AGREEMENT BETWEEN THE CITY OF AUSTIN AND
THE AUSTIN INDEPENDENT SCHOOL DISTRICT
ESTABLISHING SITE DEVELOPMENT STANDARDS
FOR THE BOWIE HIGH SCHOOL PRACTICE FIELDS

EXHIBIT D

FENCING LOCATIONS

TM# 46376

Responsible Attorney: Mitzi Cotton

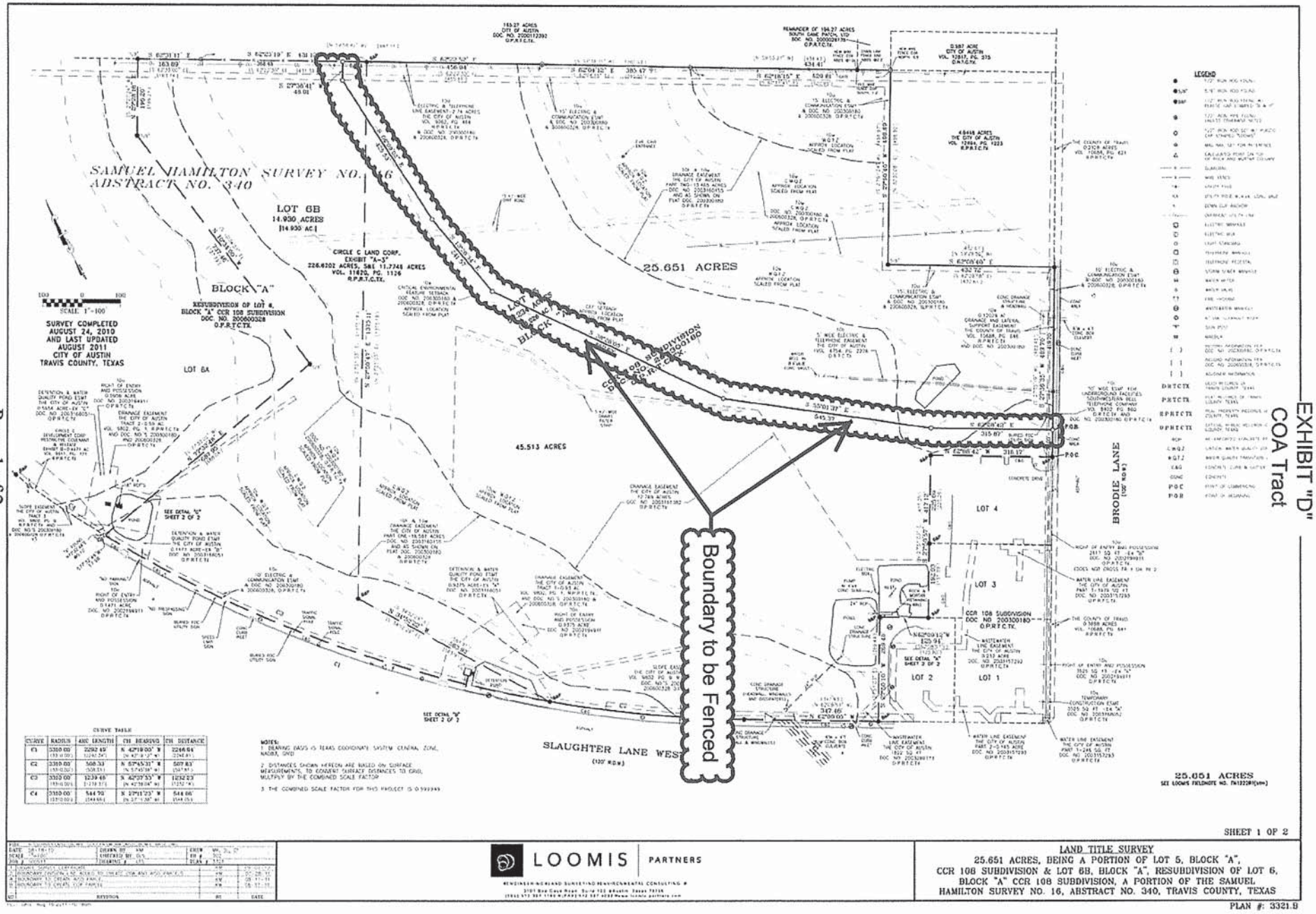
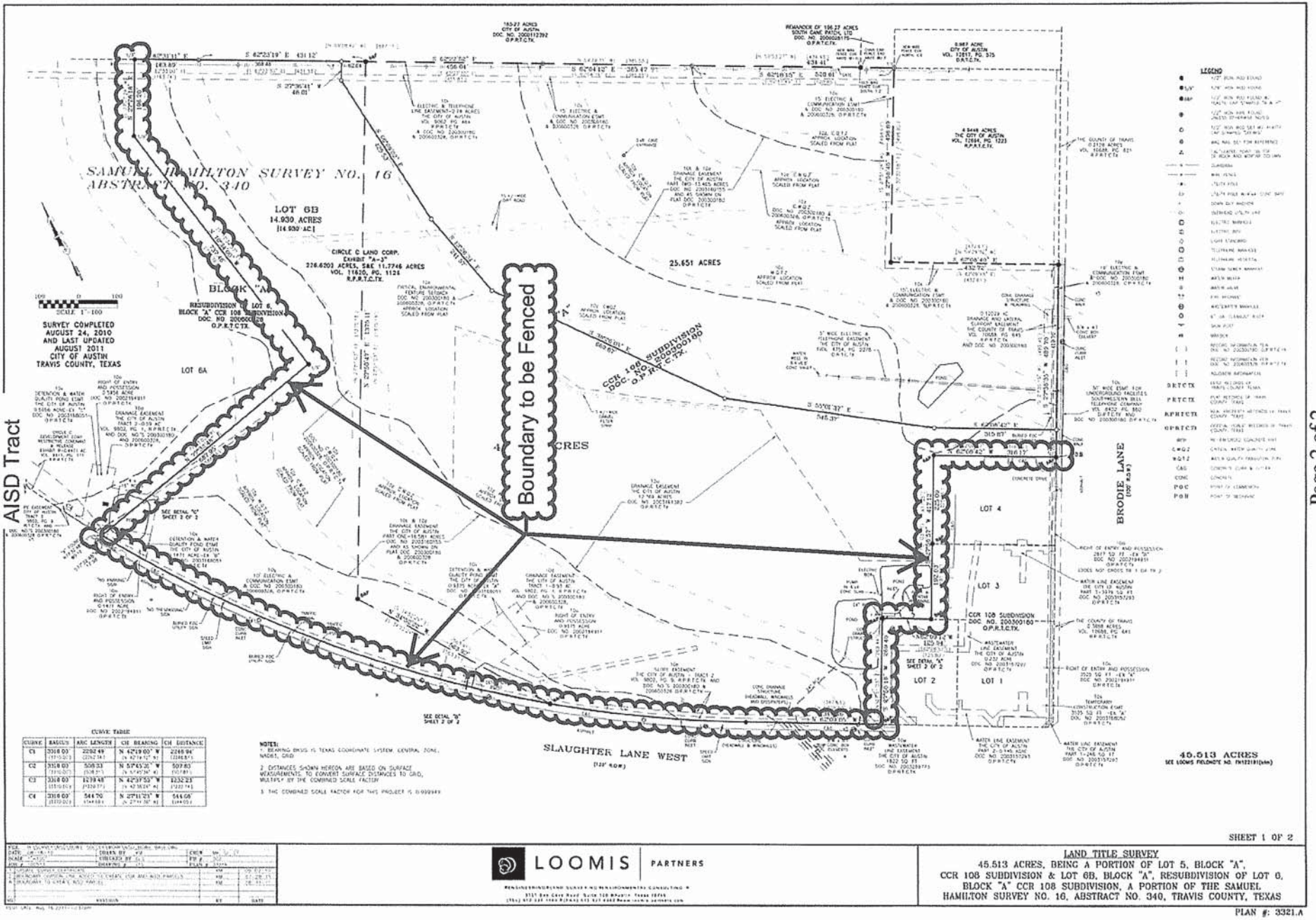


EXHIBIT "D"
COA Tract

Page 1 of 2

AISD Development Agreement - 19

EXHIBIT "D"
AISD Tract



CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CH. BEARING	CH. DISTANCE
C1	3318.03'	2292.49'	N 42°19'00" W	2246.94'
C2	3318.03'	508.33'	N 51°43'26" W	507.83'
C3	3318.03'	1239.48'	N 42°39'52" W	1232.23'
C4	3318.03'	544.70'	N 27°11'21" W	544.08'

NOTES:
1. BEARING BASIS IS TEXAS COORDINATE SYSTEM, CENTRAL ZONE, NAD83, GRID.
2. DISTANCES SHOWN HEREON ARE BASED ON SURFACE MEASUREMENTS. TO CONVERT SURFACE DISTANCES TO GRID, MULTIPLY BY THE COMBINED SCALE FACTOR.
3. THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.999949.

SHEET 1 OF 2

LOOMIS PARTNERS

LAND TITLE SURVEY
45.513 ACRES, BEING A PORTION OF LOT 5, BLOCK "A", CCR 108 SUBDIVISION & LOT 6B, BLOCK "A", RESUBDIVISION OF LOT 6, BLOCK "A" CCR 108 SUBDIVISION, A PORTION OF THE SAMUEL HAMILTON SURVEY NO. 16, ABSTRACT NO. 340, TRAVIS COUNTY, TEXAS

PLAN #: 3321.A

Case No.: 4 of 32
(City use only)

Environmental Resource Inventory

For the City of Austin
Relating to the Land Development Code (LDC) Section 25-8, Title 30-5, ECM 1.3.0 & 1.10.0
Effective October 28, 2013

The ERI is required for projects that meet one or more of the criteria listed in (LDC) Section 25-8-121(A), Title 30-5-121(A).

1. SITE/PROJECT NAME: AISD Bowie High School Practice Fields

2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 844947

3. ADDRESS/LOCATION OF PROJECT: 3700 W. Slaughter Lane, Austin, TX 78749

4. WATERSHED: Slaughter Creek

5. THIS SITE IS WITHIN THE *(Check all that apply)*

   Edwards Aquifer Recharge Zone* *(See note below)* ..... ☒YES ☐No
   Edwards Aquifer Contributing Zone* ..... ☐YES ☒No
   Edwards Aquifer 1500 ft Verification Zone* ..... ☐YES ☒No
   Barton Spring Zone* ..... ☒YES ☐No
   **(as defined by the City of Austin – LDC 25-8-2)*

   Note: If the property is over the Edwards Aquifer Recharge zone, the Hydrogeologic Report and karst surveys must be completed and signed by a Professional Geoscientist Licensed in the State of Texas.

6. DOES THIS PROJECT PROPOSE FLOODPLAIN MODIFICATION?.....☐YES** ☒NO
   If yes, then check all that apply:

   ☐ *(1) The floodplain modifications proposed are necessary to protect the public health and safety;*

   ☐ *(2) The floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a **functional assessment** of floodplain health as prescribed by the Environmental Criteria Manual, or*

   ☐ *(3) The floodplain modifications proposed are necessary for development allowed in the critical water **quality zone under Section 25-8-261 or 25-8-262 of the LDC.***

   ☐ *(4) The floodplain modifications proposed are outside of the Critical Water Quality Zone in an area determined to be in poor or fair condition by a **functional assessment** of floodplain health.*

   **** If yes, then a functional assessment must be completed and attached to the ERI (see Section 1.7 and Appendix X in the Environmental Criteria Manual for forms and guidance) unless conditions 1 or 3 above apply.**

7. IF THE SITE IS WITHIN AN URBAN OR SUBURBAN WATERSHED, DOES THIS PROJECT PROPOSE A UTILITY LINE PARALLEL TO AND WITHIN THE CRITICAL WATER QUALITY ZONE? ..... ☐YES*** ☒NO

   *****If yes, then riparian restoration is required by Section 25-8-261(E) of the LDC and a functional assessment must be completed and attached to the ERI (see Section 1.5 and Appendix X in the Environmental Criteria Manual for forms and guidance).**

8. There is a total of 10 (#'s) Critical Environmental Feature(s)(CEFs) on or within150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site (*Please provide the number of CEFs*):

0 (#'s) Spring(s)/Seep(s) 7 (#'s) Point Recharge Feature(s) 0 (#'s) Bluff(s)
0 (#'s) Canyon Rimrock(s) 3 (#'s) Wetland(s)

Note: Standard buffers for CEFs are 150 feet, with a maximum of 300 feet for point recharge features. Except for wetlands, if the standard buffer is not provided, you must provide a written request for an administrative variance from Section 25-8-281(C)(1) and provide written findings of fact to support your request. Request forms for administrative variances from requirements stated in LDC 25-8-281 are available from Watershed Protection Department.

9. The following site maps are attached at the end of this report *(Check all that apply and provide):*

All ERI reports must include:

- ☒ **Site Specific Geologic Map with 2-ft Topography**
- ☒ **Historic Aerial Photo of the Site**
- ☒ **Site Soil Map**
- ☒ **Critical Environmental Features and Well Location Map on current Aerial Photo with 2-ft Topography**

Only if present on site *(Maps can be combined):*

- ☒ **Edwards Aquifer Recharge Zone with the 1500-ft Verification Zone**
  (Only if site is over or within 1500 feet the recharge zone)
- ☐ **Edwards Aquifer Contributing Zone**
- ☒ **Water Quality Transition Zone (WQTZ)**
- ☒ **Critical Water Quality Zone (CWQZ)**
- ☐ **City of Austin Fully Developed Floodplains for all water courses with up to 64-acres of drainage**

10. **HYDROGEOLOGIC REPORT –** Provide a description of site soils, topography, and site specific geology below *(Attach additional sheets if needed):*

Surface Soils on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups*. If there is more than one soil unit on the project site, show each soil unit on the site soils map.

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
Speck stony clay loam, 1-5% (SsC), Lithic Argiustolls	D	1.5
Tarrant soils, 5-18% (TaD), Lithic Calciustolls	D	0.5 - 1

*Soil Hydrologic Groups Definitions *(Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

**Subgroup Classification – See Classification of Soil Series Table in County Soil Survey.

Description of Site Topography and Drainage *(Attach additional sheets if needed)*:

The subject property lies within the Oak Hill, Texas U.S. Geological Survey (USGS) 7.5-minute topographic map quadrangle. Topographic mapping for the project and by the City of Austin (Attachments B, D, E and F) show that elevations within the property range from a high of about 782 ft msl (mean sea level) along the north edge of the property to a low of about 758 ft msl near the south corner of the property.
The entire site is within the Slaughter Creek watershed, and surface runoff flows either northeastward or southwestward, converging on an unnamed tributary of Slaughter Creek, which flows southeastward across the property. The Federal Emergency Management Agency (FEMA) does not map any portion of the subject property within a 100- or 500-year floodplain (FEMA, 2008).

FEMA, 2008. Digital Flood Insurance Rate Map Database, Travis County, Texas (and incorporated areas). Washington, D.C.

List surface geologic units below:

Geologic Units Exposed at Surface		
Group	Formation	Member
Washita	Georgetown	--
Edwards	Person	Leached & Collapsed (undivided)
Edwards	Person	Regional Dense

Brief description of site geology *(Attach additional sheets if needed)*:

As mapped by Small et al. (1996), outcropping geologic formations on the subject property include the Regional Dense Member and the Leached and Collapsed members (undivided) of the Person Formation, as well as the Georgetown Formation (Attachment B), and the distribution of these units within the property is principally controlled by three faults reported (Small et al., 1996) to trend northeastward across the property. Bedrock exposures within the property are sparse and not well suited to verifying the accuracy of the geology mapping shown on Attachment B. Nonetheless, the mapping of the Georgetown Formation in the easternmost part of the property and the easternmost fault is corroborated by earlier mapping by the Texas Bureau of Economic Geology; as is the presence of bedrock units of the Edwards Group west of the Georgetown Formation. In addition, the localized occurrences of presence of steeping dipping and fractured bedrock in localized areas of the site, strongly suggest the presence of multiple faults.

Small, Ted A. J. A. Hanson, and N. M. Hauwert, 1996. Geologic framework and hydrogeologic characteristics of the Edwards aquifer outcrop (Barton Springs segment), northeastern Hays and southwestern Travis counties, Texas. Water-Resources Inv. Rpt 96-4306, U.S. Geological Survey, Austin, Texas.

Wells – Identify all recorded and unrecorded wells on site (test holes, monitoring, water, oil, unplugged, capped and/or abandoned wells, etc.):

There are 0 (#) wells present on the project site and the locations are shown and labeled

___ (#'s)The wells are not in use and have been properly abandoned.

___ (#'s)The wells are not in use and will be properly abandoned.

___ (#'s)The wells are in use and comply with 16 TAC Chapter 76.

There are 1 (#'s) wells that are off-site and within 150 feet of this site.

11. **THE VEGETATION REPORT** – Provide the information requested below:

Brief description of site plant communities *(Attach additional sheets if needed)*:

Vegetation consisted of a mix of riparian woodlands, juniper woodlands, and juniper savanna habitats. Riparian and juniper woodlands occupy the eastern half of the subject property, with the majority of the riparian woodland present along the margins of the unnamed tributary to Slaughter Creek in the southern third of the subject property. The remainder of the subject property consisted predominantly of juniper savanna.

There is woodland community on site .....☒YES ☐ NO *(Check one).*
If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
Ashe juniper	Juniperous ashei
Plateau live oak	Quercus fusiformis
Spanish oak	Quercus buckelyi
Cedar elm	Ulmus crassifolia
Netleaf hackberry	Celtus laevigata

There is grassland/prairie/savanna on site.....☒YES ☐ NO *(Check one).*
If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name
Johnsongrass	Sorghum halepense
King Ranch bluestem	Bothriochloa ischaemum
Cedar sedge	Carex planostachys
Bermudagrass	Cynodon dactylon
Sideoats grama	Bouteloua curtipendula
Wright's threeawn	Aristida purpurea
Dropseed	Sporobolus sp.

There is hydrophytic vegetation on site .....☒YES ☐ NO *(Check one).*
If yes, list the dominant species in table below *(next page):*

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status
Black willow	Salix niger	FACW
Eastern cottonwood	Populus deltoides	FAC
American sycamore	Platanus occidentalis	FAC
Southern knotroot bristlegrass	Setaria parviflora	FAC
Blue curls	Phacelia congesta	NOT LISTED
Smartweed	Polygonum ramosissimum	FACW
Needle spikerush	Eleocharis acicularis	OBL

A tree survey of all trees with a diameter of at least eight inches measured four and one-half feet above natural grade level has been completed on the site.
☒YES ☐ NO *(Check one).*

12. **WASTEWATER REPORT –** Provide the information requested below.

Wastewater for the site will be treated by *(Check of that Apply)*:

☐ On-site system(s)

☐ City of Austin Centralized sewage collection system

☐ Other Centralized collection system

Note: All sites that receive water or wastewater service from the Austin Water Utility must comply with Chapter 15-12 of Austin City Code and wells must be registered with the City of Austin

The site sewage collection system is designed and will be constructed to in accordance to all State, County and City standard specifications.
☒YES ☐ NO *(Check one).*

Calculations of the size of the drainfield or wastewater irrigation area(s) are attached at the end of this report or shown on the site plan.
☐YES ☐ NO ☒ Not Applicable *(Check one).*

Wastewater lines are proposed within the Critical Water Quality Zone?
☐YES ☒ NO *(Check one)*. If yes, then provide justification below:

Is the project site is over the Edwards Aquifer?
☒YES ☐ NO *(Check one).*

If yes, then describe the wastewater disposal systems proposed for the site, its treatment level and effects on receiving watercourses or the Edwards Aquifer.

No wastewater disposal systems are required for the site.

13. One (1) hard copy and one (1) electronic copy of the completed assessment have been provided.

Date(s) ERI Field Assessment was performed: 08/04/2014 - 08/07/2014
Date(s)

My signature certifies that to the best of my knowledge, the responses on this form accurately reflect all information requested.

J. Jackson Harper	(512) 243-8671
Print Name	Telephone
Signature	jackson@jjhgeo.com
	Email Address
J. Jackson Harper, P.G. (TX #50134)	08/15/2014
Name of Company	Date

For project sites within the Edwards Aquifer Recharge Zone, my signature and seal also certifies that I am a licensed Professional Geoscientist in the State of Texas as defined by ECM 1.12.3(A).

Print Form

ATTACHMENT A

CITY OF AUSTIN CRITICAL ENVIRONMENTAL FEATURE WORKSHEET

1	Project Name:	AISD Bowie High School Practice Fields	5	Primary Contact Name:	J. Jackson Harper, P.G.
2	Project Address:	3700 W/ Slaughter Lane, Austin, TX 78749	6	Phone Number:	(512) 243-8671
3	Date:	08/08/2014	7	Prepared By:	Jackson Harper
4	Environmental Assessment Date:	08/04/2014 - 08/07/2014	8	CEFS Located? {yes,no}	Yes

9	FEATURE TYPE (Wetland, Rimrock, Recharge Feature Seep, Spring)	FEATURE ID (e.g., S-1)	FEATURE LONGITUDE (WGS 1984 in Meters)		FEATURE LATITUDE (WGS 1984 in Meters)		WETLAND DIMENSIONS (ft)		RIMROCK DIMENSIONS (ft)	
			coordinate	notation	coordinate	notation	X	Y	Length	Avg Height
	Onsite CEFs									
	Recharge Feature (Solution Cavity)	G01	610,472.3		3,340,399.7					
	Recharge Feature (Solution Cavity)	G02	610,467.0		3,340,401.5					
	Recharge Feature (Solution Cavity)	G03	610,461.9		3,340,392.8					
	Wetland	G05	610,565.7		3,340,033.8		55	50		
	Recharge Feature (Close Depression)	G06	610,506.8		3,339,951.4					
	Recharge Feature (Sinkhole)	G07	610,473.1		3,340,054.0					
	Wetland	G12	610,285.5		3,340,150.2		62	40		
	Offsite CEFs (within 150 ft)									
	Recharge Feature (Close Depression)	G08	610,332.7		3,340,249.5					
	Recharge Feature (Sinkhole)	G11	610,742.6		3,340,041.3					
	Wetland	Structural Sink	610,770.3		3,339,981.9		160	54		
	Other (within 150 ft)									
	Water Well	58-50-411	610,690.1		3,340,032.4					

City of Austin Use Only WPDRD CASE NUMBER	

ATTACHMENT A (Cont'd)

CRITICAL ENVIRONMENTAL FEATURE DESCRIPTIONS AND PROPOSED BUFFERS

G01 – Point Recharge Feature (solution-enlarged fracture)

Dimensions:	1.5 ft L x 0.8 ft W x 1 ft D.
Infill:	Leaves, duff.
Substrate:	Compacted, dry, silty clay soil.
Recharge Indications:	Limited sapping of soil.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes between 1% and 2%.
Comments:	Clustered with G02 and G03. All are potentially associated with a geologic fault.

Proposed Setback: Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. Setback to encompass clustered features G01, G02 and G03. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the cluster (see Attachment E).

Because of compatible land use, ground slope, and vegetation conditions upslope of the feature, COA may allow reduction of the upslope extent of the setback to a minimum of 150 ft. In either case, most of the setback upslope of the feature is outside of the subject property and not under control of the project site owner.

View of G01 from south.

Close up view of G01 from above.

G02 – Point Recharge Feature (closed depression)

Dimensions:	2 ft L x 2 ft W x 1 ft D.
Infill:	Duff, sticks, and a few loose, small boulders.
Substrate:	Compacted, dry, silty clay soil.
Recharge Indications:	Some soil sapping.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes between 1% and 2%.
Comments:	Clustered with G01 and G03. All are potentially associated with a geologic fault.

Proposed Setback: Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. Setback to encompass clustered features G01, G02 and G03. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the cluster (see Attachment E).

Because of compatible land use, ground slope, and vegetation conditions upslope of the feature, COA may allow reduction of the upslope extent of the setback to a minimum of 150 ft. In either case, however, most of the setback upslope of the feature is outside of the subject property and not under control of the project site owner.

View of G02 from the south.

Close up view of G02 from above.

G03 – Point Recharge Feature (closed depression beneath large boulder)

Dimensions:	2 ft L x 1.5 ft W x 1 ft D.
Infill:	Duff and leaves.
Substrate:	Compacted, dry, silty clay soil and limestone bedrock.
Recharge Indications:	Some soil sapping.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes between 1% and 2%.
Comments:	Depression is beneath a flat-lying boulder that is separated from two flanking boulders by surface fractures. A cave cricket was observed beneath the void beneath the central surface boulder. G03 is clustered with G01 and G02; all are potentially associated with a geologic fault.
Proposed Setback:	Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. Setback to encompass clustered features G01, G02 and G03. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the cluster (see Attachment E). Because of compatible land use, ground slope, and vegetation conditions upslope of the feature, COA may allow reduction of the upslope extent of the setback to a minimum of 150 ft. In either case, however, most of the setback upslope of the feature is outside of the subject property and not under control of the project site owner.

View of G03 from the southeast.

Close up view of G03 from above.

G05 – Wetland (within a closed depression)

Dimensions:	55 ft L x 50 ft W x 3 ft D.
Infill:	High plasticity and low permeability clay soil with extensive desiccation cracks.
Substrate:	Clay(?).
Recharge Indications:	None.
Infiltration Rate:	Very low to nil.
Topo Setting:	Flat terrain with slopes slightly more than 2%.
Comments:	Depression contains hydric soil and hydrophytic vegetation. Feature may have resulted from ground subsidence or collapse, but the feature is primarily a wetland; not a recharge feature.
Proposed Setback:	Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.f]. 150-ft minimum radius from the edge of the depression. The northernmost edge of the setback would be outside of the subject property and not under control of the project site owner. The setback will overlap the setback for G06 (see Attachment E).

View of G05 from southeast side.

G06 – Point Recharge Feature (closed depression)

Dimensions:	8 ft L x 8 ft W x 1.5 ft D.
Infill:	Few gravel- and cobble-sized limestone fragments.
Substrate:	Firm, sandy, silty clay.
Recharge Indications:	None.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes greater than 2%.
Comments:	Depression is densely vegetated with native grasses.

Proposed Setback: Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the feature (see Attachment E). The setback will overlap the setback for G05.

View of G06 from the south.

Close up view of G06 from southeast.

G07 – Point Recharge Feature (sinkhole)

Dimensions:	7 ft L x 7 ft W x 1.5 ft D.
Infill:	Loose, flat. small, limestone boulders; duff, leaves.
Substrate:	Limestone.
Recharge Indications:	Little or no soil infill.
Infiltration Rate:	Moderate to rapid.
Topo Setting:	Flat terrain with slopes greater than 2%.
Comments:	Perimeter of sinkhole consists of broken limestone rock slumped toward the center of the depression.

Proposed Setback: Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the feature (see Attachment E).

Mapped topography of the project site (Attachment E) suggests the catchment area for G07 extends at least 300 ft upslope from the edge of the feature. Detailed mapping may show the catchment area to be smaller, which may allow the upslope setback distance to be reduced.

View of G07 from the northeast.

Close up view of G07 from above.

G08 – Point Recharge Feature (closed depression)

Dimensions:	12 ft L x 8 ft W x 2 ft D (with long axis oriented 165°)
Infill:	None.
Substrate:	Firm, silty clay.
Recharge Indications:	None.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes greater than 2%.
Comments:	Depression is densely vegetated with native grasses.

Proposed Setback: Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to a point 300 ft upslope from the edge of the feature (see Attachment E). Most of the setback upslope of the feature is outside of the subject property and not under control of the project site owner.

View of G08 from the south.

Close up view of G08.

G11 – Point Recharge Feature (clustered closed depressions)

Dimensions:	30 ft L x 15ft W x 1.5 ft D (overall dimensions)
Infill:	None.
Substrate:	Firm, silty clay.
Recharge Indications:	Soil sapping.
Infiltration Rate:	Low to moderately low.
Topo Setting:	Flat terrain with slopes between 1% and 2%.
Comments:	Multiple, oval to circular, closed depressions in a field of notably large limestone boulders.
Proposed Setback:	Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.e]. 50-ft setback downslope and cross-slope from the edge of the cluster. 50-ft setback tapering to the upslope limit of the catchment area 160 ft upslope from the edge of the feature (see Attachment E). The entire setback is outside of the subject property and not under control of project site owner.

View of G11 from the southeast.

G12 – Wetland (within a drainage course)

Dimensions:	62 ft L x 40 ft W x 0.5 ft D (overall dimensions)
Substrate:	Silty clay soil over limestone bedrock.
Recharge Indications:	None.
Infiltration Rate:	Very low to nil.
Topo Setting:	Generally flat terrain along a gently sloping drainage channel.
Comments:	Small depression dominated by vegetative species characteristic of hydric conditions.

Proposed Setback: Modified from the standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.f] to achieve the same buffer area required, while altering the buffer shape to keep it within the onsite Water Quality Transition Zone and Critical Water Quality Zone (see Attachment E).

Overview of G12. Wetland within drainage channel.

Structural Sink – Wetland (former stock tank)

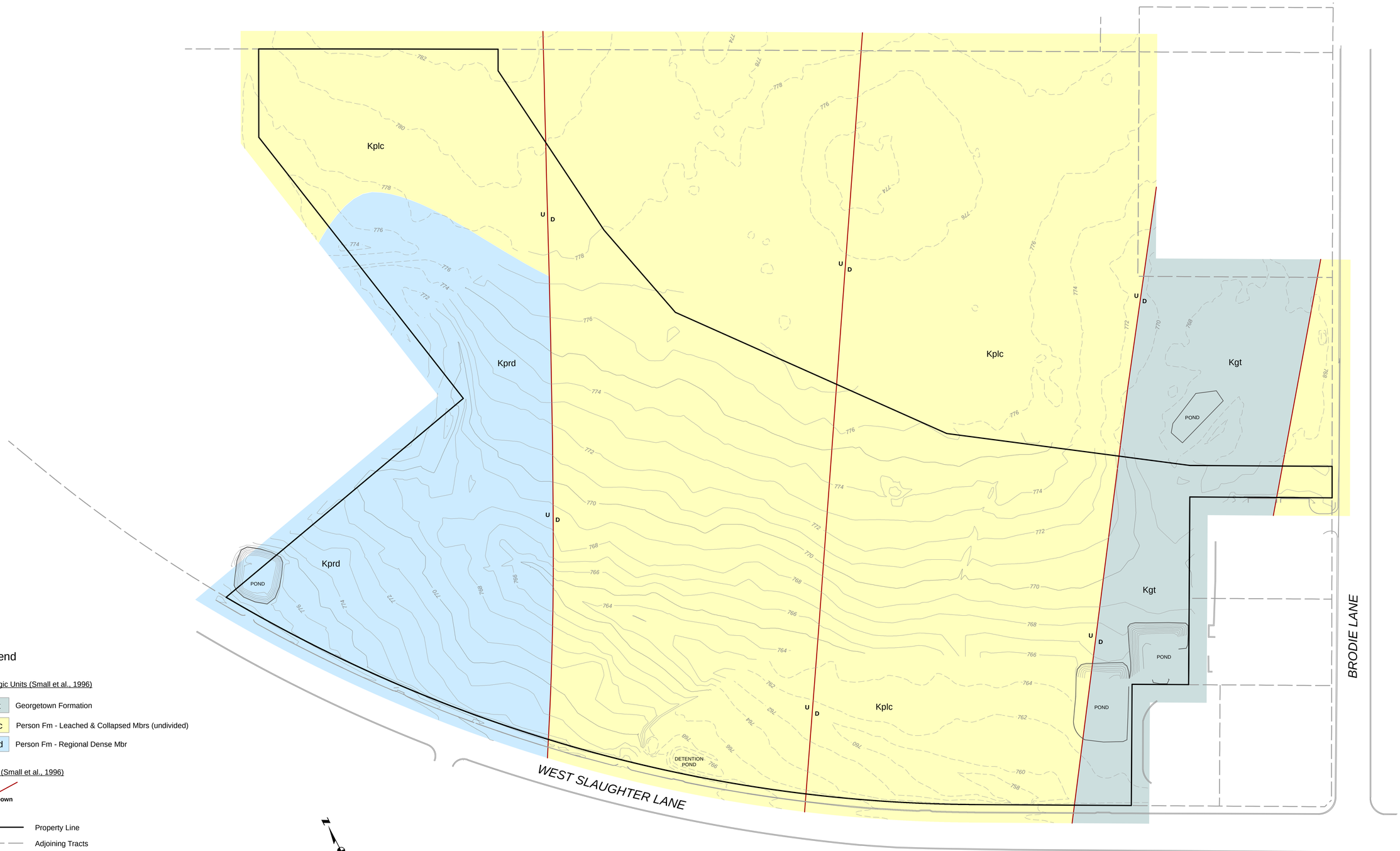
Dimensions:	160 ft L x 54 ft W x 0.5 ft D (overall dimensions)
Substrate:	Low plasticity and low permeability clay.
Recharge Indications:	None.
Infiltration Rate:	Very low to nil.
Topo Setting:	Generally flat terrain along a gently sloping drainage channel.
Comments:	Depression dominated by vegetative species characteristic of hydric conditions and ponding present.
Proposed Setback:	Standard setback per City of Austin Environmental Criteria Manual [Sec 1.3.0(A)1.f]. 150-ft minimum radius from the edge of the depression. Only the southwestern part of the setback would be within the subject property and under control of the project site owner. (see Attachment E).

Overview of Structural Sink. Contained water at time of site visit and dominated by *Polygnimum* sp.

Water Well – TWDB Well No. 58-50-411

Description: This is an unused water well located approximately 100 ft outside of the project site boundary. The well was reportedly drilled in 1940, presumably for livestock watering and/or domestic water supply. The well consists of 6-inch ID steel casing extending from a height of 1.5 ft above ground level to an unknown depth. The well is reported to be 469ft deep. Thee well casing is not sealed to prevent entry of contaminants. Water level measurements taken between 1978 and 2005 show water levels to be 217 to 231ft below ground surface.

Water Well 58-50-411



Legend

Geologic Units (Small et al., 1996)

- Kgt — Georgetown Formation
- Kplc — Person Fm - Leached & Collapsed Mbrs (undivided)
- Kprd — Person Fm - Regional Dense Mbr

Faults (Small et al., 1996)

Up / Down

Property Line

Adjoining Tracts

0 100 200 300 Feet

Notes:

1. The project site is entirely within the Edwards aquifer Recharge Zone.

REVISION	NO.	DATE

DRAWN BY: JJH
DESIGNED BY: JJH
REVIEWED BY: JJH
PROJECT NO.: 14008.01
RELEASED: 08/08/2014

J. Jackson Harper, P.G.
Geological & Hydrogeological Consulting
403 N. Lake Hills Drive • Austin, Texas 78733-3115
Tel: (512) 263-8671 • Fax: (512) 263-9690

SITE GEOLOGY MAP

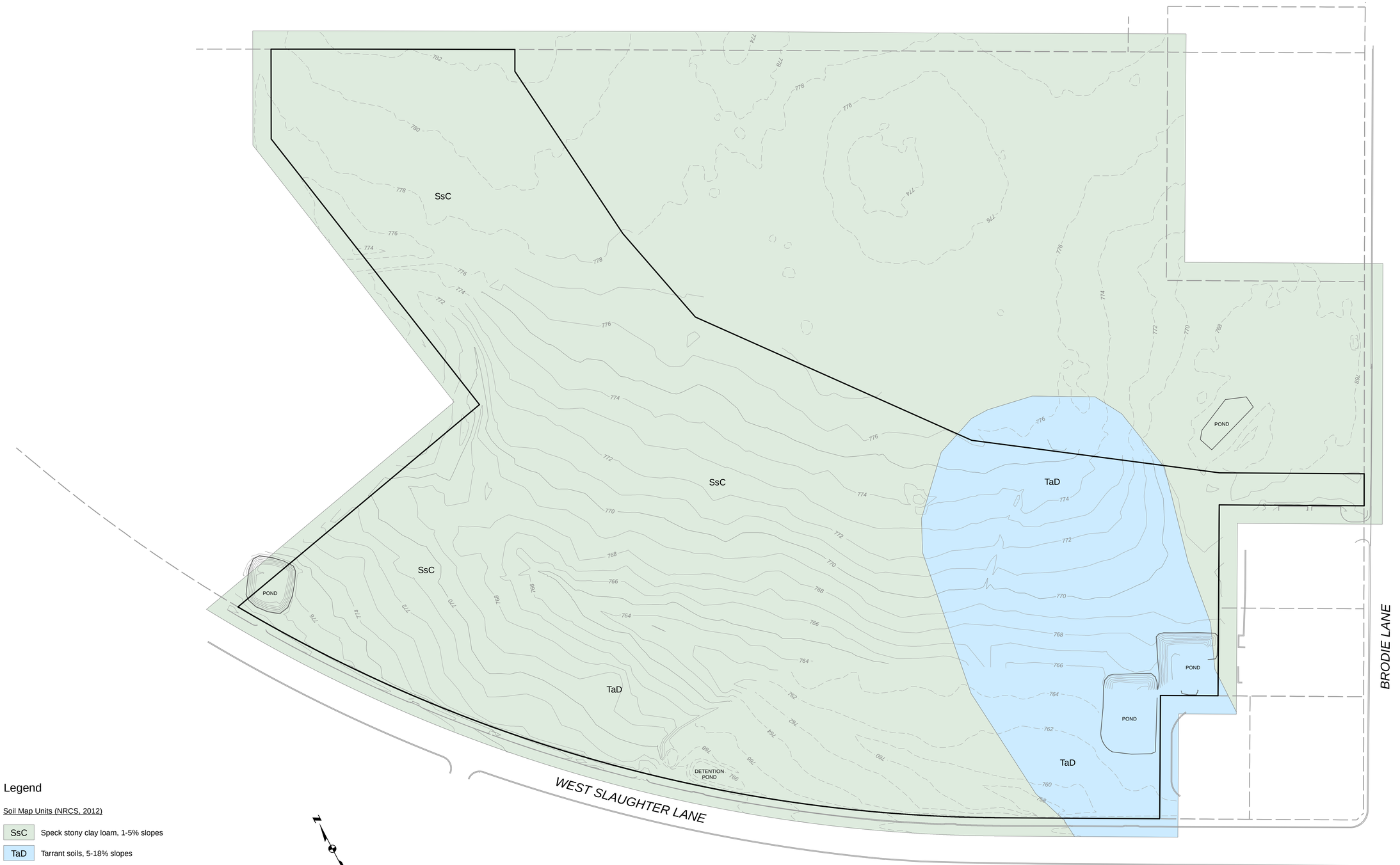
AISD BOWIE HIGH SCHOOL PRACTICE FIELDS
WEST SLAUGHTER LANE, AUSTIN, TEXAS

ATTACHMENT
B

Bowman CONSULTING

ATTACHMENT C

1980 TXDOT AERIAL IMAGE OF THE SUBJECT PROPERTY
STRATUS LAND DONATION, TRAVIS COUNTY, TEXAS



REVISION

NO.	DATE

DRAWN BY: JJH
DESIGNED BY: JJH
REVIEWED BY: JJH
PROJECT NO.: 14008.01
RELEASED: 08/08/2014

J. Jackson Harper, P.G.
Geological & Hydrogeological Consulting
403 N. Lake Hills Drive • Austin, Texas 78733-3115
Tel: (512) 243-8671 • Fax: (512) 263-9690

SITE SOILS MAP

AISD BOWIE HIGH SCHOOL PRACTICE FIELDS
WEST SLAUGHTER LANE, AUSTIN, TEXAS

ATTACHMENT
D

REVISION	DATE	NO.

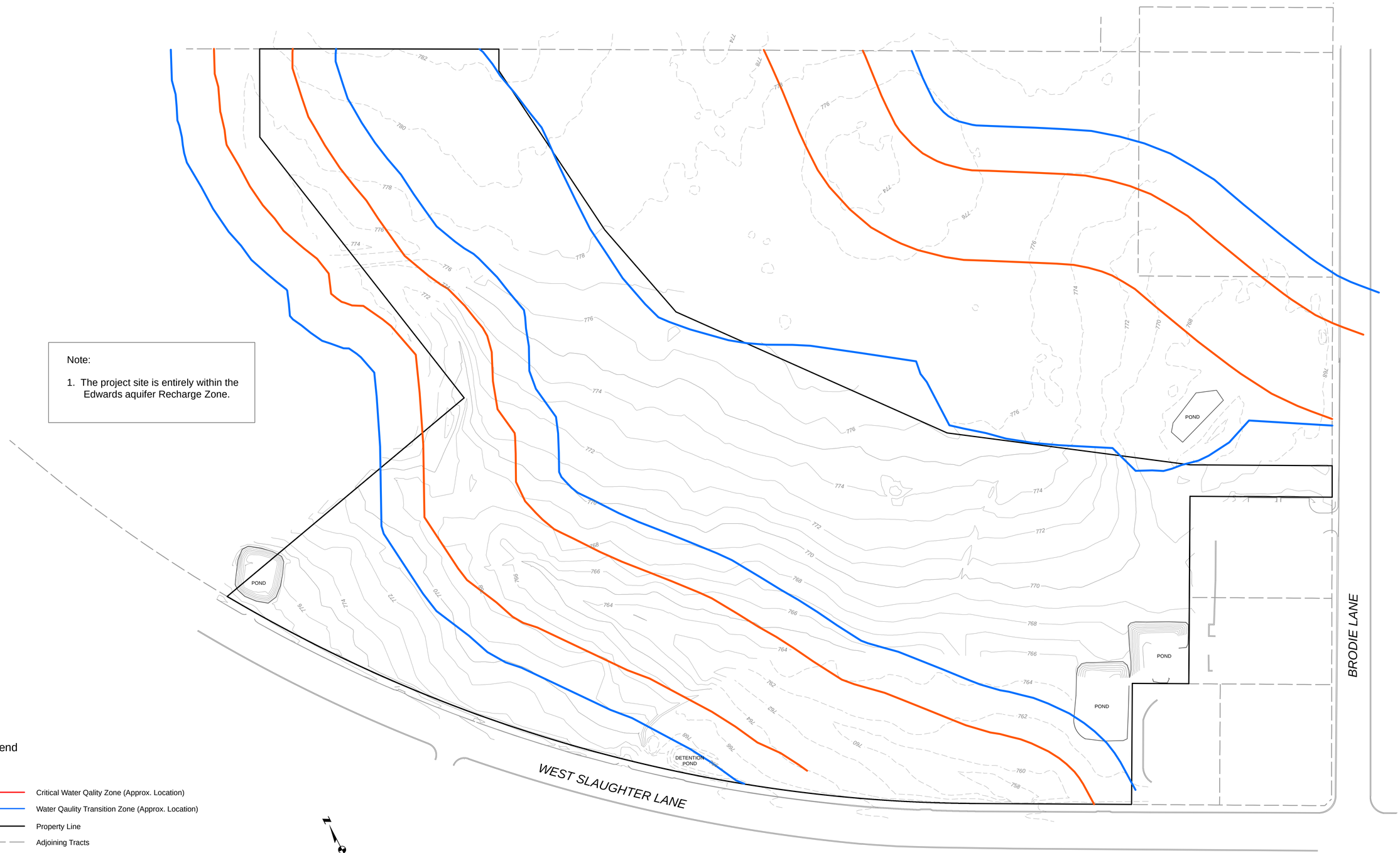
DRAWN BY: JJH
DESIGNED BY: JJH
REVIEWED BY: JJH
PROJECT NO.: 14008-01
RELEASED: 08/08/2014

J. Jackson Harper, P.G.
Geological & Hydrogeological Consulting
403 N. Lake Hills Drive • Austin, Texas 78733-3115
Tel: (512) 243-8671 • Fax: (512) 263-9690

CRITICAL ENVIRONMENTAL FEATURES AND WELL LOCATION MAP

AISD BOWIE HIGH SCHOOL PRACTICE FIELDS
WEST SLAUGHTER LANE, AUSTIN, TEXAS

ATTACHMENT
E



REVISION

NO.	DATE

DRAWN BY: JJH
DESIGNED BY: JJH
REVIEWED BY: JJH
PROJECT NO.: 14008.01
RELEASED: 08/08/2014

J. Jackson Harper, P.G.
Geological & Hydrogeological Consulting
403 N. Lake Hills Drive • Austin, Texas 78733-3115
Tel: (512) 263-8671 • Fax: (512) 263-9690

WATER QUALITY ZONES MAP

AISD BOWIE HIGH SCHOOL PRACTICE FIELDS
WEST SLAUGHTER LANE, AUSTIN, TEXAS

ATTACHMENT
F