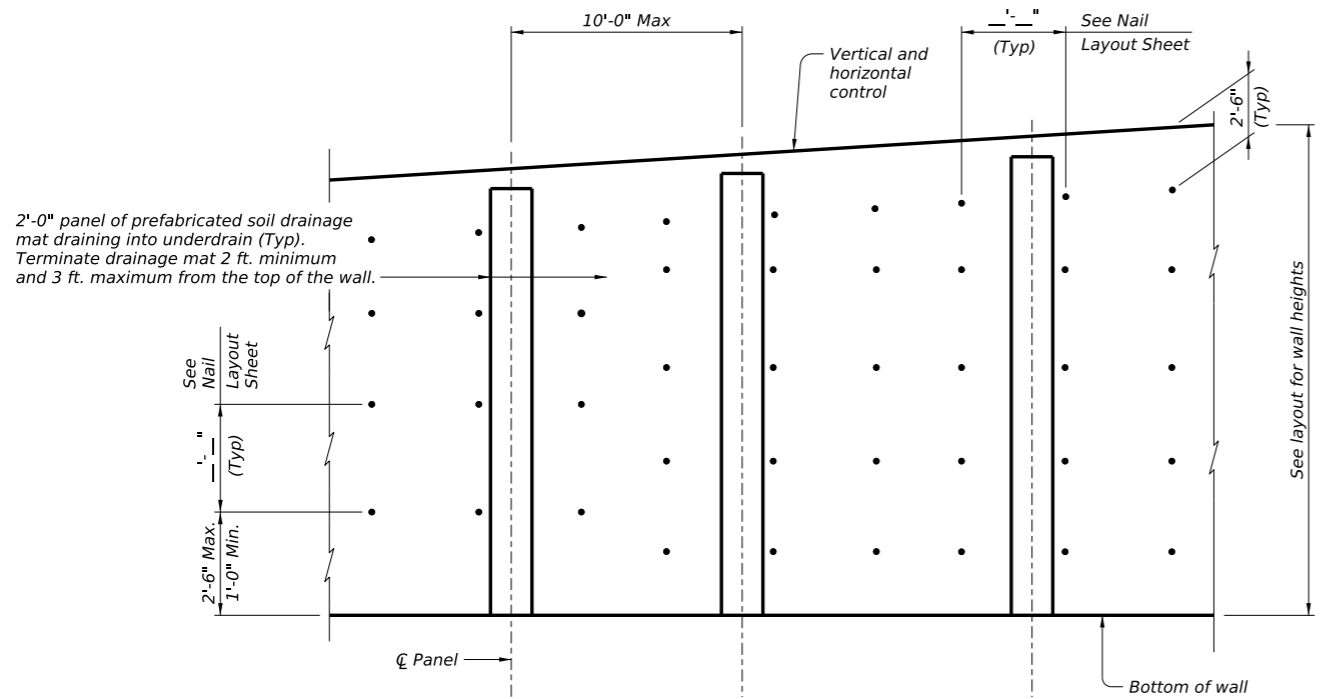
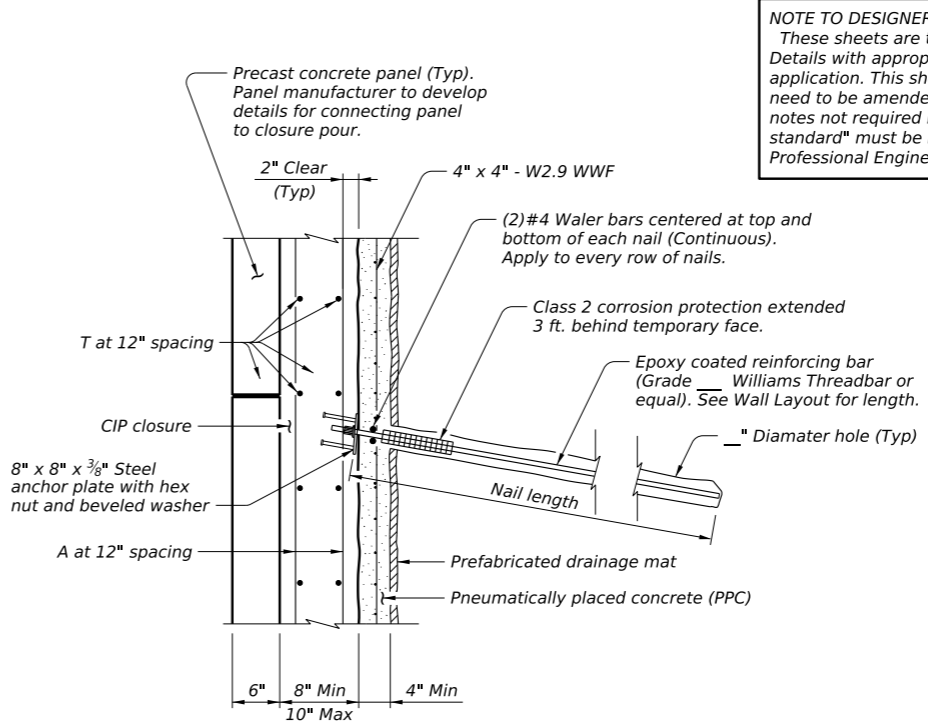


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TYPICAL WALL PROFILE
See Wall Layout for specific nail locations.



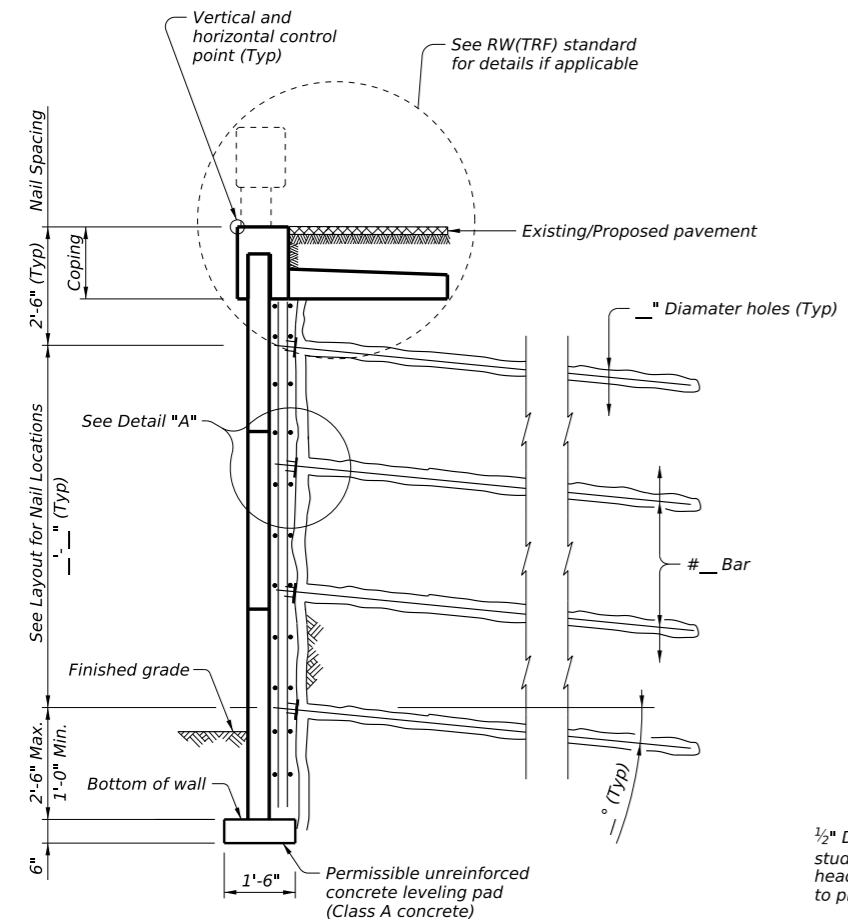
DETAIL A

NOTE TO DESIGNER:
These sheets are to be used as a guide for construction of soil nail retaining walls. Details with appropriate notes from this guide should be prepared for specific application. This sheet cannot be used without modification. The details shown may need to be amended if the exact conditions are not covered. In all cases, details and notes not required must be deleted. This note and the phrase "Not to be used as a standard" must be removed and the sheet must be signed and sealed by a Professional Engineer.

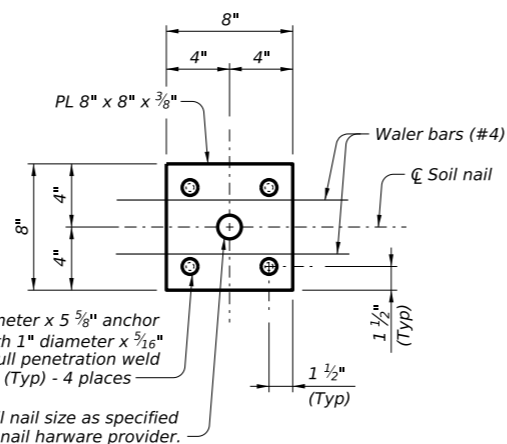
CONSTRUCTION NOTES:
The slope in front of the retaining wall must be removed in lifts. The depth of each lift shall be limited to the amount necessary to install a single horizontal row of soil nails. The amount of exposed, un-nailed vertical cut must not exceed 1' at any time. The length of each lift removed must be limited to the amount that can be nailed in one day. Any un-nailed cut face must not be exposed for over 48 hours.
Apply pneumatically placed concrete to the cut face upon completion of each day's installation of nails. The concrete must be reinforced with a single layer of welded wire reinforcing fabric (4" x 4" - W2.9) and #4 waler bars as shown. Anchor plate, beveled washer, and nuts to be tightened up to the face of the PPC.
Install the permanent concrete fascia wall within 7 working days after all rows of nails have been placed.
Chamfer all exposed corners 3/4".

MATERIAL NOTES:
Provide Class C concrete.
Provide Grade 60 reinforcing steel.
Pneumatically placed concrete must comply with requirements of Item 431, "Pneumatically Placed Concrete" (Class I) except that it will not be paid for directly. Membrane curing will be allowed in place of water curing.

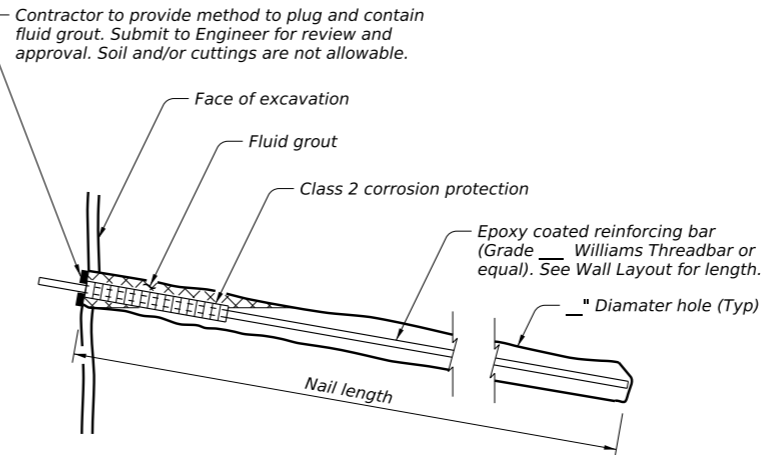
GENERAL NOTES:
Verify wall geometry prior to installation of the precast concrete fascia. Provide geometry to the precast panel supplier for development of shop drawings. Submit to the Engineer, for approval, the precast panel supplier's details and procedures for panel, coping, and cast-in-place closure wall connections. Contractor will not be compensated for additional area (sq. ft.) generated from these modifications.
Test nails will be required for each wall. Test nails in accordance with soil nail anchor specifications and the requirements shown on Sheet 3 of 3. If widely varying soil conditions are encountered, the Engineer may require additional verification tests. Verification test anchors will be paid for directly and cannot be used as production nails. Proof tests are considered subsidiary to Item 419, "Soil Nail Anchors."
Drainage system to consist of 2'-0" panels of prefabricated soil drainage mats that empty into an underdrain. Provide filter fabric meeting the requirements of DMS-6200. Place pneumatically placed concrete over the drains with the drainage mats placed against the soil. Location of underdrain outfall to be determined by Engineer. The drainage system will not be paid for directly but is considered subsidiary to Item "Retaining Walls."
All concrete, reinforcing steel, pneumatically placed concrete, precast panels, drainage material, underdrain, and any other materials necessary to complete the wall are included in Item 423, "Retaining Walls" for soil nail fascia.
The price bid per linear foot of soil nail includes all drilling, nail reinforcement, grout, class 2 corrosion protection, and proof testing.



TYPICAL SECTION THROUGH SOIL NAIL RETAINING WALL



ANCHOR PLATE



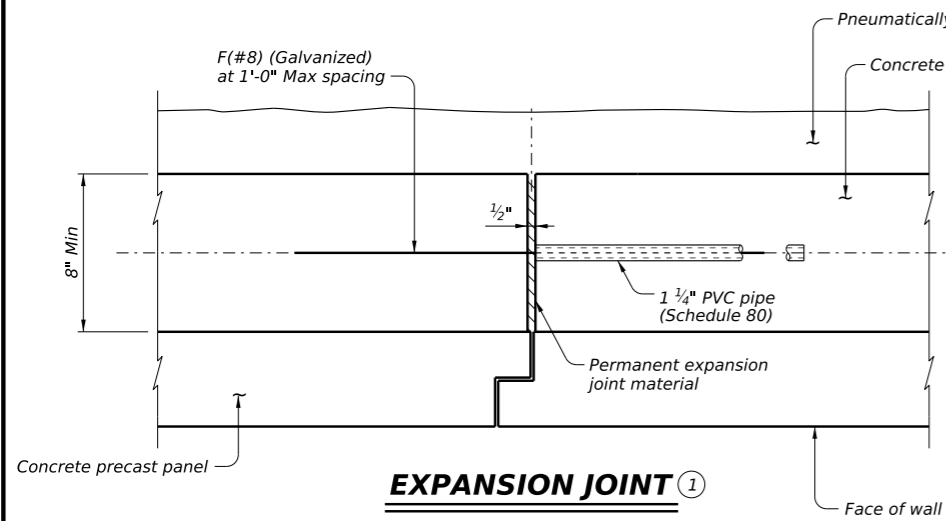
BIRDSMOUTH BUILD-UP

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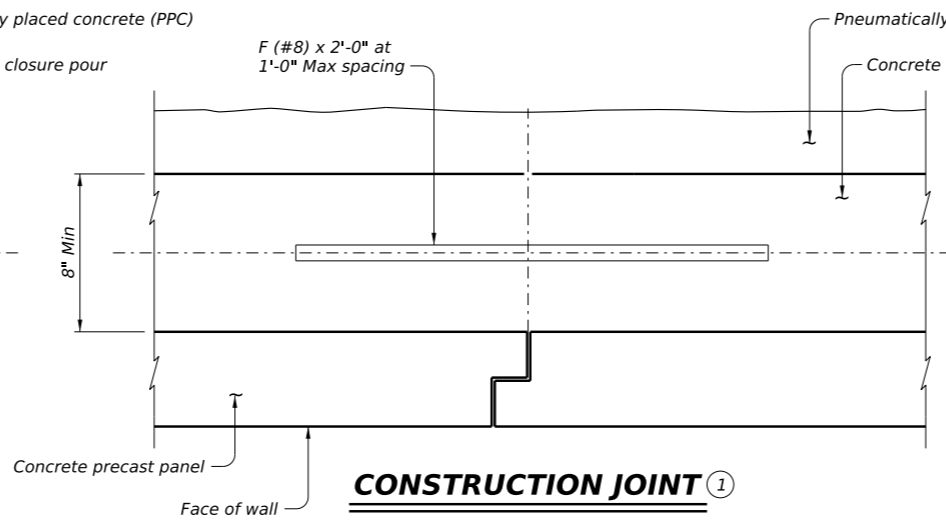
SHEET 1 OF 3

		Bridge Division Standard	
SOIL NAIL RETAINING WALL DETAILS			
(Not to be used as a standard)			
RW(SN)			
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DIST		COUNTY	
		SHEET NO.	

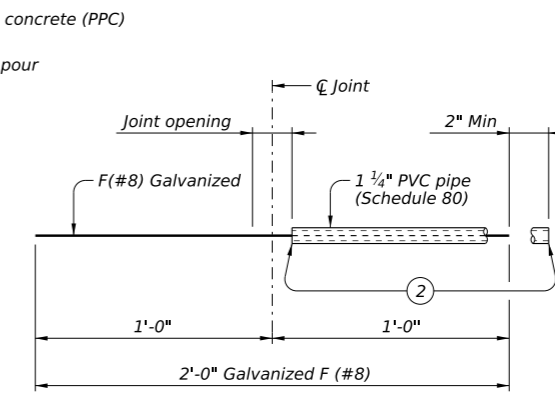
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EXPANSION JOINT ①

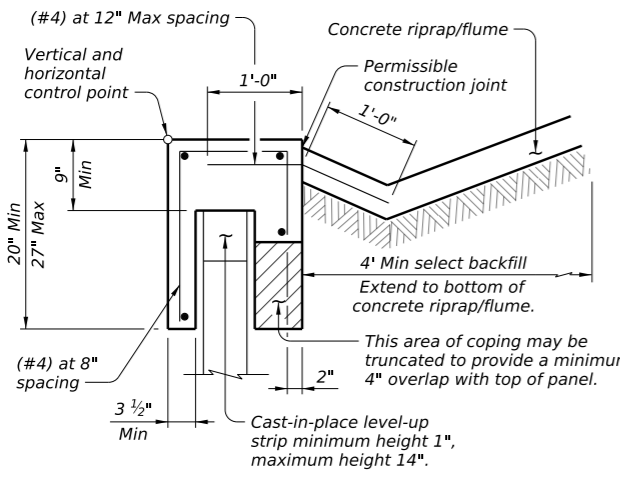


CONSTRUCTION JOINT ①



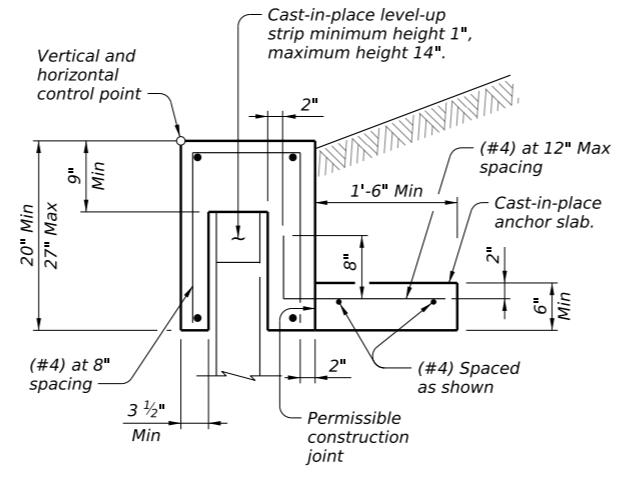
BAR F (#8) ASSEMBLY DETAIL

- ① Provide construction joints at 32 feet max spacing and expansion joints at 96 feet max spacing. Alternate construction joints and expansion joints. Align construction and expansion joint from cap to bottom of wall and with the edge of the top precast panel.
- ② Tape ends of 1 1/4" PVC Schedule 80 to prevent concrete or mortar from seeping in.

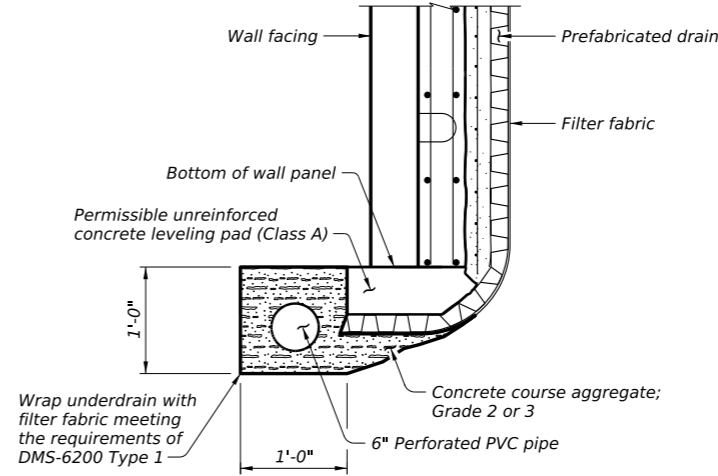


ADJACENT TO CONCRETE

Excluding concrete pavement.

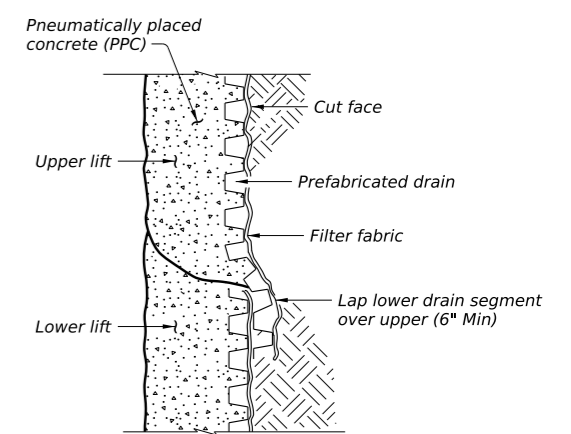


ADJACENT TO SOIL



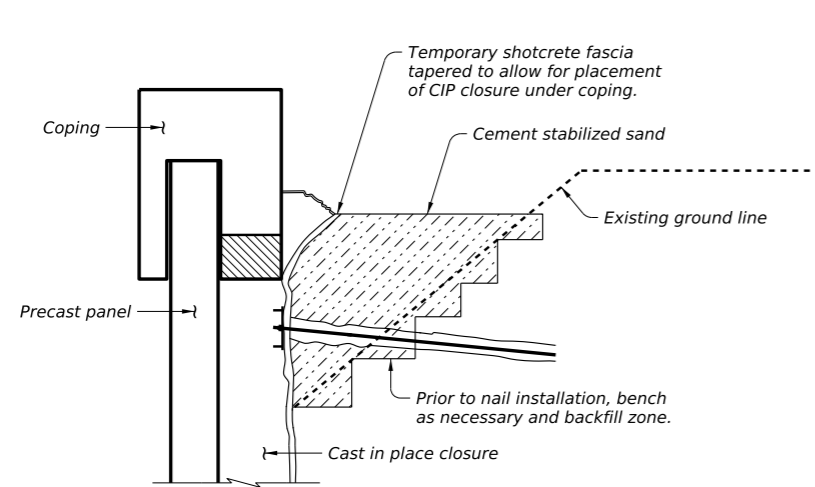
UNDERDRAIN DETAIL

Engineer to determine location of underdrain outfall.



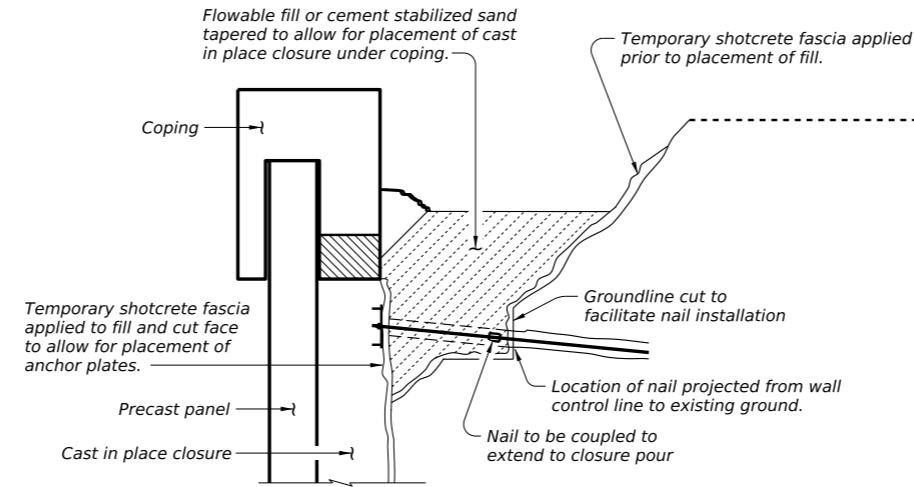
PREFABRICATED DRAINAGE DETAIL

COPING ANCHORAGE DETAILS WITHOUT TRAFFIC RAILING



OPTION 1

Fill then nail



OPTION 2

Nail then fill

TOP OF WALL BUILD-UP OPTION

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SHEET 2 OF 3



SOIL NAIL RETAINING WALL DETAILS

(Not to be used as a standard)

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