

SECTION 605 - UNDERDRAINS

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605.01 Description. This section describes furnishing and installing underdrains.

605.02 Materials.

Untreated Permeable Base Course 703.04

Grouted Rubble Paving 612.02

Perforated Plastic Pipe 706.12

Reinforcing Steel 709.01

Zinc Coating 712.10

Geotextiles for Underdrain Applications 716.03

Class A concrete, used for installing underdrains, shall conform to Section 601 – Structural Concrete.

Steel plates and bars for cleanout steel frame and cover shall conform to ASTM A 36. Stainless steel screws for cleanout steel frame and cover shall conform to ASTM A 193.

Non-perforated pipe shall conform to perforated pipe requirements, except for perforation provisions.

605.03 Construction. Excavate trenches to dimensions and grade indicated in contract documents.

Protect geotextiles from direct sunlight, mud, dust, debris, and temperatures over 140 degrees F, during transport and storage.

Place geotextile in trench, overlapping successive sheets 18 inches minimum. Maintain full geotextile contact with trench surfaces.

Place untreated permeable base, in horizontal layers not exceeding 12 inches in thickness before compaction, to depth indicated in contract documents. Place perforated pipe with perforations down. Join pipe sections securely with appropriate couplings or bands.

Compact each lift with at least two passes of vibrating pad or drum-type compactor. Fold geotextile over top of base course, with minimum 12-inch overlap. Backfill geotextile within five days of installation.

605.03

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48 Remove and replace geotextile that becomes torn or damaged, maintaining
49 18-inch overlap requirement in all directions.

50
51 Install non-perforated pipe of type and size indicated in contract documents.
52 Geotextile and base course will not be required for non-perforated sections.

53
54 Construct cleanouts and underdrain outlets as indicated in contract
55 documents.

56
57 Construct Grouted Rubble Paving in accordance with Subsection 612.03 -
58 Construction.

59
60 **605.04 Measurement.** Underdrains, underdrain outlets and cleanouts will be
61 paid on a lump sum basis. Measurement for payment will not apply.

62
63 **605.05 Payment.** Engineer will pay for accepted underdrains, underdrain outlets
64 and cleanouts on a contract lump sum basis. Payment will be full compensation for
65 work prescribed in this section and contract documents.

66
67 Engineer will pay for each of following pay items when included in proposal
68 schedule:

69

Pay Item	Pay Unit
70 _____ Inch Underdrain	Lump Sum
71	
72 _____ Inch Underdrain	Lump Sum
73	
74 Type _____ Underdrain Outlet	Lump Sum
75	
76 Cleanout	Lump Sum
77	
78	
79	

END OF SECTION 605