

## INTEGRAL ABUTMENT PILE NOTES:

*These Notes shall be modified, if necessary, based upon the recommendations contained within the Geotechnical Report.*

1. A TRENCH WITH A DEPTH OF 3'-0" AND A MINIMUM WIDTH OF 2'-6" SHALL BE CONSTRUCTED DIRECTLY BELOW THE BOTTOM OF THE PILE CAP ELEVATION. AFTER THE PILES ARE DRIVEN, THE TRENCH SHALL BE FILLED WITH CRUSHED STONE (M2.01.6).
2. ALL SPLICES SHALL HAVE COMPLETE PENETRATION BUTT WELDS. THERE SHALL BE NO SPLICES WITHIN THE TOP 20 FEET OF PILE. SPLICE WELDS SHALL BE 100% UT.
3. THE FACTORED AXIAL DESIGN LOAD PER PILE IS X KIPS AS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS STRENGTH I LOAD COMBINATION. *(Designer to specify the Limit State and the Group Load Combination that produce the highest axial load)*
4. THE FACTORED STRUCTURAL RESISTANCE PER PILE IS X KIPS AND IS THE PRODUCT OF THE NOMINAL STRUCTURAL RESISTANCE OF X KIPS AND A RESISTANCE FACTOR OF 0.XX.
5. THE FACTORED GEOTECHNICAL PILE RESISTANCE IS X KIPS. THE ESTIMATED TIP ELEVATION IS XXX FEET.  
*(Use this note only when the Factored Geotechnical Capacity controls the pile axial capacity, such as from friction or friction and end bearing as specified in the Geotechnical Report.)*
- 6a. THE MINIMUM TIP ELEVATION IS XXX FEET.  
*(Use this note only when the required pile length is not determined by the required axial capacity, i.e., lateral loading, scour resistance, or other factors, as recommended in the Geotechnical Report, determine the pile length.)*
- 6b. PILES SHALL BE DRIVEN TO BEDROCK WITH AN ESTIMATED TIP ELEVATION OF XXX FEET. HEAVY DUTY PILE SHOES SHALL BE INSTALLED ON THE TIPS OF ALL PILES. PREFABRICATED PILE SHOES MAY BE USED IF APPROVED BY THE ENGINEER.  
*(Include this note only when the Factored Structural Capacity controls the pile axial capacity due to end bearing on rock as specified in the Geotechnical Report.)*
- 6c. DETERMINATION OF THE DRIVEN PILE RESISTANCE, PILE DRIVING CRITERIA, AND PILE INTEGRITY SHALL BE PERFORMED USING THE XX *(Designer to specify the Formula Method, WEAP, PDA, Static - Cyclic (Express) Load Test, Static Load Test, or other system, as recommended in the Geotechnical Report)*  
DRIVING/TESTING METHOD WITH A RESISTANCE FACTOR OF 0.XX.  
PILES SHALL BE INSTALLED TO ACHIEVE A FACTORED DRIVEN RESISTANCE EQUAL TO OR GREATER THAN THE FACTORED AXIAL DESIGN LOAD.
7. THE CONTRACTOR SHALL SUBMIT A PILE SCHEDULE, PILE INSTALLATION, AND PILE DRIVING/TESTING PLAN FOR REVIEW AND APPROVAL OF THE ENGINEER.
8. PILES SHALL CONFORM TO AASHTO M270 GRADE 50.

## REQUIRED PILE LOCATION TOLERANCES:

1. CONFORMANCE TO THE FOLLOWING TOLERANCES IS OF EXTREME IMPORTANCE TO FOUNDATIONS OF THIS TYPE.
2. PRIOR TO DRIVING, EACH ABUTMENT PILE SHALL BE HELD BY TEMPLATE TO WITHIN 1" OF PLAN LOCATION.
3. AFTER EACH ABUTMENT PILE IS DRIVEN, THE TOP OF THE PILE SHALL BE WITHIN 3" OF PLAN LOCATION.



LRFD BRIDGE  
MANUAL, PART II

## PILE NOTES

INTEGRAL ABUTMENTS

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