

Lumpkin Road Improvements

CIP Number T - 1709



Presented to the Board of Directors
September 24, 2013

Lumpkin Road Improvement Objectives



- Improve safety and mobility
- Provide pedestrian access
- Improve drainage deficiencies
- Upgrade traffic components
- Replace aging public utilities

Lumpkin Road Improvement Highlights

- \$ 10 million infrastructure project
- 12 month construction schedule
- 20 acre-feet of new detention
- 100 year flood event design
- +/- 3600 LF new concrete roadway
- Extends from IH-10 to Northbrook
- 40' curb and gutter section
- 6' wide pedestrian walkways
- Landscaping and amenities



Existing Conditions – Drainage

- Buffalo Bayou watershed
- Primary outfall is IH-10
- Open ditches / RCB
- Westview detention basin
 - Volume = 16 acre feet

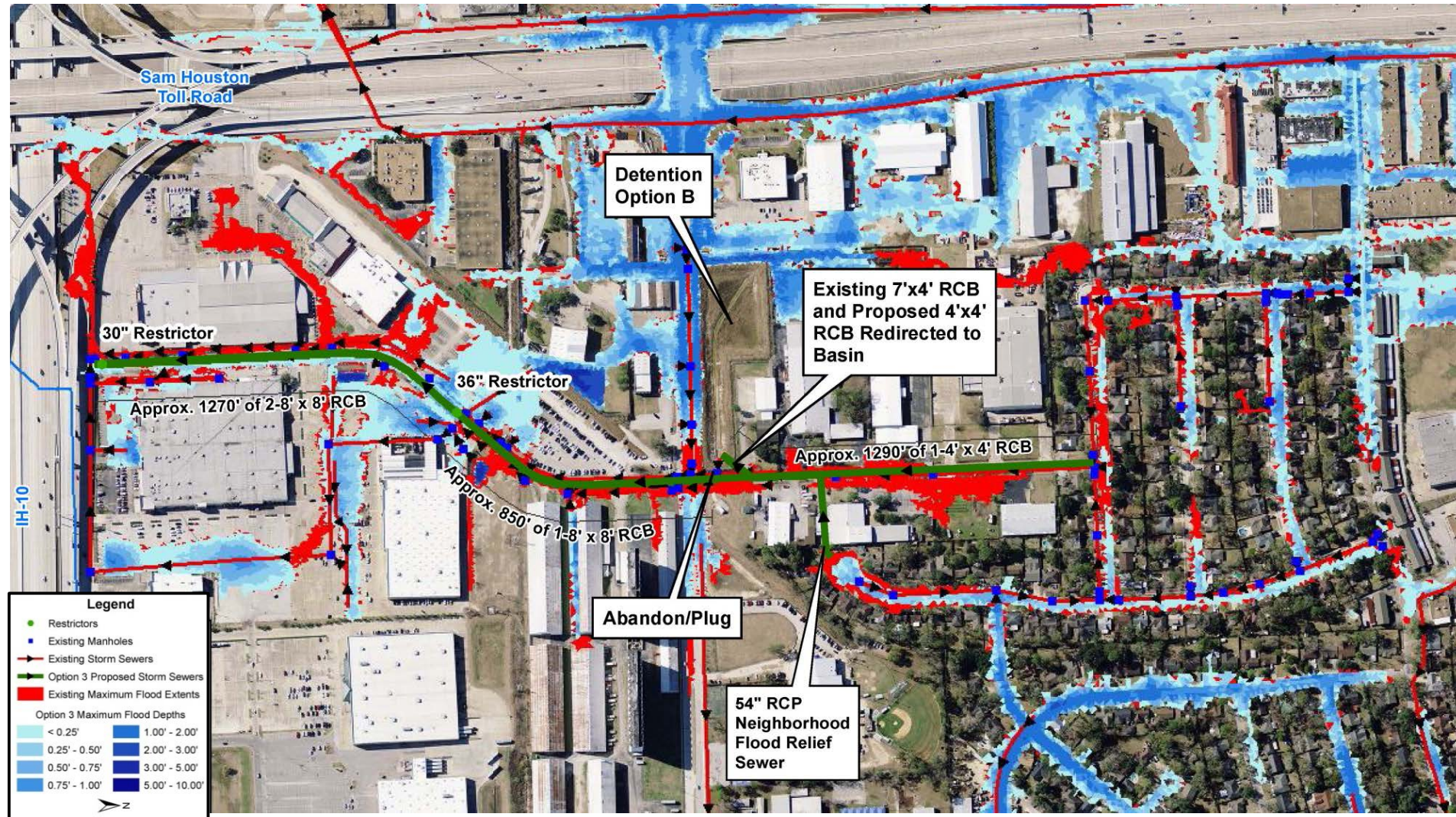


Improved Conditions – Drainage

- 30-inch restrictor at IH-10
- 2 - 8'x8' RCB IH-10 to Home Depot
- 36-inch restrictor upstream
- 8' x 8' RCB Home Depot to Westview
- 4' x 4' RCB Westview to Northbrook
- 54-inch RCP branch to Shadow Oaks
- Detention option B – 31.4 AC-FT

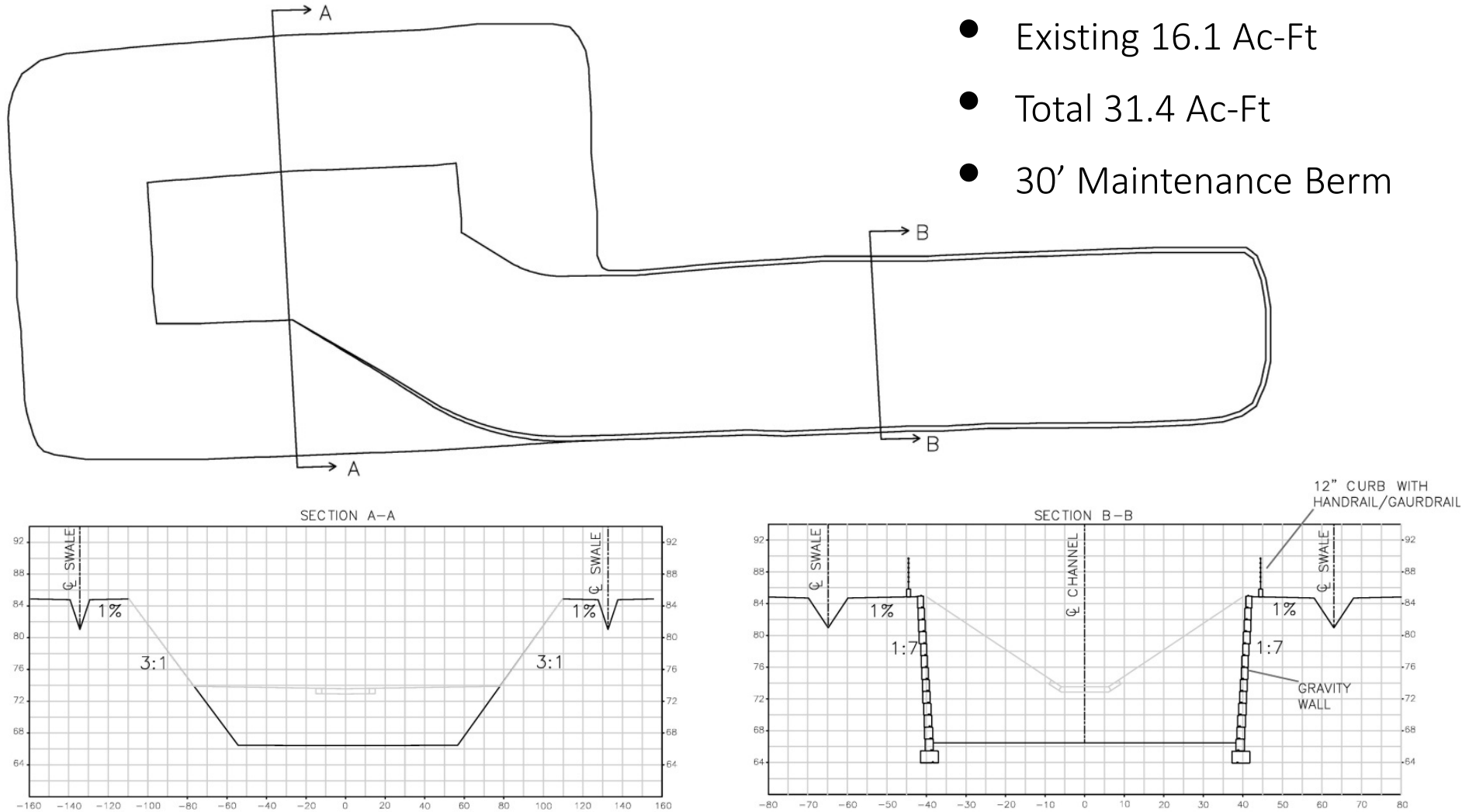


PROPOSED 100 YR SHEET FLOW PONDING



■ WESTVIEW DETENTION BASIN

- Lowering Basin +/- 8 FT
- Existing 16.1 Ac-Ft
- Total 31.4 Ac-Ft
- 30' Maintenance Berm



Additional Detention Volume = 20.7 acre-ft

- Box Culverts

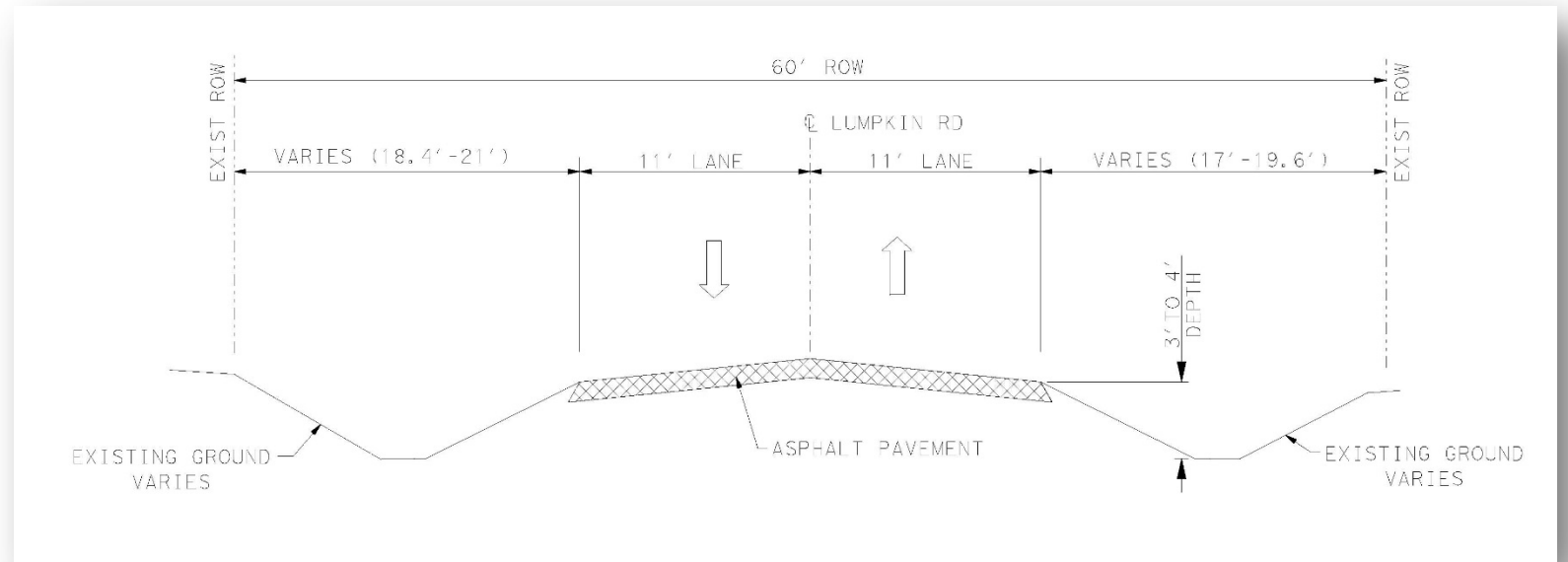
Description	Volume
Existing Trunkline	1.55 acre-ft
Proposed Trunkline	6.94 acre-ft
Additional Capacity	5.39 acre-ft

- Detention Basin

Description	Volume
Existing Basin	16.1 acre-ft
Proposed Basin	31.4 acre-ft
Additional Capacity	15.30 acre-ft

Existing Conditions – Roadway

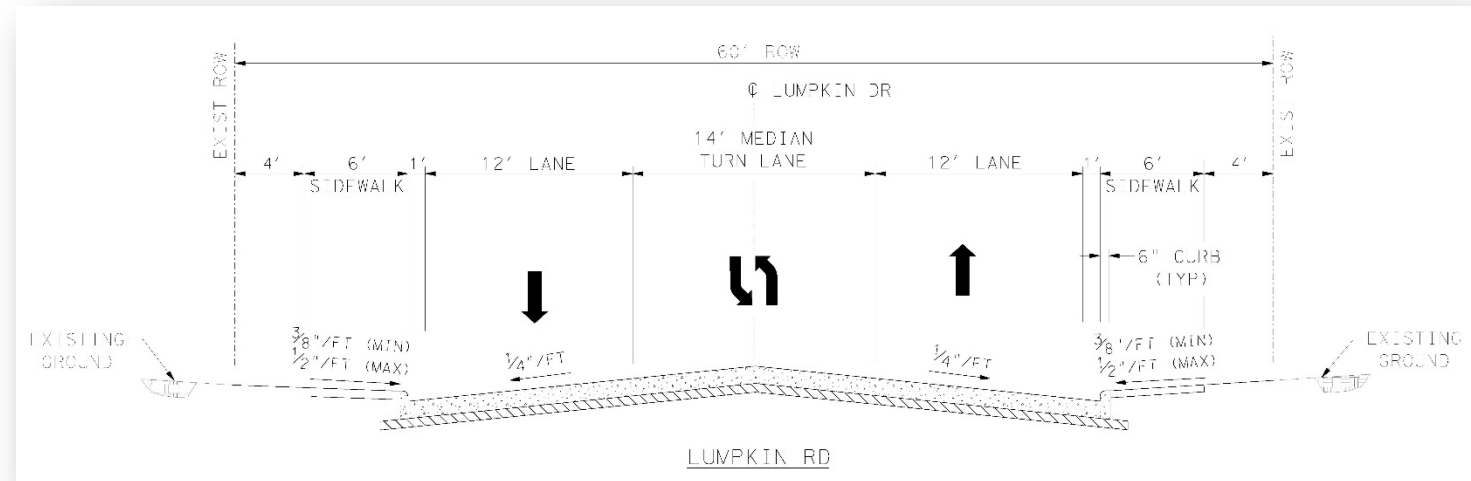
- Asphalt pavement
- Two undivided lanes
- No shoulders
- Open ditch
- Built in mid 1970's
- No speed limits
- No sidewalks



Lumpkin Road – Typical Section

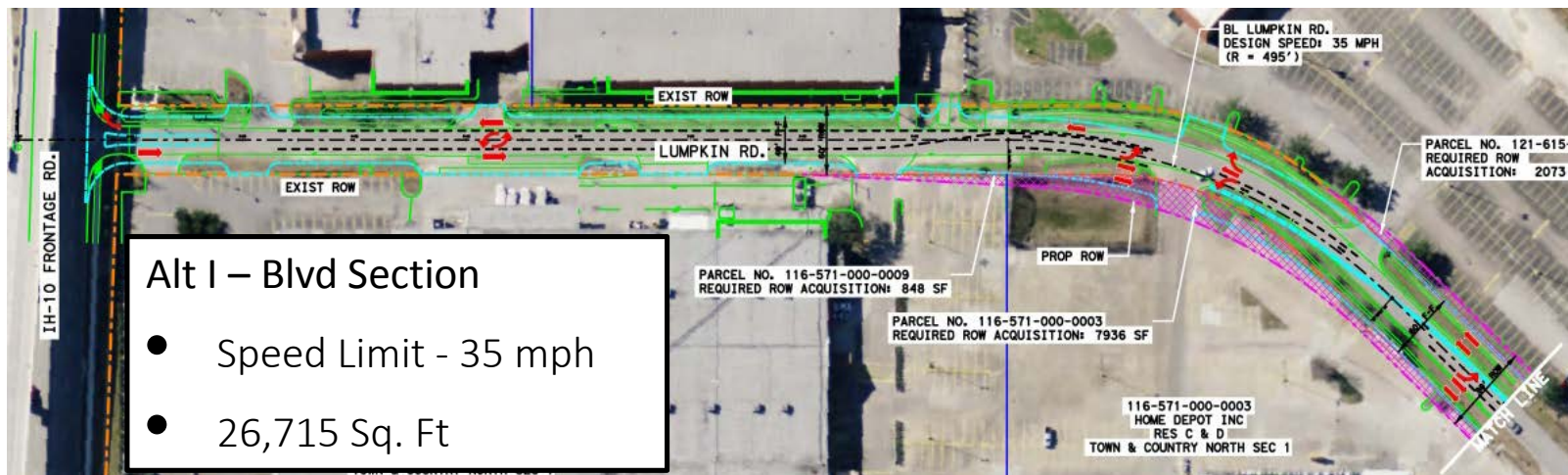
Improved Conditions – Roadway

- Reinforced concrete paving
- 60' right of way
- 35 MPH speed limit
- Two 12' lanes each way
- One 14' turning lane
- Traffic signal upgrade
- Improvements north of Westview to Northbrook
 - Commercial trucking
 - Wide turn radius
 - Pavement transition



Lumpkin Road Improvements – Typical Section

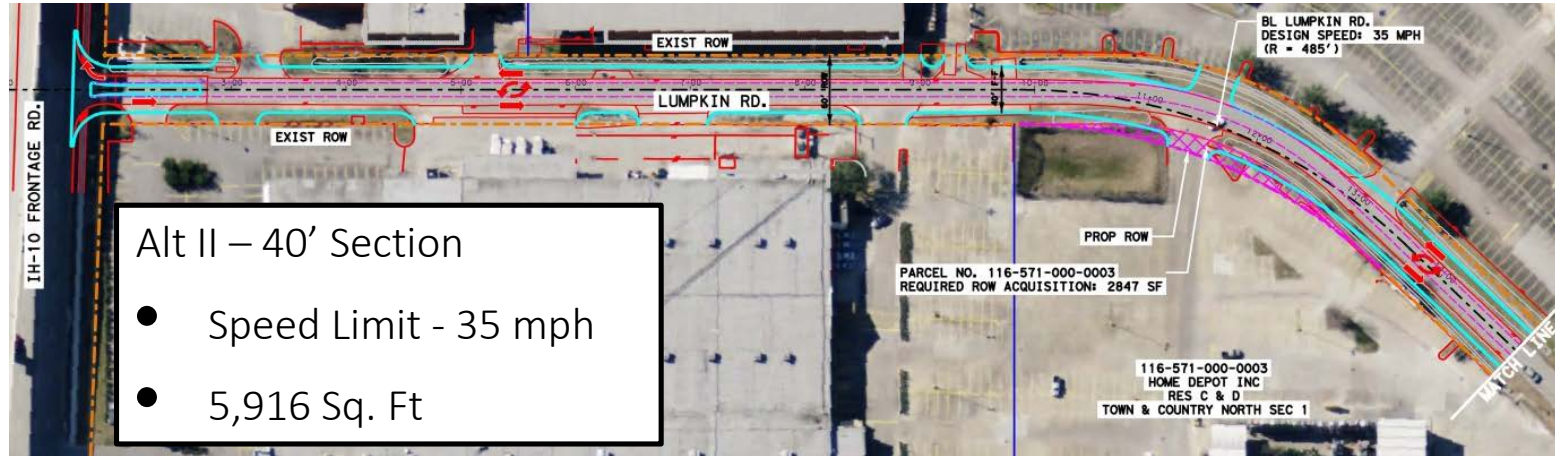
RIGHT-OF-WAY ACQUISITION – I-10 TO WESTVIEW



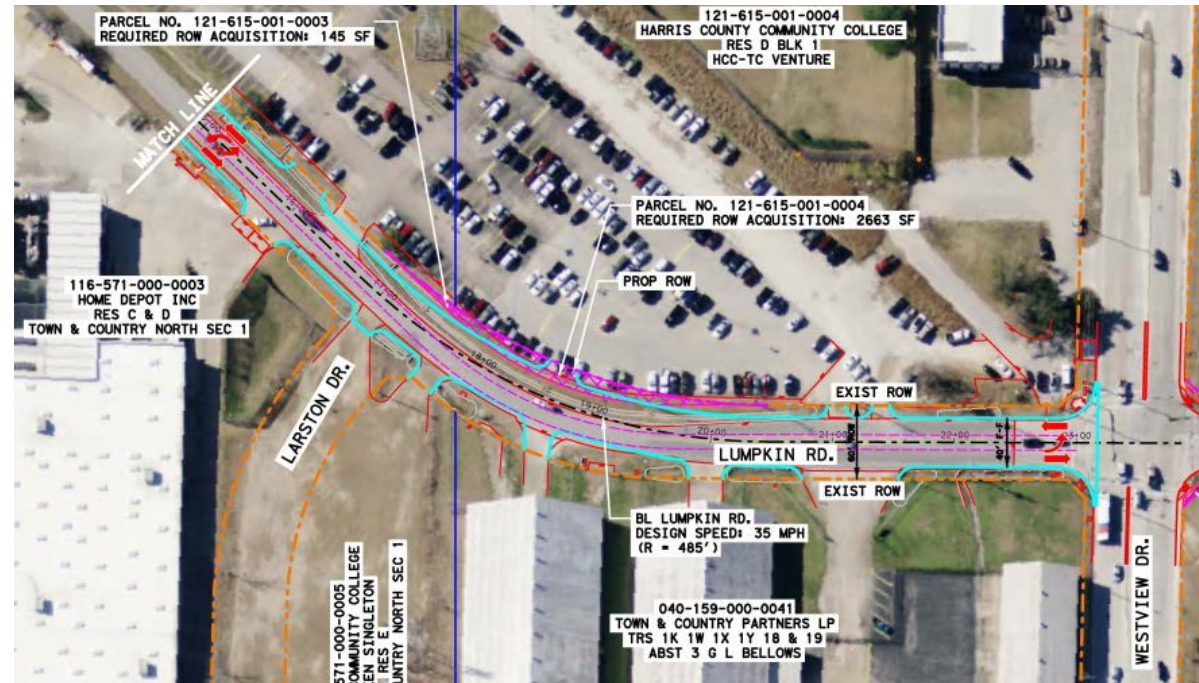
Owner	S.F.
Home Depot	9,737
HCC	12,711
Gary Mason	132
City	129
Town & Country Sq. Ltd.	4,006
Total	26,715



RIGHT-OF-WAY ACQUISITION – I-10 TO WESTVIEW DR.



Owner	S.F.
Home Depot	2,847
HCC	2,808
Gary Mason	132
City	129
Total	5,916



Fiscal Year Budget Comparisons

Description	2013	2014	2015
Planning and Design	\$ 411,703	\$ 617,798	\$ 1,000,000
Acquisition	- 0 -	\$ 500,000	- 0 -
Construction	\$ 673,478	\$ 6,000,000	\$ 9,000,000
Total	\$ 4,499,703	\$ 6,617,798	\$ 10,000,000

- FY2013 = \$ 4,499,403 from IH-10 to Westview
- FY2014 = \$ 6,617,798 from IH-10 to Northbrook
- FY2015 = \$ 10,000,000 from IH-10 to Northbrook + community drainage improvements

Budget Allocation Break-Down

Description	Dollars	Percentage
Drainage	\$ 4,500,000	45%
Mobility	\$ 2,000,000	20%
Planning and Design	\$ 1,000,000	10%
Public utilities	\$ 750,000	8%
General Conditions	\$ 500,000	5%
Landscape	\$ 250,000	3%
Contingency	\$ 1,000,000	10%
Total	\$ 10,000,000	100%

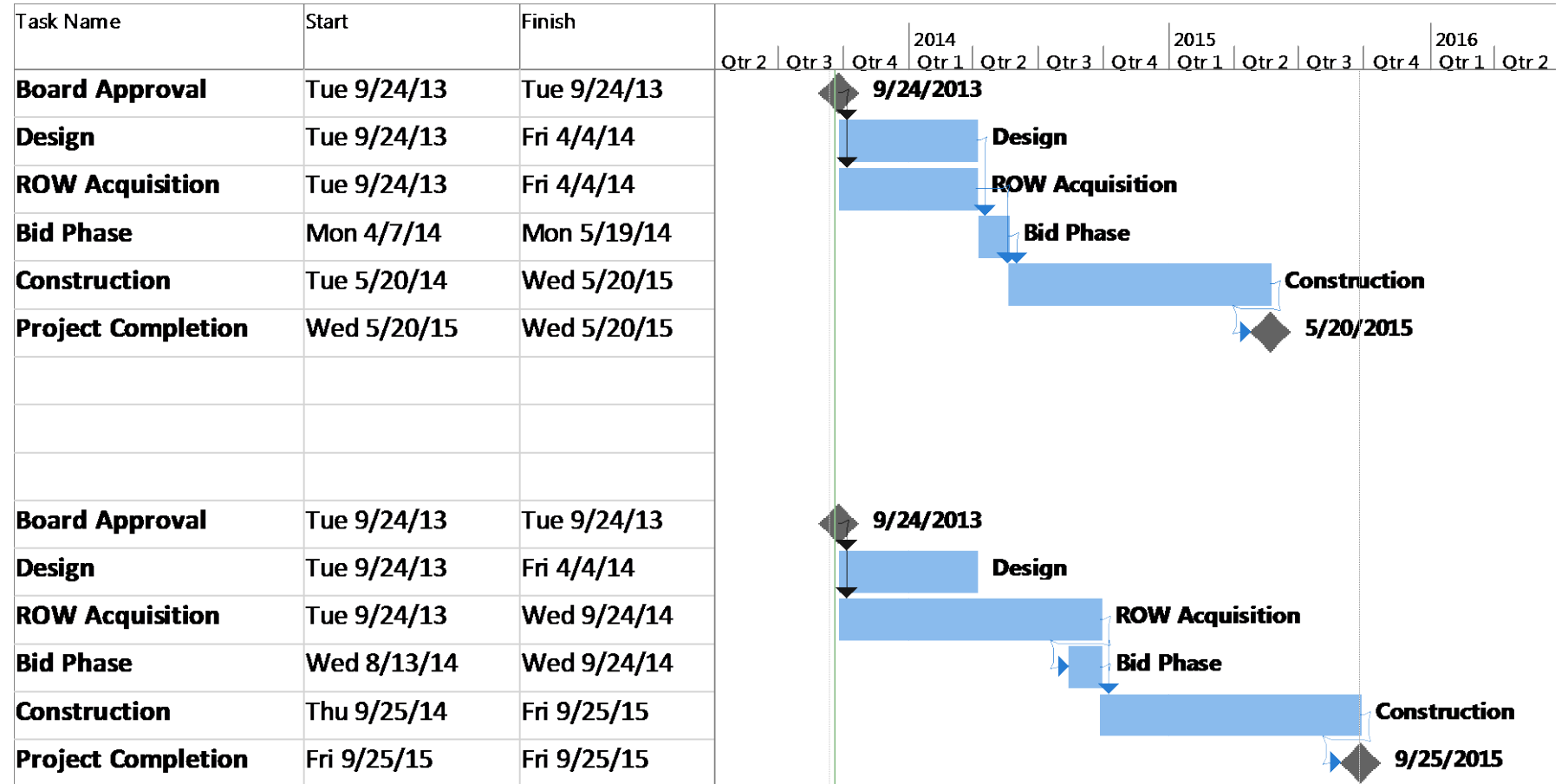
Note: Excludes ROW private utility relocation costs

Governmental Reviews

- Construction documents
- Basin modification MOU
- Drainage easement 54”
- Interagency agreement

Lumpkin Roadway Timeline

- Early finish
Spring '15



- Late Finish
Fall '15

The End

Thank you Board of Directors