NOTES:

1. *Details shown in this Chapter depict prefabricated elements, unless specified otherwise. The Designer shall specify all prefabricated elements on Construction Drawings.*
2. *The use of prefabricated elements is intended to reduce overall construction durations and the design of abutments and wingwalls is not different than conventional cast–in–place construction.*
3. *The intent of the details included within this Chapter is to illustrate how each prefabricated element is used and it is the Designer's responsibility to lay out their specific project considering the size of the individual elements for both shipping and crane picks, erection and fabrication tolerances, and stage construction (if applicable).*
4. *In general, elements wider than 12 feet, including reinforcement extensions, will require special permits and should be avoided.*
5. *There are many different means of connecting the prefabricated elements that can be used on MassDOT projects. The three concepts detailed within this Chapter include the use of a CMP pipe void, grouted splice couplers, and concrete closure pours.*
6. *CMP Voids are to be provided to reduce the weight of the precast abutment blocks and to provide a connection between the cap and the stem. The maximum number of these voids shall account for the required amount of reinforcement based on the design. For prefabricated pile supported footings using corrugated pipes for the connection, the Designer should specify the size of the corrugated pipe to an available corrugated pipe size that is a minimum of 8 inches greater than the out–to–out dimension of the pile to account for pile driven tolerances. For foundations requiring battered piles, the use of the corrugated pipe is discouraged but battered piles may be driven within footing closure pours.*
7. *Grouted splice couplers can be used to connect stem elements to footings provided the Designer account for fabrication and erection tolerances between the number of elements being connected.*
8. *Closure pours between prefabricated footings shall be made after placement of the stem elements and it is the Designer's responsibility to ensure that the structure is stable at all stages of the construction.*
9. *Vertical Adjustment Assemblies shall be designed by the Contractor. Both the mechanical assembly details and shim stack details should be included on the Construction Drawings.*