



69

ITEM FOR ENVIRONMENTAL BOARD AGENDA

**BOARD MEETING
DATE REQUESTED:** DECEMBER 18, 2013

Name & Number Water Control and Improvement District No. 17 –

OF PROJECT: Mansfield Water Treatment Plant
SPC-2012-0429C

**NAME OF APPLICANT
OR ORGANIZATION:** River City Engineering
(Contact: David Kneuper - 512-442-3008)

LOCATION: 4506 N FM 620 Rd

PROJECT FILING DATE: December 19, 2012

**WPDR/Environmental
STAFF:** Jim Dymkowski, 974-2707
james.dymkowski@austintexas.gov

**WPDR/
CASE MANAGER:** Donna Galati, 974-2733
Donna. Galati @austintexas.gov

WATERSHED: Lake Travis and Lake Austin Watersheds (Water Supply Rural)
Drinking Water Protection Zone

ORDINANCE: Comprehensive Watershed Ordinance

REQUEST: Variance request is as follows:
1. To allow impervious cover greater than 20% of the net site area allowed
by code not to exceed 36.93%
LDC Section 25-8-454(D) (1) (a)

STAFF RECOMMENDATION: The variance is not recommended.

REASONS FOR RECOMMENDATION: Findings of fact have not been met.



MEMORANDUM

TO: Mary Gay Maxwell, Chairperson and Members of the Environmental Board

FROM: Jim Dymkowski, Environmental Review Specialist Senior
Planning and Development Review Department

DATE: November 20, 2013

SUBJECT: Water Control and Improvement District No. 17 – Mansfield Water Treatment Plant - SPC-2012-0429C

On the December 18, 2013 agenda is a request for the consideration of one variance from LDC Section 25-8-454(D) (1) (a) – To allow impervious cover greater than 20% of the net site area allowed by code not to exceed 36.93%.

Description of Property

The subject property is located approximately three miles west of FM 2222 on the north side of RR 620, just east of Mansfield Dam. It is predominantly in the Lake Travis Watershed, with a small portion of the southern property near the access drive off RR 620 draining to the Lake Austin Watershed. Both watersheds are classified the Water Supply Rural within the Drinking Water Protection Zone. It is within the City of Austin limited purpose jurisdiction. The gross site area as given in the plan set is 6.849 acres granted as an easement from LCRA, the larger surrounding property owner, to WCID 17. Water and wastewater service will be provided by Travis County WCID 17. It is bordered to the north by undeveloped rangeland and Lake Travis, to the south by RR 620, to the east also by undeveloped rangeland and single family housing and to the west by Mansfield Dam.

Many years ago, the site was used and disturbed during the construction of Mansfield Dam. There is also remnant evidence of a structure that was removed from the site in the area of the proposed Membrane & Lab Building. The remainder of the site has restored itself to a natural system consistent with its hill country location.

Existing Topography/Soil Characteristics/Vegetation

The property predominately contains slopes of 0-10% with some small upland pockets of slopes greater than 15%. The project has been sited on the highpoint of the land and slopes in all directions from that highpoint. Vegetation consists of Ashe juniper, Live oak, Texas Madrone, twisted leaf yucca, Milkweed, and native grasses. According to the Environmental Assessment, geology at this site is characterized by the Glen Rose formation and soils consist of Tarrant formation.

Critical Environmental Features/Endangered Species

As stated in the environmental assessment and confirmed by the Watershed Protection Department Environmental Resource Management (ERM) staff, no Critical Environmental Features were found on or adjacent to the site. The 100' Critical water quality zone limit has been placed on the plan landward of the 681 lake elevation line.

Description of Project

The proposed project will be constructed in four phases for a 12 million gallon per day membrane water treatment plant. Phase 1 and phase 2 will be constructed together and include the raw water pump station and intake facilities, line to the plant, main membrane and lab building, chemical feed facility, flocculation basin, one clearwell, high service pump station, storage building and associated drives and parking. Phase 3 and 4 will consist of the expansion of the flocculation basis and an additional clearwell. The allowable impervious cover for this site is 20% of the NSA of 5.982 equaling 1.173 acres. The proposed impervious cover for the development is 36.19% of the NSA equaling 2.165.

The project is also requesting waivers from the Hill Country Roadway requirements of zoning sections of the land development code 25-2. These waiver requests are reviewed by the Zoning and Plating Commission.

Environmental Code Variance Request

The following variance to the land development code is being requested:

1. To allow impervious cover greater than 20% of the net site area allowed by code not to exceed 36.93%. LDC 25-8-454 (D) (1) (a)

Recommendation

Staff does not recommend approval of the variance as the Findings of Fact have not been met (see attached)



**Planning and Development Review Department
Staff Recommendations Concerning Required Findings
Water Quality Variances**

Project:	Water Control and Improvement District No. 17 – Mansfield Water Treatment Plant - SPC-2012-0429C
Ordinance Standard:	Land Development Code Section 25-8-454(D) (1) (a)
Variance Request:	To allow impervious cover greater than 20% of the net site area allowed by code not to exceed 36.93%.

Findings:

A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

No. The requirement would not deprive a privilege or safety given to others. There are two similar developments; WCID 17 District Plant office and building improvements SP-05-1269D and the City of Austin water treatment plant 4 SP-2009-0252D that were reviewed under different situations. Although the previous WCID permit was granted a variance to exceed the 20% allowable impervious cover, the variance was granted largely for after the fact constructed impervious cover. A large portion of the impervious cover on that project existed prior to the site coming into the City of Austin's ETJ and jurisdiction and was not required to be removed. Water treatment plant 4 was not granted a variance under 25-8. City Council passed a special ordinance to aid in development.

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

No. The variance is based on the method chosen by the applicant to develop the property. The amount of impervious cover required is based on the service capacity needed for the plant. The method of development in trying to site this known amount of impervious cover on this undersized piece of property creates this variance. Although the project has attempted to limit its impervious cover, and is providing improved water quality treatment by capturing building and some drive runoff and treating it to drinking water standards in the plant itself, staff does not believe that there is a greater overall environmental protection. The building and drive runoff captured and treated will leave the plant at a higher standard than code required water quality but it will be

removed from the natural system and not be returned to the land as potential base flow for surrounding water bodies. Also, staff does not believe that the increased water quality pollutant removal is a greater benefit over the large increase in site disturbance proposed by the increased impervious cover.

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

No. Staff does not believe this is a reasonable use for the size of the property chosen. The applicant has not shown a loss of privilege given to other property owners or a loss of reasonable use of the property.

- c) Does not create a significant probability of harmful environmental consequences; and

No. The overall land disturbance will be greater associate with the request for the increase impervious cover in the drinking water protection zone. The building and drive runoff captured and treated by the plant for water quality will be removed from the natural system and not be returned to the land as potential base flow for surrounding water bodies.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):

1. The above criteria for granting a variance are met;

N/A.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

N/A.

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

N/A.

Environmental Reviewer:


Jim Dymkowski

Environmental Program Coordinator:


Sue Barnett

Environmental Officer:


Chuck Lesniak

Date: December 4, 2013

Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).

Water Control and Improvement District No. 17 - Mansfield Water Treatment Plant
SPC-2012-0429C
Driving Directions

Beginning at Austin City Hall 301 W 2nd Street:

Go west on Cesar Chavez approximately 1.2 miles.

Go north on Mopac Loop 1 approximately 4.2 miles to exit for RM 2222.

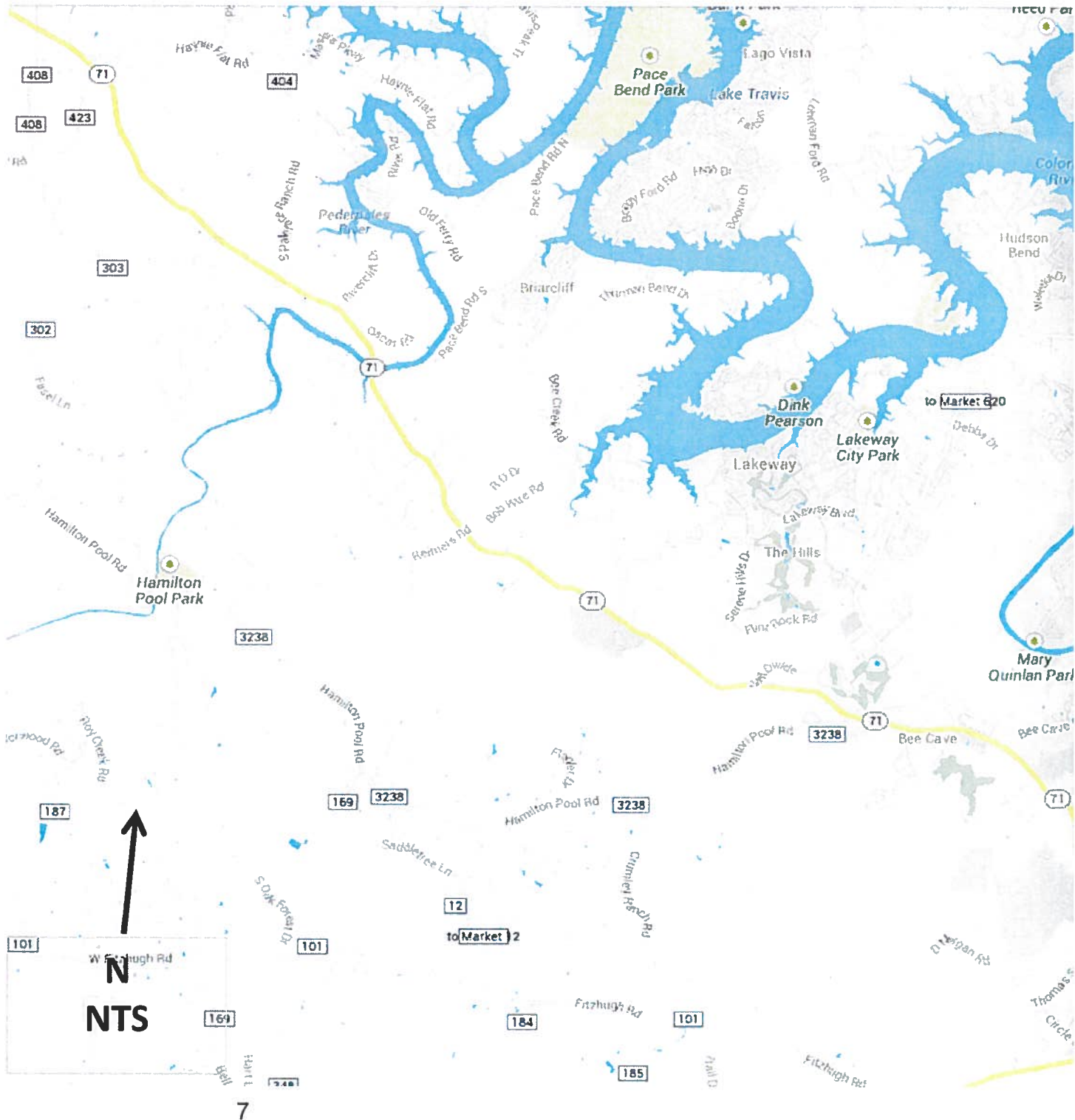
Turn left and go west on RM 2222 approximately 8.5 miles.

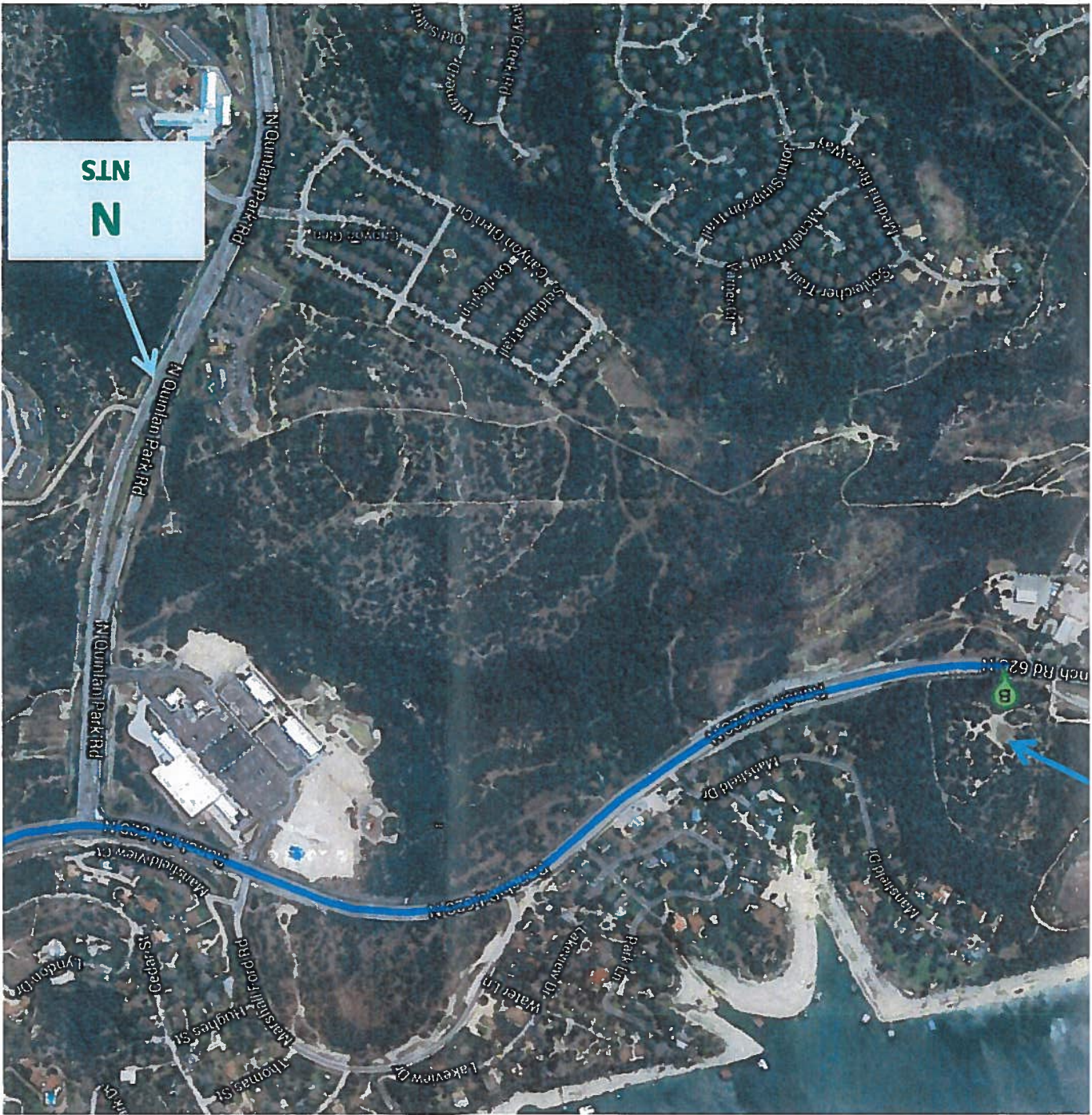
Turn left onto RR 620. and travel approximately 3 miles.

There is an access drive on the north side of the road just before the dam access turn right to be at site.

4506 N RR 620

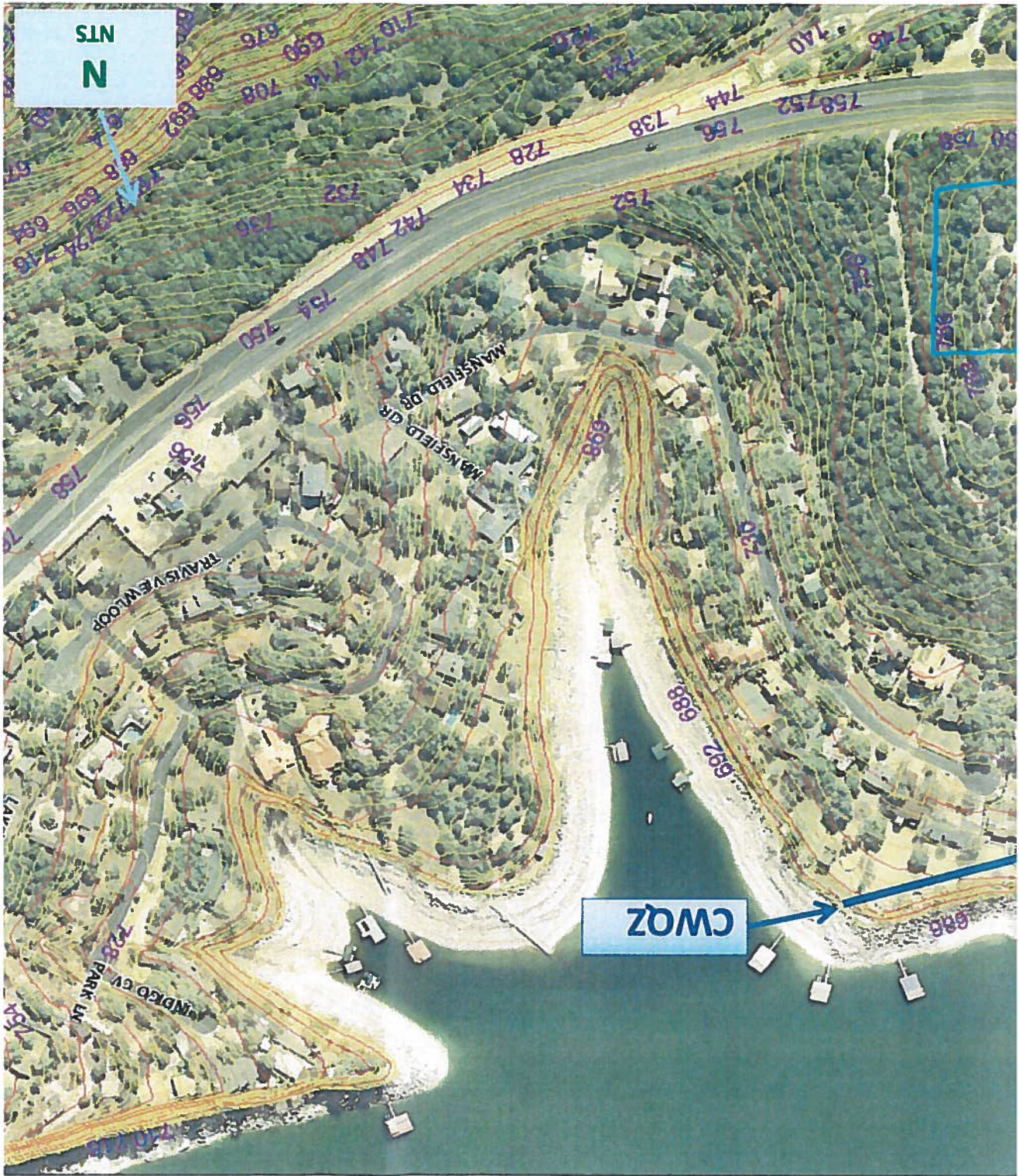
Water Control and Improvement District SPC-2012-0429C Site Location





ment Plant

Mansfield Water Treatment Plant



Water Control and Improvement District No. 17 – Mansfield Water Treatment Plant

SP-2012-0427C

Site Photos



View of site from RR620 looking north



Area of main membrane building looking north remainder of site heavily vegetated



Environmental Services, Inc.

23 June 2010

**Environmental Assessment Information
City of Austin Land Development Code (Section 25-8-121)
Compliance Report**

RE: Proposed Water Control and Improvement District (WCID) #17 Water Treatment Facility and easements, located east of Mansfield Dam, Austin, Travis County, Texas
HJN 100076 EA

1.0 INTRODUCTION

This report provides the results of an environmental assessment conducted by Horizon Environmental Services, Inc. (Horizon) on the above-referenced site. Horizon conducted the field reconnaissance on 15 June 2010. Horizon spent a minimum of 3.5 person-hours in the field evaluating the site and surrounding area, and completed the assessment process by conducting a review of existing literature.

2.0 ENVIRONMENTAL SETTING

2.1 LAND USE

The current use of the subject site is predominantly cleared land proposed for Travis County Water Control and Improvement District (WCID) #17 Water Treatment Facility and 2 easements that will serve the proposed facility (see attached). At the time of Horizon's field reconnaissance, River City Engineering personnel (project engineer) were present on the Property. Evidence of previous structures was observed on the central portion of the Property that included concrete foundations and 1 water well. The following land uses border the subject site:

North: Undeveloped rangeland with Lake Travis beyond
South: Ranch-to-Market Road (RM) 620, Pedernales Electric Co-op office and commercial business beyond
East: Undeveloped rangeland and single-family residential development and the Marshall Ford Store beyond
West: Mansfield Dam and University of Texas laboratory research facility

2.2 VEGETATION

The subject site is situated within the Cross Timbers vegetational area of Texas (Gould, 1975). Vegetation observed on the site consisted of Ashe juniper (*Juniperus ashei*), plateau live oak (*Quercus virginiana*), Texas madrone (*Arbutus xalapensis*), twist-leaf yucca (*Yucca rupicola*), green-flowered milkweed (*Asclepias asperula*), and native grasses. Clearing activities had recently occurred on the site resulting in most of the vegetation being disturbed

100076_COA_EA

CORPORATE HEADQUARTERS

1507 South IH 35 ★ Austin, Texas 78741 ★ 512.328.2430 ★ Fax 512.328.1804 ★ www.horizon-esi.com
Certified HUB/DBE/SBE

and removed or mulched. Horizon did not observe any wetland vegetation on the 4-acre Property. However, the northernmost easement borders Lake Travis.

2.3 TOPOGRAPHY AND SURFACE WATER

This site is within the Lake Travis Watershed (COA, 1998). Topographically, the site ranges from approximately 700 to 740 feet above mean sea level (USGS, 1986). The highest elevation is located in the central portion of the site with drainage occurring in a south-to-north direction and a west-to-east direction primarily by overland sheet flow toward Lake Travis. Only the northern boundary of the easement area that enters Lake Travis is within the 100-year floodplain (FEMA, 2008). A review of the National Wetland Inventory maps showed no potential wetland areas on the subject site (USFWS, 1993). However, the northern easement enters Lake Travis.

2.4 SOILS

Soils mapped within the subject site include the following:

TABLE 1 – SOILS

SOIL NAME	SOIL TYPE	SOIL DEPTH (FEET)	UNDERLYING MATERIAL	PERMEABILITY	AVAILABLE WATER CAPACITY	SHRINK-SWELL CAPACITY
Tarrant soils, rolling (TaD)	clay	0.3 to 1.2	hard limestone	moderately slow	low	high
W	water	n/a	n/a	n/a	n/a	n/a

Source: NRCS, 2010a and 2010b

2.5 EDWARDS AQUIFER ZONE

The subject site not is found within the Edwards Aquifer Recharge, Transition, or Contributing Zones (TCEQ, 1996).

2.6 GEOLOGY

A review of existing literature shows the site is underlain by Glen Rose Limestone (UT-BEG, 1981). The upper member of the Glen Rose Limestone is relatively impermeable and described as the lower confining unit of the Edwards Aquifer. It has a maximum thickness of about 350 to 500 feet. Stair-step topography is characteristic of the upper member of the Glen Rose Limestone. The Upper Glen Rose Limestone is described as yellowish-tan, thinly bedded limestone and marl (Garner and Young, 1976). The upper member of the Glen Rose Limestone is relatively more thinly bedded, more dolomitic, and less fossiliferous than the lower member of the Glen Rose Limestone. The top of the upper member of the Glen Rose Limestone is red-stained, lumpy, irregular, and bored, with oysters cemented onto the surface (Rose, 1972).

2.7 WATER WELLS

A review of the records of the Texas Water Development Board (TWDB) revealed 1 documented water well on the subject site (TWDB, 2010). Horizon observed 1 water well on the central portion of the 4-acre tract during our site reconnaissance (see attached). The TWDB

records documented the water well as State of Texas well #5833902, which has been in place since at least the 1960s. The water well is approximately 716 feet deep with the Trinity Aquifer serving as the water source.

If the on-site well is not intended for future use, it should be capped or properly abandoned according to the Administrative Rules of the Texas Department of Licensing and Regulation (TDLR), 16 Texas Administrative Code (TAC), Chapter 76. Texas Commission on Environmental Quality (TCEQ) publication RG-347, "Landowner's Guide to Plugging Abandoned Water Wells," provides specific guidance. If a well is intended for use, it must comply with 16 TAC §76.

The results of this assessment do not preclude the existence of additional undocumented/abandoned wells. If a water well or casing is encountered during construction, work should be halted near the feature until the TCEQ is contacted.

3.0 CRITICAL ENVIRONMENTAL FEATURES

The City of Austin definition of a critical environmental feature (CEF) includes caves, sinkholes, springs, wetlands, bluffs, canyon rimrock, water wells within the Edwards Aquifer, and significant recharge features located over the Edwards Aquifer Recharge Zone. Horizon did observe 1 water well on the Property; however, according to TWDB records, the Trinity Aquifer is the water source for the on-site well. No potential CEFs as defined by the City of Austin were found on or within 150 feet from the subject property.

For Horizon Environmental Services, Inc.



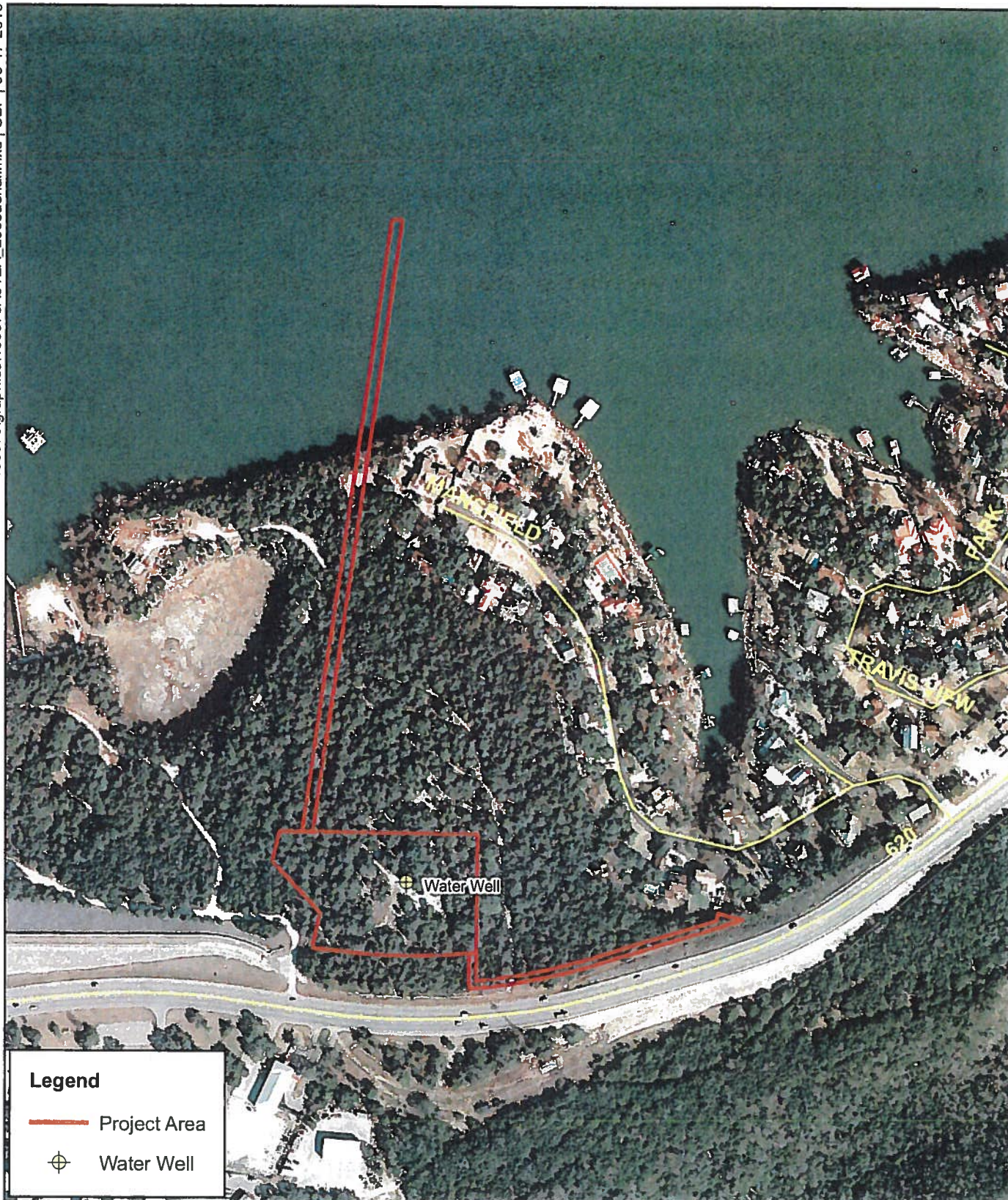
Michelle Dorsey
Environmental Specialist

23 June 2010
Date

Attachments: 2008 aerial photograph and site findings
Invoice

4.0 REFERENCES

- (CAPCOG) Capital Area Council of Governments. 2008 Orthoimagery, Mansfield Dam, Texas, quarter quadrangle. CAPCOG Center for Regional Development, Austin, Texas. 2008.
- (COA) City of Austin. *Austin Watershed Regulation Areas*. Austin, Texas: City of Austin, Department of Planning and Development. 30 January 1998.
- (FEMA) Federal Emergency Management Agency. Flood Insurance Rate Map (FIRM) Panel No. 48453C0220H, Travis County, Texas. 26 September 2008.
- Garner, L.E., and K.P. Young. *Environmental Geology of the Austin Area: An Aid to Urban Planning*. Report of Investigations 86. The University of Texas at Austin, Bureau of Economic Geology. 1976.
- Gould, F.W. *Texas Plants – A Checklist and Ecological Summary*. College Station: Texas A&M University. 1975.
- (NRCS) US Department of Agriculture, Natural Resources Conservation Service. 2010a. Web Soil Survey, <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed 14 June 2010.
- _____. 2010b. Soil Data Mart, <<http://soildatamart.nrcs.usda.gov/>>. Accessed 14 June 2010.
- Rose, P.R. *Edwards Group, Surface and Subsurface, Central Texas: Austin, Texas*. Report of Investigations 74. The University of Texas, Bureau of Economic Geology. 1972.
- (TCEQ) Texas Commission on Environmental Quality. Edwards Aquifer Recharge Zone Boundary Maps. 1996.
- _____. *Complying with the Edwards Aquifer Rules: Administrative Guidance*, revised August 1999.
- (TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database (ArcIMS), <http://wiid.twdb.state.tx.us/ims/www_drl/viewer.htm?DISCL=1&>. Accessed 14 June 2010.
- (USFWS) US Department of the Interior, Fish and Wildlife Service. National Wetland Inventory Map, Mansfield Dam Quad, Texas. 1993.
- (USGS) US Geological Survey. 7.5-minute series topographic maps, Mansfield Dam, Texas, quadrangle. 1986.
- (UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; revised 1981.



Legend

— Project Area

⊕ Water Well

MAP SOURCE: CAPCOG, 2008.

0 200 400
Feet



2008 AERIAL PHOTOGRAPHY
WCID #17 WATER TREATMENT FACILITY
AUSTIN, TRAVIS COUNTY, TEXAS

Horizon
Environmental Services, Inc.



Environmental Services, Inc.

28 June 2010

Endangered Species Habitat Assessment City of Austin Land Development Code (Section 25-8-121) Compliance Report

RE: Proposed Water Control and Improvement District (WCID) #17 Water Treatment Facility and easements, located east of Mansfield Dam, Austin, Travis County, Texas
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The results of this assessment do not preclude the existence of additional undocumented/abandoned wells. If a water well or casing is encountered during construction, work should be halted near the feature until the TCEQ is contacted.

3.0 FINDINGS

Literature and agency file searches were conducted to identify the potential occurrence of any federally listed endangered species in the vicinity of the subject site. The following federally listed species may be found in Travis County: Barton Springs salamander (*Eurycea sosorum*), Bee Creek Cave harvestman (*Texella reddelli*), Bone Cave harvestman (*Texella reyesi*), Tooth Cave spider (*Leptoneta myopica*), Kretschmarr Cave mold beetle (*Texamaurops reddelli*), Tooth Cave ground beetle (*Rhadine Persephone*), golden-cheeked warbler (*Dendroica chrysoparia*), and black-capped vireo (*Vireo atricapilla*) (USFWS, 2010). Additionally, the US Fish and Wildlife Service (USFWS) lists the following migratory bird species as potentially occurring in many or all Texas counties: bald eagle (*Haliaeetus leucocephalus*), whooping crane (*Grus americana*), Eskimo curlew (*Numerius borealis*), interior least tern (*Sterna antillarum athalassos*), and piping plover (*Charadrius melodus*).

The Balcones Canyonlands Conservation Plan (BCCP) Map of the Permit Area is a map of Travis County that reflects estimates of habitat for various threatened or endangered species based in part on aerial photographs and non-site-specific assessments. The BCCP map shows the site as within golden-cheeked warbler Zone 3, area not known to be habitat (BCCP, 1996).

The subject site is not underlain by a geologic formation that is known to form caves or voids that may provide habitat for terrestrial karst invertebrates. The subject site is mapped as Zone 4 (areas that do not contain potential endangered cave species habitat) by Veni and Associates (1991).

Golden-cheeked warbler habitat in central Texas typically consists of mature Ashe juniper (*Juniperus ashei*) and broad-leaved oak woodlands, with a high percentage of canopy coverage within and adjacent to incised canyons of central Texas. It is Horizon's opinion that the northernmost easement exhibits vegetational habitat characteristics for the golden-cheeked warbler but is likely not suitable habitat. This area of suitable habitat is highly fragmented, as the attached 4-acre tract was previously cleared and high traffic volume can be heard from RM 620 on the immediately adjacent property to the south.

Black-capped vireos typically nest in distinctive and dense scrubby mottes (to about 6 feet high) interspersed in open grassland within central Texas. Common vegetation within these mottes includes shin oak (*Quercus sinuate* var. *breviloba*), plateau live oak (*Quercus fusiformis*), evergreen sumac (*Rhus virens*), Texas persimmon (*Diospyros texana*), agarita (*Berberis trifoliolata*), and Ashe juniper. It is Horizon's opinion that the vegetation on the subject site does not exhibit habitat characteristics for the black-capped vireo.

It is Horizon's opinion that the subject site does not provide potentially suitable habitat for any of the federally listed endangered species that occur in Travis County. It is Horizon's opinion that any occurrence of the federally listed migratory bird species on the subject site would be temporary in nature, and that development of the site would not adversely impact the species.

For Horizon Environmental Services, Inc.



Michelle Dorsey
Environmental Specialist

28 June 2010
Date

Attachments: 2008 aerial photograph and site findings



ENVIRONMENTAL BOARD VARIANCE APPLICATION



TRAVIS COUNTY WCID No. 17
MANSFIELD WATER TREATMENT PLANT
#SPC-2012-0429C



December 5, 2013

CHAIRMAN OF THE ZONING AND PLATTING COMMISSION
301 West 2nd Street
Austin, Texas 78701

**RE: Travis County W.C & I.D. No. 17
Mansfield Water Treatment Plant
SPC-2012-0429C
Request for Variance to §25-8-454(D)(1)(a) of *The Code of the City of Austin*
Uplands Zone - Allowable Impervious Cover**

Dear Chairman:

Travis County W.C.&I.D. No. 17 (the District) is proposing to construct the Mansfield Water Treatment Plant Project. This project consists of expanding the District's water treatment capacity by constructing a 12-million gallon per day, at full build-out, membrane water treatment plant. This project consists of improvements that will allow the District to meet health and safety guidelines and serve its existing and future customers. This project proposes to construct impervious cover in the amount of 37% which exceeds the 20% allowed in the Uplands Zone within a Water Supply Rural Watershed. Travis County W.C.&I.D. No. 17 is requesting a variance to §25-8-454(D)(1)(a) of *The Code of the City of Austin*, Uplands Zone – Allowable Impervious Cover may not exceed 20%. As noted herein, the District's Eck Lane Water Treatment Plant received a similar variance in 2005. **Failure to grant this variance request will effectively preclude the District's ability to construct this much needed and critical public water supply project.**

The proposed improvements, which make up the Mansfield Water Treatment Plant Project for the District, include a Membrane and Lab Building, Chemical Feed Facility, High Service Pump Station, Raw Water Pump Station, Storage Building, and associated site improvements. Phase 1 of the project consists of the construction of the Raw Water Pump Station, Raw Water Intake Facility, and a portion of the Raw Water Line to the treatment plant site. Phase 2 will consist of the construction of the main Membrane and Lab Building, Chemical Feed Facility, Flocculation Basin, Clearwell, High Service Pump Station, Storage Building and additional associated site improvements. Future phases will complete construction of the project and will consist of the expansion of the Flocculation Basins and the construction of a second Clearwell. The phase 1 and 2 portions of the project will be constructed simultaneously and are proposed to deliver approximately 6-million gallons of treated water daily for the District's use. With the completion of future Phases 3 & 4, the plant will be able to produce an approximate maximum capacity of 12-million gallons of

treated water daily. These proposed improvements are vital to enable the District to meet TCEQ requirements and serve its existing and future customers.

The Mansfield Water Treatment Plant Project site is located at 4506 and 4506 B North F.M. 620 Road in Travis County, Texas. The project consists of six permanent easements obtained from the Lower Colorado River Authority (LCRA) totaling 6.849 acres of gross site area. Additional temporary construction easements were also obtained from LCRA. The project is located within the Lake Travis Watershed which is classified as a rural water supply watershed. A portion of the project is located within a FEMA defined floodplain as shown on the flood insurance rate map for Travis County, community map no. 48453C0220H, dated September 26, 2008. The project does not lie within the City of Austin Recharge Zone. The site is zoned P – Public.

Travis County W.C.&I.D. No. 17 is requesting a variance to §25-8-454(D)(1)(a) of *The Code of the City of Austin*, which states that for a commercial or multi-family use development in an Uplands Zone, impervious cover may not exceed 20%. Although this project zoning use is considered a Major Utility Facility, the project proposes to construct 37% of impervious cover.

The District selected this site for the proposed Water Treatment Plant for several reasons. Site selection was difficult because of the lack of availability and high cost of developable land in the Lake Travis / Lake Austin area for this public works project. The site needed to be located within the District service area, on the east side of Mansfield Dam and in close proximity to existing District major utility system facilities. Finally, the site location needed to be within close proximity to Lake Travis, the Water Treatment Plant's source of raw water. This is the only site that satisfied all these requirements.

The proposed improvements required for the design and implementation of the Water Treatment Plant were carefully placed and footprints minimized not only in order to reduce the amount of proposed impervious cover but to also reduce the number of existing trees needing to be removed. For example basins normally located outside of the footprint of the main Membrane building were incorporated into the building design and placed beneath the building to reduce impervious cover. Even with this careful planning, the proposed effective site impervious cover, based on the net site area, is 37%. However, all or portions of most of the proposed drainage areas will be captured and treated within the Membrane Water Treatment Plant. The captured impervious cover includes storm water run-off from roofs, driveway and drive aisle run-off, and miscellaneous concrete run-off. Capturing the run-off from this impervious cover reduces the effective site impervious cover to 16.5%.

Due to the finiteness of available land that meets the District's requirements for the proposed Water Treatment Plant, it is vital that this site be used. Additionally, alternative locations and sizes of these improvements on the site will not alleviate the need for this variance.

Listed below are the Findings of Fact, as listed in the City of Austin Land Development Code Section §25-8-41, and an explanation of each applicable finding of fact:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development? YES

- Requiring Section §25-8-454(D)(1)(a) of *The Code of the City of Austin* would prevent the ability to construct the proposed necessary major utility facility improvements. This site is the only site Travis County W.C.&I.D. No. 17 was able to locate and acquire that met the special site design requirements including needing to be within the District service area, located on the east side of Mansfield Dam and in close proximity to existing District utility system facilities. Additionally, the site needed to be within close proximity to Lake Travis, the Water Treatment Plant's source of raw water.

The District's original Water Treatment Plant (SP-05-1269D) that serves the western half of the District, located at 3812 Eck Lane, was granted a similar variance in 2005 that allowed for 56% impervious cover on the site that also was originally limited to 20% impervious cover. Furthermore, the project was granted three additional variances that allowed for parking on a slope with more than 15% gradient, building a structure on a slope with more than 35% gradient and not providing a 40% downstream buffer.

The variance is needed in order to allow the District to proceed with this critical public water supply project to ensure a reliable municipal potable water supply during the area's continuing drought. Additionally, this Water Treatment Plant is needed to provide cooling water to the City of Austin's new Water Treatment Plant No. 4 and needs to be online prior to the completion of the City's plant.

2.

- a. The variance is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance? YES
- This variance is not based on a condition caused by the method chosen by the District to develop the property. This project requires specific, significant, project site requirements as noted above. LCRA owns the property and, after lengthy negotiations, provided the District permanent easements for the project. The District was unable to acquire any additional permanent site area from LCRA.

All or portions of most of the proposed drainage areas will be captured and treated within the Membrane Water Treatment Plant. The captured impervious cover

includes storm water run-off from roofs, driveway and drive aisle run-off, as well as miscellaneous concrete run-off. By capturing nearly 56% of the total impervious cover run-off from the site, the effective site impervious cover is reduced to 16.5%. Vegetative Filter Strips have been proposed as additional water quality controls for the remainder of the proposed impervious cover. By using these two innovative approaches, the development provides water quality greater than would have resulted had development proceeded without this variance and alleviates the need for a conventional water quality pond.

Additionally, along with the construction of the proposed site improvements, an off-site force main (GP-2013-0052.D17) will be constructed to serve the plant. The proposed force main will be located within the adjacent Travis Vista Subdivision, providing sewer service to the area and removing the last direct discharge into Lake Travis.

- b. This variance is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property? YES
- This variance is the minimum change necessary. The proposed Water Treatment Plant was designed in order to minimize the amount of impervious cover required for the safe and efficient operation of this type of major utility facility as well as avoiding the removal of existing trees and minimizing project area disturbance. One example includes basins normally located outside of the footprint of the main Membrane building being incorporated into the building design and placed beneath the building to reduce impervious cover. A second example is the membrane technology utilized, which requires a smaller footprint than conventional treatment methods. Finally, the impervious pavement width of the raw water pump station access drive was minimized by the use of pervious reinforced geotextile matting.
- c. This variance does not create a significant probability of harmful environmental consequences? YES
- By using the Plant's Membrane technology, 100% of the pollutant load from 20.5% captured impervious cover storm water run-off will be removed, not only exceeding City requirements, but also returning site area that would normally be used for a water quality facility into undisturbed natural buffer area. Granting of this variance does not create significant probabilities of harmful environmental consequences.

Additionally, the District has contracted with Bartlett Tree Experts to provide a tree protection plan and services for the site. The services include root invigoration, fertilization, monthly pest management inspection during construction, dead wood pruning and a special Texas Madrone protection and improvement plan. The 10-inch Texas Madrone tree located on-site extremely rare in the native Austin landscape and the plan is designed around protecting and even improving the tree during the construction process.

3. Development with this variance will result in water quality that is at least equal to the water quality achievable without this variance.
- As noted above in 2a, the District plans to treat a high percentage of proposed impervious cover storm water run-off within the Water Treatment Plant. The District also plans on providing additional water quality controls for the remainder of the proposed impervious cover. Development with this variance will result in water quality greater than would have been achieved had development proceeded without this variance or if the project proceeded with an impervious cover less than 20%.

If you have any questions, or need additional information, please do not hesitate to contact me at (512) 442-3008, ext. 108.

Sincerely,



David Kneuper, P.E.





ENVIRONMENTAL BOARD VARIANCE APPLICATION TEMPLATE

Insert Applicant Variance Request Letter here.

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	Deborah Gernes - General Manager
Street Address	Travis County Water Control & Improvement District No. 17 3812 Eck Lane
City State ZIP Code	Austin, Texas 78734
Work Phone	(512) 266-1111
E-Mail Address	dgermes@wcid17.org

Variance Case Information

Case Name	Travis County WCID No. 17 - Mansfield Water Treatment Plant
Case Number	SPC-2012-0429C
Address or Location	4506 N. F.M. 620 Rd., Austin, Texas 78732
Environmental Reviewer Name	James Dymkowski
Applicable Ordinance	§25-8-454(D)(1)(a)
Watershed Name	Lake Travis
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input checked="" type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone

Edwards Aquifer Recharge Zone ☐ Barton Springs Segment ☐ Northern Edwards Segment
☒ Not in Edwards Aquifer Zones

Edwards Aquifer Contributing Zone ☐ Yes ☒ No

Distance to Nearest Classified Waterway The project's raw water intake is located within Lake Travis.

Water and Waste Water service to be provided by Travis County WCID No. 17

Request The variance request is as follows (Cite code references:

Impervious cover	Existing	Proposed
square footage:	<u>5,983</u>	<u>94,313</u>
acreage:	<u>0.14</u>	<u>2.17</u>
percentage:	<u>2.30%</u>	<u>36.19%</u>

Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)

The Travis County Water Control & Improvement District No. 17 – Mansfield Water Treatment Plant project site consists of six permanent easements obtained from the Lower Colorado River Authority (LCRA) totaling 6.849 acres of gross site area.

A portion of the project (Raw Water Intake Tunnel) is located within Lake Travis and subsequently within the 100-year floodplain as shown on FIRM Map No. 48453C0220H, effective date of September 26, 2008. Separate site Environmental and Endangered Species Habitat Assessments (Attached) were completed by Horizon Environmental Services, Inc. in June of 2010. According to the assessments, no potential Critical Environmental Features (CEFs), as defined by the City of Austin, were found within 150-Feet of the subject property and the site does not provide potentially suitable habitat for any of the federally listed endangered species that occur in Travis County. The site is not located in the Edwards Aquifer Recharge Zone. The site is located within the Lake Travis Watershed, a rural watershed. All six easements are within the City of Austin's Limited Purpose Planning Zoning Health Safety jurisdiction. Finally, the site is currently Public (P).

The site is currently undeveloped and consists mainly of Ashe Juniper and Oak trees along with native grasses, cacti, exposed soils and limestone outcrops. Three heritage trees are located on-site and are all proposed to

remain. Additionally, the District has contracted with Bartlett Tree Experts to provide a tree protection plan and services for the site. The services include root invigoration, fertilization, monthly pest management inspection during construction, dead wood pruning and a special Texas Madrone protection and improvement plan. The 10-inch Texas Madrone tree located on-site extremely rare in the native Austin landscape and the plan is designed around protecting and evening improving the tree during the construction process.

The main 4-acre easement is located at a high-point with the ground generally sloping off to the east and west at a gradual slope ranging from 2 – 7%. The permanent easements located to the north of the 4-acre easement slope directly to Lake Travis. A more in-depth description of the existing site can be found in the attached assessments performed by Horizon Environmental Services, Inc. (Attached).

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)

Travis County W.C.&I.D. No. 17 is requesting a variance to §25-8-454(D)(1)(a) of *The Code of the City of Austin*, which states that for a commercial or multi-family use development in an Uplands Zone, impervious cover may not exceed 20%. Although this project zoning use is considered a Major Utility Facility, the project proposes to construct an amount of impervious cover exceeding 20%.

FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project: Travis County WCID No. 17 - Mansfield Water Treatment Plant

Ordinance: §25-8-454(D)(1)(a)

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes

Requiring Section §25-8-454(D)(1)(a) of *The Code of the City of Austin* would prevent the ability to construct the proposed necessary major utility facility improvements. This site is the only site Travis County W.C.&I.D. No. 17 was able to locate and acquire that met the special site design requirements including needing to be within the District service area, located on the east side of Mansfield Dam and in close proximity to existing District utility system facilities. Additionally, the site needed to be within close proximity to Lake Travis, the Water Treatment Plant's source of raw water.

2. The variance:

- a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes

This variance is not based on a condition caused by the method chosen by the District to develop the property. This project requires specific, significant, project site requirements as noted above. LCRA owns the property and, after lengthy negotiations, provided the District permanent easements for the project. The District was unable to acquire any additional permanent site area from LCRA.

By treating a high percentage of proposed impervious cover storm water run-off within the Water Treatment Plant, and providing additional water quality controls for the remainder of the proposed impervious cover, the development provides water quality greater than would have resulted had development proceeded without this variance.

- b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes

This variance is the minimum change necessary. The proposed Water Treatment Plant was designed in order to minimize the amount of impervious cover required for the safe and efficient operation of this type of major utility facility as well as avoiding the removal of existing trees and minimizing project area disturbance. One example includes basins normally located outside of the footprint of the main Membrane building being incorporated into the building design and placed beneath the building to reduce impervious cover.

- c) Does not create a significant probability of harmful environmental consequences; and

Yes

By using the Plant's Membrane technology, 100% of the pollutant load from captured impervious cover storm water run-off will be removed, not only exceeding City

requirements, but also returning site area that would normally be used for a water quality facility into undisturbed natural buffer area. Granting of this variance does not create significant probabilities of harmful environmental consequences.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes

As noted above in 2a, the District plans to treat a high percentage of proposed impervious cover storm water run-off within the Water Treatment Plant. The District also plans on providing additional water quality controls for the remainder of the proposed impervious cover. Development with this variance will result in water quality greater than would have been achieved had development proceeded without this variance.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):

1. The criteria for granting a variance in Section A are met;

N/A

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

N/A

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

N/A

****Variance approval requires all above affirmative findings.**



Exhibits for Board Backup and/or Presentation

Please attach and paginate.

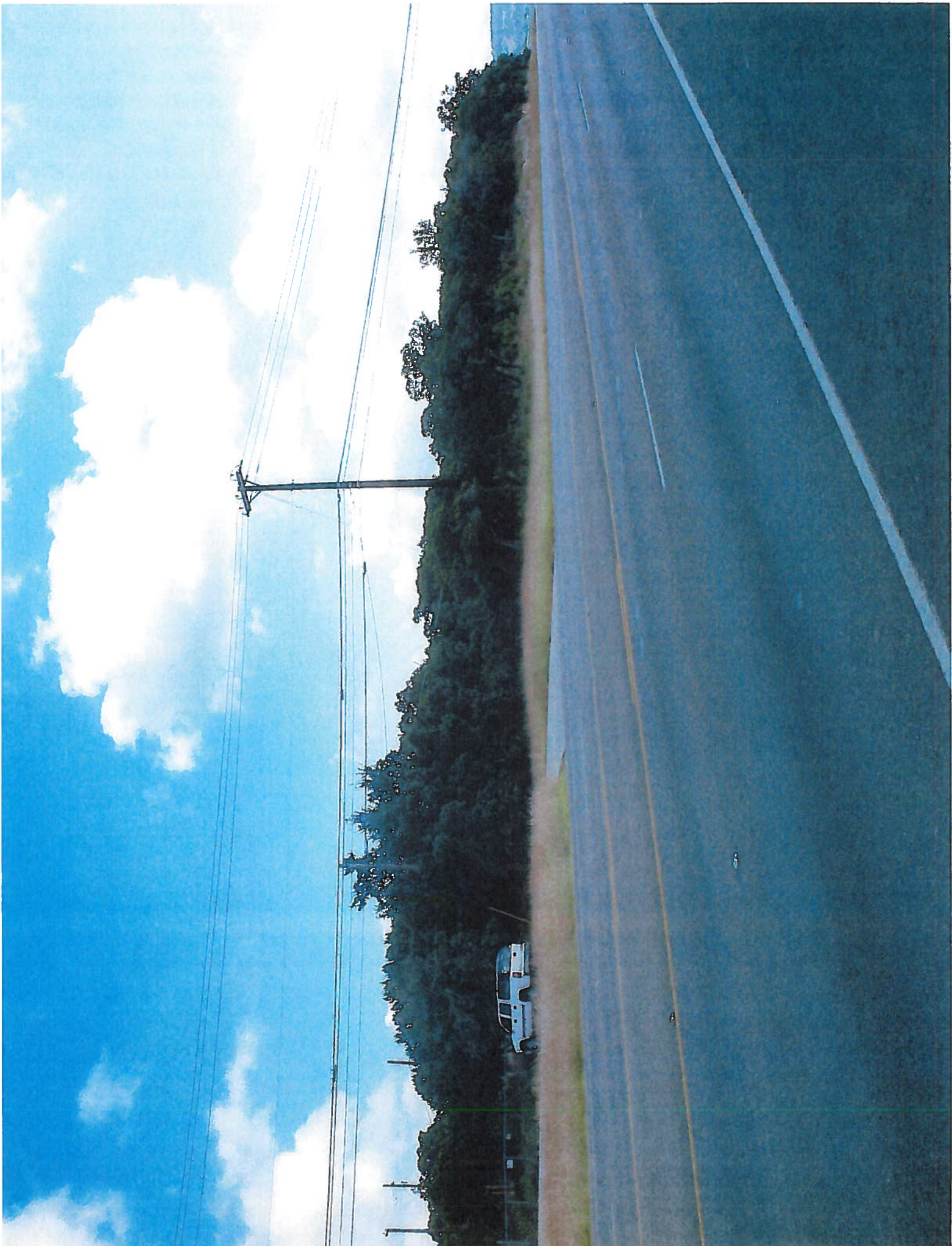
- Aerial photos of the site (backup and presentation)
- Site photos (backup and presentation)
- Aerial photos of the vicinity (backup and presentation)
- Context Map—A map illustrating the subject property in relation to developments in the vicinity to include nearby major streets and waterways (backup and presentation)
- Topographic Map - A topographic map is recommended if a significant grade change on the subject site exists or if there is a significant difference in grade in relation to adjacent properties. (backup and presentation)
- For cut/fill variances, a plan sheet showing areas and depth of cut/fill with topographic elevations. (backup and presentation)
- Site plan showing existing conditions if development exists currently on the property (presentation only)
- Proposed Site Plan- full size electronic or at least legible 11x17 showing proposed development, include tree survey if required as part of site or subdivision plan (backup and presentation)
- Environmental Map – A map that shows pertinent features including Floodplain, CWQZ, WQTZ, CEFs, Setbacks, Recharge Zone, etc. (backup and presentation)
- An Environmental Assessment pursuant to ECM 1.3.0 (if required by 25-8-121) (backup only)
- Applicant's variance request letter (backup only)





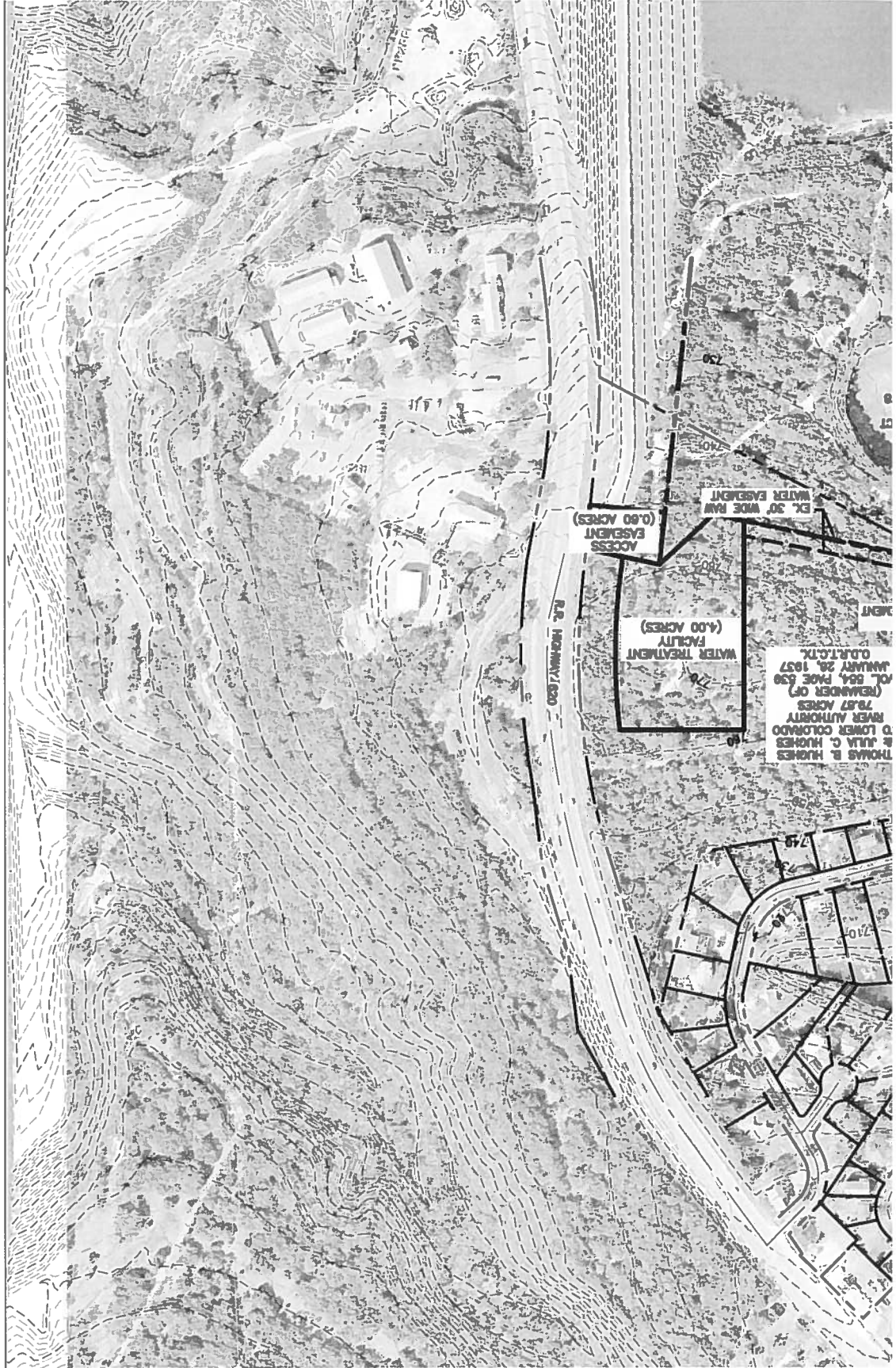


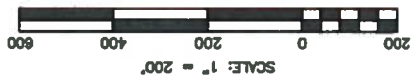


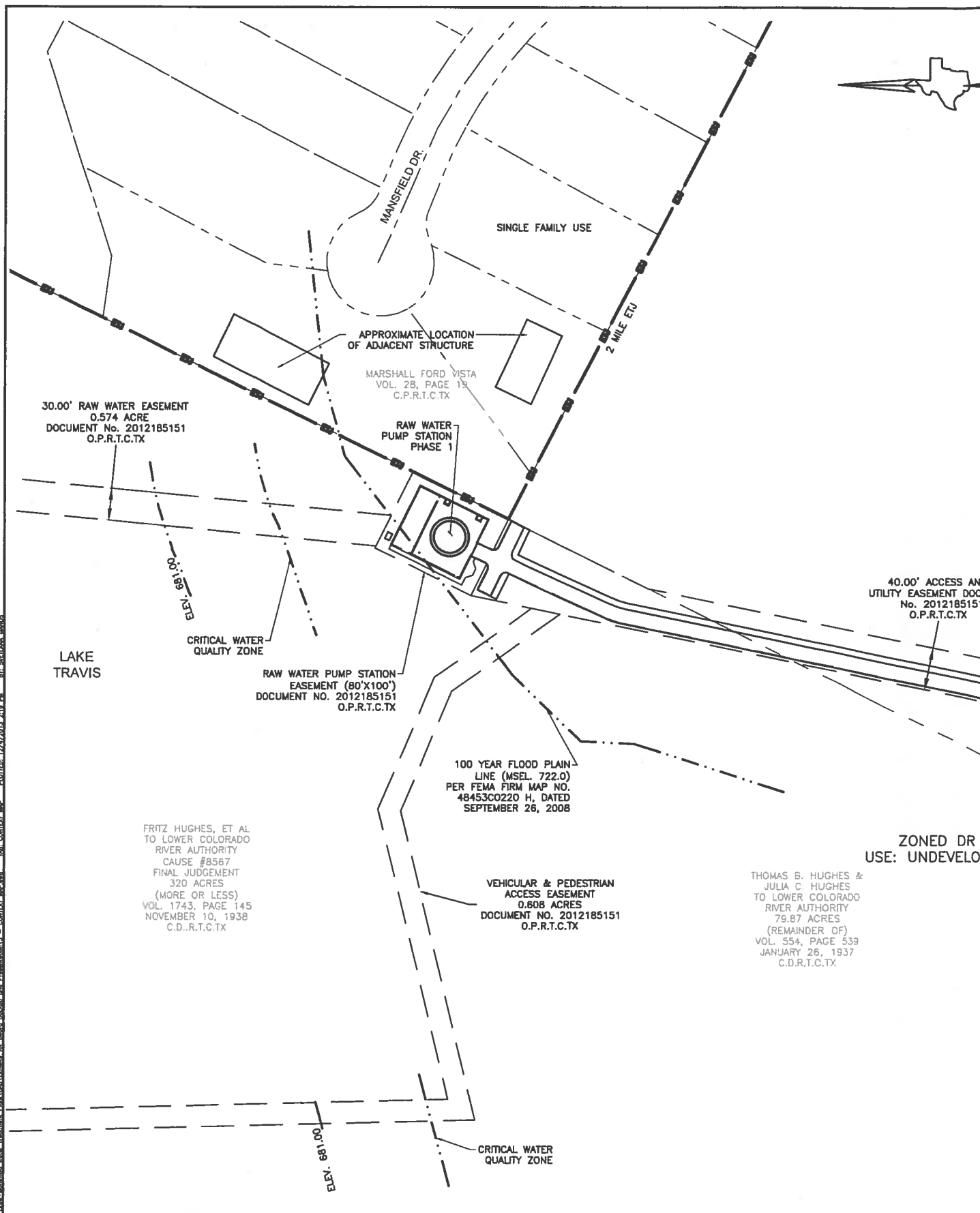








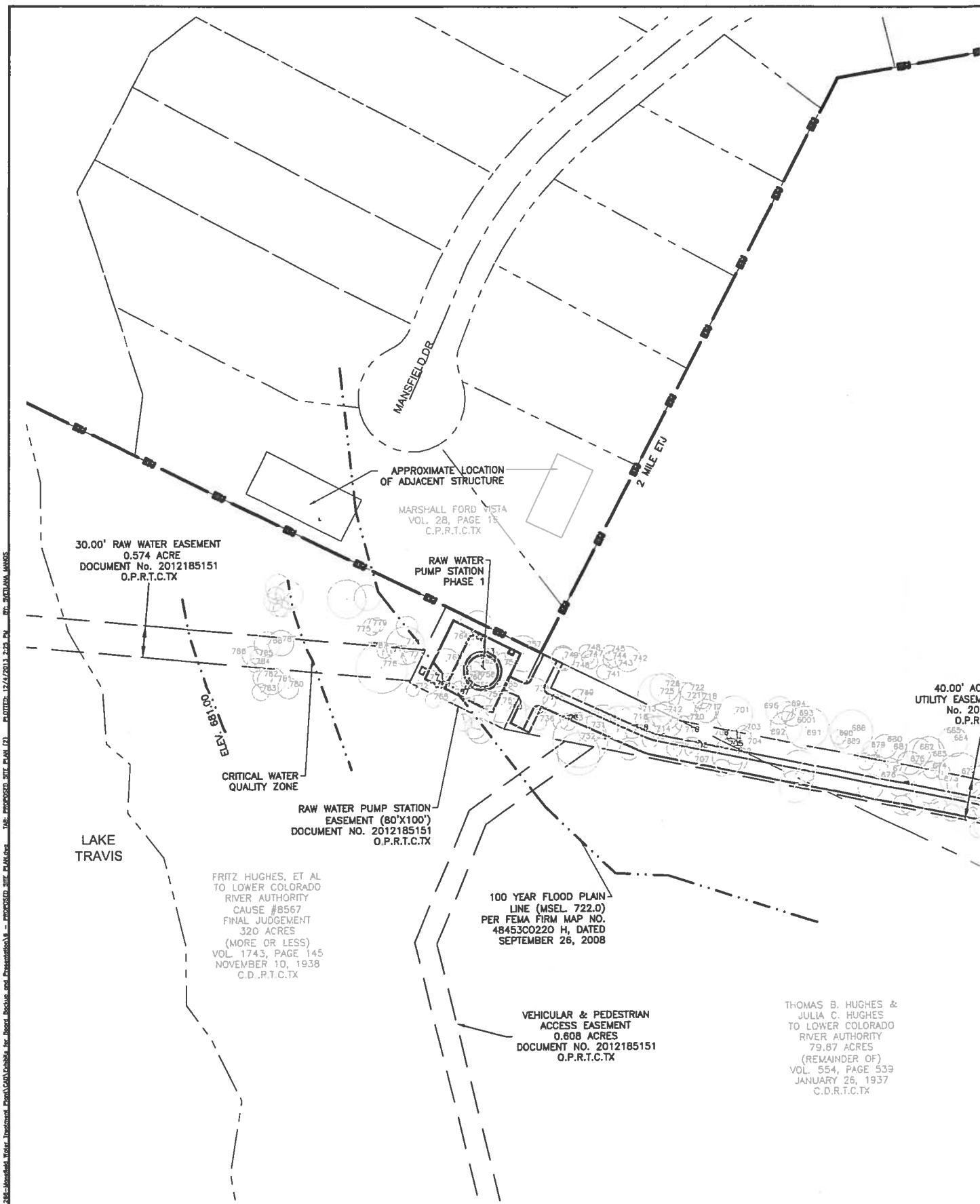




3801 SOUTH 1ST STREET
AUSTIN, TEXAS 78704-7047
PHONE: (512) 443-3068
FAX: (512) 442-6522

1011 W. COUNTY LINE ROAD, SUITE C
NEW BRAUNFELS, TEXAS 78130
PHONE: (830) 636-3558
FAX: (830) 636-3601

TRAVIS COUNTY WATER CONTROL & IMPROVEMENT DISTRICT
MANSFIELD WATER TREATMENT PLANT



P.L.C. 01/15/2011, 11:50 AM, 171,348 - Mansfield Water Treatment Plant, CAUTION: For Board Review and Approval Only - PROPOSED SITE PLAN (2) - PLATTING 12/14/2013 2:28 PM, BY: MICHAEL MANOS

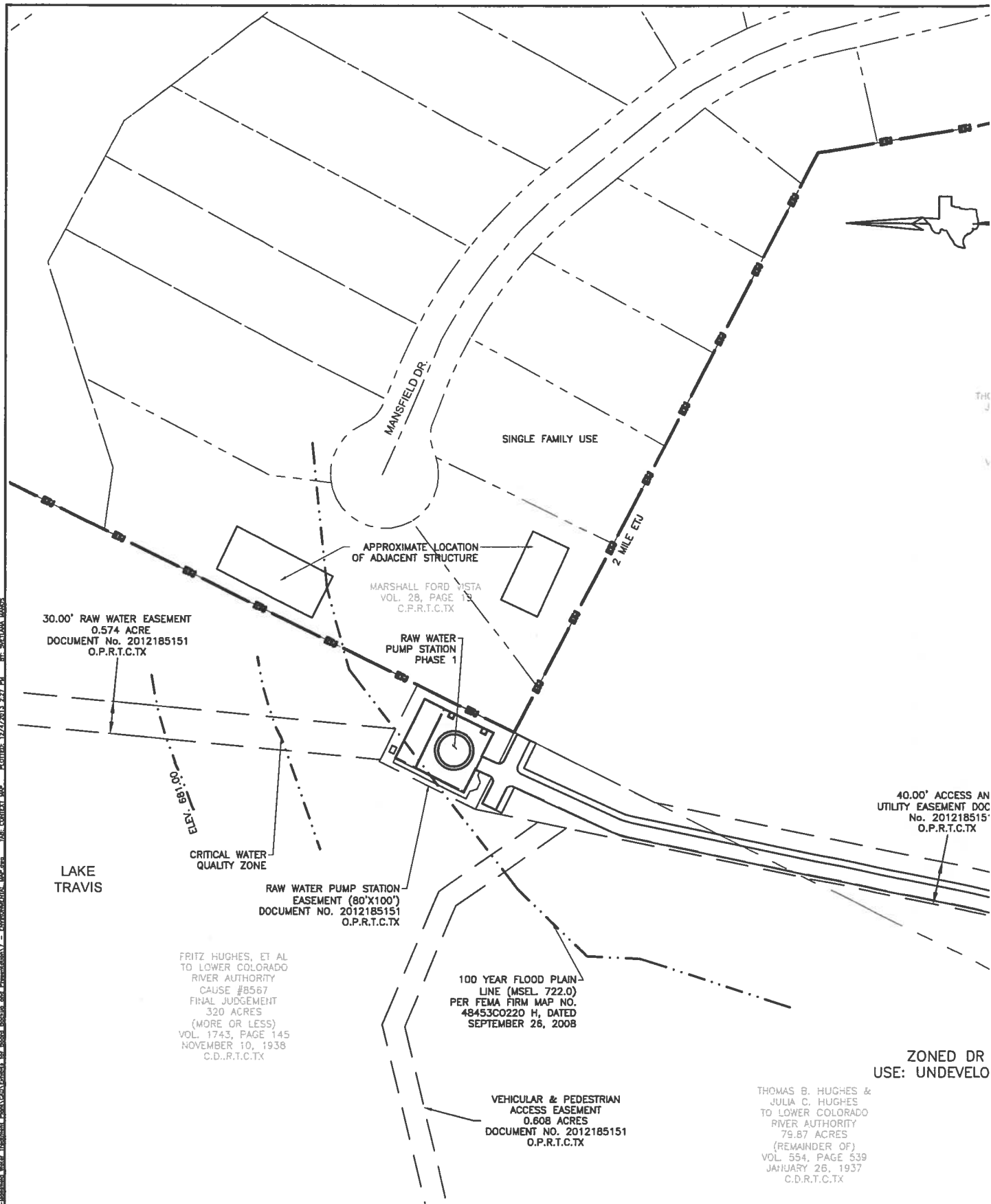
RIVER CITY ENGINEERING

Texas Registered Engineering Firm F-0001546
CIVIL, ENVIRONMENTAL & CONSULTING

3801 SOUTH 1ST STREET
AUSTIN, TEXAS 78704-7047
PHONE: (512) 443-3908
FAX: (512) 442-6522

1011 W. COUNTY LINE ROAD, SUITE C
NEW BRAUNFELS, TEXAS 78130
PHONE: (830) 670-3868
FAX: (830) 628-3001

TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT
 MANSFIELD WATER TREATMENT PLAN



3801 SOUTH 1ST STREET
AUSTIN, TEXAS 78703-7047
PHONE-512-442-3306
FAX-512-442-4522

1011 W. COUNTY LINE ROAD, SUITE C
NEW BRAUNFELS, TEXAS 78133
PHONE-830-626-3985
FAX-830-626-3601

TRAVIS COUNTY WATER CONTROL & IMPROVEMENT DIST
MANSFIELD WATER TREATMENT PLANT



25.00' TEMPORARY
CONSTRUCTION EASEMENT
0.487 ACRE
DOCUMENT NO. 2012185151
O.P.R.T.C.TX.

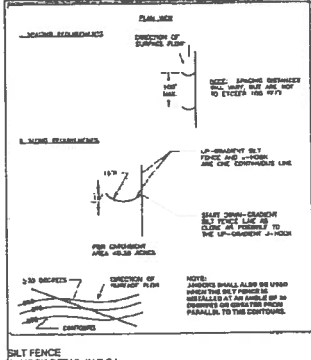
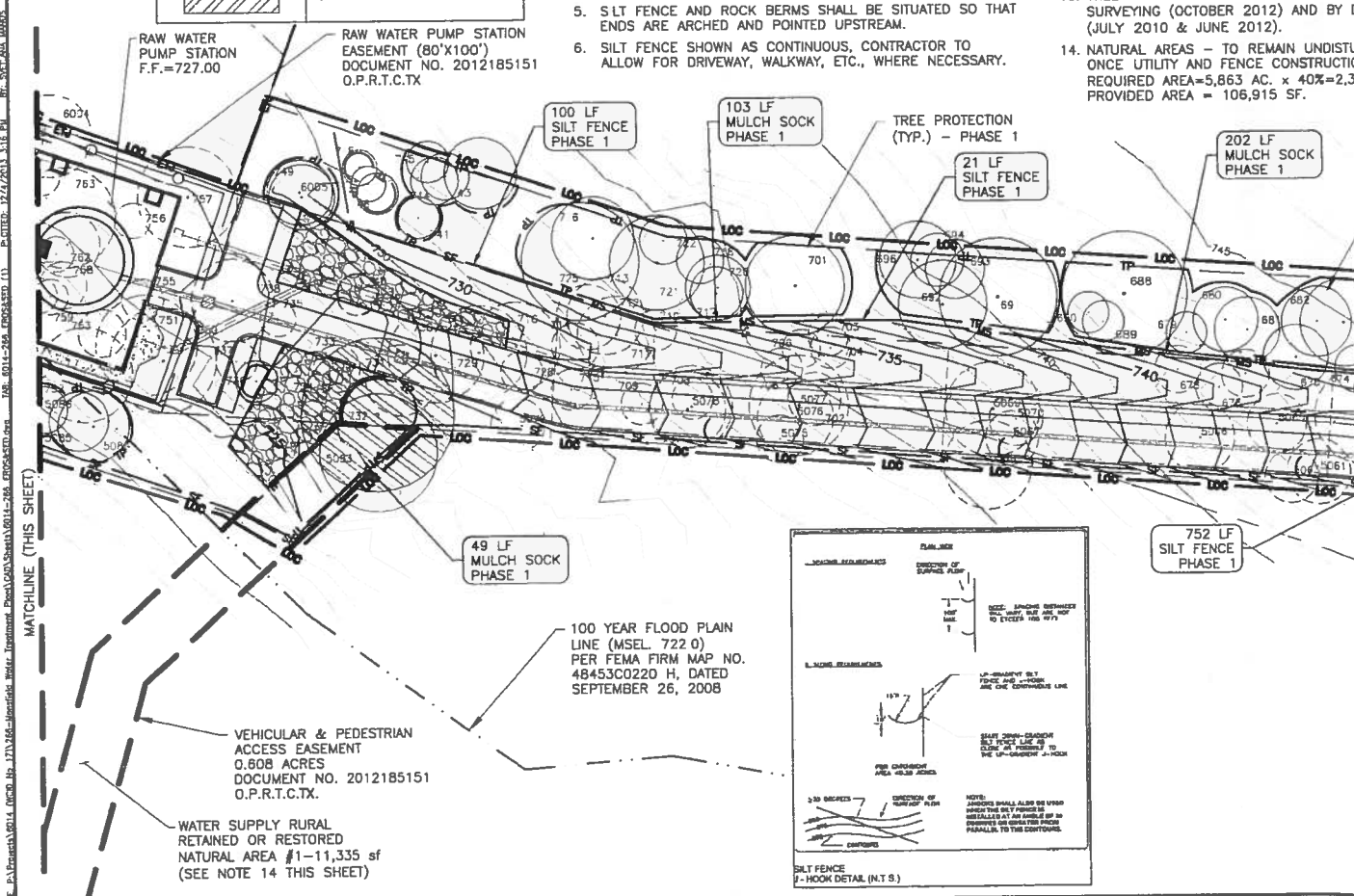
LAKE
TRAVIS

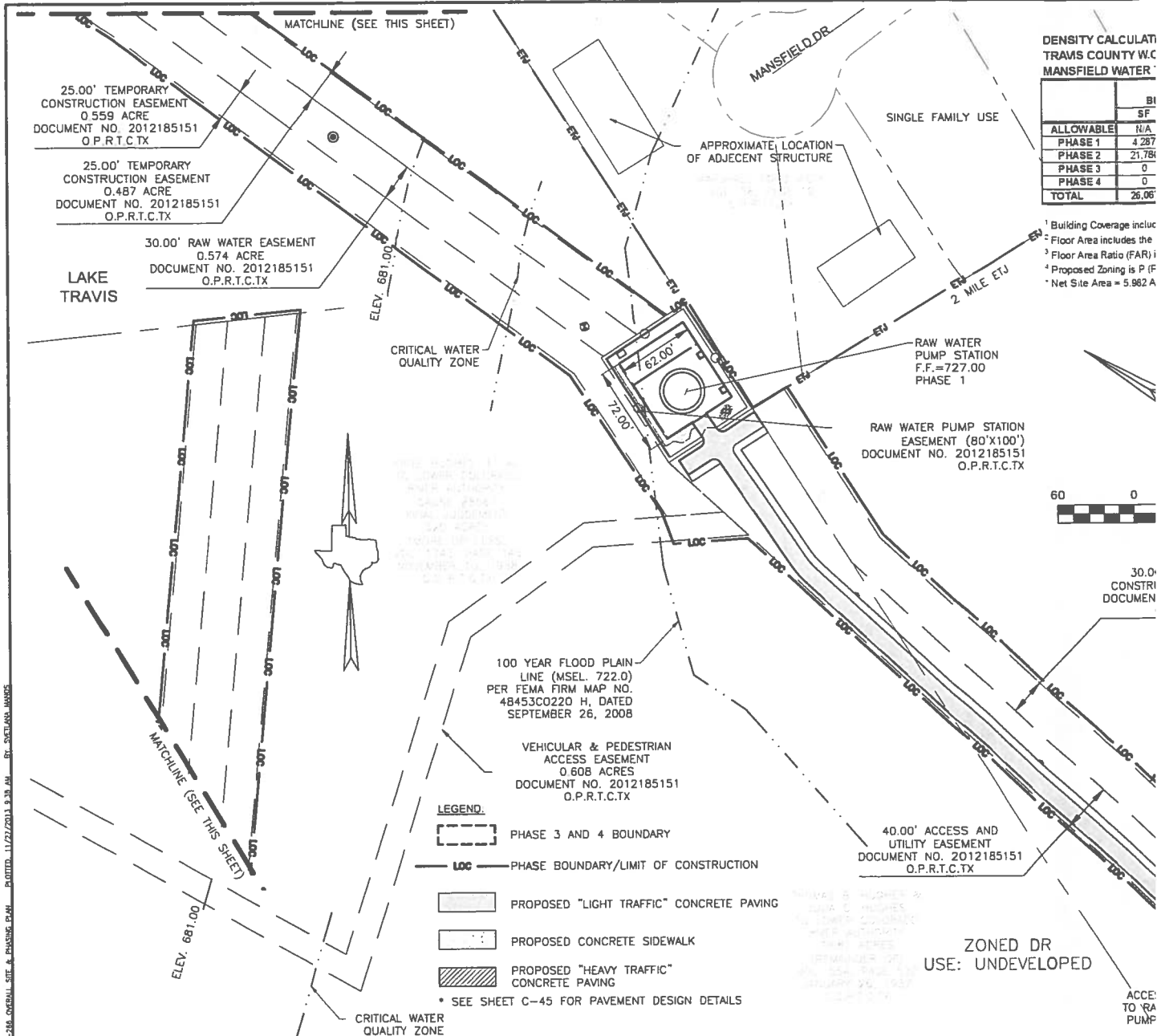
25.00' TEMPORARY
CONSTRUCTION EASEMENT
0.559 ACRE
DOCUMENT NO. 2012185151
O.P.R.T.C.TX.

LEGEND	
	EXISTING TREES
	MULCH SOCK
	EASEMENT LINE
	EXISTING CONTOUR
	LIMITS OF CONSTRUCTION
	EXTRATERRITORIAL JURISDICTION
	SILT FENCE
	TREE PROTECTION
	CONSTRUCTION STAGING AND SPOILS AREA
	STABILIZED CONSTRUCTION ENTRANCE
	HERITAGE TREE

NOTES:

- ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.
- SPOILS ARE TO BE PLACED BACK IN TRENCH EVERY NIGHT, EXCEPT FOR TRENCHED AREAS IN PAVEMENT WHERE TEMPORARY STEEL PLATING IS TO BE USED.
- CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION, SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5 (A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
- LIMITS OF TEMPORARY STAGING, STORAGE AND SPOIL AREAS SHALL BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION. THE LOCATION OF THESE SITES SHALL BE MOVED PERIODICALLY IN ORDER TO FOLLOW THE CONSTRUCTION ROUTE. TRAFFIC CONTROL, FENCING, AND EROSION/SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE AT EACH SITE. EACH SITE IS SUBJECT TO APPROVAL BY THE TRAVIS COUNTY-TRANSPORTATION AND NATURAL RESOURCES DIVISION AND CITY OF AUSTIN ENVIRONMENTAL INSPECTOR, AS APPLICABLE.
- SILT FENCE AND ROCK BERMS SHALL BE SITUATED SO THAT ENDS ARE ARCHED AND POINTED UPSTREAM.
- SILT FENCE SHOWN AS CONTINUOUS, CONTRACTOR TO ALLOW FOR DRIVEWAY, WALKWAY, ETC., WHERE NECESSARY.
- CONTRACTOR SHALL PROVIDE SOIL RETE ALL DISTURBED AREAS WITH SLOPE 3:1 AT ALL IMPACTED DRAINAGE DITCHES. PROVIDE SOIL RETENTION MATTING AT EXPEDITE RESTORATION EFFORTS.
- ANY AREA OUTSIDE THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS THAT CONTRACTOR OR HIS SUBCONTRACTOR IMMEDIATELY RESTORED. ANY ADDITIONAL MAINTENANCE SHALL BE AT NO EXPENSE.
- CONTRACTOR TO COORDINATE WITH ENGINEER REMOVING ANY SIZE TREE NOT SHOWN ON THE PLANS.
- ALL SILT FENCE AND TREE PROTECTION SHEET IS TO BE INSTALLED WITH PHASE OTHERWISE NOTED.
- IF DISTURBED AREA IS NOT TO BE WORKED WITHIN 14 DAYS, DISTURBED AREA NEED BY REVEGETATION, MULCH, TARP, OR ROCK.
- CONTRACTOR SHALL CLEAN UP SPOILS ONTO THE ROADS A MINIMUM OF ONCE.
- TREE SURVEY WERE PERFORMED BY RISE SURVEYING (OCTOBER 2012) AND BY I (JULY 2010 & JUNE 2012).
- NATURAL AREAS - TO REMAIN UNDISTURBED. UTILITY AND FENCE CONSTRUCTION REQUIRED AREA = 5,863 AC. x 40% = 2,345 PROVIDED AREA = 106,915 SF.

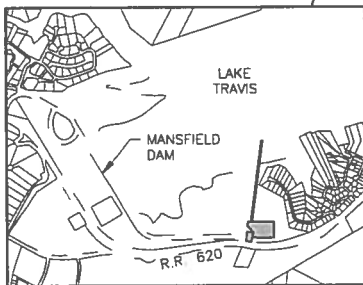




DENSITY CALCULATION
TRAVIS COUNTY W.C.
MANSFIELD WATER

	BI	SF
ALLOWABLE	N/A	
PHASE 1	4.287	
PHASE 2	21.784	
PHASE 3	0	
PHASE 4	0	
TOTAL	26.06	

- Building Coverage includes
- Floor Area includes the
- Floor Area Ratio (FAR) is
- Proposed Zoning is P (F)
- Net Site Area = 5.962 A



LOCATION MAP
NOT TO SCALE

SITE PLAN RELEASE SHEET: 4

FILE NUMBER SPC-2012-0429C EXPIRATION DATE: _____

CASE MANAGER: _____ APPLICATION DATE: _____

APPROVED ADMINISTRATIVELY ON: _____

APPROVED BY PLANNING COMMISSION ON: _____

APPROVED BY CITY COUNCIL ON: _____

UNDER SECTION 25 ON CHAPTER 8 OF THE AUSTIN CITY CODE.

SIGNING FOR DIRECTOR, PLANNING AND DEVELOPMENT REVIEW

DATE OF RELEASE: _____ OF _____ ZONING: _____

REV 1: _____ CORRECTION 1: _____

REV 2: _____ CORRECTION 2: _____

REV 3: _____ CORRECTION 3: _____

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

NOTES:

- LOCATION OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES IS APPROXIMATE. LOCATIONS SHOWN ARE BASED ON PREVIOUS CONSTRUCTION PLANS AND THE ON THE GROUND SURVEY, BUT IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS.
- ALL AREAS TO BE FILLED SHALL BE PREPARED AND FILLED IN ACCORDANCE WITH THE GEOTECHNICAL EXPLORATION REPORT BY TERRACON CONSULTANTS INC., PROJECT NO 96105079, DATED OCTOBER 18, 2010, SPECIFICALLY SECTION 4.0 AND REVISED ON FEBRUARY 15th, 2013 (96125184, REPORT B)
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES ANY EXISTING PAVEMENT, CURB, SIDEWALKS, DRAINAGE STRUCTURES, UTILITIES OR OTHER IMPROVEMENTS WHICH ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE, UNLESS IT HAS BEEN SPECIFIED THAT A PARTICULAR IMPROVEMENT IS TO BE REMOVED
- EXISTING ZONING - DR - DEVELOPMENT RESERVE. PROPOSED ZONING - P - PUBLIC (ZONING APPLICATION #C14-2012-0144) ZONING USE - MAJOR UTILITY FACILITY.
- THE RAW WATER PUMP STATION IS TO BE CONSTRUCTED IN PHASE 1. ALL OTHER BUILDINGS (HIGH SERVICE PUMP STATION, CHEMICAL FEED FACILITY, STORAGE BUILDING AND MEMBRANE BUILDING) TO BE CONSTRUCTED IN PHASE 2.
- ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENTS AND APPROVAL OF THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT
- APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL
- ALL SIGNS MUST COMPLY WITH REQUIREMENTS OF THE LAND DEVELOPMENT CODE (CHAPTER 25-10)
- ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
- WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY TRAVIS COUNTY W.C.I.D. # 17
- ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN PLANNING AND DEVELOPMENT REVIEW DEPARTMENT
- A DEVELOPMENT PERMIT MUST BE ISSUED PRIOR TO AN APPLICATION FOR BUILDING PERMIT FOR NON-CONSOLIDATED OR PLANNING COMMISSION APPROVED SITE PLAN
- FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OR DAMAGE TO UTILITIES.
- FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED

Impervious Cover Summary EXISTING

Impervious Cover Summary	EXISTING
	Impervious
	Cover (sf)
Building, Pavement, Sidewalk	5 983
Total	5 983
NET SITE AREA	260 576
IMPERVIOUS %	2 30%

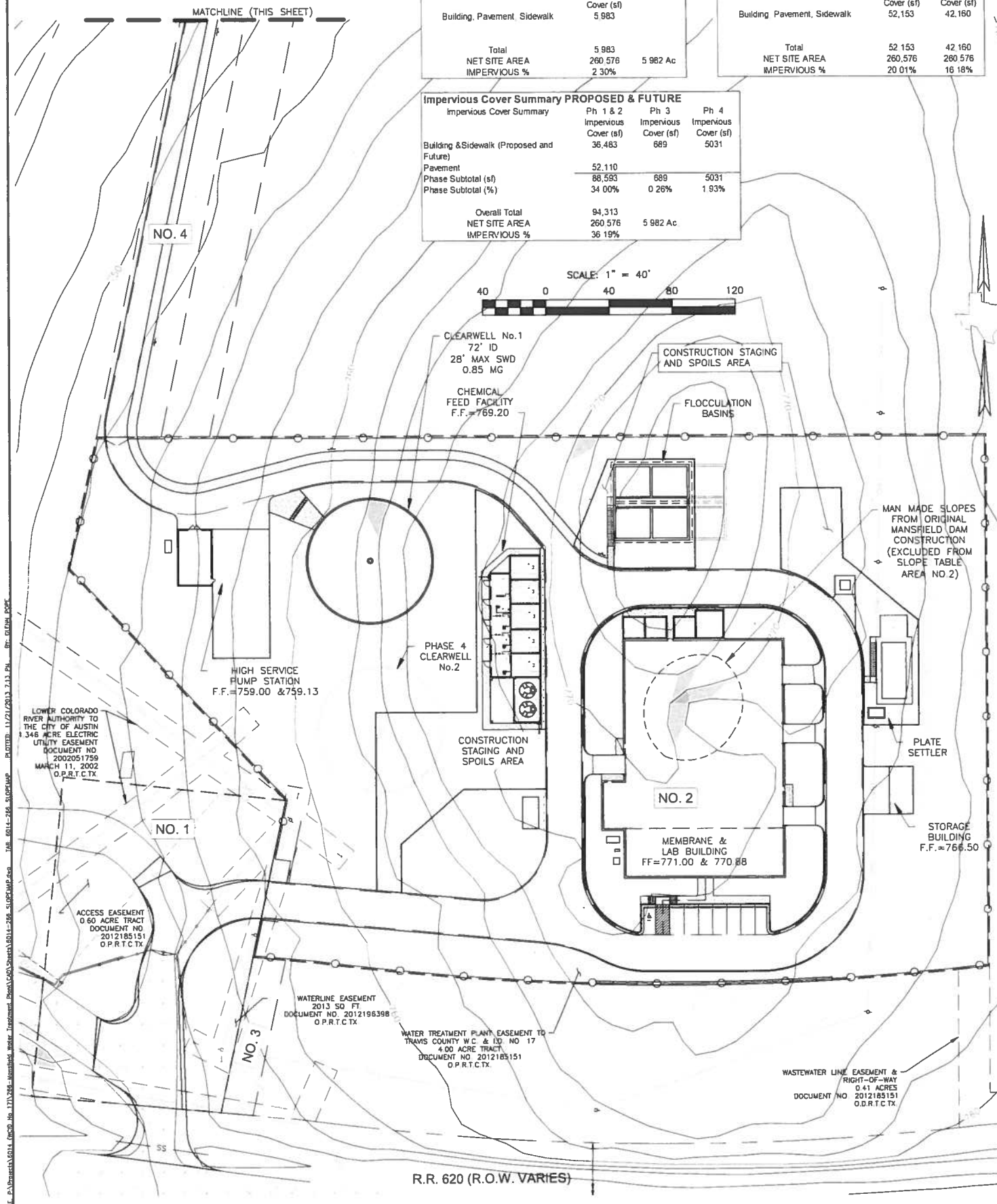
Impervious Cover Summary ADJUSTED

(Based on stormwater captured and re-used in the water treatment process)


Impervious Cover Summary		CAPTURED Impervious Cover (sf)	REMAINING Impervious Cover (sf)
Building	Pavement, Sidewalk	52,153	42,160
Total		52,153	42,160
NET SITE AREA		260,576	280,576
IMPERVIOUS %		20.01%	16.18%

Impervious Cover Summary PROPOSED & FUTURE

Impervious Cover Summary	Ph 1 & 2 Impervious Cover (sf)	Ph 3 Impervious Cover (sf)	Ph 4 Impervious Cover (sf)
Building & Sidewalk (Proposed and Future)	36,483	689	5031
Pavement	52,110		
Phase Subtotal (sf)	88,593	689	5031
Phase Subtotal (%)	34.00%	0.26%	1.93%
Overall Total	94,313		
NET SITE AREA	260.576	5.982 Ac.	
IMPERVIOUS %	36.19%		



SCALE: 1" = 30'



90 60 30 0 30

URIAL AREAS - TO REMAIN UNDISTURBED OR RESTORED ONCE
AND FENCE CONSTRUCTION IS COMPLETE. REQUIRED
45-863 AC. x 40% = 2,345 AC.(102,157 SF) PROVIDED AREA =
700 SF.

TRACTOR SHALL CLEAN UP SPOILS IS THAT MIGRATE ONTO THE
AS A MINIMUM OF ONCE DAILY.

SILT FENCE AND TREE PROTECTION SHOWN ON THIS SHEET IS TO
 INSTALLED WITH PHASE 1 UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL BE IMMEDIATELY RESTORED. ANY ADDITIONAL
CORRECTION OR MAINTENANCE SHALL BE AT NO EXPENSE TO THE

ORDERED AREAS WITH SLOPE 3:1 OR GREATER AND ALL
ECTED DRAINAGE DITCHES. CONTRACTOR MAY PROVIDE SOIL
NITION WAITING AT OTHER AREAS TO EXPEDITE RESTORATION

FENCE AND ROCK BERMS SHALL BE SITUATED SO THAT ENDS
ARCHED AND POINTED UPSTREAM.

CONSTRUCTION ROUTE, TRAFFIC CONTROL, FENCING, AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE AT EACH SITE IS SUBJECT TO APPROVAL BY THE TRAMS

TRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE
CONSTRUCTION, SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER
1.4.5 (A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.

ECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND
LATIONS.



TRAVIS
