

24 June 2021 To: Mayor and City Council members

For the major road extension connecting McHard Road between existing end points, we are just over 1/4 of the way through the construction, set to open by close of 2022. Clay

# McHard Road Extension (Mykawa to Cullen)

| Is it in Budget? |      | Is it on Schedule for the Current Phase per the Contract? |      | Community Benefit  |
|------------------|------|---|------|--|
| Yes              | □ No | Yes   | □ No | Improves mobility by providing an additional east west corridor as an alternative to Broadway (FM 518) |
|                  |      | Project Phase   |      |  |
|                  |      | Construction  |      |  |

## **Highlights:**

- The contractor will begin pouring concrete for Phase 1 and 1A on June 23.
  - Phase 1 and 1A includes the section of pavement between Cullen and Stone Rd. It also includes paving the south bound lanes at the intersections of Stone, Max, Roy, Garden, O'Day, Hatfield, and Woody.
  - The west bound lanes between Cullen and Stone of McHard Rd. will be poured first and then all traffic will be moved onto the new pavement for Phase 2.
  - Lime stabilization of roadway subgrade began on June 16.
  - Due to the anticipated high day-time temperatures, the contractor has requested to begin the paving pours at 2 am each morning.
    - Temperatures above 90 degrees reduce the workability time and the evaporate water from the mix causing excessive cracking and a reduction of the life cycle of the product.
    - Night pours are the most economical remedy for high temperatures for the contractor, ice is an alternative that is usually not readily available during summer months
  - Staff will only allow 2 am start times in areas that do not have residences within 300 feet of the construction activities.
    - For this phase of work, the section between Cullen Pkwy. and Adamo Ln. will have a daily start time of 2 am. With this start time pours should be complete by about 8:00 am. The work on this segment should be complete in approximately two days, weather permitting.
  - The contractor will be allowed to begin at 5 am in the areas with residential concentrations. Notifications to the residents will be provided to let them know when this work will occur. The roadway was completely shut down to non-local traffic on June 2 thru 4 in order to install laterals for the drainage system under the main lanes of traffic.
- The Contractor has completed:
  - Phase 1 and 1A of the drainage system is complete. Includes:
    - The installation of 4' x 2' drainage trunk line between Woody and Hatfield.
    - The installation of curb and grate inlets between Garden and Roy.
    - The installation of the lateral to the drainage ditch.

- Installed large junction box at Hickory Slough pond 2.
- Outfalls at Hickory Slough pond 2 are approximately 80% complete.
- Installed approximately 90% of the junction boxes between Woody and Mykawa.
- Began installation of the 7' x 4' trunk line through the greenfield areas of the project.

## Ongoing work includes:

- Concrete paving between Cullen and Stone Rd.
- Installation of trunk line eastward.
- Continued coordination with CenterPoint Energy, Phonoscope, AT&T and Comcast for the relocation of their facilities along the north south streets throughout the McHard corridor.

## Challenges:

- Minor utility conflicts remain throughout the alignment, mainly at the intersecting streets.
- There are several conflicts with the waterline and valves that were previously installed.
  - It was discovered that when the storm drain system was designed, the water line layer was not included in the background for reference.
  - The large drainage box alignment is requiring the contractor to adjust the existing water line.
  - The project team is working on several solutions to ensure the resolution of the waterline conflicts will have a minimal impact on the project schedule and the budget.
- James Construction Group has continued to make adjustment in the sequencing of the work to minimize the impact the utility and water line conflicts have on the schedule.

### **Budget Info:**

| Funding Sources                          | Series   | To Date    | Future    | Total Budget |
|--|----------|------------|-----------|--------------|
| Certificates of Obligation               | TBS 2022 |            | 3,978,428 | 3,978,428    |
| General Obligation Bonds                 | 2014     | 531,488    |           | 531,488      |
| General Obligation Bonds                 | 2015     | 238,566    |           | 238,566      |
| General Obligation Bonds                 | 2016A    | 222,627    |           | 222,627      |
| General Obligation Bonds                 | 2017     | 2,742,360  |           | 2,742,360    |
| General Obligation Bonds                 | 2020     | 7,850,000  |           | 7,850,000    |
| General Revenue - Cash                   |          |            |           | -            |
| HGAC TIP                                 |          | 32,580,531 |           | 32,580,531   |
| Other Funding Sources - Fund 506 Balance |          | 413,000    |           | 413,000      |
| Total Funding Sources                    |          | 44,578,572 | 3,978,428 | 48,557,000   |

| Expenditures                       | To Date    | Future    | Total      |
|------------------------------------|------------|-----------|------------|
| PER                                |            |           | -          |
| Land                               | 6,553,013  | 407,500   | 6,960,513  |
| Design                             | 4,677,357  | 130,000   | 4,807,357  |
| Construction Contract              | 30,307,364 | 1,638,634 | 31,945,997 |
| Construction Management/Inspection | 2,480,193  |           | 2,480,193  |



| <b>Project Contingency</b> | 3% | 1,500,000 |
|----------------------------|----|-----------|
| Project Balance            |    | 437,651   |

Project balance includes TIP funds associated with the project.

#### Schedule Info:

|                         | Base Line    | Current      |
|-------------------------|--------------|--------------|
| Design Start            | August-14    | August-14    |
| Bid Start               | April-17     | January-20   |
| Construction Start      | June-20      | September-20 |
| Construction Completion | September-22 | October-22   |

# **Upcoming Work Items:**

- The contractor will continue installing trunk line eastwards.
- The contractor will begin installing fiber optic conduits.
- The contractor will continue phase 1B of the project which consist of the installation of all Hickory Slough Detention Pond 2 structures and laterals.

Project Manager: Jennifer Lee

**Designer:** Freese and Nichols, Inc.

**Contractor:** James Construction Group

Construction Manager: HDR, Inc.

#### Scope:

The McHard Road project will extend from the intersection of Mykawa and McHard Rd. west to tie into the existing roadway at Cullen Blvd. It will include the construction of approximately 3.5 miles of four lane divided concrete curb and gutter roadway with signalized intersections (Max Rd., Roy Rd., O'Day Rd., Garden Rd., and Hatfield Rd.). Also included in the road design is grading, paving, mixed use sidewalks, drainage, detention ponds, signage, pavement markings, illumination, traffic control, storm water pollution prevention and landscaping/irrigation.

#### Justification:

This project is in accordance with the City's Thoroughfare Plan to alleviate traffic on FM 518 by providing an alternate east/west route between SH 288 and SH 35. The project was selected by H-GAC to receive 80% federal funding for design and construction through the 2016 TIP.

**Previous Memos:** 04.01.2015, 07.15.2015, 10.14.2015, 02.04.2016, 10.06.2016, 01.26.2017, 05.04.2017, 09.07.2017, 05.31.2018, 01.24.2019, 09.26.2019, 06.04.2020, 11.19.2020, 02.04.2021, 04.15.2021



# **Project Location Map:**







Lime stabilized sub-base between Cullen and Stone Rd.



Drainage system installation east of Stone Rd.





Looking west at the intersection of O'Day Rd.



Hickory Slough outfall 19'x6' junction box installation





Shoring and ladder per OSHA safety requirements



Installation of a curb inlet east of O'Day Rd.