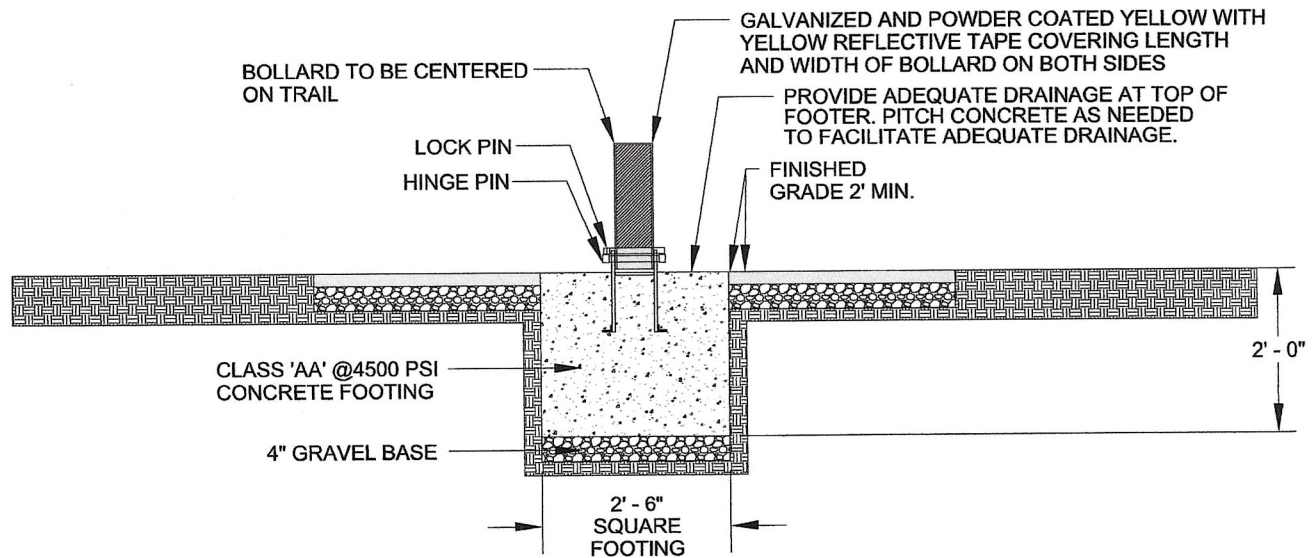
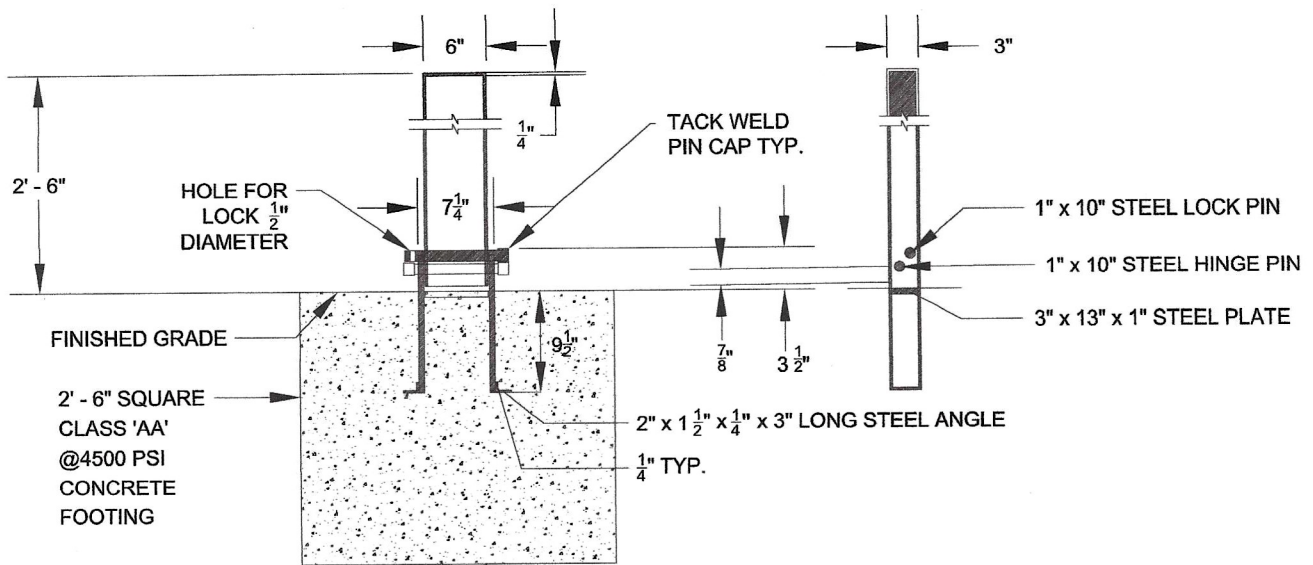


ENGINEERING SPECIFICATIONS FOR RAIL/TRAIL CONNECTORS

It is the intent of the NCDOT Rail Division to keep the right-of-way along the American Tobacco Trail (ATT) in its natural state until such time when the trail is returned to active rail use. The following rules and design specifications are required to accomplish this goal:

1. No work is to take place within the right-of-way prior to submission of plans and receipt of written plan approval by NCDOT (i.e. tree removal, construction fencing, grading, piping, etc.).
2. Sediment, erosion or water runoff from adjacent property onto the NCDOT right-of-way is prohibited.
3. Any structures approved on the state-owned corridor are temporary.
4. Municipalities can label the state-owned rail corridor as they seem fit.
5. Trail Connections will be considered on a case by case basis. This will allow for modifications to these guidelines for unusual situations. The following are the established guidelines for connections to minimize the impacts to the rail corridor:
 - a. Connections will approach the trail at a 90-degree angle from the adjacent property ROW line.
 - b. Trail connectors will be a maximum of 18 feet in width – 10 feet maximum width of non-slip resistant trail surface, plus a 4-foot grass shoulder on either side of the trail connector.
 - c. No trees outside the 18-foot connector width may be removed.
 - d. Bollards must be placed at each trail connector at a maximum spacing of 39 inches apart and must be located at the ROW line.
 - e. Existing ground elevations and berms within the NCDOT right-of-way shall not be altered unless otherwise authorized.
 - f. No shrubbery, trees or landscaping materials shall be installed along the trail connector without prior approval.
 - g. Trail connections shall be for public use serving more than one residential property.
 - h. Spacing of Trail Connectors shall be limited to a maximum of six (6) per mile (Exempt: Schools, greenways, parks and sidewalks at roads). Trail connectors shall be spaced based on topography, environmental factors, land use, existing connections, road intersections, etc. Connection spacing will be handled on a case by case basis.
 - i. Trail connections shall meet all Federal and State laws.

NCDOT response for violations: Violation of above Rules may result in (1) refusal by NCDOT to allow the encroachment, (2) restoration of property damage at violator's expense, and/or (3) NCDOT seeking any and all available legal remedies to mitigate damages and recover cost (including administrative and/or construction expenses) to correct the problem.



HINGED BOLLARD

NOTES:

1. A HINGED BOLLARD IS TYPICALLY USED IN THE CENTER OF TRAILS TO PREVENT UNAUTHORIZED MOTOR VEHICLE ENTRY. HINGED BOLLARDS MAY BE USED IN COMBINATION WITH PERMANENT BOLLARDS AND BOULDERS. SEE DETAIL GW-10.08 FOR THE VARIOUS BOLLARD AND BOULDER COMBINATIONS. HINGED BOLLARDS SHOULD BE UTILIZED AT ALL MAJOR ACCESS POINTS AND TRAIL HEADS. "NO MOTOR VEHICLES" SIGNAGE (MUTCD R5-3) MAY BE USED TO REINFORCE ACCESS RULES.
2. BOLLARDS SHOULD BE SET BACK FROM THE ROADWAY EDGE A MINIMUM OF 7 FEET AND A MAXIMUM OF 30 FEET AND WILL VARY DEPENDING ON LOCATION. OWNER SHALL INDICATE WHICH OPTION IS BEST FOR THE SITE LOCATION. BOLLARD SHALL NOT BE PLACED WITHIN THE ROADWAY RIGHT-OF-WAY UNLESS AN APPROVED RIGHT-OF-WAY OBSTRUCTION PERMIT IS SECURED WITH THE CITY OF RALEIGH RIGHT OF WAY SERVICES.
3. STRIPING AN ENVELOPE AROUND THE POST IS RECOMMENDED IF THE BOLLARD IS LOCATED WITHIN THE PAVED LIMITS OF THE TRAIL.
4. LOCKABLE, REMOVABLE BOLLARDS ALLOW ENTRANCE BY AUTHORIZED VEHICLES. WHERE USED, THE TOP OF THE MOUNT POINT SHOULD BE FLUSH WITH THE PATH SURFACE.
5. SEE MIDDLE BOLLARD WITH TRAIL SIDE BOLLARDS DETAIL, GW-10.08, FOR TYPICAL BOLLARD PLACEMENT.

STANDARD DETAIL		
REVISIONS	DATE: 4/2021	NOT TO SCALE
	HINGED BOLLARD	