130 ENVIRONMENTAL PARK
CALDWELL COUNTY, TEXAS
TCEQ PERMIT APPLICATION NO. MSW 2383

TYPE I PERMIT APPLICATION

PART II
EXISTING CONDITIONS AND
CHARACTER OF THE FACILITY AND SURROUNDING AREA

Prepared for

130 ENVIRONMENTAL PARK, LLC

Technically Complete October 28, 2014

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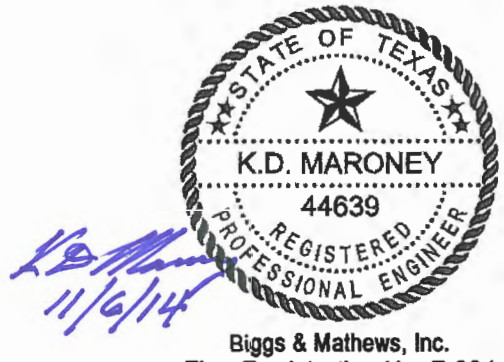

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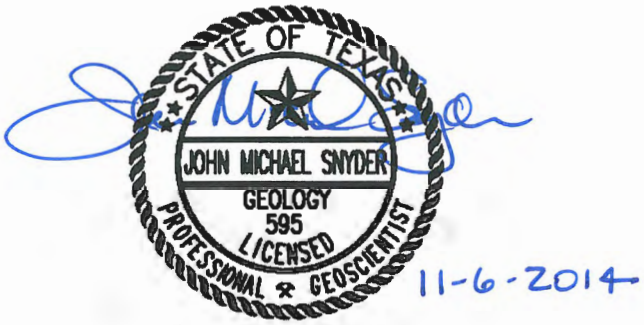

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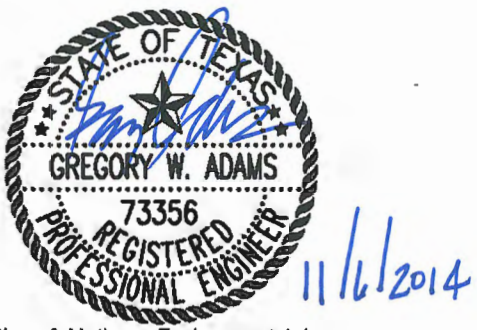

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For Section 10.6.

1 EXISTING CONDITIONS SUMMARY

30 TAC §330.61(a)

The 130 Environmental Park includes a proposed Type I municipal solid waste facility located in northern Caldwell County east of State Highway 130 (SH130). The 130 Environmental Park site entrance is approximately 1,500 feet north of the intersection of US Highway 183 (US183) and Farm to Market Road 1185 (FM1185), on the east side of SH130. US183 serves as the frontage road for SH130 in the general vicinity of the facility. The proposed facility is intended to provide waste disposal for residences and businesses in Caldwell County and surrounding Texas counties. The nearest community is the City of Lockhart, the city limit of which is more than two miles south of the proposed facility. The proposed facility location is outside the City of Lockhart city limits and outside its extraterritorial jurisdiction.

The proposed 130 Environmental Park facility boundary will encompass about 520 acres out of the approximately 1,229-acre property boundary. The landfill facility will be accessed from US183 through an entrance road. A gatehouse and scales will be provided within the facility boundary. Additional facilities located within the facility boundary will include a maintenance area, citizen convenience center, reusable materials staging area, large item storage area, used/scrap tire storage area, woodwaste processing area, leachate storage facility, and a truck wheel wash. A Type V transfer station (Registration No. 40269, application pending) will also be located within the facility boundary.

The overall property consists of gently undulating grasslands with limited forest cover. The property generally slopes to the south. The major topographic feature of the property is the Soil Conservation Service Site 21 Reservoir on Dry Creek, which traverses the property in a northeast to southwest direction, entering Plum Creek approximately five miles south of the property. Plum Creek eventually flows in a southeast direction, entering the San Marcos River about 23 miles downstream from the property. The facility boundary is located in the northern portion of the property, northwest of Dry Creek. Portions of the facility boundary along Dry Creek and unnamed tributaries are located within the limits of the 100-year floodplain; however, the entirety of the landfill footprint, processing and/or storage units, and entrance facilities will be located outside of the 100-year floodplain.

The property has been historically used as ranchland dating back at least to the mid-1930s. No waste disposal activities have occurred on the site and no permitting or construction permit approvals have been applied for or received.

1.1 Easements and Buffer Zones

No solid waste unloading, storage, disposal, and processing operations will occur within any easement, buffer zone, or right-of-way that crosses the site. The proposed 130 Environmental Park is consistent with the provisions of §330.543.

No solid waste disposal shall occur within 25 feet of the center line of any utility line or pipeline easement, but no closer than the easement, unless otherwise authorized by the executive director. All pipeline and utility easements shall be clearly marked with posts that extend at least six feet above ground level, spaced at intervals no greater than 300 feet. There are no pipeline or utility easements that will affect solid waste unloading, storage, disposal or processing operations: refer to Appendix IIA, Drawing IIA.12 – Facility Site Plan.

The buffer zone distances between the facility boundary and landfill footprint exceeds the minimum distance of 125 feet. Buffer zone distances vary along the facility boundary. The buffer distances from the facility boundary to the landfill footprint are shown on Drawing IIA.12 – Facility Site Plan.

The buffer zone distance for waste storage or processing operational activities exceeds the minimum distance of 125 feet. Buffer zone distances vary to each storage or processing facility. The buffer distances from the facility boundary to these facilities are shown on Drawing IIA.12 – Facility Site Plan.

Refer to Appendix IIK – Location Restriction Certifications for the certification statement that 130 Environmental Park meets the requirements of §330.543.

1.2 Site Specific Conditions

A detailed discussion of site-specific conditions that potentially require special design considerations as set forth in §330.61(a), including impact on surrounding area, transportation, geology, soils, groundwater, surface water, abandoned oil and water wells, floodplains, wetlands, endangered or threatened species, and Texas Historical Commission review is included in Sections 8 through 15 of Part II. As documented, there are no existing site-specific conditions that require special design considerations or possible mitigation of conditions.

2 WASTE ACCEPTANCE PLAN

30 TAC §330.61(b)

2.1 Properties and Characteristics of Waste

The major classifications of solid waste to be accepted for disposal at 130 Environmental Park include municipal solid waste, special waste, and Class 2 and 3 industrial wastes as defined by §330.3. Special wastes accepted at the facility authorized by §330.171(c) include regulated asbestos-containing materials (RACM), nonregulated asbestos-containing materials (non-RACM), and empty containers. In addition, other special wastes may be accepted based on a waste-specific approval as authorized by §330.171(b) and the facility.

130 Environmental Park is proposed to include facilities for storage and processing of waste materials. Facilities include the proposed Type V transfer station, large item storage area, reusable materials staging area, citizens convenience center, used/scrap tire storage area, and wood waste processing area. Materials accepted for storage or processing include construction and demolition wastes, white goods, inert materials, asphalt pavement or asphaltic concrete, source-separated recyclable materials, used or scrap tires, brush, and yard waste. In addition, municipal solid waste may be temporarily stored at the citizens convenience center.

130 Environmental Park will not accept medical waste, sewage, dead animals and/or slaughterhouse waste, sludge, grease trap waste, grit trap waste, liquid waste from municipal sources, municipal hazardous waste from conditionally exempt small quantity generators, or out-of-state wastes. The facility will not accept Class 1 industrial solid wastes, except for wastes that are Class 1 only because of asbestos content. The waste classifications are defined in §330.3.

Consistent with §330.15, the facility will not accept for disposal lead acid storage batteries; used motor vehicle oil; used oil filters; whole used or scrap tires; refrigerators, freezers, air conditioners or other items containing chlorinated fluorocarbons (CFC); bulk or noncontainerized liquid waste from nonhousehold sources; regulated hazardous waste; polychlorinated biphenyls (PCB) waste; radioactive materials; or other wastes prohibited by TCEQ regulations.

Consistent with §330.61(b)(1), limiting parameters for waste to be accepted include: a concentration of 1,500 mg/kg total petroleum hydrocarbons, the levels for Class 1 industrial solid waste provided in 30 TAC §335.521(a)(1), the presence of free liquids, the presence of regulated hazardous waste, the presence of polychlorinated biphenyls, the presence of radioactive waste, and the presence of chlorinated fluorocarbons.

The facility will not accept Class 1 industrial solid waste, except RACM that has been designated Class 1 industrial waste only because of its asbestos content. There are no existing or proposed Class 1 cells or disposal areas at the facility. Therefore, the facility is consistent with the provisions of §330.561; and the facility is not located within a coastal area as defined in 30 TAC §335.584 (b) (3) and (4). Refer to Appendix IIK for the location restriction statement and certification.

2.2 Volume and Rate of Disposal

The areas that are anticipated to contribute waste to the proposed 130 Environmental Park are Caldwell County and surrounding Texas counties. 130 Environmental Park, LLC anticipates that in Year 1 the landfill will receive approximately 429,000 tons of incoming waste (approximately 1,500 tons per day). The waste acceptance rate will vary over the life of the facility depending on market conditions.

The estimated maximum annual waste acceptance rate for 130 Environmental Park projected for five years is as follows:

Year	Estimated Maximum Annual Waste Acceptance Rate
1	429,000 tons
2	435,778 tons
3	442,663 tons
4	449,658 tons
5	456,762 tons

As population and economic conditions and available landfill disposal capacity change within the region, the volume of incoming waste will vary. 130 Environmental Park, LLC will maintain records to document the annual waste acceptance rate for the facility. If the rate exceeds the estimated rate and is not due to a temporary occurrence, 130 Environmental Park, LLC will file a permit modification application consistent with §330.125(h). The modification would propose any needed changes in the site operating plan to properly manage the increased waste acceptance rate, if any. As provided by §330.125(h), the estimated waste acceptance rate is not a limiting parameter of the permit.

The TCEQ defines population equivalent as "the hypothetical population that would generate an amount of solid waste equivalent to that actually being managed based on a generation rate of five pounds per capita per day and applied to situations involving solid waste not necessarily generated by individuals." Based on this definition, the approximate current and projected population equivalents of the areas capable of being served were calculated as follows:

$$\text{Current Annual Average} = 1{,}500 \text{ tons/day} \times \frac{5.5 \text{ days}}{\text{week}} \times \frac{52 \text{ weeks}}{\text{year}} = 429{,}000 \text{ tons/year}$$

Population Equivalent:	Year 1	Year 20	Year 44
	= 429,000 tons/year	= 577,848 tons/year	= 841,803 tons/year
	÷ 365 days/year	÷ 365 days/year	÷ 365 days/year
	x 2,000 lb/ton	x 2,000 lb/ton	x 2,000 lb/ton
	÷ 5 lb/person/day	÷ 5 lb/person/day	÷ 5 lb/person/day
	= 470,137 persons	= 633,258 persons	= 922,524 persons

3 GENERAL LOCATION MAPS

30 TAC §330.61(c)

Consistent with §330.61(c), the general location maps are provided in Appendix IIA – Maps and Drawings. These general location maps are provided in addition to the maps included in Part I, Appendix IA – General Location Maps. These maps, collectively as a group, accurately show the proximity of the facility to surrounding features and specifically show the items identified in §330.61(c)(1)-(12). Refer to Appendix IIA, Drawing IIA.1 through Drawing IIA.11 for the general location maps.

4 FACILITY LAYOUT MAPS

30 TAC §330.61(d)

Consistent with §330.61(d), the facility layout maps are provided in Appendix IIA – Maps and Drawings. These facility layout maps, collectively as a group, specifically show the items identified in §330.61(d)(1)-(9). Refer to Appendix IIA, Drawing IIA.12 through Drawing IIA.24 for the facility layout maps.

5 GENERAL TOPOGRAPHIC MAP

30 TAC §330.61(e)

The United States Geological Survey (USGS) General Topographic Map is included in Appendix IIA – Maps and Drawings as Drawing IIA.2 – General Topographic Map. The topographic map consists of the 7.5 minute quadrangle sheets for Lockhart North and Dale, Texas. Drawing IIA.2 is at a scale of one inch equals 2,000 feet as required by §330.61(e).

6 AERIAL PHOTOGRAPH

30 TAC §330.61(f)

Consistent with §330.61(f), the aerial photograph of the site and surrounding area is presented in Appendix IIA as Drawing IIA.7 – Aerial Photograph. This aerial photograph represents property conditions as flown May 13, 2013 and surrounding conditions provided via Google Map imagery dated August 1, 2012. The aerial photograph shows the area within at least a one-mile radius of the facility boundary. In addition, the facility boundary and landfill footprint are shown.

7 LAND USE MAP

30 TAC §330.61(g)

Consistent with §330.61(g), a land use map is included in Appendix IIB – Land Use Analysis as Figure LU-2 – Land Use – 1 Mile. This land use map has been prepared based on the land use analysis conducted by John Worrall Consulting LLC. The land use features identified and depicted on this drawing as required by §330.61(g) include the facility boundary and existing uses such as agricultural, industrial, and residential uses within one mile of the facility boundary. Locations of residences, commercial establishments, schools, licensed day care facilities, churches, cemeteries, ponds or lakes, and recreational areas within one mile of the facility boundary are shown. Refer to Drawing IIA.8 for drainage, pipeline, and utility easements within the facility boundary.

8 IMPACT ON SURROUNDING AREA

30 TAC §330.61(h)

Consistent with §330.61(h), a land use analysis of the area surrounding the facility was conducted by John Worrall Consulting LLC. Refer to Appendix IIB – Land Use Analysis for a detailed land use analysis and discussion regarding impacts of the facility. The land use analysis addresses zoning within two miles of the facility, character of surrounding land uses within one mile of the facility, growth trends within five miles of the facility, proximity to residences and other uses within one mile of the facility.

8.1 Wells Within 500 Feet

Consistent with §330.61(h)(5), a description of known wells within 500 feet of the facility has been prepared. A water well search was conducted to identify known water wells within a 500-foot radius of the proposed facility boundary.

The water well search included a review of the interactive map and well records available on the Texas Water Development Board (TWDB) website *www.twdb.state.tx.us* in the Water Information Integration and Dissemination (WIID) ArcIMS mapping application. The Texas Commission on Environmental Quality (TCEQ) website *www.tceq.state.tx.us* and the Plum Creek Conservation District website www.pccd.org were also reviewed for water well records. The U.S. Geological Society database (URL: *maps.waterdata.usgs.gov/mapper/*) was checked for groundwater sites on which it collects data that might be in the vicinity but no additional wells were found. The TCEQ Water Utility Database (*www.tceq.state.tx.us/permitting/water_supply/ud/iwud.html*) was also consulted to determine if there were any public water utility wells in the area.

An attempt was also made to locate wells visible from nearby roads and streets and confirm water well locations. Within the 500-foot radius, no obvious water well production equipment, such as well houses, pump handles, windmills, or pressure tanks were identified from the street. However, any residence in this area may have a water well associated with it, especially where no public water supply is available.

An oil and gas well search of state records was conducted in June 2013 to identify any oil and gas wells on the site and within 500 feet of the facility boundary. The search included a review of records and maps on file at the Texas Railroad Commission (www.rrc.state.tx.us). Consistent with §330.61(h)(5) three dry holes have been drilled within 500 feet of the facility boundary. Of those, one is within the facility boundary but outside the footprint. There are no producing oil or gas wells located within 500 feet of the facility boundary, as shown on Drawing IIA.5 – Locations of Oil and Gas Wells. If any abandoned crude oil or natural gas wells or other wells associated with mineral recovery are located during facility development they will be handled as described in Section 12.2 – Oil & Gas wells of this narrative.

9 TRANSPORTATION

30 TAC §330.61(i)

9.1 Traffic and Roadways

Consistent with §330.61(i)(1)-(4), a transportation study prepared by Lee Engineering is included as Appendix IIC – Transportation Study. The transportation study provides information on the availability and adequacy of access roads, provides data on the existing and expected vehicular traffic on access roads within one mile of the facility during the expected site life of the facility, and projects the volume of traffic expected to be generated by the facility on the access roads within one mile of the facility. The projected traffic volumes were developed based on the experience of 130 Environmental Park, LLC with similar sites. Documentation of coordination with the Texas Department of Transportation (TxDOT), is also included in Appendix IIC.

9.2 Airport Impact

Consistent with §330.61(i)(5), an evaluation of the facility impact on surrounding airports was conducted in accordance with §330.545. Refer to Appendix IIA – Maps and Drawings, Drawing IIA.6 – FAA Airport Location Map for the location of the facility in relationship to area airports. The airport map uses the FAA Sectional Aeronautical Chart, San Antonio, 91st Edition, dated May 2, 2013 as the base drawing. The map depicts the location of the facility, a 5,000-foot radius, a 10,000-foot radius, and a six-mile radius from the facility boundary. As depicted on Drawing IIA.6, there is no public-use airport located within a six-mile radius.

In addition, it was verified through the FAA's Notice Criteria Tool that the landfill does not exceed the criteria listed in 14 CFR Part 77.9 that would require notification to the FAA for an obstruction evaluation.

Refer to Appendix IIH – Federal Aviation Administration Documentation for documentation of coordination with FAA regarding location of the facility in relation to airports in the designated areas as required by §330.61(i) and §330.545. Refer to Appendix IIK for the airport safety location restrictions statement and certification.

10 GENERAL GEOLOGY AND SOILS STATEMENT

30 TAC §330.61(j)

Consistent with §330.61(j)(1)-(4), a general discussion of the geology and soils of the site has been prepared.

10.1 General Geology

The project site is located in the regional physiographic subdivision known as the Blackland Prairie. This north-south trending belt is underlain by Paleocene/Eocene age deposits of Midway and Wilcox Groups and Cretaceous age sediments of Navarro Group and Eagle Ford Group. These formations consist primarily of fine-grained materials deposited in ancient oceans. In addition, according to the Geologic Atlas of Texas (1972), the Leona Formation, a Quaternary fluviatile terrace deposit, is present at the surface in a narrow deposit trending northwest to southeast along the Plum Creek Valley beginning in the northwest portion of the county to the central portion of the county. Topography of the Blackland Prairie is typically flat to rolling and has a gentle slope to the southeast. The Blackland Prairie is poorly drained with sparse timber (Nordstrom, 1982).

The nearest surface water body in the area, Soil Conservation Service Reservoir 21, is located several hundred feet south of the site.

10.1.1 Regional Stratigraphy and Lithology

Formations of the Cretaceous System were deposited by northward advancing seas over extensively eroded Paleozoic strata. The Gulf Series of the Cretaceous System represent one of the major Cretaceous sea advancements. The project site is underlain by strata deposited during the late Cretaceous Gulf and the Paleocene/Eocene Series. The Eocene Series were deposited once marine deposition ceased after a general uplift to the west resulted in regression of the seas gulfward. Subsequent erosion of the Cretaceous deposits continued through the Cenozoic Era to the present.

Regional cross sections indicate that the geologic formations form a southeastward thickening wedge extending into the Gulf of Mexico structural feature.

Regional stratigraphy includes geologic units of the Cretaceous Gulf Series Navarro Group, the Paleocene Midway and Eocene Wilcox Group and Quaternary deposits of the Leona Formation.

Leona Formation – The Leona Formation is present at the surface in a narrow deposit trending northwest to southeast along the Plum Creek Valley. The Leona Formation consists of stratified gravel and sand, partly cross bedded with discontinuous lenses of caliche (Hemphill, 2005). The gravel is primarily composed of limestone pebbles but contains minor amounts of chert. Water-worn shells of the Fredericksburg Group are the only fossils found in the formation. The Leona Formation thickness ranges from a few

feet at its margins to more than 40 feet in the center of the plain. The Leona Formation yields groundwater to wells in the area and is discussed in Section 11.2 but no wells in the vicinity of the site provide groundwater from this formation. The geologic map (Drawing IIA.9) shows an isolated north-south outcrop of the Leona Formation in the area of the site. However, field investigation of the site, including borings, show only remnant pebbles and cobbles of an apparent Leona terrace deposit that have settled down into the underlying Midway clays.

Wilcox Group – The Wilcox Group was formed by a series of merged deltas. The lower portion contains sandy micaceous shale. The formation then thickens upward into more sandy units of laminated sand or clay and beds of cross stratified sand. Within the formation, some sandy units are unconsolidated in places while in other places the formations are cemented. In the vicinity of the site, the Wilcox thickness varies from 50 feet to 400 feet, approximately. Individual sand beds of the Wilcox can be up to 100 feet thick and the outcrop is located east of the site. The Wilcox yields small to large amounts of water to wells and is discussed in Section 11.2. The Wilcox outcrops east of hte site and is not present on the site.

Midway Group – The Midway Group is a massive gray clay that contains beds of limy concretions with basal glauconitic sand (Rasmussen, 1947). At the site, the Midway Group reaches a thickness of approximately 400 to 600 feet in the vicinity of the facility and it outcrops on the west side of the site and Dry Creek. The Midway is not known to produce water to wells in the area.

Navarro Group – The Navarro Group lies under the Midway Group and is primarily composed of clay and silt with some lenses of bluish sandstone. This formation has a maximum thickness of 600 feet in Caldwell County and the top of the formation is approximately 600 feet deep at the site.

General Regional Stratigraphic Column

System	Series	Group	Formation	Maximum Thickness (ft)
Quaternary	Pleistocene	Leona Formation		40
Tertiary	Eocene	Queen City Sand		500
		Reklaw Formation		400
		Carrizo Sand		400
		Wilcox Group		2,000
	Paleocene	Midway Group		600
Cretaceous	Gulf	Navarro Group		600
		Taylor Marl, Austin Chalk and Eagle Ford Shale, undifferentiated.		1,200

Source: Follett, 1966.
Barnes, 1974.

10.2 Site Stratigraphy

The site is on an outcrop of the Midway clay, which is approximately 400 to 600 feet thick. Discontinuous pebbles and cobbles, apparent remnants of an alluvial terrace deposit that has been mostly eroded, have settled into the upper few feet of the Midway clay. Stratigraphically, the site has been divided into three strata that are described in the following section.

10.3 General Soils

On-site soils are composed primarily of clay. Shallow silty clays grade into dense clay with depth. These materials correspond to the materials which make up the Eocene Midway formation.

10.3.1 Stratum I – Soil Profile – Silty Clay with Pebbles and Cobbles

This stratum ranges from two to six feet thick and consists primarily of brown to tan, organic silty fat clay with occasional occurrence of cobbles, pebbles and some gravel. This stratum is weathered clay, with alluvial deposits that have settled into portions of it. Granular materials occur sporadically and are not part of continuous strata, but rather appear to be a remnant veneer of an apparent alluvial deposit that has been mostly eroded and individual cobbles or pebbles have settled down into the upper parts of the clay. The Geologic Map of Texas (Drawing IIA.9) identifies these materials as Leona Formation.

10.3.2 Stratum II – Weathered Midway – Silty Fat Clay

Stratum II ranges in thickness from 30 to 60 feet and consists of weathered silty fat clay. This clay is very hard and dense. Weathering decreases with depth. Weathering effects are indicated primarily by color from tan near the upper parts to tan and gray and

eventually to gray as it transitions to the unweathered dark gray clay below. No evidence of fractures was observed. Evidence of slickensides was observed in only one boring, BME-24. Laboratory permeability tests indicate both horizontal and vertical permeability in Stratum II are approximately 3.7 x 10^{-8} cm/sec. Laboratory hydraulic conductivity worksheets are included in Part III, Attachment E, Appendix E5, as Figures E5-19, E5-22, E5-24, and E5-25.

10.3.3 Stratum III – Unweathered Midway – Silty Dark Gray Clay

Stratum III consists of hard, dense, dark gray silty fat clay. Drilling progressed slowly due to the extreme dense nature of the unweathered clay. All thirty-two borings were drilled into this clay that exists across the entire site. Up to 77 feet of the clay was encountered in borings. Laboratory permeability tests ranged from 1.1 x 10^{-8} cm/sec to 2.1 x 10^{-8} cm/sec. The arithmetic mean of permeability results in Stratum III is 1.47 x 10^{-8} cm/sec. Laboratory hydraulic conductivity worksheets are included in Appendix E5 as Figures E5-20, EF-21, and E5-23. Published literature (Follet, 1966 and Rasmussen, 1947) suggests that the Midway is 400 to 600 feet thick beneath the site. Literature also suggests that beneath the Midway are several hundred feet of low permeability clays, marls, and limestones of the Navarro, Taylor, Eagle Ford, and Austin formations.

No evidence of fractures or slickensides was observed in Stratum III.

Generalized Site Stratigraphy

Geologic Unit	Lithology	Average Depth to Top of Unit (ft)	Average Thickness of Unit (ft)	Hydrogeologic Unit
Stratum I	Silty clay soil	Outcrops at Surface	4	Surficial soil
Stratum II	Weathered silty clay	4	48	Uppermost aquifer*
Stratum III	Unweathered silty dark gray clay	50	400 – 600	Aquiclude

*While not recognized as an aquifer by the Texas Water Development Board, this zone functions as the uppermost aquifer for purposes of groundwater monitoring.

10.4 Fault Areas

Consistent with §330.61(j)(2) and §330.555, a fault areas evaluation was prepared as part of this application to demonstrate that the 130 Environmental Park site meets the location restriction for fault areas.

The property on which the 130 Environmental Park site is located was examined for the presence of faulting according to §330.555 criteria. A fault study was conducted that included reviewing aerial photographs for the site, reviewing available geologic literature and maps of the area, conducting site reconnaissance, and examining the subsurface boring data from the site.

The site and the immediate area were investigated for:

- Structural damage to constructed facilities (roadways, railways, and buildings).
- Scarps in natural ground.
- Presence of surface depressions (sag ponds and ponded water).
- Presence of lineations on aerial maps and topographic sheets. The following historical aerial photographs from Google Earth were reviewed:

8/1/2012	10/30/2008	8/12/2003
10/17/2011	2/28/2008	12/30/2002
3/9/2011	4/29/2006	12/30/1997
11/24/2009	10/21/2005	1/27/1995

- Structural control of natural streams.
- Vegetation changes.
- Crude oil and natural gas accumulations.
- References to published geological literature pertaining to area conditions.

A site walkover was conducted by John Michael Snyder, P.G., who is an experienced licensed professional geoscientist and site reconnaissance was conducted by a licensed professional engineer familiar with the faulting and solid waste disposal facilities to identify possible physical evidence caused by faulting. No unusual scarps or topographic breaks were interpreted within 200 feet of the site. No evidence of faulting was found associated with formation outcrops; no evidence of faulting was found by examination of area roadways; no structural influence of stream courses was found; and no unusual relief or topographic features (such as sag ponds or truncated alluvial spurs) were observed on the site. No evidence of structural damage to buildings on the property was identified.

In summary, no fault scarps were observed at the surface within 200 feet of the site and there was no evidence of vertical subsidence on any outcrops of geologic materials. No vertical displacement or stratigraphic offset indicative of faults was observed in outcrops. There is no known active faulting within 1/2 mile of the site in Holocene time; therefore, the site complies with §330.555.

Many faults are located in the area and are related to the Balcones Fault Zone and Mexia-Luling Talco Fault Zone. The Balcones Fault Zone faults last moved during the Miocene Epoch (Garner and Young, 1976; Jordan, 1977; and Grimshaw and Woodruff, 2005), while movement along the Mexia-Luling Talco Fault Zone occurred in the Eocene Epoch (Jackson, 1982; Culotta et al, 1992; Sellards & Baker, 1934; and Weeks, 1945). Consistent with §330.555(a), the faults located in the area of the facility are documented to have last moved 45 to 100 million years ago; therefore, they pre-date the Holocene Epoch. Also, the mapped faults in the area are located greater than 200 feet from the waste footprint. Refer to Appendix IIK for location restrictions statement and certification.

10.5 Seismic Impact Zones

Consistent with §330.61(j)(3) and §330.557, seismic impact zones documentation was prepared as part of this application to demonstrate that the 130 Environmental Park site meets the location restriction for seismic impact zones.

TCEQ regulations state that no new MSWLF units or lateral expansions shall be located in seismic impact zones unless the owner or operator demonstrates that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

The seismic impact zone as defined by §330.557 is an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earthen material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. Appendix IIA, Drawing IIA.10 shows the site location on the seismic impact zone map for Texas. The proposed 130 Environmental Park is not located within a seismic impact zone. Refer to Appendix IIK, for location restrictions statement and certification.

10.6 Unstable Areas

Consistent with §330.61(j)(4) and §330.559, unstable areas documentation was prepared as part of this application to demonstrate that the 130 Environmental Park site meets the location restriction for unstable areas.

An unstable area is defined by the TCEQ as a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill's structural components responsible for preventing releases from a landfill. An unstable area can exhibit poor foundation conditions, areas susceptible to mass movement, and karst terrains.

The determination of potential unstable areas at the landfill site is based on site observations and a review of existing documentation for the site by a licensed professional engineer. Based on this review, the foundation conditions and the local geologic and geomorphic formations are stable. In addition, there is no evidence to suspect mass movement of natural formations of earthen material on or in the vicinity of this site. No foundation problems exist at the site. The proposed landfill components were evaluated with respect to differential settlement, heave and slope stability. Based on the results of these analyses, the existing and proposed human-made features have been predicted to have adequate factors of safety with respect to stability.

Based on site observations, a review of existing geological data, and geotechnical analysis of the structural components of the landfill development, the site is not located in an unstable area and the integrity of the landfill is not expected to become impaired by natural, surface, or subsurface human-made features or events. Refer to Appendix IIK for location restrictions statement and certification.

11 GROUNDWATER AND SURFACE WATER

30 TAC §330.61(k)

11.1 Groundwater

Consistent with §330.61(k)(1) and 330.549, a discussion of groundwater conditions at or near the facility has been prepared. Groundwater occurs at the site only in the weathered Midway clay at the interface between Stratum II and Stratum III. The proposed groundwater monitoring well system is shown on Drawing IIA.14 – Groundwater and Landfill Gas Monitoring Plan. Refer to Appendix IIK for location restrictions statement and certification.

11.2 Regional Aquifers

Regional Tertiary and Quaternary aquifers that supply groundwater to wells in Caldwell County are the Carrizo-Wilcox and the Leona formations, respectively. The Carrizo-Wilcox is characterized by the Texas Water Development Board (TWDB) as a major aquifer. The Leona Formation is not characterized by the TWDB as either a major or minor aquifer. Most groundwater produced in northern Caldwell County is from wells tapping the Carrizo-Wilcox Formation, located east of the site. The outcrop of the Leona Formation, from which some groundwater is produced, is located south of the site. There are no water wells on site as the Midway and remnant alluvial deposits in the near-surface consist primarily of clayey materials.

11.2.1 Leona Aquifer

The geologic map (Drawing IIA.9) shows that the Leona outcrops at the site. Actual site borings show only remnant pebbles and cobbles of an apparent alluvial deposit that has settled down into the underlying Midway clays. These granular deposits are not continuous and occur within significant clay. The primary Leona Formation occurrences actually crop out in a narrow plain in the center of Caldwell County, as shown in Figure E1-1. In Caldwell County, the Leona Formation thickness ranges from a few feet at its margins to more than 40 feet in the center of the plain. The Leona yields small to moderate amounts of groundwater to domestic wells in the primary deposits that occur along Plum Creek near Lockhart. In the past, groundwater from the Leona has been used for domestic use, watering livestock, irrigation, and public supply. However, today public water supply is from the Carrizo-Wilcox, and the Leona Aquifer has limited capacity to produce groundwater (Hemphill, 2005). The Leona has an average slope of 0.25 percent in the center of the plain deposit.

11.2.2 Carrizo-Wilcox Aquifer

The Wilcox Formation crops out east of the proposed site and in a northeast trending belt across Caldwell County. The Carrizo-Wilcox dips to the southeast at an average of about 150 feet per mile and increases in thickness in the direction of dip. Fresh to slightly saline water is found in the Carrizo-Wilcox at depths ranging from about 50 feet

near the outcrop to about 2,800 feet near the southeast corner of the county. The Carrizo occurs east and southeast of the outcrop of the Wilcox, approximately 12 miles southeast of the site. The aquifer is collectively known as the Carrizo-Wilcox (Thorkildsen and Price, 1991). The Carrizo-Wilcox yields small to large quantities of water to many wells for domestic and stock purposes, public supply, and some irrigation.

Hydraulic Properties of Regional Aquifers
Compiled from TWDB, 1966, TWDB, 1991

Parameters	Leona	Carrizo-Wilcox Formation
Composition	Gravel, pebbles with sand	Sand interbedded with gravel, silt, and clay
Transmissivity	0.35 (Specific Yield)	2,425 – 18,027 ft^2/day
Hydraulic Conductivity	37 – 317 ft/day	26 – 40 ft/day
Water Table/Confined	Unconfined	Unconfined locally, confined downdip
Groundwater Flow Rate	75 – 400 ft/year	10 – 100 ft/year
Water Quality: Total Dissolved Solids Chlorides	 120 – 1500 ppm 15 – 1000 ppm	 41 – 6700 mg/L 3 – 4000 mg/L
Recharge Zones	Outcrop of Leona	Outcrop of Carrizo-Wilcox
Regional Water Table	Not Available	See Figure E1-4*
Present Use of Water	Limited irrigation and limited household use due to high nitrates.	Municipal & irrigation
Water Wells Within One Mile	None	See Table E-3 and Appendix E1, Figure E1-5

* Regional groundwater potentiometric surface map for the Carrizo-Wilcox is included in Appendix E-1, Figure E1-4.

11.3 Surface Water

Consistent with §330.61(k)(2), a discussion of surface water at and near the site has been developed.

130 Environmental Park is located in the San Marcos River Basin near the headwaters of Dry Creek. The major topographic and surface water feature of the property is the Soil Conservation Service Site 21 Reservoir (SCS21), located along Dry Creek south of the site. Dry Creek enters the property on the northeast property boundary and traverses the property in a northeast to southwest direction, southeast of the site, entering SCS21, then exiting the property along the south property boundary. Dry Creek generally flows in a north to south direction and enters Plum Creek about five miles south of the site. Plum Creek flows in a southeast direction, eventually entering the San Marcos River about 23 miles downstream from the property.

The landfill footprint is west of Dry Creek situated between Dry Creek and an unnamed tributary of Dry Creek. The entrance facilities are located west of the unnamed tributary

to Dry Creek. Surface topography generally slopes to the south toward Dry Creek or its unnamed tributaries and ultimately to SCS21. Surface water from the entrance facility area flows to the southeast and enters the unnamed tributary of Dry Creek, and then enters SCS21 south of the facility boundary. Surface water from the landfill footprint area flows to the south entering either the unnamed tributary, Dry Creek, or SCS21.

Surface water drainage facilities will be designed and constructed as part of the development of the site. These improvements are associated with the landfill footprint and entrance facilities and include perimeter channels and detention ponds. All uncontaminated surface water from the landfill footprint area will be routed through the detention and sedimentation ponds before entering Dry Creek or its tributary. Surface water entering the facility boundary from the north will be conveyed around the landfill footprint and exit the facility boundary on the south.

The surface water drainage design for 130 Environmental Park addresses requirements for surface water runon and runoff and consists of drainage swales, downchutes, perimeter channels, detention ponds, outlet structures, and erosion and sediment controls.

11.4 Stormwater Permitting

The facility has been designed to prevent the discharge of pollutants into waters of the state of Texas or waters of the United States, as defined by the Texas Water Code and the federal Clean Water Act, respectively. 130 Environmental Park, LLC will submit a notice of intent (NOI) to comply with TPDES General Permit No. TXR050000 relating to stormwater discharge associated with industrial activity (Multi-Sector General Permit). Refer to Appendix IIG – TPDES Permit for the TPDES certification statement provided consistent with §330.61(k)(3).

12 ABANDONED OIL AND WATER WELLS

30 TAC §330.61(l)

12.1 Water Wells

As described in Section 8.1 of this narrative, there are no known existing or abandoned water wells within the facility boundary of the 130 Environmental Park.

Should any unknown abandoned water wells be identified within the facility boundary, 130 Environmental Park, LLC will provide written notification to the TCEQ executive director of their location. Within 30 days prior to construction, a written certification will be submitted that all such found wells have been capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or any other regulatory agency requiring notification.

12.2 Oil and Gas Wells

There are no known existing or abandoned crude oil or natural gas wells (see Drawing IIA.5) within the 130 Environmental Park facility boundary. There is one plugged dry hole location within the facility boundary but outside the proposed waste footprint.

If any abandoned crude oil or natural gas wells or other wells associated with mineral recovery are located during site development, the site operator will provide the executive director of the TCEQ with written certification that all such wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the Railroad Commission of Texas. A copy of the well plugging report to be submitted to the appropriate state agency will also be submitted to the executive director of the TCEQ within 30 days after the well has been plugged. In accordance with 30 TAC §330.61(l)(2), any producing crude oil or natural gas well that does not affect or hamper landfill operations may be installed or remain in its current state if identified in the permit for the landfill or identified in a written notification to the executive director.

13 FLOODPLAINS AND WETLANDS

30 TAC §330.61(m)

13.1 Floodplains

Consistent with §330.61(m)(1) and §330.547, an evaluation of the 100-year floodplain has been prepared for 130 Environmental Park. 130 Environmental Park's proposed waste disposal operations will be conducted outside the 100-year floodplain.

FEMA has defined the limits of the 100-year floodplain in the vicinity of the landfill as Zone A; no base flood elevations have been determined by FEMA. The limits of the floodplain are depicted on Drawing IIA.11 - Flood Insurance Rate Map (FIRM), which is the drawing compiled from the FIRM Community Panel Number 48055C0125E, with an effective date of June 19, 2012. Drawing IIA.11 includes the facility boundary and landfill footprint with the limit of the FEMA 100-year floodplain. This drawing demonstrates that the proposed waste disposal units will not be located within the limits of the 100-year floodplain.

An evaluation of the limits of the 100-year floodplain, based on floodplain modeling of the SCS Site 21 Reservoir, Dry Creek, and its unnamed tributaries, is included in Part III, Attachment C2 – Flood Control Analysis. The limits of the 100-year floodplain determined by the floodplain modeling are depicted in Appendix IIA, Drawing IIA-21 – Landfill Completion Plan and in Appendix IIJ, Drawing IIJ.2 – 100-Year Floodplain. As depicted on these drawings, the proposed landfill unit and storage and processing facilities are not located within the limits of the 100-year floodplain.

In accordance with §330.547(a), 130 Environmental Park's waste disposal operations will not be located in the 100-year floodway. In accordance with §330.547(b), 130 Environmental Park's new municipal solid waste disposal units will not be located in the 100-year floodplain, will not restrict the flow of the 100-year flood, will not reduce the temporary water storage capacity of the floodplain, and will not result in the washout of solid waste. Further, in accordance with §330.547(c), 130 Environmental Park's processing and/or storage units are not located within the 100-year floodplain. Refer to Appendix IIK for location restrictions statement and certification.

13.2 Wetlands

30 TAC §330.61(m)(2) and (3) require identification and determination of wetlands within the proposed facility boundary. Appendix IID.1 ("Waters of the United States Delineation Report and Wetlands Determination and Identification") provides the results of an investigation that (a) delineates waters of the United States (areas subject to U.S. Army Corps of Engineers jurisdiction under Section 404 of the federal Clean Water Act, including "jurisdictional wetlands") and (b) provides a wetlands identification and determination for the 1,229 acre tract that includes the 520 acre proposed facility boundary area for the 130 Environmental Park. Based on the results of that investigation, Appendix IID.2 ("Summary of Wetlands Determination and Identification for 130 Environmental Park Facility Boundary Area") presents wetlands identification and determination for the proposed facility boundary area. As shown on Table IID.2-1 and

Figure IID.2-1 in Appendix IID.2, there are approximately 1.46 acres of wetlands located within the facility boundary, 0.49 acre of which are jurisdictional wetlands (shown on Drawing IIA.23); and there are approximately 0.68 acre of wetlands within the area proposed for the new municipal solid waste landfill unit (landfill footprint), none of which is jurisdictional wetlands. There are no jurisdictional wetland areas located within the limits of construction of the perimeter channels, detention ponds, entrance road gatehouse area, truck wheel wash, citizens' convenience center, Type V Transfer Station, maintenance building, leachate storage facilities, or other facility appurtenances. As required by 30 TAC §330.61(m)(2) and §330.553(a), Appendix IID-3 addresses, for these 0.68 acre wetlands areas within the area proposed for the landfill unit, each of the wetlands demonstrations identified in 30 TAC §330.553(b)(1) - (5). Refer to Appendix IIK for the wetlands location restriction statement and certification.

14 ENDANGERED OR THREATENED SPECIES

30 TAC §330.61(n)

Consistent with §330.61(n) and §330.551, an evaluation of endangered or threatened species at the site has been conducted by Halff Associates and is documented in Appendix IIE – Endangered or Threatened Species Documentation.

Halff has identified five threatened or endangered species that have the potential to occur within the study area: the wood stork, the golden orb, the Texas pimpleback, the Texas horned lizard, and the timber rattlesnake. Because none of these is a federal-listed threatened or endangered species, no critical habitat has been designated for any of them. Those portions of the study area that may provide suitable habitat for the state-listed wood stork, golden orb, and Texas pimpleback are limited to aquatic habitats associated with the large impoundment in the southern portion of the study area (SCS Site 21 Reservoir), away from areas that will be impacted by the proposed facility. Construction and operation of the project will not result in destruction or adverse modification of habitat (including critical habitat) for these species, and will not cause or contribute to the taking of these species.

A small area of oak/elm woods that may provide suitable habitat for the timber rattlesnake will be cleared during construction of the access road and attendant facilities; an additional larger area within some portion of the landfill footprint will also be cleared. Similarly, this habitat type may also provide habitat for the Texas horned lizard. Clearing will be done in accordance with the species protection plan for both species, included in Part IV, Appendix IVC. As a result, Halff has concluded that 130 Environmental Park and its operation will not result in the destruction or adverse modification of critical habitat for these species, or cause or contribute to the taking of these species.

Because there are no federally-listed threatened or endangered species that have the potential to occur within the study area and because no critical habitat for any such species exists within the study area, Halff has concluded that 130 Environmental Park and its operation will not result in the destruction or adverse modification of critical habitat for, or cause or contribute to the taking of, any federally-listed threatened or endangered species. There will be “no effect” to any federally-listed threatened or endangered species.

Based on evaluation by Halff Associates, and coordination with the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department, in accordance with §330.551(a) and found in Appendix IIE – Endangered or Threatened Species Documentation, the facility and the operation of the facility will not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, and will not cause or contribute to the taking of any endangered or threatened species. Refer to Appendix IIK for location restrictions statement and certification.

15 TEXAS HISTORICAL COMMISSION REVIEW

30 TAC §330.61(o)

A report of cultural resources evaluation of the 1,229-acre tract that includes the site has been submitted to the Texas Historical Commission. Because the proposed project will not be located on state or local public land and no state archaeological landmark is located within the site, the project is not subject to any requirement in Natural Resources Code, Chapter 191, Texas Antiquities Code.

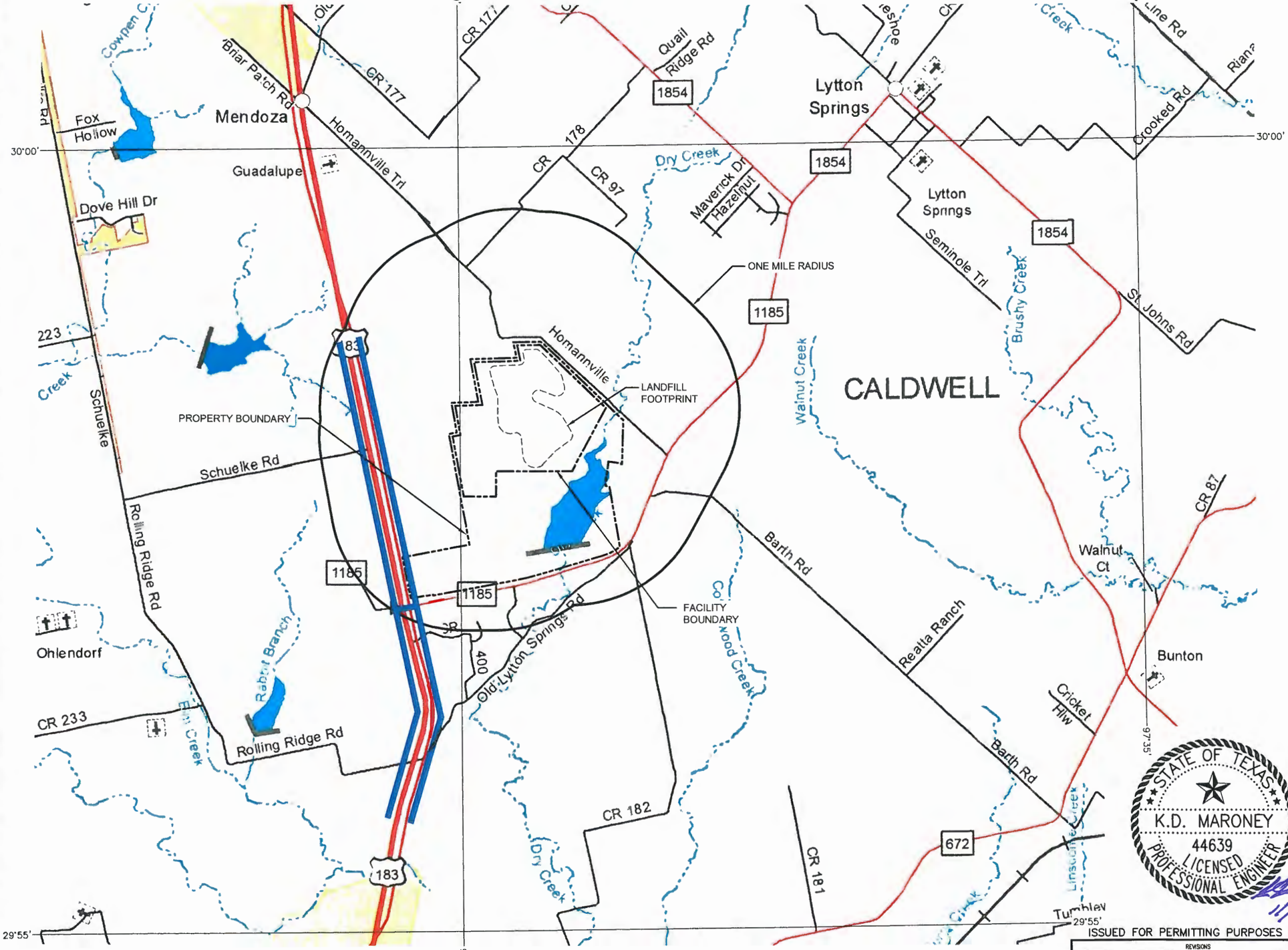
A Cultural Resources Survey of the 130 Environmental Park has been prepared by AR Consultants, Inc. Refer to Appendix IIF – Cultural Resources Survey for a copy of the November 5, 2013 report and correspondence with the Texas Historical Commission, including a letter from Mark Wolfe, State Historic Preservation Officer, stating that the report has been accepted and the project may proceed without further consultation from the Commission. The report includes a map that shows the locations of any cemeteries, historic structures and sites, archaeologically significant sites, and sites having exceptional aesthetic qualities within one mile of the facility boundary, as required by §330.61(c)(12) and §330.61(h)(4).

130 ENVIRONMENTAL PARK

APPENDIX IIA
MAPS AND DRAWINGS

Technically Complete October 28, 2014

CONTENTS



GENERAL HIGHWAY MAP
BASTROP, CALDWELL, HAYS, AND TRAVIS COUNTY TEXAS

PREPARED BY THE

TEXAS DEPARTMENT OF TRANSPORTATION

TRANSPORATION PLANNING AND PROGRAMMING DIVISION

COUNTY GRID MAPS

NOTE:

1. GENERAL HIGHWAY MAP DOWNLOADED FROM TxDOT WEBSITE AS PART OF THE COUNTY GRID MAPS ON JUNE 21, 2013.
2. PRIMARY ACCESS ROADS WITHIN ONE MILE OF THE FACILITY USED TO ACCESS THE FACILITY ARE STATE HIGHWAY 130 AND U.S. HIGHWAY 183. THESE ROADS ARE HARD SURFACED PAVED ROADS OF ASPHALT OR CONCRETE.

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER
11/6/14

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

DETAILED HIGHWAY MAP

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 08/13	DRAWING
DWN. GLW	SCALE : GRAPHIC	IIA.1
CHK. KDM	DWG : IIA.1-DetailedHMp.dwg	

J:\129\06 130 Park\102\PART II\IIA.1-DetailedHMp.dwg Layout: IIA1 User: scundiff

97°40'
97°37'30"
29°59'
29°57'30"
BLUEBONNET RD
HOMANN RD
SPOTTED HORSE TRL
HAZELNUT DR
CO ROAD RTE
ONE MILE RADIUS
DRY CREEK
HOMANNVILLE TRL
LANDFILL FOOTPRINT
PORTER LN
PROPERTY BOUNDARY
BARTH RD
Soil Conservation Service
Site 21 Reservoir
FM 1185
FACILITY BOUNDARY
OAK TRAIL DR
ALAMO DR
Dry Cr
Walnut Cr
Cottonwood Ct
Rabbit Br
183

0 1000 2000
SCALE IN FEET

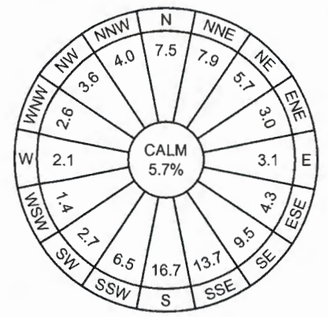
LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- ONE MILE RADIUS
- SURFACE WATER BODY OR OTHER WATER

NOTE:

1. TOPOGRAPHIC BASE MAP IS US TOPO 2013 OF 7.5 MINUTE QUADRANGLE LOCKHART NORTH, TX AND DALE, TX DOWNLOADED FROM USGS WEBSITE ON JUNE 10, 2013. IMAGERY DATE IS MAY 2010.

WIND ROSE
SOURCE: TCEQ PUBLIC WIND ROSE ANNUAL 1984–1992



WIND ROSE REPRESENTS AVERAGE PERCENT OF TIME WIND BLOWS FROM EACH OF THE 16 COMPASS POINTS SHOWN.

STATE OF TEXAS
K.D. MARONEY
44639
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PROFESSIONAL ENGINEER
11/6/14

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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

GENERAL TOPOGRAPHIC MAP

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

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CONSULTING ENGINEERS
MANSFIELD ◆ WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. KDM	DATE : 08/13	DRAWING
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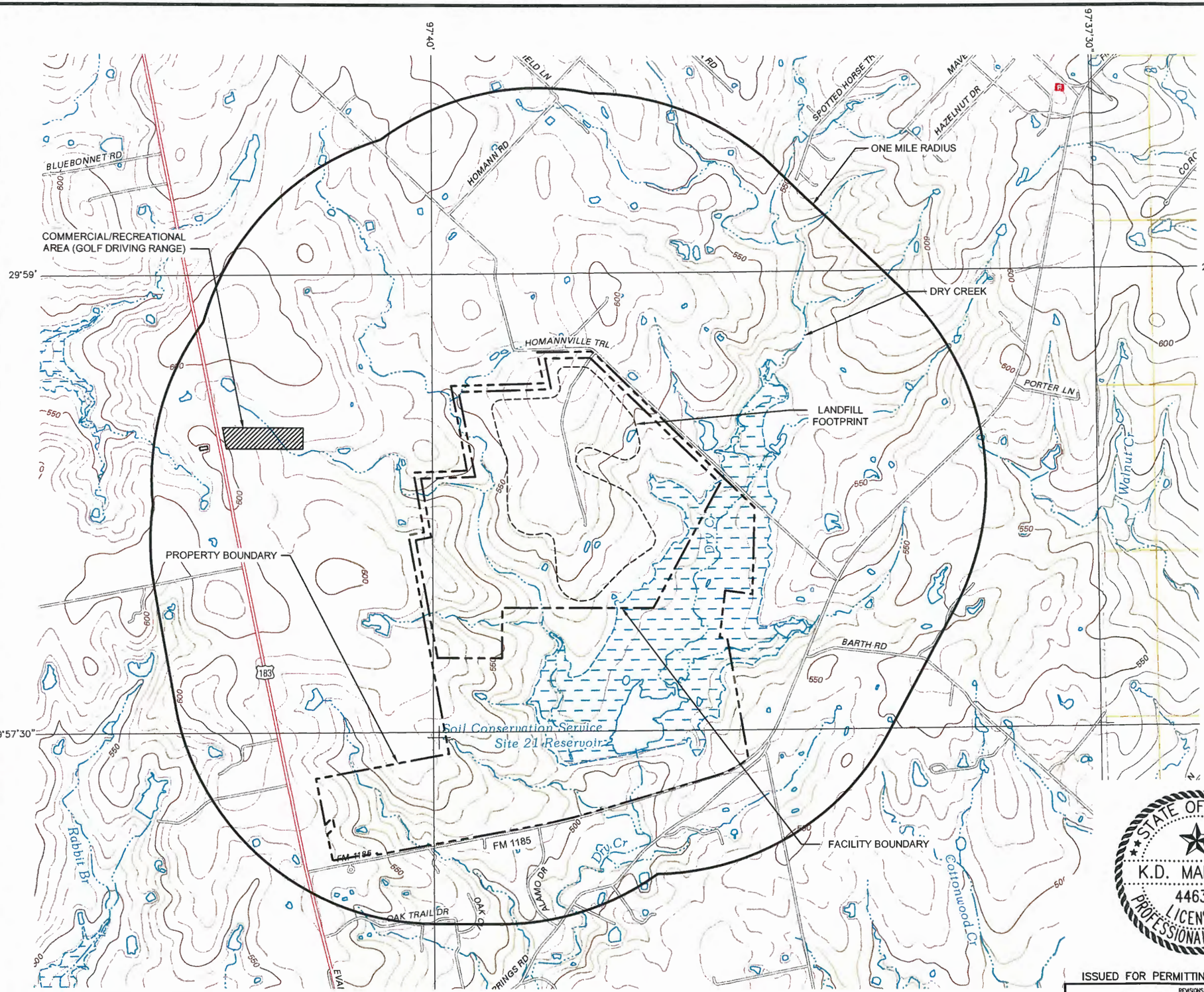
J:\129\06 130 Park\102\PART II\IIA.2–GenTopo.dwg Layout: IIA2 User: scundiff



0 1000 2000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- ONE MILE RADIUS
- SURFACE WATER BODY OR OTHER WATER

NOTES:

1. TOPOGRAPHIC BASE MAP IS US TOPO 2013 OF 7.5 MINUTE QUADRANGLE LOCKHART NORTH, TX. AND 7.5 MINUTE QUADRANGLE DALE, TX. DOWNLOADED FROM USGS WEBSITE ON JUNE 20, 2013. IMAGERY DATE IS MAY 2010.
2. REFER TO PART II, APPENDIX IIB – LAND USE ANALYSIS FOR DETAILED LAND USE INFORMATION AND LAND USE MAP. LAND USE ANALYSIS AND MAP HAS BEEN PREPARED BY JOHN WORRALL CONSULTING, LLC.
3. THE COMMERCIAL GOLF DRIVING RANGE SHOWN IS ALSO CONSIDERED A RECREATIONAL AREA.
4. THERE ARE NO SCHOOLS, DAYCARE CENTERS, HOSPITALS, CHURCHES OR CEMETERIES WITHIN ONE MILE OF THE FACILITY BOUNDARY.
5. THERE ARE NO OTHER RECREATIONAL AREAS WITHIN ONE MILE OF THE FACILITY BOUNDARY.
6. THERE ARE NO CEMETERIES, HISTORICALLY SIGNIFICANT SITES, NO ARCHAEOLOGICALLY SIGNIFICANT SITES, AND NO SITES HAVING EXCEPTIONAL AESTHETIC QUALITY WITHIN ONE MILE OF THE FACILITY BOUNDARY. REFER TO PART II, APPENDIX IIF – CULTURAL RESOURCES SURVEY PREPARED BY AR CONSULTANTS, INC.
7. REFER TO DRAWING IIA.8–GENERAL SITE PLAN FOR DRAINAGE, PIPELINE, AND UTILITY EASEMENTS WITHIN THE FACILITY BOUNDARY.
8. THERE ARE NO INTAKE/DISCHARGE STRUCTURES LOCATED WITHIN OR ASSOCIATED WITH THE FACILITIES.
9. THERE ARE NO WASTE DISPOSAL ACTIVITIES WITHIN THE FACILITY BOUNDARY THAT ARE NOT INCLUDED IN THIS FACILITY APPLICATION.

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED PROFESSIONAL ENGINEER

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

GENERAL LOCATIONS MAP

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817–563–1144

TBPE FIRM NO. F–256 | TBPG FIRM NO. 50222

DSN. KDM	DATE : 08/13	DRAWING	IIA.3
DWN. GLW	SCALE : GRAPHIC		
CHK. KDM	DWG : IIA.3–GenLandUse.dwg		

J:\129\06 130 Park\102\PART II\IIA.3–GenLandUse.dwg Layout: IIA3 User: scundiff

97°40'

97°37'30"

29°59'

29°57'30"

BLUEBONNET RD

HOMANN RD

HOMANNVILLE TRL

PORTER LN

DRY CREEK

500-FOOT RADIUS

LANDFILL FOOTPRINT

PROPERTY BOUNDARY

FACILITY BOUNDARY

BARTH RD

FM 1185

OAK TRAIL DR

OAK CV

ALAMO DR

OLD LYTTON SPRINGS RD

EVANS RD

Dry Cr

Walnut Cr

Cottonwood Cr

Rabbit Br

Soil Conservation Service
Site 21 Reservoir

Soil Conservation Service
Site 20 Reservoir

183

600

550

500

0 1000 2000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 500 FOOT RADIUS
- SURFACE WATER BODY OR OTHER WATER

NOTES:

1. TOPOGRAPHIC BASE MAP IS US TOPO 2013 OF 7.5 MINUTE QUADRANGLE LOCKHART NORTH, TX. AND 7.5 MINUTE QUADRANGLE DALE, TX. DOWNLOADED FROM USGS WEBSITE ON JUNE 21, 2013. IMAGRY DATED MAY 2010.
2. THERE ARE NO KNOWN WATER WELLS WITHIN 500 FEET OF THE PROPOSED FACILITY BOUNDARY.

STATE OF TEXAS
JOHN MICHAEL SNYDER
GEOLOGY
595
LICENSED
PROFESSIONAL GEOSCIENTIST

11-6-2014

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	JMS	JMS	JMS

WATER WELLS WITHIN 500 FEET OF FACILITY BOUNDARY

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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BIGGS & MATHEWS ENVIRONMENTAL
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MANSFIELD • WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. JMS	DATE : 08/13	DRAWING
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CHK. JMS	DWG : IIA.4-WaterWells.dwg	

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97°40'

97°37'30"

29°59'

29°57'30"

BLUEBONNET RD

HOMANN RD

ROMANNVILLE TRL

PORTER LN

BARTH RD

HVL PRODUCTS

NON HVL LIQUID PRODUCTS

500-FOOT RADIUS

DRY CREEK

LANDFILL FOOTPRINT

PROPERTY BOUNDARY

FACILITY BOUNDARY

G105
31512

34761

34758

34759

31194

33087

FM 1185

OAK TRAIL DR

OAK CV

ALAMO DR

OLD LYTTON SPRINGS RD

EVANS RD

Dry Cr

Walnut Cr

Cottonwood Cr

Rabbit Br

Soil Conservation Service
Site 21 Reservoir

Soil Conservation Service
Site 20 Reservoir

183

0 1000 2000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 500 FOOT RADIUS
- DRY HOLE
- CANCELLED LOCATION
- OIL WELL
- PLUGGED OIL WELL
- UNDERGROUND PIPELINE

NOTES:

1. TOPOGRAPHIC BASE MAP IS US TOPO 2013 OF 7.5 MINUTE QUADRANGLE LOCKHART NORTH, TX. AND 7.5 MINUTE QUADRANGLE DALE, TX. DOWNLOADED FROM USGS WEBSITE ON JUNE 21, 2013. IMAGRY DATED MAY 2010.
2. OIL AND GAS WELL LOCATIONS OBTAINED FROM RAILROAD COMMISION ONLINE VIEWER DATED JUNE 20, 2103.
3. BOUNDARY, LANDFILL FOOTPRINT, AND 500 FOOT RADIUS LINES ARE APPROXIMATE.
4. THERE ARE NO PRODUCING WELLS WITHIN 500 FEET OF THE FACILITY BOUNDARY OR WITHIN THE FACILITY BOUNDARY.
5. THERE ARE 3 DRY HOLES LOCATED WITHIN 500 FEET OF THE FACILITY BOUNDARY.

STATE OF TEXAS
JOHN MICHAEL SNYDER
GEOLOGY
595
LICENSED
PROFESSIONAL GEOSCIENTIST

11-6-2014

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	JMS	JMS	JMS

LOCATIONS OF OIL AND GAS WELLS

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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CONSULTING ENGINEERS
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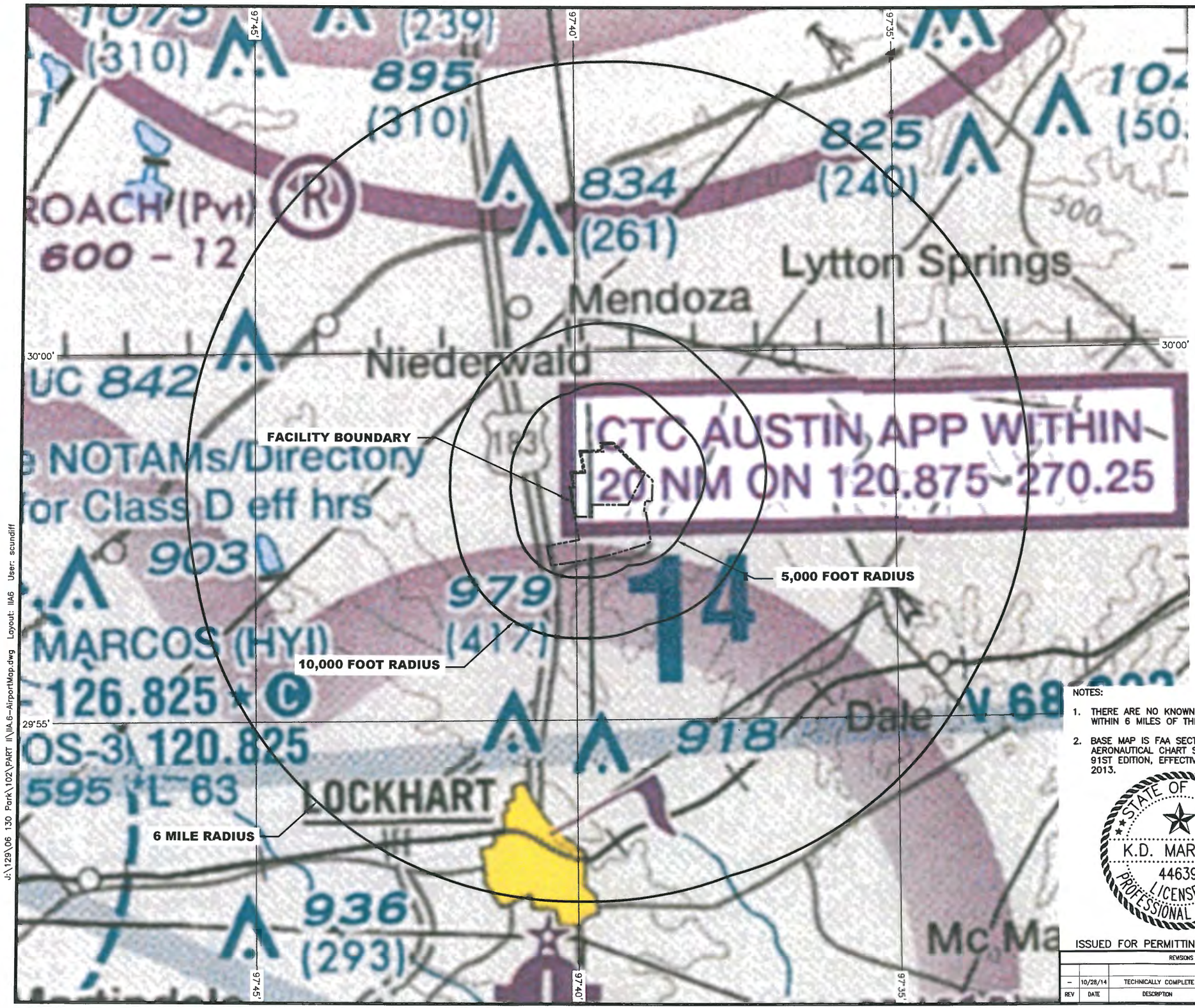
TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. JMS	DATE : 1/14	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.5	
CHK. JMS	DWG : IIA.5–Oil–GasWells.dwg		

J:\129\06 130 Park\102\PART II\IA.5–Oil–GasWells.dwg Layout: IIA5 User: scundiff



J:\129\06 130 Park\102\PART II\IIA.6-AirportMap.dwg Layout: IIA6 User: scundiff

0 4,000 8,000
SCALE IN FEET

LEGEND

PROPERTY BOUNDARY

FACILITY BOUNDARY

AIRPORTS

Other than hard-surfaced runways

Seaplane Base

Hard-surfaced runways 1500 ft. to 8069 ft. in length

Hard-surfaced runways greater than 8069 ft. or some multiple runways less than 8069 ft.

Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, or VORTAC location.

All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

TOPOGRAPHIC INFORMATION

Power Transmission Line

Aerial Cable

Lookout Tower
618 (Elevation Base of Tower)

OBSTRUCTIONS

1000 ft. and higher AGL

Below 1000 ft. AGL

Group Obstruction

Obstruction with high-intensity lights; may operate part-time.

2049 — Elevation of the top above mean sea level

(1149) — Height above ground

UC — Under construction or reported: position and elevation unverified

NOTES:

1. THERE ARE NO KNOWN AIRPORTS WITHIN 6 MILES OF THE FACILITY.
2. BASE MAP IS FAA SECTIONAL AERONAUTICAL CHART SAN ANTONIO, 91ST EDITION, EFFECTIVE MAY 2, 2013.

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER

11/6/14

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

FAA AIRPORT LOCATION MAP

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 08/13	DRAWING	IIA.6
DWN. GLW	SCALE : GRAPHIC		
CHK. KDM	DWG : IIA.6-AirportMap.dwg		

97°40'

97°37'30"

29°59'

29°57'30"

0 1000 2000

SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- STRUCTURES AND INHABITABLE BUILDINGS WITHIN 500 FEET

NOTES:

1. AERIAL PHOTOGRAPH OF SITE PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. AERIAL PHOTOGRAPH OF AREA SURROUNDING THE SITE FROM GOOGLE MAP IMAGERY DATE 8-1-12.
2. REFER TO PART II, APPENDIX IIB-LAND USE ANALYSIS FOR DETAILED LAND USE INFORMATION. LAND USE MAP AND GENERAL CHARACTER OF AREAS ADJACENT TO THE FACILITY AS PREPARED BY JOHN WORRALL CONSULTING L.L.C..
3. GENERAL CHARACTER OF AREAS WITHIN ONE MILE OF THE FACILITY BOUNDARY PROVIDED BY JOHN WORRALL CONSULTING L.L.C..

GENERAL CHARACTER	
LAND USE	PERCENT
OPEN	93.30%
RESIDENTIAL	4.90%
WATER BODIES	1.50%
COMMERCIAL/INDUSTRIAL	0.30%
	100%

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-	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

AERIAL PHOTOGRAPH

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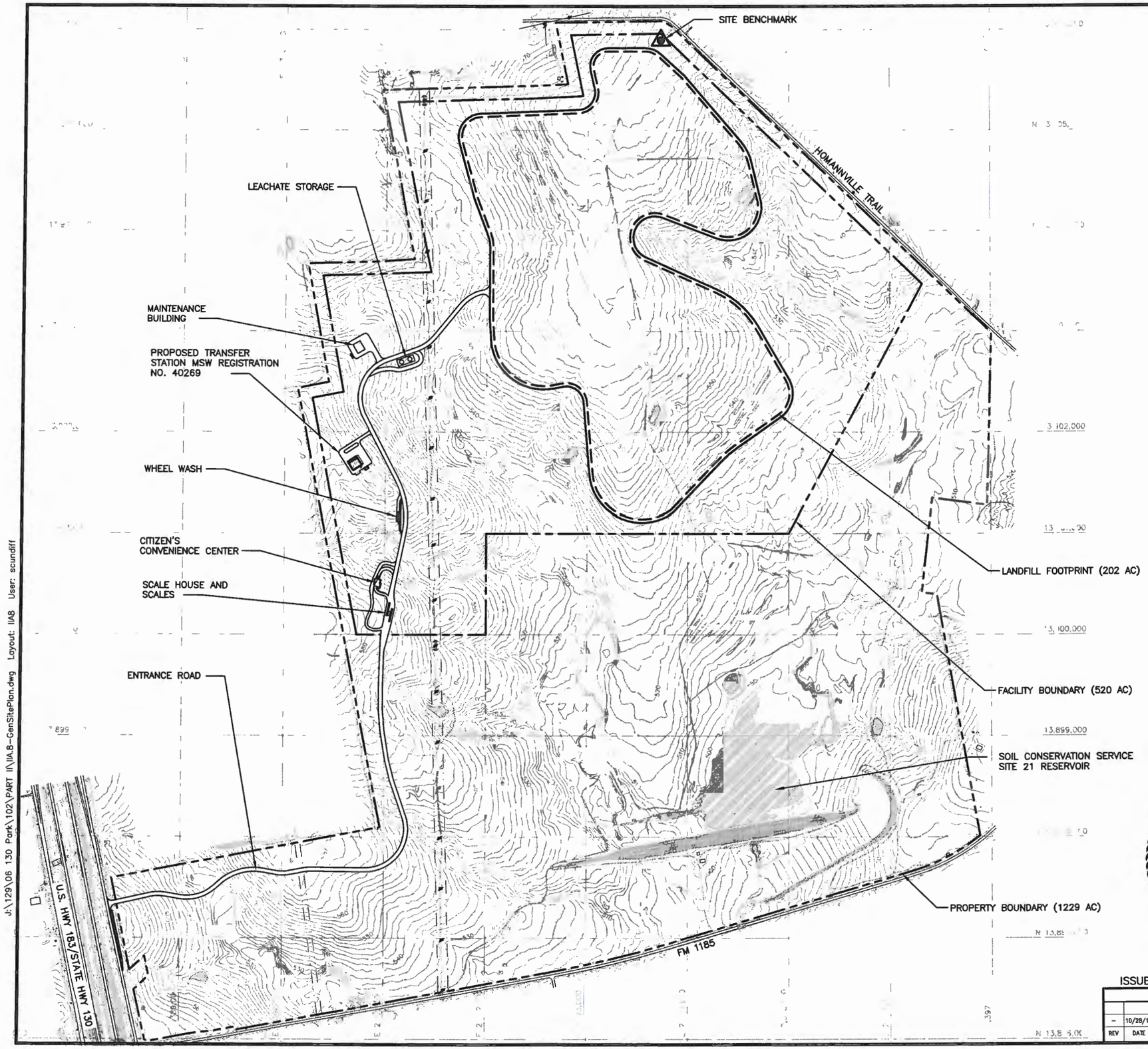
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. KDM | DATE : 08/13 | DRAWING IIA.7
DWN. GLW | SCALE : GRAPHIC
CHK. KDM | DWG : IIA.7-AerialPhoto.dwg

97°40'

J:\129\06 130 Park\102\PART II\IIA.7-AerialPhoto.dwg Layout: IIA.7 User: scundiff



0 500 1000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- SITE BENCHMARK
- 510 EXISTING CONTOUR
- N 6753000 STATE PLANE GRID
- EASEMENT LOCATION

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. ACCESS CONTROL WILL BE PROVIDED BY FENCE ALONG FACILITY BOUNDARY. SITE ENTRANCE WILL BE GATED.
4. PERMANENT BENCHMARK INFORMATION:

COORDINATES (NAD 83):	N 13905896.44
	E 2393722.33
LATITUDE:	N 29°58'43.75"
LONGITUDE:	W 97°39'24.76"
ELEVATION:	592.37 FT–MSL

STATE OF TEXAS
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REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

GENERAL SITE PLAN

130 ENVIRONMENTAL PARK, LLC
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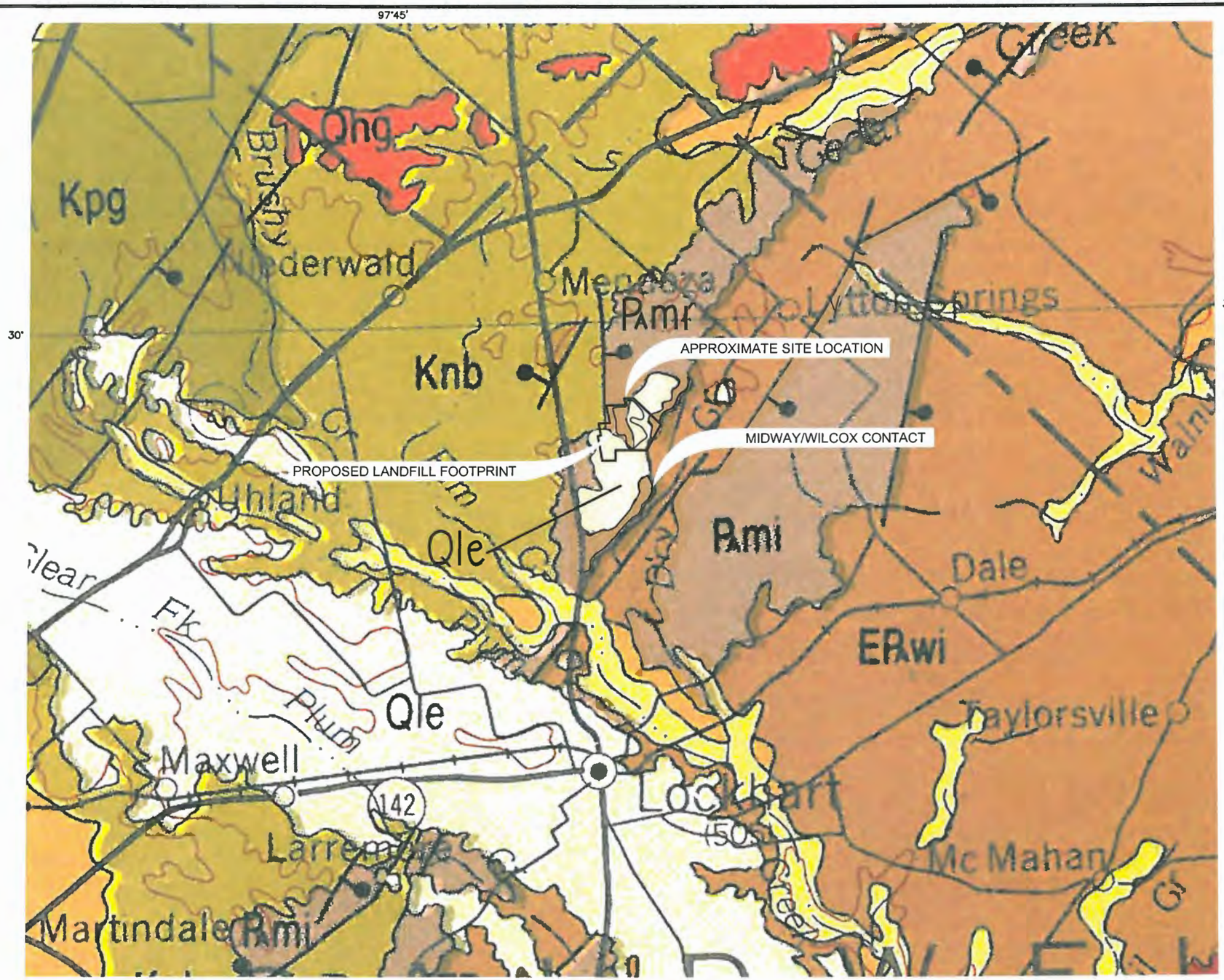
817–563–1144
TBPE FIRM NO. F–256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 8/13	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.8	
CHK. KDM	DWG : IIA.8–GenSitePlan.dwg		

J:\129\06 130 Park\102\PART II\IIA.8–GenSitePlan.dwg Layout: IIA8 User: scundiff



0 1 2
SCALE IN MILES

NOTE:

1. FOR GEOLOGIC LEGEND, SEE DRAWING IIA.9A AND IIA.9B.
2. MODIFIED FROM FROM BARNES, 1992 BY ADDING:
   A. APPROXIAMTE SITE LOCATION.
   B. PROPOSED LANDFILL FOOTPRINT.
   C. MIDWAY/WILCOX CONTACT.
   D. LABELED THE PLEISTOCENE LEONA FORMATION.
   E. LABELED THE PALEOCENE MIDWAY GROUP.

DATUM IS MEAN SEA LEVEL
CONTOUR INTERVAL 200 FEET
SUPPLEMENTAL 100-FOOT CONTOUR IN COASTAL REGION

GEOLOGIC MAP OF TEXAS

1992

REFERENCE:
BARNES, V.E., 1992, GEOLOGIC MAP OF TEXAS, BUREAU OF ECONOMIC GEOLOGY, UNIVERSITY OF TEXAS, AUSTIN, TEXAS.

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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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GEOLOGIC VICINITY MAP
CALDWELL COUNTY

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. ESF	DATE : 6/13	FIGURE	
DWN. GLW	SCALE : GRAPHIC	IIA.9	
CHK. JMS	DWG : IIA.9-GeoVicinity.dwg		

J:\129\06 130 Park\102\PART II\IIA.9-GeoVicinity.dwg Layout: IIA.9 User: scundiff

QUATERNARY

Holocene

Qs | Qds | Qsd | Qsu

Sand sheet, Qs ; dune sand sheet, Qds ; sand dune, Qsd ; and sand deposits, undivided, Qsu

Qal | Qaf

Alluvium, Qal ; and alkali flat deposits, Qaf

Holocene & Pleistocene

Qt | Qf | Qc | Qgy | Qls | Qb | Qp | Qu

Terrace, Qt , alluvial fan, Qf , caliche, Qc , gypsite, Qgy , land slide, Qls bolson, Qb , and playa, Qp , deposits; and Quaternary deposits, undivided, Qu

Pleistocene

Qle | Qo | Qse | Qli | Qg | Qtl | Qbd | Qta | Qdl | Qtu | Qun | Qao | Qhg

Leona Formation, Qle ; Onion Creek Marl, Qo ; Seymour. Qse , *Lingos, Qli , and Gatuna, Qg , Formations; Toy Limestone, Qtl , Blackwater Draw, Qbd , Tahoka, Qta , Double Lakes, Qdl , and Tule, Qtu , Formations; pond, Qun , older alluvial, Qao , and high gravel, Qhg , deposits

QTb | QT | QTu

Quaternary-Tertiary bolson deposits, QTb ; Quaternary-Tertiary deposits, undivided, QT ; and Uvalde Gravel, QTu

Pliocene

Pob | Por | Pou

Blanco, Pob , and Rita Blanca, Por , Formations; and unnamed Pliocene deposits, Pou

Miocene

Pu-Mo

Ogallala Formation

Mg

Goliad Formation

Fill and spoil

Qs | Qds | Qsd | Qsi | Qcd

Sand sheet, Qs ; dune sand sheet, Qds ; sand dune, Qsd ; silt sheet, Qsi ; and clay dune, Qcd

Qal | Qac | Qas | Qbr

Alluvium, Qal , subdivided in Rio Grande delta into areas predominantly clay, Qac , and areas predominantly sand, Qas ; and beach-ridge and barrier-flat sand deposits, Qbr

Qt | Qd | Qd?

Terrace deposits, Qt ; and Deweyville Formation, Qd , with higher level, Qd?

Qbc | Qbs | Qbv | Qbb

Beaumont Formation subdivided into areas predominantly clay, Qbc , areas predominantly sand, Qbs , in the Rio Grande delta area clay veneer over meanderbelt sand, Qbv , and barrier island deposits, Qbb

Ql

Lissie Formation

Qhg

High gravel deposits

Pow

Willis Formation

Mg

Goliad Formation

TERTIARY

Miocene

Mfo

Fleming Formation and Oakville Sandstone, undivided

Oligocene

Øcf | Øc | Øf

Catahoula Formation and Frio Clay, undivided, Øcf , Catahoula Formation, Øc ; and Frio Clay, Øf

Eocene

ØEj | ØEw | Ejl | Em | Ewb | Eca

Jackson Group, undivided, ØEj ; Whitsett Formation, ØEw ; Manning, Wellborn, and Cadell Formations, undivided, Ejl; Manning, Em , Wellborn, Ewb , and Cadell, Eca , Formations

Ey

Yegua Formation

El | Ecm | Es

Laredo Formation, El ; Cook Mountain Formation, Ecm ; and Sparta Sand, Es

Eep | Ew | Eqc

El Pico Clay, Eep ; Weches Formation, Ew ; and Queen City Sand, Eqc

Eb | Er

Bigford, Eb , and Reklaw, Er, Formations

Mfo | Mf | Mo

Fleming Formation and Oakville Sandstone, undivided, Mfo ; Fleming Formation, Mf ; and Oakville Sandstone, Mo

Øc

Catahoula Formation

ØEw | Øn

Whitsett, ØEw , and Nash Creek, Øn , Formations

Em | Ewb | Eya

Manning, Em , Wellborn, Ewb , and Yazoo, Eya , Formations

Eca | Emb

Cadell, Eca , and Moodys Branch, Emb , Formations

Ey

Yegua Formation

Ecm

Cook Mountain Formation

Es

Sparta Sand

Ew

Weches Formation

Eqc

Queen City Sand

TERTIARY

REFERENCE:
BARNES, V.E., 1992, GEOLOGIC MAP OF TEXAS, BUREAU OF ECONOMIC GEOLOGY, UNIVERSITY OF TEXAS, AUSTIN, TEXAS.

STATE OF TEXAS
JOHN MICHAEL SNYDER
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11-6-2014

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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	ESF	JMS	JMS

GEOLOGIC VICINITY MAP LEGEND

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD ◆ WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. ESF | DATE : 6/13
DWN. GLW | SCALE : GRAPHIC
CHK. JMS | DWG : E1_1_GenVin.dwg

FIGURE IIA.9A

J:\129\06 130 Park\101\AttE\E1_1_GenVin.dwg Layout: IIA.9A User: scundiff

Eocene

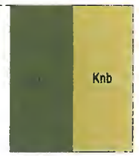
Paleocene

Upper Cretaceous

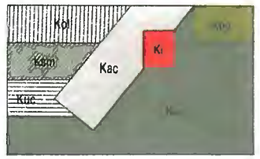
Carrizo Sand

Indio Formation, ERin ; and Wilcox Group, undivided, ERwi

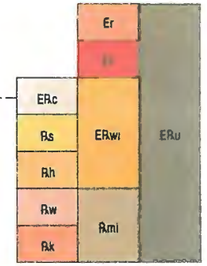
Kincaid Formation, Pk ; and Midway Group, undivided, Pmi



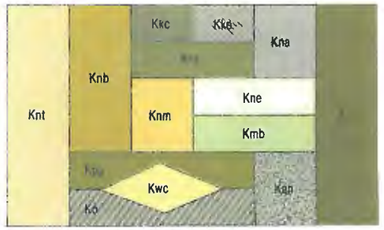
Escondido Formation, Kes ; and Navarro Group and Marlbrook Marl, undivided, Knb



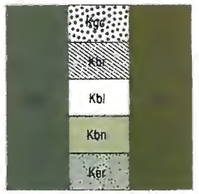
Olmos, Kol , and San Miguel, Ksm , Formations; Upson Clay, Kuc; Anacacho Limestone, Kac; Pecan Gap, Kpg , and Austin, Kau, Chalks; and igneous rocks of Austin age, Ki



Reklaw Formation, Er ; Carrizo Sand, Ec ; Calvert Bluff, ERc , Simsboro, Ps , and Hooper, Ph , Formations; Wilcox Group, undivided, ERwi ; Wills Point, Pw , and Kincaid, Pk , Formations; Midway Group, undivided, Pmi ; and Reklaw Formation, Carrizo Sand, and Wilcox and Midway Groups, undivided, ERu



Navarro and Taylor Groups, undivided, Knt ; Navarro Group and Marlbrook Marl, undivided, Knb ; Kemp Clay and Corsicana Marl, undivided, Kkc ; Kemp Clay, Kke ; Nacatoch Sand, Kns ; Navarro Group, undivided, Kna ; Neylandville and Marlbrook Marls, undivided, Knm ; Neylandville Marl, Kne ; Marlbrook Marl, Kmb ; Pecan Gap Chalk, Kpg ; Wolfe City Sand, Kwc ; Ozan Formation, Ko ; Annona Chalk, Kan ; and Upper Cretaceous rocks, undivided, Ku



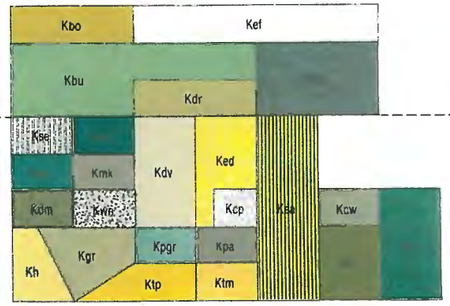
Austin Chalk, Kau ; Gober Chalk and Roxton Limestone, Kgc ; Brownstown Marl, Kbr ; Blossom Sand, Kbl ; Bonham Formation, Kbn ; Ector Chalk, Ker ; and Upper Cretaceous rocks, undivided, Ku

TERTIARY

Upper Cretaceous

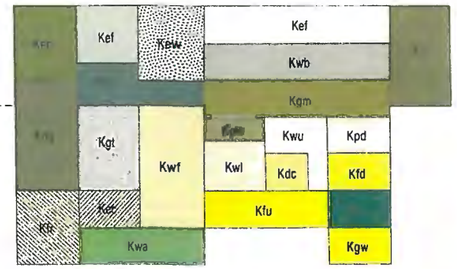
Lower Cretaceous

CRETACEOUS

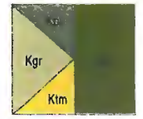


Boquillas, Kbo , and Eagle Ford, Kef , Formations; Buda Limestone, Kbu; Del Rio Clay, Kdr ; Buda Limestone and Del Rio Clay, undivided, Kbd; Santa Elena Limestone, Kse ; Salmon Peak Limestone, Ksa ; Sue Peaks Formation, Ksu ; McKnight Formation, Kmk ; Del Carmen Limestone, Kdm; West Nueces Formation, Kwn ; Devils River, Kdv , Edwards, Ked , and Comanche Peak, Kcp , Limestones; Hensell Sand, Kh; Glen Rose Limestone, Kgr ; Paluxy Sand and Glen Rose Limestone, undivided, Kpgr; Paluxy Sand, Kpa ; Travis Peak Formation, Ktp ; Twin Mountains Formation, Ktm ; Edwards Limestone and Antlers Sand, undivided, Kea ; Comanche Peak Limestone and Walnut Clay, undivided, Kcw ; Antlers Sand, Ka ; and Comanche Peak Limestone, Walnut Clay, and Antlers Sand, undivided, Kca

Cow Creek Limestone, Hammett Shale, and Sycamore Sand, undivided



Eagle Ford Formation and Buda Limestone, undivided, Keb ; Eagle Ford Formation, Kef ; Eagle Ford and Woodbine Formations, undivided, Kew ; Woodbine Formation, Kwb ; Del Rio Clay and Georgetown Limestone, undivided, Kdg ; Buda Limestone and Del Rio Clay, undivided, Kbd ; Grayson Marl and Main Street Limestone, undivided, Kgm ; Georgetown Limestone, Kgt ; Pawpaw Formation and upper limestone unit of Weno Limestone, undivided, Kpw ; lower part of Washita Group, Kwl ; undivided part of Washita Group, Kwu ; Duck Creek Limestone, Kdc ; Pawpaw Formation, Weno Limestone, and Denton Clay, undivided, Kpd ; Fort Worth Limestone and Duck Creek Formation, undivided, Kfd ; Fredericksburg Group, Kfr ; Edwards and Comanche Peak Limestones, undivided, Kec ; Walnut Clay, Kwa ; undivided parts of Washita and Fredericksburg Groups, Kwf ; undivided part of Fredericksburg Group, Kfu , Kiamichi Formation, Kki ; Goodland Limestone and Walnut Clay, undivided, Kgw ; and Upper Cretaceous rocks, undivided, Ku



Paluxy Sand, Kpa ; Glen Rose Limestone, Kgr ; Twin Mountains Formation, Ktm ; and Antlers Sand, Ka

Fault

Ball shows downthrown side

GEOLOGIC MAP OF TEXAS

1992

REFERENCE:
BARNES, V.E., 1992, GEOLOGIC MAP OF TEXAS, BUREAU OF ECONOMIC GEOLOGY, UNIVERSITY OF TEXAS, AUSTIN, TEXAS.

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–	10/28/14	TECHNICALLY COMPLETE	GLW	ESF	JMS	JMS

GEOLOGIC VICINITY MAP LEGEND

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. ESF | DATE : 6/13
DWN. GLW | SCALE : GRAPHIC
CHK. JMS | DWG : E1_1_GenVin.dwg

FIGURE
IIA.9B

A

A'

BU-67-02-508

BU-67-03-704

APPROXIMATE SITE LOCATION

BU-67-12-109

BU-67-12-201

BU-67-12-310

BU-67-13-104

BU-67-13-610

BU-67-13-611

Caldwell Co.

Gonzales Co.

W. V. Hardin
S. T. Robinson No. 1

Leona Formation

Approximate Land Surface

Weches Greensand

Navarro Group

Midway Group

Wilcox Group

Carrizo Sand

Queen City Sand

Reklaw Formation

Taylor Marl, Austin Chalk, and Eagle Ford Shale, undifferentiated

Washita Group

Edwards Limestone

Taylor Marl, Austin Chalk, and Eagle Ford Shale, undifferentiated

Taylor Marl, Austin Chalk, and Eagle Ford Shale, undifferentiated

Sea Level

Altitude, in feet

600
400
200
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200

APPROXIMATE SITE LOCATION

A

A'

0 1 2 3 4 miles

For location of section see Plate 1

CALWELL COUNTY

REFERENCE:
C.R. FOLLET, 1975, GROUND-WATER RESOURSES OF CALDWELL COUNTY, TEXAS, TEXAS WATER DEVELOPMENT BOARD REPORT 12

Plate 2

Geologic Section A-A'

U.S Geological Survey in cooperation with the Texas Water Development Board, Caldwell County Commissioners' Court and Guadalupe-Blanco River Authority

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GENERALIZED REGIONAL GEOLOGIC CROSS SECTION

130 ENVIRONMENTAL PARK, LLC
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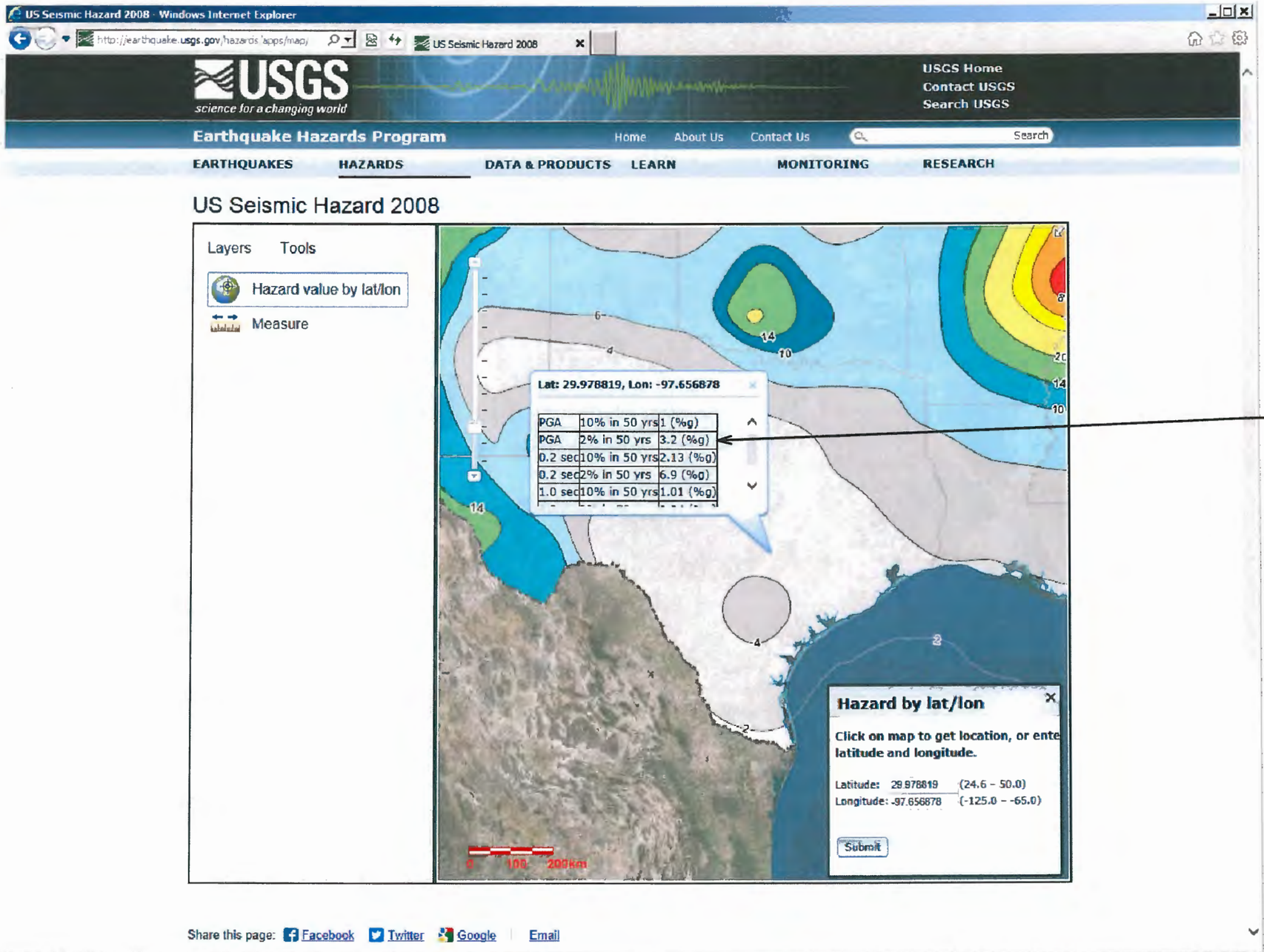
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. ESF | DATE : 1/14
DWN. GLW | SCALE : GRAPHIC
CHK. JMS | DWG : IIA.9C-RegSec.dwg

FIGURE
IIA.9C

J:\129\06 130 Park\102\PART II\IIA.9C-RegSec.dwg Layout: IIA.9C User: scundiff



Not To Scale

LEGEND

4 — CONTOURS OF PEAK GROUND ACCELERATION (PGA) IN UNITS OF PERCENT OF GRAVITY (%g)

NOTE: THE FACILITY LIES IN AN AREA WHERE THE PGA, WITH A 2% PROBABILITY OF BEING EXCEEDED IN 50 YEARS (EQUIVALENT TO A 10% PROBABILITY IN 250 YEARS), IS LESS THAN 10% OF GRAVITY (LESS THAN 0.1g).

Source; USGS Lower 48 States, 2008 Interactive Map (http://earthquake.usgs.gov/hazards/apps/map/) on June 12 2014.

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REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	SRC	JMS	JMS	JMS

SEISMIC IMPACT ZONE

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

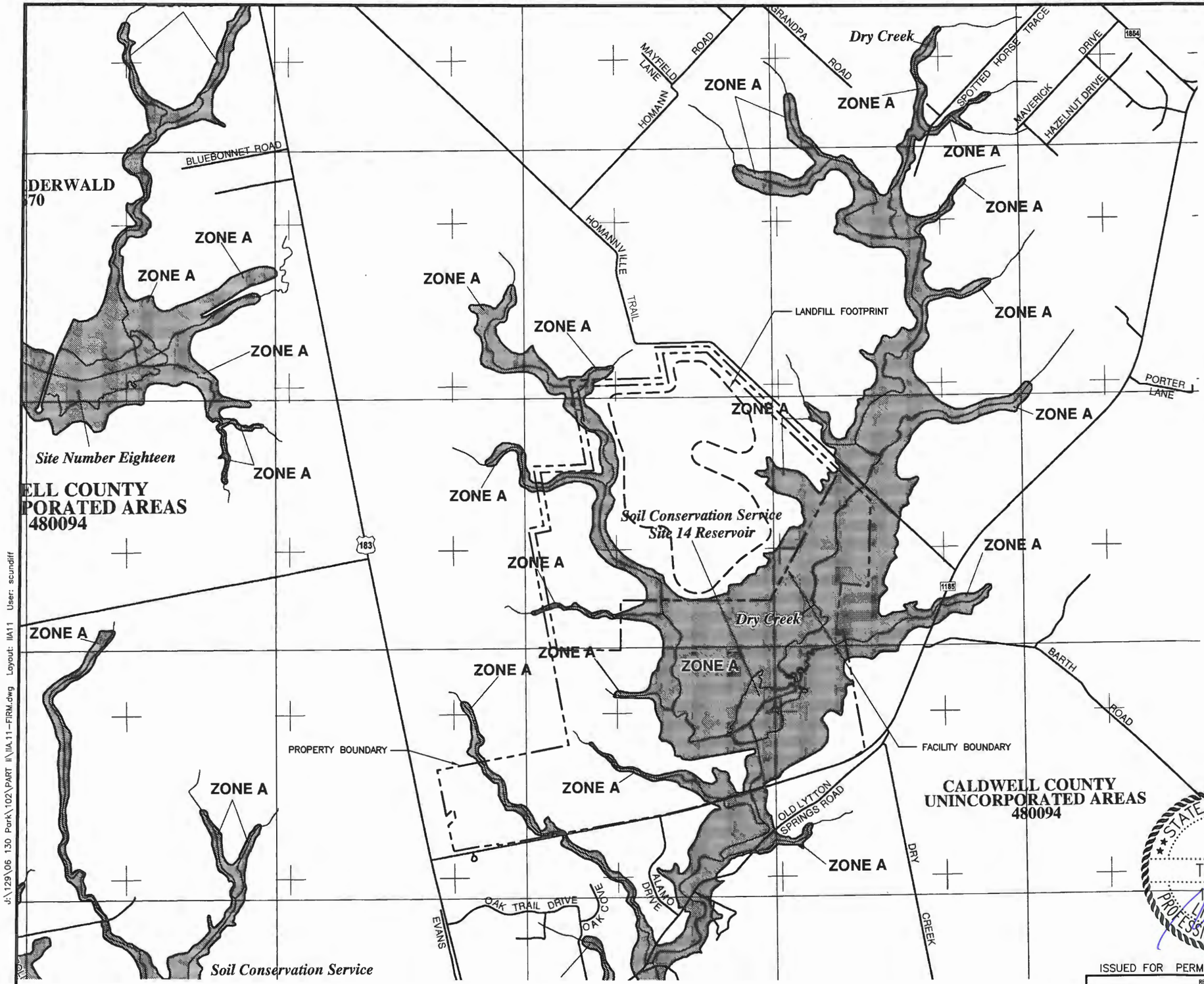
BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD ◆ WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. JMS | DATE : 08/13
DWN. GLW | SCALE : GRAPHIC
CHK. JMS | DWG : IIA.10-SeisImp.dwg

DRAWING IIA.10

J:\129\06 130 Park\102\PART II\IIA.10-SeisImp.dwg Layout: IIA10 User: scundiff



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

PROPERTY BOUNDARY

FACILITY BOUNDARY

LANDFILL FOOTPRINT

NOTE:

1. THIS MAP HAS BEEN COMPILED FROM FEMA FLOOD INSURANCE RATE MAPS (FIRM) OF CALDWELL COUNTY, TEXAS AND UNINCORPORATED AREAS COMMUNITY PANELS:

   48055C0125E EFFECTIVE DATE: 6-19-2012

2. LABELING OF THE RESERVOIR SITE AS "SOIL CONSERVATION SITE 14 RESERVOIR" IS AN APPARENT ERROR ON THE FIRM. THE RESERVOIR SITE SHOWN IS ACTUALLY SITE 21, ALSO KNOWN AS PLUM CREEK WATERSHED RETARDING STRUCTURE NO. 21.

0 1000 2000
SCALE IN FEET

11-6-14

STATE OF TEXAS
T. Traw
103797
LICENSED
PROFESSIONAL ENGINEER

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	TLT	TLT	TLT

FLOOD INSURANCE RATE MAP (FIRM)

130 ENVIRONMENTAL PARK, LLC
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MANSFIELD • WICHITA FALLS
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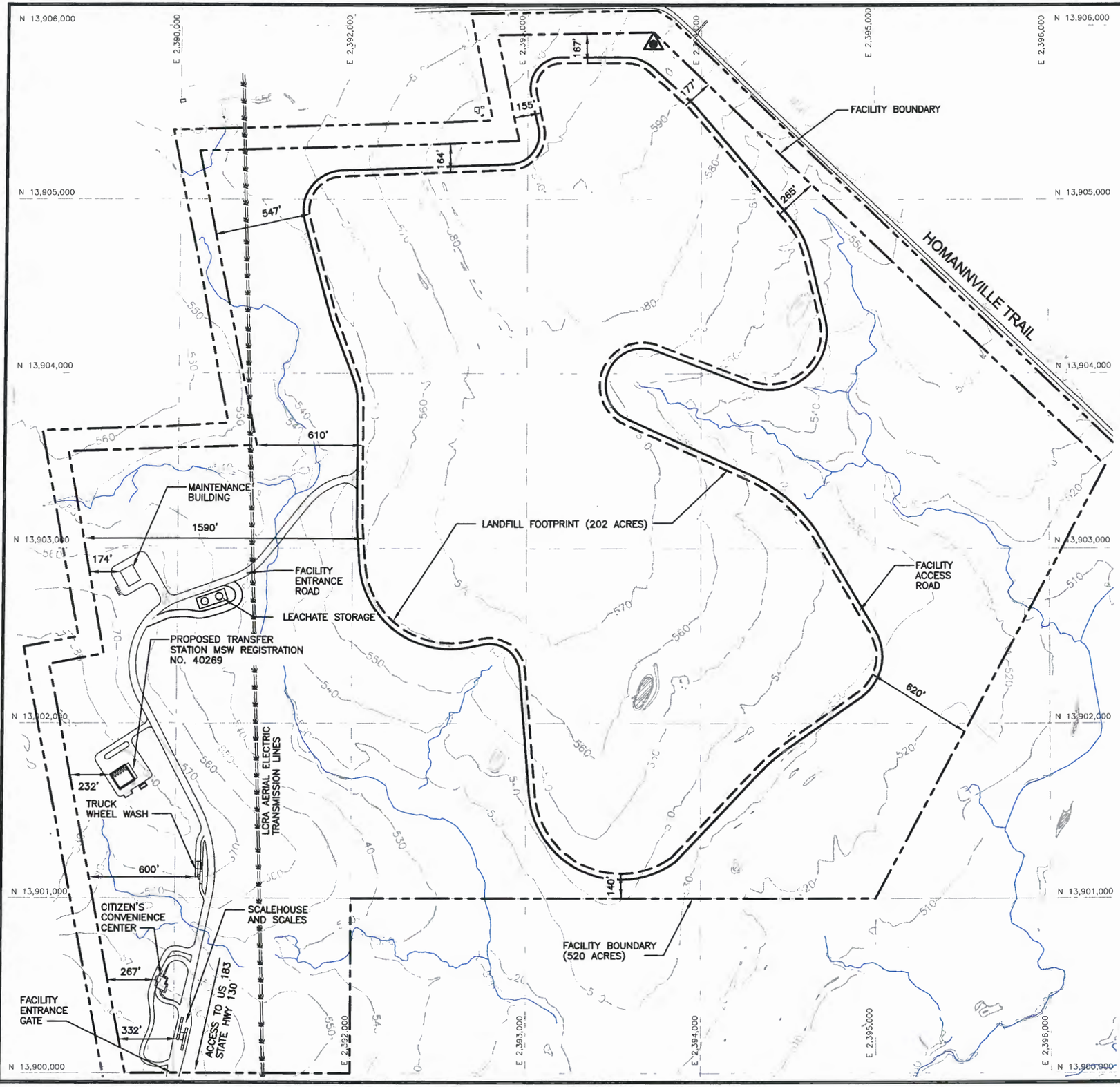
TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. TLT	DATE : 08/13	DRAWING
DWN. GLW	SCALE : GRAPHIC	IIA.11
CHK. TLT	DWG : IIA.11-FIRM.dwg	

J:\129\06 130 Park\102\PART II\IIA.11-FIRM.dwg Layout: IIA11 User: scundiff



J:\129\06 130 Park\102\PART II\IIA.12-FacSiLoy.dwg Layout: IIA12 User: scundiff

0 300 600
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- SITE BENCHMARK
- 510 EXISTING 10' CONTOUR
- N 6753000 STATE PLANE GRID
- STREAM CENTERLINE

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. PERMANENT BENCHMARK INFORMATION:
   COORDINATES (NAD 83): N 13905896.44, E 2393722.33
   LATITUDE: N 29°58'43.75"
   LONGITUDE: W 97°39'24.76"
   ELEVATION: 592.37 FT–MSL
4. ACCESS CONTROL WILL BE PROVIDED BY FENCE ALONG FACILITY BOUNDARY. SITE ENTRANCE WILL BE GATED.
5. BUFFER DISTANCES VARY ALONG FACILITY BOUNDARY AS SHOWN. MINIMUM BUFFER DISTANCE IS 140 FEET.
6. THERE ARE NO DRAINAGE OR PIPELINE EASEMENTS THAT WILL AFFECT SOILD WASTE UNLOADING, STORAGE, PROCESSING, OR DISPOSAL.
7. REFER TO DRAWING IIA.13 FOR CONSTRUCTION AND FILLING SEQUENCE.
8. REFER TO DRAWING IIA.14 FOR GROUNDWATER AND LANDFILL GAS MONITORING LOCATIONS.

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER
11/6/14

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
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–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

FACILITY SITE PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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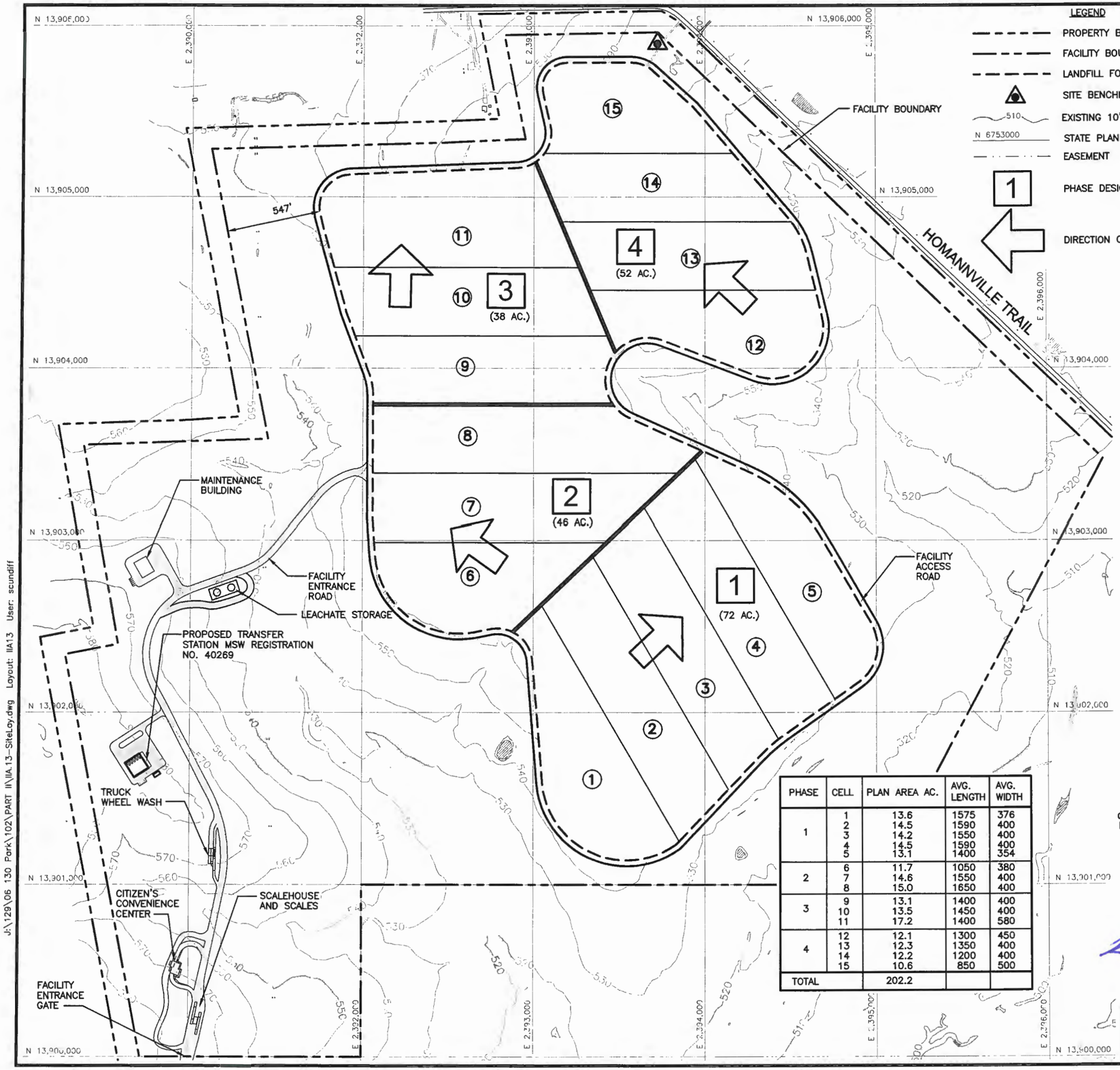
817–563–1144

TBPE FIRM NO. F–256 | TBPG FIRM NO. 50222

DSN. KDM | DATE : 8/13
DWN. GLW | SCALE : GRAPHIC
CHK. KDM | DWG : IIA.12–FacSiLoy.dwg

DRAWING IIA.12



LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- SITE BENCHMARK
- 510 EXISTING 10' CONTOUR
- N 6753000 STATE PLANE GRID
- EASEMENT
- 1 PHASE DESIGNATION
- DIRECTION OF LANDFILL DEVELOPMENT

PHASE	CELL	PLAN AREA AC.	AVG. LENGTH	AVG. WIDTH
1	1	13.6	1575	376
	2	14.5	1590	400
	3	14.2	1550	400
	4	14.5	1590	400
	5	13.1	1400	354
2	6	11.7	1050	380
	7	14.6	1550	400
	8	15.0	1650	400
3	9	13.1	1400	400
	10	13.5	1450	400
	11	17.2	1400	580
4	12	12.1	1300	450
	13	12.3	1350	400
	14	12.2	1200	400
	15	10.6	850	500
TOTAL		202.2		

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. PERMANENT BENCHMARK INFORMATION:
   COORDINATES (NAD 83): N 13905896.44, E 2393722.33
   LATITUDE: N 29°58'43.75"
   LONGITUDE: W 97°39'24.76"
   ELEVATION: 592.37 FT–MSL
4. ACCESS CONTROL WILL BE PROVIDED BY FENCE ALONG FACILITY BOUNDARY. SITE ENTRANCE WILL BE GATED. PERIMETER GATE AND FENCE WILL BE CONSTRUCTED WITH SUITABLE FENCING MATERIALS.
5. DISTURBANCE OF EXISTING NATURAL WINDBREAKS AND GREEN BELTS ON THE PROPERTY WILL BE LIMITED TO IMPROVE THE APPEARANCE OF THE FACILITY AND TO PROVIDE SCREENING FROM THE PUBLIC VIEW.
6. VISUAL SCREENING OF WASTE DISPOSAL OPERATIONS WILL BE PROVIDED BY THE VEGETATED SCREENING BERM SHOWN ON DRAWING IIA.24 AND THE FILLING SEQUENCE, DIVERSION BERMS, CONTAINMENT BERMS AND STOCKPILES.
7. ONLY TYPE I AND TYPE IV MUNICIPAL SOLID WASTE WILL BE DISPOSED AT THE LANDFILL.
8. EACH PHASE WILL BE DIVIDED INTO SEVERAL APPOXIMATELY 400 FEET WIDE CELLS. EACH CELL WILL HAVE A CROSS SLOPE TO A LEACHATE COLLECTION TRENCH LOCATED DOWN THE CENTERLINE OF THE CELL AND A DOWNSLOPE TO A LEACHATE COLLECTION SUMP LOCATED ALONG THE PERIMETER OF THE LANDFILL.
9. THE LANDFILL DEVELOPMENT WILL PROCEED FROM SOUTH TO NORTH (SEQUENTIALLY FROM PHASE 1 TO PHASE 4). REFER TO DRAWINGS IIA.15 THROUGH IIA.20 FOR LANDFILL DEVELOPMENT PLANS.
10. THE INITIAL SITE DEVELOPMENT WILL INCLUDE THE CONSTRUCTION OF THE ENTRANCE ROAD, PORTIONS OF THE PERIMETER ACCESS ROAD, SCALES, GATEHOUSE, MAINTENANCE BUILDING, CITIZEN'S CONVENIENCE CENTER, THE FIRST CELL, PERIMETER BERM, AND SURFACE WATER CONTROL FEATURES AROUND THE SOUTHERN END OF PHASE 1. MONITOR WELLS AND GAS PROBES WILL BE INSTALLED AROUND PHASE 1 ACCORDING TO THE INSTALLATION SCHEDULE PROVIDED ON DRAWING IIA.14.
11. AS EACH CELL IS CONSTRUCTED AND FILLED, THE ADJACENT UNDEVELOPED CELL WILL BE EXCAVATED TO PROVIDE OPERATIONAL SOIL AND TEMPORARY STORMWATER STORAGE. SURFACE WATER CONTROLS AND ACCESS ROADS WILL BE CONSTRUCTED ADJACENT TO EACH AREA AS IT IS DEVELOPED. MONITOR WELL AND GAS PROBES WILL BE INSTALLED ACCORDING TO THE SCHEDULE PROVIDED ON DRAWING IIA.14.
12. AS FILL AREAS REACH THE DESIGN GRADES FINAL COVER AND PERMANENT DRAINAGE FEATURES WILL BE INSTALLED. THE MAXIMUM ELEVATION OF SOLID WASTE WILL BE 732.5 FT MSL AND THE MAXIMUM ELEVATION OF FINAL COVER WILL BE 736.00 FT MSL.
13. LARGE ITEM STORAGE AREA WILL BE PROVIDED WITHIN THE LANDFILL FOOTPRINT NEAR THE WORKING FACE OR NEAR THE CITIZEN'S CONVIENIENCE CENTER.
14. REUSABLE MATERIALS STAGING AREA WILL BE PROVIDED WITHIN THE LANDFILL FOOTPRINT.
15. USED/SCRAP TIRE STORAGE AREA WILL TYPICALLY BE PROVIDED NEAR THE WORKING FACE OR NEAR THE CITIZEN'S CONVENIENCE CENTER.
16. WOOD WASTE PROCESSING AREA WILL BE PROVIDED WITHIN THE LANDFILL FOOTPRINT.

0 300 600
SCALE IN FEET

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER
11/6/14

ISSUED FOR PERMITTING PURPOSES ONLY

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

SITE LAYOUT PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817–563–1144
TBPE FIRM NO. F–256 TBPG FIRM NO. 50222

DSN. KDM DATE : 8/13
DWN. GLW SCALE : GRAPHIC
CHK. KDM DWG : IIA.13–SiteLay.dwg

DRAWING IIA.13

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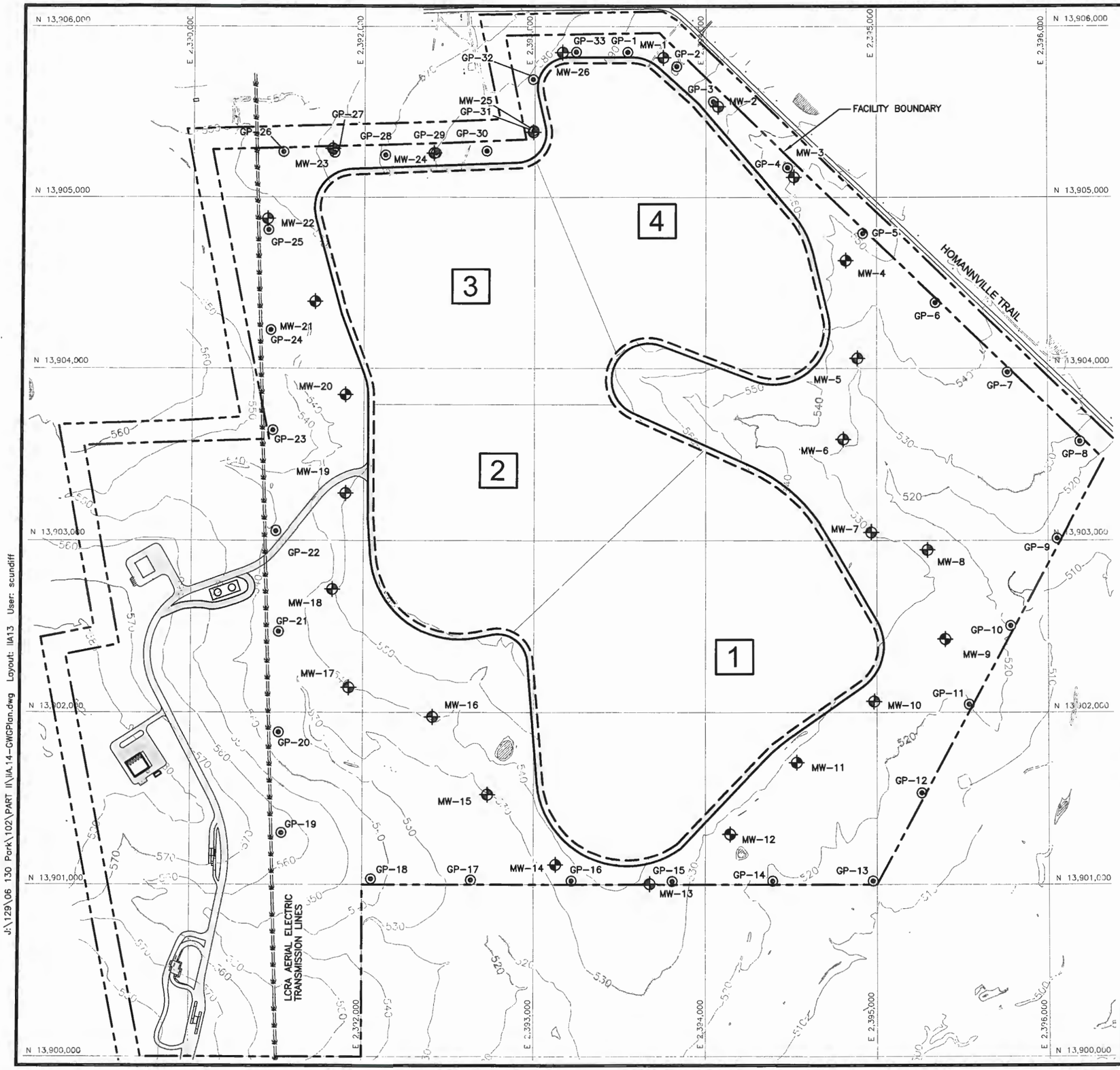

0 300 600
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 510 EXISTING 10' CONTOUR
- N 6753000 STATE PLANE GRID
- EASEMENT
- MW-4 PROPOSED MONITORING WELL
- GP-6 PROPOSED GAS PROBE
- 1 PHASE DESIGNATION

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. REFER TO PART III, ATTACHMENT F – GROUNDWATER CHARACTERIZATION REPORT FOR DESIGN OF GROUNDWATER MONITORING WELLS.
4. REFER TO PART III, ATTACHMENT G – LANDFILL GAS MANAGEMENT PLAN FOR DESIGN OF GAS MONITORING PROBES.

MONITORING INSTALLATION SCHEDULE		
PHASE 1	MW-1, MW-5 THROUGH MW-17	GP-7 THROUGH GP-21
PHASE 2	MW-18 THROUGH MW-21	GP-22 THROUGH GP-24
PHASE 3	MW-22 THROUGH MW-26	GP-25 THROUGH GP-31
PHASE 4	MW-2 THROUGH MW-5	GP-32 AND GP-33, GP-1 THROUGH GP-6

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER
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GROUNDWATER AND LANDFILL GAS MONITORING PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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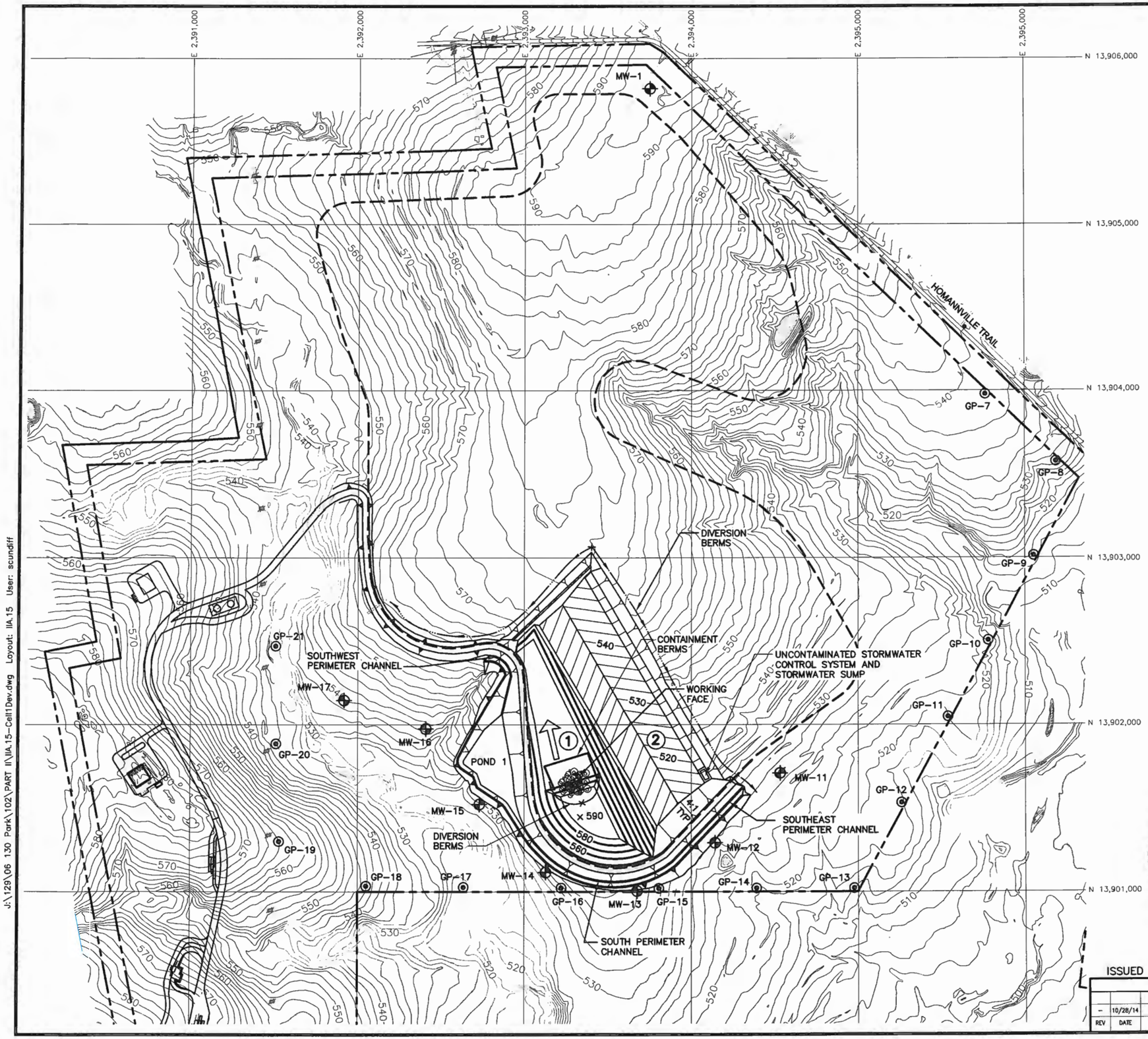
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM DATE : 8/13
DWN. GLW SCALE : GRAPHIC
CHK. KDM DWG : IIA.14-GWGPlan.dwg

DRAWING IIA.14

J:\129\06 130 Park\102\PART II\IIA.14-GWGPlan.dwg Layout: IIA13 User: scundiff



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LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC
3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN-ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN-ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C-DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6-LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELL 1 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELL 1 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 2.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

STATE OF TEXAS
GREGORY W. ADAMS
73356
LICENSED
PROFESSIONAL ENGINEER
11-6-2014

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REVISIONS							
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY	
–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA	

CELL 1 DEVELOPEMENT

130 ENVIRONMENTAL PARK, LLC
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DSN. KDM	DATE : 12/13	DRAWING	
DWN. GLW	SCALE : GRAPHIC		IIA.15
CHK. KDM	DWG : IIA.15-Cell1Dev.dwg		

E 2,391,000 E 2,392,000 E 2,393,000 E 2,394,000 E 2,395,000 E 2,395,000

N 13,906,000 N 13,905,000 N 13,904,000 N 13,903,000 N 13,902,000 N 13,901,000

MW-1 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17

GP-1 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-20 GP-21

HOMANNVILLE TRAIL

CULVERT

UNCONTAMINATED STORMWATER CONTROL SYSTEM AND STORMWATER SUMP

WORKING FACE

DIVERSION BERMS

CONTAINMENT BERMS

POND 1

POND 2

SOUTHWEST PERIMETER CHANNEL

SOUTHEAST PERIMETER CHANNEL

SOUTH PERIMETER CHANNEL

× 640

× 538

4:1 TYP

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
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3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN-ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN-ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C–DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6–LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELL 4 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELL 4 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 5.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

STATE OF TEXAS
GREGORY W. ADAMS
73356
LICENSED
PROFESSIONAL ENGINEER
11-6-2014

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CELL 4 DEVELOPMENT

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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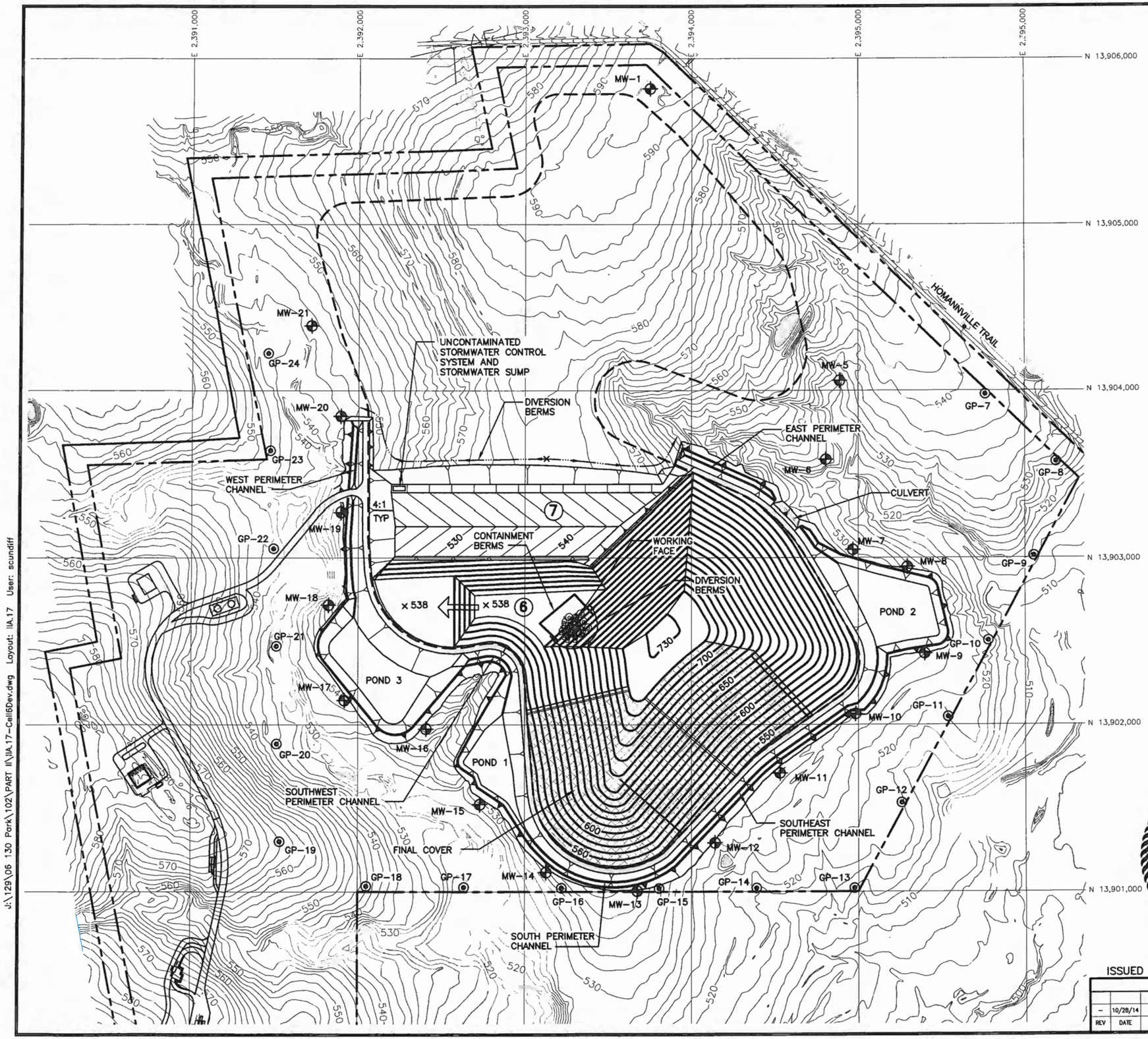
REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

DSN. KDM DATE : 12/13
DWN. GLW SCALE : GRAPHIC
CHK. KDM DWG : IIA.16–Cell4Dev.dwg

DRAWING IIA.16

J:\129\06 130 Park\102\PART II\IIA.16–Cell4Dev.dwg Layout: IIA.16 User: scundiff



LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC
3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN-ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN-ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C-DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6-LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELL 6 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELL 6 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 7.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

STATE OF TEXAS
GREGORY W. ADAMS
73356
LICENSED
PROFESSIONAL ENGINEER
11-6-2014

ISSUED FOR PERMITTING PURPOSES ONLY

CELL 6 DEVELOPMENT

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

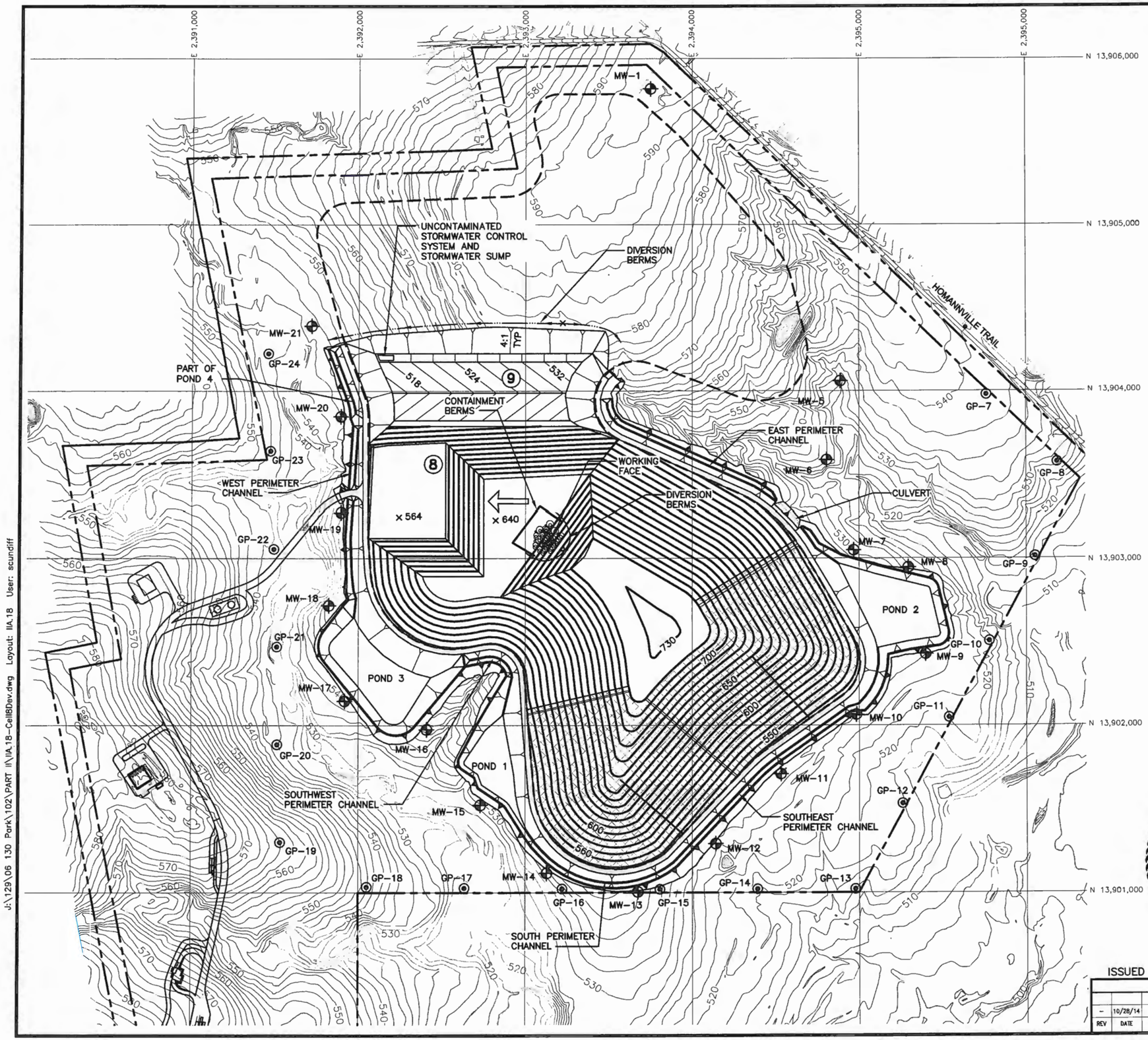
BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

DSN. KDM | DATE : 12/13
DWN. GLW | SCALE : GRAPHIC
CHK. KDM | DWG : IIA.17-Cell6Dev.dwg

DRAWING IIA.17

J:\129\06 130 Park\102\PART II\IIA.17-Cell6Dev.dwg Layout: IIA.17 User: scundiff



J:\129\06 130 Park\102\PART II\IIA.18-Cell8Dev.dwg Layout: IIA.18 User: scundiff

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC
3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN-ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN-ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C–DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6–LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELL 8 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELL 8 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 9.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

STATE OF TEXAS
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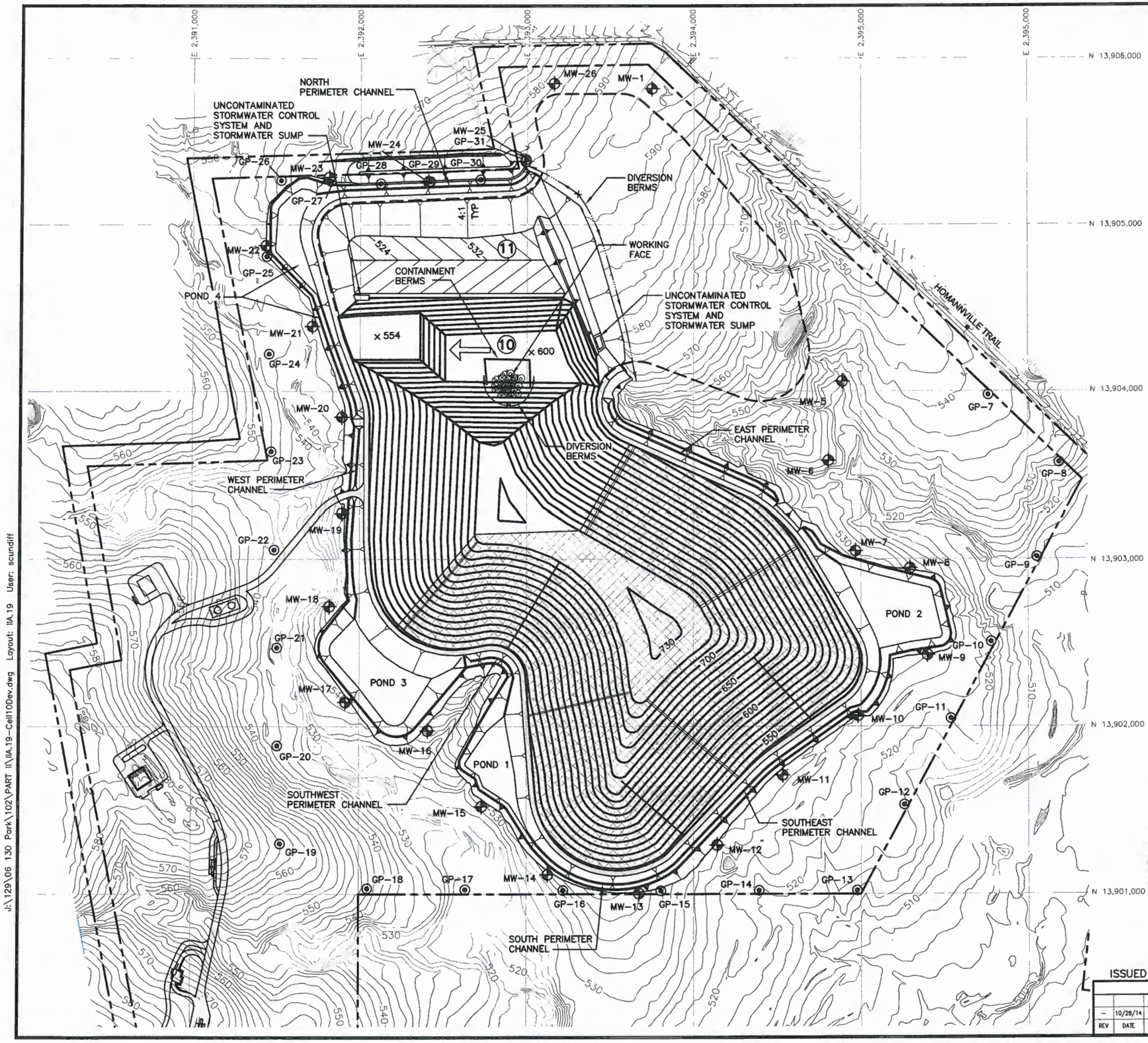
–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

CELL 8 DEVELOPMENT

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 12/13	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.18	
CHK. KDM	DWG : IIA.18-Cell8Dev.dwg		



LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION
- APPROXIMATE LIMITS OF FINAL COVER

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC
3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN–ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN–ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C–DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6–LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELL 10 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELL 10 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 11.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

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–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

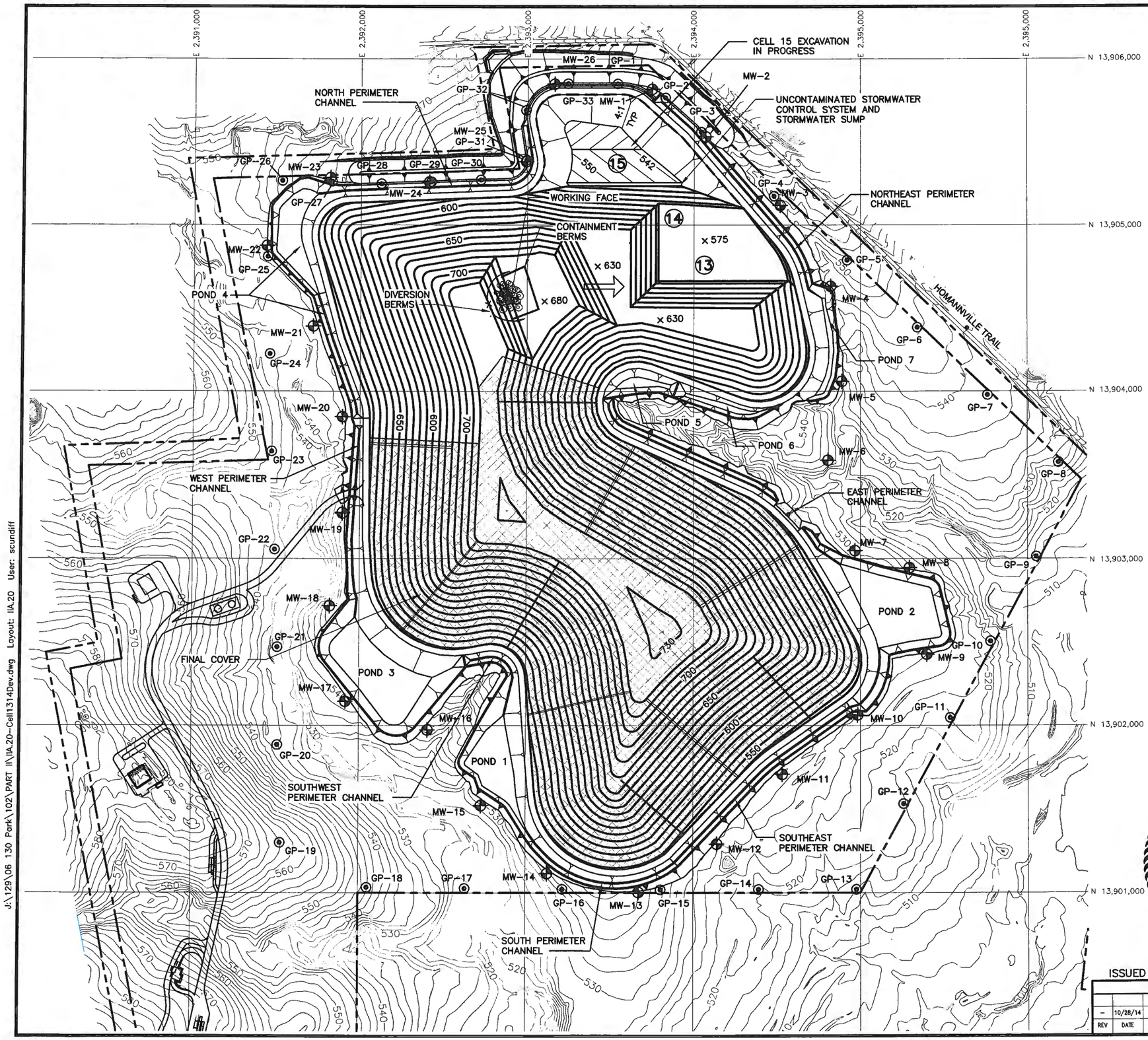
CELL 10 DEVELOPMENT

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817–563–1144
TBPE FIRM NO. F–256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 12/13	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.19	
CHK. KDM	DWG : IIA.19–Cell10Dev.dwg		

J:\129\06 130 Park\102\PART II\IIA.19–Cell10Dev.dwg Layout: IIA.19 User: scundiff



J:\129\06 130 Park\102\PART II\IIA.20-Cell1314Dev.dwg Layout: IIA.20 User: scundiff

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE
- DIRECTION OF FILL
- 630 × APPROXIMATE TOP OF WASTE SPOT ELEVATION
- APPROXIMATE LIMITS OF FINAL COVER

0 300 600
SCALE IN FEET

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC
3. THE LANDFILL ACCESS AND HAUL ROADS WILL BE SURFACED TO PROVIDE ALL WEATHER ACCESS. ROAD LOCATIONS TO BE DETERMINED DURING SITE OPERATIONS AND LOCATIONS WILL VARY.
4. THE RUN-ON STORMWATER CONTROL SYSTEM WILL CONSIST OF THE PERIMETER DRAINAGE CHANNEL, RUN-ON STORMWATER DIVERSION BERM, AND UNCONTAMINATED STORMWATER SUMP.
5. REFER TO PART III, ATTACHMENT C-DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSON AND SEDIMENT CONTROL PLAN. REFER TO PART III, ATTACHMENT D6-LEACHATE AND CONTAMINATED WATER MANAGEMENT PLAN FOR CONTAINMENT AND DIVERSION BERM CALCULATIONS.
6. UNCONTAMINATED STORMWATER COLLECTED IN SUMPS WILL BE PERIODICALLY REMOVED FROM EXCAVATED AREAS BY PUMPING TO PERIMETER DRAINAGE CHANNELS OR USED IN SITE OPERATIONS (DUST CONTROL, IRRIGATIONS, ROAD AND LINER CONSTRUCTION).
7. CELLS 13 AND 14 DEVELOPMENT DEPICTS ONGOING WASTE DISPOSAL OPERATIONS IN CELLS 13 AND 14 TO MAXIMUM WASTE FILL ELEVATION. EXCAVATION AND LINER CONSTRUCTION ONGOING IN CELL 15.
8. MONITORING WELLS AND PROBES TO BE INSTALLED AS SHOWN ON DRAWING IIA.14.

STATE OF TEXAS
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REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

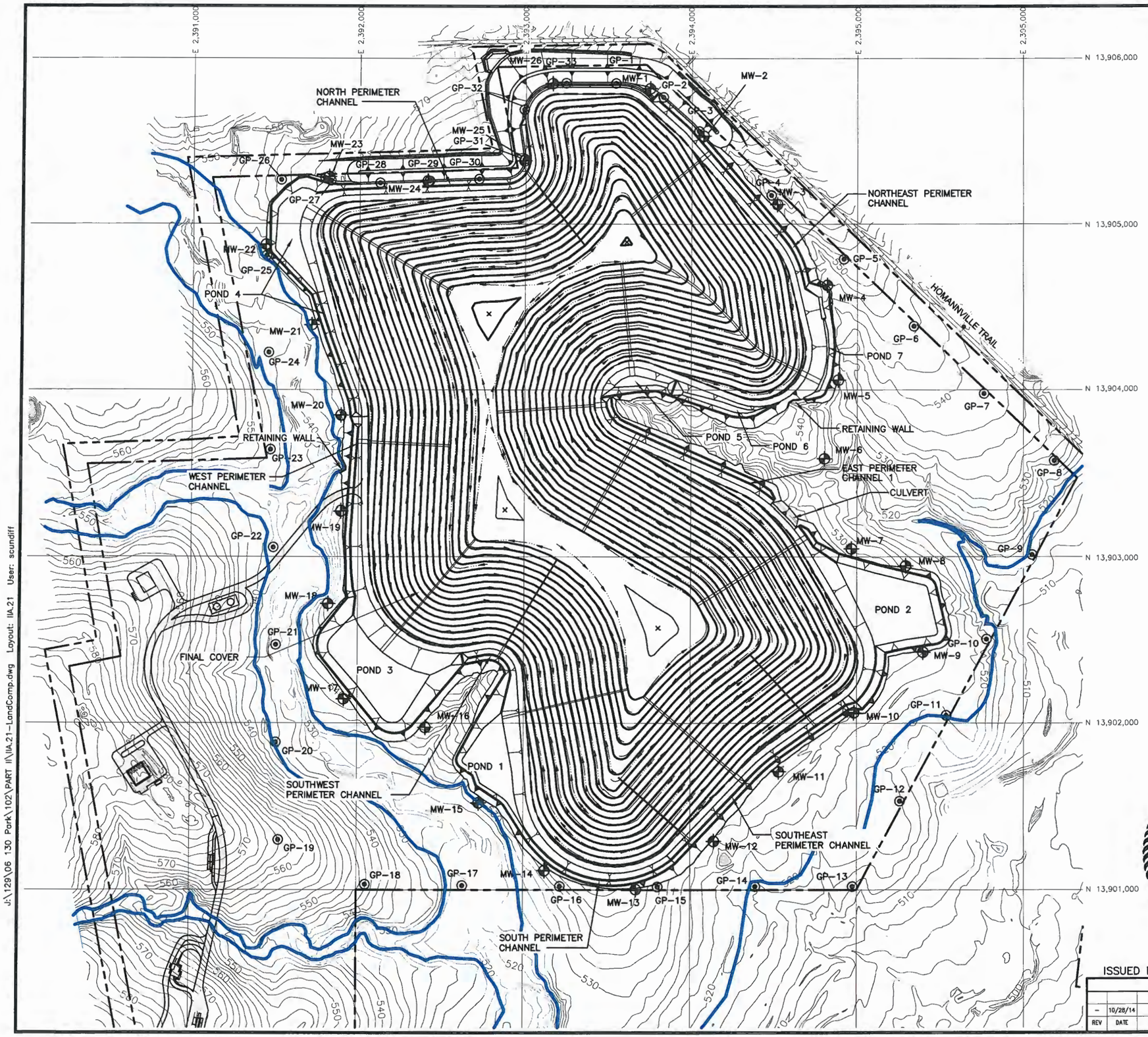
CELLS 13 AND 14 DEVELOPMENT

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM | DATE : 12/13
DWN. GLW | SCALE : GRAPHIC
CHK. KDM | DWG : IIA.20-Cell1314Dev.dwg

DRAWING IIA.20



0 300 600
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 250 EXISTING CONTOUR
- 100 YEAR FLOODPLAIN
- N 13,904,000 STATE PLANE GRID
- MW-4 MONITORING WELL
- GP-1 LFG MONITORING PROBE

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. REFER TO PART III, ATTACHMENT C – DRAINAGE DESIGN REPORT FOR STORMWATER SYSTEMS AND EROSION AND SEDIMENT CONTROL PLAN.
4. REFER TO PART III, ATTACHMENT C2 – FLOOD CONTROL STUDY FOR FLOODPLAIN MODELING TO DETERMINE LIMITS OF 100 – YEAR FLOODPLAIN.

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REVISIONS						
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–	10/28/14	TECHNICALLY COMPLETE	GLW	GWA	GWA	GWA

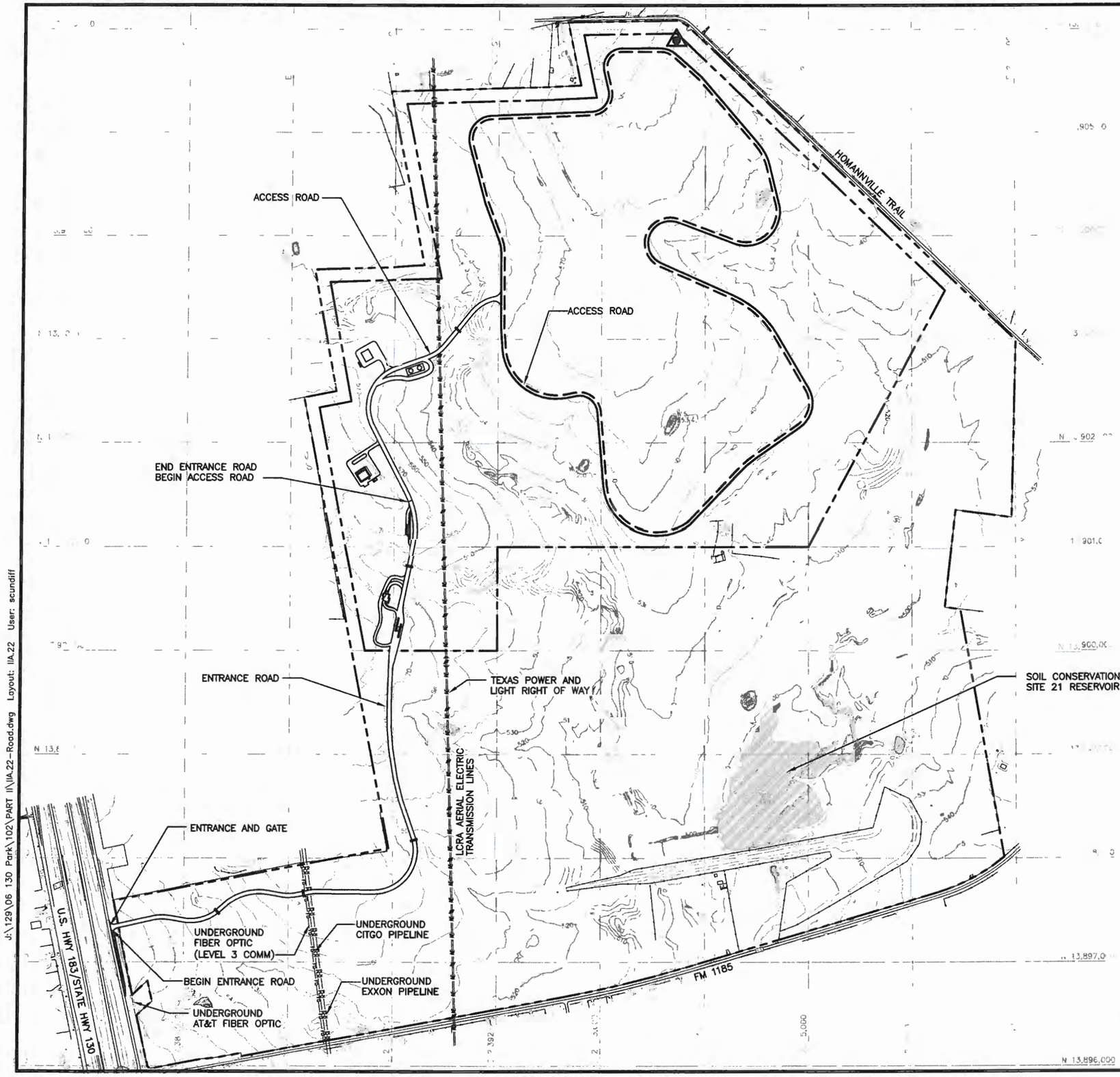
LANDFILL COMPLETION PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD ◆ WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 12/13	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.21	
CHK. KDM	DWG : IIA.21–LandComp.dwg		

J:\129\06 130 Park\102\PART II\IIA.21–LandComp.dwg Layout: IIA.21 User: scundiff



0 500 1000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- SITE BENCHMARK
- 510 EXISTING 10' CONTOUR
- N 6753000 STATE PLANE GRID

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.

STATE OF TEXAS
K.D. MARONEY
44639
LICENSED
PROFESSIONAL ENGINEER
11/6/14

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

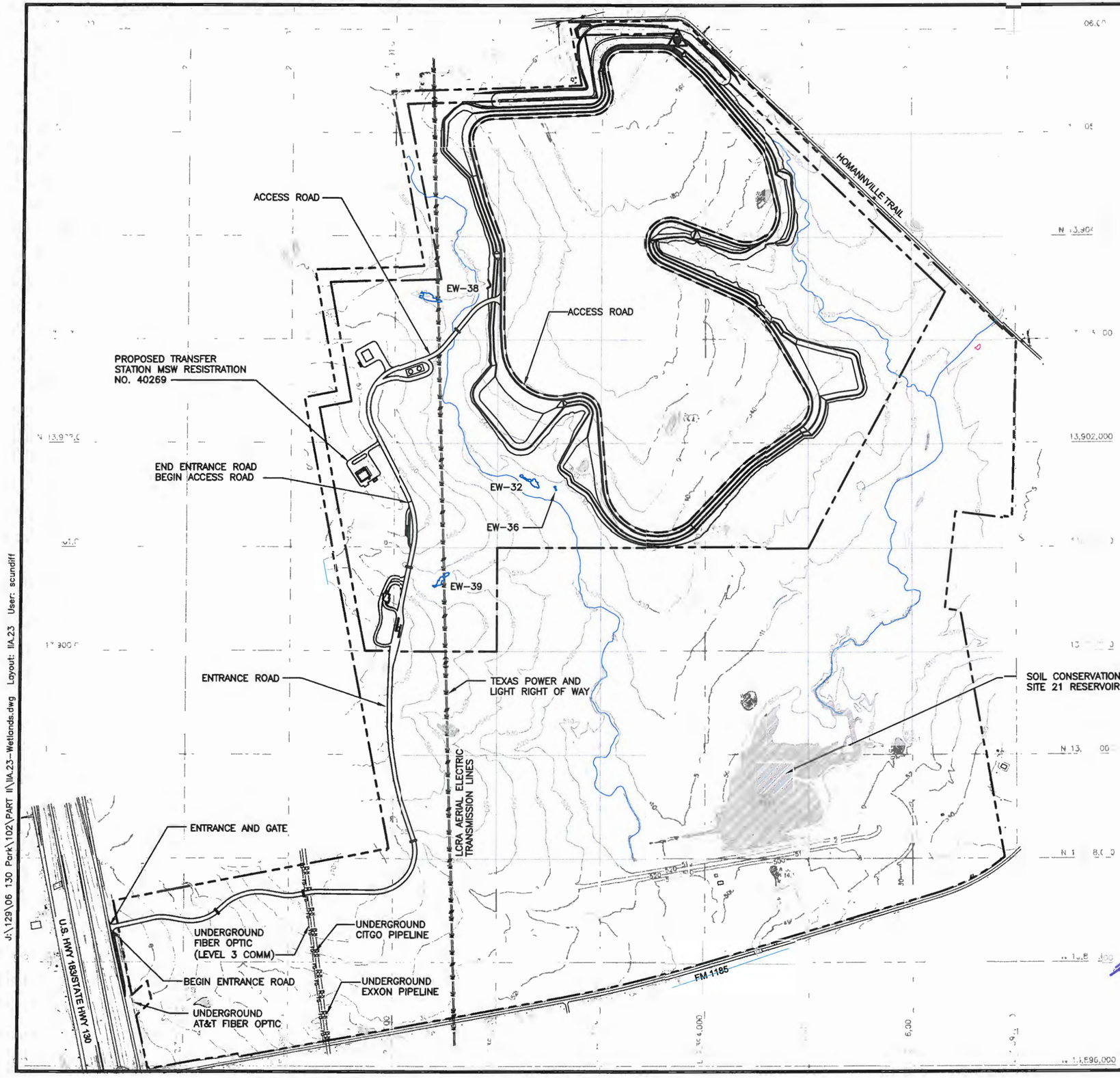
LANDFILL ENTRANCE AND ACCESS ROAD PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
TYPE I PERMIT APPLICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM	DATE : 1/14	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.22	
CHK. KDM	DWG : IIA.22–Road.dwg		

J:\129\06 130 Park\102\PART II\IIA.22–Road.dwg Layout: IIA.22 User: scundiff



0 500 1000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- SITE BENCHMARK
- 510 — EXISTING 10' CONTOUR
- N 6753000 — STATE PLANE GRID
- EW-36 — JURISDICTIONAL WETLANDS WITHIN THE FACILITY BOUNDARY

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. REFER TO PART II, APPENDIX 11D – WETLANDS DOCUMENTATION FOR WETLANDS DELINEATION AND LOCATION AS DETERMINED BY HALFF AND ASSOCIATES.

11/6/14

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FACILITY JURISDICTIONAL WETLANDS AND APPURTENANCES

130 ENVIRONMENTAL PARK, LLC
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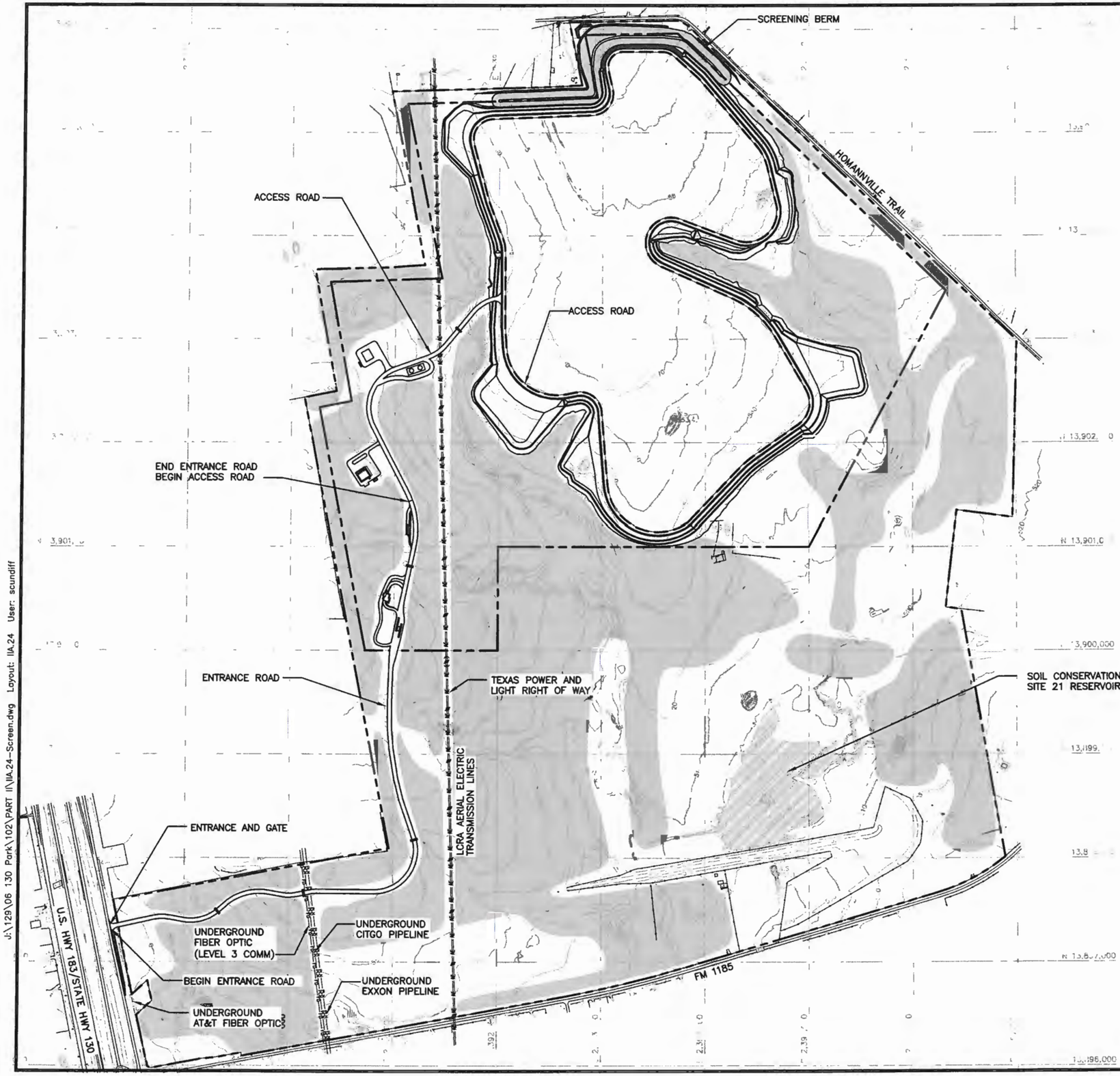
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. KDM	DATE : 1/14	DRAWING	
DWN. GLW	SCALE : GRAPHIC	IIA.23	
CHK. KDM	DWG : IIA.23-Wetlands.dwg		

J:\129\06 130 Park\102\PART II\IIA.23-Wetlands.dwg Layout: IIA.23 User: scundiff



0 500 1000
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- FACILITY BOUNDARY
- LANDFILL FOOTPRINT
- 510 EXISTING 10' CONTOUR
- N 6753000 STATE PLANE GRID
- EXISTING WOODED AREA NOT DISTURBED

NOTES:

1. CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SERVICE FROM AERIAL PHOTOGRAPHY FLOWN MAY 13, 2013. HORIZONTAL DATUM IS TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83). ELEVATIONS ARE RELATIVE TO NAVD88 – GEOID 12A.
2. PROPERTY BOUNDARY, FACILITY BOUNDARY, EASEMENT LOCATIONS, AND PERMANENT BENCHMARK PROVIDED BY HODDE & HODDE LAND SURVEYING, INC.
3. VISUAL SCREENING OF WASTE OPERATIONS WILL BE PROVIDED BY THE VEGETATED SCREENING BERM TO BE LOCATED ALONG THE NORTH FACILITY BOUNDARY AND EXISTING WOODED AREAS ON THE PROPERTY.
4. WOODED AREAS WITHIN THE FACILITY BOUNDARY AND THE PROPERTY BOUNDARY ARE DEPICTED.

STATE OF TEXAS
K.D. MARONEY
44639
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–	10/28/14	TECHNICALLY COMPLETE	GLW	KDM	KDM	KDM

FACILITY SCREENING PLAN

130 ENVIRONMENTAL PARK, LLC
130 ENVIRONMENTAL PARK
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CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
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TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. KDM DATE : 1/14
DWN. GLW SCALE : GRAPHIC
CHK. KDM DWG : IIA.24-Screen.dwg

DRAWING IIA.24

J:\129\06 130 Park\102\PART II\IIA.24-Screen.dwg Layout: IIA.24 User: scundiff