



**Advisory Committee:** Minutes of Regular Meeting – September 23, 2014

*IN ATTENDANCE:*

Gilbert A. Herrera, Chair – **Present**

Jeri Brooks – **Present**

Frances Castaneda Dyess – **Present**

Kathryn Easterly – **Present**

Scott Elmer – **Present**

Vernita Harris – Absent, with notice

Bert Keller – **Present**

Jeff Ross – Absent, with notice

Edward Taravella – **Present**

Council Member Oliver Pennington, Ex-Officio – Absent, with notice

**1. Call to Order / Welcome**

Chairman Gilbert Herrera called the meeting of the ReBuild Houston Advisory Committee (RHAC) to order at 10:40 a.m. and thanked all in attendance. Also in attendance was Council Member Larry Green.

**2. Approval of the Minutes**

Motion to approve the August 26, 2014 meeting minutes was made by Ms. Jeri Brooks and seconded by Ms. Frances Castaneda Dyess. Motion carried.

**3. CIP Process Manual (Weighting & Prioritization)**

Mr. Dale Rudick introduced Mr. Paresh Lad (Senior Project Manager, Infrastructure Planning Branch of the Planning & Development Division) and Mr. Mark Loethen (Deputy Director, Planning & Development Division).

Mr. Lad gave a presentation on the *CIP Process Manual* and SWEET model refinements resulting from the Open Ditch Evaluation. He stated that the Open Ditch Evaluation has been completed and that it

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will greatly enhance the existing data which, in turn, will assist the Public Works & Engineering Department (PWE) to better evaluate potential flooding issues.

Mr. Loethen added that it is because of the additional data set from the Open Ditch Evaluation that PWE is able to make further adjustments to the *CIP Process Manual*. Data was collected for roadway cross culverts at intersections but did not include details related to individual private driveway culverts.

Mr. Lad shared that the Evaluation data examined right-of-way cross section information for the ditches and roadway cross culvert adequacies. He also informed the committee that the data compliments the Comprehensive Drainage Plan for storm sewers.

Chairman Gilbert Herrera asked Mr. Loethen how this new data set for open ditches will be beneficial. Mr. Loethen then stated that the data collected from the Open Ditch Evaluation is beneficial because it helps to deduce water flow, direction, capacity and to determine drainage boundaries. Combined with the LiDAR technology, PWE has a more accurate representation of what is happening in city neighborhoods. Mr. Lad stated that in previous years, areas with open ditches had to rely on observation to determine ditch adequacies. The Open Ditch Evaluation allows PWE to analyze neighborhoods for ditch adequacies and to scientifically determine a Level of Service.

Mr. Rudick added that the Open Ditch Survey greatly assists PWE in evaluating potential flooding issues within a community because often, when a citizen's home floods, they do not think to report it to 3-1-1. He then stated that it is a personal decision for a citizen to report whether their home flooded or not and if a citizen chooses not to report an incident, there is missing data. The Open Ditch Evaluation helps to determine if an area is subject to flooding.

Mr. Herrera inquired about what the process is for citizens to report flooding through their council member. Council Member Larry Green stated that within his District, he has constituents fill out flooding survey cards; and then that information is passed on to PWE. The information from the cards is then verified for accuracy and, if not already in the system, is logged into the database in an effort to continue to build a complete data set with an accurate representation of the city neighborhoods.

Mr. Edward Taravella asked for a further explanation of how flooding is reported through 3-1-1 and how flooding is verified. Mr. Rudick stated that when a call comes into 3-1-1 to report structural flooding, the call and all relevant information is logged into the system and a PWE representative will go out to the site to investigate and confirm facts. Mr. Rudick also shared that, to ensure accuracy of the data set, all addresses are cross referenced to make sure that the report is not already in the database.

Mr. Loethen stated that while we continuously work to get more and more detailed data, the data is not perfect and that if a council member feels as though a particular area is not identified, the council member should share this with PWE.

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### **4. Executive Report**

Mr. Rudick offered a brief overview of the presentation given by Ms. Susan Bandy at the September 11, 2014 Transportation, Technology and Infrastructure (TTI) Committee meeting, which was similar to the presentation made at the RHAC meeting last month. He also shared that, due to the detailed presentation given by Ms. Bandy at the TTI Committee meeting, four council members have requested to meet with her to continue the dialog.

Mr. Rudick informed the committee that the October 2014 meeting will include a presentation on "Communication & Public Engagement" as decided by the Committee earlier this year. Mr. Rudick noted that this presentation coincides well with the current emphasis on communication by Mayor Annise Parker. He then stated that the November RHAC meeting will include a presentation on "Pavement Condition Data Sets & Improvements".

Mr. Rudick referenced the exhibit in the meeting packet on 'Drainage Utility Collections/Expenditures – Inception to Date (as of August 31, 2014) (attached).

### **5. Old Business/New Business**

Ms. Kathy Easterly inquired about missing ReBuild Houston signage at project sites.

### **6. Public Comments**

Mr. Judson Bryant asked for detailed funding information from previous years. Chairman Herrera stated that we do not have this information readily accessible at the moment. Mr. Herrera recommended that Mr. Bryant reach out to Mr. Rudick via email with his query.

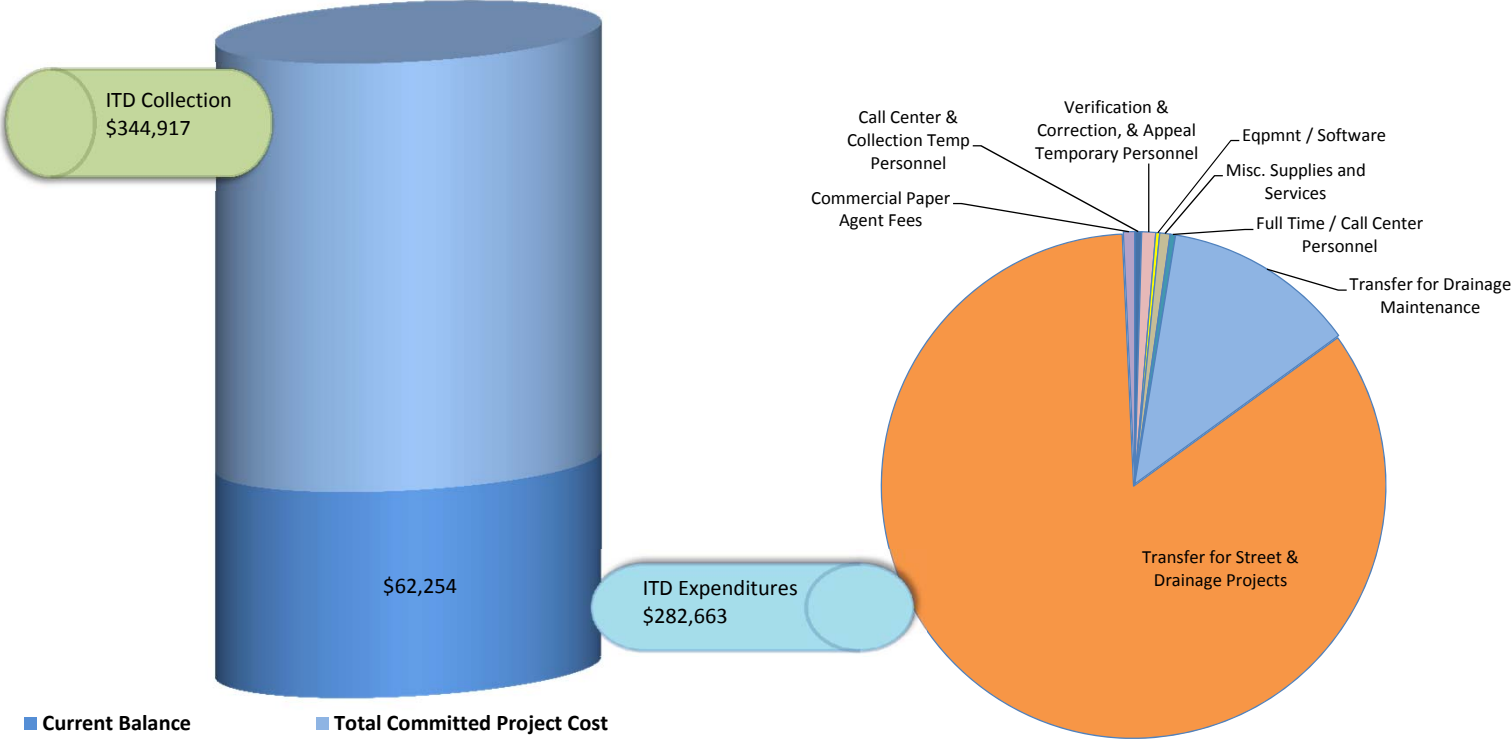
Another citizen in attendance asked for the committee to explain the difference between a CIP project and Operations & Maintenance services. Mr. Rudick shared examples of Operations & Maintenance (pothole patches and culvert cleaning) and examples of CIP projects (road reconstruction and street overlay). He also stated that another difference between the two is that CIP projects are typically lengthier, often taking two to six years to complete; while Operations & Maintenance services are much less timely.

### **7. Adjourn:** Meeting adjourned at 11:40 a.m.

#### **Attachments:**

- Drainage Utility Collections/Expenditures – Inception to Date (as of August 31, 2014)
- FY15 Refinements - PowerPoint Presentation

**Drainage Utility  
Inception to Date (ITD) Collections / Expenditures  
(\$ in Thousands)  
(As of August 31, 2014)**



■ Current Balance      ■ Total Committed Project Cost  
**Note: Currently committed project costs total \$191.8 Million.**

thumbs up



for progress

## REBUILD HOUSTON

*better streets. better drainage. better future.*



## FY15 Refinements

### Planning & Programming Updates for FY16-25 Prioritization

Department of Public Works & Engineering

# Today's Topics



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- CIP Process Manual Refinements
  - Open Ditch Data
- SWEET Refinements
  - Open Ditch Adequacy
  - Roadway Culvert Crossing Adequacy

### □ Storm Drainage

- Open ditch evaluation
- Road Culvert inadequacy (Impacts to Mobility)

### □ Candidate Projects

- Five Year time period to compete for funds
- Return to Need Area Prioritization

# SWEET Model Refinements



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- Data Sets
  - ▣ 2014 Traffic Counts (TDM)
  - ▣ PCR Data for Local Streets
  - ▣ FEMA Datasets
  - ▣ Citizen Reported (311), PWE Verified
  - ▣ CIP Town Hall Input
- Open Ditch Data
  - ▣ Survey data evaluated for adequacy



# SWEET Parameters

## Storm Drainage



**Table 2.1**  
**Storm Drainage Need Prioritization Weighting Factors**

Parameter	Percent
<b>Capacity of Existing Storm Drainage System</b>	<b>38%</b>
Design Event System Adequacy	40%
Extreme Event System Adequacy	20%
Reported "Non-Structural" Flooding	40%
<b>Existence of Structural Flooding</b>	<b>38%</b>
Reported "Structural" Flooding	65%
Flood Insurance Claims	35%
<b>Drainage Impacts to Mobility</b>	<b>24%</b>
Reported "Street Impassable" Flooding	100%

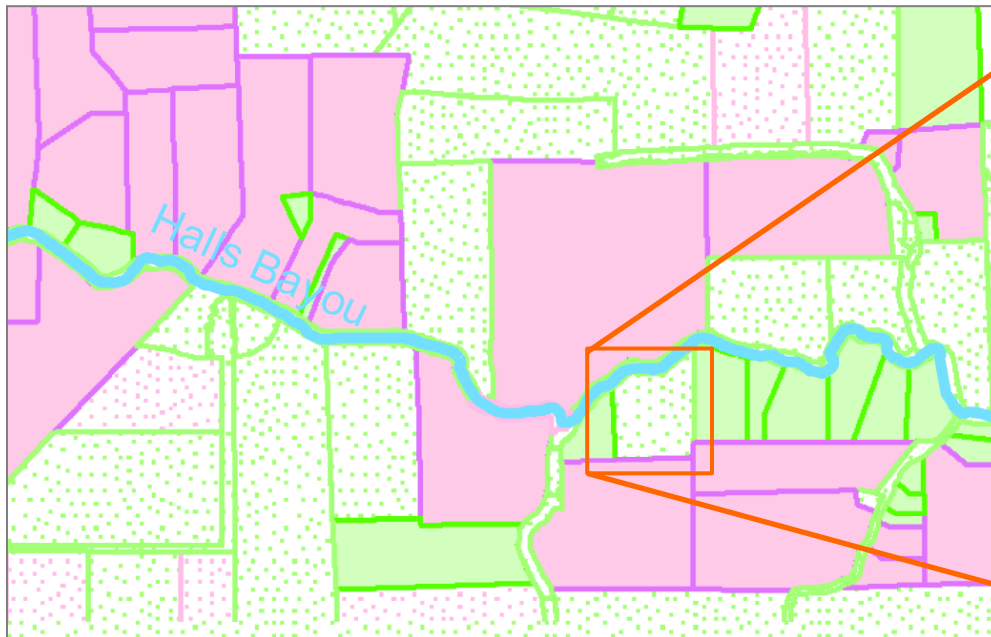
Incorporate  
 Ditch  
 Adequacy

Incorporate  
 Culvert  
 Adequacy

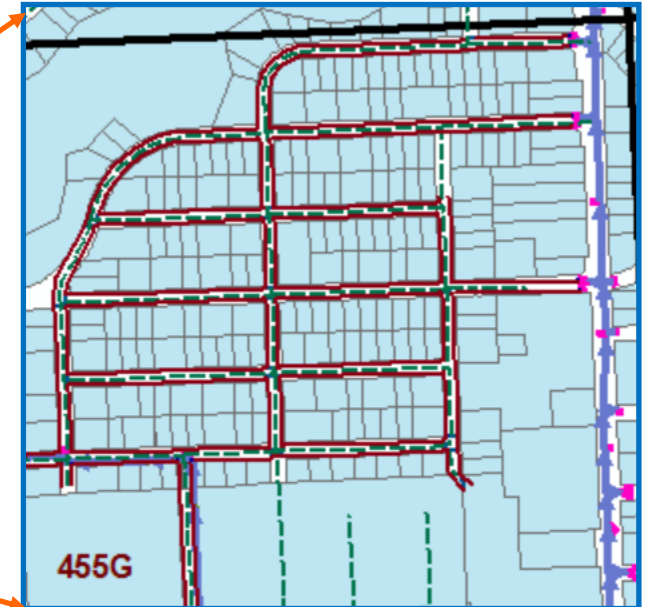
# Open Drainage Assets Analysis versus Observation

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- Systems “by Observation” relied on reported structural flooding
- Inventory and Survey Data will be used to Analyze Drainage Area and Capacity (Adequate/Inadequate)



Design System Adequacy Parameter

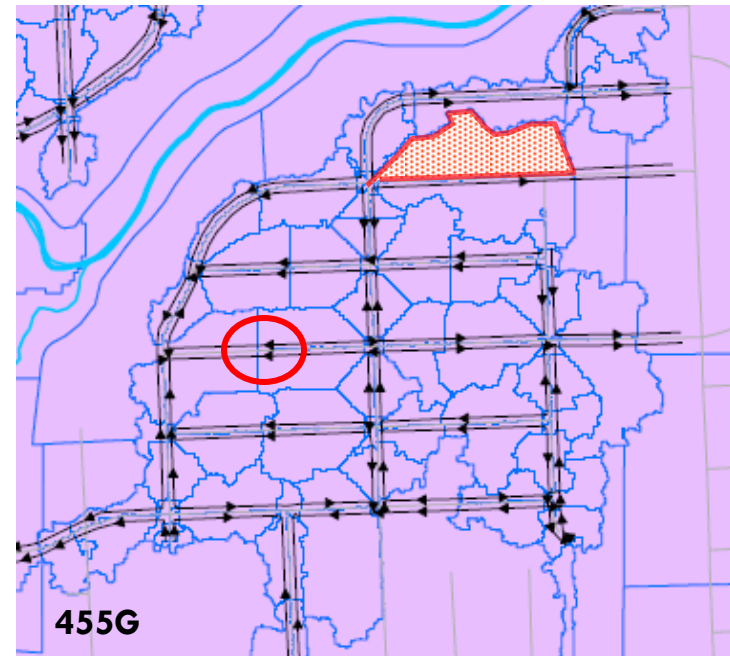
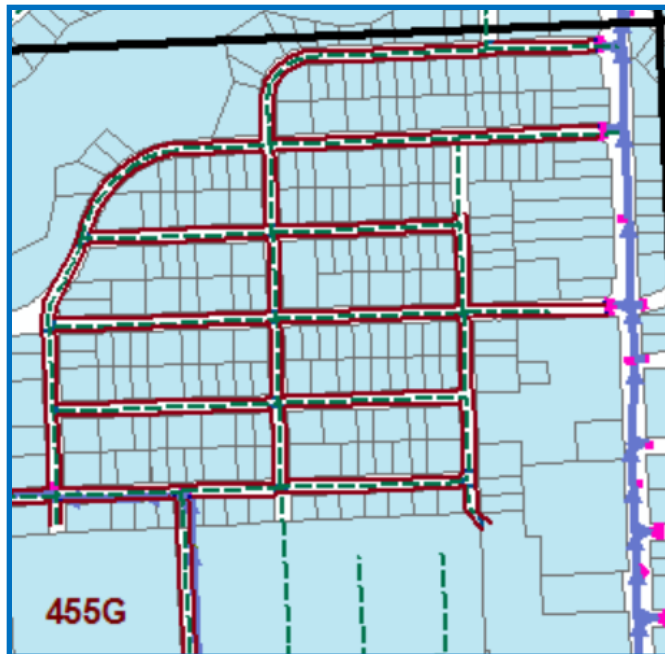


Key Map 455G

# Open Ditch Evaluation Drainage Areas

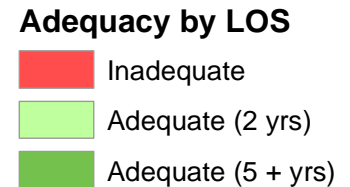
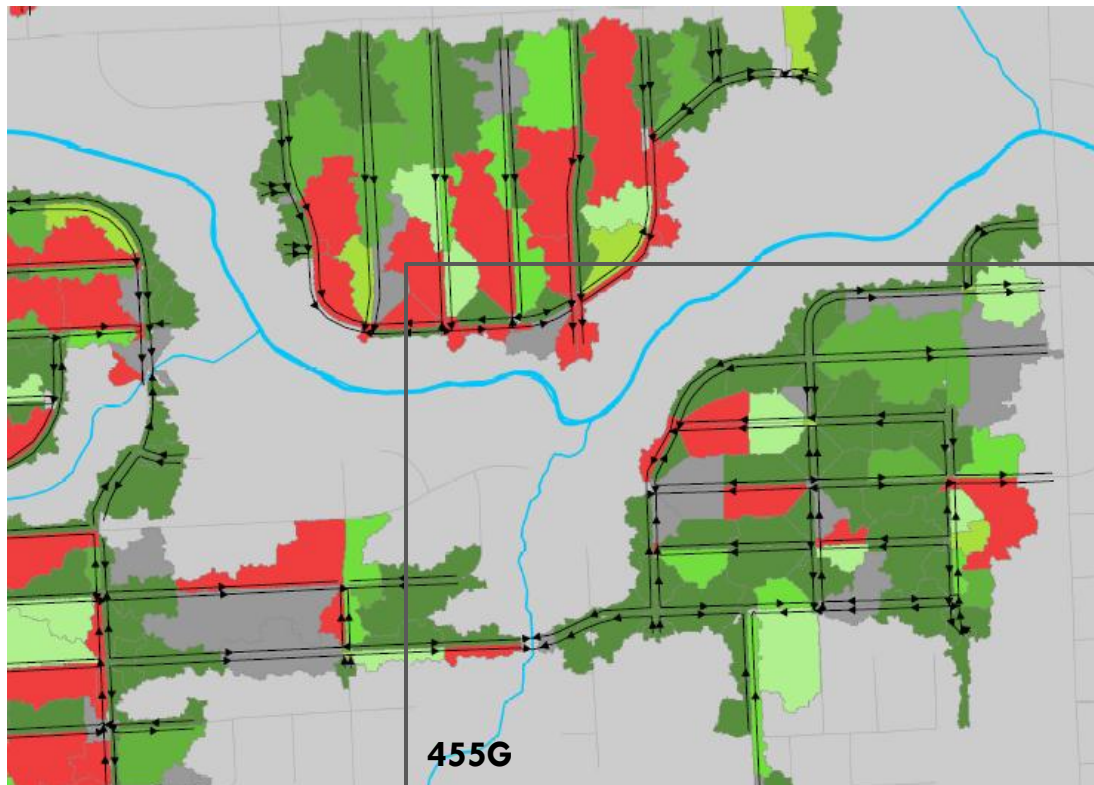
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- Define Drainage Area to determine runoff/flow

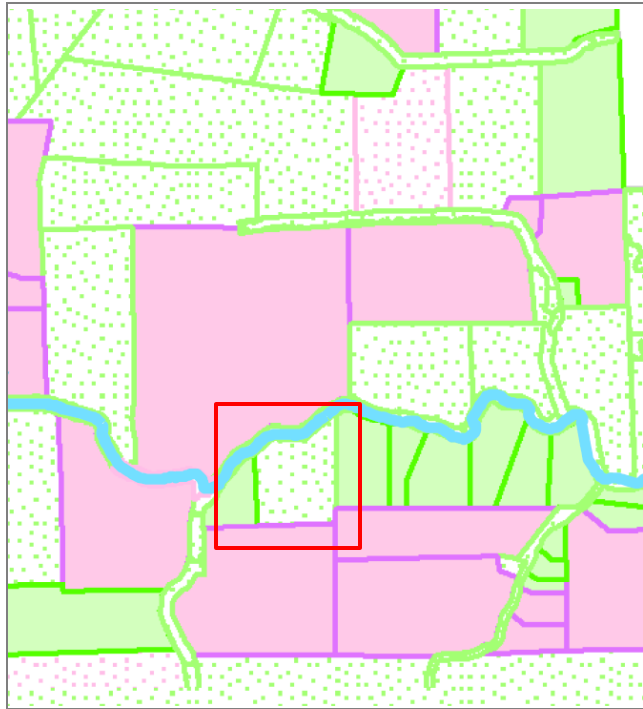


# Open Ditch Evaluation Design Event Adequacy

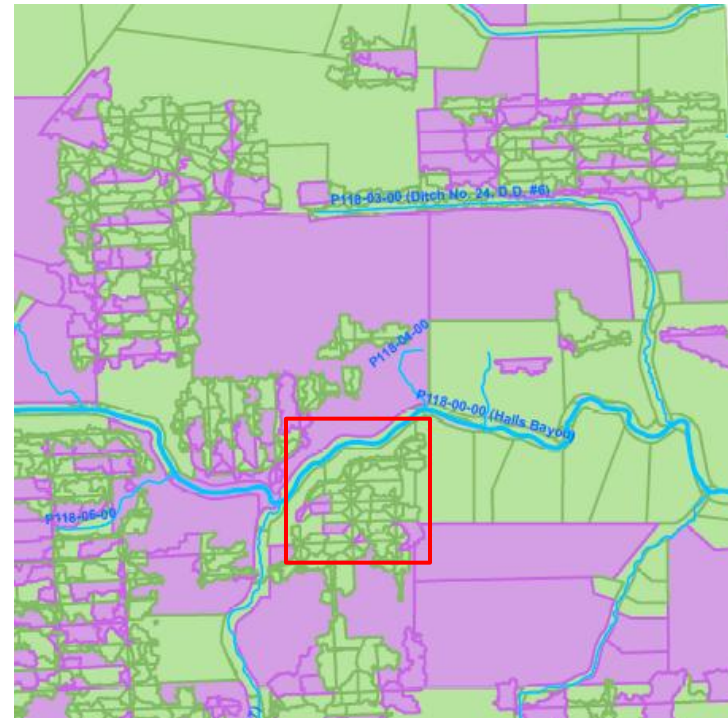
- Compare Flow to Ditch Capacity
  - ▣ Operational applications



# Open Ditch Evaluation Improved Data



Before FY15



FY15

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**QUESTIONS**

**[www.ReBuildHouston.org](http://www.ReBuildHouston.org)**