EROSION CONTROL PAD: Provide erosion control at the outlet of all farm drains except where they outlet into a drainage structure.

PAYMENT: Erosion control pads are included in the unit price bid for Item 605 - Precast Reinforced Concrete Outlet.

PRECAST REINFORCED CONCRETE OUTLETS: Provide a concrete outlet that meets CMS 611 requirements.

PAYMENT: The precast reinforced concrete outlet are paid of the contract unit price bid for Item 601 - Precast Reinforced Concrete Outlet.

Tied Concrete Block Mat, Type 1 is paid of the contract unit price bid for Item 601 - Tied Concrete Block Mat, Type 1.

SPRING DRAIN: Aggregates, torred paper, torred burlap, or geotextile fabric backfill and necessary excavation for spring drains are included for payment in the unit price bid per foot for Item 605 - Aggregate Drains for Springs.

PAYMENT: The pipe is included in the unit price bid per foot for Item 601 - 6" Unclassified Pipe Underdrains for Springs.

MASONRY COLLARS: Provide a masonry collar where plans require that a pipe extension be joined to the end of an existing pipe with a butt joint. The cost is included in the unit price bid for the new conduit.

RIPRAP CUTOFF WALL: The cost of the cutoff wall is included in the unit price bid for Item 601 - Tied Concrete Block Mat, Type 1.

Construct a 6" Reinforced Concrete Slab.

CONCRETE CRADLE:
- Pipe or reinforced 4000 psi compressive strength concrete cradle
- 6" min.
- 8" max.
- 6" in rock
- 16" #3 round bars, at 24" o.c. in two directions, or fabricated reinforcement equivalent to #3 round bars, at 24" o.c. in two directions, or wire fabric according to SCD BP-1.1.
- Mortar void as per CMS 611 Conduit
- 2½" 4000 psi compressive strength concrete collar
- 1½" 10"x10" #3 wire fabric
- 1½" 10"x10" #3 wire fabric
- 1½" 10"x10" Epoxy Coated Straight Bar
- 24" #3 Epoxy Coated Straight Bar
- 6" reinforced pipe or 6" 4000 psi compressive strength concrete
- Channel invert
- Pipe invert
- 6" Reinforced concrete slab
- Cutoff wall
- Undisturbed soil
- Foot for Item 605 - Aggregate Drains for Springs.

As per CMS 601.04, Type B, reinforce the slab approximately midway between the top and bottom of the slab, with steel bars or fabricated reinforcement equivalent to #3 round bars, at 24" o.c. in two directions, or wire fabric according to SCD BP-1.1.

NOTE:
- For Item 605 - Aggregate Drains for Springs.
- Foot for Item 605 - Aggregate Drains for Springs.
**SPRING DRAIN DETAIL**

**PLAN**

- Tiled Concrete Block Mat, Type 1, 48"x48"
- Pipe Underdrain
- 4" min.
- 3" min.

**SECTION A-A**

- Geotextile Fabric per CMS 712.09.
- Tarred paper, tarred burlap or Type B Aggregate
- Precast reinforced concrete outlet
- Mat, Type 1, 48"x48"

**Granular Filter**

- per CMS 605.03.c

**Concrete Outlet**

- Precast reinforced concrete outlet
- No. 8 Aggregate
- 4" min.
- 4" min.
- 3' min.
- 3'

**Item 605, 6" Unclassified Pipe**

- Underdrains for Springs
- 6'
- 6'
- 2'-6"