

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 Parnell Limited Liability Company				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 51A Road 2650				Company NAIC Number:	
City Aztec		State New Mexico		ZIP Code 87410	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Account R0013539					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>					
A5. Latitude/Longitude: Lat. <u>36°53'30.67"N</u> Long. <u>107°56'18.87"W</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <u>8</u>					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) <u>1500.00</u> sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>9</u>					
c) Total net area of flood openings in A8.b <u>378.00</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
A9. For a building with an attached garage:					
a) Square footage of attached garage <u>N/A</u> sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>					
c) Total net area of flood openings in A9.b <u>N/A</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number San Juan County/350064			B2. County Name San Juan		B3. State New Mexico
B4. Map/Panel Number 35045C0390	B5. Suffix F	B6. FIRM Index Date 08-05-2010	B7. FIRM Panel Effective/ Revised Date 08-05-2010	B8. Flood Zone(s) A	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 5733.40
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input checked="" type="checkbox"/> Other/Source: <u>HEC-RAS</u>					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

ELEVATION CERTIFICATE

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

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. 51A Road 2650			Policy Number:
City Aztec	State New Mexico	ZIP Code 87410	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 GPS Control Vertical Datum: NAVD 1988

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) | 5734.2 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor | 5737.7 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only) | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab) | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building
(Describe type of equipment and location in Comments) | 5734.0 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG) | 5734.1 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG) | 5734.2 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> 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 24570		
Title Professional Engineer			
Company Name Sakura Engineering and Surveying			
Address 125 West Main St.			
City Farmington	State New Mexico		ZIP Code 87401
Signature 	Date 01-18-2021	Telephone (505) 564-2139	Ext. 2

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)

Machinery is a pump house with well and water filtering equipment.

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City Aztec	State New Mexico	ZIP Code 87410	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.

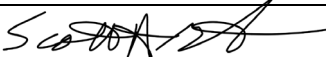
- E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
- a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ 5734.2 feet meters above or below the HAG.
 - b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ 5734.2 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 _____ 5737.7 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 _____ 5734.0 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
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Signature 	Date 01-18-2021	Telephone (505) 564-2139
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Comments

Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008
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City Aztec	State New Mexico	ZIP Code 87410	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
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- 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.

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

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City Aztec	State New Mexico	ZIP Code 87410	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 East Side of Structure (Date Taken 12-5-20)

Clear Photo One

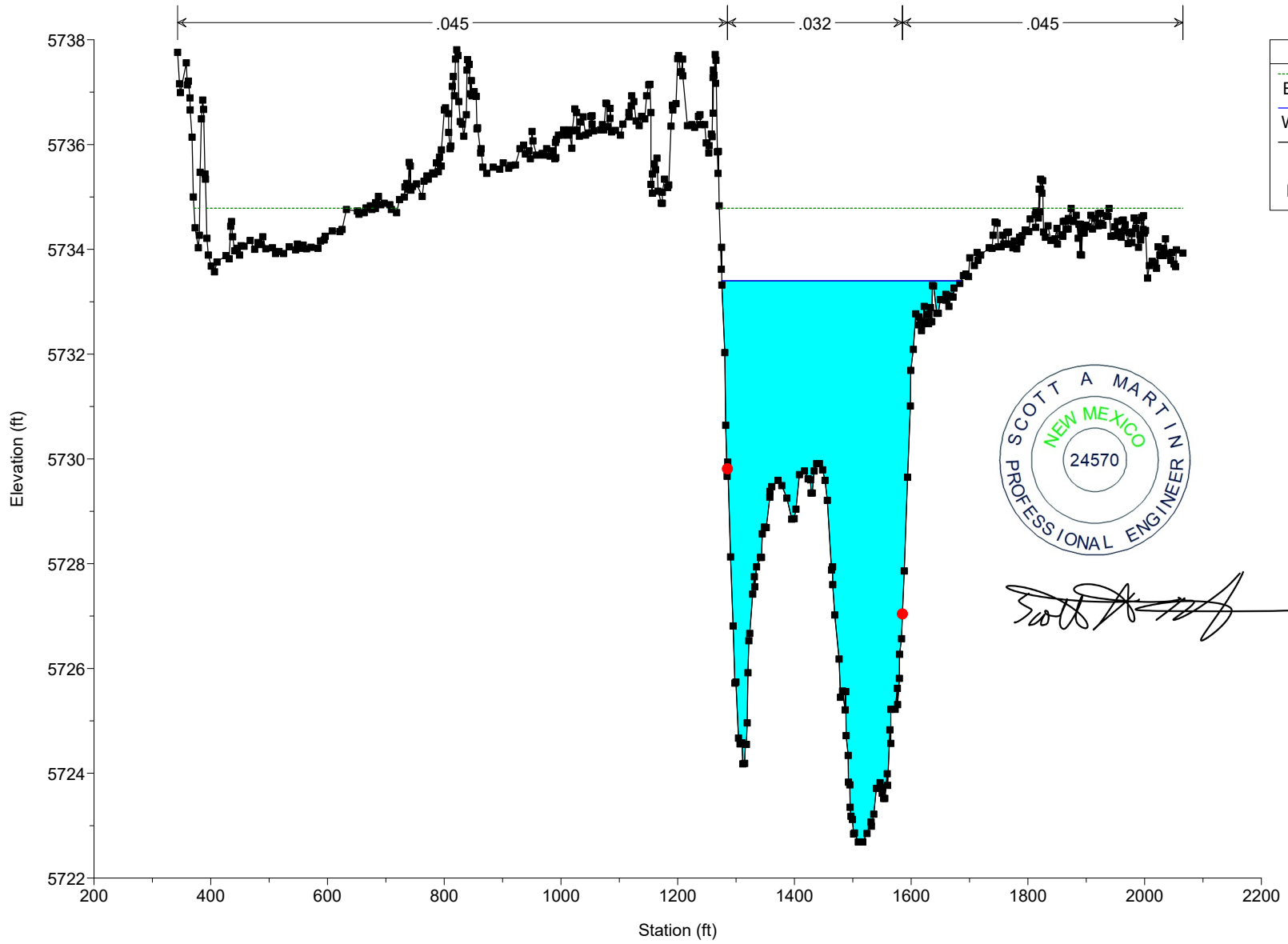


Photo Two

Photo Two Caption West Side of Structure (Date Taken 12-5-20)

Clear Photo Two

HEC-RAS Model Plan: Default Scenario 12/7/2020





Scott A. Martin

HEC-RAS HEC-RAS 5.0.7 March 2019
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
XXXXXXXX	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: HEC-RAS Model
Project File : 51a2650.prj
Run Date and Time: 12/7/2020 9:59:30 PM

Project in English units

Project Description:

```

CRS Info=<SpatialReference> <CoordinateSystem WKT="PROJCS["NAD83 / New Mexico West (ftUS)",GEOGCS["NAD83",DATUM["North_American_Datum_1983",SPHEROID["GRS 1980",6378137,298.257222101,AUTHORITY["EPSG","7019"]],AUTHORITY["EPSG","6269"],PRIMEM["Greenwich",0,AUTHORITY["EPSG","8901"]],UNIT["degree",0.0174532925199433,AUTHORITY["EPSG","9122"]],AUTHORITY["EPSG","4269"]],PROJECTION["Transverse_Mercator"],PARAMETER["latitude_of_origin",31],PARAMETER["central_meridian",-107.83333333333],PARAMETER["scale_factor",0.999916667],PARAMETER["false_easting",2723091.667],PARAMETER["false_northing",0],UNIT["US survey foot",0.304800609601219,AUTHORITY["9003","EPSG"]],AXIS["Easting",EAST],AXIS["Northing",NORTH]]" AcadCode="" />
<Registration OffsetX="0" OffsetY="0" OffsetZ="0" ScaleX="1" ScaleY="1" ScaleZ="1" /></SpatialReference>

```

PLAN DATA

Plan Title: Default Scenario
Plan File : C:\Users\t0sc0\Documents\51a2650.p01

Geometry Title: Default Geometry
Geometry File : C:\Users\t0sc0\Documents\51a2650.g01

Flow Title : Default Steady Flow
Flow File : C:\Users\t0sc0\Documents\51a2650.f01

Plan Description:
Default Scenario

Plan Summary Information:

Number of:	Cross Sections =	13	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 =	0.33
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: Default Steady Flow
Flow File : C:\Users\t0sc0\Documents\51a2650.f01

Flow Data (cfs)

River	Reach	RS	100 yr
Animas River	CenterPoint	1014	19150

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			

Animas River
Critical

CenterPoint

100 yr

Critical

GEOMETRY DATA

Geometry Title: Default Geometry

Geometry File : C:\Users\t0sc0\Documents\51a2650.g01

CROSS SECTION

RIVER: Animas River

REACH: CenterPoint

RS: 1014

INPUT

Description:

Station Elevation Data num= 490

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
333.59	5736.08	334.19	5736.05	336.05	5735.71	338.36	5736.21	339.92	5736.21
345.03	5735.16	346.81	5734.94	348.21	5734.9	352.02	5734.92	354.19	5734.73
356.79	5734.68	360.94	5734.73	362.65	5734.65	368.4	5734.56	369.12	5734.61
371.99	5733.82	372.78	5734.31	373.94	5734.44	377.15	5734.62	383.81	5734.56
389.68	5734.66	394.17	5734.42	400.43	5734.36	405.32	5734.11	407.66	5734.35
410.01	5734.75	413.42	5734.67	415.36	5734.4	415.73	5734.56	417.76	5734.67
419.83	5734.7	422.3	5734.57	428.82	5734.62	435.35	5734.72	437.72	5734.94
444.41	5734.81	446.43	5734.93	448.83	5734.85	451.72	5734.92	453.1	5734.69
454.13	5734.83	456.72	5734.71	462.73	5734.63	465.41	5734.66	472.03	5734.67
473.14	5734.78	477.84	5735	481.09	5735.35	486.23	5735.6	491.94	5735.62
494.96	5735.75	502.53	5735.77	507.71	5735.67	513.12	5735.75	513.96	5735.83
518.39	5735.94	521.19	5735.85	527.32	5735.55	529.54	5735.55	533.68	5735.32
534.91	5735.29	543.26	5735.31	546.91	5735.35	553.12	5735.37	561.31	5735.61
567.6	5736.04	571.64	5736.06	573.13	5736.14	578.41	5736.15	578.71	5736.1
587.61	5735.87	592.62	5735.81	601.05	5735.88	604.66	5736	606.59	5735.91
611.64	5735.97	614.69	5735.89	623.87	5736.27	630.21	5736.51	634.77	5736.33
643.83	5736.09	645.36	5736.07	648.98	5735.91	654.53	5735.99	663.42	5736.25
667.77	5736.2	669.48	5736.31	676.31	5736.44	678.61	5736.7	680.77	5736.52
685.84	5736.63	692.52	5736.51	696.03	5736.59	697.84	5736.69	698.11	5736.61
700.04	5736.81	702.72	5736.6	703.9	5736.58	707.27	5736.79	709.24	5736.77
713.34	5736.84	716.06	5736.84	724.88	5736.96	734.97	5736.77	737.91	5736.83
743.74	5736.86	748.5	5736.83	751.12	5736.9	755.14	5736.77	760.51	5736.87
762.68	5737.14	766.93	5736.84	777.38	5736.87	780.02	5736.77	785	5736.78
785.73	5736.97	787.97	5737.04	791.98	5736.79	795.01	5736.93	806.76	5737.04
807.72	5737.23	811.7	5736.95	813.02	5737.04	814.3	5737.62	815.44	5738.37
816.52	5738.62	818.43	5738.57	820.01	5738.18	825.3	5737.62	828.91	5737.58

832	5737.66	834.7	5737.68	834.94	5737.8	836.1	5737.62	842.76	5737.34
843.93	5737.48	846.61	5737.54	850.67	5737.53	856.61	5737.48	857.64	5737.4
862.93	5737.32	867.22	5737.3	870.08	5737.41	872.75	5737.73	873.96	5737.74
878.02	5737.58	885.53	5737.59	893.98	5737.64	894.44	5737.73	898.54	5737.81
901.19	5737.67	905.08	5737.7	910.1	5737.86	916.12	5737.82	920.42	5738.01
927.63	5738.25	931.29	5738.25	935.38	5737.93	940.14	5737.83	942.2	5737.84
942.97	5737.99	948.39	5737.92	949.04	5738.15	950.08	5738.16	951.98	5738.02
959.65	5738.25	967.07	5738.04	975.37	5738.05	978.01	5738.22	979.82	5737.97
985.11	5737.74	989.15	5737.75	992.57	5737.63	993.05	5737.72	995.84	5737.72
996.76	5737.63	1004.83	5737.62	1006.93	5737.59	1012.25	5737.6	1015.01	5737.52
1023.06	5737.6	1024.8	5737.56	1026.96	5737.59	1034.14	5737.52	1037.06	5737.65
1039.68	5737.66	1042.92	5737.84	1044.28	5737.75	1046.34	5737.73	1050.53	5737.85
1051.23	5737.77	1053.41	5737.88	1060.9	5737.99	1063.04	5737.98	1064	5738.16
1065.32	5738.17	1067.52	5737.99	1069.81	5738.01	1072.91	5737.81	1075.27	5737.93
1078.16	5737.8	1080.99	5737.79	1083.72	5737.71	1084.23	5737.77	1088.15	5737.83
1089.24	5737.76	1093.51	5737.72	1094.54	5737.85	1096.6	5737.9	1105.91	5737.92
1107.29	5738.12	1112.92	5738.35	1114.99	5739.11	1116.51	5739.11	1117.98	5738.51
1118.21	5738.87	1118.96	5738.47	1122.06	5739.2	1124.95	5739.2	1129.28	5738.47
1133.13	5738.01	1134.54	5737.95	1139.16	5737.9	1141.2	5737.98	1152.69	5738.13
1153.71	5738.27	1157.98	5738.41	1162.65	5738.38	1169.32	5738.49	1171.33	5738.31
1171.39	5738.48	1172.59	5738.32	1177.46	5738.26	1177.88	5738.14	1180.01	5738.23
1180.35	5738.14	1182.02	5738.27	1185.88	5738.26	1186.36	5738.32	1188.1	5738.24
1190.66	5738.31	1191.44	5738.24	1193.83	5738.46	1194.86	5738.25	1197.42	5738.43
1198.58	5738.97	1201.26	5739.2	1202.45	5739.5	1204.9	5739.59	1205.9	5739.07
1207.8	5739.05	1210.64	5739.5	1212.15	5739.51	1212.39	5739.61	1213.68	5739.45
1216.22	5739.46	1218.32	5739.11	1219.01	5738.9	1220.31	5738.96	1222.63	5738.47
1224.9	5738.23	1226.57	5738.23	1230.27	5738.02	1235.24	5738.06	1237.11	5737.7
1238.13	5737.6	1239.32	5737.63	1239.44	5737.48	1245.19	5737.12	1247.93	5737.1
1248.71	5737.17	1250.63	5736.99	1254.98	5737	1256	5736.79	1258.35	5736.76
1258.57	5736.51	1259.27	5736.34	1262.68	5736.08	1264.1	5735.71	1268.67	5734.95
1268.95	5735.24	1270.35	5734.61	1272.07	5734.61	1275.83	5734.03	1275.89	5733.66
1278.36	5733.49	1281.86	5732.77	1283.61	5732.77	1287.75	5732.4	1291.85	5731.82
1292.51	5731.62	1294.71	5731.57	1298.59	5731.57	1300.26	5731.38	1303.59	5731.28
1307.09	5731.28	1308.22	5731.35	1312.32	5730.96	1315.08	5731.06	1315.33	5731
1318.08	5731.02	1318.34	5730.79	1319.04	5730.83	1320.04	5731.57	1321.58	5731.7
1323.63	5731.63	1324.53	5730.07	1326.11	5729.07	1327.38	5729.43	1328.8	5727.34
1332.68	5726.05	1334.08	5724.49	1334.7	5724.99	1335.03	5724.12	1337.37	5724.04
1344.33	5724.07	1345.04	5724.1	1348.66	5723.99	1352.8	5723.97	1354.05	5724.5
1355.01	5724.12	1357.1	5725	1359.42	5726.94	1360.06	5728.05	1361.55	5728.27
1361.69	5727.99	1364.26	5728.36	1369.86	5728.66	1370.5	5729.01	1373.91	5729.41
1373.94	5729.22	1375.21	5729.5	1379.78	5729.64	1382.64	5729.64	1385.26	5729.57
1386.03	5729.43	1389.91	5729.15	1396.07	5728.65	1401.12	5728.28	1401.64	5728.37
1405.03	5728.05	1408.07	5728	1410.75	5728.14	1412.25	5727.85	1413.19	5728.07
1414.45	5728.04	1415.13	5727.69	1417.8	5728.95	1418.75	5729.16	1420.18	5729.06
1422.99	5729.62	1424.75	5730.14	1427.82	5730.25	1429.31	5730.46	1432.22	5730.51
1438.22	5730.7	1443.62	5730.71	1447.57	5730.56	1448.98	5730.59	1451.47	5730.36
1453.4	5730.37	1453.43	5730.23	1457.75	5730.05	1460.27	5729.61	1464.14	5729.15
1464.52	5729.35	1470.93	5728.48	1474.62	5727.42	1475.98	5727.13	1476.77	5727.39
1477.72	5726.75	1483.2	5725.47	1483.99	5725.82	1485.2	5725.47	1486.84	5725.43
1493.63	5725.43	1494.51	5725.32	1500.28	5725.37	1501.81	5725.16	1501.96	5724.59

1508.21	5722.94	1508.55	5723.36	1508.57	5722.85	1511.61	5722.11	1511.88	5722.53
1515.43	5721.21	1519.63	5720.71	1521.68	5719.82	1524.14	5719.73	1528.78	5718.94
1531.89	5718.69	1535.15	5718.99	1535.52	5718.8	1535.9	5719.1	1540.03	5719.45
1541.16	5720.13	1544.74	5721.03	1546.12	5720.84	1549.97	5721.97	1553.19	5724.07
1554.87	5724.74	1555.99	5724.37	1557.44	5724.82	1559.36	5724.75	1563.94	5724.82
1564.97	5725.22	1565.69	5725.35	1566.06	5725.01	1570.9	5725.99	1573.81	5726.58
1575.48	5727.36	1581.73	5728.67	1585.59	5729.43	1585.85	5729.08	1588.26	5729.83
1589.92	5729.78	1593.8	5730.05	1596.93	5730.02	1598.29	5729.64	1599.76	5729.38
1600.54	5729.63	1600.56	5729.18	1602.15	5729.01	1603.19	5729.08	1606.1	5728.57
1610.44	5728.25	1612.35	5728.33	1613.06	5728.19	1613.83	5728.35	1614.85	5728.17
1615.14	5728.39	1617.64	5728.12	1618.85	5728.37	1619.32	5728.02	1620.88	5728.36
1625.81	5728.58	1628.96	5728.26	1631.39	5728.46	1634.34	5728.43	1634.71	5728.69
1635.28	5728.71	1638.32	5729.25	1639.13	5728.93	1639.14	5729.43	1642.69	5729.74
1645.57	5730.07	1648.47	5729.55	1649.63	5730.01	1650.39	5729.89	1650.83	5730.03
1651.84	5729.91	1652.56	5730.05	1656.87	5729.25	1656.89	5729.64	1658.04	5728.86
1658.58	5729.37	1659.57	5728.55	1660.26	5728.86	1662.67	5728.45	1666.03	5729.06
1669.83	5729.34	1670.79	5729.47	1671.58	5729.29	1676.08	5730	1682.97	5730.02
1683.22	5730.1	1685.97	5730.12	1689.31	5730.68	1690.53	5730.79	1692.36	5730.76
1694.35	5730.97	1699.62	5731.12	1701.19	5731.43	1703.18	5731.52	1703.81	5731.45
1710.92	5731.87	1711.33	5731.76	1719.77	5732.19	1721.78	5732.32	1723.54	5732.31
1729	5732.45	1731.57	5732.46	1736.34	5732.18	1737.62	5731.98	1737.84	5732.24
1740.72	5732.28	1747.21	5732.46	1754.25	5732.46	1758.72	5732.4	1759.37	5732.43

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
333.59	.045	1335.03	.032	1570.9	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1335.03	1570.9		97.01	97.01		.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5735.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.82	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5734.55	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	216.67	1963.22
829.98				
E.G. Slope (ft/ft)	0.001786	Area (sq ft)	216.67	1963.22
829.98				
Q Total (cfs)	19150.00	Flow (cfs)	634.16	15473.53
3042.31				
Top Width (ft)	511.80	Top Width (ft)	87.46	235.87
188.47				
Vel Total (ft/s)	6.36	Avg. Vel. (ft/s)	2.93	7.88
3.67				
Max Chl Dpth (ft)	15.86	Hydr. Depth (ft)	2.48	8.32

4.40				
Conv. Total (cfs)	453198.2	Conv. (cfs)	15007.9	366191.9
71998.4				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	92.72	243.85
194.92				
Min Ch El (ft)	5718.69	Shear (lb/sq ft)	0.26	0.90
0.47				
Alpha	1.30	Stream Power (lb/ft s)	0.76	7.07
1.74				
Frctn Loss (ft)	0.22	Cum Volume (acre-ft)	1.72	57.49
10.10				
C & E Loss (ft)	0.04	Cum SA (acres)	0.55	8.58
3.75				

Warning: Divided flow computed for this cross-section.

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Animas River

REACH: CenterPoint RS: 1013

INPUT

Description:

Station Elevation Data		num=		490					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
303.47	5737	305.16	5736.5	306.46	5736.5	308.64	5737.23	322.37	5737.35
328.09	5737.33	330.49	5737.39	332.66	5737.03	335.7	5736.75	337.03	5736.44
340.13	5736.23	342.55	5735.81	343.99	5735.73	348.57	5735.83	352.76	5734.67
355.56	5734.23	362.31	5734.04	372.41	5734.08	375.13	5734.06	377.74	5734.16
382.33	5734.04	390.23	5734.3	391.98	5734.3	400.98	5733.99	403.1	5734.35
405.48	5733.99	409.1	5734.38	414.4	5734.37	416.81	5734.12	421.63	5734.21
424.27	5734.11	434.64	5734.24	437.18	5734.47	440.44	5734.56	444.54	5734.29
446.75	5734.3	449.84	5734.73	456.64	5734.51	461.41	5734.51	467.08	5734.73
471.05	5734.74	474.18	5734.39	479.8	5734.41	483.84	5734.5	486.58	5734.35
490.1	5734.32	498.34	5734.42	507.94	5734.44	513.52	5734.51	521.68	5734.53
527.17	5734.34	531.09	5734.3	536.4	5734.39	546.29	5734.37	553.01	5734.51
556.25	5734.47	564.14	5734.56	577.3	5734.93	584.5	5734.9	592.5	5735.06
598.21	5735.07	602.33	5735	605.7	5735.02	607.71	5735.18	619.17	5735.19
623.2	5735.17	624.04	5735.3	630.28	5735.43	631.98	5735.83	635.5	5735.88
637.28	5735.37	639.84	5735.28	644.18	5735.43	646.3	5735.35	649.97	5735.46
656.01	5735.4	664.45	5735.45	667.59	5735.37	669.99	5736.06	671.32	5735.7
672.68	5735.7	678.19	5735.93	681.06	5735.75	690.05	5735.71	691.33	5735.64
697	5735.65	699.96	5735.72	704.95	5735.74	711.95	5735.9	717.01	5735.76
721.11	5735.84	726.77	5735.85	732.92	5735.72	740.64	5735.76	747.38	5735.51
750.66	5735.56	753.86	5735.75	758.16	5735.85	760.83	5735.77	767.67	5735.79

768.13	5735.93	773.08	5736.21	773.67	5736.12	776.81	5736.84	782.83	5737.02
786.16	5736.31	788.5	5736.1	792.71	5736.13	794.65	5735.97	799.57	5736.1
802.61	5736.06	803.66	5736.34	806.26	5736.28	807.18	5736.58	808.96	5736.26
811.04	5736.32	811.3	5736.14	813.21	5736.1	813.58	5736.29	819.08	5736.1
821.45	5736.1	824.07	5736.39	827.99	5736.66	828.66	5736.62	831.54	5736.89
834.56	5736.73	835.39	5736.79	837.33	5736.22	839.27	5736.32	840.5	5736.73
843.49	5736.74	845.29	5736.38	848.21	5736.14	852.28	5736.21	856.64	5736.18
860.72	5736.44	867.96	5736.2	869.4	5736.38	871.61	5736.46	874.86	5736.43
879.77	5736.86	882.64	5737.87	883.35	5737.56	885.33	5738.43	888.01	5738.59
890.13	5738.28	893.96	5737.36	895.94	5737.41	896.37	5737.2	898.35	5737.08
898.98	5736.46	901.24	5736.14	905.39	5736.1	915.13	5736.09	919.48	5736.04
928.27	5736.11	937.55	5736.49	939.73	5736.53	941.16	5736.68	941.84	5736.54
943.81	5736.87	946.46	5736.95	946.93	5736.84	950.07	5737.25	950.21	5737.39
954.84	5737.16	958.41	5737.12	961.77	5737.28	963.8	5737	970.58	5736.73
975.19	5736.64	978	5736.48	983.3	5736.77	983.48	5736.7	989.5	5736.88
989.56	5736.77	992.88	5736.52	993.41	5736.75	997.14	5736.92	999.25	5736.89
1001.8	5736.49	1006.28	5736.52	1009.52	5736.72	1015.32	5736.76	1041.11	5736.76
1045.71	5736.65	1051.96	5736.77	1053.5	5736.67	1056.3	5736.82	1058.47	5736.74
1072.39	5736.77	1075.8	5736.88	1082.33	5736.82	1088.85	5736.95	1094.89	5736.83
1096.47	5736.99	1100.91	5737.21	1102.97	5737.13	1108.01	5737.11	1108.57	5737.19
1112.33	5737.24	1115.49	5737.9	1117.55	5737.9	1122.42	5737.77	1125.08	5737.53
1128.88	5737.44	1129.73	5737.65	1132.25	5737.72	1135.09	5737.64	1140.93	5737.65
1149.14	5737.54	1154.34	5737.76	1158.09	5737.76	1158.29	5737.63	1160.28	5737.88
1165.57	5738.22	1172.43	5737.97	1177.58	5737.91	1180.26	5738.13	1181.68	5738.01
1182.15	5738.73	1186.26	5738.74	1186.45	5739.14	1188.29	5738.73	1192.53	5738.07
1195.9	5737.93	1197.03	5738.12	1200.02	5738.23	1200.84	5737.94	1205.5	5737.82
1215.18	5737.65	1216.51	5737.92	1222.44	5738.17	1225.84	5737.98	1227.95	5738.1
1231.77	5738.03	1237.85	5738.3	1245.8	5738.45	1247.45	5738.25	1249.99	5738.29
1251.83	5738.53	1255.63	5738.7	1257.86	5738.72	1261.89	5738.6	1265.81	5738.73
1271.59	5738	1276.61	5737.77	1279.66	5737.49	1282.63	5737.48	1284.39	5737.64
1287.76	5737.41	1288.26	5737.09	1289.82	5736.77	1292.1	5736.65	1292.27	5736.46
1295.12	5736.15	1296.44	5736.19	1300.06	5735.95	1301.37	5733.91	1302.37	5734.52
1306.52	5731.4	1306.78	5731.2	1307.25	5729.54	1311.39	5728.01	1314.1	5726.52
1315.72	5725.83	1318.86	5724.93	1321.75	5724.41	1323.44	5723.98	1325.7	5723.66
1326.97	5723.82	1328.27	5723.51	1329.31	5724.14	1330.2	5724.07	1332.39	5724.58
1337.67	5724.58	1339.84	5724.91	1340.87	5726.28	1341.96	5726.17	1343.94	5726.41
1349.77	5726.98	1352.37	5727.13	1356.28	5727.22	1359.97	5727.18	1362.98	5726.99
1365.19	5727.67	1368.05	5727.81	1368.8	5728.35	1372.04	5728.91	1375.51	5729.1
1383.7	5729.8	1393.12	5730.04	1405.65	5730.12	1407.33	5730.32	1413.75	5730.88
1415.14	5730.84	1416.68	5731.04	1424.67	5731.18	1440.56	5731.09	1447.76	5730.96
1447.78	5730.87	1452.43	5730.74	1459.51	5730.27	1466.8	5729.36	1467.84	5729.48
1472.1	5728.6	1472.5	5728.86	1475.72	5728.33	1475.95	5727.91	1483.52	5726.77
1483.59	5726.28	1486.55	5725.54	1488.66	5725.53	1491.12	5725.36	1492.93	5725.42
1496.54	5724.54	1498.23	5724.5	1498.82	5724.76	1503.78	5725.03	1506.29	5725.46
1508.85	5725.46	1511.25	5725.19	1511.59	5723.85	1512.83	5723.25	1514.86	5723.27
1515.2	5722.25	1517.81	5721.29	1518.26	5721.87	1521.13	5720.89	1524.99	5719.86
1526.34	5719.3	1527.16	5719.46	1531.51	5719.17	1535.21	5719.47	1538.19	5720.3
1540.71	5720.79	1541.87	5720.6	1542.94	5721.25	1546.04	5721.92	1546.66	5721.59
1553.72	5723.54	1554.4	5723.35	1555.23	5724	1556.57	5723.7	1559.35	5725.09
1560.66	5724.92	1561.91	5725.16	1564.77	5725.08	1566.15	5724.79	1569.16	5725.09

1570.1	5724.79	1571.24	5724.77	1573.71	5725.05	1576.36	5725.24	1576.75	5725.1
1579.25	5725.94	1579.73	5725.36	1581.41	5725.93	1581.65	5726.94	1585.26	5728.36
1585.76	5727.78	1589.14	5728.85	1592.44	5729.73	1595.89	5730.85	1598.29	5732.25
1599.64	5732.19	1600.68	5732.39	1605.5	5732.27	1608.66	5732.28	1610.49	5732.06
1612.04	5732.17	1613.96	5731.96	1620	5731.96	1622.42	5732.13	1631.74	5732.11
1633.43	5732.4	1635.12	5732.17	1635.91	5732.39	1639.28	5732.14	1642.94	5732.5
1643.77	5732.25	1652.68	5732.14	1660.02	5732.16	1660.63	5732.11	1668.94	5732.1
1671.84	5732.17	1676.36	5732.51	1683.26	5732.38	1684.32	5732.26	1686.55	5732.49
1692.15	5732.46	1694.26	5732.56	1696.49	5732.43	1699.32	5732.45	1701.97	5732.66
1708.61	5732.57	1710.88	5732.92	1710.89	5732.58	1713.3	5732.93	1716.49	5733.05
1717.97	5733.02	1722.96	5733.26	1723.89	5732.93	1729.46	5733.01	1733.54	5732.9
1737.91	5733.34	1746.4	5733.35	1749.72	5733.91	1750.44	5733.58	1750.68	5733.86
1752.85	5733.89	1753.33	5733.54	1755.98	5733.33	1765.87	5733.28	1766.33	5733.08
1771.9	5732.87	1772.26	5732.63	1775.76	5732.52	1778.51	5732.16	1782.51	5731.4
1783.68	5730.52	1784.95	5730.3	1786.23	5730.5	1787.52	5730.11	1794.61	5730.19
1795.47	5730.33	1800.76	5730.73	1802.04	5730.59	1805.63	5731.13	1809.27	5731.95
1812.94	5732.66	1814.92	5733.3	1816.05	5733.43	1817.7	5733.34	1820.49	5733.67
1821.8	5733.72	1824.93	5733.6	1827.83	5733.81	1831.48	5733.88	1833.18	5734.12
1837.48	5734.02	1837.61	5733.85	1844.53	5733.27	1845.19	5733.46	1846.88	5733.23
1848.87	5733.6	1850.14	5733.53	1851.83	5733.76	1856.92	5733.78	1857.59	5733.91
1862.89	5734.04	1867.38	5734.06	1869.15	5733.83	1873	5733.66	1882.87	5733.57
1885.52	5733.64	1889.13	5733.51	1892.71	5733.58	1895.36	5733.27	1897.08	5733.33
1898.76	5733.79	1899.31	5733.24	1901.32	5733.79	1903.52	5733.62	1904.75	5733.83
1906.91	5733.51	1908.61	5733.5	1910.54	5732.96	1910.81	5733.27	1913.19	5733.25
1916.26	5733.35	1917.86	5733.07	1921.4	5732.97	1923.78	5733	1928.3	5732.69
1928.86	5733.11	1929.98	5732.64	1930.66	5732.69	1933.92	5732.44	1938.92	5732.54
1939.47	5732.34	1942.84	5732.59	1947.91	5732.45	1954.83	5732.5	1958.92	5732.45
1960.61	5733.12	1961.85	5733.35	1962.83	5733.19	1963.57	5733.58	1963.72	5733.13

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 303.47 .045 1306.52 .032 1589.14 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1306.52 1589.14 97.01 97.01 97.01 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5735.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.21	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5733.90	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	4.15	2005.55
456.61				
E.G. Slope (ft/ft)	0.002934	Area (sq ft)	4.15	2005.55
456.61				
Q Total (cfs)	19150.00	Flow (cfs)	7.43	18131.54

1011.04					
Top Width (ft)	643.40	Top Width (ft)	3.32	282.62	
357.46					
Vel Total (ft/s)	7.76	Avg. Vel. (ft/s)	1.79	9.04	
2.21					
Max Chl Dpth (ft)	14.73	Hydr. Depth (ft)	1.25	7.10	
1.28					
Conv. Total (cfs)	353556.4	Conv. (cfs)	137.1	334753.1	
18666.2					
Length Wtd. (ft)	97.01	Wetted Per. (ft)	4.16	294.28	
362.68					
Min Ch El (ft)	5719.17	Shear (lb/sq ft)	0.18	1.25	
0.23					
Alpha	1.29	Stream Power (lb/ft s)	0.33	11.28	
0.51					
Frctn Loss (ft)	0.31	Cum Volume (acre-ft)	1.47	53.07	
8.67					
C & E Loss (ft)	0.02	Cum SA (acres)	0.45	8.00	
3.14					

Warning: Divided flow computed for this cross-section.
Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Animas River
REACH: CenterPoint RS: 1012

INPUT

Description:

Station	Elevation	Data	num=	490							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
343.23	5737.76	346.39	5737.16	348.08	5736.99	358.09	5737.56	359.92	5737.14		
361.61	5737.21	364.5	5736.89	364.69	5736.66	367.88	5736.14	370.24	5735		
373.21	5734.41	378.75	5734.03	380.44	5734.27	381.89	5735.47	383.98	5736.49		
386.19	5736.85	387.69	5736.67	390.22	5735.44	391.03	5735.34	393.38	5734.21		
395.87	5733.89	400.98	5733.68	406.29	5733.57	410.76	5733.76	426.02	5733.88		
431.62	5733.82	434.16	5734.44	435.53	5734.53	437.45	5734.24	441.29	5733.97		
444.64	5734.02	449.32	5733.89	452	5734.07	457	5734.06	467.44	5734.17		
475.29	5734	480.95	5734.13	486.46	5734.09	489.08	5734.24	494.33	5734.01		
505.79	5734.03	511	5733.92	516.81	5733.96	524.87	5733.92	534.33	5734.05		
545.46	5733.99	548.54	5734.1	554.28	5734.02	558.39	5734.08	563.95	5734.01		
571.93	5734.04	583.7	5734.02	588.15	5734.16	594.23	5734.18	596	5734.25		
608.2	5734.35	621.33	5734.34	624.94	5734.38	632.35	5734.76	651.25	5734.73		
653.89	5734.67	663.02	5734.7	666.03	5734.79	673.4	5734.83	676.18	5734.76		
681.99	5734.78	682.42	5734.89	687.18	5735.01	691.28	5734.85	697.17	5734.88		

706.78	5734.85	709.51	5734.76	718.33	5734.7	723.39	5734.95	731.6	5735
732.75	5735.19	735.71	5735.26	738.37	5735.15	739.99	5735.66	741.87	5735.16
741.99	5735.59	742.95	5735.13	745.54	5735.2	752.67	5735.25	762.23	5735.01
765.32	5735.3	770.4	5735.4	772.57	5735.34	780.19	5735.46	782.57	5735.44
786.68	5735.65	789.97	5735.48	791.99	5735.76	794.9	5735.59	795.16	5735.9
800.2	5736.66	802.22	5736.7	807.45	5736.59	807.57	5736.23	810.14	5735.92
811.32	5735.97	813.8	5737.11	815.67	5737.3	817.6	5736.93	819.35	5737.63
821.47	5737.81	823.71	5737.7	824.95	5736.82	827.51	5736.44	830.88	5736.39
833.54	5736.16	837.87	5736.57	839.01	5737.42	839.85	5737.62	842.71	5737.53
844.65	5736.97	846.58	5737.22	847.52	5736.93	851.31	5737.01	854.79	5736.92
856.25	5736.3	857.19	5736.32	862.53	5735.84	863.25	5735.92	866.14	5735.57
872.74	5735.45	883.99	5735.57	895.13	5735.53	901.16	5735.65	910.63	5735.55
913.91	5735.6	921.88	5735.61	929.84	5735.92	935.93	5735.99	939.03	5735.82
945.12	5735.88	947.56	5735.73	950.45	5736.25	952.07	5736.07	958.16	5735.8
967.68	5735.83	970.2	5735.8	975.54	5735.92	981.54	5735.78	985.93	5735.88
989.41	5735.73	990.67	5736.04	991.2	5735.75	992.21	5736.1	995.71	5736.18
1002.41	5736.18	1004.59	5736.28	1012.74	5736.18	1013.95	5736.28	1018.58	5735.93
1019.2	5736.26	1023.64	5736.68	1026.76	5736.61	1027.17	5736.28	1031.65	5736.16
1033.62	5736.43	1038.12	5736.53	1042.05	5736.18	1047.09	5736.22	1051.38	5736.54
1053.31	5736.39	1053.39	5736.55	1055.99	5736.26	1068.05	5736.28	1070.95	5736.38
1073.37	5736.28	1076.92	5736.79	1078.23	5736.78	1079.93	5736.34	1083.94	5736.5
1084.24	5736.69	1086.9	5736.24	1093.17	5736.27	1101.87	5736.18	1106.22	5736.39
1116.45	5736.61	1116.61	5736.53	1120.29	5736.74	1121.2	5736.93	1124.83	5736.82
1128.69	5736.45	1134.07	5736.36	1138.12	5736.54	1143.58	5736.49	1146.81	5736.93
1150.51	5737.14	1152.37	5737.15	1154.06	5736.61	1154.13	5735.24	1156.72	5735.07
1156.82	5735.44	1159.85	5735.63	1162.03	5735.52	1164.45	5735.74	1166.37	5735.11
1171.97	5734.88	1173.7	5734.88	1173.75	5735.09	1177.37	5735.34	1182.79	5735.18
1184.73	5735.23	1188.51	5736.35	1191.03	5736.75	1191.73	5736.66	1197.04	5736.78
1200.03	5737.64	1201.63	5737.7	1204.53	5737.38	1206.34	5737.39	1208.36	5737.63
1208.87	5737.31	1216.61	5736.36	1224.41	5736.38	1228.94	5736.33	1235.6	5736.54
1238.1	5736.57	1239	5736.38	1246.32	5736.38	1248.84	5736.03	1253.33	5735.84
1253.75	5735.98	1257.6	5736.2	1258.92	5736.15	1260.44	5737.28	1260.81	5736.6
1261.22	5737.42	1262.33	5737.32	1264.32	5737.72	1264.83	5737.17	1265.65	5737.61
1268	5735.86	1269.17	5735.45	1269.75	5735.87	1271.11	5734.83	1274.72	5733.62
1275.31	5734.04	1275.55	5733.32	1280.71	5732.03	1282.26	5730.64	1284.61	5729.67
1285.2	5729.81	1285.74	5729.94	1290.52	5728.13	1294.87	5726.81	1298.12	5725.72
1299.83	5725.74	1304.07	5724.67	1306.81	5724.56	1310.09	5724.58	1311.62	5724.18
1314.67	5724.19	1315.96	5724.55	1317.82	5724.55	1319.15	5724.96	1320.47	5725.92
1321.92	5726.53	1323.55	5726.67	1328.59	5727.42	1331.4	5727.75	1332.07	5727.56
1335.02	5727.94	1341.83	5728.12	1343.71	5728.12	1344.91	5728.57	1348.53	5728.7
1351.69	5728.69	1357.99	5729.27	1358.14	5729.38	1361.28	5729.47	1371.92	5729.59
1378.19	5729.49	1387.14	5729.25	1395.32	5728.85	1399.66	5728.86	1402.67	5729.04
1408.64	5729.7	1417.15	5729.77	1423.39	5729.62	1427.74	5729.6	1428.6	5729.35
1430.49	5729.35	1433.71	5729.77	1438.14	5729.91	1442.67	5729.91	1448.32	5729.79
1452.34	5729.59	1456.31	5729.21	1463.67	5727.88	1465.37	5727.94	1465.5	5727.6
1469.12	5727.02	1476.48	5726.18	1479.03	5725.45	1482.54	5725.57	1486.94	5725.21
1487.85	5725.56	1488.64	5724.72	1492.19	5724.34	1492.52	5723.83	1494.86	5723.78
1495.45	5723.35	1496.86	5723.18	1499.44	5723.12	1501.27	5722.84	1502.83	5722.86
1509.48	5722.69	1517.08	5722.69	1524.34	5722.85	1531.36	5723.07	1531.81	5722.99
1535.92	5723.22	1540.29	5723.71	1546.79	5723.82	1550.48	5723.62	1551.27	5723.73

1552.75	5723.52	1554.76	5723.52	1558.99	5723.99	1559.6	5723.77	1563.53	5724.83
1565.08	5724.57	1565.23	5725.22	1572.6	5725.22	1576.37	5725.62	1576.75	5725.31
1579.85	5725.81	1579.98	5726.27	1583.52	5726.57	1585.18	5727.04	1588.1	5727.86
1593.89	5729.65	1598.72	5731.01	1599.44	5731.69	1603.8	5732.09	1607.9	5732.77
1613.12	5732.56	1613.23	5732.71	1617.67	5732.45	1620.19	5732.58	1622.4	5732.91
1622.53	5732.62	1628.77	5732.76	1629.89	5732.58	1632.9	5732.62	1633.03	5732.89
1635.2	5732.62	1636.51	5733.31	1638.34	5733.3	1643.91	5732.78	1646.42	5732.78
1650.02	5733.04	1659.11	5733.03	1659.5	5733.14	1662.49	5733.11	1664.6	5732.91
1668.05	5733.11	1671.67	5733.09	1673.41	5733.26	1683.3	5733.35	1689.57	5733.5
1693.89	5733.53	1698.23	5733.48	1700.43	5733.84	1708.41	5733.69	1712.97	5733.94
1714.58	5733.79	1719.01	5733.89	1733.71	5734.03	1738.56	5734.02	1740.25	5734.27
1743.76	5734.52	1747.06	5734.5	1749.67	5734.05	1754.2	5734.05	1756.68	5734.27
1758.83	5734.1	1761.74	5734.1	1763.92	5734.32	1766.58	5734.33	1766.99	5734.1
1774.3	5734.03	1776.51	5734.16	1780.83	5734.01	1785.66	5734.23	1787.87	5734.14
1790.39	5734.26	1795.37	5734.37	1801.6	5734.34	1803.89	5734.58	1812.49	5734.66
1813.42	5734.42	1813.79	5734.73	1817.18	5734.71	1818.04	5734.6	1819.33	5735.15
1819.86	5734.72	1821.74	5735.34	1821.88	5735.15	1823.9	5735.07	1825.26	5735.31
1826.84	5734.33	1830.09	5734.23	1834.38	5734.45	1839.42	5734.17	1846.27	5734.2
1849.89	5734.4	1850.69	5734.1	1857.58	5734.28	1859.79	5734.25	1860.58	5734.53
1863.65	5734.54	1865.93	5734.39	1868.87	5734.39	1869.21	5734.59	1874.04	5734.78
1874.09	5734.55	1877.7	5734.53	1882.75	5734.65	1886.09	5734.21	1887.59	5734.48
1889.79	5733.9	1890.22	5734.48	1891.21	5734.37	1891.98	5733.89	1893.36	5734.31
1896.5	5734.31	1898.93	5734.46	1902.9	5734.43	1907.85	5734.65	1910.75	5734.39
1914.85	5734.59	1920.65	5734.45	1920.88	5734.68	1924.33	5734.69	1924.49	5734.5
1928.75	5734.46	1934.18	5734.64	1937.36	5734.63	1939.04	5734.78	1942.4	5734.25
1947.89	5734.26	1948.76	5734.43	1950.61	5734.26	1953.18	5734.53	1955.42	5734.29
1957.78	5734.33	1960.04	5734.23	1961.4	5734.55	1963.39	5734.56	1965.21	5734.35
1966.62	5734.47	1971.63	5734.11	1973.54	5734.32	1976.21	5734.33	1978.11	5734.13
1978.27	5734.3	1982.07	5734.6	1984.79	5734.4	1986.84	5734.55	1989.55	5734.04
1991.81	5734.28	1993.11	5734.18	1994.68	5734.61	1997.58	5734.38	1997.94	5734.64
1999.26	5734.31	2001.64	5734.36	2005.15	5733.45	2008.19	5733.69	2012.84	5733.77
2018.08	5733.74	2020.41	5733.64	2023.05	5734.05	2026.04	5733.89	2028.76	5733.88
2031.52	5734.02	2032.01	5733.88	2035.68	5734.2	2039.46	5733.92	2044.81	5733.79
2046.98	5733.94	2050.46	5733.72	2053.03	5733.67	2054.3	5733.99	2065.51	5733.93

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 343.23 .045 1285.2 .032 1585.18 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1285.2 1585.18 97.01 97.01 97.01 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5734.78	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.38	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5733.40	Reach Len. (ft)	97.01	97.01

97.01					
Crit W.S. (ft)		Flow Area (sq ft)	16.72	1988.93	
106.46					
E.G. Slope (ft/ft)	0.003432	Area (sq ft)	16.72	1988.93	
106.46					
Q Total (cfs)	19150.00	Flow (cfs)	43.73	18894.14	
212.13					
Top Width (ft)	409.82	Top Width (ft)	9.68	299.98	
100.16					
Vel Total (ft/s)	9.07	Avg. Vel. (ft/s)	2.62	9.50	
1.99					
Max Chl Dpth (ft)	10.71	Hydr. Depth (ft)	1.73	6.63	
1.06					
Conv. Total (cfs)	326908.6	Conv. (cfs)	746.5	322540.8	
3621.3					
Length Wtd. (ft)	97.01	Wetted Per. (ft)	10.63	304.75	
101.83					
Min Ch El (ft)	5722.69	Shear (lb/sq ft)	0.34	1.40	
0.22					
Alpha	1.08	Stream Power (lb/ft s)	0.88	13.28	
0.45					
Frctn Loss (ft)	0.50	Cum Volume (acre-ft)	1.45	48.62	
8.04					
C & E Loss (ft)	0.18	Cum SA (acres)	0.44	7.35	
2.63					

Warning: The velocity head has changed by more than 0.5 ft (0.15 m). This may indicate the need for additional cross sections.

Warning: The conveyance ratio (upstream conveyance divided by downstream conveyance) is less than 0.7 or greater than 1.4. This may indicate the need for additional cross sections.

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1011

INPUT

Description:

Station	Elevation	Data	num=	490					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
275.37	5741.13	278.91	5740.22	281.08	5739.52	282.67	5739.22	283.61	5738.85
286.9	5738.27	293.11	5737.46	294	5737.44	301.59	5736.45	306.58	5736.09
309.23	5735.78	313.61	5735.12	317.76	5734.71	323.5	5734.46	325.2	5734.14
327.13	5734.12	329.02	5734.32	332.69	5734.1	338.98	5734.09	341.77	5733.9
351.65	5733.76	353.23	5733.88	357.61	5733.8	360.27	5734	363.4	5733.83

369.05	5733.66	375.38	5733.65	380.58	5733.57	389.57	5733.59	391.15	5733.49
398.65	5733.37	408.63	5733.37	418.37	5733.3	427.24	5733.38	435.45	5733.55
443.2	5733.63	451.81	5734.23	457.71	5734.6	460.54	5734.64	463.01	5734.87
468.89	5735.02	474.16	5734.89	477.37	5734.32	478.91	5734.28	481.65	5734.84
487.59	5735.42	490.66	5735.48	492.06	5735.41	496.01	5735.47	501.73	5735.48
503.9	5735.58	508.5	5735.56	510.13	5735.45	514.54	5734.58	517.93	5734.47
522.66	5734.81	526.63	5734.76	529.57	5734.47	536.31	5734.37	539.69	5734.48
548	5734.42	549.91	5734.45	552.76	5734.35	559.04	5734.46	572.87	5734.02
576.19	5733.79	583.72	5733.72	586.37	5733.9	587.3	5734.44	588.3	5734.52
589.71	5735.37	593.33	5736.4	595.79	5736.44	596.31	5736.15	599.65	5735.45
600.01	5735.51	603.23	5734.97	609.53	5734.36	614.65	5734.41	616.74	5734.2
621.37	5734.03	625.31	5734.04	628.93	5734.32	632.53	5734.15	634.25	5734.22
636.76	5734.76	639.42	5735.06	640.54	5735.01	643.93	5734.12	649.28	5734.23
655.05	5734.08	661.2	5734.32	663.75	5734.37	674.72	5734.32	677.04	5734.36
681.89	5734.31	686.8	5734.56	694.28	5734.48	697.13	5734.58	698.61	5734.81
699.6	5735.46	703.42	5735.55	703.9	5735.31	708.95	5734.92	715.75	5734.93
720.28	5734.58	722.66	5735.08	724.7	5735.12	726.39	5734.7	730.4	5734.56
733.39	5734.8	736.53	5734.75	738.97	5735.26	739.76	5735.04	742.85	5734.86
744.49	5734.58	749.85	5734.56	754.66	5734.94	761.46	5734.88	769.87	5734.87
775	5734.81	777.06	5734.69	782.51	5734.75	785.57	5734.96	799.1	5735.3
804.3	5735.35	818.52	5735.37	824.33	5735.44	825.24	5735.02	830.14	5735.13
833.43	5734.94	835.94	5735.02	838.46	5734.9	841.5	5734.91	843.56	5735.06
848.01	5734.95	856.1	5735.23	859.64	5735.14	861.09	5734.76	861.89	5734.91
868.12	5734.86	871.43	5735.02	874.44	5734.89	882.5	5734.87	885.29	5734.98
888.63	5734.77	896.18	5734.95	898.64	5734.87	903.7	5734.94	909.01	5734.91
918.2	5734.94	923.73	5735.01	926.16	5734.96	931.71	5735.02	939.68	5735.01
945.01	5734.95	948.27	5735.02	964.25	5735.21	965.37	5735.17	973.55	5735.13
976.38	5735.22	987.16	5735.38	990.02	5735.23	992.66	5735.25	999.8	5735.48
1003.53	5735.52	1007.56	5735.41	1011.27	5735.47	1015.91	5735.4	1016.66	5735.54
1020.22	5735.59	1026.99	5735.47	1030.62	5735.61	1035.42	5735.67	1039.15	5735.84
1040.37	5736.01	1042.71	5736.07	1043.16	5735.94	1049.19	5735.7	1052.86	5735.72
1052.93	5735.64	1056.99	5735.57	1058.08	5735.73	1061.59	5735.75	1063.8	5735.49
1069.62	5735.57	1082.63	5735.6	1086.71	5735.67	1098	5735.63	1099.79	5735.67
1109	5735.7	1111.46	5735.65	1126.84	5735.7	1139.53	5735.66	1146.06	5735.86
1150.35	5735.91	1159.31	5735.86	1161.14	5735.76	1167.1	5735.67	1169.47	5735.74
1176.48	5735.77	1178.28	5735.66	1183.59	5735.54	1193.45	5735.55	1197.77	5735.71
1205.03	5735.83	1208.07	5735.63	1211.78	5735.54	1213.47	5735.66	1216.63	5736.46
1218.33	5736.43	1222.19	5735.71	1224.85	5735.54	1225.13	5735.76	1227.51	5735.81
1231.14	5735.01	1236.42	5733.61	1240.6	5732.43	1241.68	5732.56	1242.26	5732.06
1243.94	5731.63	1246.63	5731.35	1251.22	5729.37	1251.22	5729.93	1252.19	5729.05
1258.11	5727.05	1261.04	5726.09	1262.18	5726.26	1264.09	5725.72	1264.99	5725.24
1266.93	5725.14	1269.58	5724.61	1275.39	5724.54	1275.62	5724.64	1283.86	5724.53
1286.75	5724.77	1289.45	5724.72	1292.07	5724.95	1295.23	5724.51	1299.04	5724.6
1299.32	5724.37	1303.93	5724.89	1307.55	5725.76	1310.59	5727.13	1316.94	5728.93
1319.1	5729.04	1327.76	5731.22	1336	5731.72	1338.03	5731.74	1342.28	5732.05
1346.53	5732.23	1352.18	5732.38	1357.86	5732.44	1365.36	5732.42	1370.19	5732.3
1372.95	5732.08	1379.15	5731.84	1383.05	5731.79	1385.78	5731.96	1388.58	5731.94
1391.67	5731.61	1394.38	5731.89	1397.42	5731.9	1398.75	5732.04	1404.06	5732.13
1408.69	5731.97	1410.84	5731.97	1415.44	5732.15	1416.58	5732.06	1419.84	5732.1
1424.22	5731.76	1427.31	5731.68	1429.7	5731.29	1432.13	5731.25	1433.68	5730.87

1436.04	5730.82	1436.95	5730.44	1440.52	5729.89	1442.04	5729.97	1443.73	5729.33
1445.43	5729.38	1445.88	5728.91	1450.78	5727.89	1452.92	5727.86	1458.66	5726.17
1459.41	5726.02	1461.86	5725.92	1466.21	5724.72	1470.28	5723.87	1470.41	5724.28
1471.21	5723.65	1473.9	5722.94	1474.47	5723.34	1478.32	5722.23	1481.47	5722.2
1483.8	5721.81	1484.2	5721.98	1486.64	5721.48	1488.5	5721.25	1489.09	5721.43
1493.09	5720.66	1502.07	5719.51	1504.9	5719.42	1507.08	5718.99	1510.85	5718.75
1510.98	5718.85	1514.09	5718.72	1517.13	5718.91	1517.51	5718.78	1519.78	5719.22
1520.41	5719.03	1520.84	5719.39	1524.98	5719.76	1525.96	5720.43	1528.76	5720.6
1530.65	5721.66	1533.23	5721.8	1534.28	5722.8	1536.5	5722.84	1536.93	5723.78
1537.93	5724.2	1541.52	5725.17	1542.17	5725.06	1544.18	5725.38	1547.01	5725.49
1547.8	5725.26	1549.63	5725.29	1552.14	5724.89	1554.74	5724.95	1556.7	5725.35
1561.28	5725.3	1561.33	5725.49	1564.42	5725.6	1565.92	5726.06	1569.98	5727.87
1570.26	5728.53	1571.7	5729.07	1572.74	5728.73	1572.88	5728.68	1578.47	5732.07
1578.93	5731.28	1581.13	5733.35	1583.03	5733.3	1586.18	5733.9	1592.7	5733.9
1598.27	5734.13	1598.9	5734.05	1600.93	5734.27	1604.55	5734.41	1608.44	5734.47
1624.4	5734.53	1625.09	5734.76	1628.95	5734.85	1637.88	5735.23	1637.94	5735.03
1640.54	5735.32	1643.86	5735.44	1644.15	5735.33	1650.51	5735.49	1652.69	5735.65
1654.29	5735.32	1658.32	5735.28	1662.63	5735.44	1666.4	5735.27	1666.94	5735.48
1669.24	5735.27	1673.49	5735.48	1676.39	5735.49	1681.6	5735.54	1685.71	5735.45
1694.3	5735.45	1696.58	5735.54	1708.17	5735.54	1712.94	5735.58	1718.36	5735.53
1722.09	5735.74	1725.32	5735.46	1731.81	5735.43	1736.19	5735.58	1742.47	5735.69
1745.83	5735.7	1747.77	5735.84	1750.11	5735.68	1752.37	5735.66	1753.34	5735.52
1754.17	5735.73	1755.51	5735.53	1761.37	5735.59	1766.81	5735.56	1773.14	5735.41
1775.8	5735.53	1777.75	5735.49	1778.98	5735.83	1782.08	5736.05	1792.7	5736.03
1793.9	5736.13	1796.96	5736.03	1797.75	5735.76	1802.6	5735.8	1802.85	5736.21
1803.82	5736.33	1807.27	5736.36	1810.24	5736.03	1813.79	5736.28	1814.85	5736.04
1817.19	5736.04	1820.34	5736.24	1822.36	5735.9	1826.14	5736.01	1829.9	5735.6
1830.49	5735.89	1832.38	5735.6	1833.4	5736.08	1838.21	5736.02	1841.57	5736.16
1845.85	5736.09	1850.71	5735.89	1854.3	5736	1859.61	5736.49	1864.66	5736.23
1867.72	5736.16	1869.47	5736.5	1869.96	5736.15	1872.8	5736.56	1874.74	5736.31
1877.4	5736.38	1879.33	5736.23	1884.48	5736.48	1887.62	5736.47	1896.74	5736.18
1906.17	5736.37	1908.33	5736.21	1912.13	5736.54	1913.7	5736.31	1914.88	5736.36
1918.29	5736.23	1925.76	5736.21	1930.09	5736.26	1936.19	5736.46	1938.59	5736.46
1940.75	5736.02	1941.09	5736.41	1941.72	5736.04	1943.67	5736.01	1947.05	5736.24
1950.65	5735.99	1952.14	5736.1	1953.15	5735.95	1956.62	5735.79	1959.75	5735.81
1961	5736.04	1964.18	5735.74	1971.49	5735.66	1975.05	5735.68	1979.16	5735.53
1983.98	5735.62	1998.47	5735.56	2001.13	5735.73	2001.24	5735.56	2003.6	5735.68
2004.99	5736.3	2011.54	5736.18	2012	5735.82	2013.09	5735.78	2021.56	5735.85
2021.68	5736.08	2023.35	5735.87	2024.48	5736.08	2026.73	5735.84	2028.46	5735.94
2043.78	5736.23	2051.31	5736.24	2053.31	5736.09	2054.7	5736.29	2056.9	5736.02
2058.36	5736.19	2059.49	5736.03	2061.29	5736.19	2063.18	5736.08	2065.13	5736.36
2068	5736.36	2071.41	5736.18	2077.29	5736.22	2081.07	5736.39	2082.48	5736.17
2098.4	5736.59	2112.17	5736.64	2115.6	5736.54	2124.03	5736.57	2126.8	5736.52

Manning's n Values		num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
275.37	.045	1258.11	.032	1572.74	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.	
	1258.11	1572.74		97.01	97.01	97.01	.1	.3

CROSS SECTION OUTPUT Profile #100 yr

		Element	Left OB	Channel
E.G. Elev (ft)	5734.11			
Right OB				
Vel Head (ft)	3.17	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5730.94	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)	5730.94	Flow Area (sq ft)	21.33	1329.15
4.51				
E.G. Slope (ft/ft)	0.008388	Area (sq ft)	21.33	1329.15
4.51				
Q Total (cfs)	19150.00	Flow (cfs)	94.26	19042.10
13.65				
Top Width (ft)	222.22	Top Width (ft)	10.52	207.85
3.86				
Vel Total (ft/s)	14.13	Avg. Vel. (ft/s)	4.42	14.33
3.03				
Max Chl Dpth (ft)	12.22	Hydr. Depth (ft)	2.03	6.39
1.17				
Conv. Total (cfs)	209090.1	Conv. (cfs)	1029.2	207912.0
149.0				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	12.07	214.97
4.50				
Min Ch El (ft)	5718.72	Shear (lb/sq ft)	0.93	3.24
0.52				
Alpha	1.02	Stream Power (lb/ft s)	4.09	46.39
1.59				
Frctn Loss (ft)	0.34	Cum Volume (acre-ft)	1.41	44.93
7.92				
C & E Loss (ft)	0.79	Cum SA (acres)	0.41	6.79
2.52				

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 velocity head has changed by more than 0.5 ft (0.15 m). This may indicate the need for additional cross sections.

Warning: The conveyance ratio (upstream conveyance divided by downstream conveyance) is less than 0.7 or greater than 1.4. This may indicate the need for additional cross sections.

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: Animas River
 REACH: CenterPoint RS: 1010

INPUT

Description:

Station Elevation Data		num= 474							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
285.4	5737.93	285.84	5737.68	286.48	5737.31	287.43	5736.97	291.05	5735.32
295.95	5734.53	296.78	5734.44	302.13	5733.95	303.14	5733.5	303.66	5733.32
303.84	5733.28	303.88	5733.27	305.18	5733.02	306.73	5733.49	307.57	5733.62
308.41	5733.68	308.67	5733.7	310.42	5733.63	312	5733.62	314.16	5733.61
318.13	5733.57	319.41	5733.57	319.69	5733.58	323.91	5733.58	325.36	5733.59
326.94	5733.49	329.4	5733.67	332.6	5733.65	334.19	5733.63	335.64	5733.47
338.08	5733.44	338.59	5733.45	339.79	5733.35	342.88	5733.23	345.05	5733.21
348.29	5733.27	348.65	5733.28	349.1	5733.28	349.36	5733.27	355.06	5733.22
357.12	5733.25	357.4	5733.24	357.46	5733.26	357.51	5733.25	357.84	5733.23
360.35	5733.13	360.38	5733.13	362.67	5733.09	363.1	5733.05	365.38	5733.03
368.1	5733.13	372.32	5733.03	372.84	5733.03	376.88	5732.99	377.15	5732.96
377.59	5732.95	380.03	5732.89	381.68	5732.85	385.29	5732.86	388.89	5732.85
391.03	5732.87	405.73	5732.82	411.89	5732.64	413.08	5732.63	413.8	5732.64
421.94	5732.62	424.81	5732.59	424.92	5732.61	425	5732.6	425.53	5732.59
426.17	5732.58	426.75	5732.57	429.13	5732.51	430.27	5732.5	430.39	5732.5
432.54	5732.51	434.39	5732.57	434.66	5732.59	435.1	5732.61	437.08	5732.66
439.71	5732.66	439.88	5732.7	439.93	5732.71	442.59	5732.82	444.32	5732.81
444.76	5732.82	445.18	5732.83	445.95	5732.81	452.19	5732.69	455.71	5732.78
456.91	5732.78	457.27	5732.78	459.62	5732.81	460.51	5732.81	462.18	5732.79
463.6	5732.8	464.51	5732.8	465.71	5732.79	466.98	5732.79	469.34	5732.84
469.37	5732.84	471.85	5732.89	474.01	5732.82	474.64	5732.82	478.23	5732.84
481.05	5732.9	489.97	5732.94	490.31	5732.93	490.69	5732.96	494.88	5733.13
496.72	5733.08	496.81	5733.09	497	5733.09	498.83	5733.16	500.69	5733.17
501.83	5733.06	502.42	5733.03	502.87	5733.03	503.14	5733.02	507.12	5732.98
508.41	5733.04	509.61	5733.05	511.44	5733.06	512.36	5733.04	512.63	5733.04
514.16	5733.02	514.74	5733.03	514.88	5733.03	516.75	5733.04	517.19	5733.04
520.55	5733.04	521.58	5733.09	523.74	5733.14	525.12	5733.16	528.47	5733.16
536.07	5733.29	536.51	5733.31	537.39	5733.35	537.98	5733.35	540.61	5733.27
541.77	5733.27	543.14	5733.26	551.08	5733.22	560.97	5733.35	568.93	5733.4
572.79	5733.49	574.48	5733.41	582.13	5733.4	588.19	5733.3	591.86	5733.31
600.55	5733.46	603.68	5733.57	609.23	5733.64	612.12	5733.54	620.81	5733.65
625.83	5733.84	629.98	5733.64	632.87	5733.97	635.04	5734.03	637.45	5734.59
639.87	5734.51	641.55	5734.66	645.59	5734.2	647.1	5734.39	653.86	5734.72
659.4	5734.7	670.26	5735.01	676.78	5735.4	682.1	5735.9	684.73	5736.05

688.85	5735.92	690.04	5736.02	692.94	5735.82	696.45	5736.04	698.96	5736.5
701.52	5736.68	705.75	5736.61	709.82	5736.01	712.52	5735.85	715.05	5735.98
719.47	5736.91	722.66	5736.97	731.77	5736.33	733.66	5736.35	738.74	5736.59
744.65	5736.72	760.24	5736.89	766.52	5736.84	782.28	5736.24	787.78	5736.09
796.66	5735.91	805.69	5735.83	809	5735.92	810.93	5735.66	815.02	5735.7
816.71	5735.38	819.52	5735.32	824.67	5734.91	827.81	5734.83	829.98	5734.66
833.84	5734.58	835.94	5734.73	838.42	5734.73	841.64	5734.57	844.7	5734.58
856.03	5734.46	858.41	5734.36	864.75	5734.46	867.71	5734.42	875.33	5734.81
878.22	5734.59	881.6	5734.58	885.04	5734.42	891.73	5734.58	894.34	5734.84
899.48	5734.73	902.58	5734.5	905.65	5734.54	909.02	5734.98	910.71	5735.03
911.99	5735.4	914.22	5735.54	915.6	5735.28	921.89	5734.63	924.9	5734.63
928.63	5734.46	934.18	5734.38	938.04	5734.49	941.6	5734.69	945.27	5734.69
948.86	5734.83	954.2	5734.78	957.1	5734.65	964.07	5734.75	966.75	5735.04
969.88	5734.84	974.68	5734.76	977.84	5734.81	983.57	5734.75	994.14	5734.85
997.15	5735.18	1000.02	5735.05	1002.17	5735.59	1003.86	5735.55	1007.52	5735.15
1011.9	5735.18	1020.06	5735.08	1024.14	5734.95	1026.7	5735.03	1031.17	5735.43
1035.52	5735.64	1036.72	5735.54	1040.67	5735.58	1042.27	5735.71	1045.41	5736.32
1050.02	5736.37	1051.7	5735.7	1054.33	5735.73	1060.85	5735.32	1064.46	5735.62
1067.84	5735.38	1072.67	5735.25	1075.49	5735.28	1077.98	5735.14	1084.29	5735.06
1086.42	5735.19	1097.34	5735.17	1100.42	5735.2	1106.45	5735.1	1113.5	5735.12
1119.98	5735.08	1125.74	5735.38	1130.24	5735.39	1140.23	5735.18	1142.88	5735.28
1145.97	5735.07	1154.5	5735	1161.69	5735.21	1163.73	5735.12	1167.72	5735.29
1171.59	5735.33	1174.74	5735.15	1176.41	5734.93	1178.1	5735.03	1180.05	5734.68
1183.61	5733.56	1187.84	5732.49	1191.13	5731.82	1207.3	5728.8	1213.33	5727.84
1224.62	5726.28	1229.71	5725.57	1238.16	5724.17	1243.73	5724.53	1248.07	5723.84
1249.58	5723.43	1252.19	5723.29	1256.05	5723.36	1259.18	5723.7	1269.54	5725.63
1274.53	5726.5	1280.64	5727.49	1285.23	5728.14	1291.27	5728.84	1296.33	5729.27
1300.76	5729.53	1306.68	5729.72	1313.86	5729.7	1328.9	5729.32	1333.13	5729.27
1344.93	5729.32	1348.67	5729.09	1354.22	5729.16	1358.33	5728.94	1362.19	5728.92
1373.49	5729.52	1378.99	5729.85	1387.27	5729.84	1389.55	5729.78	1394.75	5729.27
1400.13	5728.91	1412.58	5728.23	1417.67	5727.9	1423.46	5727.27	1426.93	5726.77
1429.18	5726.34	1431.18	5725.79	1436.25	5725.58	1439.38	5725.52	1441.08	5725.33
1444.21	5725.65	1447.58	5725.58	1449.51	5725.19	1454.83	5724.88	1456.27	5724.63
1460.18	5724.76	1464	5724.7	1466.52	5724.49	1471.23	5724.59	1476.3	5724.43
1479.32	5724.24	1482.34	5724.3	1486.68	5724.21	1487.89	5724.32	1490.06	5724.19
1491.99	5724.33	1500.03	5724.22	1502.05	5724.19	1503.74	5724	1507.19	5724.17
1508.62	5723.95	1510.32	5724.25	1513.47	5724.13	1519.73	5724.36	1522.43	5724.21
1526.24	5724.41	1528.94	5724.41	1532.37	5724.64	1534.61	5724.68	1537.49	5724.89
1540.47	5724.94	1544.33	5725.71	1546.75	5725.81	1552.04	5725.82	1557.8	5725.92
1568.42	5725.9	1570.72	5725.89	1574.96	5725.94	1578.82	5726.22	1588.96	5727.51
1595.23	5727.49	1600.77	5727.58	1618.15	5727.63	1622.74	5727.61	1638.9	5727.64
1643.96	5727.57	1652.59	5726.7	1663.51	5726.72	1665.83	5726.8	1669.24	5726.7
1672.43	5726.83	1675.84	5726.76	1682.32	5726.8	1691.9	5726.94	1697.1	5726.91
1702.05	5726.99	1727.67	5727.1	1732.75	5727.21	1737.58	5727.17	1744.29	5727.32
1753.72	5727.3	1758.06	5727.4	1763.13	5727.35	1770.19	5727.48	1776.48	5727.5
1779.02	5727.42	1784.36	5727.48	1786.05	5727.58	1797.87	5727.46	1799.55	5727.5
1810.9	5727.44	1815.96	5727.54	1818.98	5727.5	1822.72	5727.61	1825.1	5727.47
1827.78	5727.9	1828.91	5727.93	1835.51	5728.77	1838.63	5729.51	1842.02	5730.15
1844.2	5730.4	1848.3	5730.65	1857.19	5730.95	1860	5731.18	1864.95	5731.88
1871.94	5733.27	1875.81	5733.76	1877.97	5734.15	1880.39	5734.31	1884.25	5734.17

1891.24	5734.26	1897.04	5734.51	1901.66	5734.57	1907.74	5734.79	1913.92	5735.19
1925.27	5735.58	1933.02	5736.01	1938.78	5736.56	1945.22	5737.51	1950.44	5737.82
1953.02	5737.85	1962.25	5737.67	1964.5	5737.75	1966.18	5737.97	1972.72	5737.58
1973.99	5737.79	1977.41	5737.67	1981.49	5737.87	1984.87	5737.93	1986.4	5737.79
1995.14	5737.77	1997.68	5737.66	1999.32	5737.9	2009.52	5738.02	2012.8	5737.71
2014.16	5737.78	2016.47	5738.36	2017.97	5738.35	2023.22	5737.94	2032.47	5737.48
2042.27	5737.72	2045.03	5737.54	2051.69	5737.64	2055.18	5737.56	2061.59	5737.52
2067.39	5737.73	2069.55	5738.02	2071.7	5737.95	2072.71	5737.75	2077.98	5737.49
2082.35	5737.66	2083.96	5737.58	2089.6	5737.7	2091.15	5737.61	2096.83	5737.72
2107.45	5737.67	2113.14	5737.55	2116.94	5737.61	2123.7	5738.02	2125.05	5737.89
2125.77	5737.53	2128.35	5739.17	2131.26	5740.6	2133.98	5741.77		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
285.4	.045	1224.62	.032	1568.42	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.	
	1224.62	1568.42		97.01	97.01	97.01	.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5732.96	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.52	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5732.43	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	120.63	1980.33
1440.43				
E.G. Slope (ft/ft)	0.001904	Area (sq ft)	120.63	1980.33
1440.43				
Q Total (cfs)	19150.00	Flow (cfs)	382.09	12859.12
5908.80				
Top Width (ft)	679.59	Top Width (ft)	36.49	343.80
299.30				
Vel Total (ft/s)	5.41	Avg. Vel. (ft/s)	3.17	6.49
4.10				
Max Chl Dpth (ft)	9.14	Hydr. Depth (ft)	3.31	5.76
4.81				
Conv. Total (cfs)	438883.9	Conv. (cfs)	8756.7	294708.2
135419.1				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	37.01	345.16
299.84				
Min Ch El (ft)	5723.29	Shear (lb/sq ft)	0.39	0.68
0.57				
Alpha	1.15	Stream Power (lb/ft s)	1.23	4.43
2.34				
Frctn Loss (ft)	0.20	Cum Volume (acre-ft)	1.25	41.24
6.31				

C & E Loss (ft) 0.04 Cum SA (acres) 0.36 6.17
 2.18

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1009

INPUT

Description:

Station Elevation		Data		num=		490					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
274.21	5744.67	276.06	5743.47	277	5743.11	279.16	5741.59	282.61	5739.02		
285.28	5736.81	286.13	5736.78	286.67	5736.56	289.55	5735.68	293.08	5734.81		
297.16	5734.4	298.87	5734.14	301.51	5733.94	302.67	5733.65	303.63	5733		
304.15	5732.97	305.74	5733.41	307.46	5733.7	310.34	5733.47	313.94	5733.4		
319.46	5733.53	323.13	5733.7	325.45	5733.7	327.01	5733.6	333.13	5733.57		
336.98	5733.46	338.65	5733.28	345.27	5733.25	347.62	5733.27	352.11	5733.22		
353.29	5733.32	359.82	5733.15	363.94	5733.19	370.79	5733.1	378.88	5732.84		
393.38	5732.84	401	5732.76	405.57	5732.82	411.94	5732.61	416.25	5732.63		
422.72	5732.56	425.4	5732.48	433.15	5732.48	437.79	5732.56	440.35	5732.68		
445	5732.7	447.03	5732.6	451.19	5732.68	456.1	5732.73	461.24	5732.72		
463.63	5732.83	473.85	5732.64	476.53	5732.76	480.89	5732.85	490.99	5732.9		
494.82	5733.05	498.16	5733.08	501.71	5732.96	505.94	5732.99	510.15	5733.16		
515.17	5733.02	522.61	5733.11	525.01	5733.18	529.09	5733.11	538.56	5733.3		
540.32	5733.22	545.86	5733.21	548.36	5733.1	551.64	5733.1	555.42	5733.24		
562.62	5733.26	563.64	5733.33	567.38	5733.41	583.88	5733.25	588.42	5733.38		
593.92	5733.34	597.63	5733.44	615.35	5733.43	620.01	5733.58	622.6	5733.59		
624.53	5733.26	625.99	5733.35	627.86	5733.76	629.53	5733.76	629.63	5733.88		
631.44	5734.1	633.35	5734.17	635.97	5733.99	640.28	5734.03	641.58	5733.96		
645.67	5733.96	648.89	5733.89	652.07	5734	656.55	5734.03	659.18	5733.96		
661.09	5734.03	666.59	5734.03	671.65	5734.19	674.55	5734.21	679.39	5734.38		
687.14	5734.38	690.03	5734.34	696.95	5734.37	700.06	5734.29	706.26	5734.36		
711.29	5734.37	721.1	5734.53	724.04	5734.54	726.33	5734.6	729.8	5734.62		
737.11	5734.94	739.21	5735.18	741.54	5735.24	742.6	5735.4	745.42	5735.68		
749.78	5735.92	750.97	5736.07	753.12	5736	754.25	5736.06	757.6	5736.08		
761.01	5736.05	762.19	5735.89	763.19	5736	766.51	5736.04	768.61	5736.36		
770.21	5736.44	776.86	5736.47	777.2	5736.41	780.37	5736.34	780.86	5736.14		
784.21	5735.88	786.34	5735.97	788.67	5735.62	791.17	5735.77	797.94	5736.55		
802.86	5736.54	809.29	5736.59	815.27	5736.27	819.54	5736.11	822.05	5736.07		
841.8	5736.03	848.26	5735.97	851.9	5735.88	861.06	5735.73	875.76	5735.58		
889.62	5735.35	903.23	5734.99	911.71	5734.84	915.19	5734.85	924.27	5735.07		
925.98	5734.87	928.57	5734.91	931.64	5734.71	933.11	5734.69	936.17	5735.02		
937.9	5735.03	939.8	5734.87	941	5735.02	943.41	5734.9	944.92	5735.24		
947.85	5735.27	949.35	5734.87	950.77	5734.75	951.79	5734.94	953.05	5734.94		
954.57	5734.69	958.06	5734.57	964.07	5734.6	969.69	5734.8	983.54	5734.86		
988.32	5735.34	991.59	5735.19	997.62	5735.5	1002.19	5735.57	1012.96	5735.67		

1018.92 5735.66 1025.22 5735.56 1041.79 5735.19 1046.65 5735.15 1051.97 5735.14
1054.45 5735.06 1054.46 5735.14 1057.24 5734.92 1063.18 5734.88 1066.98 5734.93
1070.53 5735.08 1073.85 5734.98 1076.95 5735.06 1079.65 5734.75 1080.96 5734.76
1084.58 5734.57 1088.97 5734.54 1090.89 5734.7 1092.12 5735.63 1093.28 5735.48
1095.61 5737.11 1095.66 5736.65 1097.07 5737.21 1098.77 5737.16 1100.05 5736.69
1101.59 5735.99 1103.56 5735.91 1106.43 5735.02 1110 5735.07 1110.7 5734.94
1117.51 5734.74 1120.76 5735.01 1121.2 5734.77 1125.52 5734.8 1126.5 5734.76
1128.65 5735.01 1134.76 5734.99 1140.84 5735.13 1142.96 5735.09 1145.31 5734.46
1148.46 5734.36 1152.08 5734.44 1154.39 5734.4 1155.42 5734.29 1156.06 5734.03
1156.62 5734.39 1160.31 5732.29 1160.59 5732.18 1163.79 5731.52 1167.76 5729.42
1177.3 5725.82 1178.62 5725.91 1182.88 5724.12 1184.06 5723.77 1185.97 5723.12
1187.23 5723.12 1191.05 5723.34 1191.76 5723.52 1196.28 5723.65 1201.35 5723.69
1202.51 5723.58 1207.34 5723.57 1211.39 5723.39 1211.64 5723.22 1214.78 5723.15
1224.3 5723.16 1226.49 5723.41 1229.59 5723.61 1232.69 5723.59 1235.47 5723.82
1235.98 5723.66 1237.65 5723.88 1238.9 5724.47 1241.26 5724.6 1241.77 5724.81
1242.72 5724.89 1244.1 5724.85 1244.17 5725.12 1246.06 5725.33 1247.45 5725.31
1253.6 5725.8 1262.03 5725.81 1268.73 5725.92 1271.2 5726.05 1274.71 5726.01
1277.69 5726.03 1288.57 5726.6 1294.29 5726.76 1295.49 5726.72 1296.87 5726.9
1300.99 5727.06 1302.44 5727.21 1313.87 5727.48 1318.69 5727.46 1320.37 5727.33
1322.51 5727.38 1326.36 5727.36 1330.65 5727.4 1336.86 5727.14 1339.97 5727.14
1342.27 5726.97 1346.8 5726.81 1348.82 5726.81 1350.01 5726.72 1356.27 5726.6
1359.81 5726.57 1366.39 5726.29 1373.2 5726.17 1378.91 5726.13 1384.3 5726.05
1385.97 5725.99 1398.15 5725.95 1400.68 5725.88 1403.88 5725.85 1409.53 5725.85
1412.16 5725.74 1421.78 5725.73 1430.53 5725.67 1437.03 5725.65 1441.33 5725.8
1446.1 5725.79 1449.23 5725.61 1459.02 5725.56 1459.56 5725.41 1462.6 5725.36
1463.81 5725.47 1463.92 5725.26 1466.34 5725.22 1470.98 5725.22 1473.6 5725.06
1476.24 5725.2 1478.62 5724.93 1480.54 5724.95 1482.18 5724.7 1482.58 5724.75
1489.79 5724.55 1492.02 5724.33 1494.65 5724.35 1497.75 5724.23 1501.76 5724.17
1505.07 5724.18 1507.55 5724.3 1512.57 5724.24 1514.09 5724.35 1516.88 5724.37
1517.76 5724.19 1523.73 5724.26 1525.87 5724.32 1529.22 5724.33 1532.15 5724.51
1539.24 5724.65 1540.18 5724.72 1540.86 5724.61 1541.59 5724.74 1545.91 5724.8
1546.88 5725.33 1547.65 5725.44 1548.18 5725.29 1555.14 5725.93 1555.98 5725.93
1563.97 5725.93 1565.03 5726.51 1565.65 5726.11 1566.59 5726.94 1567.26 5727.24
1568.39 5726.84 1569.56 5727.96 1569.64 5727.38 1572.34 5728.07 1576.4 5728.36
1578.4 5728.72 1587.02 5729.53 1590.1 5729.62 1592 5729.9 1598.42 5730.34
1600.51 5730.34 1603.94 5730.5 1608.32 5730.64 1613.68 5730.66 1621.1 5730.77
1626.38 5730.78 1627.32 5730.74 1628.05 5730.92 1631.16 5731.19 1634.87 5731.44
1639.03 5731.57 1641.66 5732.29 1643.33 5732.17 1644.34 5733.04 1646.68 5733.09
1649.28 5734.23 1651.81 5734.77 1652.18 5734.4 1652.95 5734.85 1654.33 5734.83
1655.3 5734.93 1662.22 5734.96 1665.45 5734.78 1668.88 5734.97 1673.01 5734.93
1675.85 5735.08 1678.06 5735.04 1680.15 5735.27 1685.11 5735.18 1688.27 5735.25
1689.65 5735.63 1692.57 5735.76 1694.67 5735.94 1698.79 5736.01 1700.39 5735.84
1702.62 5735.84 1704.93 5736.07 1708.61 5736.12 1712.42 5735.99 1715.69 5736
1718.9 5735.73 1722.89 5736.03 1724.58 5735.98 1728.2 5736 1729.56 5736.34
1730.32 5736.17 1733.34 5736.79 1733.45 5736.58 1734.98 5736.78 1736.31 5736.82
1737.88 5736.5 1739.03 5736.41 1741.58 5736.38 1746.84 5736.19 1748.38 5736.24
1753.52 5736.26 1754.68 5736.32 1758.76 5736.26 1760.64 5736.43 1763.81 5736.49
1771.23 5736.27 1784.47 5736.18 1787.53 5736.28 1790.4 5736.3 1794.85 5736.28
1796.56 5736.32 1798.84 5736.16 1802.32 5736.11 1809.67 5736.13 1818 5736.03
1819.27 5736.17 1821.9 5736.19 1838.63 5736.23 1842.67 5736.33 1850.81 5736.38

1853.66	5736.33	1854.7	5736.24	1856.15	5736.42	1858.23	5736.45	1860.37	5736.4
1862.13	5736.56	1865.62	5736.62	1869.84	5736.62	1870.17	5736.73	1873.83	5736.71
1883.74	5736.85	1895.52	5736.93	1904.36	5736.88	1904.99	5736.9	1913.95	5736.88
1915.95	5736.97	1921.03	5736.99	1922.05	5736.95	1922.87	5737.06	1929.43	5737.01
1934	5737.05	1935.44	5736.98	1942.14	5737.11	1949.88	5737.13	1952.2	5737.1
1957.95	5737.12	1962.54	5737.06	1967.71	5737.28	1973.09	5737.25	1978.14	5737.15
1982.27	5737.4	1985.88	5737.4	1989.03	5737.6	1992.57	5737.62	2004.9	5737.51
2008.56	5737.58	2013.14	5737.58	2013.93	5737.49	2017.68	5737.64	2023.65	5737.65
2030.33	5737.63	2031.36	5737.67	2032.72	5737.47	2038.72	5737.5	2040.15	5737.62
2042.54	5737.62	2042.71	5737.55	2046.98	5737.67	2049.7	5737.61	2053.51	5737.76
2058.06	5737.75	2059.82	5737.71	2059.89	5737.83	2062.98	5737.92	2066.45	5737.93
2068.55	5737.82	2071.87	5738.02	2076.01	5738.03	2077.43	5738.31	2080.47	5738.33
2085.24	5738.49	2092.5	5738.56	2096.34	5738.54	2102.55	5738.65	2105.06	5738.65

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 274.21 .045 1184.06 .032 1555.98 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1184.06 1555.98 97.01 97.01 97.01 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5732.72	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.88	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5731.84	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	92.17	2380.61
194.91				
E.G. Slope (ft/ft)	0.002304	Area (sq ft)	92.17	2380.61
194.91				
Q Total (cfs)	19150.00	Flow (cfs)	364.03	18252.86
533.11				
Top Width (ft)	477.76	Top Width (ft)	21.81	371.92
84.03				
Vel Total (ft/s)	7.18	Avg. Vel. (ft/s)	3.95	7.67
2.74				
Max Chl Dpth (ft)	8.72	Hydr. Depth (ft)	4.23	6.40
2.32				
Conv. Total (cfs)	398926.1	Conv. (cfs)	7583.3	380237.2
11105.6				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	23.43	373.17
85.99				
Min Ch El (ft)	5723.12	Shear (lb/sq ft)	0.57	0.92
0.33				
Alpha	1.10	Stream Power (lb/ft s)	2.23	7.04
0.89				

Frctn Loss (ft)	0.19	Cum Volume (acre-ft)	1.01	36.39
4.49				
C & E Loss (ft)	0.05	Cum SA (acres)	0.30	5.37
1.75				

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1008

INPUT

Description:

Station Elevation Data		num= 490							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
284.74	5736.9	284.95	5736.76	285.39	5736.7	286.42	5736.64	289.05	5735.97
289.78	5735.62	292.89	5734.76	293.65	5734.7	294.09	5734.7	295.49	5734.47
298.97	5733.99	299.13	5734.01	300.64	5733.8	302.25	5733.71	304.23	5733.31
305.14	5733.35	307.52	5733.63	307.83	5733.63	309.45	5733.48	313.09	5733.51
316.4	5733.42	316.69	5733.53	318.79	5733.69	325.27	5733.65	328.97	5733.55
331.5	5733.51	333.68	5733.56	337.26	5733.3	340.88	5733.2	343.34	5733.16
344.21	5733.23	347.57	5733.24	349.74	5733.23	356.21	5733.22	359.72	5733.1
362.19	5733.1	363.4	5733.13	367.52	5733.15	371.87	5733.01	372.31	5732.98
375.85	5732.91	378.1	5732.92	380.1	5732.96	380.89	5732.95	381.53	5732.85
384.49	5732.82	389.05	5732.86	394.33	5732.79	404.64	5732.77	406.55	5732.69
411.03	5732.6	412.5	5732.61	420.25	5732.6	424.91	5732.48	426.63	5732.45
430.23	5732.47	433.35	5732.51	436.31	5732.5	439.04	5732.62	440.85	5732.67
447.64	5732.62	449.14	5732.66	453.97	5732.66	460.52	5732.72	461.61	5732.82
466.04	5732.85	468.61	5732.69	471.19	5732.66	473.22	5732.62	474.06	5732.65
479.22	5732.78	479.33	5732.79	484.6	5732.83	492.99	5732.91	493.66	5732.91
494.66	5732.95	497.68	5733.04	501.38	5732.91	501.99	5732.91	506.21	5733.05
506.41	5733.01	507.12	5733.12	509.2	5733.25	513.04	5733.29	515.18	5733.02
523.16	5733.11	524.07	5733.13	524.84	5733.1	526.4	5733.09	530.79	5733.12
533.67	5733.13	536.05	5733.3	539.17	5733.34	541.77	5733.19	543.52	5733.12
546.14	5733.09	546.91	5733.06	551.86	5733.05	553.55	5733.15	556.4	5733.22
559.75	5733.22	563.1	5733.24	567.89	5733.39	569.72	5733.38	573.12	5733.33
578.24	5733.29	579.09	5733.23	579.53	5733.23	595.39	5733.38	597.22	5733.41
598.23	5733.4	603.2	5733.43	606.13	5733.44	606.72	5733.41	615.92	5733.41
619.22	5733.6	620.46	5733.6	621.35	5733.49	624.77	5733.26	626.44	5733.71
627.31	5733.75	628.6	5733.73	630.5	5734.04	631.85	5734.07	632.9	5734.12
635.6	5733.95	636.62	5733.94	640.11	5733.87	640.92	5733.88	643.42	5733.84
649.58	5733.92	652.91	5733.97	655.96	5733.93	659.05	5733.92	659.43	5733.89
660.54	5733.97	661.59	5733.99	666.81	5733.99	669.33	5734.09	675	5734.19
677.42	5734.27	679.03	5734.29	694.54	5734.29	696.21	5734.28	701.98	5734.32
703.08	5734.29	708.9	5734.27	713.02	5734.37	715.36	5734.41	719.23	5734.46
729.46	5734.51	732.6	5734.64	741.14	5734.86	746.21	5735.37	747.76	5735.54
749.54	5735.62	750.51	5735.75	755.76	5736.13	756.71	5736.17	759.34	5736.17
761.01	5736.06	761.99	5736.1	763.11	5736.05	765.57	5736.01	766.84	5735.82

768.91	5735.97	770.19	5735.88	772.35	5735.91	774.17	5736.45	774.64	5736.42
776.29	5736.52	777.66	5736.58	779.9	5736.65	783.49	5736.39	786.56	5736.32
787.13	5736.14	788.77	5736.05	789.66	5735.94	790.62	5735.76	793	5735.71
794.61	5735.89	795.87	5735.94	796.6	5735.94	800.11	5736.08	801.59	5736.36
802.6	5736.36	806.68	5736.47	808.83	5736.71	812.14	5736.41	814.8	5736.26
820.78	5736.06	828.81	5736.07	831.49	5736.07	836.43	5736.06	836.57	5736.07
841.47	5736.05	845.14	5736.02	845.41	5736.03	854.6	5735.84	856.76	5735.81
868.97	5735.66	870.8	5735.64	872.42	5735.64	872.5	5735.62	881.58	5735.49
881.82	5735.48	887.31	5735.4	890.72	5735.36	891.29	5735.32	905.45	5734.99
906.91	5734.98	911.65	5734.92	915.2	5734.92	915.95	5734.95	920.55	5735.04
920.73	5735.1	923.5	5735.2	923.96	5735.17	924.3	5735.23	924.69	5735.13
929.28	5734.89	931.23	5734.93	931.71	5734.88	934.16	5735.03	935.77	5735.2
937.2	5735.11	939.59	5735.04	940.83	5735.19	943.65	5735.14	944.6	5735.4
946.29	5735.45	947.72	5735.4	948.61	5734.87	949.63	5734.9	950.54	5734.79
951.06	5734.78	953.94	5734.92	958.18	5734.61	963.02	5734.61	964.18	5734.67
970.38	5734.82	971.86	5734.83	974.92	5734.83	975.76	5734.82	976.59	5734.87
978.5	5734.9	980.42	5734.91	982.17	5735.03	982.76	5734.97	983.76	5735.19
987.87	5735.49	987.99	5735.54	989.97	5735.21	990.03	5735.54	991.22	5735.21
994.27	5735.45	995.29	5735.45	997.37	5735.54	1000.39	5735.58	1006	5735.67
1009.21	5735.7	1011.78	5735.71	1018.48	5735.71	1024.74	5735.6	1029.04	5735.56
1040.51	5735.33	1050.3	5735.05	1055.15	5735.11	1059.98	5735.04	1065.07	5735.09
1071.36	5735.5	1074.99	5735.45	1078.25	5735.19	1083.46	5734.38	1088.08	5734.87
1098.7	5734.83	1104.74	5734.7	1109.82	5734.81	1111.61	5734.97	1114.11	5734.69
1119.11	5734.58	1123.27	5734.81	1126.02	5734.75	1128.92	5734.92	1132.7	5734.91
1135.45	5734.72	1141.35	5735	1144.95	5734.29	1148.76	5733.89	1150.69	5733.26
1160.13	5728.57	1167.05	5724.85	1170.42	5722.65	1170.8	5722.4	1174.18	5722.27
1176.32	5722.91	1180.44	5723.57	1184.31	5723.56	1187.43	5723.12	1190.89	5723.07
1202.42	5722.56	1204.57	5722.55	1214.31	5722.73	1216	5723.06	1218.42	5723.13
1222.08	5723.79	1225.92	5724.85	1228.83	5725.09	1231.25	5725	1237.51	5725.97
1239.47	5726.08	1250.92	5726.13	1259.96	5726.65	1269.46	5726.75	1276.23	5726.64
1278.77	5726.5	1292.54	5726.04	1296.8	5725.96	1305.27	5725.67	1306.7	5725.54
1311.22	5725.54	1316.87	5725.39	1319.23	5725.21	1326.55	5725.24	1330.42	5725.4
1337.28	5725.17	1341.81	5725.34	1346.34	5725.22	1350.04	5725.22	1353.91	5725.09
1362.19	5724.18	1364.69	5724.22	1365.53	5724.53	1367.93	5725.95	1369.39	5726.41
1372.53	5726.3	1375.32	5726.47	1379.35	5726.46	1385.36	5726.66	1388.75	5726.49
1391.38	5725.64	1393.77	5725.37	1397.2	5725.74	1402.78	5725.46	1405.93	5725.12
1408.9	5725.1	1410.05	5725.3	1412.95	5725.3	1416.41	5724.91	1421.91	5725.45
1425.53	5725.98	1431.35	5726.08	1437.4	5725.81	1441.85	5725.38	1446.03	5725.26
1455.56	5725.16	1459.05	5724.9	1465.97	5724.94	1472.49	5724.7	1478.3	5724.73
1486.02	5724.61	1489.68	5724.66	1491.2	5724.51	1493.99	5724.57	1499	5724.48
1500.8	5724.59	1503.17	5724.34	1511.22	5724.55	1513.11	5724.33	1516.94	5724.29
1520.27	5724.13	1522.59	5723.71	1524.65	5722.97	1525.69	5722.16	1526.52	5722.33
1528.39	5723.35	1530.08	5723.74	1533.47	5724.17	1540.97	5724.57	1552.87	5724.8
1553.21	5724.81	1557.43	5724.81	1561.63	5724.56	1563.65	5724.09	1566.63	5724.12
1569.6	5723.84	1571.56	5723.93	1574.06	5724.28	1581.38	5726.56	1588.03	5728.47
1606.86	5733.32	1610.89	5734.45	1613.8	5734.67	1620.08	5734.4	1622.26	5734.44
1630.67	5734.05	1635.08	5734.06	1637.44	5733.73	1642.02	5733.69	1645.48	5733.95
1653.6	5733.98	1660.73	5734.07	1665.09	5734.29	1672.18	5734.25	1687.9	5734.32
1689.98	5734.28	1696.23	5734.41	1702.33	5734.46	1705.41	5734.32	1714.19	5734.38
1716.24	5734.28	1720.24	5734.35	1724.84	5734.19	1726.28	5734.33	1730.88	5734.18

1733.78	5734.18	1736.44	5734.33	1741.67	5734.15	1755.32	5734.21	1760.01	5734.13
1763.53	5734.34	1766.68	5733.98	1770.13	5733.94	1776.35	5734.11	1779.74	5733.94
1790.3	5733.93	1796.18	5734.04	1797.88	5733.95	1802.47	5734.05	1814.33	5734.15
1820.13	5734.04	1832.53	5734.02	1834.51	5734.1	1842.86	5734.01	1851.81	5734.05
1853.98	5733.93	1859.63	5733.9	1863.42	5734.05	1865.89	5733.93	1872.21	5733.99
1874.79	5733.74	1877.7	5733.73	1881.08	5733.52	1886.64	5733.46	1890.06	5733.33
1899.34	5733.46	1907.67	5733.31	1911.06	5733.31	1919.66	5733.03	1925.12	5733.05
1927.76	5733.16	1931.74	5732.91	1937.99	5732.79	1943.48	5732.86	1948.08	5733.46
1950.92	5734.2	1953.88	5734.57	1960.94	5734.5	1964.27	5734.28	1966.46	5733.95
1968.7	5733.85	1973.02	5733.95	1975.41	5733.85	1979.53	5733.47	1985.54	5731.73
1989.44	5730.42	1992.35	5729.62	1995.01	5729.45	1998.47	5728.85	2001.3	5729.58
2004.31	5729.83	2005.97	5730.28	2011.71	5732.87	2018.49	5735.38	2022.66	5736.52
2024.78	5737.25	2027.71	5737.27	2033.73	5736.86	2041.41	5737.05	2043.4	5737.2
2049.44	5737.25	2055.73	5737.07	2069.74	5737.78	2072.44	5737.74	2078.79	5737.94
2088.12	5737.92	2093.01	5738.11	2098.14	5738.12	2105.82	5738.25	2116.96	5738.52

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
284.74	.045	1170.42	.032	1552.87	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1170.42	1552.87		97.01	97.01		.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5732.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.70	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5731.77	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	72.38	2588.50
294.76				
E.G. Slope (ft/ft)	0.001726	Area (sq ft)	72.38	2588.50
294.76				
Q Total (cfs)	19150.00	Flow (cfs)	241.54	17791.60
1116.86				
Top Width (ft)	471.05	Top Width (ft)	16.74	382.45
71.86				
Vel Total (ft/s)	6.48	Avg. Vel. (ft/s)	3.34	6.87
3.79				
Max Chl Dpth (ft)	9.61	Hydr. Depth (ft)	4.33	6.77
4.10				
Conv. Total (cfs)	460957.9	Conv. (cfs)	5814.2	428260.0
26883.8				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	19.08	384.88
73.87				
Min Ch El (ft)	5722.16	Shear (lb/sq ft)	0.41	0.72
0.43				

Alpha	1.07	Stream Power (lb/ft s)	1.36	4.98
1.63				
Frctn Loss (ft)	0.17	Cum Volume (acre-ft)	0.83	30.85
3.94				
C & E Loss (ft)	0.00	Cum SA (acres)	0.25	4.53
1.58				

Warning: Divided flow computed for this cross-section.

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1007

INPUT

Description:

Station	Elevation	Data	num=	490							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
285.53	5737.1	288.91	5736.08	292.83	5734.73	295.24	5734.64	302.41	5733.65		
304.1	5733.26	307.7	5733.52	309.61	5733.45	314.17	5733.58	316.74	5733.46		
319	5733.65	324.96	5733.67	331.14	5733.47	333.11	5733.54	336.47	5733.28		
342.24	5733.13	345.83	5733.29	348.23	5733.17	351.34	5733.24	360.94	5733.08		
368.37	5733.17	373.17	5732.96	380.85	5732.84	387.8	5732.88	392.27	5732.8		
399.76	5732.79	409.05	5732.59	415.85	5732.56	419.93	5732.63	424.25	5732.48		
436.3	5732.48	440.8	5732.65	452	5732.63	459.59	5732.68	462.86	5732.84		
466.19	5732.85	469.57	5732.68	476.04	5732.66	479.82	5732.78	484.93	5732.79		
499.6	5732.96	506.51	5732.99	509.39	5733.35	512.71	5733.37	514.91	5733.01		
520.19	5733.07	526.2	5733.04	530.5	5733.18	533.14	5733.14	535.79	5733.43		
539.86	5733.38	541.54	5733.19	544.09	5733.06	548.48	5732.97	552.08	5733.07		
553.98	5733.13	556.51	5733.17	556.59	5733.17	560	5733.23	560.41	5733.24		
563.23	5733.21	565.19	5733.29	566.62	5733.31	568.41	5733.33	572.83	5733.31		
575.91	5733.3	577.41	5733.3	577.74	5733.26	578.32	5733.24	580.43	5733.18		
580.75	5733.18	586.01	5733.2	586.2	5733.23	586.45	5733.23	590.55	5733.34		
600.35	5733.41	604.1	5733.4	604.36	5733.4	610.34	5733.39	611.98	5733.4		
616.12	5733.37	619.81	5733.61	620.19	5733.66	623.05	5733.24	623.3	5733.31		
623.68	5733.38	624.79	5733.66	625.76	5733.69	628.32	5733.72	629.28	5733.95		
629.89	5734.04	630.77	5734.04	631.56	5734	631.66	5734.05	634.18	5733.85		
634.94	5733.85	643.26	5733.86	643.73	5733.86	652.05	5733.9	660.18	5733.86		
670.87	5734.06	681.39	5734.18	685.44	5734.18	687.27	5734.19	701.98	5734.2		
708.19	5734.21	708.64	5734.2	709.27	5734.23	711.1	5734.25	712.73	5734.28		
714.5	5734.32	714.77	5734.33	717.03	5734.38	717.99	5734.39	718.22	5734.39		
719.81	5734.41	721.08	5734.42	721.56	5734.43	723.97	5734.43	726.1	5734.44		
735.44	5734.53	739.97	5734.7	740.2	5734.67	740.6	5734.74	745.54	5734.97		
755.17	5735.72	757.66	5735.98	759.05	5736.09	760.85	5736.15	764.34	5736.28		
765.18	5736.19	765.34	5736.18	766.83	5736.1	766.92	5736.09	767.47	5736.06		
769.3	5735.91	769.55	5735.92	770.07	5735.91	771.82	5736.02	774.38	5736.19		
777.73	5736.05	778.62	5736.23	779.31	5736.23	781.29	5736.21	782.51	5736.21		

787.17	5736.64	794.51	5736.27	794.62	5736.37	794.97	5736.19	798.2	5735.59
798.53	5735.7	798.63	5735.6	802.43	5735.66	804.17	5736.01	804.41	5736
808.08	5736.4	810.61	5736.5	811.19	5736.52	811.43	5736.58	814.23	5736.23
814.68	5736.13	819.56	5736.03	822	5736.05	823.98	5736.06	828.12	5736.09
830.13	5736.1	831.39	5736.09	831.62	5736.09	837.1	5736.08	842.8	5736.08
843.56	5736.06	844.46	5736.06	844.58	5736.05	847.67	5736.01	848.1	5736
848.25	5736.02	855.26	5735.83	855.54	5735.82	858.05	5735.79	860.03	5735.75
861.52	5735.74	866	5735.7	873.13	5735.65	874.48	5735.61	883.87	5735.46
889.77	5735.39	900.37	5735.14	900.62	5735.13	900.83	5735.13	904.39	5735.06
904.49	5735.06	906.33	5735.03	907.05	5735.03	913.99	5734.99	917.33	5735.02
918.84	5735.1	922.78	5735.37	925.93	5735.37	926.4	5735.19	926.49	5735.19
928.51	5735.13	929.27	5735.07	931.9	5735.09	931.99	5735.06	933.57	5735
935.2	5735.1	935.25	5735.02	935.78	5735.13	937.63	5735.19	942.9	5735.11
946.49	5735.42	947.18	5735.16	947.25	5735.13	948.85	5734.78	949.35	5734.81
951.54	5734.72	952.15	5734.89	952.23	5734.88	953.15	5734.79	953.37	5734.89
956.27	5734.67	956.95	5734.66	957.68	5734.68	962.22	5734.67	964.65	5734.67
968.18	5734.8	971.12	5734.85	972.66	5734.87	974.02	5734.88	978.65	5735
981.41	5735	982.13	5735.14	982.86	5735.22	983.47	5735.3	984.69	5735.38
986.52	5735.6	987.76	5735.64	988.36	5735.63	989.76	5735.66	990.63	5735.33
991.39	5735.24	992.89	5735.43	995.09	5735.54	995.17	5735.55	1001.37	5735.66
1002.67	5735.66	1002.8	5735.68	1003.04	5735.68	1012.57	5735.76	1018.84	5735.76
1024.35	5735.65	1027.88	5735.62	1044.39	5735.22	1047.64	5734.98	1048.61	5735.06
1058.03	5735.01	1064.8	5735.17	1069.99	5735.59	1072.61	5735.63	1077.39	5735.22
1081.5	5734.57	1083.76	5734.42	1087.06	5734.87	1092.51	5734.87	1100.28	5734.82
1106.61	5734.96	1111.49	5734.76	1113.35	5734.54	1118.35	5734.6	1121.65	5734.83
1126.69	5734.8	1128.18	5735.01	1133.51	5734.87	1138.89	5734.86	1140.03	5734.95
1145.04	5734.06	1147.05	5734.1	1148.99	5733.5	1151.17	5732.55	1160.11	5728.2
1166.41	5724.75	1169.44	5722.71	1169.63	5722.59	1171.69	5722.21	1174.39	5722.34
1175.88	5722.88	1177.55	5723.03	1180.18	5723.58	1184.78	5723.58	1186.47	5723.18
1197.97	5722.66	1206.36	5722.54	1206.68	5722.61	1212.98	5722.79	1215.79	5723.17
1217.92	5723.23	1221.11	5723.76	1224.44	5724.78	1227.14	5725.1	1231.36	5725.17
1236.32	5726.03	1237.94	5726.18	1242.67	5726.26	1247.13	5726.55	1253.2	5726.71
1259.34	5726.66	1264.14	5726.36	1273.1	5726.02	1284.35	5725.3	1286.83	5725.25
1288.55	5725	1295.03	5724.4	1303.58	5723.73	1306.48	5723.31	1310.58	5723.18
1315.19	5723.2	1318.77	5723.37	1338.04	5725.99	1342.42	5726.72	1348.4	5728.04
1353.03	5727.8	1358.93	5728.09	1363.16	5728.39	1370.55	5728.19	1379.57	5728.11
1383.8	5727.83	1385.22	5727.54	1387.93	5727.4	1392.16	5727.62	1406.09	5725.43
1408.36	5724.99	1413.23	5724.78	1418.14	5724.19	1421.06	5724.13	1427.88	5724.53
1431.46	5724.56	1440.77	5724.93	1445.29	5725.31	1449.14	5725.18	1452.38	5724.57
1456.7	5724.39	1460.67	5724.35	1466.91	5723.93	1473.98	5723.24	1475.75	5723.14
1481.67	5723.17	1482.82	5723.07	1489.11	5723	1495.86	5722.62	1500.02	5722.56
1500.18	5722.56	1502.98	5722.24	1507.21	5721.97	1513.59	5722.09	1517.4	5722.61
1521.97	5723.66	1523.5	5723.78	1541.23	5723.76	1550.65	5723.7	1557.18	5723.65
1560.42	5723.55	1565.24	5723.63	1567.35	5724.59	1574.9	5727.25	1582.01	5730.03
1585.52	5731.02	1588.22	5731.43	1592.84	5731.9	1595.66	5732.05	1600.6	5732.02
1603.1	5732.11	1608.49	5732.01	1612	5732.09	1614.35	5731.97	1618.2	5732.06
1621.17	5732.32	1625.1	5732.09	1628.68	5732.24	1630.9	5732.09	1633.29	5732.26
1641.48	5732.48	1643.39	5732.32	1647.9	5732.22	1660.87	5732.2	1666.81	5732.3
1679.9	5732.25	1684.2	5732.19	1691.92	5732.24	1694.62	5732.16	1701.91	5732.17
1703.87	5732.09	1716.59	5731.85	1727.29	5731.74	1734.46	5731.57	1739.82	5731.68

1753.72	5731.08	1761.14	5730.89	1780.29	5730.86	1784.01	5730.97	1791.05	5730.77
1794.81	5731.26	1801.81	5731.53	1805.36	5731.55	1809.96	5731.99	1813.59	5733.39
1824.86	5737.57	1834	5741.04	1838.29	5742.33	1841.53	5742.62	1844.32	5742.27
1848.01	5740.94	1850.71	5739.29	1852.4	5738	1858.05	5735.65	1862.87	5734.19
1867.19	5732.55	1868.31	5731.84	1869.08	5731.9	1875.57	5730.23	1879.98	5729.27
1883.88	5730.43	1886	5731.44	1892.36	5734.84	1896.35	5736.87	1897.43	5737.12
1904.68	5736.94	1909.37	5737.48	1911.74	5737.57	1917.96	5737.57	1922.54	5737.34
1929.86	5737.68	1934.38	5737.77	1936.05	5738.03	1940.09	5737.82	1945.8	5737.76
1951.71	5737.49	1958.46	5737.61	1963.08	5737.58	1965.91	5736.99	1968.39	5736.89
1970.08	5737.03	1973.59	5736.84	1978.94	5737.38	1979.8	5737.27	1988.9	5737.45
1992.08	5738.48	1995.27	5737.96	1997.39	5737.99	2002.09	5737.79	2012.61	5738.11
2017.97	5738.57	2020.02	5738.5	2022.5	5737.94	2024.98	5737.76	2028.41	5738.31
2035.98	5738.52	2040.03	5738.46	2041.91	5738.64	2045.2	5738.51	2048.66	5738.81
2053.25	5738.65	2057.84	5738.81	2062.71	5738.69	2064.32	5738.89	2066	5738.78
2070.82	5738.95	2078.42	5738.97	2086.21	5739.16	2094.33	5739.26	2097.76	5739.4
2114.79	5739.84	2118.32	5740.03	2126.72	5740.25	2134.82	5740.23	2146.65	5740.27
2148.09	5740.38	2154.54	5740.41	2157.16	5740.54	2169.99	5740.76	2174.3	5740.94
2180.95	5740.81	2188.01	5741	2191.27	5740.97	2197.15	5741.1	2203.43	5741.06
2225.84	5741.95	2230.96	5742.06	2237.71	5742.38	2248.56	5742.66	2257.7	5743.17

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 285.53 .045 1169.44 .032 1550.65 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1169.44 1550.65 97.01 97.01 97.01 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5732.30	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.72	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5731.58	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	67.75	2605.12
252.23				
E.G. Slope (ft/ft)	0.001732	Area (sq ft)	67.75	2605.12
252.23				
Q Total (cfs)	19150.00	Flow (cfs)	220.64	18071.10
858.25				
Top Width (ft)	517.49	Top Width (ft)	16.28	381.21
120.00				
Vel Total (ft/s)	6.55	Avg. Vel. (ft/s)	3.26	6.94
3.40				
Max Chl Dpth (ft)	9.61	Hydr. Depth (ft)	4.16	6.83
2.10				
Conv. Total (cfs)	460151.6	Conv. (cfs)	5301.8	434226.9
20622.8				

Length Wtd. (ft) 122.13	97.01	Wetted Per. (ft)	18.57	383.06
Min Ch El (ft) 0.22	5721.97	Shear (lb/sq ft)	0.39	0.74
Alpha 0.76	1.07	Stream Power (lb/ft s)	1.28	5.10
Frctn Loss (ft) 3.34	0.22	Cum Volume (acre-ft)	0.67	25.07
C & E Loss (ft) 1.36	0.04	Cum SA (acres)	0.22	3.68

Warning: Divided flow computed for this cross-section.

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1006

INPUT

Description:

Station Elevation Data		num= 490									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
325.55	5733.58	327.47	5733.78	329.46	5733.85	329.67	5733.76	332.54	5733.76		
333.26	5733.78	334.7	5733.74	334.9	5733.76	340.4	5733.38	343.48	5733.25		
345.72	5733.2	348.87	5733.17	357.97	5733.26	358.17	5733.24	359.13	5733.25		
359.37	5733.3	361.29	5733.36	361.58	5733.28	362.84	5733.17	367.03	5733.18		
368.06	5733.16	369.91	5733.2	371.37	5733.18	373.28	5733.26	376.4	5733.03		
381.6	5732.84	382.99	5732.85	386	5732.85	386.67	5732.99	387.82	5733.03		
389.52	5732.88	395.59	5732.8	405.42	5732.8	407.27	5732.74	410.65	5732.66		
414.54	5732.56	416.14	5732.6	421.15	5732.56	421.3	5732.55	422.6	5732.61		
426.04	5732.6	429.79	5732.46	431.47	5732.48	434.85	5732.47	438.65	5732.48		
441.97	5732.47	444.89	5732.63	449.67	5732.64	453.39	5732.67	456.28	5732.62		
458.54	5732.67	459.25	5732.67	463.57	5732.7	464.67	5732.7	470.43	5732.8		
471.71	5732.71	472.93	5732.69	476.02	5732.66	481.47	5732.66	485.01	5732.78		
499.49	5732.83	500.79	5732.83	503.38	5732.89	505.48	5732.86	507.6	5732.88		
509.06	5732.88	511.7	5732.97	512.06	5733.09	514.58	5733.31	517.46	5733.36		
520.09	5733.02	520.81	5732.97	522.43	5732.97	523.42	5733.03	524.4	5733.06		
526.25	5733.08	527.11	5733.03	530.64	5732.97	531.81	5733.11	532.8	5733.17		
533.27	5733.15	537.38	5733.09	540.95	5733.44	544.79	5733.47	546.69	5733.15		
547.63	5733.07	548.15	5733.08	554.86	5732.93	559.62	5733.08	561	5733.11		
565.53	5733.17	567.84	5733.15	571.51	5733.27	574.62	5733.29	578.52	5733.29		
580.58	5733.27	581.62	5733.28	585.12	5733.16	590.94	5733.17	591.19	5733.2		
595.28	5733.31	598.49	5733.32	599.37	5733.34	604.93	5733.36	606.96	5733.38		
609.91	5733.37	616.74	5733.37	618.07	5733.4	619.38	5733.4	621.38	5733.42		
623.94	5733.66	625.22	5733.61	627.52	5733.08	630.39	5733.67	633.97	5733.72		
635.89	5733.99	637.64	5733.85	639.27	5733.79	643.85	5733.81	647.37	5733.81		
655.01	5733.9	655.55	5733.85	663.43	5733.84	667.69	5733.85	668.17	5733.84		

669.55	5733.89	671.39	5733.88	675.53	5733.97	680.35	5733.98	684.42	5734.11
685.87	5734.08	690.41	5734.1	694.7	5734.08	696.37	5734.05	698.88	5734.09
699.83	5734.09	703.77	5734.05	707.17	5734.12	712.58	5734.13	716.07	5734.17
718.64	5734.18	720.05	5734.28	721.7	5734.32	725.02	5734.34	729.11	5734.4
731.42	5734.4	733.86	5734.42	738.2	5734.42	740.06	5734.48	743.69	5734.52
747.47	5734.68	750.76	5734.74	753.09	5734.97	756.13	5735.07	761.94	5735.56
764.98	5735.71	765.85	5735.87	766.4	5735.91	768.71	5736.03	771.18	5736.14
776.44	5736.01	777.54	5736.05	780.98	5736.02	787.47	5735.56	792.93	5736.36
795.69	5736.63	797.12	5736.72	801.54	5736.67	805.86	5736.29	806.12	5735.89
806.58	5735.72	807.27	5735.62	807.52	5735.75	808.41	5735.56	810.87	5735.58
813.45	5736.1	813.73	5736.04	816.7	5736.16	817.55	5736.18	820.23	5736.02
824.82	5735.97	832.24	5736.1	835.91	5736.12	837.17	5736.12	840.81	5736.1
845.35	5736.11	849.59	5736.11	854.18	5736.01	854.27	5736.04	855.11	5735.98
859.6	5735.85	860.11	5735.86	861.11	5735.81	864.68	5735.76	866.56	5735.75
873.76	5735.7	877.71	5735.68	879.72	5735.63	885.02	5735.55	893.33	5735.41
897.19	5735.37	899.54	5735.3	904.08	5735.21	912.45	5735.08	912.91	5735.06
919.12	5735.05	919.42	5735.04	922.84	5735.08	930.83	5735.37	932.49	5735.15
936.11	5734.98	937.02	5734.98	939.93	5735.02	941.86	5735.06	943.14	5735.04
945.93	5735.03	947.53	5735.27	949.27	5735.26	950.31	5735.18	950.82	5735.09
953.12	5735.17	954.29	5734.93	955.72	5734.91	957.78	5734.82	958.03	5734.82
961.14	5734.71	962.29	5734.71	970.64	5734.76	971.74	5734.75	972.47	5734.82
974.73	5734.87	976.18	5734.89	976.72	5734.92	977.85	5734.94	983.51	5735.09
987.69	5735.28	987.76	5735.15	991.26	5735.59	991.58	5735.56	995.4	5735.69
995.66	5735.6	1000.47	5735.59	1000.65	5735.61	1009.12	5735.73	1010.71	5735.74
1011.61	5735.76	1019.79	5735.82	1021.96	5735.82	1024.4	5735.8	1025.63	5735.78
1027.45	5735.78	1028.7	5735.72	1029.4	5735.71	1038.76	5735.51	1040.53	5735.37
1041.18	5735.39	1042.25	5735.38	1044.1	5735.31	1047.48	5735.3	1050.2	5735.06
1050.35	5735.03	1051.41	5734.98	1051.96	5735	1055.49	5735.01	1055.75	5735.13
1056.91	5735.13	1062.03	5735.03	1063.21	5735.02	1065.75	5735.06	1069.02	5735.07
1070.97	5735.45	1074.1	5735.69	1078.02	5735.8	1080.15	5735.61	1080.15	5735.36
1086.44	5734.48	1088.61	5734.5	1089.09	5734.67	1089.48	5734.73	1093.94	5735.04
1097.76	5734.96	1101.44	5734.89	1103.87	5735.05	1104.89	5734.97	1107.8	5734.86
1108.95	5734.88	1111.13	5734.6	1113.05	5734.56	1114.05	5734.51	1119.84	5734.49
1121.77	5734.69	1122.43	5734.69	1125.38	5734.83	1125.89	5734.71	1126.78	5734.9
1129.32	5734.98	1132.65	5735.06	1132.78	5735	1135.96	5734.91	1137	5734.92
1140.55	5734.88	1144.9	5734.68	1145.27	5734.6	1145.33	5734.81	1147.89	5734.32
1151.75	5734.14	1152.73	5733.91	1155.71	5732.56	1161.25	5729.86	1164.74	5728.29
1167.02	5726.12	1169.68	5725.55	1173.29	5723.86	1173.89	5723.66	1176.09	5722.93
1179.03	5722.57	1180.57	5723.01	1185.48	5723.42	1188.25	5723.96	1192.41	5723.81
1194.55	5722.94	1195.93	5722.73	1199.29	5722.55	1202.97	5722.6	1208.17	5722.56
1210.79	5722.7	1211.61	5722.89	1213.15	5723.76	1214.51	5724.2	1215.77	5724.31
1218.23	5723.91	1220.27	5723.96	1228.03	5724.46	1237.17	5725.29	1239.21	5725.37
1243.3	5726.26	1249.32	5726.59	1253.08	5726.32	1259.01	5725.62	1261.54	5725.46
1263.47	5724.99	1265.92	5724.05	1269.05	5723.14	1272.99	5722.84	1279.45	5722.72
1285.89	5722.85	1288.1	5723.05	1291.28	5723.12	1293.65	5723.59	1295.69	5724.4
1298.35	5725.86	1301.09	5726.26	1307.94	5726.86	1316.02	5727.32	1323.19	5727.64
1329.08	5727.82	1340.42	5728.03	1369.77	5728.37	1383.29	5728.33	1389.24	5727.69
1394.04	5727.56	1404.24	5727.55	1408.91	5727.2	1414.74	5726.37	1417.08	5725.87
1419.49	5725.65	1422.18	5725.6	1424.32	5725.1	1430.07	5724.24	1431.66	5723.55
1433.69	5723.47	1435.8	5723.91	1439.78	5724.12	1443.69	5724.02	1451.33	5723.99

1454.09	5723.8	1459.33	5723.78	1461.42	5723.54	1464.13	5723.41	1467.85	5723
1479.81	5722.96	1483.14	5722.74	1486.22	5722.33	1490.51	5722.05	1492.81	5722.17
1495.68	5722.12	1499.33	5722.42	1504.04	5721.98	1505.41	5721.67	1506.7	5722.04
1508.78	5722.17	1513.26	5722.26	1518.23	5722.61	1521.3	5722.71	1524.63	5722.44
1527.18	5722.39	1530.38	5722.61	1536.52	5722.79	1539.57	5725.64	1544.97	5730.88
1547.03	5731.45	1552.47	5731.32	1553.74	5731.17	1556.26	5731.19	1558.55	5731.21
1560.6	5731.07	1569.11	5731.32	1573.59	5731.83	1576.09	5731.48	1578.71	5731.61
1581.59	5731.09	1584.55	5730.98	1588.57	5731.06	1589.96	5730.87	1594.71	5731.25
1598.76	5731.28	1601.75	5731.41	1604.84	5731.14	1616.18	5731.46	1623.1	5731.03
1625.44	5731.1	1631.25	5731.09	1636.01	5731.15	1647.46	5730.82	1654.25	5730.75
1665.13	5730.87	1676.01	5731.32	1678.89	5731.21	1685.05	5731.29	1692.44	5731.01
1696.16	5730.78	1703.7	5730.81	1708.69	5730.41	1711.39	5730.78	1712.74	5730.8
1718.26	5730.24	1724.92	5729.86	1730.23	5729.72	1735.74	5729.76	1745.78	5730.17
1758.9	5730.5	1767.53	5730.77	1771.07	5730.98	1777.69	5730.79	1779.72	5730.92
1782.95	5731.35	1787.5	5731.39	1791.88	5731.25	1794.26	5731.26	1796.58	5730.94
1799.09	5730.31	1800.35	5729.79	1802.71	5728.5	1804.36	5728.31	1807.79	5728.3
1809.47	5728.51	1812.99	5728.53	1815.58	5729.35	1817.6	5730.49	1819.41	5731.04
1824.52	5731.7	1826.34	5731.69	1828.85	5731.26	1831.81	5731.03	1834.85	5731.02
1837	5731.27	1841.04	5731.36	1842.76	5731.59	1846.78	5731.68	1848.52	5731.41
1851.72	5731.25	1854.67	5731.45	1858.77	5731.45	1863.88	5731.33	1869.69	5731.3
1874.39	5731.17	1878.34	5731.24	1884.04	5731.08	1894.92	5731.08	1902.93	5730.99
1910.3	5731.07	1913.66	5730.99	1921.5	5731.11	1926.51	5731.06	1929.5	5731.17
1937.82	5731.13	1942.94	5731.03	1947.1	5731.23	1954.78	5731.15	1959.03	5731.24

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
325.55	.045	1173.89	.032	1556.26	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1173.89	1556.26		97.01	97.01		.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5732.04	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.10	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5730.94	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	56.68	2212.94
89.27				
E.G. Slope (ft/ft)	0.003148	Area (sq ft)	56.68	2212.94
89.27				
Q Total (cfs)	19150.00	Flow (cfs)	236.30	18747.30
166.40				
Top Width (ft)	518.46	Top Width (ft)	14.86	371.31
132.28				
Vel Total (ft/s)	8.12	Avg. Vel. (ft/s)	4.17	8.47
1.86				

Max Chl Dpth (ft) 0.67	9.27	Hydr. Depth (ft)	3.81	5.96
Conv. Total (cfs) 2965.8	341318.6	Conv. (cfs)	4211.6	334141.2
Length Wtd. (ft) 133.44	97.01	Wetted Per. (ft)	16.79	377.40
Min Ch El (ft) 0.13	5721.67	Shear (lb/sq ft)	0.66	1.15
Alpha 0.25	1.07	Stream Power (lb/ft s)	2.77	9.76
Frctn Loss (ft) 2.95	0.27	Cum Volume (acre-ft)	0.53	19.71
C & E Loss (ft) 1.08	0.05	Cum SA (acres)	0.18	2.85

Warning: Divided flow computed for this cross-section.

CROSS SECTION

RIVER: Animas River
 REACH: CenterPoint RS: 1005

INPUT

Description:

Station	Elevation	Data	num=	490						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
334.7	5733.54	335.67	5733.62	336.42	5733.57	339.75	5733.46	340.7	5733.41	
343.35	5733.39	346.33	5733.19	347.88	5733.17	352.73	5733.12	353.15	5733.16	
356.75	5733.21	358.69	5733.25	360.13	5733.16	362.01	5733.16	366.92	5733.12	
367.98	5733.2	372.72	5733.01	376.03	5733.08	378.75	5732.94	380.42	5732.88	
383.33	5732.8	384.27	5732.81	386.57	5732.81	388.66	5732.98	390.59	5733.05	
392.28	5732.87	396.98	5732.79	398.75	5732.8	401.19	5732.76	402.25	5732.76	
405.13	5732.78	409.06	5732.76	412.78	5732.61	414.83	5732.58	417.63	5732.58	
422.35	5732.59	423.34	5732.63	423.99	5732.63	428.78	5732.56	431.33	5732.45	
432.99	5732.49	437.23	5732.46	442.49	5732.49	442.65	5732.48	445.99	5732.61	
446.48	5732.62	449.27	5732.58	453.2	5732.65	454.23	5732.61	455.82	5732.63	
458.25	5732.64	458.54	5732.66	460.22	5732.7	470.24	5732.78	471.2	5732.79	
473.88	5732.66	479.14	5732.64	481.53	5732.64	482.02	5732.67	485.34	5732.75	
490.14	5732.78	491.6	5732.74	492.77	5732.72	496.78	5732.81	501.35	5732.81	
506.93	5732.83	508.61	5732.82	513.88	5732.94	516.76	5733.24	519.39	5733.04	
522.27	5732.9	524.75	5733.06	526.11	5733.1	526.57	5733.08	528.5	5733.06	
530.55	5732.91	533.05	5733.06	534.72	5733.09	536.26	5733.08	539.52	5733.12	
541.9	5733.41	542.89	5733.46	544.9	5733.53	545.11	5733.43	547.14	5733.14	
547.89	5733.05	548.4	5733.06	551.75	5732.93	556.77	5732.9	563.71	5733.07	
569.38	5733.13	571.85	5733.18	574.22	5733.25	576.66	5733.24	580.12	5733.25	
582.35	5733.27	586.4	5733.15	591.67	5733.15	594.3	5733.22	597.05	5733.26	
599.7	5733.29	600.72	5733.32	610.08	5733.35	613.07	5733.34	617.96	5733.33	

619.27	5733.38	622.75	5733.42	625.14	5733.67	626.31	5733.56	626.44	5733.24
628.48	5732.86	629.21	5732.95	630.4	5733.5	631.42	5733.68	631.85	5733.68
632.65	5733.62	634.12	5733.63	636.14	5733.91	640.83	5733.75	643.15	5733.75
647.6	5733.72	647.81	5733.75	650.25	5733.82	652.22	5733.84	656.76	5733.81
660.09	5733.83	661.65	5733.77	664.11	5733.84	670.13	5733.82	670.77	5733.81
676.34	5733.92	677.71	5733.93	680.87	5733.93	681.55	5733.92	682.75	5733.99
683.95	5734	687.8	5733.98	688.6	5733.97	689.62	5734.01	692.56	5734.04
695.91	5734.02	698.77	5733.96	702.36	5734	705.71	5733.96	706.58	5734
708.41	5734.03	709.28	5734.02	714.22	5734.07	715.49	5734.1	718.85	5734.09
721.96	5734.21	735.07	5734.36	744.71	5734.45	748.44	5734.57	751.62	5734.64
754.64	5734.82	756.63	5734.83	758.57	5735	762.06	5735.21	763.05	5735.21
765.46	5735.29	766.34	5735.44	771.53	5735.81	771.91	5735.81	773.82	5735.86
778.6	5735.83	783.15	5735.86	787.59	5735.74	790.44	5735.65	793.2	5735.65
796.52	5735.88	798.09	5736.26	799.89	5736.36	801.52	5736.51	802.63	5736.6
804.92	5736.72	805.49	5736.73	806.41	5736.7	807.57	5736.7	810.9	5735.95
811.7	5735.87	812.91	5735.84	814.27	5735.97	815.91	5735.99	816.24	5735.8
817.2	5735.8	817.67	5735.74	819.04	5735.74	819.73	5735.91	825.07	5735.89
825.35	5735.91	828.34	5736	831.34	5736.08	834.95	5736.14	835.82	5736.14
844.65	5736.12	846.03	5736.12	850.27	5736.15	852.01	5736.15	856.55	5736.05
864.01	5735.79	864.23	5735.77	872.2	5735.73	875.67	5735.73	879.18	5735.68
880.99	5735.68	881.23	5735.65	883.8	5735.61	890.01	5735.5	898.84	5735.36
907.92	5735.2	909.35	5735.18	918.45	5735.09	923.54	5735.14	924.57	5735.13
927.49	5735.26	928.92	5735.33	930.76	5735.36	934.75	5735.21	936.96	5735.05
938.24	5735	938.99	5735	941.74	5735.03	942.48	5734.98	946.13	5734.94
946.46	5735.05	947.07	5735.08	948.46	5735.1	948.57	5735.13	949.55	5735.1
953.82	5735.06	954.78	5734.88	956.7	5734.93	958.17	5734.84	961.96	5734.84
964.82	5734.74	966.89	5734.77	971.99	5734.78	972.38	5734.82	977.25	5734.91
980.02	5735.08	980.62	5735.09	986.06	5735.26	989.32	5735.37	992.31	5735.4
992.81	5735.57	995.06	5735.69	995.23	5735.67	998.29	5735.76	1002.57	5735.65
1007.66	5735.73	1010.95	5735.77	1021.7	5735.88	1023.71	5735.88	1028.24	5735.82
1028.88	5735.84	1029.66	5735.79	1033.46	5735.7	1035.99	5735.67	1038.07	5735.54
1042.44	5735.4	1042.9	5735.45	1044.4	5735.44	1044.81	5735.46	1047.32	5735.29
1049.11	5735.26	1050.23	5735.36	1052.31	5735.4	1053.76	5735.07	1055.93	5735
1057.84	5735.1	1062.52	5734.99	1063.97	5734.96	1064.17	5734.97	1065.64	5734.95
1070.46	5734.96	1071.88	5735.41	1072.47	5735.16	1075.21	5735.88	1075.3	5735.83
1075.81	5735.92	1077.53	5735.91	1078.21	5735.93	1078.71	5735.84	1080.14	5735.84
1084.99	5734.68	1087.07	5734.55	1089.33	5734.58	1093.32	5734.98	1093.93	5735.02
1098.53	5735.02	1099.96	5735.08	1103.75	5734.91	1107.46	5734.76	1108.11	5734.74
1109.77	5734.73	1114.74	5734.48	1117.27	5734.42	1120.8	5734.42	1123.46	5734.68
1123.51	5734.7	1126.43	5734.85	1127.06	5734.77	1127.26	5734.92	1131.2	5735.15
1131.61	5735.1	1136.2	5734.94	1138.92	5734.88	1141.83	5734.89	1142.48	5734.87
1143.54	5734.89	1146.94	5734.74	1148.08	5734.39	1148.8	5734.43	1151.54	5734.44
1152.64	5733.63	1152.88	5733.51	1152.99	5734.19	1165.8	5727.96	1167.55	5726.18
1168.81	5726.34	1172.09	5724.7	1174.42	5723.69	1176.25	5722.9	1177.67	5722.45
1178.54	5722.47	1180.73	5722.96	1183.2	5723.23	1185.22	5723.28	1187.45	5723.88
1190.18	5723.76	1191.8	5723.92	1196.39	5723.19	1198.37	5722.71	1200.02	5722.56
1205.46	5722.6	1213.89	5722.55	1215.48	5722.63	1218.32	5723.19	1219.43	5723.5
1221.85	5723.77	1225.26	5724.29	1229.52	5724.42	1232.99	5724.62	1238.94	5724.8
1241.89	5725.07	1244.52	5725	1246.88	5725.08	1250.49	5724.66	1253.21	5724.76
1254.93	5724.56	1257.98	5723.32	1260.56	5722.62	1263.08	5722.48	1265.43	5722.65

1271.74	5722.78	1281.56	5723.37	1286.74	5723.51	1287.94	5723.72	1290.43	5724.51
1294.07	5724.97	1297.56	5725.79	1300.24	5726.52	1302.08	5726.92	1304.85	5727.18
1308.79	5727.16	1310.4	5727.24	1312.93	5727.18	1315.75	5727.22	1318.72	5727.08
1320.92	5726.86	1324.54	5726.79	1327.31	5726.6	1329.81	5726.57	1333.7	5726.82
1337.38	5727.31	1343.67	5727.92	1346.45	5728.04	1349.13	5728.29	1352	5728.3
1355.12	5728.03	1359	5728.02	1361.7	5727.91	1365.58	5728.09	1370.11	5727.96
1373.1	5728.12	1376.39	5727.73	1379.54	5727.64	1381.98	5727.37	1384.51	5727.34
1388.62	5727.63	1392.63	5727.67	1401.51	5727.35	1404.8	5727.18	1410.59	5726.6
1423.27	5725.06	1426.6	5724.73	1429.06	5724.57	1430.2	5724.32	1437.11	5724.1
1444.02	5723.55	1447.12	5723.42	1449.43	5723.12	1457.27	5722.72	1463.62	5722.54
1465.73	5722.53	1468.85	5722.36	1472.64	5722.26	1474.79	5722.13	1479.85	5721.98
1481.25	5722.03	1489.24	5722.03	1493.27	5721.53	1497.04	5721.6	1498.98	5721.73
1500.07	5721.71	1503.41	5721.63	1506.75	5721.23	1510.72	5721.3	1512.75	5721.1
1513.96	5721.36	1515.61	5721.18	1519.1	5721.37	1520.9	5721.33	1524.04	5720.98
1525.89	5721.33	1527.47	5721.08	1530.32	5721.17	1531.56	5721.53	1536.7	5722.21
1540.03	5722.6	1541.4	5722.9	1543.15	5723.79	1545.02	5724.75	1547.07	5725.58
1549.51	5726.43	1553.34	5727.58	1556.11	5728.3	1559.76	5729.12	1562.21	5729.58
1566.35	5730.2	1568.6	5730.04	1571.92	5730.13	1574.57	5729.92	1576.63	5729.96
1578.85	5729.71	1581.96	5729.68	1584.69	5729.74	1586.89	5729.91	1589.86	5730.33
1592.01	5730.85	1592.99	5730.96	1594.66	5730.87	1596.19	5731.29	1597.71	5731.48
1600.89	5730.74	1603.26	5730.3	1604.95	5730.11	1608.75	5729.91	1612.14	5729.89
1615.46	5729.73	1619.35	5729.64	1621.18	5729.51	1627.01	5729.41	1631.79	5729.18
1637.02	5729.07	1640.18	5729.07	1643.21	5728.93	1645.54	5728.96	1653.19	5728.87
1656.17	5728.68	1659.06	5728.63	1666.78	5728.61	1669.01	5728.53	1675.75	5728.58
1677.5	5728.66	1679.35	5728.92	1680.69	5729.35	1682.31	5729.46	1683.98	5729.28
1685.17	5728.87	1686.19	5728.91	1687.3	5729.43	1688.42	5729.47	1689.71	5729.03
1690.4	5728.49	1696.17	5728.69	1703.18	5728.84	1710.32	5729.2	1715.58	5729.64

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
334.7	.045	1174.42	.032	1543.15	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1174.42	1543.15		97.01	97.01		.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5731.72	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.91	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5730.80	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)		Flow Area (sq ft)	53.29	2335.52
286.54				
E.G. Slope (ft/ft)	0.002448	Area (sq ft)	53.29	2335.52
286.54				
Q Total (cfs)	19150.00	Flow (cfs)	190.42	18285.99
673.59				

Top Width (ft)	546.82	Top Width (ft)	14.47	368.73
163.62				
Vel Total (ft/s)	7.16	Avg. Vel. (ft/s)	3.57	7.83
2.35				
Max Chl Dpth (ft)	9.82	Hydr. Depth (ft)	3.68	6.33
1.75				
Conv. Total (cfs)	387052.4	Conv. (cfs)	3848.7	369589.3
13614.3				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	16.47	371.23
166.56				
Min Ch El (ft)	5720.98	Shear (lb/sq ft)	0.49	0.96
0.26				
Alpha	1.15	Stream Power (lb/ft s)	1.77	7.53
0.62				
Frctn Loss (ft)	0.22	Cum Volume (acre-ft)	0.41	14.64
2.54				
C & E Loss (ft)	0.03	Cum SA (acres)	0.15	2.02
0.75				

Warning: Divided flow computed for this cross-section.
Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Animas River
REACH: CenterPoint RS: 1004

INPUT

Description:

Station	Elevation	Data	num=	490							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
375.46	5732.98	378.06	5733	384.53	5732.8	388.65	5732.81	392.45	5732.96		
395.08	5732.8	398.76	5732.77	408.75	5732.77	413.07	5732.57	419.55	5732.56		
425.07	5732.65	431.55	5732.48	434.66	5732.43	440.53	5732.44	448.34	5732.57		
456.65	5732.58	460.87	5732.72	465.62	5732.7	471.84	5732.82	473.75	5732.69		
476.39	5732.63	482.27	5732.63	486.46	5732.74	489.75	5732.75	493.89	5732.67		
499.86	5732.8	504.67	5732.76	513.32	5732.81	516.44	5732.95	518.59	5732.96		
523.67	5732.85	525.07	5732.89	526.75	5733.08	529.15	5733.13	531.6	5732.87		
533.71	5732.96	538.54	5732.98	540.42	5733.07	543.54	5733.44	544.5	5733.46		
547.14	5733.33	549.21	5733.02	550.5	5732.96	553.18	5732.87	558.23	5732.88		
566.77	5733.06	570.16	5733.04	575.84	5733.2	579.52	5733.18	581.11	5733.22		
585.89	5733.23	590.91	5733.12	592.82	5733.12	596.89	5733.22	599.75	5733.22		
602.75	5733.28	613.86	5733.28	619.73	5733.3	623.86	5733.39	626.29	5733.58		
627.25	5733.5	629.16	5732.95	629.63	5732.94	632.03	5733.68	635.33	5733.65		
637.29	5733.9	638.72	5733.9	641.12	5733.71	642.08	5733.74	647.4	5733.67		
652.32	5733.76	661.37	5733.77	669.56	5733.8	672.04	5733.75	679.83	5733.88		

681.68	5733.85	684.62	5733.92	689.02	5733.89	692.8	5733.95	698.01	5733.97
700.15	5733.9	704.28	5733.93	711.39	5733.93	715.45	5734	722.39	5734.06
723.09	5734.13	727.4	5734.2	734.33	5734.25	744.63	5734.42	748.45	5734.44
751.89	5734.51	756.02	5734.69	763.35	5734.95	764.74	5735.04	767.49	5735.08
770.44	5735.27	774.74	5735.48	778.56	5735.5	781.91	5735.62	786.45	5735.66
788.6	5735.76	791.48	5735.78	795.54	5735.74	796.74	5735.82	800.54	5735.77
801.77	5735.87	802.83	5735.81	804.88	5736.08	810.17	5736.59	811.15	5736.6
813.72	5736.29	817.77	5736.3	819.69	5736.1	821.18	5736.13	825.76	5735.55
828.05	5735.82	835.7	5736.2	840.52	5736.18	843.01	5736.13	846.87	5736.13
850.49	5736.2	855.78	5736.17	863.46	5735.81	867.25	5735.75	877.76	5735.75
884.46	5735.67	895.05	5735.47	912.37	5735.21	918.86	5735.14	923.85	5735.14
927.02	5735.18	932.76	5735.32	934.19	5735.32	939.57	5735.17	940.94	5735.08
942.56	5735.13	950.68	5734.95	952.6	5735.08	957.37	5734.79	961.44	5734.89
966.63	5734.8	972.76	5734.84	976.98	5734.95	981.99	5735.26	984.15	5735.3
988.22	5735.49	993.21	5735.48	998.75	5735.96	1003.69	5735.68	1007.19	5735.71
1011.6	5735.81	1023.84	5735.95	1030.15	5735.91	1031.25	5735.84	1031.79	5735.83
1034.67	5735.75	1035.62	5735.77	1038.25	5735.6	1039.36	5735.62	1041.14	5735.49
1043.8	5735.62	1044.53	5735.55	1047.04	5735.55	1048.64	5735.45	1049.61	5735.28
1052.29	5735.34	1053.93	5735.47	1055.42	5735.05	1057.11	5735	1057.5	5735.06
1059.58	5735.01	1060.01	5735.06	1060.57	5734.99	1061.46	5734.99	1064.38	5735.12
1066.64	5734.95	1071.47	5734.95	1071.59	5735.11	1072.07	5735.17	1072.83	5735.07
1072.9	5735.34	1073.28	5735.4	1075.97	5735.58	1078.17	5735.74	1080.53	5735.57
1080.82	5735.68	1081.23	5735.47	1082.03	5735.57	1085.12	5734.77	1085.42	5735.05
1087.32	5734.7	1088.19	5734.77	1090.39	5734.87	1090.5	5734.79	1091.4	5734.93
1093.98	5734.99	1096.61	5735.03	1099.13	5734.94	1099.68	5734.98	1100.66	5734.85
1105.24	5734.74	1109.84	5734.74	1115.06	5734.49	1118.46	5734.41	1118.73	5734.4
1122.19	5734.38	1122.81	5734.57	1124.42	5734.58	1124.75	5734.67	1125.71	5734.72
1128.71	5734.83	1129.53	5735.06	1131.62	5735.11	1133.66	5735.03	1136.38	5735.02
1139.24	5734.87	1140.93	5734.84	1141.72	5734.77	1142.52	5734.84	1143.2	5734.77
1144.6	5734.83	1144.7	5734.87	1145.52	5734.78	1147.86	5734.5	1148.09	5734.73
1149.3	5734.52	1150.99	5734.43	1151.18	5734.55	1152.68	5734.59	1153.65	5734.34
1154.1	5733.24	1154.7	5732.93	1154.83	5733.69	1157.36	5731.58	1158.98	5730.75
1160.35	5730.07	1160.59	5730.75	1163.64	5728.43	1166.13	5727.99	1167.97	5726.2
1169.58	5726.2	1174.84	5723.58	1175.8	5723.1	1176.93	5722.41	1178.61	5722.29
1179.54	5722.54	1181.46	5722.69	1182.67	5722.98	1185.3	5723.25	1185.46	5723.69
1187.45	5723.73	1191.15	5723.9	1192.13	5723.89	1193.61	5723.7	1193.91	5723.56
1195.63	5723.41	1196.31	5723.51	1198.52	5723.24	1199.34	5722.7	1200.24	5722.83
1201.47	5722.65	1204.13	5722.51	1209.59	5722.42	1214.23	5722.42	1218.4	5722.58
1219.17	5722.49	1221.34	5722.47	1221.84	5722.44	1224.08	5722.4	1225.74	5722.38
1226.61	5722.38	1228.32	5722.44	1228.49	5722.44	1228.73	5722.38	1230.75	5722.47
1234.61	5722.92	1236.58	5722.86	1237.27	5722.88	1238.06	5722.85	1238.54	5722.89
1238.89	5722.84	1239.52	5722.83	1240.48	5722.85	1241.8	5722.82	1244.92	5722.99
1248.85	5723.09	1252.05	5722.87	1252.14	5722.79	1252.7	5722.77	1253.99	5722.65
1255	5722.74	1256.93	5722.41	1257.66	5722.44	1260.44	5722.45	1262.12	5722.63
1263.31	5722.71	1264.38	5722.76	1266.54	5722.78	1267.97	5722.98	1268.01	5722.92
1269.69	5723.07	1271.21	5723.05	1273.87	5723.24	1275.62	5723.25	1277.34	5723.36
1278.55	5723.28	1279.01	5723.32	1280.17	5723.27	1280.72	5723.44	1282.98	5723.47
1283.67	5723.46	1286.41	5723.46	1286.42	5723.43	1287.1	5723.46	1290.04	5723.53
1290.79	5723.57	1291.36	5723.49	1292.36	5723.67	1294.93	5723.72	1295.94	5724.05
1296.17	5724.07	1297.31	5724.02	1298.94	5724.14	1300.45	5724.53	1300.83	5724.57

1302.14	5724.53	1304.45	5724.67	1308.82	5725.44	1309.75	5725.74	1311.37	5726.41
1312.7	5726.36	1314.61	5726.84	1314.91	5726.67	1317.31	5727	1317.93	5726.96
1321.6	5727.19	1321.68	5727.2	1322.23	5727.12	1326.21	5727.4	1329.58	5727.96
1331	5728.13	1332.21	5728.05	1335.79	5728.53	1337.03	5728.98	1337.37	5729.03
1345.1	5729.89	1348.85	5730.39	1354.92	5731.04	1357.72	5731.36	1359.96	5731.38
1362.53	5731.47	1362.92	5731.5	1363.85	5731.5	1365.82	5731.47	1366.3	5731.5
1368.69	5731.45	1372.12	5731.29	1374.89	5730.91	1375.55	5731.03	1376.85	5730.71
1377.08	5730.68	1379.98	5730.57	1383.17	5730.17	1389.32	5729.08	1392.88	5728.87
1397.57	5728.33	1403.48	5727.52	1405.05	5727.37	1409.71	5726.91	1409.92	5727.07
1411.42	5726.74	1414.37	5726.47	1415.82	5726.51	1420.48	5726.12	1420.66	5725.98
1421.35	5725.94	1423.41	5725.93	1425.41	5725.91	1427.12	5725.01	1427.34	5725.37
1428.1	5725.28	1431.05	5724.38	1431.78	5724.15	1433.02	5724.15	1433.5	5724.14
1434.13	5724.04	1435.23	5724.17	1436.7	5723.9	1438.09	5723.48	1439.9	5723.44
1442.59	5723.53	1444.53	5723.57	1444.82	5723.54	1446.05	5723.58	1448.5	5723.47
1450.39	5723.28	1453.19	5723.16	1459.6	5722.72	1463.43	5722.19	1463.46	5722.31
1464.64	5722	1465.02	5721.95	1465.93	5722.14	1465.95	5721.82	1466.6	5721.71
1468.62	5721.71	1471.01	5721.44	1475.08	5721.27	1476.95	5721.08	1477.39	5720.97
1480.41	5720.84	1482.37	5720.35	1486.8	5719.94	1487.85	5719.62	1488.27	5719.68
1488.42	5719.58	1492.03	5719.48	1494.8	5719.01	1494.9	5719.22	1494.94	5718.99
1498.94	5718.77	1499.07	5718.49	1499.46	5718.44	1503.43	5717.88	1504.12	5717.77
1504.49	5718.04	1505.01	5717.64	1507.19	5717.62	1507.55	5717.76	1511.2	5717.89
1512.66	5718.06	1515.54	5718.53	1517.75	5718.98	1523.16	5720.19	1525.61	5720.7
1528.42	5721.55	1529.54	5721.4	1533.96	5722.02	1537.49	5722.62	1538.69	5723.06
1539.36	5722.56	1540.48	5723.49	1540.65	5723.64	1542.4	5723.55	1543.35	5724.21
1543.6	5724.25	1545.18	5724.15	1546.78	5724.84	1549.73	5725.36	1550.95	5725.57
1551.91	5725.37	1557.82	5726.67	1558.28	5726.42	1562.35	5726.96	1564.42	5726.98
1566.66	5727.52	1567.14	5727.66	1568.85	5727.92	1568.99	5727.93	1569.32	5727.66
1571.04	5727.92	1572.73	5728.06	1573.51	5728.04	1574.31	5727.97	1575.32	5728.07
1577.63	5727.9	1584.55	5728.01	1586.26	5728.03	1589.2	5728.04	1592.91	5728.11
1595.58	5728.13	1597.3	5728.12	1597.82	5728.13	1600.55	5728.08	1605.18	5728.04
1615.24	5727.81	1620.84	5727.69	1621.39	5727.71	1621.83	5727.68	1636.12	5727.55
1639.83	5727.46	1641.19	5727.43	1648.85	5727.3	1652.22	5727.25	1653.94	5727.22
1656.88	5727.19	1657	5727.21	1658.6	5727.17	1664.98	5727.13	1667.8	5727.13

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 375.46 .045 1174.84 .032 1540.48 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1174.84 1540.48 97.01 97.01 97.01 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5731.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.83	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5730.65	Reach Len. (ft)	97.01	97.01
97.01				

Crit W.S. (ft) 427.84		Flow Area (sq ft)	53.65	2323.29
E.G. Slope (ft/ft) 427.84	0.002081	Area (sq ft)	53.65	2323.29
Q Total (cfs) 1412.79	19150.00	Flow (cfs)	177.26	17559.95
Top Width (ft) 127.32	481.68	Top Width (ft)	15.48	338.88
Vel Total (ft/s) 3.30	6.83	Avg. Vel. (ft/s)	3.30	7.56
Max Chl Dpth (ft) 3.36	13.03	Hydr. Depth (ft)	3.47	6.86
Conv. Total (cfs) 30968.3	419766.2	Conv. (cfs)	3885.5	384912.4
Length Wtd. (ft) 131.83	97.01	Wetted Per. (ft)	18.15	344.74
Min Ch El (ft) 0.42	5717.62	Shear (lb/sq ft)	0.38	0.88
Alpha 1.39	1.14	Stream Power (lb/ft s)	1.27	6.62
Frctn Loss (ft) 1.74	0.16	Cum Volume (acre-ft)	0.29	9.45
C & E Loss (ft) 0.43	0.04	Cum SA (acres)	0.12	1.23

Warning: Divided flow computed for this cross-section.

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Animas River

REACH: CenterPoint

RS: 1003

INPUT

Description:

Station Elevation Data num= 490

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
382.22	5733.32	385.05	5733.18	386.37	5733.27	388.93	5733.07	389.84	5733.23
390.35	5733.25	392	5733.27	393.97	5733.19	396.22	5733.24	397.77	5733.08
399.22	5733.05	400.47	5732.99	404.69	5732.91	405.48	5732.93	405.69	5732.89
408.08	5732.8	410.03	5732.81	414.18	5732.8	414.42	5732.85	416.52	5732.89
418.14	5732.8	419.69	5732.79	422.42	5732.74	426.11	5732.8	428.74	5732.74
431.65	5732.78	434.19	5732.65	438.09	5732.52	440	5732.55	440.66	5732.54
442.33	5732.57	446.64	5732.59	449.84	5732.63	454.79	5732.45	455.82	5732.46
461.15	5732.39	462.32	5732.45	467.24	5732.5	471.7	5732.52	472.37	5732.55
479.82	5732.61	481.59	5732.79	482.57	5732.75	484.62	5732.78	487.47	5732.71

491.14	5732.75	495.39	5732.78	498.62	5732.65	502.38	5732.61	503.89	5732.61
505.73	5732.63	506.77	5732.67	506.95	5732.7	509.06	5732.73	512.98	5732.74
517.49	5732.63	521.57	5732.74	525.88	5732.79	529.21	5732.73	533.59	5732.75
533.83	5732.76	537.88	5732.8	538.05	5732.84	540.03	5732.89	542.27	5732.82
544.11	5732.82	544.29	5732.88	545.61	5732.89	546.49	5732.82	548.26	5732.82
550.84	5733	553.95	5732.86	558.09	5732.91	560.76	5732.9	563.03	5732.99
565.45	5733.28	566.42	5733.32	569.78	5733.34	572.9	5732.93	572.9	5732.96
576.25	5732.82	582.57	5732.87	587.07	5732.95	590.83	5733.09	594.41	5733.02
598.88	5733.11	602.67	5733.09	606.12	5733.17	618.31	5733.12	620.9	5733.21
624.57	5733.21	632.47	5733.28	633.74	5733.25	642.95	5733.24	646.94	5733.36
649.39	5733.5	650.83	5733.33	651.94	5733.01	653.47	5733.07	654.65	5733.54
655.61	5733.7	658.42	5733.65	659.89	5733.8	661.82	5733.87	663.25	5733.7
667.08	5733.71	668.99	5733.65	675.93	5733.65	681.18	5733.76	685.96	5733.71
687.42	5733.62	690.03	5733.74	696.24	5733.71	697.68	5733.75	701.34	5733.72
703.95	5733.82	706.82	5733.78	707.95	5733.83	712.98	5733.88	721.11	5733.9
725.52	5733.85	733.77	5733.88	737.26	5733.93	744.78	5733.95	751.46	5734.12
759.92	5734.22	768.2	5734.39	772.01	5734.39	777.76	5734.57	779.38	5734.57
786.36	5734.81	788.27	5734.94	793.42	5735	798.31	5735.23	802.17	5735.23
806.92	5735.41	812.12	5735.45	815.11	5735.57	819.83	5735.85	825.09	5735.96
825.33	5736.05	828.43	5735.97	829.63	5735.81	831.97	5735.85	832.75	5736
835.85	5736.27	837.48	5736.16	839.44	5736.43	842.3	5736.54	846.19	5736.42
848.03	5736.18	849.95	5735.73	851.86	5735.78	852.61	5735.68	856.75	5735.74
858.03	5735.94	863.35	5736.29	866.69	5736.12	870.06	5736.12	874.5	5736.27
878.99	5736.28	884.27	5735.97	886.77	5735.77	888.68	5735.73	898.24	5735.77
903.5	5735.77	906.94	5735.72	914.42	5735.55	937.67	5735.23	942.7	5735.18
950.36	5735.19	955.61	5735.27	962.33	5735.24	964.22	5735.3	966.85	5735.21
969	5735.21	973.06	5735.1	975.21	5735.13	976.97	5734.98	979.73	5734.9
985.29	5734.9	987.06	5734.85	993.27	5734.83	995.79	5734.89	998.55	5735.08
1000.38	5735.12	1007.5	5735.49	1013.24	5735.65	1014.15	5735.61	1018.27	5735.66
1022.32	5736.14	1025.18	5735.91	1027.1	5735.6	1029.25	5735.72	1034.74	5735.86
1040.68	5735.9	1048.13	5736.03	1051.31	5736.03	1055.06	5735.91	1058.67	5735.85
1062.54	5735.69	1064.53	5735.49	1067.62	5735.47	1069.59	5735.7	1071.2	5735.69
1072.94	5735.21	1074.12	5735.24	1075.61	5735.47	1077.46	5735.42	1079.24	5735.07
1082.27	5735.09	1085.53	5735.02	1087.71	5735.09	1090.12	5735	1094	5735.02
1097.39	5735.2	1099.57	5735.48	1101.73	5735.62	1104.63	5735.55	1106.47	5735.39
1109.57	5735.02	1111.17	5734.93	1113.96	5734.95	1118.32	5735.09	1119.57	5735.08
1122.48	5734.87	1124.47	5734.79	1132.94	5734.72	1137.26	5734.52	1141.61	5734.38
1146.31	5734.33	1151.8	5734.77	1154.59	5735.08	1157.6	5734.92	1160.26	5735.07
1161.66	5734.93	1165.42	5734.84	1166.59	5734.66	1168.25	5734.66	1169.12	5734.39
1173.74	5734.16	1174.93	5734.21	1178.29	5735.05	1179.72	5735.23	1180.68	5735.09
1182.59	5734.11	1184.14	5732.85	1184.38	5733.33	1184.39	5732.76	1184.67	5732.67
1187.37	5732.3	1187.97	5731.7	1189.24	5731.38	1189.42	5731.72	1191.57	5730.85
1191.71	5731.16	1194.46	5730.58	1197.14	5730.1	1197.57	5729.79	1201.13	5729.3
1202.7	5729.3	1203.42	5729.04	1204.56	5728.91	1207.99	5728.57	1208.2	5728.7
1208.26	5728.55	1213.76	5728.05	1215.31	5727.9	1219.71	5727.64	1219.88	5727.46
1221.87	5727.25	1224.43	5727.15	1226.74	5726.69	1228.26	5726.71	1230.17	5726.26
1230.95	5726.13	1231.57	5726.28	1231.66	5726.02	1235.23	5725.71	1238.44	5725.11
1238.64	5724.74	1239.54	5724.55	1242.3	5724.03	1245.72	5723.68	1248.05	5723.33
1249.15	5723.04	1251.25	5722.99	1253.52	5722.74	1254.57	5722.79	1257.02	5722.34
1257.39	5722.29	1258.88	5722.32	1261.8	5721.73	1263.63	5721.47	1265.33	5721.64

1266.52	5721.63	1267	5721.58	1267.9	5721.59	1269.15	5721.57	1269.88	5721.6
1272.94	5721.51	1273.19	5721.46	1275.12	5721.56	1276.14	5721.56	1279.41	5721.59
1280.64	5721.61	1283.45	5721.37	1287.56	5721.23	1290.2	5721.33	1292.83	5721.73
1295.7	5721.76	1296.49	5722.15	1296.9	5722.04	1300.19	5722.32	1300.21	5722.3
1302.2	5722.28	1302.63	5722.37	1305.98	5722.23	1306.21	5722.2	1306.78	5722.25
1308.85	5722.26	1310.44	5722.46	1312.68	5722.49	1312.97	5722.6	1316.18	5722.7
1316.5	5722.67	1320.8	5722.78	1326.21	5723.26	1326.54	5723.19	1329.46	5723.45
1331.33	5723.46	1336.59	5723.6	1341.73	5723.83	1342.09	5723.81	1347.46	5723.92
1349.97	5723.94	1351.52	5723.93	1353.67	5723.93	1355.24	5723.92	1358.11	5723.96
1362.89	5723.88	1363.22	5724.07	1365.43	5724.28	1368.92	5724.6	1371.98	5724.72
1374.36	5724.86	1376.99	5725.13	1378.42	5725.14	1379.04	5725.11	1385.83	5725.27
1389.89	5725.33	1392.76	5725.29	1394.61	5725.29	1397.31	5725.2	1397.33	5725.11
1400.71	5724.9	1402.86	5724.73	1402.87	5724.88	1404.39	5724.6	1404.9	5724.56
1406.89	5724.55	1408.31	5724.22	1410.74	5723.94	1410.95	5724.14	1416.44	5723.42
1417.89	5722.61	1418.62	5722.31	1419.28	5722.8	1420.99	5722.14	1421.38	5721.85
1423.4	5721.8	1423.46	5721.84	1424.11	5721.81	1426.96	5721.81	1428.38	5721.86
1428.4	5721.88	1431.87	5721.71	1434.61	5721.72	1435.8	5721.7	1439.63	5721.77
1441.36	5721.68	1445.29	5721.63	1446.56	5721.73	1450.38	5721.64	1450.48	5721.7
1451.86	5721.64	1458.29	5721.64	1459.68	5721.5	1463.8	5721.51	1469.26	5721.02
1469.47	5720.93	1472.8	5720.86	1475.68	5720.68	1476.21	5720.78	1479.3	5720.56
1480.83	5720.62	1483.13	5720.59	1485.47	5720.52	1486.72	5720.57	1490.96	5720.22
1491.54	5720.12	1491.98	5720.3	1493.42	5720.16	1494.61	5719.9	1496.11	5719.43
1497.64	5719.48	1499.55	5718.9	1499.63	5719.28	1499.77	5718.81	1501.05	5719.04
1502.21	5718.69	1503.45	5718.71	1504.81	5718.13	1505.05	5718.09	1506.08	5718.23
1507.09	5717.84	1508.71	5717.88	1511.8	5717.65	1513.97	5717.79	1515.65	5718.1
1517.56	5718.58	1520.3	5719.92	1521.38	5719.73	1522.18	5720.1	1522.57	5719.96
1522.71	5720.15	1522.95	5720.18	1524.97	5720.18	1526.54	5720.96	1527.13	5720.61
1527.29	5721.16	1532.9	5722.07	1534.08	5722.82	1535.13	5723.06	1536.79	5723.41
1537.02	5723.03	1537.04	5723.46	1540.26	5723.71	1542.29	5724.47	1542.53	5724.51
1543.6	5724.52	1544.62	5724.52	1547.92	5725.07	1549.77	5725.66	1551.67	5725.64
1552.32	5726.02	1553.27	5726.16	1555.9	5726.52	1558.45	5726.59	1562.02	5727.05
1563.46	5727.16	1565.37	5727.18	1567.34	5727.05	1569.76	5727.09	1569.99	5727.06
1571.84	5727.09	1571.9	5726.94	1575.23	5727.13	1575.33	5726.83	1578.05	5727.19
1580.68	5727.19	1581.69	5727.09	1583.47	5727.17	1588.09	5727.21	1589.33	5727.07
1590.95	5727.15	1592.19	5727.17	1592.74	5727.15	1594.54	5727.17	1597.64	5726.95
1598.23	5726.99	1599.6	5726.94	1601.58	5726.95	1603.41	5726.81	1605.81	5726.21
1607.08	5726.36	1608.64	5726.08	1610.75	5725.57	1613.66	5724.57	1614.61	5724.56
1616.24	5725.02	1619.35	5725.61	1620.97	5725.96	1622.5	5725.92	1624.63	5726.15
1627.05	5726.24	1627.68	5726.19	1628.29	5726.27	1631.59	5726.31	1639.48	5726.46

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
382.22	.045	1230.17	.032	1543.6	.045

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	1230.17	1543.6		97.01	97.01	.1	.3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5731.27	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.71	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5730.57	Reach Len. (ft)	97.01	97.01
97.01				
Crit W.S. (ft)	5727.45	Flow Area (sq ft)	82.48	2552.15
397.06				
E.G. Slope (ft/ft)	0.001405	Area (sq ft)	82.48	2552.15
397.06				
Q Total (cfs)	19150.00	Flow (cfs)	176.62	17750.90
1222.49				
Top Width (ft)	444.94	Top Width (ft)	35.63	313.43
95.88				
Vel Total (ft/s)	6.32	Avg. Vel. (ft/s)	2.14	6.96
3.08				
Max Chl Dpth (ft)	12.92	Hydr. Depth (ft)	2.31	8.14
4.14				
Conv. Total (cfs)	510916.4	Conv. (cfs)	4712.1	473588.7
32615.6				
Length Wtd. (ft)	97.01	Wetted Per. (ft)	36.24	319.47
101.20				
Min Ch El (ft)	5717.65	Shear (lb/sq ft)	0.20	0.70
0.34				
Alpha	1.14	Stream Power (lb/ft s)	0.43	4.87
1.06				
Frctn Loss (ft)	0.27	Cum Volume (acre-ft)	0.14	4.02
0.82				
C & E Loss (ft)	0.25	Cum SA (acres)	0.06	0.51
0.18				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Warning: The velocity head has changed by more than 0.5 ft (0.15 m). This may indicate the need for additional cross sections.

Warning: The conveyance ratio (upstream conveyance divided by downstream conveyance) is less than 0.7 or greater than 1.4. This may indicate the need for additional cross sections.

CROSS SECTION

RIVER: Animas River

REACH: CenterPoint RS: 1002

INPUT

Description:

Station Elevation Data		num=		490					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
465.57	5733.58	467.63	5733.41	468.19	5733.05	468.68	5733.05	470.45	5732.74
471.79	5733.37	472.29	5733.37	473.73	5733.5	475.04	5733.34	475.89	5733.31
478.53	5733.41	479.26	5733.38	481.01	5733.38	482.13	5733.45	484.1	5733.4
484.24	5733.43	487.41	5733.53	488.93	5733.48	492.39	5733.53	495.42	5733.46
499.48	5733.41	502.48	5733.19	503.25	5733.23	505.08	5733.09	506.52	5733.08
510.2	5733.13	512.03	5733.09	512.67	5733.09	514.29	5733.16	515.01	5733.17
516.68	5733.11	519.38	5733.13	520	5733.08	520.89	5733.05	522.02	5733.05
524.06	5733.13	526.16	5733.1	526.52	5733.11	529.95	5733.05	531.52	5733.16
532.5	5733.04	533.35	5732.99	534.61	5732.95	537.55	5732.88	541.49	5732.81
543.13	5732.79	544.1	5732.8	547.89	5732.75	549.78	5732.85	551.71	5732.8
553.94	5732.78	557.27	5732.76	558.9	5732.73	561.13	5732.75	562.79	5732.75
563.6	5732.72	569.45	5732.6	571.8	5732.5	573.59	5732.46	575.09	5732.47
577.07	5732.55	578.49	5732.57	580.96	5732.57	581.01	5732.63	582.13	5732.66
587.99	5732.44	588.92	5732.45	591.27	5732.45	593.43	5732.4	597.06	5732.41
598.92	5732.46	599.1	5732.43	600.15	5732.5	602.15	5732.49	606.64	5732.53
610.23	5732.57	612.48	5732.57	613.83	5732.96	614.74	5733.04	615.27	5733.04
617.42	5732.95	619.83	5732.72	621.06	5732.69	621.97	5732.71	628.22	5732.77
630.83	5732.66	632.77	5732.63	636.61	5732.62	638.02	5732.65	641.06	5732.66
643.29	5732.73	644.79	5732.76	648.2	5732.63	650.48	5732.62	652.16	5732.64
652.21	5732.62	653.9	5732.69	655.74	5732.72	658.45	5732.74	662.97	5732.69
663.76	5732.7	667.43	5732.69	670.09	5732.76	671.07	5732.8	673.32	5732.82
673.95	5732.81	681.49	5732.78	681.68	5732.82	683.53	5732.86	683.79	5732.89
684.62	5732.89	686.4	5732.8	694.19	5732.88	695.57	5732.95	698.74	5733.28
700.9	5733.18	703.08	5733.24	705.73	5732.91	706.14	5732.85	708.79	5732.79
713.41	5732.8	721.2	5732.93	724.59	5733.17	728.25	5732.99	734.74	5733.07
737.24	5733.04	739.11	5733.14	740.84	5733.1	745.23	5733.13	750.88	5733.11
754.21	5733.18	759.76	5733.16	762.12	5733.29	764.5	5733.34	766.9	5733.24
775.02	5733.22	780.27	5733.34	782.19	5733.51	783.4	5733.38	784.83	5732.92
786.25	5733.11	787.93	5733.6	791.51	5733.8	794.63	5733.77	796.92	5733.62
800.83	5733.68	802.75	5733.62	806.1	5733.68	809.59	5733.61	812.79	5733.71
820.91	5733.66	824.26	5733.72	831.04	5733.66	836.69	5733.75	843.87	5733.79
845.93	5733.84	850.51	5733.81	863.24	5733.83	864.48	5733.87	872.56	5733.87
875.84	5733.96	881.46	5733.98	884.75	5734.06	889.77	5734.09	892.44	5734.17
895.44	5734.19	900.05	5734.33	908.91	5734.41	911.53	5734.52	913.68	5734.53
920.39	5734.73	922.05	5734.84	932.29	5735.07	937.59	5735.07	940.46	5735.16
941.92	5735.13	946.06	5735.25	948.11	5735.26	957.43	5735.89	959.1	5736.08
962.2	5736.09	967.79	5735.88	969	5735.94	972.01	5736.27	976.34	5736.26
979.89	5736.48	981.32	5736.47	983.47	5736.17	985.63	5736.19	988.72	5735.86
989.93	5735.85	994.15	5735.65	996.38	5735.92	1000.92	5736.14	1004.51	5736.1
1007.72	5736.4	1009.3	5736.33	1011.21	5736.37	1013.36	5736.29	1017.2	5736.05
1019.2	5735.82	1021.69	5735.63	1025.08	5735.75	1028.68	5735.74	1033.45	5735.81
1036.91	5735.81	1040.86	5735.74	1048.14	5735.55	1062.15	5735.39	1074.59	5735.23
1083.4	5735.2	1087.95	5735.24	1094.72	5735.24	1097.04	5735.3	1099.41	5735.28
1101.02	5735.14	1108.26	5735.1	1110.42	5734.97	1113.87	5735.05	1116	5734.92
1125.27	5734.9	1130.05	5735.07	1132.64	5735.3	1135.56	5735.35	1138.95	5735.49
1139.42	5735.69	1141.32	5735.94	1142.49	5735.93	1143.56	5735.84	1144.14	5735.95
1145.35	5735.78	1147.42	5735.79	1156.6	5735.6	1161.32	5735.52	1166.44	5735.45
1170.11	5735.31	1171.82	5735.06	1172.64	5735.04	1173.17	5735.24	1174.02	5735.13

1174.37 5735.47 1176.7 5735.66 1178.18 5735.72 1178.41 5735.33 1179.39 5735.05
1181.18 5735.01 1182.44 5735.01 1184.53 5735.52 1186.97 5735.69 1191.62 5735.61
1196.15 5735.57 1197.73 5735.57 1198.39 5735.62 1200.19 5735.62 1202.82 5735.52
1203.36 5735.56 1203.98 5735.45 1206.21 5735.41 1209.69 5735.5 1212.66 5735.52
1215.26 5735.57 1216 5735.52 1216.46 5735.6 1218.29 5735.61 1220.41 5735.52
1223.09 5735.6 1226.55 5735.53 1227.92 5735.55 1231.15 5735.27 1232.47 5735.3
1235.26 5734.96 1242 5734.64 1244.09 5734.57 1245.91 5734.74 1249.38 5734.76
1252.16 5734.73 1253.01 5734.66 1253.22 5734.75 1254.04 5734.86 1255.7 5734.89
1259.76 5734.76 1260.83 5734.75 1265.78 5734.75 1268.27 5734.68 1272.57 5734.36
1274.59 5734.3 1275.5 5734.33 1278.62 5734.19 1286.19 5734.11 1287.01 5734.01
1288.22 5733.97 1289.41 5733.98 1291.51 5733.95 1294.14 5734.05 1294.58 5733.94
1294.62 5734.14 1296.83 5734.28 1297.55 5734.28 1299.27 5734.19 1299.9 5734.33
1300.22 5733.96 1301.84 5733.82 1302.71 5733.86 1303.18 5733.78 1304.85 5733.78
1305.86 5733.96 1306.56 5733.81 1308.05 5733.93 1308.27 5734.09 1309.25 5734.06
1310.25 5733.59 1311.14 5733.62 1312.12 5733.56 1313.44 5733.58 1314.76 5733.56
1315.47 5733.63 1316.68 5733.57 1316.83 5733.66 1317.83 5733.55 1320.93 5733.52
1321.48 5733.58 1323.69 5733.59 1324 5733.53 1326.87 5733.41 1328.19 5733.39
1330.31 5733.4 1330.77 5733.49 1333.36 5733.34 1340.55 5733.34 1342.49 5733.47
1342.86 5733.39 1344.2 5733.59 1345.14 5733.63 1347.41 5733.64 1352.78 5733.31
1355.3 5733.55 1355.57 5733.14 1356.79 5733.23 1357.14 5732.88 1359.97 5732.44
1362.88 5731.96 1367.35 5731.5 1368.86 5730.9 1371.2 5730.47 1372.4 5730.23
1372.96 5730.47 1377.38 5729.58 1380.16 5728.96 1384.02 5727.52 1384.08 5727.99
1384.14 5727.49 1387.08 5726.64 1388.43 5726.23 1388.62 5726.72 1388.95 5726.07
1391.83 5725.73 1394.58 5724.19 1395.25 5723.95 1397.45 5723.81 1397.91 5722.97
1400.93 5722.46 1401.18 5722.42 1401.58 5721.47 1402.06 5721.32 1403.27 5721.11
1403.87 5721.32 1405.82 5720.95 1408.68 5720.78 1413.87 5720.61 1415.69 5720.42
1417.91 5720.4 1418.91 5720.35 1421.6 5720.32 1423.93 5720.33 1426.11 5720.49
1427.78 5720.81 1427.93 5720.51 1430.52 5721.1 1431.72 5721.07 1435.96 5721.09
1437.57 5720.84 1439.79 5720.3 1441.98 5720.11 1443.59 5720.14 1445.28 5720.34
1446.15 5720.33 1447.64 5720.34 1447.96 5720.22 1451.04 5720.14 1453 5720.1
1454.54 5720.18 1457.39 5720.18 1458.62 5720.06 1460.05 5720.22 1460.18 5720.16
1462.77 5720.13 1464.49 5720.15 1467.92 5720.07 1469.14 5720.27 1470.49 5720.34
1472.32 5720.17 1474.33 5720.15 1474.77 5720.2 1475.02 5720.07 1477.21 5720.3
1478.68 5720.26 1480.14 5719.94 1480.4 5719.92 1482.61 5720.08 1484.8 5720.01
1488.2 5720.01 1488.46 5720.17 1488.64 5719.95 1489.96 5719.89 1490.44 5719.93
1490.96 5719.88 1492.86 5720 1496.77 5720.01 1497.51 5719.92 1498.99 5719.88
1500.94 5719.88 1502.61 5720.05 1505.33 5719.91 1505.75 5719.96 1507.08 5720.03
1508.51 5719.97 1509.73 5719.79 1511.84 5719.65 1513.64 5719.44 1514.62 5719.29
1517.1 5719.19 1518.78 5719.19 1521.96 5719.25 1522.67 5719.32 1523.18 5719.2
1529.26 5719.66 1529.6 5719.74 1530.24 5719.7 1531.95 5719.78 1533.86 5719.82
1535.73 5719.83 1537.36 5719.81 1540.99 5719.97 1542.99 5719.97 1543.03 5719.93
1543.99 5719.98 1544.36 5719.99 1544.69 5719.91 1545.56 5720.07 1549.34 5720.18
1550.1 5720.36 1551.58 5720.26 1552.6 5720.74 1552.95 5720.81 1553.35 5720.6
1554.79 5720.76 1556.43 5721.08 1556.61 5721.3 1559.19 5721.49 1559.36 5721.37
1559.61 5721.48 1563.03 5721.52 1563.6 5721.84 1565.48 5721.8 1567.36 5722.08
1567.91 5721.95 1569.14 5722.11 1571.25 5722.16 1572.82 5722.48 1573.83 5722.52
1575 5722.45 1578.67 5722.63 1578.83 5722.89 1582.98 5723.33 1584.43 5723.46
1585.25 5723.36 1585.67 5723.41 1587.65 5723.43 1588.36 5723.45 1590.88 5723.48
1592.26 5723.63 1592.57 5723.58 1593.11 5723.7 1595.55 5723.45 1599.35 5723.35
1601.18 5723.46 1601.32 5723.76 1605.09 5723.96 1606.17 5724.21 1611.53 5725.18

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 465.57 .045 1400.93 .032 1543.99 .045

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1400.93 1543.99 194.02 194.02 194.02 .1 .3

CROSS SECTION OUTPUT Profile #100 yr

E.G. Elev (ft)	5730.76	Element	Left OB	Channel
Right OB				
Vel Head (ft)	3.19	Wt. n-Val.	0.045	0.032
0.045				
W.S. Elev (ft)	5727.57	Reach Len. (ft)		
Crit W.S. (ft)	5727.57	Flow Area (sq ft)	42.63	1061.39
341.53				
E.G. Slope (ft/ft)	0.007534	Area (sq ft)	42.63	1061.39
341.53				
Q Total (cfs)	19150.00	Flow (cfs)	210.92	16151.39
2787.69				
Top Width (ft)	227.54	Top Width (ft)	16.94	143.06
67.54				
Vel Total (ft/s)	13.25	Avg. Vel. (ft/s)	4.95	15.22
8.16				
Max Chl Dpth (ft)	8.38	Hydr. Depth (ft)	2.52	7.42
5.06				
Conv. Total (cfs)	220623.6	Conv. (cfs)	2430.0	186077.2
32116.5				
Length Wtd. (ft)		Wetted Per. (ft)	18.98	144.68
71.07				
Min Ch El (ft)	5719.19	Shear (lb/sq ft)	1.06	3.45
2.26				
Alpha	1.17	Stream Power (lb/ft s)	5.23	52.51
18.45				
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:Animas River

Reach	River Sta.	n1	n2	n3
CenterPoint	1014	.045	.032	.045
CenterPoint	1013	.045	.032	.045
CenterPoint	1012	.045	.032	.045
CenterPoint	1011	.045	.032	.045
CenterPoint	1010	.045	.032	.045
CenterPoint	1009	.045	.032	.045
CenterPoint	1008	.045	.032	.045
CenterPoint	1007	.045	.032	.045
CenterPoint	1006	.045	.032	.045
CenterPoint	1005	.045	.032	.045
CenterPoint	1004	.045	.032	.045
CenterPoint	1003	.045	.032	.045
CenterPoint	1002	.045	.032	.045

SUMMARY OF REACH LENGTHS

River: Animas River

Reach	River Sta.	Left	Channel	Right
CenterPoint	1014	97.01	97.01	97.01
CenterPoint	1013	97.01	97.01	97.01
CenterPoint	1012	97.01	97.01	97.01
CenterPoint	1011	97.01	97.01	97.01
CenterPoint	1010	97.01	97.01	97.01
CenterPoint	1009	97.01	97.01	97.01
CenterPoint	1008	97.01	97.01	97.01
CenterPoint	1007	97.01	97.01	97.01
CenterPoint	1006	97.01	97.01	97.01
CenterPoint	1005	97.01	97.01	97.01
CenterPoint	1004	97.01	97.01	97.01
CenterPoint	1003	97.01	97.01	97.01
CenterPoint	1002	194.02	194.02	194.02

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS

River: Animas River

Reach	River Sta.	Contr.	Expan.
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CenterPoint	1014	.1	.3
CenterPoint	1013	.1	.3
CenterPoint	1012	.1	.3
CenterPoint	1011	.1	.3
CenterPoint	1010	.1	.3
CenterPoint	1009	.1	.3
CenterPoint	1008	.1	.3
CenterPoint	1007	.1	.3
CenterPoint	1006	.1	.3
CenterPoint	1005	.1	.3
CenterPoint	1004	.1	.3
CenterPoint	1003	.1	.3
CenterPoint	1002	.1	.3

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008

Expiration Date: November 30, 2022

ELEVATION CERTIFICATE

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. 51A Road 2650			Policy Number:
City Aztec	State New Mexico	ZIP Code 87410	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