



Lake Ralph Hall Roadway Design-Builder Contract Fact Sheet September 17, 2019

#### Background

The Lake Ralph Hall is a proposed water supply reservoir under development by the Upper Trinity Regional Water District (UTRWD). The proposed reservoir is located on the North Sulphur River in southeastern Fannin County, Texas. UTRWD holds a water rights permit (Permit Number 5821) for the proposed reservoir. The permit grants UTRWD the right to divert and convey up to 45,000 acre-feet per year to its service area in Denton County, Texas. UTRWD has also filed an application with the U.S. Army Corps of Engineers (USACE) for a permit under Section 404 of the Clean Water Act. USACE anticipates issuing a Final Environmental Impact Statement for the project on October 11, 2019 and is in the final stages of its review of UTRWD's application.

As proposed, Lake Ralph Hall will impact segments of State Highway 34, FM 2990 and FM 1550. The proposed lake will also impact a number of roads maintained by Fannin County. UTRWD has met with the Paris District of TxDOT and with Fannin County to discuss mitigation of the impacts the lake will have on their respective infrastructure. UTRWD has submitted a draft Advanced Funding Agreement (AFA) to TxDOT for its consideration to implement mitigation of impacts to infrastructure under TxDOT's jurisdiction. The District has also presented a proposal to Fannin County to implement impacts to roads in the county's jurisdiction.

Pending approval of its Section 404 Permit by the USACE, approval of an AFA with TxDOT and an agreement with Fannin County, UTRWD intends to implement roadway improvements to mitigate the roadway impacts from the proposed reservoir. The District plans to engage a Design-Builder using a progressive design-build model to complete these roadway improvements.

# Objective of the Roadway Design-Build Contract

UTRWD seeks a Design Builder to design and construct roadway improvements, as described below, to mitigate roadway impacts of the proposed Lake Ralph Hall:

- 1. Design and construct approximately three (3) miles of State Highway 34 (SH 34) relocation in two segments:
  - Approximately two and a half (2.5) miles over the North Sulphur River, beginning approximately one (1) mile north of the SH 34 FM 64 intersection and ending approximately one (1) mile south of the SH 34 FM 1550 intersection;

- Approximately one-half (0.5) miles over Merrill Creek, beginning approximately onequarter (0.25) miles north of the SH 34 – FM1550 intersection to three-quarters (0.75) miles north of the SH 34 – FM 1550 intersection.
- Design and construct a realigned segment of FM 1550 between State Highway 34 and FM 1550 along a route generally following the alignment of CR 3443 and CR 3444. The realigned FM 1550 will connect to the existing FM 1550 approximately 2.0 miles east of the SH 34 FM 1550 intersection, and connect to SH 34 approximately 1.5 miles north of the SH 34 FM 1550 intersection.
- 3. Remove paving and demolish existing bridges on a segment of FM 2990 for approximately 3.5 miles, from:
  - a. Approximately 1 mile north of the SH 34 FM 2990 intersection to approximately 0.1 miles east of the FM 2990 CR 3365 intersection.
  - a. The FM 2990 CR 3365 intersection to approximately 1.4 miles south of the FM 2990 FM 1550 intersection.
- 4. Remove any existing structures, abandon and construct "hammer head" terminations at the following county roads; CR 3340, CR 3355, CR 3360, CR 3370, CR 3375, CR 3380, CR 3395, CR 3600, CR 3645 and CR 3650 (see Table 1 attached).
- 5. Improve the CR 3640 crossing over the creek just east of SH 34 by adjusting the grade and the alignment to provide clearance over the creek, and construct a "hammer head" at the termination point.
- 6. Improve CR 3645 from FM 64 to CR 3640 making it a two lane road suitable for heavy truck traffic.
- 7. Other miscellaneous roadway improvements.
- 8. The design-builder will also be responsible for maintenance of the improvements for one-year after acceptance by UTRWD, TxDOT and Fannin County.

#### **Selection Process**

UTRWD will issue a Request for Qualifications (RFQ). Notice of the RFQ will be posted on the District's website and the Lake Ralph Hall website. Notice will also be posted on CIVCAST.

He RFQ will include instructions for preparing and submitting a Statement of Qualifications (SOQ) as well as details of the selection process.

UTRWD staff will review the SOQs it receives and develop a short list of firms to be invited to submit a detailed proposal and participate in an interview with the selection committee. The proposal will include more details on the firm's qualifications, its approach and key elements of its costs.

UTRWD will select the highest ranked firm considering approach, qualifications and value of presented in the proposals. UTRWD will negotiate a final scope of work and fee with the selected firm. If those negotiations are unsuccessful, the District will negotiate with the second ranked firm.

## Procurement Schedule

UTRWDs goal is to award a contract at its April, 2020 board meeting; therefore, the District anticipates the following schedule for the selection of the Conveyance System GEC. The schedule, however, is subject to change:

- 1. Board Resolution authorizing Design-Build delivery for Lake Ralph Hall Roadway Improvements October 5, 2019
- 2. Board Authorization to Issue a RFQ December 5, 2019
- 3. Publish RFQ February 2020
- 4. SOQ Due March 2020 (four to five weeks after RFQ)
- 5. Short List Published approximately one week after SOQ submittal
- 6. Proposals Due Approximately four weeks after Short List published
- 7. Interviews approximately five weeks after short list published
- 8. Selection approximately one week after interviews
- 9. Contract Award May 7, 2019

## UTRWD – TxDOT – Fannin County Relationships

UTRWD anticipates that it will solicit proposals from design-builders, select a contractor, fund and manage the design and construction of the facilities. All work for TxDOT roadways will be designed to TxDOT standards and subject to the TxDOT review and approval. All work for Fannin County be designed to Fannin County standards and subject to the Fannin County review and approval.

UTRWD will inspect construction and provide for independent validation that the work meets the requisite design requirements and standards. TxDOT and Fannin County will each have oversight for their respective facilities during construction, but day to day construction engineering and inspection (CEI) will be the responsibility of UTRWD.

#### Schedule Constraints

 Oncor and AT&T utility relocations – Oncor and AT&T both have infrastructure (an overhead 25 KV three phase distribution line and a buried fiber optic cable respectively) that conflict with the proposed relocation of SH 34. Oncor's proposed route to relocate its overhead distribution line is adjacent to the proposed FM 1550 relocation alignment. AT&T's proposed relocation will be to the west of the new SH 34 right-of-way in a new easement provided by UTRWD.

The relocation of these utilities must be completed prior to commencing construction of the SH 34 improvements. The Oncor relocation design and construction must also be coordinated with the FM 1550 relocation.

UTRWD will contract directly with the utilities for the design and relocation of their infrastructure. It is anticipated these relocations will be completed by the end of the third quarter of 2020.

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- 2. Partial inundation of reservoir area UTRWD anticipates issuing a notice to proceed for the Leon Hurse Dam construction in June of 2020. The dam contractor will develop a detailed schedule, but the anticipated dam construction schedule and its potential impacts on the roadway construction are as follows:
  - a. Approximately twelve months after NTP for the dam construction, the contractor will begin to fill the existing North Sulphur River Channel and divert flow through a diversion channel. Once flow is routed through the diversion channel, the water surface elevation in the North Sulphur River channel at SH 34 may remain at 585 ft. msl. (Approximately five feet deep) for extended periods of time.
  - b. Approximately twenty-four months after NTP for the dam construction, the contractor will begin to construct the spillway structure, thus constraining flows through the diversion channel. These constrains will subject the existing SH 34 and FM 1550 to the potential for periodic flooding from storm events; therefor, the relocated SH 34 and FM 1550 must be completed prior to the commencement of the spillway construction (approximate date June 2022).

### Right-of-Way Issues

UTRWD currently owns all but two or three small tracts required for the SH 34 construction, but does not own the right-of-way for the FM 1550 relocation. UTRWD is actively securing property for the Lake Ralph Hall program and anticipates that it will own the required right-of way prior to construction.

# Geotechnical Issues

UTRWD has completed substantial geotechnical investigations for the Leon Hurse Dam, but it has not completed any geotechnical investigations for the SH 34 relocation or the FM 1550 relocation. SH 34 is approximately 2 miles upstream of the proposed dam and FM 1550 relocation is approximately 2 mile north and west of the proposed dam.

The geotechnical data for the dam indicates approximately 25ft. to 35 ft. of clay overburden over a deep bed of unweathered marl.

### UTRWD Concerns

- 1. The construction of SH 34 and FM 1550 relocation completion is critical to the dam construction schedule, as noted above.
- 2. UTRWD is construction these facilities for the benefit of TxDOT and Fannin County. The quality of the design and construction and the conformance with TxDOT and Fannin County standards is paramount.
- The design of the improvements must be approved by TxDOT and Fannin County. UTRWD will
  want to have confidence that the design team can complete designs that will meet the
  requirements of these agencies in a manner that does not unduly impact the project schedule or
  budget.