ENVIRONMENTAL DETERMINATION

TO: File

FROM: Jessica Pena Zuba, Director
Regional Water Planning and Development

DATE: December 1, 2015

SUBJECT: City of Seagraves
Gaines County, Texas
Water and Wastewater Systems Improvement Projects
Texas Water Development Fund Program
Project 21746 (L1000348)

Pursuant to the environmental assessment requirements of 31 Texas Administrative Code § 363.14 of the Texas Water Development Board (TWDB) rules, the staff of the TWDB has reviewed the water and wastewater projects proposed by the City of Seagraves (City), Gaines County, Texas. The attached memorandum contains the staff's views regarding the environmental soundness of these improvements.

On December 11, 2014, the TWDB committed a loan (L1000348) to the City from the Texas Water Development Fund (DFund). The City closed the loan on April 29, 2014, in the amount of $3,375,000, and is currently utilizing a portion of these funds to define needed improvements in its water and wastewater systems. Because the loan was obtained under terms of the pre-design funding option, funds for design and construction of the proposed improvements may be released upon completion of project planning.

The City provides potable water service and wastewater collection and treatment for its 2,620 residents at 874 service connections throughout the community. Deterioration of both the water and wastewater systems, changes in water quality regulations, and increasing demand for services will affect current and future system performance. The City obtains raw water from wells developed in the Ogallala Aquifer. At present, the City's water system is operating under Administrative Orders SDWA-06-2012-1218 and SDWA-06-2014-1302, issued by the Environmental Protection Agency (EPA) on March 22, 2012, and February 19, 2014, respectively. The EPA issued the orders for violation of the Safe Drinking Water Act because of excessive concentrations of arsenic, fluoride, and nitrate in the City's treated water. The orders require remediation of these contaminants and ongoing monitoring to ensure compliance with federal drinking water standards. In addition, the City effective water supply is inadequate. The system lacks sufficient well capacity during dry periods and would be unable to meet the long-term water needs of a population growing at a mean annual rate of approximately 4.8%. Despite this growth, the City does not anticipate comparable expansion of its wastewater system. The system is not under any enforcement actions and has adequate capacity for the future; however,

the waste treatment plant was built in 1967 and there have been no system-wide renovations or upgrades.

After assessing current conditions and evaluating alternative means of addressing shortcomings, the City has determined that its water system will require new infrastructure as well as rehabilitation of existing facilities, and that portions of its wastewater system must be renovated and upgraded. To increase its raw water supply and improve water treatment, the City proposes to: drill and complete two new water wells within a new well field; construct approximately 4,400 feet of 8-inch waterline to connect the new wells to the water treatment facility; install a new treatment unit to remove arsenic and fluoride, with new controls and pumps and a new building to house the treatment unit; and repurpose an existing booster pump station. To offset the effects of age and wear at its wastewater treatment plant and lift stations and reduce contaminants, the City proposes to upgrade the aerators, clarifier, electrical system, controls, monitoring system, yard piping, storage ponds, and a lift station, and to renovate a second lift station. The proposed construction would improve water and sewer services throughout the community through 2040.

The City conducted a full environmental assessment of the potential impact of the proposed project and fulfilled program requirements for coordination with state and federal regulatory agencies. As a result, the City has reviewed environmental conditions in the project area, identified the proposed project's potential environmental impact, and defined measures needed to avoid, reduce, or mitigate adverse effects. The City has provided assurance that all measures will be implemented in a manner consistent with the requirements of the state and federal regulatory agencies and rules of the TWDB.

Based on the TWDB staff's environmental review, I have determined that no significant adverse environmental impact should result from completion of the project as discussed in the accompanying memorandum. The City's proposed water and wastewater system improvements are considered environmentally sound with the following conditions:

Special conditions

- Throughout the proposed project area, exclude vegetation clearing activities during the general bird nesting season, March through August. If clearing vegetation during the migratory bird nesting season is unavoidable, the City must retain a qualified biologist to survey the area that is proposed for disturbance to ensure that no nests with eggs or young will be disturbed by operations. Any vegetation (trees, shrubs, and grasses) where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged.

- Prior to construction, the City must retain a qualified biologist to survey the project area for prairie dog towns or other mammal burrows, species that depend on them, or suitable

habitat. If prairie dog towns or burrows are found in the project area, the City should avoid these areas during construction. If prairie dog burrows would be disturbed as a result of the proposed project, the City must utilize non-harmful exclusion methods to encourage the animals to vacate the area prior to disturbance and to discourage them from returning to the area during construction.

- If mammal burrows or suitable habitat would be disturbed as a result of the proposed project, the City must retain a qualified biologist to survey the project area for burrowing owls. If nesting owls are found, disturbance should be avoided until the eggs have hatched and the young have fledged.

- If, during construction, the project area is found to contain rare species, natural plant communities, or special features, the City must avoid impacts to them.

Standard emergency discovery conditions

- Standard emergency condition for discovery of threatened or endangered species; and

- Standard emergency condition for discovery of cultural resources.

Financial assistance for the project may be released after satisfaction of any other outstanding requirements.

Enclosure

JPZ: SCC:

MEMORANDUM

TO: Jessica Pena Zuba, Director
Regional Water Planning and Development

THROUGH: Lee Huntoon, Manager,
Team 1 - West (Regions A/E/F/O)

FROM: S. Christopher Caran, P.G., Environmental Reviewer
Team 1 - West (Regions A/E/F/O)

DATE: December 1, 2015

SUBJECT: City of Seagraves
Gaines County, Texas
Water and Wastewater Systems Improvement Projects
Texas Water Development Fund Program
Project 21746 (L1000348)

Pursuant to the environmental assessment requirements of 31 Texas Administrative Code Subchapter 363.14, I have reviewed the water and wastewater systems improvement project proposed by the City of Seagraves (City). On December 11, 2014, the Texas Water Development Board (TWDB) committed a loan (L1000348) to the City from the Texas Water Development Fund. The City closed the loan on April 29, 2014, in the amount of $3,375,000, and is utilizing a portion of these funds for project planning. Because the loan was obtained under terms of the pre-design funding option, funds for design and construction of the proposed improvements may be released upon completion of planning.

Background

The City provides water and wastewater services for its 2,620 residents at 874 service connections throughout the community. Deterioration of both the water and wastewater systems, changes in water quality regulations, and increasing demand for services will affect current and future system performance. The City obtains raw water from wells developed in the Ogallala Aquifer. At present, the City's water system is operating under Administrative Orders SDWA-06-2012-1218 and SDWA-06-2014-1302, issued by the Environmental Protection Agency (EPA) on March 22, 2012, and February 19, 2014, respectively. The EPA issued the orders for violation of the Safe Drinking Water Act because of excessive concentrations of arsenic, fluoride, and nitrate in the City's treated water. The orders require remediation of these contaminants and ongoing monitoring to ensure compliance with federal drinking water standards. In addition, the City effective water supply is inadequate. The system lacks sufficient

well capacity during dry periods and would be unable to meet the long-term water needs of a population growing at a mean annual rate of approximately 4.8%. Despite this growth, the City does not anticipate comparable expansion of its wastewater system. The system is not under any enforcement actions and has adequate capacity for the future; however, the waste treatment plant was built in 1967 and there have been no system-wide renovations or upgrades.

Project Description

After assessing current conditions and evaluating alternative means of addressing shortcomings, the City has determined that its water system will require new infrastructure as well as rehabilitation of existing facilities, and that portions of its wastewater system must be renovated and upgraded. To increase its raw water supply and improve water treatment, the City proposes to: drill and complete two new water wells within a new well field; construct approximately 4,400 feet of 8-inch waterline to connect the new wells to the water treatment facility; install a new treatment unit to remove arsenic and fluoride, with new controls and pumps and a new building to house the treatment unit; and repurpose an existing booster pump station. To offset the effects of age and wear at its wastewater treatment plant and lift stations and reduce contaminants, the City proposes to upgrade the aerators, clarifier, electrical system, controls, monitoring system, yard piping, storage ponds, and a lift station, and to renovate a second lift station. The proposed construction would improve water and sewer services throughout the community through 2040.

Environmental Review

The City conducted a full environmental assessment of the potential impact of the proposed project and fulfilled program requirements for coordination with state and federal regulatory agencies. As part of its assessment, the City prepared an Environmental Assessment (EA) document discussing environmental conditions in the project area, the proposed project's potential environmental impact, and measures needed to avoid, reduce, or mitigate adverse effects. The City has given assurance that all of these measures will be implemented in a manner consistent with state and federal regulations and rules of the TWDB.

The EA provides a record of coordination with the following federal, state, and local regulatory agencies:

- United States Army Corps of Engineers, Regulatory Branch, Fort Worth District;
- United States Fish and Wildlife Service, Ecological Services, Arlington Field Office;
- Federal Emergency Management Agency, Region VI, Denton;
- City of Seagraves Public Works (local floodplain administrator), Seagraves;
- Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program, Austin;
- Texas Historical Commission, State Historic Preservation Officer, Austin.

These agencies reviewed the City's assessment of the project's potential environmental impact and provided the following comments and permitting requirements.

United States Army Corps of Engineers (USACE)

On July 11, 2014, the City requested a review of the proposed project by USACE. The USACE took the request under advisement on July 30, 2014, and assigned the project a number, SWF-2014-00293. In a letter dated November 4, 2014, the USACE requested additional information concerning the project, which the City provided on November 13, 2014. After reviewing the information, the USACE determined that "…this project will not involve activities subject to the requirements of Section 404 [of the Clean Water Act] or Section 10 [of the Rivers and Harbors Act of 1899]. Therefore, it will not require Department of the Army authorization pursuant to Section 404 and/or Section 10."

United States Fish and Wildlife Service (USFWS)

On July 11, 2014, the City requested a review of the proposed project by USFWS. Because the USFWS did not initially respond, the City sent an additional request on October 26, 2014. On November 2, 2015, the USFWS sent an electronic message stating that the "…proposed project will have 'no effect' on Federally threatened, proposed, candidate, or listed species" and that the USFWS would take no administrative action concerning the project.

Federal Emergency Management Agency (FEMA)

A small part of the proposed project area extends into the Zone A Flood Hazard Zone (100-year floodplain). In a letter dated October 28, 2015, the City acknowledged this fact and requested administrative guidance from FEMA regarding the potential effect of the proposed project on flooding in the community. The FEMA did not respond to this request.

City of Seagraves Public Works (CSPW)

A small part of the proposed project area extends into the Zone A Flood Hazard Zone (100-year floodplain). In a letter dated October 28, 2015, the City acknowledged this fact and requested administrative guidance from the local floodplain administrator, CSPW, regarding the potential effect of the proposed project on flooding in the community. The CSPW did not respond to this request.

Texas Parks and Wildlife Department (TPWD)

On July 11, 2014, the City requested a review of the proposed project by TPWD. In a letter dated August 26, 2014, the TPWD assigned the project a number, ERCS-9455, and provided a series of comments and recommendations, summarized below. On October 26, 2015, the City agreed to implement each of the recommendations. The TPWD sent an electronic message to the City on November 2, 2015, stating that, "Based on the review of the documentation, [implementation of] the avoidance and mitigation efforts described, and provided that the project plans do not change, TPWD considers coordination to be complete." The following recommendations must be implemented:

- Throughout the proposed project area, exclude vegetation clearing activities during the general bird nesting season, March through August. If clearing vegetation during the migratory bird nesting season is unavoidable, the City must retain a qualified biologist to survey the area that is proposed for disturbance to ensure that no nests with eggs or young will be disturbed by operations. Any vegetation (trees, shrubs, and grasses) where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged.
- Prior to construction, the City must retain a qualified biologist to survey the project area for prairie dog towns or other mammal burrows, species that depend on them, or suitable habitat. If prairie dog towns or burrows are found in the project area, the City should avoid these areas during construction. If prairie dog burrows would be disturbed as a result of the proposed project, the City must utilize non-harmful exclusion methods to encourage the animals to vacate the area prior to disturbance and to discourage them from returning to the area during construction.
- If mammal burrows or suitable habitat would be disturbed as a result of the proposed project, the City must retain a qualified biologist to survey the project area for burrowing owls. If nesting owls are found, disturbance should be avoided until the eggs have hatched and the young have fledged.
- If, during construction, the project area is found to contain rare species, natural plant communities, or special features, the City must avoid impacts to them.

<u>Texas Historical Commission (THC)</u>

In response to a request from the City dated July 11, 2014, the THC reviewed the City's proposed project and assigned the project Tracking Number 201411554. On August 12, 2014, the THC determined that the proposed construction would not affect sites listed in or eligible to be listed in the National Register of Historic Places or the State Antiquities Landmarks, and that no survey of the project area was required.

<u>Environmental Conditions</u>

Consistent with requirements of 31 TAC Subchapter 363.14, the TWDB staff reviewed the available environmental information regarding this project. Issuance of a favorable environmental determination is predicated on the City's agreement to comply with all environmental conditions listed below:

Special conditions

- Throughout the proposed project area, exclude vegetation clearing activities during the general bird nesting season, March through August. If clearing vegetation during the migratory bird nesting season is unavoidable, the City must retain a qualified biologist to survey the area that is proposed for disturbance to ensure that no nests with eggs or young

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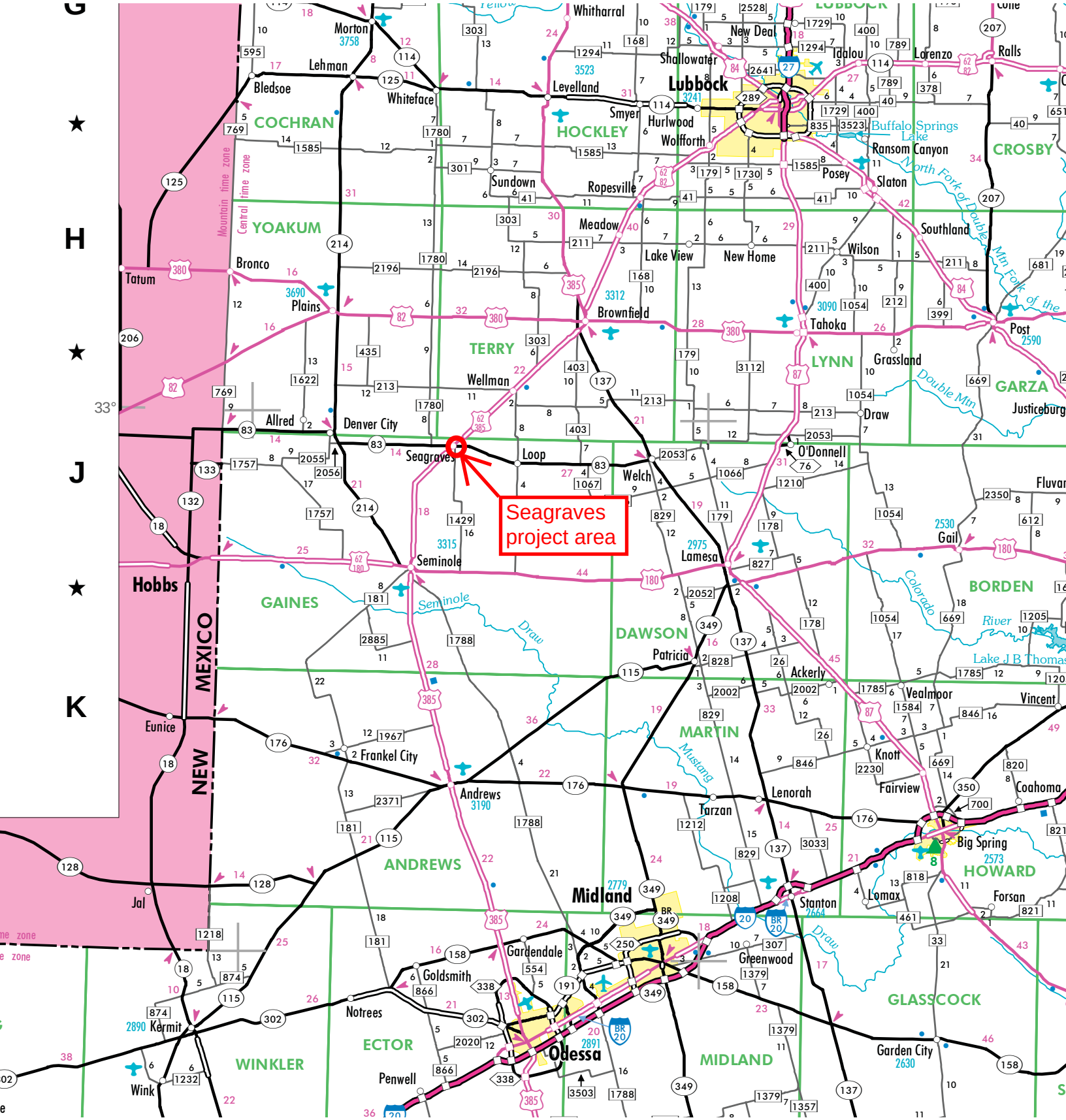
Standard emergency discovery conditions

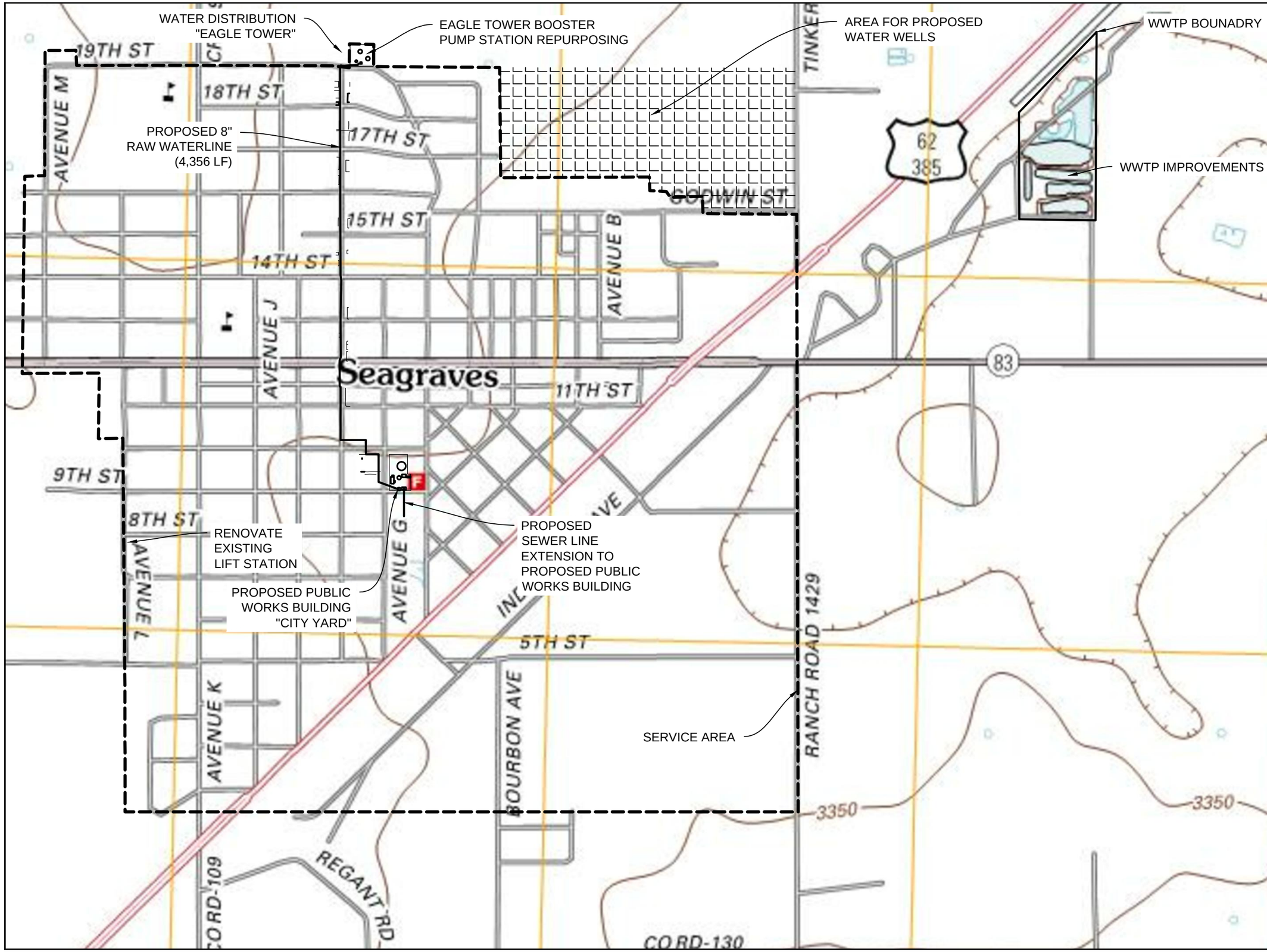
- Standard emergency condition for discovery of threatened or endangered species; and

- Standard emergency condition for discovery of cultural resources.

With these conditions, I recommend that the Executive Administrator find the City of Seagrave's proposed water and wastewater systems improvement project, as specified above, to be environmentally sound, and that project funds should be released once other requirements are satisfied.

Enclosures


Seagraves project area
Seagraves
Lubbock
Midland
Odessa
Seminole
Lamesa
Brownfield
Tahoka
Post
Big Spring
Stanton
Andrews
Frankel City
Eunice
Hobbs
Jal
Kermit
Wink
Notrees
Penwell
Goldsmith
Gardendale
Greenwood
Garden City
Lenorah
Tarzan
Patricia
Ackerly
Vealmoor
Knott
Fairview
Coahoma
Forsan
Lomax
Gail
Justiceburg
Draw
O'Donnell
Welch
Loop
Wellman
Denver City
Allred
Plains
Bronco
Tatum
Bledsoe
Lehman
Morton
Whiteface
Levelland
Whitharral
Smyer
Hurlwood
Wolfforth
Shallowater
New Deal
Idalou
Lorenzo
Ralls
Ransom Canyon
Posey
Slaton
Southland
Wilson
Grassland
Lake View
New Home
Meadow
Ropesville
Sundown
Buffalo Springs Lake
Fluvanna
Vincent
Colorado River
Lake J B Thomas
Double Mtn
North Fork of Double Mtn Fork of the
Seminole Draw
Mustang Draw
COCHRAN
HOCKLEY
CROSBY
YOAKUM
TERRY
LYNN
GARZA
GAINES
DAWSON
BORDEN
MARTIN
ANDREWS
HOWARD
GLASSCOCK
ECTOR
WINKLER
MIDLAND
NEW MEXICO
Mountain time zone
Central time zone
33°



CITY LIMITS

N

0 400 800

HORIZ. SCALE: 1"=800'

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE.

LOCATIONS OF UNDERGROUND AND/OR OVERHEAD UTILITIES ARE APPROXIMATE AND MAY NOT INCLUDE ALL UNDERGROUND UTILITIES PRESENT. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITY CROSSINGS BEFORE EXCAVATION OF ROADWAY.

CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AND RESIDENTS A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION ACTIVITIES ON OR IN THE VICINITY OF THEIR PROPERTY.

Before You Dig Anywhere In Texas
STOP! CALL 1-800-245-4545
TOLL-FREE
OSHA RULE 1926.651
REQUIRES PREVIOUS NOTIFICATION
TEXAS ONE CALL SYSTEM

No.	DATE	REVISION	APP.

WTC, INC.
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

PRELIMINARY
FOR INTERIM REVIEW ONLY.
THESE DOCUMENTS ARE FOR INTERIM REVIEW ONLY AND ARE NOT INTENDED FOR CONSTRUCTION PURPOSES. THEY ARE PREPARED BY OR UNDER THE SUPERVISION OF:
RICH OLLER, P.E., TEXAS REGISTRATION NO. 61831 DATE: October 26, 2015

	DRAWN	CHECKED
	J.A.L.	R.M.O.

WTC

WTC , INC
ENGINEERS & SURVEYORS
405 S.W. 1st. STREET
ANDREWS, TEXAS 79714
(432) 523-2181
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

GAINES COUNTY
SEAGRAVES, TX

WTC JOB No.:	DATE:
job # 49493	10/26/15

SEAGRAVES INFRASTUCTURE IMPROVEMENTS

TOPOGRAPHIC MAP

PLAT: X:\LUBBOCK PROJECTS\ENGINEERING & SURVEYING\SEAGRAVES\49493-CITY OF SEAGRAVES WATER TREATMENTS SYSTEMS ARSENIC REMOVAL\DRAWINGS\DRAWING FOR APP\MAP OF SEAGRAVE WITH PROPOSED CHANGES 9-15-15 LAYOUT TAB: TOPOGRAPHIC MAP REV 1