
VDOT
Virginia Department of Transportation

LYNCHBURG DISTRICT
CONSULTING ENGINEERING OPPORTUNITIES
UPCOMING CONSTRUCTION PROJECTS

Brian Casto, P.E.
Lynchburg District Location & Design Engineer

Lynchburg District
Round 5 SmartScale Projects

UPC	Route	Locality	Project Description	Project Estimate ($ Mil)
T27786	58	Pittsylvania	US Route 58 at Route 622 ICWS	$1.0
T27787	360	Halifax	Town of Halifax Pedestrian Improvements	$2.5
T27796	29	Danville MPO	Piedmont Drive Pedestrian Accommodations	$6.7
T27816	501	Lynchburg	US 501 Bus – Langhorne and Vassar Improvements	$9.8
T27810	29	Danville	Piney Forest Road Improvements	$22.1
T27802	29	Amherst	Seminole Drive Right Turn Lane	$2.5
T27820	29	Pittsylvania	US Route 29 at Spring Garden Rd Turn Lane Improvements	$3.9
T27799	58	Danville	Riverside Dr. Improvements – Audubon Dr. to Arnett Blvd.	$22.3
T27800	151	Nelson	Route 2/151 Intersection Improvement	$15.7
T27808	29	Amherst	Lynchburg Expressway and S Amherst Hwy Intersection	$3.0
T27798	58	Danville	Riverside Dr. Improvements – Arnett Blvd. to Main St.	$28.7
T27801	29	Amherst	Route 29B at Amherst Highway – Dillard Road and Lakeview Dr	$6.7

Lynchburg District

VDOT Administered Advertisements Scheduled through June 30, 2024

UPC	Route	Locality	Project Description	Projected AD	Estimated CN Cost ($ Mil)
115492	29	Amherst County	#SMART20 RTE 29 - CONSTRUCT RCUT AT INTERSECTION OF RTE 151	10/10/2023	3.3
110766	45	Cumberland County	#SMART 18 - RTE 45 - CONSTRUCT ROUNDABOUT AT 690	10/10/2023	4.6
111313	501	Halifax	#SMART18 - RTE 501 - INTERSECTION IMPROVEMENTS AT RTE 628	10/10/2023	6.0
122797	29	Nelson	HSIP RTE 29 - SHOULDER WIDENING W/ EDGE RUMBLES & GUARDRAIL	10/10/2023	6.1
119676	15	Buckingham	HSIP20 - RTE 15 - SHOULDER WIDENING / RUMBLE STRIPS	12/10/2023	2.6
122796	460/360	Various	HSIP DISTRICTWIDE SHOULDER WIDENING W/ EDGE RUMBLES & GUARDR	12/10/2023	4.2
112865	653	Nelson	#SGR19VB - RT 653 BRIDGE AND APPR OVER NS RAILWAY FED 12538	4/9/2024	6.3
111280	92	Charlotte	#SGR18VB - RT 92 BRIDGE & APPR OVER STAUNTON RIVER Fed 4851	4/9/2024	27.0

8 Projects – Total Estimated Cost of $61.1 Million

Lynchburg District

Locally Administered Advertisements Scheduled through June 30, 2024

UPC	FUNDING	LOCALITY	PROJECT DESCRIPTION	PROJECTED ADVERTISEMENT	ESTIMATED CN COST ($ MIL)
110764	SMARTSCALE	CITY OF DANVILLE	#SMART18 - ARNETT BLVD - SIDEWALKS, BIKE LANES, CROSSWALKS	12/29/2023	$0.8
114063	HIGHWAY SAFETY IMPROVEMENT PROGRAM	CITY OF LYNCHBURG	HSIP21 - NATIONWIDE DRIVE - PEDESTRIAN IMPROVEMENTS	12/29/2023	$0.9
113326	REVENUE SHARING	CITY OF LYNCHBURG	REVSH17 - PHASE IV - RTE 163 (FIFTH STREET)-RECONSTRUCTION	6/28/2024	$7.3
117095	REVENUE SHARING	TOWN OF SOUTH BOSTON	REVSH21 MERRITT HILLS SUBDIVISION - DRAINAGE IMPROVEMENTS	12/29/2023	$1.1
117096	REVENUE SHARING	TOWN OF SOUTH BOSTON	REVSH21 RTE 501 (WILBORN AVE) - DRAINAGE IMPROVEMENTS	12/29/2023	$0.4

5 Projects – Total Estimated Cost of $10.5 Million

Lynchburg District

Locally Funded Advertisements Scheduled through June 30, 2024

LOCALITY	PROJECT DESCRIPTION	PROJECTED ADVERTISEMENT	ESTIMATED CN COST ($ MIL)
CITY OF DANVILLE	EAST FRANKLIN TURNPIKE SANITARY SEWER EXTENSION	8/1/2023	$1.0
CITY OF DANVILLE	AIRSIDE SANITARY SEWER FORCE MAIN REPLACEMENT	8/1/2023	$1.0
CITY OF DANVILLE	BISHIP ROAD SANITARY SEWER	9/1/2023	$0.8
CITY OF DANVILLE	2024 MUNICIPAL PAVING CONTRACT	1/15/2024	$2.0

4 Projects – Total Estimated Cost of $4.8 Million

LYNCHBURG DISTRICT MAINTENANCE

Kenneth Martin
Lynchburg District Maintenance Administrator

Pavements Performance Measures

Performance Measure Description	Old Policy (% Sufficiency)	New Policy (% Sufficiency)
Interstate	82% No Section CCI less than 35	82% No Section CCI less than 35
Primary	82%	82% for ≥ AADT 3,500 75% for < AADT 3,500
Secondary	65%	82% for ≥ AADT 3,500 60% for < AADT 3,500

Factors Affecting District Funding

Inventory lane miles and AADT

- Total inventory lane miles
- Lane miles above and below AADT 3,500 (Primary and Secondary)

Pavement Condition (2023) – Statewide Approach

- Movement to target
  - Interstate: 82% sufficiency
  - Primary: Tiered
    - Sections AADT>3,500: 82% sufficiency
    - Sections AADT <3,500: 75% sufficiency
  - Secondary: Tiered
    - Sections AADT>3,500: 82% sufficiency
    - Sections AADT <3,500: 60% sufficiency

Completed work (2022) and planned work (2023)

Unit cost (average bid prices from CY 2022 paving work)

In the past, Districts were funded to stay at their current condition levels even if they exceeded targets. For CY2023 paving, districts will be funded to support statewide policy

Historical Funding Distribution – All Systems (2018 – 2023)

District	2018	2019	2020	2021	2022	2023
Bristol	10.2%	10.5%	10.6%	12.0%	12.3%	11.4%
Salem	12.0%	12.2%	12.0%	12.2%	12.5%	13.2%
Lynchburg	7.3%	7.4%	6.9%	4.7%	4.5%	7.1%
Richmond	14.5%	15.4%	15.2%	13.3%	13.4%	13.2%
Hampton Roads	5.9%	5.9%	5.3%	9.5%	9.5%	8.6%
Fredericksburg	6.4%	6.0%	6.1%	10.9%	10.2%	9.7%
Culpeper	7.6%	7.1%	7.5%	3.2%	3.7%	5.2%
Staunton	10.8%	8.9%	10.9%	10.4%	10.6%	11.0%
NOVA	25.3%	26.6%	25.5%	23.8%	23.3%	20.5%

Total Available Funds for CY 23 Paving: $463 M

VDOT

LYNCHBURG DISTRICT RESURFACING PROGRAM

Treatment	# of 2022 Contracts	2022 Estimated Quantities	Contract Value 2022	# of 2023 Contracts	2023 Estimated Quantities	Contract Value 2023
Plant Mix	6	158,700 Tons	$21.5M	6	180,000 Tons	$30M
Latex	1	1643 Tons	$0.7M	1	1350 Tons	$0.7M
Surface	1	1,050,000 SY	$1.95M	3	1,300,000 SY	$2.53M
Total	8		$24.15M	10		$33.8M

LYNCHBURG DISTRICT

Traditional Pavement Contract Advertisments Scheduled through February 2, 2023

System	Preliminary 2022 Lane Miles	Estimated Cost	Preliminary 2023 Lane Miles	Estimated Cost
Primary	144*	$21.6M	179**	$30M
Secondary	228	$3.3M	277	$3.8M
Total	372	$24.9M	456	$33.8M
	* Includes 8.9 miles of Local SGR Paving		** Includes 12.8 miles of Local SGR Paving	

LYNCHBURG DISTRICT
PAVEMENT ACTION PLAN

- Making the best decision for each paving dollar, while adhering to statewide guidelines and requirements

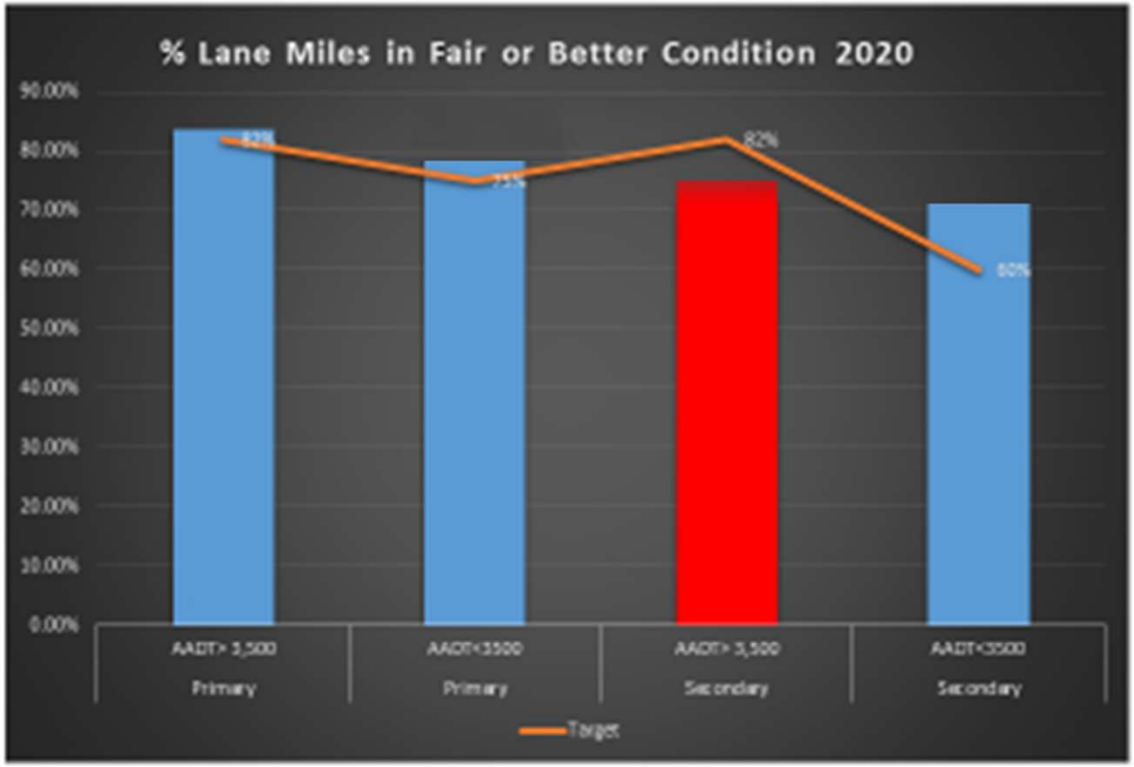
- Residencies and district partners are engaged in planning of pavement solutions. Right Road, right fix, right time.

- Planning with our local partners, developing paving locations and preparing for new paving projects throughout the year

LYNCHBURG DISTRICT PAVEMENT CONDITIONS

(New System)

System	Category	% Sufficient
Primary	AADT ≥ 3,500	83
	AADT < 3,500	77
Secondary	AADT ≥ 3,500	73
	AADT < 3,500	70



Maintenance and Operations
ADA Curb Ramp Retrofit Work

Data as of April 3, 2023

Improvements Completed	LTD Expenditures	Planned FY23 Improvements	Estimated to complete
509	$2,202,156	50	$550,000

Lynchburg District Upcoming Maintenance Contracts

Pipe Jacking and Bore – Appomattox Residency

On-Call Mechanical Tree Pruning Districtwide

Pipe Lining and Rehab Districtwide

Drop Inlet and Pipe Cleaning Districtwide

Unpaved Shoulder Machining Districtwide

LYNCHBURG DISTRICT BRIDGE ACTION PLAN

Lynchburg District currently has 2,087 structures in the inventory:

- 96.0% are non structurally deficient
- 6.3 - Average General Condition Rating (GCR) weighted by Importance factor (IF) (combined all road systems)
- Total number of deficient structures = 84; 40 SD bridges and 44 - SD culverts

Eliminating 18 SD structures in FY23:

- 7 - SD bridges
- 11 - SD culverts

Continued effort to target SD structures

- Focus on Secondary System; 71 of the 84 total SD structures

Continue focus on Condition Yellow Structures

- Districtwide Bridge Maintenance Contract $2.0 M Renewable
  - Joint Elimination and Deck Extensions
  - Epoxy Overlays
  - Rehabilitations
  - Beam End Repairs and strengthening
  - Misc. Erosion Repairs

LYNCHBURG DISTRICT FY24 BRIDGE PROJECTS

Lynchburg District plans to advertise the following projects in FY24:

#BF - Lynchburg Year 2 Structure Recoating (IIJA); 3 Bridges on the Primary System over Norfolk Southern Railway
UPC 122452, Project No. 9999-963-621, B641-B643 – Advertise September 2023

- Total Estimated CN Cost: $1.3 M

Districtwide Bridge Washing Contract at Various Locations (~465 structures)
UPC 122995, Project No. 9999-963-652, N501 – Advertise by early 2024

- Total Estimated CN Cost: $0.9 M

Districtwide Bridge Maintenance Contract
UPC 122996, Project No. 9999-963-653, N501 – Advertise early 2024

- Total Estimated CN Cost: $2.6 M

#SGR18VB – Rte. 92 Bridge and Approaches over Staunton River Fed ID 4851
UPC 111280, Project No. 0092-019-860, B607 – Advertise April 2024

- Total Estimated CN Cost: $24.5 M

#SGR19VB – Rte. 653 Bridge and Approaches over Norfolk Southern Railway Fed ID 12538
UPC 112865, Project No. 0653-062-817, B655 – Advertise April 2024

- Total Estimated CN Cost: $5.3 M

LYNCHBURG DISTRICT BRIDGE MAINTENANCE

FY24

- Preventive Maintenance - $2.6 M
- Restorative Maintenance - $2.2 M
- Replacements - $8.4 M
- Bridge Inspection - $4.2 M

TOTAL - $17.4 M

FY25

- Preventive Maintenance - $2.7 M
- Restorative Maintenance - $2.3 M
- Replacements - $8.8 M
- Bridge Inspection - $4.4 M

TOTAL - $18.2 M

FY26

- Preventive Maintenance - $2.8 M
- Restorative Maintenance - $2.5 M
- Replacements - $9.2M
- Bridge Inspection - $4.6 M

TOTAL - $19.1 M

TOTAL - $54.7 M

- **Preventive Maintenance includes cleaning, joints, epoxy overlays and bridge painting.**
- **Restorative Maintenance includes rigid deck overlays and super/sub repairs.**
- **Replacements includes superstructure and culvert/pipe replacements.**
- **Bridge Inspection includes the scheduled inspections required for all structures (bridges and large culverts).**

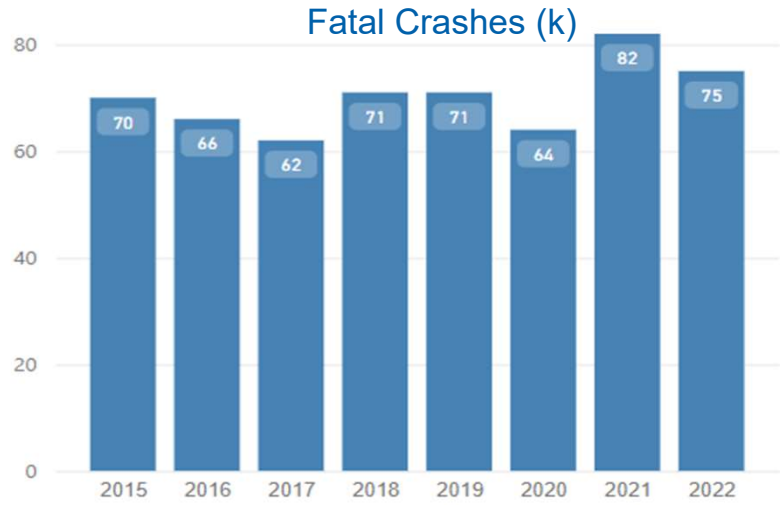
LYNCHBURG DISTRICT TRAFFIC OPERATIONS

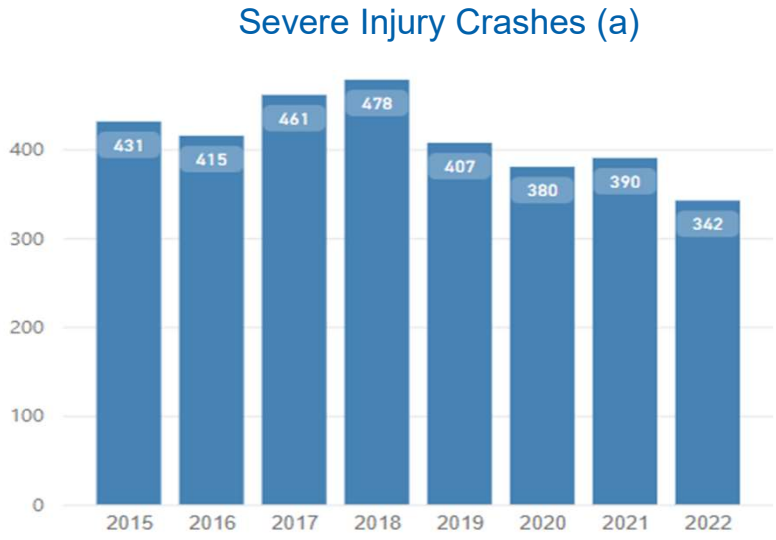
Gerry Harter, P.E.
Lynchburg District Traffic & Operations Director

Lynchburg District Safety Trends

Tracking Fatal and Severe Injury Crashes

- Crash data current through December 2022
- Fatal (k) trending up compared to 3-year average
- 2022 Fatal Crashes were approximately 4% higher than 3-year average
- Severe Injury (a) trending down
- 2022 Severe Injury Crashes were approximately 15% lower than 3-year average
- Approximately 57% of all fatal crashes in 2022 were roadway departure crashes
- Approximately 27% of all fatal crashes in 2022 occurred on high-risk rural roads (HRRR)
- Approximately 13% of all fatal crashes in 2022 involved pedestrians

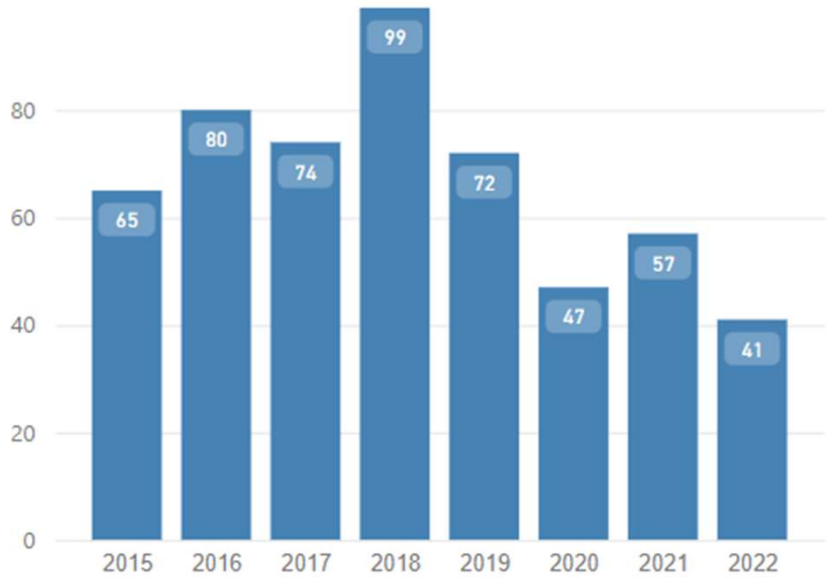




Lynchburg District Work Zone Crashes

Tracking Work Zone Crashes

- Crash data current through December 2022
- 2022 Work Zone Crashes were approximately 29% lower than 3-year average
- Approximately 10% of all WZ crashes in 2022 were distracted driving related
- Approximately 10% of all WZ crashes in 2022 were speeding related
- 36 of the crashes occurred on primaries in 2022
- Approximately 66% of the WZ crashes occurred on VDOT facilities in 2022



Lynchburg District HSIP Systemic Initiative Round 1

Project Updates

- High-Visibility Backplates Complete
- Flashing Yellow Arrow Complete
- Curve Signs
  - $310,000
  - Advertised; Bid Let April 2023
- Pedestrian Crossings
  - $350,000
  - On Call Contract Task Order
- Unsignalized Intersections
  - $1,086,312
  - Under Construction
- On Call Rumble Contract
  - $1,246,625
  - Task Orders underway
- Shoulder Wedge
  - Locations Identified on PM Schedules

Lynchburg District Traffic Future Projects

UPC 114097 – Districtwide High Friction Surface Treatment:

- Provide HFST at various locations throughout the district
- $3.4 million - AD April 2023

UPC 120329/121017 – Salem/Lynchburg Districts On Call Guardrail Contract:

- Provide programmatic guardrail improvements and on call services
- On going Task Orders
- $300,000 Task anticipated in 2023 from Lynchburg
- Potentially $250k+ for long run GR replacement

RPM/PIM Lens Replacement Task Order:

- Replace deficient lenses on various primary routes throughout the district
- $300,000 – Task Order using statewide contract 2023

UPC 122797 – Route 29 Shoulder Widening, Rumble Strips, Guardrail:

- Provide paved shoulder with edge line rumble strips and upgrade guardrail
- 6.1 million – AD September 2023

Lynchburg District Traffic Future Projects

UPC 120753 – Districtwide On Call Rumble Strip Installations:

- Provide rumble strips/stripes throughout the district
- On going Task Orders

CY 2024 Pavement Markings Maintenance Contract:

- Refresh existing pavement markings on secondary routes in 5 counties
- $1.5 million – AD December 2023

UPCs 122723/122725/122728 – HRRR Shoulder Widening & Safety Improvements:

- Extend existing pavement to widen shoulders and improve sight distance
- 1.8 million – AD September 2023

UPC 119676 – Route 15 Shoulder Widening & Rumble Strips:

- Provide paved shoulder with edge line rumble strips
- 2.6 million – AD December 2023

Lynchburg District Traffic Future Projects

UPC 122796 – Districtwide Shoulder Widening, Rumble Strips, Guardrail:

- Provide paved shoulder with edge line rumble strips and upgrade guardrail
- 4.3 million – AD December 2023

UPC 122795 – Districtwide Intersection Conflict Warning System:

- Provide actuated advanced warning devices
- $780,000 – Task Order using on call signal contract 2024

UPC 119408 – High Water Monitoring System:

- Installation of a smart high water monitoring devices
- $555,000 – Task Order using on call ITS contract 2023

UPC 121775 – ATSPM Operations Evaluation:

- Installation of equipment, programming and implementation of software
- $1.2 million – Task Order using on call signal contract 2023

Other Areas of Importance

- **New Incident Management Coordinator**
  - David Tran – 1-804-508-8319
- **HAAS TMA Update**
  - Real-time information regarding stopped vehicles
  - Advanced warning digital alerts
  - TMAs throughout the state have been outfitted as a pilot project.
  - Data collection phase, determine future users
  - Kevin Wright – project lead, 434-293-1915

LYNCHBURG DISTRICT CONSTRUCTION PROGRAM

Greg Parsons, P.E.
Lynchburg District Construction Engineer (Acting)

FOCUS AREAS FOR 2023 CONSTRUCTION SEASON

- Project safety and work zone safety
- Environmental Compliance – NPDES Coordinator, CIC and Construction
  - Be very familiar with permits, permit sketches and special provisions
  - Continuous compliance with SWPPP
  - Ask questions, perform C-107’s regularly, and report deficiencies and associated corrections
- Project Closeouts
  - Reconcile pay quantities daily and monthly
  - Material invoices to be submitted prior to payment for work
  - Buy America and ADA compliance remains a high priority

FOCUS AREAS FOR 2023 CONSTRUCTION SEASON

- Priorities for paving schedules
  - Work zone maintenance
  - Quality construction – Smooth pavements last longer
  - Joint straightness
  - Continued widespread application of safety edge where conditions allow
  - Timely application of pavement markings
  - Project communication and decision making

CIVIL RIGHTS DIVISION

SPECIAL PROVISION FOR
SECTION 107.15 - USE OF SMALL BUSINESSES
SWAM PROGRAM – STATE FUNDED PROJECTS – EFFECTIVE JUNE 7, 2021

Special Provision 107.15 is providing opportunities for Small Businesses, including Small Women-Owned, Small Minority-Owned, and Service Disabled Veteran-Owned Businesses in state contractual work.

Contractors are encouraged to take necessary and reasonable steps to provide SWaMS with the maximum opportunity possible to compete for and perform work as subcontractors and suppliers on the Contract.

Some but not all new changes to these State Funded projects are:

- **SWaM Requirement**
- **Prevailing Wage Rates**
- **Subcontract Agreements**
- **SWaM Narrative**

If you have questions, feel free to contact your District Civil Rights Office.

Lynchburg Consultant CEI Contracts (Estimates)

Contracts	2023	2024	2025	2026
District-wide Contract 1	$2.5 m	$2.7 m	$2.6 m	$1.2 m
District-wide Contract 2	$2.5 m	$2.7 m	$2.6 m	$1.2 m
New District-wide Contract 1				$1.7 m
New District-wide Contract 2				$1.7 m
TOTAL	$5.0 m	$5.4 m	$5.2 m	$5.8 m

MATERIALS PROGRAMS
LYNCHBURG & SALEM DISTRICTS

Don French, P.E.
Lynchburg District Materials Engineer

Travis Higgs, P.E.
Salem District Materials Engineer

Soils and Aggregate Changes

VDOT SP for Bioretention Basins

- Finally, the revised Bioretention Special Provision was approved by DEQ
- L&D Division is currently working with CN Division to get the Special Provision published
- As soon as it is published, Materials Division will publish the following three documents:

1. (New) Approved list for Bioretention Soil Media
2. (New) TL 144 – Bioretention Soil Media Job Mix Formula Form
3. Revised VTM- 134 (note: some minor editorial changes; testing procedures not changed)

SP for CTA

- Submitted the following changes to CN (June, 2022) :

  - Water Content : OMC to OMC+2% → OMC+/-2%
  - Density : Min. 95% of T-134 MDD → Min. 100% of T-134 MDD
  - Minimum Cement Content : 4% cement

- Addressed all the comments that we received from the Industry and FWHA. It is currently under final review by CN

Proposed changes to Sections 305, 308, and 309

- Sections 305 (Subgrade and Shoulders), 308 (Subbase Course), and 309 (Aggregate Base Course)
- The purpose of these changes is to provide clarity regarding reducing the minimum density requirements by 5% as specified in VTM-10 when using the portable density gauge in direct transmission mode.

Each layer of subbase course shall be compacted at optimum moisture, within ±2 percentage points of optimum. The density of each layer of subbase aggregate material, when compared to the theoretical maximum density as determined in accordance with VTM-1, shall conform to the following:

% Material Retained on No. 4 Sieve	Min. % Density
0-50	100
51-60	95
61-70	90

Percentages shall be reported to the nearest whole number. The above density requirements may be reduced by 5% per VTM-10 when using the portable nuclear density gauge in direct transmission mode.

The Department will perform field density determinations with a portable nuclear density gauge using the density control strip as specified in Section 304 and VTM-10, or by other approved methods as directed by the Engineer.

~~Not more than one sample in every five shall have a density less than that specified, and the density of such a sample shall be not more than 2 percent below that specified.~~

The Contractor shall scarify, reshape, and recompact the surface of the subbase if it becomes uneven or distorted and sets up in that condition. If the subbase when compacted and shaped shows a deficiency in thickness or if depressions occur in the surface, the Contractor shall scarify such sections at his own expense before additional material is added.

~~The Department will perform field density determinations with a portable nuclear field density testing device using the density control strip as specified in Section 304 and VTM-10, or by other approved methods as directed by the Engineer.~~

Proposed changes to Sections 303 and 508

- To allow broken concrete and broken asphalt to be used as rock fill in the construction of embankment and provide guidance and requirements on use of theses materials

Section 303.04 (h) Embankment is amended to add the following after the last paragraph on Page 349.

Sec. 303.04 (h)

Broken concrete and broken asphalt may be used in the construction of embankments provided that the maximum particle size is limited to 24 inches in its greatest dimension. Inclusion of fine particles of broken asphalt/concrete less than 2" in maximum dimension shall be minimized. Approximately, 10% of broken asphalt/concrete may be less than 2-inches in maximum dimension. All broken concrete and broken asphalt shall be placed in strict accordance with the requirements for rock fill to ensure that voids are not present within the finished embankment. Broken or scarified pavement layers cannot be left in place within an embankment without modification as approved by the engineer.

Broken asphalt shall be removed, stockpiled and blended with soil for placement as fill. Broken concrete and broken asphalt shall not be placed within 3 feet of finished subgrade or within 3 feet of the reinforced zones for MSE walls or Reinforced Soil Slopes (RSS). Broken asphalt shall not be placed within 5 feet of the ground water table and shall be covered by a minimum 2 feet of low permeability soil on exposed slopes. Pulverized, milled, or fine particle asphalt shall not be permitted as embankment fill or backfill.

Concrete Changes

Shrinkage Reducing Admixture

- Proposing allowing the use 1 ½ gal of SRA (Shrinkage Reducing Admixture) in place of the testing requirements in Section 217 of the Road and Bridge Specifications.

Asphalt Changes

Section 321

- Clear up density requirements on trench widening
- Depth checks on base course

- *321.04(a)(1): **Type 1:Paved Shoulder Only** shall be installed on routes where the widening will serve as a paved shoulder and will not be subjected to constant traffic. The painted edge line will not be on the trench widening. The minimum density requirement will not be enforced and plugs/cores are not required for this type of trench widening. Steel double drum rollers weighing at least 8 tons shall perform compaction of the asphalt concrete. At least five passes shall be completed.*

Section 248

- Adding language about VCA (Void in Coarse Aggregate) failures, investigations

Section 248.04 – Acceptance is amended by replacing the third paragraph with the following:

The Contractor shall check and report the VCA of the mix during production for each gyratory sample. If the VCA of the mix exceeds the VCA of the DRC, the Contractor shall stop production and notify the Engineer. Production shall not resume until the Contractor has taken corrective action and the Engineer has accepted the Contractor's means of correction. The Engineer will investigate and determine the acceptability of mix placed and represented by failing plant and/or field test results by either Department or Contractor personnel. Mix placed with failing VCA shall be investigated and removed or allowed to remain in place at the direction of the Engineer. Should visual examination by the Engineer reveal that mix in any load or portion of the paved roadway is obviously contaminated, segregated, flushed or rutted, or should discovered production issues and/or test results indicate placement of substandard mix, that load or portion of the roadway will be rejected without additional sampling or testing of the lot.

Section 248

- Strengthening remove and replace language

Section 248.04 – Acceptance is amended by replacing the fifth paragraph with the following:

If the Department determines that the mixture being produced does not conform to the approved job-mix formula and the volumetric properties in Table II-25 based on the Department or the Contractor's test results, the Contractor shall immediately make corrections to bring the mixture into conformance with the approved job-mix formula or cease paving with that mixture. The Contractor shall remove and replace mix immediately if the Voids In Total Mix (VTM) is less than 1.0 percent or exceeds 5.0 percent; if the Voids In Coarse Aggregate (VCA) of the mix exceeds the VCA of the dry rodded condition; if the field density is less than 90.0 percent of the maximum theoretical density; or if excessive flushing/bleeding occurs in the wheel paths. The Engineer will investigate and determine the acceptability of mix placed and represented by any additional failing volumetric test results.

Section 315

315.05(c)

- 4th paragraph: *The Engineer may reject the paving if the finished mat shows visual segregation or flushing, in which case the Contractor shall remove and replace the pavement.*
- 8th paragraph: *Asphalt concrete SUPERPAVE pavement courses shall be placed in layers not exceeding five times the nominal maximum aggregate size (NMAS) in the asphalt concrete. The maximum thickness may be reduced if the mixture cannot be adequately placed in a single lift and compacted to the required uniform density and smoothness. The minimum thickness for a pavement course shall be no less than 2.5 times the NMAS of the asphalt concrete.*
- *14th paragraph: Prior to application of tack coat and commencement of paving operations if, in the opinion of the Engineer, the existing pavement surface condition may detrimentally affect or prevent the bond of the new overlay, the Contractor shall clean the existing pavement surface of all accumulated dust, mud, or other debris. At no point shall soil, aggregate, or other potential bond breaker material be stored on the pavement surface. This includes all BM, IM, or SM asphalt layers.*

Section 315

- 92.5% minimum density for all asphalt layers
  - Remove Table III-3
  - Table III-4 has been changed to III-3:

TABLE III-3 Control Strip Requirement and Payment Schedule	
% TMD	% of Payment
Greater than 96.5	95
92.5– 96.5*	100
90.0-92.4	90
88.0-89.9	80
Less than 88.0	Removal
*Control strips meeting 100% pay requirement are passing.	

Section 315

315.05(e)1a: *The control strip shall be considered a lot. If the control strip density conforms to the requirements of 92.5% of TMD, the Engineer will consider the control strip to be acceptable and the control strip density shall become the target control strip density.*

If the Engineer determines that the control strip requirements of 92.5% of TMD cannot be met due to in-situ pavement conditions, Method 'B' will be used for acceptance.

Otherwise, if the density does not conform to the requirements of 92.5% of TMD, the tonnage placed in the control strip and any subsequent paving before construction of another control strip will be paid for in accordance with Table III-3. If the control strip density is below 88% TMD, then that tonnage shall be removed from the roadway at no cost to the department. At the discretion of the Engineer, the material may be accepted at 75% of the contract unit price. The Contractor shall take corrective action to comply with the density requirement of a minimum of 92.5% of TMD.

Density Pay Tables

Remove and replace for less than 88% TMD (control strip & method A) and remove and replace for less than 96.0% of target control strip density (method B)

TABLE III-4A Payment Schedule for Method A Lot Densities	
% TMD	% of Payment
Greater than 96.5	95
92.5 – 96.5	100
90.0 –92.4	90
88.0 – 89.9	80
Less than 88.0	Removal

TABLE III-4B Payment Schedule for Method B Lot Densities	
% of Target Control Strip Density	% of Payment
Greater than 102.0	95
98.0 to 102.0	100
97.0 to less than 98.0	95
96.0 to less than 97.0	90
Less than 96.0	Removal

TABLE III-5 Payment Schedule for Surface, Intermediate and Base Courses (Not sufficient quantity to perform density roller pattern and control strip)	
% TMD	% of Payment
Greater than or equal to 92.5	100
90.0-92.4	90
88.0-89.9	80
Less than 88.0	Removal

TABLE III-6 Payment Schedule for Surface, Intermediate and Base Courses (Asphalt Patching)	
% TMD	% of Payment
Greater than or equal to 91.5	100
90.0-91.4	95
88.1-89.9	90
Less than or equal to 88.0	Removal

Balanced Mix Design (BMD)

- Balanced Mix Design will go live in 2024.
- All contracts statewide will include a working version of this mix next year.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