

TYPICAL CROSS-SECTION

NOT TO SCALE

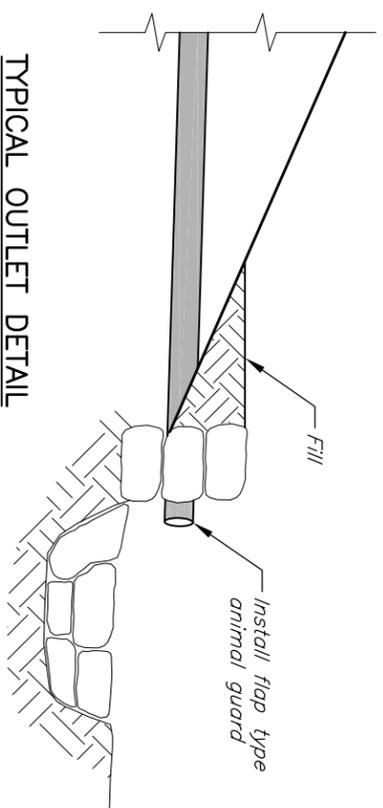
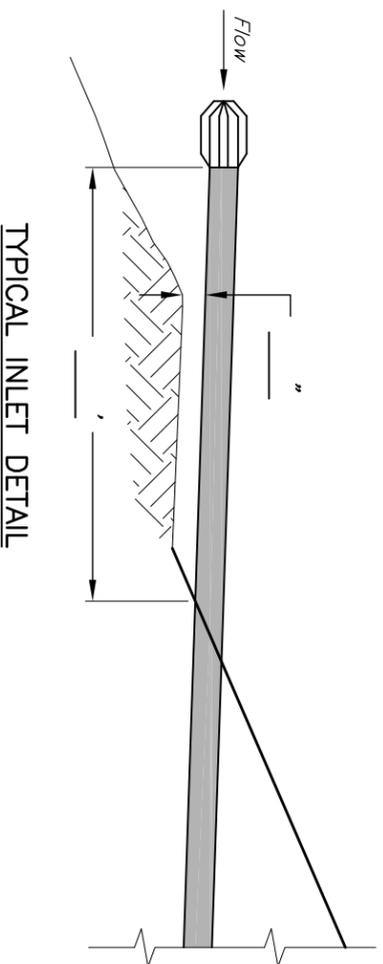
PLAN VIEW

Date	_____
Designed	_____
Drawn	_____
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Approved	_____
Title	_____

WETLAND ENHANCEMENT - 659
 LOW EMBANKMENT - TYPE B

USDA United States Department of Agriculture
 Natural Resources Conservation Service

NRCS Drawing Name _____
 NRCS Project ID _____
 B.M. Elev. _____
 B.M. Desc. _____
 Sheet _____ of _____



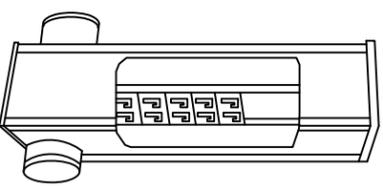
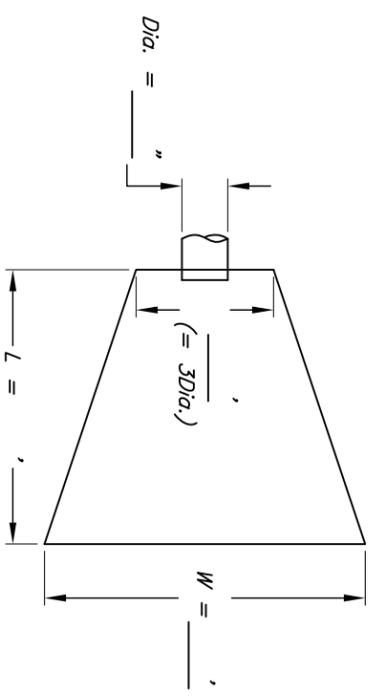
CONSTRUCTION SPECIFICATIONS AND NOTES

1. Remove all existing vegetation and topsoil from the footprint of the embankment. Topsoil shall be stockpiled for respreading on the embankment.
2. Core trench required when pool depth exceeds (2) feet. Locate trench along or parallel to center line of embankment, extending down to impervious layer. Use width of anticipated compaction equipment as bottom width with (2) feet as a minimum for hand compactors. Depth of trench should be at least (2) feet unless bedrock is encountered. Core trench fill shall be placed in layers not to exceed (9) inches and shall be compacted by a minimum of (3) passes of the construction equipment over the entire surface of the layer.
3. Fill material shall be obtained from shallow excavations at least (10) feet upstream from the toe of the embankment, or from a borrow source accepted by the approving official. Fill shall not contain vegetation, sod, frozen material, brush and roots, stones larger than (6) inches in diameter, or other objectionable material.
4. Embankment fill shall be placed in layers not to exceed (9) inches and shall be compacted by a minimum of (3) passes of the construction equipment over the entire surface of the layer.
5. Drain structure, if specified, shall have backfill materials placed and hand compacted in (4) inch layers up to (2) feet over pipe.
6. A nonwoven geotextile conforming to NRCS Materials Specification 592, Class 1 shall be installed to the full width of the stone center. A minimum of (6) inches of gravel may be substituted for geotextile (applies to Rock Lined Auxiliary Spillways).
7. Pipe shall be anchored to prevent floating.
8. A minimum of 5% of the embankment height shall be added to the embankment to allow for settlement. (Elev. = settled elev. + 0.05 height).
9. The top surface of the embankment shall be graded to be smooth and free draining. Finished side slopes shall be no steeper than 5H to 1V (5:1).
10. Apply lime and fertilizer according to soil test recommendations.
11. The embankment shall be seeded upon completion to the following specification.

Unless otherwise specified, apply seed at the following rates:

Creeping Red Fescue (Ensylo)	20 Lbs./Ac.	___ Lbs. total	Apply late season cover crop of: ___ Lbs. total
Red Top (Common)	3 Lbs./Ac.	___ Lbs. total	(after Sept. 15) ___ Lbs. total
Birdfoot Trefoil (Empire)	8 Lbs./Ac.	___ Lbs. total	___ Lbs. total
12. Apply a mulch of straw or hay at a rate of (2) Ton/Ac.

ROCK OUTLET PROTECTION					
Dia. (in.)	L (ft.)	W (ft.)	D ₅₀ (in.)	Quan. (c.y.)	Thickness (in.)
6	5	6	4	.5	9
8	6	7	4	1	9
10	11	12	4	2.5	9
12	14	15	6	5.5	14



ROCK OUTLET DETAIL

TYPICAL DRAIN STRUCTURE

Can be located upstream or downstream

ESTIMATED QUANTITIES

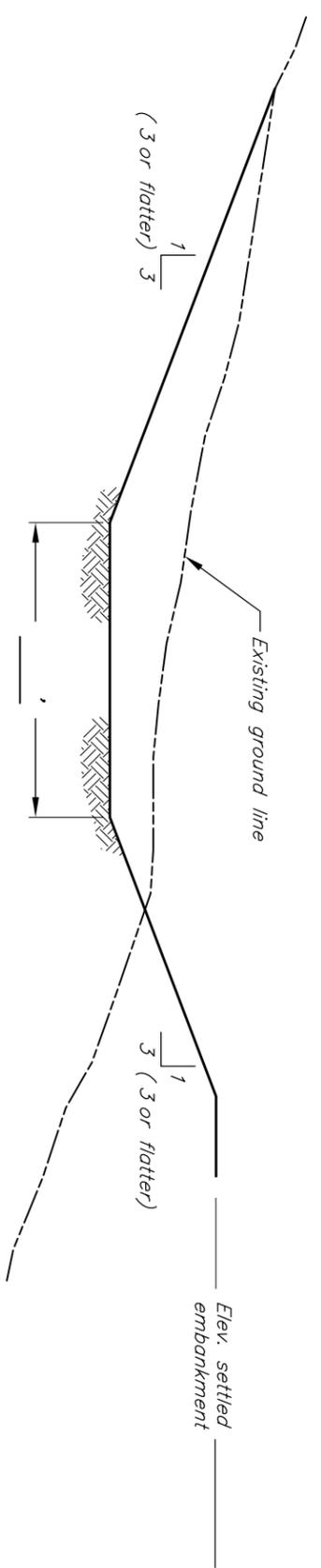
ITEM	UNIT	QUANTITY
Topsoil removal	C.Y.	
Core trench excavation	C.Y.	
Earthfill	C.Y.	
___" Dia. pipe	Ft.	
Material		
Drain structure	Anti-seep collar (specify material)	
___" Dia. x ___" h	___" w x ___" h	

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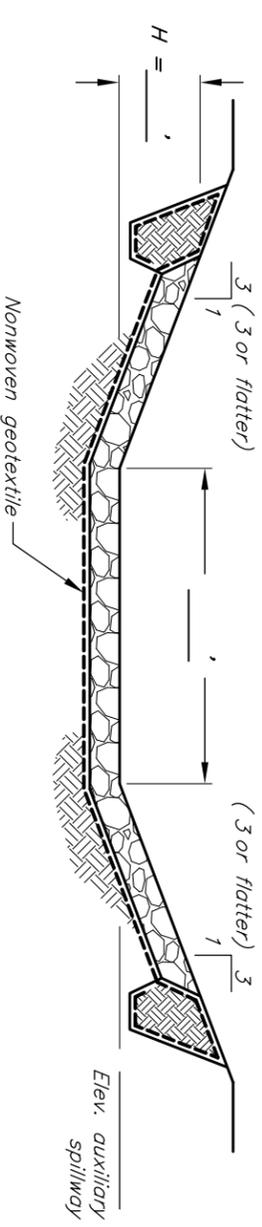
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**WETLAND ENHANCEMENT - 659
LOW EMBANKMENT - TYPE B**

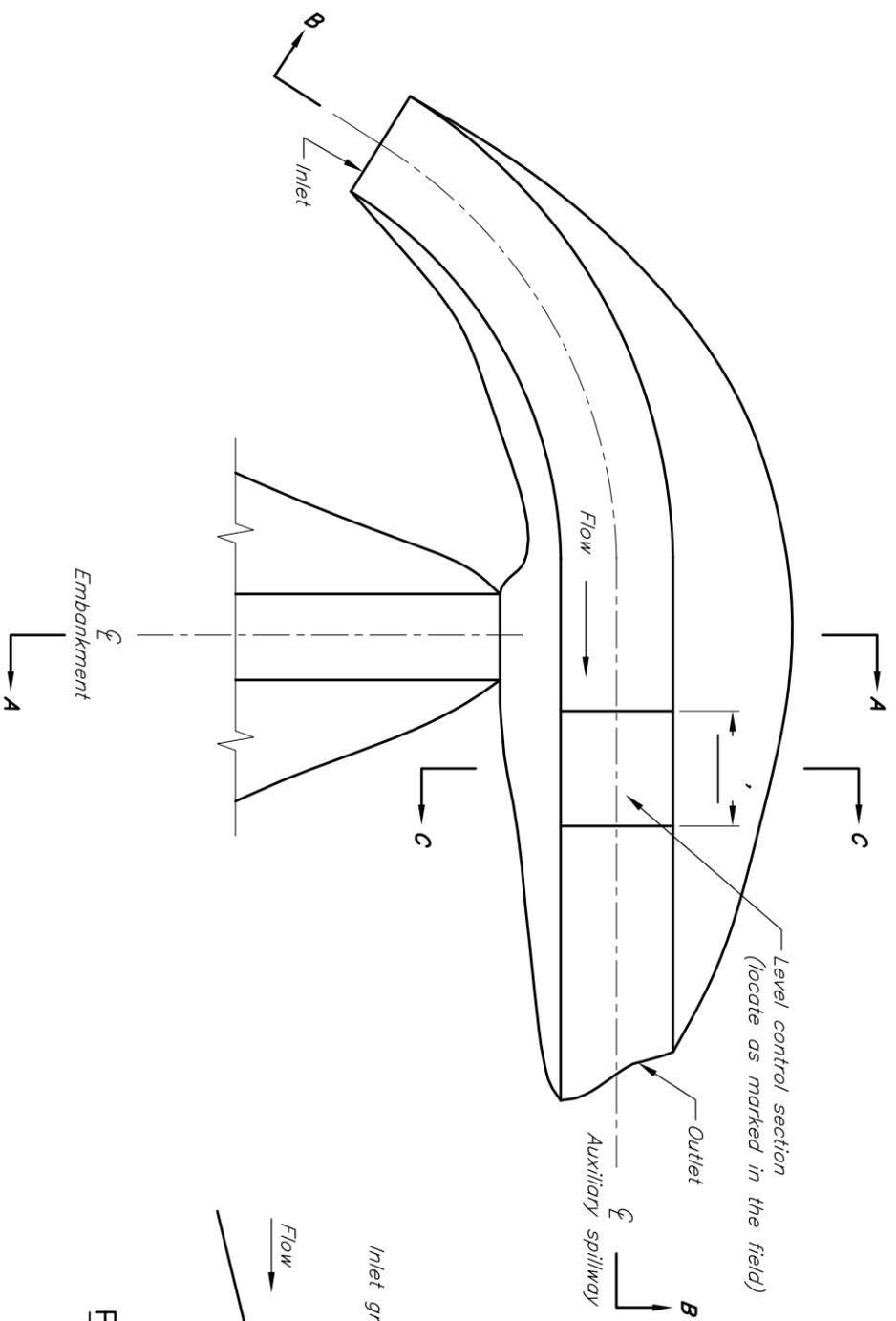
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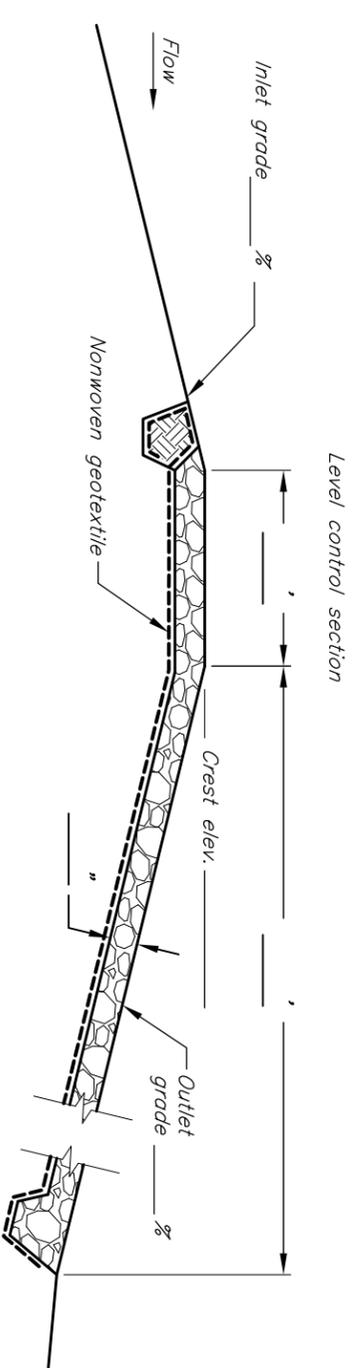
TYPICAL CROSS-SECTION OF AUXILIARY SPILLWAY
AT CENTER LINE OF EMBANKMENT (A-A)



TYPICAL CROSS-SECTION
OF AUXILIARY SPILLWAY ROCK LINING (C-C)



PLAN VIEW



PROFILE ON CENTER LINE OF AUXILIARY SPILLWAY (B-B)

Rock size: $D_{50} =$ _____

ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Rock	C.Y.	
Gravel	C.Y.	
Geotextile	Sq. Yd.	

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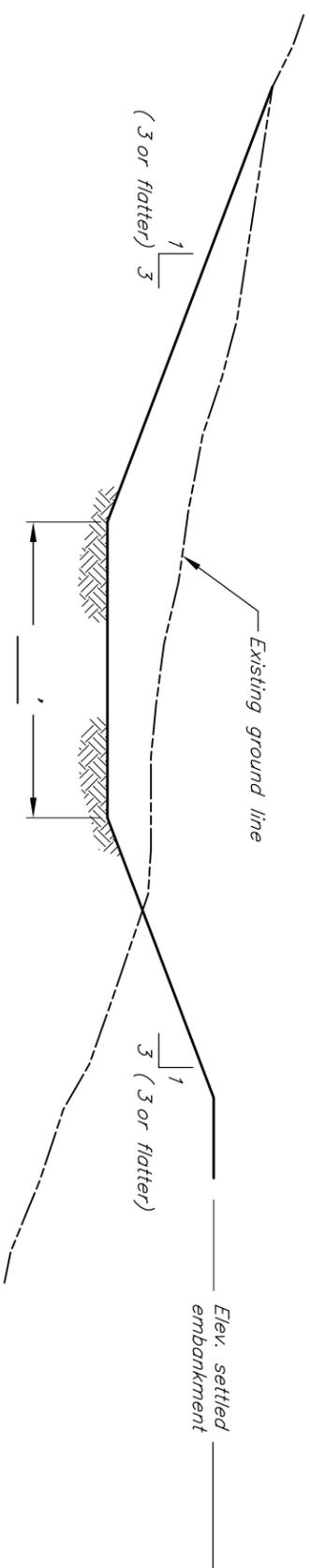
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Natural Resources Conservation Service

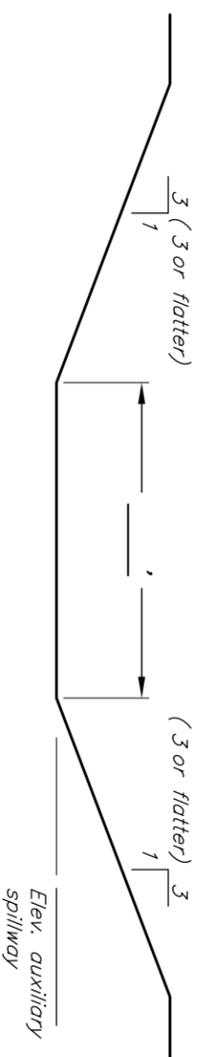
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LOW EMBANKMENT - TYPE B

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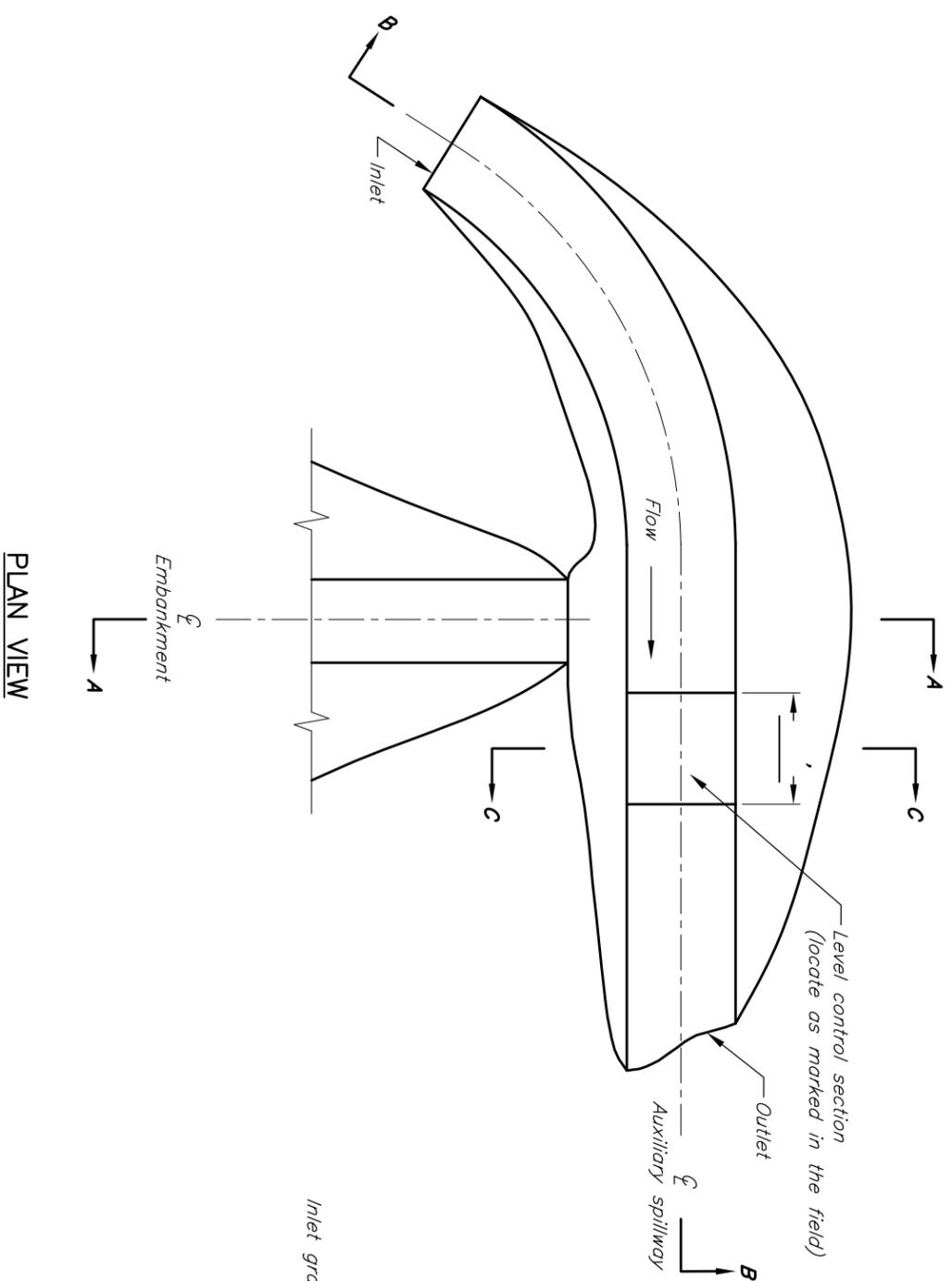
TYPICAL CROSS-SECTION OF AUXILIARY SPILLWAY

AT CENTER LINE OF EMBANKMENT (A-A)

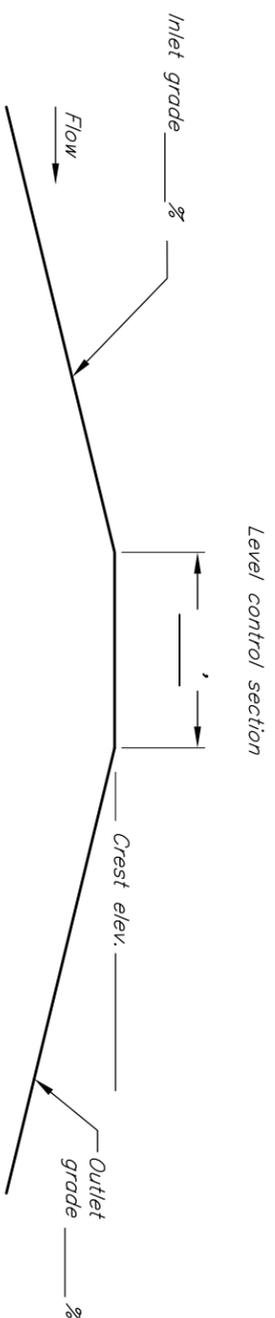


TYPICAL CROSS-SECTION OF AUXILIARY SPILLWAY

AT LEVEL CONTROL SECTION (C-C)



PLAN VIEW



PROFILE ON CENTER LINE OF AUXILIARY SPILLWAY (B-B)

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