ATASCOCITA RECYCLING AND DISPOSAL FACILITY

APPENDIX IIF
ARCHAEOLOGICAL SURVEY

8588 Katy Freeway
Suite 441
Houston, TX 77024
713-463-8200
information@knudsonservices.com

October 19, 2009

Mr. Bill Martin
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

RECEIVED
OCT 21 2009
Texas Historical Commission

Re: Intensive Archeological Survey of
The Scanlin Property in
Harris County, Texas

Dear Mr. Martin:

The purpose of this correspondence is to clarify the June 17, 2009 submittal from Knudson, LP requesting concurrence from the Texas Historical Commission (THC) for the above referenced property. Knudson submitted a report prepared by GTI Environmental, Inc. (GTI) entitled, "*An Intensive Archeological Survey of The Scanlin Property in Harris County, Texas*" for review and comment. We have received from the Texas Historical Commission concurrence that there are "No Historic Properties Affected – Project May Proceed" and "Draft Report Acceptable" stamps dated July 15, 2009. A copy of this concurrence is attached.

The Scanlin Property, owned by Waste Management of Texas, Inc. (WM), consists of 300 acres as defined in the above referenced report. WM plans to develop a portion of the overall property as an expansion of its existing Atascocita Recycling and Disposal Facility (RDF), in addition to the proposed waste water treatment plant as described in the referenced report. The Atascocita RDF is an existing Type I municipal solid waste disposal facility, regulated by the Texas Commission on Environmental Quality (TCEQ) Permit No. 1307C.

The proposed expansion of the Atascocita RDF and proposed waste water treatment facility will be located within the 300 acre Scanlin Property. Please confirm your previous approval in the form of a letter stating the THC's acceptance and concurrence of these proposed projects.

Sincerely,

KNUDSON, LP

Carlos O. Hinojosa
Project Manager

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED
by _____
for Mark Wolfe
State Historic Preservation Officer
Date 11/30/09
Track# _____

Appendix: Correspondence dated June 17, 2009

cc: Chuck Rivette, P.E., Waste Management
Betsy Arriola – Knudson, LP
Katie Northrup

PN 07-0819

8588 Katy Freeway
Suite 441
Houston, TX 77024
713-463-8200
information@knudsonservices.com

DRAFT REPORT ACCEPTABLE
Please submit 20 final report copies
by _____
for F. Lawerence Oaks
State Historic Preservation Officer
Date 7/15/09
Track# _____

June 17, 2009

NO HISTORIC PROPERTIES AFFECTED
PROJECT MAY PROCEED
By _____
for F. Lawerence Oaks
State Historic Preservation Officer
Date 7/15/09
Track# _____

Mr. Bill Martin
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Re: Intensive Archeological Survey of
The Scanlin Property in
Harris County, Texas

Dear Mr. Martin:

Knudson, LP (formerly, Northrup Associates, Inc.) contracted with GTI Environmental, Inc. (GTI) to perform an intensive archeological survey for Waste Management's proposed waste water treatment plant referred to as the WM Scanlin Project. Knudson is submitting the report prepared by GTI entitled, "*An Intensive Archeological Survey of The Scanlin Property in Harris County, Texas*" for your review and comment.

The project area of potential effect (APE) is 300 acres and is known as the WM Scanlin Property. The project area is located on the Harmaston, Texas, U.S.G.S. 7.5-minute topographic map (2995-443) located in Atascocita, Harris County, Texas. This report and evidence of consultation with the Texas Historical Commission (THC) was submitted to the U.S. Army Corps of Engineers (USACE) for consideration of this proposed Project's possible affects to cultural resources. There are no political subdivisions of the State of Texas that will own or control any part of the proposed development. Therefore, an antiquities permit was not required for the survey.

Based on GTI's opinion, the proposed construction of the waste water treatment plant will have No Effect to cultural resources that are eligible for listing in the National Register of Historic Places within the 300-acre project area. GTI also recommended that the project be allowed to proceed as planned, provided the Project boundaries are not altered.

If you agree with GTI's findings please indicate your approval in the form of a letter stating the THC's acceptance and concurrence of the proposed Project.

If you have any questions or require additional information, please feel free to contact me at (713) 932-4003.

Sincerely,

KNUDSON, LP

Carlos O. Hinojosa
Project Manager

COH:COH
Enclosures

cc: Betsy Arriola – Knudson, LP
Katie Northrup

GTI Environmental, Inc.
Environmental Consultants

An Intensive Archeological Survey of The Scanlin Property in Harris County, Texas

Prepared For:

Northrup Associates, Inc.
Houston, Texas

Prepared By:

GTI Environmental, Inc.

Principal Investigator:
Sergio A. Iruegas, R.P.A.

Authors:

Sergio A. Iruegas, R.P.A.
Melinda T. Iruegas
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October 2007

COPY

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Abstract

This document presents the results of an intensive archeological survey for Waste Management's proposed waste water treatment plant referred to as the WM Scanlin Project. The proposed project will occupy an area of approximately 182 acres in Harris County, Texas. This federal undertaking is under the jurisdiction of the U.S. Army Corps of Engineers (USACE). This report and evidence of consultation with the Texas Historical Commission (THC) will be submitted to the USACE for consideration of this proposed project's possible affects to cultural resources. There are no political subdivisions of the State of Texas that will own or control any part of the proposed development. Therefore, an antiquities permit was not required for this survey.

A total of 70 shovel tests were excavated throughout the 300 acres. In accordance with the Texas Historical Commission's letter dated February 5, 2003, GTI Environmental, Inc. (GTI) archeologists focused shovel testing along the banks of Williams Gully. Archeologists also systematically shovel tested the remainder of the project area. Archeologists did not observe any cultural material on the surface or within the shovel tests. A review of the Texas Historical Commission's Atlas data base did not reveal any previously documented cultural resources within the 300 acre project area.

Accordingly, it is GTI's opinion that the proposed construction of the waste water treatment plant will have No Effect to cultural resources that are eligible for listing in the National Register of Historic Places within the 300 acre project area. GTI recommends that the project be allowed to proceed as planned, provide the project boundaries are not altered.

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Introduction

This document presents the results of an intensive archeological survey for Waste Management's proposed borrow area referred to as the WM Scanlin Project. The proposed project will occupy an area of approximately 300 acres in Harris County, Texas (See Figure 1). This federal undertaking is under the jurisdiction of the U.S. Army Corps of Engineers (USACE). This report and evidence of consultation with the Texas Historical Commission (THC) was submitted to the USACE's for consideration of this proposed project's possible affects to cultural resources. There are no political subdivisions of the State of Texas that will own or control any part of the proposed development. Therefore, an antiquities permit was not required for this survey.

In accordance with the National Historic Preservation Act (36CFR800), The Texas Historical Commission (THC) reviewed this federal undertaking and recommended in a letter dated February 5, 2003 that the 300 acre project area be surveyed by a qualified professional archeologist. The USACE was the lead federal agency primarily responsible for the consideration of affect this project may have on cultural resources. In accordance with 33CFR325 (*Processing of Department of the Army Permits Appendix C—Procedures for the Protection of Historic Properties*), GTI is assessing which type of USACE permit (General, Nationwide, or Individual) may be required for this project or if the USACE has direct or indirect jurisdiction, which is dependent upon the probability, presence or absence of cultural resources. This cultural resources assessment demonstrates Waste Management, Inc.'s *Good Faith Effort* to identify cultural resources as early as possible in the planning process.

A total of 70 shovel tests were excavated throughout the 300 acres. In accordance with the THC's letter dated February 5, 2003, GTI Environmental, Inc. (GTI) archeologists focused shovel testing along the banks of Williams Gully. Archeologists also systematically shovel tested the remainder of the project area. Archeologists did not observe any cultural material on the surface or within the shovel tests. A review of the THC's Atlas data base did not reveal any previously documented cultural resources within the 300 acre project area.

Accordingly, it is GTI's opinion that the proposed construction of the borrow area treatment plant will have No Effect to cultural resources that are eligible for listing in the National Register of Historic Places within the 300 acre project area. GTI recommends that the project be allowed to proceed as planned, provide the project boundaries are not altered.

The report has been prepared to conform to the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.* After a synopsis of the description of the project area, this report briefly discusses the climate and soils within the project APE followed by a regional culture history. The survey methodology is outlined prior to the survey results followed by the report recommendations.

Project Area Description

The project APE is 300 acres and is known as the WM Scanlin Property. The project area is located on the Harmaston, Texas U.S.G.S. 7.5 minute topographic map (2995-443) located in Atascocita, Harris County, Texas.

The project area is composed of woodlands that appear to be periodically flooded from nearby drainages. In addition to an unnamed drainage that forms the western boundary of the project area, Williams Gully, a channelized creek crosses through the project area. Extensive modification has been made to the adjacent banks of Williams Gully by occasionally creating low berms of back-dirt. Areas of standing water were observed in the northwestern and southeastern portions of the project area and in a former channel of William Gully located about 200 meters west of the current channel.

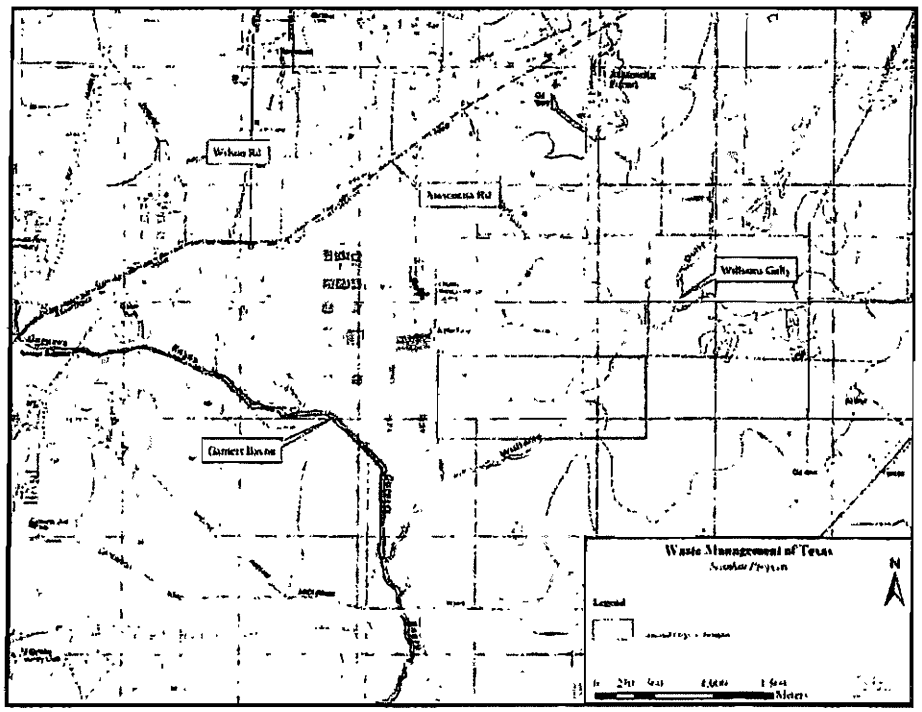

Figure 1: Project Area of Potential Effect (APE), WM Scanlin Property Harmaston U.S.G.S. 7.5 (2995-443)

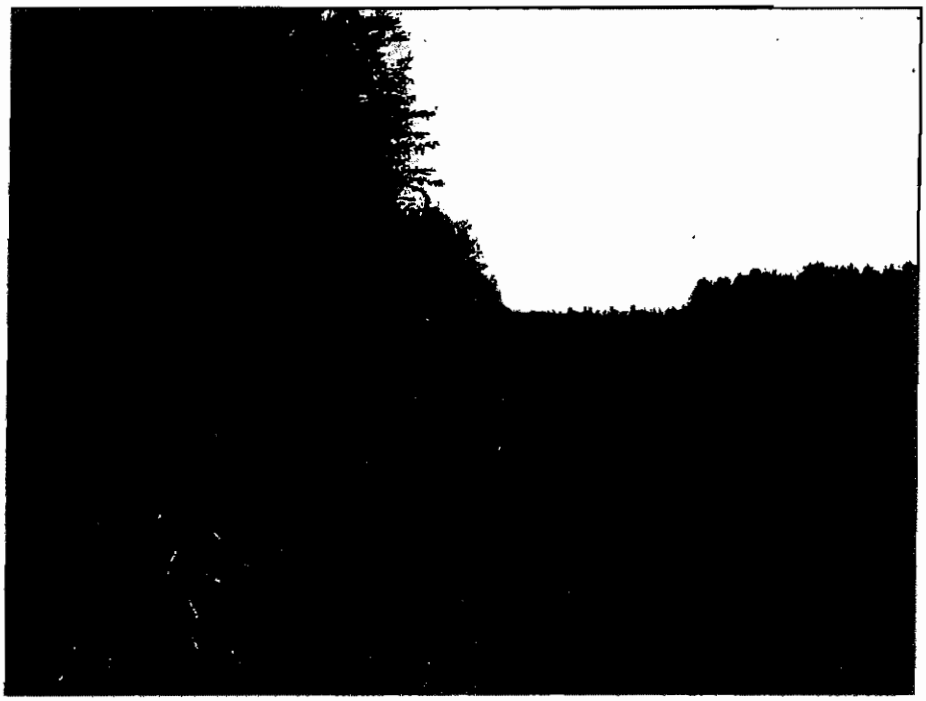

Figure 2: WM Scanlin Property location, west boundary of the project area

Figure 3: WM Scanlin Property location, North section of APE

Climate

Harris County is characterized by a humid climate, with rainfall averaging 51.55 inches per year, with the majority of the rain falling between April and September. In the summer temperatures average 81 degrees Fahrenheit and fall to an average of 53 degrees Fahrenheit in winter (Crout 1976).

Geology

Harris County is located on the West Gulf Coastal subdivision of the Atlantic and Gulf Coastal Plains. The surface geology and other sediments range from Pleistocene to Holocene in age and gently dip toward the Gulf of Mexico (Figure 4). The region is bounded on the south by the Trinity Bay, Galveston Bay and the Gulf of Mexico. The rivers within Harris County drain into the Gulf of Mexico. In both the eastern and western areas of Harris County alluvial deposits are found on bottom lands, while on terraces above the flood plain at higher elevations several levels of fluvial deposits can be found that grade to interior uplands. Along the Trinity River narrow Pleistocene terraces form the Beaumont and Lissie Formations (Crout 1976:51).

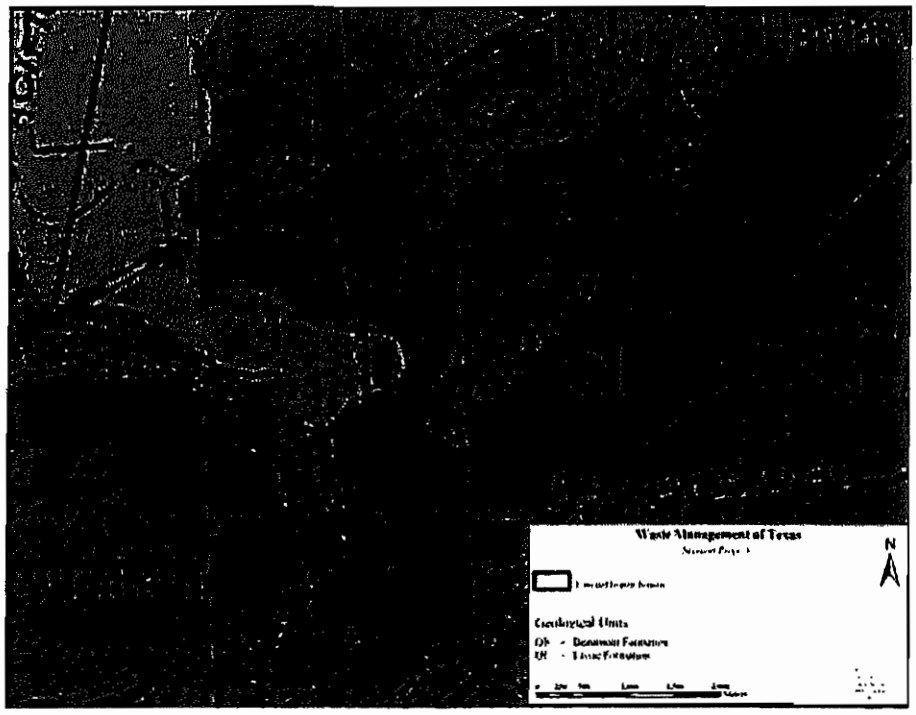

Figure 4: Quaternary Geology of the project area and surrounding terrain.

Soils

Five soil types are present within the project area: Addicks loam, Aldine very fine sandy loam, Bernard-Edna Complex, Edna fine sandy loam and Gesser loam. The variation in the soil types represent primarily differences in the degree of drainage.

Addicks loam is a soil found on nearly level upland prairies. These prairie areas are slightly higher than surrounding countryside. The surface layer is a black loam to a depth of about 11 inches. A dark gray loam is present to a depth of 12 inches below the upper soil layer (Wheeler 1976:8).

Aldine very fine sandy loam is present on nearly level to slightly convex forested landforms. The surface layer is friable dark grayish brown fine sandy loam about 5 inches thick. This soil is underlain to a depth of ten inches by a medium brownish gray fine sandy loam. The next layer consists of gray-colored clay mottled with yellowish brown and red that extends to a depth of about twenty-two inches below the ground surface (Wheeler 1976:9).

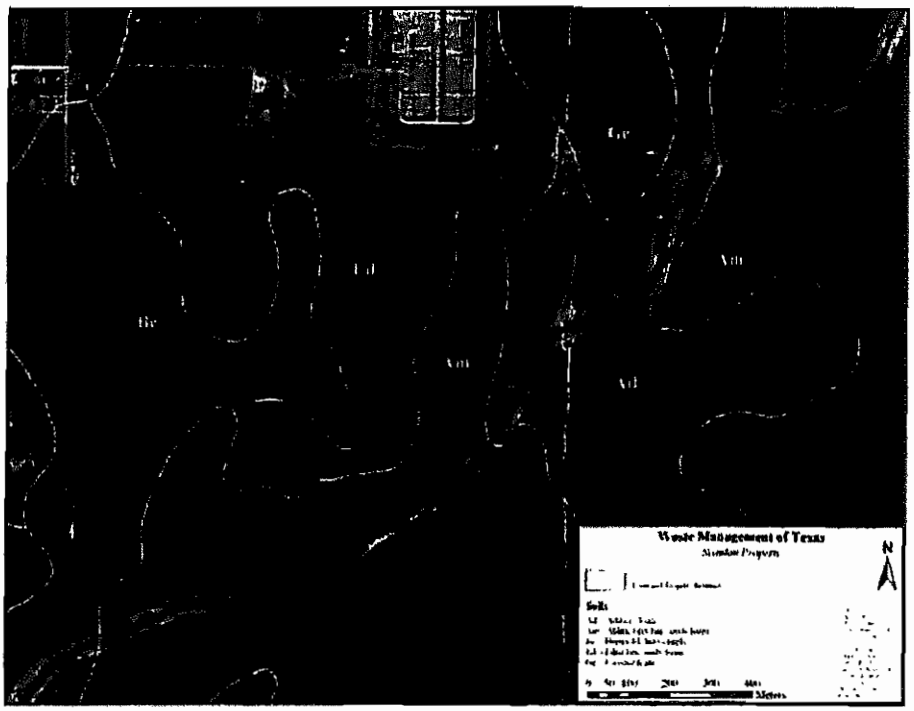

Figure 5: General Soil Map and Aerial photograph of the project area.

Gesser loam is lower on the landscape than other soils and is found in depressions and is often associated with standing water. The surface layer is a dark grayish brown loam underlain by grayish brown loam. The next layer is a dark gray loam with increased clay content (Wheeler 1976:14-15).

The Bernard-Edna complex is present in broad areas of the coastal prairie. Bernard clay loam and Edna fine sandy loam make up this association. Bernard Clay loam is found in areas of coastal prairie. Bernard soils are characterized by a very dark clay loam that increases in clay content with depth. This soil is found on more level areas of the association (Wheeler 1976:12). Edna soils make up about 30% of the complex and are found as knolls and ridges within the Bernard soils (Wheeler 1976:12). Edna soils have a surface layer that is characterized by a dark grayish brown fine sandy loam to a depth of about 5 inches. Below this layer is a bed of alkaline-rich clay (Wheeler 1976:14).

Regional Archeological Chronology

A temporal framework for prehistoric archaeological sites in Texas can be categorized by three main periods: the Paleo-Indian, the Archaic, and the Late Prehistoric. The Paleo-Indian and Archaic periods are further subdivided into Early, Middle, and Late. Suhm et al. (1954), Suhm and Jelks (1962), Prewitt (1981, 1985), and Turner and Hester (1999) established this temporal framework based on changes in projectile point morphology.

Recent discoveries have suggested that the earliest inhabitants of North America likely migrated from northeastern Asia, prior to 11,200 B.P. ago. Sites such as Monte Verde in Chile, Taima-Taima in Venezuela, Tequendama in Columbia and Pendejo Cave in southern New Mexico indicate that people were present in the Americas as early as 20,000 B.P. and that there may haven multiple migration events (Dillehay 2000: 1-2; MacNeish and Libby 2003).

Paleo-Indian Period

However, the first verifiable occupation of North America dates to approximately 15,000 B.P. with the appearance of the medium to large sized, fluted, lanceolate Clovis projectile point in the archeological record, and marks the beginning of the Paleo-Indian period (15,000 to 8,000 B.P.). The Paleo-Indian period is divided up into three temporal subdivisions Early (15,000 to 11,000 B.P.), Middle (11,000 to 10,500 B.P.) and Late (10,500 to 10,000 B.P.).

Settlement patterns for the entire Paleo-Indian period were characterized by small highly mobile bands that traveled over large ranges, migrating over time with the eastward flow of rivers. Many of these groups focused on the large river valleys, especially those of the Ohio, Tennessee, and Cumberland, where the highest concentration of Clovis sites have been identified (Bense 1994: 44). However, Clovis sites have been found throughout the United States. In Texas, for example, Clovis occupation has been identified at numerous sites, such as the Gault Site in Williamson County and the Aubrey Clovis Site in Denton County. Meltzer reports that 205 Clovis points have been identified in 95 of the 254 Texas counties at the time of the publication of his research article (Meltzer 1987).

Clovis subsistence patterns had long thought to have focused on the predation of the large mega-fauna that inhabited the late Pleistocene landscape, partly based on Clovis points associated with kill sites in the American Southwest and Great Plains (Bense 1994: 44; Dillehay 2000: 7-8). However, it is more likely that Paleo-Indian peoples were practicing a broad spectrum subsistence pattern, especially along the Gulf Coastal Plain. Subsistence mostly likely consisted of game such as rabbit and deer in inland settings with fish and other marine animals making up a larger part of the diet on the coast (Patterson 1995: 243-244).

The Middle Paleo-Indian period is characterized by the beginning of regionalization of cultures and the appearance of the Folsom point in the archeological record. Subsistence and settlement patterns are generally similar to those of the earlier period; with a greater restriction on nomadic ranges and the adaptation of populations to particular sub-regions (Bense 1994: 59).

By the Late Paleo-Indian period the climate of the southeast had begun a drying trend and the landscape of the Texas coastal plain was one of a mixed broadleaf-conifer forest, similar to that of today (Johnson 1989: 12). Along the Gulf Coast, the Late Paleo-Indian is defined by the appearance of the San Patrice culture and consists of asymmetrical Albany knives and two variants of the San Patrice dart point.

Archaic Period

The Archaic period dates from approximately 10,000 to 1,250 B.P. and coincides with the beginning of the Holocene and is characterized by the appearance of notched and stemmed triangular projectile points, pottery, and the development of long distance trade networks (Bense 1994: 62). Temporally, this period is divided into the Early Archaic (10,000–6,000 years B.P.), Middle Archaic (6,000–3,500 years B. P.), and Late Archaic (3,500–1,250 years B.P.). The Archaic period along the Texas coast spanned the period of major environmental changes during the post-Pleistocene.

Story (1990: 211) identifies several key environmental factors and events that characterize the Archaic period for the Gulf Coastal Plain. By 8,000 B.P. North America had experienced the height of the Holocene warming trend (Hypsithermal). In most places the environment was warm and dry evidenced by the abundance of plant species adapted to such conditions. Along the upper Texas coast, it is more difficult to identify the exact effects of the Hypsithermal, and the establishment of modern vegetative conditions developed gradually.

Differentiation between the material cultural of the Archaic and that of the Late Paleo-Indian period is "a matter of degree rather than kind" (Story 1990:213). In general, chronological sequences for the Archaic Period are not completely understood, with few radiocarbon assays earlier than 2,000 Radio Carbon Years Before Present (RCYBP) and few excavated stratified sites (Story 1990:213).

The stone tool assemblage of the Archaic Period is often made of less exotic materials than had been previously utilized, reflecting the greater restriction of regional mobility and a shift towards a regionalization of cultures. The tools shift in use from ones that are repeatedly used and reused and reworked, to ones that are fashioned for expedient task-specific purposes (Kelly and Todd 1988: 240; Story 1990: 213). Late Archaic points are overall better represented in the archeological record than both the Early or Middle Archaic, and are distinguished by expanded and rectangular types such as the Palmillas, Ellis, Neches River, Kent, Woden, and Pontchartrain (Story 1990: 222).

Late Prehistoric

The late Prehistoric period corresponds to the Woodland period of the southeastern United States. Typically, the Woodland period is differentiated from the Archaic by the adoption of agriculture, ceramics, and the expansion of interregional exchange systems. While ceramics are common along the upper Texas coast, agriculture is not utilized and regional trade is not developed to the extent that it is elsewhere in the southeast (Aten 1984: 74). However, some researchers argue for a Neo-Archaic period (Prewitt 1981: 74) suggesting that in many parts of the Gulf Coast Archaic practice of residential mobility continued into the Historic period (Story 1990: 213).

Environmental conditions of the Late Holocene after 2,500 B.P. are generally similar to those of modern times and the vegetative regions commonly associated with eastern and southeastern Texas are in place between 2,000 and 1,500 B.P. Shorelines and sea levels had also reached a point of stability and it appears that the rate of geologic change c. 3,000 B.P. had reached its slowest point in 4,000 years (Story 1990: 244).

The main characteristic that separates the Late Prehistoric from the Archaic on the Upper Texas coast is the introduction of pottery. The ceramic tradition can be generally linked to that of the southeast, in particular that of the Lower Mississippi Valley. This southeastern influence is reflected in the earliest pottery identified in the area. Related to Techefuncte pottery, it is found along the Sabine River and dates to between 2,500 B.P. and 2,100 B.P.

The other major technological development of the Late Prehistoric is the advent of the bow and arrow. Evidenced by the appearance of smaller projectile points in the archeological record, this technology dates to approximately 1,500 to 1,300 B.P. This technology is rapidly adopted across the southeast in contrast to the relatively slow development of ceramics (Story 1990: 248).

In general, in the Gulf Coast, points with strongly expanded stems appear first (Scallorn, Colbert, Agee types). However, in southeastern Texas, these forms are far less common. Story (1990: 249) puts forth two hypotheses for this incongruity 1) the earliest arrow points were of a completely different style or 2) bow and arrow technology arrives there later than the rest of the region.

By 800 B.P., the Prediz type begins to spread across Texas and into Mexico and may be the result of trading networks of the Jumano Indians (Kelley 1986: 139-142). Story (1990:251) further points out that the widespread use of Prediz and its link with trade networks highlights the importance of bison hunting subsistence and the trading of bison products.

Along the Texas coast ceramics appear at approximately 1,900 B.P and consist of four principle areas of ceramic assemblages: the Sabine Lake area, the Galveston Bay area, the Conroe-Livingston area, and the Brazos Delta-West Bay area. In the context of this NRHP testing, 41MQ180 lies in the Conroe-Livingston area and comprises the middle and upper portions of the San Jacinto River basin and upper sections of the Lower Trinity River drainages. Story (1990: 256) identifies this section of Texas during the Late Prehistoric as belonging to the Mossy Grove Culture and is generally characterized by sandy paste wares that are eventually replaced by grog- and bone-tempered wares that take the form of simple mouth beakers, jars, and bowls.

Chronologically this culture is divided into Early and Late Ceramic periods. The Early Ceramic is distinguished by plain pottery with a very sandy fabric (e.g. Goose Creek Plain) fashioned into simple deep bowls and jars found in association with Gary and Kent dart points. Dating of this period is related to Marksville Stamped sherds found at 41PK21 and radiocarbon dates from the Jones Hill site all suggest dates of approximately 2,100 to 1,100 B.P. Examples of the Early Ceramic have been found in good context close to the project area at 41MQ4 and 41MQ6, both near Lake Conroe (Story 1990: 275).

The Late Ceramic is separated from the early period by the presence of arrow points, small drills, grog- and bone-tempered pottery as well as the inclusion of some Caddo ceramics. Radiocarbon dates from the Jones Hill site and thermoluminescene dating of pottery from the Crawford site dates this period from approximately 1,100 to 300 B.P (Story 1990: 275).

Settlement and subsistence for the Mossy Grove people in the Conroe-Livingston is thought to have been hunter/gatherer and similar to the rest of the upper Texas Coast. It remained generally unchanged from the Archaic period despite the addition of bow and arrow and ceramic technology. Agriculture is thought to not have been practiced, though later 18th century native groups such as the Bidai, Deadose and other inland native groups cultivated some crops. Camp sites were typically small intermittently used camps with little evidence of pit features or structures. At several larger sites, 41MQA6, Jones Hill, and Burris-1, remains of possible structures and middens suggest that these were main camp sites (Story 1990: 276). This is consistent with ethnographic evidence from the Karankawa, Akokisi, and possibly the Bidai who gathered together in large groups during the cold season and dispersed into bands during the summer (Aten 1984: 82). Karankawa occupations are characterized by a distinctive type of pottery, Rockport ware. Rockport pottery is tempered using calcined bone and is occasionally decorated using asphaltum (Ricklis 1995).

Protohistoric and Historic Period

The historic period begins with the initial contact between native people and European explorers. It can be divided up into three broad historical periods 1) Early European Exploration and Early Colonization (1500-1820), 2) Anglo Settlement and Texas Republic and Statehood (1820-1845), 3) Ante-Bellum, Civil War, and Reconstruction (1845 to 1880).

Early European Exploration

The first European to reach the Texas coast was the Spaniard Alonso Alavez de Pineda in 1519. He was sent on an expedition by the governor of Jamaica, Francisco de Garay to map the coast lines of Mexico. He sailed north from Vera Cruz, Mexico to Apalachee Bay, Florida before heading back to Jamaica (Freeman 1990: 367).

The first exploration of the Texas interior came with the shipwrecking of Panphilo de Narvaez's expedition and the subsequent travels of Alvar Nunez Cabeza de Vaca throughout Texas. The expedition wrecked off the coast of Texas, possibly landing on an island off the Galveston coast. Many of the survivors chose to leave and head back, but Cabeza de Vaca remained behind to trade with the local inhabitants. Eventually he made his way through Texas and northern Mexico to a Spanish colony on the Pacific coast (Freeman 1990: 367).

Cabeza de Vaca's description of the geography and natives of Florida as well as his hearing of large cities of gold in the southwest caused a more intensive exploration and colonization of lands north of Mexico. In 1539, Hernando de Soto set out for Florida and traveled throughout much of the eastern United States until his death close to the Mississippi River in 1542. Vasquez de Coronado set in search of the "Seven Cities of Cibola," exploring northern Texas and the American southwest. He failed to discover any treasure and returned to Mexico City in 1542 (Freeman 1990: 367).

Although, Texas and much of the southeast was claimed by Spain, the French began exploration and attempted colonization in the late 1600s. Rene Robert Cavelier, Sieur de la Salle proposed French colonization of the Mississippi River Valley. In 1682, he explored the Mississippi River and claimed its entire drainage basin for France. He returned in 1684 with colonists, but missed the mouth of the Mississippi River, landing in Matagorda Bay on the Texas coast. He founded St. Louis on Garcitas Creek and began exploration of Texas, possibly making it as far as the Rio Grande near present day Langtry. However, he was murdered by a one of his expedition members in 1687. Most of the inhabitants were killed by the Karankawas that same year (Freeman 1990: 368). La Salle's brother and a few others eventually made their way to Canada. La Salle's ship the Belle, which had sunk in 1686, was excavated in Matagorda Bay by the Texas Historical Commission and Texas A&M University in 1997.

The presence of the French along the Gulf Coast caused the Spanish to increase their colonization efforts in Texas. Much of the success of the French in North America

was due to their practice of economic interaction and intermarriage with the native groups instead of subjugation and religious conversion practiced by the Spanish. A system of missions was established on the Neches and the Angelina River in present day Nacogdoches County to quell French incursions into Texas. However, they were abandoned in 1719 following the outbreak of war between France and Spain that resulted in an increase in French trading and colonization along the Red River and Gulf Coast (Freeman 1990: 369).

During the middle of the eighteenth century the Spanish attempted to firm up their control of eastern Texas in response to the increased French trade with the natives along the Red River and the founding of New Orleans in 1718. However, the Spanish were never able to successfully establish a permanent colony or mission in eastern Texas. The area was abandoned by government decree and the Spanish retreated to San Antonio. Some Spanish inhabitants remained in east Texas, even establishing a colony in 1774 on the Trinity River. By 1803, Spain had ceded Louisiana to the French who in turn sold it a month later to the United States (Freeman 1990: 369).

By the late eighteenth century, not only French but American and English colonists began actively settling eastern and southeastern Texas. Shortly afterward, Mexico gained its independence from Spain with the help of some of the Anglos living in Texas.

Anglo Settlement, Texas Republic, and Annexation

Mexican independence caused a rush of immigrants from the east, mostly Anglo-Americans. In 1823, the Mexican government officially sanctioned the immigration of Catholic setters into Texas. Numerous Anglo-Americans received *emprassario* contracts allowing them to settle Anglo-Americans in Texas, including several who would go on to be important figures in Texas independence, including Stephen F. Austin and David G. Burnet (Freeman 1990: 373). Some of Austin's original colonists arrived at the estuary of the San Jacinto River and settled there in 1824, mistaking it as part of Austin's original *emprassario* allotment. Most would relocate to the colony on the Brazos River, while others, mostly merchants and boatman remained in the area to take advantage of the navigable water. Eventually, these people would successfully petition the Mexican government to include the land as part of Austin's grant. The area became important for trade and commerce since nearby Galveston Island was off limits to Anglo settlement.

By mid-1824, the state land commissioner, the Baron de Bastrop, began issuing titles to settlers living in the area. Included amongst those was John R. Harris who chose a site along Buffalo Bayou, the San Jacinto River, and the San Jacinto estuary. By 1826, he had laid out Harrisburg on his league where Brays Bayou joined Buffalo Bayou, the head of navigation. From here he began shipping operations to New Orleans and Tampico, in addition to running a saw and grist mill.

By 1830, the influx of Anglo-Americans into Texas became too great for the Mexican government, who subsequently outlawed Americans from settling in Texas,

effectively suspending *emprassario* contracts, though Austin managed to secure himself an exemption. The law did little to stem the tide of American immigration and it was repealed in 1833. However, by this point, the laws original intention and the establishment of Mexican custom houses at Fort Anahuac and Velasco caused the colonists to revolt forcing the Mexican Army from the area (Freeman 1990: 374). By 1833, Harrisburg was the hub of east-west roads.

Texas gained its independence from Mexico in 1836, following the Battle of San Jacinto, where Sam Houston's forces caught Mexican General Santa Ana off guard. The resulting defeat forced Mexico to sign a peace treaty in Velasco on May 14, 1836, establishing the Republic of Texas. The resulting peace and removal of immigration limitations caused an explosion in the populations of Texas especially along the coast, with many immigrants coming through Galveston and Matagorda (Freeman 1990: 374). Harris County was formed that same year by act of First Congress on December 22 along with the fledgling city of Houston as county seat and state capital. The boundaries included the original municipality of Harrisburg and also included Galveston Island.

Economic centers, focused on the coast, centered on Galveston, but trading posts began to stretch out into the interior as far west as Waco. Steam boat travel along some of the rivers also helped increase traffic to the interior of Texas. With the annexation of Texas by the United States in 1847, commercial traffic and immigration to Texas increased, and many began to move into the areas north and west of Houston settling small farms along Spring Creek in Montgomery County, west of the project area (Handbook of Texas Online, Accessed November 2006).

Ante Bellum, Civil War, and Reconstruction (1845 to 1880)

Early settlers prior to the civil war were drawn mainly from the southern states; bringing with them their black slaves. In addition to working on agricultural fields, slaves also worked on ranches, particularly in open ranges south of Buffalo Bayou.

After the war, settlement began to focus on land along the newly constructed rail roads. In 1890, land developers purchased land along the North Galveston, Houston, and Kansas City Railroad, in hopes of attracting people from the Midwest. As a result, the communities of Pasadena, Deer Park, and La Porte were formed.

Survey Methodology

The survey methodology was driven by the THC's letter dated February 5, 2003. The THC letter states that although "no archeological sites or historic buildings are recorded on the tract proposed for development..., the tract has never been surveyed for cultural resources". The letter continues, "it is likely that areas near drainages, especially Williams Gully, contain archeological sites, some of which may be eligible for inclusion in the National Register of Historic Places." Accordingly, GTI archeologists focused shovel testing efforts on both sides of Williams Gully. The probability for archeological

sites to be present within the project area decreases as the distance from this water source increased. Therefore, GTI proposed to systematically conduct shovel tests in the eastern and western portions of the project area with shovel test distances greater than 30 meters.

All soil excavated from shovel tests were screened through ¼ inch (0.635 cm) hardwire cloth. Field notes were maintained on terrain, vegetation, soils, land forms, cultural material observed, etc. Photographs with a photo log were completed when appropriate. Shovel test location data was acquired via WAAS enabled Global Positioning System (GPS) units using the UTM coordinate system and map datum NAD27.

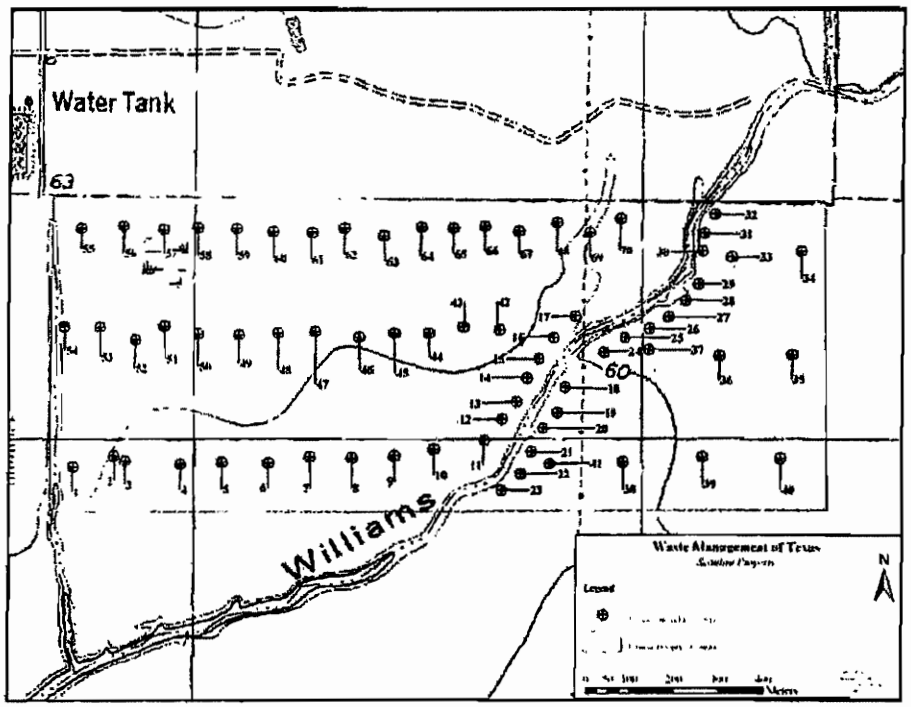

Figure 6: Locations of the Shovel Tests within the APE

Survey Results

The project area was examined by archaeologists from GTI (Figure 6 and Appendix A.). The portion of the project area located along Williams Gully was believed to have high site potential. Shovel tests were excavated at a spacing of approximately 30 meters apart along both sides of the gully except in the northern portion of the project area where recent rains prohibited shovel testing. Additional shovel testing was conducted in the woodlands away from the channel.

A total of seventy shovel tests were excavated within the APE. Archeologists excavated the shovel tests an average of at least 30 cm, and several shovel tests were

excavated 50 cm to 100 cm. Many shovel test locations demonstrated the characteristic dark gray clay ability to retain moisture preventing deeper observation.

The banks of the gully were thoroughly examined for cultural resources. Twenty-two shovel tests were excavated in this portion of the project area. Because the project area includes a confluence where an unnamed tributary drains into Williams Gully, archeologists also focused a greater number of shovel tests in this western portion of the project area compared to the eastern portion of the project area. Thirty-nine shovel tests were excavated in the general project area where the confluence was present. The remaining nine shovel tests were excavated in the eastern portion of the project area.

Archeologists did not observe any above ground evidence of cultural materials. More importantly, archeologists did not observe buried cultural deposits associated with historic or prehistoric archeological sites.

Figure 7: Shovel Test No. 38.

Accordingly, results of the intensive survey indicated that there are no archeological deposits within the project APE that may be considered eligible for listing in the National Register of Historic Places.

Recommendations

On behalf of Waste Management Inc., Northrup Associates, Inc. requested that GTI conduct an intensive archeological survey of a 300 acre project area in Harris

County, Texas. The project consisted of 70 shovel tests to determine if cultural materials were within the APE. Results of these investigations were negative. It is GTI's opinion that there are no archeological sites within the project boundaries and that the proposed project will have No Effect on cultural resources eligible for listing in the National Register of Historic Places. Further, it is GTI's opinion that the project should be allowed to proceed as planned, provided the location is not revised.

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Appendix A:
Shovel Test Log.

Intensive Archeology Survey for 300 Acre WM Scanlin Project: Shovel Test Log

SHOVEL TEST NUMBER	CMBS	SOIL DESCRIPTIONS	COMMENTS
1	0-30	Dark gray clay	Soil moist
2	0-30	Dark gray clay	Water at 30 CMBS
3	0-30	Dark gray clay	Water at 30 CMBS
4	0-30	Dark gray clay	Soil moist
5	0-30	Dark gray clay	Soil moist
6	0-30	Dark gray clay	Soil moist
7	0-30	Dark gray clay	Soil moist
8	0-30	Dark gray clay	Soil moist
9	0-40	Dark gray clay	Soil moist
10	0-5	Dark gray clay loam	
10	5-35	Very dark gray clay	
11	0-10	Dark gray clay loam	Soil disturbed
11	10-50	Dark gray clay loam	Rodent burrow observed
12	0-5	Dark gray clay loam	
12	5-40	Very dark gray clay	
13	0-40	Dark gray clay	
14	0-30	Light brown loam	Soil disturbed,
15	0-55	Very dark gray clay loam	Soil disturbed
16	0-45	Very dark clay loam	
17	0-30	Dark gray clay	
18	0-43	Dark gray clay	
19	0-45	Very dark gray clay loam	
20	0-5	Dark gray clay loam	
20	5-50	Very dark gray clay	
21	0-45	Dark gray clay	
22	0-40	Very dark gray clay loam	
23	0-35	Dark gray clay loam	
24	0-15	Light brown clay loam	Soil disturbed,
24	15-33	Very dark gray clay	
25	0-15	Very dark gray clay loam	White calcareous mottling throughout soil
25	15-40	Dark brown mottled with orange clay	
26	0-30	Light brown mottled clay loam	Soil disturbed,

SHOVEL TEST NUMBER	CMBS	SOIL DESCRIPTIONS	COMMENTS
26	30-45	Dark gray clay with light brown mottling	
27	0-35	Dark gray clay with light brown mottling	Disturbed
27	35-40	Dark gray clay loam	
28	0-5	Mottled tan sandy clay loam	
28	5-45	Mottled yellow brown sandy clay	
29	0-45	Light yellow brown clay loam mottled with light gray clay	
30	0-30	Dark gray clay loam	Very wet soil
31	0-30	Dark gray clay loam	Very wet soil
32	0-35	Dark gray clay loam	Very wet soil
33	0-30	Dark gray clay loam	Very wet soil
34	0-30	Dark gray clay loam	Very wet soil
35	0-45	Dark gray clay loam	Very wet soil
36	0-45	Light brown mottled clay loam	
36	45-50	Dark gray clay	
37	0-30	Light brown mottled clay loam	
37	30-45	Dark gray clay	
38	0-30	Mottled light brown clay loam	
39	0-100	Very light brown clay	Large open animal burrow
40	0-40	Dark gray clay	
41	0-40	Light yellow sandy clay loam	
41	40-45	Light yellow sandy clay	
42	0-40	Light yellow sandy clay loam	
42	40-45	Light yellow sandy clay	
43	0-55	Light yellow sandy clay loam	
44	0-20	Dark gray clay loam	
45	0-30	Dark gray clay	
46	0-30	Dark gray clay	
47	0-35	Dark gray clay	

SHOVEL TEST NUMBER	CMBS	SOIL DESCRIPTIONS	COMMENTS
48	0-40	Dark gray clay	
49	0-10	Very dark gray silty clay	
49	10-35	Dark gray clay	
50	0-30	Dark gray clay	
51	0-45	Dark gray clay	
52	0-30	Dark gray clay	
53	0-40	Dark gray clay	
54	0-5	Very dark gray silty clay	
54	5-30	Dark gray clay	
55	0-45	Dark gray clay	
56	0-30	Dark gray clay	
57	0-35	Dark gray clay	
58	0-40	Dark gray clay	
59	0-35	Dark gray clay	
60	0-8	Very dark gray silty clay	
60	8-30	Dark gray clay	
61	0-45	Dark gray clay	
62	0-30	Dark gray clay	
63	0-40	Dark gray clay	
64	0-35	Dark gray clay	
65	0-20	Dark gray clay	
66	0-10	Very dark gray silty clay	
66	10-40	Dark gray clay	
67	0-30	Dark gray clay	
68	0-30	Dark gray clay	
69	0-40	Dark gray clay	
70	0-35	Dark gray clay	

ATASCOCITA RECYCLING AND DISPOSAL FACILITY

APPENDIX IIG
TPDES PERMIT

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*
Margaret Hoffman, *Executive Director*

RECEIVED NOV 2 1 2002

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 01, 2002

WASTE MANAGEMENT OF TEXAS INC
106 GENOA RED BLUFF RD
HOUSTON, TX 77034-3909

RE: Permit Number TXR05N515 for the facility located at:
3623 WILSON RD, HUMBLE, TX 77396-3645

Dear Permittee:

Your notice of intent for authorization under the general permit for discharge of storm water associated with industrial activities has been received. Enclosed is a certificate that includes the permit number that was assigned to your facility.

Please be aware that the current permit will be amended to include additional reporting requirements. Public notice of the amendment will be published in the Texas Register, but you will not be directly contacted, when the amended permit is issued. A copy of the revised permit and information regarding the revisions will be included on the Texas Commission on Environmental Quality (TCEQ) storm water web page.

The permit was amended in order to meet federal storm water permit program requirements. Facilities that are currently required to sample and meet the numeric effluent limitations in Part V of the permit titled ("Specific Requirements for Industrial Activities") will be required to submit the results of laboratory analyses on Discharge Monitoring Reports (DMR) each year. All facilities that are currently required to sample and meet the numeric effluent limitations for hazardous metals in Part III, Section D of the permit titled ("Numeric Effluent Limitations") will be required to record results. If the results of the laboratory analyses exceed the limitations in the permit, the DMR form must be submitted on an annual basis. These DMR forms will now be included as a part of the amended permit, and you may duplicate these forms as needed. The revised permit, the accompanying DMR forms, and additional information is available at the following web site: www.tnrcc.state.tx.us/permitting/waterperm/wwperm/indstry.html

If you have any questions regarding the coverage of your storm water permit, you may contact the Storm Water & General Permits Team at (512) 239-4700, or obtain information on the storm water web site listed above.

Sincerely,

Michael D. Cowan, Director
Water Quality Division

Enclosure

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Texas Pollutant Discharge Elimination System
Storm Water Multi-Sector General Permit

November 06, 2002

The Notice of Intent (NOI) for the facility listed below was received on May 23, 2002. The intent to discharge storm water associated with industrial activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) storm water multi-sector general permit TXR050000 is acknowledged. Your facility's TPDES multi-sector storm water general permit number is:

TXR05N515

TCEQ's storm water multi-sector general permit requires certain storm water pollution prevention and control measures, possible monitoring and reporting, and periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a storm water pollution prevention plan (SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the storm water multi-sector general permit, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

FACILITY:
3823 WILSON RD
HUMBLE, TX 77396-3648

OWNER/OPERATOR:
WASTE MANAGEMENT OF TEXAS INC
100 GENOA RED BLUFF RD
HOUSTON, TX 77034-3909

This permit expires on August 20, 2006, unless otherwise amended. For additional information, see the TCEQ web site at www.tceq.state.tx.us or contact the Storm Water and General Permits Team by telephone at (512) 239-3700. A copy of this document should be kept with your SWP3.

ATASCOCITA RECYCLING AND DISPOSAL FACILITY

APPENDIX IIH
FEDERAL AVIATION ADMINISTRATION DOCUMENTATION

BIGGS & MATHEWS ENVIRONMENTAL
Consulting Engineers • Hydrogeologists
Mansfield • Arlington • Dallas • Wichita Falls

January 29, 2010

Ms. Faye Nedderman
Texas ADO, ASW - 650
Executive Technical Assistant
Federal Aviation Administration (FAA)
2601 Meacham Boulevard
Fort Worth, Texas 76137

Re: Waste Management of Texas, Inc. (WMTX)
Atascocita Recycling and Disposal Facility (RDF)
Harris County, Texas; TCEQ Permit No. MSW 1307C
Proposed Permit Amendment Application
Documentation of Coordination Relating to Airport Safety
FAA File No. 93-015TX

Dear Ms. Nedderman:

We have received correspondence from FAA dated December 9, 2009, in response to our letter dated October 23, 2009, concerning the proposed expansion of the existing Atascocita RDF. Based on our discussion, we are providing you with an additional copy of the October 23, 2009 letter and a copy of your December 9, 2009 response letter to complete our files. We understand that FAA "has no objection" to the proposed expansion provided the facility continues implementing the Bird Control Plan Protocol throughout the life of the facility.

Please find attached a copy of the October 23, 2009 coordination letter and a copy of the FAA response letter dated December 9, 2009. We appreciate your time in discussing the proposed project.

Please call or e-mail me at 817-563-1144 or kwelch@biggsandmathews.com if you have any questions or need additional information.

Sincerely,

BIGGS & MATHEWS ENVIRONMENTAL, INC.

Kenneth J. Welch, P.E.
Senior Engineer

Attachments: FAA Correspondence – December 9, 2009
BME Correspondence – October 23, 2009

cc: Mr. Charles A. Rivette, P.E., WMTX (1)
Mr. Carlos A. Ortiz, City of Houston (1)
Mr. Eric Potts, City of Houston (1)
Mr. John Silva, City of Houston (1)

M:\Proj\101\17\102\P\Coordination Ltr - FAA.doc

U.S. Department
of Transportation
Federal Aviation Administration

Airports Division
Southwest Region
Arkansas, Louisiana,
New Mexico, Oklahoma,
Texas

2601 Meacham Boulevard
Fort Worth, Texas 76137

December 9, 2009

Mr. Kenneth J. Welch, P.E.
Senior Engineer
Biggs and Mathews Environmental
7425 S. Hampton Road
Dallas, TX 75232

Dear Mr. Welch:

Subject: Proposed Permit Amendment
Atascocita Recycling and Disposal Facility
FAA # 93-015TX

This is in response to your letter of October 23, 2009, about a proposed expansion of the Atascocita Recycling and Disposal Facility. The facility is located about 4.3 miles southeast of the George Bush Intercontinental Airport in Harris County, Texas.

The landfill has been in operation for many years. The proposed horizontal expansion is on the eastern landfill boundary farthest from the airport.

We have no objection to the proposed expansion from the standpoint of potential wildlife hazards to aircraft operations, providing:

a. the landfill continue implementing the Bird Control Plan Protocol throughout the life of the facility,

b. and, any increase in bird activity that might be hazardous to safe aircraft operations will result in prompt mitigation actions and/or closure of the facility.

We have assigned this proposed landfill site No. 93-015TX. Please use this number in any future correspondence about this facility. Thank you for coordinating this project with the Federal Aviation Administration. If you have any questions, please call me at (817) 222-5656.

Sincerely,

Original Signed By:
Faye Neddorman

Faye Nedderman
Executive Technical Assistant

cc:
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3083

Texas Department of Transportation
Division of Aviation
125 East 11th Street
Austin, TX 78701-2483

ASW-650

BIGGS & MATHEWS ENVIRONMENTAL
Consulting Engineers • Hydrogeologists
Mansfield • Arlington • Dallas • Wichita Falls

October 23, 2009

Mr. Joseph G. Washington
Airports Division, Safety and Standards Branch
U.S. Department of Transportation
Federal Aviation Administration (FAA)
2601 Meacham Boulevard
Fort Worth, Texas 76137

Re: Waste Management of Texas, Inc. (WMTX)
Atascocita Recycling and Disposal Facility (RDF)
Proposed Permit Amendment Application
Documentation of Coordination Relating to Airport Safety
FAA File No. 93-015TX

Dear Mr. Washington:

On behalf of Waste Management of Texas, Inc. (WMTX), Biggs & Mathews Environmental is preparing a permit amendment application for a horizontal expansion of the Atascocita RDF located in Harris County, Texas. Texas Commission on Environmental Quality rules (30 TAC §330.61(i)(5)) require documentation of coordination with the Federal Aviation Administration for impacts of landfills on airport safety. Prior FAA correspondence for this facility that authorized expansion of the current permitted landfill is filed under FAA File No. 93-015TX.

The Atascocita RDF is a Type I municipal solid waste landfill located approximately 4.3 miles southeast of Houston/George Bush Intercontinental Airport, as shown on attached Figure 1B – FAA Aeronautical Map. The site's coordinates are approximately 29°57'45" north latitude and 95°14'20" west longitude. The site's location in relation to highways in Harris County is shown on attached Figure 1A – General Highway Map – Harris County.

WMTX has coordinated and met with the Houston/George Bush Intercontinental Airport to confirm that the proposed horizontal expansion will occur on the eastern portion of the existing facility boundary, farther away from the airport. In accordance with prior FAA correspondence, WMTX has adopted a "Bird Control Plan Protocol" at the Atascocita RDF to eliminate bird hazards to aircrafts and will continue to follow the plan.

The maximum landfill elevations for the proposed permitted expansion area will not exceed maximum landfill elevations for the existing permitted area, as shown in Table 1 below. Based on prior correspondence, the FAA has determined that the maximum landfill elevations for the existing permitted area will not exceed obstruction standards and will not be a hazard to air navigation.

Table 1 - Maximum Landfill Elevations

Existing Area	Proposed Area
186 feet AGL	172 feet AGL
256 feet AMSL	242 feet AMSL

Please indicate in writing if the facility's horizontal expansion has an impact on airport operations at the Houston/George Bush Intercontinental Airport. We believe that the proposed horizontal expansion at the Atascocita RDF will not exceed obstruction standards and will not be a hazard to

1700 Robert Road, Suite 100 • Mansfield, Texas 76063 • 817-563-1144 • Fax 817-563-1224

air navigation, as depicted on attached Figures 1 through 4 and based on the information provided in this letter.

Please call or e-mail me at 817-563-1144 or kwelch@biggsandmathews.com if you have any questions or need additional information. We look forward to your response.

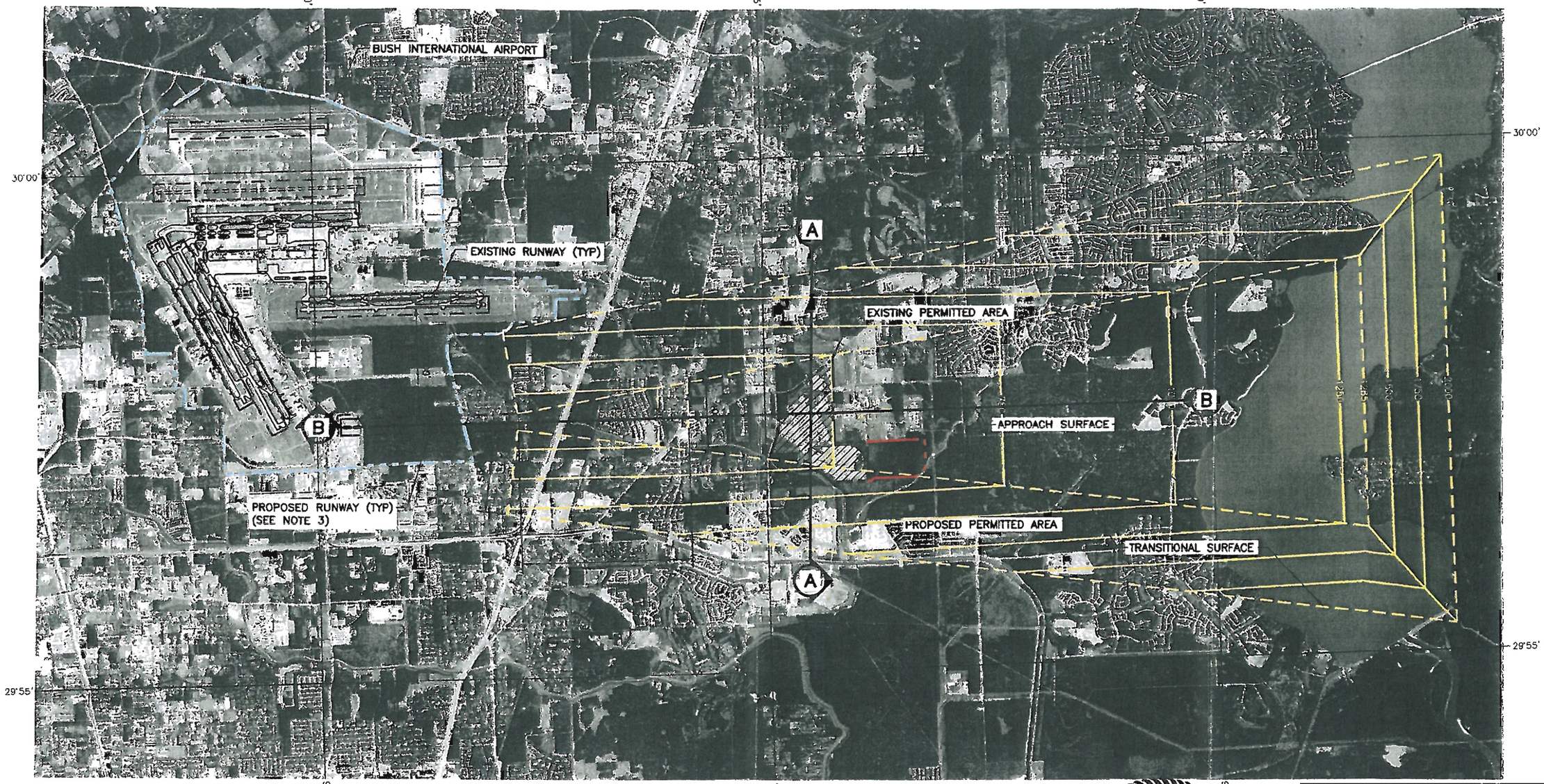
Sincerely,

BIGGS & MATHEWS ENVIRONMENTAL, INC.

Kenneth J. Welch, P.E.
Senior Engineer

Attachments: Figure 1 – FAA Protection Zones – Horizontal and Conical Surfaces
Figure 1A – General Highway Map – Harris County
Figure 1B – FAA Aeronautical Map
Figure 2 – FAA Protection Zones – Horizontal and Conical Surfaces
Figure 3 – FAA Protection Zones – Cross Section A-A'
Figure 4 – FAA Protection Zones – Cross Section B-B'

cc: Mr. Chuck Rivette, WMTX (1)
Mr. Carlos Ortiz, City of Houston (1)
Ms. Cathy Kimich, City of Houston (1)



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LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- 30°00' LATITUDE–LONGITUDE GRID
- EXISTING RUNWAY
- PROPOSED RUNWAY

0 3000 6000
SCALE IN FEET

NOTES:

1. LATITUDE–LONGITUDE GRID DERIVED FROM TEXAS STATE PLANE COORDINATE SYSTEM SOUTH CENTRAL ZONE (NAD 27 DATUM).
2. AERIAL PHOTOGRAPH DOWNLOADED FROM HGAC WEBSITE IN NOVEMBER 2008.
3. FAA APPROACH AND TRANSITIONAL SURFACES HAVE BEEN PREPARED IN ACCORDANCE WITH 14CFR77.25.
4. PROPOSED RUNWAY LOCATIONS COMPILED FROM 2006 BUSH INTERCONTINENTAL AIRPORT MASTER PLAN.
5. PROPOSED RUNWAY ELEVATION ASSUMED TO BE 85.0 FT–MSL.

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER
10/23/2009

ISSUED FOR AGENCY COORDINATION PURPOSES

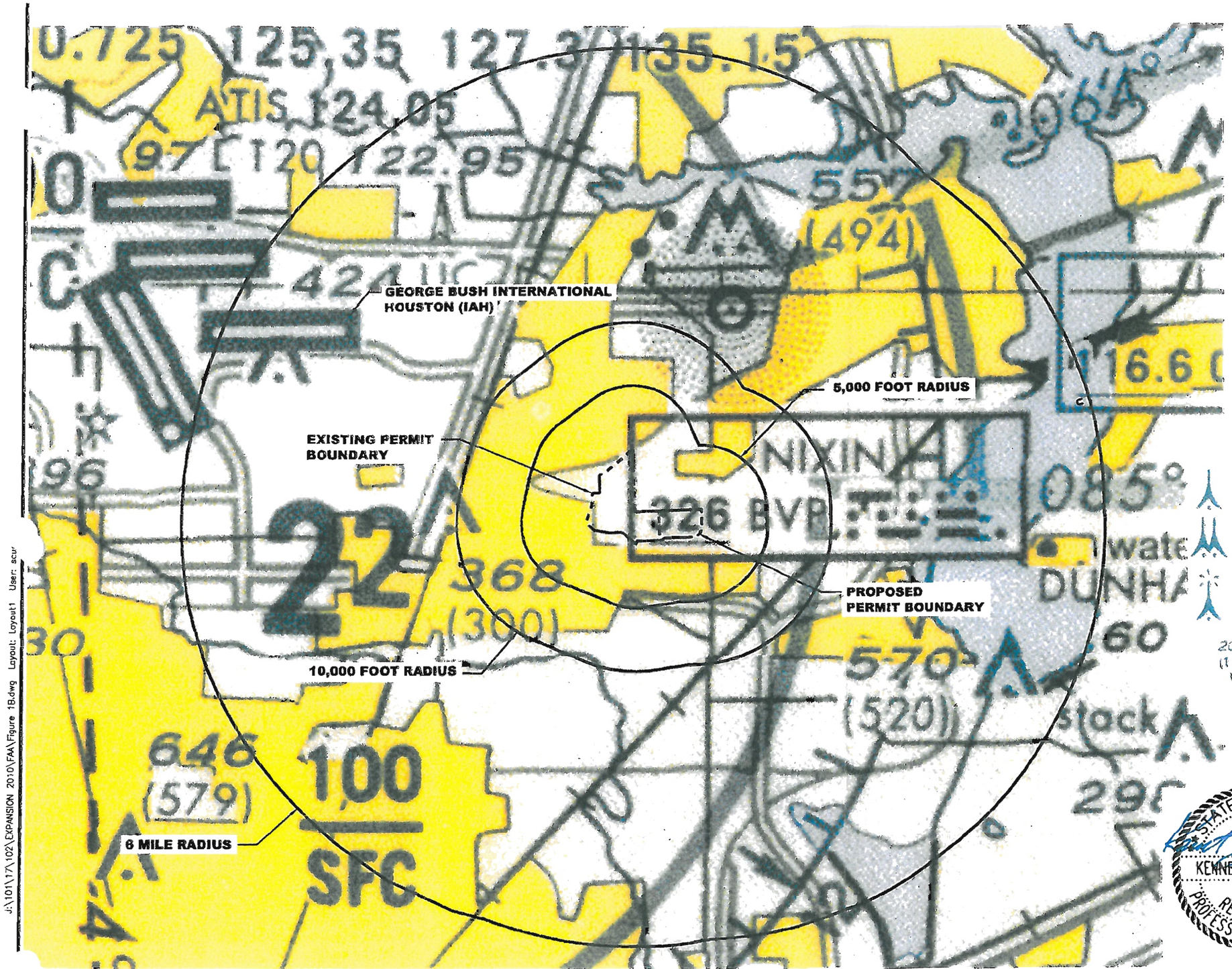
REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

FAA PROTECTION ZONES HORIZONTAL AND CONICAL SURFACES

WASTE MANAGEMENT OF TEXAS, INC. ATASCOCITA RECYCLING AND DISPOSAL FACILITY MAJOR PERMIT AMENDMENT

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD
DALLAS • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-258 TBPG FIRM NO. 50222

DSN. KJW	DATE : 10/09	FIGURE	
DWN. SRC	SCALE : GRAPHIC	1	
CHK. KJW	DWG : FAA_ApproachSurf.dwg		



0 4000 8000
SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- 6 MILE RADIUS

AIRPORTS

Other than hard-surfaced runways

Seaplane Base

Hard-surfaced runways greater than 8,069 ft. or several runways less than 8,069 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 in their true relationship. Airports may be positioned or oriented for symbol clarity.

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

TOPOGRAPHIC INFORMATION

Roads & Road Markers

Railroad

Power Transm. 35 ft. or more

Aerial Cable

Landmark Feature: stadium, factory, school, golf course, etc.

Outdoor Theater

Lookout Tower
618 (Elev. Ifon Base of Tower)

CG Coast Guard Station

NOTES:

1. THE ONLY PUBLIC-USE AIRPORT LOCATED WITHIN SIX MILES IS THE GEORGE BUSH INTERNATIONAL AIRPORT, LOCATED APPROXIMATELY 4.3 MILES NORTHEAST OF THE FACILITY.
2. BASE MAP IS FAA SECTIONAL AERONAUTICAL CHART HOUSTON, 81st EDITION, DEATED MARCH 13, 2008.

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER
10/23/2009

ISSUED FOR AGENCY COORDINATION PURPOSES

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

FAA AERONAUTICAL MAP

WASTE MANAGEMENT OF TEXAS, INC.
ATASCOCITA RECYCLING AND DISPOSAL FACILITY
MAJOR PERMIT AMENDMENT

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

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

DSN. KJW	DATE : 10/09	FIGURE	
DWN. SRC	SCALE : GRAPHIC	1B	
CHK. KJW	DWG : Figure 1B.dwg		

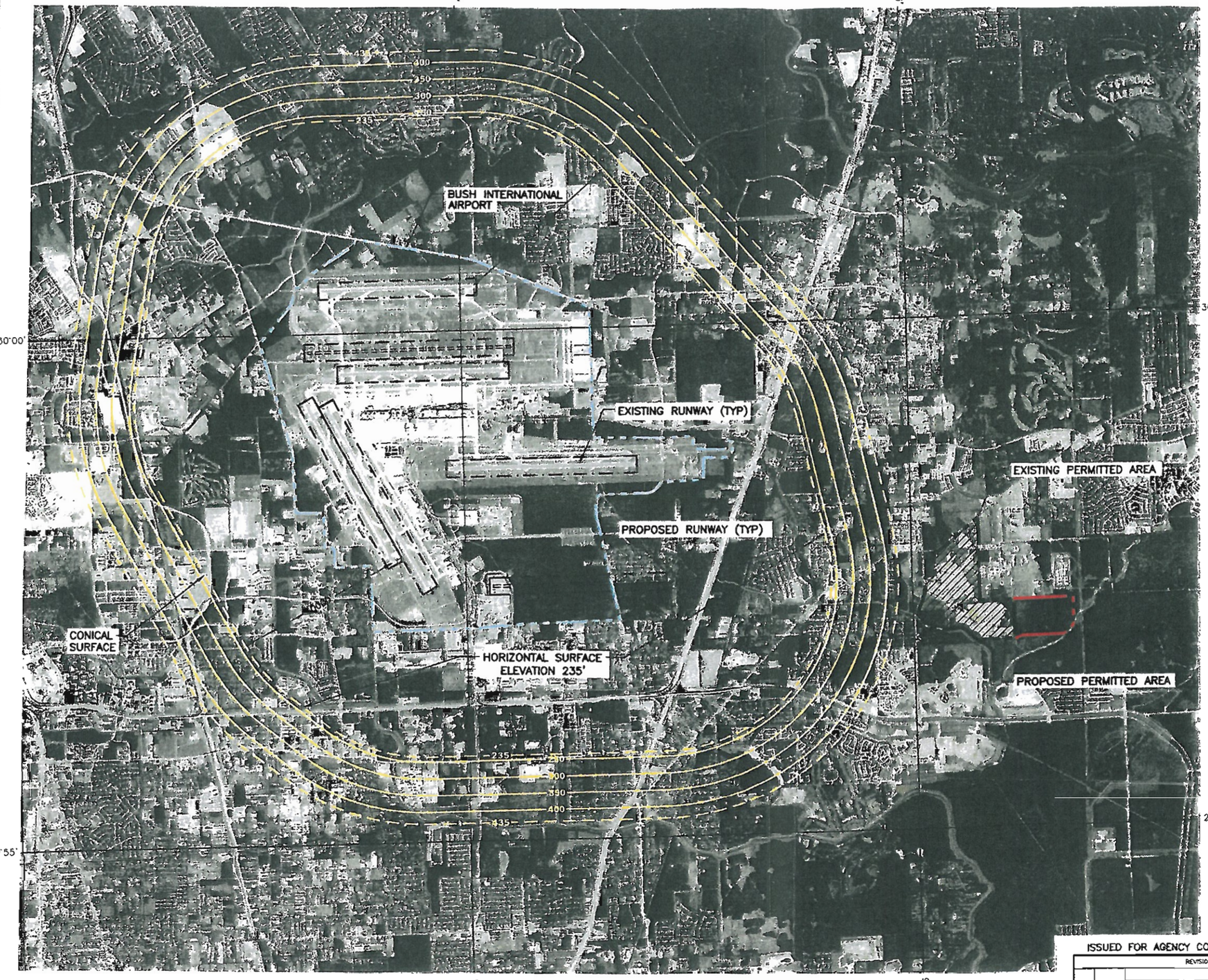
J:\101\17\102\EXPANSION 2010\FAA\Figure 1B.dwg Layout: Layout1 User: scur

95°20'

95°15'

30°00'

29°55'



0 3000 6000

SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- 30°00" LATITUDE–LONGITUDE GRID
- EXISTING RUNWAY
- PROPOSED RUNWAY

NOTES:

1. LATITUDE–LONGITUDE LINES DERIVED FROM TEXAS STATE PLANE COORDINATE SYSTEM SOUTH CENTRAL ZONE (NAD 27 DATUM).
2. AERIAL PHOTOGRAPH DOWNLOADED FROM HGAC WEBSITE IN NOVEMBER 2008.
3. PROPOSED RUNWAY LOCATIONS COMPILED FROM 2006 BUSH INTERNATIONAL AIRPORT MASTER PLAN.
4. FAA HORIZONTAL AND CONICAL SURFACES HAVE BEEN PREPARED IN ACCORDANCE WITH 14CFR77.25.

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED PROFESSIONAL ENGINEER

10/23/2009

ISSUED FOR AGENCY COORDINATION PURPOSES

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

FAA PROTECTION ZONES HORIZONTAL AND CONICAL SURFACES

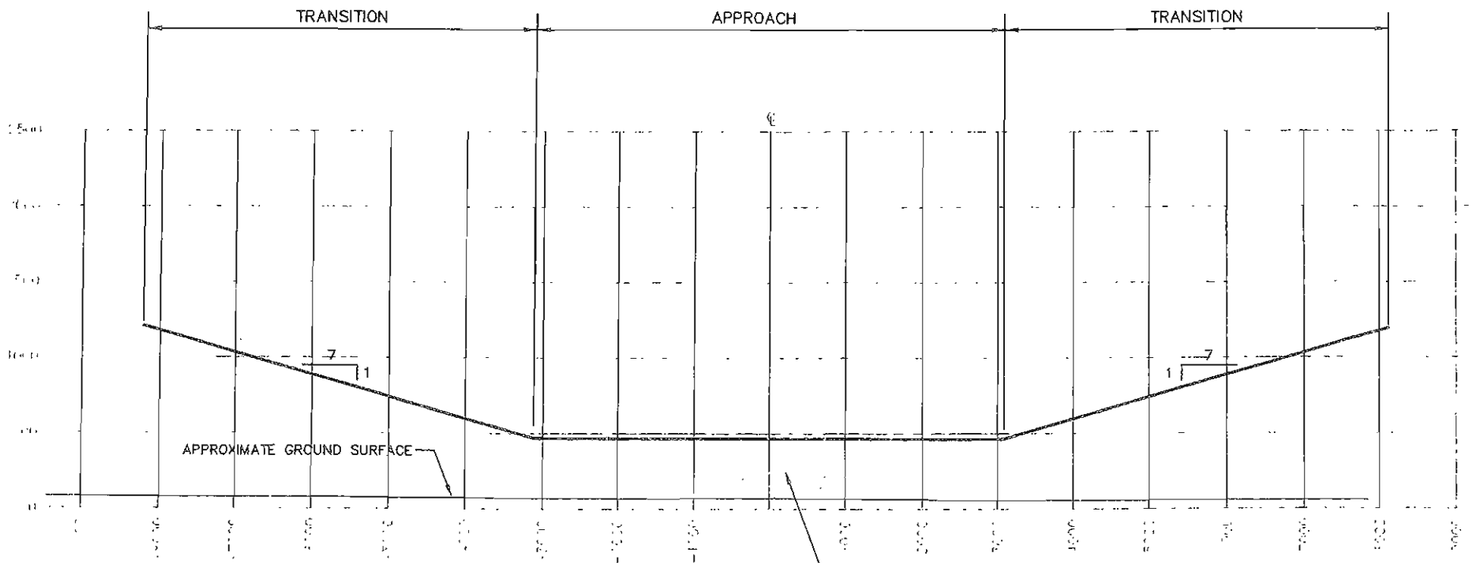
WASTE MANAGEMENT OF TEXAS, INC. ATASCOCITA RECYCLING AND DISPOSAL FACILITY MAJOR PERMIT AMENDMENT

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

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

DSN. KJW	DATE : 10/09	FIGURE	
DWN. SRC	SCALE : GRAPHIC	2	
CHK. KJW	DWG : FAA_HorConSurf.dwg		

J:\101\17\102\EXPANSION 2010\FAA\FAA_HorConSurf.dwg Layout: Layout1 User: scundiff



SECTION A – A

0 1000 2000
SCALE IN FEET
HORIZONTAL

0 500 1000
SCALE IN FEET
VERTICAL

NOTES:

1. PLEASE NOTE THAT THE EXISTING AND PROPOSED LANDFILL SECTIONS AND ELEVATIONS ARE APPROXIMATE AND ARE SHOWN FOR RELATIVE DISTANCE FROM FAA RESTRICTED AREAS ONLY.
2. FAA APPROACH AND TRANSITIONAL SURFACES HAVE BEEN PREPARED IN ACCORDANCE WITH 14CFR77.25.

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER
10/23/2009

ISSUED FOR AGENCY COORDINATION PURPOSES

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

FAA PROTECTION ZONES CROSS SECTION

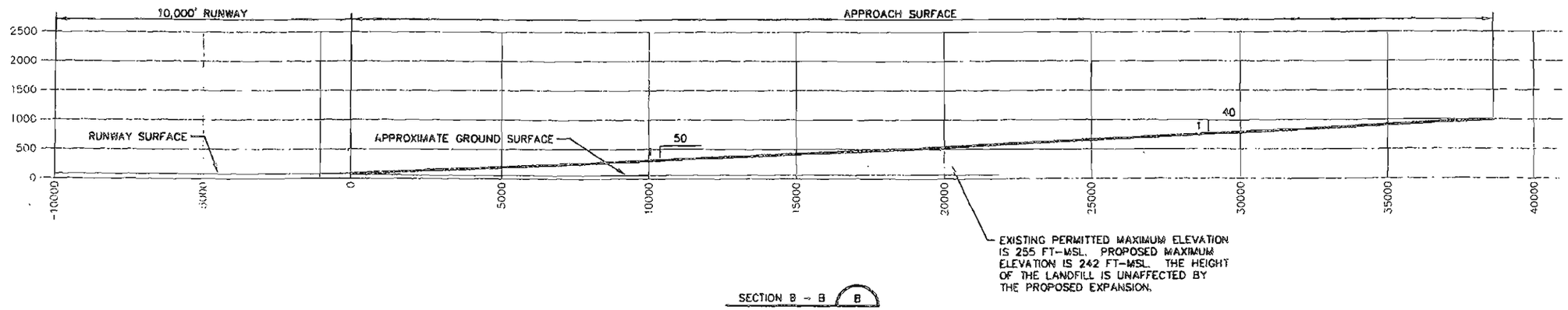
WASTE MANAGEMENT OF TEXAS, INC. ATASCOCITA RECYCLING AND DISPOSAL FACILITY MAJOR PERMIT AMENDMENT

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

DSN. KJW	DATE : 10/09		FIGURE
DWN. SRC	SCALE : GRAPHIC		3
CHK. KJW	DWG : FAA_SectionA.dwg		

J:\101\17\102\EXPANSION 2010\FAA\FAA_SectionA.dwg Layout: Layout1 User:

(IH-10



NOTES:

1. PLEASE NOTE THAT THE EXISTING AND PROPOSED LANDFILL SECTIONS AND ELEVATIONS ARE APPROXIMATE AND ARE SHOWN FOR RELATIVE DISTANCE FROM FAA RESTRICTED AREAS ONLY.
2. FAA APPROACH AND TRANSITIONAL SURFACES HAVE BEEN PREPARED IN ACCORDANCE WITH 14CFR77.25.

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER

10/23/2009

ISSUED FOR AGENCY COORDINATION PURPOSES

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

FAA PROTECTION ZONES CROSS SECTION

WASTE MANAGEMENT OF TEXAS, INC.
ATASCOCITA RECYCLING AND DISPOSAL FACILITY
MAJOR PERMIT AMENDMENT

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

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

DSN. KJW	DATE : 10/09	FIGURE	
DWN. SRC	SCALE : GRAPHIC	4	
CHK. KJW	DWG : FAA_SectionB.dwg		

ATASCOCITA RECYCLING AND DISPOSAL FACILITY

APPENDIX III
HOUSTON-GALVESTON AREA COUNCIL OF GOVERNMENTS DOCUMENTATION

BIGGS & MATHEWS ENVIRONMENTAL
Consulting Engineers • Hydrogeologists
Mansfield • Arlington • Dallas • Wichita Falls

September 13, 2010

Ms. Cheryl Mergo
Solid Waste Program Coordinator
Houston-Galveston Area Council
P.O. Box 22777
Houston, Texas 77227-2777

Re: Compliance with the Regional Solid Waste Management Plan
MSW Type I Landfill Expansion
Atascocita Recycling and Disposal Facility
Harris County, Texas

Dear Ms. Mergo:

Biggs and Mathews Environmental (BME), on behalf of Waste Management of Texas, Inc., has prepared a permit amendment application for the Atascocita Recycling and Disposal Facility, located at 3623 Wilson Road, Humble, Texas (TCEQ Permit No. 1307D). The proposed landfill expansion consists of a horizontal expansion of the landfill to the east of the current permitted area into property owned by WMTX. The permit boundary will increase to a total area of 647.1 acres. This increase includes a 27.3 acre deduction in the southwest corner of the current permit boundary, and an increase of 170.7 acres to the east of the current permit boundary. The waste disposal footprint will increase to a total of 423.7 acres. The total non-fill areas will be increased to 223.4 acres.

In accordance with 30 TAC §330.61(p), we are requesting documentation from the Houston-Galveston Area Council (H-GAC) indicating that the Atascocita Recycling and Disposal Facility permit amendment application is in compliance with the H-GAC Regional Solid Waste Management Plan, 2002-2020. The following information is attached to this letter for your review.

- Parts I and II of the TCEQ Registration Application
- Five-year compliance history of the applicant and its owner for all similar MSW facilities owned and operated by the owner in the Houston-Galveston region
- Location maps of the proposed facility

1700 Robert Road, Suite 100 • Mansfield, Texas 76063 • 817-563-1144 • Fax 817-563-1224

The proposed expansion has been designed in accordance with Texas Commission on Environmental Quality (TCEQ) rules and regulations for a Type I facility. Consistent with §330.61(p) of the TCEQ rules and regulations, this letter documents that a review letter has been requested from H-GAC for compliance with the Regional Solid Waste Plan.

If you require additional information or further assistance, please contact me at 817-563-1144, or by e-mail at kwelch@biggsandmathews.com.

Sincerely,

BIGGS & MATHEWS ENVIRONMENTAL
TBPE No. F-256 ♦ TBPG No. 50222

Kenneth J. Welch, P.E.
Principal Engineer

Attachments: Appendix A – Parts I & II of Atascocita RDF Permit Amendment Application
Appendix B – 5-Year Compliance History
Appendix C – Site Location Maps

cc: Mr. Steve Jacobs, Waste Management of Texas
Mr. Chuck Rivette, P.E, Waste Management of Texas

APPENDIX A

PARTS I AND II OF ATASCOCITA RDF PERMIT AMENDMENT APPLICATION

SEE ENCLOSED BINDER

APPENDIX B

5-YEAR COMPLIANCE HISTORY

You asked about compliance histories for site ID number, RN100216142, and all affiliated customers.

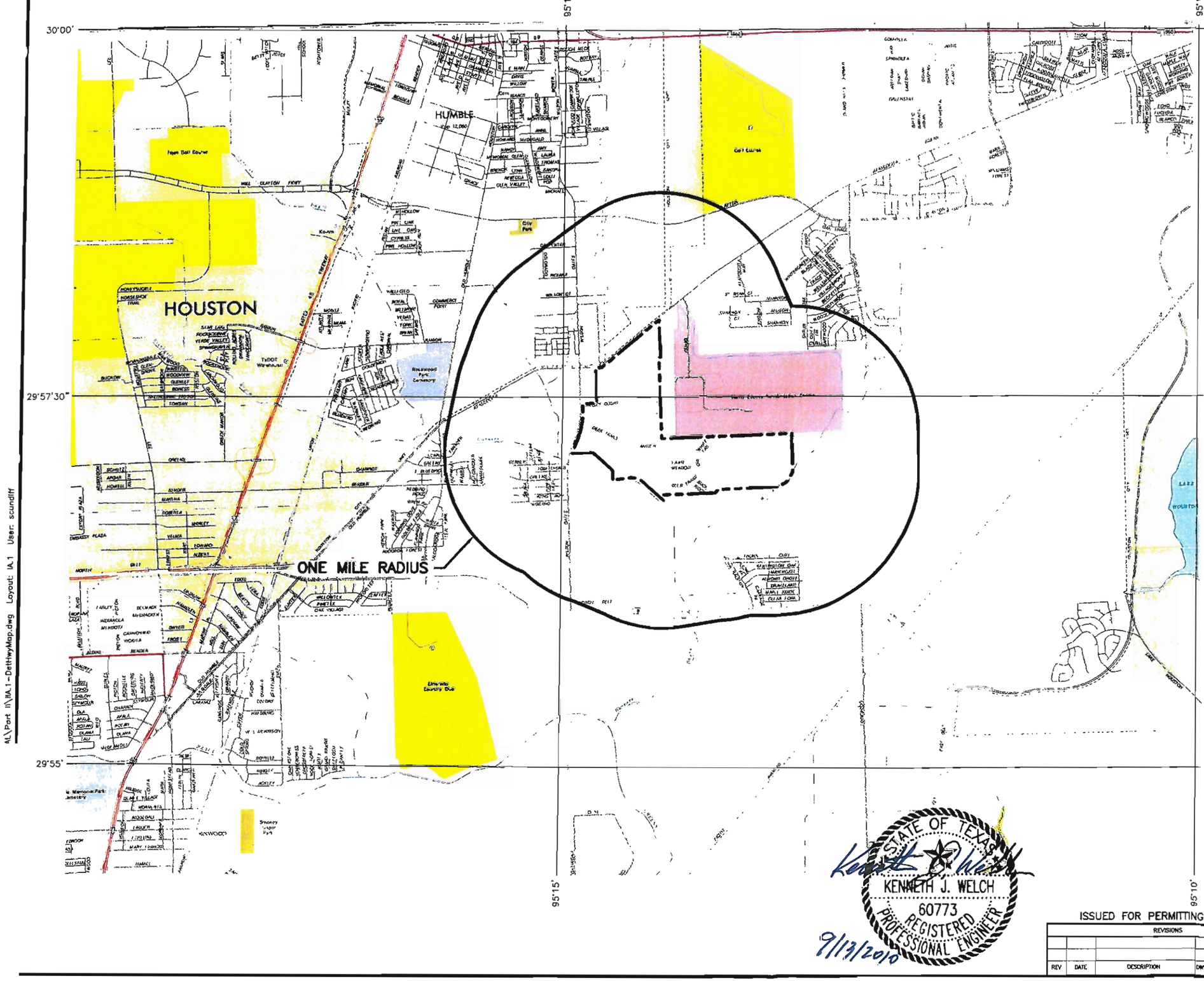
The list below is not sorted.

Customer	Site Associated with This Customer					Compliance History for Customer at this Site (If no Site appears in thesame row, this is the Customer's overall compliance history.)			
	Name	City or Nearest City	County	TCEQ Region	Related Numbers	Rating	Classification	Date Rated	Date Posted
WASTE MANAGEMENT OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 5X2600574 ▪ 1526 ▪ TXD016673147 ▪ H1307	1.44	AVERAGE	09/01/2008	10/01/2009
WASTE CORPORATION OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 35981 ▪ 1307A	0.50	AVERAGE	09/01/2009	10/01/2009
WASTE MANAGEMENT OF TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307A	0	HIGH	09/01/2009	10/01/2009
WASTE MANAGEMENT OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 35981 ▪ 35981 ▪ 81010	1.44	AVERAGE	09/01/2008	10/01/2009
WASTE CORPORATION OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307C	0.50	AVERAGE	09/01/2008	10/01/2009
WASTE MANAGEMENT OF TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307C	0	HIGH	09/01/2008	10/01/2009
WASTE MANAGEMENT OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307B	1.44	AVERAGE	09/01/2009	10/01/2009
WASTE MANAGEMENT OF TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 2112	0	HIGH	09/01/2008	10/01/2009
WASTE CORPORATION OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 5X2600574	0.50	AVERAGE	09/01/2009	10/01/2009
WASTE MANAGEMENT	ATASCOCITA RECYCLING	HUMBLE	HARRIS	REGION 12 -	▪ 5X2600574	0	HIGH	09/01/2009	10/01/2009

MANAGEMENT OF TEXAS LP	RECYCLING AND DISPOSAL FACILITY			12 - HOUSTON	▪ TXD016673147 ▪ TXD016673147				
VIRIDIS ENERGY TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ H1307	0.50	AVERAGE	09/01/2008	10/01/2009
WASTE MANAGEMENT OF TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 38954 ▪ 4820101524 ▪ 4820101524 ▪ 35981	0	HIGH	09/01/2008	10/01/2009
WASTE MANAGEMENT OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 38954 ▪ 81010	1.44	AVERAGE	09/01/2009	10/01/2009
VIRIDIS ENERGY TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 4820101524 ▪ 63686	0.50	AVERAGE	09/01/2008	10/01/2009
WASTE CORPORATION OF TEXAS INC	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307B	0.50	AVERAGE	09/01/2008	10/01/2009
VIRIDIS ENERGY TEXAS LP	ATASCOCITA RECYCLING AND DISPOSAL FACILITY	HUMBLE	HARRIS	REGION 12 - HOUSTON	▪ 1307C	0.50	AVERAGE	09/01/2009	10/01/2009

APPENDIX C

SITE LOCATION MAPS



0 2000 4000

SCALE IN FEET

LEGEND

- NATIONAL OR STATE BOUNDARY
- COUNTY BOUNDARY
- LIMIT OF ENLARGED DETAIL
- CITY LIMIT
- RAILROAD
- STATE — OTHER
- DIVIDED ROAD
- PAVED ROAD
- ALL WEATHER ROAD
- EARTH ROAD
- NOT COUNTY MAINTAINED ROAD
- ROAD IN CITY
- DIVIDED ROADWAY WITH FRONTAGE ROADS
- *4.3 9.0* MILEAGE BETWEEN POINTS
- 20 INTERSTATE HIGHWAY
- 290 U S NUMBERED HIGHWAY
- 78 STATE HIGHWAY
- 42 STATE HIGHWAY-LOOP OR SPUR
- P21 STATE HIGHWAY PARK ROAD
- 144 FARM OR RANCH TO MARKET ROAD
- R15 RECREATIONAL ROAD
- BYA B70 599 BUSINESS ROUTES
- COUNTY SEAT
- TOWN SYMBOLS
- BRIDGE OR CROSSING SEPARATION OVER 20'
- LOW WATER CROSSING
- INTERMITTENT STREAM
- FLOWING STREAM
- SHIP OR BARGE CHANNEL
- LAKE WITH DAM
- AREA SUBJECT TO INUNDATION
- INTERMITTENT LAKE
- PROMINENT ELEVATION
- ESCARPMENT OR BLUFF
- AIRPORT WITH FACILITIES
- MILITARY AIRBASE
- HISTORIC SITE
- TXDOT CO LINE MARKER
- U S CUSTOMS PORT OF ENTRY
- TRAVEL INFORMATION CENTER
- CEMETERY
- TXDOT DISTRICT OFFICE
- TXDOT WAREHOUSE
- COUNTRY CLUB / GOLF COURSE

PERMIT BOUNDARY

ONE MILE RADIUS

GENERAL HIGHWAY MAP
HARRIS COUNTY
TEXAS

PREPARED BY THE
TEXAS DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

2002

1990 CENSUS FIGURES
HIGHWAYS REVISED TO JULY 1, 2002

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER
9/13/2010

ISSUED FOR PERMITTING PURPOSES

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DETAILED HIGHWAY MAP
HARRIS COUNTY

WASTE MANAGEMENT OF TEXAS, INC.
ATASCOCITA RECYCLING AND DISPOSAL FACILITY
MAJOR PERMIT AMENDMENT

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

III-9

TBPE FIRM NO. F-258 | TBPG FIRM NO. 5022

DSN. KJW	DATE : 09/10	DRAWING	IIA.1
DWN. SRC	SCALE : GRAPHIC		
CHK. KJW	DWG : IIA.1-DetHwyMap.dwg		

M:\Port II\IIA.1-DetHwyMap.dwg Layout: IA.1 User: scundiff

95°15'

95°12'30"

29°57'30"

0 1000 2000

SCALE IN FEET

HUMBLE, TX
1995
NIMA 6943 IV NE-SERIES V882

HARMASTON, TX
1995
NIMA 6943 I NW-SERIES V882

ROAD CLASSIFICATION

Primary highway hard surface ..... ——— Light-duty road, hard or improved surface ..... ———

Secondary highway hard surface ..... ——— Unimproved road ..... - - - - - -

Interstate Route U.S. Route State Route

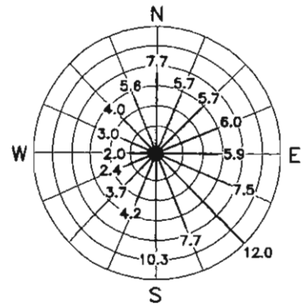
LEGEND

PERMIT BOUNDARY

LANDFILL FOOTPRINT

SPRING, SURFACE WATER BODY OR OTHER WATER

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



CALM WINDS 9.18%

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

STATE OF TEXAS
KENNETH J. WELCH
60773
REGISTERED
PROFESSIONAL ENGINEER
9/13/2010

ISSUED FOR PERMITTING PURPOSES

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

GENERAL TOPOGRAPHIC MAP

WASTE MANAGEMENT OF TEXAS, INC.
ATASCOCITA RECYCLING AND DISPOSAL FACILITY
MAJOR PERMIT AMENDMENT

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

III-10

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

DSN. KJW	DATE : 09/10	DRAWING	IIA.2
DWN. SRC	SCALE : GRAPHIC		
CHK. KJW	DWG : IIA.2-GenTopo.dwg		

L:\Part II\IIA.2-GenTopo.dwg Layout: Layout1 User: scundiff

ATASCOCITA RECYCLING AND DISPOSAL FACILITY

APPENDIX IIJ
LOCATION RESTRICTION CERTIFICATIONS

CONTENTS

EASEMENTS AND BUFFER ZONES IIJ-1

AIRPORT SAFETY IIJ-2

FLOODPLAINS IIJ-3

GROUNDWATER IIJ-4

ENDANGERED OR THREATENED SPECIES IIJ-5

WETLANDS IIJ-6

FAULT AREAS IIJ-7

SEISMIC IMPACT ZONES IIJ-8

UNSTABLE AREAS IIJ-9

COASTAL AREAS IIJ-10

TYPE I AND TYPE IV LANDFILL PERMIT ISSUANCE PROHIBITED IIJ-11

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
EASEMENTS AND BUFFER ZONES

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Kenneth J. Welch, P.E., certify that the site indicated above will be in compliance with the Easements and Buffer Zones Location Restriction, as stated in 30 TAC §330.543 – Easements and Buffer Zones.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS KENNETH J. WELCH 60773 REGISTERED PROFESSIONAL ENGINEER 9/13/2010

Supporting documentation is provided in Part II, Appendix IIA – Maps and Drawings.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
AIRPORT SAFETY

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Kenneth J. Welch, P.E., certify that the site indicated above will be in compliance with the Airport Safety Location Restriction, as stated in 30 TAC §330.545 – Airport Safety.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS KENNETH J. WELCH 60773 REGISTERED PROFESSIONAL ENGINEER 9/13/2010

Supporting documentation is provided in Part II, Appendix IIH – Federal Aviation Administration Documentation.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
FLOODPLAINS

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, A.C. Flores Varela, certify that the site indicated above will be in compliance with the Floodplains Location Restriction, as stated in 30 TAC §330.547 – Floodplains.

Firm:	Dannenbaum Engineering Corporation
Address:	3100 West Alabama Houston, TX 77098
Signature, Seal, and Date	STATE OF TEXAS A. C FLORES VARELA 56939 REGISTERED PROFESSIONAL ENGINEER alejandro Flores V 9/13/10

Supporting documentation is provided in Part III, Attachment C2 – Regional Drainage and Flood Control Analysis.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste. 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
GROUNDWATER

General Site Information:

Site: Atascocita Recycling and Disposal Facility

Site Location: Harris County, Texas

TCEQ Permit Application No.: 1307D

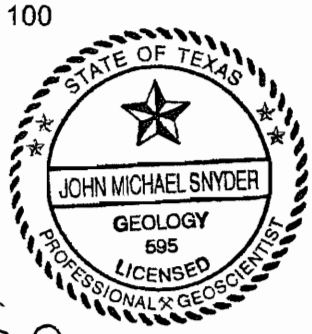
Statement of Compliance:

I, John Michael Snyder, P.G., certify that the site indicated above will be in compliance with the Groundwater Location Restriction, as stated in 30 TAC §330.549 – Groundwater.

Firm: Biggs & Mathews Environmental, Inc.

Address: 1700 Robert Road, Suite 100
Mansfield, TX 76063

Signature, Seal, and Date



9-13-2010

Supporting documentation is provided in Part III, Attachment E – Geology Report.

Owner / Operator of Site:

Owner / Operator: Waste Management of Texas

Address: 1001 Fannin, Ste 4000
Houston, TX 77002

Official's Name and Title: Steve Jacobs, Director of Landfill Operations
South Texas Market Area

Signature:

Date: 9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
ENDANGERED OR THREATENED SPECIES

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Carlos Hinojosa, certify that the site indicated above will be in compliance with the Endangered or Threatened Species Location Restriction, as stated in 30 TAC §330.551 – Endangered or Threatened Species.

Firm:	Knudson, LP
Address:	8588 Katy Freeway, Suite 441 Houston, TX 77024
Signature, Seal, and Date	9/15/10

Supporting documentation is provided in Part II, Appendix IIE – Endangered or Threatened Species Documentation.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
WETLANDS

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Carlos Hinojosa, certify that the site indicated above will be in compliance with the Wetlands Location Restriction, as stated in 30 TAC §330.553 – Wetlands.

Firm:	Knudson, LP
Address:	8588 Katy Freeway, Suite 441 Houston, TX 77024
Signature, Seal, and Date	9/13/10

Supporting documentation is provided in Part II, Appendix IID – Wetlands Documentation.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
FAULT AREAS

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Robert P. Ringholz, P.E., certify that the site indicated above will be in compliance with the Fault Areas Location Restriction, as stated in 30 TAC §330.555 – Fault Areas.

Firm:	Fugro Consultants, Inc.
Address:	6100 Hillcroft P.O. Box 740010 Houston, TX 77274
Signature, Seal, and Date	

Supporting documentation is provided in Part III, Attachment E – Geology Report, Appendix E8 – Fault Study.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
SEISMIC IMPACT ZONES

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, John Michael Snyder, P.G., certify that the site indicated above will be in compliance with the Seismic Impact Zones Location Restriction, as stated in 30 TAC §330.557 – Seismic Impact Zones.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS JOHN MICHAEL SNYDER GEOLOGY 595 LICENSED PROFESSIONAL GEOSCIENTIST 9-13-2010

Supporting documentation is provided in Part III, Attachment E – Geology Report.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-13-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
UNSTABLE AREAS

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Gregory W. Adams, P.E., certify that the site indicated above will be in compliance with the Unstable Areas Location Restriction, as stated in 30 TAC §330.559 – Unstable Areas.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS GREGORY W. ADAMS 73356 REGISTERED PROFESSIONAL ENGINEER 9-13-10

Supporting documentation is provided in Part III, Attachment D – Waste Management Unit Design.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
COASTAL AREAS

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Kenneth J. Welch, P.E., certify that the site indicated above will be in compliance with the Coastal Areas Location Restriction, as stated in 30 TAC §330.561 – Coastal Areas.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS KENNETH J. WELCH 60773 REGISTERED PROFESSIONAL ENGINEER 9/13/2010

Supporting documentation is provided in Part II, Appendix IIA – Maps and Drawings.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010

LOCATION RESTRICTION
CERTIFICATION OF COMPLIANCE
TYPE I AND TYPE IV LANDFILL PERMIT ISSUANCE PROHIBITED

General Site Information:

Site:	Atascocita Recycling and Disposal Facility
Site Location:	Harris County, Texas
TCEQ Permit Application No.:	1307D

Statement of Compliance:

I, Kenneth J. Welch, P.E., certify that the site indicated above will be in compliance with the Type I and Type IV Landfill Permit Issuance Prohibited Location Restriction, as stated in 30 TAC §330.563 – Type I and Type IV Landfill Permit Issuance Prohibited.

Firm:	Biggs & Mathews Environmental, Inc.
Address:	1700 Robert Road, Suite 100 Mansfield, TX 76063
Signature, Seal, and Date	STATE OF TEXAS KENNETH J. WELCH 60773 REGISTERED PROFESSIONAL ENGINEER 9/13/2010

Supporting documentation is provided in Part II – Existing Conditions and Character of the Site.

Owner / Operator of Site:

Owner / Operator:	Waste Management of Texas
Address:	1001 Fannin, Ste 4000 Houston, TX 77002
Official's Name and Title:	Steve Jacobs, Director of Landfill Operations South Texas Market Area
Signature:	
Date:	9-15-2010