

21 July 2022
To: Mayor and City
Council members
Update on construction progress for West Lea drainage improvements. Clay

# West Lea Subdivision Drainage Improvements

Is it in Budget?		Is it on Schedule for the Current Phase per the Contract?		Community Benefit
⊠ Yes	□ No	⊠ Yes	□ No	Sustainable Infrastructure
		Project Phase?		
		Construction		

## Highlights:

The Design contract was awarded to IDS Engineering Group on August 22, 2019. The Construction contract was awarded to Reliance Construction Services (Reliance) in October of 2021. The Notice to Proceed was issued January 31, 2022. The contractor had increased lead times for some of the waterline fittings due to supply chain issues, that caused the delay in the actual start date to March 21, 2022.

- The Contractor began installation of the storm pipe in mid May 2022 once the waterline relocation work on Heron Lane was completed and in service.
- Drainage work began at the newly installed BBD4 storm junction box at the east end of Meadow Lane and has proceeded west along Meadow Lane beyond Bluebird Way.
- Reliance presently has 3 crews on site. The pipe crew is currently installing 42" storm pipe on Meadow Lane. The culvert crew is installing the new pipe culverts for the driveways and sidewalks between West Lea Lane and Meadow Lane. And the paving crew is installing the new driveways after the new culverts have been installed. Reliance has been re-grading the ditches as they complete installation of the storm lines and culverts.
- As part of the project BDD4 is expanding the detention basin, installing the pond under drain system and connection to Mary's Creek. BDD4 has continued to install new 48" drainage pipe and junction boxes along the east edge of the subdivision. They have progressed to the southern edge of the Mockingbird Lane intersection.

## **Budget Info:**

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
General Obligation Bonds	2020	600,000		600,000
General Obligation Bonds	2021	1,000,000		1,000,000
General Obligation Bonds	2022	4,437,000		4,437,000
General Obligation Bonds *	2022	505,000		505,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources (Transfer from DR2201)		490,062		490,062
Other Funding Sources (Fund Balance from 506)	)	395,344		395,344
Total Funding Sources		7,427,406	-	7,427,406



Expenditures	To Date	Future	Total
PER			-
Land	249		249
Design	563,630		563,630
Construction	6,285,364	238,458	6,523,822
Construction Management/Inspection			-
Construction Materials Testing	99,380		99,380
FF&E			-
Total Expenditures	6,948,623	238,458	7,187,081

<b>Project Contingency</b>	<mark>3%</mark>	240,325
<b>Project Balance</b>		0

## Schedule Info:

	Base Line	Current
Design Start	August-19	August-19
Bid Start	September-20	June-21
Construction Start	August-21	January-22
Construction Completion	January-23	

## **Upcoming Work Items:**

- Reliance will continue to install the 42" storm pipe on Meadow Lane until they reach Wingtail Way.
- When Reliance reaches Wingtail Way they will move to the east end of West Lea Lane, connect to the newly installed BDD4 storm pipe, and begin installation of 48" storm pipe west along West Lea Way.
- The culvert and paving crews will continue to install culverts and driveways between Meadow Lane and West Lea Lane and Mockingbird Lane.
- Reliance will continue to connect the waterline offsets once they have completed the pressure testing and disinfection process.

Project Manager: Jennifer Lee

Construction Manager: Tim Ford

**Designer:** IDS Engineering

**Contractor:** Reliance Construction Services

#### Scope:

The scope of West Lea Subdivision Drainage project includes modifying ditch flowlines, widening roadside ditches and increasing culvert pipe sizes within the subdivision to collect and convey runoff to the Drainage District's detention facility immediately east of the subdivision. Improvements include the removal of existing undersized piping, installation of approximately 10,500 LF of up-sized piping, re-grading, widening, and reshaping approximately 40,500 LF of roadside ditch, utility adjustments, replacement of street light conduit, the removal and replacement of driveway culverts, upsizing of culverts, tree removal and protection, sidewalk

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and pavement repair, and site restoration. The project will also make improvements to the drainage ditch along the subdivision's eastern perimeter to Mary's Creek and improvements to the roadside ditch along Manvel Road (FM1128) in coordination with BDD4 and TxDOT.

#### Justification:

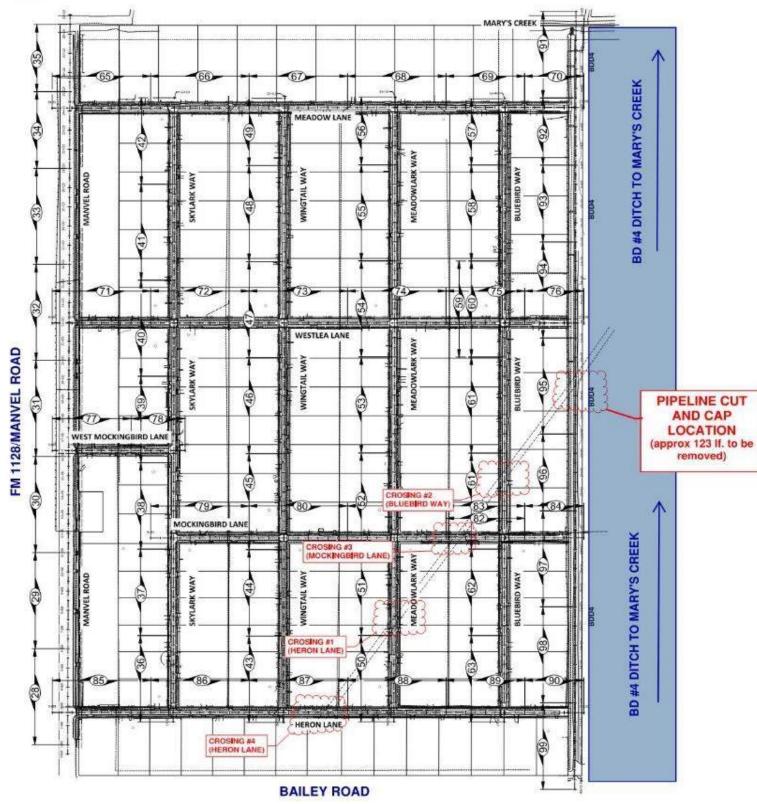
Several homes in this neighborhood have a history of repetitive loss. Concerns related to drainage have been expressed by the residents on several occasions. In Addition, the city staff have participated in several HOA meetings to understand the drainage concerns. Majority of the subdivision is located within the FIRM 100-year floodplain. Subdivision drainage is currently severed by an inadequate open ditch system. BDD4 is participating in this area by expanding the detention basin on the east side of the subdivision and widening Mary's Creek from FM1128 to Magnolia.

**Previous Memos:** 06.20.19, 10.08.20, 03.18.21, 10.14.21, 05.05.22

## **Project Location Map:**







**Enterprise Pipeline Through West Lea Subdivision** 





Waterline Offset at Mockingbird Lane and Bluebird Way



Driveway Culverts Skylark Way Facing Meadow Lane





Driveway Culverts Wingtail Way Facing West Lea Lane



**Driveway Culverts Meadowlark Way with New Concrete Paving** 





Driveway Culverts and Paving Bluebird Way facing Meadow Lane



Installing 42" Storm Pipe Meadow Lane 20+00 Left