
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: June 5, 2023

Originator: Dino Jameson

Phone: (352) 955-2933

Email: dino.jameson@dot.state.fl.us

Standard Plans:

Index Number: 446-001

Sheet Number (s): 1, 3 and 4 of 4

Index Title: Concrete Pavement Subdrainage

Summary of the changes:

Sheet 1: Updated Note 4 "Provide and install Type D-3 geotextile in accordance with Specifications 514."
Changed all references of "Filter Fabric" to Geotextile.

Sheet 3: Moved Note 3 to General Note 4 on Sheet 1; Renumbered Notes; Updated Note references in callout;
Changed all references of "Filter Fabric" to "Geotextile".

Sheet 4: Moved Note 3 to General Note 4 on Sheet 1; Renumbered Notes; Updated Note references in callout;
Changed all references of "Filter Fabric" to "Geotextile".

Areas of the Standard Plans where 985 is referenced for drainage details needs to now reference Specs 514 (Division II specs). The Contractor is not responsible for the producer requirements division III specs, but ensure that the product used is on the APL and used for appropriate intended use. Specs 514 essentially does reference 985 to meet the materials requirement. +

Commentary / Background:

In the July 2022 SSRBC workbook, construction requirements for the Contractor for geosynthetic materials from Section 985 was removed. The reason for it was that the construction requirements doesn't belong in Division III of the specifications, as this is for producer requirements. Instead of applying specific requirements to each individual specs that references 985 in Division II, the Department is going to modify specification 514 to cover geosynthetics used for drainage applications. Specs 145 covers the reinforcement (structural) applications and construction requirements and erosion control has specific requirements in various areas of Division II, therefore, both erosion and reinforcement are covered. The only missing link in Division II is the drainage applications. Proposed changes to 514 cover construction requirements and material acceptance. In addition, specs 514 ensures that the Contractor obtains geosynthetic product from a manufacturer that meets 985 spec requirements.

Other Affected Offices / Documents: (Provide name of person contacted)

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other Standard Plans –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	FDOT Design Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Basis of Estimates Manual –
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standard Specifications – Various sections where 985 is referenced.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Approved Product List –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Maintenance –

Origination Package Includes: (Submit package to Rick Jenkins)

Yes	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Redline Mark-ups
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Revised or Proposed Standard Plan Instruction (SPI)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other Support Documents

Implementation:

<input type="checkbox"/>	Design Bulletin (Interim)
<input type="checkbox"/>	DCE Memo
<input type="checkbox"/>	Program Mgmt. Bulletin
<input checked="" type="checkbox"/>	FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form

Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us

GENERAL NOTES:

1. Do not leave trench greater than 2' in depth overnight. Barricade trenches at all times.
2. Construct concrete pavement subdrainage adjacent to the low edge of the roadway pavement and under travel lanes, auxiliary pavement and shoulders, as called for in the plans. Extend the concrete pavement subdrainage 50' beyond and begin 50' before the flat point (100' overlap) when the low edge shifts between outside and inside edges of pavement. Place concrete pavement subdrainage on the low side of ramps for crossroad terminals.
3. Install concrete pavement subdrainage on a grade parallel with the edge of pavement profile, except on profiles flatter than one-tenth percent (0.10%) install the concrete pavement subdrainage on a minimum grade of one-tenth percent (0.10%).
4. Remove adhering base material and soil from the vertical face of the concrete immediately prior to placing the filter fabric.
5. Submit a procedure for holding the filter fabric in position on the vertical face of the trench for approval by the Engineer prior to placing draincrete.
6. Cap the upper end of each separate run of the concrete pavement subdrainage pipe.
7. Install outlet pipes at 500' maximum intervals. Use elbows or 1/8 bends to connect the outlet pipe to the concrete pavement subdrain pipe. Use elbows or bends of the same material as the outlet pipe.

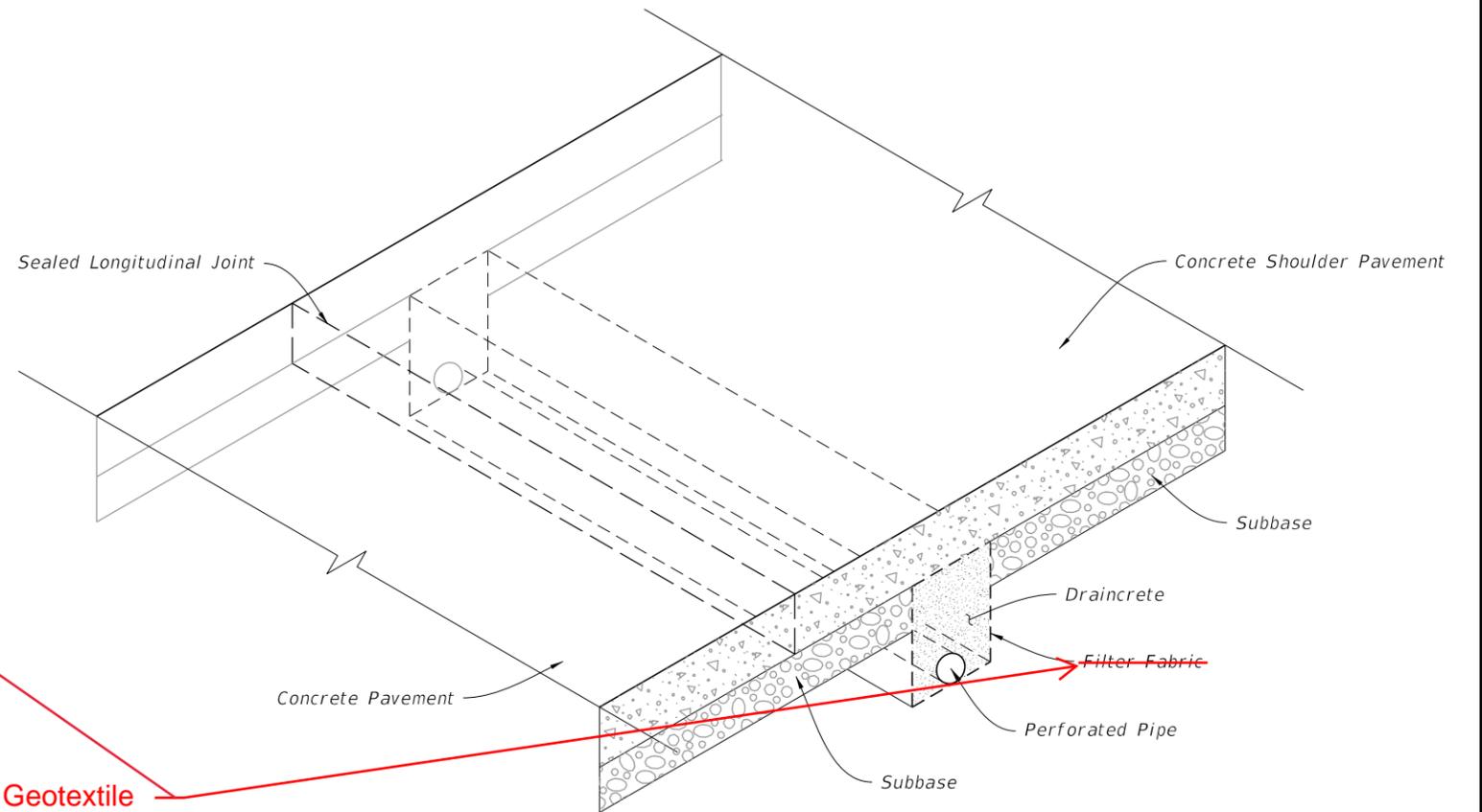
Stub outlet pipes into existing inlets or into existing ditch pavements at an elevation 6" above the inlet flowline or ditch bottom when directed by the Engineer. Concrete apron and bordering sod are not required for stubbed outlets, but replacement sodding will be required at trenches for pipes stubbed into paved ditches.

Install a single outlet apron for separate outlet pipes of concrete pavement subdrainage from opposite directions in sag vertical curves.

Install backfill consisting of cohesive soils around outlet pipes.
8. Replace existing paved shoulder removed for the construction of outlet pipes with Type SP asphaltic concrete at the rate of 500 LB per SY.

UPDATED Note 4:
Provide and install Type D-3 geotextile in accordance with Specifications 514.

CHANGED: Geotextile



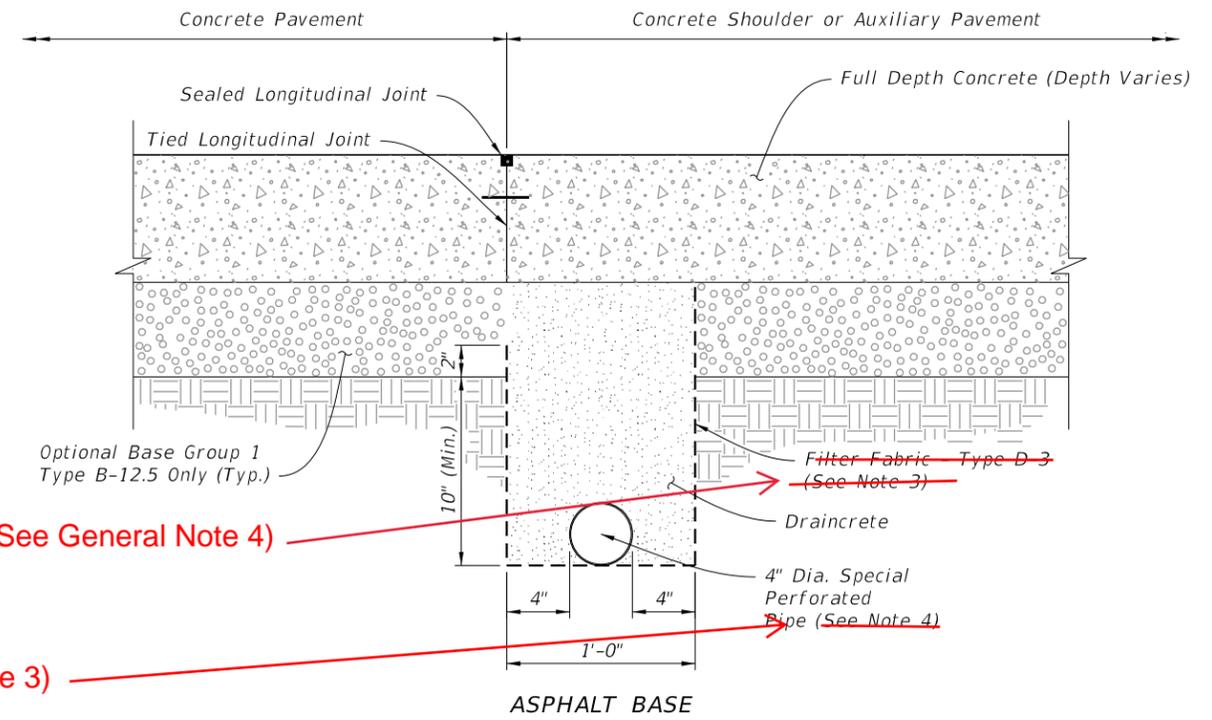
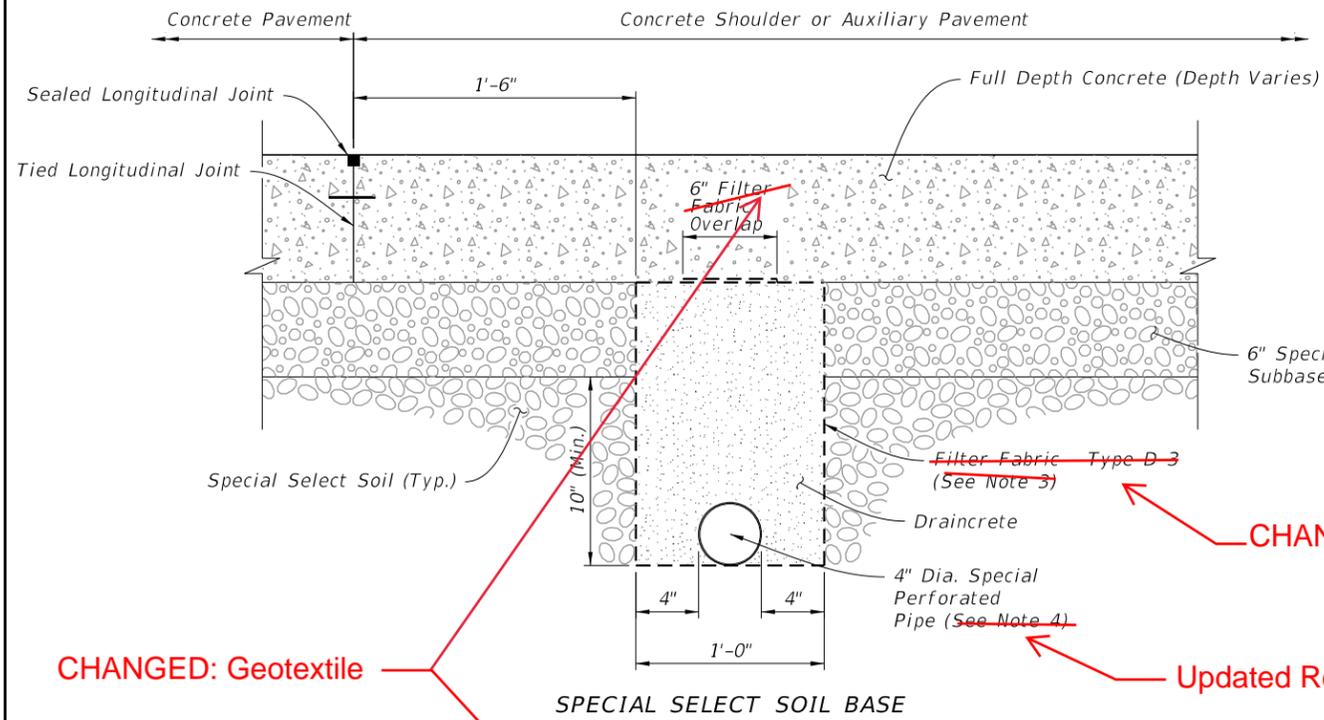
===== DRAINCRETE SUBDRAINAGE =====

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Edgedrain and Outlet
3	New Construction
4	Rehabilitation

10/20/2022 8:49:26 AM

LAST REVISION 11/01/19	REVISION 11/01/23	DESCRIPTION:	 FY 2023-24 STANDARD PLANS	CONCRETE PAVEMENT SUBDRAINAGE	INDEX 446-001	SHEET 1 of 4
--------------------------------------	----------------------	--------------	---	-------------------------------	------------------	-----------------

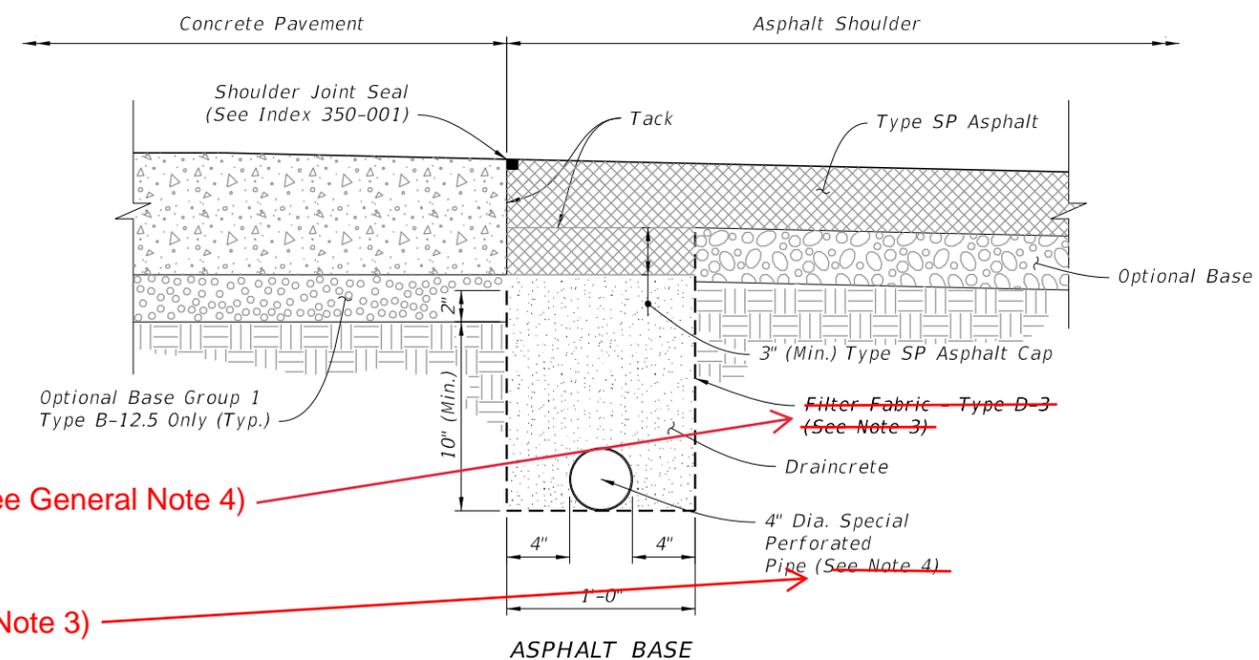
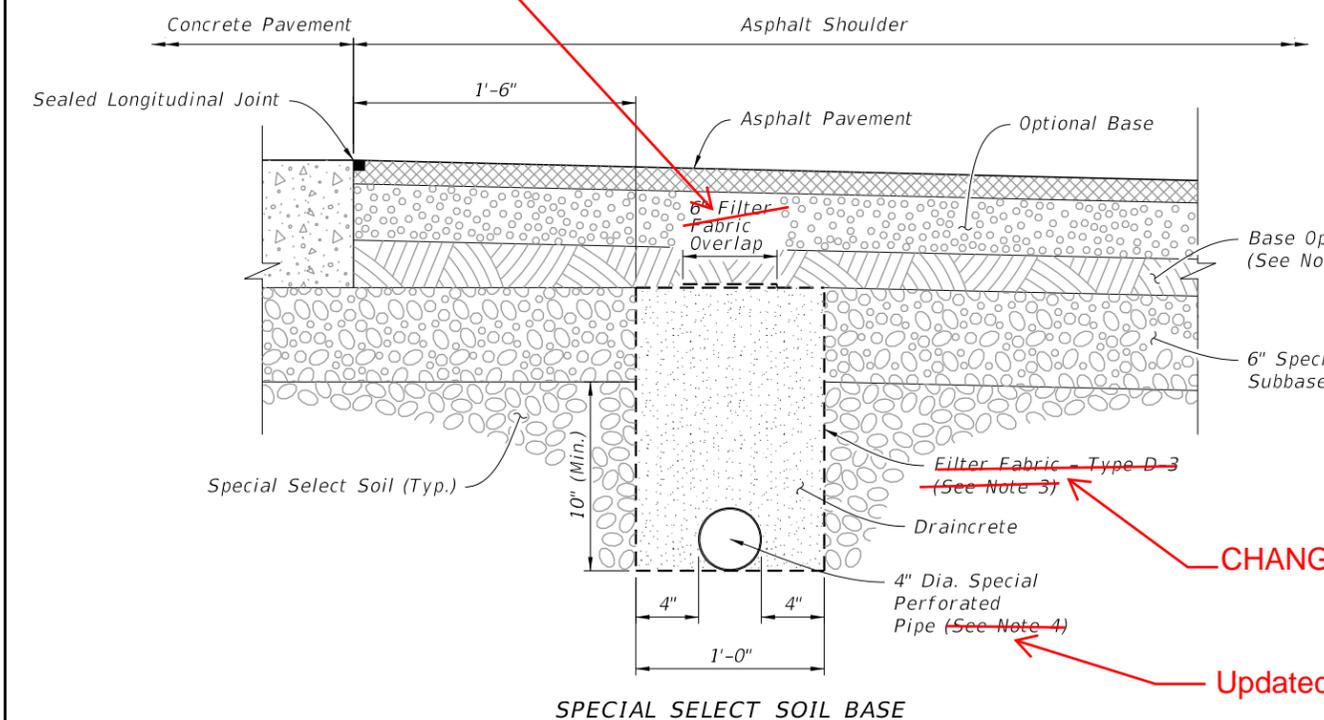


CHANGED: Geotextile

CHANGED: Geotextile (See General Note 4)

Updated Reference: (See Note 3)

CONCRETE SHOULDERS AND AUXILIARY PAVEMENT



CHANGED: Geotextile (See General Note 4)

Updated Reference: (See Note 3)

ASPHALT SHOULDERS

NOTES:

Renumbered Notes

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
- ~~3. Install the filter fabric in accordance with Specification 514.~~ Moved to General Note 4 on Sheet 1
3. Install only noncorrugated or smooth lined corrugated pipe.
4. At the Contractor's option this area may be constructed of Optional Base material (Specification 285) or special stabilized subbase.

11/01/23

10/20/2022 8:49:28 AM

LAST REVISION	DESCRIPTION:
11/01/19	
11/01/23	


 FY 2023-24
 STANDARD PLANS

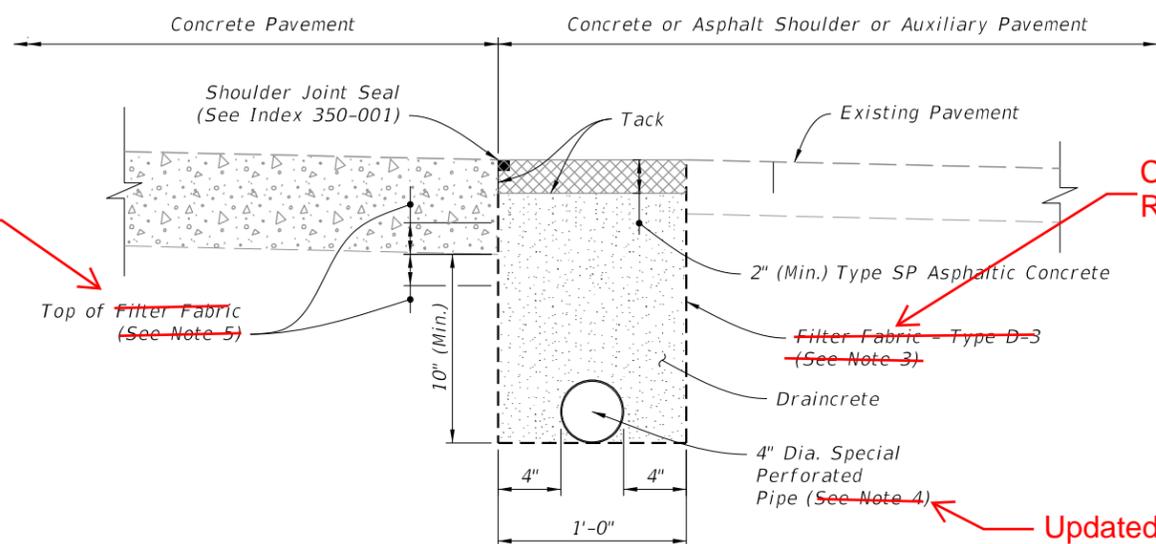
CONCRETE PAVEMENT SUBDRAINAGE

NEW CONSTRUCTION

INDEX	SHEET
446-001	3 of 4

CHANGED: Geotextile (See Note 4)

CHANGED Geotextile: Updated Reference (See General Note 4)



Updated Reference: (See Note 3)

EXISTING SHOULDERS

NOTES:

Renumbered Notes

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
3. Install the filter fabric in accordance with Specification 514. **Moved to General Note 4 on Sheet 1**
3. Install only noncorrugated or smooth lined corrugated pipe.
4. Install Filter Fabric 2" below bottom of pavement for cement stabilized, soil cement and econocrete subbases and 2" above bottom of pavement for other subbases.

CHANGED: Geotextile

11/01/23

10/20/2022 8:49:29 AM

LAST REVISION 11/01/19	REVISION 11/01/23	DESCRIPTION:	 FY 2023-24 STANDARD PLANS	CONCRETE PAVEMENT SUBDRAINAGE	REHABILITATION INDEX 446-001	SHEET 4 of 4
--------------------------------------	----------------------	--------------	---	-------------------------------	------------------------------------	-----------------

GENERAL NOTES:

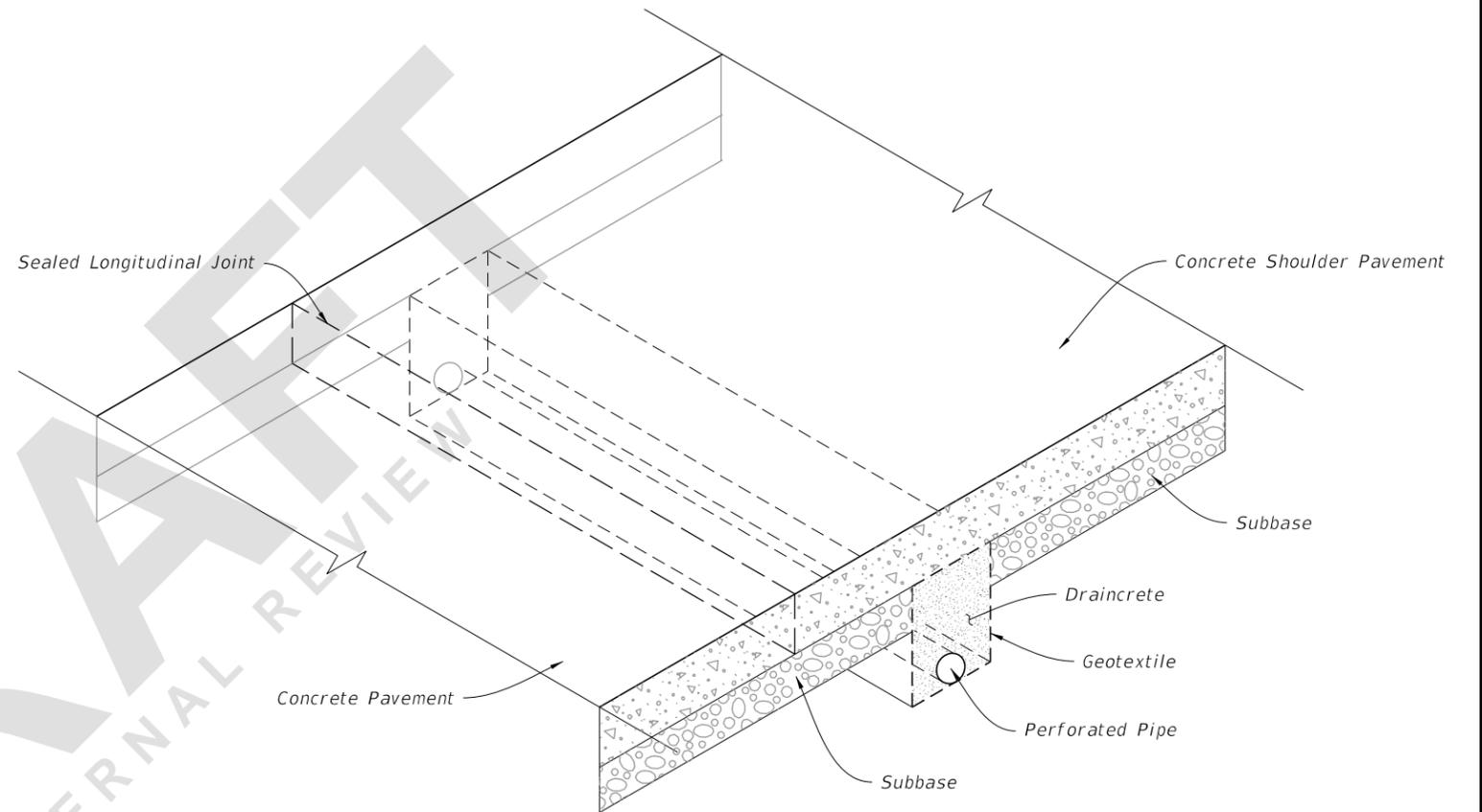
1. Do not leave trench greater than 2' in depth overnight. Barricade trenches at all times.
2. Construct concrete pavement subdrainage adjacent to the low edge of the roadway pavement and under travel lanes, auxiliary pavement and shoulders, as called for in the plans. Extend the concrete pavement subdrainage 50' beyond and begin 50' before the flat point (100' overlap) when the low edge shifts between outside and inside edges of pavement. Place concrete pavement subdrainage on the low side of ramps for crossroad terminals.
3. Install concrete pavement subdrainage on a grade parallel with the edge of pavement profile, except on profiles flatter than one-tenth percent (0.10%) install the concrete pavement subdrainage on a minimum grade of one-tenth percent (0.10%).
4. Remove adhering base material and soil from the vertical face of the concrete immediately prior to placing the geotextile. Provide and install Type D-3 geotextile in accordance with Specification 514.
5. Submit a procedure for holding the geotextile in position on the vertical face of the trench for approval by the Engineer prior to placing draincrete.
6. Cap the upper end of each separate run of the concrete pavement subdrainage pipe.
7. Install outlet pipes at 500' maximum intervals. Use elbows or 1/8 bends to connect the outlet pipe to the concrete pavement subdrain pipe. Use elbows or bends of the same material as the outlet pipe.

Stub outlet pipes into existing inlets or into existing ditch pavements at an elevation 6" above the inlet flowline or ditch bottom when directed by the Engineer. Concrete apron and bordering sod are not required for stubbed outlets, but replacement sodding will be required at trenches for pipes stubbed into paved ditches.

Install a single outlet apron for separate outlet pipes of concrete pavement subdrainage from opposite directions in sag vertical curves.

Install backfill consisting of cohesive soils around outlet pipes.

8. Replace existing paved shoulder removed for the construction of outlet pipes with Type SP asphaltic concrete at the rate of 500 LB per SY.

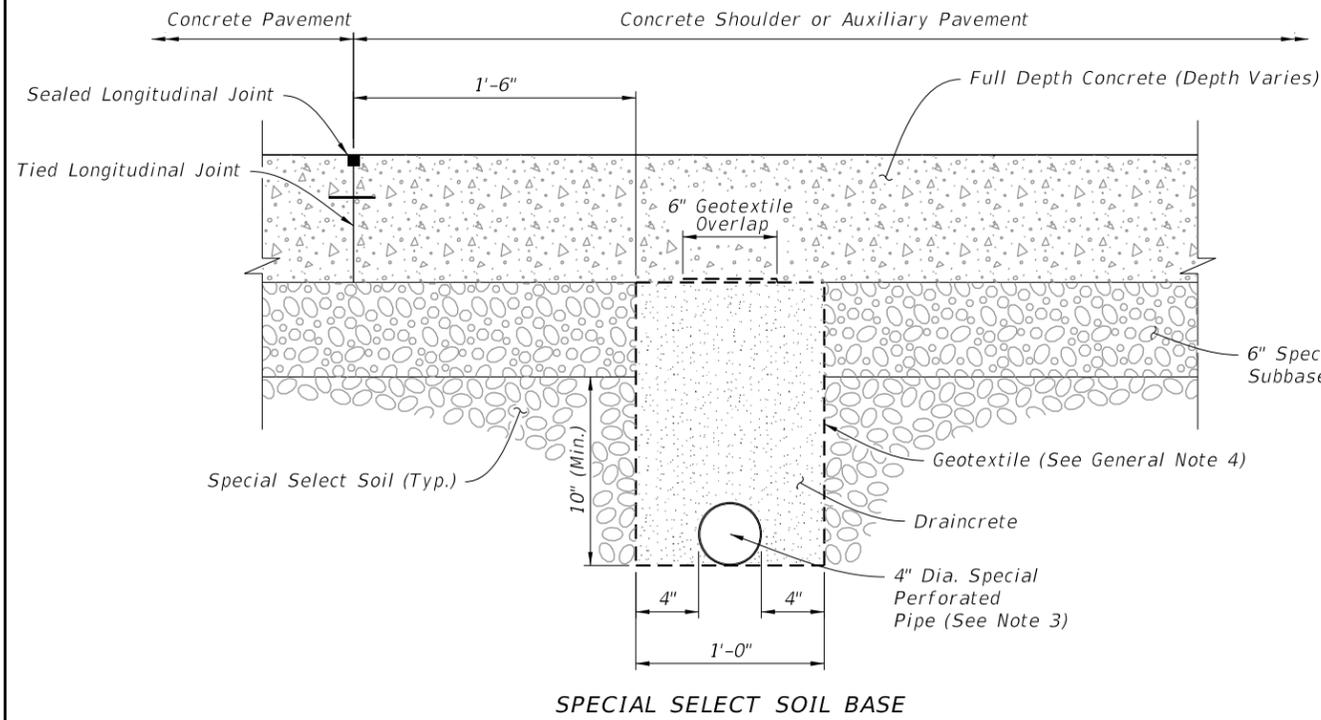


DRAFT
INTERNAL REVIEW

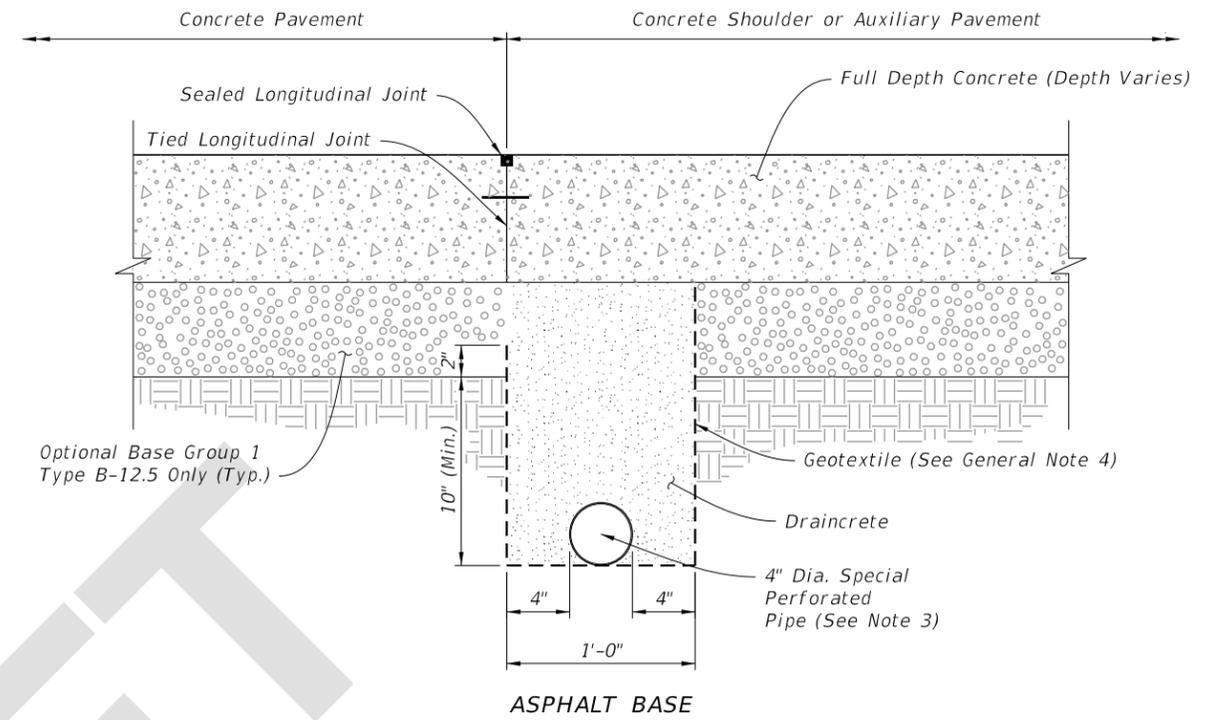
===== DRAINCRETE SUBDRAINAGE =====

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Edgedrain and Outlet
3	New Construction
4	Rehabilitation

6/28/2023 1:07:23 PM

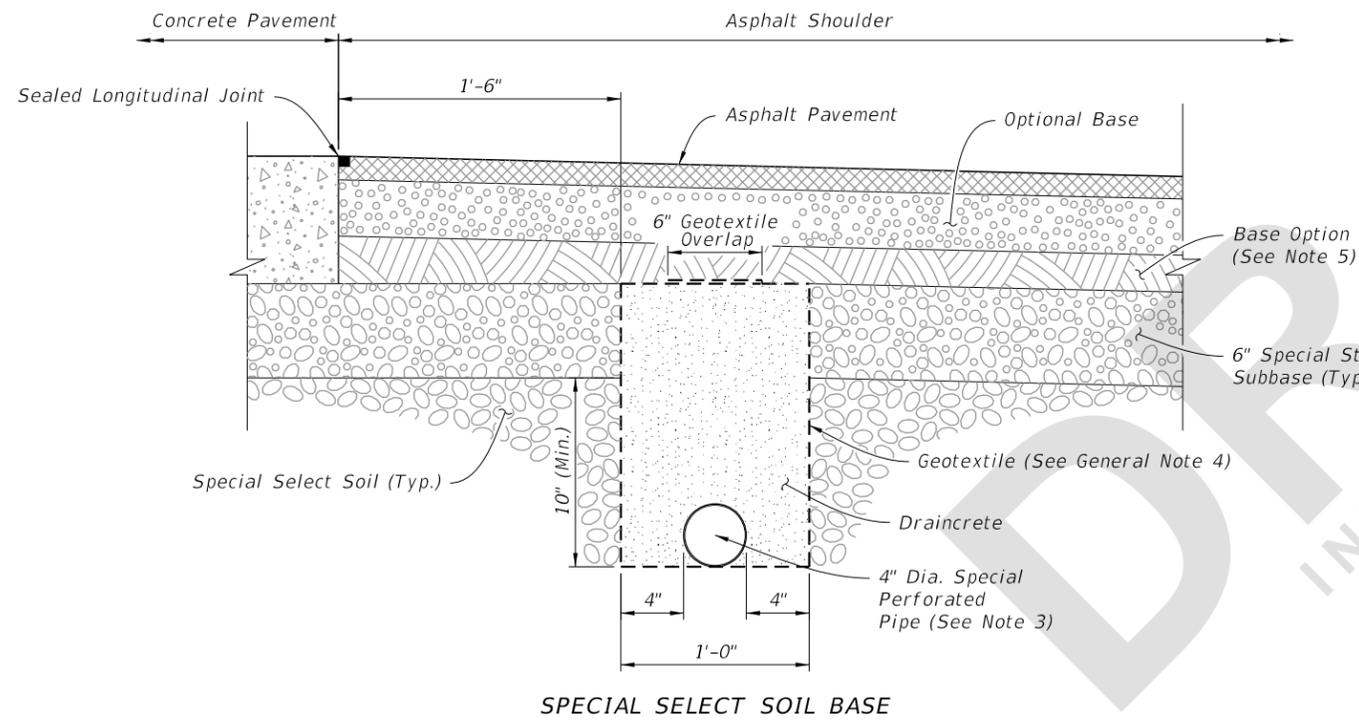


SPECIAL SELECT SOIL BASE

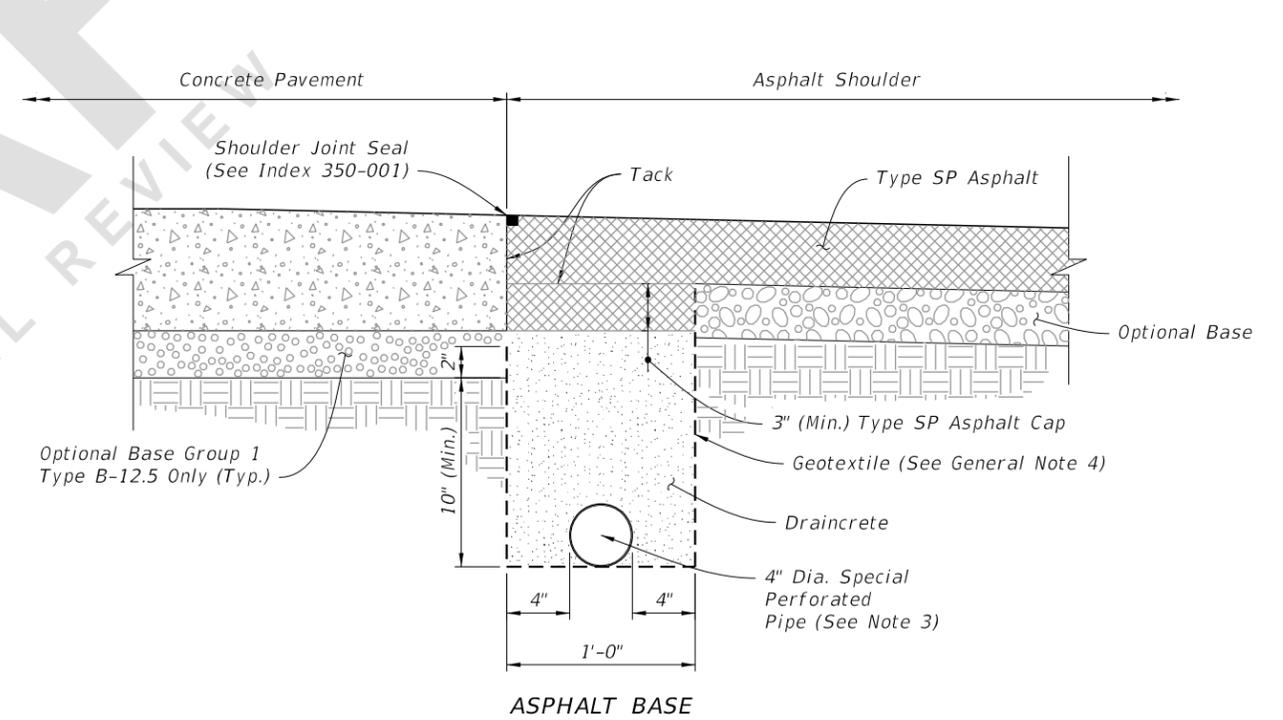


ASPHALT BASE

CONCRETE SHOULDERS AND AUXILIARY PAVEMENT



SPECIAL SELECT SOIL BASE



ASPHALT BASE

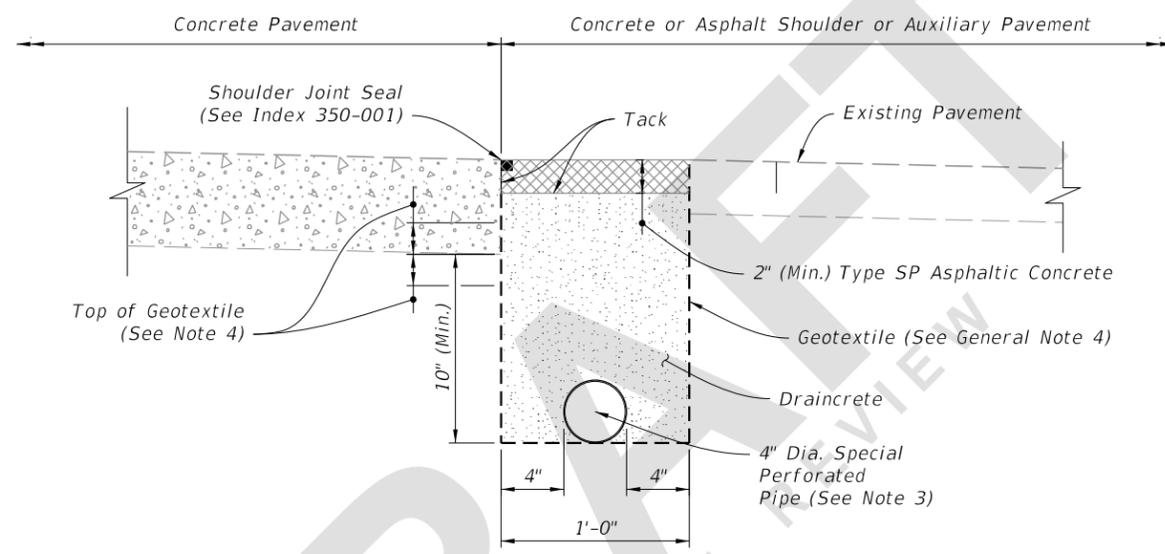
ASPHALT SHOULDERS

NOTES:

1. The edgeline sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgeline to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
3. Install only noncorrugated or smooth lined corrugated pipe.
4. At the Contractor's option this area may be constructed of Optional Base material (Specification 285) or special stabilized subbase.

6/28/2023 1:07:31 PM

LAST REVISION 11/01/23	DESCRIPTION:
---------------------------	--------------



EXISTING SHOULDERS

NOTES:

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
3. Install only noncorrugated or smooth lined corrugated pipe.
4. Install geotextile 2" below bottom of pavement for cement stabilized, soil cement and econocrete subbases and 2" above bottom of pavement for other subbases.

6/28/2023 1:07:38 PM

LAST REVISION 11/01/23	REVISION	DESCRIPTION:		FY 2024-25 STANDARD PLANS	CONCRETE PAVEMENT SUBDRAINAGE	REHABILITATION INDEX 446-001	SHEET 4 of 4
------------------------------	----------	--------------	--	------------------------------	-------------------------------	------------------------------------	-----------------