

CITY OF ALBUQUERQUE

Hydrology Section Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

May 10, 2019

Matt Korte
Adams Engineering
513 Main St Suite 300
Fort Worth, TX 76102

**Re: McDonalds - 8315 Montgomery Blvd NE
Tract A-1-F of the Los Pastores Shopping Center
Grading and Drainage Plan - Engineer's Stamp date 4/4/2019 (F19D013A)**

Dear Mr. Korte,

Based on the application received 5/9/2019, the above referenced plan cannot be approved for building permit until the following comments are addressed.

Prior to approval for Building Permit

1. Please state the Drainage Management Plan for this site (ie. Retention, Detention, or Free Discharge). The "Conclusion" on sheet C8.1 is a misstatement of the pertinent facts and should be replaced with "Drainage Management Plan – This site will drain in accordance with the Los Pastores Shopping Center DMP with engineers stamp date 5/2/2019 which includes a combination of Free Discharge and Detention. The other statements in the "Conclusion are not pertinent and should be deleted.
2. The flow rates shown along the alley do not agree with the Los Pastores Shopping Center DMP. It is not necessary for this development to duplicate the flow rates that are identified in that DMP, but if the flow rates are going to be called out on Sheet C8.1 then they must agree with the DMP.
3. Please change "Bio-retention (0.34)" to "Redevelopment SWQV (0.26)" in the "Proposed Conditions" Paragraph on sheet C8.1.
4. The plan must clearly identify how the Stormwater Quality Volume (SWQV) requirements are being met. If the response to comments letter, which says "It is McDonald's desire to provide payment in lieu of the total required storage volume", is correct, then please add that statement to the plan including the specific area of impervious not served by onsite BMPs and the volume associated with the Payment in Lieu of Construction.
5. Ponds #1 and #4 appear to have been deleted from the plan, Sheet C8.1 or are not labeled. If so, please delete the Stage Storage Volume table from sheet C8.2 for those two ponds. Also delete them from the "Pond FF Elevation Table" on that sheet. The second table titled "First Flush Volume Calculations" should look more like the one below using the volumes from the "Stage Storage Volume" tables.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Basin ID	Area (Ac.)	SWQV		Pond #	Deficiency (CF)
		Req. (CF) ⁽¹⁾	SWQV Prov. (CF)		
A1	0.038	36	0	N/A	36
A2	0.175	165	165	Los Pastores	0
A3	0.041	39	0	N/A	39
A4	0.182	172	48	5	124
A5	0.091	86	82	3	4
A6	0.052	49	130	2 ⁽²⁾	-81
A7	0.035	33	0	N/A	33
R1	0.098	92	0	N/A	92
Total	0.712	672	425	N/A	247

Footnotes:

(1) The required volume is 0.26" from the impervious surface.

(2) Pond #2 serves more than just area A6, it also captures the excess from Ponds #3 and #5.

Payment in Lieu for 247 CF @ \$8/CF = \$1,976.00

6. Hydrology will generate an invoice after the G&D Plan has been revised and resubmitted with the correct area of impervious and the missing volume shown clearly in a note on the plan together with the intention of the owner to pay the fee in lieu of constructing the required SWQV, then the fee must be paid prior to approval of the G&D Plan for Building Permit.
7. A Private Drainage Easement is required for the offsite storm drain on Tract A-1-E. Please provide a copy of the recorded easement that clearly indicates maintenance responsibilities and beneficiary. Also show the easement on the G&D Plan sheet C7.0 and label Tract A-1-E, Access A, and A-1-D and the other easements and utilities in the offsite area of construction north of this site.
8. A Drainage covenant is required for the offsite Los Pastores Shopping Center Pond using the recently approved plan to make the exhibit.

Prior to acceptance for Certificate of Occupancy

9. An Engineer's Certification must be submitted for approval to Hydrology showing that the site has been graded and will drain in accordance with the approved plan.
10. A Drainage Covenant is required for the onsite BMP ponds. The original notarized form, pond exhibits (legible on 8.5x11 paper), and recording fee (\$25, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants.

CITY OF ALBUQUERQUE

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11. As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance, Building Permit, or Work Order.

If you have any questions, you can contact me at 924-3986 or E-mail at jhughes@cabq.gov.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development and Review Services

CC Cesar Segovia, Architect

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



Thursday, May 09, 2019

City of Albuquerque
Development Review Services (Hydrology)

RE: 8315 Montgomery Blvd. NE (F19D013A)— HYDROLOGY COMMENTS

Thank you for taking the time to review Site Development plans for the McDonald's at 8315 Montgomery Blvd. NE. We have addressed your comments related to the Civil Construction Plans as follows:

Hydrology Comments:

- 1) Please use the new DTIS form. **The most current version of the DTIS form on the City's website has been utilized (REV 11/2018).**
- 2) An engineer's stamp and signature are required on the G&D Plan. **During review phase, plans are submitted with the preliminary seal to help protect against someone utilizing preliminary plans for construction. Grading and Drainage plan has been sealed for this submittal.**
- 3) The floor elevation of the building must be set a minimum of 1.0' above the adjacent floodplain elevation. There is a Special Flood Hazard Area in Montgomery Blvd. It is an AO (depth 1 feet) zone which may have been rounded down from 1.4' depth. The street flow line elevation in front of the east edge of the building 5420.7 so the minimum floor elevation should be 5423.1. Please add a note addressing the floodplain, show the floodplain on the G&D Plan, show the floor elevation on the G&D plan and indicate the direction of the roof drainage. A floodplain development permit is required for any work in the floodplain. **The building floor elevation has been raised to 5423.1 and is shown on the G&D plans, and floodplain note has been added and shown. Roof drains go through downspouts and into a landscape / SWQ area in the SW corner of the site.**
- 4) The alley and Montgomery Blvd. both have limited drainage and the plan increases the peak rate of runoff to both. The City engineer cannot approve any development who's increased runoff exceeds the downstream capacity per Section 14-5-2-12(G). The Drainage Management Plan for the Los Pastores Shopping Center (Hydro#F19D013C) established an allowable discharge of 26.47cfs from the 21.18 acres draining to the pond which equates to 1.25cfs/acre. The 0.6 acre portion of this site that currently drains to the Los Pastores Pond only contributes 0.75cfs to Montgomery after going through the pond, but that area will contribute 2.86cfs to Montgomery with the new plan. The existing floodplain on Montgomery indicates that it does not have capacity for any increased flow from this site. This site must either drain 0.6 acres to the Los Pastores Pond, or provide an equivalent onsite pond or some combination of those two. **Per meeting with Doug Hughes, the engineer for Los Pastores (Tierra West) has modified their DMP to reflect the altered as-built condition of the pond to indicate greater storage capacity and lower outflow from the pond in the as-built condition. Additionally, McDonald's**

has revised their drainage plan to release water into the alley rather than directly onto Montgomery. The result of all changes is overall LOWER alley flow and LOWER flow into Montgomery compared to the previous condition, thereby improving the drainage situation in both locations. Several design points have been updated in both the Los Pastores DMP and the McDonald's plans to reflect these updates.

- 5) This proposed G&D Plan also shows about a 1.5 cfs increase in direct runoff to the alley from the north half of this site which is partially offset by about 0.75 cfs decrease flow from the Los Pastores Pond if 0.6 acres of this site no longer drains to the pond. The increased flow to the alley may be allowed if the applicant can demonstrate that the alley has capacity for more flow than was shown in the Drainage Management Plan Addendum for Los Pastores Shopping Center. Otherwise ponds may have to be used to mitigate the increased flow to the alley. The Drainage Management Plan and Addendum for Los Pastores Shopping Center are available thru the City's GIS Advanced Map Viewer. See the Hydrology Section web page for instructions on how to access the files. **Per meeting with Doug Hughes and engineer for Los Pastores (Tierra West), several modifications have been made to the overall Los Pastores DMP to show lowered flow rate from the pond in the as-built condition. This demonstrates additional alley capacity for McDonald's. Several design points have been updated in both the Los Pastores DMP and the McDonald's plans to reflect these updates.**
- 6) The drainage management summary on sheet 8.1 needs to be revised to include discussion of the diversion of flow from the Los Pastores Pond and the limited capacity downstream of this site in the alley and in Montgomery. The narrative should acknowledge the Drainage Management Plan for the Los Pastores Shopping Center and discuss specifically how the proposed site will conform to that plan. This level of analysis, hydrograph development, pond routing, and detailed hydraulic analysis is more easily bound into a report than spread out on 24" x 36" sheets, but either way the calculations must be stamped and signed by a registered Professional Engineer in the state of New Mexico. **Narratives and calculations have been updated to match the revised Los Pastores DMP and McDonald's flow off-site.**
- 7) 7. Any portion of the peak 100 year flow rate that drains into Montgomery Blvd. will have to do so through appropriately sized sidewalk culverts. Use the weir equation to size the culvert not Manning's normal depth. The typical capacity is about 1.25 cfs per foot of opening, so two 2' wide culverts should be used. The sidewalk culvert must also extend all of the way from the curb to the right of way, and the invert should be specified at that location instead of the back of sidewalk. The culverts should be moved as far west as possible to the low corner of the pond. **Culverts have been removed and flow over a lowered-curb weir into the alleyway has been added. Los Pastores DMP and McDonald's plans reflect this modification.**
- 8) 8. Additional Stormwater Quality Volume (SWQV) is required for this site. The City Council and Mayor signed a new Drainage Ordinance into effect October 24, 2018 which requires a waiver for onsite management of anything less than 100% of the SWQV. It appears that onsite management of the Stormwater Quality Volume (SWQV) may be waived if private offsite mitigation is provided by

deepening the existing pond north of this site. The basis for requesting a waiver of management onsite is to be clearly demonstrated on the plan. If the site does not qualify for a waiver in accordance with § 14-5-2-6(H), then the developer may choose payment in lieu or provide the total SWQV onsite by adding below grade infiltration trenches to complete the volume. The new ordinance is available on the City Hydrology Section web page (see link in footer). **It is McDonald's desire to provide payment in lieu of the total required storage volume. The site is severely limited by space, existing topography, redevelopment standards and available surrounding storm infrastructure to reach an economically feasible solution.**

- 9) Private Drainage Easement and Drainage Covenant is required for the offsite storm drain on Tract A-1-E. It is near other easements which need to be shown and labeled on the plan as well as any conflicting utilities. Label Tract A-1-E, Access A, and A-1-D. **A private drainage easement and covenant have been drafted and will be submitted to accommodate this request.**
- 10) A Drainage Covenant is required for the first flush ponds. The original notarized form, pond exhibits (legible on 8.5x11 paper), and recording fee (\$25, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. **Drainage Covenants will be provided.**
- 11) As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance, Building Permit, or Work Order. **Acknowledged – McDonald's sub-consultant Evniroserve has prepared the SWPPP and will submit to the appropriate contacts.**

Please let us know if any further corrections are needed.

Sincerely,



Matthew Korte

Attachments: 1 (Updated Civil Plans)



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: McDonald's Montgomery Blvd **Building Permit #:** 2018-12163 **Hydrology File #:** F19D013A
DRB#: N/A **EPC#:** N/A **Work Order#:** N/A
Legal Description: A Portion of Tract A-1, Los Pastores Shopping Center, Albuquerque, Bernalillo County, New Mexico
City Address: 8315 Montgomery Blvd NE, Albuquerque, NM 87109

Applicant: Adams Engineering **Contact:** Matthew Korte
Address: 8951 Cypress Waters Blvd
Phone#: 817-328-3200 **Fax#:** **E-mail:** mkorte@adams-engineering.com
Owner: Rogue Architects **Contact:** Cesar Segovia
Address: 513 Main Street #300
Phone#: 8175296874 **Fax#:** **E-mail:** cesar@roguearchitects.com

TYPE OF SUBMITTAL: 1 PLAT (# OF LOTS) RESIDENCE DRB SITE ADMIN SITE

IS THIS A RESUBMITTAL?: X Yes No

DEPARTMENT: TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

ENGINEER/ARCHITECT CERTIFICATION
 PAD CERTIFICATION
 CONCEPTUAL G & D PLAN
X GRADING PLAN
X DRAINAGE MASTER PLAN
 DRAINAGE REPORT
 FLOODPLAIN DEVELOPMENT PERMIT APPLIC
 ELEVATION CERTIFICATE
 CLOMR/LOMR
 TRAFFIC CIRCULATION LAYOUT (TCL)
 TRAFFIC IMPACT STUDY (TIS)
 OTHER (SPECIFY)
 PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL
 CERTIFICATE OF OCCUPANCY
 PRELIMINARY PLAT APPROVAL
 SITE PLAN FOR SUB'D APPROVAL
 SITE PLAN FOR BLDG. PERMIT APPROVAL
 FINAL PLAT APPROVAL
 SIA/ RELEASE OF FINANCIAL GUARANTEE
 FOUNDATION PERMIT APPROVAL
 GRADING PERMIT APPROVAL
 SO-19 APPROVAL
 PAVING PERMIT APPROVAL
 GRADING/ PAD CERTIFICATION
 WORK ORDER APPROVAL
 CLOMR/LOMR
 FLOODPLAIN DEVELOPMENT PERMIT
 OTHER (SPECIFY)

DATE SUBMITTED: 5/9/2019 **By:** Matthew Korte

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:

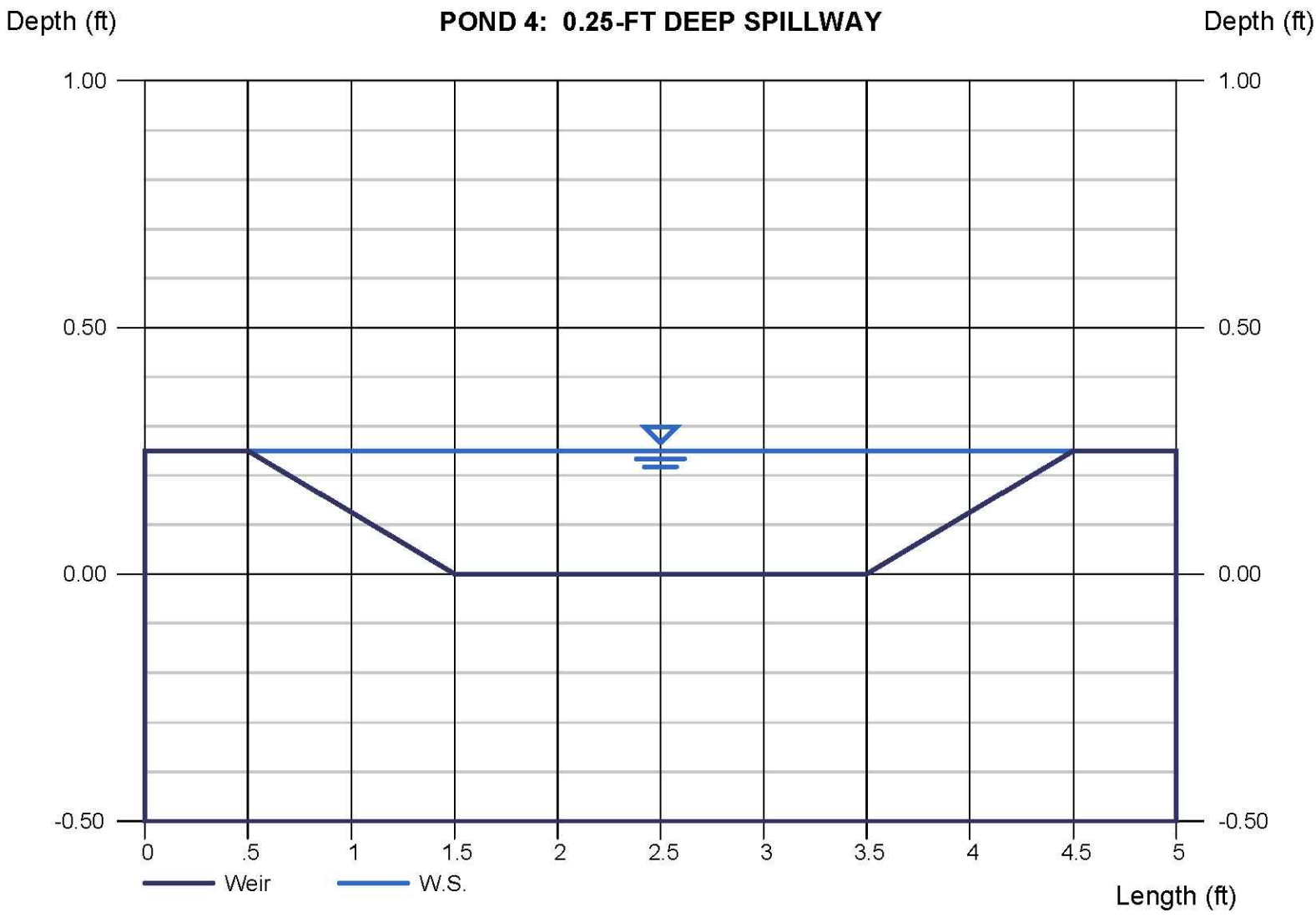
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 PLOT TIME: 5:54:03 PM
 PLOT DATE: Thursday, April 04, 2019
 PLOTTED BY: Heather Macomber
 FILENAME: C8.1 POST-DEVELOPED DRAINAGE PLAN.dwg

Weir Report

Hydrflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.
 Friday, Aug 10 2018

POND 4: 0.25-FT DEEP SPILLWAY

Trapezoidal Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.25
Bottom Length (ft)	= 2.00	Q (cfs)	= 1.085
Total Depth (ft)	= 0.25	Area (sqft)	= 0.75
Side Slope (z:1)	= 4.00	Velocity (ft/s)	= 1.45
		Top Width (ft)	= 4.00
Calculations			
Weir Coeff. Cw	= 3.10		
Compute by:	Known Depth		
Known Depth (ft)	= 0.25		

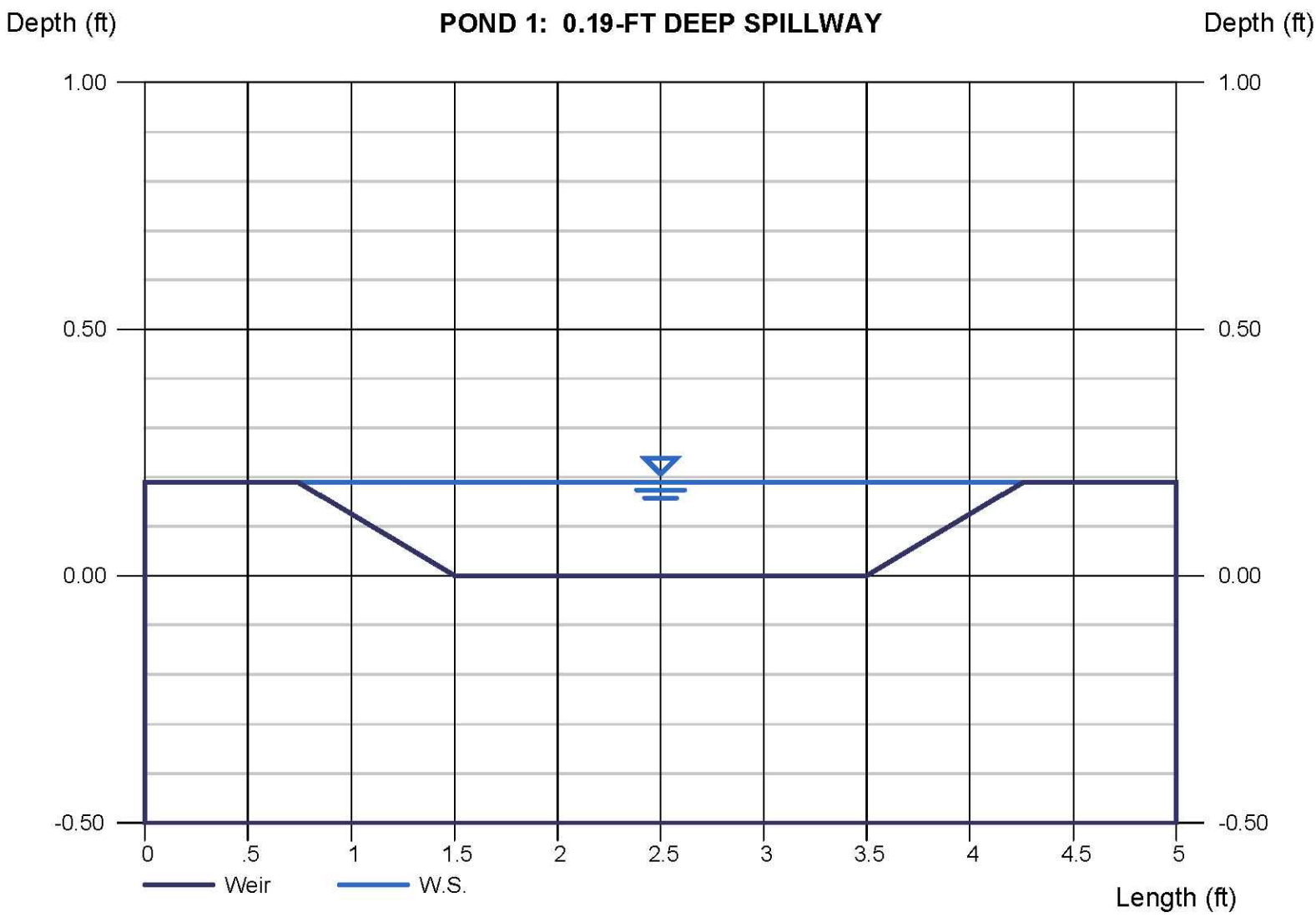


Weir Report

Hydrflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.
 Friday, Aug 10 2018

POND 1: 0.19-FT DEEP SPILLWAY

Trapezoidal Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.19
Bottom Length (ft)	= 2.00	Q (cfs)	= 0.670
Total Depth (ft)	= 0.19	Area (sqft)	= 0.52
Side Slope (z:1)	= 4.00	Velocity (ft/s)	= 1.28
		Top Width (ft)	= 3.52
Calculations			
Weir Coeff. Cw	= 3.10		
Compute by:	Known Depth		
Known Depth (ft)	= 0.19		

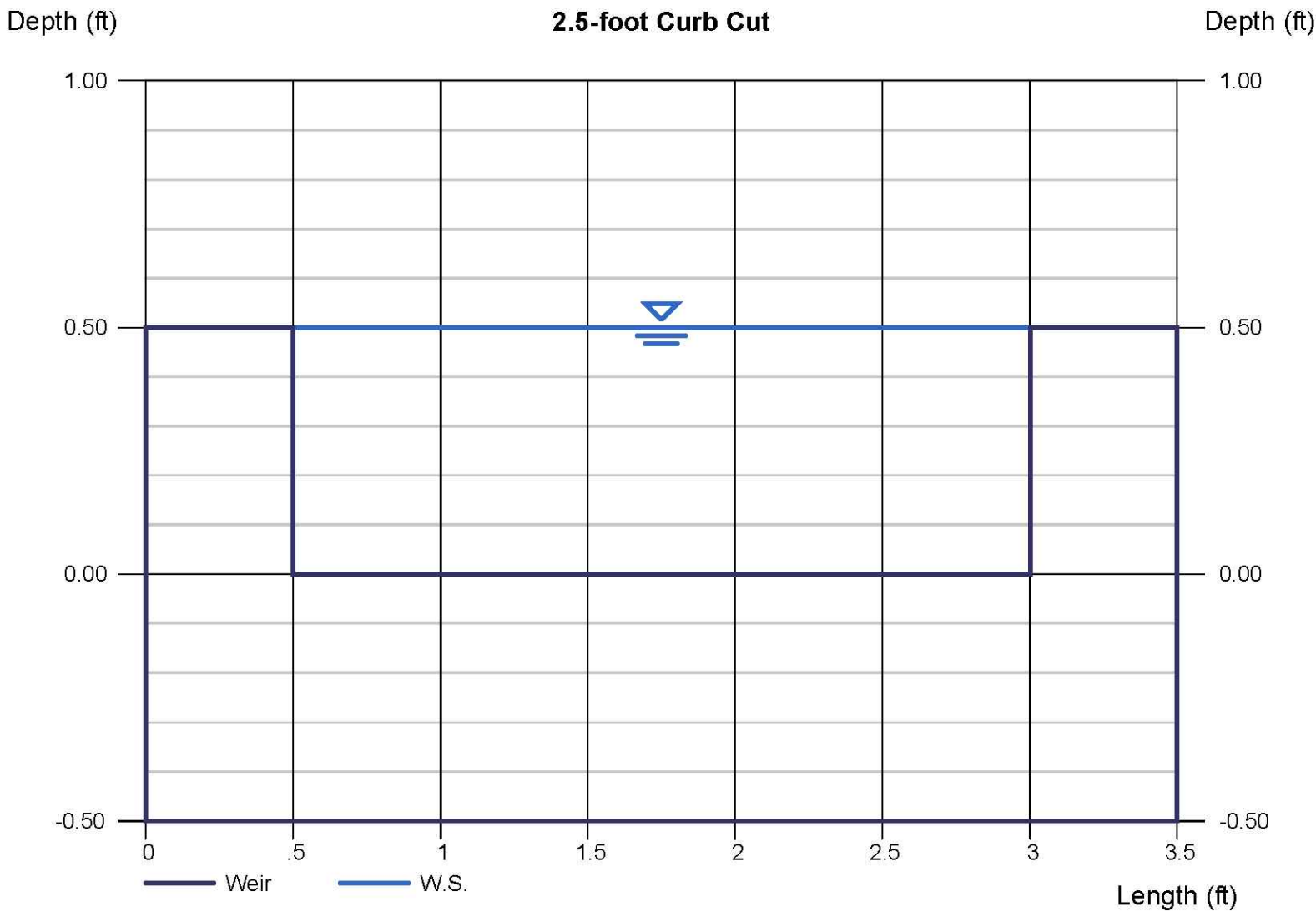


Weir Report

Hydrflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.
 Friday, Aug 10 2018

2.5-foot Curb Cut

Rectangular Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 2.50	Q (cfs)	= 2.943
Total Depth (ft)	= 0.50	Area (sqft)	= 1.25
		Velocity (ft/s)	= 2.35
		Top Width (ft)	= 2.50
Calculations			
Weir Coeff. Cw	= 3.33		
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		

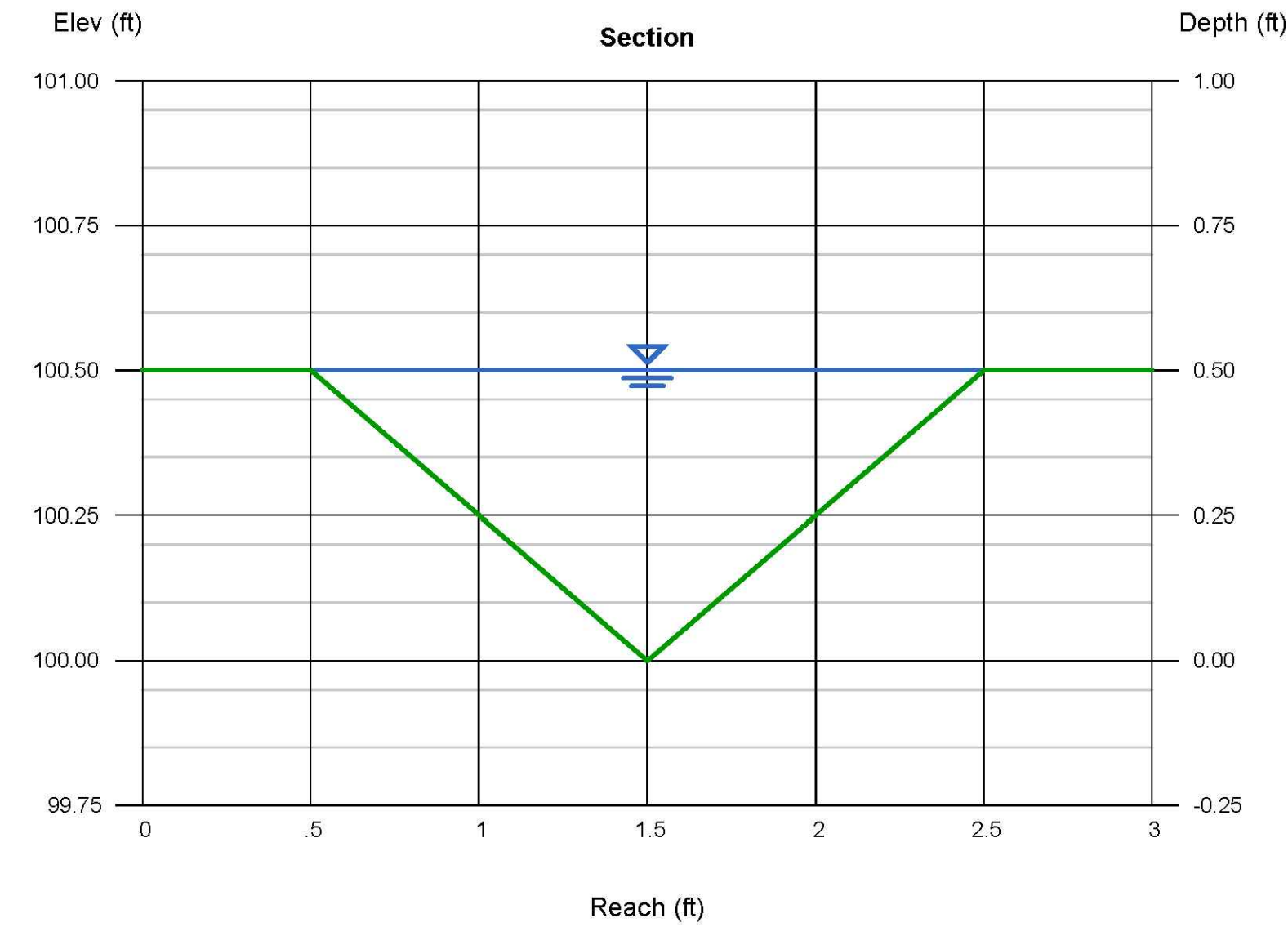


Channel Report

Hydrflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.
 Friday, Aug 10 2018

CONC. SWALE FROM POND 2 TO SW CULVERT

Triangular		Highlighted	
Side Slopes (z:1)	= 2.00, 2.00	Depth (ft)	= 0.50
Total Depth (ft)	= 0.50	Q (cfs)	= 5.112
		Area (sqft)	= 0.50
		Velocity (ft/s)	= 10.22
		Wetted Perim (ft)	= 2.24
		Crit Depth, Yc (ft)	= 0.50
		Top Width (ft)	= 2.00
		EGL (ft)	= 2.13
Calculations			
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		

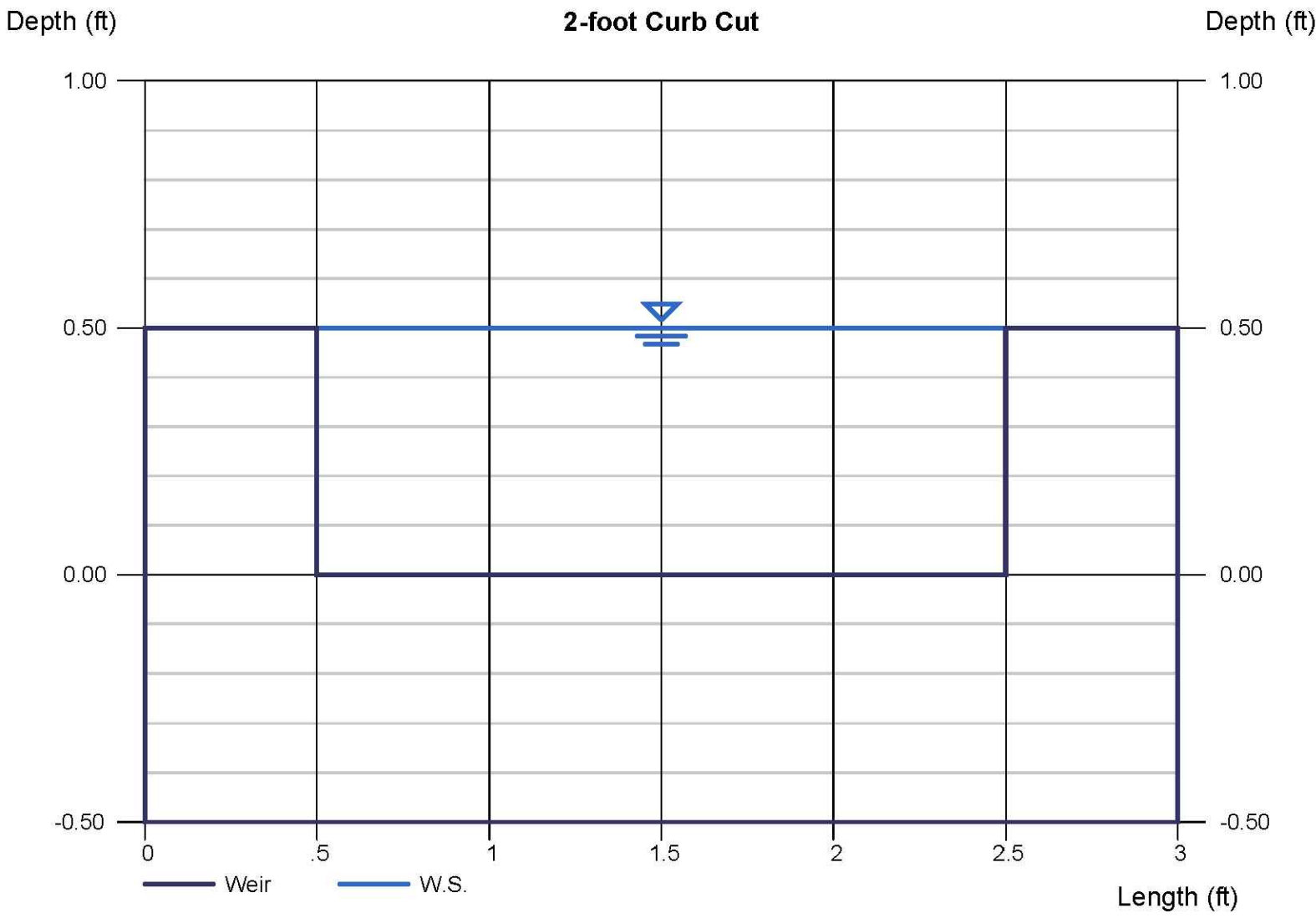


Weir Report

Hydrflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.
 Friday, Aug 10 2018

2-foot Curb Cut

Rectangular Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 2.00	Q (cfs)	= 2.355
Total Depth (ft)	= 0.50	Area (sqft)	= 1.00
		Velocity (ft/s)	= 2.35
		Top Width (ft)	= 2.00
Calculations			
Weir Coeff. Cw	= 3.33		
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		



BY	DESCRIPTION	DATE	REV
BWB	PER CITY COMMENTS	10/24/2018	---
MDK	ISSUE FOR BID	01/11/2019	---
MDK	PER MCD COMMENTS & HYDROLOGY COMMENTS	04/04/2019	1
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ADAMS JOB NO.: 2016.212

8951 Cypress Waters Blvd Suite 150 ■ Dallas, Texas 75019 ■ (817) 338-3200

OFFICE	MTN. SOUTHWEST FIELD EXECUTION TEAM	MCDONALD'S, L/C	30-0031
ADDRESS	KROC DRIVE - OAK BROOK, ILLINOIS 60521		

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8315 MONTGOMERY BLVD. NE
 ALBUQUERQUE, NM

PLAN APPROVALS		DATE
REGIONAL MGR.	SIGNATURE (2 REQUIRED)	
CONST. MGR.		
OPERATIONS DEPT.		
REAL ESTATE DEPT.		
CO-SIGN SIGNATURES		
CONTRACTOR		
OWNER		

DESIGNED	DATE	BY
DRAWN	----	----
CHECKED	----	----
AS-BUILT		

DRAINAGE CALCULATIONS

C8.3