

TYPE OF WORK

ITEMS AND REQUIREMENTS FOR EACH TYPE OF WORK

SODDING	PERMANENT SEEDING	TEMPORARY SEEDING	Reference Item 161, 162, 164, 166, 168 of the Texas Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges 2024 for specifications, dimensions, volumes and measurements that are not shown. Use latest Houston District, Special Provisions for those items indicated.						
	✓		161-7002 COMPOST MANUF TOPSOIL (4") SY	APPLICATION RATE Item 161.2.1. Compost Manufactured Topsoil (CMT)	Item 161.2. Materials Submit quality control(QC) documentation to the Engineer. Compost producer's STA certification must be dated to meet STA requirements (certification must be within 30 or 90 days per STA requirements). Lab analysis performed by an STA-certified lab must be dated within 30 days before delivery of the compost.				
✓			162-7002 BLOCK SODDING SY	GRASS SPECIES Item 162.2. Materials Common Bermuda (Cynodon Dactylon)	Item 162.2.1. Block Sod Use block palletized or roll type sod. REMOVE PLASTIC BACKING FROM ROLL TYPE SOD. Place sod within 48 hours of delivery to site. No exceptions. Place sod with joints alternating on each row to prevent continuous joint lines. Peg sod as needed with wood pegs to hold sod in place. Pegging sod is subsidiary to Item 162.				
	✓		164-7016 DRILL SEEDING (OPT1) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH SEED MIX <table border="1"> <tr> <td>March, April, May, June, July, August, September, October</td> <td>Hulled - Bermudagrass (Cynodon dactylon).....40.0 lbs PLS/acre Foxtail Millet (Setaria italica).....34.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia).....4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula).....3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium).....1.4 lbs PLS/acre</td> </tr> <tr> <td>November, December, January, February,</td> <td>Unhulled - Bermudagrass (Cynodon dactylon).....40.0 lbs PLS/acre Oats (Avena sativa).....72.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia).....4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula).....3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium).....1.4 lbs PLS/acre</td> </tr> </table>	March, April, May, June, July, August, September, October	Hulled - Bermudagrass (Cynodon dactylon).....40.0 lbs PLS/acre Foxtail Millet (Setaria italica).....34.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia).....4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula).....3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium).....1.4 lbs PLS/acre	November, December, January, February,	Unhulled - Bermudagrass (Cynodon dactylon).....40.0 lbs PLS/acre Oats (Avena sativa).....72.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia).....4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula).....3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium).....1.4 lbs PLS/acre	Item 164.2.1. Seed Provide documentation of PLS (Pure Live Seed) requirements. Item 164.3. Construction Scarify the area to a depth of 4 inches before placing the seed unless otherwise directed. When performing permanent seeding after an established temporary seeding, scarify the seedbed to a depth of 4 inches or mow the area before placement of the permanent seed. Plant the seed and place the straw or hay mulch after the area has been completed to lines and grades as shown on the plans. Item 164.3.2. Broadcast Seeding Use broadcast seeding method where site conditions prevent drill seeding method. Distribute the dry seed or dry seed mixture uniformly over the areas shown on the plans using hand or mechanical distribution on top of soil. HYDRO SEEDING NOT ALLOWED. Item 164.3.5. Drill Seeding Plant seed or seed mixture uniformly over the area shown on the plans at a depth of 1/4 to 1/3 inch using a cultipacker(turfgrass) type seeder. Plant seed along the contour of the slopes.
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	✓	164-7008 BROADCAST SEED (OPT1) SY Item 164.1. Description Provide and install seeding as shown on District Standard							
		✓	164-7015 DRILL SEED (TEMP_WARM_COOL) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH SEED MIX <table border="1"> <tr> <td>March, April, May, June, July, August, September, October</td> <td>Foxtail Millet (Setaria italica).....34.0 lbs PLS/acre</td> </tr> <tr> <td>November, December, January, February,</td> <td>Oats (Avena sativa).....72.0 lbs PLS/acre</td> </tr> </table>	March, April, May, June, July, August, September, October	Foxtail Millet (Setaria italica).....34.0 lbs PLS/acre	November, December, January, February,	Oats (Avena sativa).....72.0 lbs PLS/acre	
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		✓	164-7007 BROADCAST SEED (TEMP_WARM_COOL) SY Item 164.1. Description Provide and install seeding as shown on District Standard						
	✓	✓	164-7065 STRAW OR HAY MULCH SY	APPLICATION RATE Immediately after planting the seed or seed mixture, apply straw or hay mulch uniformly over the seeded area. Apply straw or hay mulch at 2 tons per acre. Use tacking agent with straw or hay mulch as described on this sheet.	Use straw or hay mulch in conformance with Article 162.2.5. Mulch. Use biodegradable tacking agents only applied at a rate in accordance with manufacturer's recommendations. Use the following products or an approved equal(see note this sheet): Conweb/Contac Guar Gum, Profile Products Corporation, (307) 655-9565, Ramtec/Procol/Viscol Guar Gum, Ramtec Corporation, (800) 366-1180				
✓	✓	✓	166-7001 FERTILIZER AC Item 166.2. Materials Use fertilizer as shown in District Standard	APPLICATION RATE Deliver and evenly distribute fertilizer at a rate of 4000 lbs/acre.	Use a NON-CHEMICAL fertilizer which meets all the following criteria: (1) BRAND NAME must be registered with the Texas State Chemist as a commercial fertilizer. (2) Meets USEPA guidelines for unrestricted use. (3) Derived from biological sources such as, but not limited to: sewage sludge, manures, vegetation, etc. (4) In granular form and essentially dust free. Submit proof of registration and nutrient source to Engineer. Use the following products or an approved equal(see note this sheet): Sigma, SIGMA AgriScience, 281-706-8171 Sustanite-standard grade, Automation Nation, Inc., 713-675-4999 Milorganite, MMSD, 800-287-9645				
✓	✓	✓	168-7001 VEGETATIVE WATERING TGL	APPLICATION RATE Item 168.3. Construction 6 TGL (6000 gallons/acre per working day) x 20 consecutive working days = 120 TGL (120,000 gallons total/acre)	Begin watering immediately after installation of seed or sod. Replace, fertilize, and water any seed or sod in poor condition due to the failure to apply the specified amount of water within the time allowed at no expense to the Department.				

SEQUENCE OF WORK

SODDING	PERMANENT SEEDING	TEMPORARY SEEDING
1. FERTILIZER 2. SCARIFY SOIL (ITEM 162.3) 3. BLOCK SOD 4. VEGETATIVE WATERING	1.FERTILIZER 2.COMPOST MANUFACTURED TOPSOIL (ITEM 161.2.1) 3.BLEND/SCARIFY SOIL (ITEMS 161.3.1 AND 164.3) 4.PERMANENT SEEDING 5.STRAW/HAY MULCH 6.VEGETATIVE WATERING	1.FERTILIZER 2.SCARIFY SOIL (ITEM 164.3) 3.TEMPORARY SEEDING 4.STRAW/HAY MULCH 5.VEGETATIVE WATERING



HOUSTON DISTRICT

FERTILIZER, SEED, SOD, STRAW, COMPOST, AND WATER

SHEET 1 OF 1

FSSCW-15

REVISIONS		FILE:	FED DIV	STATE	PROJECT NUMBER			SHEET
10/2014	UPDATED TO 2014 SPECS		6	TEXAS				
3/2015	MINOR CORRECTIONS							
3/2023	ADDED SHEET ABBREVIATION							
6/2024	UPDATED TO 2024 SPECS							
ORIGINAL:	DIST	COUNTY	CONTROL	SECT	JOB	HIGHWAY		
	12							