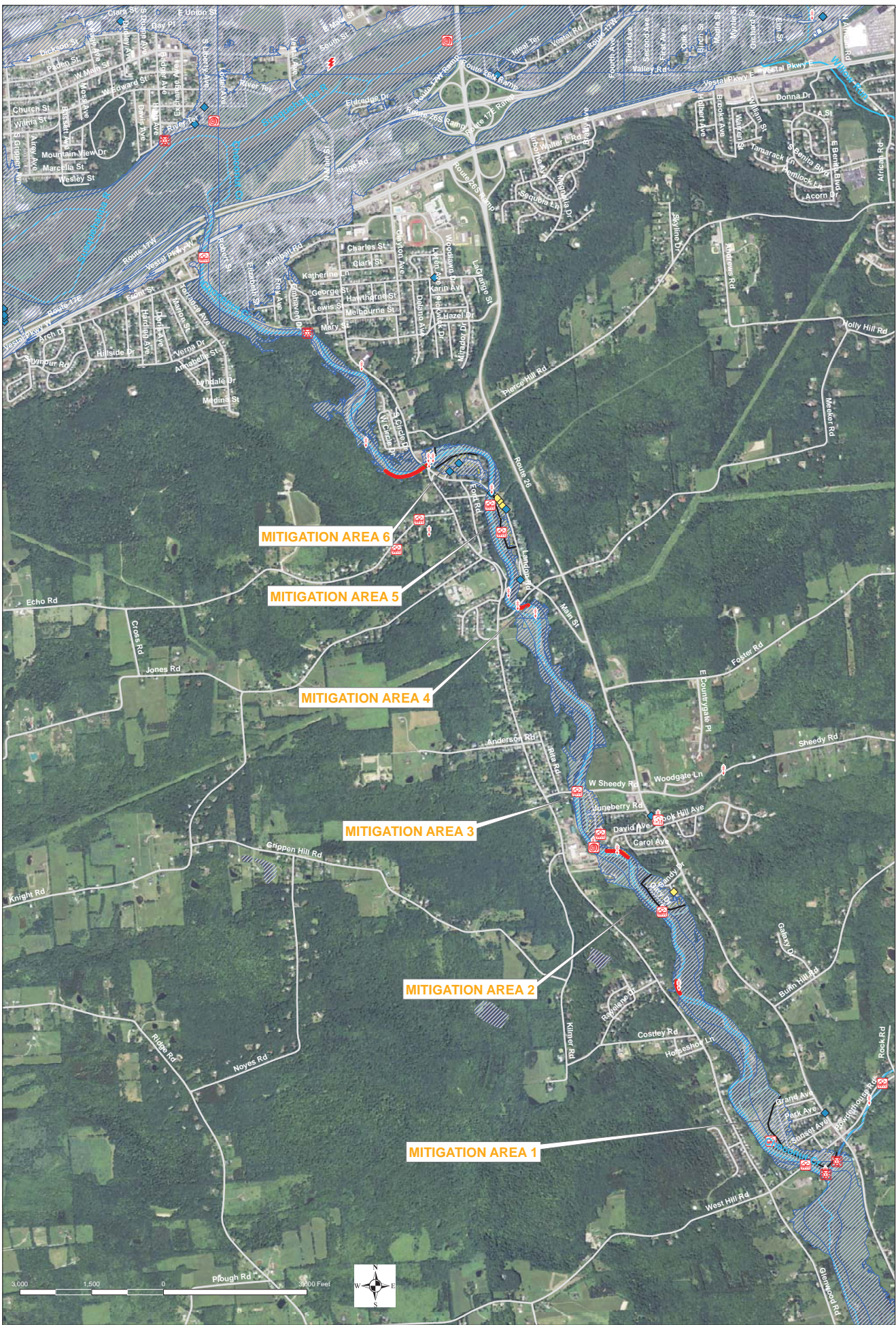


APPENDIX B

- B-1 Lower Choconut (LC) Flood Mitigation Site Index Map
- B-2 LC Flood Mitigation Site 6 and LC Flood Mitigation Site 5
- B-3 LC Flood Mitigation Site Map 3
- B-4 LC Flood Mitigation Site 6 50-year Flood Water Depth Grid Map
- B-5 LC Flood Mitigation Site 6 100-year Flood Water Depth Grid Map
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- B-8 Conceptual Berm Design for LC Flood Mitigation Site 6
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- B-38 Benefit Cost Ratio for PC Flood Mitigation Site 1
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- B-41 PC Flood Mitigation Site 3 Flooding Locations
- B-42 Table B1 LC Flood Mitigation Site 6 Hydraulic Comparison Table
- B-43 Table B2 LC Flood Mitigation Site 5 Hydraulic Comparison Table

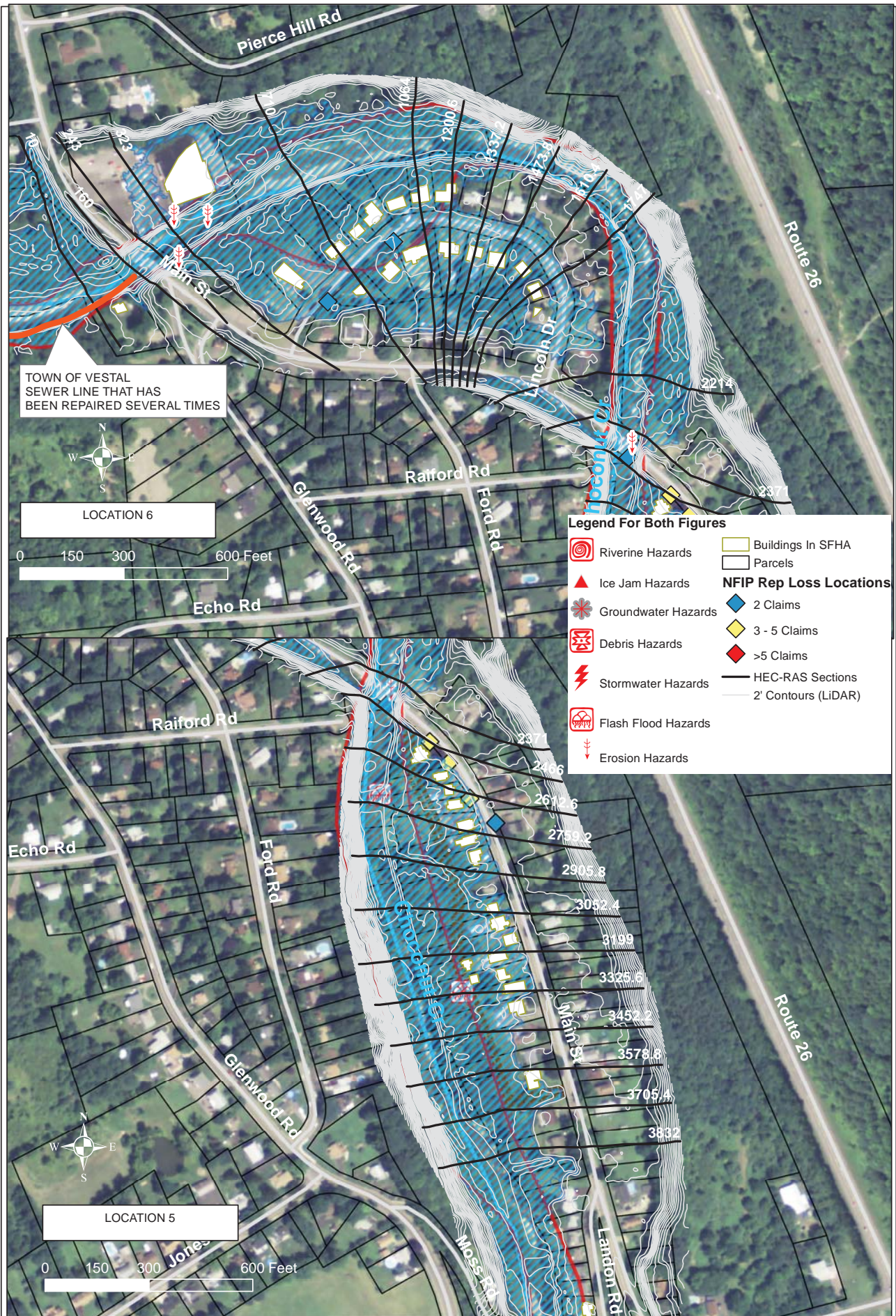




DATE	3/18/15
DESIGNED BY	GDF
DRAWN BY	GDF
CHECKED BY	
PROJECT NO	EO22-2013
FIGURE NUMBER	1

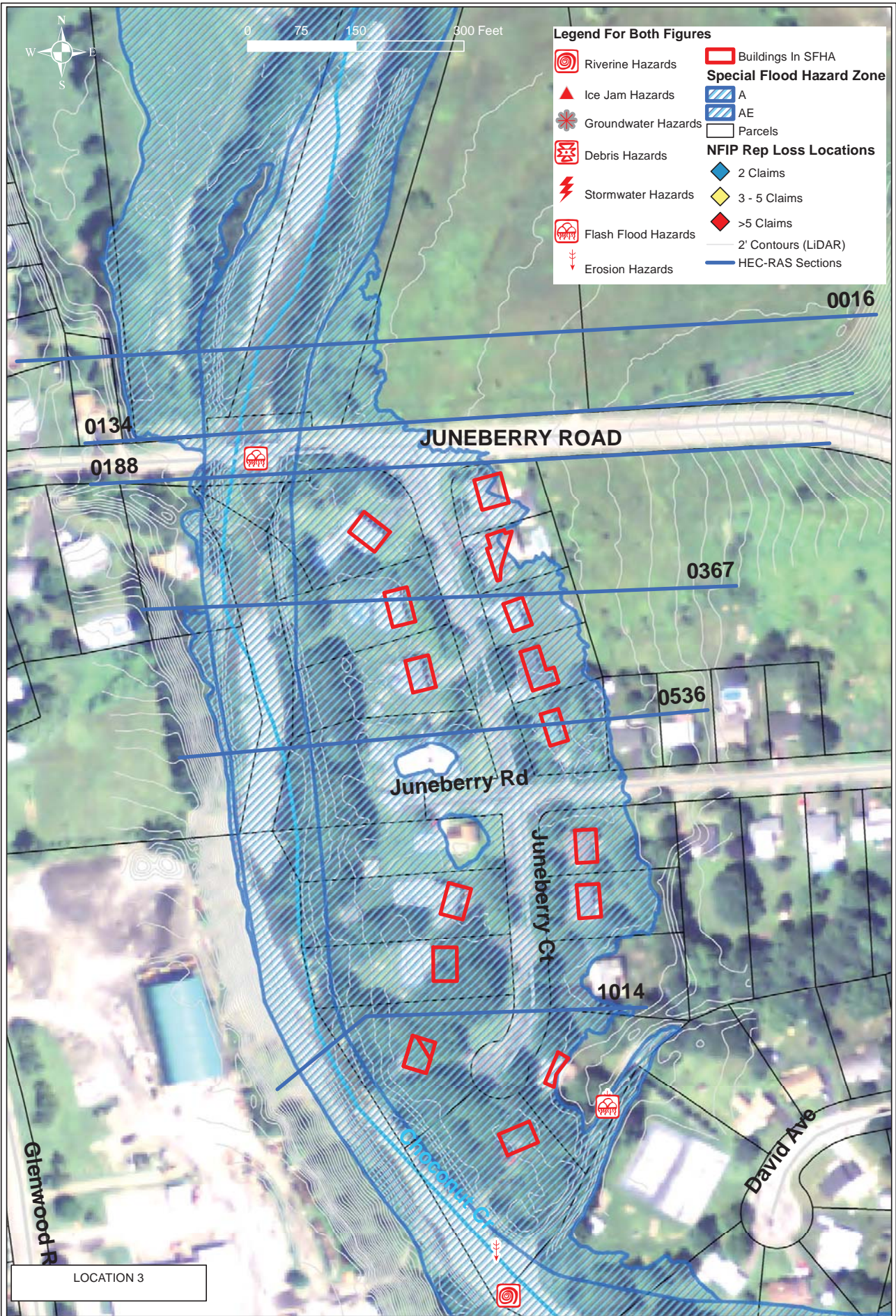
**LOWER CHOCONUT CREEK
 MITIGATION INDEX MAP**
**BROOME COUNTY WATERSHED
 FLOOD MITIGATION ANALYSIS**
BROOME COUNTY, NY

<ul style="list-style-type: none"> Riverine Hazards Flash Flood Hazards Stormwater Hazards Debris Hazards Erosion Hazards Groundwater Hazards Ice Jam Hazards 	<ul style="list-style-type: none"> Streams Roads Buildings In SFHA Linear Beneficial 	<ul style="list-style-type: none"> NFIP Rep Loss Locations Claims 5 Claims 5 Claims
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2 1	DATE: 3/23/16 DESIGNED BY: GDF CHECKED BY: GDF PROJECT NO: E022.2013 FIGURE NUMBER: 1	LOWER CHOCONUT CREEK MITIGATION #6 AND #5 BROOME COUNTY WATERSHED FLOOD MITIGATION ANALYSIS BROOME COUNTY, NY
	BACKGROUND PHOTO: 2013 NAPP	
		



LOCATION 3

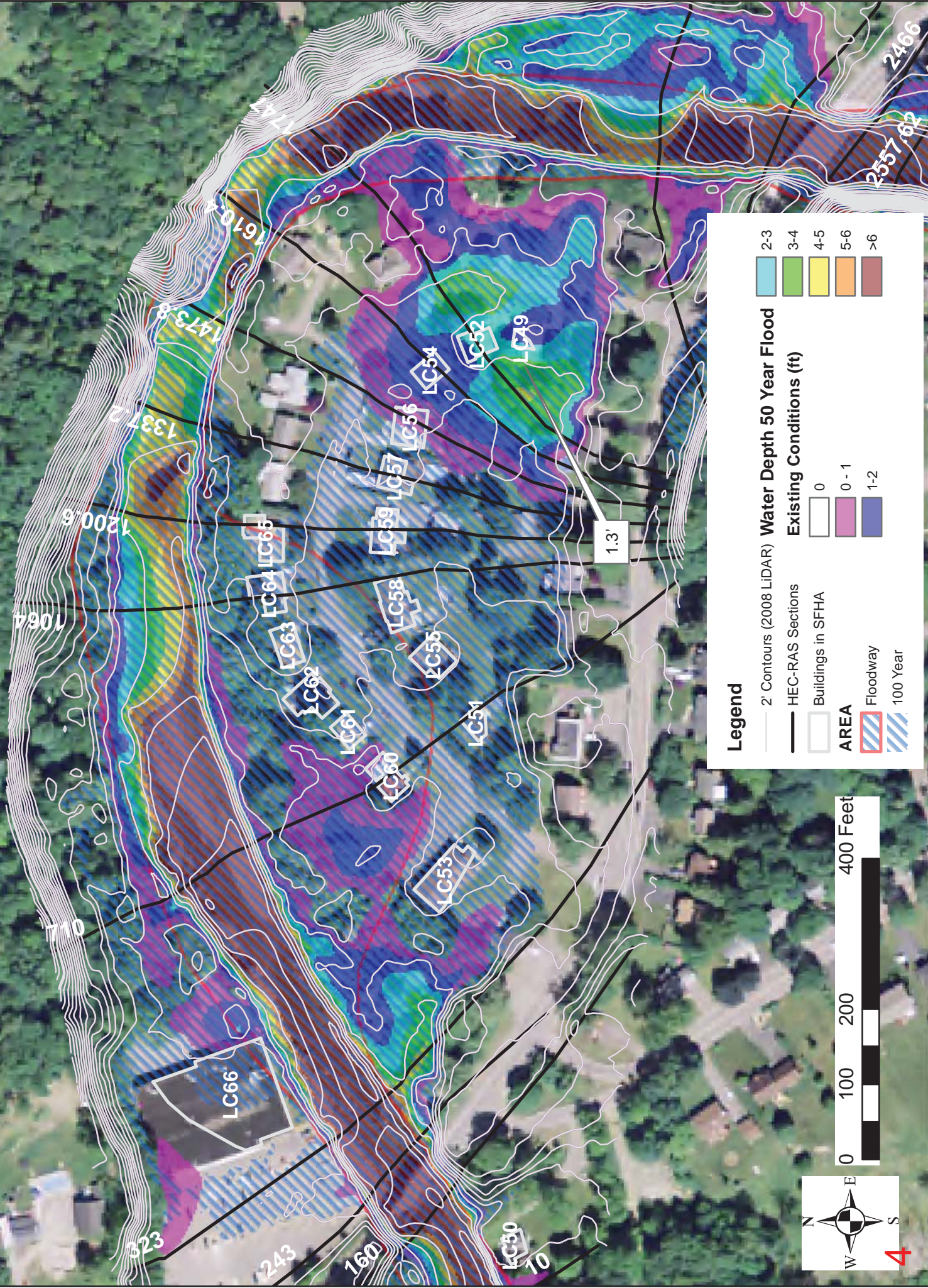
DATE: 12/24/15
 DESIGNED BY: GDF
 DRAWN BY: GDF
 CHECKED BY: GDF
 PROJECT NO: E022.2013
 FIGURE NUMBER: 1

LOWER CHOCONUT CREEK
 MITIGATION #3
 BROOME COUNTY WATERSHED
 FLOOD MITIGATION ANALYSIS
 BROOME COUNTY, NY

BACKGROUND PHOTO: 2013 NAPP



LC Flood Mitigation Site 6 50-year Flood Water Depth Grid Map

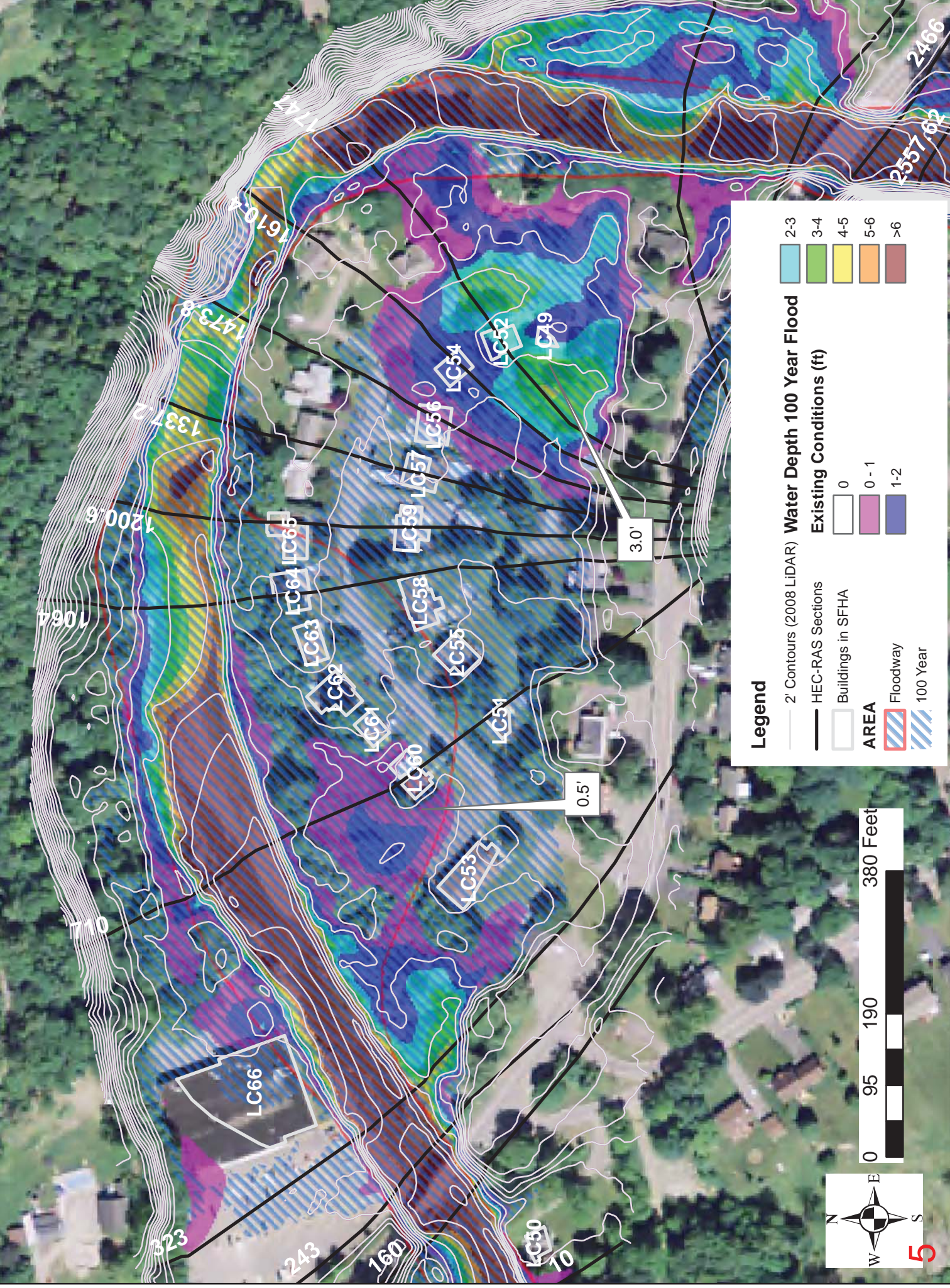


Legend

- 2' Contours (2008 LIDAR)
- HEC-RAS Sections
- Buildings in SFHA
- AREA**
 - Floodway
 - 100 Year
- Water Depth 50 Year Flood**
 - 2-3
 - 3-4
 - 4-5
 - 5-6
 - >6
- Existing Conditions (ft)**
 - 0
 - 0 - 1
 - 1-2

0 100 200 400 Feet

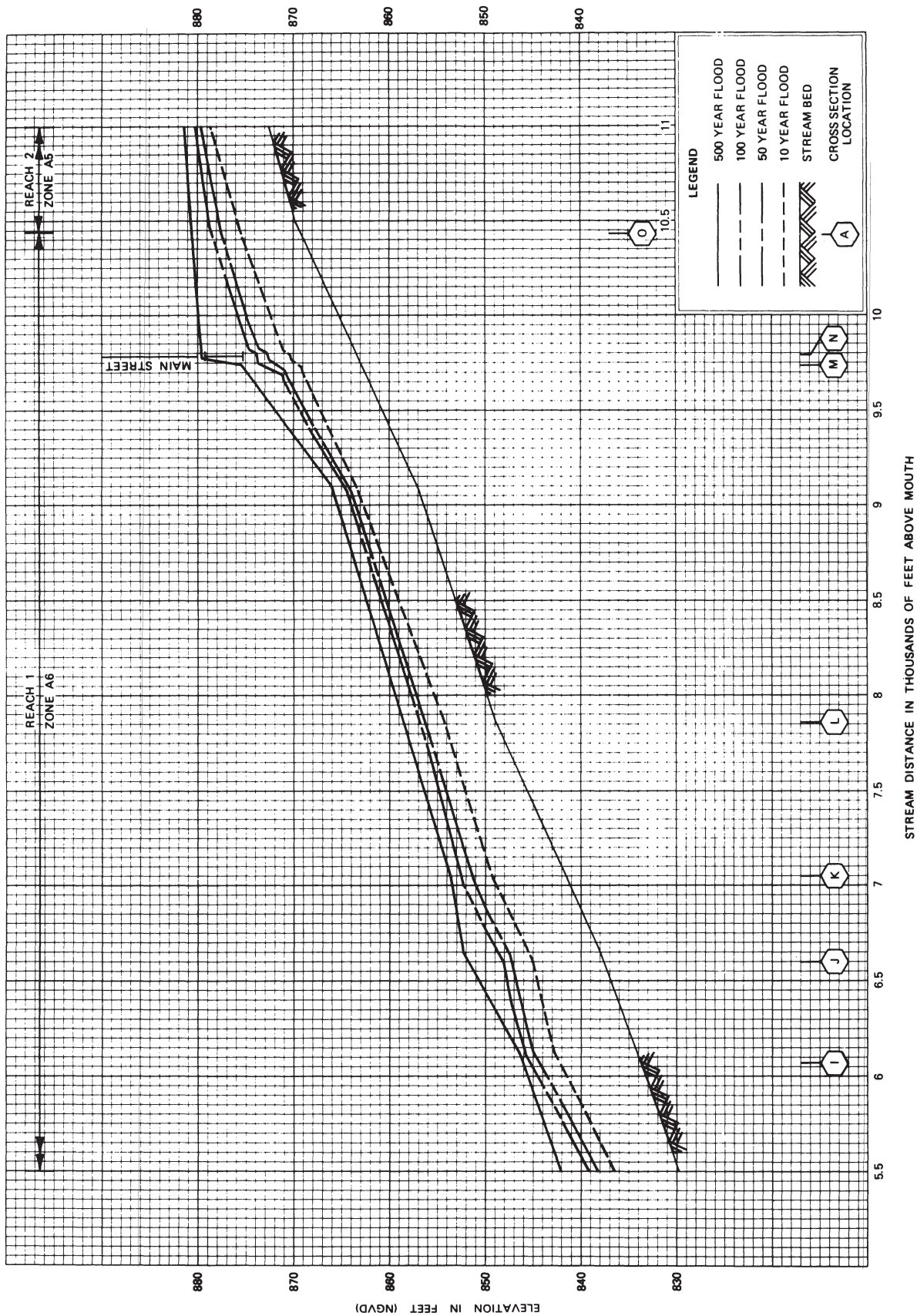
LC Flood Mitigation Site 6 100-year Flood Water Depth Grid Map



FLOOD PROFILES
CHOCONUT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
TOWN OF VESTAL, NY
(BROOME CO.)

07P



FIRM Flood Profiles for LC Flood Mitigation Site 6

Home (Ctrl+H) (Ctrl+P) (Ctrl+S)

Projects Structures (Ctrl+P) (Ctrl+S)

Print (Ctrl+R) (Ctrl+E)

Export BCA (Ctrl+E)

Import/Export (Ctrl+I) Data

Backup/Restore (Ctrl+B) Database

About (Ctrl+A) About

Save and Continue

PROJECT BCR: 0.64

Project: LC49

My Projects













- LC49
- LC52
- LC54
- LC56
- LC60
- PC3 Franklin Street
- NewNode

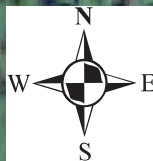
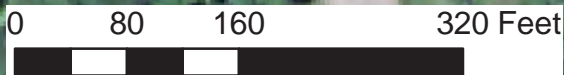
Project Structures Summary

Name	Structure	Benefits	Costs	BCR	Address	City	State	County	Zip
LC49	Building	\$148,654	\$517,500	0.29			New York	Broome	
LC52	Building	\$12,340	\$100	123.40			New York	Broome	
LC54	Building	\$149,244	\$100	1,492.44			New York	Broome	
LC56	Building	\$20,858	\$100	208.58			New York	Broome	
LC60	Building	\$2,528	\$100	25.28			New York	Broome	

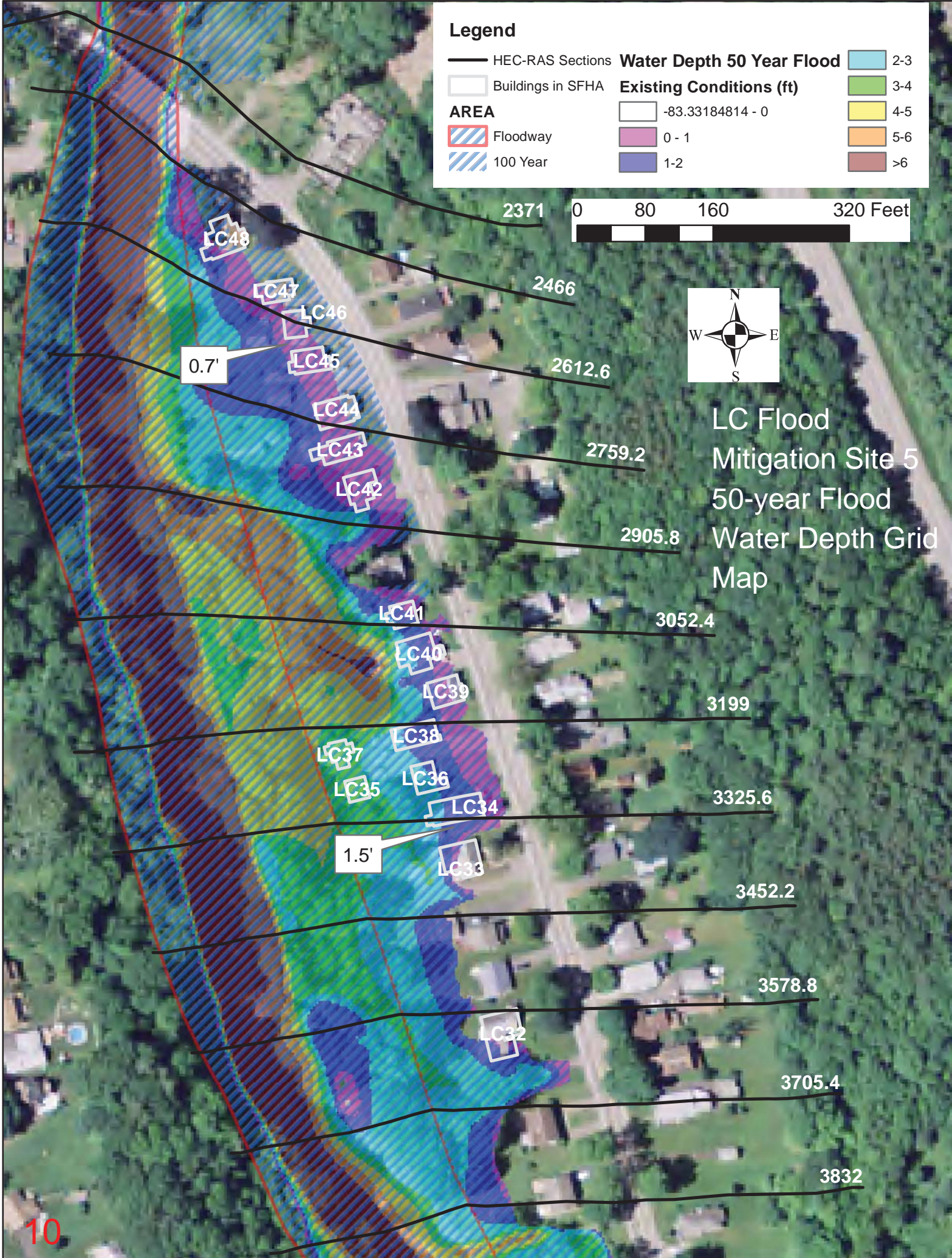
Benefit Cost Ratio for LC Flood Mitigation Site 6

Legend













	HEC-RAS Sections	Water Depth 50 Year Flood		2-3
	Buildings in SFHA	Existing Conditions (ft)		3-4
AREA				4-5
	Floodway			5-6
	100 Year			>6

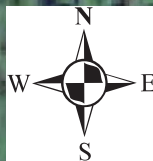


LC Flood Mitigation Site 5
50-year Flood Water Depth Grid Map

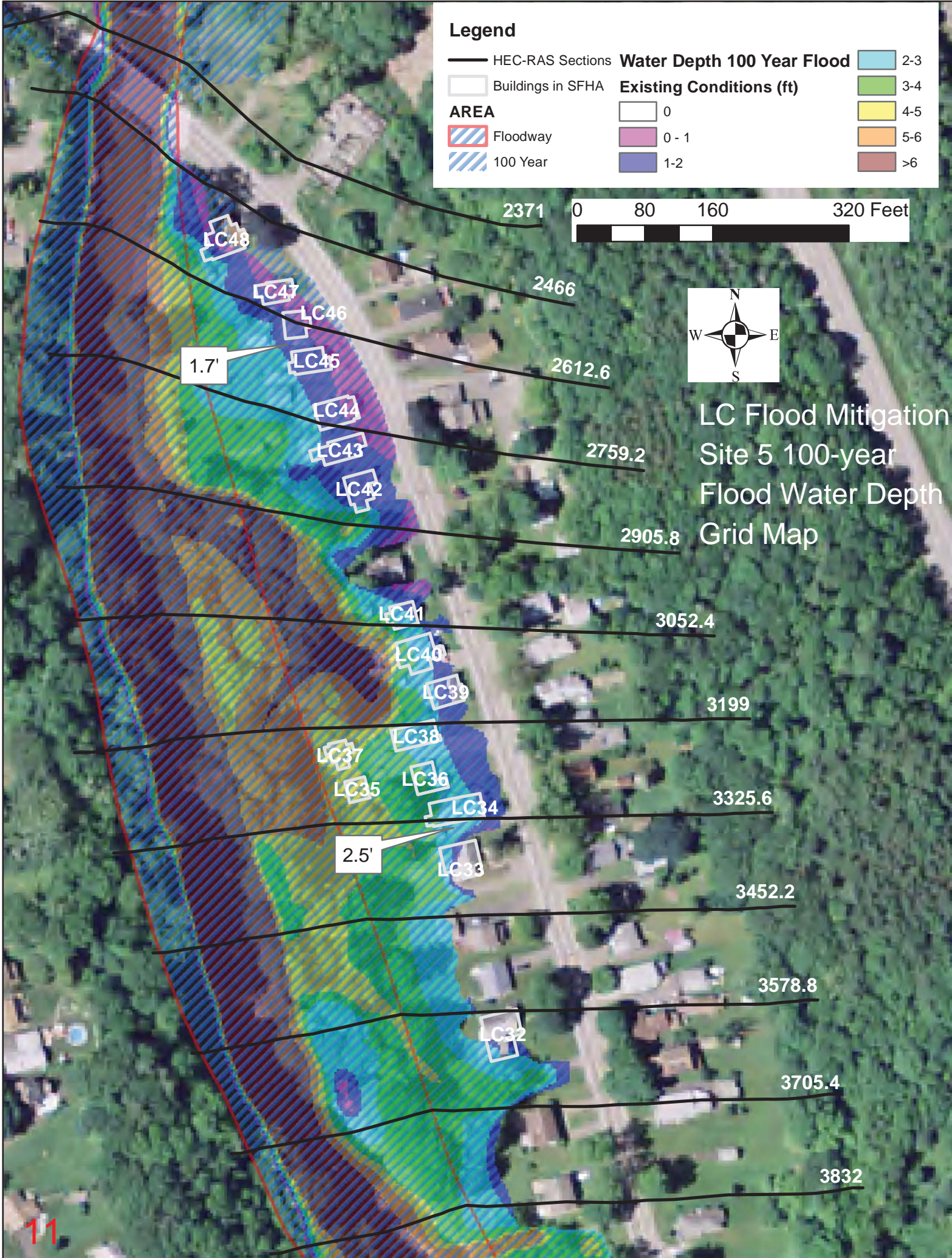


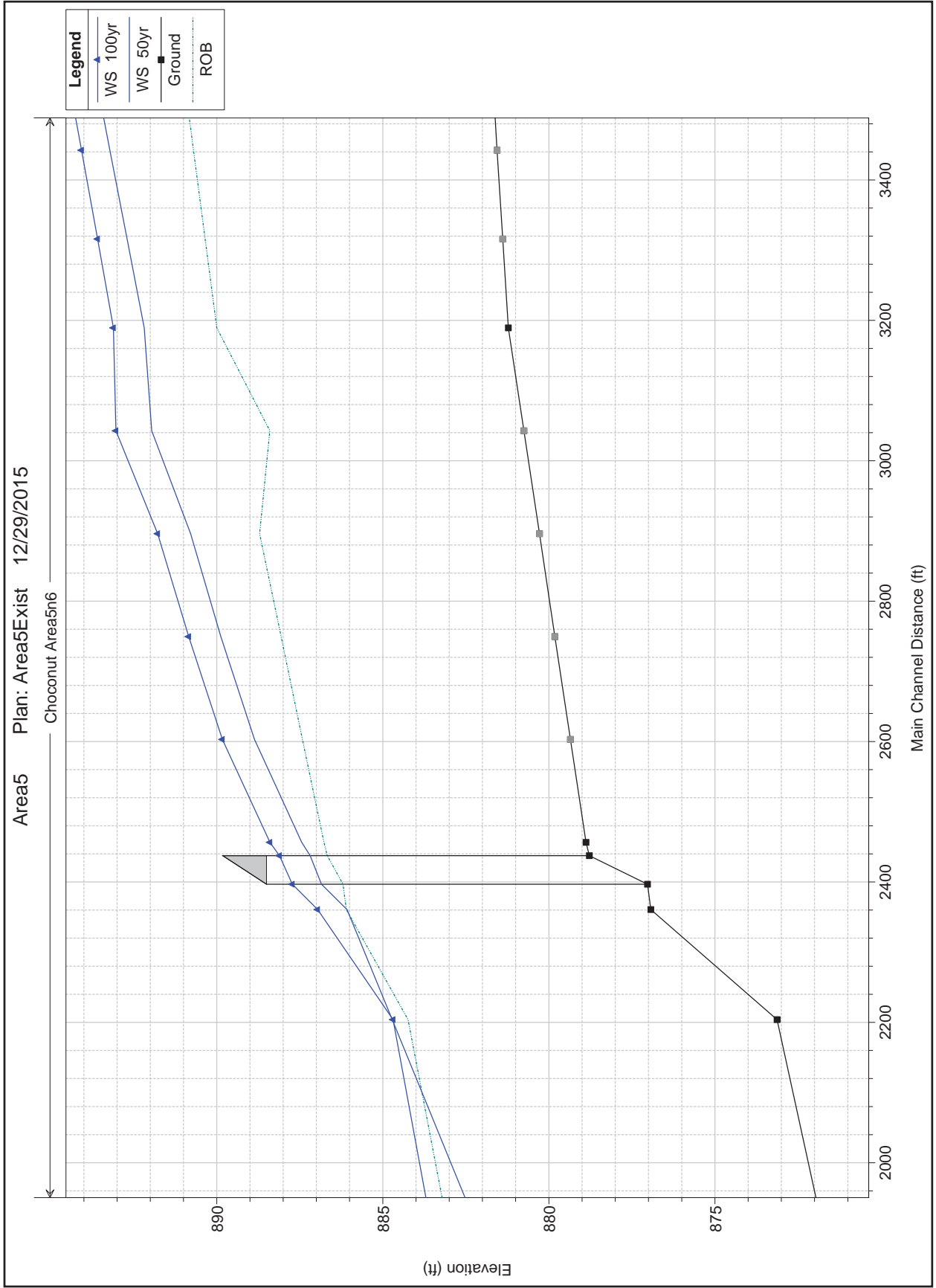
Legend

	HEC-RAS Sections	Water Depth 100 Year Flood		2-3
	Buildings in SFHA	Existing Conditions (ft)		3-4
AREA				4-5
	Floodway			5-6
	100 Year			>6



LC Flood Mitigation Site 5 100-year Flood Water Depth Grid Map





Upper Main Street Bridge Water Surface Profile

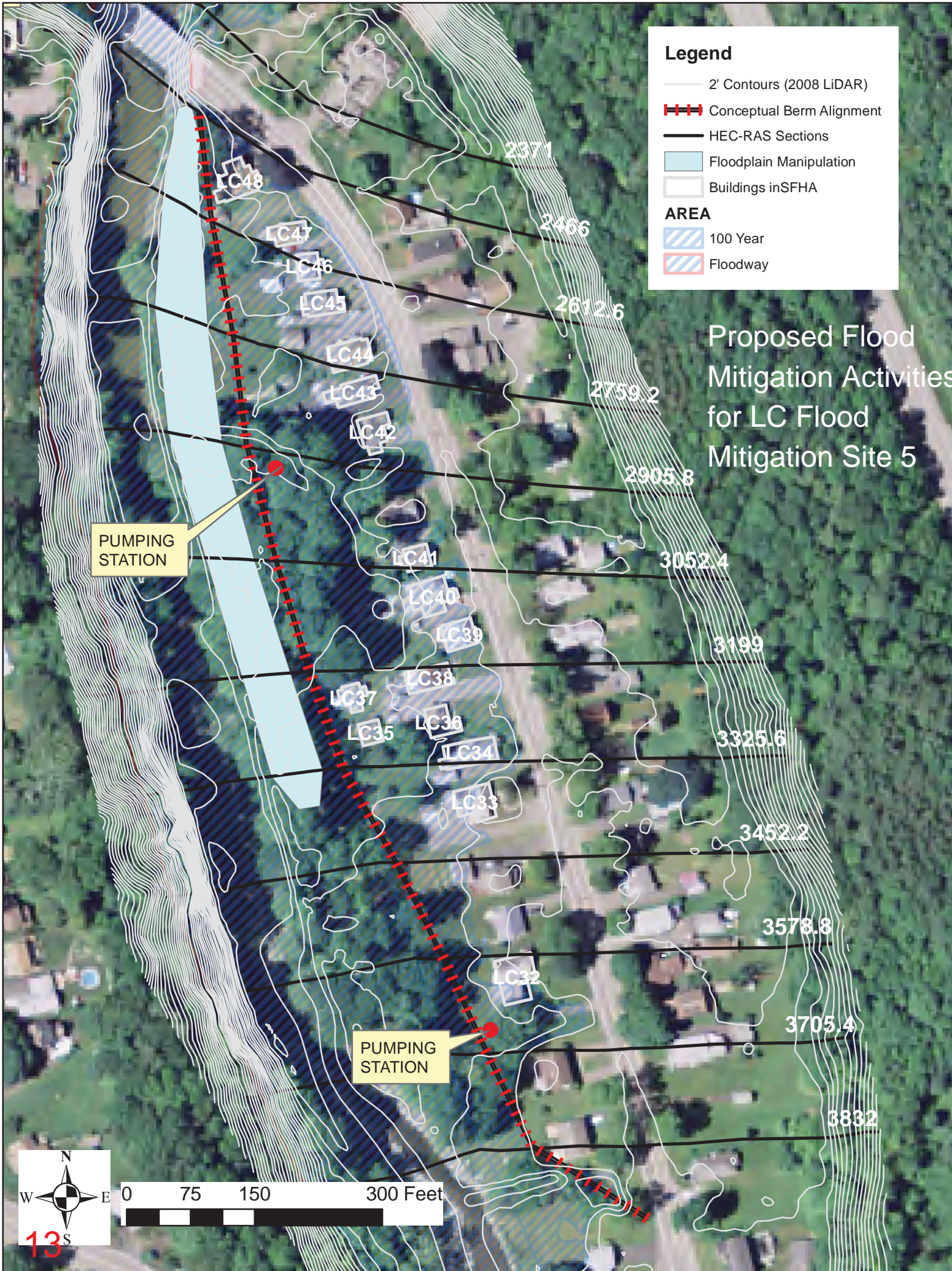
Legend

- 2' Contours (2008 LiDAR)
- ▬▬▬ Conceptual Berm Alignment
- HEC-RAS Sections
- ▭ Floodplain Manipulation
- ▭ Buildings inSFHA

AREA

- ▨ 100 Year
- ▨ Floodway

Proposed Flood Mitigation Activities for LC Flood Mitigation Site 5



PUMPING STATION

PUMPING STATION



13S

Area5 Plan: 1) 5prop 2) 5exist

RS = 2759.2*



Typical Cross Section of Proposed Conditions for LC Flood Mitigation Site 5

Benefit Cost Analysis 5.1

Home (Ctrl+H) Projects (Ctrl+P) Structures (Ctrl+S) Print (Ctrl+P) Export BCA (Ctrl+E) Import/Export (Ctrl+I) Backup/Restore (Ctrl+B) Database About (Ctrl+A) About

Save and Go Back PROJECT NAME: Area5 PROJECT BCR: 0.62

Backup/Restore Data (Ctrl+B) Backup/Restore (Ctrl+B)

My Projects

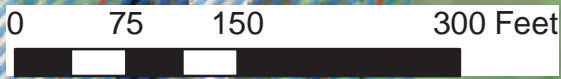
- My Projects
 - LC32
 - LC34
 - LC35
 - LC36
 - LC37
 - LC38
 - LC40
 - LC41
 - PC1
 - PC2
 - TC2
 - TC101
 - TC102
 - TC103
 - TC107
 - TC108
 - NewNode

Project Structures Summary

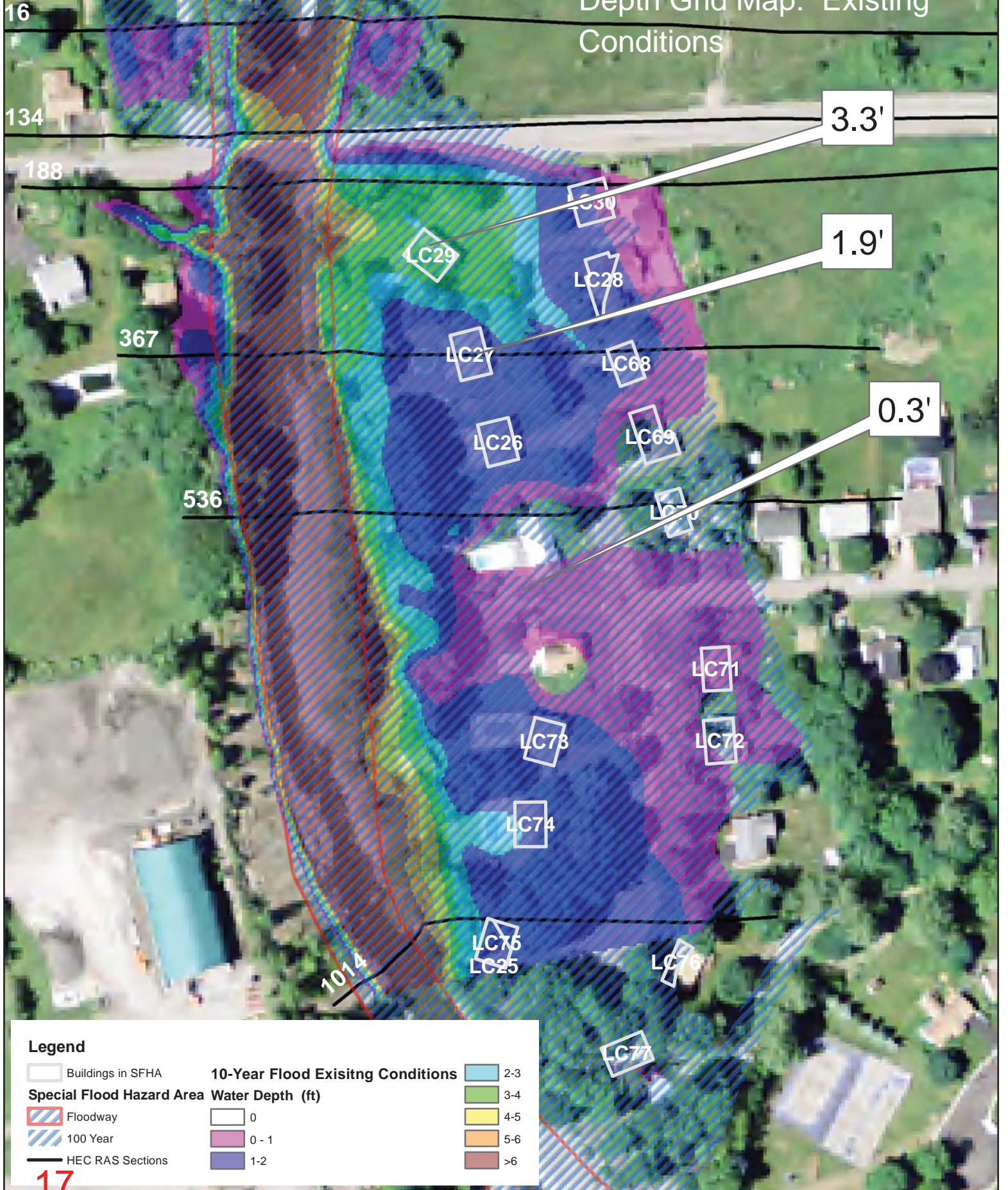
Name	Structure	Benefits	Costs	BCR	Address	City	State	County	Zip
LC32	Building	\$16,077	\$923,000	0.02			New York	Broome	
LC34	Building	\$17,117	\$100	171.17			New York	Broome	
LC35	Building	\$81,043	\$100	810.43			New York	Broome	
LC36	Building	\$19,710	\$100	197.10			New York	Broome	
LC37	Building	\$73,663	\$100	736.63			New York	Broome	
LC38	Building	\$18,768	\$100	187.68			New York	Broome	
LC40	Building	\$330,070	\$100	3,300.70			New York	Broome	
LC41	Building	\$14,124	\$100	141.24			New York	Broome	

Save and Continue

Benefit Cost Ratio for LC Flood Mitigation Site 5



LC Flood Mitigation Site 3 10-year Flood Water Depth Grid Map: Existing Conditions



Legend

- Buildings in SFHA
- Floodway
- 100 Year
- HEC RAS Sections

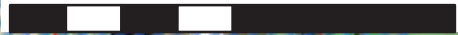
10-Year Flood Existing Conditions

- Water Depth (ft)
- 0
 - 0 - 1
 - 1-2

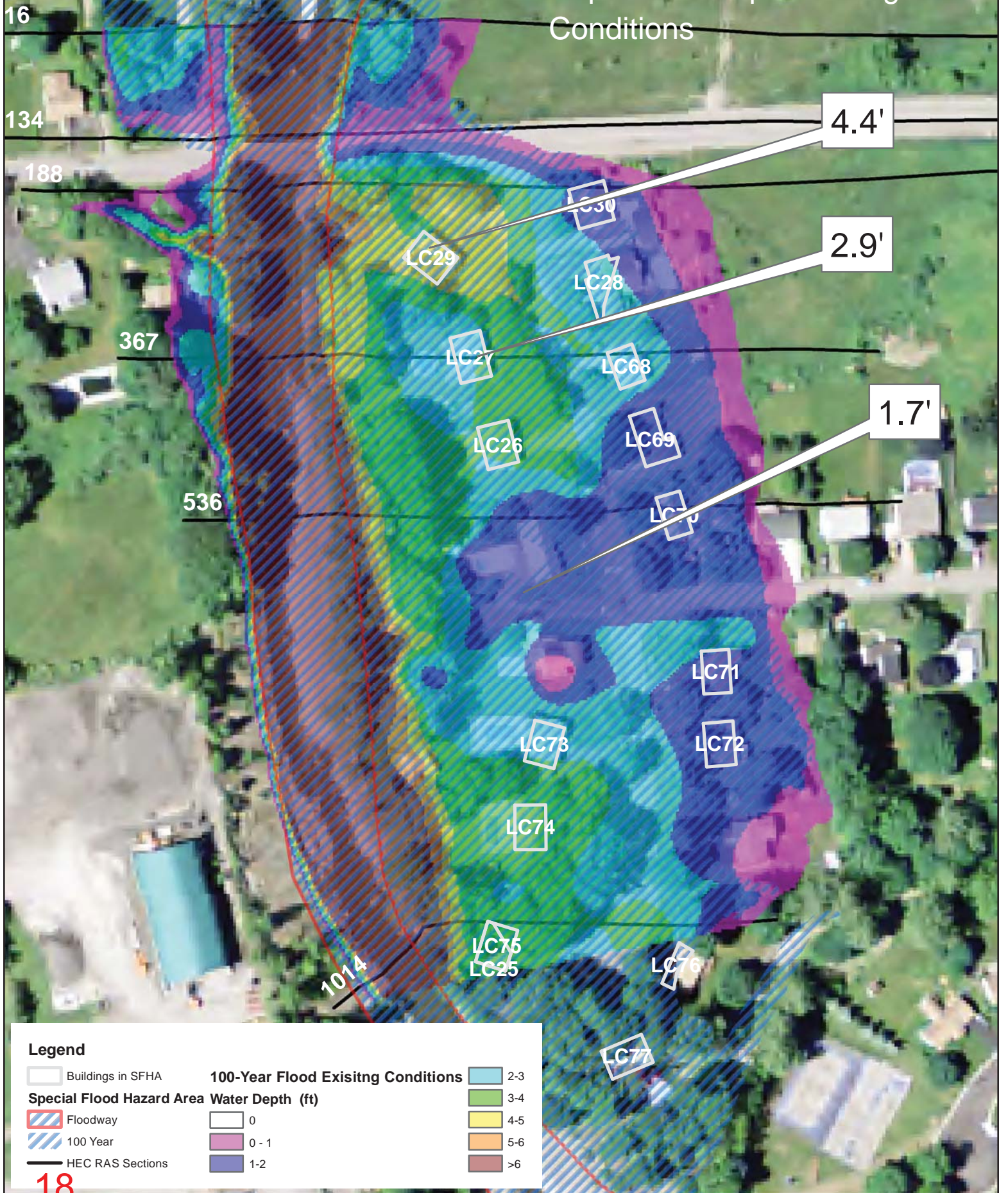
- 2-3
- 3-4
- 4-5
- 5-6
- >6



0 75 150 300 Feet



LC Flood Mitigation Site 3 100-year Flood Water Depth Grid Map: Existing Conditions



Legend

Buildings in SFHA

Special Flood Hazard Area Water Depth (ft)

Floodway

100 Year
 HEC RAS Sections

100-Year Flood Existing Conditions

0

0 - 1

1-2

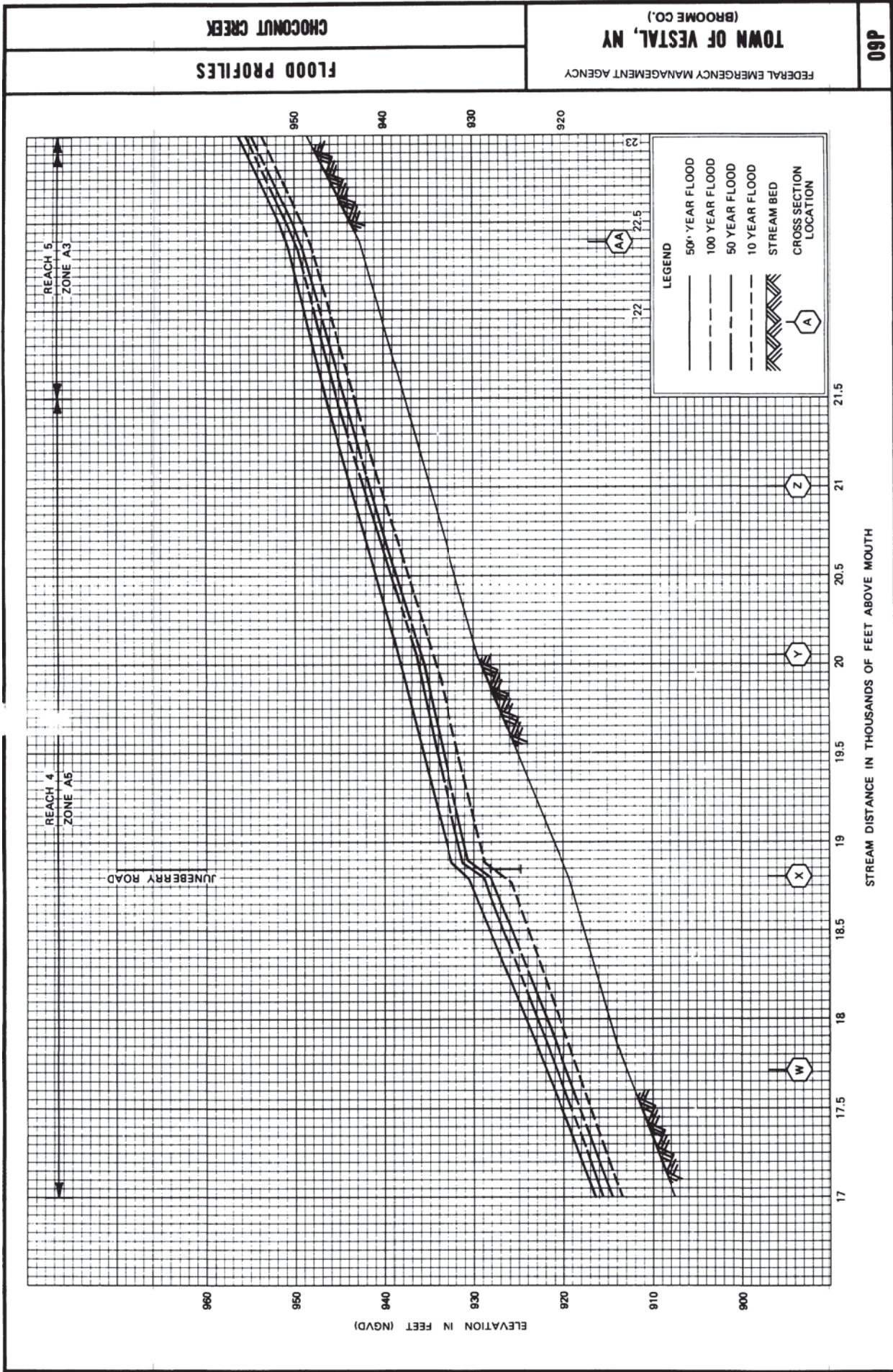
2-3

3-4

4-5

5-6

>6

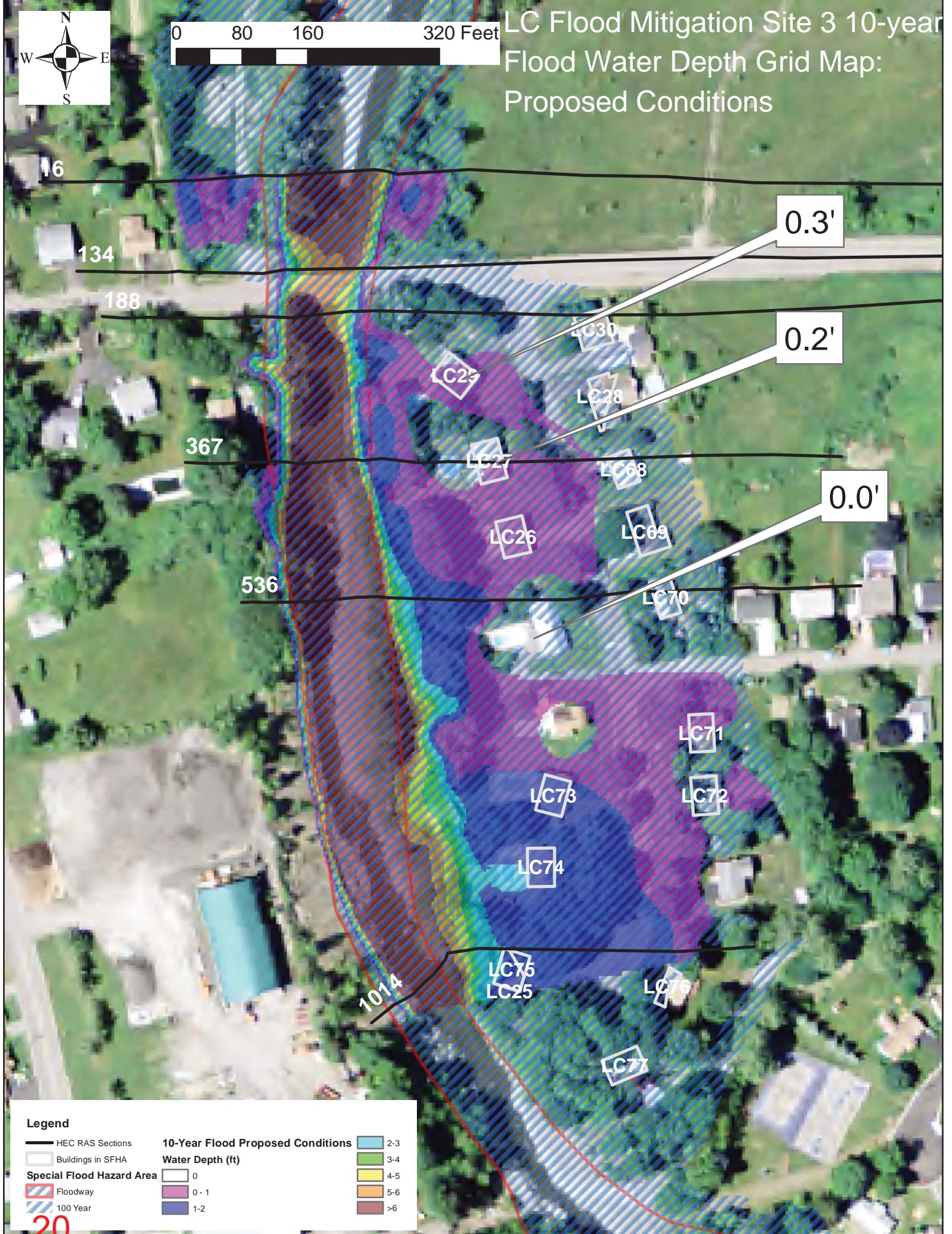


FIRM Flood Profiles for LC Flood Mitigation Site 3



0 80 160 320 Feet

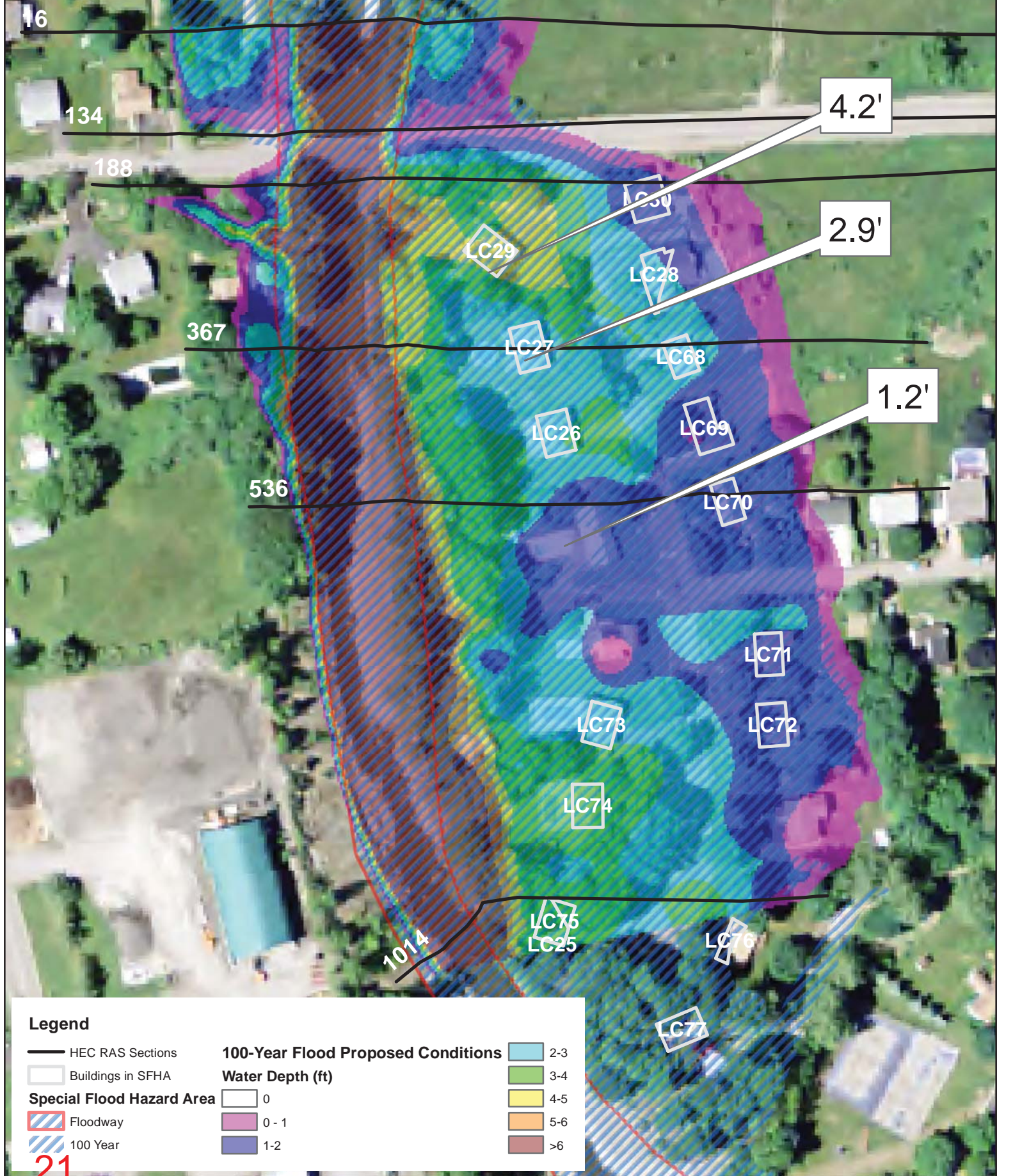
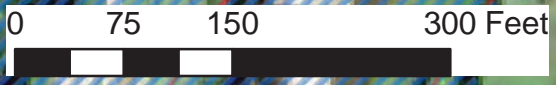
LC Flood Mitigation Site 3 10-year Flood Water Depth Grid Map: Proposed Conditions



Legend

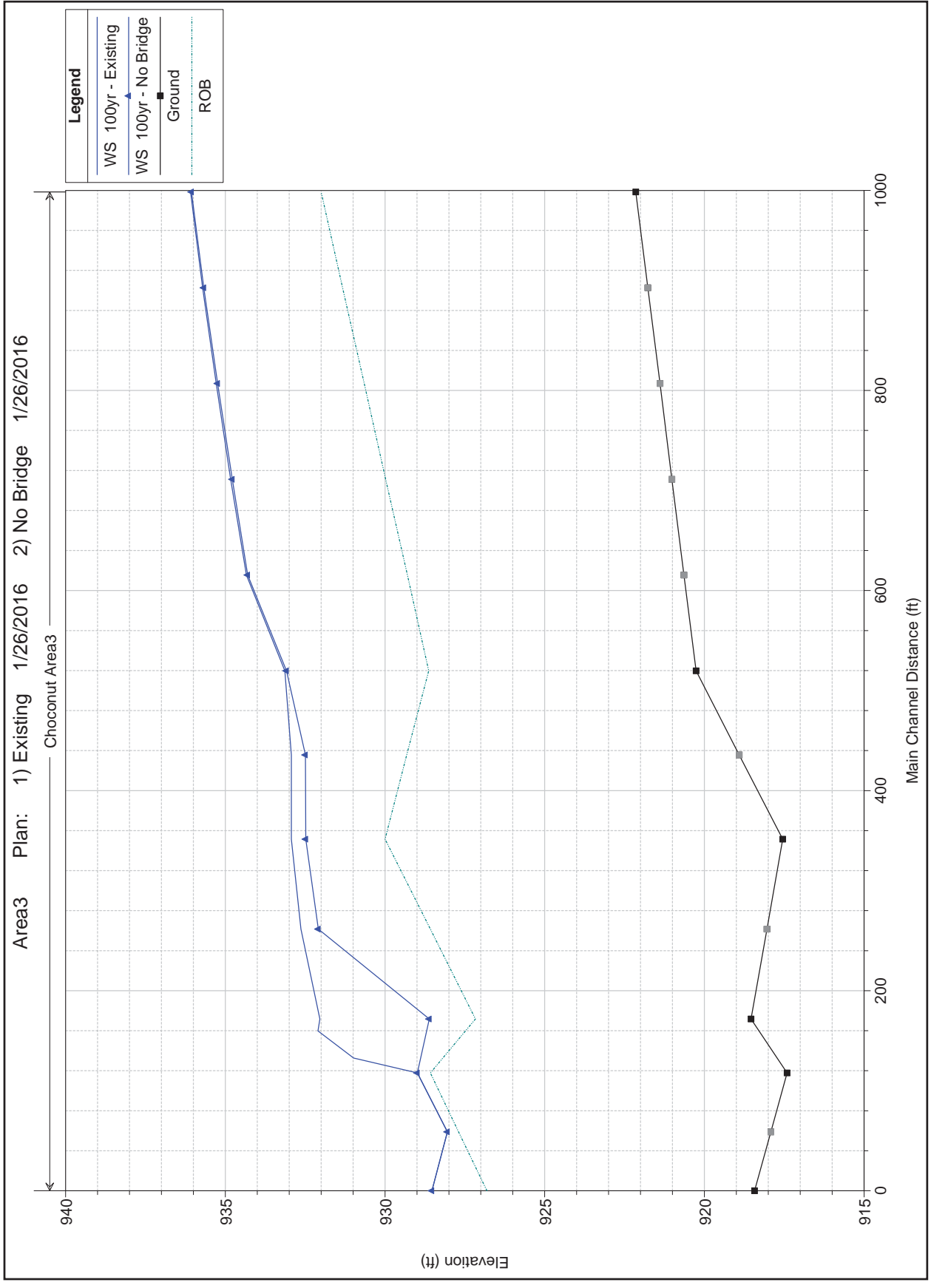
- HEC RAS Sections
- Buildings in SFHA
- Special Flood Hazard Area
 - Floodway
 - 100 Year
- 10-Year Flood Proposed Conditions Water Depth (ft)
 - 0
 - 0 - 1
 - 1-2
 - 2-3
 - 3-4
 - 4-5
 - 5-6
 - >6

LC Flood Mitigation Site 3 100-year Flood Water Depth Grid Map: Proposed Conditions



Legend

HEC RAS Sections	100-Year Flood Proposed Conditions	2-3
Buildings in SFHA	Water Depth (ft)	3-4
Special Flood Hazard Area	0	4-5
Floodway	0 - 1	5-6
100 Year	1-2	>6



Water Surface Profiles With No Bridge for LC Flood Mitigation Site 3

Home

Home (Ctrl+H) (Ctrl+P) (Ctrl+S) Projects Structures (Ctrl+P) (Ctrl+S)

Print (Ctrl+R) (Ctrl+R) Export BCA (Ctrl+E) (Ctrl+E) BCA

Import/Export (Ctrl+I) (Ctrl+I) Data Import/Export (Ctrl+I) (Ctrl+I)

Backup/Restore (Ctrl+B) (Ctrl+B) Database Backup/Restore (Ctrl+B) (Ctrl+B)

About (Ctrl+A) (Ctrl+A) About (Ctrl+A) (Ctrl+A)

Save and Continue

PROJECT BCR: 1.66

PROJECT NAME: Area3

Project Structures Summary

Name	Structure	Benefits	Costs	BCR	Address	City	State	County	Zip
LC26	Building	\$1,071,792	\$1,210,000	0.89			New York	Broome	
LC27	Building	\$251,075	\$100	2,510.75			New York	Broome	
LC28	Building	\$171,612	\$100	1,716.12			New York	Broome	
LC29	Building	\$511,615	\$100	5,116.15			New York	Broome	
LC68	Building	\$0	\$1	0.00			New York	Broome	
LC71	Building	\$0	\$1	0.00			New York	Broome	
LC73	Building	\$0	\$1	0.00			New York	Broome	
LC74	Building	\$0	\$0	0.00			New York	Broome	

Project: LC26

- My Projects
 - LC26
 - LC27
 - LC28
 - LC29
 - LC68
 - LC71
 - LC73
 - LC74
 - PC1
 - PC2
 - TC1