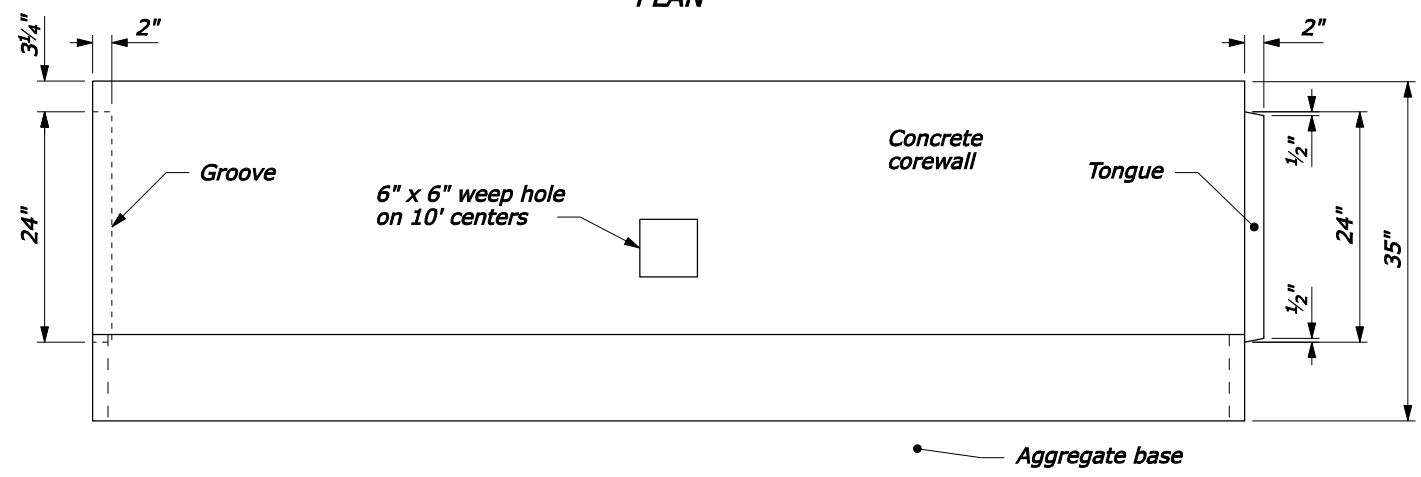
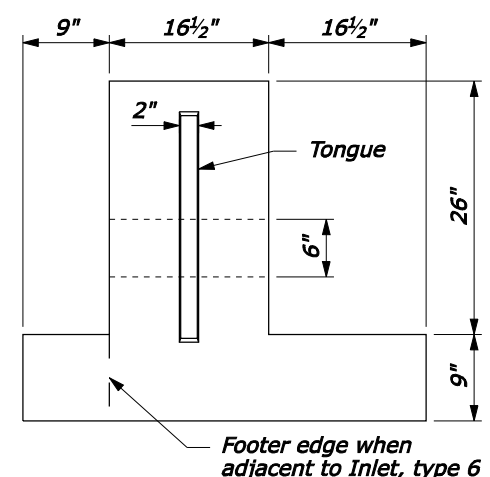


PLAN

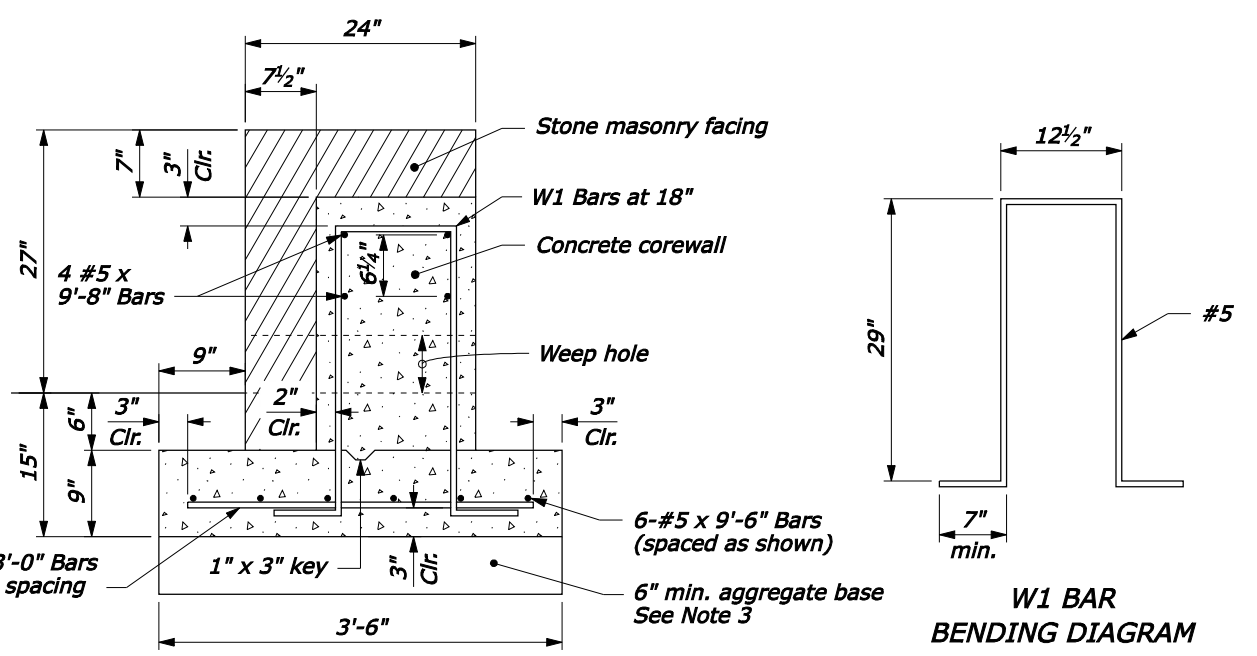


ELEVATION

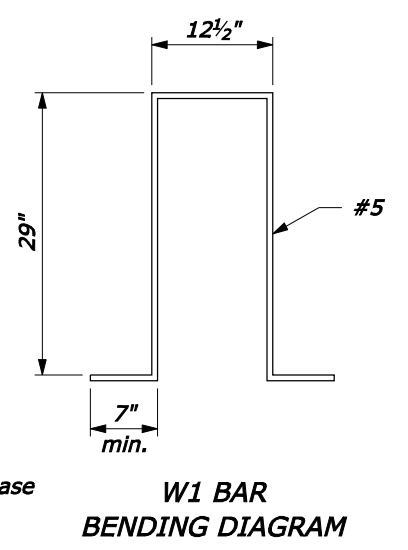
**PRECAST CONCRETE COREWALL**



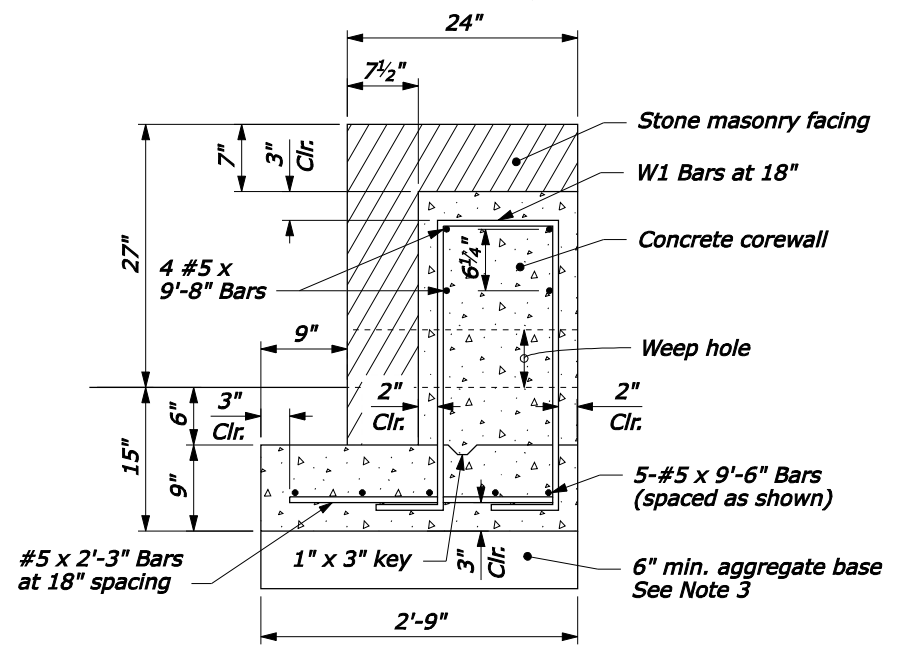
END VIEW



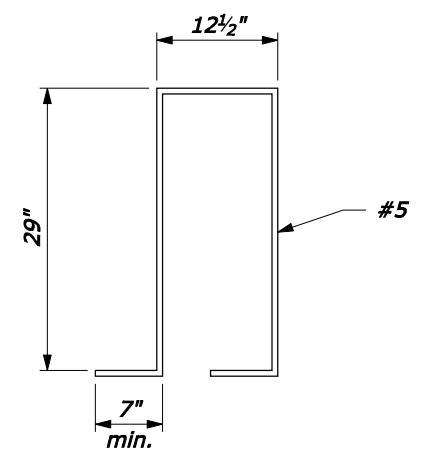
**TYPICAL GUARDWALL CROSS SECTION (SINGLE FACE ADJACENT TO CUT SLOPE)**



W1 BAR BENDING DIAGRAM



**TYPICAL GUARDWALL CROSS SECTION (SINGLE FACE ADJACENT TO INLET, TYPE 6A)**



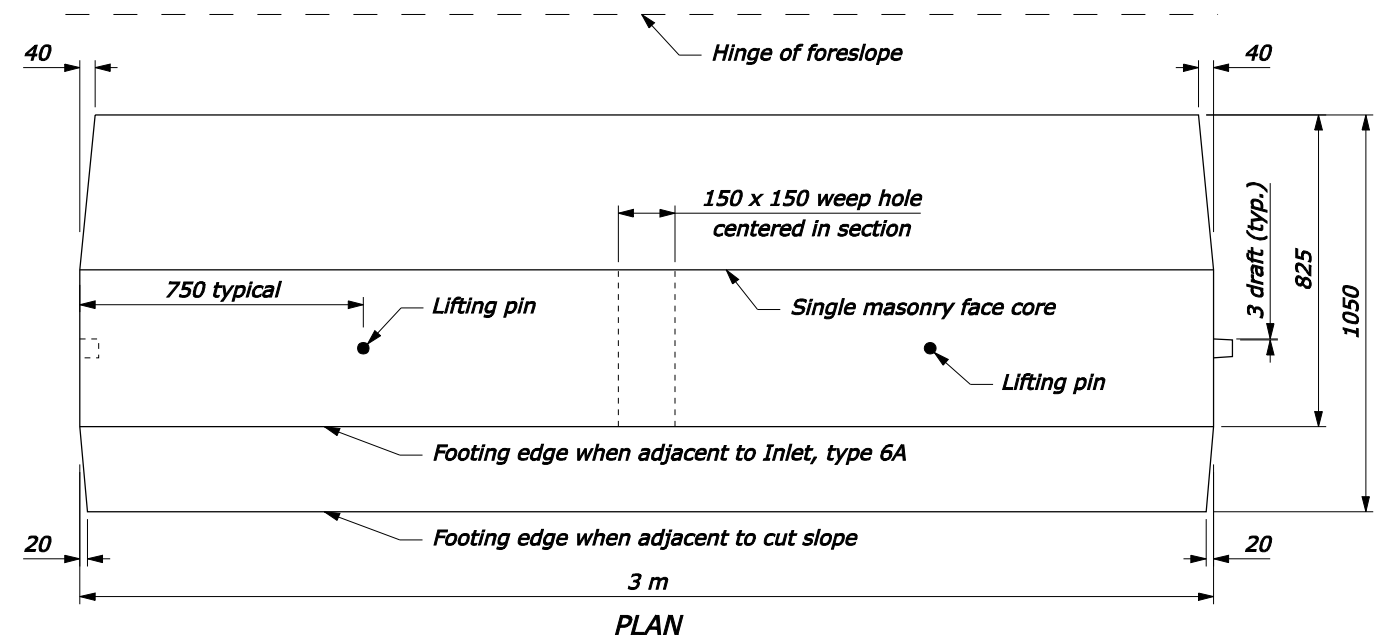
W1 BAR BENDING DIAGRAM

**NOTE:**

1. Form construction joints in the corewall at 30-foot intervals or, at the option of the Contractor, the corewall may be constructed of precast concrete units.
2. On curves with radius less than 150 feet, the corewall is to be cast-in-place.
3. The depth of base may be less than 6" as directed by the CO, when the foundation is on either rock fill or solid rock.
4. See Typical Section for guardwall offset distance and pavement structure.
5. Set galvanized metal slots with anchors for the stone work or other approved type of metal anchors in the concrete. Equivalent attachment systems are allowed with the approval of the CO.

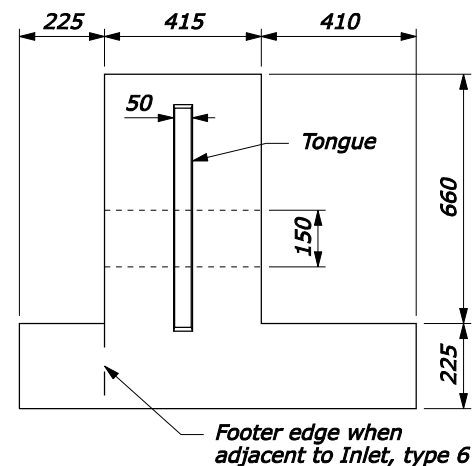
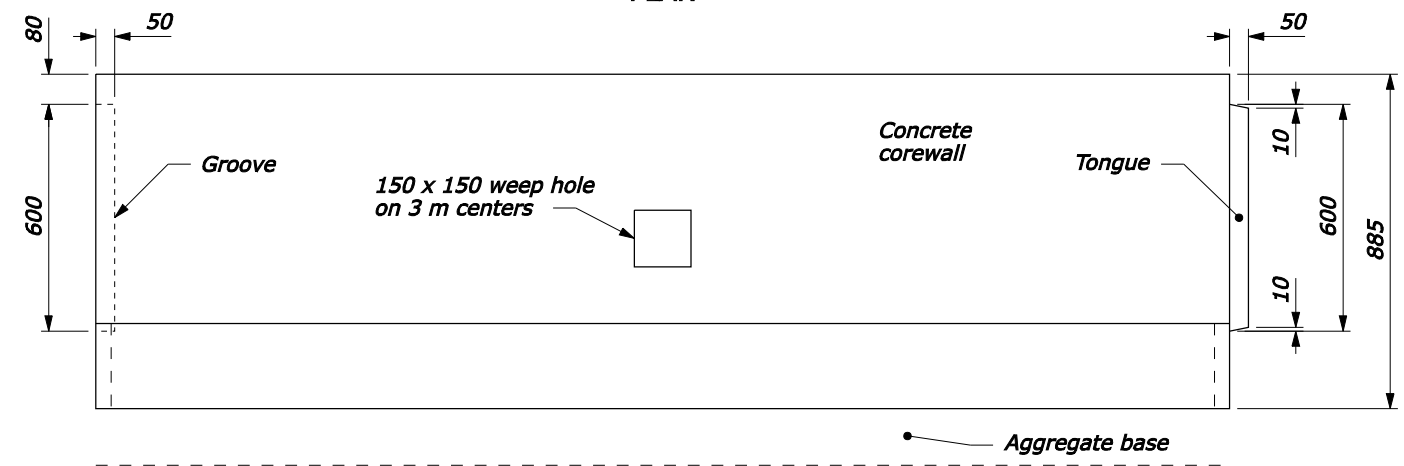
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
<b>STONE MASONRY GUARDWALL (SINGLE FACE)</b>	
STANDARD APPROVED FOR USE 6/2005	STANDARD
REVISED:	620-1

NO SCALE

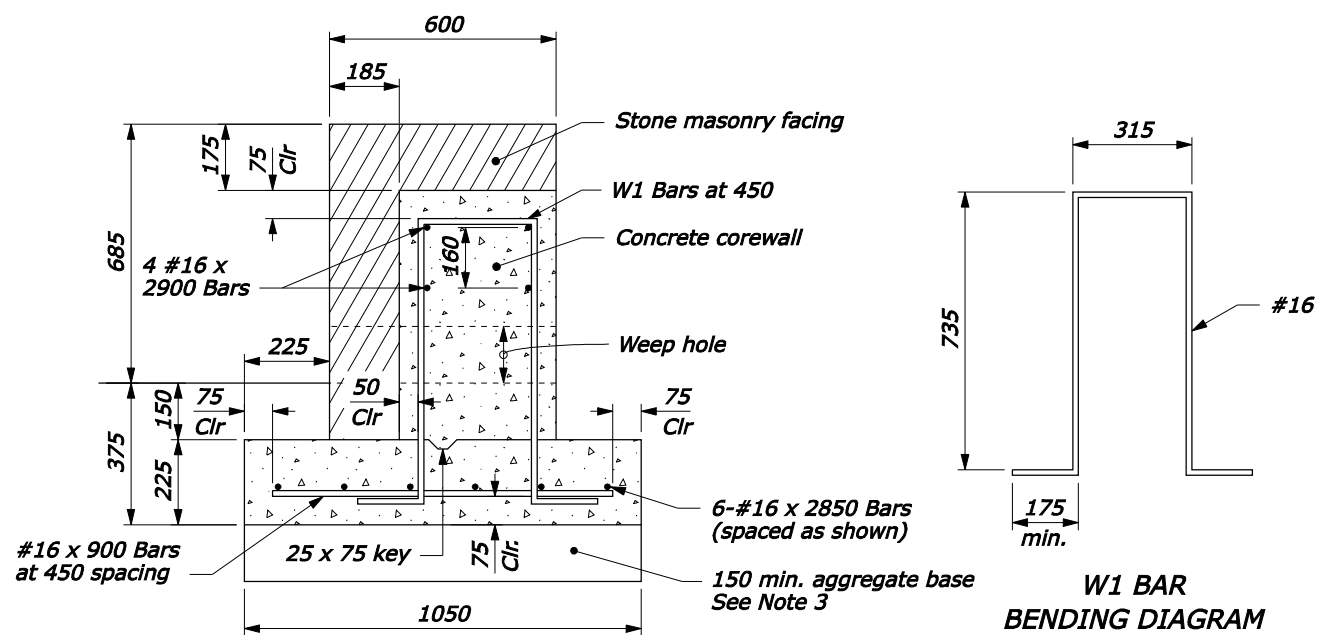


**NOTE:**

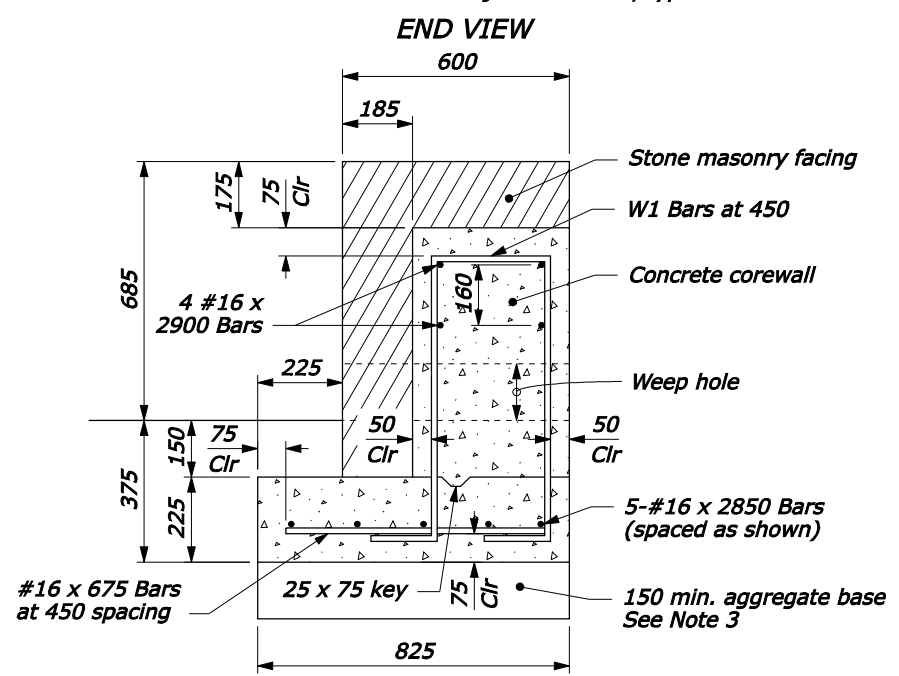
1. Form construction joints in the corewall at 9 m intervals or, at the option of the Contractor, the corewall may be constructed of precast concrete units.
2. On curves with radius less than 50 m, the corewall is to be cast-in-place.
3. The depth of base may be less than 150 mm as directed by the CO, when the foundation is on either rock fill or solid rock.
4. See Typical Section for guardwall offset distance and pavement structure.
5. Set galvanized metal slots with anchors for the stone work or other approved type of metal anchors in the concrete. Equivalent attachment systems are allowed with the approval of the CO.
6. Dimensions without units are millimeters



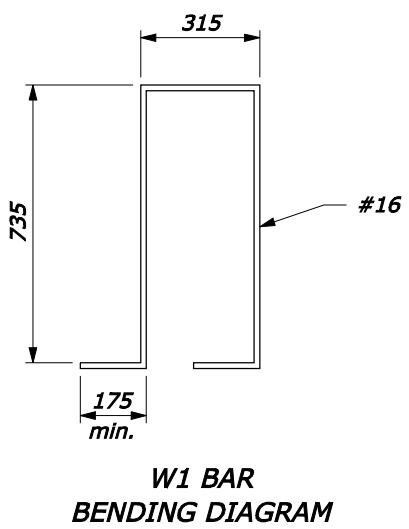
**PRECAST CONCRETE COREWALL**



**TYPICAL GUARDWALL CROSS SECTION (SINGLE FACE ADJACENT TO CUT SLOPE)**



**TYPICAL GUARDWALL CROSS SECTION (SINGLE FACE ADJACENT TO INLET, TYPE 6A)**



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY  
METRIC STANDARD

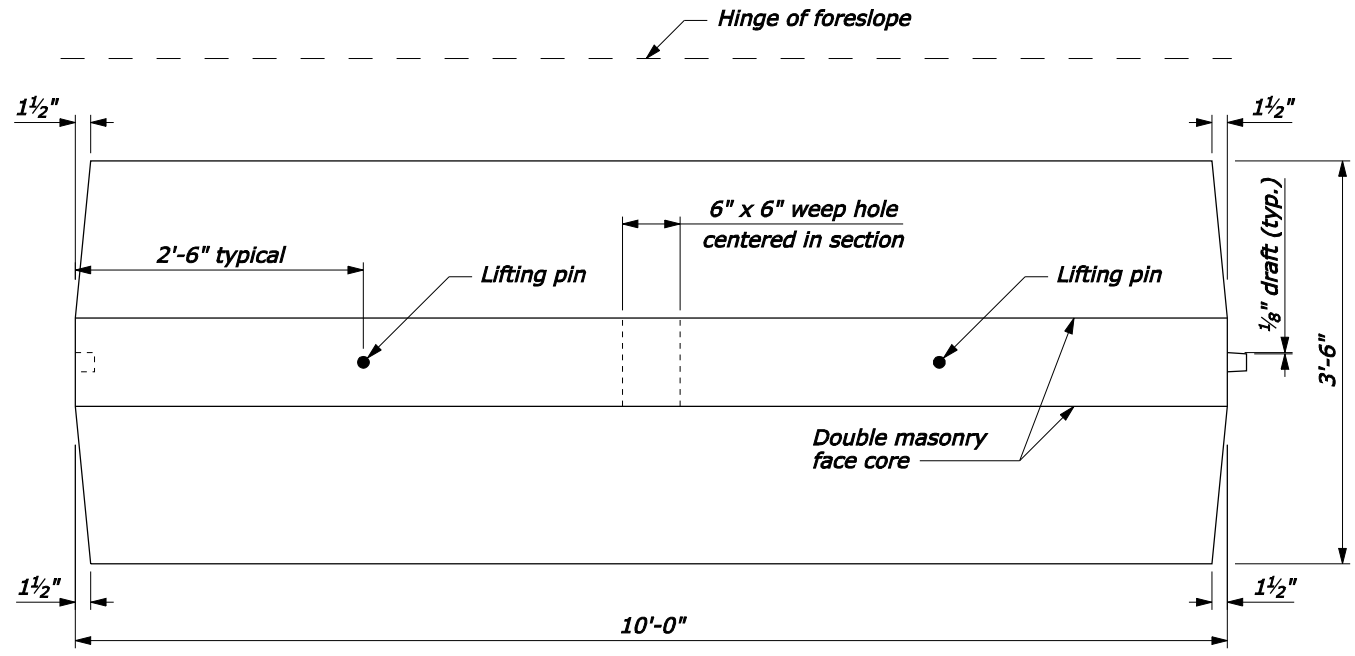
**STONE MASONRY GUARDWALL (SINGLE FACE)**

STANDARD APPROVED FOR USE 6/2005  
REVISED:

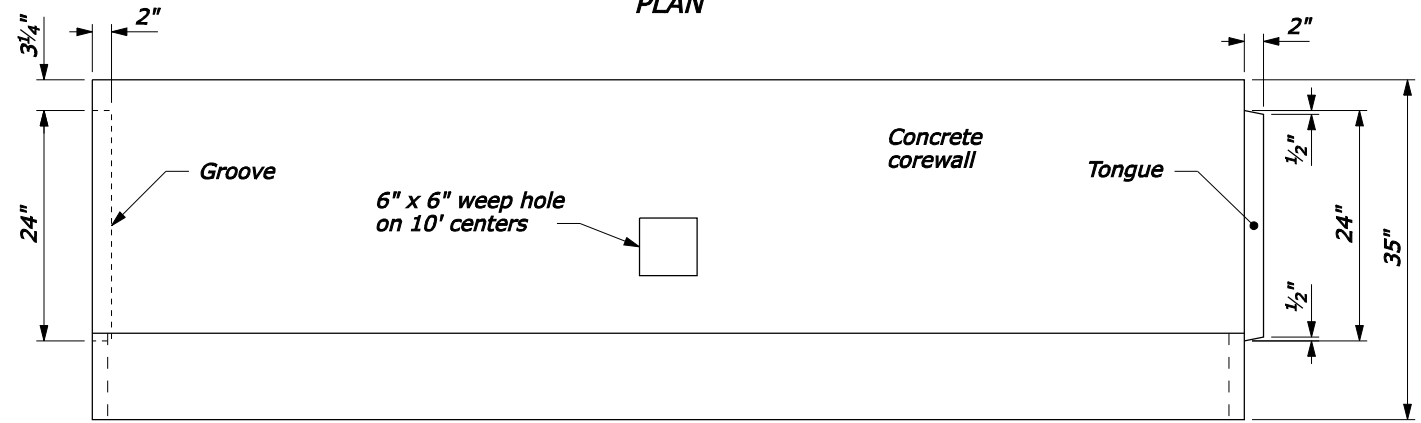
STANDARD  
M620-1

NO SCALE

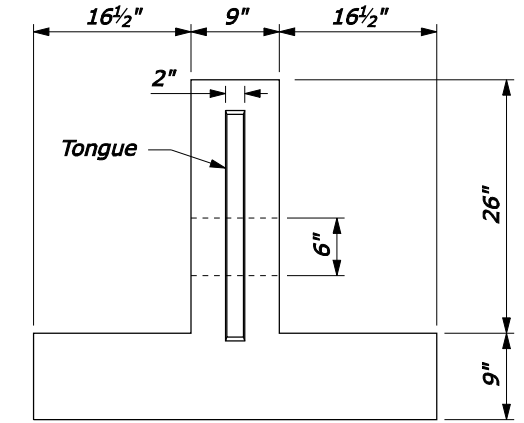
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PLAN

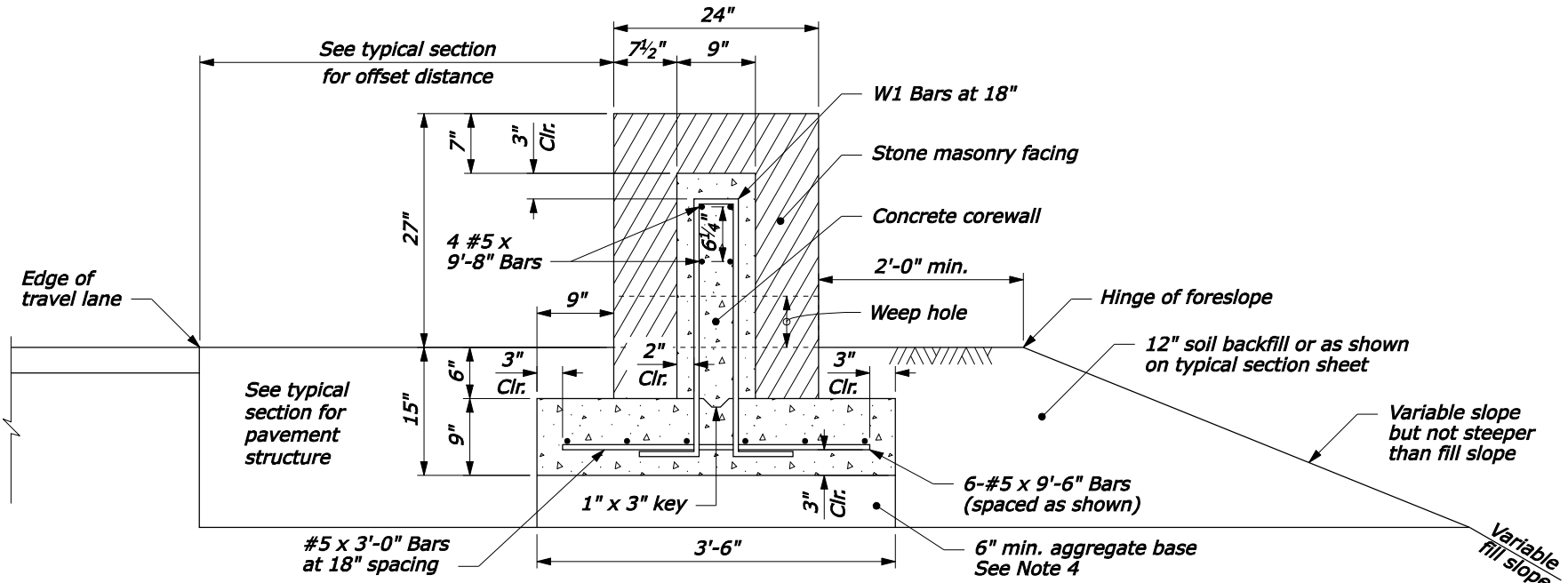


ELEVATION

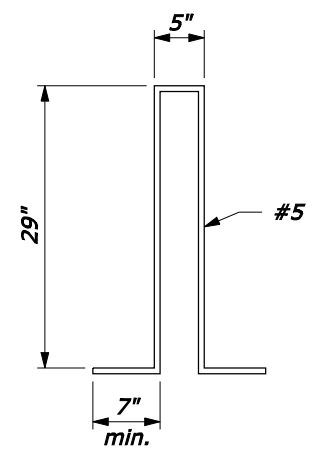


END VIEW

**PRECAST CONCRETE COREWALL**



**TYPICAL GUARDWALL CROSS SECTION (DOUBLE FACE)**



W1 BAR BENDING DIAGRAM

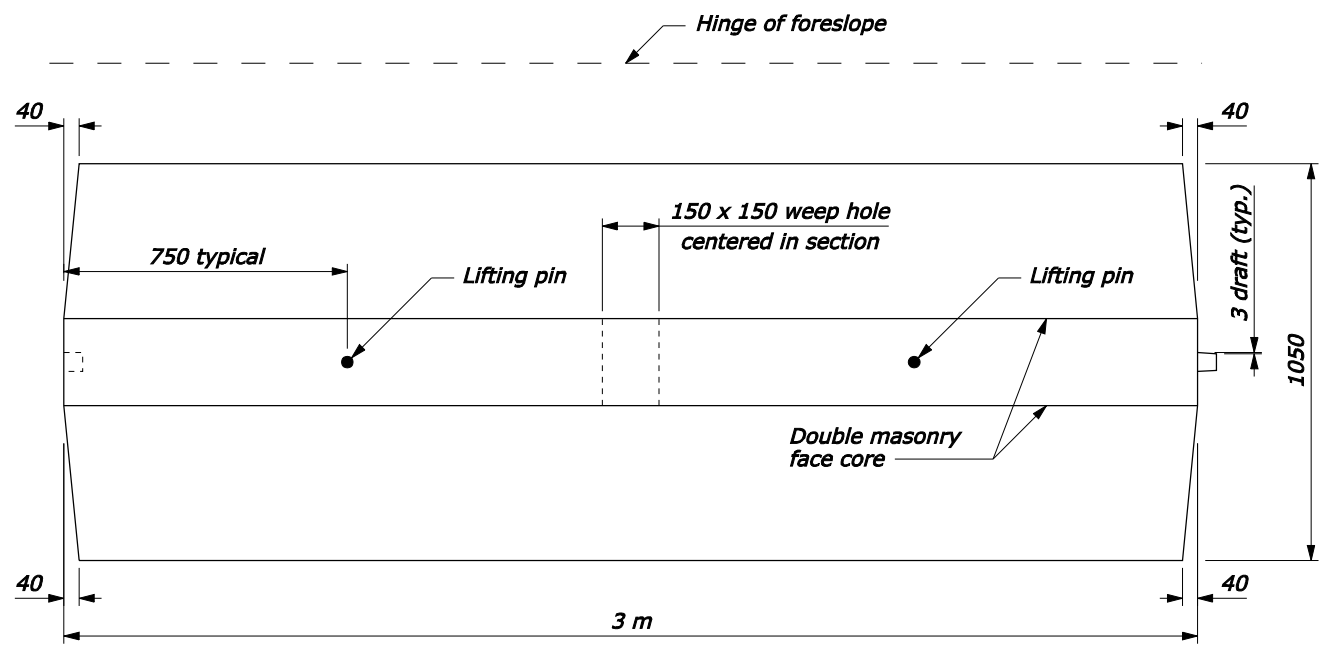
**NOTE:**

1. Form construction joints in the corewall at 30-foot intervals or, at the option of the Contractor, the corewall may be constructed of precast concrete units.
2. On curves with radius less than 150 feet, the corewall is to be cast-in-place.
3. The depth of base may be less than 6" as directed by the CO, when the foundation is on either rock fill or solid rock.
4. Set galvanized metal slots with anchors for the stone work or other approved type of metal anchors in the concrete. Equivalent attachment systems are allowed with the approval of the CO.

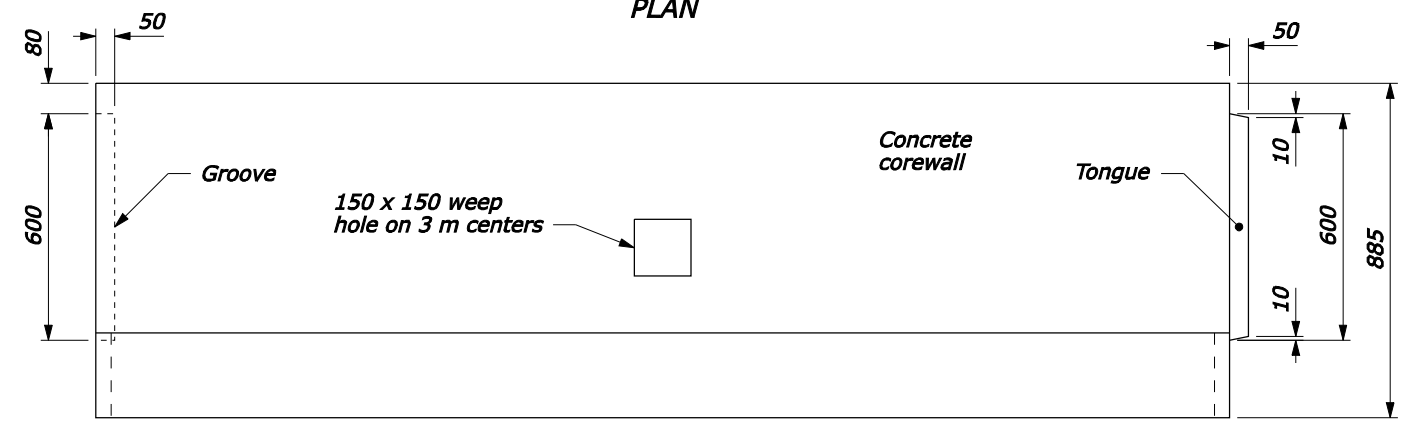
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
<b>STONE MASONRY GUARDWALL (DOUBLE FACE)</b>	
STANDARD APPROVED FOR USE 3/1990	STANDARD
REVISED: 4/1994 6/2005	620-2

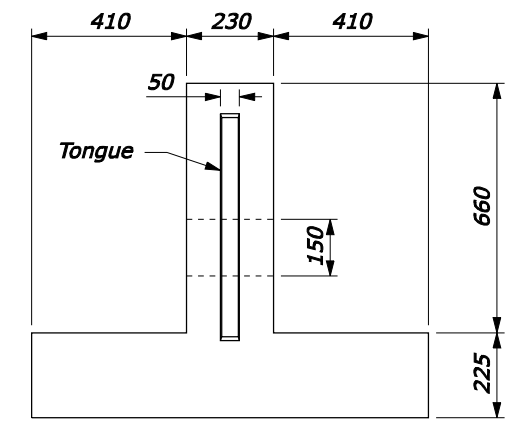
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PLAN

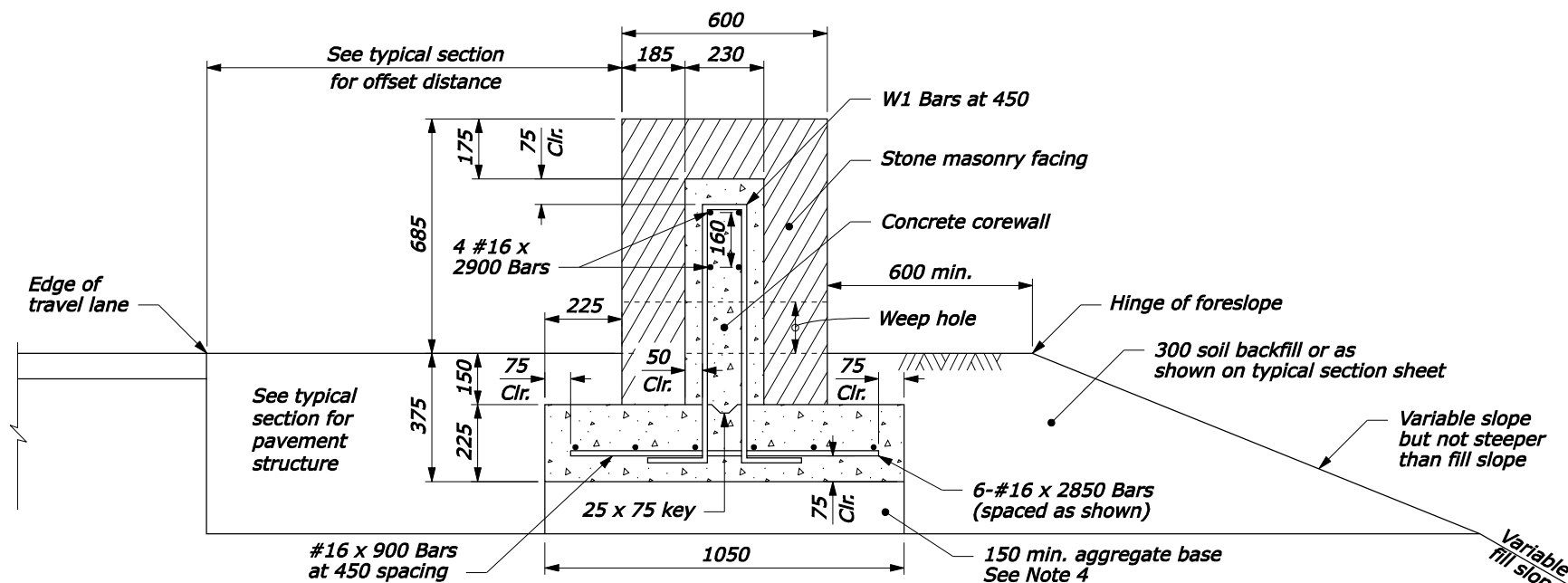


ELEVATION

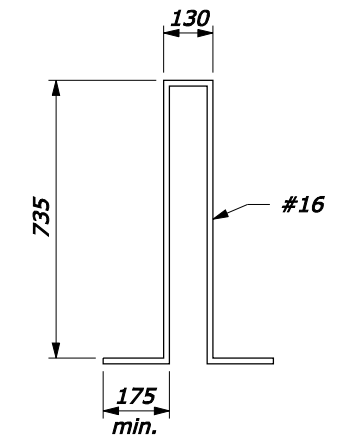


END VIEW

**PRECAST CONCRETE COREWALL**



**TYPICAL GUARDWALL CROSS SECTION (DOUBLE FACE)**



**W1 BAR BENDING DIAGRAM**

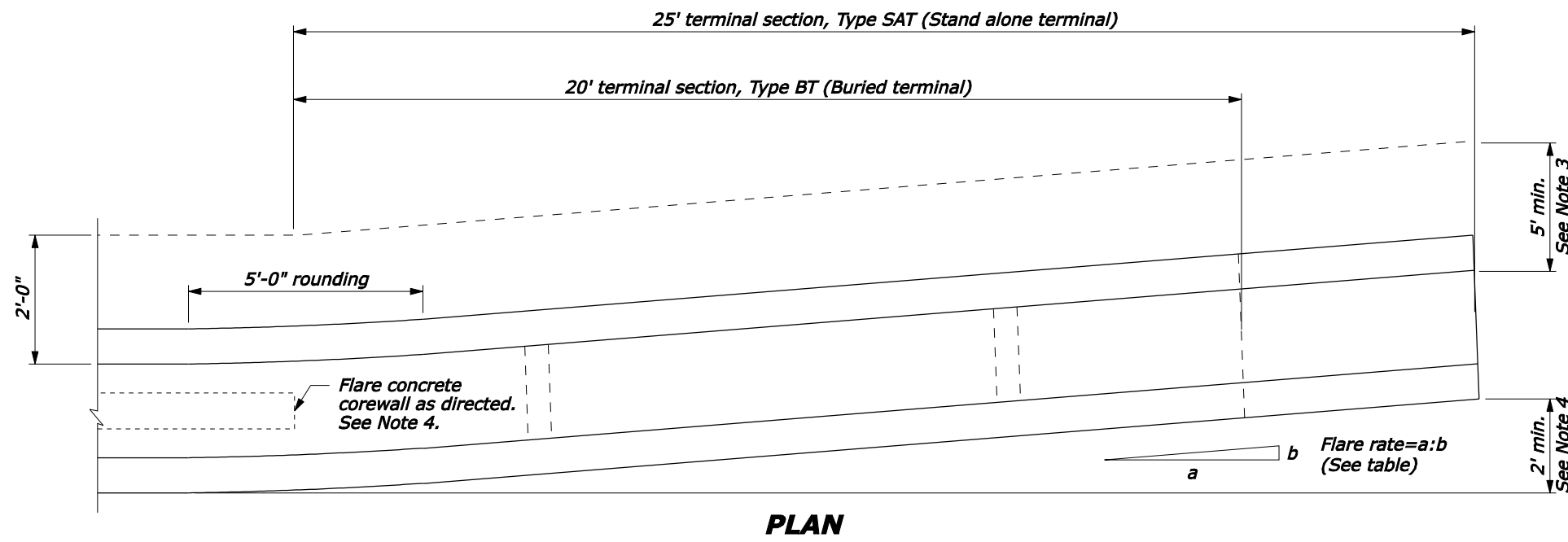
**NOTE:**

1. Form construction joints in the corewall at 9 m intervals or, at the option of the Contractor, the corewall may be constructed of precast concrete units.
2. On curves with radius less than 50 m, the corewall is to be cast-in-place.
3. The depth of base may be less than 150 mm as directed by the CO, when the foundation is on either rock fill or solid rock.
4. Set galvanized metal slots with anchors for the stone work or other approved type of metal anchors in the concrete. Equivalent attachment systems are allowed with the approval of the CO.
5. Dimensions without units are millimeters

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY METRIC STANDARD	
<b>STONE MASONRY GUARDWALL          (DOUBLE FACE)</b>	
STANDARD APPROVED FOR USE 3/1996 REVISED: 5/1997 6/2005	STANDARD <b>M620-2</b>

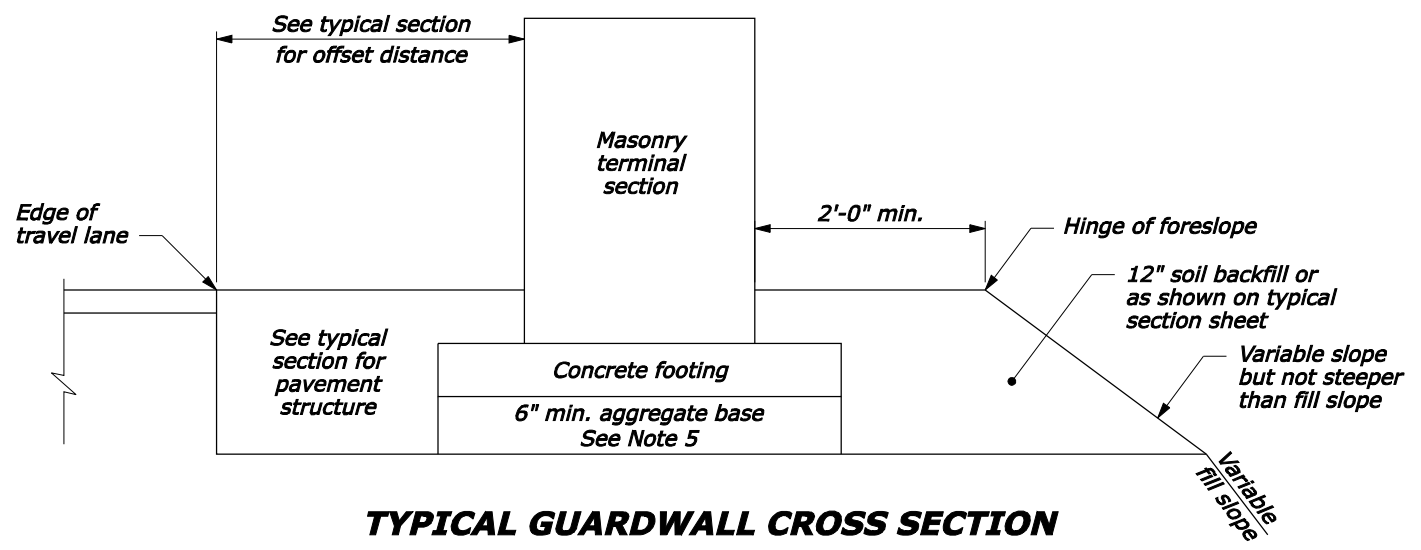
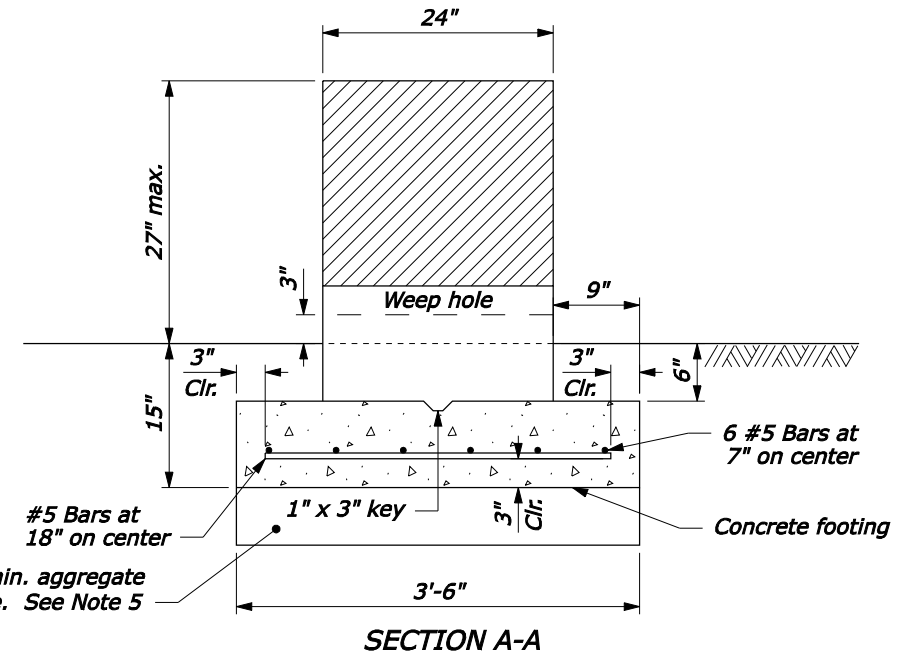
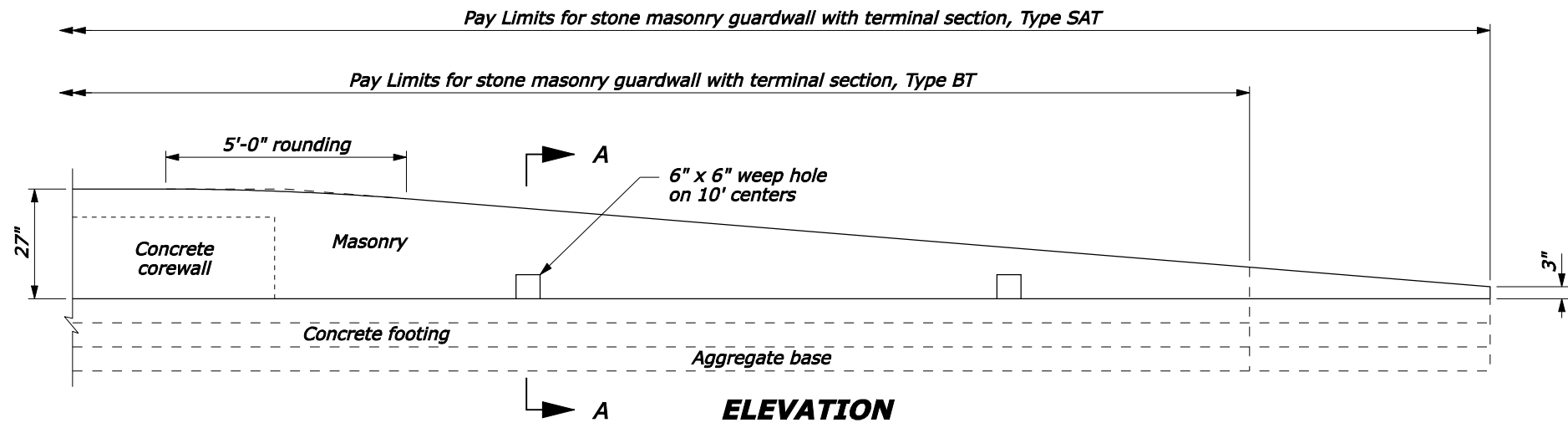
NO SCALE

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**NOTE:**

1. The Type SAT (Stand alone terminal) terminal section or the Type BT (Buried terminal) terminal section to be used as specified.
2. For the Type BT terminal section the last 5 feet of the Type SAT terminal section is deleted. See Standard 204-1, Earth berm for roadside barrier terminal section, for construction of the earth berm.
3. Extend the fill widening a minimum of 5 feet behind the guardwall for the Type SAT terminal section, unless otherwise directed.
4. The guardwall flare shown in the plan view is the minimum length and rate required. Flare the guardwall so that the terminal section is outside the clear zone as directed by the CO.
5. The depth of base may be less than 6 inches as directed by the CO, when the foundation is on either rock fill or solid rock.
6. Ensure guardrail terminal section is outside the clear zone by using appropriate flare rate in guardrail layout and as directed by CO.



Design Speed (mph)	Shy line offset (ft)	Flare rate inside shy line (a:b)	Flare rate outside shy line (a:b)
60	8.0	26:1	18:1
50	6.5	21:1	14:1
40	4.5	16:1	10:1
30 or less	3.5	13:1	8:1

NO SCALE

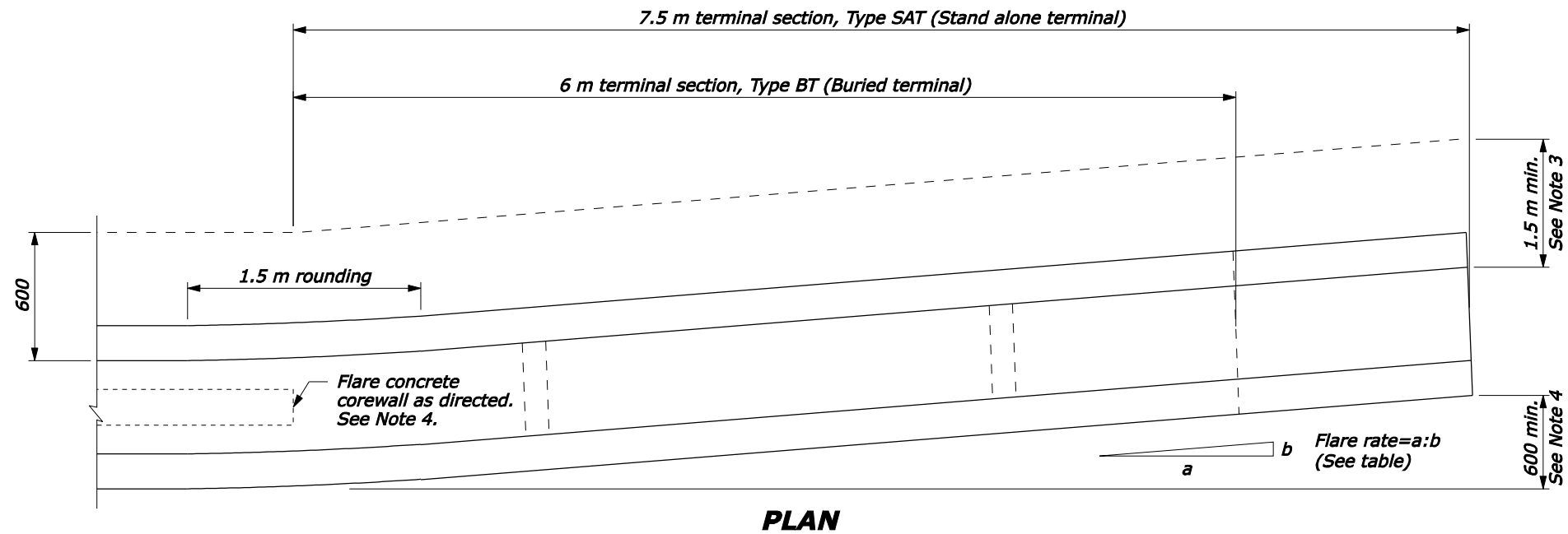
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

**STONE MASONRY GUARDWALL  
TERMINAL SECTIONS  
TYPE SAT AND TYPE BT**

STANDARD APPROVED FOR USE 3/1990	STANDARD
REVISED: 4/1994 6/2005	620-3

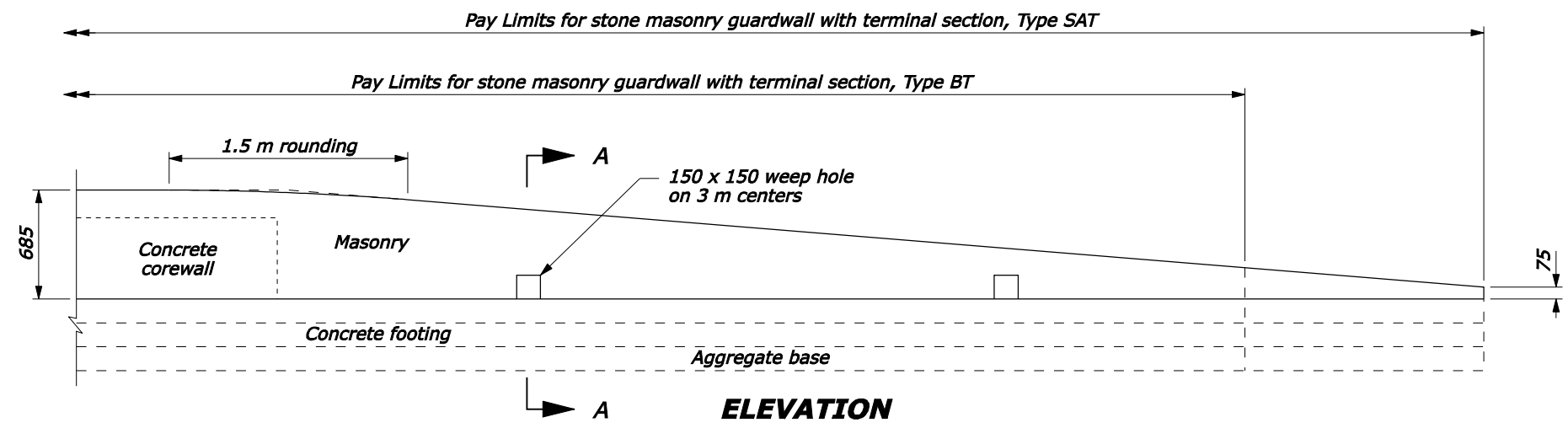
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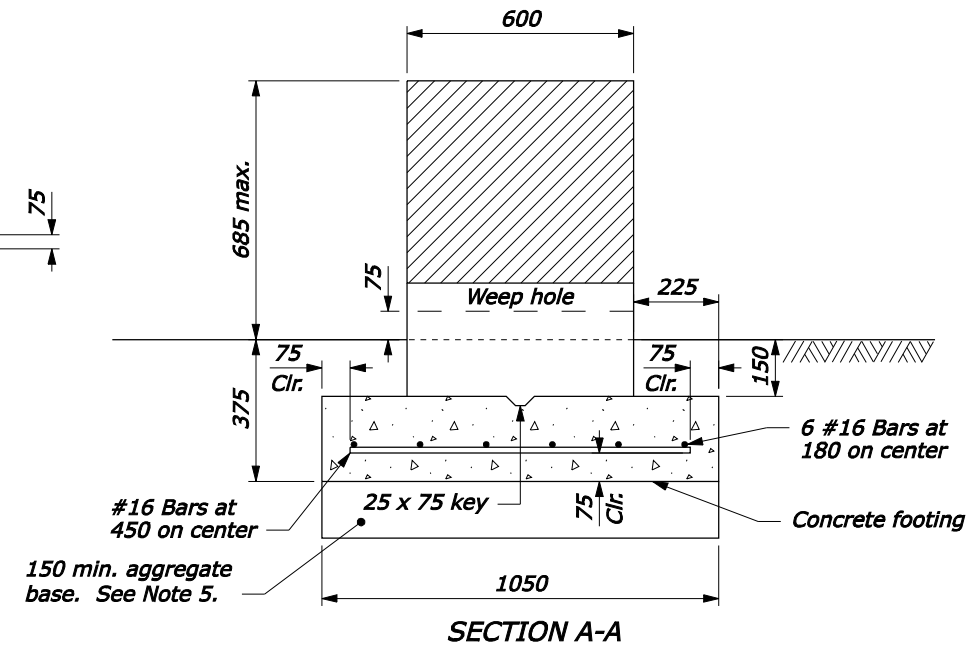
**PLAN**

**NOTE:**

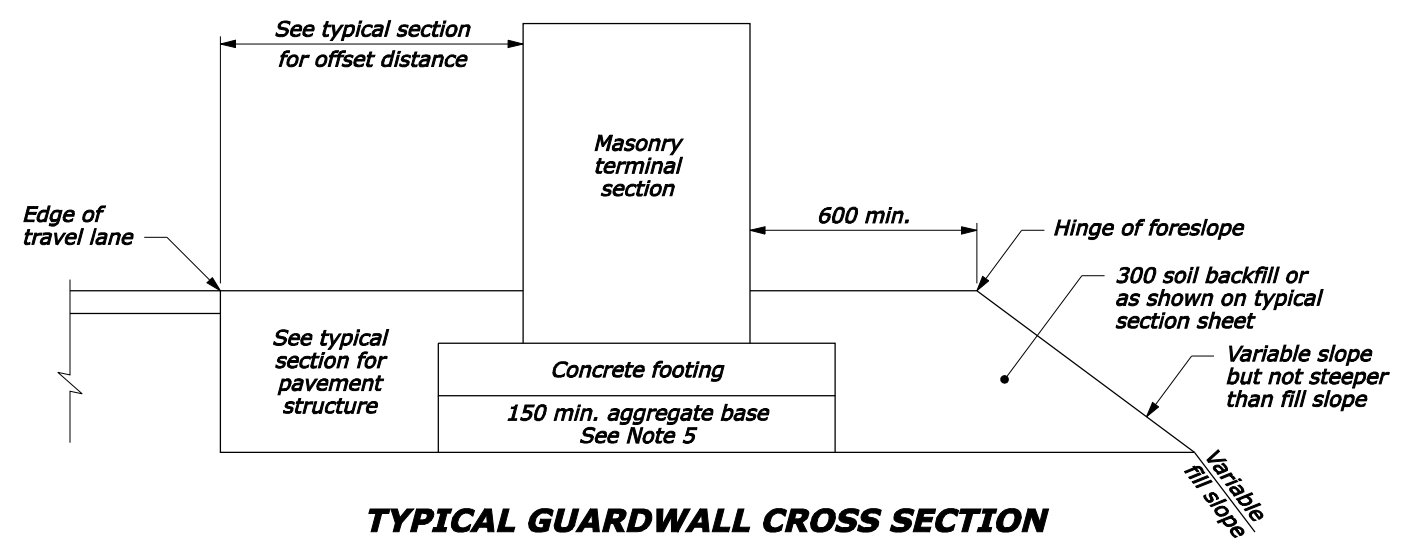
1. The Type SAT (Stand alone terminal) terminal section or the Type BT (Buried terminal) terminal section to be used as specified.
2. For the Type BT terminal section the last 1.5 m of the Type SAT terminal section is deleted. See Standard M204-1, Earth berm for roadside barrier terminal section, for construction of the earth berm.
3. Extend the fill widening a minimum of 1.5 m behind the guardwall for the Type SAT terminal section, unless otherwise directed.
4. The guardwall flare shown in the plan view is the minimum length and rate required. Flare the guardwall so that the terminal section is outside the clear zone as directed by the CO.
5. The depth of base may be less than 150 mm as directed by the CO, when the foundation is on either rock fill or solid rock.
6. Ensure guardrail terminal section is outside the clear zone by using appropriate flare rate in guardrail layout and as directed by CO.
7. Dimensions without units are millimeters.



**ELEVATION**



**SECTION A-A**



**TYPICAL GUARDWALL CROSS SECTION**

<b>GUARDWALL FLARE RATE TABLE</b>			
Design Speed (km/h)	Shy line offset (meters)	Flare rate inside shy line (a:b)	Flare rate outside shy line (a:b)
100	2.4	26:1	18:1
80	2.0	21:1	14:1
60	1.4	16:1	10:1
50 or less	1.1	13:1	8:1

U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION  
 FEDERAL LANDS HIGHWAY  
 METRIC STANDARD

**STONE MASONRY GUARDWALL  
 TERMINAL SECTIONS  
 TYPE SAT AND TYPE BT**

STANDARD APPROVED FOR USE 3/1996  
 REVISED: 6/1997 6/2005

STANDARD  
**M620-3**

NO SCALE

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