

# Memorial Drive Mobility & Drainage Improvements Project

Town Hall Meeting Presentation

WBS No. T-1738A

04/14/2015



Lockwood, Andrews  
& Newnam, Inc.  
A LEO A DALY COMPANY

TIRZ 17

REDEVELOPMENT  
AUTHORITY



# Memorial Drive Improvements

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# INTRODUCTION

# AGENDA

AGENDA ITEMS	SPEAKER	EST. TIME
6:30pm: Welcome & Introductions	John Rickel	5 mins
6:35pm: Overview of Meeting / Agenda	John Rickel	5 mins
6:40pm: Opening Comments from Council Member Oliver Pennington	CM Pennington	5 mins
6:45pm: TIRZ 17 Overview	John Rickel	10 mins
6:55pm: Input Process/Introduction of Engineer	Dave Hamilton	5 mins
7:00pm: Memorial Drive Improvements/ Preliminary Design	Muhammad Ali	30 mins
<b>7:30pm: Question &amp; Answer Session- Board as Required</b> (Submitted on cards or asked from the floor)		60 mins
8:30pm: Breakout sessions with engineers	Dave Hamilton	30 mins
8:40pm: Board convenes in Executive Session to discuss employment matters		

# Memorial Drive Improvements

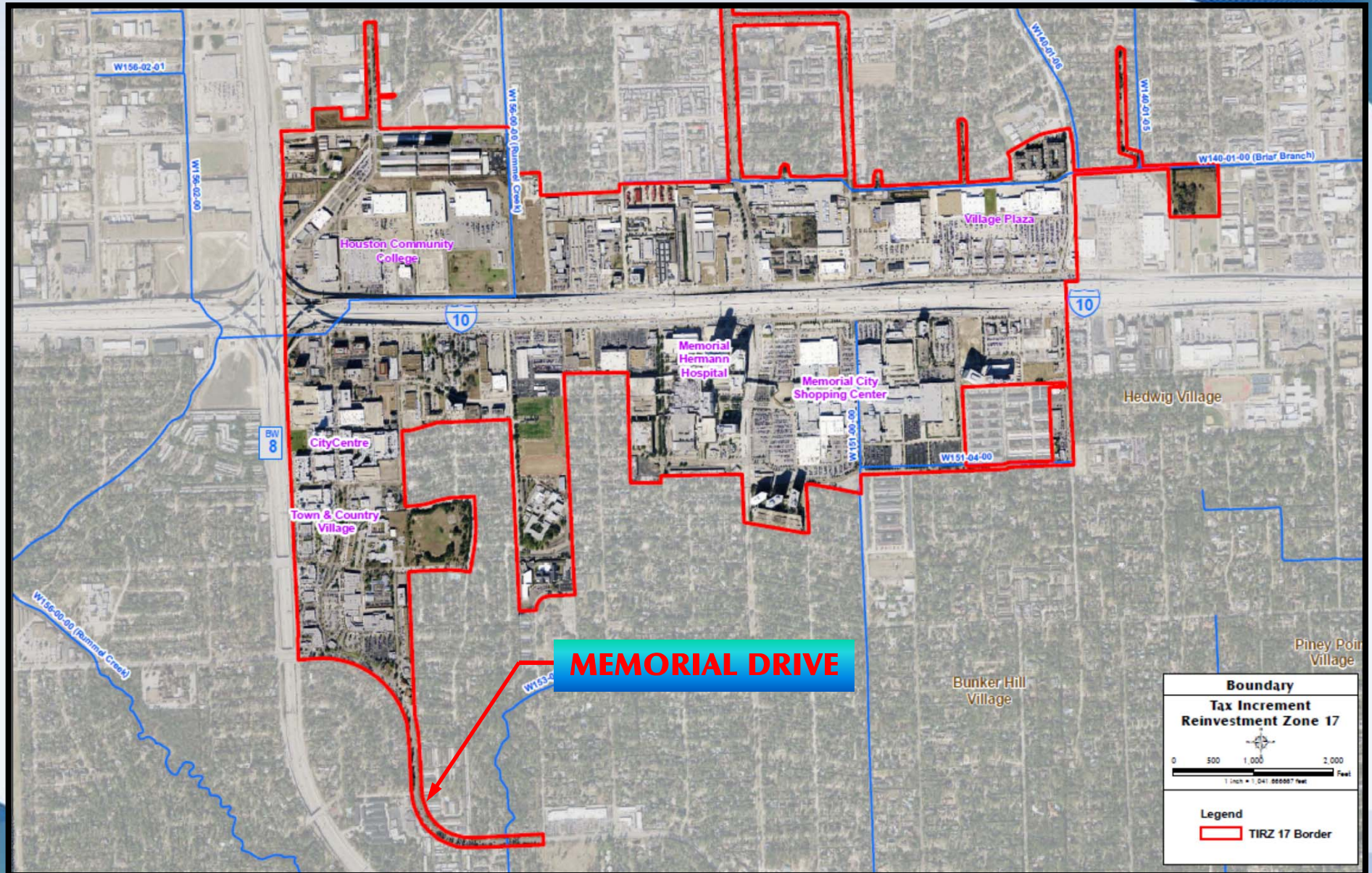
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## TIRZ 17 OVERVIEW

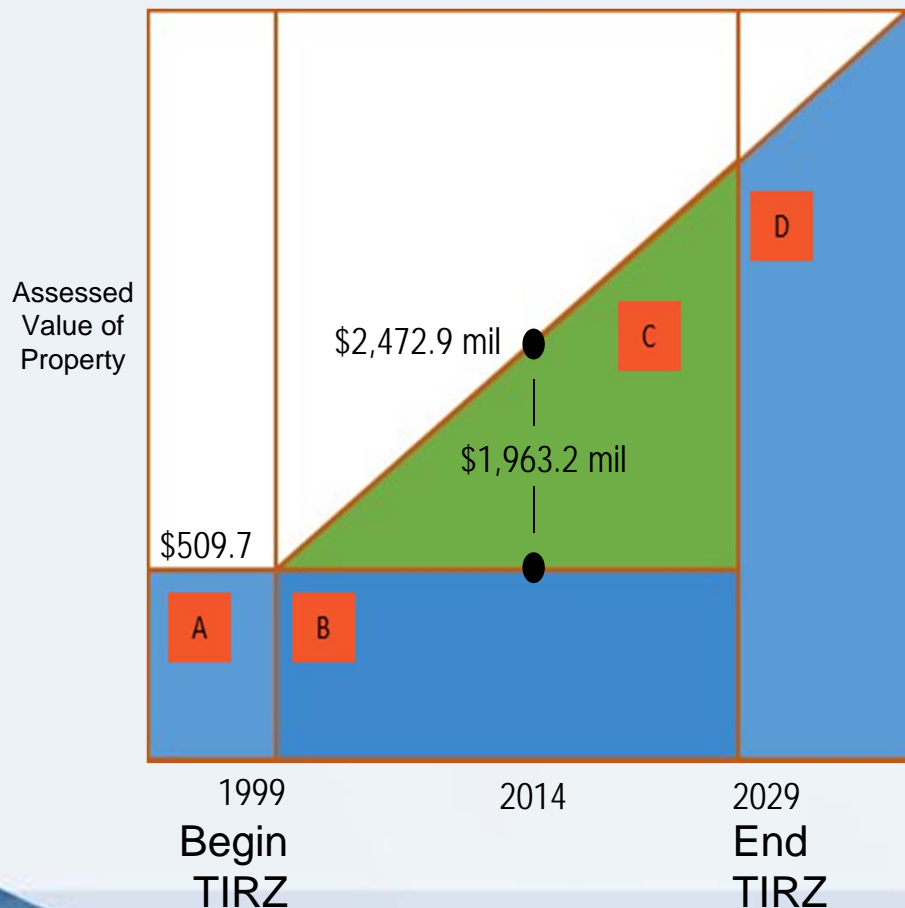
# T I R Z AX NCREMENT REINVESTMENT ZONE

A Special District created by the City of Houston to promote both new development and re-development within a specific geographic area inside the city limits

# TIRZ 17 Boundaries



# How a TIRZ works?



- For TIRZ 17, base year is 1999 and assessed value for the property in the Zone was \$509.7 mil - - which is the frozen amount through 2029
- Since 1999, development and increase in property values have increased the assessed value in 2014 to \$2,472.9 mil
- The difference between the present value of \$2,472.9 mil and the base year amount of \$509.7 mil is the increment of \$1,962.2 mil that drives the Zone's revenue
- Zone receives the city tax rate of .63108/\$100\* the incremental value of \$1,963.2 mil, which equals approximately \$12 mil for 2014



# What the TIRZ can do:

- Fund needed public infrastructure to provide drainage and mobility relief to benefit the properties within the TIRZ and the adjacent communities
- Build enhancements and/or amenities into infrastructure projects
- Develop green space for improved quality of life
- Encourage new quality private investment through public improvements





# What the TIRZ cannot do:

- Permit or approve building and development plans
- Exercise eminent domain
- Maintain infrastructure
- Fund improvements projects that do not directly benefit the TIRZ



# What the TIRZ is not:

- **A regulatory agency**
  - It does not review or approve building or project plans
- **A Planning Commission**
  - It does not review zoning or usage proposals and has no input into that process
- **Code Enforcement**
  - The TIRZ has no role or input in determining if buildings/drainage/detention requirements meet City of Houston rules or regulations

# Governance

TIRZ 17 Redevelopment Authority is governed by a 7 member Board of Directors. All board members are appointed by the City of Houston.

## Board Members

David A. Hamilton, P.E.

John Rickel

Dr. Bob Tucker

Ann Thomas Givens (Chair)

Dr. Zachary R. Hodges

Brad Freels

Glenn E. Airola

# Governance

- Appointments are made by the Mayor and approved by City Council
- Positions are voluntary and uncompensated
- Board Term is 2 years
- Any Director may be removed with or without cause by the City Council
- Board is subject to both the Open Meetings and Open Records act
- Board is primarily advisory in nature

# Advisory In Nature

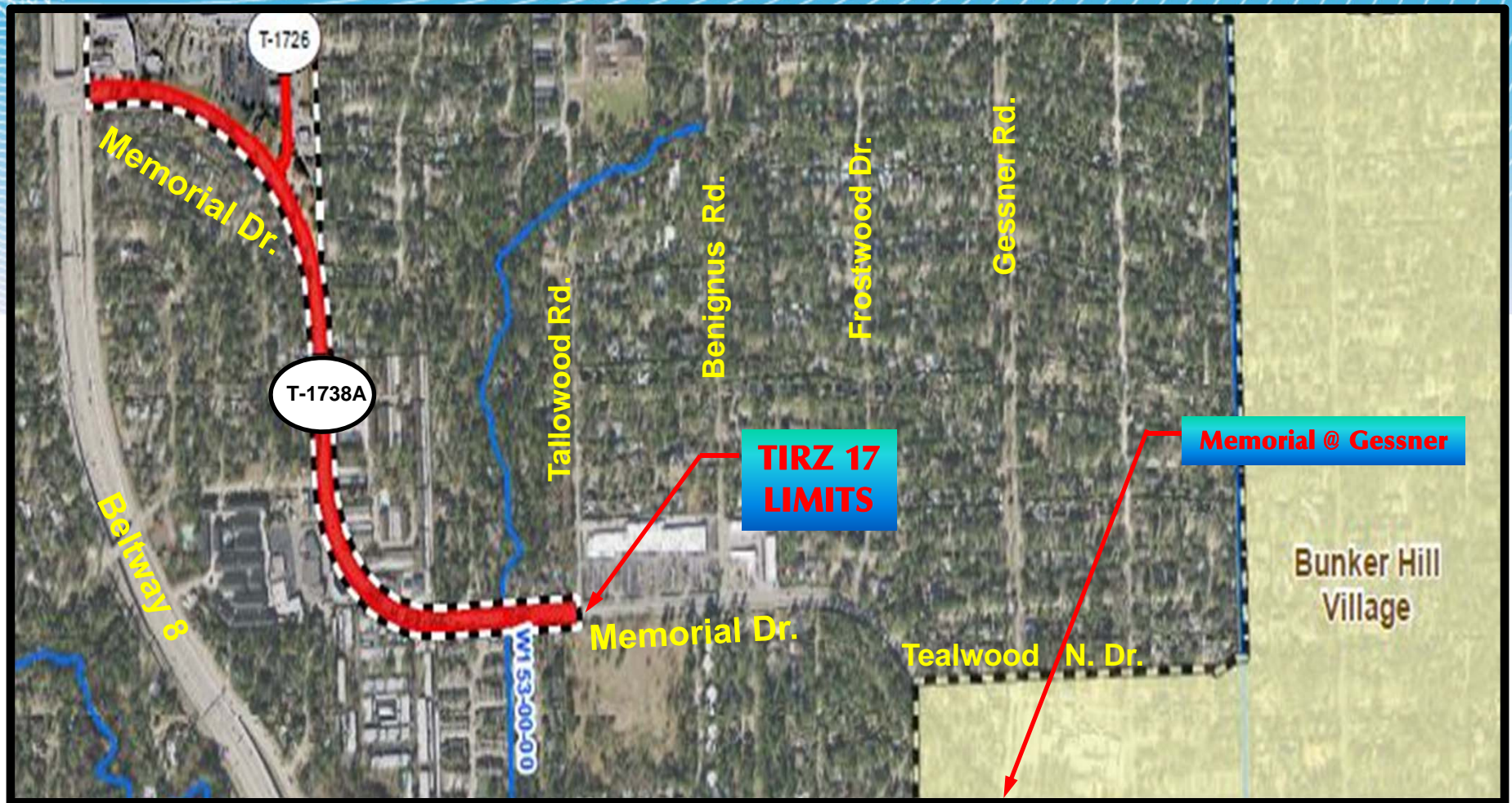
- Budget / 5 Year Capital Improvement Plan (CIP) approved annually by City Council
- All projects must be included in the approved budget
- All contracts subject to review and approval by the City's Chief Development Officer
- Any Bond Issuance/Borrowings must be approved by the City Council
- Any Annexation of property into the zone must be approved by the City Council
- Any Eminent Domain actions have to be handled by the City

# Memorial Drive Improvements

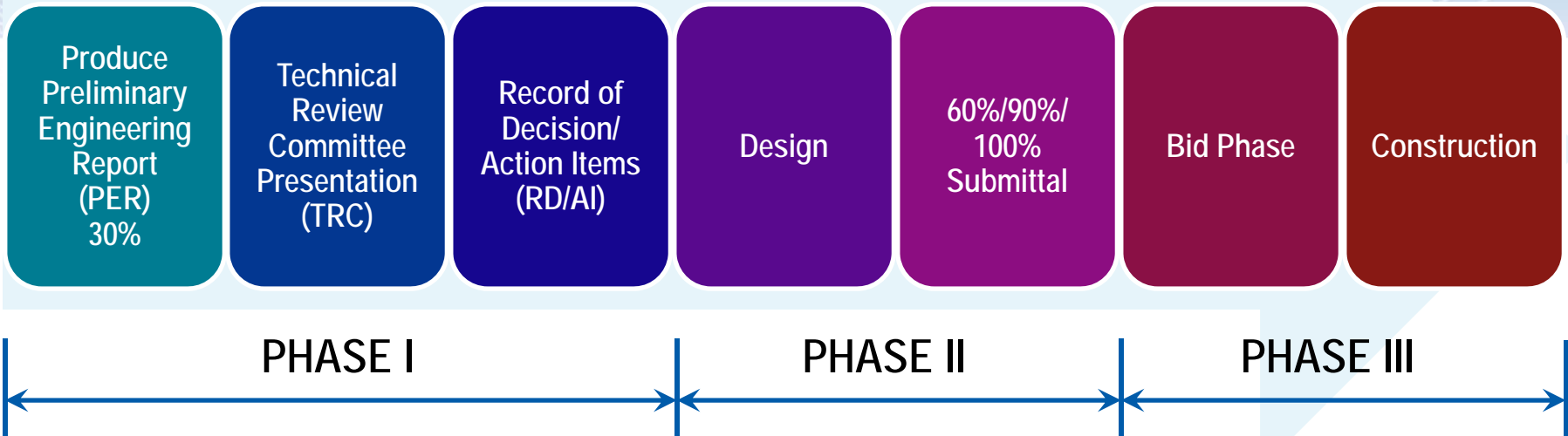
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# MEMORIAL DRIVE

# PROJECT OVERVIEW



# PROJECT STATUS

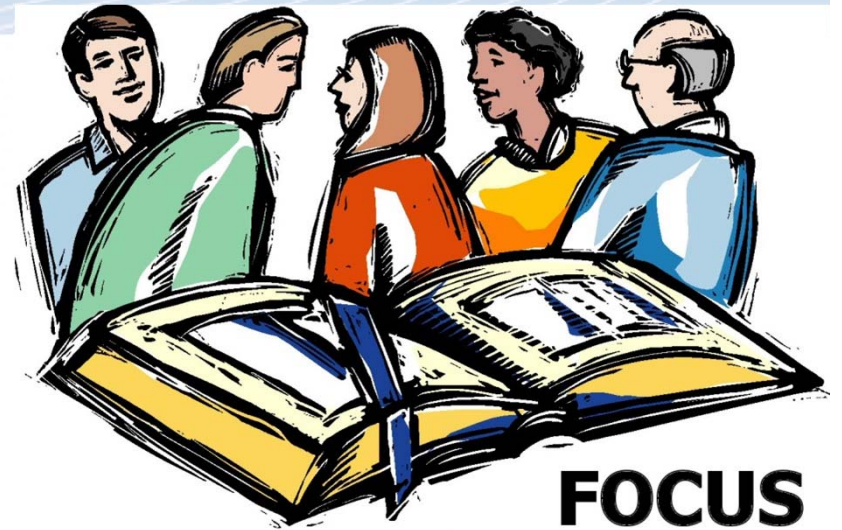




# LOCAL INTERACTION GROUP

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- Focus Group met March 27
- Open Dialogue
- Valuable Input
- All Comments Noted and Evaluated



**FOCUS  
GROUPS**

# LOCAL INTERACTION GROUP

March 27

Interlocal Group 3/27/15 ①  
Memorial Drive Phase 1  
Beltway 8 to Tallwood

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Focus Group

- Concern - light studs <sup>poles, signs,</sup> conflict w/ Sidewalk
- Bike path friendly - connect to TxDOT path

Comments

TxDOT project Kuhlman to Eldridge  
Ded. bike lane, slow tree buffer  
Need continuity  
Energy corridor  
Michelle - TxDOT contact  
Civiltech - Consultant

②

- Signal locations concern (two)
- Tallwood - concern for signal is one warranted? TIA ->
- Why not go to Bunker Hill ?
- " " work w/ COH to complete the project east ?
- Concerned about transition
- Rebuild Tallwood intersection w/ no widening of Tallwood
- Mem Myrt District - question on participation
- Runway strip - pavers @ crosswalks concern
- No dedicated bike lane - concern

③

- want concern - consistent w/ TxDOT project - to Eldridge (Bike lane)  
dedicated
- Concern - narrow the esplanade  
Put buffer on residential side
- Think neighborhood sensitive -
- Concern about encroachments
- Stakeholder coord. mtgs
- Corner clips - concern
- Need enlargements for ROW / Survey - for clarification

# LOCAL INTERACTION GROUP

March 27

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Consider shopping center transition area  
 Think thru this area - turning movements  
 also Methodist Property / Midway  
 Look @ information

← Lower lane

- TIRZ 17 guidelines - requires coord w/ COH Public Works & HCFCD
- Purpose / Budget \$12-16mil
- Concern - Safety | mobility / drainage
- Children crossing access right
- Group Likes ~~20' esplanade~~
- Protect in permeability
- Do not want hickory
- Could put trees in esplanade

5

- Group - want buffer between curbs and sidewalk / shared use path
- is an option w/ smaller <sup>protected</sup> esplanade option
- Concern - signal timing both intersection
- Where are detention ponds South?
- Concern - Memorial @ W153 drainage
- Build for future capacity
- Don't tear up road

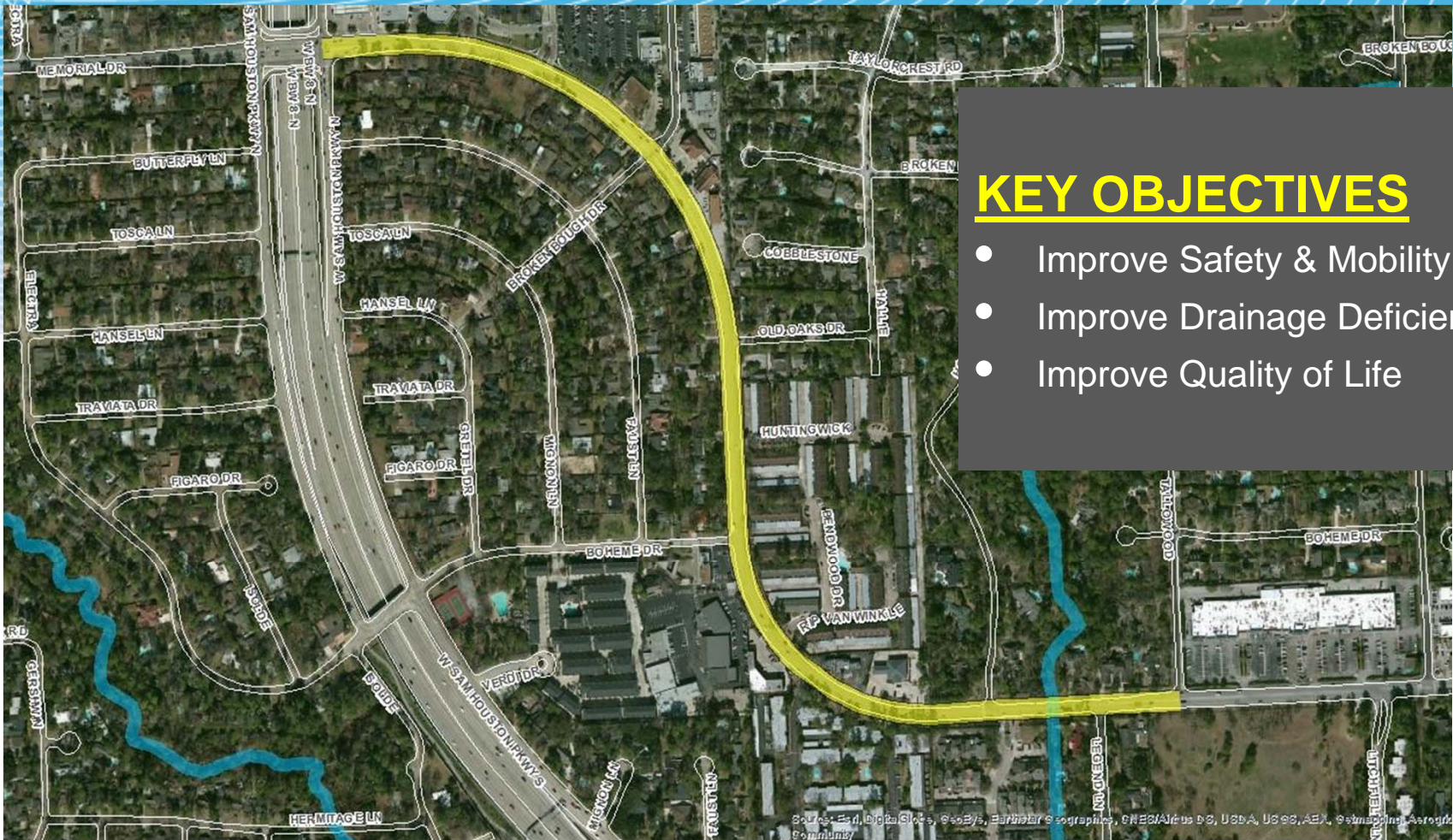
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- Concern - Meth Site drainage as relates to mem. Drive
- Find another "solution" to choke pt @ Mem Drive / W153
- want copy of map - 10 yr. event
- ~~Primary concern~~
- Primary concern - lack of attention to detention South
- Need to address!
- Work w/ Rebuild Houston
- Hillw 10x10 bas - inline det
- Westbough / Memorial intersection

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# PROJECT OBJECTIVES



## KEY OBJECTIVES

- Improve Safety & Mobility
- Improve Drainage Deficiencies
- Improve Quality of Life

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- Improve Safety & Mobility
- Improve Drainage Deficiencies
- Improve Quality of Life



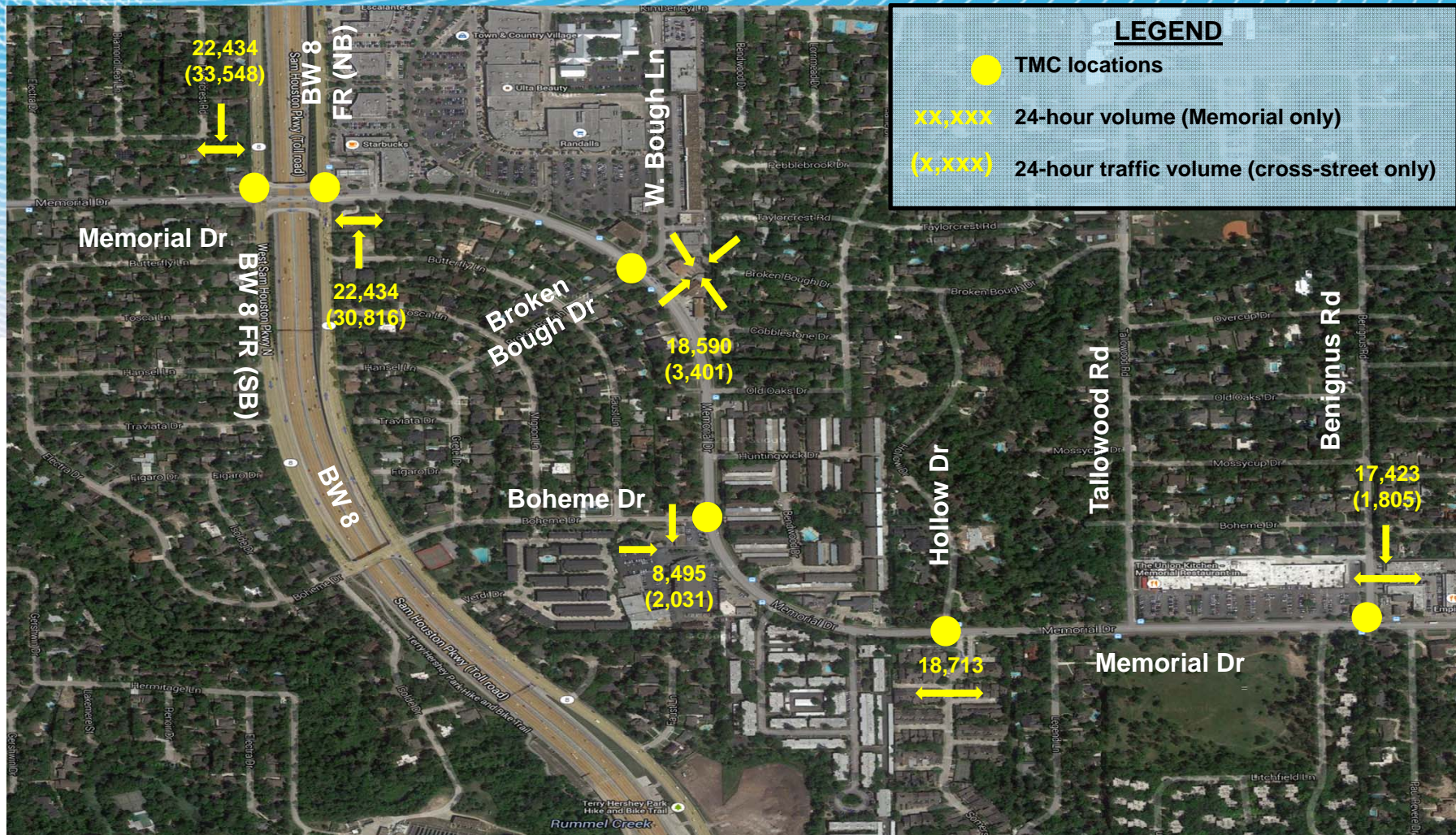
# EXISTING CONDITIONS

## Existing Roadway

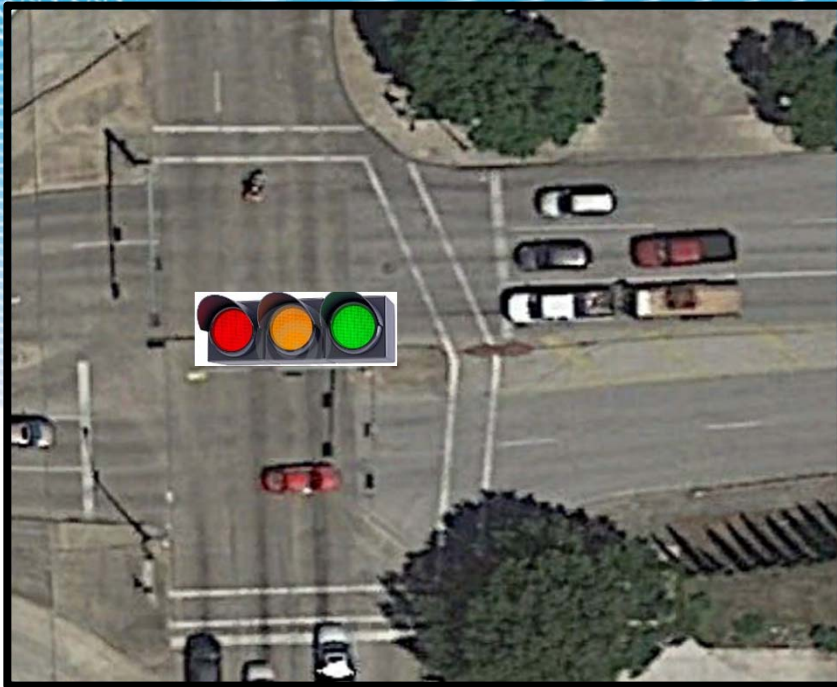
- 100 foot ROW
- 4-Lanes
- Asphalt Pavement - Poor Condition
- Discontinuous/Sub-standard 4' Wide Sidewalks
- Open Ditch/Curb & Gutter
- METRO Bus Routes
- Two Traffic Signals- BW 8 & W. Bough Dr.



# EXISTING TRAFFIC VOLUMES

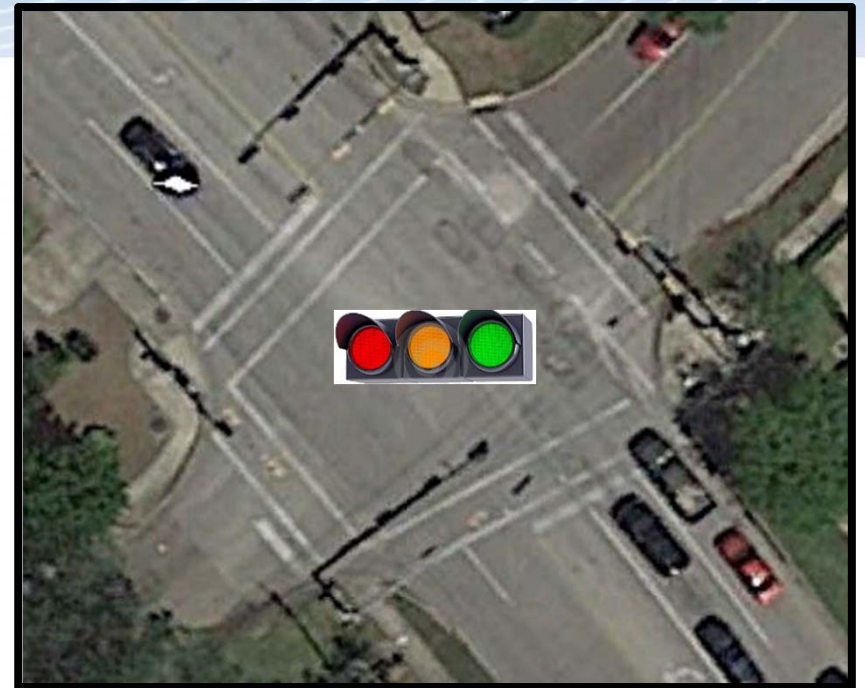


# EXISTING TRAFFIC SIGNALS



*Memorial Drive at Beltway 8-  
Frontage Road*

*Memorial Drive at W. Bough Lane*

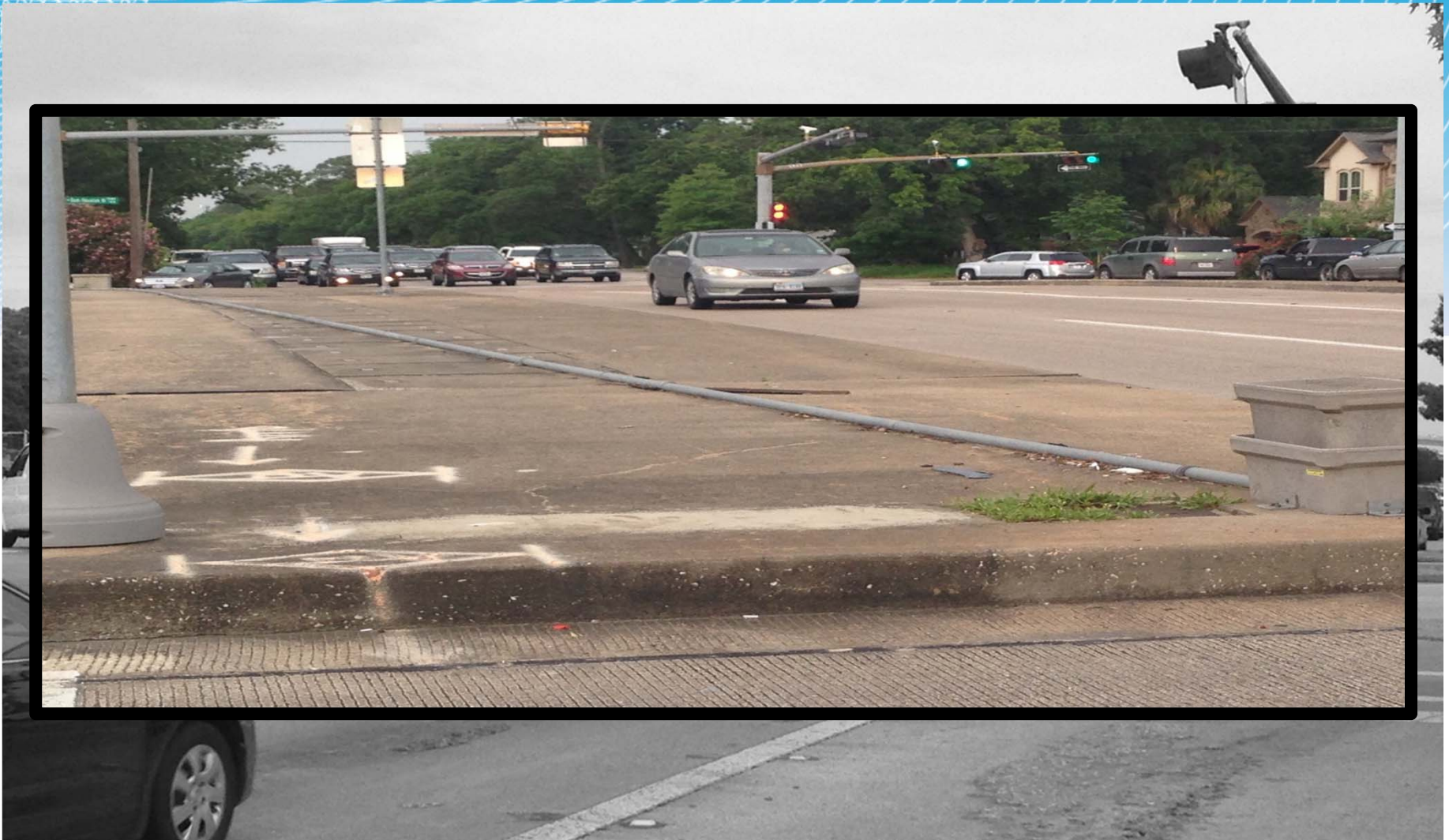




# EXISTING TRAFFIC SIGNALS



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# TRAFFIC SIGNALS



# **PROPOSED CONDITIONS**

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# **ROADWAY**

# **ALTERNATIVES**

# ALTERNATIVE #1

## 30-FOOT MEDIAN

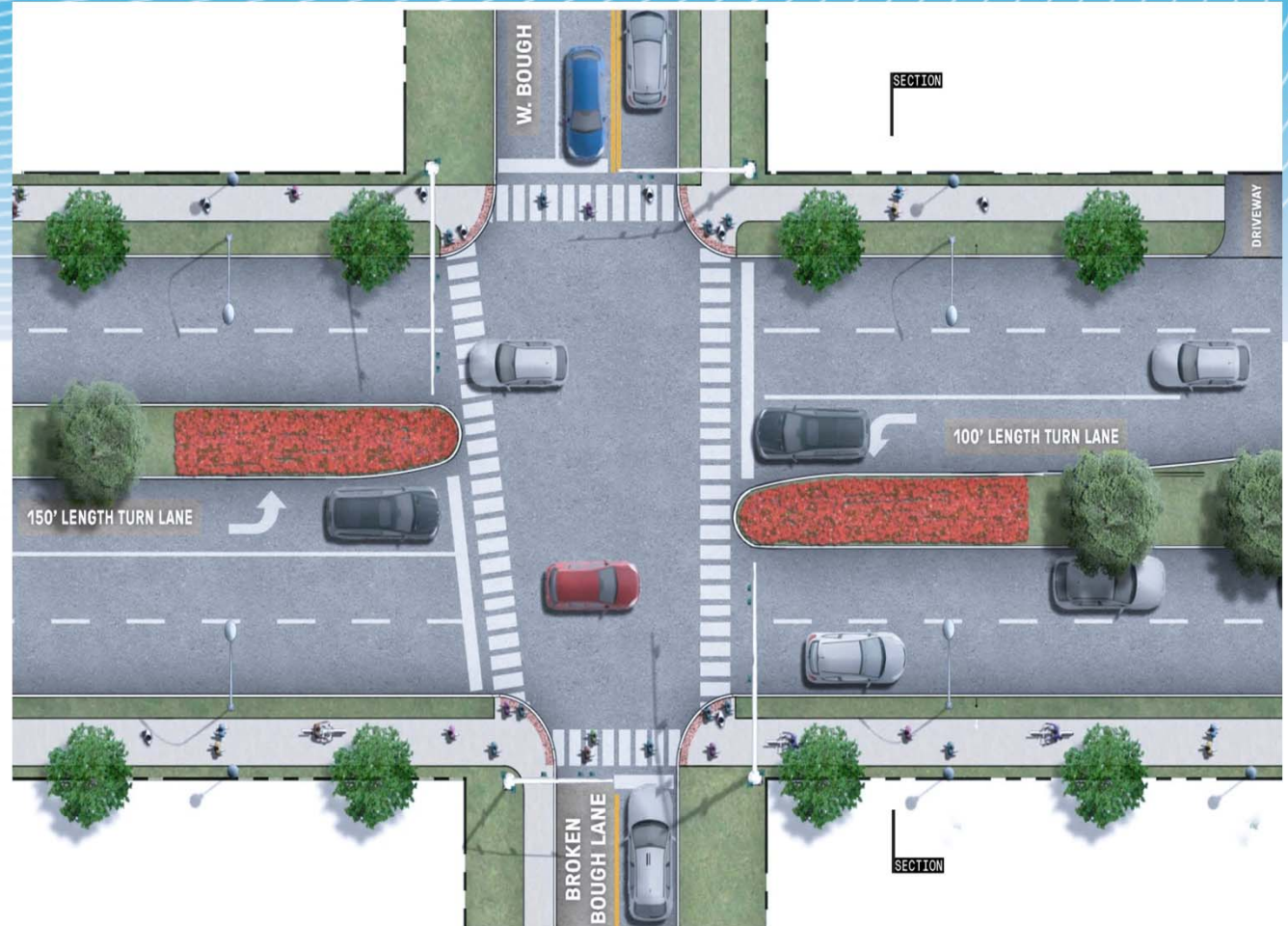
- 100-FT ROW
- 4~11' Lanes
- Concrete Curb and Gutter
- 30-foot Median
- Left Turn Lane Bays
- 10-Foot Wide Shared Use Path (South Side)
- Continuous 6-foot Wide Sidewalks (North side)



# ALTERNATIVE #2

## 24-FOOT MEDIAN

- 100-FT ROW
- 4~11' Lanes
- Concrete Curb and Gutter
- 24-foot Median
- Left Turn Lane Bays
- 10-Foot Wide Shared Use Path (South Side)
- Continuous 6-foot Wide Sidewalks (North side)



# ALTERNATIVE #3

## CONTINUOUS LEFT TURN LANE

- 100 foot ROW
- 4~11' Lanes
- 14' Wide Center Turn Lane
- Concrete Curb and Gutter
- 10-Foot Wide Shared Use Path (South Side)
- Continuous 6-foot Wide Sidewalks (North side)

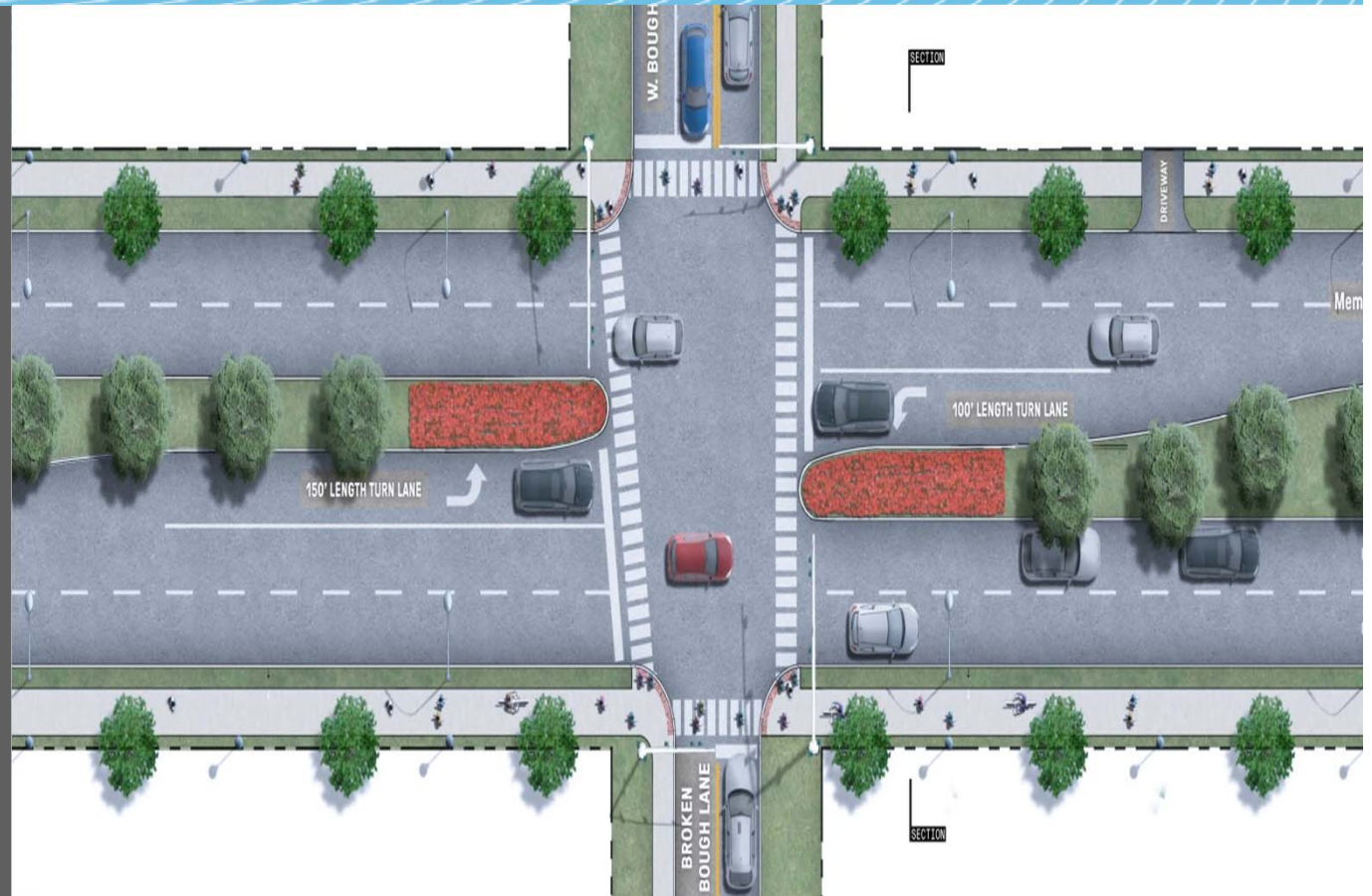


# RECOMMENDED ALTERNATIVE

## 24-FOOT MEDIAN

### 24-FOOT MEDIAN

- 100 foot ROW
- 4~11' Lanes
- Concrete Curb and Gutter
- 24-foot Median
- Left Turn Lane Bays
- 10-Foot Wide Shared Use Path (South Side)
- Continuous 6-foot Wide Sidewalks (North side)



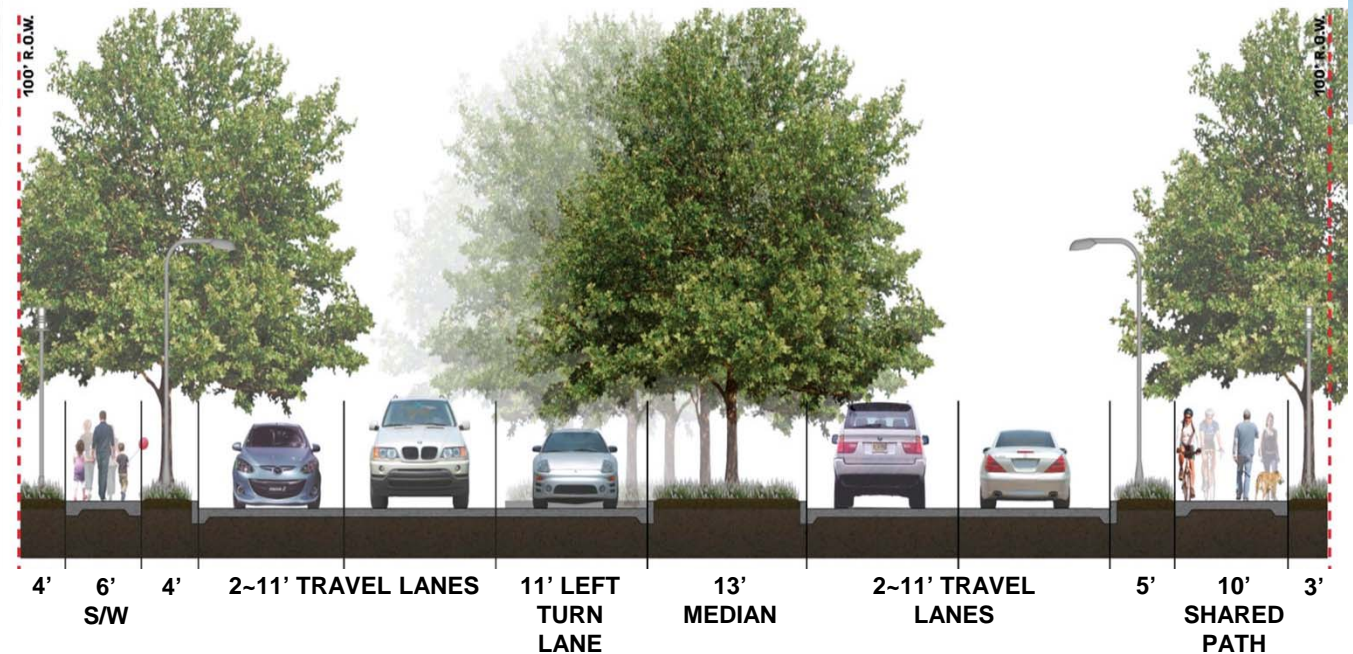


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# RECOMMENDED ALTERNATIVE



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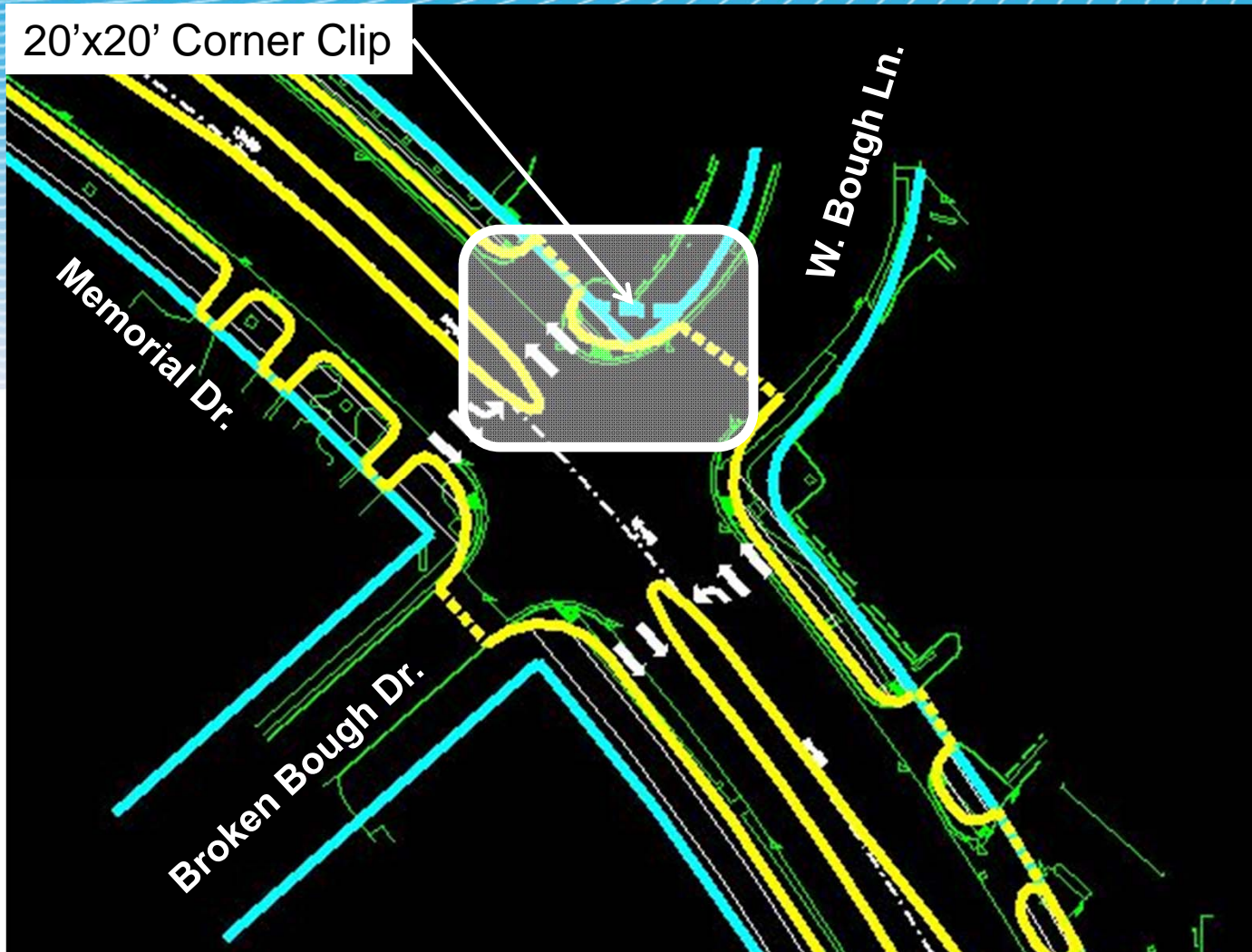


# RIGHT-OF-WAY NEEDS

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- No Right of Way Acquisition Required
  - Existing 100-foot ROW
- Only One Corner Clip Needed
  - W. Bough at Memorial (20'x20')

# RIGHT-OF-WAY NEEDS



# PROPOSED TRAFFIC IMPROVEMENTS

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- Upgrade Both Existing Traffic Signals
  - Current City Standards
  - New Mast Arms
  - Audible Push Buttons
  - Countdown Signal Heads
  
- Improve Safety with Larger Left Turn Bays

# PROPOSED TRAFFIC IMPROVEMENTS



# ACCESS MANAGEMENT

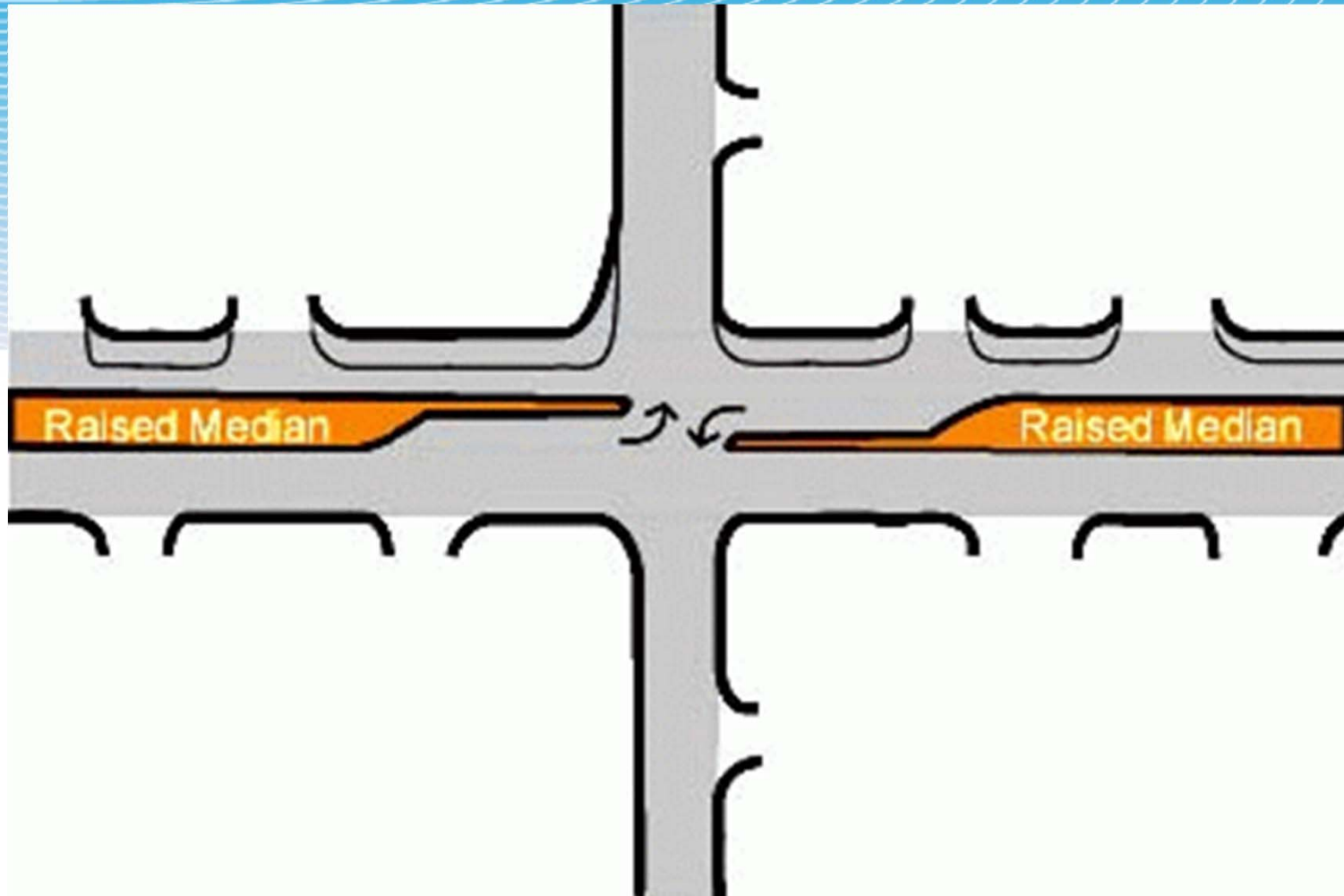
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- Median Openings at Key Locations (5 Locations)
  - Locations based on Access Management Study
    - Turning Movement Counts
    - City Minimum 600' Spacing
  
- Left Turn Bays to Allow Safe Queuing
  - 100' to 220' Long Bays for Proper Vehicle Storage

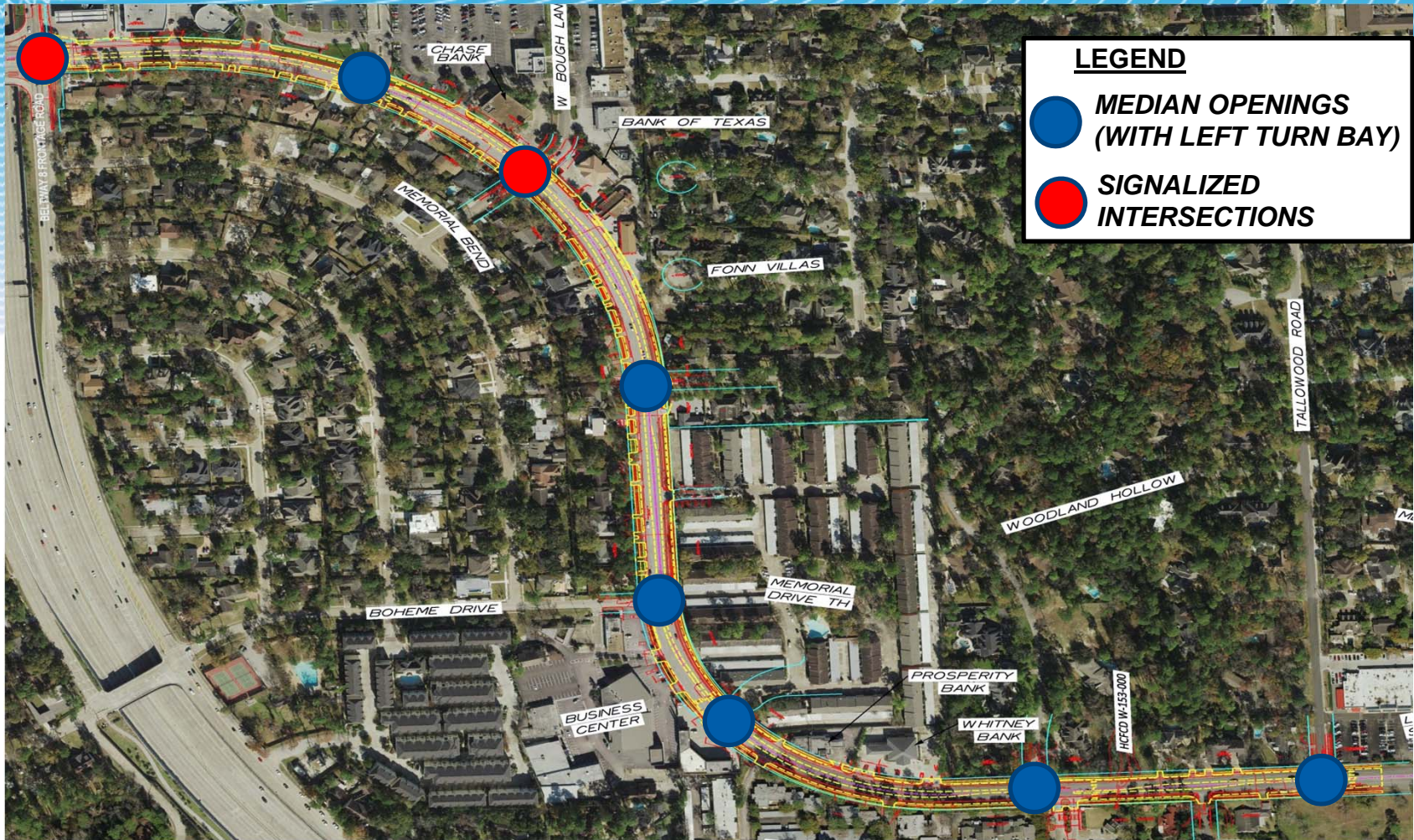


# ACCESS MANAGEMENT

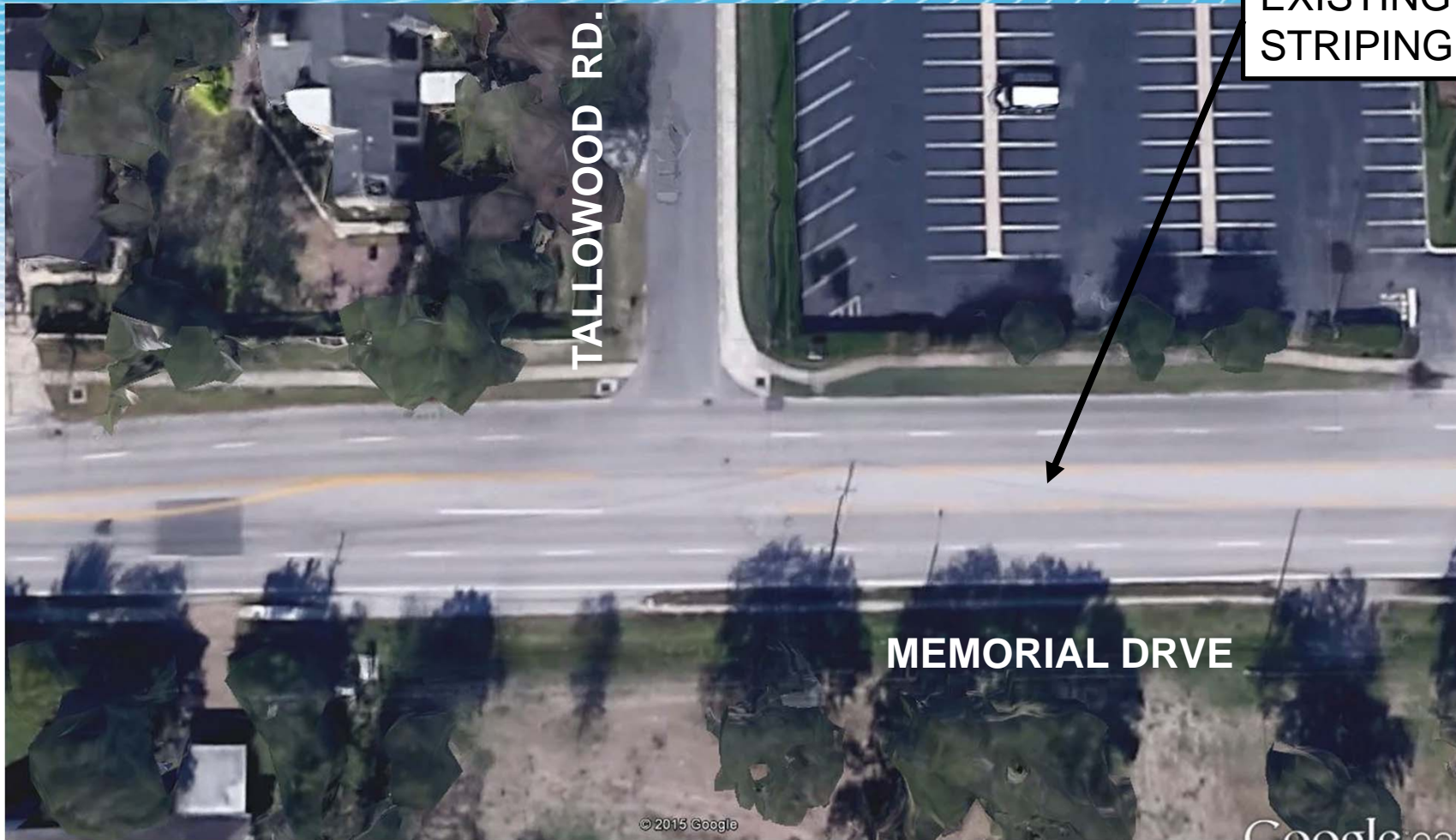
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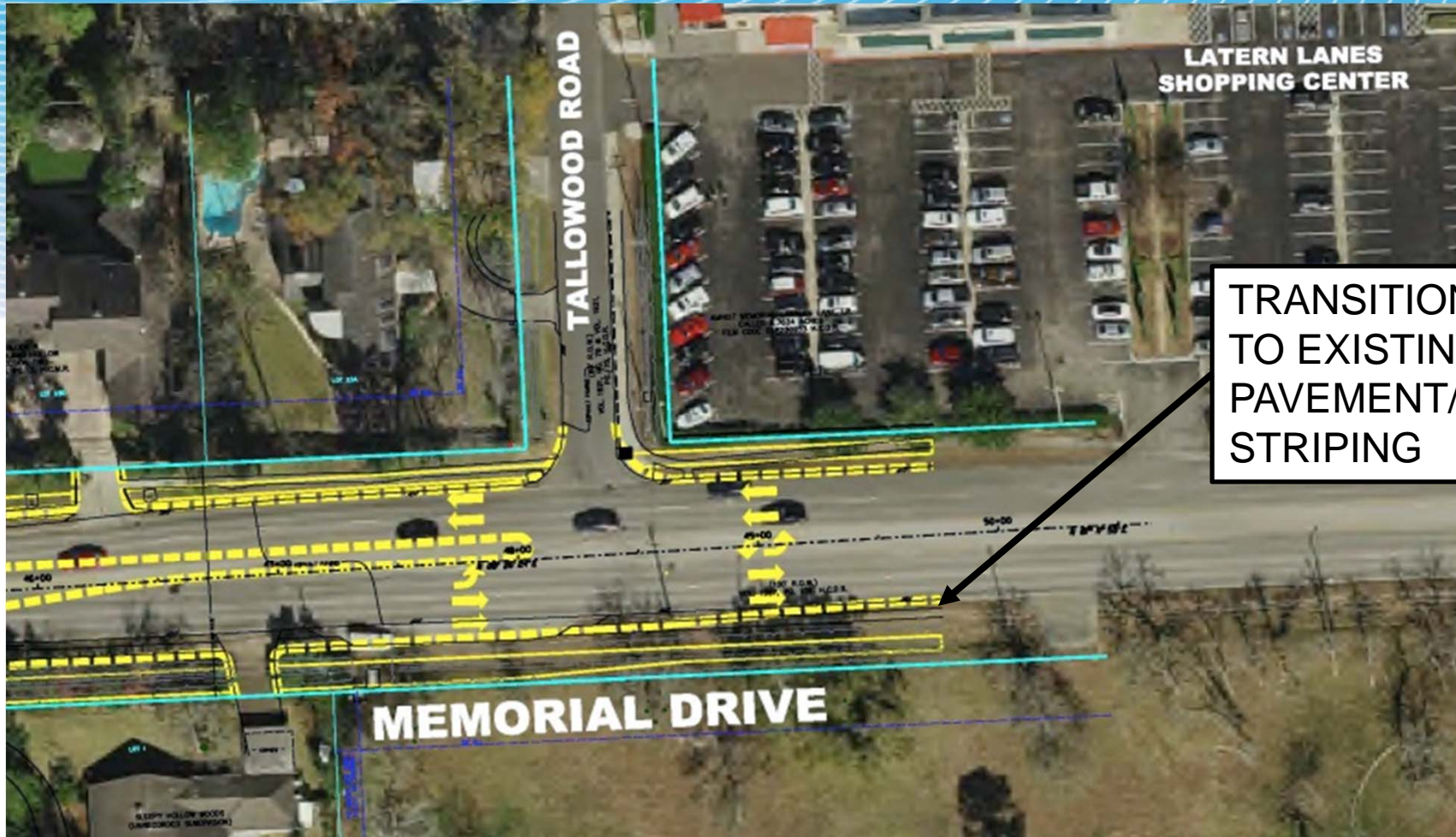
# ACCESS MANAGEMENT



# TRANSITION TO EXISTING



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# Memorial Drive

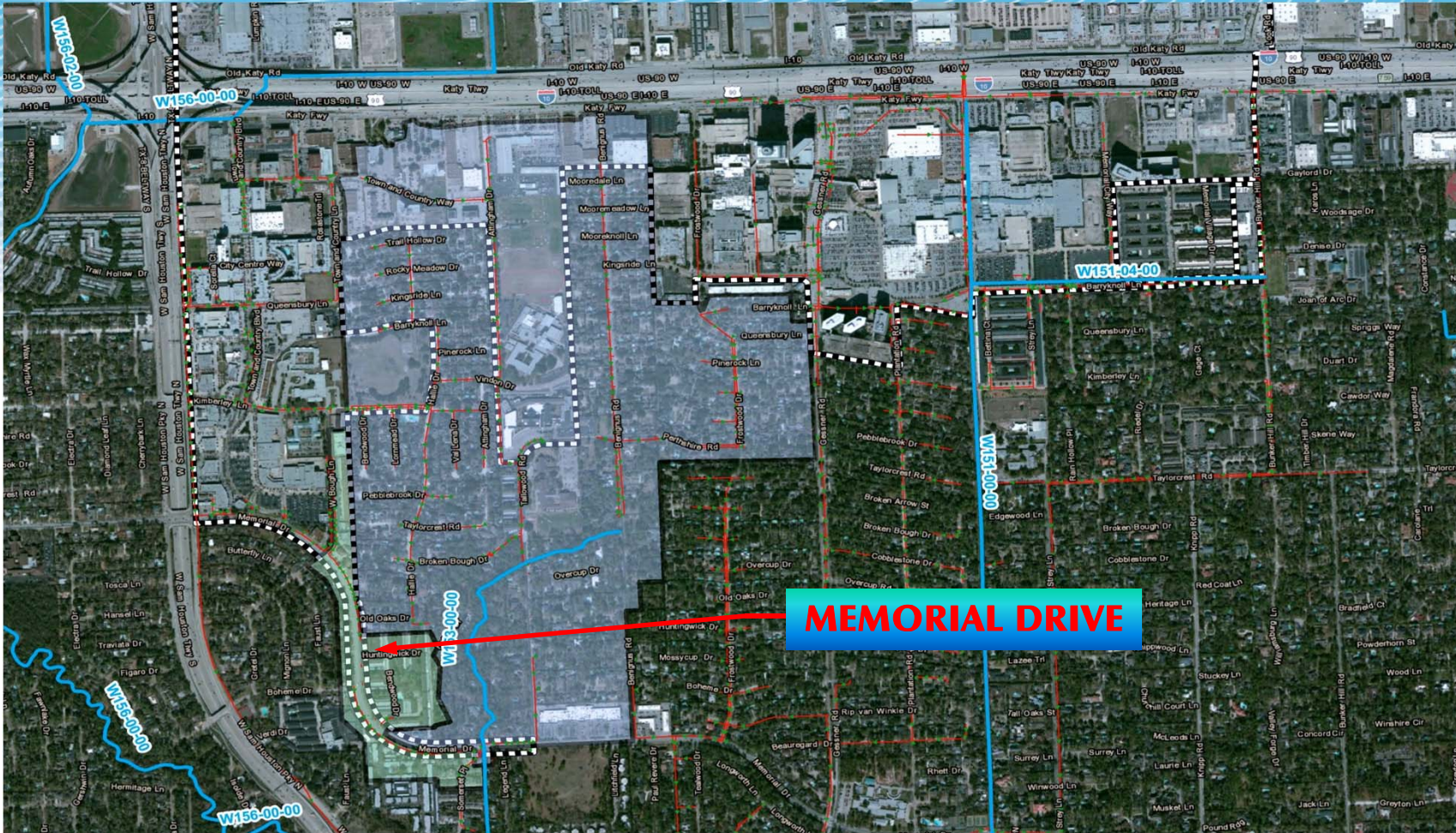
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## KEY OBJECTIVES

- Improve Safety & Mobility
- **Improve Drainage Deficiencies**
- Improve Quality of Life



# W153-00-00 WATERSHED

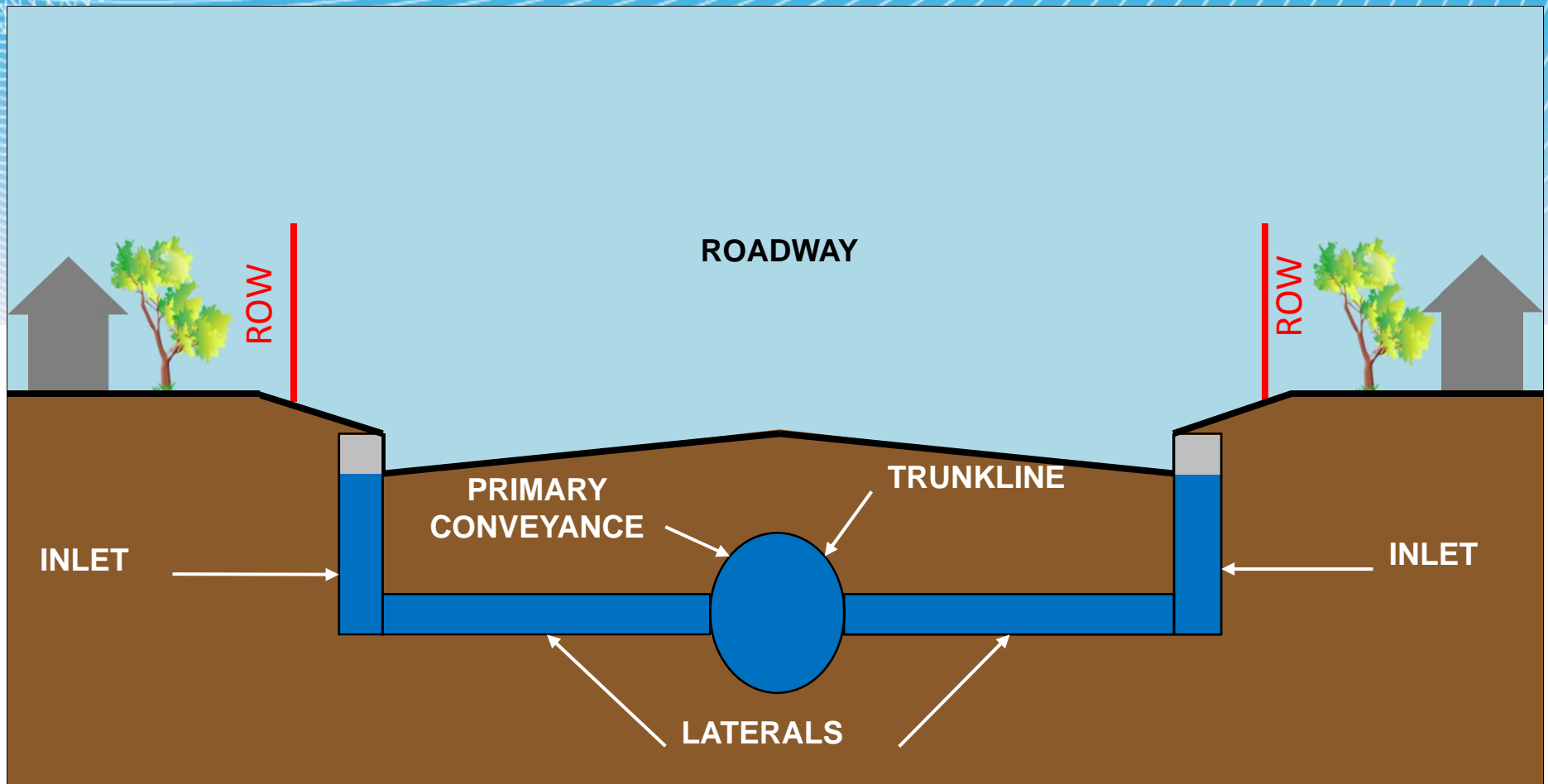


# **PROPOSED CONDITIONS**

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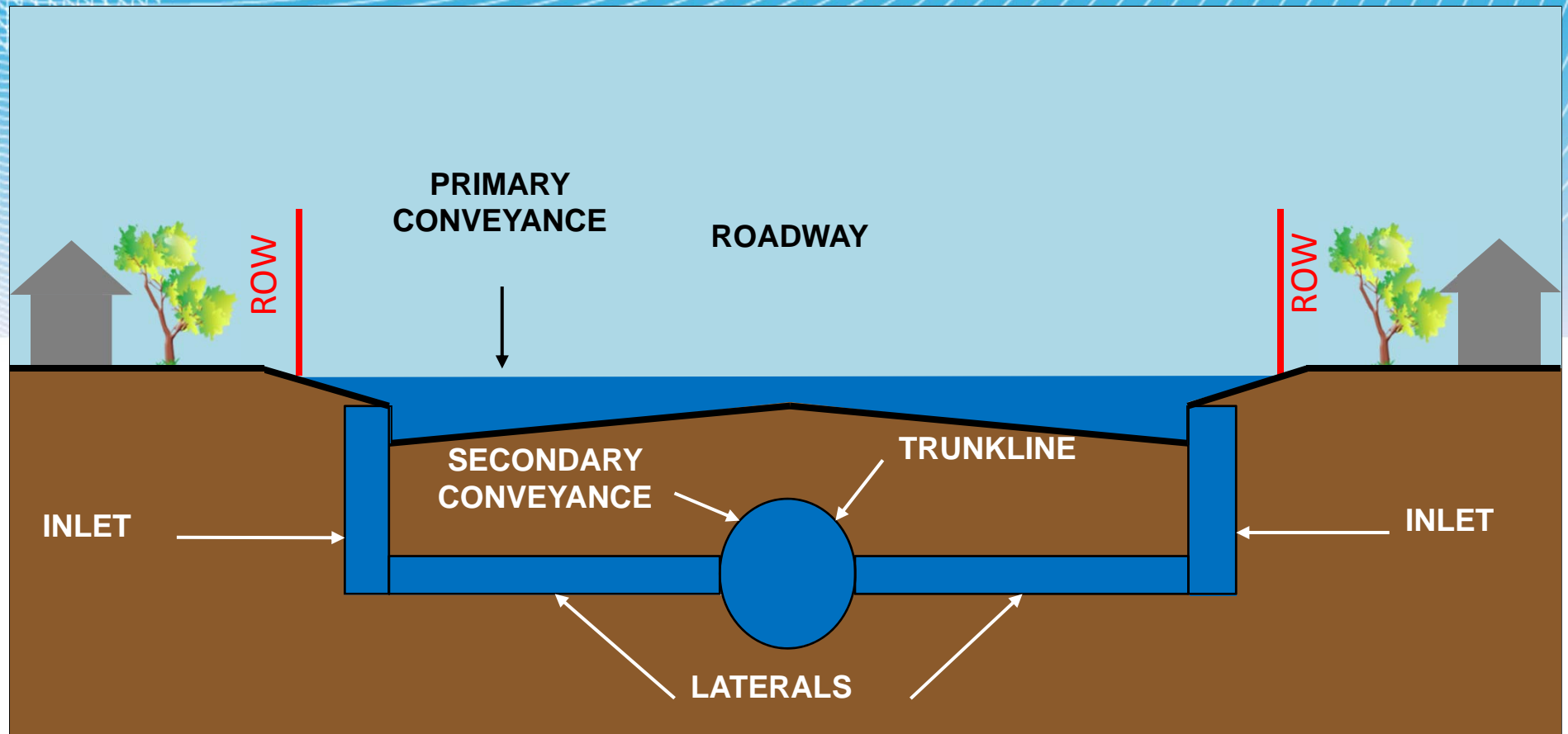
# **DRAINAGE DEFINITIONS**

# DRAINAGE CRITERIA – 2-YEAR



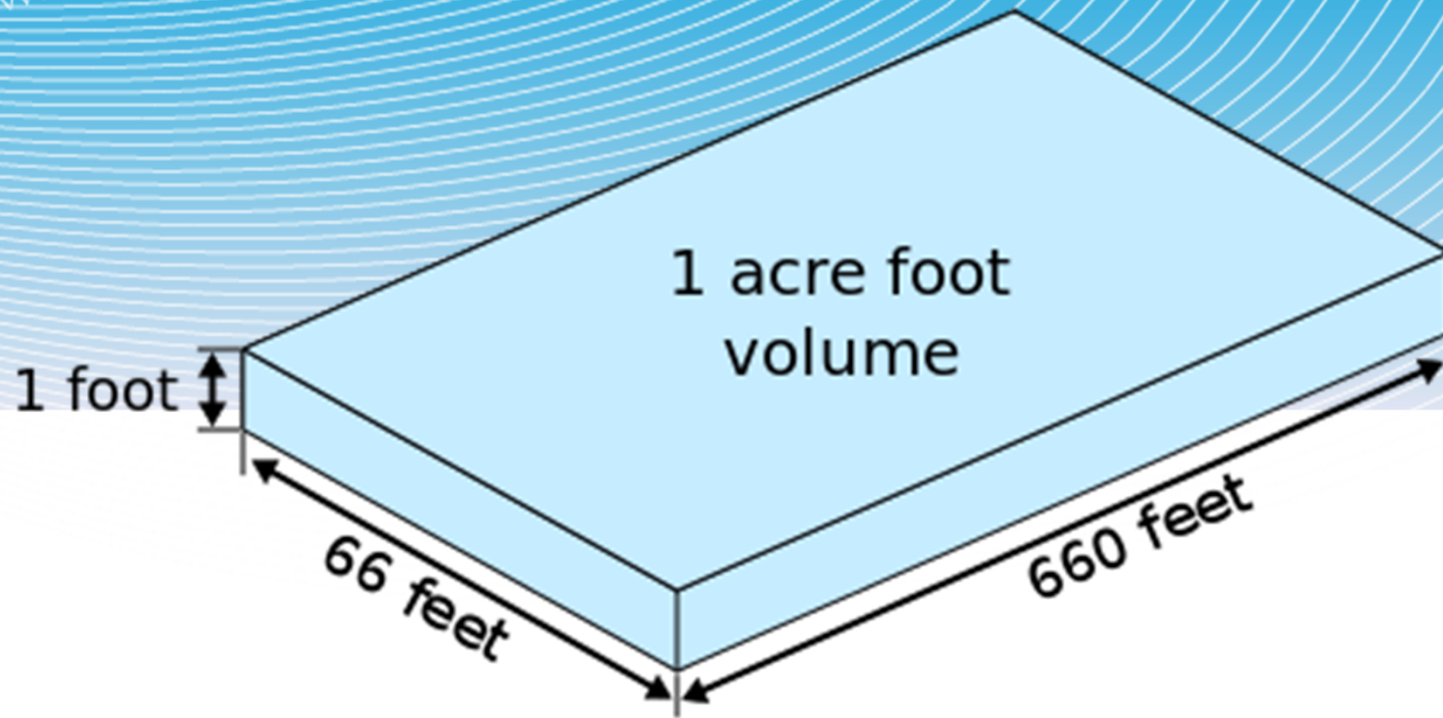


# DRAINAGE CRITERIA – 100-YEAR



# 1 ACRE-FT

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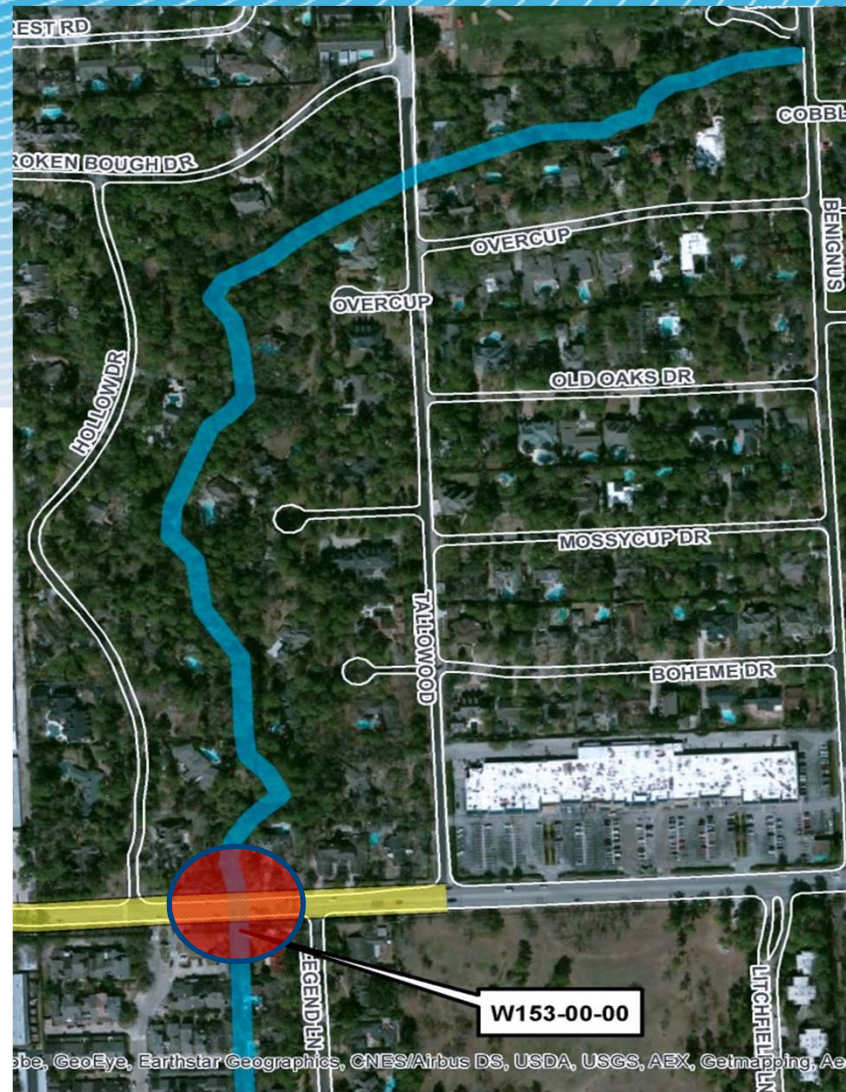


- 1 acre-foot = 43,560 Cubic Feet
  - 1 acre-foot = approx. 326,000 Gallons
- (Note, 1 football field = 6,400 square yard = 1.3 acres)*

# EXISTING DRAINAGE

## EXISTING DRAINAGE

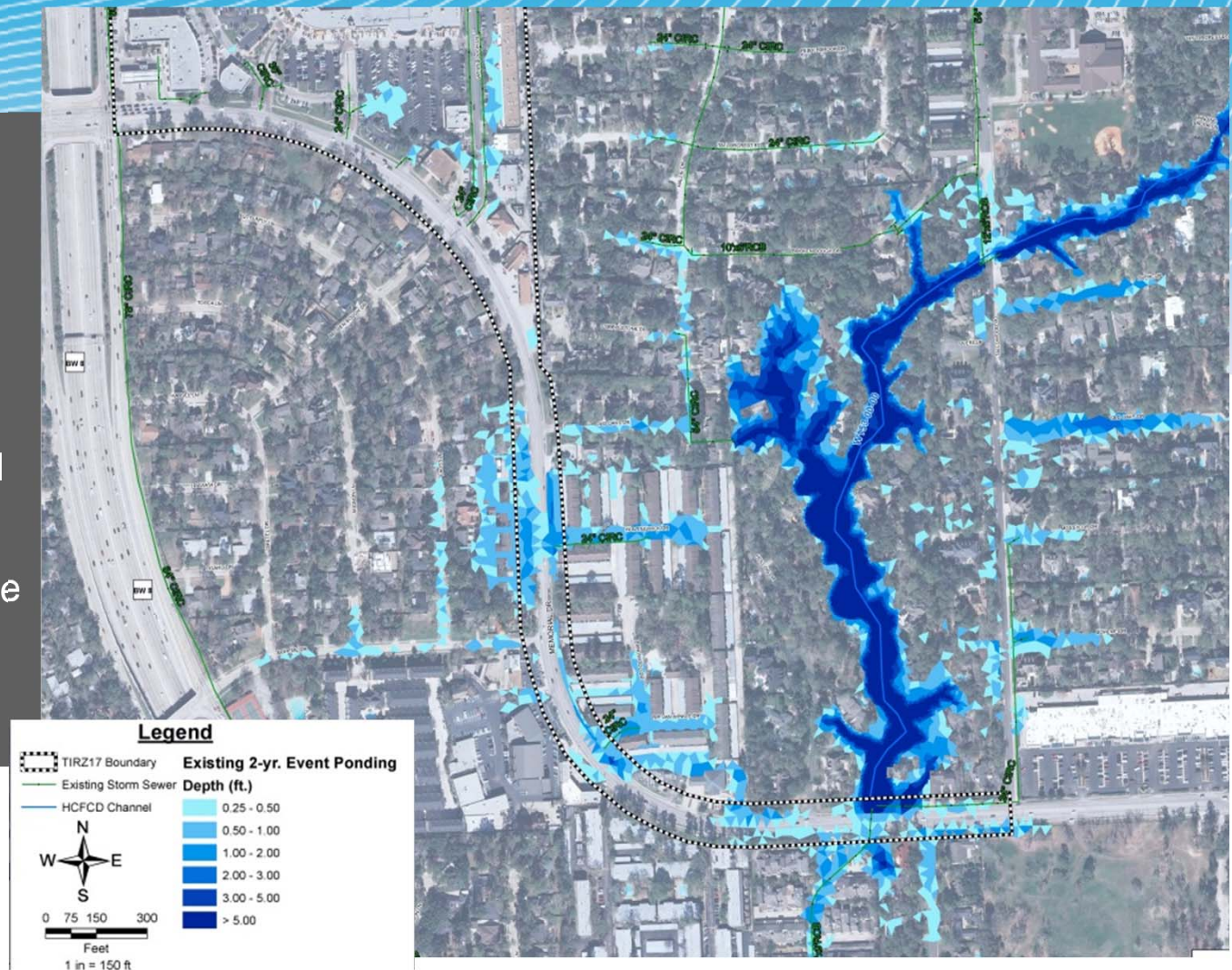
- HCFCW W153-000
- Existing 9'x9' Box Culverts under Memorial Drive
- Combination Roadside Ditches and Curb & Gutter



# EXISTING CONDITIONS - 2-YEAR EVENT

## EXISTING DRAINAGE

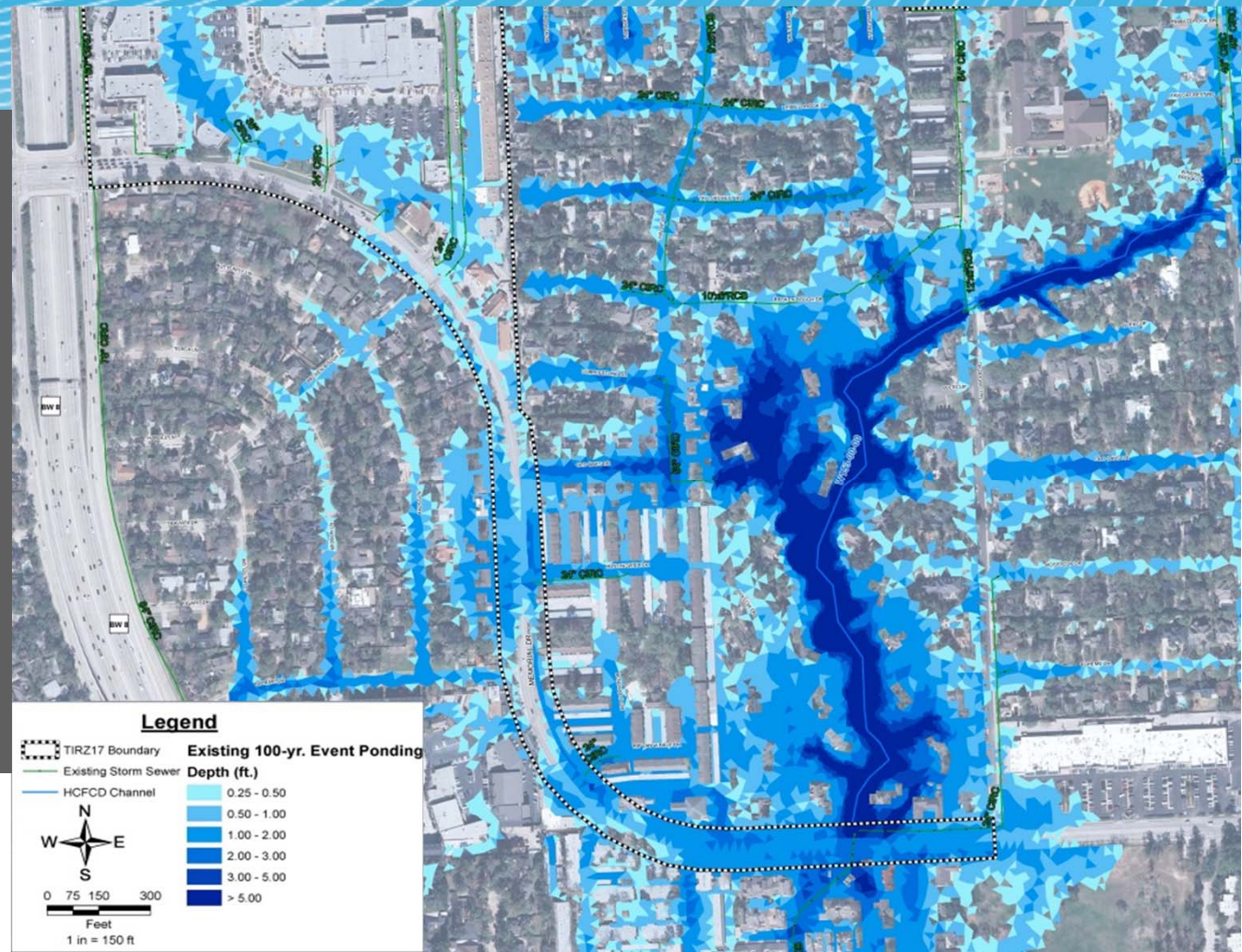
- Does Not Meet City's 2-yr/100 year Criteria
- Inadequate Side Ditches & underground storm sewers
- Surrounding area Prone to Flooding



# EXISTING CONDITIONS - 100-YEAR EVENT

## EXISTING DRAINAGE

- Does Not Meet City's 2-yr/100 year Criteria
- Inadequate Side Ditches & underground storm sewers
- Surrounding area Prone to Flooding



# DRAINAGE IMPROVEMENTS

## PROPOSED IMPROVEMENTS

- Dual 10'x10' Concrete Boxes
- 10 year level of protection
- 10+ acre/feet subsurface detention
- Reduction in area flooding

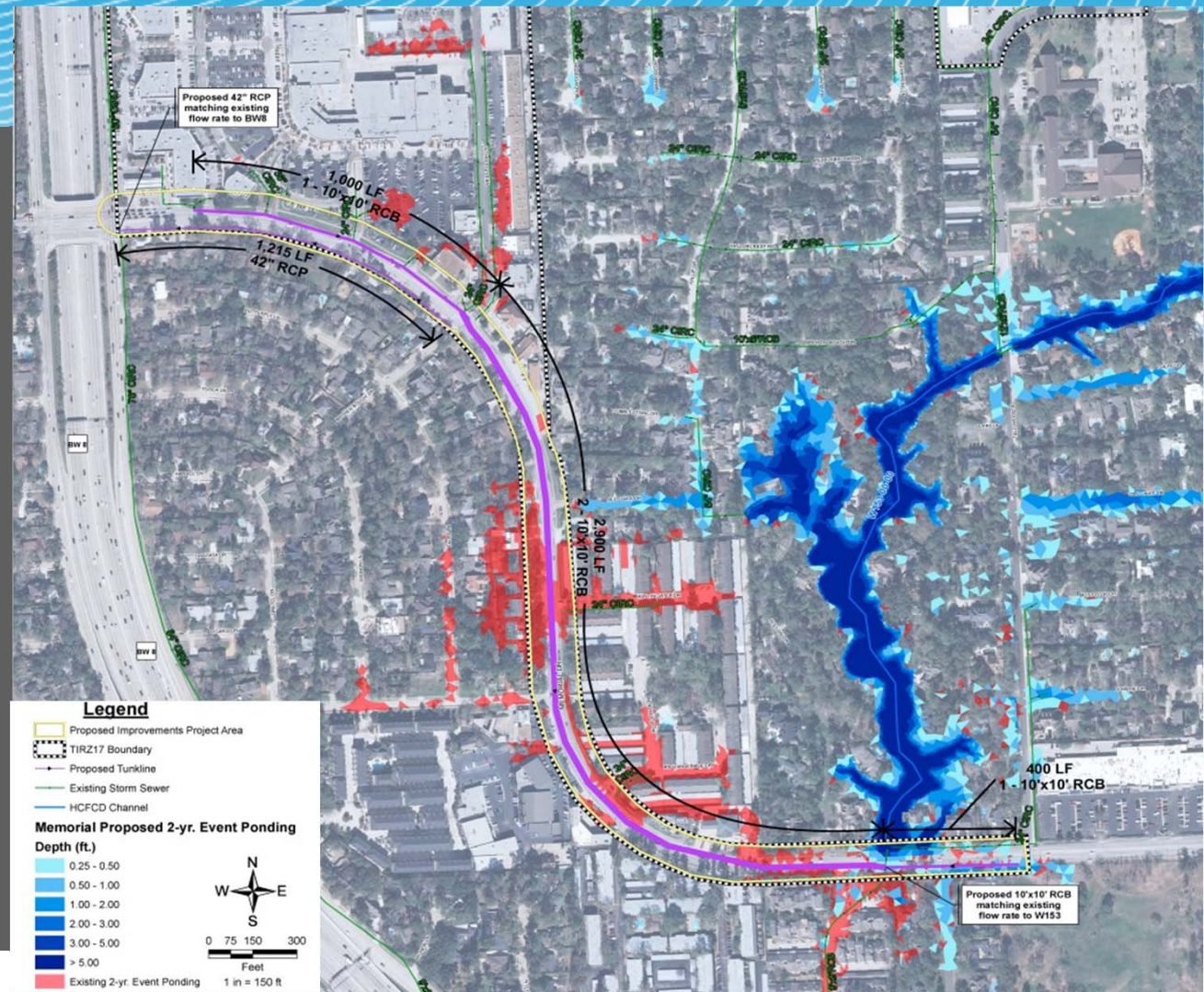


# DRAINAGE IMPROVEMENTS

## PROPOSED 2-Year Event

### PROPOSED IMPROVEMENTS

- Dual 10'x10' Concrete Boxes
- 2 year storm event compliant
- 10+ acre/feet net subsurface detention
- Reduction in area flooding

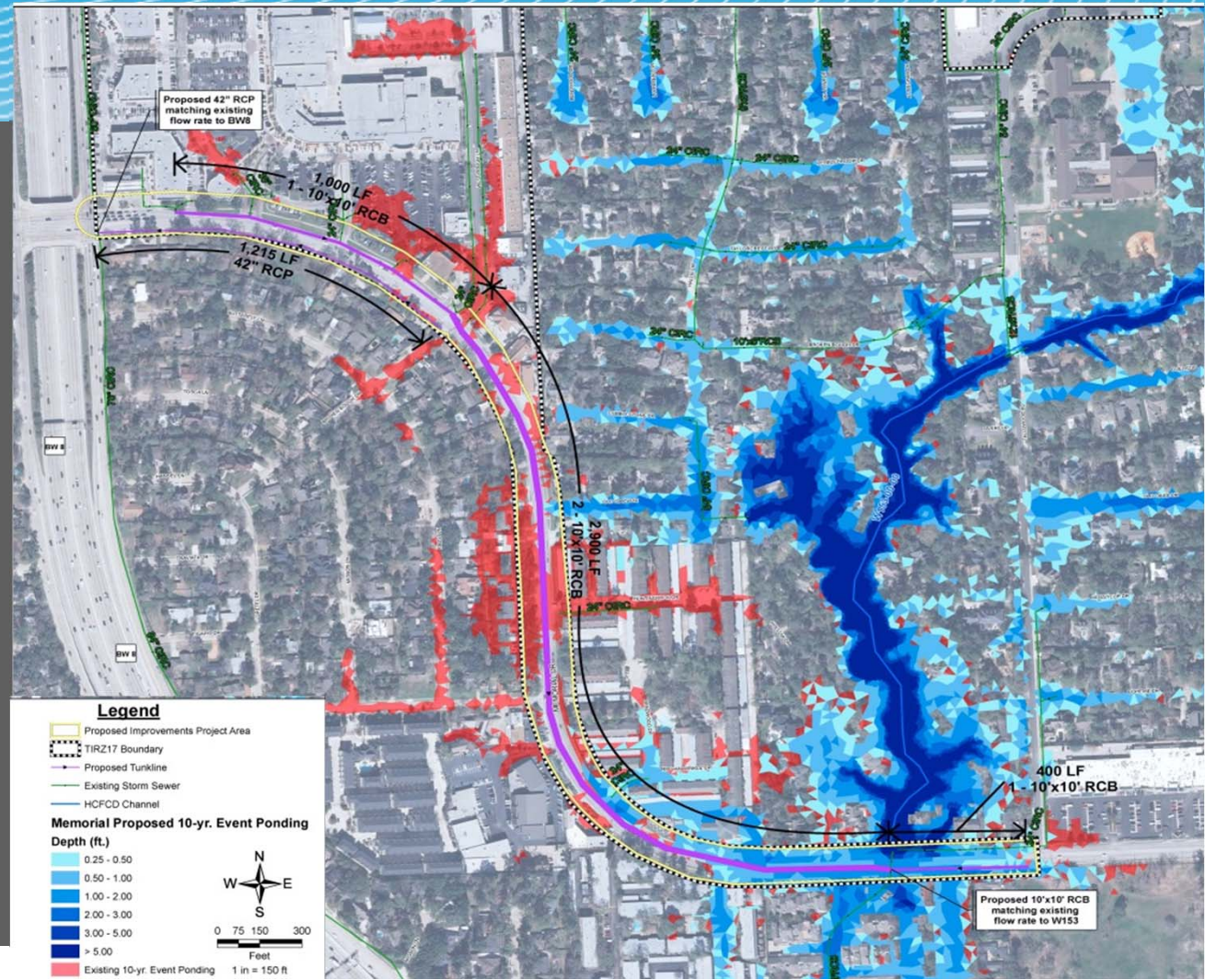


# DRAINAGE IMPROVEMENTS

## PROPOSED 10-Year Event

### PROPOSED IMPROVEMENTS

- Dual 10'x10' Concrete Boxes
- 10-year level of protection
- 10+ acre/feet net subsurface detention
- Reduction in area flooding





# Memorial Drive

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## KEY OBJECTIVES

- Improve Safety & Mobility
- Improve Drainage Deficiencies
- Improve Quality of Life



# QUALITY OF LIFE

## SHARED USE PATH

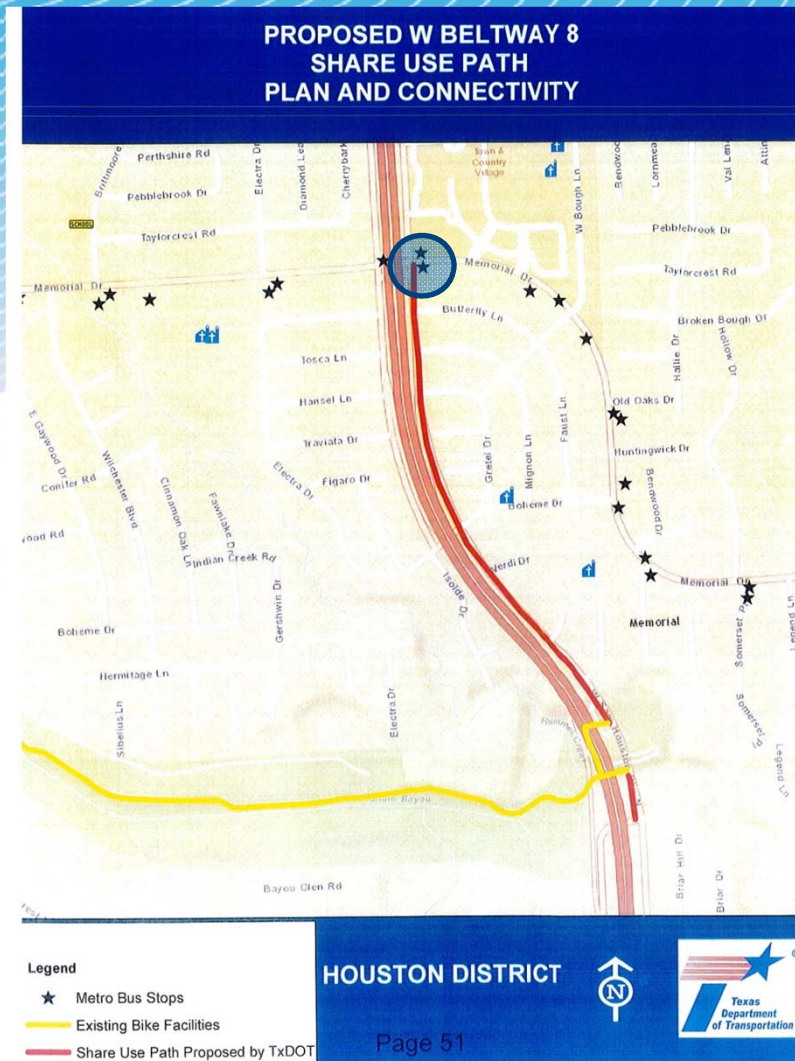
- Context Sensitive EO
- Pedestrian Lighting
- Hardscape/Softscape
- 24-foot Median
- Continuous Sidewalks
- Multi Use Path



# QUALITY OF LIFE

## TxDOT PATH

- Current TxDOT Project
- 8-foot Wide
- From Terry Hershey Park to Memorial Drive
- Preliminary Design

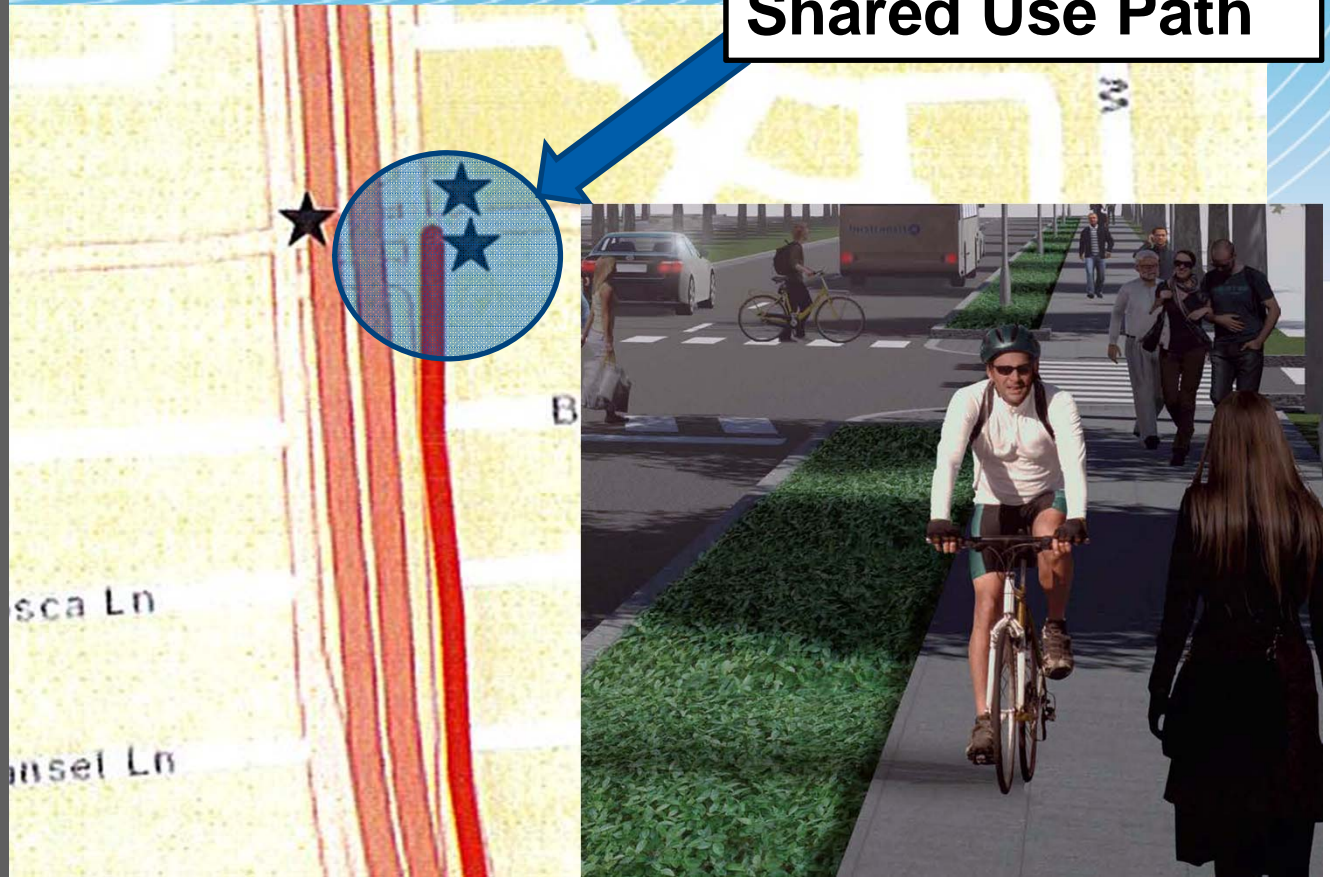


# QUALITY OF LIFE

**Connect Memorial  
Shared Use Path**

## TxDOT PATH

- Current TxDOT Project
- 8-foot Wide
- From Terry Hershey Park to Memorial Drive
- Preliminary Design



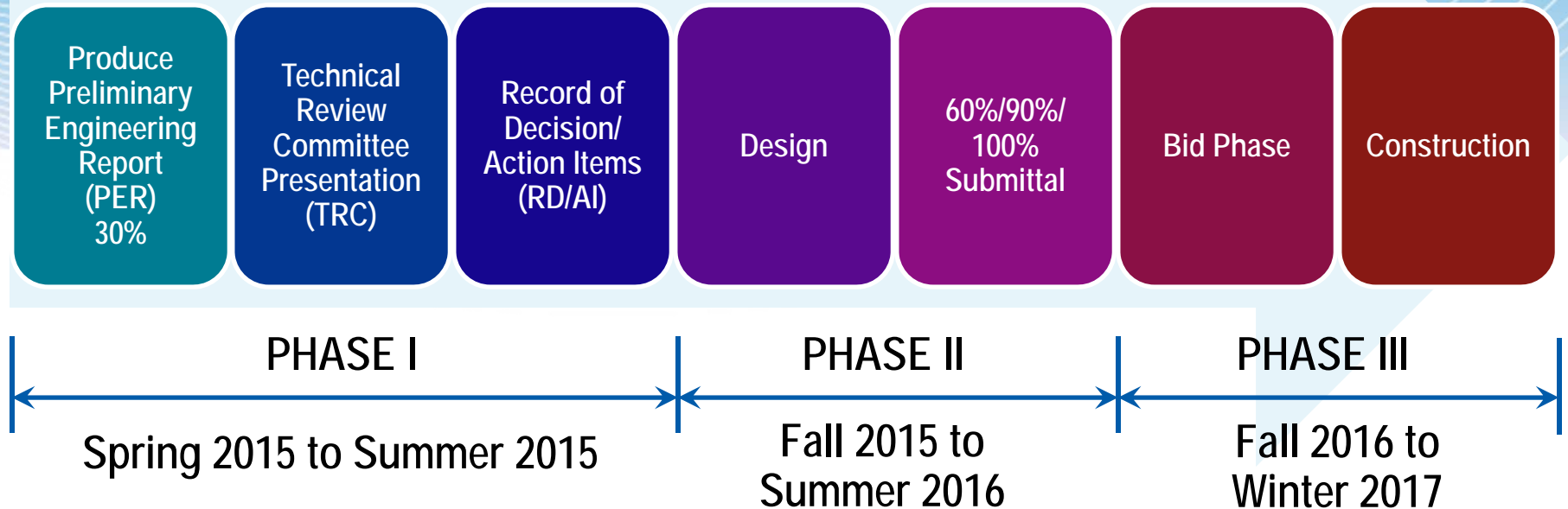
# KEY OBJECTIVES

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- **Improve Safety & Mobility**
- **Improve Drainage Deficiencies**
- **Improve Quality of Life**



# PROJECT SCHEDULE



# Questions/ Comments



**Lockwood, Andrews  
& Newnam, Inc.**

A LEO A DALY COMPANY