



Engineering and Construction Division



Garden Oaks Civic Club

Garden Oaks and Shepherd Forest Drainage & Paving

M-000285-0001-3, Council District C

January 7, 2014

Engineering Branch

Ravi Kaleyatodi, P.E., CPM

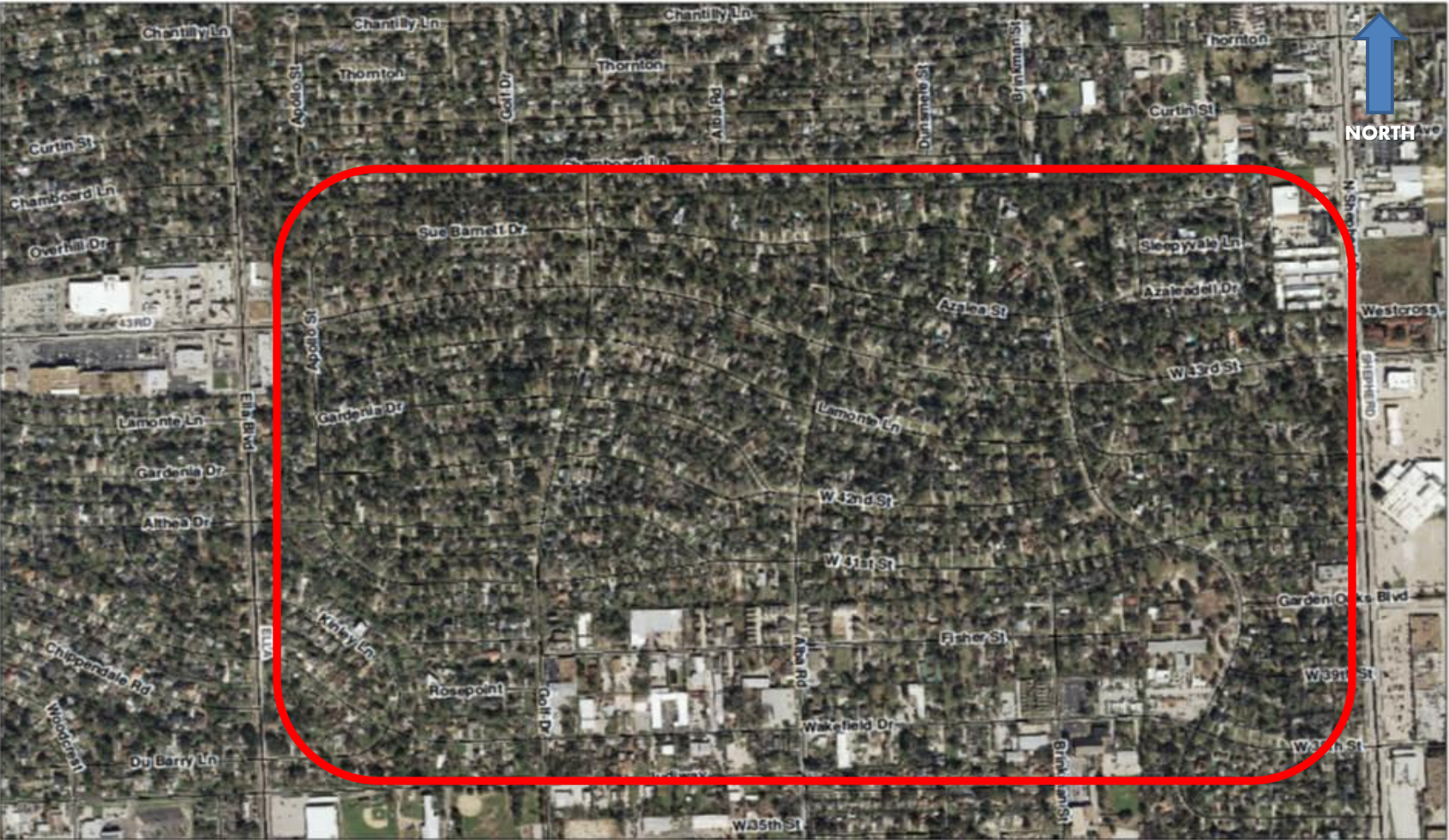
Senior Assistant Director

Storm Water Engineering Section

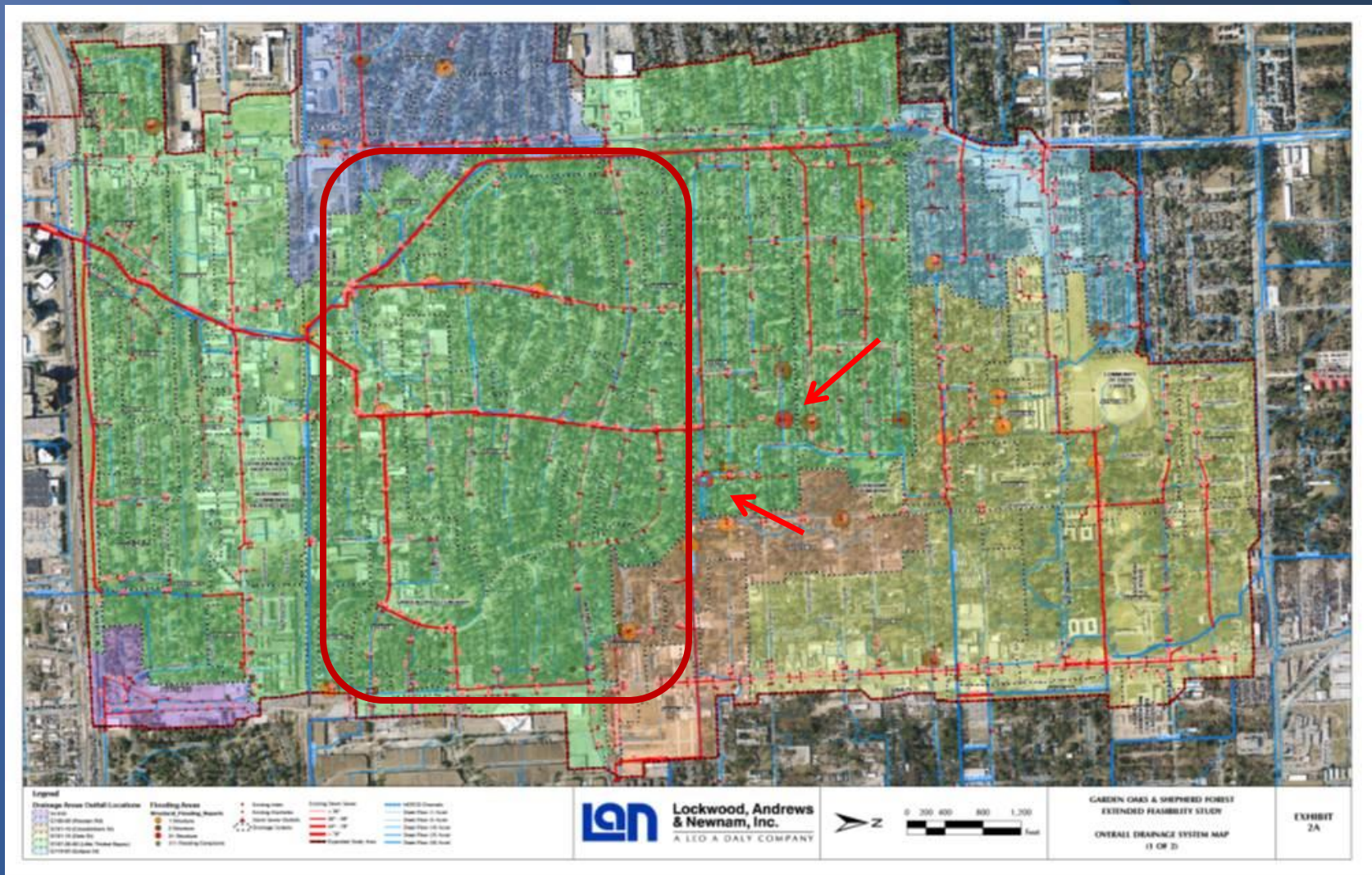
Dane P. Schneider, P.E. – Managing Engineer

Jeffrey T. Hall, P.E. – Project Manager

Garden Oaks – Aerial View



Garden Oaks – Flooding Complaints



Higher Concentration to the North of Garden Oaks

Total Project – Flooding Counts

Project Name: Garden Oaks and Shepherd Forest Drainage and Paving Improvements

WBS No.: M-000285-0001-3

Table 1: Comparison of Structural Flooding and ECC

Flooding Instance	Total No. of Parcels	Total No. of Structures	Existing Condition [Impacted Parcels/Structures]	Task B - Inline Detention [Impacted Parcels/Structures]	% Reduction of Task B - 100 yr
⁽¹⁾ 2-yr HGL touching parcel boundary.	1897	3001	253	11	96%
⁽¹⁾ 100-yr HGL inundating an area > 100 sq ft of the respective parcel.			1368	178	87%
⁽¹⁾ 100-yr HGL touching building foot print			777	65	92%
Estimated Construction Cost (Millions)				\$	46.40

⁽¹⁾ This product is for informational purposes **ONLY** and may not have been prepared for or be suitable for legal, engineering or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of prop

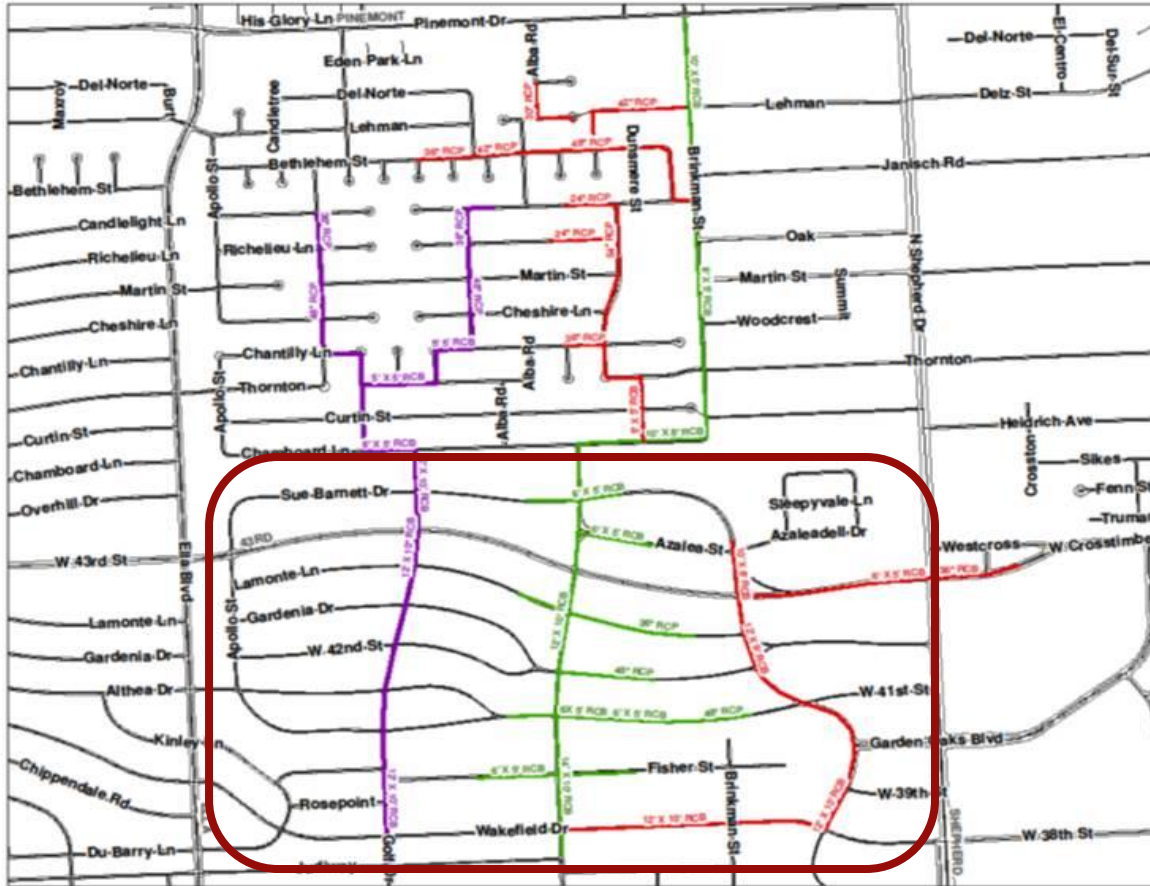
Used the following GIS layers to Geoprocess and perform the count:

* 2011 HCAD Parcels

*COH Building Footprint

- Impacted Parcels/Structures in Existing Conditions
- Impacted Parcels/Structures in Proposed Conditions
- Based upon Hydraulic Analysis

Garden Oaks – Proposed Storm System



Garden Oaks &
Shepherd Forest
Drainage & Paving
Improvements
M-000285-0001-3

Sub-Project 1

Sub-Project 2

Sub-Project 3

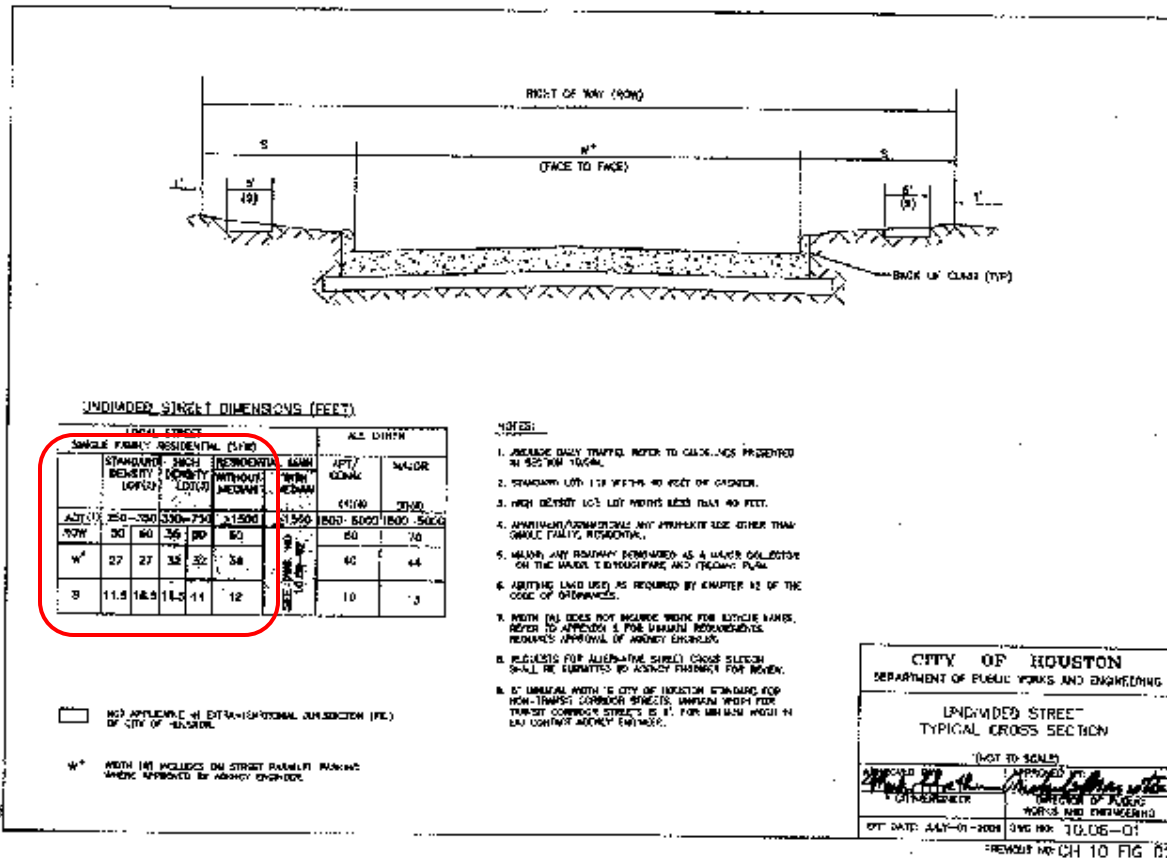
Garden Oaks – Proposed Pavement Section

CITY OF HOUSTON

Department of Public Works & Engineering

DESIGN MANUAL

Street Paving Design Requirements



Garden Oaks – Estimated Construction Cost

	SUB-PROJECT 1	SUB-PROJECT 2	SUB-PROJECT 3			
GENERAL ITEMS	\$706,000	\$784,000	\$750,000			
PAVING ITEMS	\$4,242,000	\$3,202,000	\$4,613,000			
STORM SEWER ITEMS	\$9,040,000	\$6,162,000	\$5,494,000			
WASTEWATER ITEMS	\$706,000	\$341,000	\$358,000			
WATER ITEMS	\$196,000	\$461,000	\$0			
TRAFFIC SIGNALS	\$163,000	\$163,000	\$0			
EXTRA ITEMS	\$11,000	\$9,000	\$5,000			
ALLOWANCES	\$21,000	\$11,000	\$12,000			
MOBILIZATION	\$603,000	\$445,000	\$449,000			
CONTINGENCIES	\$3,017,000	\$2,227,000	\$2,247,000			
TOTALS	\$18,705,000	\$13,805,000	\$13,928,000			
Adopted CIP	Fiscal Year 2015	Not Programmed	Not Programmed			



QUESTIONS?