


**Notes:**

1. Foundation soil properties area based on unit weights and friction angles provided by VTrans - refer to design calculations for details
2. Min. concrete compressive strength: 4000 psi @ 28 days
3. Reinforcing: ASTM A615 Grade 60
4. Cast foundation against undisturbed earth or within a permanent steel casing
5. Install conduit per Owner specification
6. Extend foundation 4" above ground when in earth. Construct foundation flush when in concrete island or sidewalk
7. The design of the foundation follows VTrans MREI 10-01
8. Construct foundation in accordance with the current edition of the VTrans Standard Specifications for Construction
9. Refer to the plans prepared by VTrans (Project no. STP SGNL(46)) for the location of MAP foundation.
10. Design factors of safety:
  - 10.1. Overturning: 3.0
  - 10.2. Bearing Capacity: 3.0
  - 10.3. Torsion: 1.1
11. DigSafe prior to excavation. Refer to STP SGNL (46) plans for underground utility. Verify locations prior to MAP foundation installation.

9 ft MAP Foundation (3 to be installed)		
Total Quantity:	Item Description:	Spec Reference:
1 each	9 ft Rebar Cage	Section 507
1 each	42" x 9 ft Casing	Optional
3.25 cy	4000 psi Concrete	Section 501
11 ft MAP Foundation (1 to be installed)		
Total Quantity:	Item Description:	Spec Reference:
1 each	11 ft Rebar Cage	Section 507
1 each	54" x 11 ft Casing	Optional
6.5 cy	4000 psi Concrete	Section 501
12 ft MAP Foundation (5 to be installed)		
Total Quantity:	Item Description:	Spec Reference:
1 each	12 ft Rebar Cage	Section 507
1 each	42" x 12 ft Casing	Optional
4.5 cy	4000 psi Concrete	Section 501
14 ft MAP Foundation (2 to be installed)		
Total Quantity:	Item Description:	Spec Reference:
1 each	14 ft Rebar Cage	Section 507
1 each	42" x 14 ft Casing	Optional
5.25 cy	4000 psi Concrete	Section 501
16 ft MAP Foundation (1 to be installed)		
Total Quantity:	Item Description:	Spec Reference:
1 each	16 ft Rebar Cage	Section 507
1 each	42" x 16 ft Casing	Optional
5.75 cy	4000 psi Concrete	Section 501

 <b>ENGINEERS CONSTRUCTION, INC.</b> P.O. BOX 2187 SOUTH BURLINGTON, VT 05407 (802) 863 - 6389	TITLE:  <p style="text-align: center;"><b>MAST ARM FOUNDATION DETAIL</b>  <b>WILLISTON-ESSEX STMP SGNL (46)</b>  <b>WILLISTON-ESSEX, VERMONT</b></p>	SCALE:     NTS  DWG NO.:     WILLISTON-ESSEX STPG SGNL (46)	DATE:     01/18/2018  CHECKED BY:     KAP	SHEET:    1    OF    2  APPROVED BY:    KAP
	DRAWN BY:     BLS		REV 0	
	WILLISTON-ESSEX, VERMONT			