

# Public Meeting

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Diversion and Abandonment of Kirkwood #3 LS to New Harvest Moon LS  
WBS No. R-000536-0021-3



Presented by  
Public Works and Engineering  
City of Houston

District: G  
Council Member: Oliver Pennington

June 11, 2015 at 6:30 p.m.  
Briarwood School, 12207 Whittington

# Agenda for the Public Meeting

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1. Opening Remarks by Council Member's Office
2. Introduction of all participants
3. Project Presentation
4. Questions and Answers
5. Closing Remarks by Council Member's Office

# Purpose of the Project

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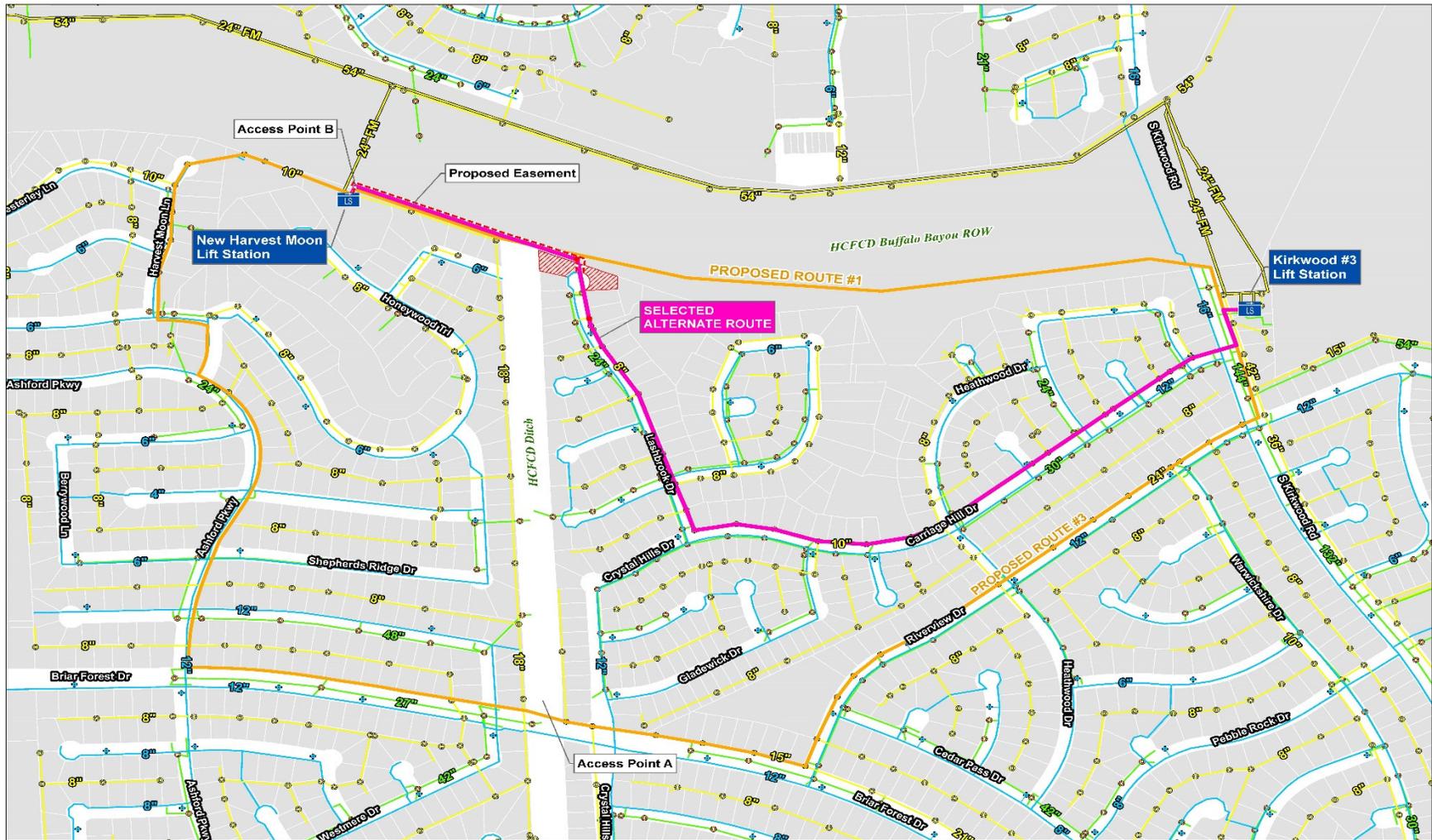
- This project is a part of City of Houston's (COH) ongoing plan to consolidate its Wastewater Facilities to improve the efficiency of the wastewater infrastructure
- ARCADIS was retained by the City of Houston to evaluate the options of eliminating Kirkwood #3 Lift Station (LS) by diversion to the new Harvest Moon LS.
- The existing Harvest Moon LS is being replaced with a new regional lift station with increased capacity capable of handling flows from the Kirkwood #3 LS. Construction of Harvest Moon LS will begin in 90 to 120 days.
- COH reviewed alternative alignments & recommendations prepared by ARCADIS for the diversion of Kirkwood #3 LS and selected the most feasible alignment for final design.

# Benefits of Ongoing Projects

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- Capacity of the Harvest Moon LS will be increased. The new LS will be compliant with relevant design standards.
  - Increased capacity will prevent the frequent high wetwell levels at LS during heavy rains, that causes backup in collection system and consequent overflows from upstream manholes
  - The LS is elevated above the floodplain to keep it operational during flood events
- Kirkwood #3 LS will be eliminated and diverted via gravity to the New Harvest Moon LS
  - Existing LS wet well is undersized resulting in collection system surcharge. Proposed diversion line will eliminate surcharges in the collection system.
  - Elimination of lift station will eliminate the susceptibility of pump failures and resulting overflows

# Overall Layout of Kirkwood #3 Project.



**Legend**

<b>Proposed Relief Sewers</b>	<b>Houston GIMS Wastewater</b>	<b>Houston GIMS Stormwater</b>	<b>Houston GIMS Water</b>
LS Lift Station	Existing Manhole	Existing Manhole	Existing Hydrant
Sewer Alignment	Existing Force Main	Existing Gravity Main	Existing Meter
	Existing Gravity Main		Existing Pressure Main
			Existing Lateral



Z:\GIS\Projects\CDM\_LMS\Stations (TX\000942)\MXD\2015\_06\_02 Kirkwood #3 (Selected Alt Route).mxd

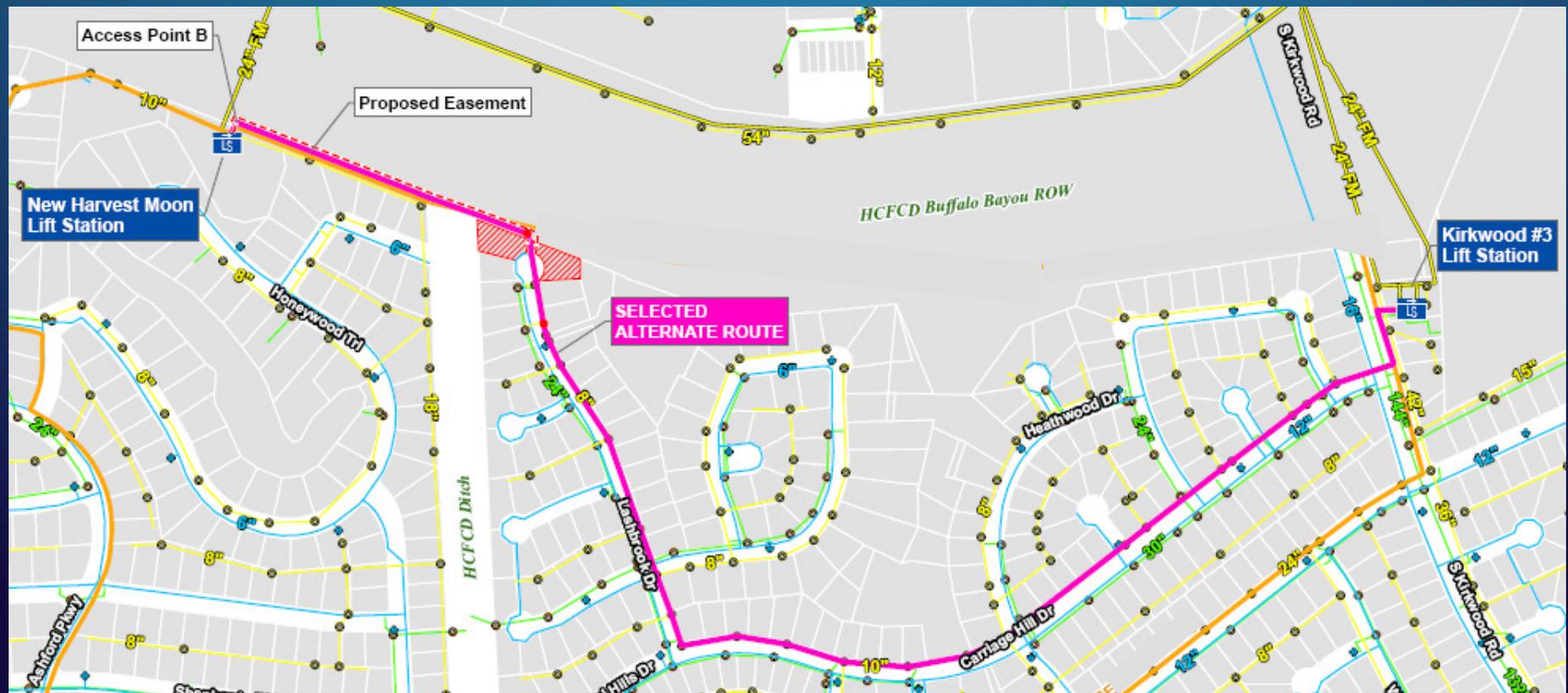


**CITY OF HOUSTON**  
**KIRKWOOD #3 LIFT STATION**  
**DIVERSION AND ABANDONMENT**  
**SELECTED ALTERNATE ROUTE**  
 WBS No. R-000536-0021-3

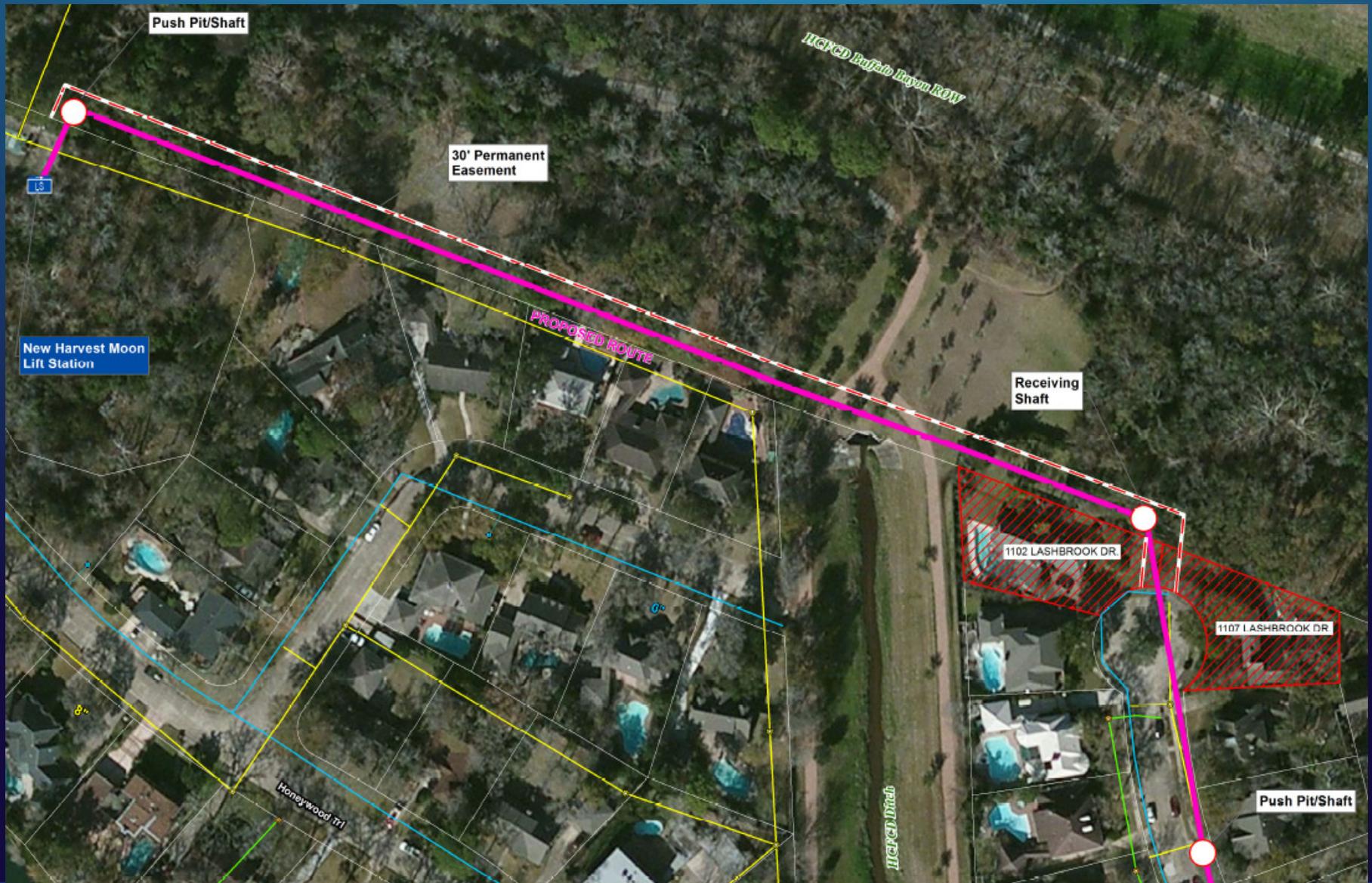


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 Houston, TX 77042  
 Tel: 713-953-4800 Fax: 713-977-4620  
 www.arcadis-us.com  
 Texas Registration Firm No. F-533

# Kirkwood #3 Relief Sewer



# Kirkwood Lift Station #3



# Scope of work

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## For Diversion Line from Kirkwood #3 LS to Harvest Moon LS

- Install 5,200 linear feet of sanitary sewer 42 inch diameter pipe by Micro tunneling
- Purchase Easements from HCFCD, and 1 and / or 2 private home owners

## For Harvest Moon Lift Station site

- Upgrade Harvest Moon LS to handle flows from Kirkwood #3

## For Kirkwood #3 Lift Station site

- Demolish existing Kirkwood #3 lift station and all associated infrastructure in accordance with the TCEQ and COH Requirements
- Intercept and divert influent sanitary flows incoming to Kirkwood #3 to the 42-inch sewer

# Kirkwood Lift Station #3



# Kirkwood Lift Station #3



Intersection of S. Kirkwood Dr. and Carriage Hill Dr.



Carriage Hill Dr. Looking East

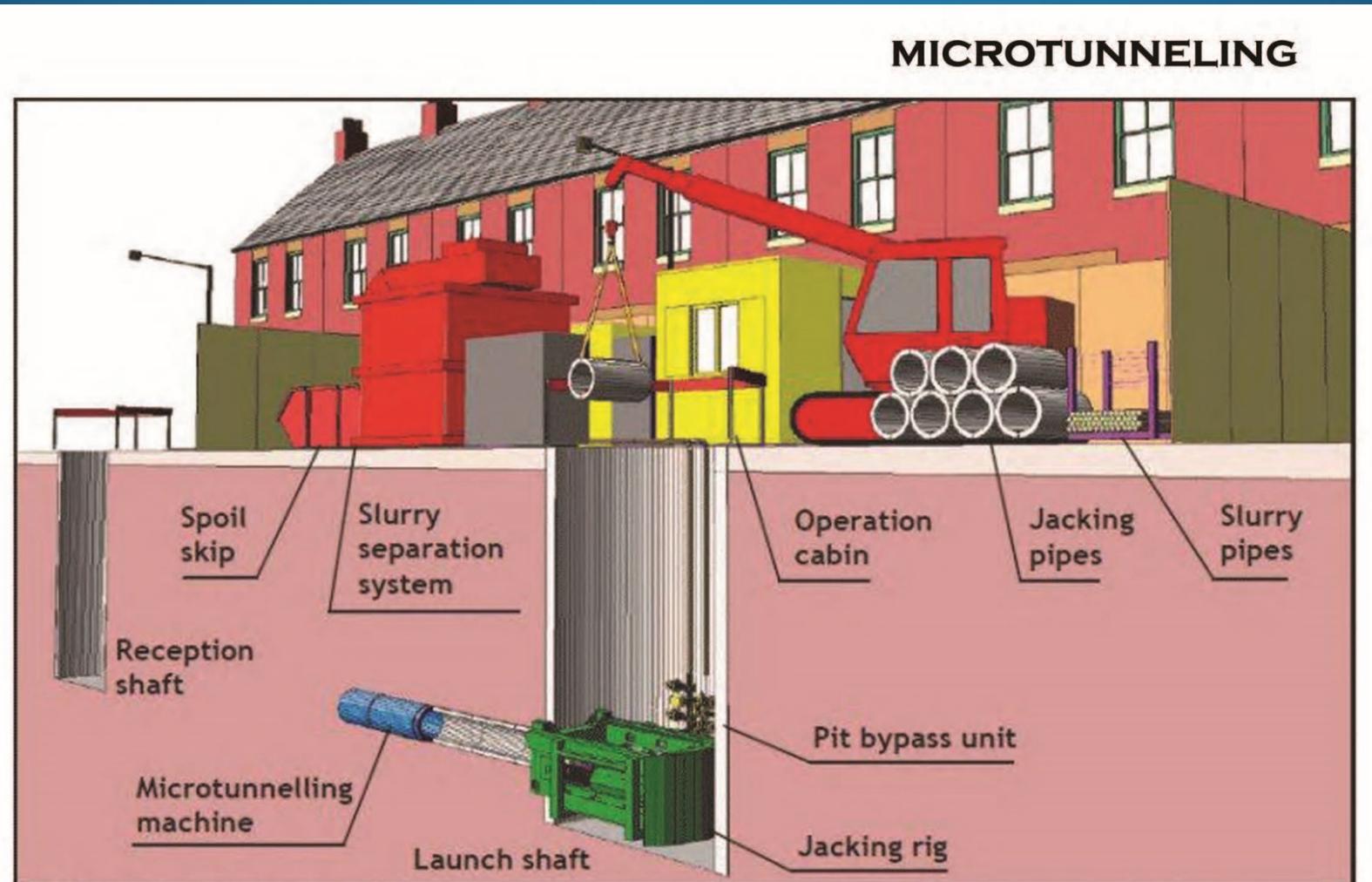


Intersection of Carriage Hill Dr. and Lashbrook Dr.



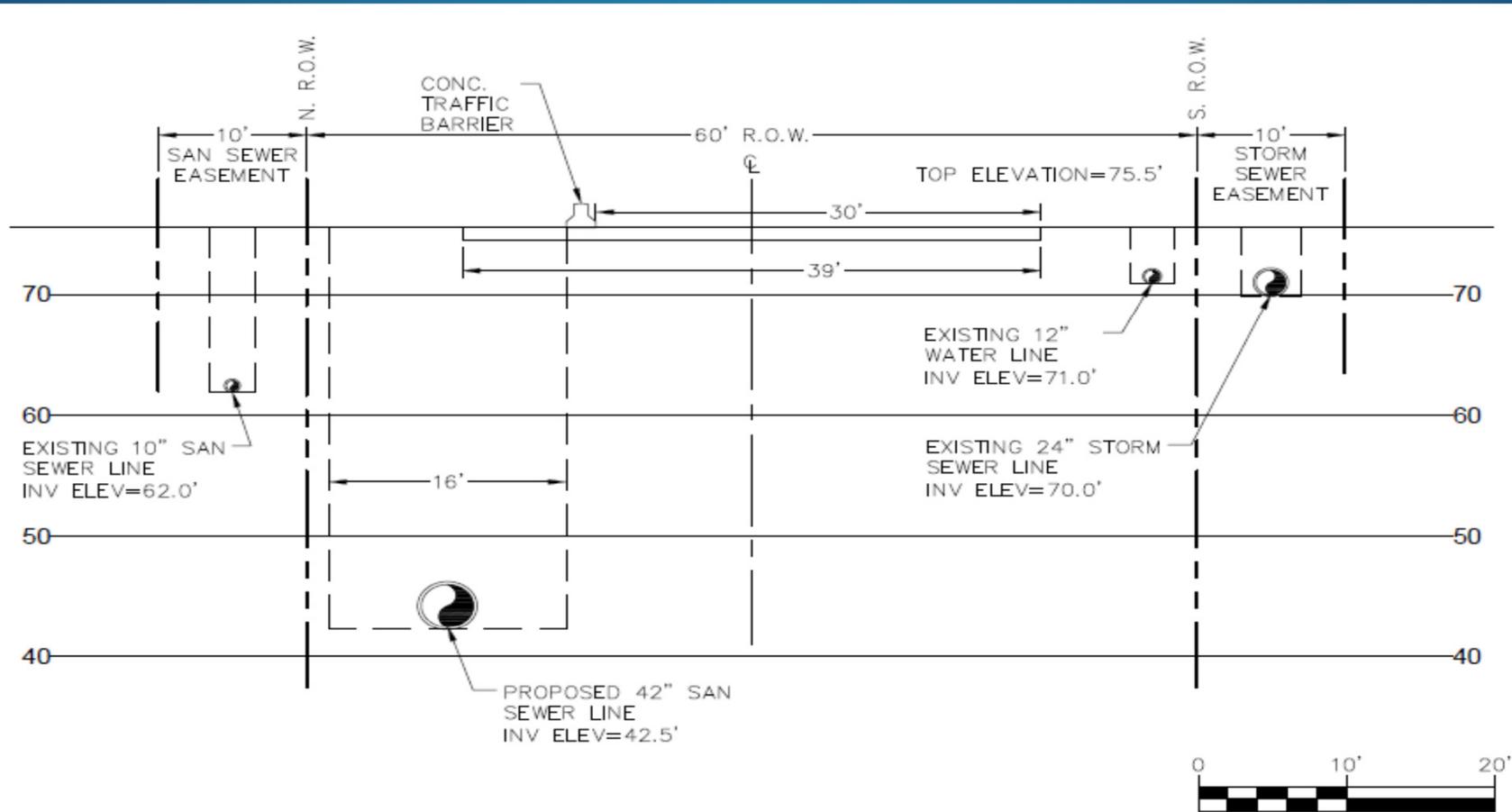
Street View along Lashbrook Dr. looking South

# Microtunneling



Iseki Microtunneling image

# Profile – Carriage Hill Drive

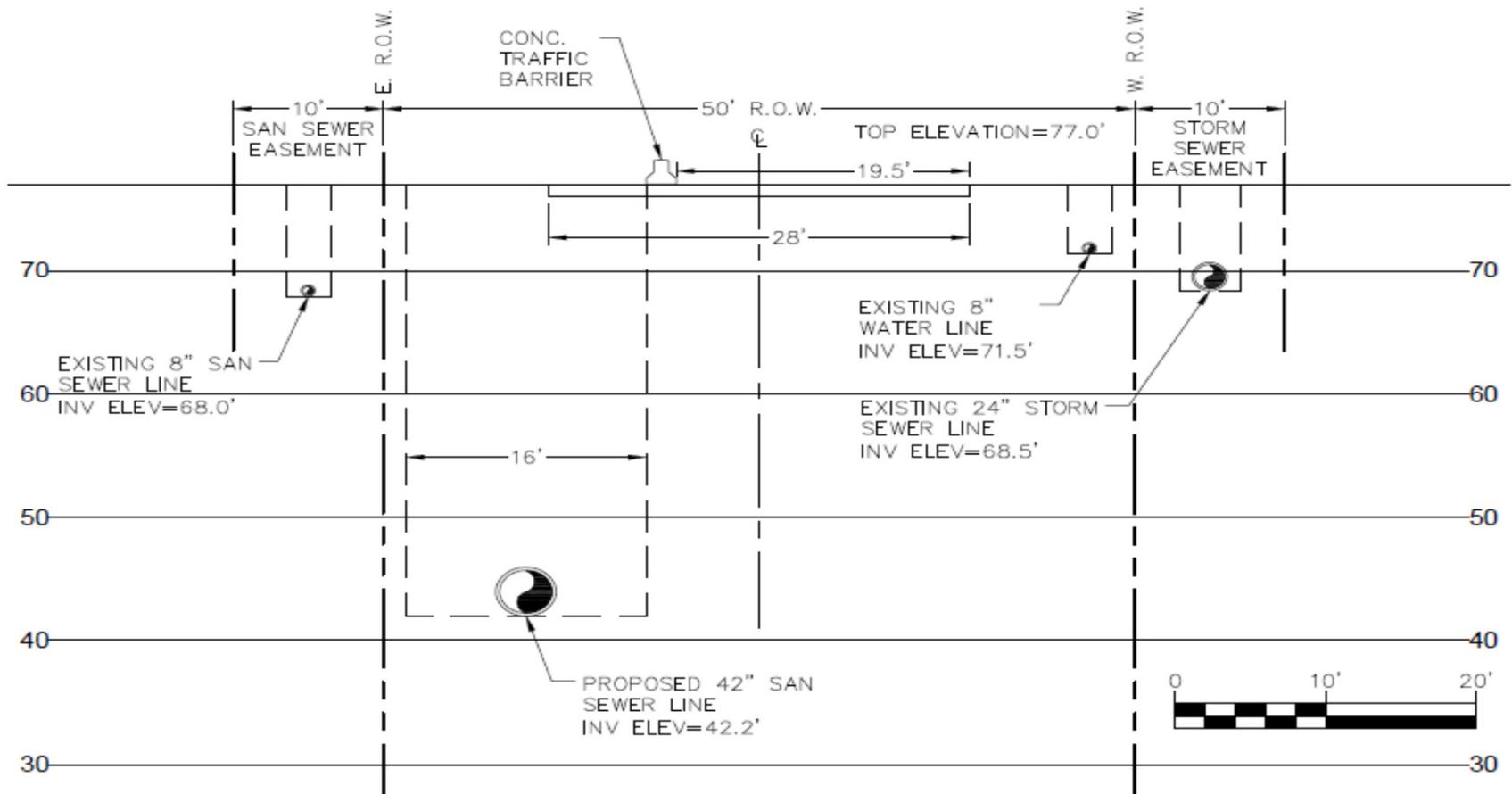


CITY OF HOUSTON  
 LIFT STATION DIVERSION &  
 ABANDONMENT PROJECT  
 WBS NO. R-000536-0021-3

PROFILE – CARRIAGE HILL DRIVE  
 (LOOKING EAST)  
 PUBLIC MEETING

JUNE 2015

# Profile – Lashbrook Drive



CITY OF HOUSTON  
 LIFT STATION DIVERSION &  
 ABANDONMENT PROJECT  
 WBS NO. R-000536-0021-3

PROFILE – LASHBROOK DRIVE  
 (LOOKING SOUTH)  
 PUBLIC MEETING

JUNE 2015

# Anticipated Urban Forest Impacts



**Access Point B: Launch shaft location at Harvest Moon LS – Cleared area with minimal tree impact**



**HCFCD Access Point A: Clearance prune and root protection with wooden matting**

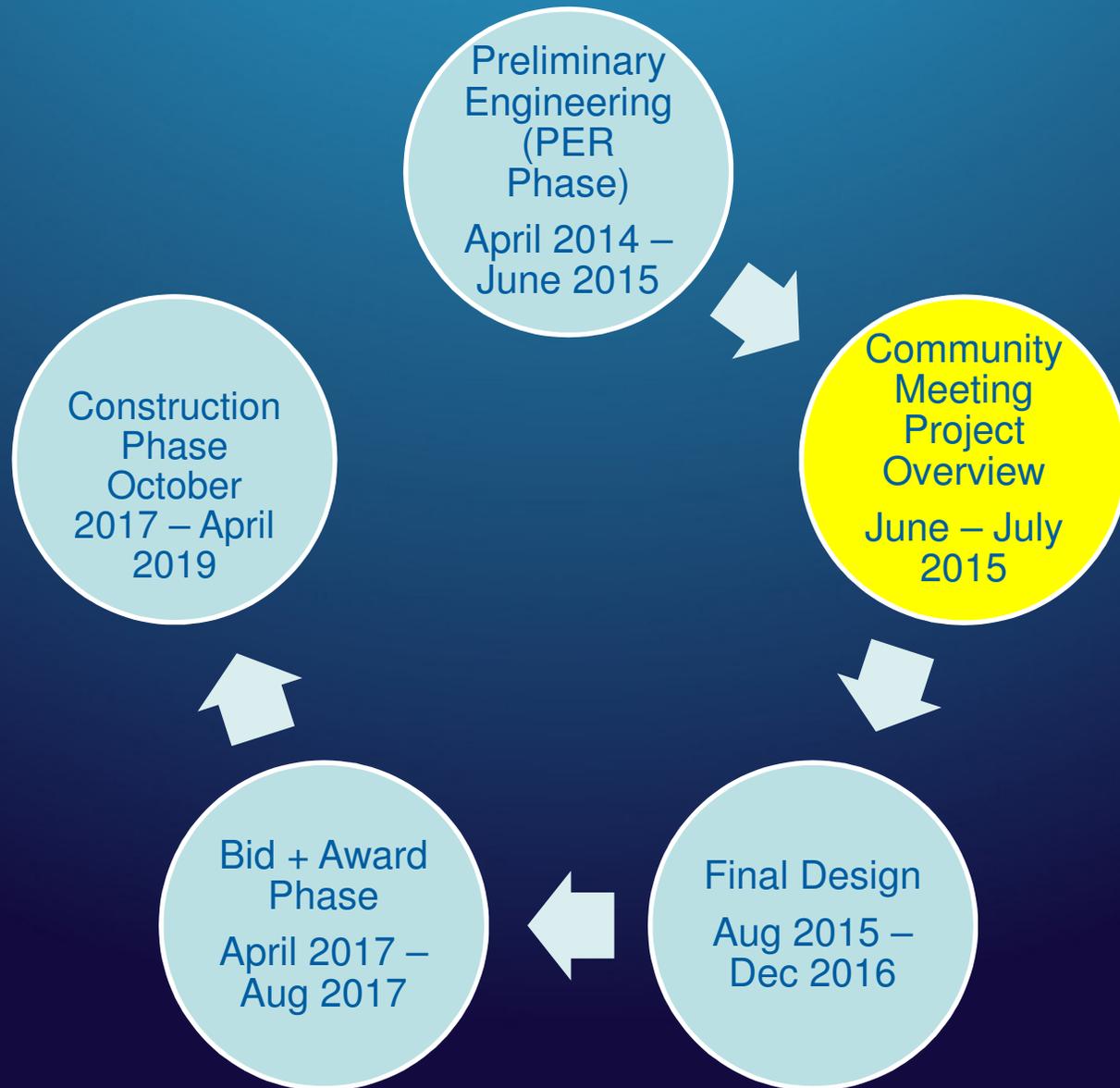


**190' section of brush clearing between HCFCD & Lashbrook Cul-de-Sac**



**Lashbrook Cul-de-Sac Receiving Shaft Access Point – Protect trees by Clearance prune and wooden matting**

# Project Timeline



# Construction Impact for Residents

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- **Traffic Control:**  
Signs and Concrete Traffic Barriers will provide travel awareness/safety warnings during construction operation. Access to public roadway will be maintained at all times.
- **Construction Sequence:**  
Construction will take place within the City of Houston ROW. Street pavement will be cut and complete panels replaced for shaft installations.
- **Driveway:**  
Every effort will be made not to impact Driveways.
- **Sidewalk:**  
Minimal Impact on Sidewalks. One side to remain open at all times.
- **Utility Impact:**  
No major anticipated impacts.
- **Pre-Construction Public Meeting:**  
Tentative Schedule: August 2017 - October 2017

# Communication and Notices

Door Hanger and Coordination Process will be followed for :

- Geotechnical Activity
- Survey Activity
- Traffic Control Signs
- For Construction Activities



  
**PUBLIC NOTIFICATION**  
Surveying

[Date]

Dear [Address] Resident:

"[Survey Co Name]" has been contracted by [Consultant] who is under contract with the City of Houston to perform surveying work for the "[Project Name]". This project is a part of the City of Houston's ongoing Capital Improvement Program to upgrade neighborhood sewer systems.

The survey work will consist of [Activity] of the public right-of-way that is [Location] work will be conducted on [Date].

Should you have any questions concerning this work, please contact "[Consultant's PM]" at "[Phone #]".

Your cooperation is greatly appreciated.

Sincerely,  
"[Survey PM]"  
"[Survey Co Name]"

  
**PUBLIC NOTIFICATION**  
Geotechnical Investigation

[Date]

Dear [Address] Resident:

"[Geotechnical Co Name]" has been contracted by [Consultant] who is under contract with the City of Houston to perform geotechnical investigation services for the "[Project Name]". This project is a part of the City of Houston's ongoing Capital Improvement Program to upgrade neighborhood sewer systems.

The geotechnical investigation will involve collecting soil samples by drilling or excavating. These activities will be conducted on [Date].

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# Questions

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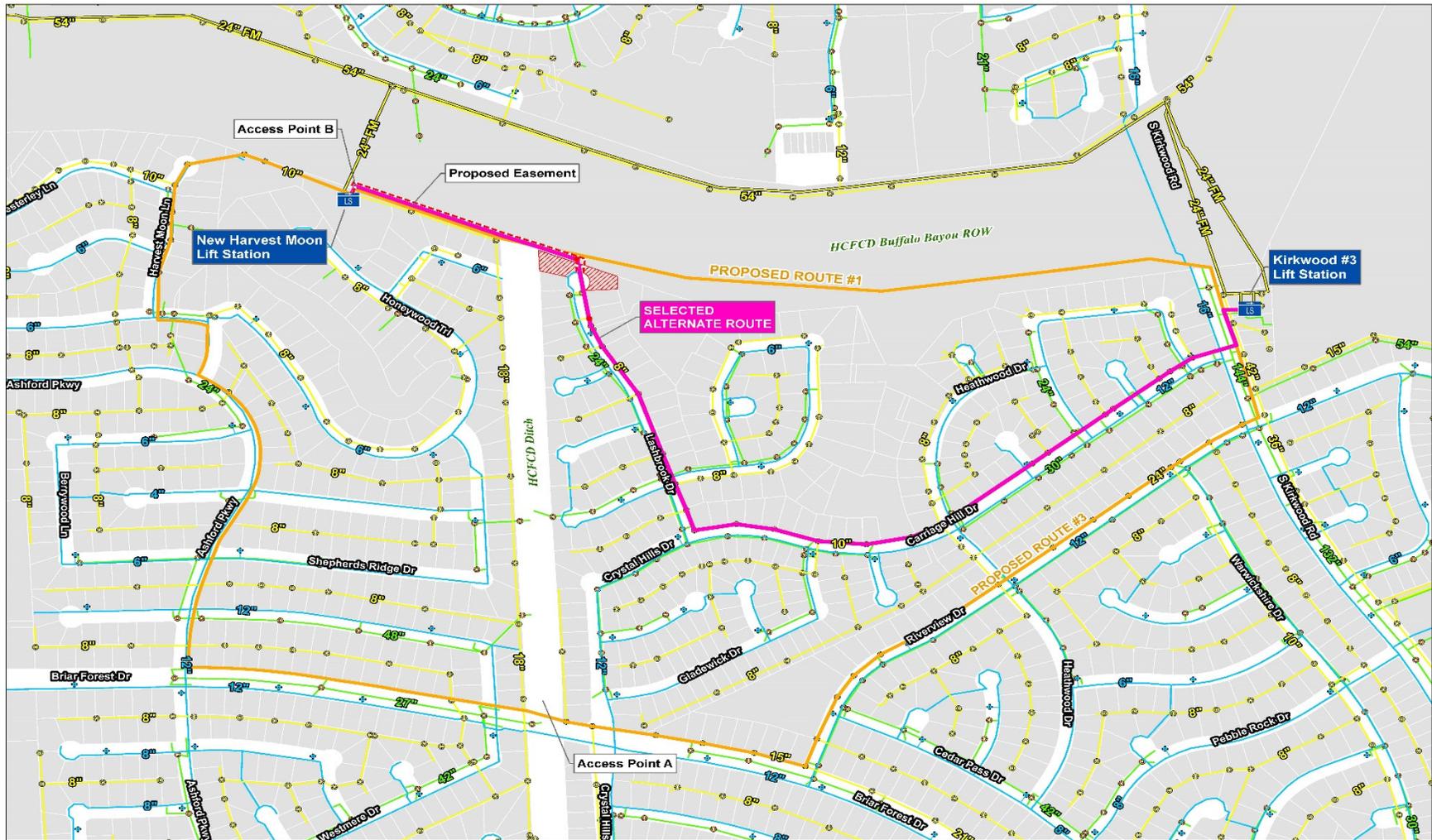
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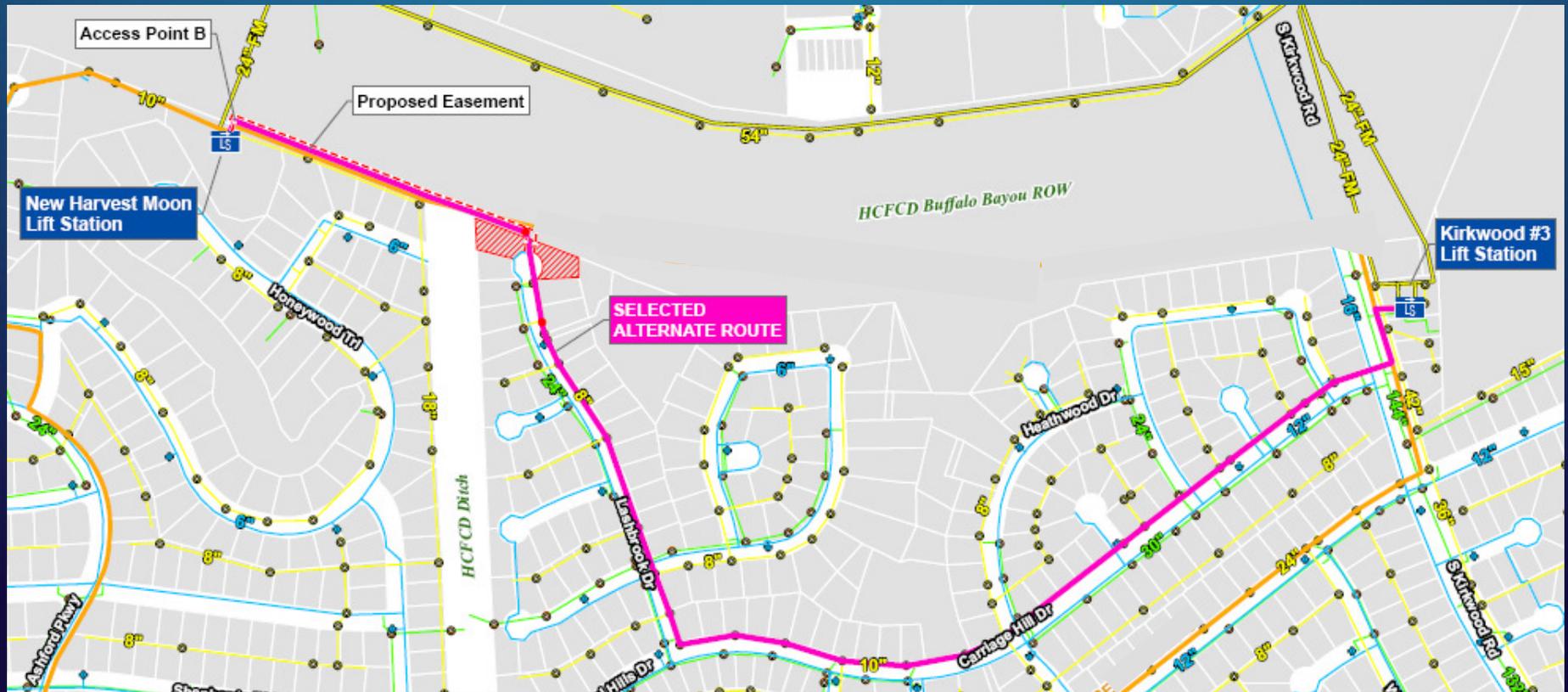


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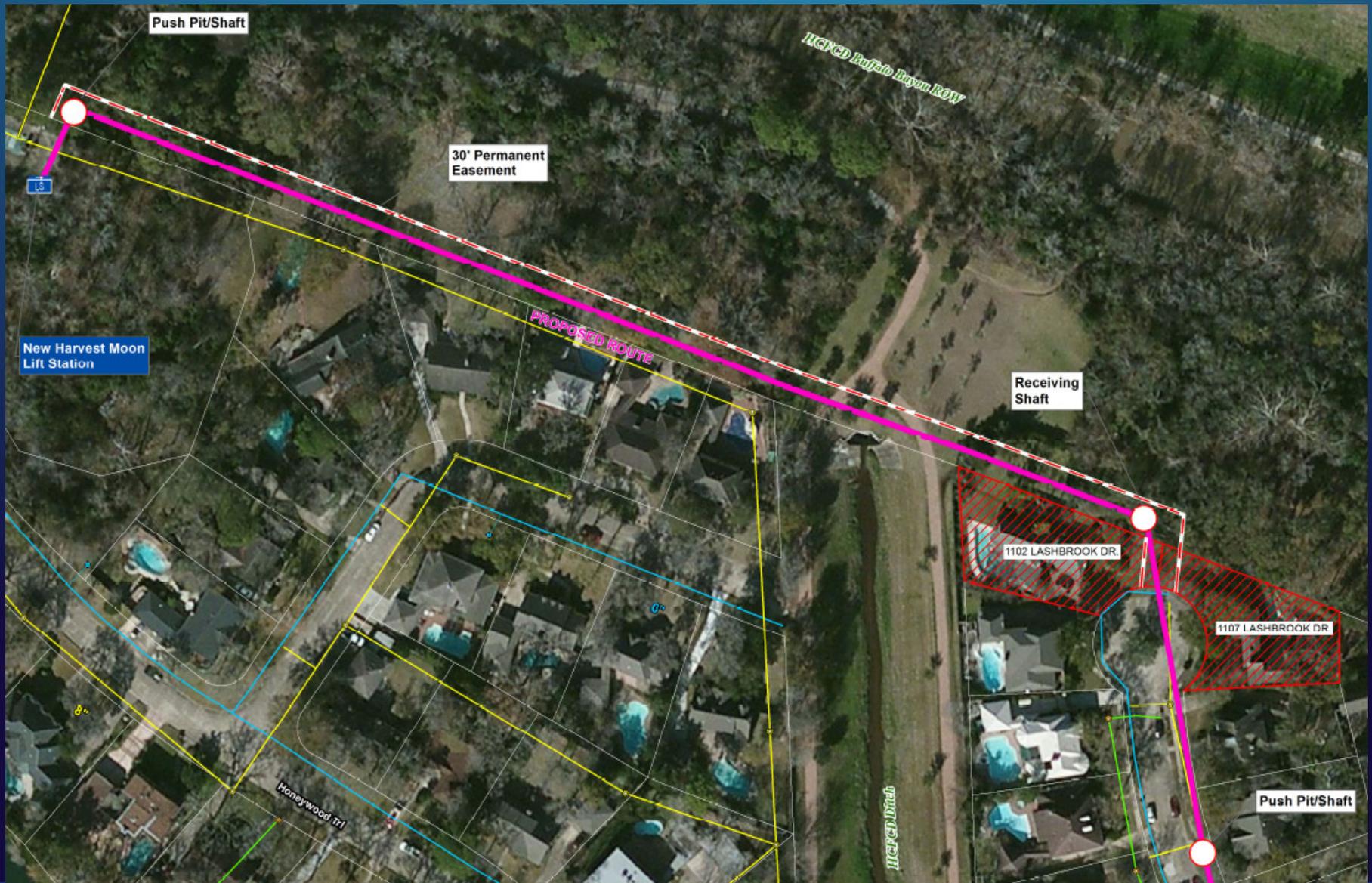


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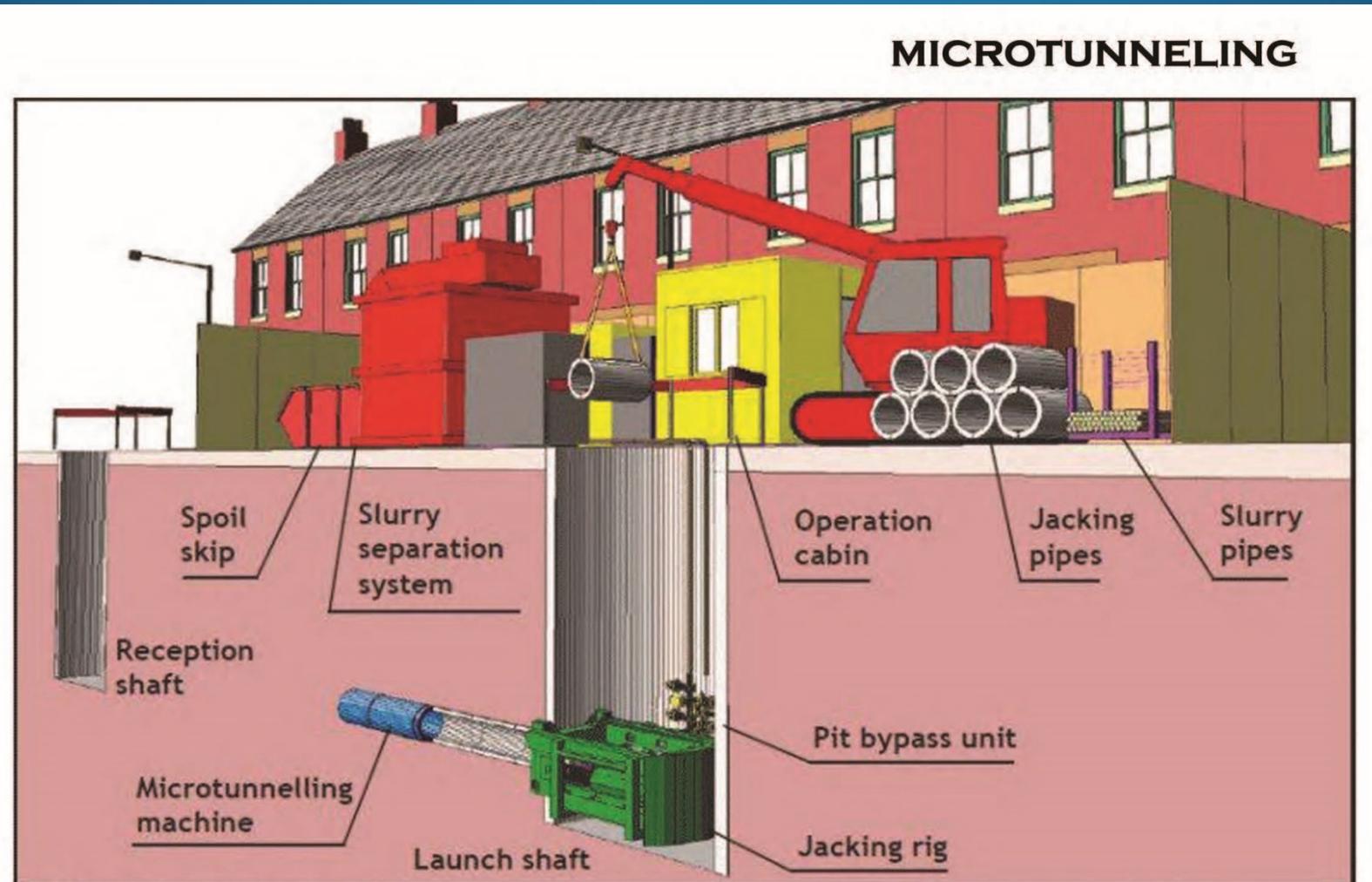


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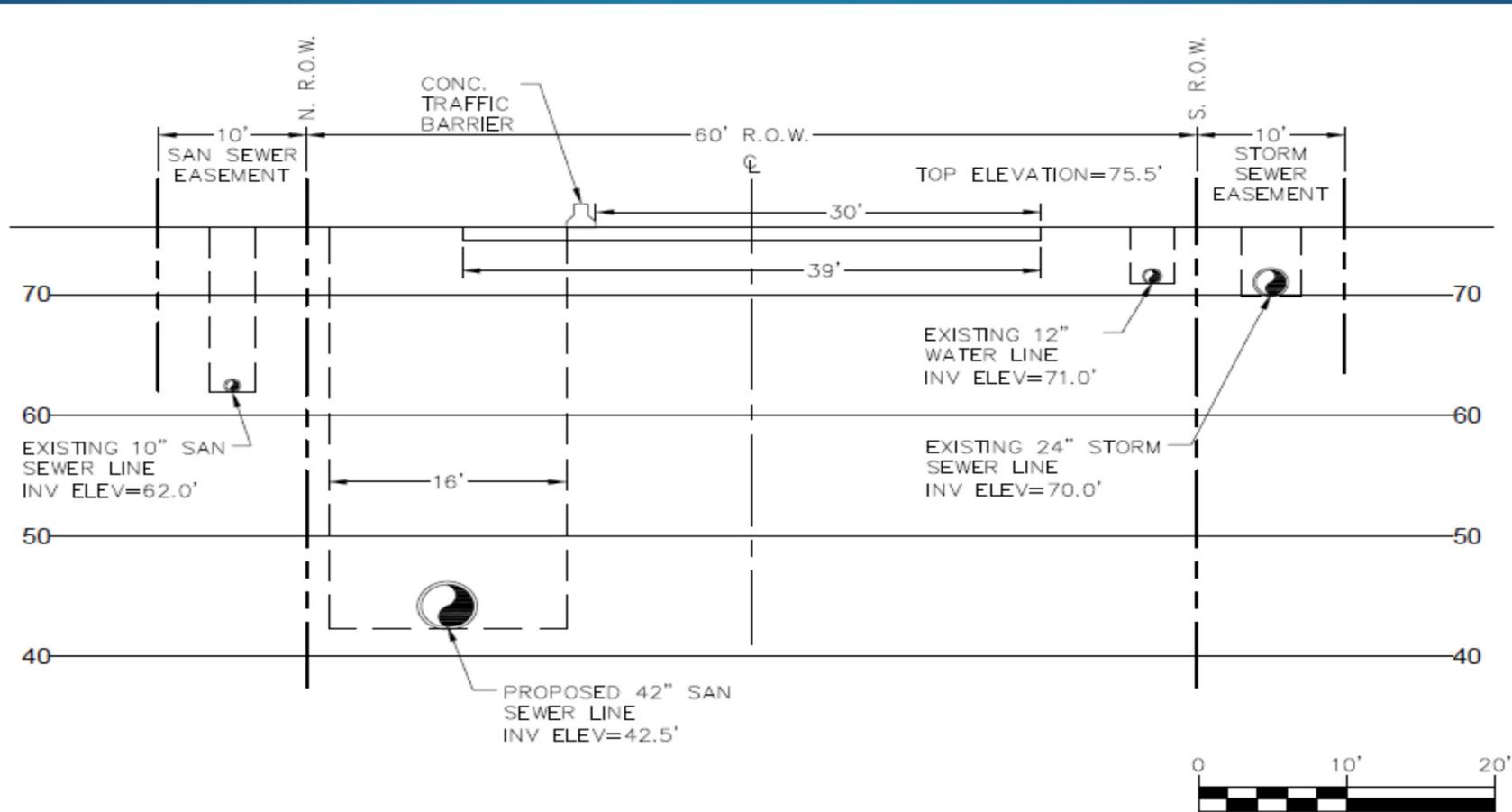
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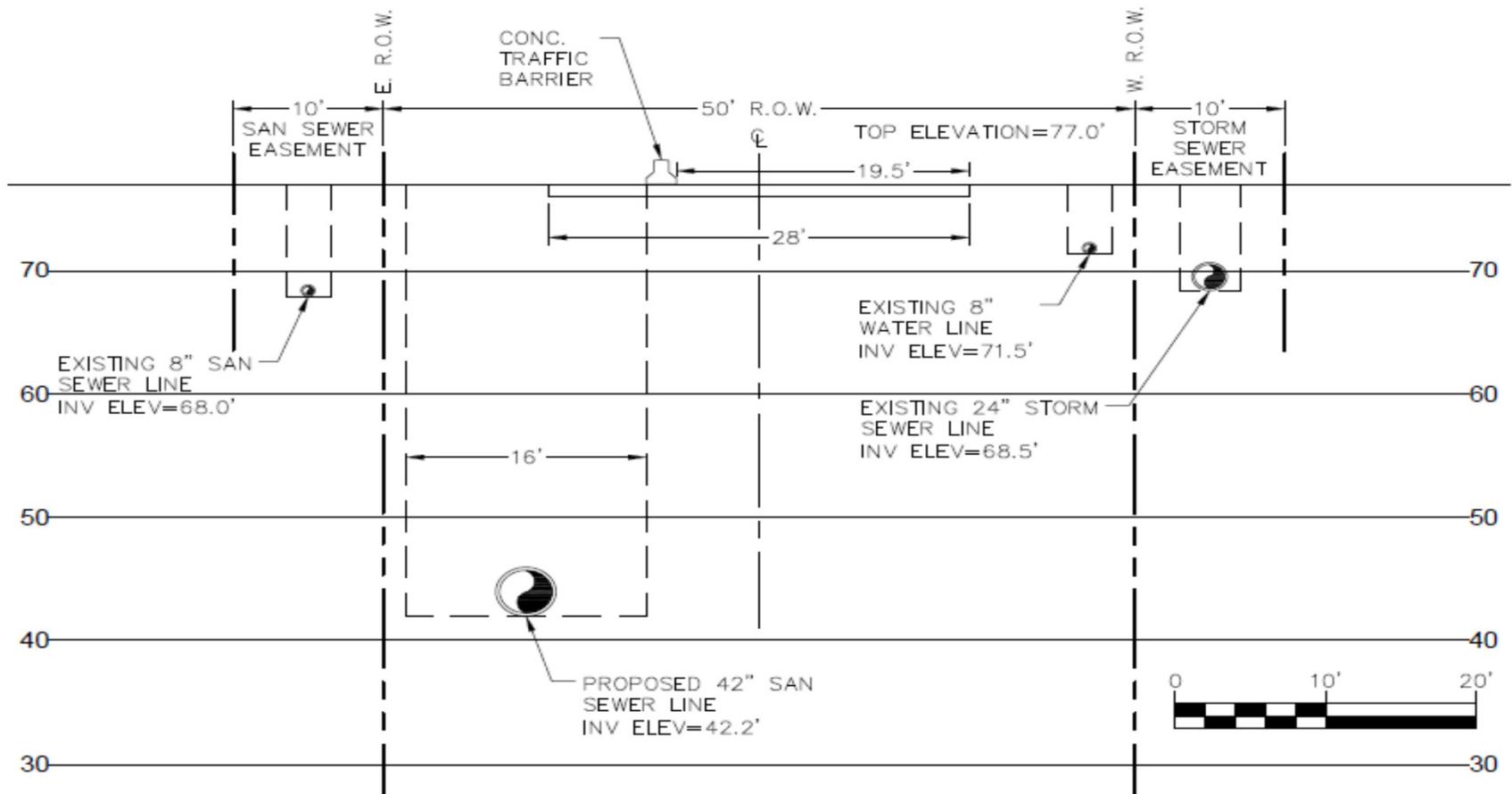


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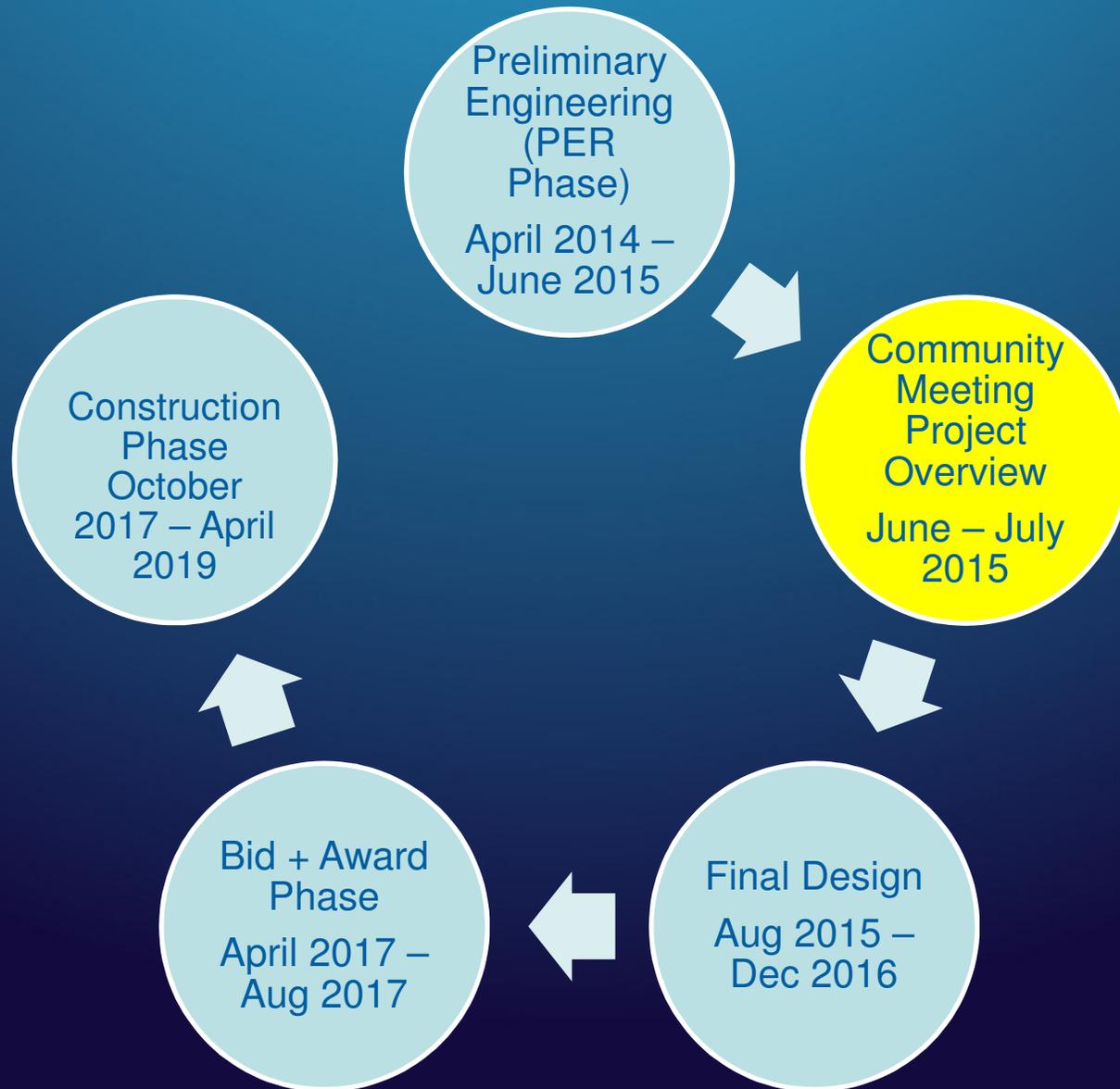


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