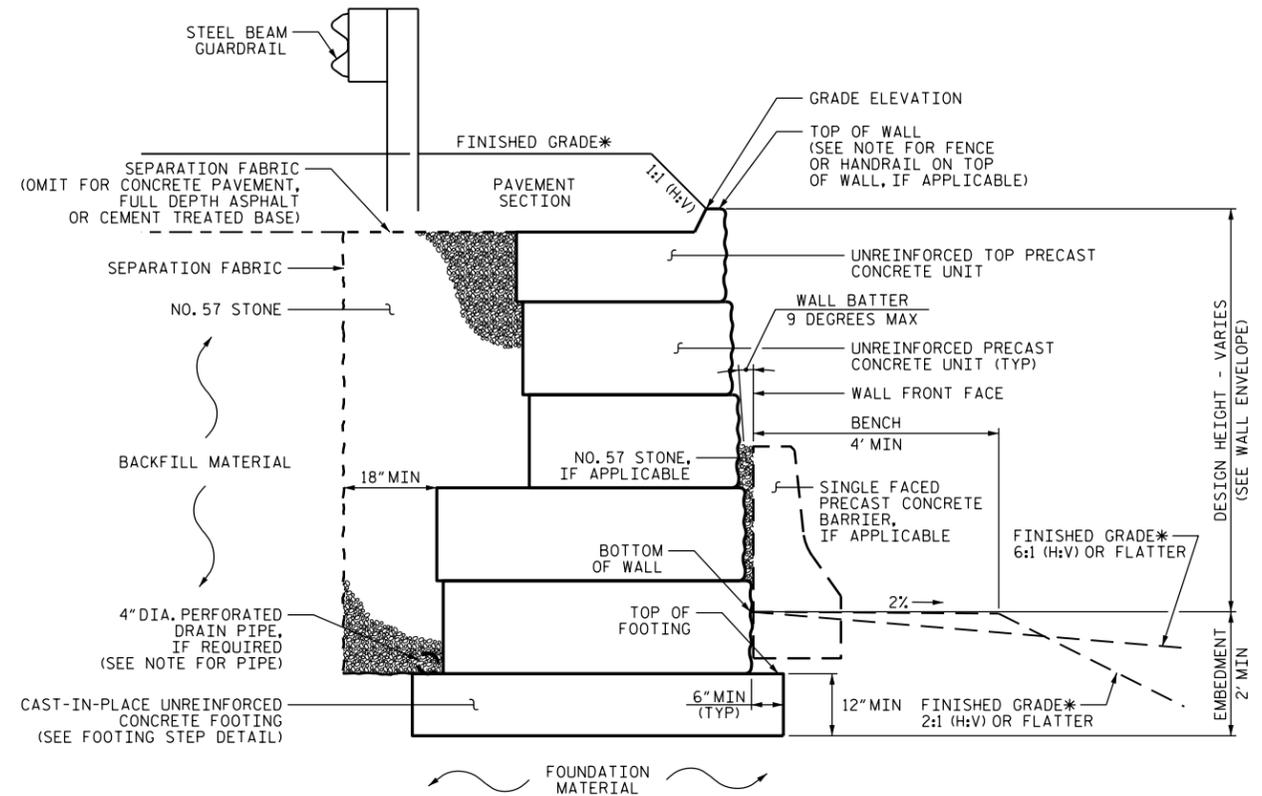


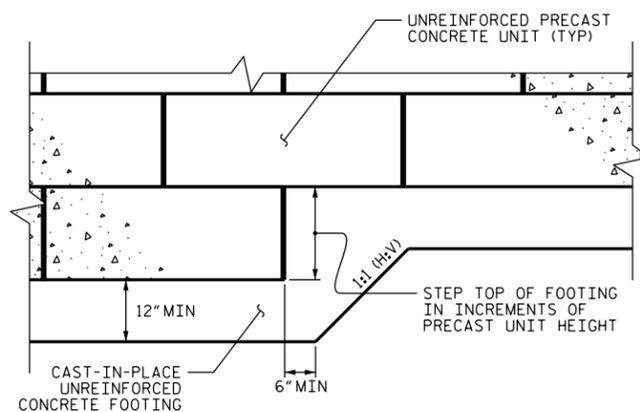
**PRECAST GRAVITY WALL WITH CAP PRECAST UNIT - TYPICAL SECTION**

\*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.



**PRECAST GRAVITY WALL WITH TOP PRECAST UNIT - TYPICAL SECTION**

\*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.



**FOOTING STEP DETAIL**

**NOTES:**

- FOR PRECAST GRAVITY RETAINING WALLS, SEE PRECAST GRAVITY RETAINING WALLS PROVISION.
- FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.
- FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.
- A CONCRETE BARRIER RAIL WITH MOMENT SLAB IS REQUIRED ABOVE RETAINING WALL NO. . SEE PLANS FOR CONCRETE BARRIER RAIL WITH MOMENT SLAB DETAILS.
- A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALL NO. . SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.
- USE PRECAST UNITS WITH A \_\_\_\_\_ FACE FOR RETAINING WALL NO. .
- USE PRECAST UNITS WITH A \_\_\_\_\_ COLOR FOR RETAINING WALL NO. .
- A DRAIN PIPE IS OR IS NOT REQUIRED FOR RETAINING WALL NO. .
- BEFORE BEGINNING PRECAST GRAVITY WALL DESIGN FOR RETAINING WALL NO. , SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.
- DESIGN RETAINING WALL NO. FOR WALL HEIGHTS EQUAL TO THE DESIGN HEIGHT PLUS DEPTH TO TOP OF FOOTING (DIFFERENCE BETWEEN GRADE ELEVATION AND TOP OF FOOTING ELEVATION).
- DESIGN RETAINING WALL NO. FOR THE FOLLOWING:
  - 1) MINIMUM DESIGN LIFE = 75 YEARS
  - 2) MAXIMUM FACTORED RESISTANCE = \_\_\_ PSF
  - 3) MINIMUM EMBEDMENT ELEVATION = \_\_\_ FT
  - 4) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (γ) PCF	FRICTION ANGLE (φ) DEGREES	COHESION (c) PSF
BACKFILL	---	---	---
FOUNDATION	---	---	---

- THE MINIMUM EMBEDMENT ELEVATION FOR RETAINING WALL NO. INCLUDES EMBEDMENT FOR SCOUR.
- DESIGN RETAINING WALL NO. FOR A LIVE LOAD (TRAFFIC) SURCHARGE.
- DESIGN RETAINING WALL NO. FOR THE POINT, LINE, OR SURFACE SURCHARGE LOAD SHOWN.
- DESIGN RETAINING WALL NO. FOR A PIPE EXTENDING THROUGH THE WALL AS SHOWN. VERIFY PIPE LOCATION AND ELEVATION BEFORE BEGINNING PRECAST GRAVITY WALL DESIGN OR CONSTRUCTION.
- ADJUST PAVED DITCH WIDTH OR BACK SLOPE FOR VARYING GRADE ELEVATIONS ALONG TOP OF RETAINING WALL NO. AND SUBMIT A CAST-IN-PLACE CONCRETE DITCH DETAIL FOR REVIEW WHEN TOP OF WALL STEPS DOWN.
- DO NOT PLACE CONCRETE FOR FOOTINGS FOR RETAINING WALL NO. UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.
- "TEMPORARY SHORING" IS OR MAY BE REQUIRED FOR RETAINING WALL NO. IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION. SEE ROADWAY, STRUCTURE, OR GEOTECHNICAL PLANS.
- AT THE CONTRACTOR'S OPTION, "TEMPORARY SHORING FOR WALL CONSTRUCTION" MAY BE USED TO CONSTRUCT RETAINING WALL NO. SEE PRECAST GRAVITY RETAINING WALLS PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



**GEOTECHNICAL ENGINEERING UNIT**  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

STD CELL Wall\_PrecastGravity\_Surcharge\_GR  
PRECAST GRAVITY WALL WITH SURCHARGE AND GUARDRAIL - TYPICALS, NOTES AND FOOTING STEP DETAIL  
DATE: 6-21-11