U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB No. 1660-0008
Expiration Date: November 30, 2022

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1–9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name
Adam and Jolinda Marie Morrissey

Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
6 Road 1632

Company NAIC Number:

City	State	ZIP Code
La Plata	New Mexico	87418

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Tract 1 of the Bramwell Summary Subdivision R4004727

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. 36-51-41.62432N Long. 108-12-23.97105W Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 8

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 2000.00 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 6

c) Total net area of flood openings in A8.b 84.00 sq in

d) Engineered flood openings? ☐ Yes ☒ No

A9. For a building with an attached garage:

a) Square footage of attached garage N/A sq ft

b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A

c) Total net area of flood openings in A9.b N/A sq in

d) Engineered flood openings? ☐ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
San Juan County/350064	San Juan	New Mexico

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
35045C0700	F	08-05-2010	08-05-2010	A	5536.90

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
☐ FIS Profile ☐ FIRM ☐ Community Determined ☒ Other/Source: HEC-RAS

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No

Designation Date: ☐ CBRS ☐ OPA

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Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6 Road 1632			Policy Number:
City La Plata	State New Mexico	ZIP Code 87418	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☒ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: San Juan County Base Point Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source: _____

Datum used for building elevations must be the same as that used for the BFE.

		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	5550.1	☒ feet	☐ meters
b) Top of the next higher floor	5552.8	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☐ feet	☐ meters
d) Attached garage (top of slab)	N/A	☐ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	N/A	☐ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	5549.5	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	5550.1	☐ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	N/A	☐ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No ☐ Check here if attachments.

Certifier's Name Scott A. Martin	License Number 21663	
Title Engineer/Surveyor		
Company Name Sakura Engineering and Surveying		
Address 125 West Main St.		
City Farmington	State New Mexico	ZIP Code 87401

Signature	Date	Telephone	Ext.
Scott A Martin	01-27-2021	(505) 564-2139	

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

Old Hec-RAS Report was found to be 304.34 feet higher than new survey data. Adjusted B9 too match new data

ELEVATION CERTIFICATE

OMB No. 1660-0008
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IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6 Road 1632			Policy Number:
City La Plata	State New Mexico	ZIP Code 87418	Company NAIC Number

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B,and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is 0.0 ☒ feet ☐ meters ☒ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is 0.6 ☒ feet ☐ meters ☒ above or ☐ below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is 2.7 ☒ feet ☐ meters ☒ above or ☐ below the HAG.

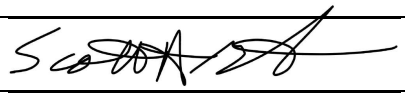
E3. Attached garage (top of slab) is N/A ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is N/A ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name Scott A Martin			
Address 125 West Main St.	City Farmington	State New Mexico	ZIP Code 87401
Signature 	Date 01-27-2021	Telephone (505) 564-2139	

Comments

☐ Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008
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Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6 Road 1632			Policy Number:
City La Plata	State New Mexico	ZIP Code 87418	Company NAIC Number

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued

G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____ ☐ feet ☐ meters Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____ ☐ feet ☐ meters Datum _____

G10. Community's design flood elevation: _____ ☐ feet ☐ meters Datum _____

Local Official's Name	Title
Community Name	**Telephone**
Signature	**Date**

Comments (including type of equipment and location, per C2(e), if applicable)

☐ Check here if attachments.

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

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City La Plata	State New Mexico	ZIP Code 87418	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

Photo One

Photo One Caption South East Residence(Date Taken January 22, 2021) Clear Photo One

Photo Two

Photo Two Caption North East Residence(Date Taken January 22, 2021) Clear Photo Two

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008
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Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 6 Road 1632			Policy Number:
City La Plata	State New Mexico	ZIP Code 87418	Company NAIC Number

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

Photo Three

Photo Three

Photo Three Caption

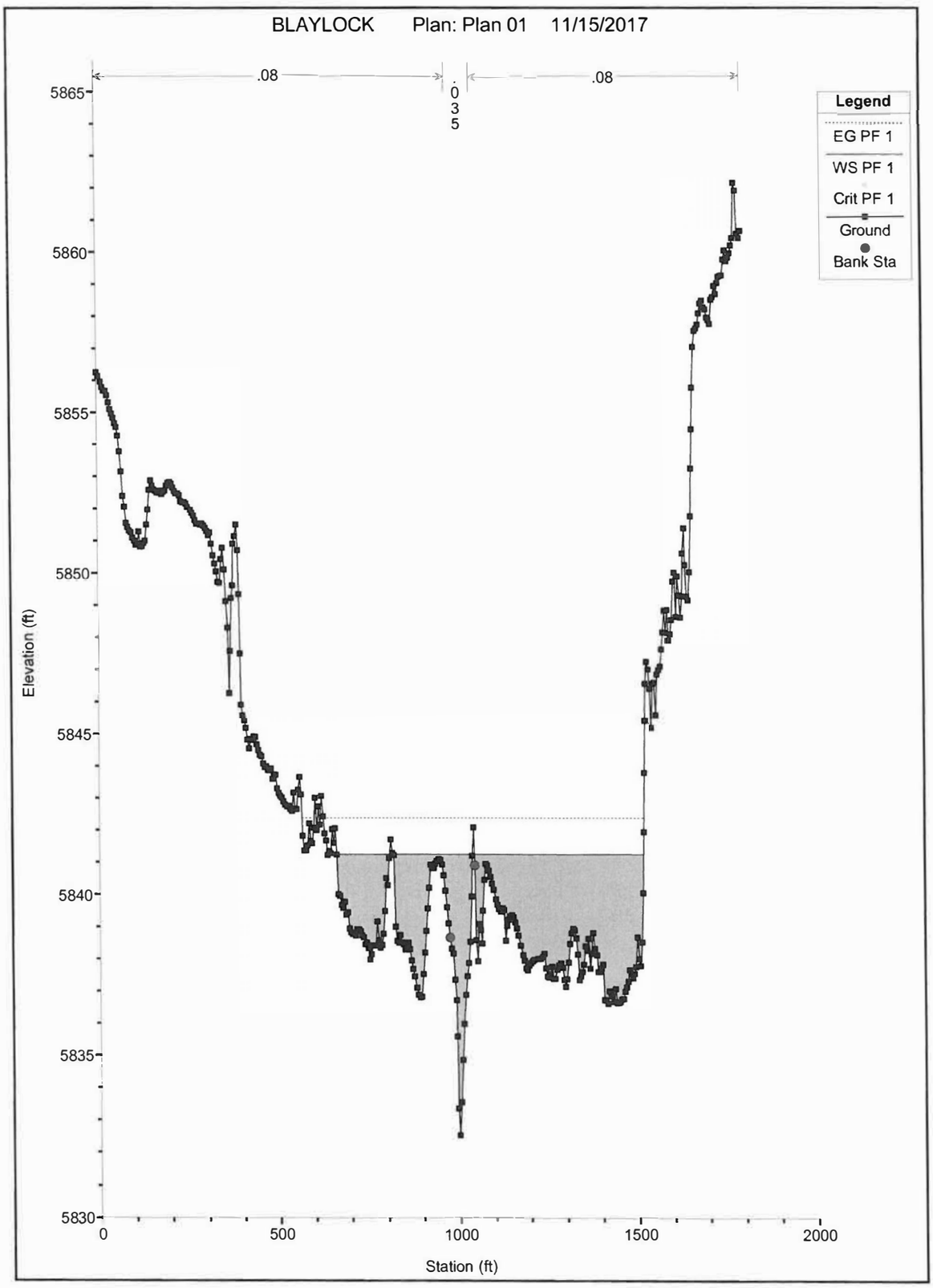
Clear Photo Three

Photo Four

Photo Four

Photo Four Caption

Clear Photo Four


BLAYLOCK Plan: Plan 01 11/15/2017
.08
.035
.08
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
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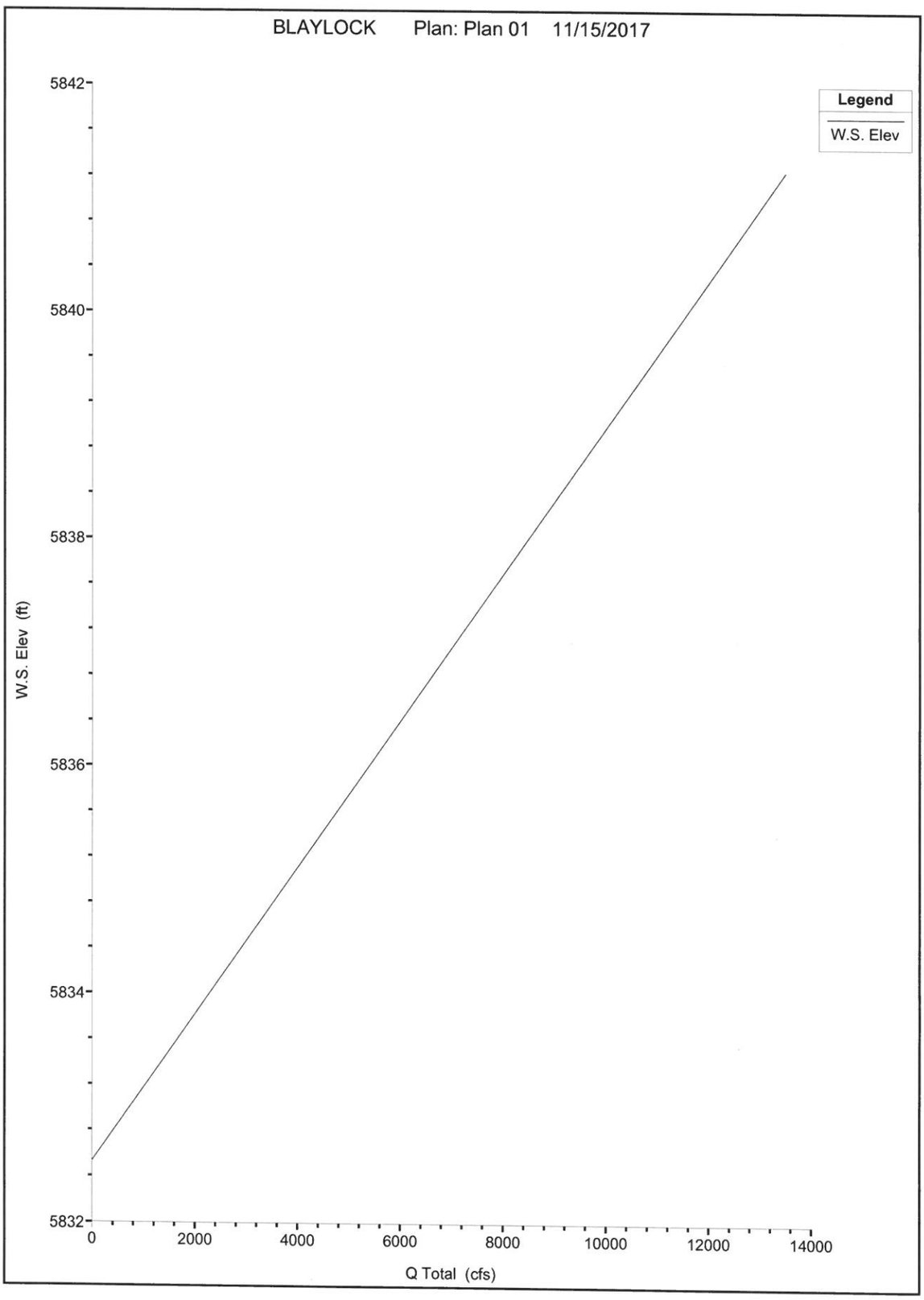
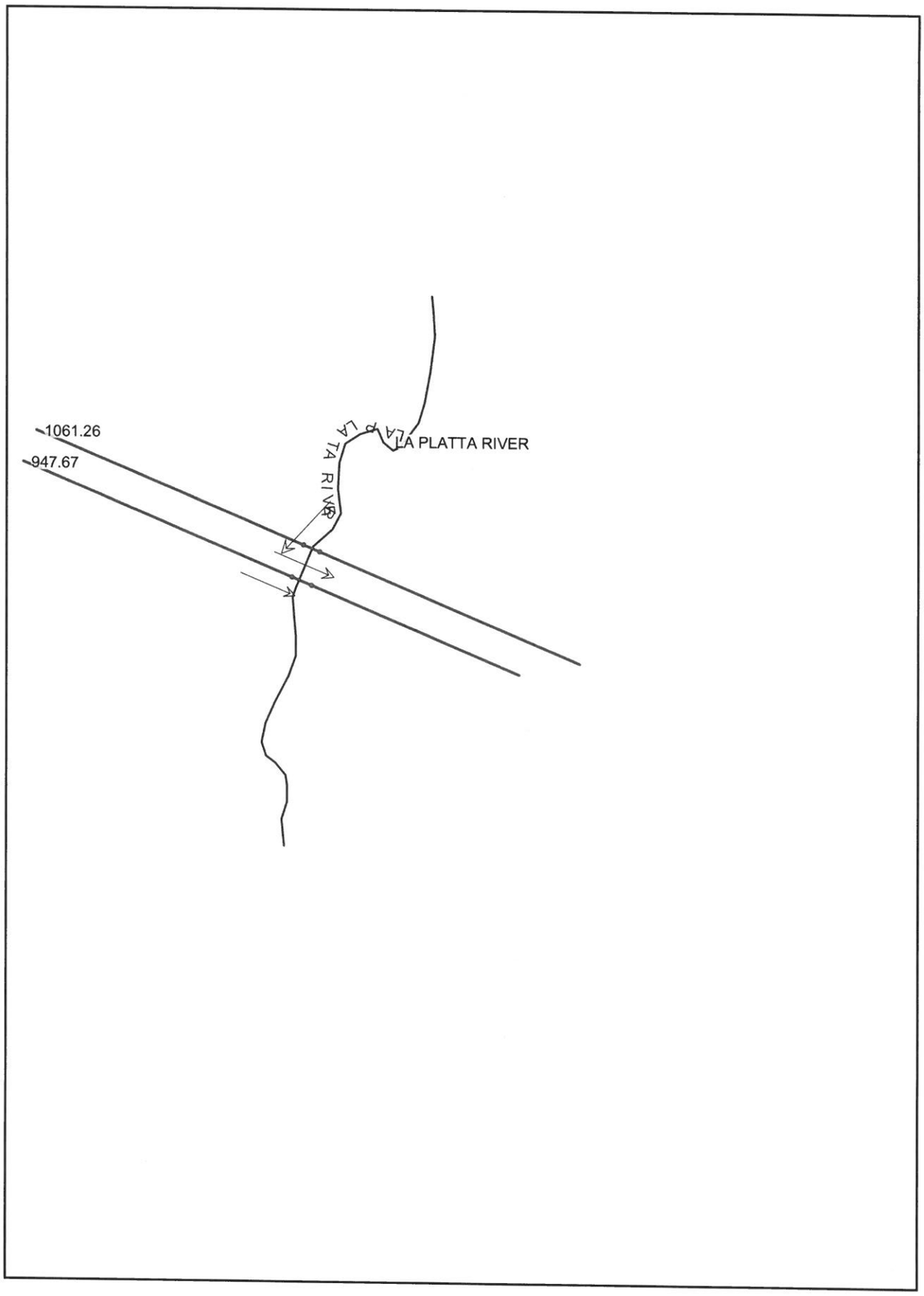
5860
5855
5850
5845
5840
5835
5830
0
500
1000
1500
2000
Station (ft)


BLAYLOCK Plan: Plan 01 11/15/2017
Legend
W.S. Elev
5842
5840
5838
5836
5834
5832
W.S. Elev (ft)
0
2000
4000
6000
8000
10000
12000
14000
Q Total (cfs)


1061.26
947.67
LA PLATTA RIVER
LA PLATTA RIVER

HEC-RAS HEC-RAS 5.0.3 September 2016
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
```

PROJECT DATA
Project Title: BLAYLOCK
Project File : BLAYLOCK.prj
Run Date and Time: 11/15/2017 2:27:10 PM

Project in English units

PLAN DATA

Plan Title: Plan 01
Plan File : C:\Users\Scott\Documents\BLAYLOCK.p01

Geometry Title:
Geometry File : C:\Users\Scott\Documents\BLAYLOCK.g02

Flow Title : Flow 02
Flow File : C:\Users\Scott\Documents\BLAYLOCK.f02

Plan Summary Information:

Number of:	Cross Sections	= 2	Multiple Openings	=	0
	Culverts	= 0	Inline Structures	=	0
	Bridges	= 0	Lateral Structures	=	0

Computational Information
Water surface calculation tolerance = 0.01
Critical depth calculation tolerance = 0.01
Maximum number of iterations = 20

Maximum difference tolerance = 0.3
Flow tolerance factor = 0.001

Computation Options
Critical depth computed only where necessary
Conveyance Calculation Method: At breaks in n values only
Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

FLOW DATA

Flow Title: Flow 02
Flow File : C:\Users\Scott\Documents\BLAYLOCK.f02

Flow Data (cfs)

River	Reach	RS	PF 1
LA PLATA RIVER	LA PLATTA RIVER	1061.26	13500

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
LA PLATA RIVER	LA PLATTA RIVER	PF 1	Critical	

GEOMETRY DATA

Geometry Title:
Geometry File : C:\Users\Scott\Documents\BLAYLOCK.g02

CROSS SECTION

RIVER: LA PLATA RIVER
REACH: LA PLATTA RIVER RS: 1061.26

INPUT
Description:
Station Elevation Data num= 457

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	5856.48	4.25	5856.38	8.41	5856.12	12.68	5855.86	17.64	5855.63
22.04	5855.93	26.22	5856.12	30.37	5856.54	34.45	5856.91	38.99	5856.98
43.07	5857.11	47.42	5857.11	52.6	5857.03	57.34	5856.99	61.67	5857.07
68.66	5857.01	73	5857	77.33	5856.94	81.96	5856.95	86.44	5856.96
90.7	5856.81	96.03	5856.56	100.51	5856.47	105.22	5856.52	109.46	5856.63
113.58	5856.7	120.19	5856.8	124.5	5857.6	128.81	5859.16	133.08	5860.02
137.29	5858.3	141.44	5857.2	145.56	5856.59	149.97	5856.41	154.14	5856.18
158.29	5856	162.38	5855.86	166.62	5855.72	175.34	5855.49	180.32	5855.5
185.26	5855.42	193.93	5855.38	200.95	5855.35	206.05	5855.29	210.2	5855.2
215.64	5855.21	220.89	5855.19	225.23	5855.58	229.39	5855.22	234.05	5854.89
239.94	5854.8	244.28	5854.65	248.9	5854.55	253.1	5854.52	257.29	5854.46
261.79	5854.5	266.26	5854.89	270.65	5854.65	275.76	5854.79	279.92	5854.55
286.22	5853.96	290.3	5853.92	294.55	5853.91	298.79	5853.87	303.13	5854.3
307.42	5853.87	311.71	5853.66	317.95	5853.2	322.63	5853.02	327.57	5853.07
331.73	5853.19	335.89	5853.38	340.36	5853.4	344.73	5853.13	348.82	5852.44
353.05	5851.84	357.31	5851.93	361.63	5851.44	365.95	5850.98	368.19	5849.47
372.35	5848.11	376.45	5846.96	378.71	5848.81	380.87	5850.06	385.03	5850.57
389.29	5849.88	393.61	5851.22	397.81	5851.91	402.09	5851.29	404.16	5849.6
406.24	5847.54	410.51	5846.89	414.67	5846.11	419.04	5845.97	423.51	5846.52
427.67	5846.61	432.15	5846.06	436.31	5844.92	440.41	5844.5	445.26	5844.09
449.52	5844.17	453.67	5844.05	457.84	5844.01	462.18	5843.68	466.52	5843.6
470.83	5843.29	475.19	5843.37	479.41	5842.71	483.86	5842.86	488	5842.66
492.16	5842.45	496.25	5842.63	500.48	5842.75	505.07	5842.49	509.22	5842.56
513.7	5843.59	517.86	5843.13	522.01	5842.17	526.49	5841.87	530.65	5842.09
535.13	5841.92	539.15	5841.08	543.42	5840.99	548.06	5841.07	552.4	5841.97
556.87	5841.83	561.03	5841.7	565.51	5841.63	570.59	5841.78	574.78	5841.54
579.26	5841.37	583.6	5841.25	587.84	5841.31	592.27	5841.27	596.42	5840.98
600.58	5841.11	604.66	5841.26	608.9	5841.28	613.16	5841.12	617.48	5841.08
621.79	5840.91	626.96	5840.86	631.3	5840.82	637.47	5840.97	641.94	5840.93
646.34	5840.92	650.81	5841	654.92	5841.06	659.1	5840.79	663.5	5840.6
669.08	5840.72	673.58	5840.84	677.76	5840.88	681.92	5841.08	686.59	5840.68
690.8	5840.56	695.26	5841.16	699.38	5840.51	704.62	5840.91	708.74	5840.5
712.94	5841	717.1	5840.75	721.28	5840.21	725.61	5840.12	729.8	5840.14
733.95	5840.09	738.03	5840.33	742.36	5840.73	746.52	5840.64	750.86	5840.88
755.15	5840.91	759.44	5840.84	763.56	5841	767.89	5841.41	772.23	5841.65
776.61	5842.59	780.74	5842.25	784.9	5842.58	789.05	5842.33	793.21	5842.34
797.37	5842.47	801.85	5841.98	806	5841.99	810.48	5840.64	814.51	5839.91
818.73	5839.12	823.18	5839.72	827.31	5840.11	833.75	5840.65	837.98	5839.76
842.13	5838.85	846.3	5838.41	851.1	5838.37	855.39	5838.59	859.6	5838.96
865.81	5839.62	870.21	5840.1	874.44	5840.51	878.6	5840.84	882.69	5841.09
889.15	5841.38	895.44	5841.62	899.52	5841.83	903.75	5842.14	908.02	5842.52
912.68	5842.17	916.98	5841.93	921.13	5842.25	925.38	5842.42	930.27	5842.48
934.45	5842.75	938.53	5843.42	942.75	5844.23	947.04	5844.1	951.33	5844.25
955.44	5844.42	957.57	5843.29	959.77	5841.39	961.94	5839.28	964.11	5838.11

968.45 5839.68 969.38 5840.05 973.87 5841.4 976.04 5840.37 980.19 5838.44
984.35 5836.65 988.43 5834.83 992.67 5832.95 996.93 5832.94 1001.25 5833.03
1006.12 5833.15 1010.36 5834.09 1014.51 5835.66 1018.68 5837.3 1023.09 5839.26
1025.18 5840.38 1028.07 5840.9 1032.41 5841.18 1036.74 5841.26 1041.03 5840.51
1045.42 5840.85 1049.61 5840.69 1054.09 5841 1058.29 5841.2 1062.76 5840.9
1066.97 5841.53 1071.43 5840.46 1073.6 5839.27 1075.77 5838.15 1080.04 5839.31
1084.44 5840.36 1088.62 5841.02 1092.77 5841.09 1096.85 5840.8 1098.95 5841.92
1103.2 5841.88 1107.58 5843.41 1112.02 5842.74 1114.09 5841.56 1116.22 5839.85
1118.26 5838.51 1122.39 5838.53 1126.72 5838.15 1131.06 5838.07 1135.4 5838.35
1139.73 5840.56 1144 5841.14 1148.4 5840.74 1152.58 5839.76 1156.73 5838.41
1160.81 5837.89 1165.06 5838.35 1169.3 5838.7 1178.05 5838.47 1182.22 5838.01
1186.35 5838.22 1192.85 5838.41 1197.04 5838.57 1201.18 5838.71 1205.62 5838.66
1209.8 5838.18 1213.89 5837.87 1218.1 5838.11 1222.39 5838.38 1226.68 5838.78
1231.03 5839.27 1235.5 5839.89 1239.66 5840.55 1244.14 5840.32 1248.3 5840.09
1252.42 5839.9 1256.81 5839.77 1261 5839.88 1265.15 5838.27 1269.82 5838.19
1274.52 5838.24 1278.68 5838.09 1283.16 5838.45 1287.31 5838.62 1291.42 5838.71
1295.84 5839.31 1300 5838.2 1304.16 5837.8 1308.24 5838.16 1312.48 5838.41
1316.86 5838.26 1322.62 5838.29 1326.84 5838.06 1330.92 5838.69 1335.1 5838.47
1339.44 5840.13 1343.69 5841.17 1347.76 5841.21 1352.21 5840.85 1356.39 5842.66
1358.51 5843.86 1362.68 5843.56 1366.76 5844.33 1370.99 5844.59 1375.26 5844.74
1379.57 5844.43 1383.89 5844.16 1388.37 5844.75 1392.62 5844.77 1397.01 5844.46
1401.16 5844.16 1405.64 5845.29 1409.67 5844.73 1413.89 5843.92 1418.34 5844.97
1422.47 5845.01 1426.64 5845 1430.72 5845.48 1434.95 5845.91 1439.22 5845.64
1443.7 5845.35 1445.87 5844.1 1450.09 5843.87 1454.12 5845.4 1458.35 5845.46
1462.79 5844.18 1467.46 5844.02 1473.95 5843.96 1479.26 5843.97 1483.67 5844.03
1487.99 5844.42 1492.41 5844.38 1497.35 5844.12 1501.82 5844.38 1506.02 5844.26
1510.49 5844.3 1515.02 5844.51 1519.49 5845.24 1524.17 5845.06 1530.37 5845.08
1534.52 5844.9 1539 5844.73 1543.16 5845.93 1547.27 5847.42 1552.11 5847.93
1556.38 5848.41 1560.53 5848.77 1565 5849.65 1569.38 5848.26 1573.54 5847.66
1578.02 5847.01 1584.05 5847.67 1588.54 5847.95 1594.65 5847.99 1598.81 5848.12
1602.96 5848.43 1607.12 5847.88 1611.23 5846.86 1615.64 5849.53 1617.67 5850.68
1621.83 5851.89 1625.99 5851.27 1630.15 5851.82 1634.4 5852.01 1638.78 5851.62
1642.94 5851.69 1647.42 5852.44 1651.57 5851.03 1655.7 5850.06 1660.09 5848.27
1664.28 5847.18 1668.88 5846.55 1673.32 5846.68 1677.8 5846.88 1681.95 5847.01
1686.43 5848.18 1690.59 5849.49 1694.7 5849.91 1699.12 5850.89 1703.35 5853.05
1707.79 5853.85 1711.97 5854.36 1716.46 5854.39 1720.65 5854.3 1725.12 5852.7
1727.3 5851.53 1731.48 5852.03 1735.98 5852.89 1740.16 5854.46 1744.32 5854.19
1748.47 5856.14 1752.63 5857.33 1756.79 5858.78 1761.27 5860.33 1765.68 5860.67
1769.9 5861.39 1774.06 5861.6 1778.26 5861.78 1782.59 5862.36 1786.74 5862.08
1790.9 5862.22 1794.98 5862.59 1799.22 5862.34 1804.27 5862.44 1808.92 5862.79
1813.39 5863.18 1817.55 5862.85 1822.03 5862.96 1826.19 5863.47 1830.82 5863.33
1835.1 5863.45 1839.78 5863.8 1843.98 5863.84 1846.02 5865.32 1850.17 5865.12
1854.33 5864.35 1858.81 5864.71 1862.97 5864.97 1867.08 5865.64 1871.49 5865.38
1875.66 5867.45 1879.81 5867.86 1883.9 5866.63 1888.14 5867.36 1892.39 5866.56
1894.63 5867.58 1898.78 5867.48 1903.26 5867.51 1907.42 5867.86 1911.54 5868.07
1915.93 5868.93 1920.13 5869.51 1924.61 5869.38 1928.8 5870.82 1933.28 5871.85
1937.48 5870.83 1941.64 5869.94 1945.8 5869.68 1952.19 5869.51 1956.35 5869.47
1970.42 5869.51 1972.31 5869.53

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.08	969.38	.035	1028.07	.08

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
969.38	1028.07	113.59	113.59	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	5844.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.35	Wt. n-Val.	0.080	0.035
0.080				
W.S. Elev (ft)	5843.22	Reach Len. (ft)	113.59	113.59
113.59				
Crit W.S. (ft)	5843.22	Flow Area (sq ft)	967.85	402.83
1219.60				
E.G. Slope (ft/ft)	0.008742	Area (sq ft)	967.85	402.83
1219.60				
Q Total (cfs)	13500.00	Flow (cfs)	2794.33	5558.76
5146.91				
Top Width (ft)	854.08	Top Width (ft)	467.90	58.69
327.49				
Vel Total (ft/s)	5.21	Avg. Vel. (ft/s)	2.89	13.80
4.22				
Max Chl Dpth (ft)	10.28	Hydr. Depth (ft)	2.07	6.86
3.72				
Conv. Total (cfs)	144386.4	Conv. (cfs)	29886.2	59452.5
55047.7				
Length Wtd. (ft)	113.59	Wetted Per. (ft)	471.93	62.15
333.41				
Min Ch El (ft)	5832.94	Shear (lb/sq ft)	1.12	3.54
2.00				
Alpha	3.20	Stream Power (lb/ft s)	3.23	48.82
8.43				
Frctn Loss (ft)	1.29	Cum Volume (acre-ft)	2.13	0.90
3.46				
C & E Loss (ft)	0.07	Cum SA (acres)	1.01	0.16
1.04				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical
depth for the water surface and continued on with the calculations.
Warning: Divided flow computed for this cross-section.

Warning: The energy loss was greater than 1.0 ft (0.3 m). between the current and previous cross section. This may indicate
the need for additional cross sections.
Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated
water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The
program defaulted to critical depth.

CROSS SECTION

RIVER: LA PLATA RIVER
REACH: LA PLATTA RIVER RS: 947.67

INPUT
Description:
Station Elevation Data num= 418

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	5856.25	4.53	5856.13	11.08	5855.96	15.56	5855.79	19.84	5855.68
24.51	5855.67	28.91	5855.53	33.15	5855.31	37.29	5855.1	41.46	5854.96
45.69	5854.83	50.1	5854.66	54.12	5854.54	58.35	5854.27	62.8	5853.78
67.01	5853.15	71.47	5852.39	75.68	5852.06	80.14	5851.55	84.48	5851.43
88.77	5851.32	93.15	5851.27	97.75	5851.1	102.81	5851	107.24	5850.88
111.39	5850.91	115.55	5851.29	119.64	5850.82	123.87	5850.83	128.55	5850.93
132.79	5851	136.87	5851.5	141.03	5851.97	145.19	5852.58	149.52	5852.88
153.72	5852.71	158.19	5852.59	162.53	5852.55	166.87	5852.49	171.95	5852.52
176.13	5852.56	180.26	5852.45	184.5	5852.52	189.22	5852.56	193.37	5852.71
197.53	5852.8	202.33	5852.83	206.8	5852.78	210.96	5852.65	215.14	5852.54
219.6	5852.47	224.71	5852.47	228.87	5852.41	233.35	5852.23	238.54	5852.2
242.75	5852.2	247.09	5852.15	251.43	5852.05	259.6	5851.96	263.89	5851.87
268.43	5851.78	272.51	5851.64	276.84	5851.53	287.02	5851.5	292.01	5851.53
296.55	5851.47	300.63	5851.4	304.99	5851.3	309.25	5851.17	313.42	5851.26
317.55	5850.91	321.89	5850.55	326.23	5850.29	330.25	5850.05	334.73	5849.73
339.52	5849.69	343.84	5850.43	348.16	5850.78	352.42	5850.11	356.58	5849.13
360.92	5848.3	365.11	5846.26	367.24	5847.57	371.4	5849.22	375.48	5849.62
377.58	5850.91	381.74	5851.14	386.22	5851.5	390.45	5850.71	392.61	5849.34
394.85	5847.49	396.88	5845.9	401.03	5845.57	405.37	5845.41	409.56	5845.18
413.72	5844.81	418.37	5844.54	422.62	5844.83	427.05	5844.8	431.2	5844.91
435.36	5844.9	439.44	5844.67	443.68	5844.49	447.94	5844.34	452.26	5844.3
456.68	5844.07	461.37	5843.96	465.52	5843.98	469.69	5843.87	473.92	5843.86
478.32	5843.92	482.8	5843.59	486.96	5843.73	491.43	5843.72	495.69	5843.29
499.84	5843.15	503.86	5843.06	508.35	5843.01	512.93	5842.88	517.47	5842.79
523.41	5842.73	527.87	5842.75	532.2	5842.65	536.51	5842.59	540.88	5843.16
545.21	5842.66	549.55	5842.65	553.67	5843.25	557.84	5843.65	561.92	5843.1
566.15	5841.81	570.42	5841.35	575.51	5841.36	579.9	5841.51	584.09	5842.2
588.23	5841.65	592.32	5841.58	596.57	5842.06	600.81	5843	605.15	5841.99
609.44	5842.73	613.73	5842.16	618.08	5843.06	622.55	5842.42	626.71	5841.89

631.19	5841.67	635.35	5841.21	639.47	5841.34	643.86	5841.27	648.05	5842.02
652.19	5841.59	656.28	5842.05	660.53	5841.23	664.77	5840	669.11	5839.95
673.4	5839.67	677.69	5839.58	681.81	5839.77	686.14	5839.37	690.48	5839.44
694.85	5838.94	699.15	5838.82	703.43	5838.77	707.82	5838.79	712.1	5838.73
716.61	5838.92	721.05	5838.91	725.53	5838.86	730.01	5838.73	734.63	5838.67
738.84	5838.45	742.92	5838.51	747.46	5838.33	751.79	5837.98	755.91	5838.14
760.07	5838.41	768.38	5838.41	772.54	5839.16	776.7	5838.58	780.86	5838.35
785.88	5838.43	790.01	5838.78	794.18	5839.48	798.26	5840.5	802.49	5840.28
806.76	5841.12	811.24	5841.7	815.5	5841.28	819.87	5841.21	824.03	5839
828.51	5838.56	832.67	5838.5	837.14	5838.74	841.62	5838.51	845.78	5838.45
850.26	5838.29	854.76	5838.29	858.89	5838.5	863.05	5838.3	867.52	5837.95
871.68	5837.69	875.82	5837.45	882.24	5837.1	886.7	5836.88	892.2	5836.8
896.31	5836.82	901.1	5837.53	905.13	5838.19	909.36	5838.87	913.8	5839.56
917.94	5840.2	922.47	5840.91	926.81	5840.81	931.49	5840.81	935.64	5840.94
939.78	5841.03	945.24	5841.08	949.92	5841.06	954.19	5840.92	958.5	5840.59
962.83	5840.11	967.08	5839.6	971.25	5839.1	975.59	5838.66	979.78	5838.32
984.57	5838.16	988.6	5837.35	992.82	5836.71	995.1	5835.59	997.27	5833.35
1001.52	5832.53	1005.95	5833.54	1010.28	5834.86	1014.62	5835.98	1019.11	5836.88
1023.24	5837.46	1027.63	5837.87	1031.82	5838.53	1036.3	5839.94	1038.47	5841.19
1042.74	5842.08	1045.98	5840.9	1048.2	5838.58	1052.56	5837.93	1056.78	5839.08
1061.23	5838.9	1065.36	5838.48	1067.4	5839.5	1071.56	5840.45	1075.72	5840.94
1079.88	5840.89	1084.35	5840.73	1088.51	5840.54	1092.99	5840.33	1097.01	5840.14
1103.51	5839.85	1107.7	5839.68	1111.86	5839.54	1117.62	5839.47	1121.94	5839.57
1126.2	5839.52	1130.61	5838.57	1134.79	5839.03	1138.94	5839.22	1143.02	5839.32
1147.96	5839.36	1152.3	5839.29	1156.63	5839.14	1160.97	5838.95	1165.21	5838.73
1171.66	5838.41	1177.95	5838.12	1182.03	5837.95	1186.37	5837.71	1190.53	5837.65
1194.85	5837.8	1199.48	5837.87	1204.71	5837.93	1209.08	5837.97	1219.68	5838
1227.39	5838.01	1232.84	5838.06	1237.22	5838.16	1241.38	5837.71	1245.86	5837.45
1250.01	5837.42	1254.16	5837.53	1258.54	5837.76	1262.71	5837.38	1266.86	5837.38
1273.04	5837.67	1277.2	5837.8	1283.27	5837.86	1287.67	5837.73	1292.14	5837.35
1296.25	5837.14	1300.43	5837.37	1304.83	5837.89	1309.05	5838.47	1313.13	5838.8
1317.67	5838.94	1321.97	5838.9	1326.13	5838.65	1330.28	5838.14	1334.76	5837.34
1338.92	5837.46	1343.05	5837.6	1347.43	5837.83	1351.63	5838.4	1356.31	5838.26
1360.44	5838.63	1364.78	5837.7	1369.11	5838.16	1373.14	5838.81	1377.62	5838.32
1383.9	5838.12	1387.98	5837.6	1392.19	5837.6	1396.48	5837.71	1400.77	5837.83
1404.89	5836.73	1409.22	5836.71	1414.39	5836.61	1418.72	5837	1422.91	5836.96
1427.19	5836.84	1431.34	5836.67	1435.61	5837.07	1439.78	5836.63	1444.23	5836.64
1448.61	5836.66	1452.77	5836.74	1458.29	5836.76	1462.68	5836.99	1466.84	5837.12
1470.98	5837.3	1475.35	5837.66	1479.56	5837.54	1484.43	5837.4	1488.59	5837.54
1493.07	5837.75	1497.22	5838.68	1501.7	5838	1506.08	5837.79	1510.34	5838.52
1514.66	5840.05	1516.73	5841.94	1518.97	5843.79	1521.21	5845.41	1523.24	5846.56
1527.39	5847.24	1531.72	5847.01	1535.92	5846.41	1540.08	5845.2	1544.23	5846.56
1548.39	5846.6	1552.55	5845.59	1557.03	5846.85	1561.18	5846.99	1565.66	5847.1
1569.82	5847.63	1573.94	5848.16	1578.34	5848.84	1582.52	5848.15	1586.67	5848.86
1590.75	5847.91	1595	5848.11	1599.24	5848.55	1603.58	5849.75	1607.88	5850.03
1612.16	5848.65	1616.28	5849.91	1620.62	5849.32	1624.83	5848.63	1629.29	5849.29
1631.46	5850.62	1635.66	5851.4	1637.9	5850.26	1642.3	5849.28	1646.48	5849.16
1650.63	5850.04	1654.71	5851.77	1656.81	5853.25	1658.96	5854.48	1661.06	5855.77

1665.44 5857.04 1669.6 5857.54 1674.08 5857.61 1678.23 5857.73 1682.36 5858.08
1686.75 5858.39 1691 5858.48 1695.42 5858.27 1700.62 5858.21 1704.78 5857.95
1708.93 5857.88 1713.09 5857.75 1717.25 5858.51 1721.37 5858.59 1725.77 5858.93
1729.95 5858.68 1734.1 5859.02 1738.18 5859.22 1743.12 5859.25 1747.46 5859.26
1751.79 5859.75 1756.13 5860.04 1760.46 5859.7 1765.22 5859.81 1769.48 5859.95
1773.63 5860.19 1777.65 5860.42 1782.21 5862.14 1786.33 5861.9 1790.49 5860.55
1795.47 5860.42 1799.76 5860.64 1800 5860.64

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.08	975.59	.035	1045.98	.08

Bank Sta: Left	Right	Coeff Contr.	Expan.
975.59	1045.98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	5842.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.13	Wt. n-Val.	0.080	0.035
0.080				
W.S. Elev (ft)	5841.24	Reach Len. (ft)		
Crit W.S. (ft)	5841.24	Flow Area (sq ft)	667.04	289.08
1432.97				
E.G. Slope (ft/ft)	0.015322	Area (sq ft)	667.04	289.08
1432.97				
Q Total (cfs)	13500.00	Flow (cfs)	2573.11	4034.75
6892.14				
Top Width (ft)	840.59	Top Width (ft)	306.51	64.09
469.99				
Vel Total (ft/s)	5.65	Avg. Vel. (ft/s)	3.86	13.96
4.81				
Max Chl Dpth (ft)	8.71	Hydr. Depth (ft)	2.18	4.51
3.05				
Conv. Total (cfs)	109063.5	Conv. (cfs)	20787.6	32595.9
55680.1				
Length Wtd. (ft)		Wetted Per. (ft)	308.30	66.79
473.58				
Min Ch El (ft)	5832.53	Shear (lb/sq ft)	2.07	4.14
2.89				
Alpha	2.28	Stream Power (lb/ft s)	7.98	57.79
13.92				
Frctn Loss (ft)		Cum Volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

Warning: Divided flow computed for this cross-section.

SUMMARY OF MANNING'S N VALUES

River:LA PLATA RIVER

Reach	River Sta.	n1	n2	n3
LA PLATTA RIVER	1061.26	.08	.035	.08
LA PLATTA RIVER	947.67	.08	.035	.08

SUMMARY OF REACH LENGTHS

River: LA PLATA RIVER

Reach	River Sta.	Left	Channel	Right
LA PLATTA RIVER	1061.26	113.59	113.59	113.59
LA PLATTA RIVER	947.67			

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: LA PLATA RIVER

Reach	River Sta.	Contr.	Expan.
LA PLATTA RIVER	1061.26	.1	.3
LA PLATTA RIVER	947.67	.1	.3