

Computer File Information
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 Designer Initials: JBK
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 Detailer Initials: LTA
 CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English

Sheet Revisions

Date:	Comments:

Colorado Department of Transportation
 2829 West Howard Place
 CDOT HQ, 3rd Floor
 Denver, CO 80204
 Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

WINGWALLS FOR PIPE OR BOX CULVERTS
 Issued by the Project Development Branch July 31, 2019

STANDARD PLAN NO.
 M-601-20
 Standard Sheet No. 1 of 2
 Project Sheet Number:

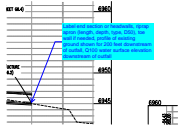
c-BARS AND REINFORCING STEEL QUANTITY (EXCLUDE TOE WALL)

* REINFORCING STEEL QUANTITY INCLUDES STEM AND FOOTING QUANTITIES, BUT DOES NOT INCLUDE TOE WALL QUANTITIES.

L (MULTIPLE OF m)	k (FT)	≤ (1.0 x m)		≤ (1.25 x m)		≤ (1.75 x m)		≤ (2.0 x m)		≤ (2.25 x m)		≤ (2.75 x m)		≤ (3.25 x m)		≤ (3.5 x m)	
		* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)	* REINFORCING STEEL QUANTITY (LB./L.F.)	* REINFORCING STEEL QUANTITY (KG./M)
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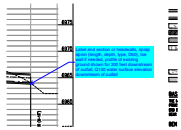
V_2 GEC.pdf Markup Summary

Callout (3)



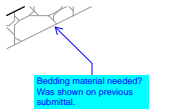
Subject: Callout
Page Label: [26] 26 POND E - OUTLET STRUCTURE DETAILS
Author: CDurham
Date: 4/11/2024 5:36:52 PM
Status:
Color: ■
Layer:
Space:

Label end section or headwalls, riprap apron (length, depth, type, D50), toe wall if needed, profile of existing ground shown for 200 feet downstream of outfall, Q100 water surface elevation downstream of outfall



Subject: Callout
Page Label: [32] 32 POND D - POND DETAILS
Author: CDurham
Date: 4/11/2024 5:37:26 PM
Status:
Color: ■
Layer:
Space:

Label end section or headwalls, riprap apron (length, depth, type, D50), toe wall if needed, profile of existing ground shown for 200 feet downstream of outfall, Q100 water surface elevation downstream of outfall



Subject: Callout
Page Label: [32] 32 POND D - POND DETAILS
Author: CDurham
Date: 4/11/2024 5:49:05 PM
Status:
Color: ■
Layer:
Space:

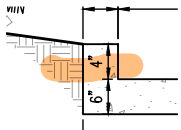
Bedding material needed? Was shown on previous submittal.

Stamp - Stormwater Comment Legend (1)



Subject: Stamp - Stormwater Comment Legend
Page Label: [1] 1 COVER SHEET
Author: Mikayla Hartford
Date: 4/16/2024 10:11:00 AM
Status:
Color: ■
Layer:
Space:

SW - Highlight (6)



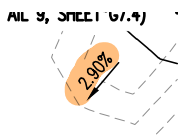
Subject: SW - Highlight
Page Label: [30] 30 POND D - OUTLET STRUCTURE DETAILS
Author: Mikayla Hartford
Date: 4/16/2024 4:57:48 PM
Status:
Color: ■
Layer:
Space:



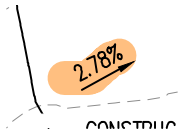
Subject: SW - Highlight
 Page Label: [32] 32 POND D - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 5:09:14 PM
 Status:
 Color: ■
 Layer:
 Space:



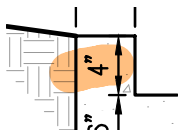
Subject: SW - Highlight
 Page Label: [32] 32 POND D - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 5:09:15 PM
 Status:
 Color: ■
 Layer:
 Space:



Subject: SW - Highlight
 Page Label: [32] 32 POND D - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 5:09:18 PM
 Status:
 Color: ■
 Layer:
 Space:

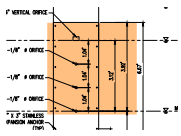


Subject: SW - Highlight
 Page Label: [32] 32 POND D - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 5:09:20 PM
 Status:
 Color: ■
 Layer:
 Space:



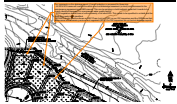
Subject: SW - Highlight
 Page Label: [32] 32 POND D - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 5:25:05 PM
 Status:
 Color: ■
 Layer:
 Space:

SW - Rectangle (1)



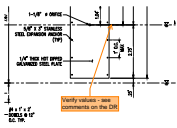
Subject: SW - Rectangle
 Page Label: [28] 28 POND E - POND DETAILS
 Author: Mikayla Hartford
 Date: 4/16/2024 4:54:18 PM
 Status:
 Color: ■
 Layer:
 Space:

SW - Textbox with Arrow (5)



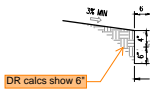
Subject: SW - Textbox with Arrow
Page Label: [14] 14 FINAL EROSION CONTROL PLAN
Author: Mikayla Hartford
Date: 4/16/2024 3:40:33 PM
Status:
Color: ■
Layer:
Space:

Per comments on the drainage report, if runoff reduction is proposed for these lots:
- All RPA/SPA areas will need to be within a no build/drainage easement (or tract) and discussed in the maintenance agreement and O&M manual. This can be existing no build setback areas but it needs to be clearly identified because it is a permanent water quality facility.
- RPA vegetation should have a uniform density of at least 80%. This needs to be specified in a detail and the seed mix needs to be identified.
- RPA/SPA limits must be shown on GEC Plans (not just FDR) so our SW inspectors and the QSM know that these areas are to remain pervious and vegetated (80%). Our SW inspectors do not look at drainage reports.



Subject: SW - Textbox with Arrow
Page Label: [28] 28 POND E - POND DETAILS
Author: Mikayla Hartford
Date: 4/16/2024 4:54:32 PM
Status:
Color: ■
Layer:
Space:

Verify values - see comments on the DR



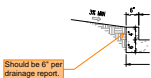
Subject: SW - Textbox with Arrow
Page Label: [30] 30 POND D - OUTLET STRUCTURE DETAILS
Author: Mikayla Hartford
Date: 4/16/2024 4:58:02 PM
Status:
Color: ■
Layer:
Space:

DR calcs show 6"



Subject: SW - Textbox with Arrow
Page Label: [32] 32 POND D - POND DETAILS
Author: Mikayla Hartford
Date: 4/16/2024 5:10:02 PM
Status:
Color: ■
Layer:
Space:

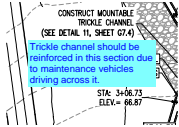
Pond bottom should have a minimum slope of 3% to the trickle channel and micropool (USDCM Vol 3, detail T-5). Please adjust to minimize future maintenance needs.



Subject: SW - Textbox with Arrow
Page Label: [32] 32 POND D - POND DETAILS
Author: Mikayla Hartford
Date: 4/16/2024 5:25:33 PM
Status:
Color: ■
Layer:
Space:

Should be 6" per drainage report.

Text Box (1)



Subject: Text Box

Page Label: [32] 32 POND D - POND DETAILS

Author: CDurham

Date: 4/11/2024 5:43:31 PM

Status:

Color: ■

Layer:

Space:

Trickle channel should be reinforced in this section due to maintenance vehicles driving across it.