

## SCDOT Quality Acceptance Sampling & Testing Guide

Amendment to Figure 106B & 106C of the SCDOT Construction Manual (Rev. 7/1/2023)

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Aggregate, Coarse (non asphalt)	Aggregate, # 1 Stone	Agg1	(1) per 500 Tons <sup>F</sup>	(1) 40 Lbs.	<a href="#">SC-T-1</a>	<a href="#">QPL 2</a>	RCE	-	-	<b>S:</b> 501, 701, 802  <b>Appendix:</b> A-2, A-3, A-4, A-6  <b>STS:</b> <a href="#">SC-M-203-5 (7/18)</a> <a href="#">SC-M-205-2 (7/17)</a>	Sample requirement waived for:  1) Temporary applications used in CMRB Curing Methods B & C  2) Use in Non-structural Class 2500 concrete  <i>*Small Quantity Acceptance</i>
	Aggregate, # 4 Stone	Agg4									
	Aggregate, # 5 Stone	Agg5									
	Aggregate, # 56 Stone	Agg56									
	Aggregate, # 57 Stone	Agg57									
	Aggregate, # 67 Stone	Agg67									
	Aggregate, # 6M Stone	Agg6M									
	Aggregate, # 7 Stone	Agg7									
	Aggregate, # 78 Stone	Agg78									
	Aggregate, # 789 Stone	Agg789									
	Aggregate, # 89M Stone	Agg89M									
	Aggregate, # 8M Stone	Agg8M									
	Aggregate, Light Weight Stone	AggLghtWeight									
Aggregate, CR-14 Stone Crusher Run	AggCR-14										
Aggregate, Stone Column Backfill	AggStnColmnBack										
Aggregate, Fine (non asphalt)	Aggregate, FA-10	AggFA10	(1) per 500 Tons <sup>F</sup>	(1) 20 Lbs.	<a href="#">SC-T-2</a>	<a href="#">QPL 1</a>	RCE	-	-	<b>S:</b> 501, 701, 802  <b>Appendix:</b> A-2, A-3, A-5, A-6  <b>SS:</b> <a href="#">(5/1/08)</a>	Sample requirement waived for:  2) Use in Non-structural Class 2500 concrete  <i>*Small Quantity Acceptance</i>
	Aggregate, FA-10 / Manufactured Sand	AggFA10M-701									
	Aggregate, FA-12	AggFA12									
	Aggregate, FA-13	AggFA13									
	Aggregate, Fine Agg. Blended	AggFABlend-701									
	Aggregate, Natural Sand used in Asphalt	AggNatSand401									
	Aggregate, Regular Screenings	AggScr									
Aggregate, Washed Screenings	AggWScr										
Asphalt Emulsions (used in Tack Coat Applications)	Asphalt, Emulsified RS-1 (Rapid Set)	AsphLiqRS1-406	Obtain sample only if field application issue exists	(1) 0.5 Gallon	<a href="#">SC-T-61</a>	<a href="#">QPL 38</a>	RCE	Roadway Placement: <a href="#">SC-T-86</a>	(1) Each Application (Form 400.04)	<b>S:</b> 401.4.18	Submit to OMR within 7 days of sampling
	Asphalt, Emulsified HFMS-1	AspLiqHFMS1-406									
	Asphalt, Emulsified HFMS-1H	AspLiqHFMS1H406									
	Asphalt, Emulsified HFMS-2	AspLiqHFMS2-406									
	Asphalt, Emulsified SS-1 (Slow Set)	AsphLiqSS1-406									
	Asphalt, Emulsified CRS-1	AsphLiqCRS1-406									
	Asphalt, Emulsified CRS-2	AsphLiqCRS2-407									
	Asphalt, Emulsified CMS-2	AsphLiqCMS2-406									
Asphalt, Emulsified CSS-1H	AsphLiqCSS-1H										
Asphalt, Emulsified Non-Tracking Tack	AsphLiqNTT										
Asphalt Emulsions (used in Surface Treatment Applications)	Asphalt, Emulsified CRS-1	AsphLiqCRS1-406	(1) per 25,000 Gallons	(1) 0.5 Gallon	<a href="#">SC-T-61</a>	<a href="#">QPL 38</a>	RCE	Roadway Placement: <a href="#">SC-T-86</a>	(1) Each Application (Form 400.04)	<b>S:</b> 406, 407, 408  <b>Appendix:</b> A-2, A-3  <b>SS:</b> <a href="#">(3/1/16)</a>	Sample requirement waived for: Temporary applications used in CMRB Curing Methods B & C Submit to OMR within 7 days of sampling <i>*Small Quantity Acceptance</i>
	Asphalt, Emulsified CRS-2	AsphLiqCRS2-407									
	Asphalt, Emulsified CRS-2L (Latex)	AsphLiqCRS2L406									
	Asphalt, Emulsified CRS-2P (Polymer)	AsphLiqCRS2P407									
	Asphalt, Emulsified CSS (FDR)	AsphLiqCSS(FDR)									
	Asphalt, Emulsified CSS-1H	AsphLiqCSS-1H									
	Asphalt, Emulsified EAP Special	AsphLiqEAPS-407									
Poly Mod Emulsified Asph Fog Seal - OGFC	AsphLiqFogSeal										
Asphalt, Micro- Surfacing	Asphalt, Emulsified CQS-Micro	AsphLiqCQSMicro	(1) per 25,000 Gallons	(1) 0.5 Gallon	<a href="#">SC-T-61</a>	<a href="#">QPL 38</a>	RCE	Compute the Daily Average of Residual Aphalt & Mix Rate: (Based on Contractors QC readings)	(1) per Days Production	<b>SS:</b> <a href="#">(1/1/19)</a>	Observe test section construction for approval of Mix Design and System Performance
	Aggregate, Micro Surface Screenings	AggMicroScrn	(1) per 50,000 SY Installed	(1) 20 Lbs.	<a href="#">SC-T-2</a>	<a href="#">QPL 1</a>	RCE				

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Asphalt, PMTLS	Preventative Maintenance Thin Surf. WMA	Surf-PrevMa_WMA	(1) per 5,000 Tons	(1) 15-50 Lbs.	<a href="#">SC-T-62</a>	-	DAM	Ambient Temperature: <a href="#">SC-T-84</a>	(1) Before paving starts, then (2) per LOT (Form 400.04)	<b>SS:</b> <a href="#">(11/1/13)</a>	-
	Preventative Maintenance Thin Surface	Surf-PrevMaint						Mix/Mat Temperature: <a href="#">SC-T-84</a>	(4) per LOT (Form 400.04)		
Asphalt Binder	Asphalt, Liquid PG 64-22	AsphLiqPG64-401	(1) per 20,000 Tons of Mix Produced	(1) Quart	<a href="#">SC-T-61</a>	<a href="#">QPL 37</a>	DAM	-	-	<b>SS:</b> 401 <b>SS:</b> <a href="#">(1/1/19)</a>	<i>*Small Quantity Acceptance</i>  <i>All samples submitted to OMR Central Lab in Columbia</i>
	Asphalt, Liquid PG 76-22	AsphLiqPG76-401	(1) per 10,000 Tons of Mix Produced								
Asphalt, OGFC	Open Graded Friction Course 12.5mm	OGFC-403	(1) per 5,000 Tons	(1) 1500-1700 gram Sample	<a href="#">SC-T-110</a>	-	DAM	Ambient Temperature: <a href="#">SC-T-84</a>	(1) Before paving starts, then (2) per LOT (Form 400.04)	<b>S:</b> 409  <b>SS:</b> <a href="#">(1/1/19)</a>  <b>SS (Table):</b> <a href="#">(4/1/16)</a> <a href="#">SC-M-403 (7/21)</a>	Establish and document the roller pattern required to seat the mix
	Maintenance Open Graded Friction Course	Surf-Maint-OGFC						Mix/Mat Temperature: <a href="#">SC-T-84</a>	(4) per LOT (Form 400.04)		
Asphalt, Surface	Asphalt SMA Surface 9.5mm	AsphSMASurf95	(1) per 5,000 Tons	(1) 15-50 Lbs.	<a href="#">SC-T-62</a>	-	DAM	Calculate&Mark Core Locations for SMA, STA & STB Mixes: <a href="#">SC-T-101</a>	(1) per 1,500 ft paved	Contract Special Provision	Document Control Strip Density Test (Form 400.02)
	Asphalt SMA Surface 12.5mm	AsphSMASurf125									
	Surface Type A	Surf-T-A									
	Surface Type B	Surf-T-B									
	Surface Type B Warm Mix Asphalt	Surf-T-B_WMA									
	Surface Type C	Surf-T-C									
	Surface Type C Warm Mix Asphalt	Surf-T-C_WMA									
	Surface Type D	Surf-T-D									
	Surface Type D Warm Mix Asphalt	Surf-T-D_WMA									
	Surface Type E (Sand Seal)	Surf-T-E									
Surface Type E Warm Mix Asphalt	Surf-T-E_WMA										
								Ambient Temperature: <a href="#">SC-T-84</a>	(1) Before paving starts, then (2) per LOT (Form 400.04)	<b>S:</b> 401, 403  <b>STS:</b> <a href="#">SC-M-400 (1/20)</a> <a href="#">SC-M-403 (7/21)</a>	Observe and document the in-place density test procedures being performed: <a href="#">SC-T-87</a> <a href="#">SC-T-65</a>
								Mix/Mat Temperature: <a href="#">SC-T-84</a>	(4) per LOT (Form 400.04)		
								Lay Down Rate: <a href="#">SC-T-85</a>	(1) per 200 Tons (Form 400.04)		
								Calculate&Mark Density Gauge for STC & STD Mixes: <a href="#">(SC-T-101)</a>	(1) per 500 ft. paved		No in-place density performed on STE Mixes

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Asphalt, Intermediate	Intermediate Type A	Inter-T-A	(1) per 5,000 Tons	(1) 35-50 Lbs.	<a href="#">SC-T-62</a>	-	DAM	Ambient Temperature: <a href="#">SC-T-84</a>	(1) Before paving starts, then (2) per LOT (Form 400.04)	<b>S:</b> 401, 403	Document Control Strip Density Test (Form 400.02)  Observe and document the in-place density test procedures being performed: <a href="#">SC-T-87</a>  *ITB-Special Acceptance, Placement rate: < = 300 #, Cores > 300 #, Gauge
	Intermediate Type B	Inter-T-B						Mix/Mat Temperature: <a href="#">SC-T-84</a>	(4) per LOT (Form 400.04)		
	Intermediate Type B Special	Inter-T-B(Spec)						Lay Down Rate: <a href="#">SC-T-85</a>	(1) per 200 Tons (Form 400.04)		
	Intermediate Type B Warm Mix Asphalt	Inter-T-B_WMA						Calculate&Mark Core Locations for ITA, ITB, & *ITB-Special Mixes: <a href="#">SC-T-101</a>	(1) per 1500 ft. paved		
	Intermediate Type C	Inter-T-C						Calculate&Mark Density Guage Locations for ITC Mixes: <a href="#">SC-T-101</a>	(1) per 500 ft. paved		
	Intermediate Type C Warm Mix Asphalt	Inter-T-C_WMA									
Asphalt, Base	Base Type A	Base-T-A	(1) per 5,000 Tons	(1) 25-50 Lbs.	<a href="#">SC-T-62</a>	-	DAM	Ambient Temperature: <a href="#">SC-T-84</a>	(1) Before paving starts, then (2) per LOT (Form 400.04)	<b>S:</b> 401, 309, 310	Document Control Strip Density Test (Form 400.02)  Observe and document the in-place density test procedures being performed: <a href="#">SC-T-65</a>
	Base Type A Warm Mix Asphalt	Base-T-A_WMA						Mix/Mat Temperature: <a href="#">SC-T-84</a>	(4) per LOT (Form 400.04)		
	Base Type B	Base-T-B						Lay Down Rate: <a href="#">SC-T-85</a>	(1) per 200 Tons (Form 400.04)		
	Base Type B Warm Mix Asphalt	Base-T-B_WMA						Calculate&Mark Density Guage Locations: <a href="#">SC-T-101</a>	(1) per 500 ft. paved		
	Base Type C (Surface Sand Base)	Base-T-C									
	Base Type C Warm Mix Asphalt	Base-T-C_WMA									
	Base Type D (Surface Sand Base)	Base-T-D									
	Base Type D Warm Mix Asphalt	Base-T-D_WMA									
Asphalt, Shoulder Widening	HMA Shoulder Widening Course	Shoulder-HMA	(1) per 5,000 Tons	(1) 25-50 Lbs.	<a href="#">SC-T-62</a>	-	DAM	Ambient Temperature: <a href="#">SC-T-84</a> Mix/Mat Temperature: <a href="#">SC-T-84</a> Lay Down Rate: <a href="#">SC-T-85</a>	(1) Before paving starts then (2) per LOT (Form 400.04) (4) per LOT (Form 400.04) (1) per 200 Tons (Form 400.04)	<b>S:</b> 401  <b>SS:</b> <a href="#">(4/3/09)</a>  <b>STS:</b> <a href="#">SC-M-400 (1/20)</a>	-

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Backfill	Backfill Materials, MSEW	Backfill-713.08	(1) Initial Source Evaluation Sample  (1) per 2,000 CY (Short Test)  (1) per 15,000 CY (Full Test)	Stone: (5) 70 Lb. bags Granular: (2) 70 Lb. bags  Stone: (1) 70 Lb. bags Granular: (1) 20 Lb. bag  Stone: (5) 70 Lb. bags Granular: (2) 70 Lb. bags	<a href="#">SC-T-1</a>  <a href="#">SC-T-2</a>	<a href="#">QPL 1</a>  <a href="#">QPL 2</a>	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>  (Not required for stone)	(1) per every 2 Lifts for every: (Form 200.03)  25ft of wall for any portion of wall within 150ft of bridge  100ft of wall for any portion of the wall greater than 150ft away from bridge	<b>S:</b> 713  <b>STS:</b> <a href="#">SC-M-713 (01/19)</a>	Specify what level of testing is required when submitting the sample (Initial Source, Short, Full)  <i>Short Test : completed in-house</i> <i>Full Test : sent out for internal friction angle test</i>
	Reinforced Soil Slope	Backfill-RSS	(1) per 4,000 CY (Short Test)  (1) per 20,000 CY (Full Test)	Soil: (1) 20 Lb. bag	<a href="#">SC-T-1</a>  <a href="#">SC-T-2</a>	<a href="#">QPL 1</a>  <a href="#">QPL 2</a>	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>	(1) per every lift for every: (Form 200.03)  25ft of wall for any portion of wall within 150ft ft of bridge  75ft of wall for any portion of the wall greater than 150ft away from bridge	<b>STS:</b> <a href="#">SC-M-206 (04/16)</a>	Specify what level of testing is required when submitting the sample (Initial Source, Short, Full)  <i>Short Test : completed in-house</i> <i>Full Test : sent out for internal friction angle test</i>
	Pipe, Culvert Backfill (Bed for Pipe)	BackfillPipeCul	(1) Verification Sample at start of operations & (1) per 1000 LF of production	Fine: (1) 20 Lbs. Course: (1) 40 Lbs. Base: (1) 70 Lbs.	<a href="#">SC-T-1</a>  <a href="#">SC-T-2</a>	<a href="#">QPL 1</a>  <a href="#">QPL 2</a>	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>	See <b>STS</b> (08/09) (Form 200.07 & 200.08)	<b>S:</b> 714  <b>STS:</b> <a href="#">SC-M-714 (01/21)</a>	Specify if Project has approved Pipe Backfill Material Waiver
Embankment	Unclassified Excavation used in Embankment	-	-	-	-	-	-	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>	Below 18": (1) Each 2,000 CY min. of (1) per Lift Top 18": (1) Each 1,000 ft per 2 lanes	<b>S:</b> 205	-
	Borrow, Embankment	BorrEmb-203	(1) Each day of work from each source used		Obtain a representative sample from entire width of roadway	-	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>	(1) Each 2,000 CY min. of (1) per Lift	<b>S:</b> 205	Specify if the sample is Below 5' of Finished Grade
	Borrow Embankment Subgrade Top 18 inches	BorrSubgrade203	(1) Each 1,000 ft per 2 lanes		Obtain a representative sample from entire width of roadway	-	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a>	(1) Each 1,000 ft per 2 lanes	<b>S:</b> 205	-

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Base	Base, Sand Clay	BaseSanClay-303	(1) Each 1,000 ft per 2 lanes	10 Lbs.	Obtain a representative sample from entire width of roadway	-	RCE	Compaction: <a href="#">SC-T-29</a> <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> Depth Check:	(1) Each 2,000 CY min. of (1) per Lift  (1) Each 250ft per 2 lanes (Form 300.01)	<u>S:</u> 303	-
	Base, Coquina Shell Course	BaseCoq-304	(1) Initial Theoretical Density Sample  (1) Each 1000 ft per 2 lanes each layer	(5) 70 Lb. bags  25 Lbs.	<a href="#">SC-T-1</a>	<a href="#">QPL 4</a>	RCE	Compaction: <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> Depth Check:	(1) Each 2,000 CY min. of (1) per Lift (Form 300.03)  Each 250ft per 2 lanes (Form 300.01)	<u>S:</u> 304	-
Graded Aggregate Base	Base, Macadam Course	BaseMac-305	(1) Initial Theoretical Density Sample	(5) 70 Lb. bags	<a href="#">SC-T-1</a>	<a href="#">QPL 2</a>	RCE	Compaction: <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> Depth Check:	(1) Each 1,000ft per 2 lanes each layer (Form 300.03)	<u>S:</u> 305  <u>SS:</u> <a href="#">(1/2/14)</a> <a href="#">(5/1/09)</a>	Submit these samples to OMR within 3 business days from the date of sampling
	Base, Marine Limestone	BaseMarLime-305		70 Lbs.	<a href="#">SC-T-100</a>				Each 250ft per 2 lanes (Form 300.01)		
	Base, Recycled Portland Cement Concrete	BaseRecyConc305	(1) Each 1000 ft per 2 lanes each layer								
Cement Treated Base	Earth Base, Cement Stabilized	-	(1) Initial Mix Design & Theoretical Density Sample	(2) 70 Lb. bags	Obtain a representative sample	-	RCE	Compaction: <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> Depth Check: Cement Application Rate: <a href="#">SC-T-141</a>	(1) Each 1,000ft per 2 lanes (Form 300.03)  Each 250ft per 2 lanes (Form 300.01) Daily Average & Spot Checks	<u>S:</u> 306	Submit material for Mix Design to OMR 30 days prior to construction
	Recycled Base, Cement Modified	-	-	-	-	-	RCE	Compaction: <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> <a href="#">SC-T-33</a> Depth Check: Cement App Rate: <a href="#">SC-T-141</a>	(1) Each 1,000ft per 2 lanes (Form 300.06)  Each 500ft per 2 lanes (Form 300.01) (1) per Tanker Load	<u>S:</u> 306  <u>STS:</u> <a href="#">SC-M-306 (7/21)</a>	Submit Contractor's Mix Design to OMR for approval 2 weeks prior to construction
	Aggregate Base, Cement Stabilized	-	Sample & submit aggregate samples according to GAB guidelines	-	If a Pugmill is used, sample the virgin aggregate from the stockpile (1) Each 1,000 Tons <a href="#">SC-T-1</a>	-	RCE	Compaction: <a href="#">SC-T-33</a> Depth Check:  Cement Application Rate: <a href="#">SC-T-141</a>	(1) Each 1,000ft per 2 lanes (Form 300.03)  Each 250ft per 2 lanes (Form 300.01)  Daily Average & Spot Checks	<u>S:</u> 308  <u>STS:</u> <a href="#">SC-M-308 (10/15)</a>	Submit Contractor's Mix Design to OMR for approval 2 weeks prior to construction  Observe & document QC compressive strength specimen sampling & testing
	Subbase, Cement Modified	SubCemMod-301	(1) Initial Mix Design & Theoretical Density Sample  (1) per Day	(2) 70 Lb. bags  (2) 4" diameter Cores	Obtain a representative sample  Construction Manual 301.3.3.5	-	RCE	Compaction: <a href="#">SC-T-30</a> <a href="#">SC-T-31</a> <a href="#">SC-T-32</a> Depth Check: Cement App Rate: <a href="#">SC-T-141</a>	(1) Each 1,000ft per 2 lanes (Form 300.06)  Each 500ft per 2 lanes (Form 300.01) Daily Average & Spot Checks	<u>S:</u> 301	Submit material for Mix Design to OMR 30 days prior to construction

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Cement	Portland Cement Type I	CementTypeI	(1) Each 100 Tons for Concrete use	(1) Gallon	SC-T-47	QPL 6	RCE	-	-	S: 701	Sample requirement waived for use in non-structural Class 2500 concrete  Mill Test Report is required. Submit to OMR along with sample.
	Portland Cement Type II	CementTypeII	(1) Each 400 Tons for Base use							SS: (5/5/14)	
	Portland Cement Type III	CementTypeIII	(1) Each 100 Tons							SS: (5/5/14)	
	Cement Type I (Slag Modified)	CementTypeISM	(1) Each 50 Tons							S: 701.4.9 SS: (5/5/14)	
	Fly Ash, Portland Cement Concrete	FlyAshPCC-701	(1) Each 50 Tons							S: 701.4.9 SS: (5/5/14)	
	Slag, Granulated	SlagPCC-701	(1) Each 50 Tons							SS: (5/5/14)	
Masonry	Clay Brick	ClayBrick	(1) Each 50,000 Bricks	(6) Bricks	-	-	RCE	-	-	S: 718	-
	Concrete Block	ConcBlock-718	(1) Each Source	(6) Blocks							
	Concrete Brick	ConcBrick	(1) Each 50,000 Bricks	(6) Bricks							
	Grout	Grout	(1) per 10 CY	(1) Set of 3 Cubes (2")						ASTM C109	
Concrete	Concrete Cylinder, Class 2500	ConcCyl. 2500	Non-structural Class 2500: (1) per 50 CY Structural: (1) per 50 CY on small pours & min. of 1/structure if <50 CY or (1) per 100 CY on large pours* *exceeds 100 CY Pavement: (1) per 1500 CY & a min. of 1 per production day	Non-structural Class 2500: (1) Set of 3 Cylinders (4" x 8") Structural: (1) Set of 3 Cylinders (4" x 8") Pavement: (1) Set of 6 Cylinders (6" x 12") 3 Cylinders will be tested at 72 hrs 3 Cylinders will be tested at 28 days	ASTM C172  ASTM C31	QPL 28	RCE	Slump: (AASHTO T-119, ASTM C143)  Air Content: (AASHTO T-196, ASTM C231 or ASTM C173)  Temperature: (ASTM C1064)  Thickness Verification:	Structural: (1) each time test specimens are made  Pavement: (4) each days production, and (1) each time test specimens are made  Pavement: See STS SC-M-503 (03/08)	Structural: S: 701, 702, 704 SS: (2/1/2015) (8/1/2014) (5/5/2014) (8/2/2013)	Report field test results on Ready Mix Concrete Report (Form 700.04)  Not Required for Non-structural Class 2500 concrete  *Small Quantity Acceptance  Slump, Air Content, & Temperature field testing is waived for High Early Strength Mix for patching
	Concrete Cylinder, Class 3000	ConcCyl. 3000									
	Concrete Cylinder, Class 4000	ConcCyl. 4000									
	Concrete Cylinder, Class 4500	ConcCyl. 4500									
	Concrete Cylinder, Class 5000	ConcCyl. 5000									
	Concrete Cylinder, Class 5500	ConcCyl. 5500									
	Concrete Cylinder, Class 6000	ConcCyl. 6000									
	Concrete Cylinder, Class 6500	ConcCyl. 6500									
	Concrete Cylinder, Class 7000	ConcCyl. 7000									
	Concrete Cylinder, Class 7500	ConcCyl. 7500									
	Concrete Cylinder, Class 8000	ConcCyl. 8000									
	Concrete Cylinder, Class 8500	ConcCyl. 8500									
	Concrete Cylinder, Class 9000	ConcCyl. 9000									
Concrete Cylinder, Class 9500	ConcCyl. 9500										
Concrete Cylinder, Class 10,000	ConcCyl. 10,000										
Water	Water-701	(1) Each Source	(1) Gallon	Obtain a representative sample	-	RCE	-	-	-	S: 701.2.11	
Roller Compacted Concrete	Roller Compacted Portland Cement	CementTypeI	According to Cement Guidelines			-	RCE	Compaction: SC-T-33  Paver Compaction Verification: SC-T-33	(1) Each 1,000 ft per 2 lanes (Form 300.03)  (1) per Project, & as determined necessary	Contract Special Provision	Observe & document QC compressive strength specimen sampling & testing
	Roller Compacted Concrete Aggregate	AggCompConcPvmt	(1) per 500 Tons Agg	(1) 40 Lbs.	SC-T-1	QPL 2					
High Friction Surface Treatment	High Friction Surface Treatment Binder	HFST-PolyRes	(1) per 2,000 SY of Treatment & (1) Each Batch	(1) 1/2 - 1 Gallon, Each component	Obtain each component of the binder in a separate tightly sealed container.	QPL 87	RCE	Depth Check:	(1) per 100 SY	SS: (9/1/15)	Compare manual depth checks to equipment output readings to verify calibration
	High Friction Surface Treatment Agg.	AggHighFriction	(1) per 2,000 SY of Treatment &	(1) 10 Lbs.	SC-T-2	-	RCE	-	-	SS: (9/1/15)	Verify adequate rate/coverage

Product	Material Description	SiteManager Material Code	Minimum Sample Frequency	Sample Size	Sampling Procedure	QPL	Office to Obtain Sample	RCE to Test (Test-Minimum Frequency)		Spec Reference	Remarks
Bridge Lift	Stone Bridge Lift Material	StoneBridgeLift	(1) per 500 Tons	(1) 100 Lbs.	<a href="#">SC-T-1</a>	<a href="#">QPL 2</a>	RCE	-	-	<b>SS:</b> <a href="#">(3/8/16)</a>	-
	Granular Bridge Lift Material	GranBridgeLift	(1) Each day of work from each source used	Base: (1) 70 Lbs. Granular: (1) 20 Lbs.	<a href="#">SC-T-1</a> <a href="#">SC-T-2</a>	-	RCE	-	-	<b>SS:</b> <a href="#">(3/8/16)</a>	-
	Borrow Bridge Lift Material	BorrBridgeLift	(1) Each day of work from each source used	10 Lbs.	Obtain a representative sample	-	RCE	-	-	<b>SS:</b> <a href="#">(3/8/16)</a>	-
Reinforcing Steel	Reinforcing Steel # 3 Bar / 10mm	SteelReinf-#3	(1) per month, each size, each shipment  Exemption shown in Section 703.2.1.3 of <b>SS:</b> <a href="#">(7/1/19)</a>	(1) 30"	Encompass the entire mill marking in the sampled section	<a href="#">QPL 60</a>	RCE	-	-	<b>S:</b> 703  <b>SS:</b> <a href="#">(7/1/20)</a>	Mill Test Report is required. Submit to OMR along with sample.  No reinforcing steel samples are required for Catch Basins. <b>RCE</b> should obtain mill test report for file.
	Reinforcing Steel # 4 Bar / 13mm	SteelReinf-#4									
	Reinforcing Steel # 5 Bar / 16mm	SteelReinf-#5									
	Reinforcing Steel # 6 Bar / 19mm	SteelReinf-#6									
	Reinforcing Steel # 7 Bar / 22mm	SteelReinf-#7									
	Reinforcing Steel # 8 Bar / 25mm	SteelReinf-#8									
	Reinforcing Steel # 9 Bar / 29mm	SteelReinf-#9									
	Reinforcing Steel # 10 Bar / 32mm	SteelReinf-#10									
	Reinforcing Steel # 11 Bar / 36mm	SteelReinf-#11									
	Reinforcing Steel # 14 Bar / 43mm	SteelReinf-#14									
	Reinforcing Steel # 18 Bar / 57.3mm	SteelReinf-#18									
	Steel Reinforcing Wire, Spiral	SteelWireSpiral	(1) Each Size Each Shipment	(1) 40"	-	-	RCE	-	-	<b>S:</b> 703	-
Steel, Butt-Welded Splice, Welded Hoop	SteelButtWeld	(1) Each Size Each Shipment	(1) Spliced sample, 30"	-	-	RCE	-	-	<b>S:</b> 704  <b>SS:</b> <a href="#">(7/1/20)</a>	-	
Mechanical Couplers for Reinf. Steel	SteelCoupler	(1) Each Lot, Each Size	(1) Assembled sample, 30"  (2) Assembled Check Samples: 12" of rebar from each end of coupler	Splice located at mid-point of assembled sample	<a href="#">QPL 73</a>	RCE	-	-	<b>S:</b> 703  <b>SS:</b> <a href="#">(7/1/20)</a>	Mill Test Report is required. Submit to OMR along with sample.  30" rebar control bar from heat used in coupler assembly required with check samples. Submit to OMR along with sample.	
Structural Steel Fasteners High Strength	StlStrucFast709	(1) Each possible combo. of bolt lot, nut lot, washer lot, & DTI lot	(3) Assemblies of Bolt, Nut, Washer, & DTI	-	-	RCE	-	-	<b>S:</b> 709	Certification is required. Submit to OMR along with sample. <i>No sample required for bolt assemblies through prestressed girders attaching steel diaphragms.</i>	

Summary Of Revisions	
Revision Date:	Summary:
7/1/2023	Revised sampling requirements for Asphalt Binder PG 64-22
7/1/2021	Removed sample requirement for Reinforcing Steel (Seven-Wire Strand Reinforcing Cable)
7/1/2021	Corrected the Asphalt Surface sample size requirement to (1) 15-50 Lbs.
3/1/2020	Updated CMRB reference and curing methods to comply with SC-M-306 (1/2018)
3/1/2020	Added new SM material code for Stone Column Backfill
1/1/2020	Removed sample requirements for Reinforcing Steel (Wire Mesh 4x4, 6x6, & Deformed Wire)
1/1/2020	Revised sample requirements for Concrete Brick- decreased sample size to 6 bricks
1/1/2020	Revised sample requirements for Concrete Block - increased sample size to 6 blocks
6/25/2019	Revised Structural Steel Fasteners to include DTI lot & Remark for bolt assemblies req.
6/19/2019	Revised sampling frequency for Structural Concrete to include small & large pours
6/19/2019	Added Spec Ref SCM 403 to Asphalt OGFC & Surface
6/19/2019	Added Asphalt SMA Surface 9.5mm & 12.5mm
4/1/2019	Added Roller Compacted Concrete sampling of Portland Cement (for clarification)
4/1/2019	Removed sample requirement for Preformed Joint Filler for Concrete (cert only)
4/1/2019	Removed sample requirement for PipePVC (Perf & Solid - Underdrain, Slope Drain)
1/1/2019	Editorial updates to some form numbers and notes
11/1/2018	Revised sample requirements for Reinforcing Steel per updated SS (7/1/18)
11/1/2018	Added note in Reinforcing Steel eliminating the sample requirements for steel in catch basins - material code SteelReinf - CB (mill test report required for RCE file)
11/1/2018	Added sample requirements and new SM material code for Reinforced Soil Slopes
11/1/2018	Removed sample requirements for fence materials
2/7/2018	Revised Micro Surfacing screenings minimum sampling frequency
1/23/2018	Added new Asphalt and CMRB specifications, clarified cement sampling frequencies based on use
10/27/2017	Added Slag, Granulated
9/18/2017	Added Unclassified Excavation used in Embankment to clarify field testing requirements

* Small Quantity Acceptance		
RCE must submit Form 100.25 to report acceptance of small quantity materials to OMR		
Material	Criteria	Maximum Small Quantity
Aggregates	Other than in critical concrete work or asphalt mixes	500 Tons each type
Asphalt PG Binder	-	2500 Tons of Asphalt Mix produced
Asphalt Emulsions	-	5000 Gallons
Portland Cement Concrete	Including component materials for use in structural non-critical items such as sidewalks, curb & gutter, catch basins, signs, fence posts, & guardrail anchoring	50 Cubic Yards

**F** = Sampling Frequencies may be modified on large projects, as approved by the Materials & Research Engineer.

This guide serves as an amendment to Figure 106B & 106C of the SCDOT Construction Manual. It should be used in conjunction with the Materials Certification Requirements List, Qualified Products Policies & Listings, Pretested Materials Policies & Listings, and all other applicable guidance for quality acceptance of materials to be incorporated into the work of SCDOT projects.

**Specification Reference Abbreviations:**

**S** = [SCDOT 2007 Standard Specifications for Highway Construction](#)

**SS** = [Supplemental Specification](#)

**STS** = [Supplemental Technical Specification](#)