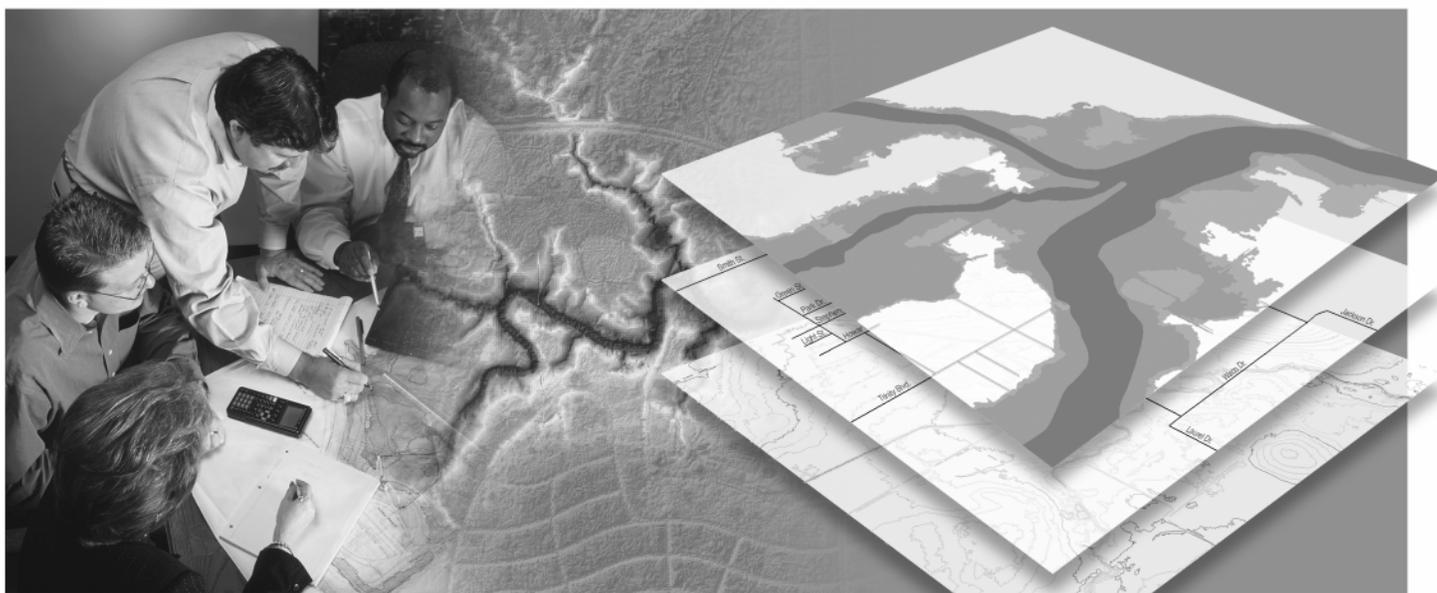


Flood Insurance Study

Harris County, Texas and Incorporated Areas

VOLUME 1 of 11



This revised preliminary FIS report only includes revised Floodway Data Tables, revised profiles, and revised Summary of Discharges. The unrevised components will appear in the final FIS report.

COMMUNITY NAME	COMMUNITY NO.	COMMUNITY NAME	COMMUNITY NO.
Baytown, City of	485456	Nassau Bay, City of	485491
Bellaire, City of	480289	Pasadena, City of	480307
Bunker Hill Village, City of ¹	480290	Pearland, City of	480077
Deer Park, City of	480291	Piney Point Village, City of	480308
El Lago, City of	485466	Seabrook, City of	485507
Galena Park, City of	480293	Shoreacres, City of	485510
Hedwig Village, City of ¹	480294	South Houston, City of	480311
Hilshire Village, City of	480295	Southside Place, City of	480312
Houston, City of	480296	Spring Valley, City of	480313
Humble, City of	480297	Stafford, City of	480233
Hunters Creek Village, City of	480298	Taylor Lake Village, City of	485513
Jacinto City, City of	480299	Tomball, City of	480315
Jersey Village, City of	480300	Webster, City of	485516
La Porte, City of	485487	West University Place, City of	480318
Missouri City, City of	480304	Harris County Unincorporated Areas	480287
Morgans Point, City of	480305		

¹ No Special Flood Hazard Areas identified

REVISED PRELIMINARY:
SEPTEMBER 25, 2014



FEMA

REVISED:
FLOOD INSURANCE STUDY NUMBER
48201CV001B

NOTICE TO FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

This Preliminary Flood Insurance Study contains only Floodway Data Tables and Profiles revised as part of this Physical Map Revision (PMR). Also, the profiles are being presented at a reduced scale to minimize reproduction costs. All tables and profiles will be included and printed at full scale in the final published report.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components. A listing of Community Map Repositories can be found on the Index Map.

This FIS was revised on [to be determined]. Users should refer to Section 10.0, Revision Description, for further information. Section 10.0 is intended to present the most up-to-date information for specific portions of this FIS report. Therefore, users of this FIS report should be aware that the information presented in Section 10.0 supersedes information in Sections 1.0 through 9.0 of this FIS report.

This publication incorporates revisions to the original FIS.

Initial Countywide FIS Effective Date: September 28, 1990

First Revised Countywide FIS Date: September 30, 1992 – to update corporate limits; to decrease Base Flood Elevations; to update map format and roads and road names; and to incorporate previously issued letters of map amendment.

Second Revised Countywide FIS Date: November 6, 1996 – to update corporate limits, map format and roads and road names; to decrease Base Flood Elevations; and to incorporate previously issued letters of map amendment.

Third Revised Countywide FIS Date: April 20, 2000 – to update corporate limits; to add Base Flood Elevations, Special Flood Hazard Areas; to change Base Flood Elevations, Special Flood Hazard Areas, and zone designations; to add road and road names; to reflect updated topographic information; and to incorporate previously issues letters of map revision, and previously issues letters of map amendment.

Fourth Revised Countywide FIS Date: June 18, 2007 – to change Base Flood Elevations, Special Flood Hazard Areas, zone designations, and floodway; and to reflect updated topographic information.

Fifth Revised Countywide FIS Date: To be determined – to change Base Flood Elevations, Special Flood Hazard Areas, and zone designations; to update roads and road names and the effects of wave action; to reflect revised shoreline and the effects of coastal erosion; and to incorporate previously issues Letters of Map Revision.

This revised preliminary FIS report only includes revised Floodway Data Tables, revised profiles, and revised Summary of Discharges. The unrevised components will appear in the final FIS report.

TABLE OF CONTENTS

VOLUME 1

	<u>Page</u>
1.0 <u>INTRODUCTION</u>	1
1.1 Purpose of Study.....	1
1.2 Authority and Acknowledgments	1
1.3 Coordination	3
2.0 <u>AREA STUDIED</u>	4
2.1 Scope of Study.....	4
2.2 Community Description.....	6
2.3 Principal Flood Problems.....	26
2.4 Flood Protection Measures	28
3.0 <u>ENGINEERING METHODS</u>	30
3.1 Hydrologic Analyses.....	30
3.2 Hydraulic Analyses.....	96
3.3 Vertical Datum.....	110
3.4 Effects of Land Subsidence	110
3.5 Coastal Analyses.....	116
3.6 Light Detection and Ranging (LiDAR)	130
3.7 Base Map	132
4.0 <u>FLOODPLAIN MANAGEMENT APPLICATIONS</u>	133
4.1 Floodplain Boundaries.....	133
4.2 Floodways.....	134
5.0 <u>INSURANCE APPLICATION</u>	135
6.0 <u>FLOOD INSURANCE RATE MAP</u>	136
7.0 <u>OTHER STUDIES</u>	141
8.0 <u>LOCATION OF DATA</u>	141
9.0 <u>BIBLIOGRAPHY AND REFERENCES</u>	141
10.0 <u>REVISIONS</u>	145
10.1 Coastal Analysis and Mapping PMR.....	145

TABLE OF CONTENTS (cont'd)

VOLUME 1

	<u>Page</u>
<u>FIGURES</u>	
Figure 1 – Vicinity Map.....	5
Figure 2 – Stream Network Map.....	19
Figure 3 – Watershed Map.....	22
Figure 4 – Graph of Base Flood Discharges for 15 Urban Gaging Stations.....	42
Figure 5 – Map Coefficient C-1.....	46
Figure 6 – Map Coefficient C-2.....	47
Figure 7 – Drainage Area VS Percent of the 1 Percent TP 40 Rainfall.....	48
Figure 8 – Land Subsidence Schematic – Riverine Flooding.....	113
Figure 9 – Land Subsidence Schematic – Hurricane/Tidal Surge Flooding.....	115
Figure 10a – Transect Location Map – Clear Creek.....	127
Figure 10b – Transect Location Map – Galveston Bay.....	128
Figure 10c – Transect Location Map – Ship Channel.....	129
Figure 11 – Transect Schematic.....	130
Figure 12 – Floodway Schematic	135

TABLES

Table 1 – Scope of Study.....	7
Table 2 – Stream Name Changes.....	16
Table 3 – Summary of Discharges.....	49
Table 4 – Summary of Reservoir Elevations	95
Table 5 – Summary of Roughness Coefficients.....	97
Table 6 – Summary of Coastal Elevations.....	118
Table 7 – Transect Data.....	121
Table 8 – Floodway Data.....	See Volumes 2 and 3
Table 9 – Community Map History.....	137

VOLUME 2

Table 8 – Floodway Data (Watersheds A – D)

VOLUME 3

Table 8 – Floodway Data (Watersheds J – W)

EXHIBITS

Exhibit 1 – Flood Profiles – Flood Profiles included in this report are shown in Volumes 4 – 8. See the pages following for a complete listing.

Exhibit 2 –Transect Profiles – 0.2 PCT Transect Profiles included are shown in Volumes 9, 10 and 11

PUBLISHED SEPARATELY:

Flood Insurance Rate Map Index
Flood Insurance Rate Map

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 4

Clear Creek Watershed (A)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
A100-00-00	Clear Creek	Panels A01P--A10P*
A104-00-00	Taylor Bayou	Panels A11P--A13P**
A104-04-00	Tributary 3.10 to Taylor Bayou	Panel A14P**
A104-07-00	Tributary 3.93 to Taylor Bayou	Panel A15P**
A104-13-00	Tributary 3.36 to Taylor Bayou	Panel A16P**
A104-14-00	Taylor Bayou Diversion Channel	Panel A17P**
A107-00-00	Cow Bayou	Panels A18P--A19P**
A107-03-00	Unnamed Tributary to Cow Bayou	Panel A19P**
A111-00-00	Tributary 10.08 to Clear Creek	Panels A20P--A22P
A118-00-00	Cedar Gully	Panel A23P
A119-00-00	Turkey Creek	Panels A24P--A25P
A119-02-00	Tributary 0.16 to Turkey Creek	Panel A26P
A119-05-00	Unnamed Tributary to Turkey Creek	Panels A27P--A28P
A119-07-00	Unnamed Tributary to Turkey Creek	Panel A29P
A119-07-02	Unnamed Tributary to A119-07-00	Panels A29P--A30P
A120-00-00	Halls Road Ditch	Panels A31P--A33P

Armand Bayou Watershed (B)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
B100-00-00	Armand Bayou	Panels B01P--B03P*
B104-00-00	Horsepen Bayou	Panels B04P--B05P
B104-04-00	Tributary 4.51 to Horsepen Bayou	Panel B06P
B104-05-00	Tributary 5.44 to Horsepen Bayou	Panel B07P
B106-00-00	Big Island Slough	Panels B08P--B09P
B109-00-00	Spring Gully	Panel B10P
B109-03-00	B112-02-00 Interconnect	Panel B11P
B111-00-00	Tributary 9.39 to Armand Bayou	Panel B12P
B112-00-00	Willow Springs Bayou	Panels B13P--B14P
B112-02-00	Tributary 1.78 to Willow Springs Bayou	Panels B15P--B16P
B112-04-00	Tributary B to Willow Springs Bayou	Panel B17P
B113-00-00	Tributary 10.46 to Armand Bayou	Panel B18P
B114-00-00	County "C", D.D. #5	Panels B19P--B20P
B114-01-00	Private "G", D.D. #5	Panel B21P
B114-02-00	Unnamed Tributary to B114-00-00	Panel B22P
B115-00-00	Tributary 12.18 to Armand Bayou	Panel B23P
B115-01-00	Tributary 12.18 to Armand Bayou (continued)	Panel B23P
B204-04-00	Horsepen Bayou Diversion Channel	Panel B24P

*Some Panels Not Printed as Areas Superseded by 1% Annual Chance Coastal Flooding

**All Panels Not Printed as Areas Superseded by 1% Annual Chance Coastal Flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 4 (cont'd)

Sims Bayou Watershed (C)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
C100-00-00	Sims Bayou	Panels C01P--C05P
C102-00-00	Plum Creek	Panels C06P--C07P
C103-00-00	Pine Gully	Panels C08P--C09P
C106-00-00	Berry Bayou	Panels C10P--C12P
C106-01-00	Berry Creek	Panels C13P--C14P
C106-01-07	Unnamed Tributary to Berry Creek	Panel C14P
C106-03-00	Tributary 2.00 to Berry Bayou	Panels C15P--C16P
C106-08-00	Tributary 3.31 to Berry Bayou	Panel C17P
C118-00-00	Salt Water Ditch	Panel C18P
C123-00-00	Tributary 10.77 to Sims Bayou	Panel C19P
C223-00-00	Tributary 10.77 to Sims Bayou (continued)	Panel C19P
C127-00-00	Swengel Ditch	Panel C20P
C132-00-00	Tributary 13.83 to Sims Bayou	Panel C21P
C147-00-00	Tributary 20.25 to Sims Bayou	Panels C22P--C23P
C161-00-00	Tributary 17.82 to Sims Bayou	Panel C24P

Brays Bayou Watershed (D)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
D100-00-00	Brays Bayou	Panels D01P--D07P
D109-00-00	Harris Gully	Panel D08P
D111-00-00	Poor Farm Ditch	Panels D09P--D10P
D112-00-00	Willow Waterhole Bayou	Panel D11P
D118-00-00	Keegans Bayou	Panels D12P--D13P
D120-00-00	Tributary 20.90 to Brays Bayou	Panels D14P--D15P
D122-00-00	Tributary 21.95 to Brays Bayou	Panels D16P--D17P
D124-00-00	Tributary 22.69 to Brays Bayou	Panel D18P
D126-00-00	Tributary 23.53 to Brays Bayou	Panels D19P--D20P
D129-00-00	Tributary 26.20 to Brays Bayou	Panels D21P--D22P
D132-00-00	Tributary 29.16 to Brays Bayou	Panel D23P
D133-00-00	Bintliff Ditch	Panel D24P
D139-00-00	Chimney Rock Diversion Channel	Panel D25P
D140-00-00	Fondren Diverson Channel	Panel D26P
D140-04-00	Fondren Diverson Channel (continued)	Panel D26P
D142-00-00	Tributary 20.86 to Brays Bayou	Panel D27P
D144-00-00	City Ditch	Panel D28P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 5

White Oak Bayou Watershed (E)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
E100-00-00	White Oak Bayou	Panels E01P--E11P
E101-00-00	Little White Oak Bayou	Panels E12P--E13P
E115-00-00	Brickhouse Gully	Panels E14P--E16P
E115-04-00	Tributary 1.61 to Brickhouse Gully	Panel E17P
E116-00-00	Tributary 10.1 to White Oak Bayou	Panel E18P
E116-05-00	Tributary 10.1 to White Oak Bayou (continued)	Panel E18P
E117-00-00	Cole Creek	Panels E19P--E21P
E121-00-00	Vogel Creek	Panels E22P--E24P
E122-00-00	Unnamed Tributary to White Oak Bayou	Panels E25P--E26P
E124-00-00	Tributary 15.8 to White Oak Bayou	Panel E27P
E125-00-00	Rolling Fork	Panel E28P
E127-00-00	Tributary 19.05 to White Oak Bayou	Panel E29P
E135-00-00	Tributary 19.82 to White Oak Bayou	Panel E30P
E141-00-00	Beltway 8 Outfall Ditch	Panels E31P--E32P

Galveston Bayou Watershed (F)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
F216-00-00	Little Cedar Bayou	Panels F01P--F02P
F220-00-00	Pine Gully	Panel F03P
F220-03-00	Pine Gully (continued)	Panel F03P

San Jacinto River Watershed (G)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
G100-00-00	San Jacinto River, Houston Ship Channel	Panel G01P
G100-00-00	Buffalo Bayou, Houston Ship Channel	Panels G02P--G04P
G103-00-00	San Jacinto River	Panels G05P--G08P*
G103-01-00	Unnamed Tributary to San Jacinto River	Panels G09P--G10P
G103-07-00	Unnamed Tributary 2 to San Jacinto River	Panels G11P--G14P
G103-00-00	Lake Houston	Panels G15P--G17P
G103-00-00	West Fork San Jacinto River	Panels G18P--G21P
G103-33-00	Bens Branch	Panels G22P--G24P
G103-43-00	Jordan Gully	Panel G25P
G103-44-00	TxDOT Ditch #4	Panel G26P
G103-48-00	Blacks Branch	Panel G27P
G103-80-00	Lake Houston (continued)	Panels G17P & G28P
G103-80-00	East Fork San Jacinto River	Panels G29P--G34P
G103-80-03	Caney Creek	Panel G35P

*Some Panels Not Printed as Areas Superseded by 1% Annual Chance Coastal Flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 5 (cont'd)

San Jacinto River Watershed (G) (cont'd)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
G103-80-03.1	White Oak Creek	Panels G36P--G37P
G103-80-03.1A	Mills Branch	Panel G38P
G103-80-03.1B	Taylor Gully	Panels G39P--G40P
G104-00-00	Patrick Bayou	Panels G41P--G43P
G104-08-00	E. 13th St. Outfall Channel	Panels G44P--G45P
G105-00-00	Boggy Bayou	Panels G46P--G47P
G108-00-00	Glenmore Ditch	Panel G48P
G109-00-00	Tributary 6.77 to Buffalo Bayou	Panel G49P
G110-00-00	Cotton Patch Bayou	Panel G50P
G112-00-00	Panther Creek	Panel G51P

Hunting Bayou Watershed (H)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
H100-00-00	Hunting Bayou	Panels H01P--H06P
H103-00-00	Wallisville Outfall	Panels H07P--H09P
H110-00-00	Tributary 12.70 to Hunting Bayou	Panel H10P
H112-00-00	Schramm Gully	Panel H11P
H118-00-00	Tributary 12.05 to Hunting Bayou	Panels H12P--H13P

Vince Bayou Watershed (I)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
I100-00-00	Vince Bayou	Panels I01P--I03P
I101-00-00	Little Vince Bayou	Panels I04P--I05P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 6

Spring Creek Watershed (J)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
J100-00-00	Spring Creek	Panels J01P--J29P
J109-00-00	Bender Lake	Panel J30P
J109-01-00	Continuation of Bender Lake	Panels J30P--J31P
J121-00-00	Tributary 21.08 to Spring Creek	Panel J32P
J131-00-00	Boggs Gully	Panels J33P--J36P
J131-01-00	Tributary 1.25 to Boggs Gully	Panel J37P
J158-00-00	Kickapoo Creek	Panels J38P--J40P

Cypress Creek Watershed (K)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
K100-00-00	Cypress Creek	Panels K01P--K11P
K111-00-00	Turkey Creek	Panels K12P--K14P
K111-03-00	Tributary to Turkey Creek	Panel K15P
K112-00-00	Wild Cow Gulch	Panel K16P
K116-00-00	Schultz Gully	Panel K17P
K120-00-00	Lemm Gully	Panels K18P--K19P
K120-01-00	Senger Gully	Panels K20P--K21P
K120-03-00	Wunsche Gully	Panel K22P
K124-00-00	Seals Gully	Panels K23P--K24P
K124-02-00	Kothman Gully	Panels K25P--K26P
K131-00-00	Spring Gully	Panels K27P--K28P
K131-02-00	Theiss Gully	Panels K29P--K30P
K131-02-04	Tributary to Theiss Gully	Panel K30P
K131-03-00	Tributary 2.1 to Spring Gully	Panel K31P
K131-04-00	Tributary to Spring Gully	Panel K32P
K133-00-00	Dry Gully	Panels K33P--K34P
K140-00-00	Pilot Gully	Panels K35P--K36P
K142-00-00	Faulkey Gully	Panels K37P--K39P
K145-00-00	Dry Creek	Panels K40P--K41P
K150-00-00	Tributary 36.6 to Cypress Creek	Panels K42P--K44P
K152-00-00	Tributary 37.1 to Cypress Creek	Panel K45P
K155-00-00	Tributary 40.7 to Cypress Creek	Panels K46P--K47P
K157-00-00	Tributary 42.7 to Cypress Creek	Panels K48P--K49P
K159-00-00	Channel A to Cypress Creek	Panels K50P--K51P
K159-01-00	Channel D to Channel A to Cypress Creek	Panel K52P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 6 (cont'd)

Cypress Creek Watershed (K) (cont'd)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
K160-00-00	Rock Hollow	Panels K53P--K55P
K160-01-00	Tributary 1.63 to Rock Hollow	Panels K56P--K58P
K166-00-00	Mound Creek	Panels K59P--K62P
K166-01-00	East Fork Mound Creek	Panels K63P--K64P
K166-02-00	Little Mound Creek	Panels K65P--K66P
K166-03-00	Tributary 7.62 to Mound Creek	Panel K67P
K185-00-00	Tributary 44.5 to Cypress Creek	Panel K68P
K172-00-00	Tributary 44.5 to Cypress Creek (continued)	Panels K68P--K70P

Little Cypress Creek Watershed (L)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
L100-00-00	Little Cypress Creek	Panels L01P--L09P
L109-00-00	Tributary 9.36 to Little Cypress Creek	Panel L10P
L112-00-00	Tributary 10.99 to Little Cypress Creek	Panel L11P
L114-00-00	Tributary 13.92 to Little Cypress Creek	Panels L12P--L13P
L114-01-00	Tributary 0.12 to Tributary 13.92	Panels L14P--L16P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 7

Willow Creek Watershed (M)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
M100-00-00	Willow Creek	Panels M01P--M09P
M101-00-00	Tributary 0.26 to Willow Creek	Panel M10P
M102-00-00	Tributary 1.77 to Willow Creek	Panel M11P
M104-00-00	Tributary 2.44 to Willow Creek	Panels M12P--M13P
M108-00-00	Hughes Gully	Panel M14P
M109-00-00	Cannon Gully	Panel M15P
M109-01-00	Metzler Creek	Panel M16P
M112-00-00	Roan Gully	Panels M17P--M18P
M116-00-00	Tributary 8.16 to Willow Creek	Panels M19P--M20P
M124-00-00	Tributary 13.50 to Willow Creek	Panels M21P--M23P
M129-00-00	Continuation of Willow Creek	Panel M09P

Carpenter Bayou Watershed (N)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
N100-00-00	Carpenter Bayou	Panels N01P--N03P
N100-00-00	Sheldon Reservoir	N/A
N104-00-00	Tributary 3.33 to Carpenters Bayou	Panel N04P
N117-00-00	Tributary 11.715 to Carpenters Bayou	Panel N05P

Goose Creek Watershed (O)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
O100-00-00	Goose Creek	Panels O01P--O03P
O105-00-00	East Fork Goose Creek	Panels O04P--O05P
O200-00-00	Spring Gully	Panels O06P--O07P
O208-00-00	Spring Gully Diversion Channel	Panel O08P

Greens Bayou Watershed (P)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
P100-00-00	Greens Bayou	Panels P01P--P18P
P107-00-00	Big Gulch	Panels P19P--P21P
P109-00-00	Sulphur Gully	Panel P22P
P110-00-00	Spring Gully	Panels P23P--P24P
P114-00-00	Unnamed Tributary to Greens Bayou	Panel P25P
P118-00-00	Halls Bayou	Panels P26P--P34P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 7 (cont'd)

Greens Bayou Watershed (P) (cont'd)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
P118-14-00	Tributary 6.71 to Halls Bayou	Panel P35P
P118-23-00	Tributary 11.96 to Halls Bayou	Panel P36P
P125-00-00	Tributary 14.27 to Greens Bayou	Panels P37P--P38P
P125-04-00	Tributary 14.27 to Greens Bayou (continued)	Panel P38P
P126-00-00	Tributary 14.82 to Greens Bayou	Panels P39P--P40P
P130-00-00	Garners Bayou	Panels P41P--P44P
P130-02-00	Williams Gully	Panels P45P--P46P
P130-02-02	Tributary 2.01 to Williams Gully	Panel P47P
P130-03-00	Tributary 3.19 to Garners Bayou	Panel P48P
P130-03-01	Tributary 0.55 to Tributary 3.19 to Garners Bayou	Panel P49P
P130-05-00	Reinhardt Bayou	Panels P50P--P51P
P133-00-00	Tributary 20.88 to Greens Bayou	Panel P52P
P138-00-00	Tributary 24.97 to Greens Bayou	Panels P53P--P54P
P140-00-00	Tributary 26.64 to Greens Bayou -- Hoods Bayou	Panel P55P
P140-04-00	Continuation of Tributary 26.64 to Greens Bayou	Panels P55P--P56P
P140-04-03	Continuation of Tributary 26.64 to Greens Bayou	Panels P56P--P57P
P145-00-00	North Fork Greens Bayou	Panels P58P--P59P
P145-03-00	Tributary 1.95 to North Fork Greens Bayou	Panels P60P--P61P
P146-00-00	Tributary 32.23 to Greens Bayou	Panel P62P
P147-00-00	Unnamed Tributary to Greens Bayou	Panels P63P--P64P
P148-00-00	Tributary 34.60 to Greens Bayou	Panel P65P
P155-00-00	Unnamed Tributary to Greens Bayou	Panels P66P--P67P
P156-00-00	Unnamed Tributary to Greens Bayou	Panel P68P

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 8

Cedar Bayou Watershed (Q)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
Q100-00-00	Cedar Bayou	Panels Q01P--Q09P*
Q101-00-00	Pine Gully	Panel Q10P**
Q112-00-00	Cary Bayou	Panels Q11P--Q12P
None	Horsepen Bayou (City of Baytown)	Panel Q13P (Deleted)
Q114-00-00	McGee Gully	Panels Q14P--Q15P
Q122-00-00	Clawson Ditch	Panels Q16P--Q17P
Q128-00-00	Adlong Ditch	Panels Q18P--Q20P
Q130-00-00	Unnamed Tributary to Cedar Bayou	Panels Q21P--Q22P
Q200-00-00	Cedar Bayou Diversion Channel	Panel Q23P**

Jackson Bayou Watershed (R)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
R100-00-00	Jackson Bayou	Panels R01P--R02P
R102-00-00	Gum Gully	Panels R03P--R04P
R102-03-00	Tributary 2.70 to Gum Gully	Panel R05P
R102-03-01	Tributary 2.70 to Gum Gully (continued)	Panel R05P
R102-13-00	Tributary 3.08 to Gum Gully	Panel R06P

Luce Bayou Watershed (S)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
S100-00-00	Luce Bayou	Panels S01P--S04P
S110-00-00	Shook Gully	Panels S05P--S06P
S114-00-00	Mexican Gully	Panel S07P

Barker Reservoir Watershed (T)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
T100-00-00	Upper Buffalo Bayou / Cane	Panel not printed
T100-00-00	Cane Island Branch	Panels T01P--T03P
T101-00-00	Mason Creek	Panels T04P--T06P
T101-03-00	Tributary 4.96 to Mason Creek	Panels T07P--T08P
T101-10-00	Unnamed Tributary to Mason Creek	Panel T06P
T103-00-00	Tributary 52.9 to Upper Buffalo Bayou	Panels T09P--T10P
T103-01-00	Tributary 2.17 to Tributary 52.9 to Upper Buffalo Bayou	Panel T11P

*Some Panels Not Printed as Areas Superseded by 1% Annual Chance Coastal Flooding

**All Panels Not Printed as Areas Superseded by 1% Annual Chance Coastal Flooding

TABLE OF CONTENTS (Cont'd)

Exhibit 1 – Flood Profiles

VOLUME 8 (cont'd)

Addicks Reservoir Watershed (U)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
U100-00-00	Langham Creek	Panels U01P--U06P
U101-00-00	South Mayde Creek	Panels U07P--U12P
U101-07-00	Tributary 9.4 to South Mayde Creek	Panels U14P--U15P
U101-22-00	Unnamed Tributary to South Mayde Creek	Panels U12P--U13P
U102-00-00	Bear Creek	Panels U16P--U20P
U102-01-00	Unnamed Tributary to Bear Creek	Panels U21P--U22P
U106-00-00	Horsepen Creek	Panels U23P--U25P
U120-00-00	Dinner Creek	Panels U26P--U27P
U200-00-00	Addicks Reservoir Diversion Channel	Panel U01P
U202-01-00	Bear Creek Diversion Channel	Panel U16P

Buffalo Bayou Watershed (W)

<u>HCFC Designation</u>	<u>Stream Name</u>	<u>Panels</u>
W100-00-00	Buffalo Bayou	Panels W01P--W14P
W140-00-00	Spring Branch	Panels W15P--W16P
W140-01-00	Briar Branch	Panels W17P--W18P
W141-00-00	Soldiers Creek	Panels W19P--W20P
W142-00-00	Bering Ditch	Panel W21P
W156-00-00	Rummel Creek	Panels W22P--W23P
W157-00-00	Unnamed Tributary to Buffalo Bayou	Panels W24P--W25P
W167-00-00	Turkey Creek	Panel W26P
W167-04-00	Continuation of Turkey Creek	Panels W26P--W29P
W167-01-00	Tributary 3.9 to Turkey Creek (See Addicks Watershed)	N/A
W170-00-00	Unnamed Tributary to Buffalo Bayou	Panels W30P--W32P
W190-00-00	Clodine Ditch	Panels W33P--W34P

TABLE OF CONTENTS (Cont'd)

Exhibit 2 – Transect Profiles

VOLUME 9

Coastal Transects

Transects 1 - 49

Panels

Panels 01P--101P

VOLUME 10

Coastal Transects

Transects 49 - 117

Panels

Panels 102P--200P

VOLUME 11

Coastal Transects

Transects 118 - 180

Panels

Panels 201P--279P

10.0 REVISIONS

This section has been added to provide information regarding significant revisions made since the original FIS was printed. Future revisions may be made that do not result in the republishing of the FIS report. To assure that the user is aware of all the revisions it is advisable to contact the community repositories of flood hazard data.

10.1 Coastal Analysis and Mapping PMR

Coastal Analysis was based on Storm Surge Modeling prepared by the U.S Army Corps of Engineers (Reference 3.5.15). Using storm surge study results, wave height analysis was performed to identify areas of the coastline subject to overland wave propagation or wave runup hazards. Detailed explanation of the analysis can be found in section 3.5 of this report.

Combined probability analysis was performed along approximately 170 miles of streams. In addition to the coastal revisions, 6 LOMRs were incorporated into the mapping. In total 37 panels were updated to incorporate the revised coastal mapping information.

The revised FIS does not show Regulatory Elevations in the Floodway Data Tables at stream stations superseded by coastal flooding. Profiles have been revised to show elevations from the combined probability analysis. The profiles do not show elevations in areas superseded by coastal flooding. A set of 0.2-percent-annual-chance wave envelop profiles along all transects have been added to the report.

Revised Summary of Discharges

<u>Flooding Source and Location</u>	<u>Drainage Area (sq. mi.)</u>	<u>Peak Discharges (cfs)</u>			
		<u>10% Annual Chance</u>	<u>2% Annual Chance</u>	<u>1% Annual Chance</u>	<u>0.2% Annual Chance</u>
G103-07-00 (UNNAMED TRIBUTARY 2 TO SAN JACINTO RIVER)					
At mouth	5.87	3,695	5,310	6,146	8,550
Downstream of U.S. Highway 90	4.94	3,160	4,253	5,227	7,228
Upstream of Sheldon Road	1.74	1,141	1,623	1,877	2,585
Upstream of confluence with Tributary G103-07-04	0.54	347	492	569	783
N100-00-00 (CARPENTERS BAYOU)					
At mouth	31.80	6,343	9,758	11,448	16,067
Upstream of Tributary 3.33 (N104-00-00)	24.52	5,475	8,272	9,633	13,763
Downstream of Tributary 11.715 (N117-00-00)	11.45	1,110	1,622	1,906	2,753

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					FEET (NAVD 88, 2001 Adjustment)			
G103-07-00 Unnamed Tributary 2 to San Jacinto River								
A	5,486	1,091	7,110	0.9	22.6	13.5 ²	14.3	0.8
B	6,074	389	1,796	3.4	22.6	15.3 ²	16.2	0.9
C	6,886	77	839	7.3	22.6	18.9 ²	19.6	0.7
D	7,966	68	752	7.7	25.8	25.8	25.9	0.1
E	8,056	70	817	7.1	26.5	26.5	26.8	0.3
F	8,145	71	881	6.5	27.2	27.2	27.4	0.2
G	8,249	81	958	6.0	27.8	27.8	28.0	0.2
H	8,938	99	995	5.8	29.7	29.7	29.9	0.2
I	9,867	81	879	6.3	32.6	32.6	32.6	0.0
J	10,942	108	1,195	4.5	35.2	35.2	35.3	0.1
K	11,379	130	1,378	3.8	35.8	35.8	35.9	0.1
L	12,302	138	1,345	3.5	36.3	36.3	36.4	0.1
M	13,281	108	809	5.0	37.0	37.0	37.1	0.1
N	14,020	99	711	5.5	38.1	38.1	38.2	0.1
O	14,806	88	644	1.6	38.8	38.8	38.9	0.1
P	15,020	73	493	2.1	39.5	39.5	39.5	0.0
Q	15,744	81	525	1.3	39.8	39.8	39.8	0.0
R	16,528	78	432	1.3	39.9	39.9	40.0	0.1
S	17,497	71	415	1.3	40.1	40.1	40.2	0.1
T	18,398	66	355	1.6	40.2	40.2	40.3	0.1

¹ Feet abover confluence with G103-00-00 (San Jacinto River)

² Elevations computed without consideration of backwater effects from G103-00-00 (San Jacinto River)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		G103-07-00 (Unnamed Tributary 2 to San Jacinto River)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					FEET (NAVD 88, 2001 Adjustment)			
N100-00-00 Carpenters Bayou								
A	1,727	391	6,679	1.7	*	6.7	7.7	1.0
B	2,934	263	4,112	2.7	*	6.7	7.7	1.0
C	4,636	373	5,904	1.9	*	7.0	8.0	1.0
D	5,946	422	5,761	1.9	*	7.1	8.1	1.0
E	7,761	414	5,389	2.0	*	7.3	8.2	0.9
F	9,283	362	4,818	2.2	*	7.5	8.4	0.9
G	10,684	280	2,653	4.0	*	7.7	8.5	0.8
H	11,816	507	4,349	2.4	*	9.3	9.8	0.5
I	12,968	755	6,240	1.7	*	9.8	10.4	0.6
J	13,984	550	4,949	2.1	16.7 ²	10.4	10.9	0.5
K	14,723	500	4,579	2.2	16.7 ²	11.0	11.4	0.4
L	16,002	400	4,499	2.3	16.9 ²	12.1	12.4	0.3
M	17,108	555	5,866	1.7	17.2 ²	13.0	13.4	0.4
N	18,117	565	6,159	1.6	17.3 ²	13.5	13.9	0.4
O	18,968	605	6,575	1.5	17.5 ²	14.0	14.5	0.5
P	20,014	281	2,440	3.8	17.7 ²	14.7	15.3	0.6
Q	21,128	255	3,260	2.8	19.1 ²	17.2	17.8	0.6
R	22,003	220	3,001	2.9	19.7 ²	18.4	19.0	0.6
S	23,117	270	2,758	3.1	20.0 ²	18.8	19.5	0.7
T	24,344	245	3,073	2.6	20.6 ²	19.7	20.3	0.6
U	27,198	245	3,154	2.4	21.7 ²	21.0	21.8	0.8
V	28,433	197	1,878	4.0	22.1 ²	21.5	22.4	0.9
W	29,239	303	2,238	3.3	22.7 ²	22.4	23.3	0.9
X	30,217	189	1,883	3.9	23.5 ²	23.2	24.2	1.0
Y	30,834	103	1,602	4.4	24.1 ²	23.9	24.7	0.8

¹ Feet above confluence with G100-00-00 (Buffalo Bayou, Houston Ship Channel)

² Elevation computed using combined probability analysis

* Controlled by coastal flooding - see Flood Insurance Rate Map for applicable elevations

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		N100-00-00 (CARPENTERS BAYOU)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					FEET (NAVD 88, 2001 Adjustment)			
N100-00-00 Carpenters Bayou								
Z	31,729	116	1,858	3.8	24.6 ²	24.4	25.4	1.0
AA	32,787	164	1,860	3.3	25.2 ²	25.0	25.9	0.9
AB	33,867	191	1,974	3.1	25.6 ²	25.5	26.5	1.0
AC	35,011	120	1,494	4.0	26.3 ²	26.2	27.2	1.0
AD	35,826	167	1,420	3.9	26.8 ²	26.8	27.6	0.8
AE	36,898	135	1,381	3.2	27.7 ²	27.6	28.3	0.7
AF	38,057	131	1,360	3.3	28.2 ²	28.1	28.7	0.6
AG	39,112	142	1,377	3.1	28.8	28.8	29.3	0.5
AH	39,962	150	1,472	2.9	29.1	29.1	29.6	0.5
AI	41,004	136	1,445	2.8	29.5	29.5	29.9	0.4
AJ	42,012	116	1,201	3.3	29.8	29.8	30.2	0.4
AK	42,982	120	1,229	3.1	30.2	30.2	30.6	0.4
AL	44,027	162	1,307	2.9	30.6	30.6	30.9	0.3
AM	44,595	112	963	3.8	30.8	30.8	31.2	0.4
AN	45,462	169	1,582	2.3	31.6	31.6	31.8	0.2
AO	46,172	161	1,754	2.1	31.7	31.7	31.9	0.2
AP	47,014	148	1,334	2.7	31.8	31.8	32.0	0.2
AQ	47,941	109	1,048	3.4	32.1	32.1	32.3	0.2
AR	49,009	81	753	4.6	33.2	33.2	33.8	0.6
AS	49,887	576	2,462	1.4	34.4	34.4	35.3	0.9
AT	50,887	556	2,231	1.5	34.9	34.9	35.7	0.8
AU	51,728	1,990	15,809	0.2	35.1	35.1	36.0	0.9
AV	52,799	1,749	7,167	0.4	35.3	35.3	36.1	0.8
AW	53,782	1,429	14,492	0.2	35.5	35.5	36.3	0.8
AX	54,729	968	6,636	0.5	35.8	35.8	36.5	0.7

¹ Feet above confluence with G100-00-00 (Buffalo Bayou, Houston Ship Channel)

² Elevation computed using combined probability analysis

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		N100-00-00 (CARPENTERS BAYOU)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					FEET (NAVD 88, 2001 Adjustment)			
N100-00-00 Carpenters Bayou								
AY	55,969	98	885	3.5	36.5	36.5	37.1	0.6
AZ	56,501	98	867	3.4	36.7	36.7	37.4	0.7
BA	57,566	113	1,045	2.8	37.6	37.6	38.2	0.6
BB	59,016	92	882	3.2	38.1	38.1	38.8	0.7
BC	59,945	83	850	2.5	38.4	38.4	39.1	0.7
BD	61,078	81	774	2.6	38.6	38.6	39.4	0.8
BE	61,622	81	743	2.6	38.8	38.8	39.6	0.8
BF	62,721	89	736	2.6	39.5	39.5	40.2	0.7

¹ Feet above confluence with G100-00-00 (Buffalo Bayou, Houston Ship Channel)

TABLE 8	FEDERAL EMERGENCY MANAGEMENT AGENCY HARRIS COUNTY, TX AND INCORPORATED AREAS	FLOODWAY DATA
		N100-00-00 (CARPENTERS BAYOU)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					FEET (NAVD 88, 2001 Adjustment)			
P107-00-00 Big Gulch								
P	15,778	66	463	3.8	34.9	34.9	35.1	0.2
Q	16,943	66	462	3.6	35.6	35.6	35.9	0.3
R	17,762	180	641	2.4	36.2	36.2	36.5	0.3
S	18,768	240	971	1.4	36.6	36.6	37.1	0.5
T	19,813	420	754	1.6	36.8	36.8	37.5	0.7
U	20,954	256	491	0.9	37.4	37.4	38.3	0.9
V	21,824	68	319	1.2	37.5	37.5	38.4	0.9
W	22,757	95	247	1.4	38.9	38.9	39.5	0.6
X	23,689	127	634	0.4	39.3	39.3	39.8	0.5
Y	24,117	235	1,249	0.2	39.3	39.3	39.8	0.5
Z	26,123	282	1,236	0.2	39.5	39.5	40.1	0.6
AA	26,530	201	796	0.9	39.5	39.5	40.1	0.6
AB	27,098	206	683	0.2	39.6	39.6	40.1	0.5
P109-00-00 Sulfur Gully								
A	923	68	320	3.9	28.2 ²	8.2	8.5	0.3
B	2,134	90	349	3.3	28.2 ²	11.2	11.3	0.1
C	3,021	90	348	3.0	28.2 ²	13.1	13.1	0.0
D	3,954	74	263	3.4	28.2 ²	14.7	14.9	0.2
E	4,796	25	78	10.5	28.2 ²	19.2	19.2	0.0
F	5,838	80	331	2.2	28.2 ²	25.3	25.4	0.1
G	7,028	49	141	4.4	28.3	28.3	28.3	0.0
H	7,819	32	130	4.5	30.8	30.8	30.8	0.0

¹ Feet above confluence with P100-00-00 (Greens Bayou)

² Elevation computed with consideration of backwater from P-100-00-00 (Greens Bayou)

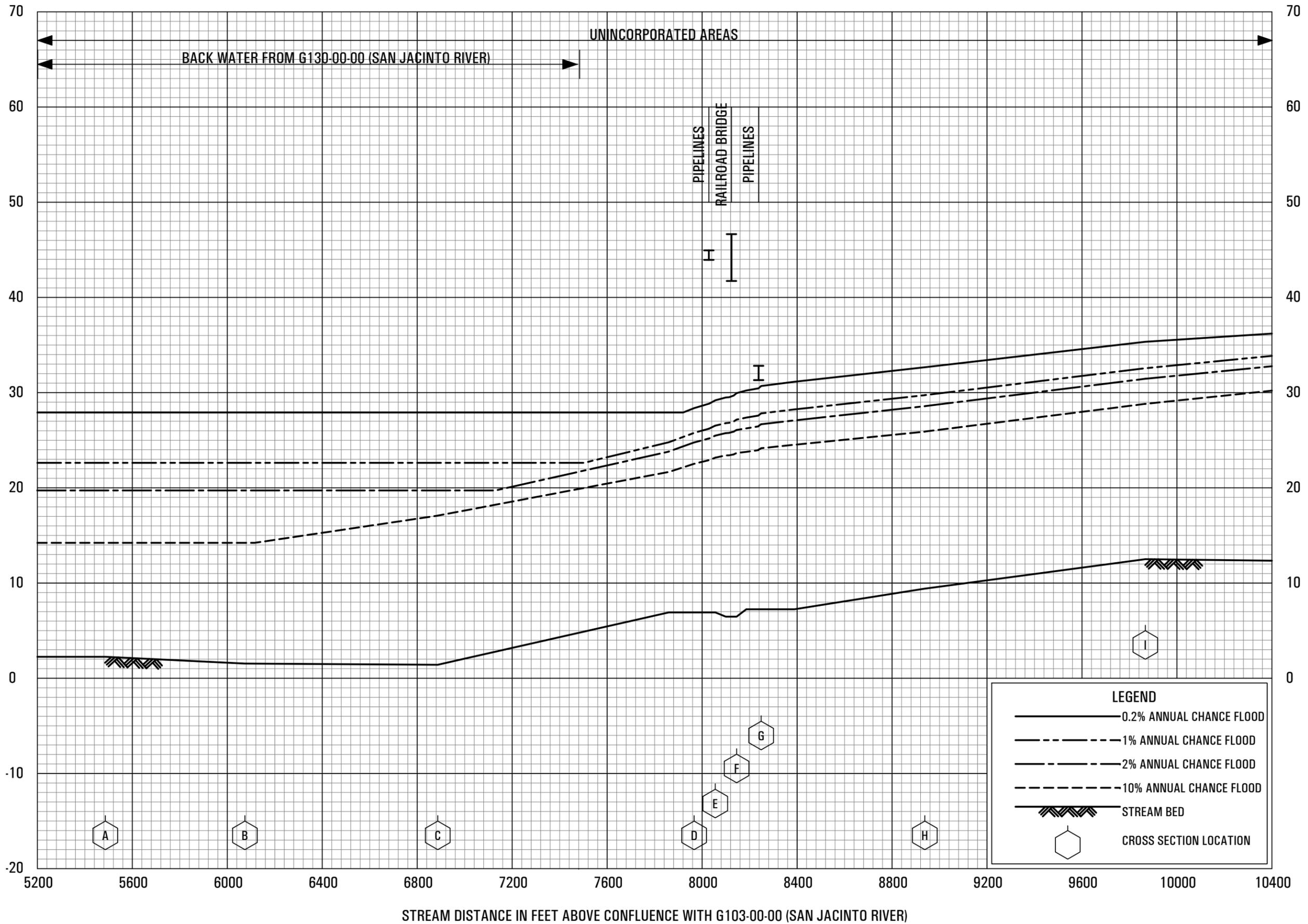
TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY
HARRIS COUNTY, TX
AND INCORPORATED AREAS

FLOODWAY DATA

P107-00-00 BIG GULCH
P109-00-00 SULFUR GULLY

ELEVATION IN FEET NAVD88 (2001 ADJUSTMENT)



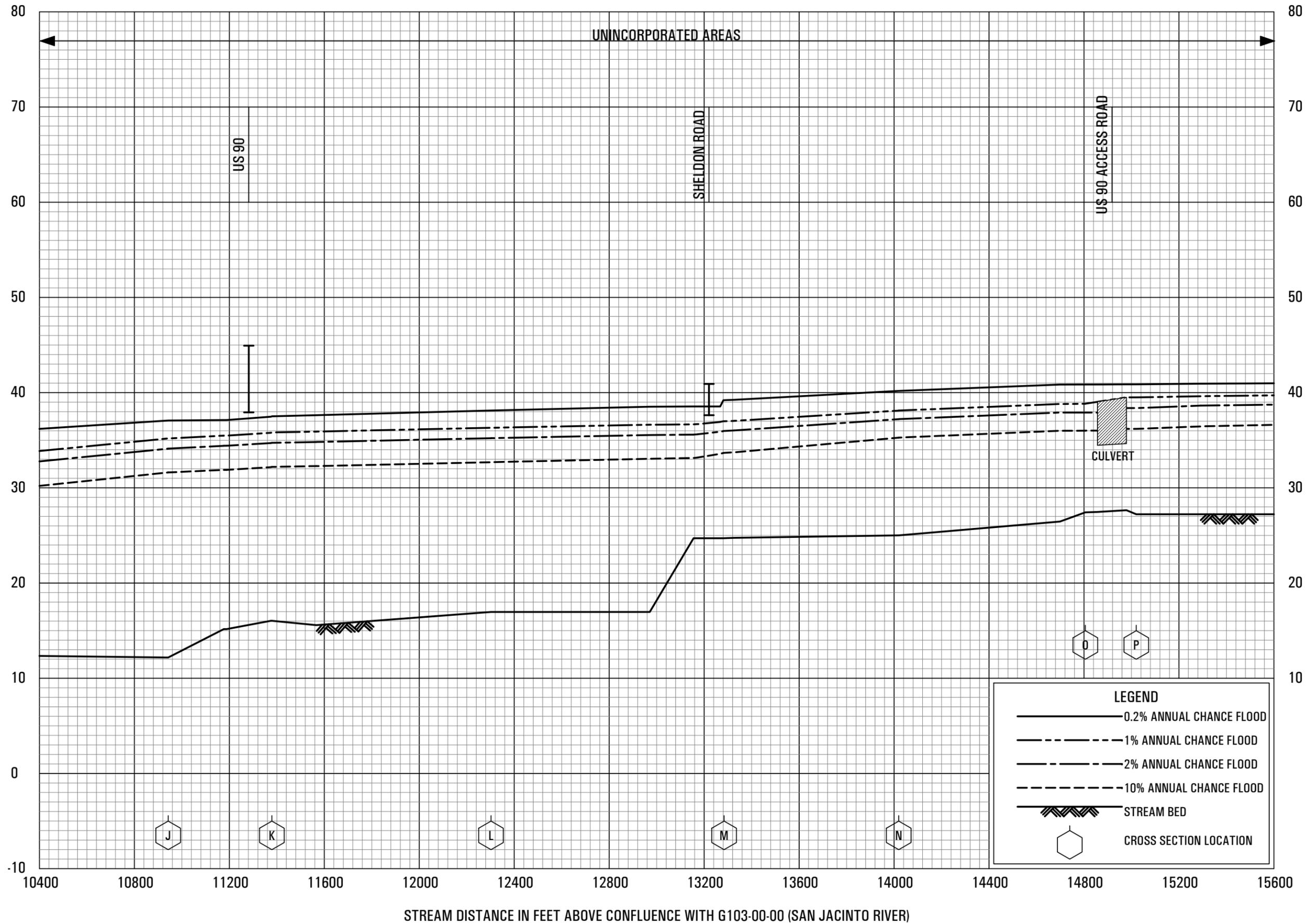
FLOOD PROFILES

G103-07-00 (UNNAMED TRIBUTARY 2 TO SAN JACINTO RIVER)

FEDERAL EMERGENCY MANAGEMENT AGENCY
HARRIS COUNTY, TX
AND INCORPORATED AREAS

G12P

ELEVATION IN FEET NAVD88 (2001 ADJUSTMENT)



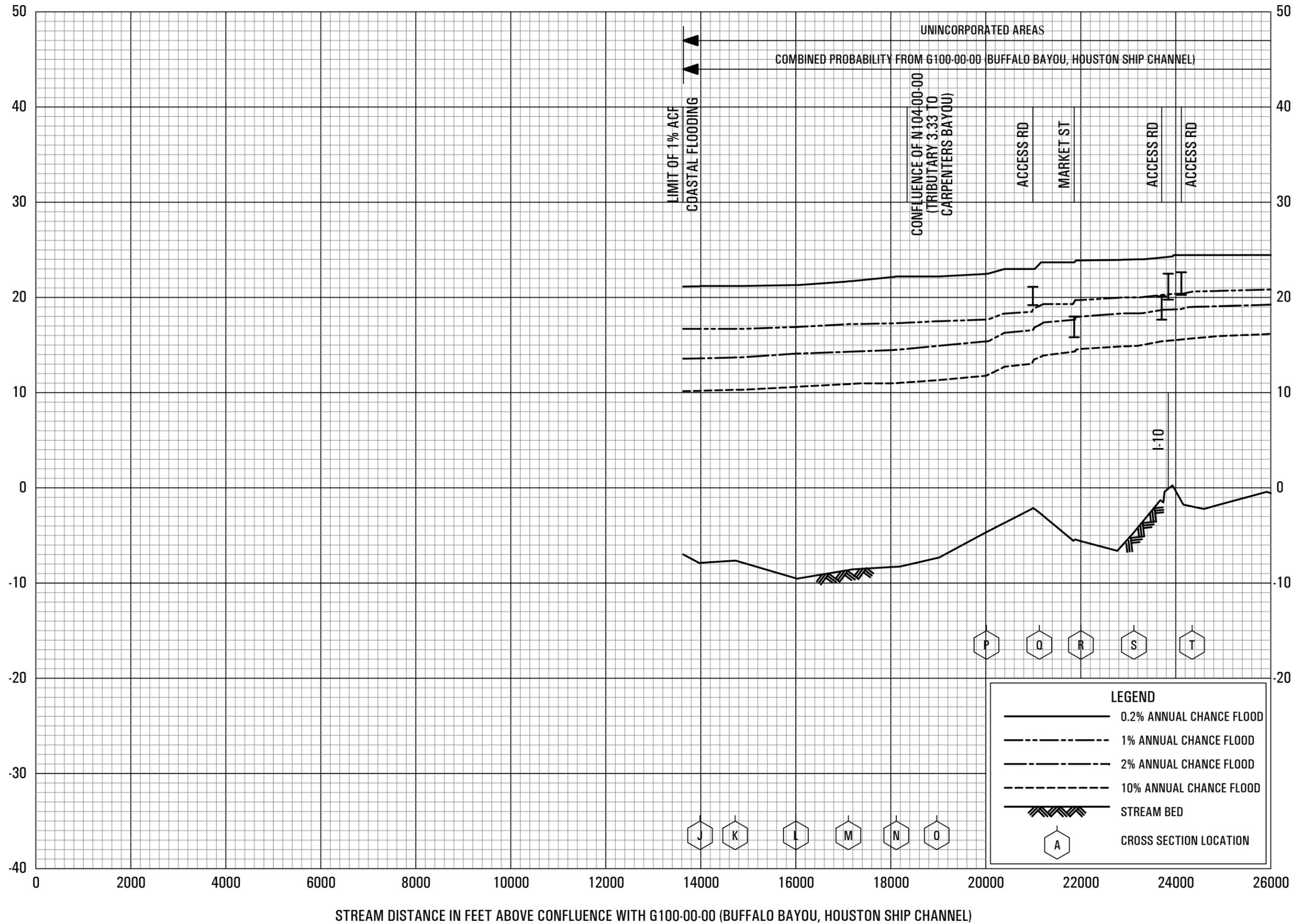
FLOOD PROFILES

G103-07-00 (UNNAMED TRIBUTARY 2 TO SAN JACINTO RIVER)

FEDERAL EMERGENCY MANAGEMENT AGENCY
HARRIS COUNTY, TX
AND INCORPORATED AREAS

G13P

ELEVATION IN FEET NAVD 88 (2001 ADJUSTMENT)



FLOOD PROFILES

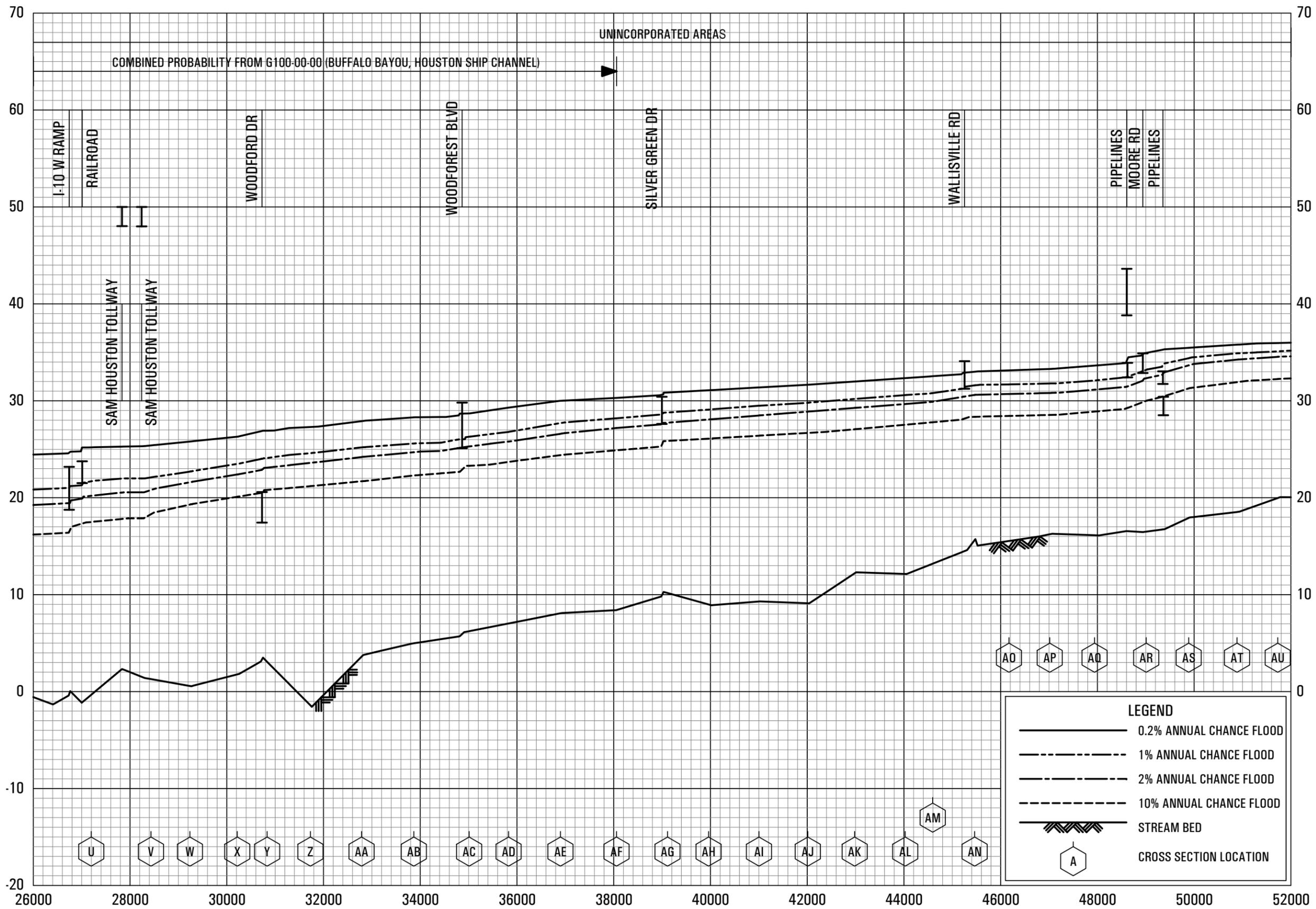
N100-00-00 (CARPENTERS BAYOU)

FEDERAL EMERGENCY MANAGEMENT AGENCY

HARRIS COUNTY, TX
AND INCORPORATED AREAS

N01P

ELEVATION IN FEET NAVD 88 (2001 ADJUSTMENT)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH G100-00-00 (BUFFALO BAYOU, HOUSTON SHIP CHANNEL)

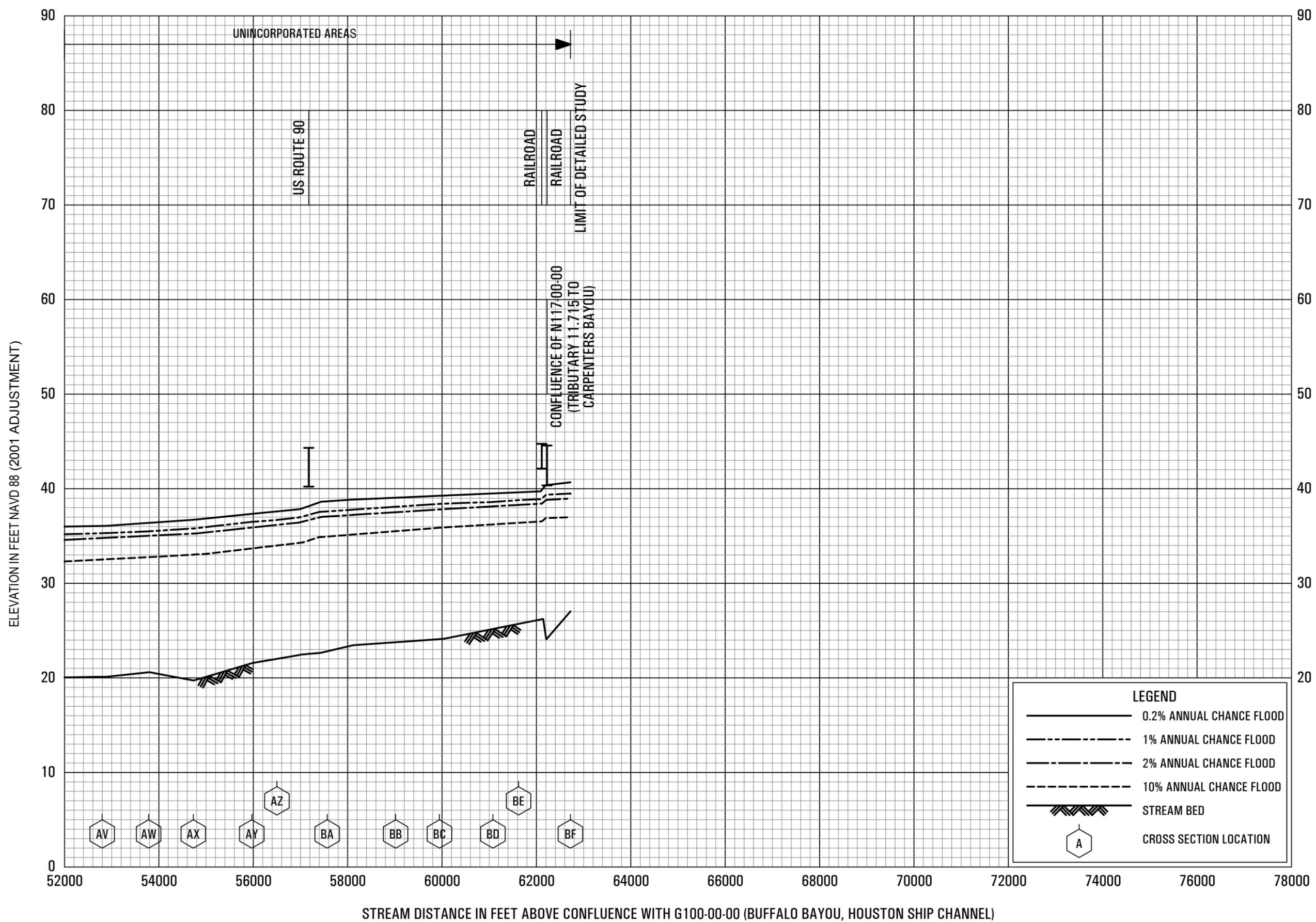
FLOOD PROFILES

N100-00-00 (CARPENTERS BAYOU)

FEDERAL EMERGENCY MANAGEMENT AGENCY

HARRIS COUNTY, TX
AND INCORPORATED AREAS

N02P



FLOOD PROFILES

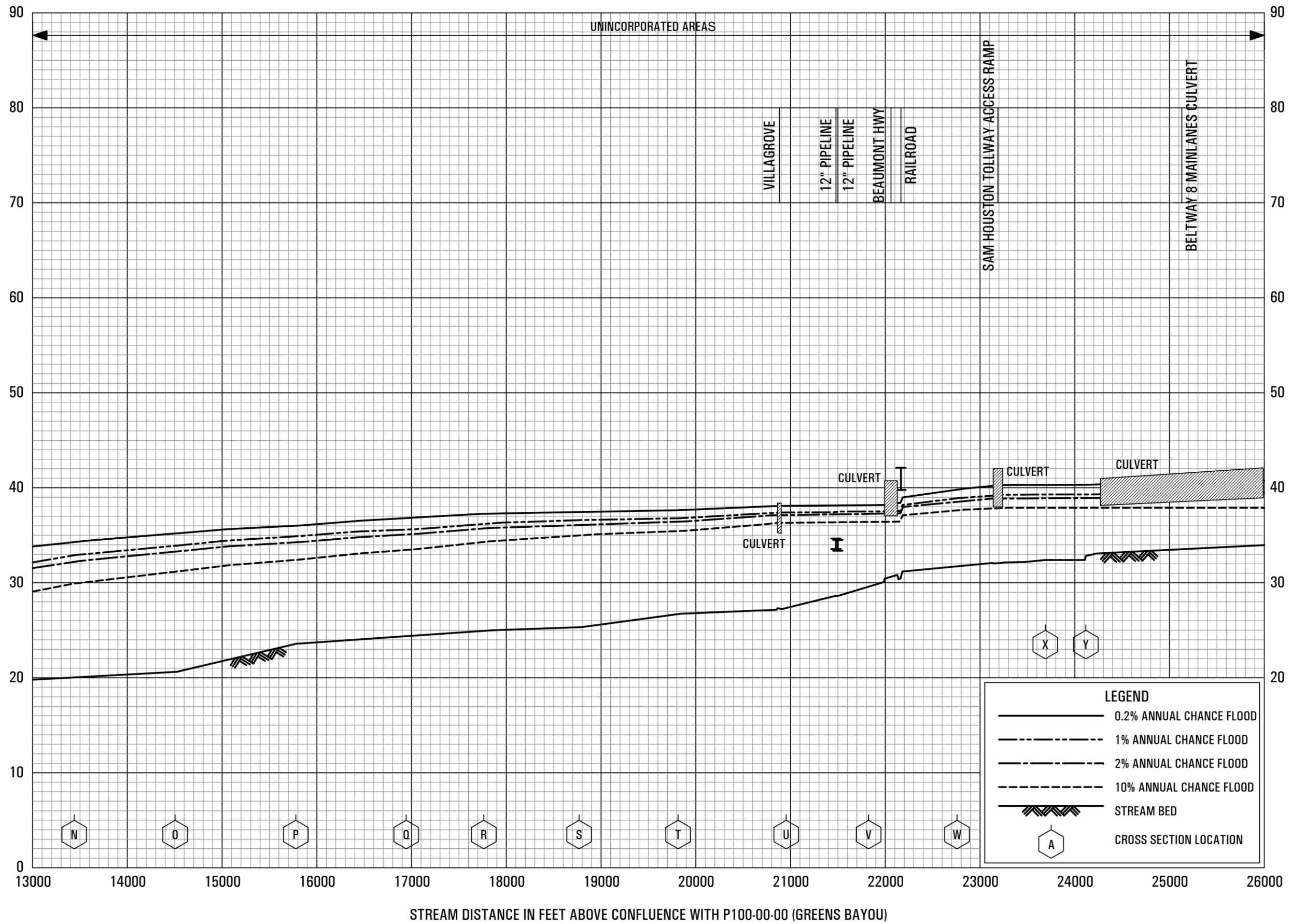
N100-00-00 (CARPENTERS BAYOU)

FEDERAL EMERGENCY MANAGEMENT AGENCY

HARRIS COUNTY, TX
AND INCORPORATED AREAS

N03P

ELEVATION IN FEET NAVD 88 (2001 ADJUSTMENT)



UNINCORPORATED AREAS

VILLAGROVE

12" PIPELINE

12" PIPELINE

BEAUMONT HWY

RAILROAD

SAM HOUSTON TOLLWAY ACCESS RAMP

BELTWAY 8 MAINLANES CULVERT

FLOOD PROFILES

P107-00-00 (BIG GULCH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

HARRIS COUNTY, TX

AND INCORPORATED AREAS

P20P

