**Facility**	NHS
State	**Funding**	Federal
Locality	**Owner**	VDOT
Type I	**Project Category**	Type V
Extensive	**Experience**	Minimal

LOWER  **HIGHER**

Risk-Based Oversight (LAP MANUAL CHAP 9)

Table 1 – Project Risk Assessment

**** See VDOT Construction Oversight Guide, Appendix A, for Category Definitions***

Element	Value (factor)	Check Elements That Apply	Total Factor per Element
Federal Oversight	20		
National Highway System	20		
Design-Build/PPTA	20		
Funding			
Federal Funded (non-Transportation Alternatives)	15		
State Funded	10		
Federal Transportation Alternatives (Impacts R/W)	7		
Federal Transportation Alternatives (Off R/W)	1		
Completed Project Maintenance			
State Maintained Project	10		
LPA Maintained Project	2		
Project Category *			
Category I	2		
Category II	5		
Category III, IV, V	10		
LPA Experience Administering Project			
Low Level	15		
Intermediate Level	10		
High Level	5		
Factor Total			

Table 2 – Oversight Assessment

Level of Oversight	Range of Factor Total
High (H)	> 45
Moderate (M)	25-55
Low (L)	< 35

Oversight Level	Impact/Probability
High (H)	Significant impact on infrastructure due to non-compliance - Significant effects to quality of construction, cost and schedule; High risk of non-compliance resulting in loss of funding or regulatory agency action
Moderate (M)	Moderate impact on infrastructure due to non-compliance - Moderate effects to quality of construction, cost and schedule; Moderate probability of non-compliance
Low (L)	Minimal impact on infrastructure due to non-compliance - Minimal effects to quality of construction, cost and schedule; Low probability of non-compliance

Compliance: Following Regulations

- **FHWA Compliance Assessment Program (CAP)**
  - **Core Checklist**
  - **Technical Review**

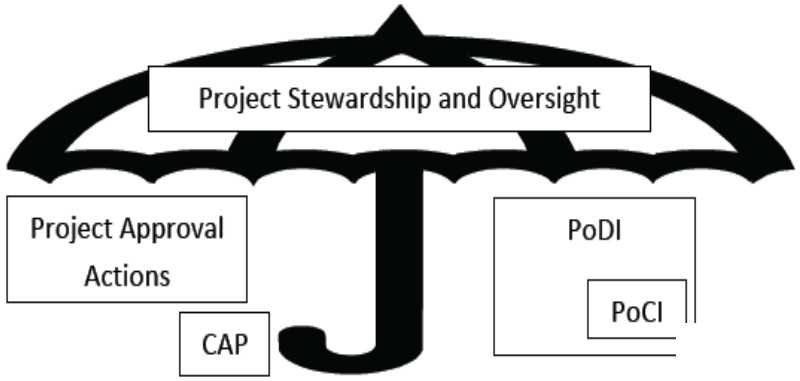
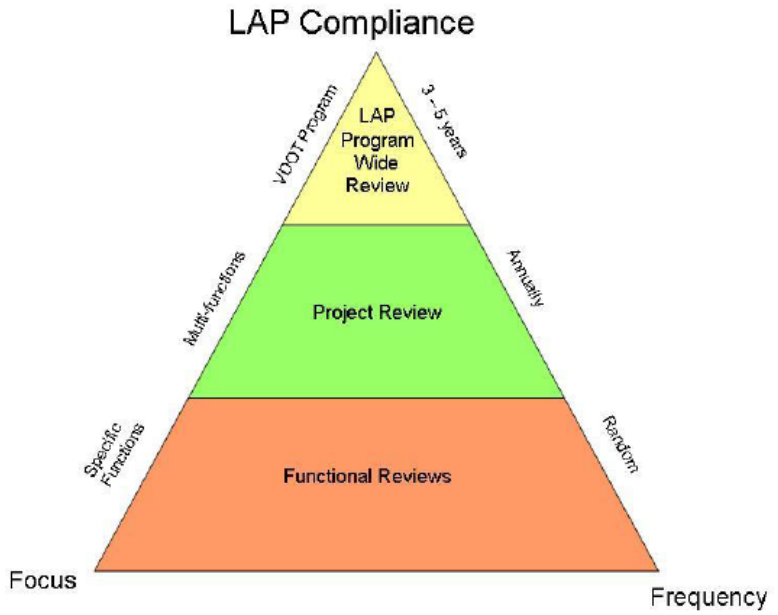


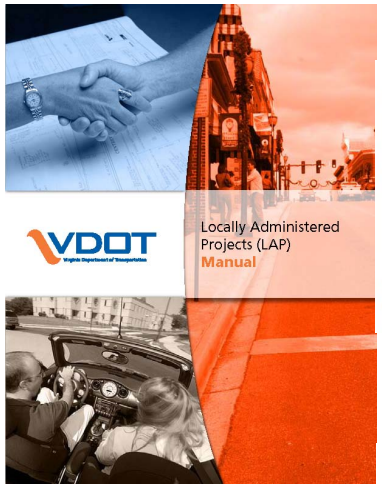
Figure 1.

- **VDOT LAP Compliance Assessment Program**
  - **Program wide reviews:**
    - LAP program evaluation (3-5 years)
  - **Project reviews:**
    - individual project (8-10 per year)
  - **Functional reviews:**
    - discipline specific (ongoing)

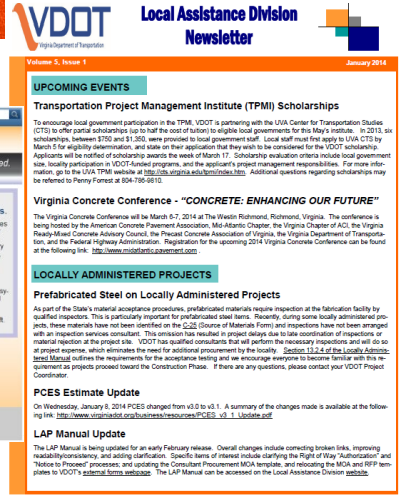


Local Programs Resources

- LAD Program Area Manuals and Guidance
- Local Stakeholder Groups
- LAD Newsletters
- LAD-hosted Webinars and Workshops
- UVA – Transportation Training Academy Training Courses
- LAD Core Curriculum Training
- FHWA-National Highway Institute (NHI) Courses
- Federal-aid Essentials
- VDOT LAP Qualification Program



NATIONAL HIGHWAY INSTITUTE



VDOT | VA LTAP

Locally Administered Projects Qualification Program

- FHWA Every Day Counts supported program
- Provides a consistent method to evaluate locals readiness to administer federally funded projects
- Required for locality's to have at least **one** person "qualified" to administered federally funded projects by **December 31, 2020**
- High level overview of federal requirements for LAPs
- Set series of on-line & classroom training sessions
- Program is offered at no cost to local governments
- Requalification process

Want more information?

Michaela McCain
Michaela.McCain@vdot.Virginia.gov

Local Programs Workshop

Networking for Success!

- Local Government Staff
- VDOT Staff
- Private Sector Staff

Two days of training

- Project Management
- Project Development

VDOT District Locality Days

- Compliments the Local Programs Workshop
- Training and Networking

Local Program Resources

Local Assistance Division External Website

http://www.virginiadot.org/business/local-assistance.asp

Traffic Information

511 offers real-time traffic info. Anytime you need it, anywhere you are.

VDOT 511

SMART SCALE Dashboard

Funding the right transportation projects.

SMART SCALE | DASHBOARD

Virginia Roads

Your one-stop source for VDOT maps, data and project info.

VIRGINIA

Local Assistance Division

About | Access Programs | Training-Outreach | Local Projects | Other Programs | Revenue Sharing | Rural Rustic Roads | Scenic Byways | State Programs | Transportation Enhancement/Transportation Alternatives | Urban Construction Initiative | Devolution | Urban Highways

The Virginia Department of Transportation's (VDOT) Local Assistance Division develops policy and provides guidance for special funding programs and other programs that impact work performed by localities, and serves as a liaison to local governments.

Save the Date! The 2018 Local Programs Workshop will be held on September 18-20, 2018 at the Hotel Roanoke, click here.

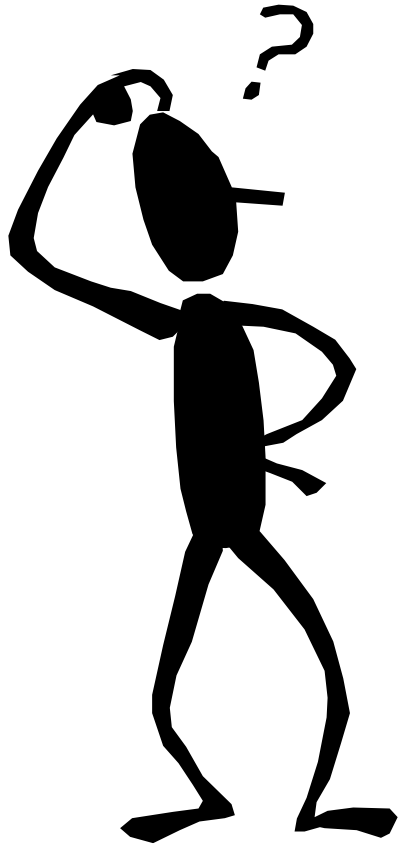
The division also:

- Manages several special funding programs
- Manages urban system changes
- Manages the local assistance payments program
- Provides oversight for locally administered projects
- Coordinates the urban construction program

Email Update Sign-up

VDOT's Local Assistance Division offers email notifications when we update our web pages. Sign up to be notified when we post revised guidance, letters to local governments or training opportunities. Sign up!

Questions



Contact Information

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Locally Administered Projects | Local Assistance Division | VDOT

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Office 804.371.4870

VIRGINIA DEPARTMENT OF TRANSPORTATION

Local Assistance Projects

Lloyd B. Arnold, PMP, SSGB/Lean

February 11, 2020