

Macadam Stone Wing Armoring Notes:

Macadam stone shall be placed along the side of the wing and abutment footing, typically at each corner of the bridge unless otherwise noted in the plans. This macadam stone shall be underlaid with engineering fabric and comply with **Article 4196.01, B, 3, of the Standard Specifications**.

The bridge berm foreslope shall be compacted and shaped as shown on these plans, the Situation Plan, and as directed by the Engineer. The berm foreslope shall be firm when the engineering fabric and macadam stone are placed.

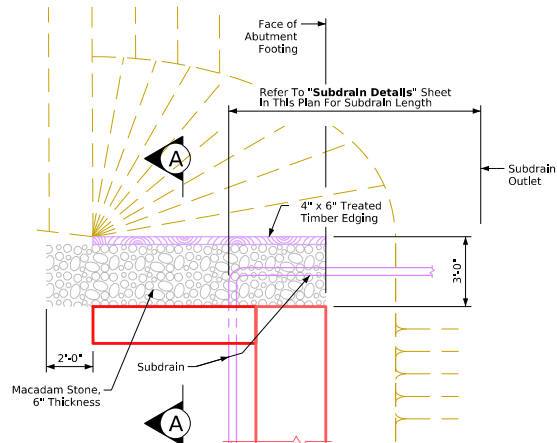
The engineering fabric shall meet the requirements of **Article 4196.01, B, 3, of the Standard Specifications**. If the fabric is lapped, the laps shall be a minimum of one foot in length, placed in shingle fashion with the upslope lap piece on top and stapled for continuity.

The macadam stone shall comply with **Article 4122.02 of the Standard Specifications** for coarse material (no choke stone allowed).

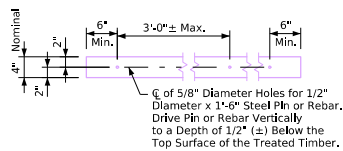
The wood preservative treatment for the timber edging shall meet the requirements for guardrail posts, sawed four sides, and comply with **Section 4161 of the Standard Specifications**.

The macadam stone shall be deposited, spread, consolidated, and shaped by mechanical or hand methods to provide uniform depth, density, and surface appearance.

Payment for the bridge wing armoring shall be incidental to the price bid item **"Structural Concrete (Bridge)"** and shall include all material and labor costs to construct the wing armoring as shown in these plans.



Plan View of Wing Armoring



4" x 6" Treated Timber Edging Details

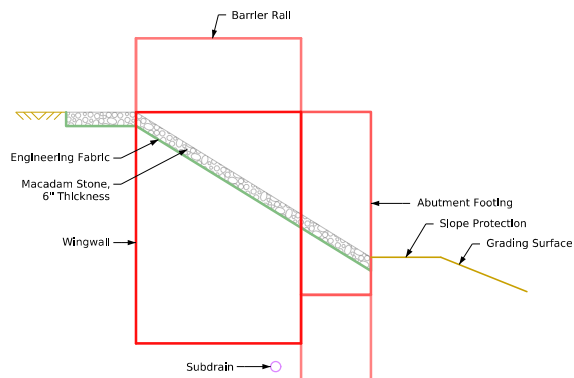
Subdrain Notes:

For details on placing all subdrains and subdrain outlets required for this structure, see **Subdrain Details** on sheet **J44-54-25** and **"Situation Plan"**.

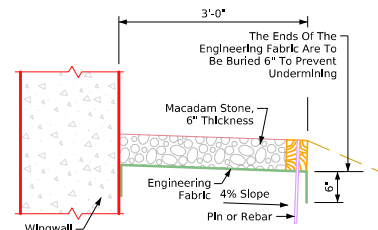
The Bridge Contractor is responsible for installing subdrains behind the abutment. The subdrains shall be 4" in diameter and comply with **Article 4143.01, B, of the Standard Specifications**. The subdrain outlet shall consist of a 6'-0" length of pipe with a removable rodent guard.

The dimensions shown for the proposed subdrains are based on the grading layout of the bridge berms. These dimensions are for estimating purposes only. Required lengths and general locations of subdrains may change due to field adjustments to the grading layout.

The cost for furnishing and placing the subdrain (including excavation), granular backfill, porous backfill, and subdrain outlet is to be included in the price bid for **"Structural Concrete (Bridge)"**. No additional payment will be made.



Elevation View of Wing Armoring



Section A-A

Latest Revision Date	IOWA DOT	
	Standard Design-40'-0" Roadway, 3 Span Bridge	
	Continuous Concrete Slab Bridge	
Approved By Bridge Engineer	July, 2025	
	Wing Protection & Macadam Stone Details	J40-54-25