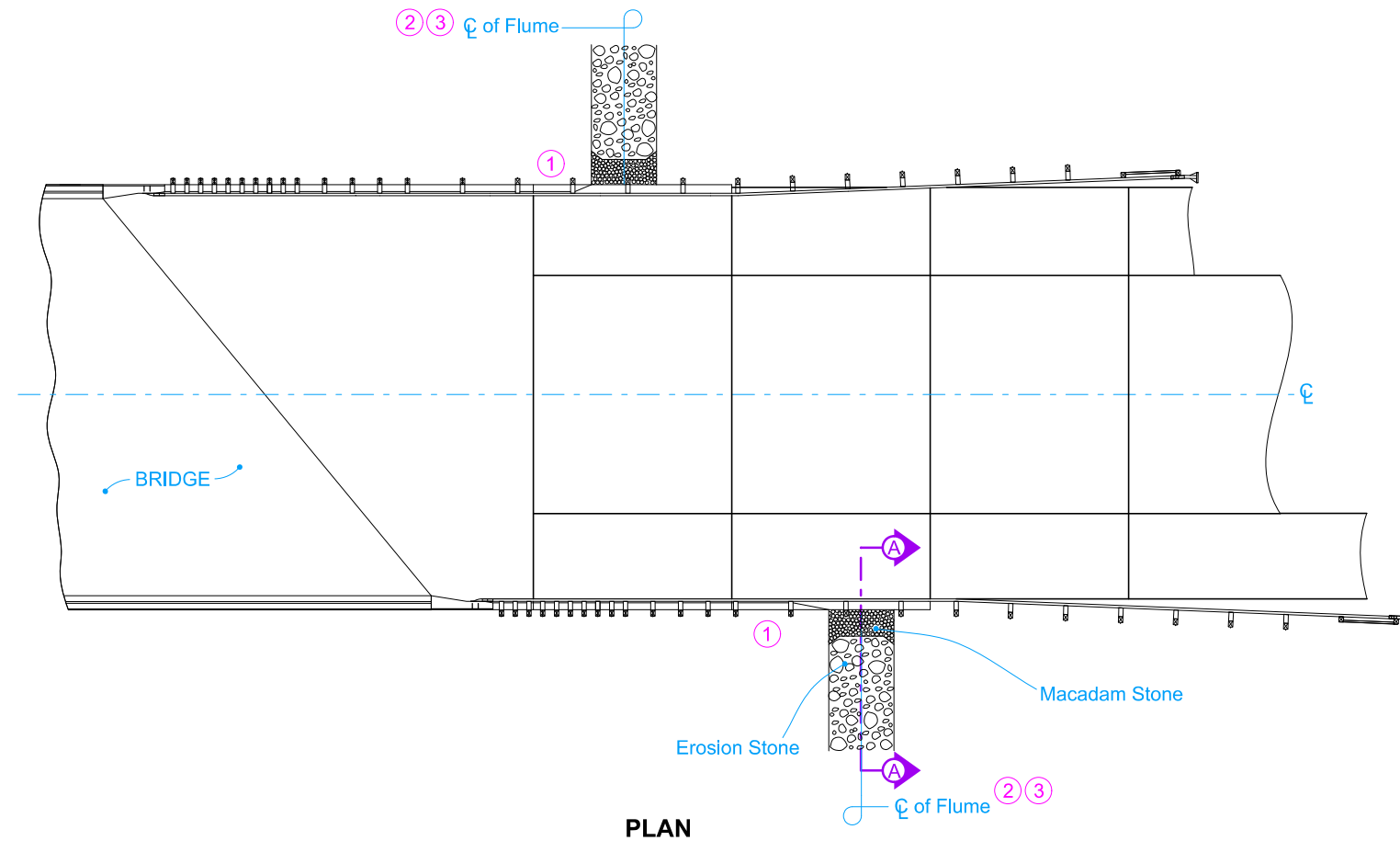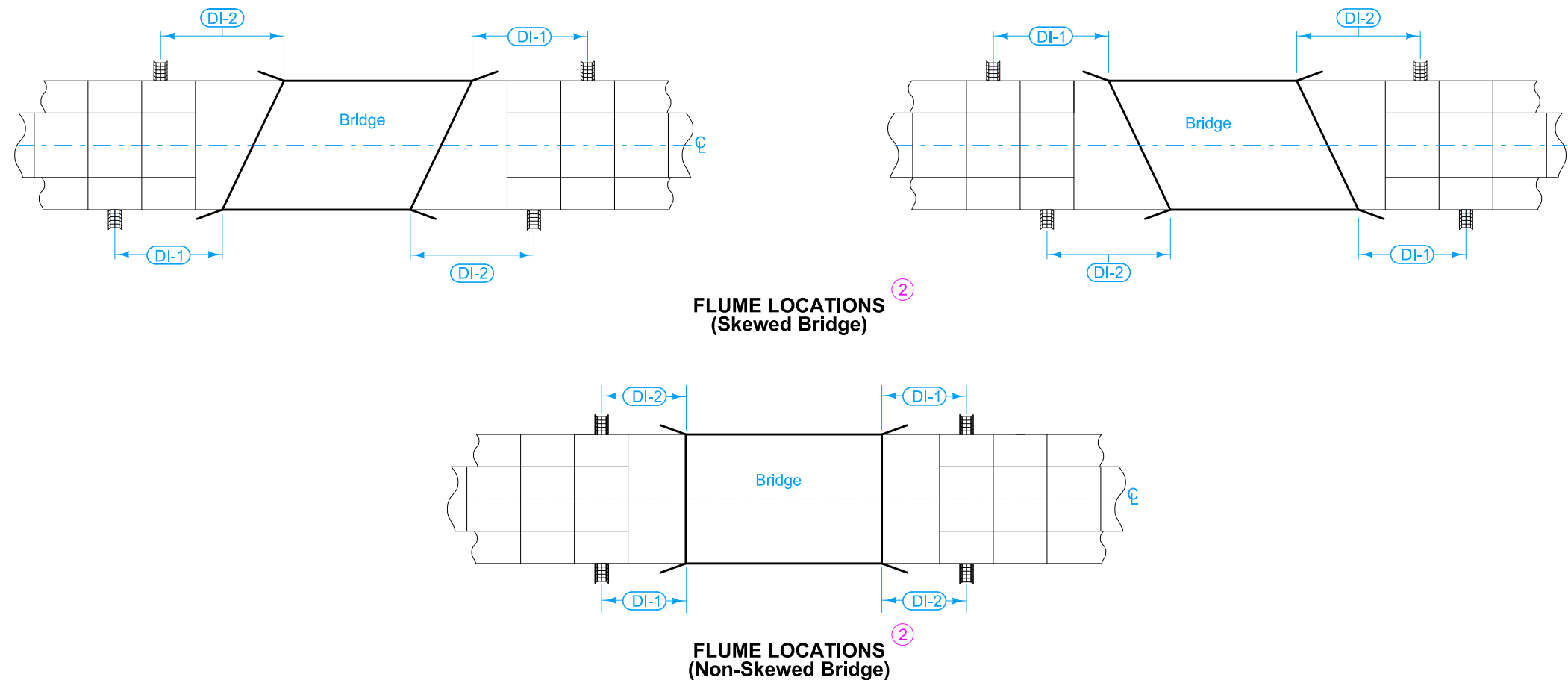Price bid for "Bridge End Drain, DR-402" is full compensation for furnishing, installing, and constructing the Bridge End Drain as shown.

1. Continue 4 inch sloped curb to edge of flume per section B-B. Refer to BR-201, BR-202, BR-203, BR-204, or BR-205 for details of 4 inch curb.

2. DI-1 and DI-2 distances measured from center of Bolt Pattern. Refer to BA-202.

3. Extend rock flume to toe of backslope. If no backslope exists, extend rock flume a minimum of 4 feet beyond the toe of foreslope.

PLAN

FLUME LOCATIONS
(Skewed Bridge)

FLUME LOCATIONS
(Non-Skewed Bridge)

Possible Contract Items:
Bridge End Drain, DR-402

Incidental to Bridge End Drain:
Macadam Stone Base Material
Erosion Stone
Engineering Fabric
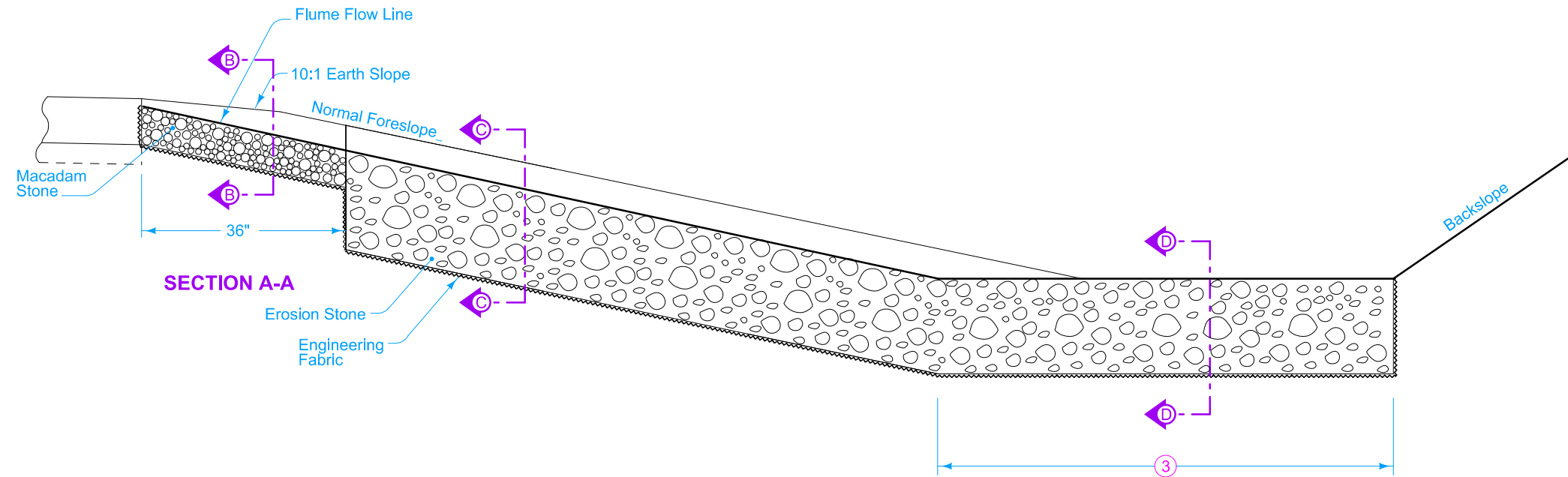Excavation, hauling, and disposing of material

Possible Tabulation:
104-8A

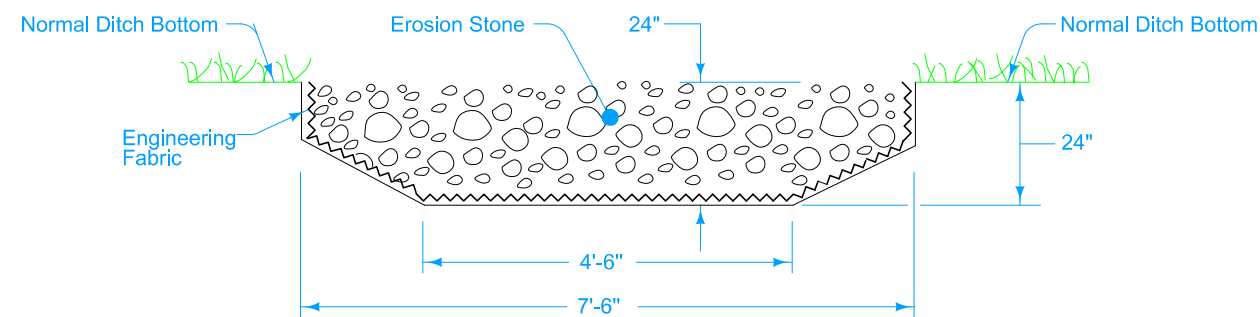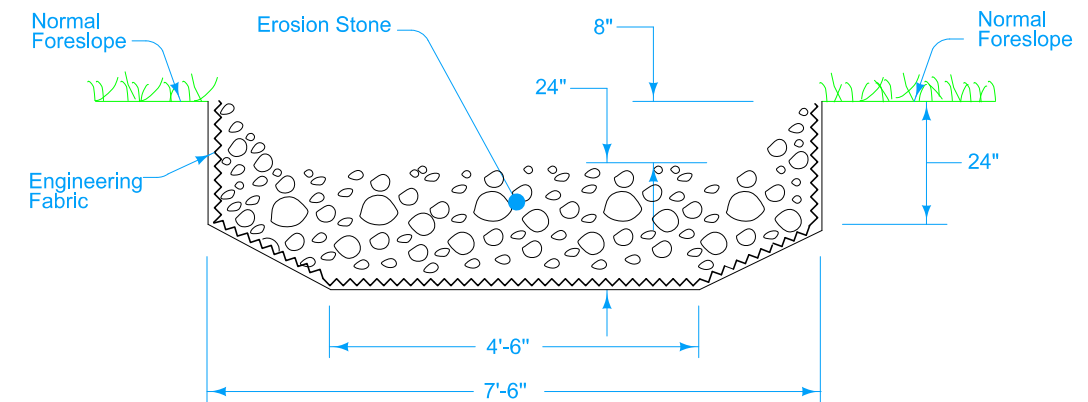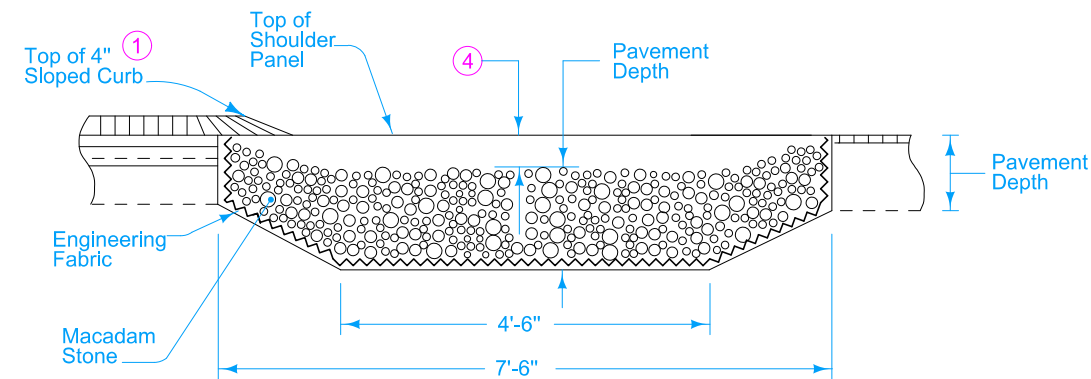| IOWA DOT	REVISION	
	7	04-16-24
STANDARD ROAD PLAN	**DR-402**	
	SHEET 1 of 2	

REVISIONS: Added reference to BA-202 in note 2.

APPROVED BY DESIGN METHODS ENGINEER

ROCK FLUME FOR
BRIDGE END DRAIN

Flume Flow Line

B

10:1 Earth Slope

Normal Foreslope

C

Macadam
Stone

B

36"

Backslope

D

SECTION A-A

Erosion Stone

C

Engineering
Fabric

D

③

① Continue 4 inch sloped curb to edge of flume per section
B-B. Refer to BR-201, BR-202, BR-203, BR-204, or
BR-205 for details of 4 inch curb.

③ Extend flume to toe of backlope. If no backslope exists,
extend rock flume a minimum of 4 feet beyond the toe of
foreslope.

④ Transitions from 2 inches at edge of pavement to 8
inches within 3 feet.

⑤ Transition the flume flow line depth from 8 inches at the
toe of slope to 0 inches with an approximate transition
rate of 2 inches per 1 foot horizontal.

Top of 4" ①
Sloped Curb

Top of
Shoulder
Panel

④

Pavement
Depth

Engineering
Fabric

Pavement
Depth

Macadam
Stone

4'-6"

7'-6"

SECTION B-B

Normal
Foreslope

Erosion Stone

8"

Normal
Foreslope

24"

Engineering
Fabric

24"

4'-6"

7'-6"

SECTION C-C

Normal Ditch Bottom

Erosion Stone

24"

Normal Ditch Bottom

Engineering
Fabric

24"

4'-6"

7'-6"

SECTION D-D ⑤