



City of Corinth

Public Meeting on FEMA Flood Insurance Rate Map Update for Lynchburg Creek

January 31, 2019

Lynchburg Creek

- NCTCOG CTP FEMA – Developed revised flood study for entire watershed
- Preliminary Flood maps issued June 2018



Flood Risk Report

Lynchburg Creek Watershed
North Central Texas Council of Governments
(NCTCOG) CTP – FY15 Risk MAP Project
City of Corinth and Town of Shady Shores
Texas

Report Number 01
10/31/2017

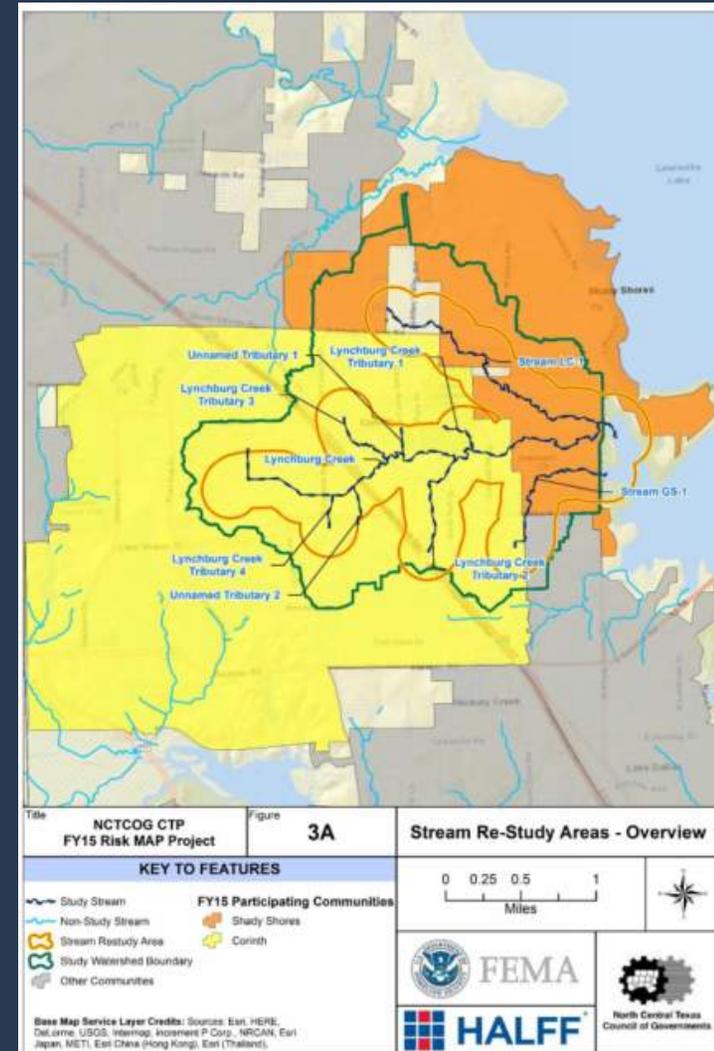
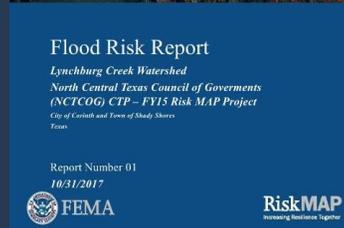


FEMA

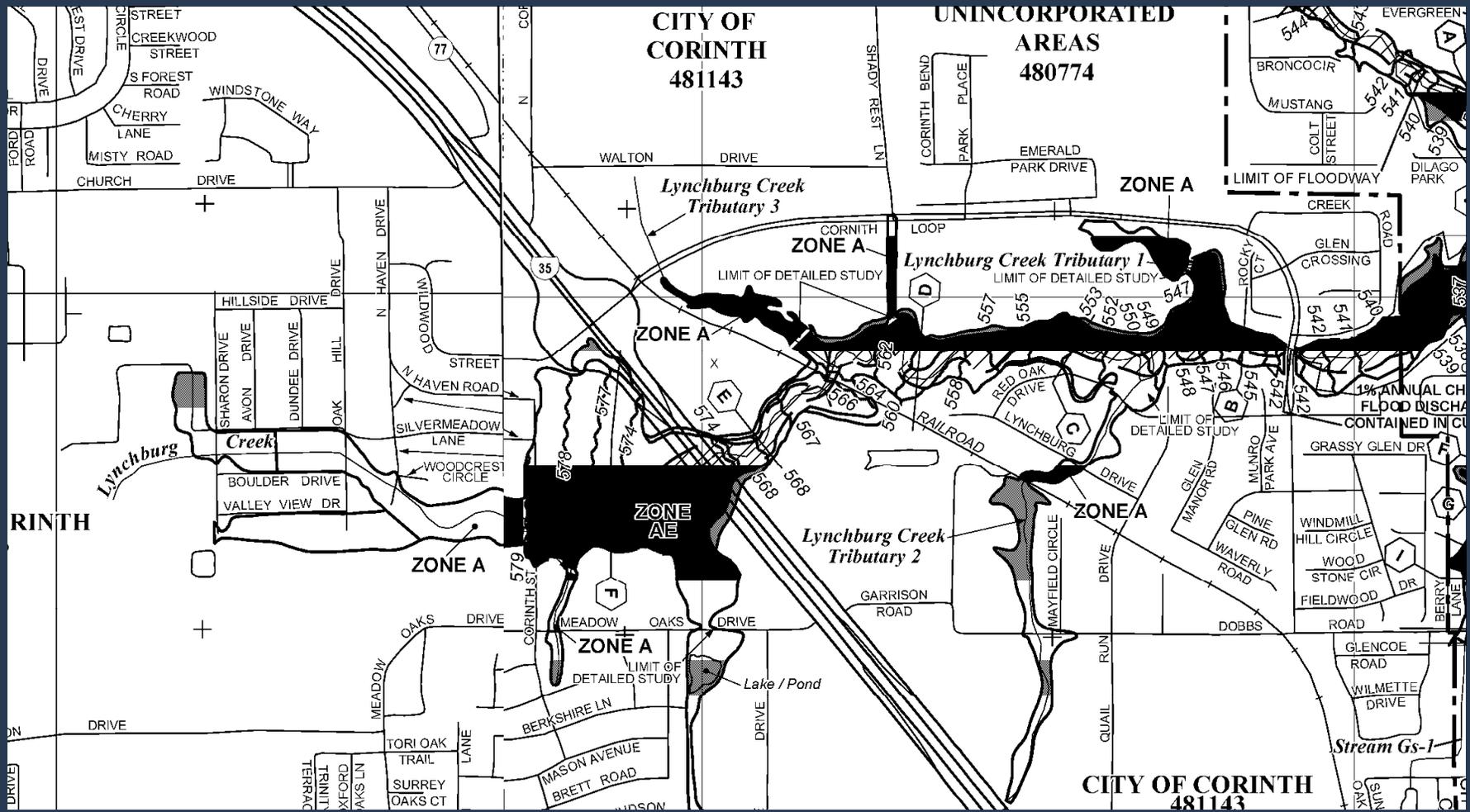
RiskMAP
Increasing Resilience Together

Lynchburg Creek Flood Risk Report

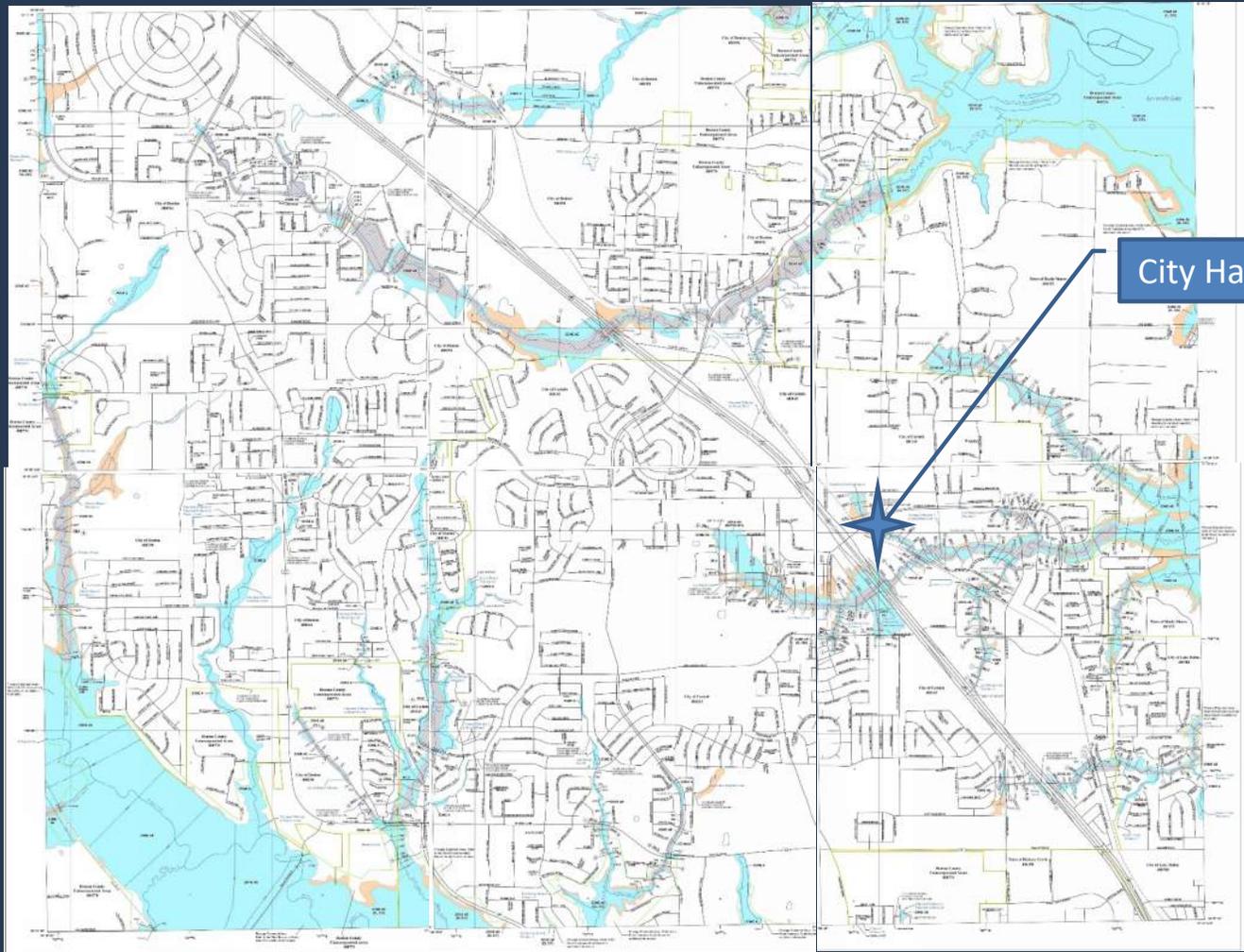
- Updated Drainage Bains
- Updated Hydrologic and hydraulic data
- Updated topographic data
 - Field survey
 - LIDAR Contours



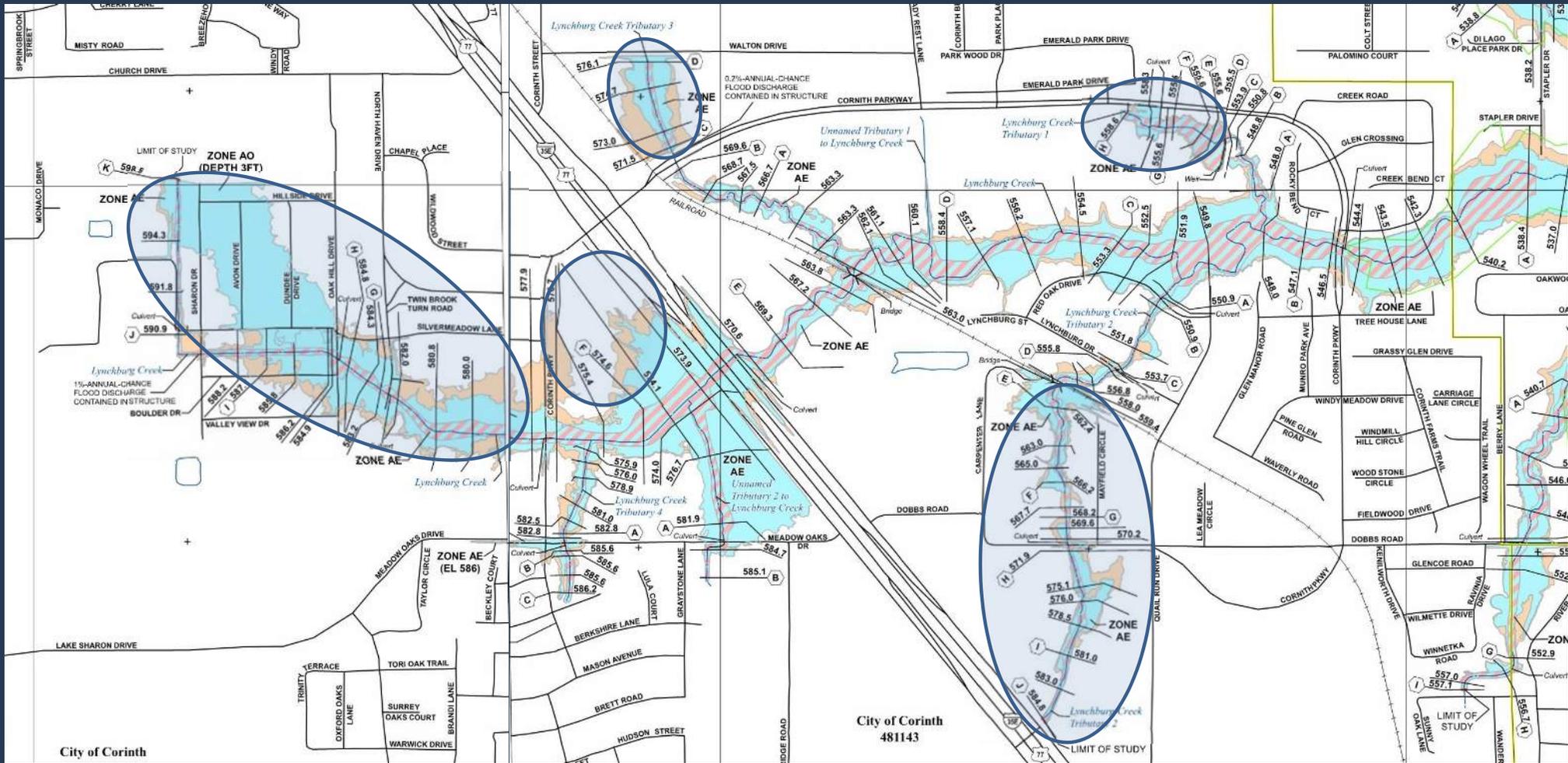
Existing Flood Insurance Rate Maps



Preliminary Flood Insurance Rate Maps

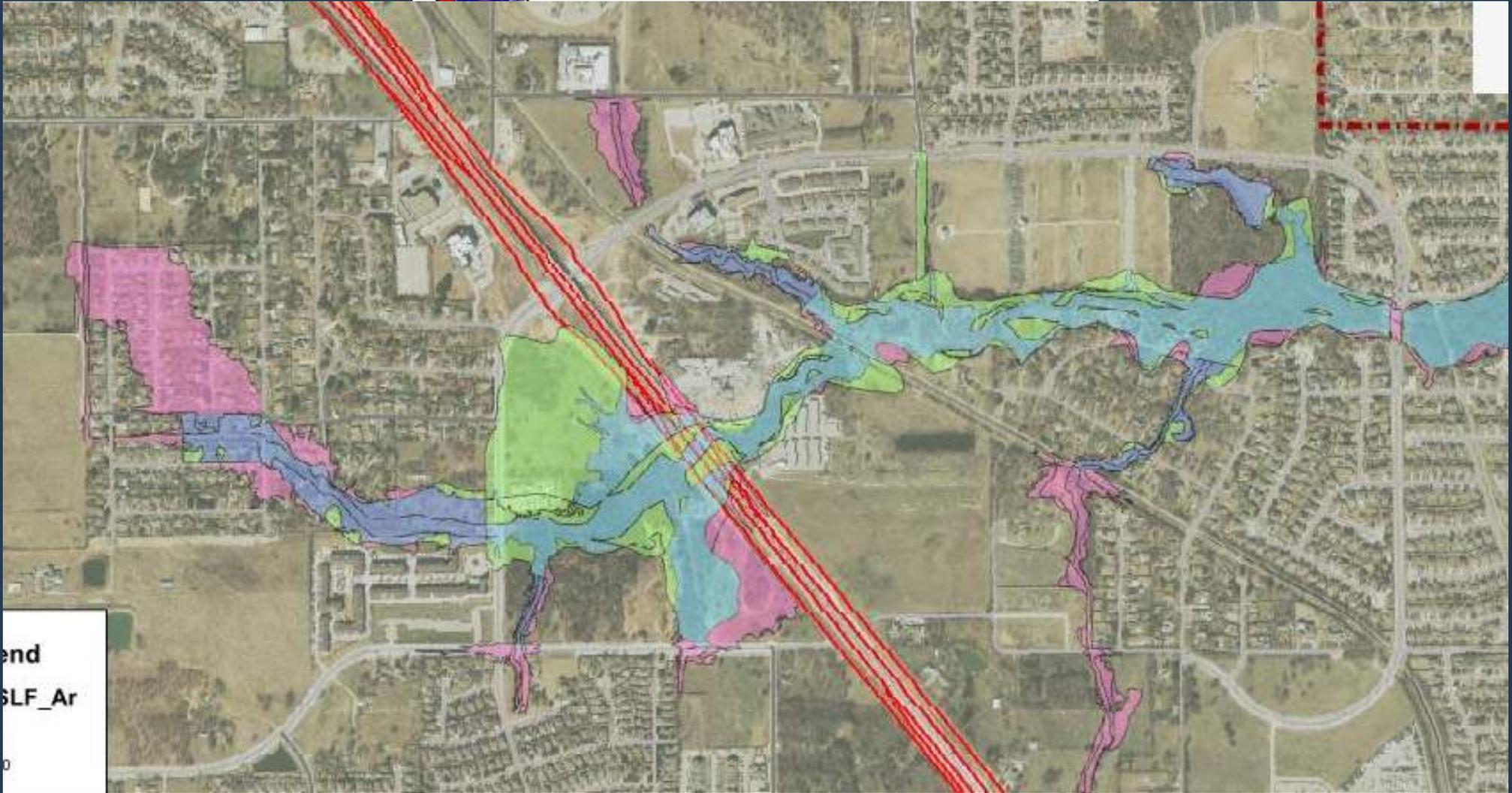


Preliminary Flood Insurance Rate Maps





CITY OF CORINTH



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SLF_Ar



CITY OF CORINTH



What do new maps mean?

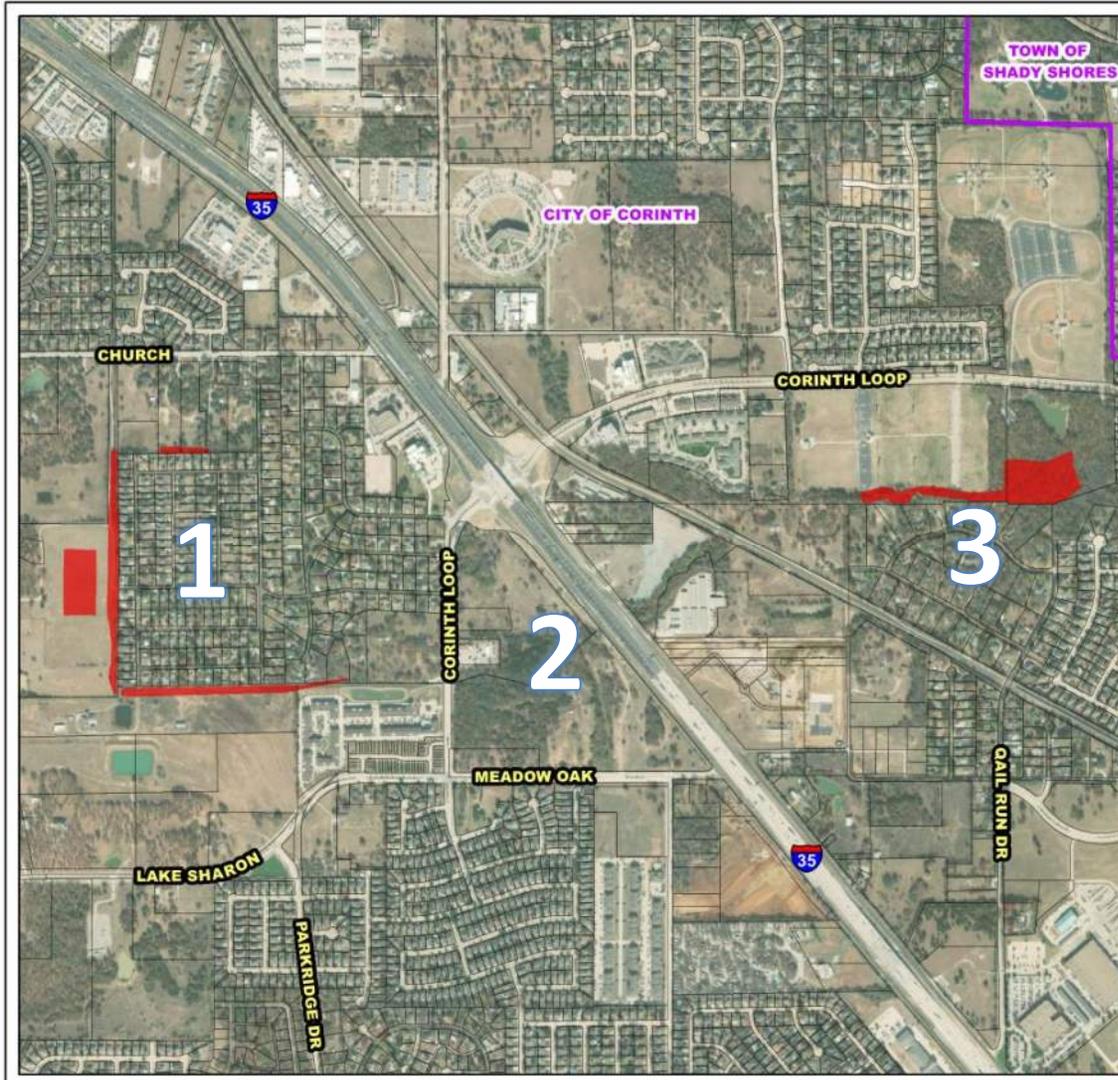
- Property owners with federally regulated mortgages within the SFHA will be required to obtain flood insurance.
- Flood insurance ranges from \$400 to \$4000 depending on where the home sits within the floodplain.

Flood Insurance Rate Map Grandfathering Rules

- Allows existing policy rates to remain effective after a map change
 - May be subject to 18% increase each year
 - (Homeowner Flood Insurance Affordability Act of 2014)
 - Maintain continuous coverage
- May be cases where rating based on elevation will result in lower premiums (Zone A to AE)

Lynchburg Creek

- Jones & Carter – Consultant for Corinth
 - Review study for technical inaccuracies
 - Review mitigation grant opportunities
 - Area 1 – Amity Village
 - Area 2 – I-35E & Lynchburg Creek
 - Area 3 – Red Oak Drive



VICINITY MAP
Scale: 1 inch equals 10 miles

LEGEND

-  City Boundary
-  Parcels
-  Project Area

Aerial Imagery flown January 2014

**EXHIBIT 1
CORINTH GRANT
VICINITY MAP**

**CORINTH GRANT
DENTON COUNTY, TEXAS**



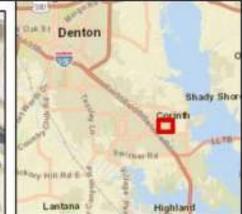
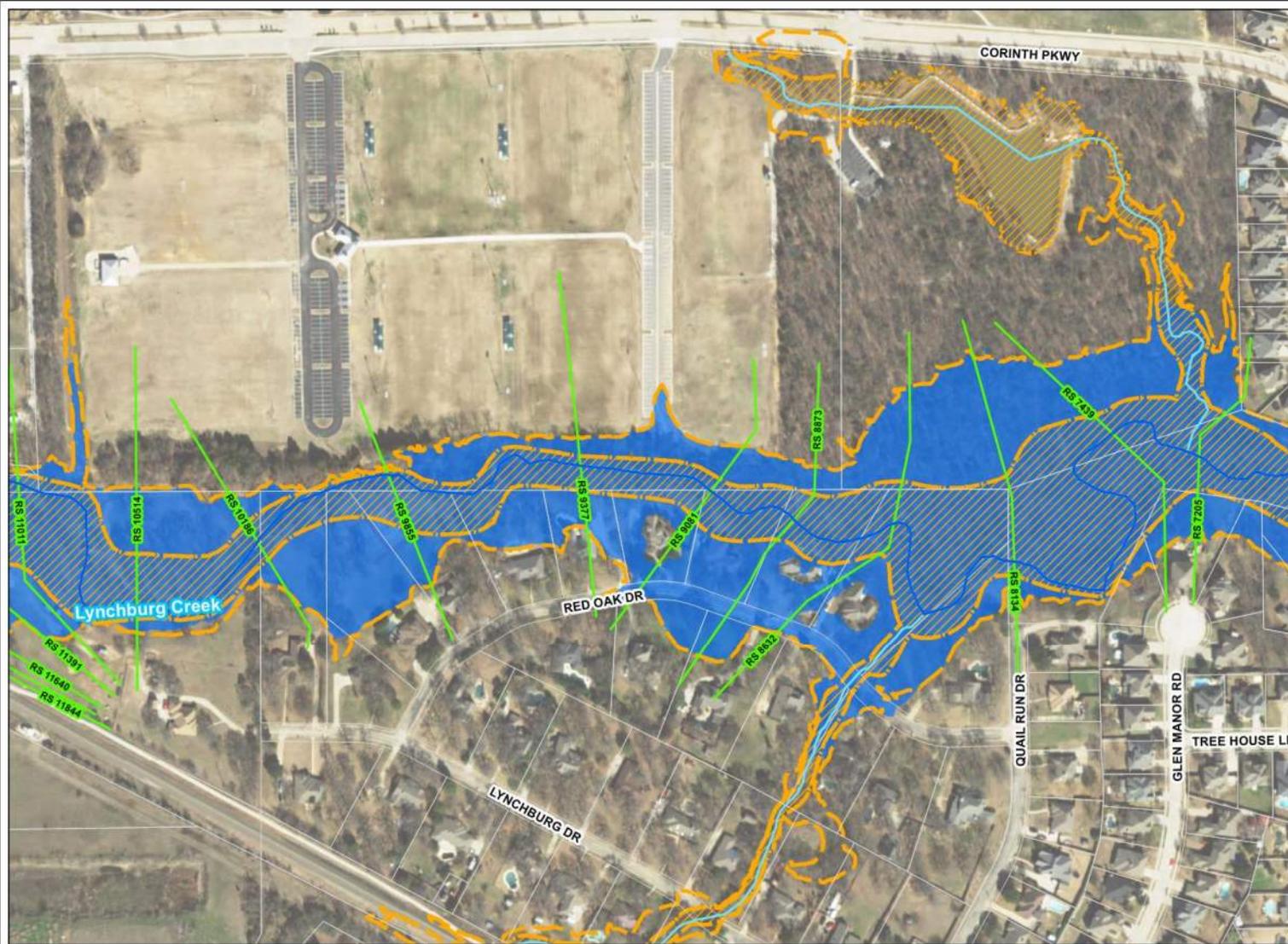
1 inch equals 1,100 feet

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JONES CARTER
Texas Board of Professional Engineers Registration No. F-439

Path: I:\Projects\BGC\Adams\Corinth Grant\Exhibit 1 - Vicinity Map.mxd
 Project Number: 0318-0002-00
 Date: 12/7/2018
 User Name: ACB



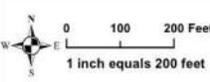
VICINITY MAP
Scale: 1 inch equals 5 miles

- LEGEND**
- RevExist RAS Stream CL
 - RevExist RAS Lateral Structures
 - RevExist RAS Cross Sections
 - ▨ Preliminary FEMA Floodplain
Zone AE (100-Year)
 - ▨ Zone AE (Floodway)
 - Revised Existing 100-Year
 - ▭ Parcels
 - Stream

Aerial Imagery courtesy of ESRI

**EXHIBIT 7
AREA 3 - REVISED
EXISTING FLOODPLAIN**

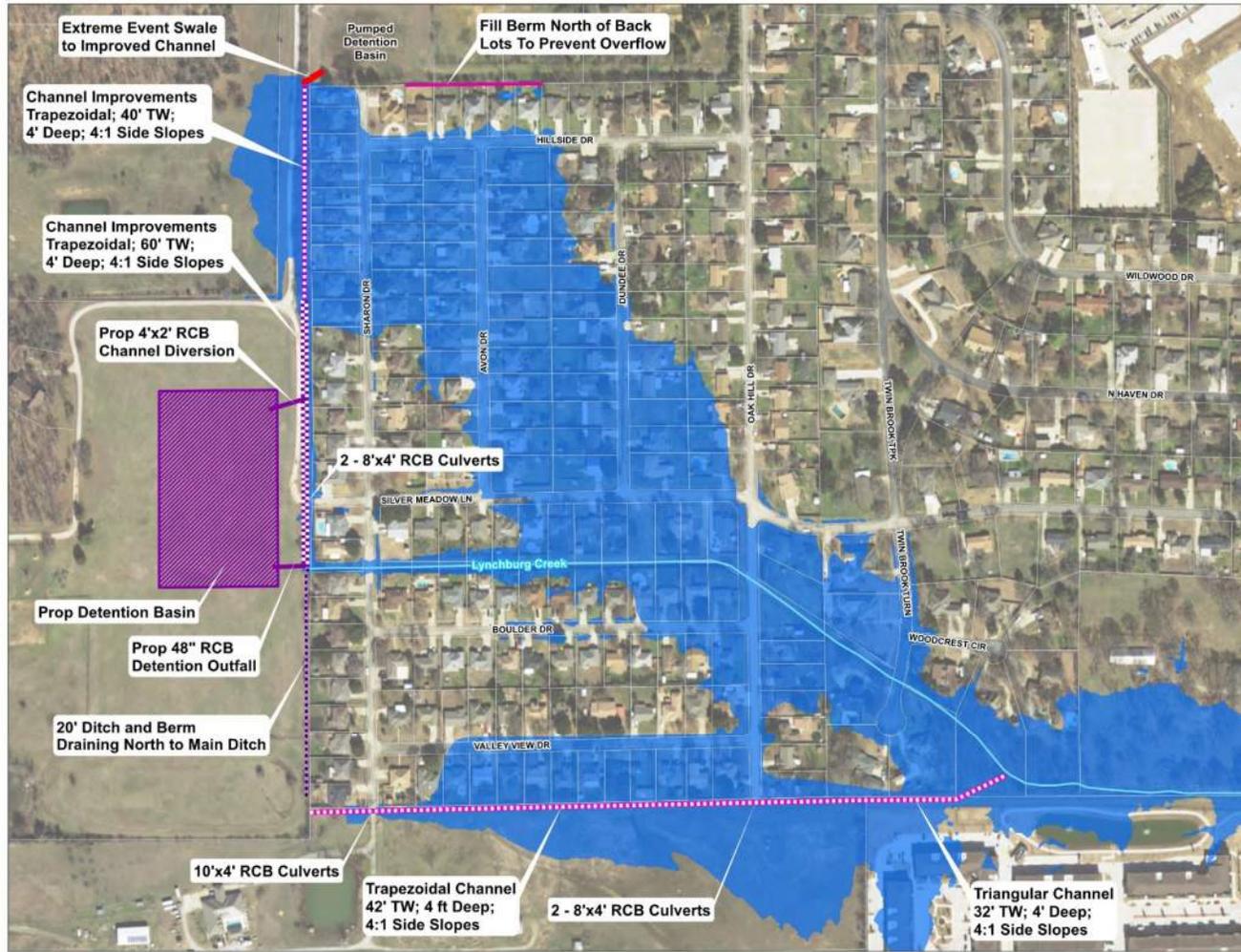
**FLOOD REDUCTION PROJECTS
CITY OF CORINTH, TEXAS**



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Project Number: 2018-0001-08 Date: 11/21/2018
 User Name: JG



VICINITY MAP
Scale: 1 inch equals 5 miles

LEGEND

- AREA 1 CONCEPTUAL ALTERNATIVES**
- 12' Trapezoidal Channel West of Amity Village
 - 42' Trapezoidal Channel South of Amity
 - Channel Improvements - 40' Ditch
 - Channel Improvements - 60' Ditch
 - Extreme Event Swale to Channel
 - Fill Ditch Bank Along Back Lots
 - Proposed Detention
 - Permits
 - Revised Existing 100-Year Floodplain
 - Stream

EXHIBIT 10
AREA 1 - PREFERRED
ALTERNATIVES SCHEMATIC

FLOOD REDUCTION PROJECTS
CITY OF CORINTH, TEXAS
DECEMBER 2018



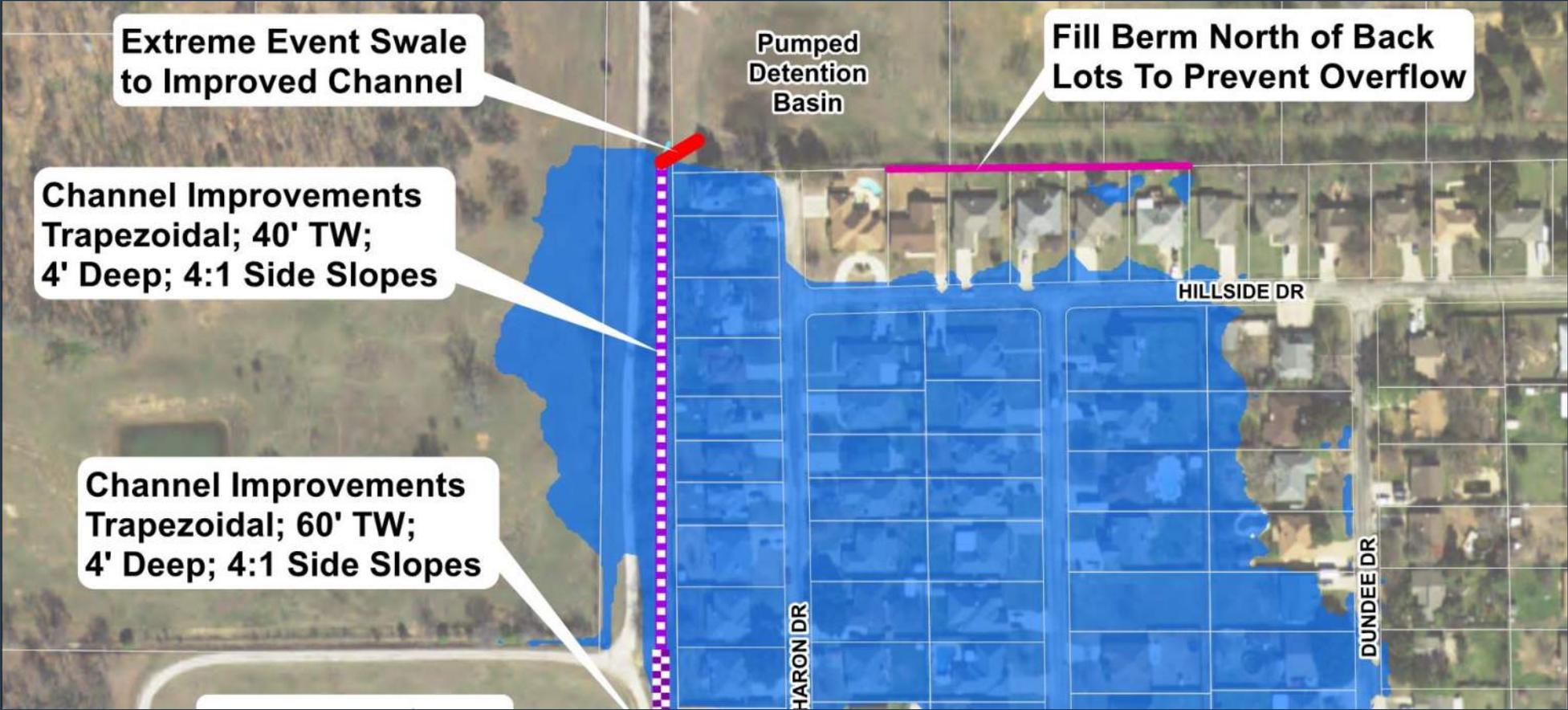
1 inch equals 120 feet

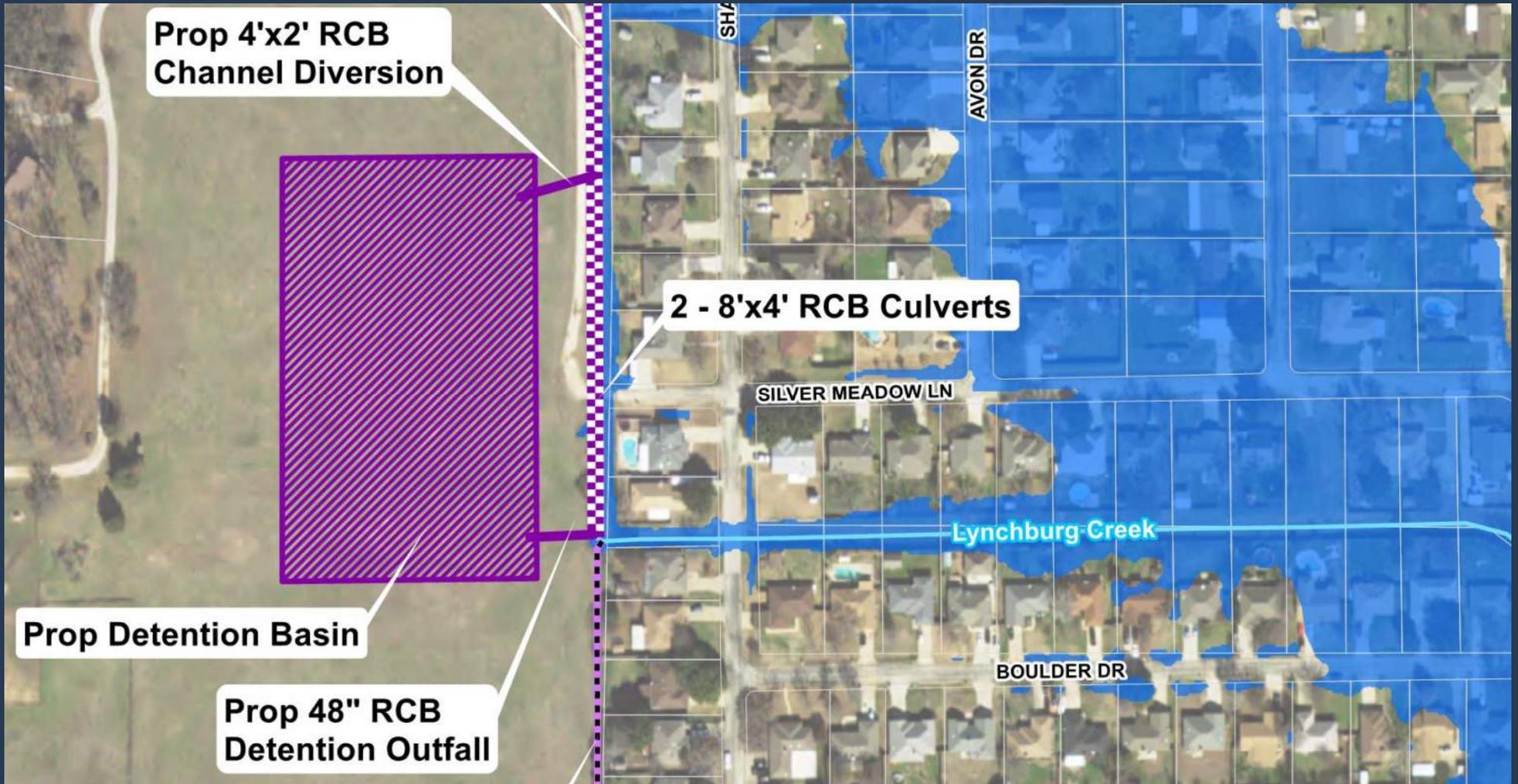
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JONES CARTER
Texas Board of Professional Engineers Registration No. F-439

Date: 12/20/18
 Project Number: 18118-0000-08
 File: 181181018-0000-08 Lynchburg Creek Main Drainage Project Design (181181018-0000-08) - Preferred Alternatives Schematic - Area 1.dwg
 User Name: JCM





**Prop 4'x2' RCB
Channel Diversion**

2 - 8'x4' RCB Culverts

Prop Detention Basin

**Prop 48" RCB
Detention Outfall**

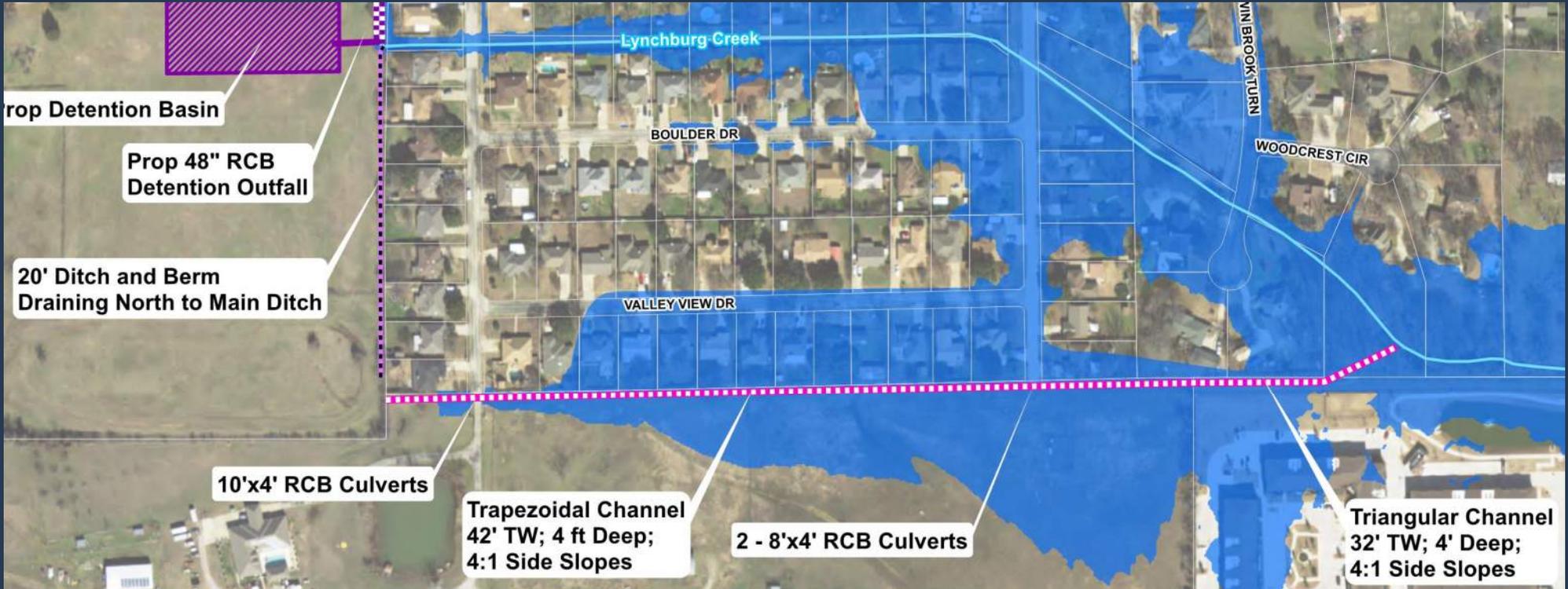
SHAW DR

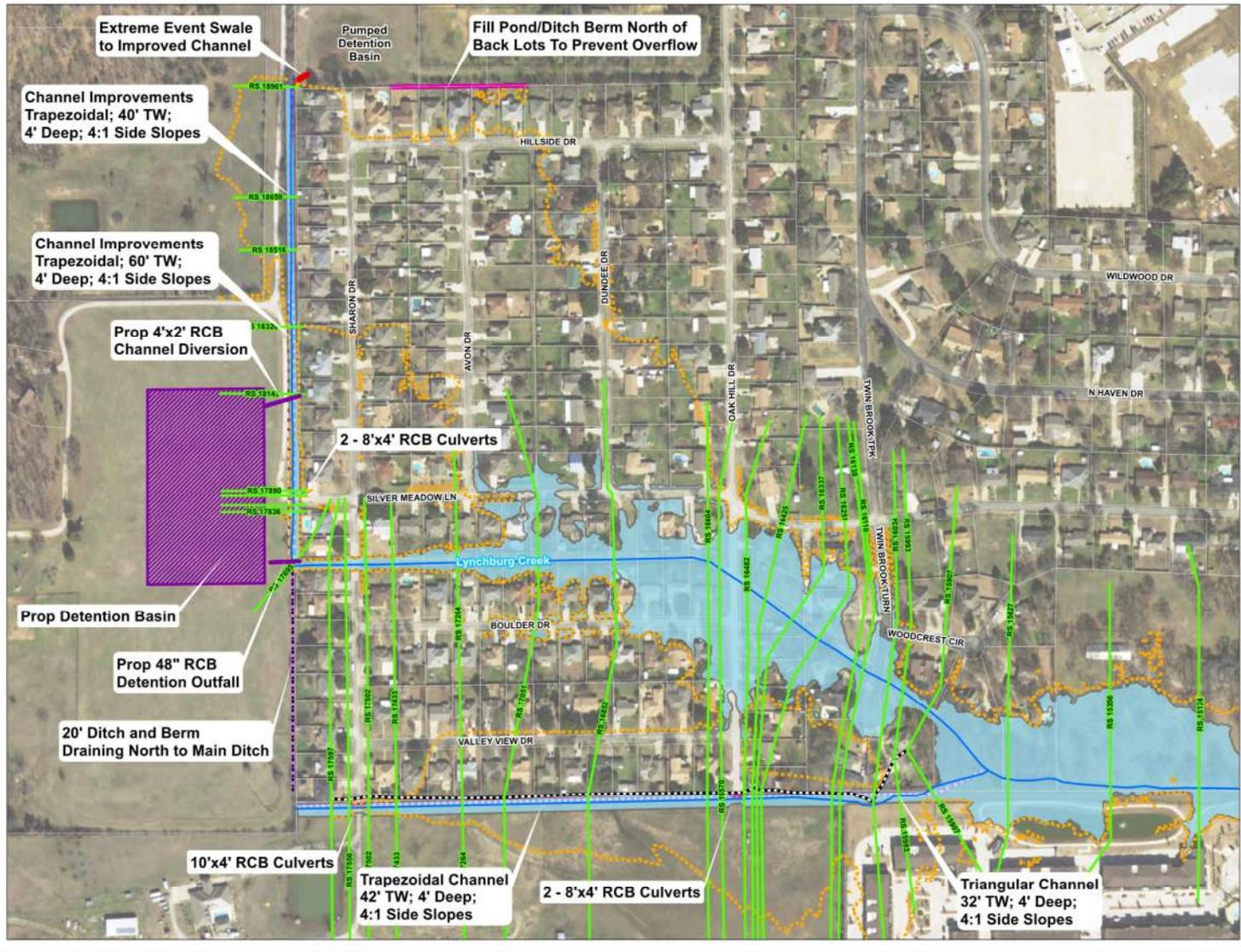
AVON DR

SILVER MEADOW LN

Lynchburg Creek

BOULDER DR





VICINITY MAP
Scale: 1 inch equals 5 miles

LEGEND

- Proposed RAS Cross Sections
 - Proposed RAS Stream Centerline
 - Proposed RAS Lateral Structures
 - Revised Existing - 100-Year Floodplain
 - Proposed Alternatives - 100-Year Floodplain
 - Parcels
 - Stream
- AREA 1 CONCEPTUAL ALTERNATIVES**
- 17 Trapezoidal Channel West of Andy Village
 - 42 Trapezoidal Channel South of Andy
 - Channel Improvements - 40' Ditch
 - Channel Improvements - 60' Ditch
 - Extreme Event Swale to Channel
 - 18 Ditch Bank Along Back Lots
 - Proposed Detention

EXHIBIT 12
AREA 1 - PREFERRED
ALTERNATIVES FLOODPLAIN

FLOOD REDUCTION PROJECTS
CITY OF CORINTH, TEXAS
DECEMBER 2016

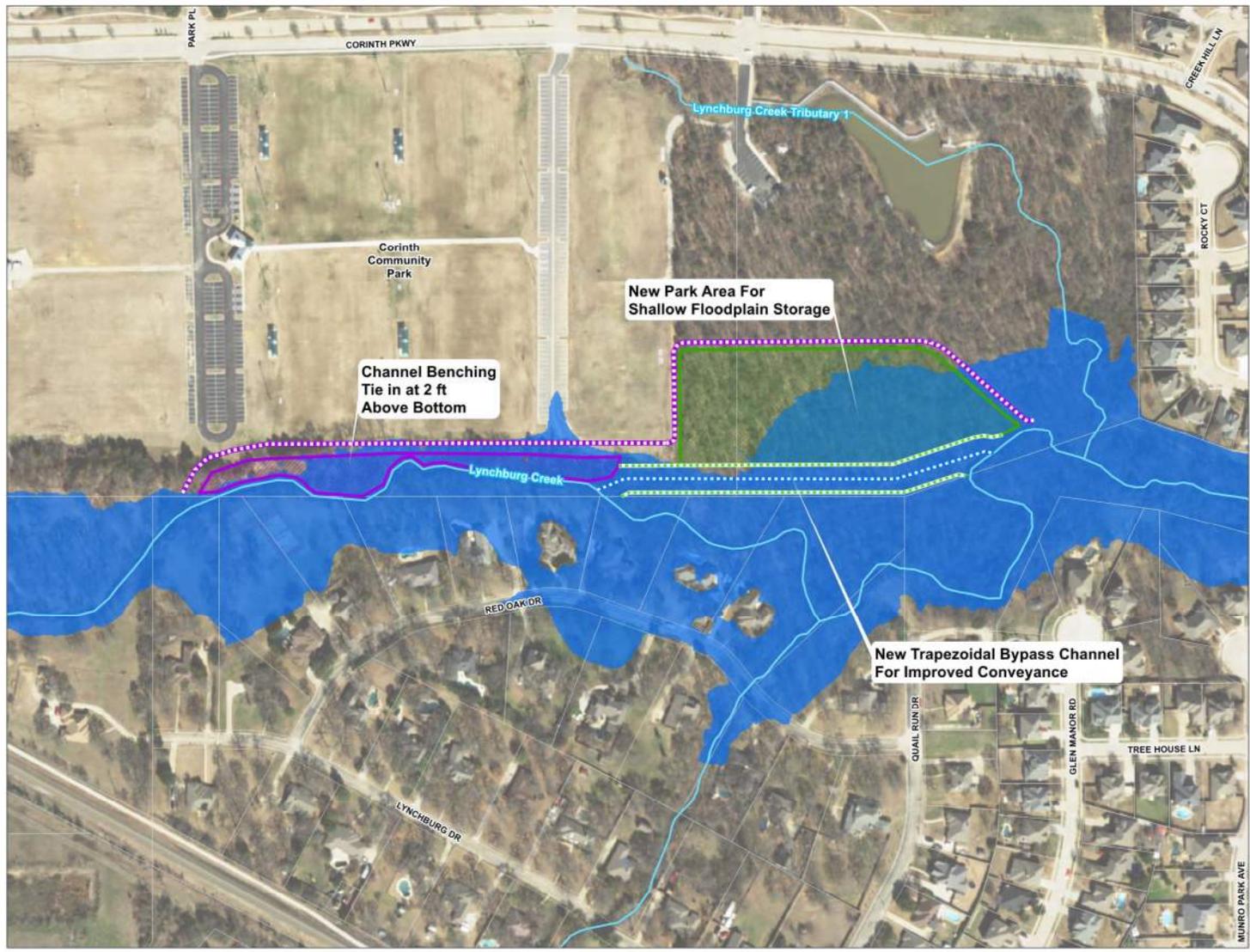


1 inch equals 120 feet

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User Name: ACE Date: 12/20/16 Project Number: 16118-6002-01 Path: K:\16118-6002-01\Lynchburg Creek Master Drainage Plan\GIS\6002\FMA Green Exhibit\EC12 - Preferred Alternatives Floodplain_Area 1.mxd



VICINITY MAP
Scale: 1 inch equals 5 miles

LEGEND

- Prop Benching Top of Bank
- New Channel Banks
- New Channel Centerline
- Shallow Floodplain Storage
- Prop Channel Benching
- Revised Existing - 100-Year Floodplain
- Parcels
- Stream

EXHIBIT 11
AREA 3 - PREFERRED
ALTERNATIVES SCHEMATIC

FLOOD REDUCTION PROJECTS
CITY OF CORINTH, TEXAS
DECEMBER 2016



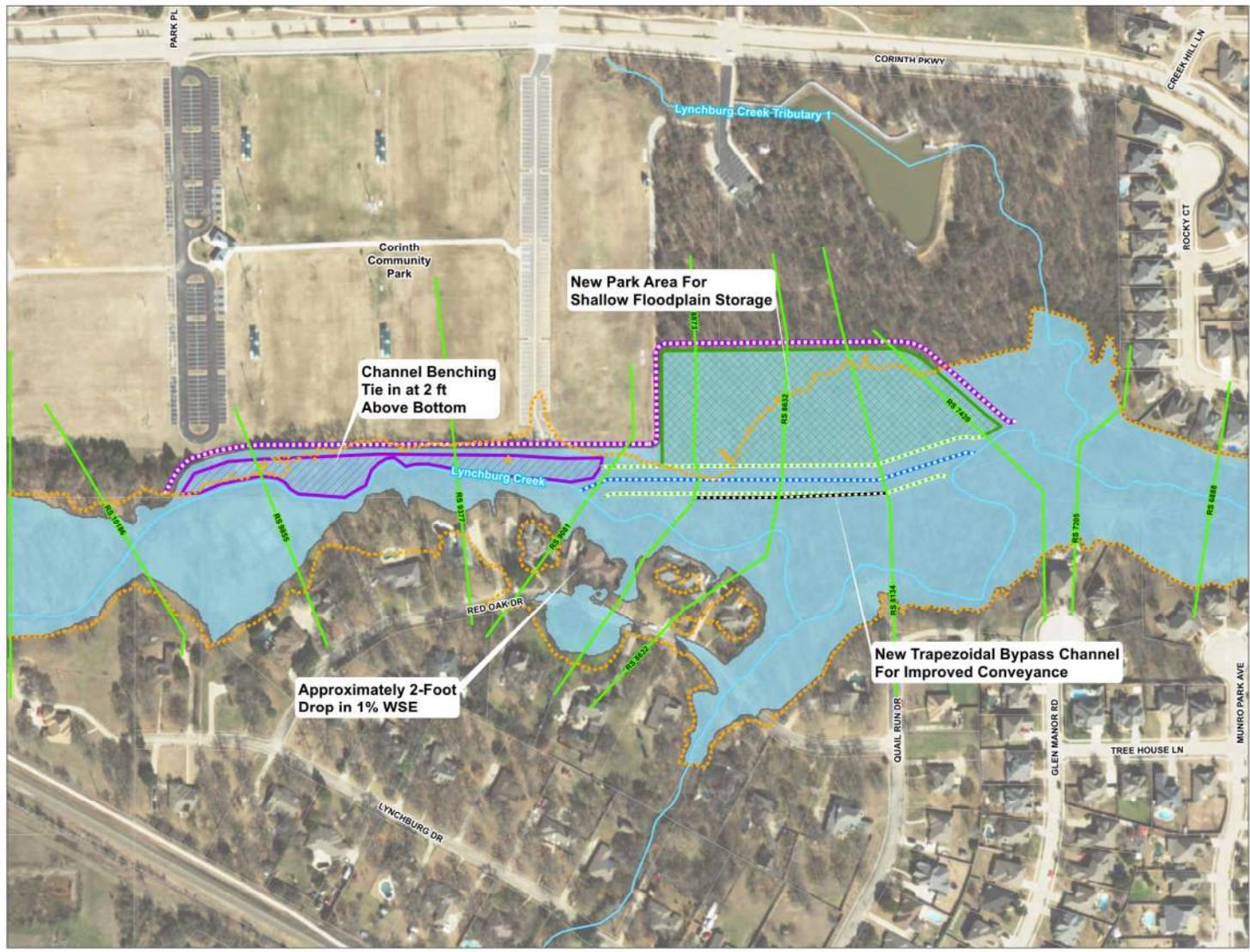
1 inch equals 100 feet

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JONES CARTER
Texas Board of Professional Engineers Registration No. F-439

Path: K:\5011580116-002-00 Lynchburg Creek Master Drainage Plan Design Phase\GIS\Map\Area 3 - Preferred Alternatives Schematics_ArcDoc.mxd
 Date: 12/16/16
 User Name: TW



VICINITY MAP
Scale: 1 inch equals 5 miles

LEGEND

- Revised Existing - 100-Year Floodplain
- Proposed Alternatives - 100-Year Floodplain
- Proposed RAS Cross Sections
- Proposed RAS Lateral Structures
- Prop Benching Top of Bank
- New Channel Banks
- New Channel Centerline
- Shallow Floodplain Storage
- Prop Channel Benching
- Parcels
- Stream

EXHIBIT 13
AREA 3 - PREFERRED
ALTERNATIVES FLOODPLAIN

FLOOD REDUCTION PROJECTS
CITY OF CORINTH, TEXAS
DECEMBER 2016



1 inch equals 100 feet

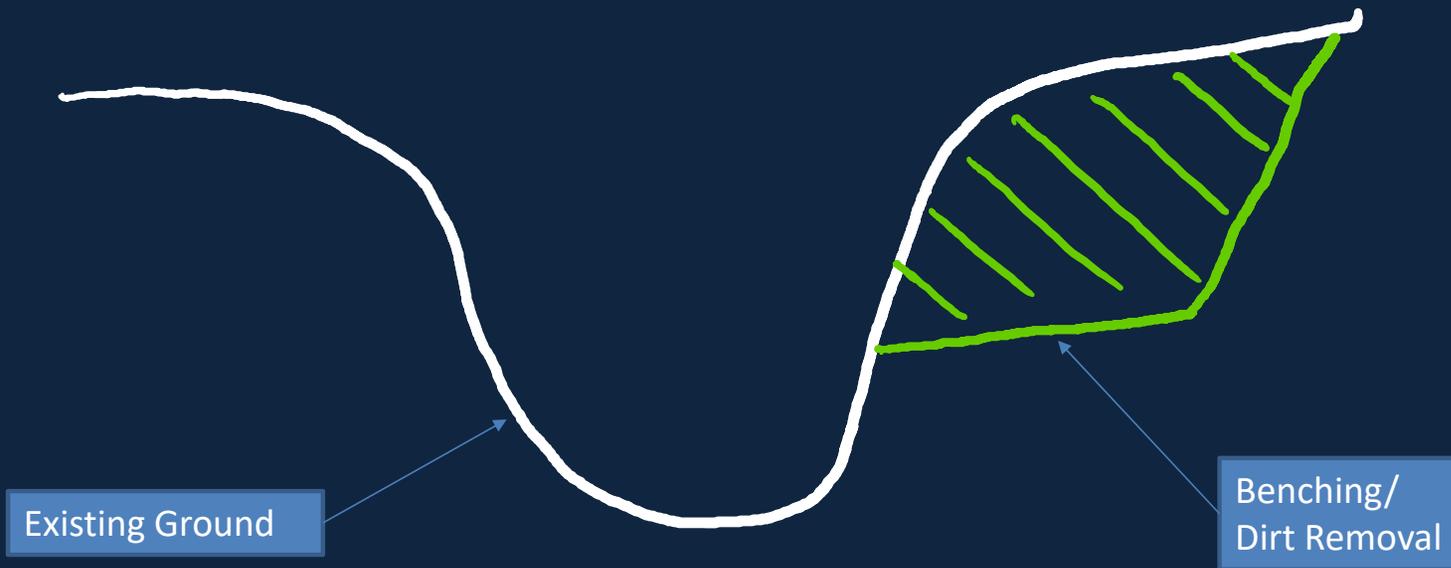
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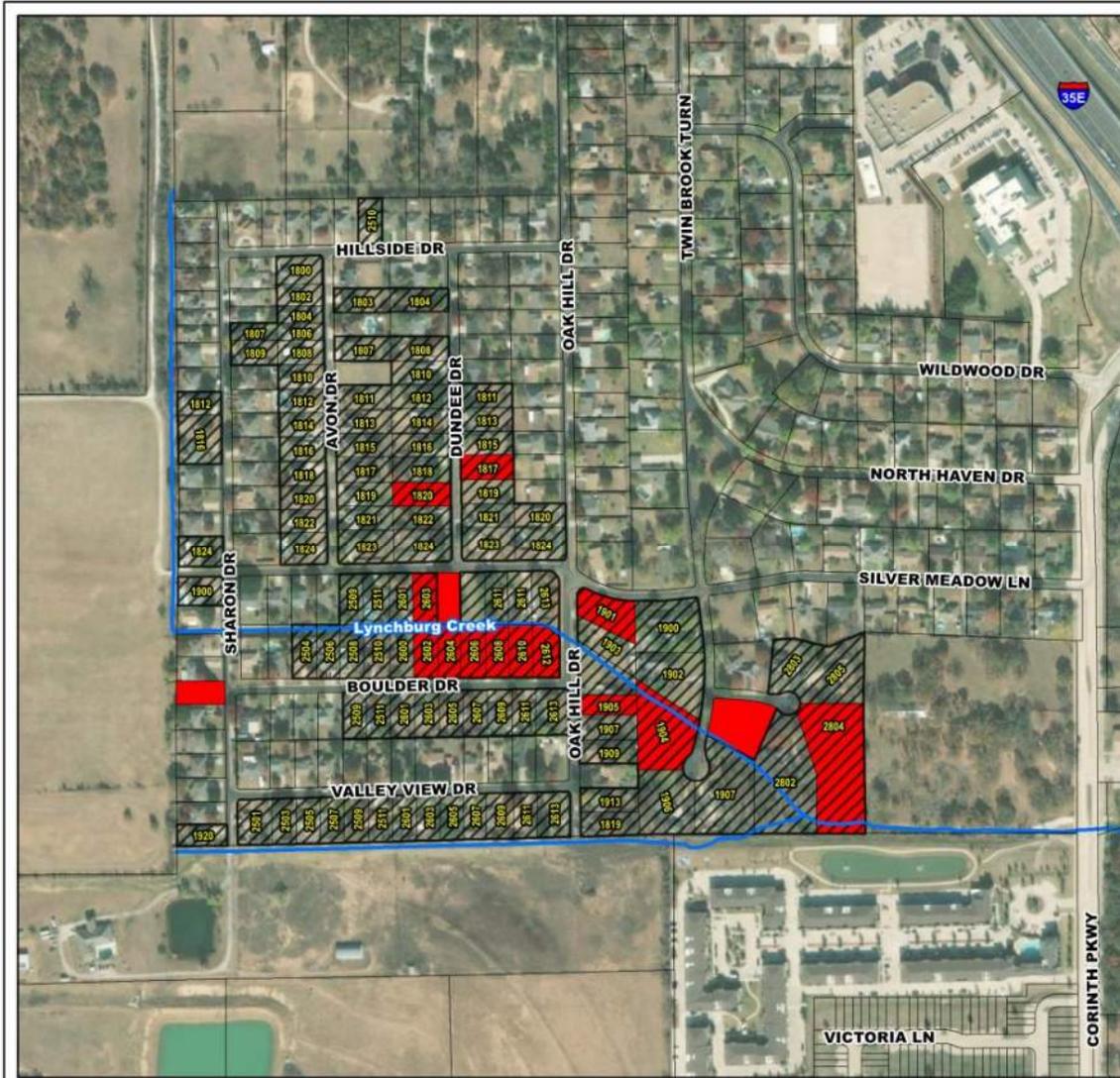


JONES CARTER
Texas Board of Professional Engineers Registration No. F-439

Path: K:\S0111480116-0002-00 Lynchburg Creek Master Drainage Plan\GIS\MapArea\Green Exhibit\EC13 - Preferred Alternatives Floodplain_Area3.mxd
 Project Number: 00116-0002-00
 Date: 12/20/16
 User Name: TMF

Benching Explained:





VICINITY MAP
Scale: 1 inch equals 10 miles

LEGEND

-  Streams
-  Structures Affected
-  NFIP Policies

Aerial Imagery flown January 2014

**EXHIBIT 14
STRUCTURES AFFECTED
AREA 1**

**CITY OF CORINTH
DENTON COUNTY, TEXAS**

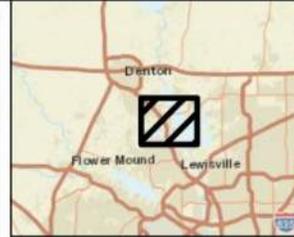
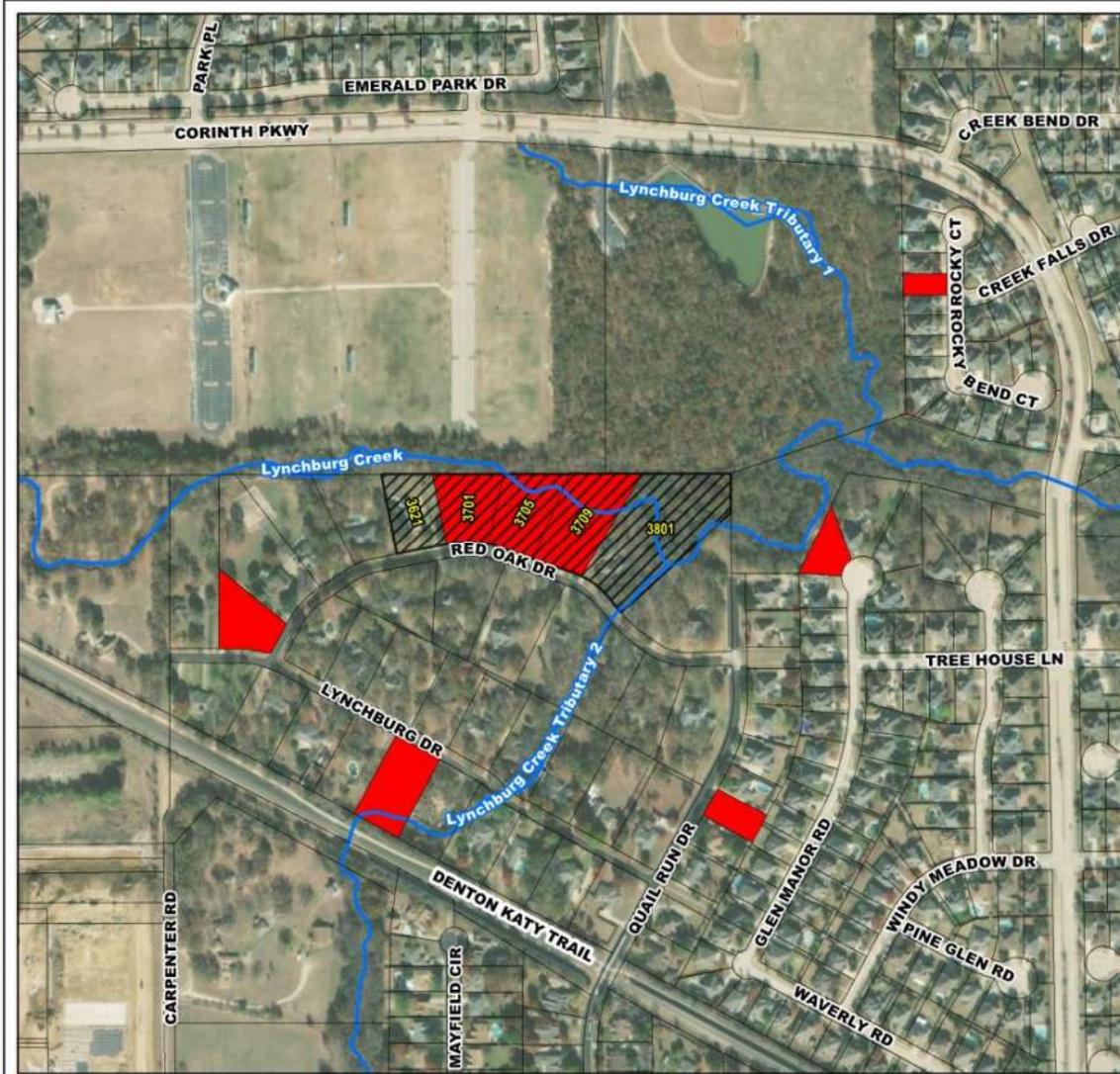


1 inch equals 400 feet

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User Name: ACB
Date: 12/12/2018
Project Number: 0113-0002-00
Structures Affected Area 1.mxd



VICINITY MAP
Scale: 1 inch equals 10 miles

LEGEND

- Streams
- Structures Affected
- NFIP Policies

Aerial Imagery from January 2014

**EXHIBIT 15
STRUCTURES AFFECTED
AREA 3**

**CITY OF CORINTH
DENTON COUNTY, TEXAS**



1 inch equals 400 feet

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JONES CARTER
Texas Board of Professional Engineers Registration No. F-439

Date: 12/27/2018
 Project Number: 0118-0002-00
 Structures Affected: Area 3.mxd
 User Name: ACF

Lynchburg Creek Flood Mitigation Summary

- 65 homes added to Floodplain due to revised mapping.
- 100 homes – reduced flood risk
 - 70 homes in Amity come out of the floodplain
 - 5 homes along Red Oak come out of the floodplain
- \$ 3,361,492 total project cost (75% covered by grant)
- 15 NFIP Policies
 - \$10,575,759 insured vs \$3,850,000 = 2.75 BCA
- 100 Homes
 - \$43,193,234 potential insured vs \$3,850,000 = 11.22 BCA
 - * \$3,850,000 includes maintenance cost for 20 years

City of Corinth, TX

Flood Mitigation Costs

- \$25,252 Admin & Legal
- \$1,235,955 Easement
- \$112,663 Engineering Design
- \$132,400 Environmental
- \$37,620 Project Inspection
- \$9,350 Demolition
- \$1,808,252 Construction
- \$3,361,492 Total
- Annual maintenance
 - \$35,398 Mowing

Questions?

www.cityofcorinth.com/gis

www.cityofcorinth.com/floodplain