DESIGN CONCEPT REPORT

Jensen Drive From Kelley Street to IH-69

Stage 1 - Baseline Data June 23rd, 2025

Harris County Engineering UPIN: 24102MF34J01

Prepared by **Ardurra**

















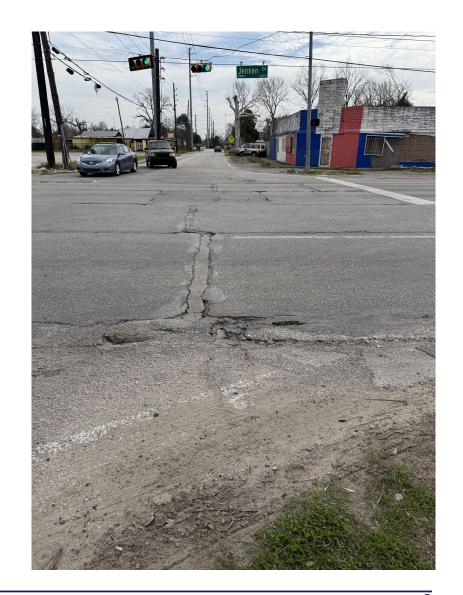




TODAY'S DISCUSSION

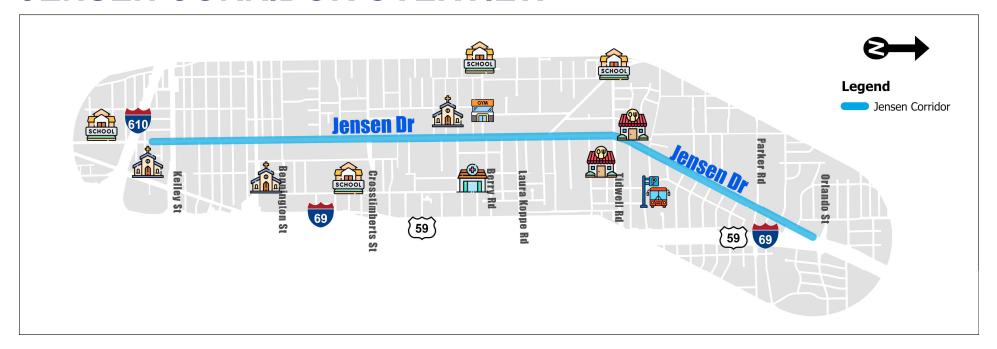
Jensen CORRIDOR OVERVIEW

- Corridor Background and Context
 - Roadway Conditions and Operations
 - Walk, Bike & Transit Networks
 - Safety
 - Drainage
- Future No Build
- Next Steps





JENSEN CORRIDOR OVERVIEW



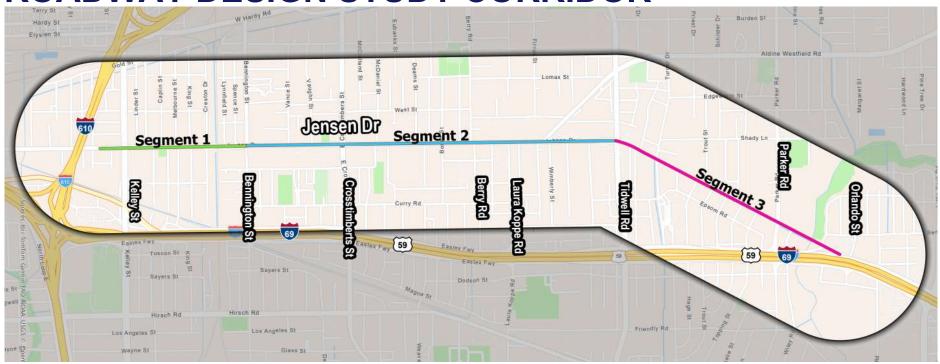
TAKEAWAYS

- Roadway Design Study Corridor:
 - 3.67-mile corridor. From Kelley Street to IH-69
 - Jensen Dr is a two-way major thoroughfare in northeast Houston (Harris County Precinct 2), running north-south between Kelley Street and IH-69 within Council District B and the Eastex-Jensen Super Neighborhood (46).
- METRO Tidwell Transit-Oriented Plan (TOD)

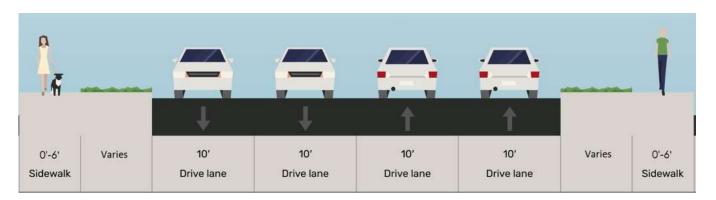
The Tidwell Transit-Oriented Development Plan outlines improvements for the Tidwell Transit Center and its surrounding area, which serves multiple local bus routes in the Eastex-Jensen neighborhoods of northeast Houston. The corridor is part of this plan and includes 4,070 residential properties



ROADWAY DESIGN STUDY CORRIDOR



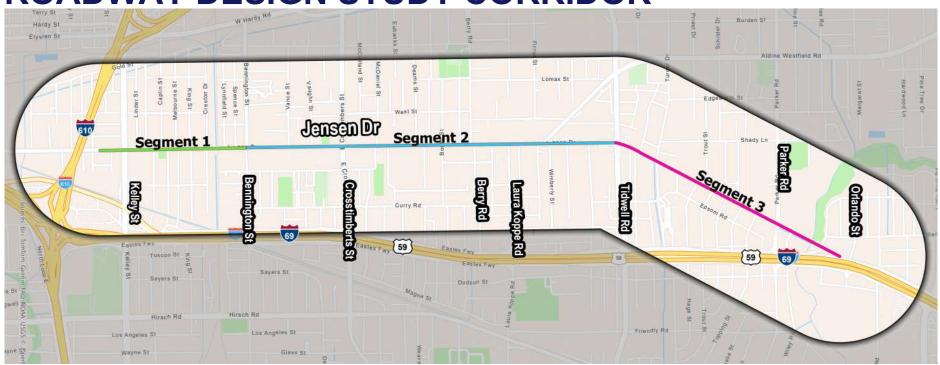
SEGMENT 1



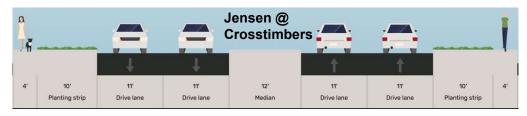
100' ROW The typical section shown here exists throughout the study corridor except where mentioned otherwise

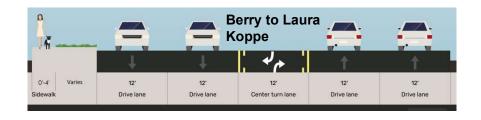


ROADWAY DESIGN STUDY CORRIDOR



SEGMENT 2

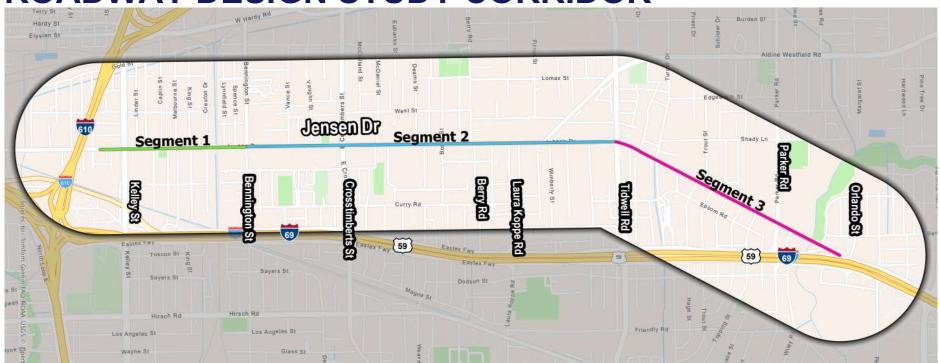




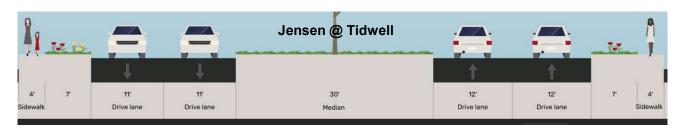
100' ROW



ROADWAY DESIGN STUDY CORRIDOR



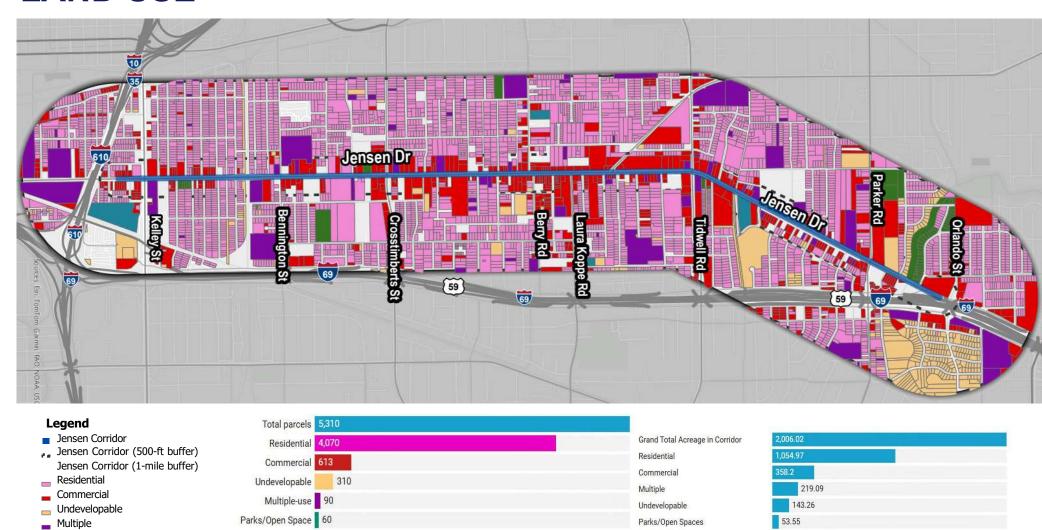
SEGMENT 3



• 90' – 100 ROW



LAND USE



Vacant Developable (includes Farming) 20.56



Parks/Open Spaces

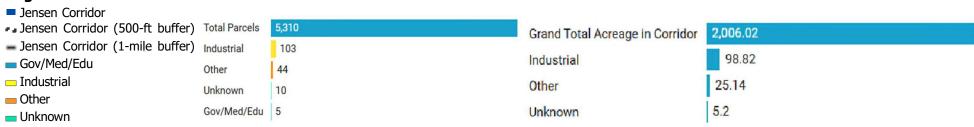
Vacant Developable (includes Farming)

Vacant 4

OTHER LAND USE



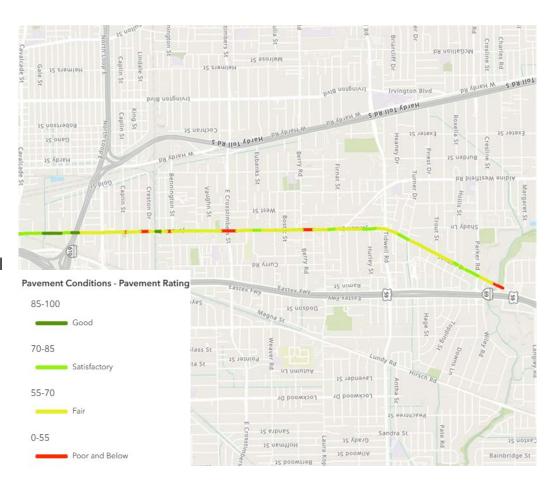
Legend





PAVEMENT QUALITY

- Corridor average PCI: 63.45Jensen Drive Pavement Condition Index overall average is ranked as "fair"





BIKEWAYS



- Almost no high comfort bikeways along or intersecting the Study Corridor
- Kelley Street features high-comfort divided bike lanes, while the area around IH-69 has low-comfort existing bike facilities.
- Monthly bike rides occur on Jensen Drive called "Critical Mass"



PEDESTRIAN INFRASTRUCTURE



- 68% of the Study Corridor is without consistent sidewalk
- From Kelley to Vance, sidewalks are broken and discontinuous
- From Sadler to Berry, sidewalks are missing
- From Berry to IH-69, sidewalks are broken and discontinuous



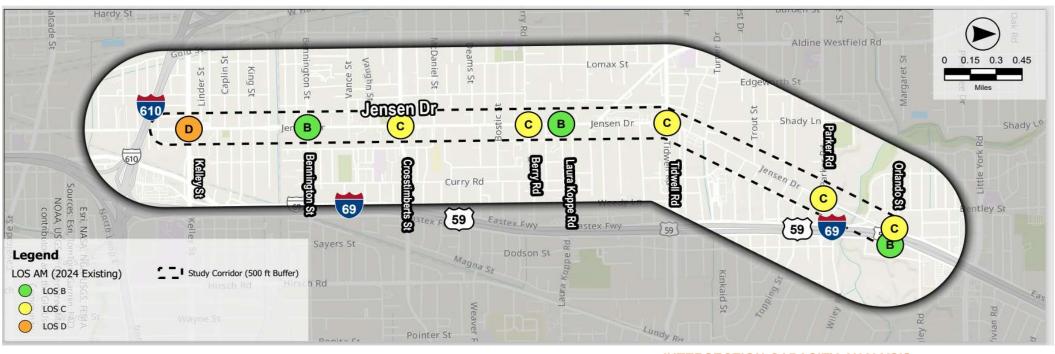
EXISTING TRANSIT NETWORK



- Transit Accessibility Along Jensen Drive Corridor: This map highlights transit coverage within a 1-mile buffer of Jensen Drive, showing frequent bus stops and multiple METRO bus routes serving the corridor. The area is supported by MetroNEXT BOOST corridors and MetroNEXT BRT lines, indicating strong public transit connectivity and future transit investment in the study area.
- METRO routes serving the corridor include #6 and #83 on Jensen Dr, #51 and #52 on Kelley St, #36 on E Crosstimbers St, and #45, #80, and #83 on Tidwell Dr.



SIGNALIZED INTERSECTIONS & OPERATIONS – AM



TAKEAWAYS

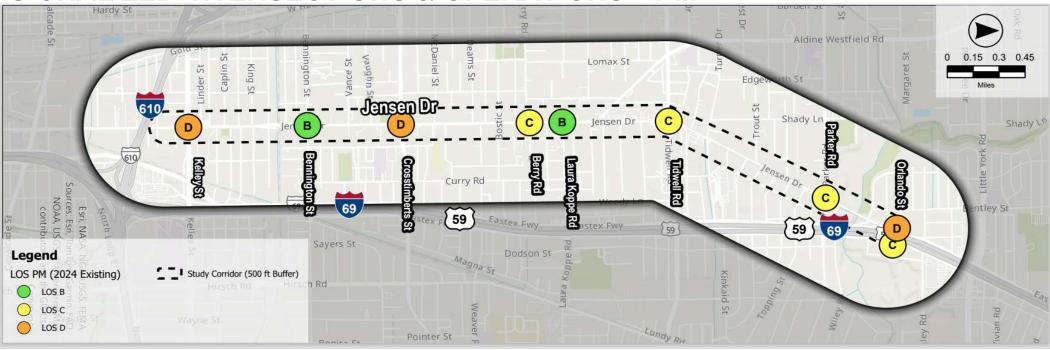
 2024 Existing AM Peak Level of Service (LOS) on Jensen Drive Corridor: This map shows morning peak-hour LOS conditions at major intersections along Jensen Drive. Most intersections operate at acceptable levels (LOS B or C), with only Kelley Street showing a lower performance at LOS D. The map highlights the overall manageable morning traffic flow throughout the study corridor.

INTERSECTION CAPACITY ANALYSIS

Intersection	Delay	LOS
Jensen Dr & Kelley St	37.7	D
Jensen Dr & Bennington St	15.3	В
Jensen Dr & E Crosstimbers St	30.6	С
Jensen Dr & Berry Rd	21.8	С
Jensen Dr & Laura Koppe Rd	15.9	В
Jensen Dr & Tidwell Rd	25.3	С
Jensen Dr & Parker Rd	28.9	С
Jensen Dr/I-69 SBFR & Orlando St	23	С
Eastex Fwy/I-69 NBFR & Saunders Rd	19.9	В



SIGNALIZED INTERSECTIONS & OPERATIONS – PM



TAKEAWAYS

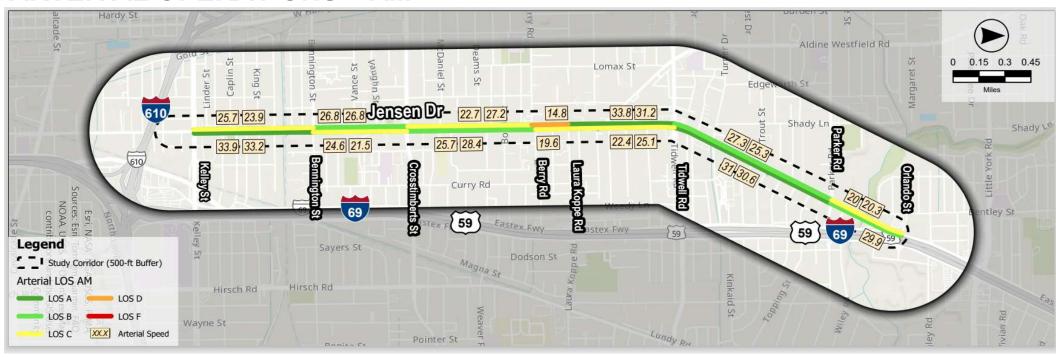
 2024 Existing Level of Service (LOS) on Jensen Drive Corridor: This map illustrates the current (2024) peak period Level of Service (LOS) conditions at key intersections along Jensen Drive from I-610 to Orlando Street. LOS grades range from B (good flow) to D (approaching unstable flow), highlighting areas with moderate congestion particularly near Kelley Street, Crosstimbers Street, and Orlando Street.

INTERSECTION CAPACITY ANALYSIS

Intersection	Delay	LOS
Jensen Dr & Kelley St	48.8	D
Jensen Dr & Bennington St	15.4	В
Jensen Dr & E Crosstimbers St	35.6	D
Jensen Dr & Berry Rd	20.5	С
Jensen Dr & Laura Koppe Rd	13.1	В
Jensen Dr & Tidwell Rd	34.3	С
Jensen Dr & Parker Rd	31.8	С
Jensen Dr/I-69 SBFR & Orlando St	44.3	D
Eastex Fwy/I-69 NBFR & Saunders Rd	21.7	С



ARTERIAL OPERATIONS – AM

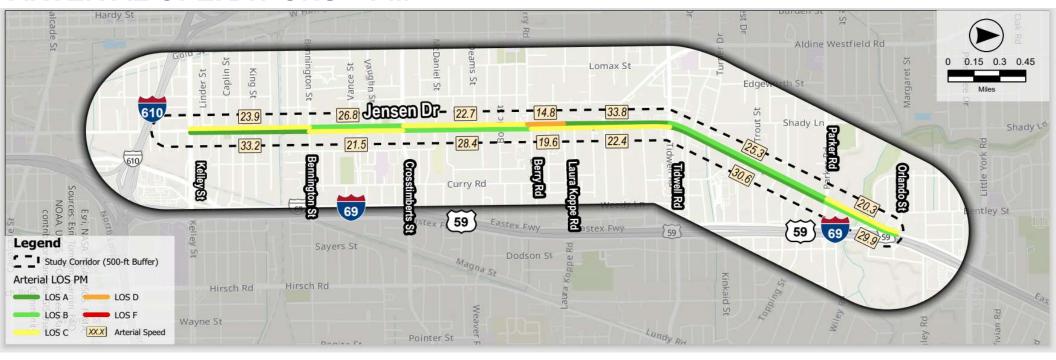


TAKEAWAYS

 Arterial Level of Service (LOS) along Jensen Dr: Most of the corridor operates at LOS A–C during the AM peak, indicating generally free-flowing conditions, except near Berry Rd where speeds drop significantly to 14.8 mph (LOS D) and around Bennington St where speeds fall as low as 21.5 mph (LOS D), suggesting localized congestion.



ARTERIAL OPERATIONS - PM



TAKEAWAYS

 PM Peak Arterial LOS on Jensen Dr: The corridor generally operates at LOS A–C in the evening peak, but segments near Berry Rd and Bennington St experience slower speeds (14.8– 21.5 mph), resulting in LOS D and indicating moderate congestion in those areas.



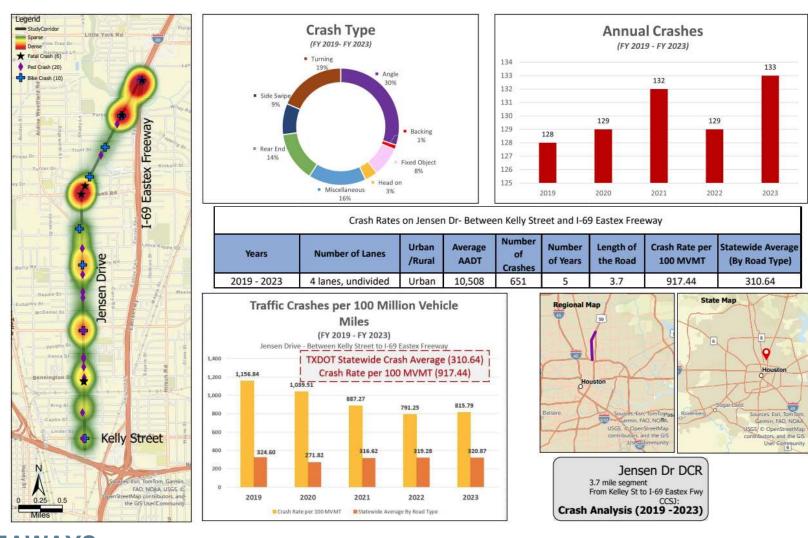
EXISTING TRAVEL TIME



- Northbound travel times: 7.9 minutes during the AM peak and 8.2 minutes during the PM peak.
- Southbound travel times: 8.6 minutes during the AM peak and 9.1 minutes during the PM peak.



CRASH ANALYSIS

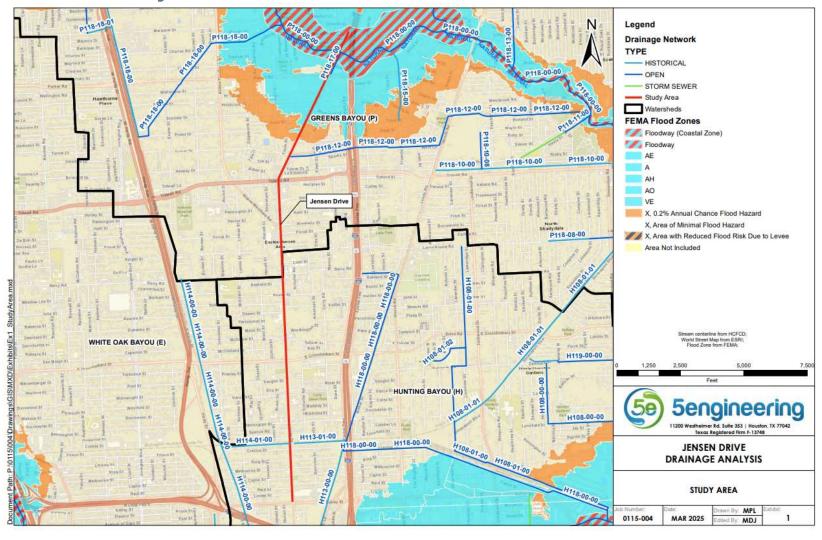


TAKEAWAYS

• Between 2019 and 2023, the study corridor saw 6 fatal, 20 pedestrian, and 10 bike crashes.

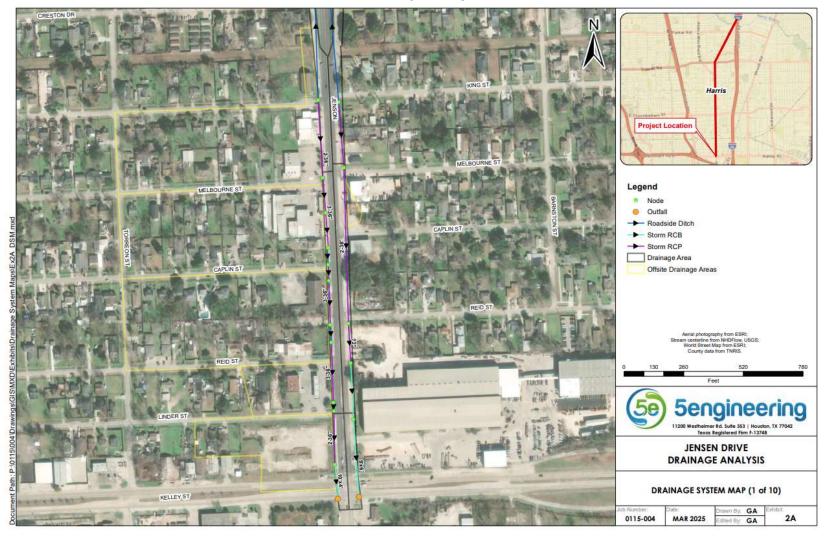


DRAINAGE Study Area





DRAINAGE DRAINAGE SYSTEM MAP (1/10)





DRAINAGE DRAINAGE SYSTEM MAP (2/10)



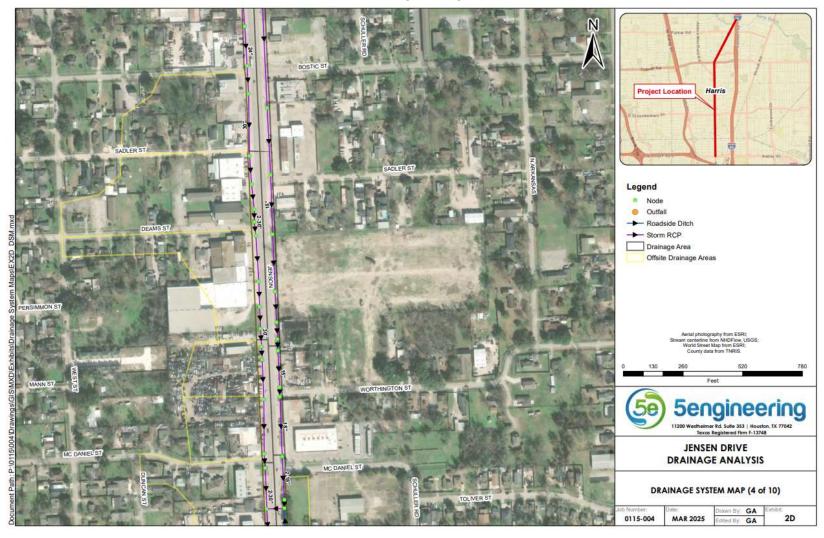


DRAINAGE DRAINAGE SYSTEM MAP (3/10)



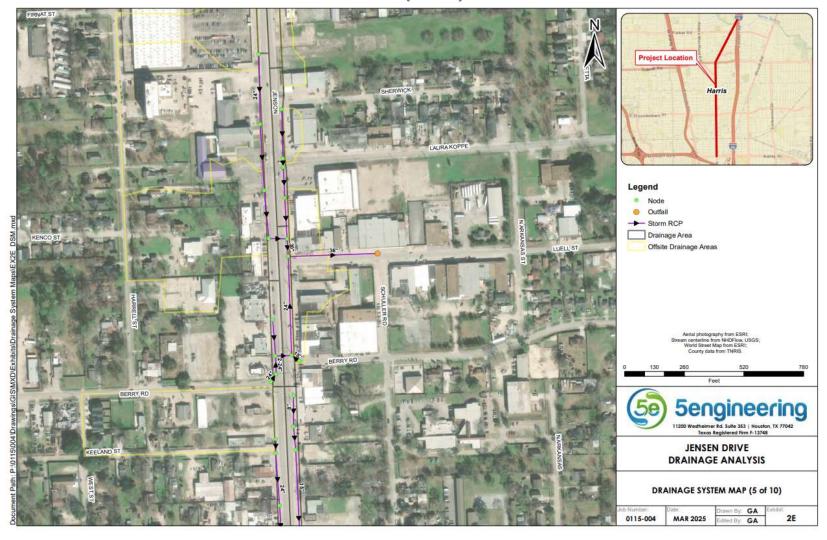


DRAINAGE DRAINAGE SYSTEM MAP (4/10)





DRAINAGE DRAINAGE SYSTEM MAP (5/10)



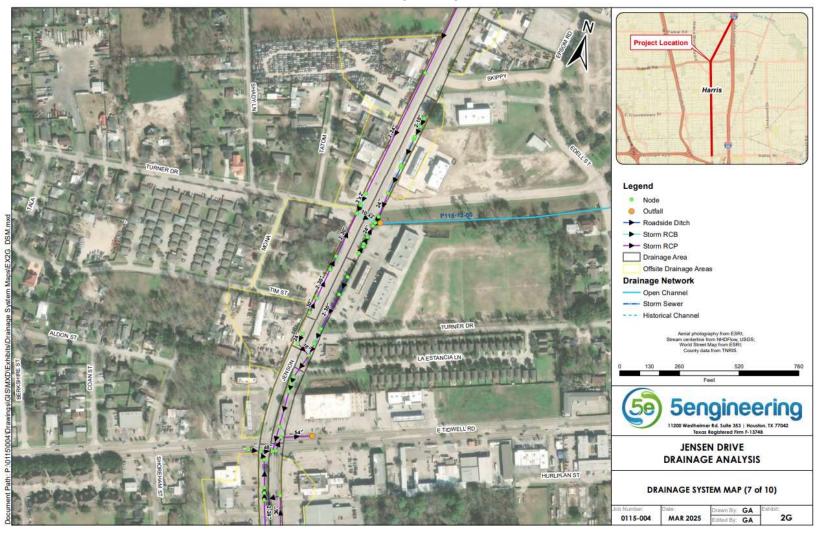


DRAINAGE DRAINAGE SYSTEM MAP (6/10)



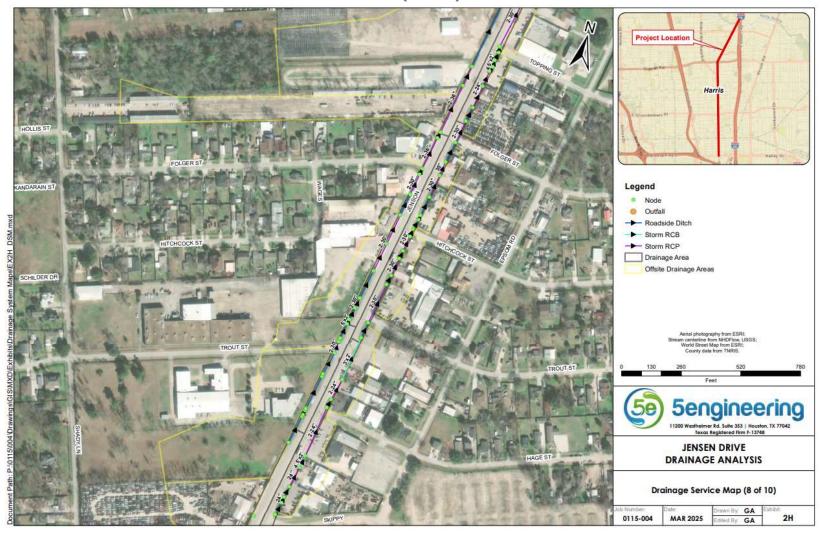


DRAINAGE DRAINAGE SYSTEM MAP (7/10)



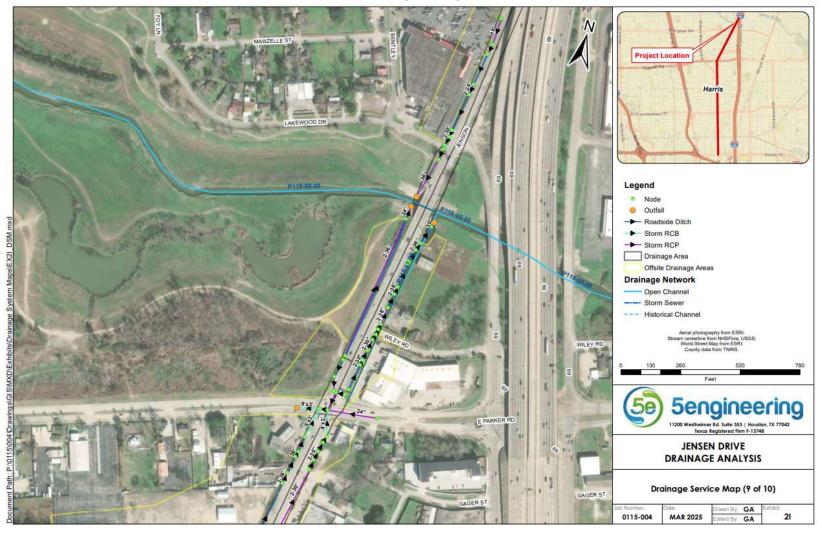


DRAINAGE DRAINAGE SYSTEM MAP (8/10)





DRAINAGE DRAINAGE SYSTEM MAP (9/10)



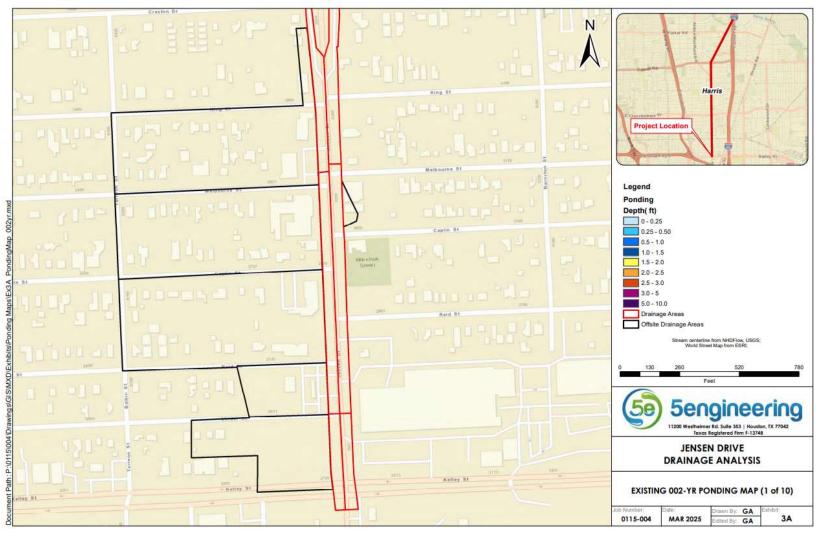


DRAINAGE DRAINAGE SYSTEM MAP (10/10)



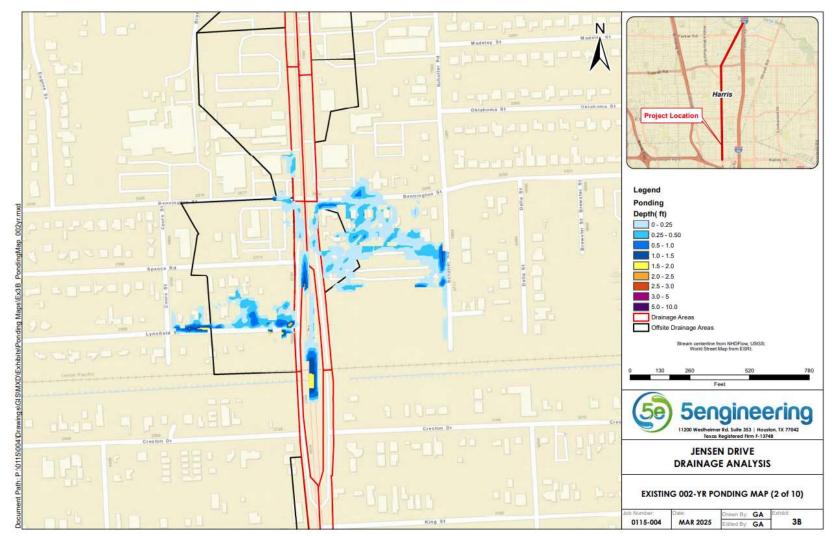


DRAINAGE Existing 002-YR Ponding Map (1/10)



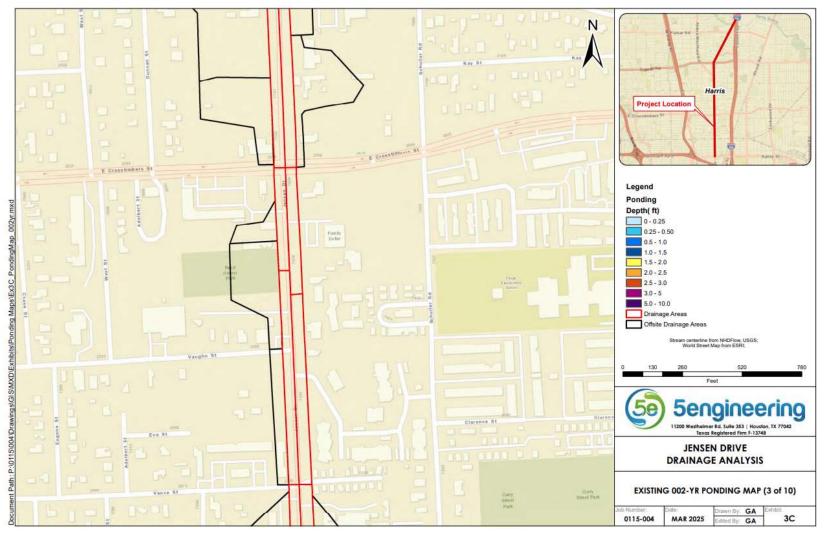


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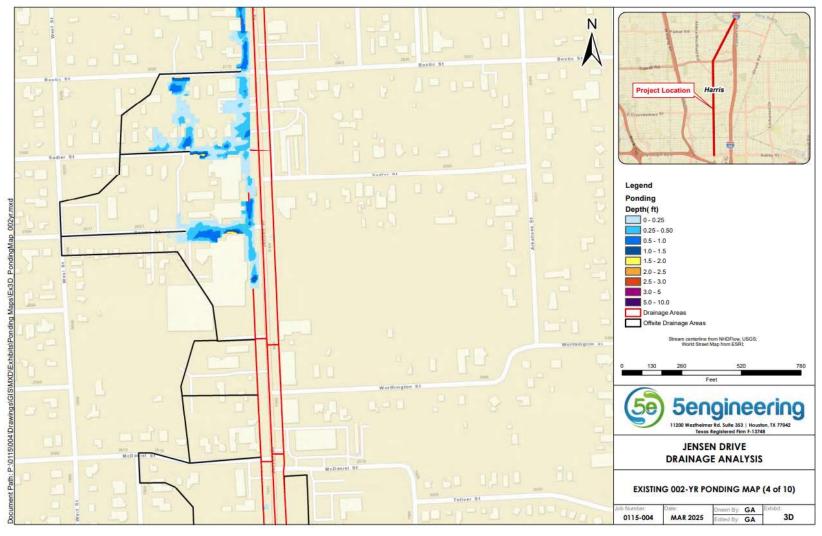


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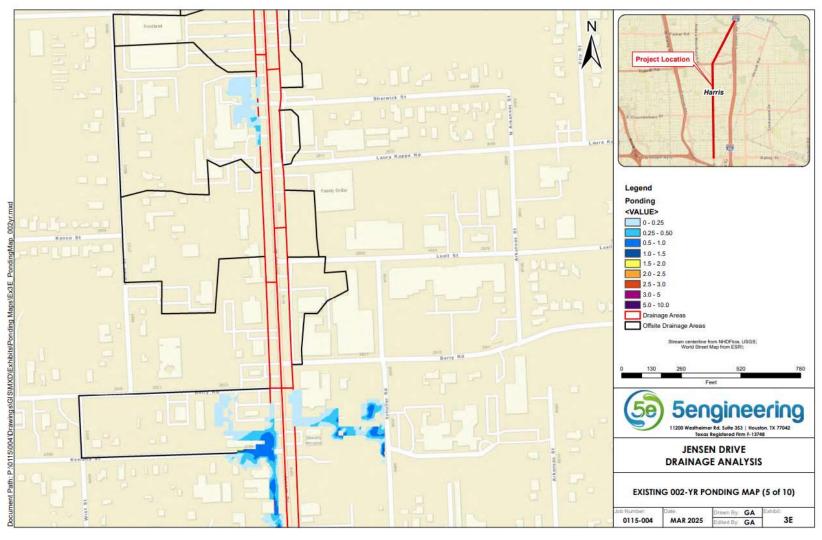


DRAINAGE Existing 002-YR Ponding Map (4/10)





DRAINAGE Existing 002-YR Ponding Map (5/10)



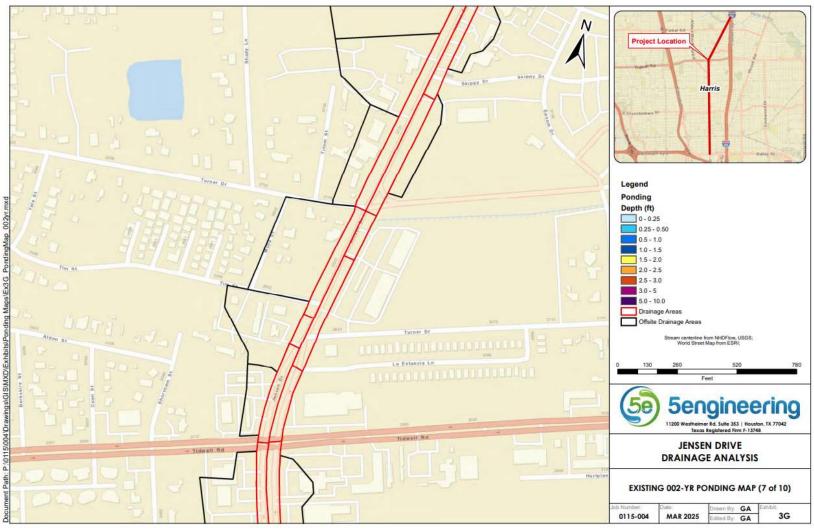


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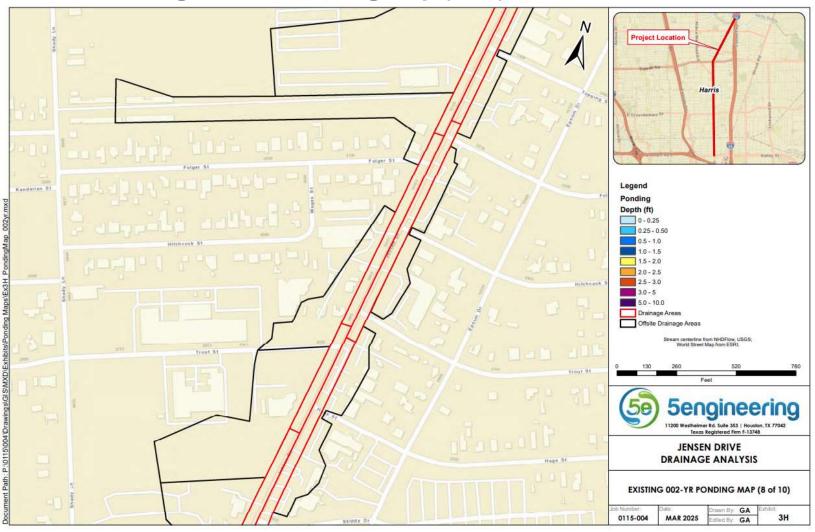


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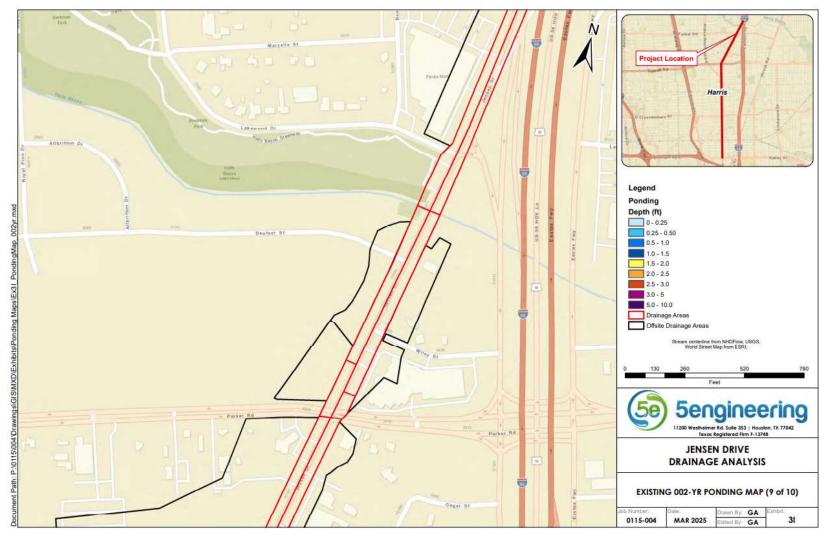


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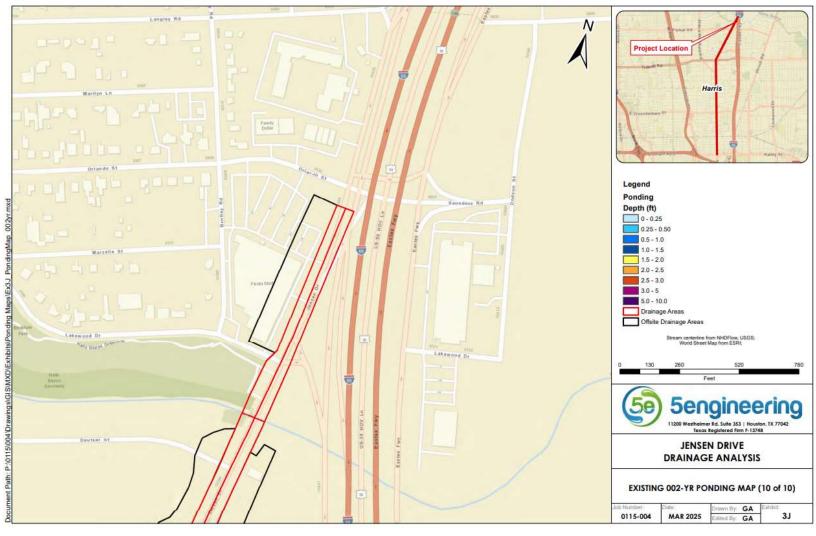


DRAINAGE Existing 002-YR Ponding Map (9/10)



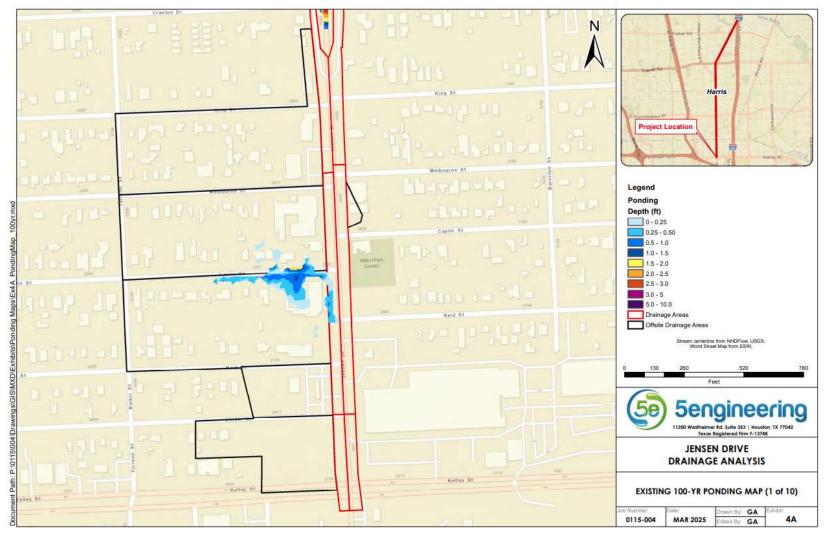


DRAINAGE Existing 002-YR Ponding Map (10/10)





DRAINAGE Existing 100-YR Ponding Map (1/10)





DRAINAGE Existing 100-YR Ponding Map (2/10)



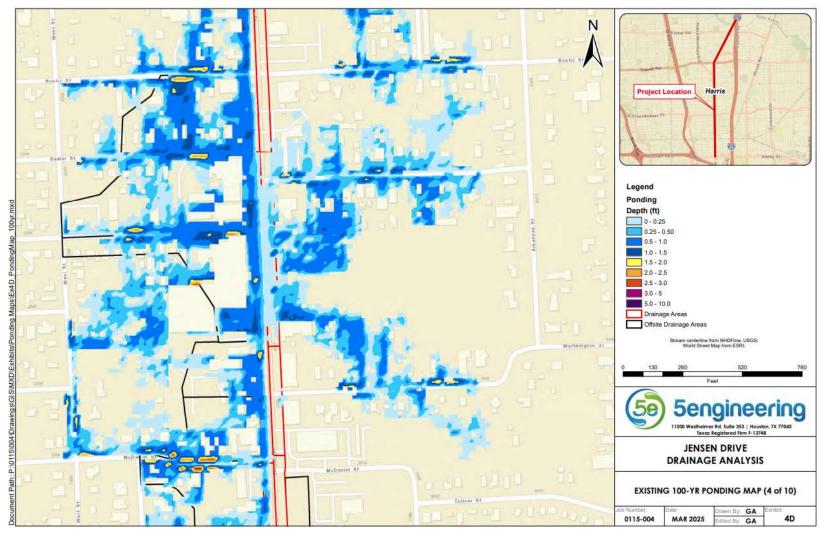


DRAINAGE Existing 100-YR Ponding Map (3/10)



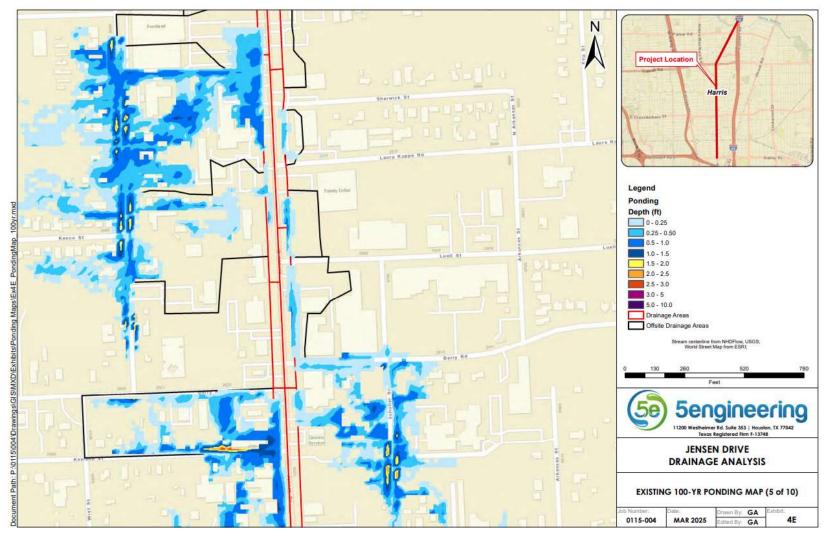


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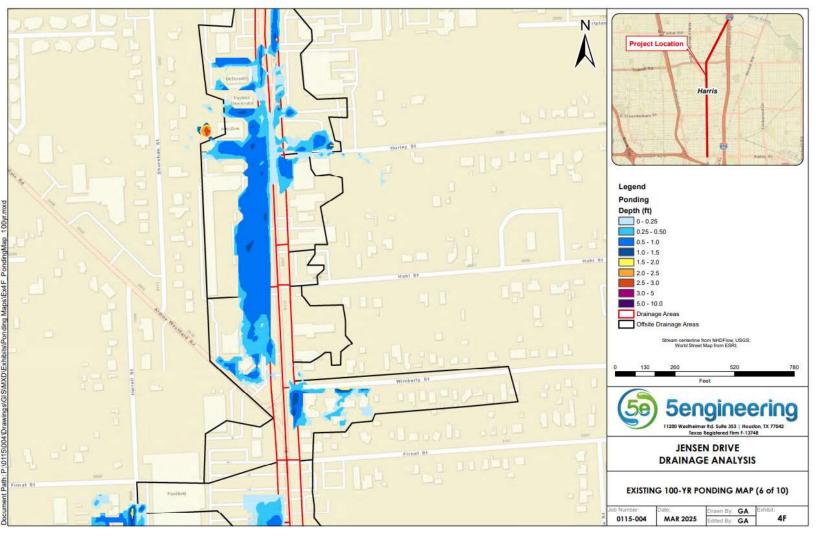


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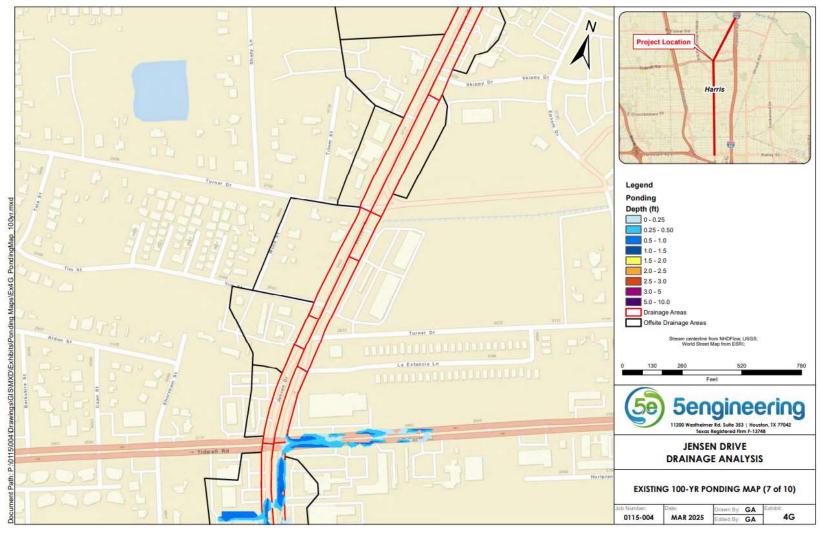


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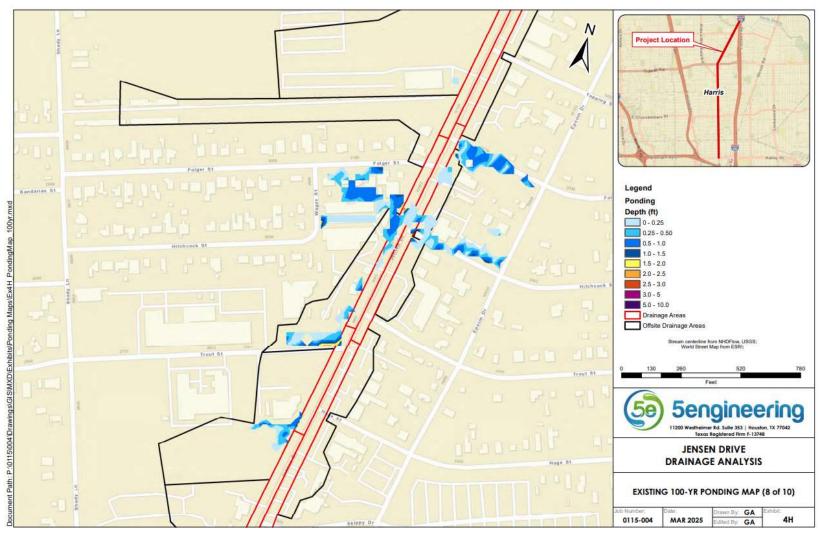


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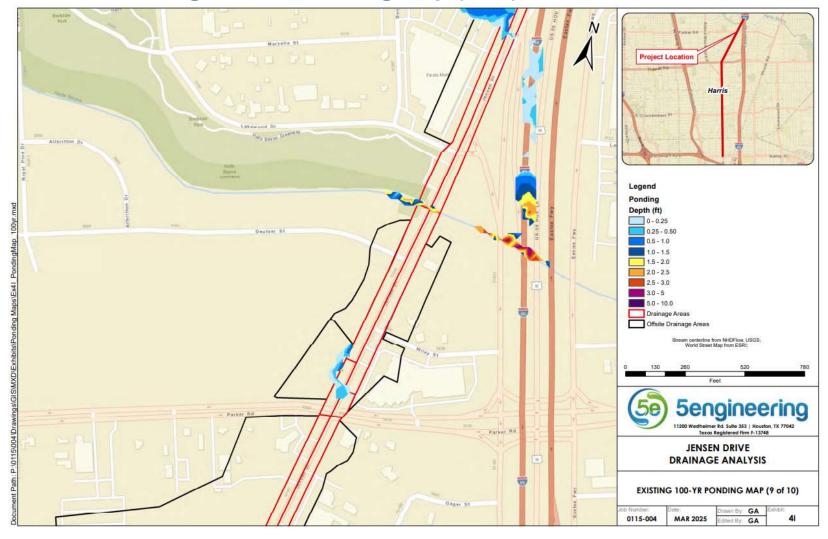


DRAINAGE Existing 100-YR Ponding Map (8/10)





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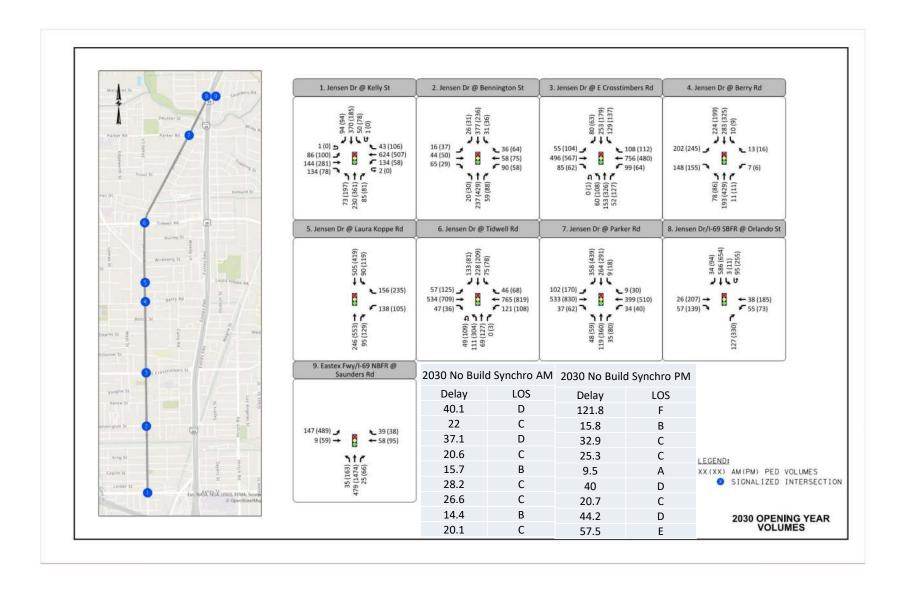


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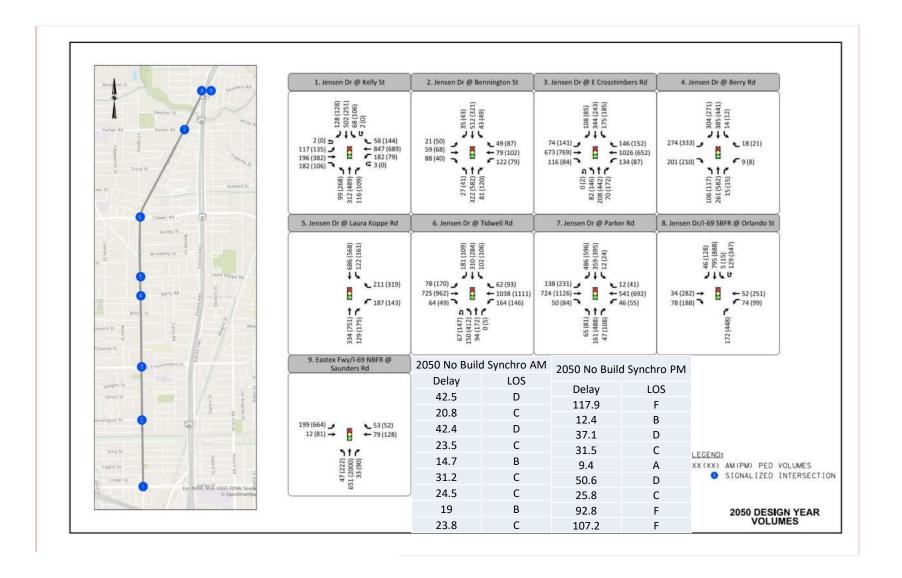


FUTURE NO BUILD 2030 OPENING YEAR





FUTURE NO BUILD 2050 OPENING YEAR





NEXT STEPS

- Gather feedback on design alternatives from stakeholders and public
- Refine design alternatives
- Refine Stage 1 Jensen DCR Report and Submit to City for review.
- Run drainage analysis on refined alternatives

