

Applicant:
Waste Management of Texas, Inc.

RESPONSE TO NOD 1

REGISTRATION APPLICATION

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

VOLUME I OF I

Owner/Operator:
Waste Management of Texas, Inc.

Physical Site Address:
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Austin, Texas 78754
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Prepared by:



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January 2020

Via Hand Delivery

31 January 2020

Ms. Kristen A. Hernandez
Texas Commission on Environmental Quality (TCEQ)
MSW Permits Section, Waste Permits Division (MC-124)
12100 Park 35 Circle, Bldg. F
Austin, Texas 78753

**Subject: Tracking No. 24549480
Response to Notice of Deficiency – New Registration Application
Austin Community Transfer Station – Travis County
Municipal Solid Waste (MSW) – Registration No. 40306
RN100215938/CN600127856**

Dear Ms. Hernandez:

On behalf of Waste Management of Texas, Inc. (WMTX), Geosyntec Consultants (Geosyntec) has prepared this cover letter and accompanying materials in response to the notice of deficiency (NOD) comments on the above-referenced registration application, as transmitted in a 12 November 2019 letter from the Texas Commission on Environmental Quality (TCEQ) to WMTX.

RESPONSE TO NOD ITEMS

TCEQ's NOD comments were provided in the Table of Deficiencies included with the agency's 12 November 2019 letter. As requested, WMTX's responses to the NOD items are provided in tabular format using the Table of Deficiencies, and the responses are provided in a new column entitled "NOD Response." The NOD response table is attached to this cover letter. Note that references to the application page numbers in the responses refer to the page numbers of the updated (replacement/new addition) pages.

OTHER REQUESTED REVISIONS

In addition to the revisions made in response to TCEQ's NOD comments, WMTX is requesting certain other revisions to the application. An itemized list of these requested revisions, explaining each requested revision and where each such revision is located in the application, is provided in a table attached to this letter. Additionally, the main substantive revisions are summarized in the table below.

Description of Requested Revision	Purpose and/or Benefit
Shifted Transfer Station Building Location (still wholly within landfill permit boundary, but further away from Giles Road)	Moved at neighbor's request. Results in greater setback distance from Giles Road, and building orientation that will reduce visibility of entrance openings from public roadways and adjacent properties. Greater setback and adjusted building orientation will improve visual aesthetics and screening, and further reduce the potential for off-site odors, noise, and windblown litter. Adjusted location removes building footprint (and associated site development) from City of Austin limits and zoning.
Reduced Registration Boundary Area (significantly smaller area of approximately 11.4 acres instead of full 360-acre landfill permit boundary)	Addresses public concerns that questioned why the transfer station needed the full 360 acres of the Austin Community Recycling & Disposal Facility (RDF) landfill site. Limits registered transfer station operations (i.e., waste processing and storage) to a much smaller area that is indicative of the actual limits of transfer station operations and where such operations will actually occur. This change will impose an enforceable restriction on transfer station operations to the smaller registration boundary area.
Reduced Operating Hours (no waste acceptance or processing on Sundays)	WMTX has decided to reduce the requested transfer station operating hours by eliminating acceptance and processing of waste on Sundays.

Description of Requested Revision	Purpose and/or Benefit
Reduced Allowable Maximum Waste Storage Times (reduced from 72 hours to 48 hours)	<p>Limits the maximum allowable time that waste may be temporarily stored on-site to 48 hours (reduced from 72 hours), to address public concerns about the duration of temporary waste storage on weekends and holidays.</p> <p>As stated in the initial application submittal, during typical operating conditions, waste will be transferred off-site on a daily basis (i.e., on-site less than 24 hours).</p>
Addition of optional Citizen's Recycling Drop-Off Area	The application has been revised to include an optional Citizen's Recycling Drop-Off Area.

INTERNET POSTING OF REGISTRATION APPLICATION REVISIONS

An electronic copy of this submittal, including the registration application revisions, has been posted to the internet at the same URL as the initial online posting of the application.

APPLICANT'S CERTIFICATION STATEMENT

Revisions to applicable pages of the Part I Application Form are provided with this submittal as described in the table of changes attached to this letter. This Part I Application Form includes a completed, signed, and notarized Signature Page containing the applicant's certification statement.

REGISTRATION APPLICATION REVISIONS

Registration application revisions are enclosed. The text revisions are provided in "redline/strikethrough" (i.e., marked) format, as well as "clean" (i.e., unmarked) replacement page format. The specific registration application revisions being made in response to TCEQ's NOD comments are identified in the attached Table of Deficiencies – with Applicant Responses.

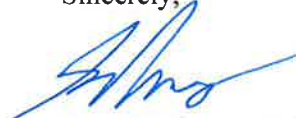
Ms. Kristen A. Hernandez
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CLOSING

One original and two (2) copies of this submittal are being provided to the TCEQ MSW Permits Section in Austin. A copy is also being sent directly to the TCEQ Region 11 office in Austin, as indicated in the "copy to" list below. Additionally, a copy of this submittal is being placed in the University Hills Branch Library for public viewing and copying, to accompany the copy of the application that was previously placed at the library when the application was initially submitted.

Geosyntec trusts that this submittal provides the information necessary to complete TCEQ's technical review of the registration application. If you have any questions regarding this information, please do not hesitate to contact me by telephone at (512) 451-4003, or by e-mail at sgraves@geosyntec.com.

Sincerely,



Scott M. Graves, P.E.
Principal, Geosyntec Consultants, Inc.

Copy to: Mr. Elijah Gandee, Air & Waste Section Manager, TCEQ Region 11
 Mr. Charles Rivette, Waste Management of Texas, Inc.
 Mr. Kenneth May, CAPCOG

TABULATED LIST OF REQUESTED APPLICATION REVISIONS

Location	Description of Change
Binder Cover Pages	Added MSW Registration No. (now assigned) and date of this revision.
Part I Form, Page 1	Added MSW Registration No. (now assigned) and date of this revision.
Part I Form, Page 3, Item 11	Updated to only list permit or approval items that are within or otherwise applicable to the requested revised transfer station registration boundary.
Part I Form, Page 3, Item 12	Added RN (now issued).
Part I Form, Page 6, Item 18	Box checked for both Class A and Class B, because the Supervisor will obtain either license (not both) as indicated in Section 3.1.1 (Page IV-7) of the Site Operating Plan (SOP).
Part I Form, Page 9	Local Government Jurisdiction changed to “N/A” consistent with requested revisions to transfer station building location and registration boundary and post-application changes by the City of Austin to the city’s extraterritorial jurisdiction (ETJ) (which removed site from ETJ). Also checked box “Yes” to indicate that the facility will be located in an area where there is a county ordinance purporting to prohibit storage, processing or disposal of municipal or industrial solid waste, although the county ordinance does not apply to this application.
Part I Form, Page 10	Updated Signature Page provided.
Part I Form, Page 11	Updated to place a check mark in the box for Waste Storage, Processing and Disposal Ordinances. As indicated, a copy of the ordinance is attached to Part I as “Exhibit A to the Part I Form,” although, as noted above, the ordinance does not apply to this application.
Part I/II Table of Contents and Part I/II Report	For convenience based on the changes itemized below, a full replacement of the Part I/II Table of Contents and Report is being provided.
Part I/II Cover Page	Added MSW Registration No. (now assigned) and date of this revision.
Part I/II Supplemental Report Cover Page	Added MSW Registration No. (now assigned) and date of this revision.
Part I/II Report, Section 1.1	Minor clarification of terminology used.
Part I/II Report, Section 1.2	Corrected typographical error(s).

Location	Description of Change
Part I/II Report, Section 2.1	Updated transfer station facility acreage (reflecting different acreage than landfill facility), and clarified building structure characteristics.
Part I/II Report, Section 2.2	Clarification of terminology for landfill facility and transfer station registration boundary.
Part I/II Report, Sections 2.3, 2.4	Corrected typographical error(s).
Part I/II Report, Section 3.1	In addition to deleting acceptance of contaminated beverages, correct typographical errors and redundant language.
Part I/II Report, Section 3.2	In addition to revising storage timeframes, revised Table I/II-1. Also corrected typographical errors and redundant or inconsistent language.
Part I/II Report, Sections 3.3.1, 3.3.2, and 3.4	Corrected typographical error(s).
Part I/II Report, Section 3.5	Updated as described in response to Comment NT2.
Part I/II Report, Section 3.6	Updated Table I/II-2 footnote to clarify conservative assumption regarding transfer vehicle capacity for this calculation.
Part I/II Report, Sections 4.1, 4.2	Updated language for revised transfer station registration boundary.
Part I/II Report, Section 4.3	Updated easement description for revised transfer station registration boundary.
Part I/II Report, Sections 4.4 to 4.6, 5.1, and 5.3	Corrected typographical error(s). Clarified description/applicability of other permits.
Part I/II Report, Section 5.5	Improved readability of bullet list; revised acknowledgement statements for air and stormwater permits based on process to be followed for the transfer station.
Part I/II Report, Section 6.1	Clarified that land use information is current.
Part I/II Report, Section 6.1.1	Clarified that there is no zoning within the transfer station registration boundary. Clarified the history and current status of extraterritorial jurisdiction (ETJ).
Part I/II Report, Section 6.1.2	Updated Table I/II-3 and narrative of land uses/features based on proximity to revised transfer station registration boundary (and re-ordered categories in descending order); clarified facility terminology.
Part I/II Report, Section 6.1.3	Clarified language and facility terminology and updated for current growth trends (e.g., zip code population data in Table I/II-4).

Location	Description of Change
Part I/II Report, Section 6.1.4	Updated proximity to specified uses based on revised transfer station registration boundary; clarified that information is current.
Part I/II Report, Section 6.2	Updated to delete mention of water well (no longer within 500-ft of revised transfer station registration boundary).
Part I/II Report, Section 6.4.1	Updated number of easements based on revised transfer station registration boundary.
Part I/II Report, Section 6.4.2	Clarified facility terminology and provided more description of buffer/set-back.
Part I/II Report, Section 6.5	Clarified age of Austin Community RDF landfill, removed redundant phrase.
Part I/II Report, Section 7.1	Updated as described in response to Comment T4, and corrected typographical error. Added Tables I/II-6, and I/II-7, and additional discussion on the comparison between transfer station traffic vs. landfill traffic. Added to list of conclusions.
Part I/II Report, Section 7.2, 8.2, 8.3, 8.5	Clarified facility terminology.
Part I/II Report, Section 9.2	Updated surface water description for revised transfer station registration boundary.
Part I/II Report, Section 9.3	Updated as described in response to Comment NT6.
Part I/II Report, Sections 10, 10.1, 10.2	Clarified facility terminology and corrected typographical errors.
Part I/II Report, Section 11.1	Updated floodplain description for revised transfer station registration boundary, updated information on Decker Creek, and clarified facility terminology.
Part I/II Report, Sections 11.2 and 12	Updated wetlands and species description for revised transfer station registration boundary and corrected typographical errors.
Part I/II Report, Section 13	Updated as described in response to Comment NT7 and clarified facility terminology.
Part I/II, Appendix I/IIA - General Location Maps	Appendix cover page revised for drawing revision dates; maps updated for revised transfer station registration boundary and building location. [Full replacement of this appendix with revised items]
Part I/II, Appendix I/IIB - Adjacent Land Ownership Map and List	Updated adjacent landowner map and list for revised (i.e., reduced) transfer station registration boundary (and resulting smaller 1/4-mile offset). [Full replacement of this appendix with revised items]

Location	Description of Change
Part I/II, Appendix I/IIC - Registration Boundary Surveys	Updated registration boundary legal description and map for revised (i.e., reduced) transfer station registration boundary. Added copy of Easement Map with notations on transfer station location. [Full replacement of this appendix with revised items]
Part I/II, Appendix I/IIIE - Evidence of Competency	Updated job titles to correct minor inconsistencies, and minor clarification of personnel experience to reflect transfer station management. [Replace cover page and Pages I/IIIE-3 to 4 of this appendix]
Part I/II, Appendix I/IIG - Land Use	Based on updates to Part I/II Report, Section 6.1.1, add City of Austin Ordinance removing site from its extraterritorial jurisdiction (ETJ). [add new Pages I/IIG-61 to 62 to this appendix]
Part I/II, Appendix I/IIH - Transportation	Updated as described in response to Comment T5 (added coordination letters). [Add new Pages I/IIH-86 to 92 to this appendix]
Part I/II, Appendix I/IIK - Texas Historical Commission	Updated as described in response to Comment NT7 (added THC response). [Add new pages I/IIK-32 to 33 to this appendix]
Part I/II, Appendix I/IIL - CAPCOG Documentation	Updated as described in response to Comment NT8 (CAPCOG documentation). [Add new pages I/IIL-1 to 16 into this appendix]
Part III Table of Contents and Part III Report	For convenience based on the changes itemized below, a full replacement of the Part III Table of Contents and Report is being provided.
Part III Cover Page	Added MSW Registration No. (now assigned) and date of this revision.
Part III Narrative Report Cover Page	Added MSW Registration No. (now assigned) and date of this revision.
Part III Report, Section 1.1	Minor text deletion based on revised transfer station registration boundary.
Part III Report, Section 1.4	Added abbreviated facility name (acronym).
Part III Report, Section 2.2	Defined acronym and updated language for fencing relative to transfer station facility.
Part III Report, Section 2.3.2	Updated as described in response to Comment T17 (clarified where temporary waste storage will occur).
Part III Report, Section 2.3.3	Updated as described in response to Comment T14 (clarified terminology and described ponded water prevention with respect to odor control).
Part III Report, Section 2.3.4	Updated as described in response to Comments T16 and T17 (added performance data discussion, clarified terminology).

Location	Description of Change
Part III Report, Section 2.3.5	Updated as described in response to Comments T17 and NT18 (clarified where temporary waste storage will occur, clarified that there will be no waste operations on Sundays), and updated for revised transfer station building location and its effect on noise pollution control.
Part III Report, Section 2.4	Updated as described in response to Comment T17 (clarified where temporary waste storage will occur).
Part III Report, Section 2.4.1	Clarified language on storage area and state waters.
Part III Report, Section 2.4.2	Clarified language to better describe where processing will occur.
Part III Report, Section 3.3	Clarification based on revised transfer station registration boundary.
Part III Report, Section 4.2	Updated as described in response to Comment T17 (clarified where temporary waste storage will occur), and for updated tipping floor dimensions.
Part III Report, Section 4.3	Clarified language on building and how roof will prevent precipitation from coming in contact with waste.
Part III Report, Section 4.4	Updated as described in response to Comment T17 (clarified where temporary waste storage will occur), and for reduced temporary waste storage times.
Part III, Attachment 1 - General Location Maps	Attachment cover page revised for drawing revision dates Drawings updated for revised transfer station registration boundary and building location. [Replacement of all drawings in this appendix except Drawing III-1-1]
Part III, Attachment 2 - Surface Water Drainage Report	Updated drainage analysis (and accordingly, report text and appendices) for revised transfer station registration boundary. Analysis reflects minor updates to drainage sub-areas, change in detention pond location for revised registration boundary, updates to runoff characteristics for revised layout (e.g., impervious areas), and elimination of Attachment 2B (there is no longer a need for a channel or culvert design). [Full replacement of this attachment with the revised version]
Part IV Site Operating Plan (SOP)	For convenience based on the changes itemized below, a full replacement of the SOP is being provided.
Part IV SOP Cover Page	Added MSW Registration No. (now assigned) and date of this revision.
SOP Section 1.1	Defined acronym.

Location	Description of Change
SOP Section 2	Updated as described in response to Comment NT25 (off-site record location).
SOP Section 2.2	Clarified signature requirements are per the cited rule if applicable.
SOP Section 3.1.1	Added MSW Facility Class A license as an allowable type of license.
SOP Sections 3.1.2, 3.1.3	Corrected typographical error(s).
SOP Section 4.2	Revised unloading area (i.e., tipping floor) dimensions, updated allowable storage times, removed superfluous language on destination of transferred MSW.
SOP Section 4.3	Updated as described in response to Comment NT20 (clarified where wastewater will be transported).
SOP Section 5	Updated as described in response to Comment NT21 (regulatory citation and language on contaminated water management).
SOP Section 6.1	Updated as described in response to Comment NT22 and NT23 (clarified where temporary waste storage will occur, added reference to optional Citizen's Recycling Drop-off Area).
SOP Section 6.2	Updated as described in response to Comment NT24 (clarified storage of food wastes in approved containers).
SOP Section 6.3	Added optional Citizen's Recycling Drop-Off Area and related descriptions.
SOP Sections 7 and 7.1	Updated as described in response to Comments NT26 and NT27 (added reference to local fire codes and language on water supply).
SOP Section 8.2.2	Corrected typographical error(s).
SOP Section 8.3	Updated as described in response to Comment T30 (clarifying language on spill prevention).
SOP Section 8.4	Updated (reduced) operating hours and provided justification for requested operating hours (addresses Comment NT31). This section has been subdivided into two sub-sections for clarify.
SOP Section 8.6	Updated as described in response to Comment NT32 (description of windblown material prevention/control).
SOP Section 8.7	Updated for consistency regarding transfer trailers being tarped.
SOP Section 8.8	Updated as described in response to Comment NT29 (description of all-weather roads and prevention of contact with mud).
SOP Section 8.9	Enhanced discussion of noise pollution control and visual screening.

Location	Description of Change
SOP Section 8.10	Updated as described in response to Comment NT33 (information on tracking of waste receipts to prevent overloading).
SOP Section 8.11	Updated as described in response to Comment NT34 (wash water management description).
SOP Section 8.12	Updated as described in response to Comments NT35, NT36, and NT37 (enhanced discussion of measures to prevent off-site nuisance odors).
SOP Section 10.1	Updated to be consistent with the Waste Acceptance Plan in Part I/II.
SOP Section 10.2 and Table IV-3	Corrected typographical error(s).

TCEQ-PROVIDED TABLE OF DEFICIENCIES – WITH APPLICANT RESPONSES

Table of Deficiencies - With Applicant Responses

NOD ID	MRI ID	App. Part	Citation	Location	1st NOD Type	NOD Description	NOD Response
							THE RESPONSES BELOW THROUGH NOD ID # NT37 ARE IN RESPONSE TO TCEQ COMMENTS DATED 11/12/2019.
NT1	125	Part II	330.61(b)(1)	Part I/II Report, Section 3, Page I/II-7	Incomplete	Explain on Table IV-3 how contaminated beverages will be handled in Pt. I/II and Pt. IV.	The facility does not intend to accept contaminated beverages. Accordingly, the Waste Acceptance Plan presented in Section 3.1 of the Part I/II Report (Page I/II-8) has been revised to delete contaminated beverages from the list of allowable wastes. Based on the foregoing, no changes are necessary to Table IV-3 of the Part IV Site Operating Plan (SOP).
NT2	129	Part II	330.61(b)(1)(B)	Part I/II Report, Section 3, Page I/II-10	Incomplete	Provide intended destination of the solid waste received.	The requested information is provided in Section 3.5 of the Part I/II Report (Page I/II-11). A minor revision has been made to this section to delete superfluous information not required by the cited Rule. For consistency, this change as also been made to Section 4.2 of the Part IV SOP (Page IV-12).
T3	134	Part II	330.61(h)	Part I/II Report, Section 6, starting on Page I/II-17	Incomplete	Revise Table I/II-3 with current acreage information for the listed land uses.	Please note that this comment also relates to NOD ID # NT10. In response to NOD ID # NT10, an updated land use map has been provided. The land use mapping data were obtained from the City of Austin in November 2019. Table I/II-3 in 6.1.2 of the Part I/II Report (Page I/II-18) has been revised accordingly, and the footnote has been revised to reflect that the table represents current conditions. Also, the similar table presented on Drawing I/IIA-8 of Part I/II, Appendix I/IIA has been revised.
T4	140	Part II	330.61(i)(1)	Part I/II Report, Section 7, Pages I/II-25 to 27	Incomplete	Identify roads used to access the site.	The Part I/II Report, Section 7.1 (Page I/II-25) has been revised as requested to identify the roads that will be used to access the site.
T5	141	Part II	330.61(i)(2)	Part I/II Report, Section 7, Page I/II-27 (detailed data in Appendix I/IIH)	Incomplete	Provide TXDOT response.	The Texas Department of Transportation's (TxDOT's) response to the 25 September 2019 coordination letter was received in a letter from TxDOT dated 22 October 2019. A copy of this letter is provided as requested, to be added to Part I/II, Appendix I/IIH as Application Page No. I/IIH-86, along with a follow-up letter to TxDOT dated 29 January 2020, to be added as Page No. I/IIH-87 through 92. Finally, TxDOT's reply letter dated 30 January 2020 is provided (to be added as Page No. I/IIH-93)
NT6	157	Part II	330.61(k)(3)(A)	Part I/II Report, Section 9.3, Page I/II-33	Ambiguous	Include statement certifying an updated stormwater discharge permit.	The Part I/II Report, Section 9.3 (Page I/II-35) has been revised as requested to provide a certification statement signed by the owner/operator.
NT7	169	Part II	330.61(o)	Part I/II Report, Section 13, Page I/II-38; Appendix I/IIK	Omitted		The Texas Historical Commission's (THC's) response to the 25 September 2019 request for project review letter was received in a response from THC dated 25 October 2019. A copy of THC's response is provided as requested, to be added to Part I/II, Appendix I/IIK as Application Page Nos. I/IIK-32 and 33. Part I/II Report, Section 6.1.4 (page I/II-21) and Section 13 (Page I/II-40) have also been revised accordingly.
NT8	170	Part II	330.61(p)	Part I/II Report, Section 14, Page I/II-39; Appendix I/IIIL	Omitted		Part I/II, Appendix I/IIIL contains documentation to demonstrate that a conformance review request for compliance with the Regional Solid Waste Management Plan (RSWMP) was sent to the Capital Area Council of Governments (CAPCOG), along with a copy of Parts I and II of the application. WMTX appeared before the CAPCOG Solid Waste Advisory Committee on 23 January 2020, at which time they provided an overview of the proposed transfer station. On 23 January 2020 the SWAC voted that they lack sufficient information to make a conformance recommendation to the CAPCOG Executive Committee. As such, to-date, CAPCOG has not issued a "review letter" (i.e., a determination on whether the application is in conformance with the CAPCOG RSWMP). Subsequently, WMTX filed (concurrently with this TCEQ Comment Response submittal), a completed CAPCOG Regional solid Waste Management Plan Conformance Checklist. A copy of the 31 January 2020 CAPCOG correspondence and completed conformance checklist is being provided for inclusion into Part I/II, Appendix I/IIIL (added pages I/IIIL-1 to 16).
T9	174	Part II	330.61(c)(2)	Part I/II, Appendix I/IIA, Drawing I/IIA-13	Incomplete	Update to include note 3.	The call-out of Note 3 on Drawing I/IIA-13 in Appendix I/IIA of Part I/II was a typographical error; there is no Note 3 on the drawing. Drawing I/IIA-13 has been revised to delete the call-out.
NT10	176	Part II	330.61(c)(4)	Part I/II, Appendix I/IIA, Drawing I/IIA-8	Incomplete	Provide a current land use map.	Drawings I/IIA-8 and I/IIA-9 in Part I/II, Appendix I/IIA provide general and detailed land use mapping information, respectively. In response to this comment, land use mapping data were obtained from the City of Austin in November 2019 and were used to update Drawing I/IIA-9. Drawing I/IIA-9 has been revised to show and reference the source of this latest available land use map. Drawing I/IIA-8 has also been revised with an updated table of surrounding land use percentages within one mile of the facility.
NT11	181	Part II	330.61(c)(9)	Part I/II, Appendix IIA Drawings; survey drawing of property provided in Appendix I/IIC (Pg I/IIC-6)	Incomplete	Provide Page 4 of 4 of the facility plat records.	Page 4 of 4 of the plat was inadvertently omitted from the initial hardcopy submittal due to a photocopying error. The requested page is being provided with this submittal. Due to other requested changes involving a revised transfer station registration boundary, a full replacement of Part I/II, Appendix I/IIC is being provided. The fourth page of the plat is now numbered as Page No. I/IIC-8. of this appendix.
T12	200	Part II	330.61(e)	Part I/II, Appendix I/IIA, Drawing I/IIA-3	Omitted		Drawing I/IIA-3 of Part I/II, Appendix I/IIA, titled "General Topographic Map," uses the United States Geological Survey 7.5-minute series quadrangle sheets for the facility. The initial submittal of this drawing used an incorrect scale bar. Drawing I/IIA-3 has been revised to correct the scale bar.
T13	201	Part II	330.61(f)	Part I/II, Appendix I/IIA, Drawing I/IIA-4	Incorrect	Provide correct scale.	Drawing I/IIA-4 of Part I/II, Appendix I/IIA has been revised as requested to correct the scale bar.
T14	276	Part III	330.63(b)(2)(C)	Part III Report, Section 2.3.3, Page III-3	Incomplete	Describe measures for control of ponded water.	Section 2.3.3 of the Part III Report (Page III-5) has been revised as requested to describe the design measures for control of ponded water. Note that the comment was made on the report section on odor control, and in that context the added language on ponded water controls is tailored to prevention of odors from ponded water that has come in contact with waste (i.e., within the transfer station building).

Table of Deficiencies - With Applicant Responses

NOD ID	MRI ID	App. Part	Citation	Location	1st NOD Type	NOD Description	NOD Response
T15	277	Part III	330.63(b)(2)(D)	Part III Report, Section 2.3.4, Page III-4; and Part III Attachment 1 Drawings	Incomplete	Include storage area and wheel wash in site Plan drawing.	<p>This comment was discussed with TCEQ on 22 November 2019 to clarify the comment. As discussed, the September 2019 version of Attachment 1 Drawing III-1-3 presented existing conditions in the general area of the proposed transfer station, including identification of an existing wheel wash and existing storage areas. The identified wheel wash and storage areas will not be used by the transfer station. Also note that the existing "storage areas" identified on the September 2019 drawing are not waste storage areas.</p> <p>Drawing III-1-3 has been revised to delete the existing "storage areas" and to note that that existing infrastructure in and around the transfer station building and access areas will be decommissioned as needed prior to transfer station building construction. Part I/II, Appendix I/IIA, Drawing I/IIA-7 has also been revised in the same manner for consistency. Also note that as part of this response package, the Applicant has made a minor shift to the location of the transfer station building. The aforementioned drawings have also been revised to reflect the updated proposed transfer station building location.</p>
T16	278	Part III	330.63(b)(2)(D)	Part III Report, Section 2.3.4, Page III-4; and Part III Attachment 1 Drawings	Incomplete	Provide performance data for storage and processing units.	This comment was discussed with TCEQ on 22 November 2019 to clarify the comment. As discussed, it was requested that performance data on design capacity vs. maximum waste acceptance rate be provided in the Part III Site Development Plan for the transfer station. Accordingly, Section 2.3.4 of the Part III Report (Page III-5) has been revised to provide these data.
T17	280	Part III	330.63(b)(2)(F)	Part III Report, Section 2.3.4, Page III-4; and Part III Attachment 1 Drawings	Incomplete	Provide engineering designs for containment of storage. Current google images show buildings in proposed area, describe change that would occur.	Sections 2.3.2 and 2.3.4 of the Part III Report (Pages III-4 and 5, respectively) have been revised to note that waste storage will take place (and thus be contained within) the transfer station building. Also, the Drawing III-1-3 revisions described in response to Comment ID # T15 also added a note to clarify the need for decommissioning of infrastructure (e.g., existing site features in the transfer station area).
NT18	283	Part III	330.63(b)(2)(I)	Part III Report, Section 2.3.5, Pages III-5	Inconsistent	States facility will not operate on Sunday, but the proposed operating hours state operation on Sundays at 9:00 pm.	Section 2.3.5 of the Part III Report (Page III-6) has been revised to make a statement that is consistent with the proposed operating hours in the Part IV SOP.
NT19	716	Part III	330.459(a)	Part III, Attachment 3 (Closure Plan), Section 2, Page 3-2	Incomplete	Update closure plan to include a plan for storage units.	The transfer station building is the waste management unit where waste storage will take place - as indicated in the first paragraph of Section 2 of the Closure Plan (Page 3-2). Responses to Comment ID #s T15 and T17 have clarified that the previously identified "storage areas" identified on some of the September 2019 drawings (e.g., Drawing III-1-3) are not waste storage areas. Accordingly, the Closure Plan as- submitted is complete, thus no changes have been made to the Closure Plan.
NT20	992	Part IV	330.203(b)	SOP Section 4.2, Page IV-11	Ambiguous	Provide reference of intended destination of generated wastes.	The requested information is provided in Section 4.3 of the Part IV SOP (Page IV-12), which has been slightly modified for clarity.
NT21	1010	Part IV	330.205(c)	SOP Section 4.3, Page IV-12 and Section 5, Page IV-13	Ambiguous	Indicate management of wastewaters in accordance with 330.207.	Section 5 of the Part IV SOP (Page IV-13) has been revised to include the requested language.
NT22	1026	Part IV	330.209(a)	SOP Section 6.1, Page IV-14	Ambiguous	Provide details on waste storage methods to not provide food or harborage for animals and vectors.	Section 6.1 of the Part IV SOP (Page IV-14) has been revised to clarify where and for how long waste will be stored and how it will be enclosed/covered. These methods are intended to limit the length of time waste is stored on the tipping floor, to prevent animals and vectors from being attracted to food or to give them the opportunity for harborage.
NT23	1027	Part IV	330.209(b)	SOP Section 6.1, Page IV-14	Ambiguous	Provide location of on-site storage for source-separated recyclables.	Section 6.1 of the Part IV SOP (Page IV-14) has been revised to cross-reference Drawings III-1-2 and III-1-4 of Part III, Attachment 1 - which have been revised to show the location of a, optional Citizen's Recycling Drop-off Area that has been designated in an area away from the transfer station waste processing area. Section 6.3 of the SOP (Page IV-15) has also been revised to describe the optional Citizen's Recycling Drop-off Area.
NT24	1029	Part IV	330.211	SOP Section 6.1, Page IV-14	Incomplete	Address type of containers for storage of waste containing food waste.	Section 6.2 of the Part IV SOP (Page IV-14) has been revised as requested to address the specific rule requirements regarding storage of waste containing food wastes.
NT25	1038	Part IV	330.219(a)	SOP Section 2, Page IV-2	Incomplete	Provide off-site location.	Section 2 of the Part IV SOP (Page IV-2) has been revised as requested.
NT26	1053	Part IV	330.221(c)	SOP Section 7, Page IV-16	Incomplete	Address fire protection plan compliance with local fire codes.	Section 7 of the Part IV SOP (Page IV-16) has been revised as requested to indicate that the plan has been prepared to address compliance with local fire codes, and Section 7.1 has been revised in a similar manner to reference the requirement to comply with local fire codes for the transfer station building design.
NT27	1054	Part IV	330.221(a)	SOP Section 7, Page IV-16	Ambiguous	Provide details on water availability for firefighting purposes.	Section 7.1 of the Part IV SOP (Page IV-16) has been revised as requested to clarify the source of the pressurized water supply, and also to reference that the transfer station building will be designed to comply with applicable local fire codes with respect to topics such as provision of an approved water supply and/or fire hydrant access as required by the building permit.
NT28	1058	Part IV	330.223(b)	SOP Section 8.1.3, Page IV-20	Inconsistent	Show adequate turning radii for access roads in facility drawings.	This comment was discussed with TCEQ on 22 November 2019 to clarify the comment. From this discussion, the concern raised by the comment was whether the presence of a wheel wash would interfere with vehicle turnaround areas. As described in response to Comment ID # T15, the wheel wash will be decommissioned before the transfer station commences operation, and drawing revisions have been made accordingly. This will allow for unimpeded vehicle turnaround areas as shown on the drawings.
NT29	1059	Part IV	330.223(b)	SOP Section 8.1.3, Page IV-20; Section 8.8, Page IV-24	Incomplete	Provide details on the measures for controlling mud tracking.	Section 8.8 of the Part IV SOP (Page IV-26) has been revised to better clarify the types of all-weather road surfaces that may be used, and how the use of all-weather surfacing is a mud control measure because it will prevent the formation of mud.
T30	1067	Part IV	330.227	SOP Section 8.3, Page IV-22	Omitted		Section 8.3 of the Part IV SOP (Page IV-22) has been revised to better clarify where waste processing and storage will occur, and to cross-reference the drawing in the Site Development Plan presenting relevant design information for the tipping floor and the transfer station building being enclosed.
NT31	1069	Part IV	330.229(a)	Alternate hours are requested - see SOP Section 8.4, Page IV-22	Inconsistent	(a) Provide justification of waste acceptance and operating hours and (b) Revise or delete sentence stating facility not accepting/processing waste on Sunday. (facility accepts waste from 9pm Sunday).	The registration application has been revised to not include hours for waste acceptance and processing on Sundays. Section 8.4 of the Part IV SOP (Page IV-22) has been revised accordingly. Additionally, Section 8.4 has been revised as requested to provide a justification of the proposed waste acceptance and operating hours (Page IV-23 to 24).

Table of Deficiencies - With Applicant Responses

NOD ID	MRI ID	App. Part	Citation	Location	1st NOD Type	NOD Description	NOD Response
NT32	1075	Part IV	330.233(a)(1)	SOP Section 8.6, Page IV-23 & 24	Ambiguous	Describe litter control devices to be used.	Section 8.6 of the Part IV SOP (Page IV-25) has been revised as requested to describe the litter control devices/measures to be used. As noted, windblown litter will be minimized by unloading and transferring waste within the enclosed transfer station building.
NT33	1083	Part IV	330.241(a)	SOP Section 8.10, Page IV-25	Incomplete	Describe procedure facility design capacity will not be exceeded or reference location of description.	Section 8.10 of the Part IV SOP (Page IV-26) has been revised as requested to describe the procedure the facility will use to ensure the facility design capacity rate is not exceeded.
NT34	1088	Part IV	330.243(b)	SOP Section 8.11, Page IV-25	Incomplete	Provide methods to be employed in preventing water accumulation.	Section 8.11 of the Part IV SOP (Page IV-27) has been revised as requested to indicate that the tipping floor will be sloped towards a floor drain, which will prevent the accumulation of wash waters. Also on a closely-related topic, in response to Comment ID # NT37, Section 8.12 of the SOP has also been revised to reference the sloped tipping floor as a means of preventing ponded water.
NT35	1092	Part IV	330.245(c)	SOP Section 8.12, Page IV-26	Omitted	Include details of odor retaining containers and vessels to be used.	Section 8.12 of the Part IV SOP (Page IV-27 to 28) has been revised as requested (see added bullet list in this Section).
NT36	1095	Part IV	330.245(f)(1) – (4)	SOP Section 8.12, Page IV-26	Ambiguous	Indicate measures to be used.	Section 8.12 of the Part IV SOP (Page IV-27 to 28) has been revised as requested (see added bullet list in this Section).
NT37	1099	Part IV	330.245(k)	SOP Section 8.12, Page IV-26	Incomplete	Address methods for preventing and controlling ponded water.	Section 8.12 of the Part IV SOP (Page IV-27 to 28) has been revised as requested (see added bullet list in this Section).

REDLINE/STRIKETHROUGH (i.e., “MARKED”) PAGES

To facilitate TCEQ’s review, the attached pages present a redline/strikethrough “marked” version of the proposed text revisions to the registration application. Note that due to re-pagination of the redline/strikethrough version, the page numbers may not match the final page numbers in the “clean” (replacement page) version.

For convenience, divider tabs are provided to indicate which portion of the application the revisions pertain. The designation “ST” on the tabs is an abbreviation for “strikethrough” and is intended to help identify the tabs that contain the redline/strikethrough versions, as opposed to the “clean” replacement pages provided subsequently with this response.

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306 [to be
assigned]
AUSTIN, TRAVIS COUNTY, TEXAS**

VOLUME I OF I

Owner/Operator:
Waste Management of Texas, Inc.

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

Prepared by:

Geosyntec 
consultants

8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003

Submitted September 2019; Revised January 2020

Applicant:
Waste Management of Texas, Inc.

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THE RESPONSIBLE ENGINEER AS REQUIRED BY
THE TEXAS ENGINEERING PRACTICE ACT.

Submitted September 2019
Revised January 2020

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART I and PART II – SITE AND APPLICANT INFORMATION, EXISTING CONDITIONS SUMMARY, AND CHARACTER OF THE FACILITY AND SURROUNDING LAND

AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY

**REGISTRATION NO. MSW-40306 _____ [to be assigned]
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Owner and Operator:
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PROFESSIONAL.

Submitted September 2019
Revised January 2020

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APPENDIX I/IIB	ADJACENT LAND OWNERSHIP MAP AND LIST
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APPENDIX I/II F	APPOINTMENTS
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APPENDIX I/II J	ENDANGERED AND THREATENED SPECIES DOCUMENTATION
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PROFESSIONAL.

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART I/II SUPPLEMENTAL TECHNICAL REPORT

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306 ~~_____~~ *[to be assigned]*
AUSTIN, TRAVIS COUNTY, TEXAS**

Prepared by:

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SEALED FOR THIS PART I/II SUPPLEMENTAL
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Submitted September 2019
Revised January 2020

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WITHIN EACH APPENDIX, ITEMS THAT REQUIRE A SIGNATURE AND SEAL BY A LICENSED PROFESSIONAL (E.G., ENGINEER, SURVEYOR) ARE SIGNED, SEALED, AND DATED, AS APPROPRIATE, BY THE RESPONSIBLE PROFESSIONAL.

Appendix I/IIA	General Location Maps
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1. INTRODUCTION

1.1 Terms of Reference

Waste Management of Texas, Inc. (WMTX) is submitting an application to register a Type V municipal solid waste (MSW) transfer station facility. Within this report, the terms “facility” and “site” refer to the transfer station facility and its registration boundary, unless expressly stated otherwise. The proposed facility will be located within the permitted boundaries of an MSW Type-I facility (namely, the Austin Community Recycling and Disposal Facility (RDF), TCEQ Permit No. MSW-249D). ~~—with a registration boundary that coincides with the landfill permit boundary.~~ The facility is located on the east side of Austin, Texas, in Travis County.

The purpose of the transfer station is to provide an efficient means to transfer MSW to ~~local duly-permitted~~ landfills ~~after the Austin Community RDF landfill reaches-nears its full capacity and after the landfill has ceased accepting waste and is in the process of being/is closed-and-closes.~~ The proposed facility will provide WMTX with the ability to transfer MSW from collection vehicles to larger transfer trailers ~~before~~ shipment to ~~area~~ duly-permitted landfills.

The complete registration application is divided into Parts I through IV as required by 30 TAC §330.57. Part I includes the Part I Application Form, this report, and attached appendices. These materials collectively present site and applicant information to address the items required by 30 TAC §330.59; 30 TAC §281.5; and 30 TAC §305.45. Part II presents an existing conditions summary and information on the character of the facility and surrounding area. Part II has been combined with Part I, as allowed. This includes provision of a single Part I/II Supplemental Technical Report (i.e., this report), referencing and attaching as appendices, the various required informational items of Parts I and II

Part III presents facility design information, schematic designs of the facility, and required plans. Part IV presents the Site Operating Plan (SOP), which describes the general procedures for conducting day-to-day operations at the facility.

1.2 Organization of Part I/II Supplemental Technical Report

The remainder of this report is organized as follows:

- a facility description is presented in Section 2 (includes reference to maps showing the facility location and facility layout);

- the waste acceptance plan is presented in Section 3;
- property, owner, and operator information are discussed in Section 4;
- the applicability and status of other permits is addressed in Section 5, along with other applicant acknowledgements;
- a land use evaluation and discussion on the facility's potential impact on the surrounding area is addressed Section 6;
- information on transportation (roads, traffic, airports) is presented in Section 7;
- information on geologic conditions and soils is addressed in Section 8;
- information on groundwater and surface water conditions at and near the site are addressed in Section 9;
- abandonment of any oil and gas wells and water wells discovered are discussed in Section 10;
- floodplains data and wetlands are discussed in Section 11;
- information on endangered or threatened species is discussed in Section 12;
- compliance with the Texas Antiquities Code and related Texas Historical Commission (THC) documentation is addressed in Section 13; and
- documentation of council of governments review request (submitted to the Capitol Area Council of Governments (CAPCOG)) is discussed in Section 14.

Appendices to this report contain maps/drawings, data, and relevant documentation of the topics discussed in this report. The appendices are organized as follows:

- Appendix IA/IIA presents a series of location maps;
- Appendix I/IIB presents an adjacent land ownership map and a landowner list;
- Appendix I/IIC includes ownership-related information, including a legal description of the registration boundary;

- Appendix I/IID provides a property owner affidavit and documents the legal authority of the applicant;
- Appendix I/IIE addresses evidence of competency of the operator;
- Appendix I/IIF presents letters of appointment that define the roles of certain individuals involved in the application;
- Appendix I/IIG presents land use information;
- Appendix I/IIH provides transportation information and coordination documentation;
- Appendix I/II-I provides wetlands documentation;
- Appendix I/IIJ provides documentation on endangered and threatened species;
- Appendix I/IIK provides ~~Texas Historical Commission~~ (THC) antiquities code coordination documentation; and
- Appendix I/IIL provides ~~Capitol Area Council of Governments~~ (CAPCOG) correspondence.

2. FACILITY DESCRIPTION

This section provides information on the general facility location, to address 30 TAC §330.59(b) and (c), as well as §330.61(c), (e), (f), and (g) to show proximity to surrounding features. Facility layout, pursuant to §330.61(d), is also addressed.

2.1 Overview

As mentioned, the proposed facility will be located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D). ~~—with a registration boundary that coincides with the landfill permit boundary. As such, the transfer station facility~~ registration boundary will occupy an area of approximately 10.8 acres within the 359.71-acre Austin Community RDFs. The proposed facility is located approximately 500-ft north of US Highway 290 and Giles Lane Road, on the east side of Austin, in Travis County, Texas. ~~It is important to note that the proposed transfer station will be relatively small in footprint compared to the overall facility boundary, occupying an area near the existing Austin Community RDF facility~~ entrance and scales west of Giles Lane Road, as shown on maps and drawings included in Appendix I/IIA. The transfer station itself (i.e., the building) will be less than one acre in size. In total, the area to actually be developed for transfer station operations (the building, associated all-weather access roads and vehicle turnaround areas, approach ramps, parking, support features, etc.) will be less than approximately 10 acres. The transfer station building and area developed for transfer station operations will be located outside of the waste disposal footprints of the landfill's ~~waste management units~~.

The proposed transfer station building will be an enclosed structure (i.e., a pre-engineered metal building with a roof, exterior walls on three sides, openings on the fourth side for collection vehicles to enter the building to unload, covered load-out tunnels/areas on the sides of the building with building openings at the load-out tunnels, and ancillary support features). The transfer station building will have a reinforced concrete slab tipping floor with an area of approximately 25,000 square feet, and reinforced concrete push walls to resist typical forces for transfer operations. Details on the layout of the transfer station, design features, and design criteria, are provided in the Site Development Plan (Part III) portion of the application, as required.

The transfer station will utilize the Austin Community RDF's landfill's existing gate and scale house. Incoming loads will be weighed and directed to the tipping floor inside the ~~covered enclosed~~ transfer station building. Solid waste unloaded in this area will be pushed by a front-end loader(s) into the transfer trailers, which will haul the waste to an area landfill for disposal.

2.2 Existing Conditions Summary

The transfer station registration boundary will be situated entirely within the permit boundary of the existing Austin Community RDF (also referred to herein as the “landfill facility”) landfill facility, whose boundary coincides with this proposed transfer station registration facility boundary. The Austin Community RDF, is an active operating Type I MSW landfill, whose remaining landfill capacity is limited. The proposed transfer station will commence operations after the landfill is nearing its full capacity, and is either receiving only *de minimus* quantities of waste, or after the landfill has ceased accepting waste and is in the process of being/is closed.

The approximately 360-acre landfill facility site includes two waste-MSW management units: -one approximately 64-acre unit on the eastern portion of the landfill facility site (“East Hill”), and one approximately 178-acre unit on the western portion of the site landfill facility (“West Hill”). The overall site landfill facility also includes a closed industrial waste unit, and a closed portion of the closed Travis County Hwy 290 Landfill landfill (Permit MSW-684) area of initial MSW disposal referred to as the “Phase I Unit”. These waste management units are shown on a facility layout plan included in Appendix I/IIA of this application, and Aas shown, the transfer station registration boundary will be located outside of the landfill’s waste disposal footprints of these waste management units.

The existing Austin Community RDF facility infrastructure includes a perimeter fence, gate house and scales, landfill office building, maintenance shop/office building, all-weather roads, soil borrow and stockpile areas, environmental monitoring systems (landfill gas and groundwater), a lined leachate evaporation pond, stormwater management features, and solid waste disposal areas. As noted, the approximately 10.80-acre transfer station facility area on the eastern portion of the site landfill facility where the transfer station registration boundary, building, and supporting operational features will be located are not within the landfill waste footprint limits. Furthermore, the area used for transfer station operations will not interfere with the landfill’s environmental monitoring points-systems or other landfill-related features infrastructure that will remain in place after closure of the landfill.

2.3 Maps and Drawings

A group of maps and drawings are presented in Appendix I/IIA to show the general location of the facility, proximity to surrounding features, land use of the area, etc. This appendix also includes a facility layout plan for the transfer station. As mentioned, the required transfer station process and design drawings are provided in the Site Development Plan (Part III), as required.

2.4 Adjacent Land Ownership

A map presenting the adjacent land ownership is included in Appendix I/IIB. The map shows properties within ¼-mile ~~from~~ of the registration boundary and addresses mineral interest ownership under the facility. A land ownership list, keyed to the land ownership maps, is also provided in Appendix I/IIB. A compact disk (CD) containing the land owners list in electronic format is provided with the original binders of this application submitted to TCEQ, at the front of the binder after the cover letter.

This information has been provided to satisfy the requirements of 30 TAC §330.59(c)(3), 30 TAC §305.45(a)(6)(D), and 30 TAC §281.5.

3. WASTE ACCEPTANCE PLAN

This section provides information on waste acceptance to address 30 TAC §330.61(b), including a description of the waste characteristics, the maximum amount of waste to be received daily and annually for five years, and other amounts and durations of, and capacity for, receipt and/or storage, as detailed herein. This section also provides information on the anticipated facility service area (i.e., sources/generation areas of the waste) and population-equivalent served.

3.1 Waste Characteristics

The proposed facility is a Type V MSW facility (a transfer station). The general classifications of solid waste that may be allowed to be accepted at the transfer station, and that are prohibited from acceptance, are provided below. The waste classifications are ~~waste are~~ defined in 30 TAC §330.3.

Allowable Wastes: The facility is allowed to accept the following classifications of solid wastes, for subsequent transfer to a properly-permitted ~~municipal solid waste~~ MSW landfill facility for disposal:

- household waste;
- yard waste;
- commercial waste;
- construction waste;
- demolition waste;
- brush;
- rubbish;
- Class 2 non-hazardous industrial solid waste;
- Class 3 non-hazardous industrial solid waste;
- shredded or quartered tires; and
- certain special wastes. Special waste is defined by ~~TCEQ's solid waste regulations (30 TAC §330.3(148))~~. Only those ~~certain~~ special wastes ~~specifically~~ listed below are allowed to be accepted at this facility without prior written approval from the Executive Director. Further, such special waste must be compatible with the compaction and loading equipment operated at the facility, ~~or~~ unless modifications are made to the facility to accommodate the special waste.

- Dead animals and slaughterhouse waste that are incidental to routine collection of ~~municipal solid waste~~MSW and that can be systematically processed along with other solid waste.
- Drugs; and contaminated foods, ~~or contaminated beverages~~, other than those contained in normal household waste.
- Empty containers which have been used for pesticides, herbicides, fungicides, or rodenticides, ~~will be accepted for disposal~~ provided the containers have been triple rinsed, crushed, or rendered unusable upon receipt at the gate.
- Incidental amounts of non-regulated asbestos-containing materials (~~non-NRACM~~). ~~An~~The incidental amount is defined as the maximum of 10--percent of the waste received on an annual basis by scale weight (annual basis is defined as the ~~latest~~ most recent 4-four consecutive quarters).
- Waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility. Only those wastes authorized for disposal at a solid waste management facility will be accepted.
- Waste generated outside the boundaries of Texas that contains any industrial waste; any waste associated with oil, gas, and geothermal exploration, production, or development activities; or any material that is listed in the bullets above.
- ~~Other~~ Special waste ~~other~~ than as described above and approved for acceptance by the TCEQ Executive Director.

Prohibited Wastes: The facility is prohibited from accepting, and shall not accept, the following wastes:

- regulated hazardous waste;
- polychlorinated biphenyls (PCBs);
- liquid wastes;
- certain special wastes not listed above as allowable, namely:
 - hazardous waste from conditionally exempt small-quantity generators that may be exempt from full controls under Title 30 TAC Chapter 335, Subchapter N (relating to Household Materials Which Could Be Classified as Hazardous Wastes);
 - Class 1 non-hazardous industrial waste;

- untreated medical waste;
- municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges;
- septic tank pumpings;
- grease and grit trap wastes;
- wastes from commercial or industrial wastewater treatment plants; air pollution control facilities; and tanks, drums, or containers used for shipping or storing any material that has been listed as a hazardous constituent in 40 CFR, Part 261, Appendix VIII but has not been listed as a commercial chemical product in 40 CFR §261.33(e) or (f);
- soil contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligrams per kilogram total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1 of 30 TAC §335.521(a)(1);
- incinerator ash;
- used oil;
- lead acid storage batteries; and
- used-oil filters from internal combustion engines.

3.2 Waste Acceptance Amounts and Storage Durations

Waste acceptance rates are tabulated below in Table I/II-1.

TABLE I/II-1
5-YEAR PROJECTION OF WASTE ACCEPTANCE RATES

<u>Calendar Year of Operation</u>	Estimated Annual Waste Acceptance Rate ⁽¹⁾ (tons/year)	Estimated Daily Average Waste Acceptance Rate ⁽¹²⁾ (tons/day)	Maximum Amount of Solid Waste <u>Allowed</u> to be Received Annually ⁽²⁾ (tons/year)	Maximum Amount of Solid Waste <u>Allowed</u> to be Received Daily (tons/day)
<u>12020</u>	<u>669,2998,400</u>	<u>3,2002,145</u>	998,400	3,200
<u>22021</u>	<u>669,2998,400</u>	<u>3,2002,145</u>	998,400	3,200
<u>32022</u>	<u>669,2998,400</u>	<u>3,2002,145</u>	998,400	3,200
<u>42023</u>	<u>669,2998,400</u>	<u>3,2002,145</u>	998,400	3,200
<u>52024</u>	<u>669,2998,400</u>	<u>3,2002,145</u>	998,400	3,200

Notes:

(1) Individual daily acceptance rates are expected to fluctuate on a day-to-day basis. The basis for the estimated daily average and estimated annual waste acceptance rate is the assumption that the Austin Community RDF Landfill (Permit MSW-249D) is accepting only de minimis waste quantities or has ceased accepting waste and is in the process of being/is closedis has commenced closureclosed. The resulting transfer station daily average and annual waste acceptance rate is an estimate based on the market conditions projected to exist under this assumption. For this, the estimated annual waste acceptance rate is calculated by multiplying the average daily rate by 312 days (i.e., operating 6 days/week, 52 weeks/year), rounded to the nearest hundred tons.~~Based on projections including allowances for obtaining regulatory approvals and for construction of the transfer station, it is estimated that Year 1 of transfer station operation would be approximately the year 2022.~~

(2) ~~The estimated daily average~~maximum amount of waste acceptance that would be allowed to be received annually~~rate is calculated by dividing multiplying the estimated annual maximum allowable daily waste acceptance rate (registered limit) by 312 days (i.e., 6 day/week operatingons 6 days/week, 52 weeks/year6 days/week), rounded to the nearest hundred tons. Individual daily acceptance rates are expected to fluctuate on a day-to-day basis, but will not to exceed the maximum amount allowed to be received daily).~~

In addition to the waste acceptance rates tabulated above, the following storage-related amounts and durations are established:

- ~~Thus, On~~On average, solid waste accepted at the facility will be transferred on a daily basis (i.e., remaining at the facility for less than 24 hours).

- The maximum length of time material will remain (i.e., be temporarily stored) on-site is 48 hours, ~~except holidays and weekends.~~
- ~~During holidays and/or weekends, maximum length of time material will remain on-site is 72 hours.~~
- The maximum amount of waste that may be stored at the facility for more than 24 hours is 2,500 tons.

3.3 Facility Service Area

3.3.1 Waste Sources and Generation Areas

The facility will serve, in general, ~~the~~ individuals, businesses, communities, institutions, and public and private solid waste collection vehicles ~~from waste generated~~ in the City of Austin, Travis County, and surrounding counties.

3.3.2 Population-Equivalent Served

The average population-equivalent of areas served by the facility, using the above 5-year average daily projected waste acceptance rates and a per capita disposal rate of 5 lbs/person/day, is between 8581,000,000 persons in Year 1 to 1,160,000 persons in Year 5.

3.4 Facility Design Capacity

It is important to recognize that the facility, based on its size and other design attributes, has the theoretical design capacity to safely and efficiently transfer ~~even~~ more than the maximum amounts tabulated in Table I/II-1 on a daily (and annual) basis. For example, the transfer station has been designed with additional tipping floor area for staging and storage of waste. Table I/II-2, presented on the following page, provides a summary of the facility's theoretical design capacity, along with associated assumptions that form the basis for these calculations.

3.5 Intended Destination of Solid Waste Received at this Facility

The destination of the solid waste ~~collected~~ received by the facility is a properly-permitted Type I ~~municipal solid waste~~ MSW facility, where the waste will be disposed. ~~A Type I municipal solid waste facility within approximately 50 miles or less will typically be utilized for receiving and disposal of the transferred waste.~~

3.6 Facility Qualification as a Registration

Per 30 TAC §330.9(b)(4), this transfer station facility qualifies for a registration because it will be located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D).

**TABLE I/II-2
THEORETICAL FACILITY DESIGN CAPACITY**

Item	Value	Notes
<i>Unloading</i>		
Number of Tipping Floor Unloading Positions	6	-
Average Time to Unload a Collection Vehicle (minutes)	8	Conservative value - typically able to unload more quickly
Number of Vehicles Unloaded Per Hour, Per Position	7	Calculated as 60 minutes per hour divided by the average loading time (and rounded down to nearest whole number)
Hourly Unloading Capacity (tons/hour)	294	Calculated as number of vehicles per hour per position x number of positions x average collection vehicle capacity (i.e., 7 tons)
Daily Unloading Capacity (tons/day)	5,880	Calculated as the hourly capacity multiplied by the number of operating hours per day (assumed to be 20 hours - but not a limiting parameter of the registration)
<i>Load-out Capacity</i>		
Number of Transfer Trailer Loading Positions	2	-
Average Time to Load a Transfer Trailer (minutes)	15	Conservative value - typically able to transfer and load-out more quickly
Number of Vehicles Loaded Per Hour, Per Position	4	Calculated as 60 minutes per hour divided by the average loading time (and rounded down to nearest whole number)
Hourly Load-out Capacity (tons/hour)	160	Calculated as number of vehicles per hour per position x number of positions x average transfer trailer vehicle capacity (i.e., 20 tons)
Daily Load-out Capacity (tons/day)	3,200	Calculated as the hourly capacity multiplied by the number of operating hours per day (assumed to be 20 hours - but not a limiting parameter of the registration)
<i>Theoretical Maximum Design Capacity</i>		

The above scenario, while not particularly likely (because it assumes the transfer station is running at its peak efficiency for a 20-hour day), is used to establish the maximum design-basis transfer rate of the facility. The 20-hour day assumption is not a limiting parameter of this registration. Also, a conservatively-low transfer vehicle capacity was assumed solely for the purposes of generating a conservative load-out design capacity calculation. From the above scenario, the limiting factor for determining the design capacity is the Daily Load-out Capacity plus the Available Storage to be provided. As such, the theoretical daily design capacity of the facility is: 3,200 tons/day + 2,500 tons/day = **5,700 tons/day**.

4. PROPERTY, OWNER, AND OPERATOR INFORMATION

This section provides property and owner-related information, to address the requirements of 30 TAC §330.59(d) through (h).

4.1 Legal Description of Facility

A legal description of the transfer station registration boundary ~~, which coincides with the facility permit boundary of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D)~~ is presented in Appendix I/IIC.

4.2 Property Ownership

As shown on the documentation provided in Appendix I/IIC, WMTX is the owner of the land ~~that comprises the Austin Community RDF permit boundary, and accordingly owns the land within the 359.71 transfer station registration boundary that is situated entirely within the permit boundary of the existing Austin Community RDF.~~

Property owner affidavits and legal authority are discussed subsequently in Section 4.4 (with legal authority documentation in Appendix I/IID).

4.3 Easements

A survey of easements within the ~~registration-Austin Community RDF permit~~ boundary ~~are is~~ presented on a survey drawing in Appendix I/IIC. These easement locations are derived from the surveyor's easement research on recorded easements listed in the real property records of Travis County for the subject parcels of land. A duplicate of this survey map that has been modified to show the transfer station registration boundary and proposed transfer station building location is also provided in Appendix I/IIC. As shown, there are ~~four~~¹⁴ utility easements ~~and one temporary easement~~ (and zero drainage or pipeline easements) within or adjacent to the ~~overall transfer station~~ registration boundary, but there are no easements in the area that will be occupied by the transfer station building. Accordingly, no solid waste loading or storage will occur within any easement (or right of way) that crosses the facility.

4.4 Property Owner Affidavit and Legal Authority

WMTX is the owner (and operator) of the facility. WMTX is a wholly-owned subsidiary of Waste Management, Inc., a Delaware corporation based in Houston, Texas, whose shares are publicly

traded on the New York Stock Exchange. No other person or entity owns more than 20-percent of the company or facility.

A signed property owner affidavit, pursuant to 30 TAC §330.59(d)(2), is presented in Appendix I/II D. The legal authority and status of the applicant has been verified as required by 30 TAC §330.59(e) and §281.5 and is also included in Appendix I/II D.

4.5 Evidence of Competency – Facility Operator

Information demonstrating the ~~evidence of~~ competency of the facility operator is presented in Appendix I/II E.

4.6 Appointment Letters

Letters that ~~acknowledge the~~ authorize ~~the~~ Applicant's Agent ~~for signing authority of to sign~~ the application, and that designate the Engineer, are presented in Appendix I/II F.

5. OTHER PERMITS/AUTHORIZATIONS/ACKNOWLEDGEMENTS

5.1 Other Permits or Approvals/Authorizations

Besides this TCEQ registration application for the proposed Type V MSW facility (transfer station), other ~~applicable~~-facility permits, authorizations, or construction approvals within the transfer station registration boundary, or that are otherwise applicable/relevant, are identified on the Part I Application Form.

5.2 Non-Applicable Regulatory Programs

The facility will not accept or manage hazardous or radioactive waste, perform underground injection or ocean dumping of waste, or discharge waste into waters of the U.S. Also, the facility does not propose to perform subsurface area drip dispersal. No jurisdictional wetlands will be affected. Therefore, the facility does not require any additional permits or construction approvals under the following programs:-

- Hazardous Waste Management Program under the Texas Solid Waste Disposal Act;
- Underground Injection Control (UIC) Program under the Texas Injection Well Act;
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;
- Dredge or fill permits under the Federal Clean Water Act;
- Licenses under the Texas Radiation Control Act; or
- Subsurface area drip dispersal system permits under Texas Water Code, Chapter 32.

5.3 Application Fees

On behalf of the applicant, Geosyntec Consultants has paid the \$150 ~~permit amendment~~ registration application fee. The e-pay receipt confirmation number is provided on the Part I Application Form, and a copy of the payment receipt is attached to the overall application cover letter at the front of the application binder.

5.4 Internet Posting

In accordance with 30 TAC §330.57(i), a complete copy of this application will be posted (upon submittal of the application to TCEQ) to the internet at the publicly-accessible website identified (Web address link provided) on the Part I Application Form. Future revisions and supplements to

the application will be posted at the same location. The internet posting is for informational purposes only.

5.5 Other Owner/Operator Acknowledgements and Informational Items

The owner/operator acknowledges the following:

- The construction and operation of this facility must comply with Subchapter U of ~~this~~ 30 TAC Chapter 330 (relating to Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations), or other approved air authorizations. As indicated in the Part I Application Form, the Austin Community RDF facility has received an Air New Source Review (Standard Air Permit) Registration and holds a Title V Air Permit. These air authorizations will be amended as needed to incorporate the transfer station as a co-located facility within the landfill permit boundary before the transfer station is placed into operation or when otherwise required.
- Liquids resulting from the operation of this ~~solid waste~~ facility will be disposed of in a manner that will not cause surface water or groundwater pollution. The facility will provide for the treatment of wastewaters resulting from waste management activities and from cleaning and washing. The operator will ensure that storm-water and wastewater management is in compliance with the regulations of the Ceommission. As indicated in the table in the Part I Application Form, the Austin Community RDF facility has received a TPDES Storm Water Multi-Sector General Permit. Permit coverage for the transfer station under the TPDES program will be obtained as described and certified in Section 9.3 of this Part I/II Report.

~~The owner/operator is providing a discussion as follows to address other general informational requirements for which they will be responsible, as indicated below.~~

- It is the responsibility of ~~thean~~ owner or operator to possess the property-related rights and interests required by applicable provisions of 30 TAC §330.67.
- It is the responsibility of ~~thean~~ owner or operator to obtain any permits or approvals that may be required by local agencies, such as for building construction, discharge of uncontaminated waters into ditches under control of a drainage district, discharge of effluent into a local sanitary sewer, etc.
- The owner or operator will be aware of and meet their requirements and responsibilities associated with the public notice process for registrations, as required by applicable provisions of 30 TAC §330.69.

- The owner or operator will be aware of and meet their requirements and responsibilities associated with standard registration conditions for MSW facilities, as required by applicable provisions of 30 TAC §330.73.

6. LAND USE

6.1 Land Use Information

A land use evaluation was conducted for this project to assess the potential impact of the facility on the surrounding area. A comprehensive land use analysis was performed by Richardson Verdoorn (RVI) in 2006 for the ~~now-approved~~TCEQ-permitted expansion of the Austin Community RDF ~~landfill~~ (TCEQ Permit No. MSW-249D). The RVI analysis was adopted as the baseline for the current Austin Community Transfer Station land use evaluation, and updated for this registration application as appropriate to reflect current land use conditions and growth trends. The results of the analysis are summarized in the following sections and updated with more current information where applicable. A copy of the RVI land use analysis is included in Appendix I/IIG.

Existing land uses in the area were determined using City of Austin GIS data (including land use maps), the City of Austin's Property Profile website, 2018 aerial imagery, the ~~Texas Historical Commission's~~ (THC's) Texas Historic Sites Atlas, and the Travis County Cemetery Project. ~~It is also noted that at the outset of the land use evaluation, CAPCOG's Regional Solid Waste Management Plan: 2002-2022 was also reviewed for information relevant to land use compatibility.~~

6.1.1 Zoning

~~The majority of the facility is located within the extraterritorial jurisdiction (ETJ) of the City of Austin in Travis County, Texas, with the easternmost portion of the existing site being within the city limits of Austin. The easternmost strip is zoned DR (development reserve) and P-CO (public, with conditional overlay). The remainder of the~~ There is no zoning within the proposed transfer station registration boundary site is not zoned. Zoning within the two-mile radius of the site and the zoning district definitions are shown on Drawing I/IIA-10. The transfer station registration boundary is not within the city limits of any municipality, nor is it within the extraterritorial jurisdiction (ETJ) of a municipality. When this registration application was initially filed on 27 September 2019, the site was within the ETJ of the City of Austin; however, the City of Austin subsequently released portions of the WMTX property, including the entire area occupied by the transfer station registration boundary, from its ETJ. A copy of the City of Austin Ordinance releasing the land from its ETJ is included in Appendix I/IIG.

6.1.2 Surrounding Land Use

Overview of Surrounding Land Uses

The characteristics of the surrounding land use within a one-mile radius of the transfer station facility registration permit boundary ~~were~~ investigated, and the results show that land within the one-mile radius of the site is developed with a wide variety of commercial, industrial, residential, institutional, and recreational uses. The area includes residential areas, one school, ~~an historic site~~, recreational facilities, a day care, a golf course, a church, ponds (stock tanks and stormwater management ponds), ~~and other~~ landfills, as well as large portions of undeveloped “open” land. A “General Land Use Map” is presented on Drawing I/IIA-8, and a “Detailed Land Use Map” is presented in Drawing I/IIA-9. A “Structures and Inhabitable Buildings Map,” showing buildings and inhabitable structures within 500 feet of the site, is presented on Drawing I/IIA-12. The following table provides an approximate breakdown, by percent of total area, of the existing land uses within one mile of the transfer station facility registration permit boundary (and excluding the land within the facility registration boundary) (see also Drawing I/IIA-8 and I/IIA-9).

**TABLE I/II-3
SUMMARY OF SURROUNDING LAND USE**

Land Use	Area in Acres*	Percentage of Total Area
Open	2,934,758	65.530.3
Industrial	6971,169	15.646.7
Open	758	30.3
Commercial	171	6.8
Recreational	169	6.7
Residential	577162	12.96.5
Recreational	119169	2.76.7
Commercial	71171	1.66.8
Water	51	2.0
Institutional	4125	0.91.0
Water	3951	0.82.0
Total	4,4782,505	100

*based on ~~2006 RVI Land Use Analysis as a baseline, and updated for current (2019-2020) conditions based on~~, examination of ~~updated~~ aerial imagery, and ~~updated~~ City of Austin (COA) Land Use mapping information.

Directional Land Uses

A description of the surrounding land use in each direction around the site, within one mile of the transfer station facility registration permit boundary, is presented below.

- North. The closed Sunset Farms Landfill lies directly to the north of the site. Beyond that landfill, land use is a mix of undeveloped/agricultural and residential, including a school and a day care facility.
- East. Land use east of the site is a mix of industrial, undeveloped, residential, recreational, and commercial. A church and a large semiconductor manufacturer are located east of the site.
- South. Land use immediately south of the site is a mix of retail commercial and warehousing. Further south, The closed Travis County Landfill is located directly south of the site. Beyond that landfill, across U.S. Highway 290, land use is a mix of undeveloped/agricultural, retail commercial/office, institutional, warehousing, residential, and industrial, including a pipeline terminal/fuel storage facility.
- West. The Austin Community RDF and the closed Travis County Landfill are located directly west of the site. Besides those landfills, Land use towards the west is a mix of west of the site is largely undeveloped or residential; land is also used for miscellaneous industrial and commercial, including an event venue with an historic site (Barr Mansion).

Summary

The surrounding land use within one mile of the site is summarized below.

- There are approximately 2,402,880 residential units, including:
 - Approximately 1,808,691 single family homes; and
 - 2 multifamily properties with approximately 594,189 housing units.
- There are approximately 60–43 businesses representing a mix of commercial, manufacturing, and industrial activity.
- Undeveloped, park/park-like, or agricultural land, which includes the following:
 - Bluebonnet Hill Golf Course;
 - Southern Walnut Creek Greenbelt;

- Walnut Creek Sports Park;
 - ~~Walnut Creek Nature Preserve;~~
 - ~~Pioneer East Recreational Center;~~
 - ~~Colonial Place recreational area;~~
 - Harris Branch Recreational Center and Neighborhood Park; and
 - Undeveloped/agricultural land.
- There are three landfills: the active Austin Community RDF, the closed Sunset Farms Landfill, and the closed Travis County Landfill.
 - ~~Walnut Creek is located approximately 1,000 feet west of the site at its closest point.~~
 - ~~The Community Bible Fellowship Church is approximately 150-300 feet east of the site.~~
 - ~~Barr Mansion, a historic site, is located approximately 0.5 mile northwest of the site.~~

The total land area within a one~~1~~-mile radius is 7.03~~9~~ square miles. Based on the number of housing units in the area, it is estimated that the population density within a one-mile radius of the site is about 885~~582~~ people per square mile. This is estimated by assuming an average of 2.58 people per household (the average for Travis County based on the latest available 2013-2017 U.S. Census Bureau American Community Survey 5-Year Estimate [census.gov/quickfacts/fact/table/traviscountytexas/PST045218]). Overall, the land within a one-mile radius of the transfer station facility registration permit boundary has a slightly lower population density than Travis County as a whole, where the average population density is about 1,034 people per square mile (based on the same 5-Year Estimate referenced above). The land within one mile of the transfer station facility registration permit boundary can be summarized as being a suburban area used for a mix of industrial, residential, and commercial.

6.1.3 Growth Trends and Directions of Major Development

The 2006 RVI Land Use Analysis included in Appendix I/II provides a detailed description of growth trends near the Austin Community RDF site through the mid-2000s. The site-Austin Community RDF and vicinity was at that time, and continues to be, is located in one of the most rapidly growing sectors of the Austin metropolitan area. The five-mile radius around the facility existing Austin Community RDF has continued and will continue to experience substantial residential growth. From 2000 through the first half of 2006, the area within five miles around the Austin Community RDF increased by 6,580 households, from 49,447 households to 56,027. With respect to the proposed transfer station facility and growth trends at the time of this application,

Much of the residential growth within five miles is occurring within major new subdivisions located north and east of the facility, although a significant proportion is also occurring at the redevelopment site of the former Mueller airport, five miles to the southwest. Based on historical aerial imagery available since 2006, the area surrounding the site has continued to experience rapid growth.

Population growth estimates in the eight ZIP codes that make up the majority of the area within five miles of the transfer station facility registration permit boundary were made using the City of Austin's "DTI 2040 Population and Employment Forecast." Projected growth in these ZIP codes is estimated as follows:

**TABLE I/II-4
REGIONAL GROWTH**

ZIP code	2020 Population Forecast	2040 Population Forecast	% growth from 2020 to 2040
78754 (site is in this ZIP code)	19,975	34,727	74%
78752	25,536	37,752	48%
78753	47,114	56,769	20%
78758	56,251	69,816	24%
78723	39,282	52,638	34%
78724	22,138	34,419	55%
78725	13,972	25,678	84%
78653	14,759	43,371	194%
78660	32,776	43,853	34%

6.1.4 Proximity to Specified Uses

The aforementioned general and detailed land use maps (Drawings I/IIA-8 and I/IIA-9, respectively) show the proximity to residences and other land uses within a one-mile radius of the transfer station facility registration permit boundary, and the surrounding land use was summarized in the previous subsections. The proximity to specified uses within one mile of the transfer station facility is as follows:

- **Residences.** Based on the 2006 RVI Land Use Analysis and a review of the latest available aerial imagery (obtained in January ~~September 2020~~ 2019, with latest available imagery dated January 13, 2018), it is estimated that there are approximately ~~2,402~~ 2880 existing residences located within one mile of the facility. The nearest existing residence is

approximately ~~326~~3,037 feet ~~southwest~~north of the facility, in the ~~Colonial Place~~Parkside at Harris Branch subdivision.

- Commercial Establishments. Based on ~~the 2006 RVI Land Use Analysis and~~ a review of aerial imagery (obtained in ~~January~~September 2020~~2019~~, with latest available imagery dated January ~~13~~, 2018), it is estimated that there are approximately ~~60~~43 businesses within one mile of the site, representing a mix of both commercial and industrial activity. However, the majority of the business activity is industrial. ~~The~~Excluding the Austin Community Landfill~~RDF, the nearest business is,~~ the 7-Eleven Convenience Store located to the south; ~~is adjacent to the southern boundary~~ of the site.
- Churches. There is one church located within one mile of the site: ~~Namely, t~~The Community Bible Fellowship Church is located on Giles Lane~~Road~~, approximately ~~30~~150 feet east of the site.
- Historic/Archaeologically Significant Sites. There ~~is one~~are no historic sites located within one mile of the site. ~~The Barr Mansion is located approximately 2,400 feet northwest of the facility permit boundary on Sprinkle Road.~~

Horizon Environmental Services, Inc. performed a Cultural Resources Survey in 2003 which included undisturbed portions of the Austin Community RDF site as of the date of the field assessment. The assessment concluded that there would be ~~"no effect"~~ to cultural resources by the ~~then-proposed development~~expansion of the Austin Community RDF. The survey was forwarded to the ~~Texas Historical Commission ("THC")~~ for concurrence. The THC concurred that no historic properties were affected and the landfill expansion project may proceed. The correspondence with the ~~Texas Historical Commission~~THC, as well as the Cultural Resources Survey, are included in Appendix I/IIK.

In 2019, additional coordination has occurred with ~~the~~ THC to inform them of the proposed transfer station and request their review of the project for conformance with the Texas Antiquities Code. The THC replied to the request with a response dated 25 October 2019 that indicated "No Significant Sites – Project May Proceed." This documentation of coordination for this project is also included in Appendix I/IIK.

- Parks. There are ~~five~~three recreational areas and one golf course located within one mile of the site. Walnut Creek ~~Nature Preserve~~Sports Park is located approximately 0.75 mile south of the site along Daffan Lane ~~along Walnut Creek just south of U.S. Highway 290.~~ Southern Walnut Creek Greenbelt is located approximately 0.9 mile south of the site, south

of Old Manor Road. Harris Branch Recreational Center and Harris Branch Neighborhood Park are located approximately 0.8 mile north of the site on Farmhaven Road. ~~Pioneer East Recreational Center is located approximately 0.9 mile northwest of the site on Samsung Boulevard. A recreational area associated with the Colonial Place development is located approximately 1,400 feet southwest of the site.~~ The Bluebonnet Hill Golf Course (public) is located approximately ~~2,400~~2,700 feet southeast of the site on Decker Lane.

- Schools and Day Care Centers. There is one school located within one mile of the site. The Bluebonnet Trail Elementary School is located approximately ~~4,823~~5,029 feet northwest of the site on Farmhaven Road. There is one licensed day care facility located within one mile of the site. The Children's Courtyard is located approximately ~~3,445~~3,580 feet northeast of the site on Harris Branch Parkway.
- Ponds and Lakes. There are scattered ponds (mostly stock tanks and stormwater management basins) located within the one-mile radius around the site. There are no lakes within one mile of the site.
- Other. There are no known sites having exceptional aesthetic quality within one mile of the facility.

6.2 Wells Within 500-Feet of the Facility

In Appendix I/IIA, drawings are included that present water well map and an oil and gas well map. These maps include a 500-ft offset line from the transfer station facility registration boundary, and reveal the following:

- Water Wells: ~~There are no known off-site water well locations outside of the facility boundary but within 500 feet of the facility registration boundary. There is one existing water well located outside of the facility boundary but within 500 feet of the facility. The depth of the water well is 27 feet below ground surface, and the well is designated as an irrigation well.~~ Further, there are also no known existing water wells located within the facility boundary. Water well abandonment is discussed subsequently in Section 10.1.
- Oil and Gas Wells: There are no known off-site oil and gas well locations ~~outside of the facility boundary but~~ within 500 feet of the facility registration boundary. Further, there are also no known oil and gas wells located within the facility boundary. Oil and gas well abandonment is discussed subsequently in Section 10.2.

6.3 Prevailing Wind Direction

A wind rose is included on a location map in Appendix I/IIA (see Drawing I/IIA-12). The wind rose indicates that the prevailing wind direction in the area is from the south.

6.4 Easements and Buffer Zones

6.4.1 Easements

As discussed previously in Section 4.3 of this report, there are ~~four~~eleven utility easements ~~and one temporary easement~~ (and zero drainage or pipeline easements) within or adjacent to the ~~overall~~ transfer station registration boundary, but there are no easements in the area that will be occupied by the transfer station building. Accordingly, no solid waste loading or storage will occur within any easement (or right of way) that crosses the facility, nor in any buffer zone.

6.4.2 Buffer Zones

30 TAC §330.543(b) requires that a minimum 50-ft separating distance be maintained between the facility's ~~permit~~ boundary and solid waste storage and processing areas. The buffer zone must provide for safe passage for fire-fighting and other emergency vehicles.

The buffer zones are ~~shown evident~~ on the facility layout plan presented in Part III, Attachment 1, Drawing III-1-4), ~~and the shortest buffer distance is labeled on this plan (i.e., a 56-ft distance from the transfer station building to the eastern registration boundary, but because the adjoining land to the east is owned by WMTX the shortest set-back from land not owned/controlled by WMTX is 249-ft).~~ As shown, a 50-ft or greater buffer will be maintained between the transfer station and the facility ~~permit~~ boundary.

6.5 Conclusions Regarding Land Use

The Austin Community Transfer Station is viewed as a compatible land use for the following reasons:

1. The Austin Community RDF (landfill) has been in existence for ~~many over 450~~ years (the initial MSW landfill permit for the property was issued in 1974), and solid waste management activities have been a continuous, predominant land use in the area since 1968. The transfer station operation would be a continuation of this established land use.

2. The closed Travis County Landfill and the closed Sunset Farms Landfill are located directly south and north of the site, respectively. In addition, the ~~disposal units in~~ Austin Community RDF will be filled to capacity and closed in the near future. The presence of these landfills further establishes the presence of waste management activities as a land use, and these nearby features will limit the ability to significantly develop or change the use of that nearby land.

7. TRANSPORTATION

7.1 Roads and Traffic

A comprehensive Transportation Study evaluating roads and traffic was performed for the Austin Community RDF for Permit MSW-249D – covering a study period through the year 2027. This process included agency coordination with the Texas Department of Transportation (TxDOT), who provided affirmation that they have “no objections” to the findings of the study that the main roads that will be used to access the site are available and adequate. Copies of the landfill Permit MSW-249D Transportation Study and the TxDOT coordination letters and response are provided in Appendix I/IIH of this application ~~to serve as the basis for satisfying~~ as supporting information relevant to the following ~~requirements for this application~~:

- availability and adequacy of roads that the owner or operator will use to access the site, {which are the same roads for the transfer station as they were for the Austin Community RDF landfill, as studied, namely:
 - US 290;
 - Giles Lane; and
 - ○ Johnny Morris Road.;
- the volume of vehicular traffic on access roads within one mile of the facility, both existing and expected, during the expected life of the facility, ~~{which was studied through the year 2027}~~; and
- the volume of traffic expected to be generated by the facility on the access roads within one mile of the proposed facility, {which, as discussed below, is greater for the landfill Austin Community RDF than will be for the transfer station}.

Volume of Traffic Associated with Proposed Transfer Station:

If the transfer station were to operate at its maximum daily waste acceptance rate (~~consistent with the rate indicated in the waste acceptance plan see Section 3.2, Table I/II-1 in the~~ Part I/II Supplemental Technical Report), the estimated facility-generated vehicles are tabulated below in Table I/II-5 ~~on the next page~~.

**TABLE I/II-5
TRANSFER STATION PEAK DAILY TRAFFIC GENERATION ESTIMATE**

Vehicle Type	Truck Capacity (tons)	Estimated Distribution of Waste Stream ⁽¹⁾ (tons/day)	Estimated Vehicle Counts ⁽²⁾ (vehicles/day)
Collection - Rear Loader	6	700	117
Collection - Front Loader	10	2,200	220
Collection - Rolloffs	5	290	58
Private Individuals	0.25	10	40
Subtotal		3,200	435
Transfer Trailers	25	3,200	128
Facility Personnel/Misc.	-	-	10
Total Vehicles per Day			573
Total Trips per Day			1,1465

Notes:

- (1) The distribution of waste stream is based on operator experience with hauling and transfer stations, and ~~assumes~~^{using} a peak day (i.e., receiving waste at the maximum allowable daily rate).
- (2) Vehicle counts refer to one-way trips (i.e., vehicles entering the site). To obtain the total number of vehicle trips on public roadways, the vehicle counts should be doubled (to account for vehicles both entering and leaving the facility on the same day).
- (3) Vehicles for facility personnel/miscellaneous were conservatively estimated as being 10 vehicles per day (considered a conservatively high estimate).

Comparison of Transfer Station Traffic to Landfill Traffic:

For the year 2027, the comprehensive Transportation Study and traffic analysis conducted for the year 2027 for the Austin Community RDF Type I MSW landfill facility was based on an estimated 667 vehicles (i.e., 1,334 trips) per day. Actual 2019 scale records from the Austin Community RDF provide accurate daily vehicle counts and waste tonnage received. From this, comparisons can be made of the actual waste vehicle daily traffic being generated by the landfill versus the estimated daily traffic that will be generated by the transfer station. These comparisons are presented below in Table I/II-6.

As another point of comparison, in 2019 to-date in 2019, traffic counts from scale records at the landfill have revealed that about 490 vehicles per day cross the scales on a typical landfill operating day that receives approximately 3,500 to 4,000 tons of waste. This shows that the traffic being experienced currently at the landfill is well below that used in the study that was the basis for Permit MSW-249D.

TABLE I/II-6
COMPARISON OF LANDFILL TRAFFIC TO TRANSFER STATION TRAFFIC

Item	2019 Landfill Daily Tonnage Values	2019 Landfill Daily Traffic Values (# of Vehicles)	Transfer Station Daily Tonnage Estimates	Transfer Station Daily Traffic Estimates (# of Vehicles)
Peak Day	5,213	623	3,200	573
Average of Busiest Day of Each Month	4,345	592	3,006	538
Average of M-F Operating Days	3,469	550	2,442	437
Average of All Operating Days	3,045	504	2,145	384

Operation of the transfer station will be phased in as the landfill phases out of operation – i.e., When the transfer station will not commence operation until, the landfill will nears its full capacity and is have (other than accepting only *de minimus* levels) ceased operations amounts of waste. – and as such the landfill will stop generating. Thus, the cumulative traffic impacts from the co-located facilities will be minimal as the two facilities will not be fully operational at the same time. As shown by through the comparisons presented above, the daily number of vehicles (and corresponding vehicle trips in and out of the facility site) will go down for the transfer station on its peak and average operating days, as compared to the daily number of vehicles generated by the landfill on its peak and average operating days. The transfer station traffic volumes are also less than those that were the basis of the traffic analysis Transportation Study for the landfill Austin Community RDF permit.

Volume of Vehicular Traffic on Roads Used to Access the Transfer Station:

Data on the volume of vehicular traffic, existing and projected, on the roads within one mile of the proposed transfer station that will be used to access the facility are tabulated below in Table I/II-7. The existing data were obtained from recent TxDOT-published traffic count data sources, as referenced in the footnotes to the table. The projected data were calculated using the population forecast in the Capital Area Metropolitan Planning Organization (CAMPO) 2040 Regional Transportation Plan (regional growth percentage from 2020 to 2040).

TABLE I/II-7
VOLUME OF TRAFFIC ON AREA ROADS

<u>Road Segment/Location</u>	<u>TxDOT- Published Traffic Counts⁽¹⁾⁽²⁾ (vpd)</u>	<u>Landfill- Generated Traffic Contribution⁽³⁾ (%)</u>	<u>Projected 2040 Traffic⁽⁴⁾ (vpd)</u>	<u>Transfer Station- Generated Traffic Contribution⁽⁵⁾ (%)</u>
US 290 at Giles Lane	62,306	1.1%	116,859	0.5%
Giles Lane - South of Transfer Station Entrance	8,619	11.6%	18,184	5.0%
Giles Lane - North of Transfer Station Entrance	6,648	3.7%	14,026	1.6%
Johnny Morris Road - South of US 290	5,990	5.6%	12,637	2.4%

Key: vpd = Vehicles per Day

1. Data Source for US 290: TxDOT 2018 District Traffic Web Viewer, AADT Annuals.

2. Data Source for Giles Ln. and Johnny Morris Rd.: TxDOT “2015 Austin Urban Traffic Map (Sheet 83 of 139 Urban Sheets),” Average Daily Traffic Counts(Sept. 2016).

3. Landfill-generated traffic contribution is based on the 2019 peak landfill daily vehicle trips (i.e., 623 vehicles x 2 trips = 1,246 vehicle trips).

4. Projected 2040 traffic is calculated using the regional growth percentage presented in the CAMPO 2040 Regional Transportation Plan population forecast.

5. Transfer station-generated traffic contribution is based on the peak transfer station daily vehicle trips (i.e., 573 vehicles x 2 trips = 1,146 vehicle trips).

The above TxDOT traffic data are from years when the Austin Community RDF was operating; therefore, landfill-generated traffic are included in these counts. The key takeaway from Table I/II-7 is that the transfer station, with a registered maximum daily waste acceptance rate and, thus, a constant maximum value of peak daily traffic over the life of the facility – will contribute a small and ever-decreasing percentage of the total traffic volumes on these area roadways during the life of the transfer station.

Traffic Conclusions:

From the data presented herein and for the reasons described below, this proposed facility (i.e., the transfer station) will result in diminished (i.e., lower facility-generated traffic volumes) traffic conditions as compared to the Austin Community RDF landfill. Therefore, it is apparent that the

transfer station will have less traffic impact on surrounding roadways than the already-approved and operating landfill. ~~and Accordingly,~~ it is concluded that the roads the operator will use to access the site are available and adequate. This conclusion is based on the following rationale:

- The comprehensive Transportation Study (attached) for the landfill was for a study period through the year 2027.
- The comprehensive Transportation Study for the landfill considered ~~the planned~~ improvements to ~~the US 290 Freeway~~ and the ~~Giles Road Lane~~ intersection. These improvements, now constructed, have improved safety and traffic flow ~~for this intersection~~.
- The comprehensive Transportation Study was based on the landfill generating 667 vehicles per day (i.e., 1,334 trips per day) in 2027. Accurate landfill vehicle counts from scale records reveal that on the peak landfill operating day of 2019 when the most tonnage was received and the most traffic was generated, 623 vehicles crossed the scale (i.e., 1,246 trips).
- The transfer station will restrict its allowable tonnage to not exceed a maximum allowable value; using the waste hauling truck capacities, throughout its expected life the transfer station facility is projected to generate no more than 573 vehicles per day (i.e., 1,146 trips) on a peak day if operating at the maximum allowable waste acceptance rate.
- The transfer station daily waste acceptance rates will fluctuate from day-to-day, but are projected to be, on average, well below the allowable daily maximum (see Table I/II-6). Accordingly, the transfer station traffic generation is also well below that of a peak day (e.g., about 437 vehicles (874 trips) on an average weekday – again, also indicating a reduction compared to average daily landfill traffic generation at the Austin Community RDF.
- The distribution of transfer station traffic throughout the day is anticipated to be similar to that of the landfill. The waste vehicle types will also be similar.
- ~~Because the transfer station will generate less volume of traffic than the landfill that was used as the basis for the comprehensive Transportation Study (which TxDOT affirmed as being acceptable),~~ it can be reasonably concluded that the proposed transfer station will have less overall traffic impact compared to the landfill, and that the roads used to access the site are available and adequate, based on the following considerations: (i) the transfer station traffic volumes will be reduced as compared to those actually being experienced at the Austin Community RDF on its peak and average daily (and annual) basis; (ii) the transfer station will generate less traffic than the landfill that was used as the basis for the comprehensive Transportation Study; and (iii) the transfer station's maximum peak daily

traffic will remain constant over time due to the registered limit on the transfer station's maximum allowable daily waste acceptance, resulting in a small and ever-decreasing contribution percentage to the traffic volumes projected on area roadways over the expected life of the transfer station.

A ~~new~~ coordination letter ~~has been~~was submitted to TxDOT in September 2019 for this proposed transfer station (see Appendix I/IIH), requesting their review and concurrence of these findings. TxDOT's October 2019 reply and documentation of additional follow-up coordination is also included in Appendix I/IIH.

7.2 Airports

An airport map is provided in Appendix I/IIA. ~~The map which~~ presents the current edition of the Federal Aviation Administration (FAA) Sectional Aeronautical Chart for the area, identifies the site location, and shows a six-mile offset radius from the facility's registration permit boundary; ~~is provided in Appendix I/IIA.~~ As shown, there is one small public-use airport within six miles of the facility: -the Austin Executive Airport (formerly known as the Bird's Nest Airport), located approximately 5.1 miles northeast of the facility. A small private-use airport, the Dryden Airport, is located approximately 4.2 miles south of the facility. As additional information, it is noted that the nearest large, public/commercial use airport is Austin-Bergstrom International Airport (ABIA), which is more than 8.2 miles south of the facility.

Because the proposed transfer station is located much more than 10,000 feet from the end of any airport runway, a demonstration of airport safety per 30 TAC §330.545(a) is not required. Furthermore, because the proposed transfer station is not a "landfill unit" or "lateral expansion" of a landfill unit, the FAA and airport notifications for landfills within a six-mile radius of an airport (or five-mile radius of any large commercial airport runways), per 30 TAC §330.545(b), are not applicable.

The transfer station will manage solid waste indoors, within a single-story building with a roof, of a height much lower than surrounding terrain. Therefore, no adverse impacts to air traffic or airport safety will be created by transfer station operations.

8. GENERAL GEOLOGY AND SOILS STATEMENT

8.1 Geology

The site is underlain by the Upper Cretaceous age Taylor Group. The Taylor Group consists of massive beds of shale and marl, with clayey chalk, clay, sand, and some nodular and phosphatic zones. Beneath the site, the upper portion of the Taylor is composed of weathered montmorillonite clay with high shrink/swell potential. The clay is generally hard and occasionally contains shell fragments. Underlying the weathered material is the unweathered Taylor Group, which in the site area is composed of calcareous claystone. The top of this unit is most often encountered between 20 and 50 ft below ground surface. Below the claystone is an unweathered marl layer. Based on regional data, the base of the Taylor Group in the site area is at a depth of approximately 700 ft below ground surface [Golder Associates, Permit Amendment Application, Austin Community Recycling & Disposal Facility, January 2008].

Underlying the Taylor Group is the Austin Chalk, which consists of massive beds of chalk and marl with bentonitic seams, glauconite, and pyrite nodules. The Austin Chalk is approximately 400-ft thick. Below the Austin Chalk are the Eagle Ford Group, Buda Limestone, and Del Rio Clay, which have a combined thickness of approximately 150 feet. Underlying those units are the Edwards and associated limestones, which have a thickness of approximately 300-ft. The base of the Edwards and associated limestones is approximately 1,600 feet below ground surface [Golder Associates, Permit Amendment Application, Austin Community Recycling & Disposal Facility, January 2008].

8.2 Topography and Soils

The site is located in Travis County, Texas. The topography of Travis County decreases from west to east, with the greatest change in relief associated with the inactive Balcones Fault Zone. The Balcones Fault Zone divides Travis County into two physiographic provinces: the Gulf Coastal Plains to the east; and the Great Plains to the west. The Gulf Coastal Plain physiographic province is further subdivided into the Rolling Prairie Physiographic Region and the Blackland Prairie Physiographic Region. The site is located in the Blackland Prairie Physiographic Region.

The natural surface relief in the site area is towards both the Walnut Creek and Decker Creek drainage watersheds. Drainage features of the site are erosional valleys which generally transport surface water toward the southern, western, and eastern portions of the site. There is a natural drainage divide that passes through the eastern portion of the site landfill facility, and the proposed transfer station area-facility is on the east side of this divide (with topography draining generally

eastward, ultimately reaching the Decker Creek watershed). Maps showing the general site topography are included with this report in Appendix I/IIA.

Shallow soils in the eastern portion of the site-landfill facility (where the proposed transfer station facility will be located) are predominantly Heiden Series, Houston-Black Series, and Ferris-Heiden complex. The Heiden Series are well-drained clay soils that are developed in calcareous marl under a cover of grasses. The Houston-Black Series consist of deep, moderately well drained soils that have developed in calcareous marls, alluvial clays, and chalk under prairie grasses. The Ferris-Heiden soils consist of deep clay soils developed in calcareous marls.

8.3 Faults

The Balcones Fault Zone passes through the center of Travis County, from the northeast to southwest. The fault system is approximately six to eight miles wide and is located 2-3 miles west of the site. No movement has occurred along the fault since the Miocene Epoch, 12.5 to 5 million years ago.

A detailed fault study was previously prepared for the Austin Community RDF landfill in March 1994 by Rust Environmental and Infrastructure as part of the Subtitle D location restrictions evaluation and was evaluated and updated as needed in January 2008 by Golder Associates. From this, the nearest mapped inactive fault is located approximately 0.7 miles west of the western edge of the facility boundary (which is over 1.7 miles, or about 9,000-feet west of the proposed transfer station). There are no active faults or surface expressions of faults at the site or in the area.

8.4 Seismic Impact Zones

It is important to note that regulatory requirements regarding the siting of MSW facilities include requirements for “municipal solid waste landfill units and lateral expansions” to not be located in seismic impact zones unless certain demonstrations are made (30 TAC §330.557). For this application – a proposed transfer station – this location restriction is not applicable. However, as general information on the seismicity (or lack thereof) in the area, an evaluation was performed for this application to assess whether the facility is in a seismic impact zone, based on available United States Geologic Survey (USGS) seismic hazard maps online at: <https://earthquake.usgs.gov/hazards/hazmaps/>. The results of this evaluation clearly indicate that facility is not in a seismic impact zone (i.e., an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10g in 250 years).

8.5 Unstable Areas

An unstable area assessment was previously prepared for the Austin Community RDF landfill as part of approved location restrictions, with the conclusion that no unstable areas exist at, or adjacent to, the site. The site is situated on a substantial thickness of stiff and stable Taylor Group materials that provide a good foundation, and is underlain by bedrock terrain, not prone to differential subsidence or karst activity, not in a setting susceptible to natural or human-induced events or forces that could impair structures, and not in an area susceptible to mass movement.

9. GROUNDWATER AND SURFACE WATER STATEMENT

9.1 Groundwater

The Taylor Group, which directly underlies the site, produces only a small amount of the total groundwater used in Travis County. In the site area, groundwater in the Taylor Group primarily occurs within the weathered portions, perched on top of unweathered claystone. These clays have a relatively high shrink/swell potential, and during dry periods, desiccation cracks may form and allow precipitation to enter the formation. Perched groundwater, where present, generally moves in subdued conformity to topography following the weathered/unweathered interface. On the eastern portion of the site, where the proposed transfer station will be located, the interface slopes gently toward the east.

The first significant aquifer underlying the site is the Edwards and associated limestones, at a depth of about 1,600 feet below ground surface. The site is located east of the downdip limit of fresh to slightly saline water, and the groundwater in the Edwards beneath the site is not considered potable because of high concentrations of dissolved solids. The site is more than five (5) miles away from a recharge zone of the Edwards. At the site, the Edwards is overlain by confining units that serve as low permeability aquitards.

9.2 Surface Water

~~This portion of the site (where the transfer station area facility will be located)~~ is located within the Gilleland Creek-Colorado River watershed of the Lower Colorado River Basin (more specifically, within the Decker Creek sub-watershed). For reference, it is noted that the ~~the~~ western portion of the site landfill facility (non-transfer station areas) is located within the Walnut Creek Watershed of the Lower Colorado River Basin.

The major regional surface water features within the vicinity of the site include Ferguson Creek, Walnut Creek, Harris Branch, Gilleland Creek, Decker Creek, and Walter E. Long Lake. There are also several tributaries/branches of these creeks scattered around the vicinity of the site, along with scattered stock-tank-type ponds randomly located within a one-mile radius of the site. The general topographic maps presented in Appendix I/IIA show the streams and surface water bodies in the general site vicinity.

As mentioned, there is a natural drainage divide that passes through the eastern portion of the site landfill facility, and the proposed transfer station facility area is on the east side of this divide (with topography draining surface water generally eastward, ultimately reaching the Decker Creek

watershed). Drainage west of this divide (~~not associated with transfer station facility areas~~) flows west, ultimately reaching the Walnut Creek- Watershed. The proposed transfer station facility will not modify the existing drainage system for the landfill.

Perimeter drainage features of the landfill are up-gradient from the proposed transfer station, ~~which and will continue to~~ divert water around and away from the transfer station area. The Site Development Plan (Part III, Attachment 2) includes a surface water drainage report that provides additional specifics on the drainage rates and drainage design features related to the proposed transfer station.

9.3 Stormwater Permitting Under TPDES

TPDES Certification

~~The transfer station 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.~~ Surface water from the existing landfill facility is discharged under Texas Pollutant Discharge Elimination System (TPDES) Multi-Sector Storm Water General Permit TXR050000 (Permit No. TXR05AJ96) for Storm Water Discharges Associated with Industrial Activity, obtained through WMTX's filing of a Notice of Intent to comply with this TPDES Multi-Sector General Permit, as required by §402 of the federal Clean Water Act. The existing landfill facility also has and implements a site-specific Storm Water Pollution Prevention Plan (SWPPP).

The transfer station 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. The facility will ~~continue to~~ be subject to TCEQ's applicable TPDES stormwater permitting requirements ~~under the TPDES program and the federal Clean Water Act, §402, as amended.~~ In accordance with 30 TAC §330.61(k)(3)(A), this TPDES Certification affirms that ~~and accordingly,~~ WMTX will modify and/or obtain the appropriate TPDES permit coverage as required for this facility before the transfer station is placed into operation or when otherwise required. ~~operate in accordance with the TPDES permit requirements of the appropriate industry sector for the transfer station, including a site-specific Storm Water Pollution Prevention Plan (SWPPP).~~

WITNESS MY HAND on this _____ day of _____, 2020.

SWORN AND SUBSCRIBED before me by Steve Jacobs on the _____ day of _____, 2020.

Notary Public

10. ABANDONED OIL AND WATER WELLS

Pursuant to 30 TAC §330.61(l), this section provides a description and discussion of all existing or abandoned water and oil and gas wells situated within the facility ~~permit~~ boundary. Previously in this report, information was presented on water and oil and gas wells within 500 feet of the proposed facility (but not within the ~~registration permit~~ boundary). The information presented is based on a Texas Water Development Board (TWDB) and TCEQ search for water wells; and a Railroad Commission of Texas (RRC) search for crude oil wells, natural gas wells, and other wells associated with mineral recovery.

10.1 Water Wells Within the Facility Boundary

There are no known water wells within the facility boundary. In the event that previously unknown or abandoned water wells are discovered during development of the transfer station, the facility will provide written notification to the TCEQ ~~E~~xecutive ~~D~~irector of their location within 30 days of their discovery; the facility shall also provide, within 30 days prior to construction, the TCEQ ~~E~~xecutive ~~D~~irector with written certification that the well has been capped, plugged, and closed in accordance with all applicable rules and regulations of the Commission or other state agency.

10.2 Oil and Gas Wells Within the Facility Boundary

There are no known ~~water~~-oil and gas wells within the facility boundary. In the event that previously unknown or abandoned oil and gas wells are discovered during development of the transfer station, the facility will provide written notification to the TCEQ ~~E~~xecutive ~~D~~irector of their location within 30 days of their discovery. The facility will also properly cap, plug, and close the wells in accordance with all applicable rules and regulations of the RRC. A copy of the plugging report will be submitted to the TCEQ ~~E~~xecutive ~~D~~irector within 30 days after the well has been plugged.

11. FLOODPLAIN AND WETLANDS STATEMENT

11.1 Floodplains

11.1.1 Introduction and Purpose

Pursuant to 30 TAC §330.61(m)(1), this section provides data on floodplains. This section also discusses how the facility will be in compliance with the applicable provisions of the floodplain location restriction ~~given~~ in 30 TAC §330.547 as they pertain to transfer stations.

11.1.2 FEMA Map

With respect to mapped floodplains, the site and vicinity are part of FEMA Flood Insurance Rate Map (FIRM) Numbers 48453C0460K (January 6, 2016) and 48453C0480J (August 18, 2014). ~~In particular, the latter FIRM covers the location of the eastern portion of the site where the proposed transfer station facility will be located. This portion of the site area is identified by FEMA as an “area of minimal flood hazard,” and there are no mapped 100-year floodplains or floodways on or near the eastern portion of the site. The extreme western portion of the site along a Walnut Creek tributary, more than West of the site, more than 5,06,800 feet away from the proposed transfer station area, and in a the valley of the Walnut eCreek, that creek valley includes 100-year floodplains and floodways. that extend onto the western facility boundary. The FEMA-mapped 100-year flood elevations along Walnut Creek at the point closest to the site are at approximately elevation 53152 feet above sea level (ft, MSL). Northeast of the site, more than 1,700 feet away from the transfer station registration boundary, is the 100-year floodplain of Decker Creek. The FEMA-mapped 100-year flood elevations along Decker Creek at the point closest to the site are at approximately at elevation 601.5 ft, MSL. In contrast, the proposed transfer station area is near a topographic high (drainage divide on a ridge), at approximately at elevation 6340 ft, MSL.~~

A Floodplain Map, using the FEMA FIRMs as base maps, is provided in Appendix I/IIA. As shown on the map and as discussed above, the proposed transfer station facility will not be in or near a 100-year floodplain.

11.1.3 City of Austin Updated (Interim) 100-Year Floodplain

To assess another source of potentially-relevant floodplain delineation information, ~~as part of this application preparation,~~ the City of Austin’s “FloodPro” map viewer tool was used to check whether the proposed transfer station ~~area of the~~ facility is affected (i.e., in a City-delineated 100-year floodplain). The FloodPro mapping tool (<http://www.ATXfloodpro.com>) presents an interim 100-year floodplain based on the current 500-year floodplain, as an interim means of assessing the

effects of larger storm intensities than previously thought for a given flood frequency (i.e., as presented in the National Weather Service's 2018 "Atlas 14" rainfall study).

The FloodPro map viewer tool allows a search by address, and interactive viewing of mapped floodplain areas. Using FloodPro, the information presented above based on the FEMA FIRMS was confirmed. The only difference is that the 100-year flood elevations in Walnut Creek ~~at the extreme western part over 5,000 feet away from of the transfer station facility boundary~~ are a few feet (at most) higher on the City of Austin interim maps. ~~As noted, the proposed transfer station area is over 6,800 feet away from the western edge of the site along Walnut Creek, and from this, the transfer station will be situated on land that is more than 890-ft feet higher in elevation higher than the potential flood levels of Walnut Creek. The FloodPro map viewer also shows that the 100-year flood elevations in Decker Creek, over 1,700 feet away from the transfer station facility, are approximately equal to those on the FEMA FIRMS, indicating the transfer station will be situated on land that is more than 18-ft feet higher in elevation higher than the potential flood levels of Decker Creek.~~ Clearly, the proposed transfer station facility will not be impacted by a 100-year flood ~~in from either of the two nearest creeks and their associated 100-year floodplains/floodways.~~

11.2 Wetlands

As required by 30 TAC §330.61(m)(2), a wetlands determination under applicable federal, state, and local laws was made by a qualified Geosyntec ecologist for the proposed transfer station facility and adjacent areas that will be developed ~~to~~ support transfer station operations ~~was made by a qualified Geosyntec ecologist.~~

In September 2019, Geosyntec's ecologist performed a general determination of "Waters of the US" (including wetlands). The wetlands determination consisted of a pre-field inspection desktop study, followed by a field inspection of the site. It is noted that Geosyntec's 2019 study focused on the proposed transfer station facility ~~and adjacent areas on the eastern portion of the site area~~ that will be developed and potentially disturbed as part of the transfer station operations. The existing landfill areas ~~of the west of the transfer station~~ site were beyond the scope of Geosyntec's study because a wetlands study was previously conducted for the landfill permit application, the existing landfill is operating in accordance with MSW-249D (found to be in compliance with wetlands location restrictions), and the transfer station will not be located within any landfill footprint (nor will adjacent storm-water conveyances be affected).

Geosyntec's 2019 wetlands study findings presented in their environmental site assessment report are provided in Appendix I/II-I. In Geosyntec's best professional judgment, there do not appear

to be any wetlands or other jurisdictional water bodies (e.g., streams) within the limits of disturbance of the proposed transfer station area. Accordingly, the demonstrations required by paragraphs (1) – (5) of 30 TAC §330.553(b) are not required.

12. PROTECTION OF ENDANGERED SPECIES

With respect to endangered and/or threatened species, this facility, and operation of this facility, must meet 30 TAC §330.551(a), which requires that a facility and the operation of a facility shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species.

Pursuant to 30 TAC §330.61(n) and §330.551, a site-specific endangered and threatened species assessment was conducted in September 2019 by a Geosyntec ecologist. The assessment included a review of state and federal reference information and a field survey for threatened or endangered species and their habitats at the proposed transfer station facility and adjacent areas that will be developed ~~to~~he support transfer station operations.

Geosyntec's site-specific field survey was conducted to check for listed species or suitable habitats for listed species. Geosyntec concluded that suitable habitat does not occur for any federally-listed species that could potentially occur within the County (i.e., Travis County) and that there is no critical habitat occurring for any federally listed species within the project area. Further, with respect to state-listed endangered or threatened species, no state-listed species were observed in the study area during the investigations or have been documented in the vicinity. Geosyntec's 2019 study findings are provided in Appendix I/III.

In summary, Geosyntec's findings are that ongoing facility development and operation is not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species.

It is noted that Geosyntec's 2019 study focused on the proposed transfer station facility ~~and adjacent areas on the eastern portion of the site~~area that will be developed and potentially disturbed as part of the transfer station operations. The existing landfill areas west of the transfer station site were beyond the scope of Geosyntec's study because threatened/endangered species assessments were previously conducted for the landfill permit application with findings that landfill development and operation are~~is~~ not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species, and the existing landfill is operating in accordance with MSW-249D (found to be in compliance with endangered species location restrictions). As mentioned, the transfer station will not be located within any landfill footprint.

13. TEXAS HISTORICAL COMMISSION REVIEW

As part of the previous landfill permitting activities, culminating with the current (now approved) Permit MSW-249D, the landfill facility has been evaluated for compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. THC performed their review for the landfill facility, and the State Historic Preservation Officer (SHPO) issued a “no effect” finding (project may proceed).

For this proposed transfer station registration application, coordination with THC has been performed to inform them of this project, and to confirm the understanding that the portion of the ~~facility-property~~ proposed for the transfer station facility was covered under the previous finding, or otherwise is in compliance with the Texas Antiquities Code, and may proceed.

A copy of the THC coordination letter, which also includes backup information from the previous coordination efforts, is provided with this application as Appendix I/IIK. As shown in this appendix, THC replied to the recent coordination request for this project with a response dated October 2019 that indicated “No Significant Sites – Project May Proceed.”

14. COUNCIL OF GOVERNMENTS REVIEW REQUEST

30 TAC §330.61(p) requires that the owner or operator shall submit documentation that Parts I and II of the application were submitted for review to the applicable council of governments for compliance with regional solid waste plans. The owner or operator shall also submit documentation that a review letter was requested from any local governments as appropriate for compliance with local solid waste plans. A review letter is not a prerequisite to a final determination on a permit or registration application.

The applicable council of governments for this facility location is CAPCOG. Documentation that Parts I and II of this application were submitted to CAPCOG for their review for compliance with regional solid waste plans is provided in Appendix I/III.

APPENDIX I/IIA

GENERAL LOCATION MAPS

LIST OF DRAWINGS		
Drawing No.	Title	Drawing Date (latest revision)
I/IIA-1	General Location Highway Map	September 2019 <u>January 2020</u>
I/IIA-2	Detailed Highway Map	September 2019 <u>January 2020</u>
I/IIA-3	General Topographic Map	September 2019 <u>January 2020</u>
I/IIA-4	Aerial Photograph of Surroundings	September 2019 <u>January 2020</u>
I/IIA-5	Site Aerial Photograph	September 2019 <u>January 2020</u>
I/IIA-6	Facility Layout Plan	September 2019 <u>January 2020</u>
I/IIA-7	Transfer Station Area Site Plan	September 2019 <u>January 2020</u>
I/IIA-8	General Land Use Map	September 2019 <u>January 2020</u>
I/IIA-9	Detailed Land Use Map	September 2019 <u>January 2020</u>
I/IIA-10	Zoning Map	September 2019 <u>January 2020</u>
I/IIA-11	Airport Map	September 2019 <u>January 2020</u>
I/IIA-12	Structures and Inhabitable Buildings Map	September 2019 <u>January 2020</u>
I/IIA-13	Water Wells Map	September 2019 <u>January 2020</u>

I/IIA-14	Oil and Gas Wells Map	September 2019 <u>January</u> 2020
I/IIA-15	Floodplain Map	September 2019 <u>January</u> 2020

APPENDIX I/IIB

ADJACENT LAND OWNERSHIP MAP AND LIST

LANDOWNER'S LIST

- | | | | |
|----|--|----|---|
| 1 | <u>WASTE MANAGEMENT</u>
<u>OF TEXAS INC</u>
<u>PO BOX 1450</u>
<u>CHICAGO, IL 60690-1450</u> <u>GLOBAL</u>
<u>WORDWIDE</u>
<u>INTERNATIONAL LLC</u>
<u>3616 FAR WEST BLVD UNIT 500</u>
<u>AUSTIN, TX 78731-3082</u> | 2 | <u>BFI WASTE SYSTEMS OF</u>
<u>NORTH AMERICA</u>
<u>18500 N ALLIED WAY</u>
<u>PHEONIX, AZ 85054-</u>
<u>6164</u> <u>CLINTON HAZEL L</u>
<u>9305 HAPPY TRAIL</u>
<u>AUSTIN, TX 78754</u> |
| 3 | CITY OF AUSTIN
P.O. BOX 1088
AUSTIN, TX 78761-1088 | 4 | APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 |
| 5 | TRABEV REAL ESTATE LTD
1500 SCENIC DR APT 105
AUSTIN, TX 78703-2049 | 6 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 7 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 | 8 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 9 | YESCAS HUMBERTO
6802 SPRUCE GUM LN
AUSTIN, TX 78744-4946 | 10 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 11 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 | 12 | 7-ELEVEN INC
P.O. BOX 711
DALLAS, TX 75221-0711 |

LANDOWNER'S LIST

- | | |
|--|--|
| 13 SUAREZ HUMBERTO
11717 PILLION PL
MANOR, TX 68653-3767 | 14 ROBERTSON FAMILY
290 PROPERTY LLC
3506 BONNIE RD
AUSTIN, TX 78703-2604 |
| 15 BFI WASTE SYSTEMS OF NORTH AMERICA
18500 N ALLIED WAY
PHEONIX, AZ 85054-6164 | 16 CENTRAL TEXAS REGIONAL MOBILTY AUTHORITY
515 CONGRESS AVE STE 2230
AUSTIN, TX 78701-3506 |
| 17 <u>APPLIED MATERIALS INC</u>
<u>RUSSELL MANGINEL</u>
<u>9700 E HIGHWAY 290</u>
<u>AUSTIN, TX 78724-1102</u> BFI WASTE SYSTEMS OF NORTH AMERICA
18500 N ALLIED WAY
PHEONIX, AZ 85054-6164 | 18 <u>APPLIED MATERIALS INC</u>
<u>RUSSELL MANGINEL</u>
<u>9700 E HIGHWAY 290</u>
<u>AUSTIN, TX 78724-1102</u> INDICATED AS "NULL" IN TRAVIS COUNTY APPRAISAL DISTRICT PROPERTY RECORDS |
| 19 <u>FIRST CHURCH OF GOD OF AUSTIN INC</u>
<u>PO BOX 141005</u>
<u>AUSTIN, TX 78714-1005</u> GLOBAL WORDWIDE INTERNATIONAL LLC
3616 FAR WEST BLVD UNIT 500
AUSTIN, TX 78731-3082 | 20 <u>APPLIED MATERIALS INC</u>
<u>RUSSELL MAGINEL</u>
<u>9700 E HIGHWAY 290</u>
<u>AUSTIN, TX 78724-1102</u> SOOTH LIMITED PARTNERSHIP
3008 DAWN DR STE 107
GEORGETOWN, TX 78628-2821 |
| 21 <u>APPLIED MATERIALS INC</u>
<u>RUSSELL MAGINEL</u>
<u>9700 E HIGHWAY 290</u>
<u>AUSTIN, TX 78724-1102</u> LAKE P FRANK TRUSTEES & LIPCO REAL ESTATE LLC
P.O. BOX 2134
AUSTIN, TX 78768-2134 | 22 <u>C L THOMAS HOLDINGS LLC</u>
<u>PO BOX 1876</u>
<u>VICTORIA, TX 77902-1876</u> APPLIED MATERIALS INC
RUSSELL MANGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 |
| 23 <u>LAKE P FRANK TRUSTEES & LIPCO REAL ESTATE LLC</u>
<u>P.O. BOX 2134</u>
<u>AUSTIN, TX 78768-2134</u> APPLIED MATERIALS INC
RUSSELL MANGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 | 24 <u>WALLACE H DALTON</u>
<u>9505 JOHNNY MORRIS RD</u>
<u>AUSTIN, TX 78724-1527</u> FIRST CHURCH OF GOD OF AUSTIN INC
PO BOX 141005
AUSTIN, TX 78714-1005 |

LANDOWNER'S LIST

~~25—APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102~~

~~26—APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102~~

~~27—BROUGHER PARTNERS LTD,
ETAL
1107 NUECES ST
SUITE 104
AUSTIN, TX 78701-2105~~

~~28—CITY OF AUSTIN
REAL ESTATE DIVISION
PO BOX 1088
AUSTIN, TX 78767-1088~~

~~29—WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~30—WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~31—Wallace H Dalton
9505 JOHNNY MORRIS RD
AUSTIN, TX 78724-1527~~

~~32—C L THOMAS HOLDINGS LLC
PO BOX 1876
VICTORIA, TX 77902-1876~~

~~33—NUMBER NOT USED~~

~~34—BFI WASTE SYSTEMS OF
NORTH AMERICA LLC
18500 N ALLIED WAY
PHOENIX, AZ 85054-6164~~

~~35—AMERICA
TELECOMMUNICATIONS
GROUP INC
6633 E HWY 290 STE 312
AUSTIN, TX 78723-1111~~

~~36—BARR LANE LLC
803 CUTLASS
LAKEWAY, TX 78734-5338~~

LANDOWNER'S LIST

~~37 WASTE MANAGEMENT OF
TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~38 WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~39 WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~40 BARR LANE LLC
803 CUTLASS
LAKEWAY, TX 78734-5338~~

~~41 NUMBER NOT USED~~

~~42 WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450~~

~~43 TRAVIS RICHARD A
& BRENDA S
9502 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

~~44 TRAVIS RICHARD A
& BRENDA S
9502 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

~~45 TJFA LP
PO BOX 17126
AUSTIN, TX 78760-7126~~

~~46 WAGNER PETER &
ANNA MARGARETTA
RICCOBENE
9506 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

~~47 TRAVIS RICHARD A
& BRENDA S
9502 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

~~48 TRAVIS RICHARD A
& BRENDA S
9502 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

LANDOWNER'S LIST

~~49—PREWITT RAYMOND A JR &
CHRISTOPHER ROBERT
CASTLEBERRY
9500 SPRINGDALE RD
AUSTIN, TX 78754-9639~~

~~50—DJR INC
PO BOX 142683
AUSTIN, TX 78714-2683~~

~~51—DJR INC
PO BOX 142683
AUSTIN, TX 78714-2683~~

~~52—GLOBAL WORLDWIDE
INTERNATIONAL LLC
3616 FAR WEST BLVD UNIT 500
AUSTIN, TX 78731-3082~~

~~53—G3 EXHIBITS LLC
304 BUCKEYE TR
AUSTIN, TX 78746-4422~~

~~54—BFI WASTE SYSTEMS OF
NORTH AMERICA INC
18500 N ALLIED WAY STE 100
PHOENIX, AZ 85054-3101~~

~~55—WALLACE H DALTON
9505 JOHNNY MORRIS RD
AUSTIN, TX 78724-1527~~

~~56—ROYAL BLUE PROPERTY
MANAGEMENT LLC
1881 79TH STREET CSWY APT
1801
NORTH BAY VILLAGE,
FL 33141-4275~~

~~57—WALLACE H DALTON
9505 JOHNNY MORRIS RD
AUSTIN, TX 78724-1527~~

APPENDIX I/IIC

**REGISTRATION BOUNDARY, PROPERTY OWNERSHIP, AND
EASEMENT INFORMATION**

APPENDIX I/II

EVIDENCE OF COMPETENCY

Management and Personnel

The WMTX principals and supervisors who will be involved in the management and operations of the facility are:

Mr. Donald J. Smith, Vice President

Mr. Smith holds the title of Area Vice President with WMTX and has responsibility for the overall management of WMTX and its wholly owned subsidiaries' operations throughout Texas. He has over 28 years of experience in the solid waste industry, and in addition to being currently responsible for all WMTX and affiliate operations in this geographic area, he also handles regulatory and legislative affairs in the state of Texas pertaining to the solid waste industry.

Mr. Steve Jacobs, Director of Disposal Landfill Operations

Mr. Jacobs has over 33 years of experience in the solid waste industry, ~~both~~ in municipal solid waste and hazardous waste landfill operations and management and transfer station operations and management. He has held a variety of positions ranging from equipment operator, to landfill manager, to a corporate region manager and an area manager, and now as a director of disposal operations in a two-state corporate region. Through this he has gained a broad experience in the areas of landfill and earthwork construction, as well as management of transfer stations. Mr. Jacobs was affiliated with Browning Ferris Industries, Inc. (BFI) for 18 years and CECOS International (a wholly-owned subsidiary of BFI) for 4 years before moving to WMTX. Mr. Jacobs has held positions of steadily increasing responsibility for personnel management and corporate financial management. He joined WMTX as an area manager, and transitioned to greater responsibility into his current position where he is responsible for the operations of multiple municipal solid waste landfills in Texas and Oklahoma. He holds a current Texas MSW Facility Class A license for supervising or managing an MSW facility.

Mr. Charles Rivette, P.E., Director of Planning and Project Development

Mr. Rivette has over 28 years of experience in the operations and management of municipal and hazardous waste landfills and municipal solid waste transfer stations. He has been involved with all aspects of landfill and transfer station management during that period. Mr. Rivette was affiliated with BFI for 11 years prior to moving to WMTX. Presently, Mr. Rivette works daily with operations management of over 20 municipal solid waste landfill and transfer station facilities in Texas. These responsibilities include profit/loss; regulatory compliance; oversight of permitting, engineering, environmental compliance, landfill liner and final cover construction; personnel safety and training; and community relations activities. ~~His role is consistent with that of the "Area Landfill Operations Manager" described in the Fairbanks Landfill Site Operating Plan.~~ He holds a Texas Professional Engineer (P.E.) license, and holds a Texas MSW Facility Class A license for supervising or managing an MSW facility.

Mr. Tim Champagne, Environmental Protection Manager

Mr. Champagne is currently the environmental protection manager for various WMTX Texas MSW facilities. He has over 25 years of experience in the solid waste industry, including over 14 years of direct involvement with environmental compliance issues related to municipal solid waste in Texas. He is responsible for managing environmental compliance programs and related regulatory coordination at six municipal solid waste landfills, as well as eight other solid waste facilities in Texas facility.

Facility-Site Manager

The Facility-Site Manager will have and maintain a Class A or B license as a municipal solid waste facility supervisor in accordance with 30 TAC, Chapter 30, Subchapter F: Municipal Solid Waste Facility Supervisors. The Facility-Site Manager will be responsible for day-to-day operations.

Employees

The aforementioned management team and Facility-Site Manager will provide oversight and training for employees at the facility.

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306 ~~_____~~ *[to be assigned]*
AUSTIN, TRAVIS COUNTY, TEXAS**

Owner and Operator:
Waste Management of Texas, Inc.

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

THE ABOVE P. E. SEAL APPLIES TO THIS TITLE PAGE ONLY. WITHIN PART III, EACH INDIVIDUAL ENGINEERING REPORT, PLAN, OR CALCULATION, AND EACH ENGINEERING DRAWING IS SIGNED, SEALED, AND DATED BY THE RESPONSIBLE ENGINEER AS REQUIRED BY THE TEXAS ENGINEERING PRACTICE ACT.

Submitted September 2019
Revised January 2020

PART III TABLE OF CONTENTS

SITE DEVELOPMENT PLAN

THE P.E. SEAL ON THIS PAGE APPLIES TO THIS TABLE OF CONTENTS PAGE ONLY. WITHIN PART III, EACH INDIVIDUAL ENGINEERING REPORT, PLAN, OR CALCULATION, AND EACH ENGINEERING DRAWING IS SIGNED, SEALED, AND DATED BY THE RESPONSIBLE ENGINEER AS REQUIRED BY THE TEXAS ENGINEERING PRACTICE ACT.

PART III SITE DEVELOPMENT PLAN NARRATIVE REPORT

ATTACHMENT 1 GENERAL FACILITY DESIGN

ATTACHMENT 2 SURFACE WATER DRAINAGE REPORT

ATT. 2A On-Site Drainage Analysis – Hydrology

~~ATT. 2B On-Site Analysis and Design – Drainage Channels and Culverts~~

ATTACHMENT 3 CLOSURE PLAN

ATTACHMENT 4 COST ESTIMATE FOR CLOSURE

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN NARRATIVE REPORT

AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306 ~~_____~~ [to be assigned]
AUSTIN, TRAVIS COUNTY, TEXAS

Prepared by:

Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003

SEALED FOR THIS PART III NARRATIVE REPORT,
AND FOR REGISTRATION PURPOSES ONLY.

WITHIN EACH ATTACHMENT, ITEMS THAT REQUIRE
A SIGNATURE AND SEAL BY A LICENSED
PROFESSIONAL (E.G., ENGINEER, SURVEYOR, OR
GEOSCIENTIST) ARE SIGNED, SEALED, AND
DATED, AS APPROPRIATE, BY THE RESPONSIBLE
PROFESSIONAL.

Submitted September 2019
Revised January 2020

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ATTACHMENTS

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. F-1182

SEALED FOR THIS PART III NARRATIVE REPORT,
AND FOR REGISTRATION PURPOSES ONLY.

WITHIN EACH ATTACHMENT, ITEMS THAT REQUIRE A SIGNATURE AND SEAL BY A LICENSED PROFESSIONAL (E.G., ENGINEER, SURVEYOR, OR GEOSCIENTIST) ARE SIGNED, SEALED, AND DATED, AS APPROPRIATE, BY THE RESPONSIBLE PROFESSIONAL.

- Attachment 1 General Facility Design
- Attachment 2 Surface Water Drainage Report
- Attachment 3 Closure Plan
- Attachment 4 Cost Estimate for Closure

1. INTRODUCTION

This Part III – Site Development Plan (SDP) Narrative Report has been prepared for the Austin Community Transfer Station (hereafter also referred to as the “facility” or “site”) consistent with the requirements of 30 TAC §330.63. The Part III SDP addresses the criteria used in the selection and design of this facility for safeguarding the health, welfare, and physical property of the public and the environment. This Part III narrative report includes discussion of the drainage, land use, zoning, adequacy of access roads and highways, and other considerations specific to this facility.

1.1 Background

The Austin Community Transfer Station will provide an efficient means to process ~~and transfer~~ the waste that is generated in the City of Austin, Travis County, and the surrounding areas and transfer the waste to a Texas Commission on Environmental Quality (TCEQ) permitted MSW landfill. This facility qualifies for a registration, per Title 30 Texas Administrative Code (TAC) §330.9(b)(4), by being located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community Recycling and Disposal Facility (RDF), TCEQ Permit No. MSW-249D). ~~The registration boundary coincides with the landfill permit boundary.~~

1.2 Site Location

The transfer station facility is located at 9900 Giles Road, approximately 500 feet north of the intersection of Giles Road and US Highway 290, in Travis County, Texas. The site location is shown on the general location maps in Part I/II, Appendix A (e.g., see Drawing I/IIA-1).

1.3 Land Use and Zoning

An analysis of land use and zoning, and potential impact on the area surrounding the facility, is presented in the Part I/II narrative report (see Section 5 of the Part I/II report).

1.4 Adequacy of Access Roads and Highways

Adequacy of access roads and highways is addressed in the Part I/II Supplemental Technical Report (see Section 7 of that report). The traffic evaluation presented in Part I/II of the application, with additional supporting documentation including a comprehensive Transportation Study contained in Appendix I/IIH, concludes that for this transfer station access roads are available and adequate.

A facility layout plan showing the access points is presented on Part III, Attachment 1, Drawing III-1-1.

Access to the transfer station will continue via the existing landfill (i.e., the Austin Community Recycling & Disposal Facility RDF) driveway on Giles Road. As discussed in Part I/II, Appendix I/IIH, the primary access routes to the site are via Giles Road, Johnny Morris Road, and US Highway 290. Routine maintenance of Giles Road and Johnny Morris Road by Travis County should be adequate to keep these roadways in good condition over the life of the facility. There are no known weight restrictions on these roads in one-mile proximity to the facility, other than the maximum legal weight limit of 80,000 pounds.

1.5 Organization of Part III (Site Development Plan)

The remainder of this report is organized as follows:

- the general facility design is presented in Section 2;
- the facility surface water drainage design is discussed in Section 3;
- the waste processing facility design is discussed in Section 4;
- the facility closure plan is discussed in Section 5; and
- cost estimate for closure is discussed in Section 6.

The attachments to the Site Development Plan are organized as follows:

- Attachment 1 provides drawings that present additional information on the general facility design (related to waste movement and access);
- Attachment 2 is the Facility Surface Water Drainage Report, with related drawings and calculations;
- Attachment 3 is the Closure Plan;
- Attachment 4 is the Cost Estimate for Closure.

2. GENERAL FACILITY DESIGN

2.1 Introduction

Section 2 of this report has been prepared to address the general facility design topics required by 30 TAC §330.63(b).

2.2 Facility Access Control

This section describes how access will be controlled for the facility, pursuant to 30 TAC §330.63(b)(1). The access controls described below are designed to prevent the entry of livestock, protect the public from exposure to potential health and safety hazards, and to discourage unauthorized entry ~~and/or~~ uncontrolled disposal of solid waste or hazardous materials. Refer to Section 8 of Part IV (the Site Operating Plan (SOP)), for operating requirements related to access control.

Fencing and gates will serve as the primary ~~landfill~~-access controls. The ~~facility-perimeter of the Austin Community RDF (within which the transfer station facility will be situated)~~ is fenced to control access and prevent unauthorized access, and has lockable gates. Fencing will be composed of (at minimum) a four-foot barbed wire fence or a six-foot chain-link fence or equivalent (e.g., iron or metal bar-style fencing). The operating area (i.e., the transfer station) is a building. The location of the main entrance/exit gate is shown on Part III, Attachment 1, Drawing III-1-2 and in greater detail on Drawing III-1-4.

A facility attendant will be on-site during operating hours and will monitor entrance to the facility. Entry to the transfer station will be restricted to designated personnel, appropriate subcontractors, approved waste haulers, the public, TCEQ personnel, and properly identified persons whose entry is authorized by facility management. The facility attendant will direct waste transport drivers to the transfer station. There, the drivers will be directed to a specific unloading area. Additionally, when appropriate, signs with directional arrows and/or barricades may be placed along site roads to direct traffic and control interior access.

During normal operating hours, facility personnel will be on duty at the scale house and in the vicinity of transfer station operations to control access. When the site is closed to the public, the entry gate at the main entrance/exit will be closed to prevent site access, and locked when no personnel are present on site.

2.3 Waste Movement

2.3.1 Waste Flow Diagram

Pursuant to §330.63(b)(2)(A), a waste flow diagram indicating the processing and storage sequences (there is no disposal) for wastes received is shown on Part III, Attachment 1, Drawing III-1-1.

2.3.2 Waste Process Schematic

Pursuant to §330.63(b)(2)(B), a schematic indicating the waste processing and storage areas is shown on the “Facility Layout Plan” in Part III, Attachment 1, Drawing III-1-2. As indicated on the Facility Layout Plan, waste storage and processing will take place in the transfer station building. Waste may also be temporarily stored in tarped transfer trailers awaiting transport off-site. The Facility Layout Plan shows the location of the transfer station building within the registration boundary, and also for informational purposes and context, references other features on the site that are not associated with the registration (e.g., the permitted landfill features of Permit No. MSW-249). Additional drawings ~~and are~~ provided in Part III Attachment 1 to show the layout of the transfer station building within the registration boundary at an enlarged scale, and also to show the traffic flow patterns to help better define the waste process schematics. Note that there is no disposal proposed as part of this registration application, and that there is no phased sequence of development ~~(the transfer station will be built all at once in order to commence operations).~~

2.3.3 Ventilation and Odor Control

As required by §330.63(b)(2)(C), the transfer station ~~structure-building~~ is designed to provide adequate ventilation. Ventilation in the transfer station building will be provided by the openings through which waste hauling vehicles will enter and exit, and vents which will be installed on the building roof. ~~The transfer facility doors on each end of the transfer truck loadout tunnel may also be opened, if needed, for additional ventilation.~~ Excessive dust and particulates that occur at the transfer station facility will be controlled using water sprays or similar methods. No significant air ~~pollution~~ emissions are expected to result from the operation of the transfer station.

The transfer station will be operated to provide ~~adequate~~ ventilation for odor control and employee safety. The operator will prevent nuisance odors from leaving the transfer station registration boundary. If nuisance odors are detected near the transfer station registration boundary, the site will immediately take action to abate the condition. Odors are controlled by limiting operations to within the ~~structure-building~~ and limiting the time solid waste may be stored on the tipping floor

(refer to Part IV - SOP, Sections 4.2 and 8.2). All processing of solid waste will occur within the transfer station ~~structure~~building. Mist systems (using water) may be used within the transfer station ~~structure~~building to suppress odors, if needed. The mist (or similar) systems may also be used to control odors through the addition of chemical deodorizers. Ponding water will be controlled to avoid objectionable odors; namely, through: (i) the enclosed transfer station building whose roof will prevent precipitation from coming in contact with waste; (ii) the slope of the tipping floor in the transfer station building (where waste will be managed and stored) towards a floor drain as described below; and (iii) through site grading of areas outside the transfer station building to drain and direct stormwater away from the transfer station building.

2.3.4 Generalized Construction Details

Waste processing activities (and storage) will take place in the transfer station building. The proposed transfer station building will be an enclosed structure (i.e., a pre-engineered metal building with a roof, exterior walls on three sides, openings on the fourth side for collection vehicles to enter the building to unload, covered loadout areas-tunnels on the sides of the building with building openings at the loadout tunnels, and ancillary support features). The inside of the transfer station building will have a reinforced concrete slab tipping floor with an area of approximately 25,000 square feet, and reinforced concrete push walls to resist typical forces for transfer operations.

The tipping floor is designed with a slope to drain toward the south of the ~~building~~structure. The ~~north side of the building is oriented with the~~has openings for collection vehicles to enter the tipping floor for unloading facing north. The east and west sides of the building have openings for loading of transfer trailer vehicles in the loadout tunnels. The tipping floor is designed with a slope to drain toward a grate drain at one end of the tipping floor. The grate drain will convey water (primarily wash water), which will be managed as contaminated water, to a minimum 2,000-gallon (nominal) holding tank.

Performance data on the transfer station is as follows (taken from computations in the Part I/II Report, Table I/II-2, with assumptions stated therein): The transfer station is designed with a theoretical capacity to receive and process/store a total of 5,700 tons/day. However, the transfer station registration application limits the maximum amount of waste to be received daily to 3,200 tons/day. Thus, on a day when the facility receives its maximum amount, the transfer station would be operating at 56% of its design capacity. In accordance with 30 TAC §330.241(a), the design capacity will not be exceeded during operation.

Engineering drawings presenting the site plan, general construction details, and associated design criteria for the transfer station are provided in Part III, Attachment 1.

2.3.5 Noise Pollution Control

As required by §330.63(b)(2)(I), the transfer station ~~will be~~ designed to control noise pollution. ~~Since waste processing activities will take place in the transfer station building activities take place. Since these activities are confined to be indoors within the enclosed building structure,~~ generated noise ~~will be~~ ~~largely mostly~~ confined to the ~~inside of the transfer station building structure.~~ Waste transfer operations ~~and associated noise~~ are ~~also~~ screened and buffered from the public roadway (Giles Road) by ~~an existing~~ vegetated earthen berm and mature trees ~~on registrant-owned property along Giles Road, along with a set-back distance from the roadway of about 250 feet.~~ The transfer station ~~structure building~~ is ~~also~~ located ~~with set-backs of such that a sufficient distance from adjacent landowners (including nearby residences and businesses) so that activities at the site will be not be readily visible, and at a distance and orientation such that potential noise pollution will be attenuated (i.e., by being blocked by the building walls, roof, and existing terrain, and/or by being dissipated across the set-back distances from potential off-site receptors).~~ For example, ~~the transfer station structure building~~ is located approximately 1,143 feet from the nearest business, and approximately 3,000 feet from the nearest residence. Also, ~~there is one church near the southeast corner of the facility boundary, on the other side of Giles Road (approximately 860 feet from the transfer station building, but~~ Not only is there a substantial distance buffering the church from transfer station operations, but the transfer station will also not accept ~~waste and/or~~ transfer waste on Sundays. There are no schools or aesthetically significant sites within a half-mile radius of the facility.

2.4 Sanitation and Water Pollution Control

As required by §330.63(b)(3) and (4), the transfer station will be designed to facilitate proper cleaning. The transfer station ~~building will be an enclosed~~ structure ~~and~~ will include a metal or equivalent material roof that covers the concrete slab waste processing ~~and storage~~ area (i.e., the tipping floor) ~~and the waste storage area.~~ Waste will be unloaded and processed on the concrete tipping floor. Floor washdown water management is discussed below. The transfer station site will be graded to prevent run-on drainage and flow of stormwater onto the tipping floor.

2.4.1 Surface Water and Groundwater Protection

As required by §330.63(b)(3)(A) and §330.63(b)(4), surface drainage in the vicinity of the facility will be controlled to prevent surface water runoff onto, into, and off the ~~treatment solid waste~~

processing area. Based on the facility design information presented in this Site Development Plan, the transfer station is 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. The facility will be constructed, maintained, and operated to manage run-on and runoff during the peak discharge of a 25-year rainfall event and prevent the off-site discharge of waste material, including, but not limited to, in-process and/or processed materials. Surface water drainage in and around the facility will be controlled to prevent surface water from running into, onto, and off the processing area. Since all contaminated water is managed in a controlled manner, as discussed above, surface water and groundwater is protected.

2.4.2 Floor Wash Down

As required by §330.63(b)(3)(A) through (D) and §330.243(a), the transfer station will be constructed to facilitate proper cleaning. Waste processing operations within the enclosed transfer station structure-building will be conducted on ~~a covered~~the tipping floor. All floors in operating areas will be constructed of reinforced concrete. The push walls will be composed of reinforced concrete to resist typical forces on transfer operations and be able to be hosed down and scrubbed. Other walls in operating areas will be masonry, concrete, or other hard-surfaced materials that can be hosed down and scrubbed. A connection to a supply of water under pressure will be provided for cleaning. Tipping floor washdown water will drain through a grate drain and be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

2.5 Protection of Endangered Species

Pursuant to 30 TAC §330.61(n), §330.63(b)(5), and §330.551, site-specific endangered and threatened species assessments were conducted by a qualified biologist for this project site. The assessment included a review of state and federal reference information of the United States Fish and Wildlife Service (USFWS) and the Texas Parks and Wildlife Department (TPWD) and a field survey for threatened or endangered species and their habitats. The endangered species assessment and related documentation is provided in Part I/II, Appendix I/IIJ.

The outcome of the assessment is that no federally-listed or state-listed endangered or threatened species, or any critical habitats for such species, were found at the site. The findings are that ongoing facility development and operation is not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species.

3. SURFACE WATER DRAINAGE REPORT

3.1 Introduction

Section 3 of this report has been prepared to address the applicable surface water drainage design topics required by 30 TAC §330.63(c).

3.2 Drainage Design

The transfer station will be constructed, maintained, and operated to manage run-on and runoff during the peak discharge of a 25-year storm event and prevent the off-site discharge of waste material, including, but not limited to, in-process and/or processed materials. Surface water drainage in and around the facility will be controlled to minimize surface water running onto, into, and off the processing area. Details of the drainage system and associated design demonstrations are included in Part III, Attachment 2, Surface Water Drainage Report.

3.3 Floodplain Considerations

As shown on Drawing I/IIA-15 in Appendix I/IIA of Part I/II and documented/discussed further in Section 11 of the Part I/II Supplemental Technical Report, the transfer station ~~area-facility~~ is not located within a 100-year floodplain.

4. WASTE PROCESSING FACILITY DESIGN

4.1 Introduction

Section 4 of this report presents waste management unit design information, pursuant to 30 TAC §330.63(d)(1). The general facility design was previously addressed in Section 2. Attachment 1 of this SDP provides the supporting engineering drawings, plans, specifications, and calculations for the design of the waste processing facility.

4.2 Waste Operations

Pursuant to 30 TAC §330.63(d)(1)(A), the transfer station facility is designed for rapid processing and minimum detention of solid waste, up to and including the registered maximum daily waste acceptance rate as set forth in the Waste Acceptance Plan (see Section 3 of the Part I/II Supplemental Technical Report). The area to be used for waste transfer operations will be the tipping floor in the building footprint, which is approximately 1540 feet by 16880 feet.

All solid waste capable of creating public health hazards or nuisances will be stored indoors within the building, processed ~~or and~~ transferred promptly, and will not be allowed to result in a nuisance or public health hazard. All solid waste that is stored overnight at the facility will ~~either be either~~ stored in tarped a-transfer trailers with a tarp over it or stored indoors in the enclosed transfer station building on the tipping floor, with a tarp over it. ~~Recyclable materials on the tipping floor or within enclosed containers will not require tarping.~~

Procedures for the unloading of waste are provided in Section 8 of the SOP. This includes procedures for traffic control on-site, and procedures for the detection and prevention of unauthorized waste.

Unloading of waste in unauthorized areas is prohibited. Any waste that is identified as having been deposited in an unauthorized area will be immediately moved to the proper unloading areas.

4.3 Spill Prevention and Control

Pursuant to 30 TAC §330.63(d)(1)(B), the transfer station facility is designed to control and contain spills and contaminated water. Staging and processing areas at this facility will be located within the transfer station ~~structure~~building. The unloading areas are designed to control and contain spills and contaminated water. The building walls in waste operations areas (discussed above in Section 2.4.2 of this report) will serve as a form of spill containment. Additionally, the tipping floor is designed with a slope to drain toward a grate drain at one end of the tipping floor.

The grate drain will convey water (primarily wash water), which will be managed as contaminated water, to a minimum 2,000-gallon (nominal) holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

Uncontaminated stormwater run-on and run-off will be directed away from the transfer station building entrances by site grading. The transfer station building interior where waste is managed will not result in any storm-generated run-off since the enclosed transfer station building is completely covered will have a roof to prevent precipitation from coming in contact with waste.

4.4 Waste Storage Period

Pursuant to 30 TAC §330.63(d)(1)(A) and (C), the period of time that wastes will remain on-site will be limited. The facility will not accumulate solid waste in quantities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of other vectors. Solid waste will be stored in a manner to prevent fires, ensure safety, prevent a health hazard, ~~or and~~ preclude food or harborage for animals and vectors, and contained to minimize windblown solid waste and litter. Solid waste that is stored overnight at the facility will be either stored either in a transfer trailers with a tarp cover or stored indoors in the enclosed transfer station building on the tipping floor with a tarp cover. Recyclable materials stored on the tipping floor or in enclosed containers will not require tarping. The maximum time waste material will be stored on-site is will not exceed 48 hours, for the transfer station, except on holidays or weekends. On holidays and/or weekends the maximum time will not exceed 72 hours.

5. CLOSURE PLAN

Pursuant to 30 TAC §330.63(h), a facility Closure Plan is included with Part III. This Plan is provided in Part III, Attachment 3. The Closure Plan has been prepared to meet the requirements of 30 TAC §330.459 (closure requirements for MSW Storage and Processing Units).

6. COST ESTIMATE FOR CLOSURE

Pursuant to 30 TAC §330.63(j), the cost estimate for closure is included with Part III. This information is provided in Part III, Attachment 4. The closure cost estimate has been prepared to meet the requirements of 30 TAC §330.505.

ATTACHMENT 1

GENERAL FACILITY DESIGN

LIST OF DRAWINGS		
Drawing No.	Title	Drawing Date (latest revision)
III-1-1	Flow Diagram	September 2019
III-1-2	Facility Layout Plan	January 2020 September 2019
III-1-3	Existing Site Conditions - Transfer Station Area	January 2020 September 2019
III-1-4	Transfer Station Site Plan	January 2020 September 2019
III-1-5	Transfer Station Design	January 2020 September 2019

ATTACHMENT 2

FACILITY SURFACE WATER DRAINAGE REPORT

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN ATTACHMENT 2

FACILITY SURFACE WATER DRAINAGE REPORT

AUSTIN COMMUNITY TRANSFER STATION AUSTIN, TRAVIS COUNTY, TEXAS

Prepared by:

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Attachment 2A On-Site Drainage Analysis – Hydrology

~~Attachment 2B On-Site Analysis and Design Drainage Channels and Culverts~~

1. INTRODUCTION

1.1 Purpose

Pursuant to 30 TAC §330.63(c), this Facility Surface Water Drainage Report (Drainage Report) has been developed as part of the Type V Municipal Solid Waste (MSW) Transfer Station (TS) registration application for the Austin Community Transfer Station, Austin, Texas (site). This Drainage Report has been prepared to demonstrate that the facility design complies with the requirements of 30 TAC §330.303. The Drainage Report includes a narrative description of the drainage setting and features at the site under pre-development and post-development conditions and is accompanied by supporting hydrology and hydraulic structural design calculations for the site's drainage features. Specific objectives of this Drainage Report are to:

- establish the pre-development drainage conditions;
- summarize the proposed post-development surface water management system design and describe the drainage features and components within the TS facility area;
- describe the post-development drainage conditions;
- describe the hydrologic method and design parameters applied to estimate peak flow rates and runoff volumes for both the pre-development and post-development drainage conditions;
- compare pre-development versus post-development discharges from the site and provide analyses and discussion to demonstrate that the existing pre-development drainage patterns will not be adversely altered as a result of the proposed TS facility;
- describe the hydraulic methods and design parameters applied to analyze and design the features and components of the surface water management system;
- present the erosion and sediment control measures, including requirements for surface water inspections and maintenance; and
- present overall conclusions that summarize the results of the surface water drainage analysis and design.

1.2 Project Overview

The Austin Community TS facility is located at 9900 Giles Road, approximately 500 feet north of the intersection at Giles Road and US Highway 290, in Travis County, Texas. The Austin Community TS facility will provide an efficient means to process and transfer the waste that is generated in the City of Austin, Travis County, and the surrounding areas and transfer the waste to a Texas Commission on Environmental Quality (TCEQ) permitted MSW landfill.

This plan addresses surface water drainage design and erosion control as part of the MSW ~~TSransfer Station r~~Registration ~~a~~Application. Consistent with the requirements of 30 TAC §330.63(c) and §330.303, the facility will be constructed, maintained, and operated to manage run-on and runoff during the peak discharge of a 25-year rainfall event and will prevent the off-site discharge of waste materials.

1.3 100-Year Floodplain Information

The proposed TS facility will not be located in a 100-year floodplain.

This is demonstrated and documented in Part I and II of the registration application (in particular, the Part I/II Supplemental Technical Report, Section 11.1, and floodplain map in Appendix I/IIA, Drawing I/IIA-15).

2. DESCRIPTION OF THE PRE-DEVELOPMENT CONDITION

Pre-development drainage areas for the transfer station facility location (registration boundary) for the applicable portions of the facility where the TS will be located were delineated for this TS registration application. These pre-development areas are consistent with those delineated for the landfill facility on which the TS will be situated, as set forth in the approved 2008 Permit Amendment Application Facility Surface Water Drainage Report (Golder Associates, 2008). For this TS registration application, minor adjustments and updates were made based on current conditions, using the latest topographic survey (DAS, Inc., 2019). This pre-development assessment will allow a proper comparison to post-development conditions at the common points-of-interest (the outfalls where surface water exits the site) as discussed later in this report.

Because the TS will occupy only a portion of the overall facility boundary occupied by the permitted Type I landfill (TCEQ Permit MSW-249D), only the affected sub-areas of the facility were analyzed herein. The other facility sub-areas will not be disturbed, modified, or otherwise affected by the proposed TS facility, and therefore by definition the pre-development and post-development conditions would be the same and therefore were excluded from analysis in this application.

The proposed TS facility is located in drainage areas S12, S13, and S14 (using the nomenclature and sub-areas identified in the approved 2008 Permit Amendment Application for the landfill for consistency). For this analysis, the pre-development drainage areas in the TS Registration Bboundary are delineated on Figure 2A-1, presented in Attachment 2A of this Drainage Report. Figure 2A-1 delineates the approximately 17.4910.8 acres of transfer station area under for both pre-development and post-development conditions that drain to the site outfall locations where surface water runoff leaves the TS registration boundary. Note that the western TS registration boundary follows a drainage divide. Surface water runoff flows generated west of this divide are part of the Austin Community Recycling and Disposal Facility (RDF) landfill drainage system, and such landfill systems will not be disturbed, modified, or otherwise affected by the proposed transfer station. Thus, there will be no surface water “run-on” flowing on to the TS registration boundary from adjacent areas. There are three outfall locations (see Figure 2A-1): i) OF-1 located at the outfall point of drainage area TS-1; ii) OF-2 located at the outfall point of drainage area TS-2; and iii) OF-3 located at the outfall point of drainage area TS-3. The pre-development and post-development surface conditions are presented in this Drainage Report. A description of the selected hydrologic method and the analysis/design parameters is presented subsequently in this Drainage Report.

3. PROPOSED SURFACE WATER MANAGEMENT SYSTEM

3.1 General

This section summarizes the proposed surface water management system design and describes the drainage features and components within the TS facility. The surface water management system has been designed and will be operated to achieve the following objectives:

1. Prevent the discharge of wastes or pollutants into or adjacent to wWaters of the United States.
2. Prevent the discharge of pollutants into wWaters of the United States.
3. Prevent the discharge of dredged or fill material to wWaters of the United States.
4. Prevent the discharge of nonpoint source pollution to wWaters of the United States.
5. Prevent erosion on~~ver~~ areas associated within the registration boundary and where surface water runoff exits the site.

The TS facility consists of a building with a -reinforced concrete slab (tipping floor) under a steel frame roofed structure, where unloading and transfer of waste from delivery vehicles to transfer trailers will occur. The TS site will be graded to prevent run-on drainage and flow of stormwater onto the tipping floor to prevent the potential for off-site discharge of waste materials. Surface water drainage in and around the facility is controlled to prevent surface water running onto, into, and off the TS facility tipping floor. Tipping floor washdown water will drain through a grate drain and be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

The TS facility site area will be graded to route stormwater runoff to off-site discharge using drainage patterns that are similar to the pre-developed drainage patterns.

3.2 Surface Water Management System Components

The drainage patterns for the post-development conditions are consistent with the pre-development drainage patterns. More specifically, there will be no change under post-development conditions to drainage area TS-1 or its outfall. The post-development drainage area TS-2 -areas-is similar to, but slightly larger than, the pre-development drainage area, and with the same outfall location. Under post-development conditions, TS-2 runoff willare-graded-to drain towards a proposed stormwater detention pond (Detention Pond) located east of the TS building; the pond is that-will

~~be added designed~~ to attenuate post-development flowrates, ~~designed northeast of the TS building.~~
The ~~transfer station~~TS site plan in Part III, Attachment 1, Drawing III-1-4 shows the detention pond layout. ~~Stormwater runoff from both pre- and post-development drainage areas will be directed to the site outfalls through sheet flow.~~ Stormwater runoff from post-development drainage areas will be directed through a conveyance drainage channel (Channel C1) routed to the Detention Pond. Ultimately, surface water will discharge from the Detention Pond at the site outfall OF-2 to the north under for both pre-development and post-development conditions via t. Two existing 24-12-inch diameter culverts (Culvert 1) will serve as the Detention Pond outlet structure at the site outfall OF-2. Finally, the post-development drainage area TS-3 is being reduced in size compared to pre-development conditions (because more area is being directed to drain to the Detention Pond in area TS-2), and maintaining the same outfall location.

4. DESCRIPTION OF THE POST-DEVELOPMENT CONDITION

The post-development conditions and resulting drainage areas are delineated on Figure 2A-2 presented in Attachment 2A of this Drainage Report. The post-development surface water management features at the site and the routing of surface water was discussed in Section 3. Figure 2A-2 shows that the total post-development drainage area is approximately 17.4910.8 acres (consistent with pre-development drainage area conditions) and the same site outfalls is-are identified as in pre-development conditions.

A description of the hydrologic method and design parameters is presented subsequently in this Drainage Report. Also, in Section 5.5.1, comparisons of the pre-development and post-development conditions are discussed.

5. DRAINAGE CALCULATIONS

5.1 General

In accordance with 30 TAC §330.303(a), the surface water management system has been designed to be capable of conveying the peak discharges from the 25-year, 24-hour rainfall event. Design and analysis calculations are made to demonstrate that post-development peak discharges exiting the facility are less than pre-development flows exiting the facility from the 25-year, 24-hour rainfall event. Calculations have been performed to size the drainage features and to demonstrate that flow velocities and tractive stresses in conveyance components will not cause erosion. The hydrology calculations (i.e., calculations of peak runoff rates and total runoff volumes for the pre-development conditions and post-development conditions) related to the site surface water management features are presented as additional Attachment 2As to the Drainage Report, ~~and are as follows:~~

- ~~Hydrology calculations (i.e., calculations of peak runoff rates and total runoff volumes for the pre-development conditions and post-development conditions) are presented in Attachment 2A.~~
- ~~Hydraulic calculations for the sizing and the design of the proposed drainage channels and culvert are presented in Attachment 2B.~~

5.2 Design Rainfall Event

As indicated above and pursuant to 30 TAC §330.63(c)(1)(D)(i), the 25-year, 24-hour rainfall depth was utilized as the design rainfall event for the surface water management system design. ~~The rainfall depth duration frequency relationships for this analysis was designed using a A~~ rainfall depth of 8.65 inches was selected for this analysis to represent the 25-year, 24-hour rainfall in Travis County (NOAA Atlas 14, 2019).

5.3 Hydrologic Model

The U.S. Army Corps of Engineers Hydrologic Engineering Center – Hydrologic Modeling System (HEC-HMS) computer program was used to model the pre-development conditions and the post-development conditions. HEC-HMS is the successor to and replacement for the HEC-1 program. Modeling was used to calculate surface water runoff volumes, peak flow rates, routing of rainfall event hydrographs through channels, and runoff discharge quantities. Attachment 2A of this Drainage Report presents detailed drainage calculations, including a detailed discussion of the parameters used in the analyses and results of the hydrologic modeling efforts.

5.4 Hydraulics

Principles of open channel flow using Manning's equation (Chow, 1959) were used to size the drainage channels based on the peak flows derived from the HEC-HMS hydrologic modeling.

Manning's Equation in its general form is expressed as:

$$Q = \frac{1.49}{n} A R^{2/3} S_o^{1/2}$$

where: Q = discharge (cfs);
 n = manning's roughness coefficient;
 A = area of cross-section of flow (ft²);
 P = wetted perimeter (ft);
 R = hydraulic radius (ft) = A/P ; and
 S_o = longitudinal slope (ft/ft).

The average tractive stress for a given depth of flow in a channel is calculated by:

$$\tau_o = \gamma_w R S$$

where: τ_o = average tractive stress (lb/ft²);
 γ_w = unit weight of water (lb/ft³);
 R = hydraulic radius (ft); and
 S = channel slope (ft/ft).

Tractive stresses, as well as flow velocities resulting from peak flows, were calculated to select the type of channel lining that would be necessary to prevent erosion of the drainage features.

As mentioned, the Hydraulic computations for sizing surface water management system components (i.e., the proposed Detention Pond and its outfall structure) are found in the following Attachments 2A – Hydrology to this Drainage Report.:

- Attachment 2A – Hydrology; and
- Attachment 2B – Culverts and Drainage Channels.

5.5 Calculation Results Summary

5.5.1 Discharge Comparisons

Table 5-1 summarizes the pre- and post-development peak discharge, total discharge volume, peak velocities, and the time to the peak discharge rate. The pre- and post-development drainage sub-areas contributing to the discharge at the site outfalls are a combined area of approximately 17.4910.8 acres. For post-development conditions, the Detention Pond discharge contributes to the site outfall OF-2. A more detailed description of the hydrologic analysis and modeling results summarized above are provided in Attachment 2A.

TABLE 5-1
SUMMARY OF PEAK DISCHARGE CONDITIONS AT SITE OUTFALLS (PRE- VS. POST-DEVELOPMENT COMPARISON)

LOCATION	OUTPUT PARAMETER	<u>PRE- DEVELOPMENT CONDITIONS</u> (25-YEAR EVENT)	<u>POST- DEVELOPMENT CONDITIONS</u> (25-YEAR EVENT)
<u>SITE OUTFALL OF-1</u>	PEAK DISCHARGE (CFS)	<u>16.8</u> 121.6	<u>16.8</u> 114.1
	TOTAL RUNOFF VOLUME (AC-FT)	<u>1.4</u> 10.3	<u>1.4</u> 12.3
	TIME TO PEAK DISCHARGE (MIN)	<u>4</u> 7	<u>4</u> 9
	PEAK VELOCITY (FPS)	<u>1.2</u> 4.8	<u>1.2</u> 4.7
<u>OF-2</u>	<u>PEAK DISCHARGE (CFS)</u>	<u>37.6</u>	<u>29.4</u>
	<u>TOTAL RUNOFF VOLUME (AC-FT)</u>	<u>4.0</u>	<u>5.1</u>
	<u>TIME TO PEAK DISCHARGE (MIN)</u>	<u>12</u>	<u>15</u>
	<u>PEAK VELOCITY (FPS)</u>	<u>0.6</u>	<u>5.0</u>
<u>OF-3</u>	<u>PEAK DISCHARGE (CFS)</u>	<u>13.0</u>	<u>8.3</u>
	<u>TOTAL RUNOFF VOLUME (AC-FT)</u>	<u>1.3</u>	<u>0.7</u>
	<u>TIME TO PEAK DISCHARGE (MIN)</u>	<u>10</u>	<u>4</u>
	<u>PEAK VELOCITY (FPS)</u>	<u>2.5</u>	<u>2.8</u>

Examination of the calculation results shown above indicates that the predicted peak post-development discharge rates and velocities are less than the peak pre-development discharge rates at the site outfalls. The computed runoff volumes are similar for pre-development and post-development conditions at the site outfalls. Additionally, the times to peak discharge are similar between pre- and post-development conditions for the site outfalls.

The calculated post-development flows leaving site outfalls OF-1 and OF-3 will be at low, non-erodible velocities. The calculated post-development flow leaving the culvert pipes of the Detention Pond near the OF-2 outfall as concentrated flow is at a higher velocity than under the pre-development sheet flow conditions. Accordingly, the culvert outlets will be equipped with an energy dissipator (riprap apron or equivalently-effective concrete dissipation device) to reduce flow velocity to a low, non-erodible level at OF-2.

Because the post-development flow rates are reduced, the final construction-level design may be further adjusted to optimize the Detention Pond size and outlet structure, and/or to include other detention devices such as rainwater collection cisterns to receive runoff from the building roof. Any such changes shall be made by a Professional Engineer licensed in Texas and must demonstrate that the post-development discharges achieve the required design criteria (i.e., post-development peak discharge less than pre-development, with acceptable non-erosive discharge velocities).

In summary, the proposed site outfalls will be in the same locations as the existing site outfalls, and surface water runoff under proposed post-development conditions is generally routed towards the site outfalls in a similar manner to pre-development conditions. The proposed drainage areas and patterns of runoff will be similar to the existing permitted pre-development drainage patterns. The reduced peak discharge rates under post-development conditions are considered to be beneficial given the importance of reducing runoff during storm events.

~~The other areas of the facility beyond the limits of this drainage analysis will not be affected by the proposed transfer station, and therefore pre-development and post-conditions will be by definition identical.~~

This information demonstrates that the existing pre-development drainage patterns will not be adversely affected by the proposed TS facility development.

5.5.2 Drainage Channel

~~The proposed drainage Channel C1, has been designed to convey the peak flows from the 25-year, 24-hour rainfall event while maintaining at least 0.5 feet of freeboard. Additionally, Channel C1~~

was designed with the capacity to convey the 100-year, 24-hour rainfall event without overtopping. Traactive stresses and velocities for peak flows during the 25-year, 24-hour rainfall event have been computed and the channel lining has been selected to withstand the predicted traactive stresses. Figure 2A-2 of Attachment 2A, shows the location of the proposed drainage Channel C1. Table 5-2 summarizes the peak 25-year, 24-hour and peak 100-year, 24-hour rainfall event design and analysis values in the proposed channel. Table 5-3 summarizes the channel width, depth, and slope.

TABLE 5-2
DRAINAGE CHANNEL RESULTS

<u>Channel Segment Designation</u>	<u>25-Yr Peak Flow Rate (ft³/s)</u>	<u>25-Yr Peak Flow Depth (ft)</u>	<u>25-Yr Peak Flow Velocity (ft/s)</u>	<u>25-Yr Peak Traactive Stress (lb/ft²)</u>	<u>25-Yr Freeboard (ft)</u>	<u>100-Yr Freeboard (ft)</u>	<u>Proposed Channel Lining Material</u>
Drainage Channel C1	48.7	1.48	4.42	0.42	0.52	0.26	grass

TABLE 5-3
DRAINAGE CHANNEL DESIGN

<u>Channel Segment Designation</u>	<u>Width (ft)</u>	<u>Depth (ft)</u>	<u>Horizontal slope</u>	<u>Longitudinal slope (ft/ft)</u>
Drainage Channel C1	3.0	2.0	3:1	0.0075

5.5.3 Culvert

As mentioned, there is one existing culvert at the site outfall location (Culvert 1). The proposed culvert under post-development conditions (Culvert 2) is identified on Figure 2A-2. Culvert 2 was designed to adequately function during a 25-year, 24-hour rainfall event. The hydraulic analysis for the design of Culvert 2 is presented in Attachment 2B of this Drainage Report. Culvert 2 was analyzed by utilizing the HY-8 Culvert Analysis Program v.7.5 (HY-8) developed by the Federal

~~Highway Administration (FHWA). The performance of the culvert is modeled and assessed based on boundary conditions of the structure, culvert configuration, peak flow criteria, and tailwater levels.~~

6. EROSION AND SEDIMENT CONTROL

6.1 General

As required, the erosion control measures will be documented in the Stormwater Pollution Prevention Plan (SWPPP) required by the applicable Texas Pollutant Discharge Elimination System (TPDES) stormwater permitting requirements administered by TCEQ, that will be developed/updated by the operator for the ~~transfer station~~TS facility before it begins operation, consistent with TPDES requirements. These features include the establishment of vegetation or other landscaping on the non-paved portion of the property. In addition, site grading is designed to convey runoff from the TS site to the on-site stormwater Detention Pond without causing erosion (i.e., runoff velocities are less than five feet per second).

6.2. Surface Water Maintenance Plan

6.2.1 General

During site construction activities and site operations, inspection and maintenance of disturbed areas and their surface water management system features will be conducted in accordance with the facility's TPDES Multi-Sector General ~~Sstorm Wwater P~~permit that will be obtained and/or modified before the transfer station is placed into operation as required for appropriate TPDES permit coverage for this facility. Written records of these inspections and maintenance activities will be maintained as required by the TPDES permits.

6.2.2 Site Maintenance Activities

In general, the following procedures will be followed when deemed necessary by the inspections performed as part of the TPDES permit to maintain and ensure functionality of the surface water management system and erosion and sedimentation controls:

- Eroded areas or areas with ponding water will be regraded to their original slopes and reseeded or covered with an erosion resistant material. Upgrades to the original design specifications can be considered at this remedial stage depending upon the severity of systems degradation.
- Additional temporary erosion protection and sediment control measures using established BMPs will be implemented (seeding, temporary berms, ditches, silt fences, erosion mat, check dams, silt traps, etc.), as necessary, during operation to minimize

the amount of erosion and sedimentation. These measures can be removed once the erosion has been stopped and long-term vegetation is established and permanent conveyance structures are in place.

- Piped structures (i.e., ~~eulvert~~Detention Pond outlet structure) will be kept free of debris to allow flows to achieve the design.
- Vegetated water conveyance areas will be mowed periodically to encourage healthy growth and to maintain design flow capacities and erosion resistance.
- Erosion control structures and drainage features will be cleaned periodically (removal of debris and sediment) in order to maintain design capacity. The excavated sediment will be transported to designated areas of the site for spreading and drying (must be surrounded by adequate temporary erosion controls).
- Areas of distressed vegetation will be identified and re-vegetated.
- Excess silt, weeds and other debris accumulated in drainage channels and other conveyances will be removed to restore their design configuration, followed by re-vegetating the disturbed areas as appropriate.

The decision on whether or not maintenance or repairs of site surface water features are needed and the timing on implementing any remedies will be selected based on the severity of the erosion or damage compared to the disturbance that will be caused by the repair and seasonal factors (weather patterns, growing season, etc.).

7. CONCLUSION

This Drainage Report has been prepared to demonstrate that the facility design complies with the requirements of 30 TAC §330.303 and to address the applicable requirements of 30 TAC Chapter 330, Subchapter G. The Drainage Report is accompanied by supporting hydrology calculations and hydraulic structural design calculations for the site's drainage features. The following conclusions summarize the results of the drainage analysis and design:

- The drainage design criteria selected meet the requirements of 30 TAC Chapter 330, Subchapter G.
- ~~The surface water management system drainage structures are designed to convey peak flows from the 25-year rainfall event with 0.5 feet of freeboard.~~
- Erosion will be minimized through the interim and permanent design features and best management practices described herein.
- The post-development discharge rates from the site are less than the pre-development discharge rates, and the discharge volumes, velocities, and time-to-peak discharge for the pre- and post-development conditions are similar.
- The proposed TS facility is not within the 100-year floodway or 100-year floodplain and is on land that is at substantially higher elevation than off-site 100-year floodplain elevations. The TS facility is protected from the 100-year frequency flood event.
- The post-development drainage patterns will be similar to the existing pre-development drainage patterns and will direct surface water runoff to the same outfall locations. The existing pre-development drainage patterns will not be adversely altered.

8. REFERENCES

~~Chow, V. T. (1959). *Open Channel Hydraulics*, McGraw Hill.~~

~~DAS, Inc. (2019): Dallas Aerial Surveyors, Inc. topographic information obtained 20 February 2019.~~

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ATTACHMENT 2A

ON-SITE DRAINAGE ANALYSIS – HYDROLOGY

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019

Client: **WM** Project: **Austin Community TS** Project No.: **GW7107** Phase No.: **01**

ON-SITE DRAINAGE ANALYSIS – HYDROLOGY AUSTIN COMMUNITY TRANSFER STATION

SEALED FOR REGISTRATION PURPOSES;
CALCULATION PAGES 1 TO 297

GEOSYNTEC CONSULTANTS, INC.
TX ENG. FIRM REGISTRATION NO. F-1182

1 PURPOSE

The purpose of this calculation package is to present the hydrology analysis for the estimation of surface water runoff as a part of the Austin Community Transfer Station (TS) Registration Application in Austin, Texas. The specific objectives of the hydrologic analysis include calculating peak discharges and total runoff volumes from the site for the: (i) pre-development conditions and (ii) post-development conditions. The calculated values of peak discharge and runoff volume of the proposed surface water system presented in this calculation package are compared against pre-development conditions in order to demonstrate that the proposed Transfer Station development does not adversely alter, to any significant degree, the drainage patterns of the watershed in the vicinity of the site.

The following definitions pertain to the two conditions analyzed in this package:

- Pre-Development Conditions – represent the currently permitted existing drainage conditions of the area-of-interest before construction of the Transfer Station.
- Post-Development Conditions – represent conditions of the site once the Transfer Station has been fully developed, with the permanent surface water management system installed.

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2 METHODOLOGY

2.1 HEC-HMS Computer Model

Surface water discharges for the pre-development and post-development conditions are estimated using the Hydrologic Modeling System (HEC-HMS) computer program developed through the Hydraulic Engineering Center (HEC) of the United States Army Corps of Engineers (USACE). The program simulates natural and controlled precipitation-runoff and routing processes of a watershed. HEC-HMS is the successor to and replacement for the HEC-1 program (USACE, 2000). For precipitation-runoff-routing simulation, HEC-HMS provides the following components:

- Precipitation-specification options can describe an historical precipitation event, a frequency-based hypothetical precipitation event (i.e., design rainfall or storm event), or an event that represents the upper limit of precipitation possible at a given location. For this analysis, the 25-year (4% annual chance), 24-hour duration hypothetical precipitation event (herein referred to as the 25-year, 24-hour event) was used to compare pre-development and post-development conditions.
- Water loss models can estimate the volume of runoff given the precipitation and properties of the watershed. For this analysis, the Soil Conservation Service (SCS) Curve Number Loss Model was used (USDA, 1986).
- Direct runoff transform models can account for overland flow, storage, and energy losses as surface water runs off a watershed and into the drainage channels. For this analysis, the SCS Unit Hydrograph Model was selected.
- Hydraulic routing models account for storage and energy flux as surface water flows through drainage channels. The Kinematic Wave Model was selected for these analyses.
- Hydraulic models of water-control measures such as surface water pond outfall structures (i.e., outlet control structures).

HEC-HMS was used to model the pre-development conditions and the post-development conditions. More specifically, HEC-HMS modeling calculates surface water runoff

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volumes, peak flow rates, and flow characteristics for the ~~perimeter channels and the~~ surface water ponds.

2.2 Pre-Development Condition

Figure 2A-1 presents the pre-development conditions. Existing topographic information was compiled from photogrammetric methods based on aerial photography performed on 20 February 2019 by Dallas Aerial Surveys (DAS), Inc. Approximately ~~2.23+7.49~~ acres for pre-development flow to the site outfall OF-1 location, ~~a. Approximately 6.42 acres flow to the site outfall OF-2 location, and approximately 2.12 acres flow to the site outfall OF-3 location.~~

2.3 Post-Development Condition

The post-development drainage areas are delineated on Figure 2A-2. The proposed surface water management system will maintain similar drainage patterns to the pre-development condition. The proposed surface water management system will discharge at the site outfalls described in the pre-development condition section above. ~~The pre-development and post-development total drainage areas to the site outfall are equivalent.~~ The post-development area TS-2-s ~~will be graded to~~ drain towards a stormwater detention pond (Detention Pond) located to the northeast of the TS building. ~~Stormwater runoff from post-development drainage areas will be directed through a conveyance drainage channel (Channel C1) routed to the Detention Pond.~~ Ultimately, surface water discharges from the Detention Pond at the site outfall OF-2 ~~to the north for both pre-development and post-development conditions.~~ Under post-development conditions, approximately 2.23 acres flow to the site outfall OF-1 location, approximately 7.45 acres flow to the site outfall OF-2 location, and approximately 1.09 acres flow to the site outfall OF-3 location. Two existing culverts (~~Culvert 1~~) will serve as the Detention Pond outlet structure at the site outfall OF-2 and are modeled as 1224-inches in diameter ~~culverts~~.

3 DESIGN PARAMETERS

The following data and assumptions were utilized in selecting engineering parameters to estimate surface water runoff.

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3.1 Rainfall

- Rainfall Return Periods, Durations, and Depths – The Texas Department of Transportation (TxDOT) Hydraulic Design Manual (2019) provides guidance for rainfall frequency and duration depths. The rainfall depths corresponding to 24-hour duration hypothetical precipitation event and 25-year and 100-year frequency return periods for the site are 8.65 inches and 12.3 inches, respectively (NOAA Atlas 14, 2019). The design storm hyetograph is defined using a SCS Type III rainfall distribution as shown in Figure 2A-3 (USDA, 1986).

3.2 Drainage Areas and Reaches

- Drainage Areas – The contributing watershed areas for each basin (drainage area) ~~or reach (drainage channel)~~ in the pre-development and post-development models are divided into multiple subbasins (subareas). Subbasins are modeled based on the receiving surface water drainage feature. The SCS Curve Number Loss Model was used to estimate the volume of runoff from a given subbasin. The SCS Unit Hydrograph Model was used to estimate the direct runoff flow rates from each subbasin. Each subbasin is assigned a curve number representing the type of ground cover for a given soil for the area. The subbasin area, curve number, and SCS Unit Hydrograph lag time input parameters are included in the HEC-HMS output in Appendix 2A-1.
- Curve Number (CN) – Curve numbers were selected based on ~~the 2008 Permit Amendment Application (Golder Associates, 2008) and values consistent with previous work,~~ local regulations/practice, and conservative assumptions. A CN = 80 was selected for unpaved areas within the drainage areas which is representative of open space with good grass cover (>75%) and Hydrologic Soil Group D. A CN = 98 was selected for areas that were paved and the stormwater detention pond. An area-weighted average was then completed for pre- and post-development at each drainage area. Table 2A-1 summarizes the CNs chosen for the analyses performed documented within this calculation package.
- Manning's Roughness Coefficients – Values of Manning's roughness coefficients used in the reach routing calculations were obtained from the TxDOT *Hydraulic*

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Design Manual (2019). Table 2A-2 summarizes the Manning's coefficients used in this calculation package. It should be noted that for design purposes, the culverts assume a Manning's coefficient for a reinforced concrete pipe (RCP). Any culvert material type may be used provided that the Manning's coefficient is equal to or less than that for RCP.

- Time of Concentration – The time of concentration is the time needed for water to flow from the hydraulically most remote point in a watershed to the watershed outlet. Computation of the time of concentration for the pre-development analysis was completed according to the recommended methodology from USDA (1986). Table 2A-3 displays the pre-development time of concentration calculations. The time of concentration ~~calculations was conservatively assumed to be five minutes for all post-development drainage areas as recommended by the City of Austin Drainage Criteria Manual~~ are displayed in Table 2A-4.
- ~~Drainage Channel Reaches~~ Reaches in the HEC-HMS program represent drainage channels that route surface water from upstream subbasins to downstream subbasins through a junction. Reaches also may route surface water from upstream reaches. The Kinematic Wave Model is used to model the surface water flow in each of the reaches in the HEC-HMS program. The Kinematic Wave Model accounts for storage and energy flux as surface water moves through stream channels. Average geometric characteristics of the stream channel measured from the existing and proposed topography are input into HEC-HMS.

3.3 Surface Water Ponds

~~An existing pond (Existing Pond) is identified upon review of the latest topographic survey (DAS, Inc., 2019) and is therefore incorporated in the pre-development analysis. The Existing Pond's capacity is based on a topographic low point near Culvert 1 at the site outfall. The pond capacity will be increased under post-development conditions to maintain post-development discharge flow rates at or below pre-development discharge flow rates for a 25-year, 24-hour duration hypothetical precipitation event.~~

The proposed surface water Detention Pond is incorporated in the post-development analysis to temporarily detain surface water runoff and reduce discharge flow rates from

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the upstream areas. The pond is accounted for in the HEC-HMS program as a “reservoir” node. The elevation-area relationship is input for ~~both the pre-development and post-development~~ surface water ponds to describe the volume of storage provided, which is computed based on the surface water pond geometry. Specifically, the surface area at various elevations throughout the pond was used to compute the elevation-area relationship. Design characteristics of the outflow structures include pond outflow pipe diameter (~~i.e., Culvert 1~~) and emergency spillway (~~i.e., existing roadway~~) depth and breadth. Input and output files for the surface water ponds design are provided in Appendix 2A-1. The pond discharges via the outlet culverts and their energy dissipation devices (e.g., riprap aprons) ~~to the existing Culvert 1~~ at the site outfall OF-2. ~~The emergency spillway is the existing entry driveway to the site.~~

3.4 Nodal Network Diagrams

Nodal network diagrams used in HEC-HMS for the pre-development and post-development analyses are provided and correspond to the output results included in Appendix 2A-1.

- Pre-Development Nodal Network – Figure 2A-4 of this calculation package presents the nodal network drawing for the pre-development conditions. The nodal network diagram represents the existing conditions draining to the site outfalls shown on Figure 2A-1.
- Post-Development Nodal Network – Figure 2A-5 of this calculation package presents the nodal network drawing for the post-development conditions. The post-development nodal network diagram shows the subbasins, ~~reaches,~~ surface water ponds, and site outfalls. The nodal network diagram represents the proposed surface water management system and site outfalls shown on Figure 2A-2.

4 RESULTS

Modeling results from calculations presented in this calculation package indicate that post-development peak discharges from the facility are less than the pre-development peak discharge rates at the site outfall for the 25-year, 24-hour precipitation event. ~~Model results predicted a depth of approximately 0.4 feet overtopping the roadway elevation at the discharge point of the Detention Pond under post-development conditions, which is~~

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~~consistent with model results for the Existing Pond under pre-development conditions.~~ Thus, the ~~Transfer Station~~ is not anticipated to adversely affect or significantly alter the drainage patterns in the vicinity of the site. Table 2A-4 summarizes analysis results for the pre- and post-development peak discharges and total discharge runoff volumes from the site. The calculation results described in Table 2A-4 are provided in Appendix 2A-1.

5 REFERENCES

- ~~Chow, V.T. (1959). *Open Channel Hydraulics*, McGraw-Hill Book Company, Inc., New York, NY.~~
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- USDA (1986). *Urban Hydrology for Small Watersheds*, Technical Release 55 (TR-55), United States Department of Agriculture, Science and Education Administration, Agriculture Handbook Number 537.

TABLES

- Table 2A-1. Summary of Curve Numbers used in Analysis (from USDA, 1986)
- Table 2A-2. Manning's n Values (from TxDOT, 2019)
- Table 2A-3. Pre-Development Time of Concentration
- Table 2A-4. Post Development Time of Concentration
- Table 2A-~~54~~. Summary of Peak Discharge and Total Discharge Volumes at Site Outfalls

Table 2A-1. Summary of Curve Numbers used in Analysis¹
(from USDA, 1986)

Cover description Cover type and hydrologic condition	Average percent impervious area ^{2/}	Curve numbers for hydrologic soil group			
		A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)	68	79	86	89	
Fair condition (grass cover 50% to 75%)	49	69	79	84	
Good condition (grass cover > 75%)	39	61	74	80	
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)	98	98	98	98	
Streets and roads:					
Paved: curbs and storm sewers (excluding right-of-way)	98	98	98	98	
Paved: open ditches (including right-of-way)	83	89	92	93	
Gravel (including right-of-way)	76	85	89	91	
Dirt (including right-of-way)	72	82	87	89	

**Table 2A-2. Manning's n Values
(from TxDOT, 2019)**

Type of channel	Manning's n
B. Excavated or dredged channels	
1. Earth, straight and uniform	
a. Clean, recently completed	0.016-0.020
b. Clean, after weathering	0.018-0.025
c. Gravel, uniform section, clean	0.022-0.030
d. With short grass, few weeds	0.022-0.033
2. Earth, winding and sluggish	
a. No vegetation	0.023-0.030
b. Grass, some weeds	0.025-0.033
c. Deep weeds or aquatic plants in deep channels	0.030-0.040
d. Earth bottom and rubble sides	0.028-0.035
e. Stony bottom and weedy banks	0.025-0.040
f. Cobble bottom and clean sides	0.030-0.050
g. Winding, sluggish, stony bottom, weedy banks	0.025-0.040
h. Dense weeds as high as flow depth	0.050-0.120
3. Dragline-excavated or dredged	
a. No vegetation	0.025-0.033
b. Light brush on banks	0.035-0.060
4. Rock cuts	
a. Smooth and uniform	0.025-0.040
b. Jagged and irregular	0.035-0.050
5. Unmaintained channels	
a. Dense weeds, high as flow depth	0.050-0.120
b. Clean bottom, brush on sides	0.040-0.080
c. Clean bottom, brush on sides, highest stage	0.045-0.110
d. Dense brush, high stage	0.080-0.140
C. Lined channels	
1. Asphalt	0.013-0.016
2. Brick (in cement mortar)	0.012-0.018
3. Concrete	
a. Trowel finish	0.011-0.015
b. Float finish	0.013-0.016
c. Unfinished	0.014-0.020
d. Gunite, regular	0.016-0.023
e. Gunite, wavy	0.018-0.025
4. Riprap (n-value depends on rock size)	0.020-0.035
5. Vegetal lining	0.030-0.500

Table 2A-3. Pre-Development Times of Concentration

PRE-DEVELOPMENT CONDITIONS			Watershed Characterization			Sheet Flow			Shallow Concentrated Flow					Open Channel Flow													
Subcatchment Designation	Area A (mi ²)	Area A (acres)	Initial Abstraction (in)	Curve Number	Impervious Cover (%)	Flow Length (ft)	Manning's n	Slope (ft/ft)	Time T _i (min)	Flow Length (ft)	Velocity (ft/s)	Slope (ft/ft)	Average Velocity (ft/s)	Time T _a (min)	Flow Length (ft)	Depth d (ft)	Area A (ft ²)	Wetted Perimeter P (ft)	Hydraulic Radius (ft)	Manning's n	Slope (ft/ft)	Velocity (ft/s)	Time T _c (min)	Design Time T _d (min)	SCS Lag Time (min)	HMS 25-yr Flow (cfs)	HMS 100-yr Flow (cfs)
TS-1	0.00317	2.03	0.28	87.9	0.00	100	0.15	0.060	5.57	130	7.00	0.023	1.06	2.04	245	1.0	7.00	11.26	0.62	0.027	0.006	3.15	1.30	8.91	5.34	13.90	20.40
TS-2	0.00665	4.26	0.29	87.2	0.00	100	0.011	0.030	0.91	110	7.00	0.036	1.33	1.37	400	1.0	7.00	11.26	0.62	0.027	0.015	4.92	1.35	5.00	3.00	29.90	44.70
TS-3	0.01752	11.21	0.27	88.0	0.00	100	0.011	0.040	0.81	525	13.96	0.015	1.72	5.08	140	1.0	7.00	11.26	0.62	0.027	0.014	4.80	0.49	6.37	3.82	80.70	118.10
Total Area			2.5-year, 24-hour Design Rainfall Depth = 4.11 inches			Bench Left Side Slope = 3.0 H V										Bench Right Side Slope = 5.0 H V											

Notes:

- Curve numbers were approximated through area-weighted averages. A curve number of 80 was selected for areas that were unpaved and developed while a curve number of 98 was selected for any paved areas (Golder Associates, 2008).
- Manning's roughness coefficient: $n = 0.15$ represents short grass prairie for sheet flow (USDA, 1984).
- Manning's roughness coefficient: $n = 0.011$ represents smooth surfaces (concrete, asphalt, gravel, or bare soil) for sheet flow (USDA, 1984).
- Manning's roughness coefficient: $n = 0.027$ represents an excavated earth channel that is straight and uniform with short grass and few weeds (Chow, 1959).
- Travel Time (T_t) is calculated using Manning's kinematic solutions for sheet flow (USDA, 1986).
$$T_t = 0.007(nL)^{0.8} / (P^{0.48} S^{0.4})$$
- Velocity factor of 7.0 ft/s corresponds to short grass pasture from the Upland Method as reported by HydroCAD v.8 Owner's Manual.
- Velocity factor of 20.33 ft/s corresponds to paved surfaces from the Upland Method as reported by HydroCAD v.8 Owner's Manual.
- Open channel flow velocity is calculated using Manning's equation (USDA, 1986).
$$V = (1.49 / n) R^{2/3} S^{1/2} \text{ / ft/s where: } R = \text{hydraulic radius (ft) and is equal to } A/P \text{ (area (ft}^2\text{) / wetted perimeter (ft))}$$
- Design rainfall depth taken from NOAA Atlas 14, Volume II, Figure 2.

PRE-DEVELOPMENT CONDITIONS					Watershed Characterization			Sheet Flow			Shallow Concentrated Flow					Open Channel Flow											
Subcatchment Designation	Area A (mi ²)	Area A (acres)	Initial Abstraction (in)	Curve Number	Impervious Cover (%)	Flow Length (ft)	Manning's n	Slope (ft/ft)	Time T _i (min)	Flow Length (ft)	Velocity (ft/s)	Slope (ft/ft)	Average Velocity (ft/s)	Time T _a (min)	Flow Length (ft)	Depth d (ft)	Area A (ft ²)	Wetted Perimeter P (ft)	Hydraulic Radius R (ft)	Manning's n	Slope (ft/ft)	Velocity (ft/s)	Time T _c (min)	Design T _c (min)	SCS Lag Time (min)	HMS 25-yr Flow (cfs)	HMS 100-yr Flow (cfs)
TS-1	0.00349	2.43	0.21	90.6	0.00	100	0.011	0.020	3.07	253	7.00	0.032	1.24	3.39	353	7.00	0.032	1.24	7.73								
TS-2	0.01003	6.92	0.21	90.6	0.00	100	0.011	0.010	3.41	656	7.00	0.008	0.62	1.05													
TS-3	0.00522	3.62	0.27	88.1	0.00	100	0.010	0.020	8.65	372	20.33	0.011	3.11	2.94													
						160				160	7.00	0.013	0.78	3.41													
Total Area					2.5 year, 24-hour Design Rainfall Depth = 4.11 inches					Bench Left Side Slope = 3.0 H/V Bench Right Side Slope = 3.0 H/V																	

Notes:

- Curve numbers were approximated through area-weighted averages. A curve number of 80 was selected for areas that were unpaved and developed while a curve number of 98 was selected for any paved areas (Golder Associates, 2008).
- Manning's roughness coefficient: $n = 0.15$ represents short grass prairie for sheet flow (USDA, 1984).
- Manning's roughness coefficient: $n = 0.011$ represents smooth surfaces (concrete, asphalt, gravel, or bare soil) for sheet flow (USDA, 1984).
- Manning's roughness coefficient: $n = 0.027$ represents an excavated earth channel that is straight and uniform with short grass and few weeds (Chow, 1959).
- Travel Time (T_t) is calculated using Manning's kinematic solutions for sheet flow (USDA, 1986).
$$T_t = 0.007(nL)^{0.8} / (P^{0.48} S^{0.4})$$
- Velocity factor of 7.0 ft/s corresponds to short grass pasture from the Upland Method as reported by HydroCAD v.8 Owner's Manual.
- Velocity factor of 20.33 ft/s corresponds to paved surfaces from the Upland Method as reported by HydroCAD v.8 Owner's Manual.
- Open channel flow velocity is calculated using Manning's equation (USDA, 1986).
$$V = (1.49 / n) R^{2/3} S^{1/2} \text{ / ft/s where: } R = \text{hydraulic radius (ft) and is equal to } A/P \text{ (area (ft}^2\text{) / wetted perimeter (ft))}$$
- Design rainfall depth taken from NOAA Atlas 14, Volume II, Figure 2.

Table 2A-4. Post Development Time of Concentration

POST-DEVELOPMENT CONDITIONS										Watershed Characterization				Sheet Flow			Shallow Concentrated Flow				Open Channel Flow								
Subcatchment Designation	Area A (acres)	Initial Abstraction (in)	Curve Number	Impervious Cover (%)	Flow Length (ft)	Manning's n	Slopes (ft/ft)	Time T _c (min)	Flow Length (ft)	Flow Velocity (ft/s)	Slopes (ft/ft)	Average Velocity (ft/s)	Time T _c (min)	Flow Length (ft)	Depth d (ft)	Area A (ft ²)	Wetted Perimeter P (ft)	Hydraulic Radius R (ft)	Manning's n	Slopes (ft/ft)	Flow Velocity (ft/s)	Time T _c (min)	Design T _c (min)	93% Lag Time (min)	25-yr Flow (cfs)	100-yr Flow (cfs)			
TS-1	0.00348	0.21	90.6	0.00	100	0.011	0.020	1.07	253	7.00	0.032	1.24	3.39										3.00	3.00	16.80	24.40			
TS-2	0.01145	0.07	94.7	0.00	100	0.011	0.010	1.41	650	20.33	0.008	1.82	5.96										3.37	4.42	55.90	79.70			
TS-3	0.00170	0.16	92.7	0.00	100	0.011	0.005	1.86	230	20.33	0.020	2.84	1.35										3.00	3.00	8.30	12.00			
Total Area		0.01663																											
										Bench Left side Slope = 3.0 H/V										Bench Right side Slope = 3.0 H/V									
										-year, 24-hour Design Rainfall Depth = 4.11 inches																			

Notes:

- 1) Curve numbers were approximated through area-weighted averages. A curve number of P₂ was selected for areas that were ungrazed and developed while a curve number of P₃ was selected for any paved areas (Golden Association, 2003).
- 2) Manning's roughness coefficient: n = 0.15 represents short grass prairie for sheet flow (USDA, 1984).
- 3) Manning's roughness coefficient: n = 0.011 represents smooth surfaces (concrete, asphalt, gravel, or bare soil) for sheet flow (USDA, 1984).
- 4) Manning's roughness coefficient: n = 0.07 represents an excavated earth channel that is straight and uniform with short grass and few weeds (Chow, 1959).
- 5) Travel Time (T_c) is calculated using Manning's formula: $T_c = 0.0078 L^{0.78} / (P^{0.48} S^{0.48})$, where L is flow length in feet, P is wetted perimeter in feet, and S is slope in feet per foot.
- 6) Velocity factor of 0.48 corresponds to short grass prairie from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 7) Velocity factor of 20.33 ft/s corresponds to paved surfaces from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 8) Open channel flow velocity is calculated using Manning's equation (USDA, 1984): $V = 4.49 / n \cdot R^{2/3} \cdot S^{1/2}$, where V = velocity in feet per second, R = hydraulic radius in feet, and S = slope in feet per foot.
- 9) Design rainfall depth values from NOAA Atlas 14, Volume II, Section 2.

Table 2A-54. Summary of Peak Discharge and Total Discharge Volumes at Site Outfall

Location	Item	Pre-Development (25-year)	Post-Development (25-year)
Site Outfall OF-1	Peak Discharge (cfs)	121.6 <u>16.8</u>	114.1 <u>16.8</u>
	Total Runoff Volume (ac-ft)	10.3 <u>1.4</u>	12.3 <u>1.4</u>
OF-2	Peak Discharge (cfs)	<u>37.6</u>	<u>29.4</u>
	Total Runoff Volume (ac-ft)	<u>4.0</u>	<u>5.1</u>
OF-3	Peak Discharge (cfs)	<u>13.0</u>	<u>8.3</u>
	Total Runoff Volume (ac-ft)	<u>1.3</u>	<u>0.7</u>

FIGURES

- Figure 2A-1. Pre-Development Drainage Areas
- Figure 2A-2. Post-Development Drainage Areas
- Figure 2A-3. SCS Rainfall Distributions (from USDA, 1986)
- Figure 2A-4. Pre-Development HEC-HMS Nodal Network
- Figure 2A-5. Post-Development HEC-HMS Nodal Network

Figure 2A-1. Pre-Development Drainage Areas

[DELETE PREVIOUS FIGURE 2A-1; REPLACE WITH REVISED FIGURE (PRESENTED IN CLEAN VERSION)]

Figure 2A-2. Post-Development Drainage Areas

[DELETE PREVIOUS FIGURE 2A-2; REPLACE WITH REVISED FIGURE (PRESENTED IN CLEAN VERSION)]

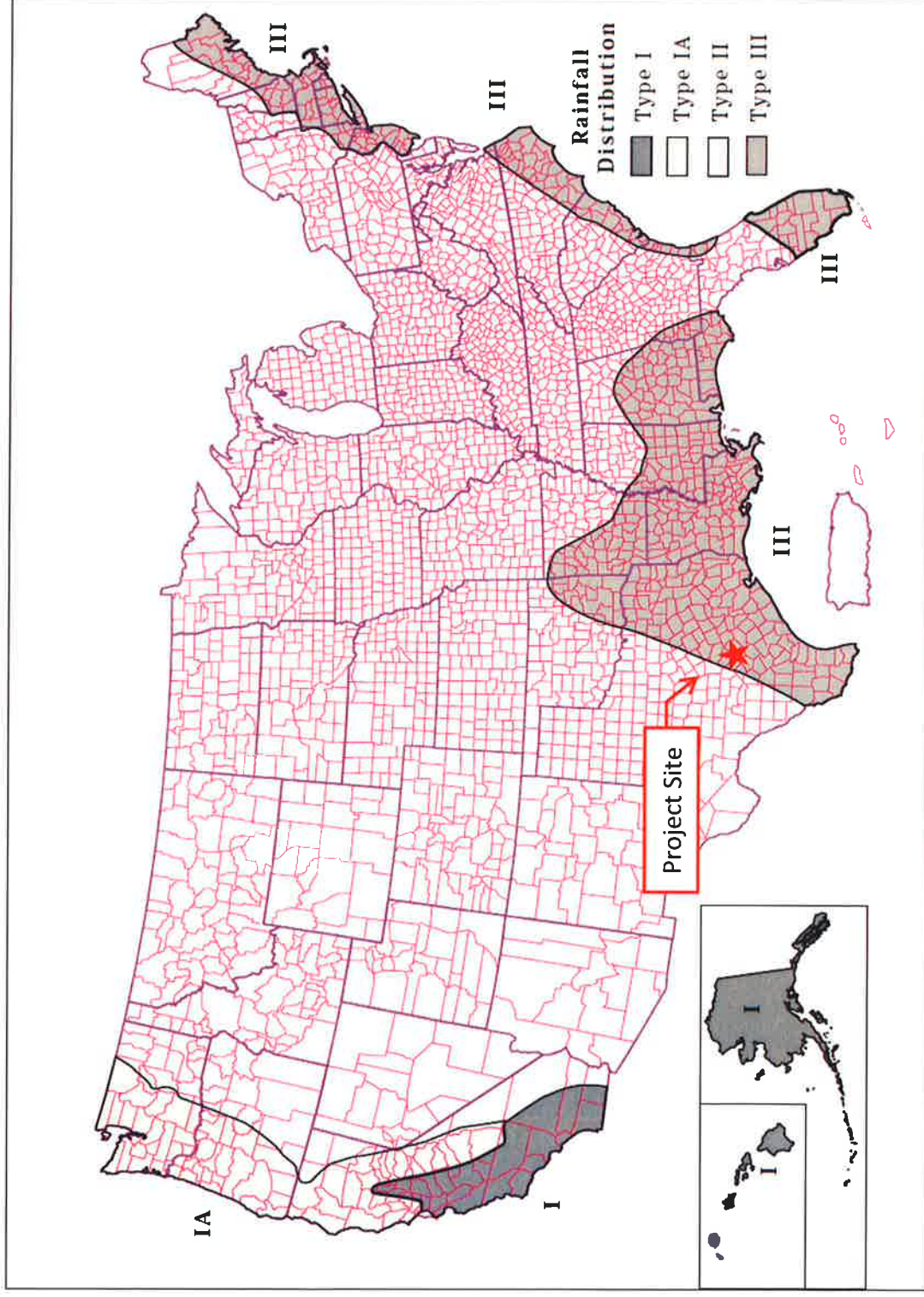
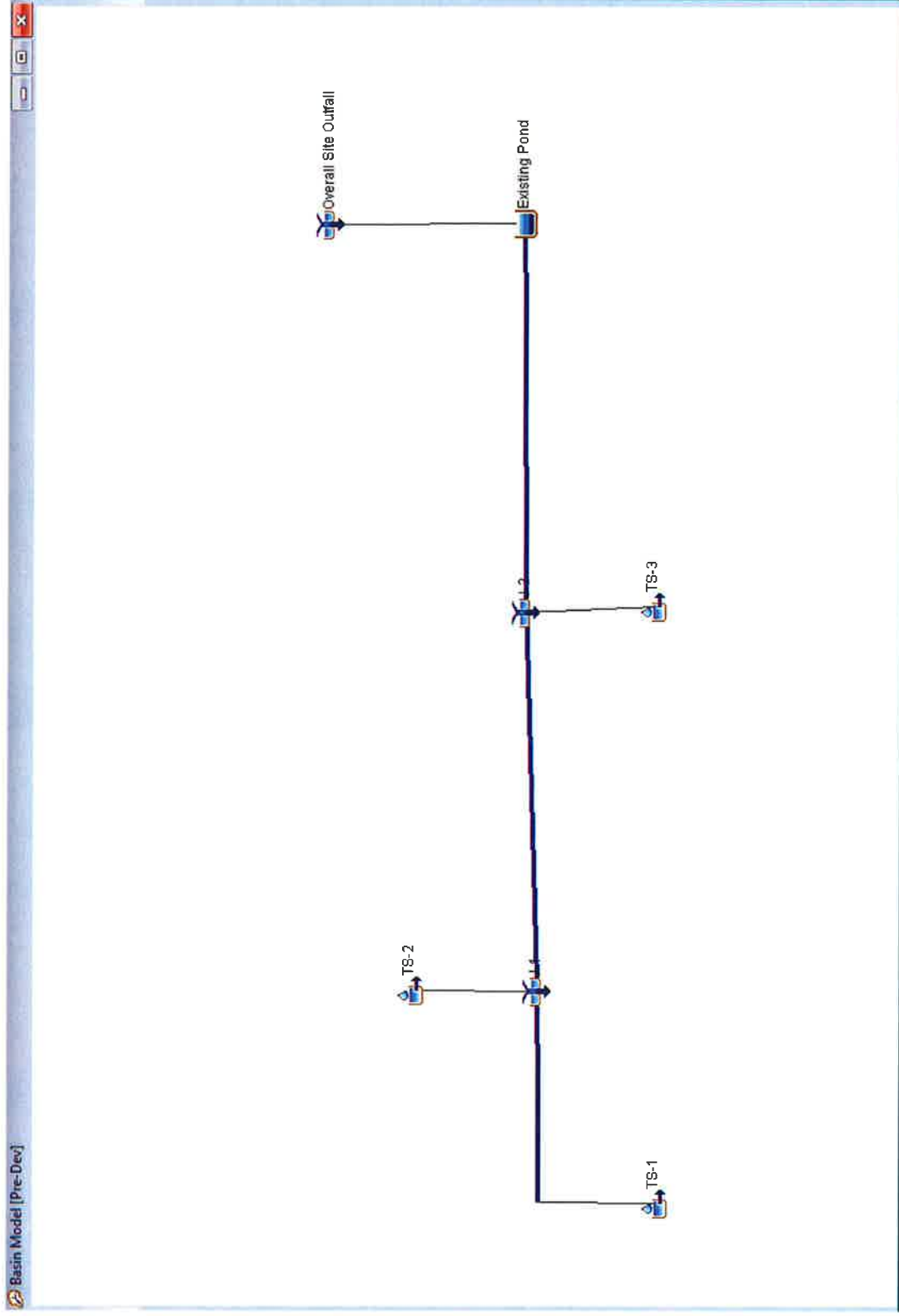


Figure 2A-3. SCS Rainfall Distributions (from USDA, 1986)



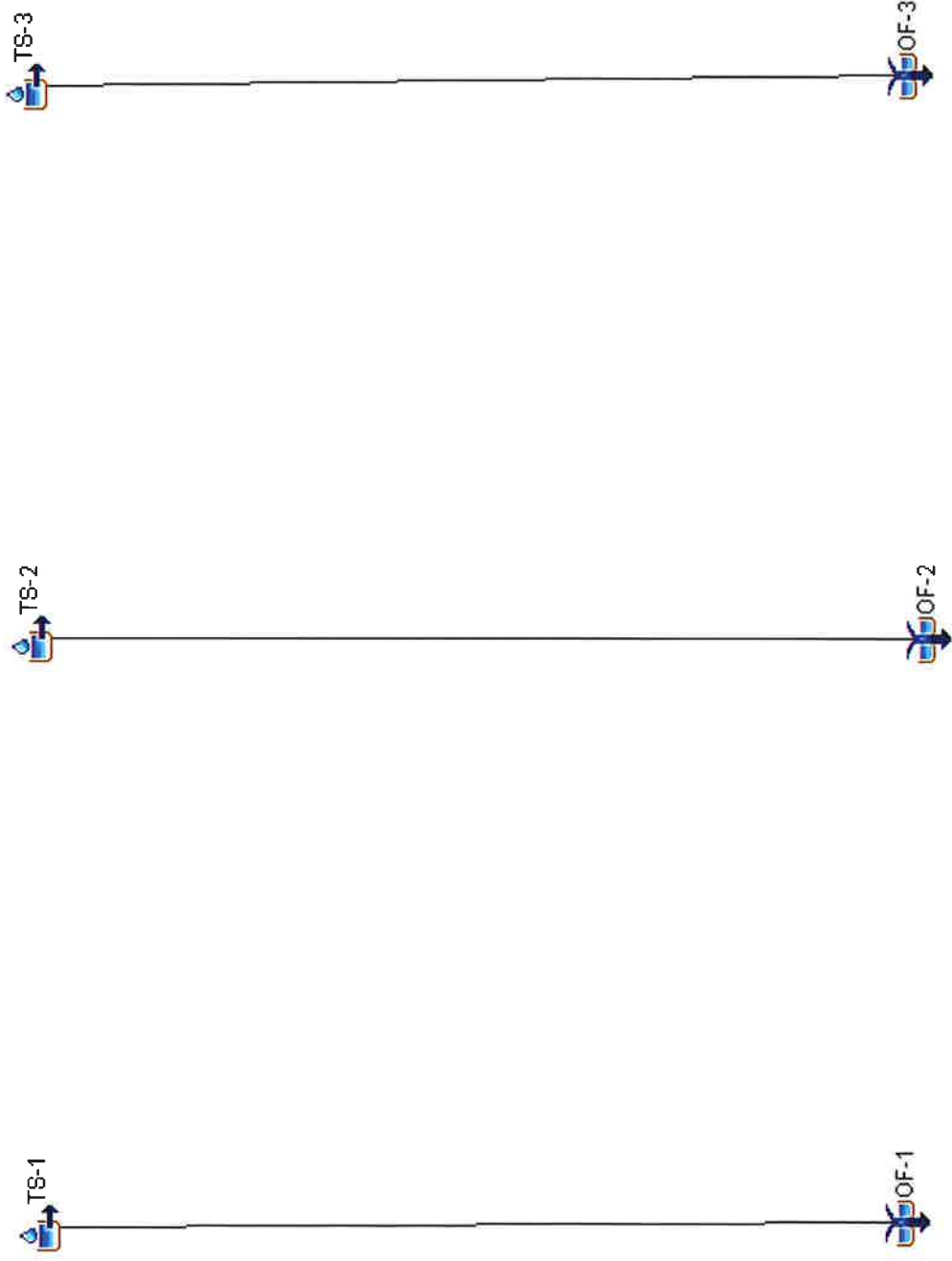
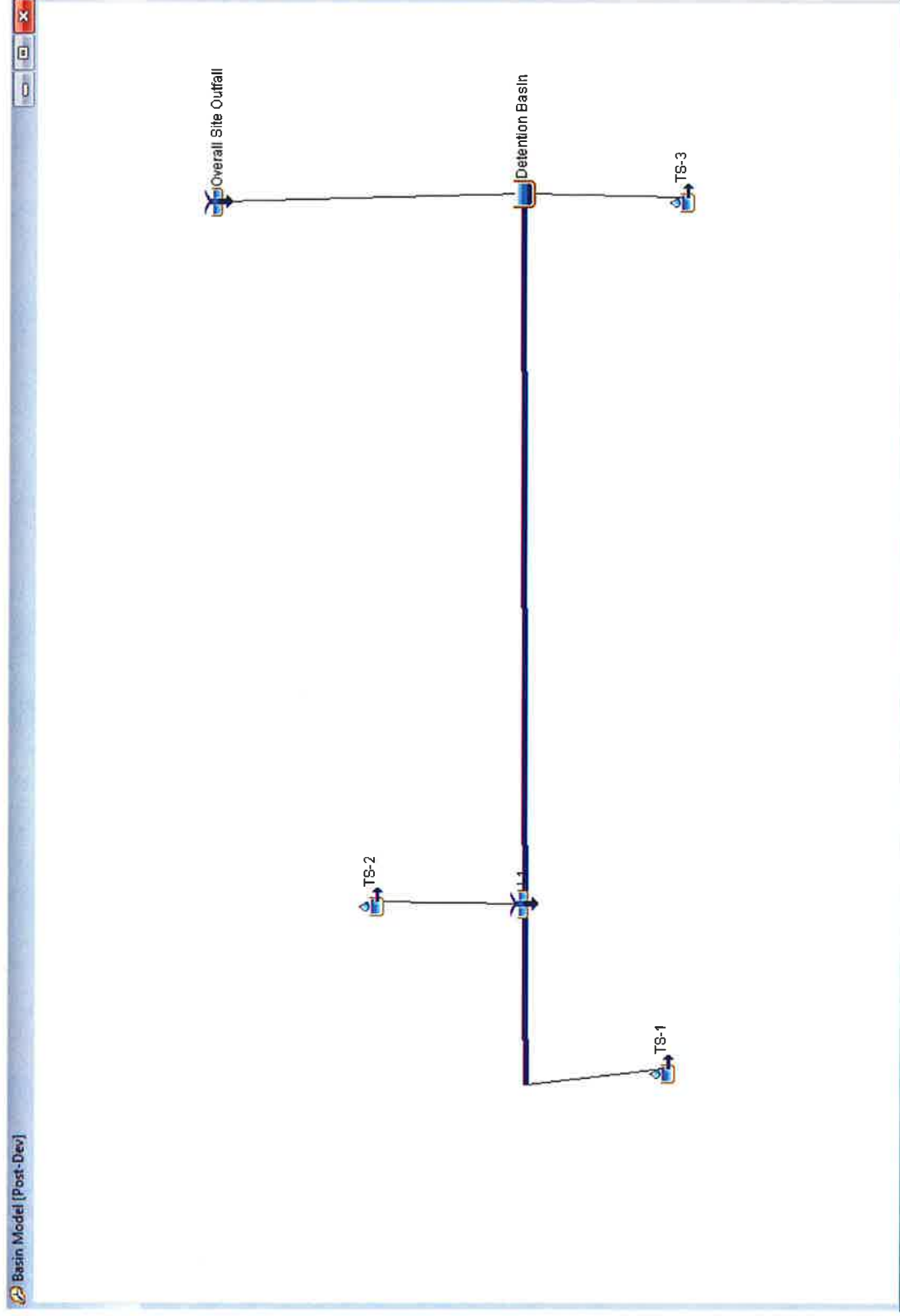


Figure 2A-4. Pre-Development HEC-HMS Nodal Network



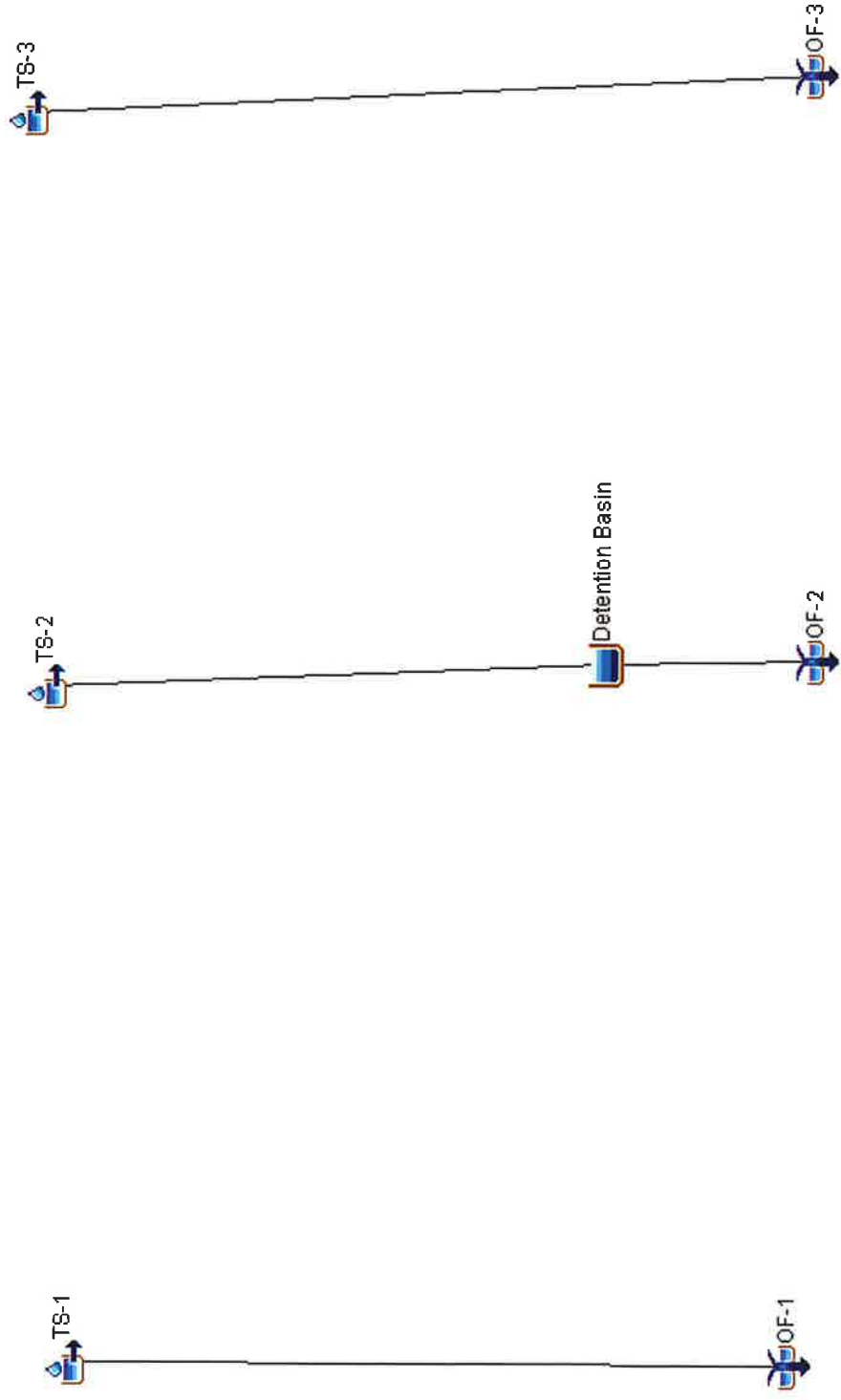


Figure 2A-5. Post-Development HEC-HMS Nodal Network

APPENDIX 2A-1

HEC-HMS HYDROLOGIC MODEL PARAMETERS

Table 2A-1-1. Pre-Development Existing Pond Elevation-Area Relationship

 Paired Data ☒ Table ☐ Graph

Elevation (FT)	Area (AC)
618.8	0.00001
620.0	0.04223
622.0	0.18753
624.0	0.56704

Table 2A-1-12. Pre-Development 25-year, 24-hour Precipitation Event Nodal Areas, Peak Flow Rates, and Runoff Volumes

Global Summary Results for Run "pre dev; 25 YR"				
Project: ACL_TransferStation Simulation Run: pre dev; 25 YR				
Start of Run: 01Jan2019, 00:00		Basin Model: Pre-Dev		
End of Run: 04Jan2019, 00:00		Meteorologic Model: 25YR 24HR		
Compute Time: 25Sep2019, 11:14:53		Control Specifications: Control 1		
Show Elements:	All Elements	Volume Units:	<input checked="" type="radio"/> IN <input type="radio"/> AC-FT	Sorting: Hydrologic
Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
R-TS3	0.02734	122.7	01Jan2019, 12:06	7.09
R-TS2	0.00982	42.7	01Jan2019, 12:06	6.89
TS-3	0.01752	80.7	01Jan2019, 12:05	7.20
TS-2	0.00665	29.9	01Jan2019, 12:04	6.75
TS-1	0.00317	13.9	01Jan2019, 12:07	7.19
R-TS1	0.00317	13.9	01Jan2019, 12:08	7.19
J-2	0.00982	42.7	01Jan2019, 12:06	6.89
J-1	0.00317	13.9	01Jan2019, 12:08	7.19
Existing Pond	0.02734	121.6	01Jan2019, 12:07	7.09
Overall Site Outfall	0.02734	121.6	01Jan2019, 12:07	7.09

Global Summary Results for Run "pre dev; 25 YR"				
Project: ACL_TransferStation_200123 Simulation Run: pre dev; 25 YR				
Start of Run: 01Jan2019, 00:00		Basin Model: Pre-Dev		
End of Run: 04Jan2019, 00:00		Meteorologic Model: 25YR 24HR		
Compute Time: 28Jan2020, 16:28:47		Control Specifications: Control 1		
Show Elements:	All Elements	Volume Units:	<input type="radio"/> IN <input checked="" type="radio"/> AC-FT	Sorting: Alphabetic
Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
OF-1	0.00	16.8	01Jan2019, 12:04	1.4
OF-2	0.01	37.6	01Jan2019, 12:12	4.0
OF-3	0.00	13.1	01Jan2019, 12:10	1.3
TS-1	0.00	16.8	01Jan2019, 12:04	1.4
TS-2	0.01	37.6	01Jan2019, 12:12	4.0
TS-3	0.00	13.1	01Jan2019, 12:10	1.3

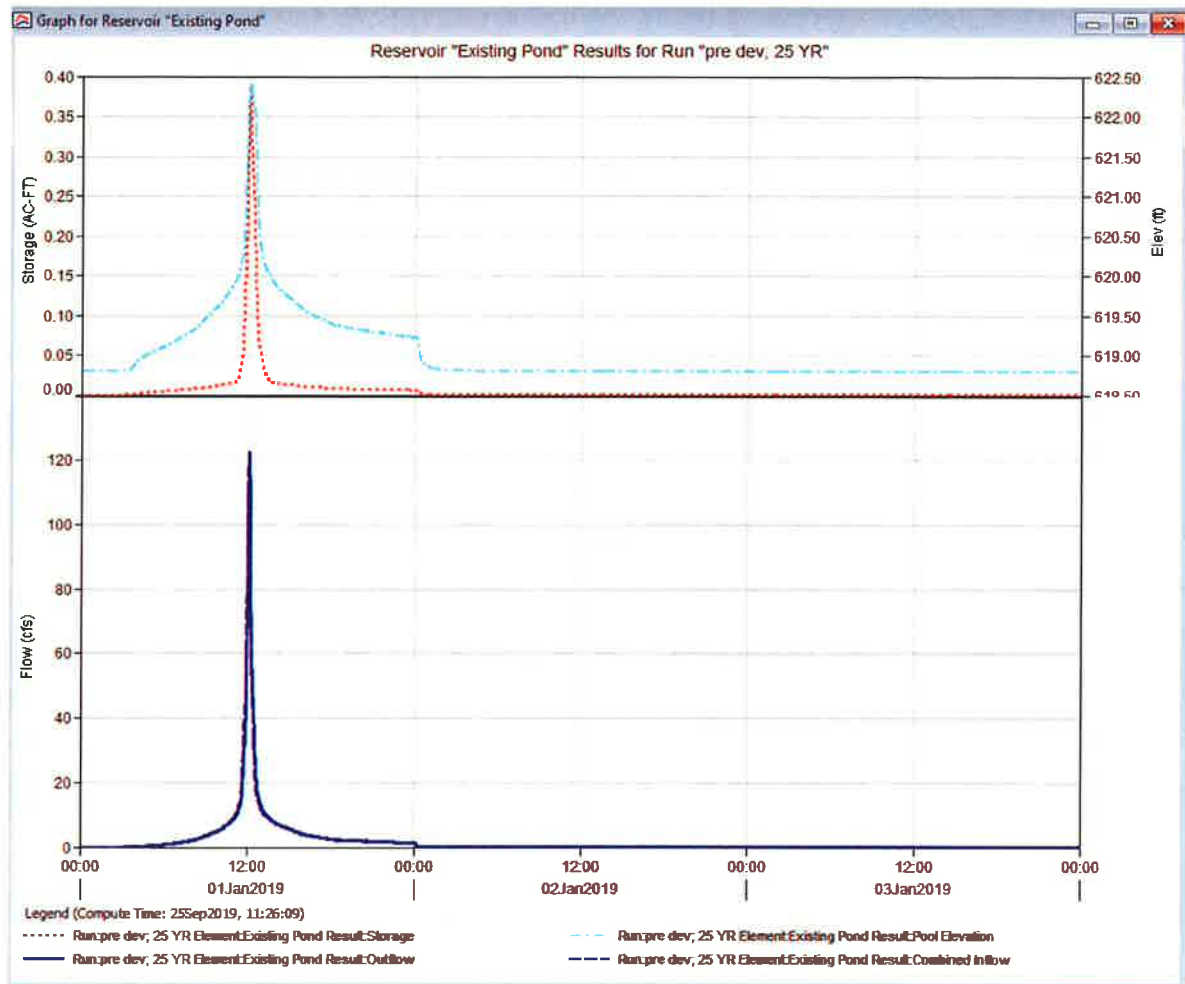
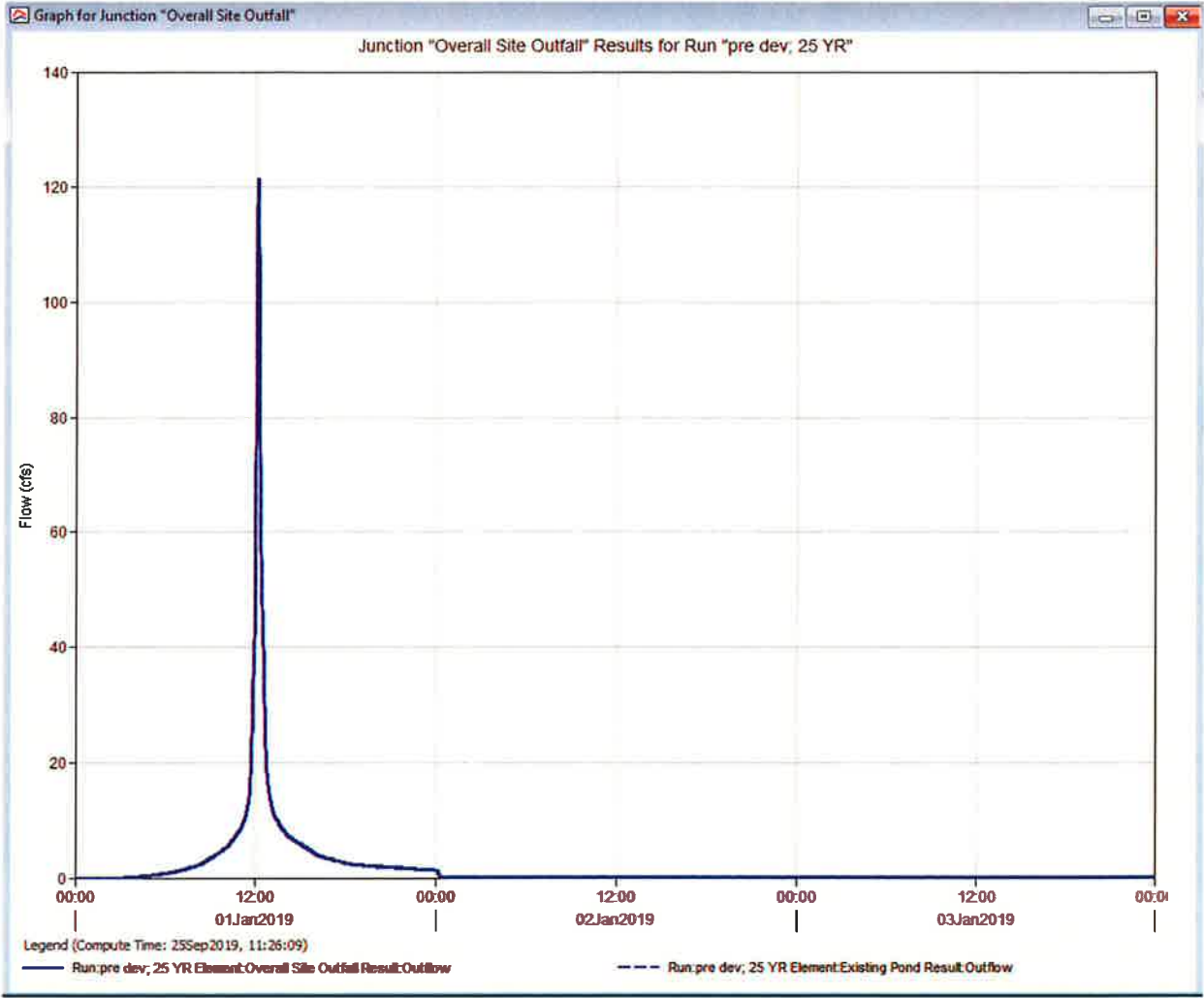


Figure 2A-1-1. Pre-Development 25-year, 24-hour Precipitation Event Existing Pond Hydrograph and Elevation/Storage Relationships



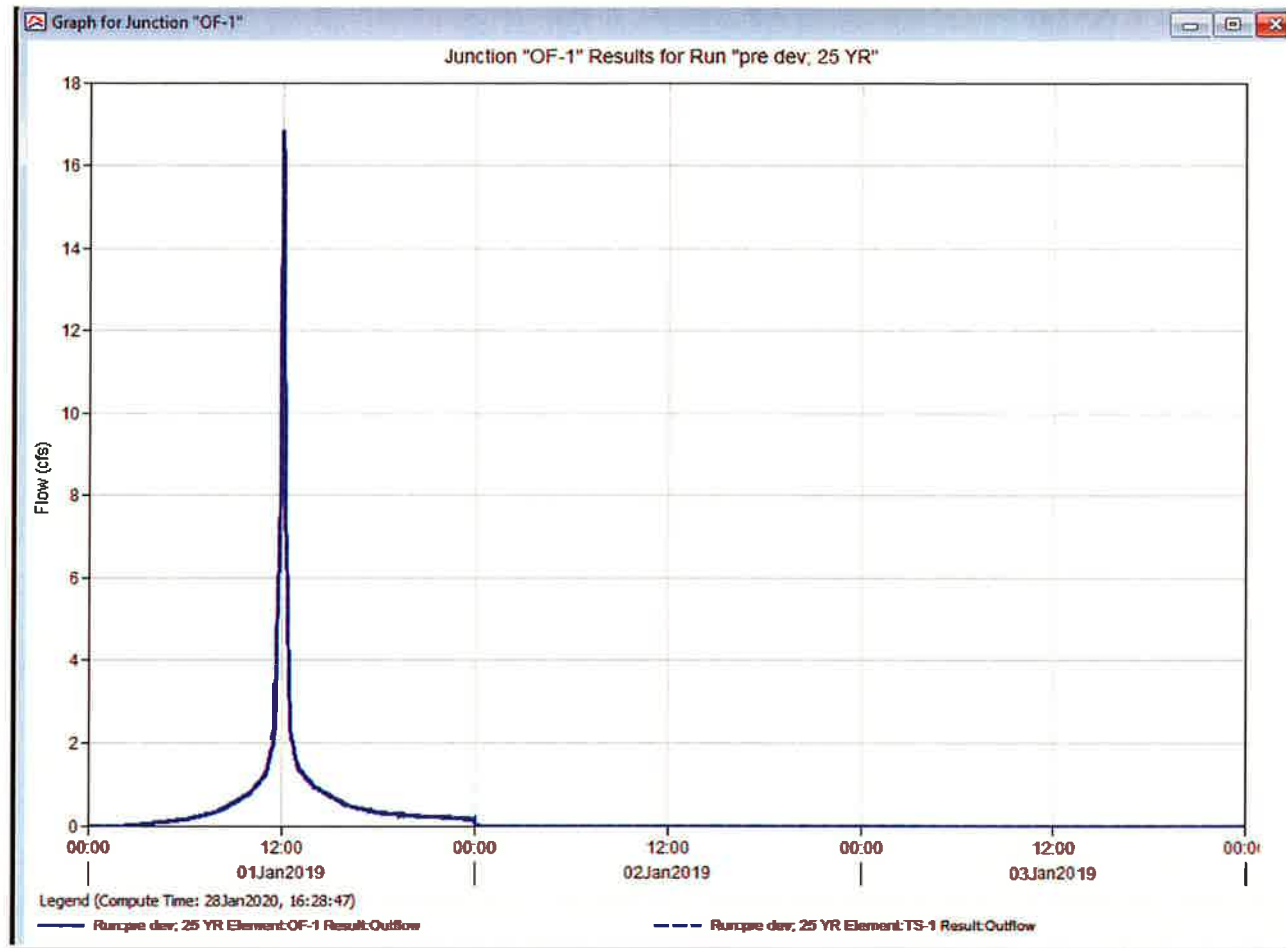


Figure 2A-1-21. Pre-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-1

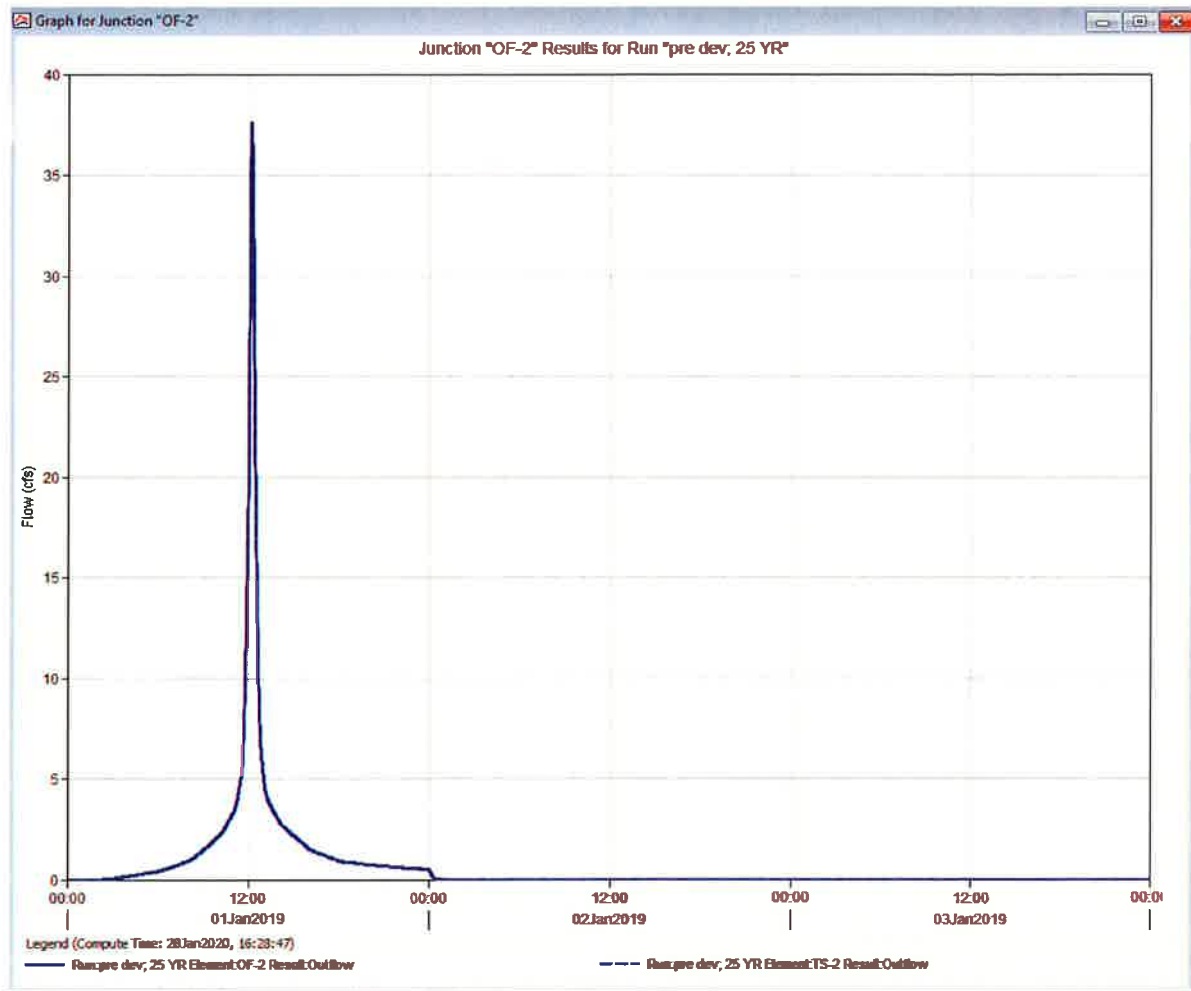


Figure 2A-1-2. Pre-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-2

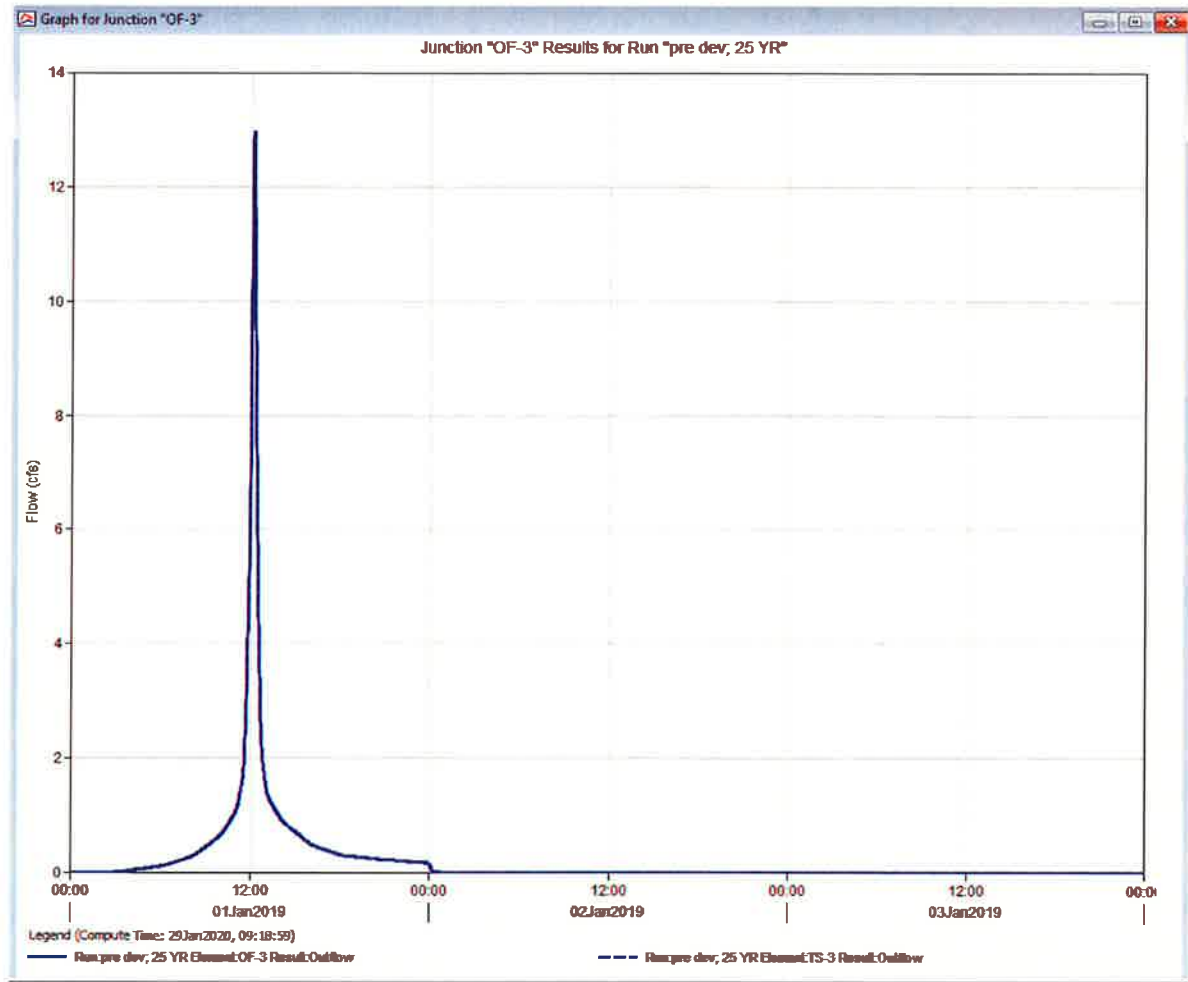




Figure 2A-1-3. Pre-Development 25-year, 24-hour Precipitation Event Runoff
Hydrograph at Site Outfall OF-3

Table 2A-1-23. Post-Development Surface Water Detention Pond Elevation-Area Relationship

 Paired Data Table Graph

Elevation (FT)	Area (AC)
618.8	0.40143
620.0	0.58968
622.0	0.77930
624.0	1.00000

 Paired Data Table Graph

Elevation (FT)	Area (AC)
624.0	0.356
628.0	0.525

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Table 2A-1-34. Post-Development 25-year, 24-hour Precipitation Event Nodal Areas, Peak Flow Rates, and Runoff Volumes

Global Summary Results for Run "post dev; 25YR"

Project: ACL_TransferStation Simulation Run: post dev; 25YR

Start of Run: 01Jan2019, 00:00 Basin Model: Post-Dev
 End of Run: 04Jan2019, 00:00 Meteorologic Model: 25YR 24HR
 Compute Time: 25Sep2019, 11:28:51 Control Specifications: Control 1

Show Elements: All Elements Volume Units: ☒ IN ☐ AC-FT Sorting: Hydrologic

Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
TS-3	0.01752	87.9	01Jan2019, 12:04	8.41
TS-2	0.00665	33.3	01Jan2019, 12:04	8.41
TS-1	0.00317	15.9	01Jan2019, 12:04	8.41
R-TS1	0.00317	15.8	01Jan2019, 12:05	8.41
J-1	0.00982	48.9	01Jan2019, 12:04	8.41
R-TS23	0.00982	48.7	01Jan2019, 12:06	8.41
Detention Basin	0.02734	114.1	01Jan2019, 12:09	8.40
Overall Site Outfall	0.02734	114.1	01Jan2019, 12:09	8.40

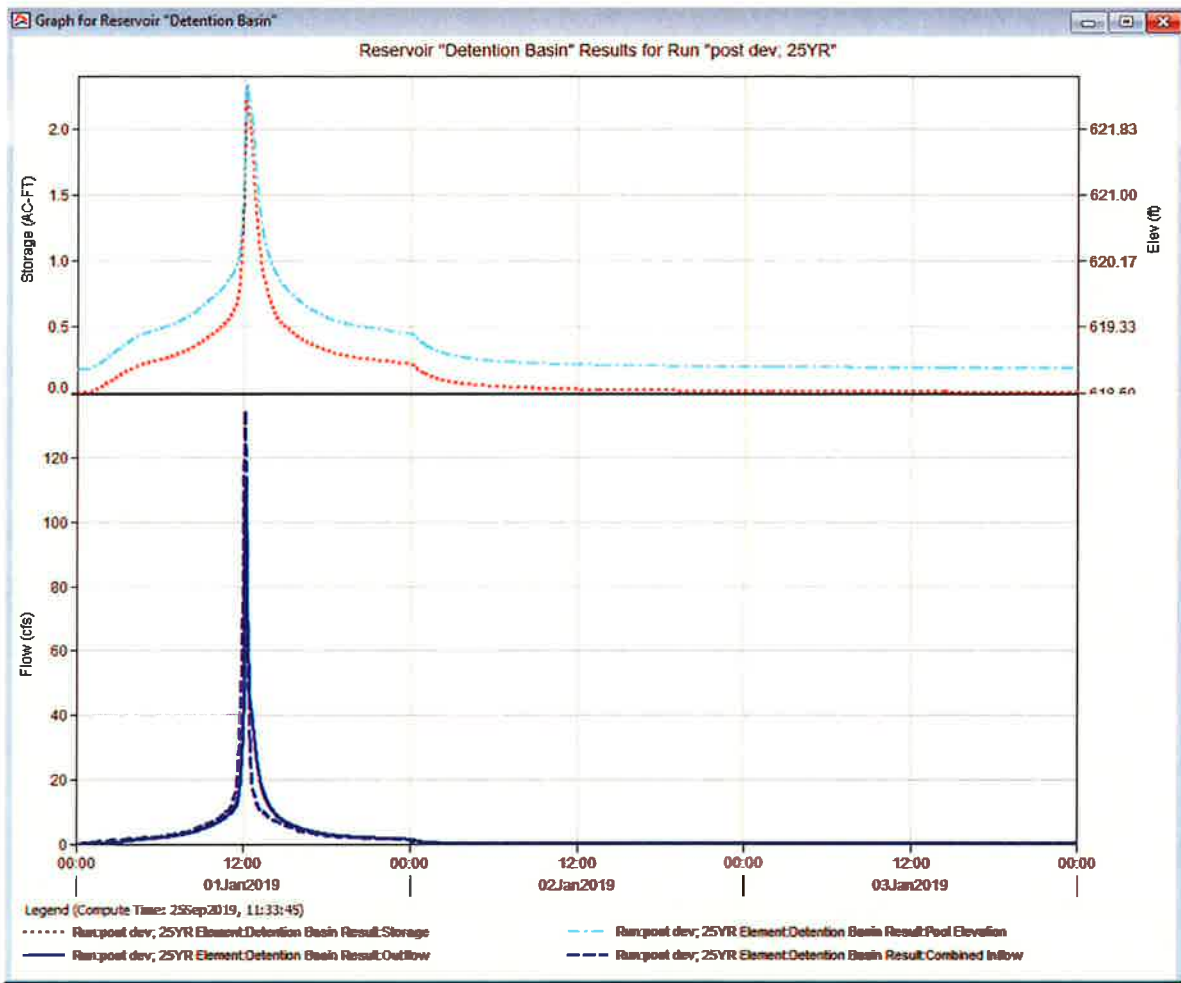
Global Summary Results for Run "post dev; 25YR"

Project: ACL_TransferStation_200123 Simulation Run: post dev; 25YR

Start of Run: 01Jan2019, 00:00 Basin Model: Post-Dev
 End of Run: 04Jan2019, 00:00 Meteorologic Model: 25YR 24HR
 Compute Time: 28Jan2020, 16:37:23 Control Specifications: Control 1

Show Elements: All Elements Volume Units: ☐ IN ☒ AC-FT Sorting: Alphabetic

Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
Detention Basin	0.01	29.4	01Jan2019, 12:15	5.1
OF-1	0.00	16.8	01Jan2019, 12:04	1.4
OF-2	0.01	29.4	01Jan2019, 12:15	5.1
OF-3	0.00	8.3	01Jan2019, 12:04	0.7
TS-1	0.00	16.8	01Jan2019, 12:04	1.4
TS-2	0.01	55.9	01Jan2019, 12:06	5.1
TS-3	0.00	8.3	01Jan2019, 12:04	0.7



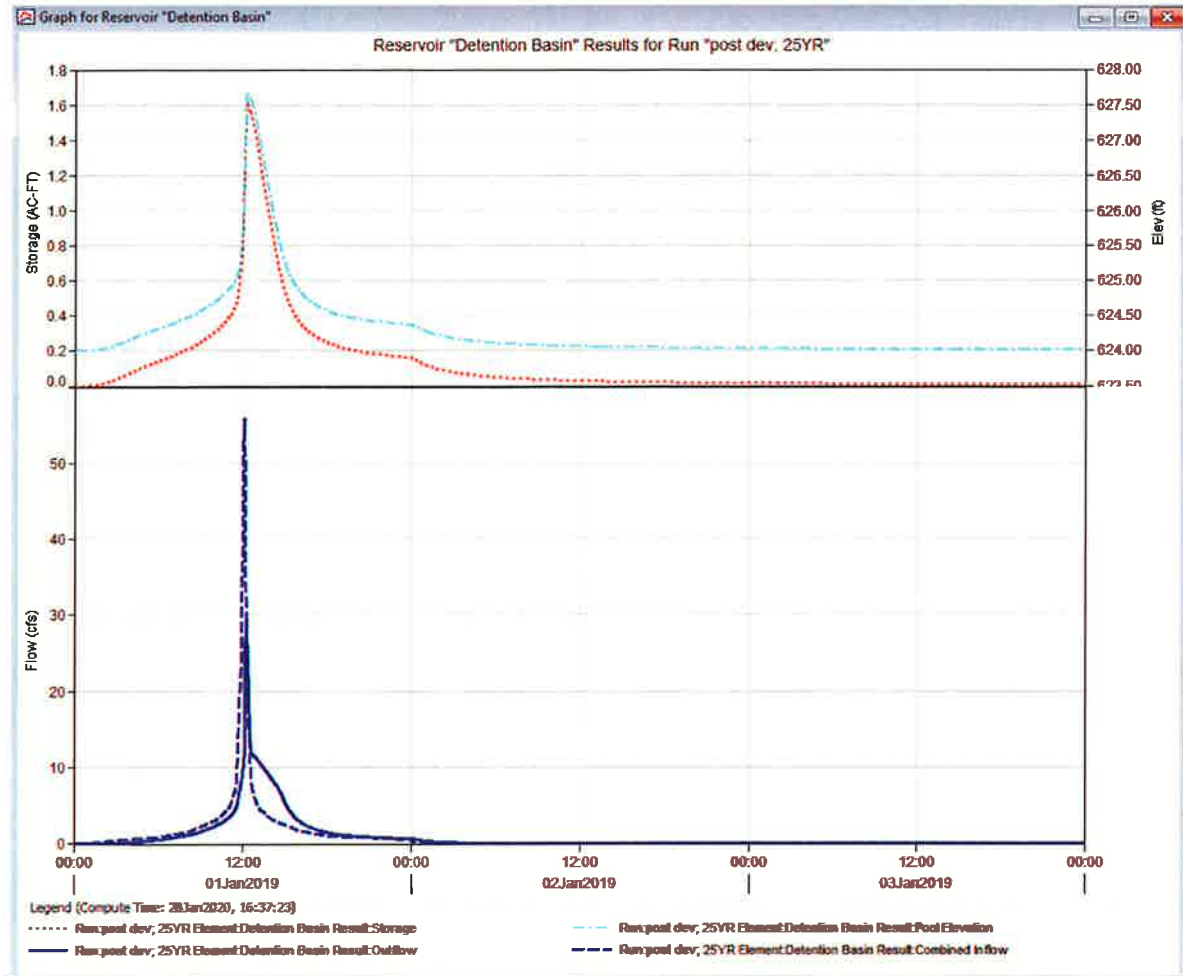
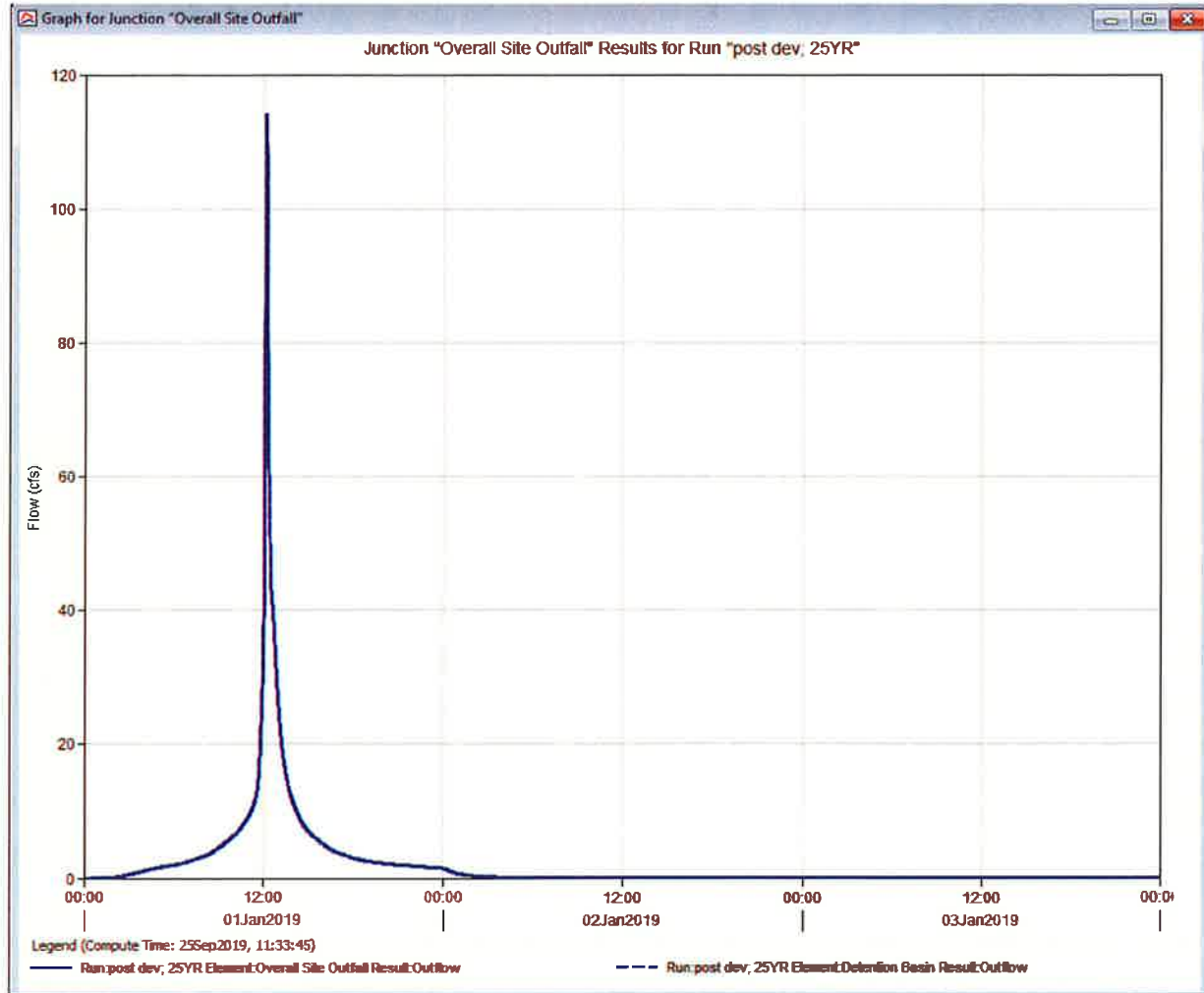


Figure 2A-1-4. Post-Development 25-year, 24-hour Precipitation Event Surface Water Detention Pond Hydrograph and Elevation/Storage Relationships



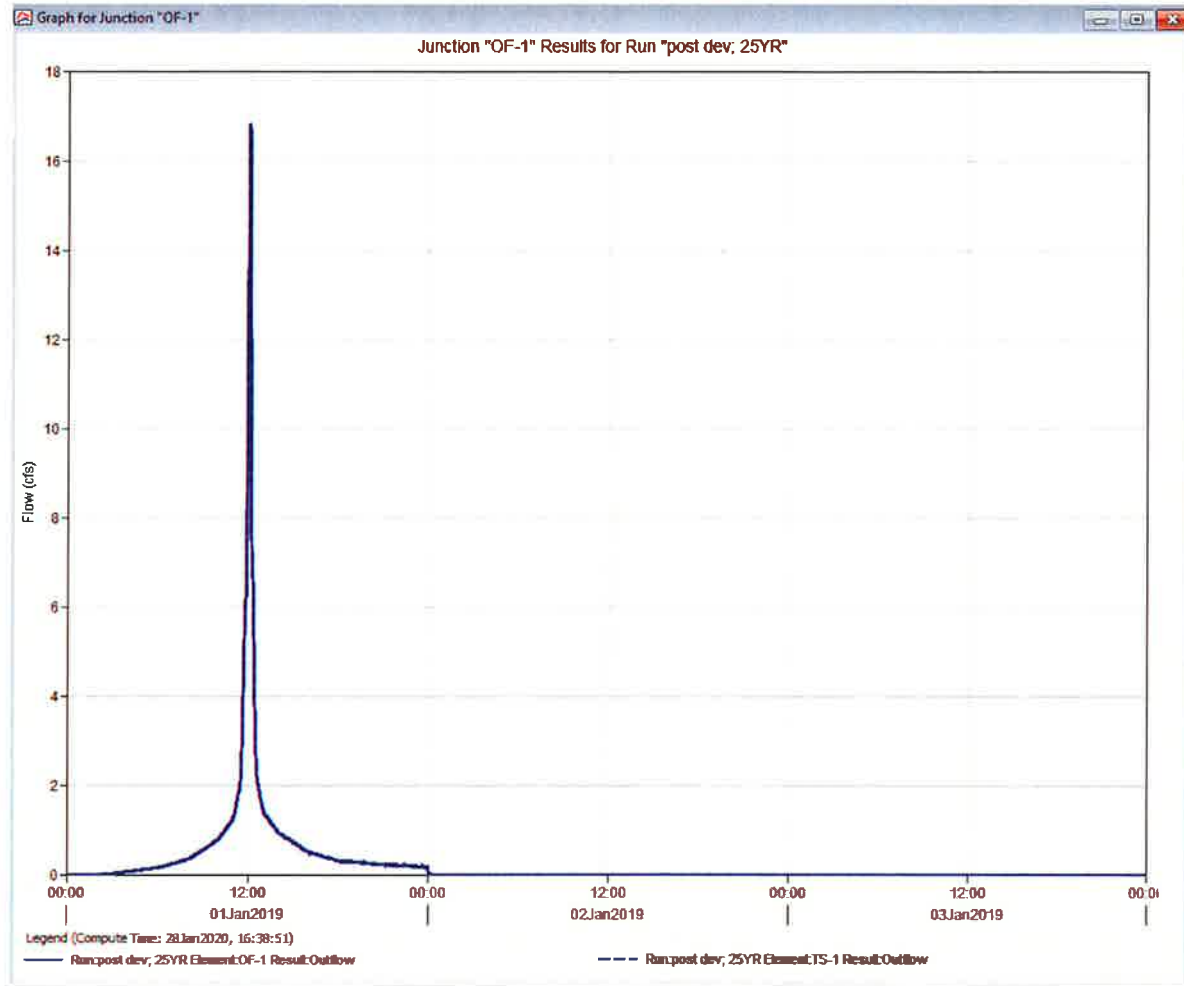


Figure 2A-1-5. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-1

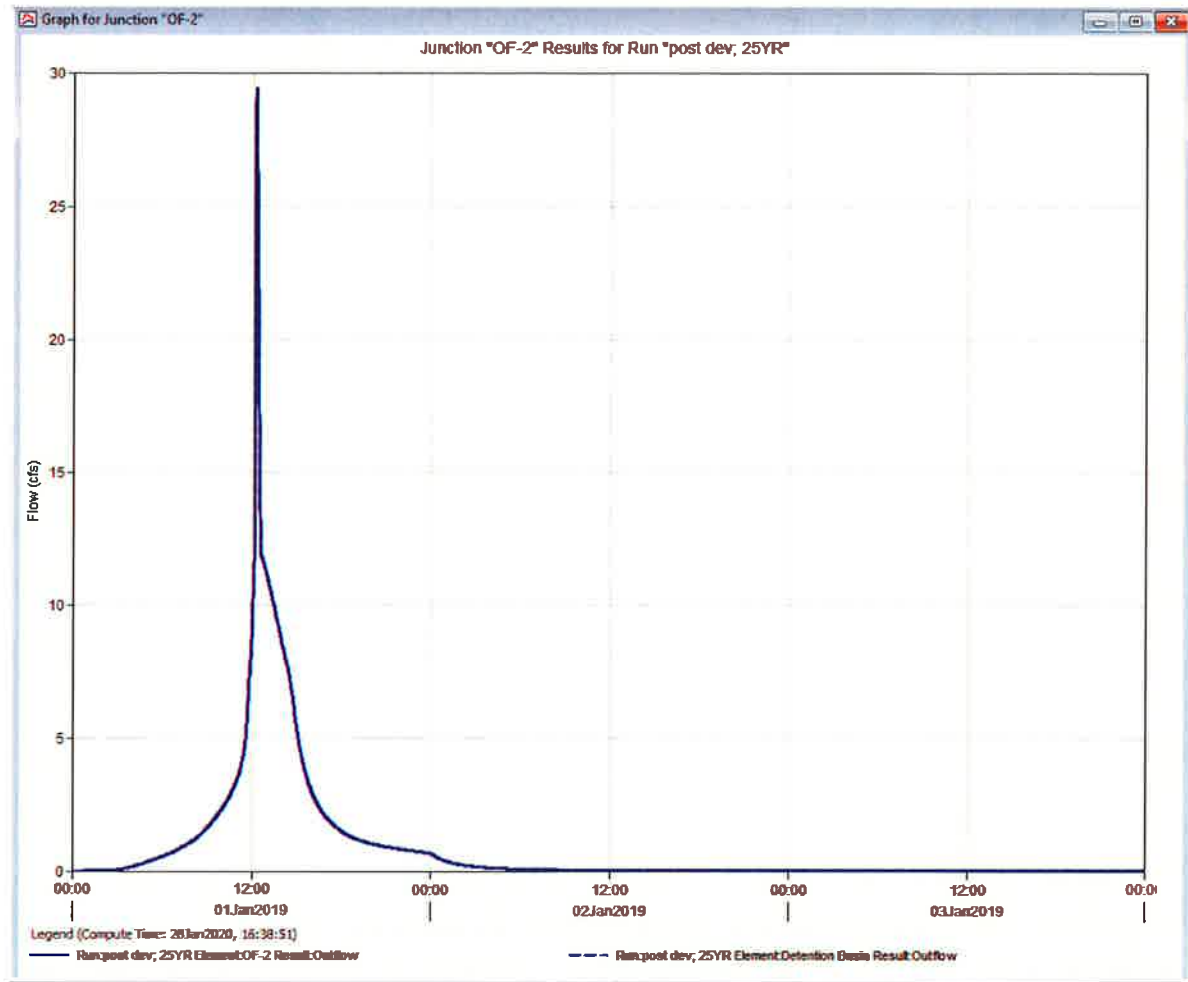


Figure 2A-1-6. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-2

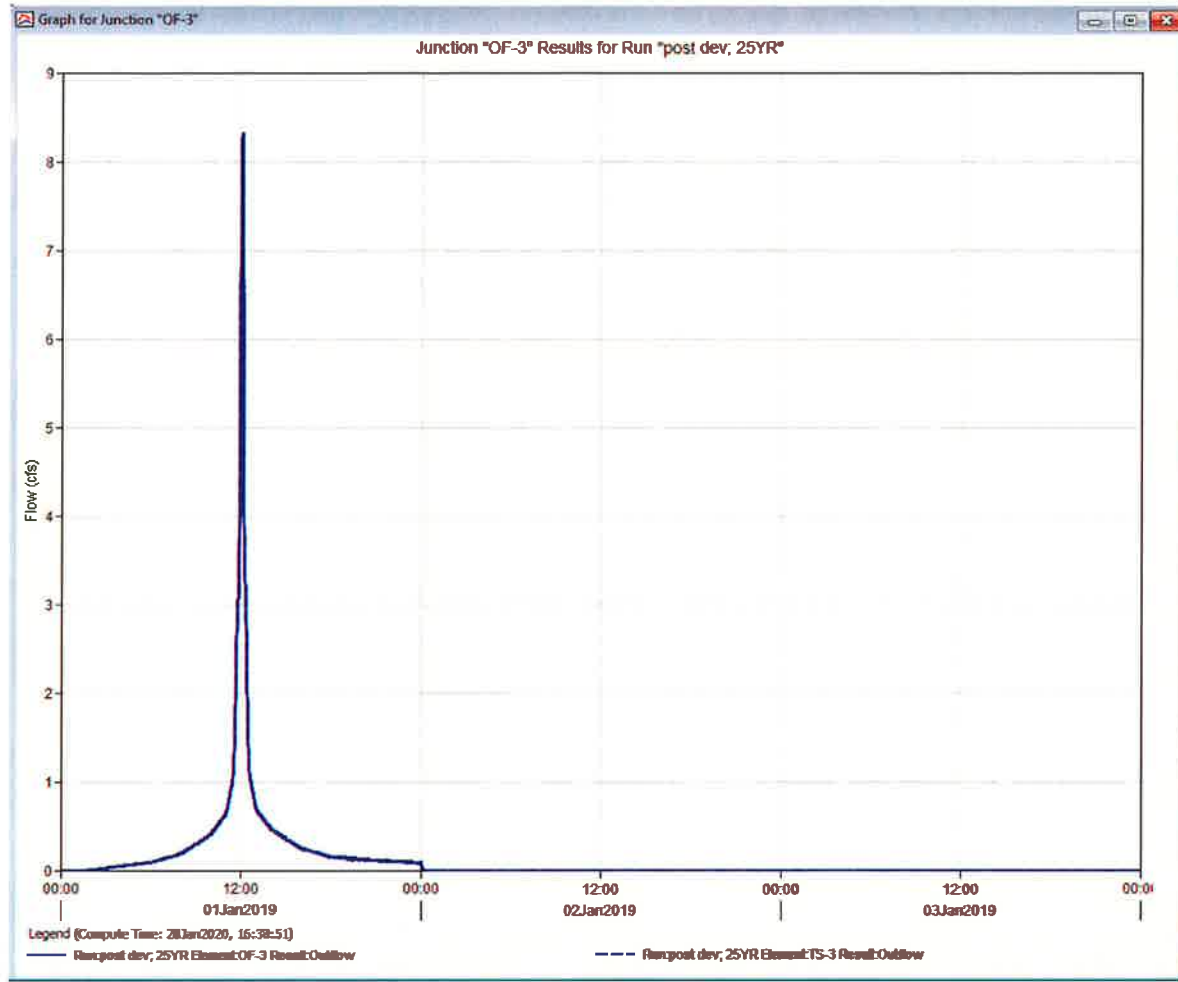


Figure 2A-1-7. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-3

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART IV – SITE OPERATING PLAN (SOP)

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306 ~~_____~~ [to be assigned]
AUSTIN, TRAVIS COUNTY, TEXAS**

Prepared by:
Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003

SEALED FOR THIS PART IV SITE OPERATING PLAN,
AND FOR REGISTRATION PURPOSES ONLY.

Submitted September 2019
Revised January 2020

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Table IV-3	Special Waste Processing Procedures

FIGURE

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SITE OPERATING PLAN (SOP)

1. INTRODUCTION

1.1 Terms of Reference

The Austin Community Transfer Station (hereafter also referred to as the “facility” or “site”) is a proposed Type V municipal solid waste (MSW) facility, owned and operated by Waste Management of Texas, Inc. (WMTX). This Site Operating Plan (SOP) provides general and facility-specific instructions for site management and personnel to operate the facility on a daily basis in a manner consistent with the design of the facility and with the applicable rules of the Texas Commission on Environmental Quality (TCEQ). This SOP complies with the requirements of Texas Administrative Code (TAC) Title 30, Chapter 330, Subchapter E, “Operational Standards for Municipal Solid Waste Landfill Storage and Processing Units,” applicable to Type V MSW transfer station registrations.

The specific procedures outlined in this SOP are operational requirements and must be understood, acknowledged, and followed by the site personnel. This SOP will be retained at the facility throughout the active life of the facility until after certification of closure.

References to the terms “Executive Director” or “TCEQ” used in this SOP shall refer to the Executive Director of the TCEQ or the designated representative(s) of the TCEQ. References to information in the “registration” or “registration application” for this facility shall refer to the most current version of those documents, including any amendments, modifications, or revisions as approved.

1.2 General Facility Information

The Austin Community Transfer Station is located on the east side of Austin, Texas, approximately 500 feet north of the intersection of Giles Road and US Highway 290. The facility will accept and process MSW from public and private waste hauling vehicles, and from the public generally (refer to Section 3 of this SOP for specific waste acceptance information), and then transfer this waste to a properly permitted MSW landfill for disposal.

2. RECORDKEEPING AND REPORTING REQUIREMENTS

The facility will maintain the Site Operating Record for the life of the facility until after certification of closure. The Site Operating Record will be maintained on-site, in an organized format, where information is readily locatable and retrievable, with the required records to be maintained as set forth herein. Site Operating Record files that are older than five (5) years may be stored off-site at a local Iron Mountain® records storage facility. at an alternate off-site location. ~~The alternate off-site location will be recorded in the Site Operating Record.~~ Records stored off-site will be made available for review within 72 hours of a request. Records, including waste manifests, may be maintained electronically and/or in a manner consistent with the e-manifest database requirements. Consistent with 30 TAC §330.219, copies of documents that are part of the approved registration process and are considered part of the Site Operating Record for the facility are listed in Table IV-1.

A list of records required to be maintained is provided below in Table IV-1. These documents will be made available for inspection by TCEQ agency representatives or other interested parties.

2.1 Required Records to be Maintained

The facility will promptly record and retain in the Site Operating Record, either electronically or in physical format, the information and records listed below in Table IV-1.

Table IV-1. Recordkeeping Requirements

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
MSW Registration	Issuance of Registration	§330.219(a)
Approved Registration Application	Approval of Registration Application	§330.219(a)
Site Operating Plan	Approval of Registration Application	§330.219(a)
As-built set of construction plans and specifications	After completion of construction	§330.219(a)
Other required plans or related documents	As required	§330.219(a)

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
All location restriction demonstrations	Approval of Registration Application	§330.219(b)(1)
Inspection records and training procedures	Per occurrence	§330.219(b)(2)
Closure plans and any monitoring, testing, or analytical data relating to closure requirements	As required	§330.219(b)(3)
Cost estimates and financial assurance documentation relating to closure	Annually	§330.219(b)(4)
Copies of all correspondence and responses relating to facility operation, registration modifications, approvals, and technical assistance	Per occurrence	§330.219(b)(5)
All shipping documents, manifests, and trip tickets, etc., involving special waste	Per occurrence	§330.219(b)(6)
Any other document(s) specified in the registration or by the Executive Director	As required	§330.219(b)(7)
Trip tickets as required by §312.145(b)(2)	Per occurrence (retained for 5 years)	§330.219(b)(8)
Dates, times, and durations of alternative operating hours (e.g., if not as stated in Section 8.4)	As required	§330.229(d)
Fire Protection Plan	Approval of Registration Application	§330.221(c)
Personnel training records and detailed job descriptions	As needed	§330.219(b)(2)
Records to document the annual waste acceptance rate, including the annual solid waste summary report	Annually	§330.675(b)
Random load inspection records	Per occurrence	§330.225
Personnel operator licenses issued under 30 TAC Chapter 30, Subchapter F	As needed	§330.59(f)(3)
All facility inspection and maintenance documentation noted in Section 8.15 - Facility Inspection and Maintenance Schedule	As required	§§330.223-330.243

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
Documentation that all wastes leaving the facility are being adequately managed by other licensed or permitted facilities	As needed	§330.205(a)

Note that the recordkeeping requirements of 30 TAC §330.219(d) are not applicable because this facility is not a permitted solid waste composting or landfill mining facility.

2.2 Report Signatories

The owner or operator will sign all reports and other information requested by the Executive Director as described in 30 TAC §305.44(a) if applicable, or they will be signed by a duly authorized representative of the owner or operator only if:

- The authorization is made in writing by the owner or operator as described in 30 TAC §305.44(a);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity or for environmental matters for the owner or operator (e.g., environmental manager, or a position of equivalent responsibility). A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- The written authorization is submitted to the Executive Director.

If an authorization under this section is no longer accurate because of a change in individuals or position, a new authorization satisfying the requirements of this section must be submitted to the Executive Director prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

Any person signing a report shall make the certification in 30 TAC §305.44(b).

2.3 Executive Director Access to Information

All information contained in the Site Operating Record will be furnished to the Executive Director upon request and will be made available at reasonable times at the facility for inspection by the Executive Director.

and federal regulations. The Site Manager serves as the emergency contact and coordinator for the facility and will be responsible for maintaining the Site Operating Record and required logs.

The Site Manager has overall responsibility for implementation and adherence to this SOP. Wherever this SOP describes procedures or requirements without naming a specific individual or position responsible for those requirements, the Site Manager shall have primary responsibility for those requirements. Where a specific individual or position is responsible for a particular task, that responsibility is described. Otherwise, the Site Manager may delegate authority and assign qualified personnel to accomplish the requirements of this SOP. The Site Manager will designate an individual(s) to fulfill his or her duties during periods when the Site Manager is absent.

The Site Manager will have a minimum education of a high school diploma or equivalent and will have experience in MSW processing operations. The Site Manager will have and maintain a MSW Facility Class A or B License as a MSW facility supervisor in accordance with 30 TAC Chapter 30, Subchapter F; and, as such, must meet the specific qualification standards (training, education, experience, applicable examination) contained in that Subchapter to obtain and maintain a Class B License. The Site Manager's designee will ~~at a minimum~~ also have a Class A or B license.

3.1.2 Lead Operator

The Site Manager will appoint a Lead Operator who will be responsible for the safe operation of the equipment involved in the facility's operation. This individual will be responsible for detecting prohibited waste, potentially dangerous conditions, and potentially careless or improper actions of persons while on the premises. The Lead Operator will consider personnel safety and will direct Equipment Operators on a daily basis regarding waste processing operations. The Lead Operator will also perform other required tasks as directed by the Site Manager. The Lead Operator must have a minimum of one (1) year of solid waste processing operations experience, be familiar with SOP requirements, and have the aptitude to manage personnel and implement operational aspects of solid waste processing operations.

3.1.3 Facility Attendant

The Facility Attendant is primarily responsible for maintaining complete and accurate records of vehicles and solid waste entering the facility. The Facility Attendant will be trained in facility safety procedures, to visually check for unauthorized wastes, to weigh vehicles, to measure waste volumes if necessary, and to collect waste disposal fees. Specifically, the Facility Attendant is required to: (i) monitor the incoming vehicles for waste type(s) and to exclude prohibited waste; (ii) inspect waste loads to confirm that they are authorized for disposal; (iii) review manifests and other shipping documents; (iv) record incoming waste loads; (v) review and confirm special waste documents; and (vi) accept tipping fees. The

Bulky and large items arriving at the transfer station will be placed on the tipping floor so as to allow the front-end loader to crush and flatten the items prior to loading into the transfer trailer. Where this is not possible, bulky or large items will be loaded into transfer trailers that have been partially filled to prevent damage to the trailer from impact due to the heavy weight of the bulky and large items. Appliances potentially containing refrigerant will be inspected to ensure that any refrigerant has been extracted in accordance with Section 608 of the federal Clean Air Act. Items containing chlorinated fluorocarbons (CFCs) will be handled in accordance with the Code of Federal Regulations (CFR), Title 40, Part 82.

4.2 Volume and Rate of Transfer

The facility will serve, in general, the individuals, businesses, institutions, and public and private collection vehicles from Travis County and surrounding counties. The facility will process and transfer solid waste up to the registered maximum daily waste acceptance rate of 3,200 tons/day. The facility is designed for efficient waste processing. The area to be used for unloading and waste transfer operations will be approximately 1540 feet by 1680 feet. Facility layout drawings are included in the Site Development Plan (Part III, Attachment 1).

The following types and estimated percentages of waste are expected to be received at the facility. These waste types and percentages are estimates only and may vary based upon the actual wastes received at the facility.

<u>Type of Waste</u>	<u>Expected Percentage of Waste Stream</u>
Residential Waste	45 %
Commercial/Institutional Waste	30%
Const & Demo Waste	15%
Class 2 & 3 Non-Haz Industrial Waste	7%
Other Authorized Waste	3%

The facility is designed for the efficient transfer of MSW to trucks for transport to a permitted MSW landfill for disposal, typically on the same day the waste is received at the facility. As economic conditions, population growth, and waste generation rates change, the volume of incoming waste may vary. As noted in Section 2.7 of this SOP, the waste acceptance rate for the facility will be reported annually. The maximum amount of waste that may be temporarily stored at the facility is 2,500 tons. On average (i.e., under typical operating conditions), MSW accepted at the facility will be transferred on a daily basis (i.e., in less than 24-hours), and the maximum length of time waste material will remain (i.e., be temporarily stored) on-site is 48 hours, except

~~holidays and weekends. During holidays and/or weekends, waste may be temporarily stored at the facility for up to 72 hours.~~

The destination of the MSW collected by the facility is a properly permitted Type I municipal solid waste facility where the waste will be disposed. ~~A Type I municipal solid waste facility within approximately 50 miles or less will typically be utilized for receiving the transferred waste for disposal.~~

The facility will maintain documentation in the Site Operating Record that all wastes leaving the facility are being adequately managed by other authorized solid waste management facilities.

4.3 Facility-Generated Wastes

The only facility-generated waste is wastewater (i.e., wash water resulting from washing the tipping floor and, potentially, small amounts of liquids contained within the incoming waste loads). This water will be handled and managed as contaminated water, and will be transported to a duly-permitted off-site treatment and disposal facility in accordance with the provisions set forth in Section 5 of this SOP. All solid and liquid wastes generated by the facility must be processed or disposed of at an authorized facility.

4.4 Sampling and Analysis for Solid Waste Processing and Experimental Facilities

The requirements of 30 TAC §330.203(c) will be addressed by the facility as follows:

- This facility is not an experimental facility, and furthermore, will transfer only MSW. There is no on-site processing of grit trap wastes, sludge – nor the generation of effluent from a treatment process. As such, there will be no effluent discharged to a trap, interceptor, or treatment facility permitted under Texas Water Code, Chapter 26. Therefore, the sampling and analysis requirements of 30 TAC §330.203(c)(1) and (2) are not applicable.
- Management of contaminated water generated at the facility is discussed in Section 5.

4.5 Special Waste Acceptance and Handling Procedures

A Special Waste Acceptance Plan (SWAP) is provided in Section 10 of this SOP. The SWAP outlines the acceptance requirements and handling procedures for special wastes that are allowed for acceptance at this facility.

5. CONTAMINATED WATER MANAGEMENT

The facility shall manage contaminated water in accordance with 30 TAC §330.207. All potentially contaminated liquids resulting from the operation of the facility shall be disposed of in a manner that will not cause surface water or groundwater pollution, and The facility shall implement necessary steps to control and prevent the unauthorized discharge of contaminated water from the facility. As noted in the Site Development Plan (Part III narrative report, Section 2), the facility is designed to manage stormwater in a controlled manner in order to not cause surface water or groundwater pollution.

Contaminated water generated by the facility will consist of wash water resulting from washing the tipping floor and, potentially, small amounts of liquids contained within the incoming waste loads (i.e., leachate). This contaminated water will be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank where it will be collected and contained until properly managed. The contaminated water collected in the holding tank will be pumped as necessary into a tanker truck (properly registered hauler) for transportation to a duly-permitted off-site treatment and disposal facility that is authorized to accept this type of wastewater. The Austin Community Transfer Station will adhere to the sampling and analysis (testing) requirements of the receiving treatment facility (and associated treatment facility concentration or other parametric limit requirements of acceptance for treatment).

The discharge of stormwater from the tipping floor area will not occur. All water coming in contact with waste will be managed as contaminated water. The transfer station will be operated consistent with 30 TAC §330.15(h)(1)-(4), prohibiting the discharge of solid wastes or pollutants into waters of the United States. The facility will not discharge contaminated water without a separate, specific written authorization from TCEQ under the authority of the Texas Pollutant Discharge Elimination System (TPDES).

Uncontaminated stormwater run-on and run-off will be directed away from the transfer station building entrances by site grading. The building interior where waste is processed will not result in any storm-generated run-off since the enclosed transfer station building will have a roof to prevent precipitation from coming in contact with waste. is completely covered. Stormwater will be managed by maintaining the stormwater patterns identified in the Site Development Plan (e.g., the Site Plan in Part III, Attachment 2) in areas outside of the transfer station building footprint.

6. STORAGE REQUIREMENTS

6.1 Solid Waste Storage

Solid waste storage will take place either indoors in the enclosed transfer station building on the tipping floor or entering the transfer station facility will be stored indoors in the covered transfer station building and inside tarped transfer trailers awaiting transport off-site. All solid waste will be stored in such a manner that it does not constitute a fire, safety, or health hazard, or provide food or harborage for animals and vectors, or cause odors; and will be contained to prevent windblown solid waste and litter.

As shown on the Facility Layout Plan in Part III, Attachment 1, Drawing III-1-2, the facility has may designated an optional Citizen's Recycling Drop-Off Area for potential on-site storage area for acceptable source-separated or recyclable materials; and, if so, it will be in a location separate from the transfer station waste tipping area and transfer vehicle loading operations. Refer to Section 6.3 of this SOP for further information on the optional Citizen's Recycling Drop-Off Area and how it will be managed.

No solid waste loading or storage will occur within any easement, buffer zone, or right-of-way that crosses the facility. On-site storage of waste will comply with the maximum storage times and volumes set forth in Section 4.2 of this SOP. Waste that is stored overnight at the facility will be either stored in tarped transfer trailers or will be stored indoors in the enclosed transfer station building covered with a tarp on the transfer station-tipping floor (except that tarping of segregated recyclable materials will not be required).

The transfer station will not recover materials from solid waste that contains putrescible materials. The transfer station will not process liquid waste.

6.2 Approved Containers

It is required that all solid waste containing food wastes shall be stored in covered or closed containers that are leakproof, durable, and designed for safe handling and easy cleaning. This will be accomplished through the use of approved containers, along with the waste processing methods to limit the length of time waste is stored on the tipping floor, as follows: Incoming waste will be deposited onto the concrete tipping floor within the enclosed transfer station building. Waste will be transferred to transfer trailers on a daily basis (i.e., within less than 24-hours) under typical operating conditions, and under all circumstances waste will not be stored on-site for more than 48 hours. The transfer trailers will be maintained in a condition such that they do not create a nuisance or conditions conducive for the harborage, feeding, and propagation of vectors. The transfer trailers will be leak-proof, durable, and designed for safe handling and easy cleaning. The transfer trailers will be equipped with tarps or covers to be used during on-site storage and

transport. These containers (mechanically handled) are designed to prevent spillage or leakage during storage, handling, and transport.

Non-reusable containers, if used, will be of suitable strength to minimize animal scavenging or rupturing during collection operations. All containers to be emptied manually will be capable of being serviced without the collector coming into contact with waste.

6.3 Citizen's Collection Station/Recycling Drop-Off Area

As mentioned in Section 6.1, an area of the facility has been designated for an optional Citizen's Recycling Drop-Off Area. The Citizen's Recycling Drop-Off Area will be used if there is sufficient customer demand. At this drop-off area (see Part III, Attachment 1, Drawings III-1-2 and III-1-4 for location), small-quantities (i.e., non-commercial customers such as area residents with household recyclables) of acceptable source-separated recyclable materials would be received and stored on-site. This area will be equipped with covered dumpsters or tarped roll-off containers where customers would be able to drop-off specified types of recyclable material. Each container would be dedicated to one type of recyclable material (e.g., one each for newspaper, glass, plastic, etc.).

When in use, signs will be posted next to the Citizen's Recycling Drop-Off Area listing the rules governing the use of the drop-off area (e.g., who may use it, what may be deposited, what shall not be deposited, etc.). The facility will remove the deposited recyclables when the containers are full and will transport them to an authorized off-site recycling facility where the material will be recycled or otherwise managed as recyclable material. The facility will visually monitor and inspect the drop-off area and will maintain it in a sanitary condition. Control of odors, vectors, and windblown material from this storage area shall be maintained by storing the recyclable material in covered dumpsters or tarped roll-off containers. A separate citizen's collection station/dropoff area will not be provided at the facility. Therefore, the requirements of 30 TAC §330.213 are not applicable to this facility.

6.4 Stationary Compactors

A stationary compactor will not be provided at the facility. Therefore, the requirements of 30 TAC §330.215 are not applicable to this facility.

7. FIRE PROTECTION PLAN

This Fire Protection Plan describes the source(s) of fire protection (i.e., fire prevention and protection methodology), procedures for using the fire protection source(s), and employee training and safety procedures. This plan has been prepared to address compliance with local fire codes.

7.1 Fire Prevention

In order to minimize fire hazards at the facility, the following fire prevention steps or procedures will be implemented.

- Smoking is allowed only in designated areas. Smoking is specifically prohibited:
 - at fuel storage and dispensing areas;
 - at the active waste tipping and loading areas; and
 - other fire-sensitive areas.
- Fuels will be stored and dispensed only in authorized areas. Efforts will be made to contain and control fuel spills immediately upon discovery. Spilled fuel and impacted soil will be promptly collected, profiled, and properly disposed.
- The open burning of waste is prohibited at the facility.
- The facility will be equipped with readily-available fire extinguishers of a type, size, location, and number as recommended by the local fire department or the designated company fire prevention specialist. Each fire extinguisher will be fully-charged and ready for use at all times. Each extinguisher will be inspected on an annual basis and recharged as necessary. These inspections will be performed by a qualified service company, and all extinguishers will display a current inspection tag. Inspection and recharging will be performed following each use.
- An adequate supply of water under pressure will be available for fire-fighting purposes. The transfer station building will either be connected to a public water supply system or equipped with water storage tanks as the source of pressurized water for wash-down of the tipping floor, which will also be available for use by facility personnel for extinguishing fires.
- In conjunction with the building permit process, the transfer station building will be designed to comply with applicable local fire codes, including the provision of fire protection systems (e.g., fire alarm, fire extinguishing or smoke control systems,

approved water supply capable of supplying the required fire flow or fire hydrant access, as applicable) as required by code for the size and usage of the building.

- “Hot loads” (burning waste from incoming loads) will be prevented from being dumped in the active area of the transfer station. The Facility Attendants and Equipment Operators will be alert and will observe incoming loads for signs of burning waste such as smoke, steam, or heat. The vehicle will be directed to an area outside the transfer station building where waste can be safely discharged and isolated, and the fire extinguished. Upon extinguishing the fire, the waste will be immediately moved inside the transfer station building.

7.2 General Fire-Fighting Procedures

The following general procedures will be implemented in the event of a fire.

- If it can be done safely, fires will be promptly extinguished by trained site personnel.
- If necessary:
 - Contact the local fire department by calling 911.
 - Notify the Site Manager and alert other facility personnel.
 - Assess the extent of the fire and the potential for the fire to spread.
 - If safe, attempt to contain or extinguish the fire until the local fire department arrives.
 - Direct the local fire department to the fire and provide assistance as appropriate.
 - Do not attempt to fight the fire alone.
 - Do not attempt to fight the fire without adequate personal protective equipment.
 - Evacuate the facility as necessary.

In general, fire-fighting methods include separating burning material from other waste and spraying the burning material with water from the wash-down hoses or using a fire extinguisher. All transfer station equipment and vehicles will be equipped with a fire extinguisher, and two additional fire extinguishers will be located in the transfer station building.

7.3 Specific Fire-Fighting Procedures

The following specific procedures will be followed in the event of a fire.

- If a fire occurs on a vehicle or piece of equipment, the Equipment Operator should bring the vehicle or equipment to a safe stop. If the safety of personnel will allow, the vehicle must be parked outside of the facility away from fuel supplies, solid wastes, and other vehicles. The engine should be shut off and the brake engaged (or other methods implemented) to prevent movement of the vehicle or

8.2.2 Procedures for the Detection and Prevention of Unauthorized Waste

This section provides procedures for the detection and prevention of unauthorized waste, including regulated hazardous waste as defined in 40 CFR Part 261 and polychlorinated biphenyl (PCB) wastes as defined in 40 CFR Part 761.

Prohibited waste will not be accepted at the facility. Additionally, the facility is not required to accept any solid waste that the facility determines will cause or may cause problems in maintaining full and continuous compliance with this SOP and applicable TCEQ regulations.

The Facility Attendant is the first point of contact with the hauler. The hauler will be asked to inform the Facility Attendant of the content of the load. The Facility Attendant may visually inspect containers to verify contents. In the event prohibited wastes are identified in the load, the entire load is turned away from the gate and not allowed entrance to the site. In addition, if the waste hauling vehicle is delivering special or industrial waste, facility personnel may visually compare the material presented for disposal with the waste profile form to confirm that the physical characteristics (e.g., color, odor, appearance) of the material matches that detailed on the profile. In the event that the physical characteristics of the waste differ from the approved waste stream, the waste load will be rejected.

Equipment Operators will visually monitor the unloading of waste. Should any indication of prohibited waste be detected, appropriate facility personnel will stop the unloading of the vehicle to allow facility personnel to conduct a thorough evaluation of the load. The driver will be directed to a load inspection area, where the load will be discharged from the vehicle. The load inspector will break up the waste pile and inspect the material for any prohibited waste. Known prohibited waste will be placed back into the vehicle and the driver will be instructed to depart the facility. Should any regulated hazardous waste be detected, the entire load will be rejected.

Any prohibited waste that is not discovered by the facility until after it is unloaded will be returned to the vehicle that delivered the waste. That party will be responsible for the proper disposal of this rejected waste. In the event the unauthorized waste is not discovered until after the vehicle that delivered it has departed the site, the waste will be segregated and controlled as necessary. An effort will first be made to identify the entity that deposited the prohibited waste and have them return to the facility and properly dispose of the waste. In the event that identification of the responsible party is not possible, the facility will arrange for the proper management of the waste or will notify the TCEQ and seek guidance on how to dispose of the waste.

In addition to the above procedure, incoming loads will be visually inspected on a random basis. The Sitefacility Manager will be responsible for determining the random load

inspection schedule. The driver of the randomly selected load will be notified and instructed to proceed as above to a load inspection area.

The ~~Site~~facility ~~M~~anager will maintain and include in the operating record the load inspection reports for randomly inspected loads. Load inspection reports, recorded on standardized forms, will be completed for each inspected load. The reports will include at a minimum, the date and time of inspection, the name and address of the hauling company and driver, the type of vehicle, the size and source of the load, contents of the load, indicators of prohibited waste, and results of the inspection.

8.3 Spill Prevention and Control

The tipping floor (i.e., waste unloading, processing, and storage area) has been designed to control and contain spills and contaminated water from leaving the facility. Relevant transfer station design information is presented on Drawing III-1-5 of Part III, Attachment 1. Since the transfer station tipping floor will be in a roofed-building, and because liquid wastes are not allowed to be delivered to the transfer station, only small amounts of liquids incidental to MSW may be within the materials delivered to the transfer station (i.e., precipitation from storm events will not enter the enclosed transfer station building). The reinforced concrete transfer station tipping floor will be equipped with gravitysloped towards a floor drains and will have exterior push with walls to serve as containment of spills and wash waters. These liquids will be managed as contaminated water as described in Section 5 of this SOP.

8.4 Operating Hours

8.4.1 Proposed Operating Hours

The facility will be authorized to accept waste from operator-owned or affiliated-company waste haulers and from other commercial waste hauling companies between 39:00 ap.m. on MondaySunday through 7:00 p.m. on Saturday. Hours when the facility is open to the public may be at any times within these hours and will be posted on the facility entrance sign.

The facility will be allowed to process waste with heavy equipment, transfer it to transfer trailers, and transport waste and other materials on- or off-site any time between 39:00 ap.m. on MondaySunday through 7:00 p.m. on Saturday.

On-site construction or maintenance activities involving heavy equipment and transport of non-waste materials on- or off-site are allowed any time between 5:00 a.m. on Monday through 9:00 p.m. on Saturday, and between 7:00 a.m. to 7:00 p.m. on Sunday.

~~The facility will not accept or process waste on Sundays.~~

Other activities not involving waste operations or heavy equipment operation do not require specific approval and may be performed seven (7) days per week, 24 hours per day.

The facility may request TCEQ approval of alternate operating hours up to five (5) days in a calendar year period to accommodate special occasions, special purpose events, holidays, and other special occurrences. Also, the TCEQ Region 11 office may allow additional temporary waste acceptance hours to address disasters, emergency situations, or other unforeseen circumstances that could result in the disruption of waste management services in the area. The facility will record in the Site Operating Record the dates, times, and durations when any alternate operating hours are used.

8.4.2 Justifications for Proposed Transfer Station Operating Hours

Operating hours beyond the default hours in 30 TAC § 330.229(a) are necessary at the Austin Community Transfer Station to meet customer and community needs while maintaining safe, efficient, and cost-effective waste collection and transfer operations. WMTX reasonably expects that most (but not all) of the customers and haulers utilizing the Austin Community RDF for disposal will transition their waste deliveries to the Austin Community Transfer Station as WMTX transitions waste operations from the landfill to the transfer station and the landfill ceases to receive waste. The Austin Community RDF is currently authorized to operate from 9:00 p.m. Sunday through 7:00 p.m. Saturday and, if necessary, from 7:00 a.m. to 4:00 p.m. on Sunday. Given (1) the more limited transfer station operations as compared to the landfill (i.e., transfer vs. disposal); (2) the more limited maximum waste acceptance rate at the transfer station as compared to the landfill; (3) and the expected and estimated reduction in waste deliveries to the transfer station as compared to the landfill, WMTX estimates that waste processing operations on Sundays will not be necessary at the Austin Community Transfer Station.

In 2019, the Austin Community RDF accepted approximately 27% of its waste loads outside of the hours of 7:00 a.m. to 7:00 p.m. Also in 2019, the Austin Community RDF accepted approximately 28% of its waste tonnage outside of the hours of 7:00 a.m. to 7:00 p.m.

Certain of WMTX's and the Austin Community RDF's existing customers require waste collection services in the early morning hours prior to 7:00 a.m. Such contracts are commonplace in the industry for municipal and commercial/institutional customers, and WMTX expects to maintain and enter into such contracts when the Austin Community Transfer Station is operational. The transfer station will service collection vehicles that collect and haul waste pursuant to the terms of such contracts.

Collecting waste in urban areas in the pre-dawn hours keeps large waste collection and hauling vehicles out of the downtown, campus, and commercial areas during times of heavier traffic – when people are arriving at work, walking to class, or patronizing restaurants or other businesses.

Collecting waste in urban areas after 6:00 a.m. can result in increased traffic congestion and it can be physically impossible to access the containers that need to be serviced due to the increased presence of other vehicles in the alleyways where the containers are located.

If the Austin Community Transfer Station was required to process all waste loads within the hours of 7:00 a.m. to 7:00 p.m. on weekdays only, the limited waste acceptance hours would result in an increase in the amount of traffic to and from the transfer station and within the facility during the busiest traffic hours of the day, and waste collection trucks would be lined up each morning for hours in front of the facility waiting for the gates to open, creating significant traffic congestion and safety issues and increasing air emissions.

For many decades, the Austin Community RDF has served as a convenient and viable local waste management option for area residents. If the Austin Community Transfer Station is to continue to provide this much needed public service, then the facility must be open during weekend hours for those individuals that work the typical Monday through Friday work-week. In 2019, 7,603 vehicles entered the Austin Community RDF during weekend hours and disposed of approximately 5% of the waste loads received at the facility during the year; the majority of these weekend waste loads were delivered by small haulers and members of the public.

The need for operating hours beyond the weekday hours of 7:00 a.m. to 7:00 p.m. is expected to increase in the coming years as the area economy continues to improve and as the population of Austin, Travis County, and neighboring communities and counties continues to grow.

WMTX has historically managed the Austin Community RDF's active hours of operation judiciously, opening the facility for waste acceptance and other operations in the evening, early morning, and weekend hours only as necessary to accommodate the needs of its customers and the community. WMTX will carry forward and apply this managerial approach to the operations of the Austin Community Transfer Station.

8.5 Facility Entrance Sign

A conspicuous sign measuring at least 4-ft by 4-ft will be maintained at the entrance to the facility through which wastes are received. The sign will be readable from the facility entrance and will state, at a minimum, in letters at least three (3) inches high:

- the name of the facility;
- the facility MSW registration number.
- the type of site (i.e., Type V MSW facility);
- the hours and days of operation for waste acceptance;
- a 24-hour emergency contact phone number(s);
- the emergency phone number of the local fire department (i.e., 911); and

- facility rules (e.g., regarding prohibited wastes, stating that all loads must be properly covered or otherwise secured, etc.).

Other relevant information may also be included on the sign. Note that waste acceptance hours may differ for commercial waste haulers versus the public, and, if different, both categories of waste acceptance hours will be posted on the facility sign. In no instance will normal waste acceptance hours be outside the allowable hours for waste acceptance as set forth in Section 8.4 of this SOP.

8.6 Control of Windblown Material and Litter

Windblown material and litter will be collected and properly managed to control unhealthy, unsafe, or unsightly conditions by the following methods:

- Waste transportation vehicles using this facility must be enclosed or use adequate covers, such as a tarp, net, or other means, to effectively secure the load consistent with §330.235 and Section 8.7. The adequacy of covers or other means to secure incoming wastes will be checked at the facility gatehouse/scale area.
- Windblown material and litter along the entrance road that has accumulated along fences and the registration boundary and throughout the facility will be collected once a day on days that the facility is in operation and returned to the tipping floor for processing.
- The transfer station building will be ~~a covered structure with openings (vehicle bays/doors) on the sides~~ an enclosed structure as described in Section 2.3.4 of the Site Development Plan Narrative Report to facilitate the safe and efficient flow of vehicles through the facility while also minimizing windblown material and litter. Unloading and loading of waste will be performed ~~underneath the structure's roof~~ within the enclosed building, which will help shield the waste from wind and prevent the generation and off-site transport of windblown material and litter. Should unhealthy, unsafe, or unsightly conditions occur, the facility will employ supplemental litter control devices or other measures constructed of appropriate materials (e.g., portable litter control fences or wire mesh screening) for the control of windblown material and litter, as necessary, ~~at appropriate locations near the unloading areas and elsewhere.~~

8.7 Materials Along the Route to the Facility

The facility will take steps to encourage vehicles hauling waste to the facility to enclose or cover their loads with a tarpaulin, net, or other means to properly secure the load. Transfer trailers loaded with waste that are leaving the facility will be tarped. These steps are necessary to prevent the escape of any part of the load by blowing or spilling. The facility will post a sign at the entrance

notifying haulers of this requirement and associated enforcement measures. The facility will provide for the cleanup of waste materials spilled along and within the rights-of-way of the public access roads serving the facility for a distance of two miles in either direction from the entrance gate. Inspection and any necessary cleanup for the spilled materials will be performed once per day on days when the facility accepts waste. The facility will consult with TxDOT, county, and local government officials concerning cleanup of roads and rights-of-way consistent with 30 TAC §330.235.

8.8 Facility Access Roads

The facility entrance and on-site access roads will be as described in Section 8.1.3 of this SOP. Because the facility roads will have an all-weather surface (e.g., gravel, asphalt, concrete), the formation of mud will be prevented (i.e., the provision of all-weather road surfaces will serve as mud prevention/controls); and it is not anticipated that mud or other debris will be tracked onto Giles Road given the all-weather surface that will exist on the site roads, thus preventing the vehicles from coming in contact with mud.

The on-site access roads will be maintained in a reasonably mud- and dust-free condition by sweeping and/or periodic water spraying by a water truck dispatched to the site or with water obtained from the wash-down hoses, as necessary. The entrance, access, and internal roads will be maintained in a clean and safe condition. Grading and maintenance equipment will be used as needed to regrade the facility access roads to minimize depressions, ruts, and potholes.

8.9 Noise Pollution and Visual Screening

Since transfer activities will be mostly enclosed within/beneath the transfer station building structure, generated noise will be largely confined to the inside of the the transfer station building/facility, and the waste unloading and transfer operations will be visually-screened from the public to prevent adverse visual impacts. Waste transfer operations and associated noise are also screened and buffered via the building set-back of about 250 feet from Giles Road. Additionally, the facility boundary along the public roadway (Giles Road) and an even greater setback from adjacent landowners. These set-backs, which are greater than the regulatory minimum 50-foot buffer, are such that waste transfer operations at the site will not be readily visible from off-site locations. Additionally, such operations will be at a distance and orientation such that potential noise pollution will be attenuated (i.e., by being blocked by the building walls, roof, and existing terrain, and/or by being dissipated across the setback distances from potential off-site receptors). Screening (for both noise and aesthetic purposes) will also be provided by a vegetated earthen berm and mature trees on top of the berm on registrant-owned property along Giles Road as a means of visual screening, and these features will remain in-place and be maintained throughout the operating life of the transfer station.

8.10 Overloading and Breakdown

As required by 30 TAC §330.241(a), the design capacity of the transfer station will not be exceeded during operation. The design capacity of the facility is computed in the Part I/II Report, Table I/II-2. Such overloading beyond the design capacity will be prevented by conducting The allowable waste acceptance rate of the facility (see Section 4.2 of this SOP) will not be exceeded during the operation of the transfer station, and the waste storage volumes and times set forth in Section 4.2 of this SOP will not be exceeded. real-time tracking of incoming waste tonnage received at the facility throughout each operating day (i.e., each load is weighed and the data are recorded by the facility). Through this real-time tracking of cumulative daily total waste receipts, the facility will continually monitor the incoming tonnage and will stop accepting waste before the registered maximum daily waste acceptance rate is exceeded, thus ensuring that the design capacity is not exceeded. By assuring this as the registration requires, the design capacity of the facility will not be exceeded.

Furthermore, The waste storage volumes and times set forth in Section 4.2 of this SOP will not be exceeded, and the facility will not accumulate solid waste in quantities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of vectors. If such accumulations occur, additional solid waste will not be received until the adverse conditions are abated.

If a significant work stoppage should occur at the facility due to a mechanical breakdown or other causes, or the facility is expected to become inoperable for a period of 24 hours or more beyond the storage periods listed in Section 4.2 of this SOP, or the facility cannot operate in accordance with this SOP, the facility will restrict the receiving of solid waste and direct incoming solid waste to other approved processing or disposal facilities. If the work stoppage is anticipated to last long enough to create objectionable odors, insect breeding, or harborage of vectors, the accumulated solid waste will be removed from the facility to an approved backup processing or disposal facility. In no event will waste remain (i.e., be temporarily stored) on-site for more than 48 hours.

8.11 Sanitation

The tipping floor will be washed down at least once per week at the completion of the daily processing period, or more frequently if it is determined to be necessary to control odors within the transfer station facility. Wash waters will not be allowed to accumulate on the tipping floor; the tipping floor will be sloped towards a floor drain, where all wash water will be collected and managed as contaminated water, and properly disposed of in an authorized manner as set forth in Section 5 of this SOP.

8.12 Ventilation and Air Pollution Control

The facility is designed and will be operated to provide adequate ventilation for odor control and employee safety. Ventilation in the transfer station building will be provided by the openings through which waste hauling vehicles will enter and exit, and vents installed on the building roof. ~~The transfer facility doors on each end of the transfer truck loadout tunnel may also be opened, if needed, for additional ventilation.~~

The operator will prevent nuisance odors from leaving the boundary of the facility. The following measures will be employed:

- On-site buffer zones will be maintained. That is, all waste processing and storage will occur in areas set-back from the facility boundary by a minimum of 50 feet (the setbacks from adjacent landowners are substantially greater than 50 feet). In particular, the transfer station building where waste will be unloaded, processed, and stored, will maintain setback buffers within the facility boundary that are greater than the minimum required 50-foot buffer zone (as illustrated on Drawing III-1-2 of Part III, Attachment 1).
- Solid waste processing will occur within the enclosed transfer station building.
- Stored solid waste will be kept in odor-retaining containers (i.e., either indoors in the enclosed transfer station building or in tarped transfer trailers awaiting transport off-site).
- Misting systems (using water) or non-aqueous odor control systems may be used to suppress odors, if needed. The misting system may also be used to control odors through the addition of chemical deodorizers in the water. ~~or nonaqueous odor control systems may be utilized.~~ Air authorization(s) will be obtained from TCEQ, as necessary, for the odor control system(s) used.
- Ponded water will be controlled to avoid objectionable odors and nuisance conditions (e.g., by the enclosed transfer station building whose roof will prevent precipitation from coming in contact with waste and the sloping of the tipping floor in the transfer station building (which is where waste will be managed and stored) towards a floor drain). In the event that objectionable odors do occur from any ponded water, appropriate measures shall be taken to alleviate the condition. The site will be graded to drain naturally—so that stormwater will not accumulate. Any unanticipated low spots where stormwater may pond will be addressed by filling or grading.

There are no proposed process areas that recover material from any solid waste that contains putrescible wastes. Additionally, the facility will not accept liquid waste; thus, there will be no

10. SPECIAL WASTE ACCEPTANCE PLAN

10.1 Introduction

This Special Waste Acceptance Plan (SWAP) outlines the acceptance requirements and review and approval process that will be used to accept special waste. Special waste is defined by TCEQ's MSW regulations (30 TAC §330.3(148)).

- Only those special wastes specifically listed below will be accepted at this facility without prior written approval from the Executive Director.

- Dead animals and slaughterhouse waste that are incidental to routine collection of MSW and that can be systematically processed along with other solid waste.
- Drugs ~~and~~, contaminated foods, ~~or contaminated beverages~~, other than those contained in normal household waste.
- Empty containers that have been used for pesticides, herbicides, fungicides, or rodenticides ~~will be accepted for disposal~~ provided the containers have been triple rinsed, crushed, or rendered unusable upon receipt at the gate.
- Incidental amounts of non-regulated asbestos-containing materials (non-RACM). ~~An~~The incidental amount is defined as the maximum of ~~ten (10)~~ percent of the waste received on an annual basis by scale weight (annual basis is defined as the ~~most recent~~ latest four ~~(4)~~ consecutive quarters).
- Waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility. Only those wastes authorized for disposal at a solid waste management facility will be accepted.
- Waste generated outside of Texas that contains any industrial waste; any waste associated with oil, gas, and geothermal exploration, production, or development activities; or any material that is listed in the bullets above.
- Special ~~Other~~ waste other than as described above and approved for acceptance by the TCEQ Executive Director.

No special waste will be received at the facility unless it is compatible with the compaction and loading equipment operated at the facility or unless modifications are made to the facility to accommodate the special waste. Any changes in operations must be approved in writing by the Executive Director prior to implementation.

Table IV-3. Special Waste Processing Procedures

Special Waste Type	Special Handling Procedures
Slaughterhouse waste and dead animals	Slaughterhouse waste consisting primarily of plant trash, shipping and packaging waste will be accepted. Also, dead animals that are incidental to routine collection of municipal solid waste and that can be systematically processed along with other solid waste will be accepted at this facility. This waste may contain some animal remains; however, this facility will not accept bulk quantities of dead animals or animal remains in a specific shipment or load. All slaughterhouse waste, including contaminated packaging materials, and dead animals will be processed upon receipt or covered with a minimum of three feet of solid waste until it is processed into transfer trailers. The tipping floor and equipment will be cleaned at the end of each day when special waste containing dead animals or slaughterhouse waste is processed.
Drugs and contaminated foods that are not considered controlled substances	These wastes will be processed into transfer trailers promptly upon receipt. Operators will observe unloading and loading of these waste materials to ensure no scavenging or salvaging of the waste. The tipping floor and equipment will be cleaned at the end of each day when special waste of this type is processed.
Empty containers, including paper, cardboard, and metal; that have been used for pesticides, herbicides, fungicides, or rodenticides	These containers will be processed in the transfer station upon receipt. These containers will not be allowed to accumulate on the tipping floor. All containers received will be handled in accordance with Title 30 TAC Â§330.171 and will be triple rinsed prior to arrival. If containers cannot be processed upon receipt they will be crushed with the loader and rendered unusable.
Incidental amounts of non-regulated asbestos-containing materials (non-RACM)	Loads of primarily non-RACM will be transferred directly from the tipping floor of the transfer station into the transfer trailers. The front-end loader will not attempt to compact or travel over the non-RACM. These procedures will minimize the handling of non-RACM so that the integrity of the material is maintained.

CLEAN REPLACEMENT PAGES

The pages that follow completely replace the previous versions of these pages. For convenience, divider tabs are provided to indicate which portion of the application the revisions pertain.

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

VOLUME I OF I

Owner/Operator:
Waste Management of Texas, Inc.

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

Prepared by:

Geosyntec 
consultants

8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003

Submitted September 2019; Revised January 2020

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

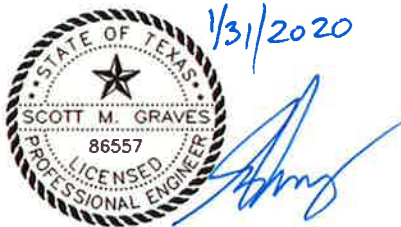
**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

Owner/Operator:
Waste Management of Texas, Inc.

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

VOLUME I OF I

Prepared by:



Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182

8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003

THE ABOVE SEAL APPLIES TO THIS BINDER TITLE
PAGE ONLY, AND IS FOR REGISTRATION
PURPOSES ONLY.

EACH INDIVIDUAL ENGINEERING REPORT OR PLAN
AND EACH ENGINEERING DRAWING WITHIN THE
APPLICATION IS SIGNED, SEALED, AND DATED BY
THE RESPONSIBLE ENGINEER AS REQUIRED BY
THE TEXAS ENGINEERING PRACTICE ACT.

Submitted September 2019
Revised January 2020

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART I and PART II – SITE AND APPLICANT INFORMATION, EXISTING CONDITIONS SUMMARY, AND CHARACTER OF THE FACILITY AND SURROUNDING LAND

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

Owner and Operator:
Waste Management of Texas, Inc.



FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

THE ABOVE P.E. SEAL APPLIES TO THIS TITLE PAGE ONLY AND IS
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PROFESSIONAL (E.G., ENGINEER, SURVEYOR) ARE SIGNED,
SEALED, AND DATED, AS APPROPRIATE, BY THE RESPONSIBLE
PROFESSIONAL.

Submitted September 2019
Revised January 2020

PART I and II TABLE OF CONTENTS SITE AND APPLICANT INFORMATION

PART I APPLICATION FORM

PART I/II SUPPLEMENTAL TECHNICAL REPORT & ATTACHMENTS

APPENDIX I/IIA	GENERAL LOCATION MAPS
APPENDIX I/IIB	ADJACENT LAND OWNERSHIP MAP AND LIST
APPENDIX I/IIC	REGISTRATION BOUNDARY, PROPERTY OWNERSHIP, AND EASEMENT INFORMATION
APPENDIX I/IID	PROPERTY OWNER AFFIDAVIT AND LEGAL AUTHORITY
APPENDIX I/IIIE	EVIDENCE OF COMPETENCY
APPENDIX I/IIF	APPOINTMENTS
APPENDIX I/IIG	LAND USE
APPENDIX I/IIH	TRANSPORTATION
APPENDIX I/II-I	WETLANDS DOCUMENTATION
APPENDIX I/IIJ	ENDANGERED AND THREATENED SPECIES DOCUMENTATION
APPENDIX I/IIK	TEXAS HISTORICAL COMMISSION (THC), ANTIQUITIES CODE DOCUMENTATION
APPENDIX I/IIL	CAPITOL AREA COUNCIL OF GOVERNMENTS (CAPCOG) DOCUMENTATION



FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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SEALED, AND DATED, AS APPROPRIATE, BY THE RESPONSIBLE
PROFESSIONAL.

PART I APPLICATION FORM

Facility Name: Austin Community Transfer Station
Permittee/Registrant Name: Waste Management of Texas, Inc.
MSW Authorization #:40306
Initial Submittal Date: 9/26/2019
Revision Date: 1/31/2020



Texas Commission on Environmental Quality
Part I Application Form for New Permit, Permit
Amendment, or Registration for a
Municipal Solid Waste Facility

1. Reason for Submittal

☐ Initial Submittal ☒ Notice of Deficiency (NOD) Response

2. Authorization Type

☐ Permit ☒ Registration

3. Application Type

☐ New Permit ☐ Permit Major Amendment ☐ Permit Major Amendment (Limited Scope)
☒ New Registration

4. Application Fees

Amount
☐ \$2,050 for Permits and Permit Amendments ☒ \$150 for Registrations
Payment Method
☐ Check ☒ Online through ePay portal <<https://www3.tceq.texas.gov/epay/>>
If paid online, enter ePay Trace Number: **582EA000359216**

5. Application URL

Is the application submitted for a Type I Arid Exempt (AE) or Type IV AE facility?
☐ Yes ☒ No

If the answer is "No", provide the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted.
<http://www.wm.com/wm/permits-texas/permits.jsp>

6. Application Publishing

Party Responsible for Publishing Notice:

☐ Applicant ☐ Agent in Service ☒ Consultant

Contact Name: **Scott Graves**

Title: **Principal**

7. Alternative Language Notice

Is an alternative language notice required for this application? (For determination refer to Alternative Language Checklist on the Public Notice Verification Form TCEQ-20244-Waste)

☒ Yes ☐ No

8. Public Place Location of Application

Name of the Public Place: **University Hills Branch Library**

Physical Address: **4721 Loyola Ln**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78723**

(Area code) Telephone Number: **512-974-9940**

9. Consolidated Permit Processing

Is this submittal part of a consolidated permit processing request, in accordance with 30 TAC Chapter 33?

☐ Yes ☒ No ☐ Not Applicable

If "Yes", state the other TCEQ program authorizations requested:

10. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☒ No

If "Yes", cross-reference the confidential documents throughout the application and submit as a separate attachment in a binder clearly marked "CONFIDENTIAL."

11. Permits and Construction Approvals

Permit or Approval	Received	Pending	Not Applicable
Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Underground Injection Control Program under the Texas Injection Well Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA). Nonattainment Program under the FCAA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dredge or Fill Permits under the CWA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Licenses under the Texas Radiation Control Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (describe) TCEQ Permit MSW-249D (Type I Landfill)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe) TPDES Permit TXR05AJ96*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe) Title V Air O-01525*; Air New Source Reg No. 85436*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe) Petroleum Storage Tank Reg Nos. 15649 and 78669; *Refers to permits received for the Austin Community RDF facility. Refer to Section 5.5 of the Part I/II Report for more information.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. General Facility Information

Facility Name: Austin Community Transfer Station

Contact Name: **Charles Rivette**

Title: **Director**

MSW Authorization No. (if available): **40306**

Regulated Entity Reference No. (if issued)*: **RN100215938**

Physical or Street Address (if available): **9900 Giles Road**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78754**

(Area Code) Telephone Number: **512-272-6245**

Latitude (Degrees, Minutes Seconds): **30° 20' 02.59" N**

Longitude (Degrees, Minutes Seconds): **97° 37' 22.85" W**

Benchmark Elevation (above mean sea level): **636.049ft.**

Provide a description of the location of the facility with respect to known or easily identifiable landmarks: **The facility is located at 9900 Giles Road, approximately 500-feet north of the intersection of Giles Road and US Highway 290 in Austin, Travis County, Texas**

Detail access routes from the nearest United States or state highway to the facility: **US 290 to Giles Road. The facility entrance is on the west side of Giles Road, approximately 500-feet north of US 290.**

*If this number has not been issued for the facility, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Facility as the Regulated Entity.

13. Facility Type(s)

- | | | |
|------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> Type I | <input type="checkbox"/> Type IV | <input checked="" type="checkbox"/> Type V |
| <input type="checkbox"/> Type I AE | <input type="checkbox"/> Type IV AE | <input type="checkbox"/> Type VI |

14. Activities Conducted at the Facility

- | | | |
|---|--|-----------------------------------|
| <input checked="" type="checkbox"/> Storage | <input checked="" type="checkbox"/> Processing | <input type="checkbox"/> Disposal |
|---|--|-----------------------------------|

15. Facility Waste Management Unit(s)

- | | |
|---|---|
| <input type="checkbox"/> Landfill Unit(s) | <input type="checkbox"/> Incinerator(s) |
| <input type="checkbox"/> Class 1 Landfill Unit(s) | <input type="checkbox"/> Autoclave(s) |
| <input type="checkbox"/> Process Tank(s) | <input type="checkbox"/> Refrigeration Unit(s) |
| <input checked="" type="checkbox"/> Storage Tank(s) | <input type="checkbox"/> Mobile Processing Unit(s) |
| <input checked="" type="checkbox"/> Tipping Floor | <input type="checkbox"/> Type VI Demonstration Unit |
| <input checked="" type="checkbox"/> Storage Area | <input type="checkbox"/> Compost Pile(s) and/or Vessel(s) |
| <input checked="" type="checkbox"/> Container(s) | <input type="checkbox"/> Other (specify): |
| <input checked="" type="checkbox"/> Roll-off Boxes | <input type="checkbox"/> Other (specify): |
| <input type="checkbox"/> Surface Impoundment | <input type="checkbox"/> Other (specify) |

16. Description of Proposed Facility or Changes to Existing Facility

Provide a brief description of the proposed activities if application is for a new facility, or the proposed changes to an existing facility or permit conditions if the application is for an amendment.

This is a registration application for a proposed new Type V MSW facility (transfer station) that will be located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D).

17. Facility Contact Information

Site Operator (Permittee/Registrant) Name: Waste Management of Texas, Inc.

Customer Reference No. (if issued)*: **CN600127856**

Contact Name: **Charles Rivette**

Title: **Director**

Mailing Address: **9900 Giles Road**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78754**

(Area Code) Telephone Number: **512-272-6245**

Email Address: **crivette@wm.com**

TX Secretary of State (SOS) Filing Number: **0022300000**

*If the Site Operator (Permittee/Registrant) does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Site Operator (Permittee/Registrant) as the Customer.

Operator Name¹: Same as "Site Operator (Permittee/Registrant)"

Customer Reference No. (if issued)*:

Contact Name: Title:

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address:

TX SOS Filing Number:

¹If the Operator is the same as Site Operator/Permittee type "Same as "Site Operator (Permittee/Registrant)".

*If the Operator does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Operator as the customer.

Consultant Name (if applicable): Geosyntec Consultants

Texas Board of Professional Engineers Firm Registration Number: **1182**

Contact Name: **Scott Graves** Title: **Principal**

Mailing Address: **8217 Shoal Creek Blvd, Suite 200**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78754**

(Area Code) Telephone Number: **512-451-4003**

E-Mail Address: **sgraves@geosyntec.com**

Agent in Service Name (required only for out-of-state):

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address:

18. Facility Supervisor's License

Select the Type of License that the Solid Waste Facility Supervisor, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations, will obtain prior to commencing facility operations.

☒ Class A ☒ Class B

19. Ownership Status of the Facility

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Corporation | <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> Federal Government |
| <input type="checkbox"/> Individual | <input type="checkbox"/> City Government | <input type="checkbox"/> Other Government |
| <input type="checkbox"/> Sole Proprietorship | <input type="checkbox"/> County Government | <input type="checkbox"/> Military |
| <input type="checkbox"/> General Partnership | <input type="checkbox"/> State Government | <input type="checkbox"/> Other (specify): |

Does the Site Operator (Permittee/Registrant) own all the facility units and all the facility property?

☒ Yes ☐ No

If "No", provide the information requested below for any additional ownership.

Owner Name:

Street or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address (optional):

20. Other Governmental Entities Information

Texas Department of Transportation District: Austin District

District Engineer's Name: **Tucker Ferguson, P.E.**

Street Address or P.O. Box: **7901 N. I-35**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78753**

(Area Code) Telephone Number: **512-832-7000**

E-Mail Address (optional):

The Local Governmental Authority Responsible for Road Maintenance (if applicable): Travis County, TNR Road and Bridge Division

Contact Person's Name: **Supervisor, Austin East Maintenance Facility**

Street Address or P.O. Box: **8902 FM 969**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78724**

(Area Code) Telephone Number: **(512) 854-9433**

E-Mail Address (optional):

City Mayor Information

City Mayor's Name: **Not Applicable (N/A) - transfer station facility not within corporate limits or extraterritorial jurisdiction (ETJ) of a city**

Office Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address (optional):

City Health Authority: N/A - transfer station facility not within corporate limits or ETJ of a city

Contact Person's Name:

Street Address or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address (optional):

County Judge Information

County Judge's Name: **Sarah Eckhardt**

Street Address or P.O. Box: **700 Lavaca, Suite 2.300**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78767**

(Area Code) Telephone Number: **512-854-9555**

E-Mail Address (optional):

County Health Authority: Travis County Health and Human Services

Contact Person's Name: **Sherri Fleming**

Street Address or P.O. Box: **100 N Interstate 35 Frontage Road #2000**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78701**

(Area Code) Telephone Number: **512-854-4100**

E-Mail Address (optional):

State Representative Information

District Number: **50**

State Representative's Name: **Celia Israel**

District Office Address: **P.O. Box 2910**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78768**

(Area Code) Telephone Number: **512-463-0821**

E-Mail Address (optional):

State Senator Information

District Number: **14**

State Senator's Name: **Kirk Watson**

District Office Address: **P.O. Box 12068**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78711**

(Area Code) Telephone Number: **512-463-0114**

E-Mail Address (optional):

Council of Government (COG) Name: Capital Area Council of Governments

COG Representative's Name: **Kenneth May**

COG Representative's Title: **Solid Waste Coordinator**

Street Address or P.O. Box: **6800 Burleson Road, Building 310, Suite 165**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78744**

(Area Code) Telephone Number: **512-916-6000**

E-Mail Address (optional):

River Basin Authority Name: Lower Colorado River Authority

Contact Person's Name: **Phil Wilson**

Watershed Sub-Basin Name: **Lower Colorado River**

Street Address or P.O. Box: **3700 Lake Austin Boulevard**

City: **Austin** County: **Travis** State: **Texas** Zip Code: **78703**

(Area Code) Telephone Number: **512-578-3200**

E-Mail Address (optional):

Coastal Management Program

Is the facility within the Coastal Management Program boundary?

☐ Yes ☒ No

U.S. Army Corps of Engineers

The facility is located in the following District of the U.S. Army Corps of Engineers:

☐ Albuquerque, NM ☐ Galveston, TX

☒ Ft. Worth, TX ☐ Tulsa, OK

Local Government Jurisdiction

Within City Limits of: **N/A**

Within Extraterritorial Jurisdiction of: **N/A**

Is the facility located in an area in which the governing body of the municipality or county has prohibited the storage, processing or disposal of municipal or industrial solid waste?

☒ Yes ⁽¹⁾ ☐ No

⁽¹⁾See clarification on cover page of Exhibit A to Part I Form.

If "Yes", provide a copy of the ordinance or order as an attachment.

Signature Page

I, Steve Jacobs, _____ Director of Disposal Operations,
(Site Operator (Permittee/Registrant)'s Authorized Signatory) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: 1-31-20

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____
(Print or Type Operator Name) (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said _____

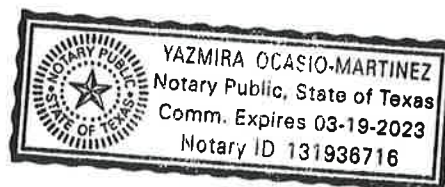
On this 31 day of Jan, 2020

My commission expires on the 19 day of March, 2023

[Signature]
Notary Public in and for

Travis County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)



Part I Attachments

(See Instructions for P.E. seal requirements.)

Required Attachments

Supplementary Technical Report	Attachment No.
Property Legal Description	Part I/II Report
Property Metes and Bounds Description	Appendix I/IIC
Facility Legal Description	Appendix I/IIC
Facility Metes and Bounds Description	Appendix I/IIC
Metes and Bounds Drawings	Appendix I/IIC
On-Site Easements Drawing	Appendix I/IIC
Land Ownership Map	Appendix I/IIB
Land Ownership List	Appendix I/IIB
Electronic List or Mailing Labels	with Cover Letter
Texas Department of Transportation (TxDOT) County Map	Appendix I/IIA
General Location Map	Appendix I/IIA
General Topographic Map	Appendix I/IIA
Verification of Legal Status	Appendix I/IID
Property Owner Affidavit	Appendix I/IID
Evidence of Competency	Appendix I/IIE

Additional Attachments as Applicable- Select all those apply and add as necessary

<input checked="" type="checkbox"/> TCEQ Core Data Form(s)	with Cover Letter
<input checked="" type="checkbox"/> Signatory Authority Delegation	Appendix I/IIF
<input checked="" type="checkbox"/> Fee Payment Receipt	with Cover Letter on App Form
<input type="checkbox"/> Confidential Documents	
<input checked="" type="checkbox"/> Waste Storage, Processing and Disposal Ordinances	Exhibit A to Part I Form
<input checked="" type="checkbox"/> Final Plat Record of Property	Appendix I/IIC
<input checked="" type="checkbox"/> Certificate of Fact (Certificate of Incorporation)	Appendix I/IID
<input type="checkbox"/> Assumed Name Certificate	

EXHIBIT A TO PART I FORM

COPY OF ORDINANCE

**TRAVIS COUNTY REGULATIONS FOR SITING OF SOLID
WASTE FACILITIES (Amended 9/17/2019)**

Note: On Page 9 of the Part I Form under Local Government Jurisdiction, the box is checked “Yes” to indicate that the facility will be located in an area where there is a county ordinance purporting to prohibit storage, processing or disposal of municipal or industrial solid waste. Although the county ordinance does not apply to this application, a copy is provided.

Chapter 312. Siting of Solid Waste Facilities¹

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312.001 Definitions²

Unless the context clearly requires otherwise, in this chapter:

- (1) “Airport” means an airport that is open to the general public for the landing or takeoff of aircraft with or without a prior request to use the airport.
- (1.1) “Clean Wood” means tree trunks and stumps, branches, brush, wood or wood products that have been cut or shaped, including wet, air-dried, and kiln-dried products. Clean wood does not include wood products that have been painted, pigment-stained, or pressure treated by toxic preservatives including copper chromium arsenate, pentachlorophenol, or creosote or any other toxic preservative. Clean wood does not include vegetation killed by any systemic herbicide.
- (2) “Executive Manager” or “County Executive” means the County Executive of the Travis County Transportation and Natural Resources Department.
- (3) “Health care facility” means a hospital, a nursing home, or overnight facility that provides medical care or treatment under the direction of a licensed physician to four or more persons unrelated to the proprietor or operator of the facility.
- (4) “Individual residence” means any structure intended to serve as the primary residence of, and is actually inhabited by a human being. A structure is presumed to be an individual residence if it

¹ Chapter 62 was adopted by the Travis County Commissioners Court on 7/22/2003, (item 34). Chapter 62 was renumbered as Chapter 312 on June 1, 2018 (approved May 15, 2018, Item 7). “Executive Manager” updated to “County Executive” throughout May 29, 2018, Item 8. Chapter 312 was amended September 17, 2019, Item 21, with an effective date of September 17, 2019.

² Section 312.001 was amended 9/17/2019, Item 21.

is designed for human residential habitation and is connected to water and electrical utilities.

- (5) "Minor facility" means a transfer station or recycling facility.
- (6) "Major Facility" means any solid waste processing and disposal facility other than a minor facility or landfills classified as Type I or IV by TCEQ rules at Title 30, Texas Administrative Code, as it existed on the effective date of the subsection.
- (6.1) "Mulch" means ground, coarse, woody yard trimmings, clean wood and other vegetative material. Paper and manure may be added to mulch. "Mulch" also means to treat or cover with mulch.
- (7) "Neighborhood" means any manufactured or mobile home development, apartment or condominium complex, subdivision, or community, having a total of nine or more individual residences or residential units and an overall average density of one residential unit or more per acre.
- (7.1) "Person" means an individual, corporation, organization, government or governmental subdivision or agency, business trust, partnership, association, or any other legal entity.
- (8) "Place of worship" means an enclosed structure that is owned by a religious institution or organization and that is used primarily as a place of regular group ceremony or meditation, education, and fellowship, and the purpose of which is to manifest or develop reverence, homage, and commitment in behalf of a religious faith.
- (9) "Processing and disposal" means the discharging, depositing, injecting, dumping, spilling, leaking, placing, collecting, handling, transporting, storing, or processing of solid waste, including the systematic control of the activities of generation, source separation, treatment, composting, recycling beneficial use, resource recovery, or land application.
- (10) "Public park or historic facility" means real property owned or operated, or a facility officially designated as historic pursuant to express statutory authority, by a unit of federal, state, or local government, and that is used for the primary purpose of public congregation or visitation for recreation or historical or scientific education.
- (11) "Public water well" means a water well that is owned or operated by a utility subject to regulation by TCEQ and that presently supplies or is capable of supplying potable water.

- (12) "Receptor" means a public water well, school or day-care center, place of worship, health care facility, public park or historic facility, individual residence, or neighborhood.
- (13) "Recycling facility" means a solid waste processing and disposal facility where paper, plastic, glass, or metal materials, that are scrapped, discarded, used, surplus, or obsolete, or have served their intended use, and are collected, separated, or processed and returned to use in the form of new products or raw materials in the production of new products rather than being permanently disposed of at the recycling facility.
- (14) "School or day-care center" means a public or private facility, other than a home school, attendance at which satisfies the compulsory school attendance requirements of Section 25.085 and Section 25.086, Education Code, as the sections existed on the effective date of this chapter, or a daycare center as defined in Section 42.002, Human Resources Code, as the section existed on the effective date of this chapter.
- (15) "Solid waste" means solid, liquid, semisolid, or contained gaseous waste resulting from or incidental to municipal, community, commercial, industrial, institutional, agricultural, mining, or recreational activities, including sludge, garbage, rubbish, refuse, ashes, street cleaning, dead animals, abandoned automobiles, and other discarded material. The term does not include the following:
 - (A) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued under Chapter 26, Water Code;
 - (B) soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements;
 - (C) waste materials that result from activities associated with the exploration, development or production of oil or as or geothermal resources and other substances or material regulated by the Railroad Commission of Texas under Section 91.101 Natural Resources Code; or
 - (D) hazardous waste.
- (16) [Reserved]
- (17) "Solid waste processing and disposal facility" means land, structures, appurtenances, and other improvements on land, used for management or disposal of solid waste, including any incinerator, landfill, transfer station, or land application,

beneficial use, or composting site. The term includes a publicly or privately owned solid waste facility consisting of several processing, storage, or disposal operational units, such as one or more landfills, surface impoundments, or a combination of units.

- (17.5) "TCAD" means Travis Central Appraisal District.
- (18) "TCEQ" means the Texas Commission on Environmental Quality or any successor agency.
- (19) "Transfer station" means a fixed facility used solely to facilitate the transfer of solid waste from collection vehicles to long-haul vehicles for transport to another solid waste processing and disposal facility for further or final processing and disposal.
- (20) "Unit" means a discrete area of land or an excavation, or a building, where solid waste is processed or disposed, and that may be smaller than the facility within which the unit is located, and that does not include land, structures, appurtenances, and other improvements on land, that are beyond that discrete area or building, in which solid waste is processed or disposed.

312.002 Application of Ordinance³

- (a) Processing and disposal of solid waste in areas not meeting the requirements of County Code sections 312.003 through 312.0061 is declared to be an inappropriate land use and is prohibited, unless Travis County issues a variance pursuant to section 312.007. This chapter does not apply to:
 - (1) areas inside the full purpose corporate limits of any municipality;
 - (2) an area for which a complete application for a permit or other authorization under Chapter 361, Health & Safety Code, has been filed with, and that is pending before, TCEQ prior to the effective date of the applicable provision of this chapter and that is finally approved by TCEQ;
 - (3) an area for which a permit or other authorization under Chapter 361, Health & Safety Code, has been issued by TCEQ prior to the effective date of the applicable provision of this chapter and remains in effect;
 - (4) an area to which Section 361.090, Health & Safety Code, applies;
 - (5) processing and disposal of biosolids at a municipally-owned municipal wastewater treatment and biosolids facility; or

³ 312.002 was amended 9/17/2019, Item 21.

- (6) any activity that otherwise qualifies as solid waste processing and disposal, but constitutes a *de minimis* activity, including the following:
 - (A) collection stations for household hazardous waste or citywide or roadside cleanups;
 - (B) composting and land application of source-separated yard trimmings, clean wood material, vegetative material, manure, and paper;
 - (C) mulch processing and production, both without manure;
 - (D) agricultural operations that compost and use agricultural materials onsite, and disposal of litter or other solid waste generated by a person on that person's own land, for other than commercial purposes not exceeding 2,000 pounds per year;
 - (E) a minor change to the pattern or place of processing and disposal within the outermost perimeter of a facility's footprint, that does not increase the maximum height or overall volumetric capacity of the facility, or any similar activity that the County Executive determines to be *de minimis*.
- (b) The exception for areas described in Section 312.002(a)(3)–(4) includes only those types of processing or disposal and only those discrete units specifically authorized by TCEQ. Other types of processing and disposal and processing, and processing disposal outside or in excess of the capacity of those units, are not excepted from this chapter.
- (c) Where this chapter requires solid waste to be processed and disposed of at certain distances from a receptor, those distances shall be measured from the edge of each individual unit in which solid waste processing and disposal is to be permitted to the edge of the area lying within 100 feet of a receptor that existed as of the date the application for the permit or other authorization in question is filed. No requirement to process or dispose of solid waste at a certain distance from an individual residence, school or day-care center, place of worship, health care facility, public park or historic facility shall apply if a person has filed with the County Executive and in the Travis County Real Property Records written consent to the processing or disposal of solid waste at a distance closer than that specified by this chapter.
- (d) Unless otherwise required by state or federal law, no department, official, or employee under the supervision of the Travis County Commissioners Court may issue a county permit or other approval for a solid waste management or disposal facility that does not meet the requirements of this chapter. Any permit issued based on false,

incorrect, or incomplete information produced in association with the permit application is voidable.

312.003 Siting Criteria for Minor Facilities⁴

Solid waste may be processed and disposed of at a minor facility only if the minor facility is located at least 350 feet from all:

- (1) public water wells,
- (2) schools or day-care centers,
- (3) places of worship,
- (4) health care facilities,
- (5) public parks or historic facilities, and
- (6) individual residences.

312.004 Siting Criteria for Major Facilities

Solid waste may be processed and disposed of at a major facility only if the major facility is located:

- (1) at least 1500 feet from all:
 - (A) public water wells,
 - (B) schools or day-care centers,
 - (C) places of worship,
 - (D) health care facilities,
 - (E) public parks and historic facilities, and
 - (F) individual residences;
- (2) at least 5280 feet from all neighborhoods;
- (3) at least 500 feet from the recharge zone of the Colorado River Alluvial Aquifer, including associated terrace deposits, as depicted by the Geologic Atlas of Texas, Qal and Qt Map Units, Austin Sheet, University of Texas at Austin Bureau of Economic Geology, 1974 (reprinted 1995);
- (4) outside the recharge and contributing zones of the Barton Springs and Northern segments of the Edwards Aquifer, as mapped by TCEQ under 30 Texas Administrative Code 213 and housed at TCEQ's Region 11 Office, and the Trinity Aquifer recharge zone as depicted by Aquifers of Texas, Ashworth, J.B. and Hopkins, J., Report No. 345, Texas Water Development Board (1995);

⁴ 312.003 was amended 9/17/2019, item 21

- (5) at least 3,000 feet from Lake Travis, Lake Austin, or any other public surface drinking water reservoir; or
- (6) where the major facility will take its primary vehicular access from a road that is or will prior to commencement of operations at the facility be capable of withstanding a minimum of 2,000,000 18-kip single axle loads for a 20-year period assuming 750 trucks per day.

312.005 Special Siting Criteria: Airports⁵

Putrescible solid waste may be processed and disposed of only in an area:

- (1) greater than 10,000 feet from the runway ends of any airport at which jet aircraft take off and land; and
- (2) greater than 5,000 feet from the runway ends of any other airport.

312.006 Special Siting Criteria: Floodplains⁶

Solid waste may be processed and disposed of only in an area that complies with the requirements of Chapter 464, Travis County Code.

312.0061 Landfills⁷

- (a) This section applies to the processing and disposal of solid waste at Type I through IV landfills as defined by TCEQ regulations in effect on the date of this section.
- (b) Solid waste processing and disposal at Type I through IV landfills is prohibited except as follows:
 - (1) Processing and disposal of Type IV solid waste is not prohibited on the land in TCAD Property ID Numbers 297471, 298867 ("IESI Travis County Landfill");
 - (2) Processing and disposal of Type I through IV solid waste is not prohibited on the land in TCAD Property ID Numbers 352540, 352534, 300573, 351860, 300484, 300492, 300553, 300557, 300568, 300588, 300606, 301083, 301490, 301491, 351835, 351839, 351852, 351854, 351855, 351856, 351858, 351863, 351864, 351868, 351869, 351870, 351873, 352531, 352532, 352536, 352537, 352538, 352539, 352562, 374038, 382570, 382571, 726401, 352559, 352541 ("TDS Landfill");

⁵ 312.005 was amended 9/17/2019, Item 21.

⁶ 312.006 was amended 9/17/2019, Item 21.

⁷ 312.00061 was added 9/17/2019, Item 21.

- (3) Processing and disposal of Type I through IV solid waste is not prohibited on the land in TCAD Property ID Number 840515 ("West Travis County Site"); and
- (4) The types of processing and disposal of Type I through IV solid waste is not prohibited in units authorized in a permit issued before the effective date of this section on the land in TCAD Property ID Numbers 236645 and 711099. Other types of processing and disposal and processing and disposal outside or in excess of the capacity of those units are prohibited there. ("WMI")
- (c) No other TCAD parcels may be used for solid waste processing and disposal.
- (d) References to TCAD Property ID Numbers means those in existence on the effective date of this section.

312.007 Variances⁸

- (a) If all requirements of this section are met to Travis County's satisfaction, Travis County may issue a variance for the processing and disposal of solid waste in an area where it is otherwise declared inappropriate and prohibited under Section 312.002(a). A person seeking a variance shall submit to the County Executive the following information, the amount and detail of the information shall be commensurate with the volume of and potential for adverse impacts from the proposed processing and disposal activities, as determined by the County Executive:
 - (1) Satisfactory evidence of the impracticability of locating or having located a facility in an area where the processing and disposal of solid waste is not prohibited by this chapter;
 - (2) Satisfactory assurances that the facility operator will comply with all necessary conditions and employ all necessary measures to protect public health, safety, and welfare by mitigating any adverse impacts on adjacent property, natural resources, and persons who reside, work, or recreate adjacent to the facility;
 - (3) Satisfactory evidence of the degree to which the proposed facility or expansion will contribute to meeting the solid waste management needs of the Capitol Area Planning Council region;
 - (4) Copies of the notices of violation, notices of enforcement, final judicial or administrative orders, agreed orders or settlements, and all other compliance history information required under

⁸ 312.007 was amended 9/17/2019, Item 21.

Subchapter Q, Chapter 5, Water Code, and the rules adopted thereunder, for the facility in question and any other facility in the State of Texas under the control of the same operator, supplemented by copies of any notices, of violation, notices of enforcement, citations, indictments, final judicial or administrative orders, agreed orders or settlements, and other compliance history information issued or produced after the date of the foregoing Subchapter Q, Chapter 5, Water Code, information; and

- (5) A certification that written notice of the variance request, including a request that written comments be submitted to Travis County within 30 days, was both posted prominently at the site of the facility and mailed to all property owners either within 350 feet of the facility if it is a minor facility, or within 1500 feet of the facility if it is a major facility, or a Type I through IV landfill as defined by TCEQ regulations in effect on the effective date of this section, and to any homeowners association of any neighborhood if a major facility or Type I through IV landfill is proposed within 5,280 feet of the neighborhood. Property ownership shall be determined by reference to records of the Travis Central Appraisal District.
- (b) Within 30 days after the end of the written comment period, the County Executive shall issue a written determination of whether to issue the variance under Subsection (c) below and post it on the Travis County web site. Persons entitled to mailed notice under Section 312.007(b)(5) or the person requesting the variance may file a written appeal to the Commissioners Court within 30 days of an adverse determination by the County Executive. If an appeal is filed, at the earliest practicable date the Commissioners Court shall hold a public hearing and determine whether to issue the variance under Subsection (d) below.
- (c) [Reserved]
- (d) Travis County may issue a variance order authorizing, and specially designating as an appropriate land use, the processing and disposal of solid waste in the area if the County finds that the following requirements are met:
 - (1) It is impracticable to process and dispose of the solid waste at a facility located in an area where the processing and disposal of solid waste is not prohibited by this chapter;
 - (2) Taking into account the information described in Section 312.007(a)(1) through (4) and any other significant and reliable information obtained by the County, there are adequate assurances that the operator will comply with all necessary conditions and employ all necessary measures to protect the public health, safety, and welfare by mitigating any adverse

impacts on persons, property, and natural resources adjacent to the facility, and that the operator has agreed to an adequate remediation plan that the operator shall be obligated to implement in the event of any release of pollutants or waste from the facility; and

- (3) The facility will provide an overall public benefit in light of the solid waste management needs of the Capitol Area Planning Council region.

312.008 Severability

If this ordinance is declared partially void or unenforceable by an order of a court of competent jurisdiction, the remaining parts of this ordinance shall be construed as remaining in effect to the full degree allowed by that order.

312.009 No Implied Determinations⁹

The exemption from this chapter of any solid waste processing and disposal facility, or the failure of this chapter to prohibit processing and disposal of solid waste in any particular area does not constitute the County's determination that either such a facility or the disposal and processing of solid waste in such an area is an appropriate land use.

The County reserves the right to participate fully in administrative and legal proceedings regarding such areas and facilities, including but not limited to land use compatibility hearings under 30 Texas Administration Code Section 331.60, and to base its positions in such proceedings on the individual circumstances of the facility or area in question, including but not limited to a position that a permit should be amended or denied on the basis of land use as provided by Section 361.089, Health & Safety Code.

⁹ 312.009 was amended 9/17/2019, Item 17.

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART I/II SUPPLEMENTAL TECHNICAL REPORT

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

Prepared by:

Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003



SEALED FOR THIS PART I/II SUPPLEMENTAL
TECHNICAL REPORT, AND FOR REGISTRATION
PURPOSES ONLY.

WITHIN EACH APPENDIX, ITEMS THAT REQUIRE A
SIGNATURE AND SEAL BY A LICENSED
PROFESSIONAL (E.G., ENGINEER, SURVEYOR) ARE
SIGNED, SEALED, AND DATED, AS APPROPRIATE,
BY THE RESPONSIBLE PROFESSIONAL.

Submitted September 2019
Revised January 2020

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FOR REGISTRATION PURPOSES ONLY
GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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GEOSYNTEC CONSULTANTS, INC.
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4/31/2020




FOR REGISTRATION PURPOSES ONLY
GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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WITHIN EACH APPENDIX, ITEMS THAT REQUIRE A SIGNATURE AND SEAL BY A LICENSED PROFESSIONAL (E.G., ENGINEER, SURVEYOR) ARE SIGNED, SEALED, AND DATED, AS APPROPRIATE, BY THE RESPONSIBLE PROFESSIONAL.

1. INTRODUCTION

1.1 Terms of Reference

Waste Management of Texas, Inc. (WMTX) is submitting an application to register a Type V municipal solid waste (MSW) transfer station facility. Within this report, the terms “facility” and “site” refer to the transfer station facility and its registration boundary, unless expressly stated otherwise. The proposed facility will be located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community Recycling and Disposal Facility (RDF), TCEQ Permit No. MSW-249D). The facility is located on the east side of Austin, Texas, in Travis County.

The purpose of the transfer station is to provide an efficient means to transfer MSW to duly-permitted landfills as the Austin Community RDF landfill nears its full capacity and after the landfill has ceased accepting waste and is in the process of being/is closed. The proposed facility will provide WMTX with the ability to transfer MSW from collection vehicles to larger transfer trailers for shipment to duly-permitted landfills.

The complete registration application is divided into Parts I through IV as required by 30 TAC §330.57. Part I includes the Part I Application Form, this report, and attached appendices. These materials collectively present site and applicant information to address the items required by 30 TAC §330.59; 30 TAC §281.5; and 30 TAC §305.45. Part II presents an existing conditions summary and information on the character of the facility and surrounding area. Part II has been combined with Part I, as allowed. This includes provision of a single Part I/II Supplemental Technical Report (i.e., this report), referencing and attaching as appendices the various required informational items of Parts I and II

Part III presents facility design information, schematic designs of the facility, and required plans. Part IV presents the Site Operating Plan (SOP), which describes the general procedures for conducting day-to-day operations at the facility.

1.2 Organization of Part I/II Supplemental Technical Report

The remainder of this report is organized as follows:

- a facility description is presented in Section 2 (includes reference to maps showing the facility location and facility layout);

- the waste acceptance plan is presented in Section 3;
- property, owner, and operator information are discussed in Section 4;
- the applicability and status of other permits is addressed in Section 5, along with other applicant acknowledgements;
- a land use evaluation and discussion on the facility's potential impact on the surrounding area is addressed Section 6;
- information on transportation (roads, traffic, airports) is presented in Section 7;
- information on geologic conditions and soils is addressed in Section 8;
- information on groundwater and surface water conditions at and near the site are addressed in Section 9;
- abandonment of any oil and gas wells and water wells discovered are discussed in Section 10;
- floodplains data and wetlands are discussed in Section 11;
- information on endangered or threatened species is discussed in Section 12;
- compliance with the Texas Antiquities Code and related Texas Historical Commission (THC) documentation is addressed in Section 13; and
- documentation of council of governments review request (submitted to the Capitol Area Council of Governments (CAPCOG)) is discussed in Section 14.

Appendices to this report contain maps/drawings, data, and relevant documentation of the topics discussed in this report. The appendices are organized as follows:

- Appendix I/IIA presents a series of location maps;
- Appendix I/IIB presents an adjacent land ownership map and a landowner list;
- Appendix I/IIC includes ownership-related information, including a legal description of the registration boundary;

- Appendix I/IID provides a property owner affidavit and documents the legal authority of the applicant;
- Appendix I/IIE addresses evidence of competency of the operator;
- Appendix I/IIF presents letters of appointment that define the roles of certain individuals involved in the application;
- Appendix I/IIG presents land use information;
- Appendix I/IIH provides transportation information and coordination documentation;
- Appendix I/II-I provides wetlands documentation;
- Appendix I/IIJ provides documentation on endangered and threatened species;
- Appendix I/IIK provides THC antiquities code coordination documentation; and
- Appendix I/IIL provides CAPCOG correspondence.

2. FACILITY DESCRIPTION

This section provides information on the general facility location, to address 30 TAC §330.59(b) and (c), as well as §330.61(c), (e), (f), and (g) to show proximity to surrounding features. Facility layout, pursuant to §330.61(d), is also addressed.

2.1 Overview

As mentioned, the proposed facility will be located within the permit boundary of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D). The transfer station registration boundary will occupy an area of approximately 10.8 acres within the 359.71-acre Austin Community RDF. The proposed facility is located approximately 500-ft north of US Highway 290 and Giles Lane, on the east side of Austin, in Travis County, Texas. The proposed transfer station will occupy an area near the existing Austin Community RDF entrance and scales west of Giles Lane, as shown on maps and drawings included in Appendix I/IIA. The transfer station itself (i.e., the building) will be less than one acre in size. In total, the area to actually be developed for transfer station operations (the building, associated all-weather access roads and vehicle turnaround areas, approach ramps, parking, support features, etc.) will be less than approximately 10 acres. The transfer station building and area developed for transfer station operations will be located outside of the waste disposal footprint of the landfill.

The proposed transfer station building will be an enclosed structure (i.e., a pre-engineered metal building with a roof, exterior walls on three sides, openings on the fourth side for collection vehicles to enter the building to unload, covered load-out tunnels on the sides of the building with building openings at the load-out tunnels, and ancillary support features). The transfer station building will have a reinforced concrete slab tipping floor with an area of approximately 25,000 square feet, and reinforced concrete push walls to resist typical forces for transfer operations. Details on the layout of the transfer station, design features, and design criteria are provided in the Site Development Plan (Part III) portion of the application, as required.

The transfer station will utilize the Austin Community RDF's existing gate and scale house. Incoming loads will be weighed and directed to the tipping floor inside the enclosed transfer station building. Solid waste unloaded in this area will be pushed by a front-end loader(s) into the transfer trailers, which will haul the waste to an area landfill for disposal.

2.2 Existing Conditions Summary

The transfer station registration boundary will be entirely within the permit boundary of the existing Austin Community RDF (also referred to herein as the “landfill facility”). The Austin Community RDF is an active operating Type I MSW landfill whose remaining landfill capacity is limited. The proposed transfer station will commence operations as the landfill nears its full capacity and is receiving only *de minimis* quantities of waste, or after the landfill has ceased accepting waste and is in the process of being/is closed.

The approximately 360-acre landfill facility includes two MSW management units: one approximately 64-acre unit on the eastern portion of the landfill facility (“East Hill”), and one approximately 178-acre unit on the western portion of the landfill facility (“West Hill”). The overall landfill facility also includes a closed industrial waste unit, and a closed area of initial MSW disposal referred to as the “Phase I Unit”. These waste management units are shown on a facility layout plan included in Appendix I/IIA of this application. As shown, the transfer station registration boundary will be located outside of the waste disposal footprints of these waste management units.

The existing Austin Community RDF infrastructure includes a perimeter fence, gate house and scales, landfill office building, maintenance shop/office building, all-weather roads, soil borrow and stockpile areas, environmental monitoring systems (landfill gas and groundwater), a lined leachate evaporation pond, stormwater management features, and solid waste disposal areas. As noted, the approximately 10.8-acre transfer station facility area on the eastern portion of the landfill facility where the transfer station registration boundary, building, and supporting operational features will be located are not within the landfill waste footprint limits. Furthermore, the area used for transfer station operations will not interfere with the landfill’s environmental monitoring systems or other landfill-related infrastructure that will remain in place after closure of the landfill.

2.3 Maps and Drawings

A group of maps and drawings are presented in Appendix I/IIA to show the general location of the facility, proximity to surrounding features, land use of the area, etc. This appendix also includes a facility layout plan for the transfer station. As mentioned, the required transfer station process and design drawings are provided in the Site Development Plan (Part III), as required.

2.4 Adjacent Land Ownership

A map presenting the adjacent land ownership is included in Appendix I/IIB. The map shows properties within ¼-mile of the registration boundary and addresses mineral interest ownership under the facility. A land ownership list, keyed to the land ownership maps, is also provided in Appendix I/IIB. A compact disk (CD) containing the land owners list in electronic format is provided with the original binders of this application submitted to TCEQ, at the front of the binder after the cover letter.

This information has been provided to satisfy the requirements of 30 TAC §330.59(c)(3), 30 TAC §305.45(a)(6)(D), and 30 TAC §281.5.

3. WASTE ACCEPTANCE PLAN

This section provides information on waste acceptance to address 30 TAC §330.61(b), including a description of the waste characteristics, the maximum amount of waste to be received daily and annually for five years, and other amounts and durations of, and capacity for, receipt and/or storage, as detailed herein. This section also provides information on the anticipated facility service area (i.e., sources/generation areas of the waste) and population-equivalent served.

3.1 Waste Characteristics

The proposed facility is a Type V MSW facility (a transfer station). The general classifications of solid waste that may be allowed to be accepted at the transfer station, and that are prohibited from acceptance, are provided below. The waste classifications are defined in 30 TAC §330.3.

Allowable Wastes: The facility is allowed to accept the following classifications of solid wastes, for subsequent transfer to a properly-permitted MSW landfill facility for disposal:

- household waste;
- yard waste;
- commercial waste;
- construction waste;
- demolition waste;
- brush;
- rubbish;
- Class 2 non-hazardous industrial solid waste;
- Class 3 non-hazardous industrial solid waste;
- shredded or quartered tires; and
- certain special wastes. Special waste is defined by 30 TAC §330.3(148). Only those special wastes listed below are allowed to be accepted at this facility without prior written approval from the Executive Director. Further, such special waste must be compatible with the compaction and loading equipment operated at the facility, unless modifications are made to the facility to accommodate the special waste.
 - Dead animals and slaughterhouse waste that are incidental to routine collection of MSW and that can be systematically processed along with other solid waste.

- Drugs and contaminated foods, other than those contained in normal household waste.
- Empty containers which have been used for pesticides, herbicides, fungicides, or rodenticides, provided the containers have been triple rinsed, crushed, or rendered unusable upon receipt at the gate.
- Incidental amounts of non-regulated asbestos-containing materials (non-RACM). An incidental amount is defined as the maximum of 10-percent of the waste received on an annual basis by scale weight (annual basis is defined as the most recent four consecutive quarters).
- Waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility. Only those wastes authorized for disposal at a solid waste management facility will be accepted.
- Waste generated outside the boundaries of Texas that contains any industrial waste; any waste associated with oil, gas, and geothermal exploration, production, or development activities; or any material that is listed in the bullets above.
- Special waste other than as described above and approved for acceptance by the TCEQ Executive Director.

Prohibited Wastes: The facility is prohibited from accepting, and shall not accept, the following wastes:

- regulated hazardous waste;
- polychlorinated biphenyls (PCBs);
- liquid wastes;
- certain special wastes not listed above as allowable, namely:
 - hazardous waste from conditionally exempt small-quantity generators that may be exempt from full controls under Title 30 TAC Chapter 335, Subchapter N (relating to Household Materials Which Could Be Classified as Hazardous Wastes);
 - Class 1 non-hazardous industrial waste;
 - untreated medical waste;
 - municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges;

- septic tank pumpings;
- grease and grit trap wastes;
- wastes from commercial or industrial wastewater treatment plants; air pollution control facilities; and tanks, drums, or containers used for shipping or storing any material that has been listed as a hazardous constituent in 40 CFR, Part 261, Appendix VIII but has not been listed as a commercial chemical product in 40 CFR §261.33(e) or (f);
- soil contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligrams per kilogram total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1 of 30 TAC §335.521(a)(1);
- incinerator ash;
- used oil;
- lead acid storage batteries; and
- used-oil filters from internal combustion engines.

3.2 Waste Acceptance Amounts and Storage Durations

Waste acceptance rates are tabulated below in Table I/II-1.

**TABLE I/II-1
5-YEAR PROJECTION OF WASTE ACCEPTANCE RATES**

Year of Operation	Estimated Annual Waste Acceptance Rate⁽¹⁾ (tons/year)	Estimated Daily Average Waste Acceptance Rate⁽¹⁾ (tons/day)	Maximum Amount of Solid Waste Allowed to be Received Annually⁽²⁾ (tons/year)	Maximum Amount of Solid Waste Allowed to be Received Daily (tons/day)
1	669,200	2,145	998,400	3,200
2	669,200	2,145	998,400	3,200
3	669,200	2,145	998,400	3,200
4	669,200	2,145	998,400	3,200
5	669,200	2,145	998,400	3,200

Notes:

(1) Individual daily acceptance rates are expected to fluctuate on a day-to-day basis. The basis for the estimated daily average and estimated annual waste acceptance rate is the assumption that the Austin Community RDF landfill (Permit MSW-249D) is accepting only *de minimis* waste quantities or has ceased accepting waste and is in the process of being/is closed. The resulting transfer station daily average and annual waste acceptance rate is an estimate based on the market conditions projected to exist under this assumption. For this, the estimated annual waste acceptance rate is calculated by multiplying the average daily rate by 312 days (i.e., operating 6 days/week, 52 weeks/year), rounded to the nearest hundred tons.

(2) The maximum amount of waste that would be allowed to be received annually is calculated by multiplying the maximum allowable daily waste acceptance rate (registered limit) by 312 days (i.e., operating 6 days/week, 52 weeks/year), rounded to the nearest hundred tons.

In addition to the waste acceptance rates tabulated above, the following storage-related amounts and durations are established:

- On average, solid waste accepted at the facility will be transferred on a daily basis (i.e., remaining at the facility for less than 24 hours).

- The maximum length of time material will remain (i.e., be temporarily stored) on-site is 48 hours.
- The maximum amount of waste that may be stored at the facility for more than 24 hours is 2,500 tons.

3.3 Facility Service Area

3.3.1 Waste Sources and Generation Areas

The facility will serve, in general, individuals, businesses, communities, institutions, and public and private solid waste collection vehicles in the City of Austin, Travis County, and surrounding counties.

3.3.2 Population-Equivalent Served

The average population-equivalent of areas served by the facility, using the above 5-year average daily projected waste acceptance rates and a per capita disposal rate of 5 lbs/person/day, is 858,000 persons.

3.4 Facility Design Capacity

It is important to recognize that the facility, based on its size and other design attributes, has the theoretical design capacity to safely and efficiently transfer more than the maximum amounts tabulated in Table I/II-1 on a daily (and annual) basis. For example, the transfer station has been designed with additional tipping floor area for staging and storage of waste. Table I/II-2, presented on the following page, provides a summary of the facility's theoretical design capacity, along with associated assumptions that form the basis for these calculations.

3.5 Intended Destination of Solid Waste Received at this Facility

The destination of the solid waste received by the facility is a properly-permitted Type I MSW facility, where the waste will be disposed.

3.6 Facility Qualification as a Registration

Per 30 TAC §330.9(b)(4), this transfer station facility qualifies for a registration because it will be located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community RDF, TCEQ Permit No. MSW-249D).

TABLE I/II-2
THEORETICAL FACILITY DESIGN CAPACITY

Item	Value	Notes
<i>Unloading</i>		
Number of Tipping Floor Unloading Positions	6	-
Average Time to Unload a Collection Vehicle (minutes)	8	Conservative value - typically able to unload more quickly
Number of Vehicles Unloaded Per Hour, Per Position	7	Calculated as 60 minutes per hour divided by the average loading time (and rounded down to nearest whole number)
Hourly Unloading Capacity (tons/hour)	294	Calculated as number of vehicles per hour per position x number of positions x average collection vehicle capacity (i.e., 7 tons)
Daily Unloading Capacity (tons/day)	5,880	Calculated as the hourly capacity multiplied by the number of operating hours per day (assumed to be 20 hours - but not a limiting parameter of the registration)
<i>Load-out Capacity</i>		
Number of Transfer Trailer Loading Positions	2	-
Average Time to Load a Transfer Trailer (minutes)	15	Conservative value - typically able to transfer and load-out more quickly
Number of Vehicles Loaded Per Hour, Per Position	4	Calculated as 60 minutes per hour divided by the average loading time (and rounded down to nearest whole number)
Hourly Load-out Capacity (tons/hour)	160	Calculated as number of vehicles per hour per position x number of positions x average transfer trailer vehicle capacity (i.e., 20 tons)
Daily Load-out Capacity (tons/day)	3,200	Calculated as the hourly capacity multiplied by the number of operating hours per day (assumed to be 20 hours - but not a limiting parameter of the registration)

<i>Theoretical Maximum Design Capacity</i>		
<p>The above scenario, while not particularly likely (because it assumes the transfer station is running at its peak efficiency for a 20-hour day), is used to establish the maximum design-basis transfer rate of the facility. The 20-hour day assumption is not a limiting parameter of this registration. Also, a conservatively-low transfer vehicle capacity was assumed solely for the purposes of generating a conservative load-out design capacity calculation. From the above scenario, the limiting factor for determining the design capacity is the Daily Load-out Capacity plus the Available Storage to be provided. As such, the theoretical daily design capacity of the facility is: 3,200 tons/day + 2,500 tons/day = 5,700 tons/day.</p>		

4. PROPERTY, OWNER, AND OPERATOR INFORMATION

This section provides property and owner-related information, to address the requirements of 30 TAC §330.59(d) through (h).

4.1 Legal Description of Facility

A legal description of the transfer station registration boundary is presented in Appendix I/IIC.

4.2 Property Ownership

As shown on the documentation provided in Appendix I/IIC, WMTX is the owner of the land that comprises the Austin Community RDF permit boundary, and accordingly owns the land within the transfer station registration boundary that is situated entirely within the permit boundary of the existing Austin Community RDF.

Property owner affidavits and legal authority are discussed subsequently in Section 4.4 (with legal authority documentation in Appendix I/IID).

4.3 Easements

A survey of easements within the Austin Community RDF permit boundary is presented on a survey drawing in Appendix I/IIC. These easement locations are derived from the surveyor's easement research on recorded easements listed in the real property records of Travis County for the subject parcels of land. A duplicate of this survey map that has been modified to show the transfer station registration boundary and proposed transfer station building location is also provided in Appendix I/IIC. As shown, there are four utility easements (and zero drainage or pipeline easements) within or adjacent to the transfer station registration boundary, but there are no easements in the area that will be occupied by the transfer station building. Accordingly, no solid waste loading or storage will occur within any easement (or right of way) that crosses the facility.

4.4 Property Owner Affidavit and Legal Authority

WMTX is the owner and operator of the facility. WMTX is a wholly-owned subsidiary of Waste Management, Inc., a Delaware corporation based in Houston, Texas, whose shares are publicly traded on the New York Stock Exchange. No other person or entity owns more than 20-percent of the company or facility.

A signed property owner affidavit, pursuant to 30 TAC §330.59(d)(2), is presented in Appendix I/IIID. The legal authority and status of the applicant has been verified as required by 30 TAC §330.59(e) and §281.5 and is also included in Appendix I/IIID.

4.5 Evidence of Competency – Facility Operator

Information demonstrating the competency of the facility operator is presented in Appendix I/IIIE.

4.6 Appointment Letters

Letters that authorize the Applicant's Agent to sign the application, and that designate the Engineer, are presented in Appendix I/IIF.

5. OTHER PERMITS/AUTHORIZATIONS/ACKNOWLEDGEMENTS

5.1 Other Permits or Approvals/Authorizations

Besides this TCEQ registration application for the proposed Type V MSW facility (transfer station), other facility permits, authorizations, or construction approvals within the transfer station registration boundary, or that are otherwise applicable/relevant, are identified on the Part I Application Form.

5.2 Non-Applicable Regulatory Programs

The facility will not accept or manage hazardous or radioactive waste, perform underground injection or ocean dumping of waste, or discharge waste into waters of the U.S. Also, the facility does not propose to perform subsurface area drip dispersal. No jurisdictional wetlands will be affected. Therefore, the facility does not require any additional permits or construction approvals under the following programs:

- Hazardous Waste Management Program under the Texas Solid Waste Disposal Act;
- Underground Injection Control (UIC) Program under the Texas Injection Well Act;
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;
- Dredge or fill permits under the Federal Clean Water Act;
- Licenses under the Texas Radiation Control Act; or
- Subsurface area drip dispersal system permits under Texas Water Code, Chapter 32.

5.3 Application Fees

On behalf of the applicant, Geosyntec Consultants has paid the \$150 registration application fee. The e-pay receipt confirmation number is provided on the Part I Application Form, and a copy of the payment receipt is attached to the overall application cover letter at the front of the application binder.

5.4 Internet Posting

In accordance with 30 TAC §330.57(i), a complete copy of this application will be posted (upon submittal of the application to TCEQ) to the internet at the publicly-accessible website identified (Web address link provided) on the Part I Application Form. Future revisions and supplements to

the application will be posted at the same location. The internet posting is for informational purposes only.

5.5 Other Owner/Operator Acknowledgements and Informational Items

The owner/operator acknowledges the following:

- The construction and operation of this facility must comply with Subchapter U of 30 TAC Chapter 330 (relating to Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations), or other approved air authorizations. As indicated in the Part I Application Form, the Austin Community RDF facility has received an Air New Source Review (Standard Air Permit) Registration and holds a Title V Air Permit. These air authorizations will be amended as needed to incorporate the transfer station as a co-located facility within the landfill permit boundary before the transfer station is placed into operation or when otherwise required.
- Liquids resulting from the operation of this facility will be disposed of in a manner that will not cause surface water or groundwater pollution. The facility will provide for the treatment of wastewaters resulting from waste management activities and from cleaning and washing. The operator will ensure that stormwater and wastewater management is in compliance with the regulations of the Commission. As indicated in the table in the Part I Application Form, the Austin Community RDF facility has received a TPDES Storm Water Multi-Sector General Permit. Permit coverage for the transfer station under the TPDES program will be obtained as described and certified in Section 9.3 of this Part I/II Report.
- It is the responsibility of the owner or operator to possess the property-related rights and interests required by applicable provisions of 30 TAC §330.67.
- It is the responsibility of the owner or operator to obtain any permits or approvals that may be required by local agencies, such as for building construction, discharge of uncontaminated waters into ditches under control of a drainage district, discharge of effluent into a local sanitary sewer, etc.
- The owner or operator will be aware of and meet their requirements and responsibilities associated with the public notice process for registrations, as required by applicable provisions of 30 TAC §330.69.
- The owner or operator will be aware of and meet their requirements and responsibilities associated with standard registration conditions for MSW facilities, as required by applicable provisions of 30 TAC §330.73.

6. LAND USE

6.1 Land Use Information

A land use evaluation was conducted for this project to assess the potential impact of the facility on the surrounding area. A comprehensive land use analysis was performed by Richardson Verdoorn (RVi) in 2006 for the TCEQ-permitted expansion of the Austin Community RDF (TCEQ Permit No. MSW-249D). The RVi analysis was adopted as the baseline for the current Austin Community Transfer Station land use evaluation, and updated for this registration application as appropriate to reflect current land use conditions and growth trends. The results of the analysis are summarized in the following sections and updated with more current information where applicable. A copy of the RVi land use analysis is included in Appendix I/IIG.

Existing land uses in the area were determined using City of Austin GIS data (including land use maps), the City of Austin's Property Profile website, 2018 aerial imagery, the THC's Texas Historic Sites Atlas, and the Travis County Cemetery Project. CAPCOG's Regional Solid Waste Management Plan: 2002-2022 was also reviewed for information relevant to land use compatibility.

6.1.1 Zoning

There is no zoning within the proposed transfer station registration boundary. Zoning within the two-mile radius of the site and the zoning district definitions are shown on Drawing I/IIA-10. The transfer station registration boundary is not within the city limits of any municipality, nor is it within the extraterritorial jurisdiction (ETJ) of a municipality. When this registration application was initially filed on 27 September 2019, the site was within the ETJ of the City of Austin; however, the City of Austin subsequently released portions of the WMTX property, including the entire area occupied by the transfer station registration boundary, from its ETJ. A copy of the City of Austin Ordinance releasing the land from its ETJ is included in Appendix I/IIG.

6.1.2 Surrounding Land Use

Overview of Surrounding Land Uses

The characteristics of the surrounding land use within a one-mile radius of the transfer station registration boundary were investigated, and the results show that land within the one-mile radius of the site is developed with a wide variety of commercial, industrial, residential, institutional, and recreational uses. The area includes residential areas, one school, recreational facilities, a day care,

a golf course, a church, ponds (stock tanks and stormwater management ponds), and landfills, as well as large portions of undeveloped “open” land. A “General Land Use Map” is presented on Drawing I/IIA-8, and a “Detailed Land Use Map” is presented in Drawing I/IIA-9. A “Structures and Inhabitable Buildings Map,” showing buildings and inhabitable structures within 500 feet of the site, is presented on Drawing I/IIA-12. The following table provides an approximate breakdown, by percent of total area, of the existing land uses within one mile of the transfer station registration boundary (and excluding the land within the registration boundary) (see also Drawing I/IIA-8 and I/IIA-9).

TABLE I/II-3
SUMMARY OF SURROUNDING LAND USE

Land Use	Area in Acres*	Percentage of Total Area
Industrial	1,169	46.7
Open	758	30.3
Commercial	171	6.8
Recreational	169	6.7
Residential	162	6.5
Water	51	2.0
Institutional	25	1.0
Total	2,505	100

*based on examination of aerial imagery and City of Austin (COA) Land Use mapping information.

Directional Land Uses

A description of the surrounding land use in each direction around the site, within one mile of the transfer station registration boundary, is presented below.

- **North.** The closed Sunset Farms Landfill lies directly to the north of the site. Beyond that landfill, land use is a mix of undeveloped/agricultural and residential, including a school and a day care facility.
- **East.** Land use east of the site is a mix of industrial, undeveloped, residential, recreational, and commercial. A church and a large semiconductor manufacturer are located east of the site.

- South. Land use immediately south of the site is a mix of retail commercial and warehousing. Further south, across U.S. Highway 290, land use is a mix of undeveloped/agricultural, retail commercial/office, institutional, warehousing, residential, and industrial, including a pipeline terminal/fuel storage facility.
- West. The Austin Community RDF and the closed Travis County Landfill are located west of the site. Besides those landfills, land use towards the west is a mix of industrial and commercial.

Summary

The surrounding land use within one mile of the site is summarized below.

- There are 880 residential units, including:
 - Approximately 691 single family homes; and
 - 2 multifamily properties with approximately 189 housing units.
- There are approximately 43 businesses representing a mix of commercial, manufacturing, and industrial activity.
- Undeveloped, park/park-like, or agricultural land, which includes the following:
 - Bluebonnet Hill Golf Course;
 - Southern Walnut Creek Greenbelt;
 - Walnut Creek Sports Park;
 - Harris Branch Recreational Center and Neighborhood Park; and
 - Undeveloped/agricultural land.
- There are three landfills: the active Austin Community RDF, the closed Sunset Farms Landfill, and the closed Travis County Landfill.
- The Community Bible Fellowship Church is approximately 300 feet east of the site.

The total land area within a one-mile radius is 3.9 square miles. Based on the number of housing units in the area, it is estimated that the population density within a one-mile radius of the site is about 582 people per square mile. This is estimated by assuming an average of 2.58 people per household (the average for Travis County based on the latest available 2013-2017 U.S. Census Bureau American Community Survey 5-Year Estimate [census.gov/quickfacts/fact/table/traviscountytexas/PST045218]). Overall, the land within a one-mile radius of the transfer station

registration boundary has a lower population density than Travis County as a whole, where the average population density is about 1,034 people per square mile (based on the same 5-Year Estimate referenced above). The land within one mile of the transfer station registration boundary can be summarized as being a suburban area used for a mix of industrial, residential, and commercial.

6.1.3 Growth Trends and Directions of Major Development

The 2006 RVI Land Use Analysis included in Appendix I/II-G provides a detailed description of growth trends near the Austin Community RDF site through the mid-2000s. The Austin Community RDF and vicinity was at that time, and continues to be, located in one of the most rapidly growing sectors of the Austin metropolitan area. The five-mile radius around the existing Austin Community RDF has continued and will continue to experience substantial residential growth. From 2000 through the first half of 2006, the area within five miles around the Austin Community RDF increased by 6,580 households, from 49,447 households to 56,027. With respect to the proposed transfer station facility and growth trends at the time of this application, much of the residential growth within five miles is occurring within major new subdivisions located north and east of the facility. Based on historical aerial imagery available since 2006, the area surrounding the site has continued to experience rapid growth.

Population growth estimates in the eight ZIP codes that make up the majority of the area within five miles of the transfer station registration boundary were made using the City of Austin's "DTI 2040 Population and Employment Forecast." Projected growth in these ZIP codes is estimated as follows:

**TABLE I/II-4
REGIONAL GROWTH**

ZIP code	2020 Population Forecast	2040 Population Forecast	% growth from 2020 to 2040
78754 (site is in this ZIP code)	19,975	34,727	74%
78752	25,536	37,752	48%
78753	47,114	56,769	20%
78723	39,282	52,638	34%
78724	22,138	34,419	55%
78725	13,972	25,678	84%
78653	14,759	43,371	194%
78660	32,776	43,853	34%

6.1.4 Proximity to Specified Uses

The aforementioned general and detailed land use maps (Drawings I/IIA-8 and I/IIA-9, respectively) show the proximity to residences and other land uses within a one-mile radius of the transfer station registration boundary, and the surrounding land use was summarized in the previous subsections. The proximity to specified uses within one mile of the facility is as follows:

- Residences. Based on a review of the latest available aerial imagery (obtained in January 2020, with latest available imagery dated January 13, 2018), it is estimated that there are approximately 880 existing residences located within one mile of the facility. The nearest existing residence is approximately 3,037 feet north of the facility, in the Parkside at Harris Branch subdivision.
- Commercial Establishments. Based on a review of aerial imagery (obtained in January 2020, with latest available imagery dated January 13, 2018), it is estimated that there are approximately 43 businesses within one mile of the site, representing a mix of both commercial and industrial activity. However, the majority of the business activity is industrial. Excluding the Austin Community RDF, the nearest business is the 7-Eleven Convenience Store located to the south of the site.
- Churches. There is one church located within one mile of the site: The Community Bible Fellowship Church is located on Giles Lane, approximately 300 feet east of the site.
- Historic/Archaeologically Significant Sites. There are no historic sites located within one mile of the site.

Horizon Environmental Services, Inc. performed a Cultural Resources Survey in 2003 which included undisturbed portions of the Austin Community RDF site as of the date of the field assessment. The assessment concluded that there would be “no effect” to cultural resources by the then-proposed expansion of the Austin Community RDF. The survey was forwarded to the THC for concurrence. The THC concurred that no historic properties were affected and the landfill expansion project may proceed. The correspondence with the THC, as well as the Cultural Resources Survey, are included in Appendix I/IIK.

In 2019, additional coordination has occurred with the THC to inform them of the proposed transfer station and request their review of the project for conformance with the Texas Antiquities Code. The THC replied to the request with a response dated 25 October 2019 that indicated “No Significant Sites – Project May Proceed.” This documentation of coordination for this project is also included in Appendix I/IIK.

- Parks. There are three recreational areas and one golf course located within one mile of the site. Walnut Creek Sports Park is located approximately 0.75 mile south of the site along Daffan Lane. Southern Walnut Creek Greenbelt is located approximately 0.9 mile south of the site, south of Old Manor Road. Harris Branch Recreational Center and Harris Branch Neighborhood Park are located approximately 0.8 mile north of the site on Farmhaven Road. The Bluebonnet Hill Golf Course (public) is located approximately 2,700 feet southeast of the site on Decker Lane.
- Schools and Day Care Centers. There is one school located within one mile of the site. The Bluebonnet Trail Elementary School is located approximately 5,029 feet northwest of the site on Farmhaven Road. There is one licensed day care facility located within one mile of the site. The Children's Courtyard is located approximately 3,580 feet northeast of the site on Harris Branch Parkway.
- Ponds and Lakes. There are scattered ponds (mostly stock tanks and stormwater management basins) located within the one-mile radius around the site. There are no lakes within one mile of the site.
- Other. There are no known sites having exceptional aesthetic quality within one mile of the facility.

6.2 Wells Within 500-Feet of the Facility

In Appendix I/IIA, drawings are included that present water well map and an oil and gas well map. These maps include a 500-ft offset line from the transfer station registration boundary, and reveal the following:

- Water Wells: There are no known off-site water well locations within 500 feet of the registration boundary. Further, there are also no known existing water wells located within the facility boundary. Water well abandonment is discussed subsequently in Section 10.1.
- Oil and Gas Wells: There are no known off-site oil and gas well locations within 500 feet of the registration boundary. Further, there are also no known oil and gas wells located within the facility boundary. Oil and gas well abandonment is discussed subsequently in Section 10.2.

6.3 Prevailing Wind Direction

A wind rose is included on a location map in Appendix I/IIA (see Drawing I/IIA-12). The wind rose indicates that the prevailing wind direction in the area is from the south.

6.4 Easements and Buffer Zones

6.4.1 Easements

As discussed previously in Section 4.3 of this report, there are four utility easements (and zero drainage or pipeline easements) within or adjacent to the transfer station registration boundary, but there are no easements in the area that will be occupied by the transfer station building. Accordingly, no solid waste loading or storage will occur within any easement (or right of way) that crosses the facility, nor in any buffer zone.

6.4.2 Buffer Zones

30 TAC §330.543(b) requires that a minimum 50-ft separating distance be maintained between the facility boundary and solid waste storage and processing areas. The buffer zone must provide for safe passage for fire-fighting and other emergency vehicles.

The buffer zones are evident on the facility layout plan presented in Part III, Attachment 1, Drawing III-1-4), and the shortest buffer distance is labeled on this plan (i.e., a 56-ft distance from the transfer station building to the eastern registration boundary, but because the adjoining land to the east is owned by WMTX the shortest setback from land not owned/controlled by WMTX is 249-ft). As shown, a 50-ft or greater buffer will be maintained between the transfer station and the facility boundary.

6.5 Conclusions Regarding Land Use

The Austin Community Transfer Station is viewed as a compatible land use for the following reasons:

1. The Austin Community RDF (landfill) has been in existence for over 45 years (the initial MSW landfill permit for the property was issued in 1974), and solid waste management activities have been a continuous, predominant land use in the area since 1968. The transfer station operation would be a continuation of this established land use.

2. The closed Travis County Landfill and the closed Sunset Farms Landfill are located directly south and north of the site, respectively. In addition, the Austin Community RDF will be filled to capacity and closed in the near future. The presence of these landfills further establishes the presence of waste management activities as a land use, and these nearby features will limit the ability to significantly develop or change the use of that nearby land.

7. TRANSPORTATION

7.1 Roads and Traffic

A comprehensive Transportation Study evaluating roads and traffic was performed for the Austin Community RDF for Permit MSW-249D – covering a study period through the year 2027. This process included agency coordination with the Texas Department of Transportation (TxDOT), who provided affirmation that they have “no objections” to the findings of the study that the main roads that will be used to access the site are available and adequate. Copies of the Transportation Study and the TxDOT coordination letters and response are provided in Appendix I/III of this application as supporting information relevant to the following:

- availability and adequacy of roads that the owner or operator will use to access the site, which are the same roads for the transfer station as they were for the Austin Community RDF, as studied, namely:
 - US 290;
 - Giles Lane; and
 - Johnny Morris Road.
- the volume of vehicular traffic on access roads within one mile of the facility, both existing and expected, during the expected life of the facility; and
- the volume of traffic expected to be generated by the facility on the access roads within one mile of the proposed facility, which, as discussed below, is greater for the Austin Community RDF than will be for the transfer station.

Volume of Traffic Associated with Proposed Transfer Station:

If the transfer station were to operate at its maximum daily waste acceptance rate (see Section 3.2, Table I/II-1 in the Part I/II Supplemental Technical Report), the estimated facility-generated vehicles are tabulated below in Table I/II-5.

TABLE I/II-5
TRANSFER STATION PEAK DAILY TRAFFIC GENERATION ESTIMATE

Vehicle Type	Truck Capacity (tons)	Estimated Distribution of Waste Stream⁽¹⁾ (tons/day)	Estimated Vehicle Counts⁽²⁾ (vehicles/day)
Collection - Rear Loader	6	700	117
Collection - Front Loader	10	2,200	220
Collection - Rolloffs	5	290	58
Private Individuals	0.25	10	40
Subtotal		3,200	435
Transfer Trailers	25	3,200	128
Facility Personnel/Misc.	-	-	10
Total Vehicles per Day			573
Total Trips per Day			1,146

Notes:

- (1) The distribution of waste stream is based on operator experience with hauling and transfer stations, and assumes a peak day (i.e., receiving waste at the maximum allowable daily rate).
- (2) Vehicle counts refer to one-way trips (i.e., vehicles entering the site). To obtain the total number of vehicle trips on public roadways, the vehicle counts should be doubled (to account for vehicles both entering and leaving the facility on the same day).
- (3) Vehicles for facility personnel/miscellaneous were conservatively estimated as being 10 vehicles per day (considered a conservatively high estimate).

Comparison of Transfer Station Traffic to Landfill Traffic:

For the year 2027, the comprehensive Transportation Study conducted for the Austin Community RDF estimated 667 vehicles (i.e., 1,334 trips) per day. Actual 2019 scale records from the Austin Community RDF provide accurate daily vehicle counts and waste tonnage received. From this, comparisons can be made of the actual waste vehicle daily traffic being generated by the landfill versus the estimated daily traffic that will be generated by the transfer station. These comparisons are presented below in Table I/II-6.

TABLE I/II-6
COMPARISON OF LANDFILL TRAFFIC TO TRANSFER STATION TRAFFIC

Item	2019 Landfill Daily Tonnage Values	2019 Landfill Daily Traffic Values (# of Vehicles)	Transfer Station Daily Tonnage Estimates	Transfer Station Daily Traffic Estimates (# of Vehicles)
Peak Day	5,213	623	3,200	573
Average of Busiest Day of Each Month	4,345	592	3,006	538
Average of M-F Operating Days	3,469	550	2,442	437
Average of All Operating Days	3,045	504	2,145	384

Operation of the transfer station will be phased in as the landfill phases out of operation – i.e., the transfer station will not commence operation until the landfill nears its full capacity and is accepting only *de minimis* amounts of waste. Thus, the cumulative traffic impacts from the co-located facilities will be minimal as the two facilities will not be fully operational at the same time. As shown by the comparisons presented above, the daily number of vehicles (and corresponding vehicle trips in and out of the site) will go down for the transfer station on its peak and average operating days, as compared to the daily number of vehicles generated by the landfill on its peak and average operating days. The transfer station traffic volumes are also less than those that were the basis of the Transportation Study for the Austin Community RDF permit.

Volume of Vehicular Traffic on Roads Used to Access the Transfer Station:

Data on the volume of vehicular traffic, existing and projected, on the roads within one mile of the proposed transfer station that will be used to access the facility are tabulated below in Table I/II-7. The existing data were obtained from recent TxDOT-published traffic count data sources, as referenced in the footnotes to the table. The projected data were calculated using the population forecast in the Capital Area Metropolitan Planning Organization (CAMPO) 2040 Regional Transportation Plan (regional growth percentage from 2020 to 2040).

**TABLE I/II-7
VOLUME OF TRAFFIC ON AREA ROADS**

Road Segment/Location	TxDOT- Published Traffic Counts⁽¹⁾⁽²⁾ (vpd)	Landfill- Generated Traffic Contribution⁽³⁾ (%)	Projected 2040 Traffic⁽⁴⁾ (vpd)	Transfer Station- Generated Traffic Contribution⁽⁵⁾ (%)
US 290 at Giles Lane	62,306	1.1%	116,859	0.5%
Giles Lane - South of Transfer Station Entrance	8,619	11.6%	18,184	5.0%
Giles Lane - North of Transfer Station Entrance	6,648	3.7%	14,026	1.6%
Johnny Morris Road - South of US 290	5,990	5.6%	12,637	2.4%

Key: vpd = Vehicles per Day

1. Data Source for US 290: TxDOT 2018 District Traffic Web Viewer, AADT Annuals.
2. Data Source for Giles Ln. and Johnny Morris Rd.: TxDOT “2015 Austin Urban Traffic Map (Sheet 83 of 139 Urban Sheets),” Average Daily Traffic Counts(Sept. 2016).
3. Landfill-generated traffic contribution is based on the 2019 peak landfill daily vehicle trips (i.e., 623 vehicles x 2 trips = 1,246 vehicle trips).
4. Projected 2040 traffic is calculated using the regional growth percentage presented in the CAMPO 2040 Regional Transportation Plan population forecast.
5. Transfer station-generated traffic contribution is based on the peak transfer station daily vehicle trips (i.e., 573 vehicles x 2 trips = 1,146 vehicle trips).

The above TxDOT traffic data are from years when the Austin Community RDF was operating; therefore, landfill-generated traffic are included in these counts. The key takeaway from Table I/II-7 is that the transfer station, with a registered maximum daily waste acceptance rate and, thus, a constant maximum value of peak daily traffic over the life of the facility – will contribute a small and ever-decreasing percentage of the total traffic volumes on these area roadways during the life of the transfer station.

Traffic Conclusions:

From the data presented herein and for the reasons described below, this proposed facility (i.e., the transfer station) will result in lower facility-generated traffic volumes as compared to the Austin Community RDF. Therefore, it is apparent that the transfer station will have less traffic impact on

surrounding roadways than the already-approved and operating landfill. Accordingly, it is concluded that the roads the operator will use to access the site are available and adequate. This conclusion is based on the following rationale:

- The comprehensive Transportation Study (attached) for the landfill was for a study period through the year 2027.
- The comprehensive Transportation Study for the landfill considered planned improvements to US 290 and the Giles Lane intersection. These improvements, now constructed, have improved safety and traffic flow.
- The comprehensive Transportation Study was based on the landfill generating 667 vehicles per day (i.e., 1,334 trips per day) in 2027. Accurate landfill vehicle counts from scale records reveal that on the peak landfill operating day of 2019 when the most tonnage was received and the most traffic was generated, 623 vehicles crossed the scale (i.e., 1,246 trips).
- The transfer station will restrict its allowable tonnage to not exceed a maximum allowable value; using the waste hauling truck capacities, throughout its expected life the transfer station facility is projected to generate no more than 573 vehicles per day (i.e., 1,146 trips) on a peak day if operating at the maximum allowable waste acceptance rate.
- The transfer station daily waste acceptance rates will fluctuate from day-to-day, but are projected to be, on average, well below the allowable daily maximum (see Table I/II-6). Accordingly, the transfer station traffic generation is also well below that of a peak day (e.g., about 437 vehicles (874 trips) on an average weekday – again, also indicating a reduction compared to average daily landfill traffic generation at the Austin Community RDF.
- The distribution of transfer station traffic throughout the day is anticipated to be similar to that of the landfill. The waste vehicle types will also be similar.
- It can be reasonably concluded that the proposed transfer station will have less overall traffic impact compared to the landfill, and that the roads used to access the site are available and adequate, based on the following considerations: (i) the transfer station traffic volumes will be reduced as compared to those actually being experienced at the Austin Community RDF on its peak and average daily (and annual) basis; (ii) the transfer station will generate less traffic than the landfill that was used as the basis for the comprehensive Transportation Study; and (iii) the transfer station's maximum peak daily traffic will remain constant over time due to the registered limit on the transfer station's maximum allowable daily waste acceptance, resulting in a small and ever-decreasing contribution

percentage to the traffic volumes projected on area roadways over the expected life of the transfer station.

A coordination letter was submitted to TxDOT in September 2019 for this proposed transfer station (see Appendix I/IIH), requesting their review and concurrence of these findings. TxDOT's October 2019 reply and documentation of additional follow-up coordination is also included in Appendix I/IIH.

7.2 Airports

An airport map is provided in Appendix I/IIA. The map presents the current edition of the Federal Aviation Administration (FAA) Sectional Aeronautical Chart for the area, identifies the site location, and shows a six-mile offset radius from the facility's registration boundary. As shown, there is one small public-use airport within six miles of the facility: the Austin Executive Airport (formerly known as the Bird's Nest Airport), located approximately 5.1 miles northeast of the facility. A small private-use airport, the Dryden Airport, is located approximately 4.2 miles south of the facility. As additional information, it is noted that the nearest large, public/commercial use airport is Austin-Bergstrom International Airport (ABIA), which is more than 8.2 miles south of the facility.

Because the proposed transfer station is located much more than 10,000 feet from the end of any airport runway, a demonstration of airport safety per 30 TAC §330.545(a) is not required. Furthermore, because the proposed transfer station is not a "landfill unit" or "lateral expansion" of a landfill unit, the FAA and airport notifications for landfills within a six-mile radius of an airport (or five-mile radius of any large commercial airport runways), per 30 TAC §330.545(b), are not applicable.

The transfer station will manage solid waste indoors, within a single-story building with a roof, of a height much lower than surrounding terrain. Therefore, no adverse impacts to air traffic or airport safety will be created by transfer station operations.

8. GENERAL GEOLOGY AND SOILS STATEMENT

8.1 Geology

The site is underlain by the Upper Cretaceous age Taylor Group. The Taylor Group consists of massive beds of shale and marl, with clayey chalk, clay, sand, and some nodular and phosphatic zones. Beneath the site, the upper portion of the Taylor is composed of weathered montmorillonite clay with high shrink/swell potential. The clay is generally hard and occasionally contains shell fragments. Underlying the weathered material is the unweathered Taylor Group, which in the site area is composed of calcareous claystone. The top of this unit is most often encountered between 20 and 50 ft below ground surface. Below the claystone is an unweathered marl layer. Based on regional data, the base of the Taylor Group in the site area is at a depth of approximately 700 ft below ground surface [Golder Associates, Permit Amendment Application, Austin Community Recycling & Disposal Facility, January 2008].

Underlying the Taylor Group is the Austin Chalk, which consists of massive beds of chalk and marl with bentonitic seams, glauconite, and pyrite nodules. The Austin Chalk is approximately 400-ft thick. Below the Austin Chalk are the Eagle Ford Group, Buda Limestone, and Del Rio Clay, which have a combined thickness of approximately 150 feet. Underlying those units are the Edwards and associated limestones, which have a thickness of approximately 300-ft. The base of the Edwards and associated limestones is approximately 1,600 feet below ground surface [Golder Associates, Permit Amendment Application, Austin Community Recycling & Disposal Facility, January 2008].

8.2 Topography and Soils

The site is located in Travis County, Texas. The topography of Travis County decreases from west to east, with the greatest change in relief associated with the inactive Balcones Fault Zone. The Balcones Fault Zone divides Travis County into two physiographic provinces: the Gulf Coastal Plains to the east; and the Great Plains to the west. The Gulf Coastal Plain physiographic province is further subdivided into the Rolling Prairie Physiographic Region and the Blackland Prairie Physiographic Region. The site is located in the Blackland Prairie Physiographic Region.

The natural surface relief in the site area is towards both the Walnut Creek and Decker Creek drainage watersheds. Drainage features of the site are erosional valleys which generally transport surface water toward the southern, western, and eastern portions of the site. There is a natural drainage divide that passes through the eastern portion of the landfill facility, and the proposed transfer station facility is on the east side of this divide (with topography draining generally

eastward, ultimately reaching the Decker Creek watershed). Maps showing the general site topography are included with this report in Appendix I/IIA.

Shallow soils in the eastern portion of the landfill facility (where the proposed transfer station facility will be located) are predominantly Heiden Series, Houston-Black Series, and Ferris-Heiden complex. The Heiden Series are well-drained clay soils that are developed in calcareous marl under a cover of grasses. The Houston-Black Series consist of deep, moderately well drained soils that have developed in calcareous marls, alluvial clays, and chalk under prairie grasses. The Ferris-Heiden soils consist of deep clay soils developed in calcareous marls.

8.3 Faults

The Balcones Fault Zone passes through the center of Travis County, from the northeast to southwest. The fault system is approximately six to eight miles wide and is located 2-3 miles west of the site. No movement has occurred along the fault since the Miocene Epoch, 12.5 to 5 million years ago.

A detailed fault study was previously prepared for the Austin Community RDF landfill in March 1994 by Rust Environmental and Infrastructure as part of the Subtitle D location restrictions evaluation and was evaluated and updated as needed in January 2008 by Golder Associates. From this, the nearest mapped inactive fault is located approximately 0.7 miles west of the western edge of the facility boundary (which is over 1.7 miles, or about 9,000-feet west of the proposed transfer station). There are no active faults or surface expressions of faults at the site or in the area.

8.4 Seismic Impact Zones

It is important to note that regulatory requirements regarding the siting of MSW facilities include requirements for “municipal solid waste landfill units and lateral expansions” to not be located in seismic impact zones unless certain demonstrations are made (30 TAC §330.557). For this application – a proposed transfer station – this location restriction is not applicable. However, as general information on the seismicity (or lack thereof) in the area, an evaluation was performed for this application to assess whether the facility is in a seismic impact zone, based on available United States Geologic Survey (USGS) seismic hazard maps online at: <https://earthquake.usgs.gov/hazards/hazmaps/>. The results of this evaluation clearly indicate that facility is not in a seismic impact zone (i.e., an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10g in 250 years).

8.5 Unstable Areas

An unstable area assessment was previously prepared for the Austin Community RDF landfill as part of approved location restrictions, with the conclusion that no unstable areas exist at, or adjacent to, the site. The site is situated on a substantial thickness of stiff and stable Taylor Group materials that provide a good foundation, and is underlain by bedrock terrain, not prone to differential subsidence or karst activity, not in a setting susceptible to natural or human-induced events or forces that could impair structures, and not in an area susceptible to mass movement.

9. GROUNDWATER AND SURFACE WATER STATEMENT

9.1 Groundwater

The Taylor Group, which directly underlies the site, produces only a small amount of the total groundwater used in Travis County. In the site area, groundwater in the Taylor Group primarily occurs within the weathered portions, perched on top of unweathered claystone. These clays have a relatively high shrink/swell potential, and during dry periods, desiccation cracks may form and allow precipitation to enter the formation. Perched groundwater, where present, generally moves in subdued conformity to topography following the weathered/unweathered interface. On the eastern portion of the site, where the proposed transfer station will be located, the interface slopes gently toward the east.

The first significant aquifer underlying the site is the Edwards and associated limestones, at a depth of about 1,600 feet below ground surface. The site is located east of the downdip limit of fresh to slightly saline water, and the groundwater in the Edwards beneath the site is not considered potable because of high concentrations of dissolved solids. The site is more than five (5) miles away from a recharge zone of the Edwards. At the site, the Edwards is overlain by confining units that serve as low permeability aquitards.

9.2 Surface Water

The transfer station facility is located within the Gilleland Creek-Colorado River watershed of the Lower Colorado River Basin (more specifically, within the Decker Creek sub-watershed). For reference, it is noted that the western portion of the landfill facility (non-transfer station areas) is located within the Walnut Creek Watershed of the Lower Colorado River Basin.

The major regional surface water features within the vicinity of the site include Ferguson Creek, Walnut Creek, Harris Branch, Gilleland Creek, Decker Creek, and Walter E. Long Lake. There are also several tributaries/branches of these creeks scattered around the vicinity of the site, along with scattered stock-tank-type ponds randomly located within a one-mile radius of the site. The general topographic maps presented in Appendix I/IIA show the streams and surface water bodies in the general site vicinity.

As mentioned, there is a natural drainage divide that passes through the eastern portion of the landfill facility, and the proposed transfer station facility is on the east side of this divide (with topography draining surface water generally eastward, ultimately reaching the Decker Creek watershed). Drainage west of this divide (not associated with transfer station areas) flows west,

ultimately reaching the Walnut Creek Watershed. The proposed transfer station facility will not modify the existing drainage system for the landfill.

Perimeter drainage features of the landfill are up-gradient from the proposed transfer station, and will divert water around and away from the transfer station area. The Site Development Plan (Part III, Attachment 2) includes a surface water drainage report that provides additional specifics on the drainage rates and drainage design features related to the proposed transfer station.

9.3 Stormwater Permitting Under TPDES

TPDES Certification

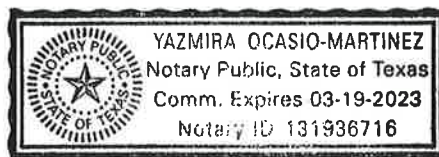
Surface water from the existing landfill facility is discharged under Texas Pollutant Discharge Elimination System (TPDES) Multi-Sector Storm Water General Permit TXR050000 (Permit No. TXR05AJ96) for Storm Water Discharges Associated with Industrial Activity, obtained through WMTX's filing of a Notice of Intent to comply with this TPDES Multi-Sector General Permit, as required by §402 of the federal Clean Water Act. The existing landfill facility also has and implements a site-specific Storm Water Pollution Prevention Plan (SWPPP).

The transfer station 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. The facility will be subject to applicable TPDES stormwater permitting requirements and the federal Clean Water Act, §402, as amended. In accordance with 30 TAC §330.61(k)(3)(A), this TPDES Certification affirms that WMTX will modify and/or obtain the appropriate TPDES permit coverage as required for this facility before the transfer station is placed into operation or when otherwise required.

WITNESS MY HAND on this 31 day of January, 2020.



SWORN AND SUBSCRIBED before me by Steve Jacobs on the 31 day of January, 2020.


Notary Public

10. ABANDONED OIL AND WATER WELLS

Pursuant to 30 TAC §330.61(l), this section provides a description and discussion of all existing or abandoned water and oil and gas wells situated within the facility boundary. Previously in this report, information was presented on water and oil and gas wells within 500 feet of the proposed facility (but not within the registration boundary). The information presented is based on a Texas Water Development Board (TWDB) and TCEQ search for water wells; and a Railroad Commission of Texas (RRC) search for crude oil wells, natural gas wells, and other wells associated with mineral recovery.

10.1 Water Wells Within the Facility Boundary

There are no known water wells within the facility boundary. In the event that previously unknown or abandoned water wells are discovered during development of the transfer station, the facility will provide written notification to the TCEQ Executive Director of their location within 30 days of their discovery; the facility shall also provide, within 30 days prior to construction, the TCEQ Executive Director with written certification that the well has been capped, plugged, and closed in accordance with all applicable rules and regulations of the Commission or other state agency.

10.2 Oil and Gas Wells Within the Facility Boundary

There are no known oil and gas wells within the facility boundary. In the event that previously unknown or abandoned oil and gas wells are discovered during development of the transfer station, the facility will provide written notification to the TCEQ Executive Director of their location within 30 days of their discovery. The facility will also properly cap, plug, and close the wells in accordance with all applicable rules and regulations of the RRC. A copy of the plugging report will be submitted to the TCEQ Executive Director within 30 days after the well has been plugged.

11. FLOODPLAIN AND WETLANDS STATEMENT

11.1 Floodplains

11.1.1 Introduction and Purpose

Pursuant to 30 TAC §330.61(m)(1), this section provides data on floodplains. This section also discusses how the facility will be in compliance with the applicable provisions of the floodplain location restriction in 30 TAC §330.547 as they pertain to transfer stations.

11.1.2 FEMA Map

With respect to mapped floodplains, the site and vicinity are part of FEMA Flood Insurance Rate Map (FIRM) Numbers 48453C0460K (January 6, 2016) and 48453C0480J (August 18, 2014). The latter FIRM covers the location of the proposed transfer station facility. This area is identified by FEMA as an “area of minimal flood hazard,” and there are no mapped 100-year floodplains or floodways on or near the site. West of the site, more than 5,000 feet away from the proposed transfer station area, the valley of Walnut Creek includes 100-year floodplains and floodways. The FEMA-mapped 100-year flood elevations along Walnut Creek at the point closest to the site are approximately 531 feet above sea level (ft, MSL). Northeast of the site, more than 1,700 feet away from the transfer station registration boundary, is the 100-year floodplain of Decker Creek. The FEMA-mapped 100-year flood elevations along Decker Creek at the point closest to the site are approximately at elevation 601.5 ft, MSL. In contrast, the proposed transfer station area is near a topographic high (drainage divide on a ridge), approximately at elevation 630 ft, MSL.

A Floodplain Map, using the FEMA FIRMs as base maps, is provided in Appendix I/IIA. As shown on the map and as discussed above, the proposed transfer station facility will not be in or near a 100-year floodplain.

11.1.3 City of Austin Updated (Interim) 100-Year Floodplain

To assess another source of potentially-relevant floodplain delineation information, the City of Austin’s “FloodPro” map viewer tool was used to check whether the proposed transfer station facility is affected (i.e., in a City-delineated 100-year floodplain). The FloodPro mapping tool (<http://www.ATXfloodpro.com>) presents an interim 100-year floodplain based on the current 500-year floodplain, as an interim means of assessing the effects of larger storm intensities than previously thought for a given flood frequency (i.e., as presented in the National Weather Service’s 2018 “Atlas 14” rainfall study).

The FloodPro map viewer tool allows a search by address, and interactive viewing of mapped floodplain areas. Using FloodPro, the information presented above based on the FEMA FIRMs was confirmed. The only difference is that the 100-year flood elevations in Walnut Creek over 5,000 feet away from the transfer station facility are a few feet (at most) higher on the City of Austin interim maps. From this, the transfer station will be situated on land that is more than 90 feet higher in elevation than the potential flood levels of Walnut Creek. The FloodPro map viewer also shows that the 100-year flood elevations in Decker Creek, over 1,700 feet away from the transfer station facility, are approximately equal to those on the FEMA FIRMs, indicating the transfer station will be situated on land that is more than 18 feet higher in elevation than the potential flood levels of Decker Creek. Clearly, the proposed transfer station facility will not be impacted by a 100-year flood from either of the two nearest creeks and their associated 100-year floodplains/floodways.

11.2 Wetlands

As required by 30 TAC §330.61(m)(2), a wetlands determination under applicable federal, state, and local laws was made by a qualified Geosyntec ecologist for the proposed transfer station facility and adjacent areas that will be developed to support transfer station operations .

In September 2019, Geosyntec’s ecologist performed a general determination of “Waters of the US” (including wetlands). The wetlands determination consisted of a pre-field inspection desktop study, followed by a field inspection of the site. It is noted that Geosyntec’s 2019 study focused on the proposed transfer station facility area that will be developed and potentially disturbed as part of the transfer station operations. The existing landfill areas west of the transfer station site were beyond the scope of Geosyntec’s study because a wetlands study was previously conducted for the landfill permit application, the existing landfill is operating in accordance with MSW-249D (found to be in compliance with wetlands location restrictions), and the transfer station will not be located within any landfill footprint (nor will adjacent stormwater conveyances be affected).

Geosyntec’s 2019 wetlands study findings presented in their environmental site assessment report are provided in Appendix I/II-I. In Geosyntec’s best professional judgment, there do not appear to be any wetlands or other jurisdictional water bodies (e.g., streams) within the limits of disturbance of the proposed transfer station area. Accordingly, the demonstrations required by paragraphs (1) – (5) of 30 TAC §330.553(b) are not required.

12. PROTECTION OF ENDANGERED SPECIES

With respect to endangered and/or threatened species, this facility, and operation of this facility, must meet 30 TAC §330.551(a), which requires that a facility and the operation of a facility shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species.

Pursuant to 30 TAC §330.61(n) and §330.551, a site-specific endangered and threatened species assessment was conducted in September 2019 by a Geosyntec ecologist. The assessment included a review of state and federal reference information and a field survey for threatened or endangered species and their habitats at the proposed transfer station facility and adjacent areas that will be developed to support transfer station operations.

Geosyntec's site-specific field survey was conducted to check for listed species or suitable habitats for listed species. Geosyntec concluded that suitable habitat does not occur for any federally-listed species that could potentially occur within the County (i.e., Travis County) and that there is no critical habitat occurring for any federally listed species within the project area. Further, with respect to state-listed endangered or threatened species, no state-listed species were observed in the study area during the investigations or have been documented in the vicinity. Geosyntec's 2019 study findings are provided in Appendix I/II.

In summary, Geosyntec's findings are that ongoing facility development and operation is not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species.

It is noted that Geosyntec's 2019 study focused on the proposed transfer station facility area that will be developed and potentially disturbed as part of the transfer station operations. The existing landfill areas west of the transfer station site were beyond the scope of Geosyntec's study because threatened/endangered species assessments were previously conducted for the landfill permit application with findings that landfill development and operation are not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species, and the existing landfill is operating in accordance with MSW-249D (found to be in compliance with endangered species location restrictions). As mentioned, the transfer station will not be located within any landfill footprint.

13. TEXAS HISTORICAL COMMISSION REVIEW

As part of the previous landfill permitting activities, culminating with the current (now approved) Permit MSW-249D, the landfill facility has been evaluated for compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. THC performed their review for the landfill facility, and the State Historic Preservation Officer (SHPO) issued a “no effect” finding (project may proceed).

For this proposed transfer station registration application, coordination with THC has been performed to inform them of this project, and to confirm the understanding that the portion of the property proposed for the transfer station facility was covered under the previous finding, or otherwise is in compliance with the Texas Antiquities Code, and may proceed.

A copy of the THC coordination letter, which also includes backup information from the previous coordination efforts, is provided with this application as Appendix I/IIK. As shown in this appendix, THC replied to the recent coordination request for this project with a response dated October 2019 that indicated “No Significant Sites – Project May Proceed.”

14. COUNCIL OF GOVERNMENTS REVIEW REQUEST

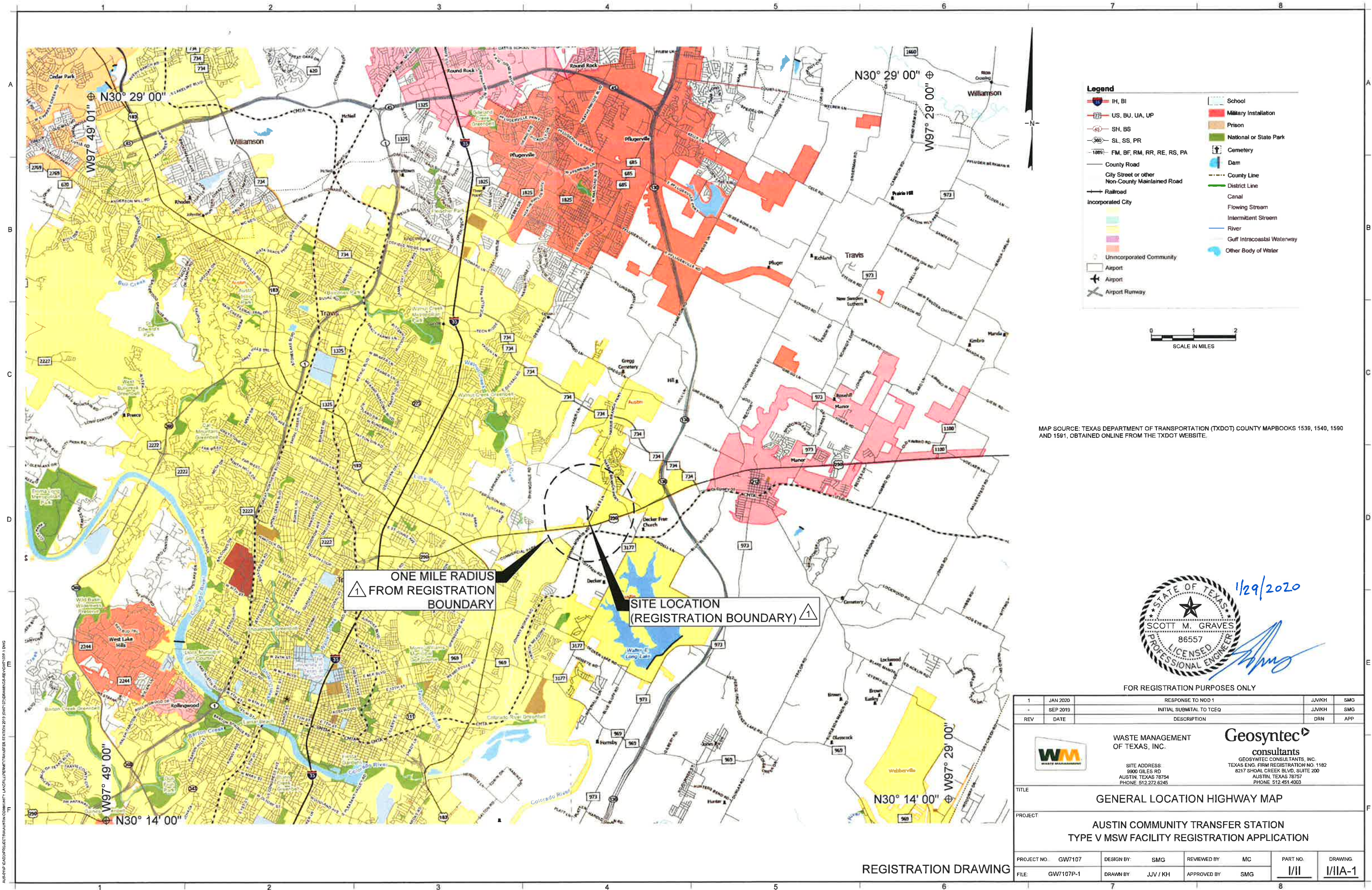
30 TAC §330.61(p) requires that the owner or operator shall submit documentation that Parts I and II of the application were submitted for review to the applicable council of governments for compliance with regional solid waste plans. The owner or operator shall also submit documentation that a review letter was requested from any local governments as appropriate for compliance with local solid waste plans. A review letter is not a prerequisite to a final determination on a permit or registration application.

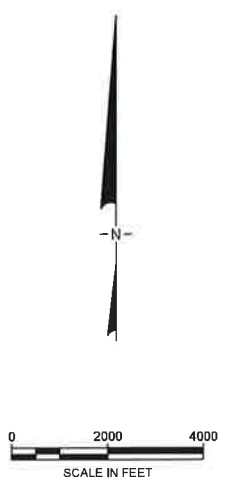
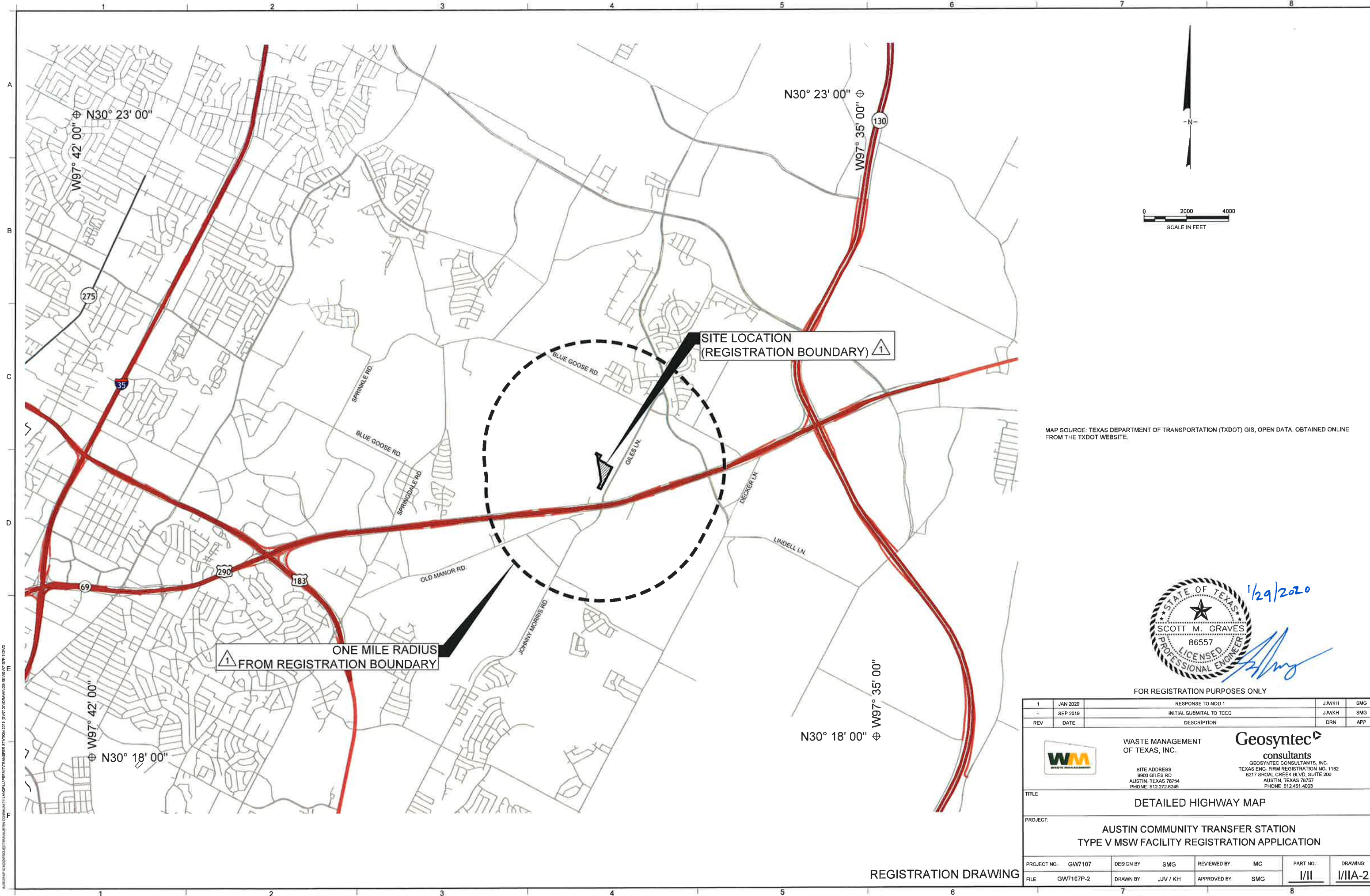
The applicable council of governments for this facility location is CAPCOG. Documentation that Parts I and II of this application were submitted to CAPCOG for their review for compliance with regional solid waste plans is provided in Appendix I/III.

APPENDIX I/IIA

GENERAL LOCATION MAPS

LIST OF DRAWINGS		
Drawing No.	Title	Drawing Date (latest revision)
I/IIA-1	General Location Highway Map	January 2020
I/IIA-2	Detailed Highway Map	January 2020
I/IIA-3	General Topographic Map	January 2020
I/IIA-4	Aerial Photograph of Surroundings	January 2020
I/IIA-5	Site Aerial Photograph	January 2020
I/IIA-6	Facility Layout Plan	January 2020
I/IIA-7	Transfer Station Area Site Plan	January 2020
I/IIA-8	General Land Use Map	January 2020
I/IIA-9	Detailed Land Use Map	January 2020
I/IIA-10	Zoning Map	January 2020
I/IIA-11	Airport Map	January 2020
I/IIA-12	Structures and Inhabitable Buildings Map	January 2020
I/IIA-13	Water Wells Map	January 2020
I/IIA-14	Oil and Gas Wells Map	January 2020
I/IIA-15	Floodplain Map	January 2020







MAP SOURCE: TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) GIS, OPEN DATA, OBTAINED ONLINE FROM THE TXDOT WEBSITE.



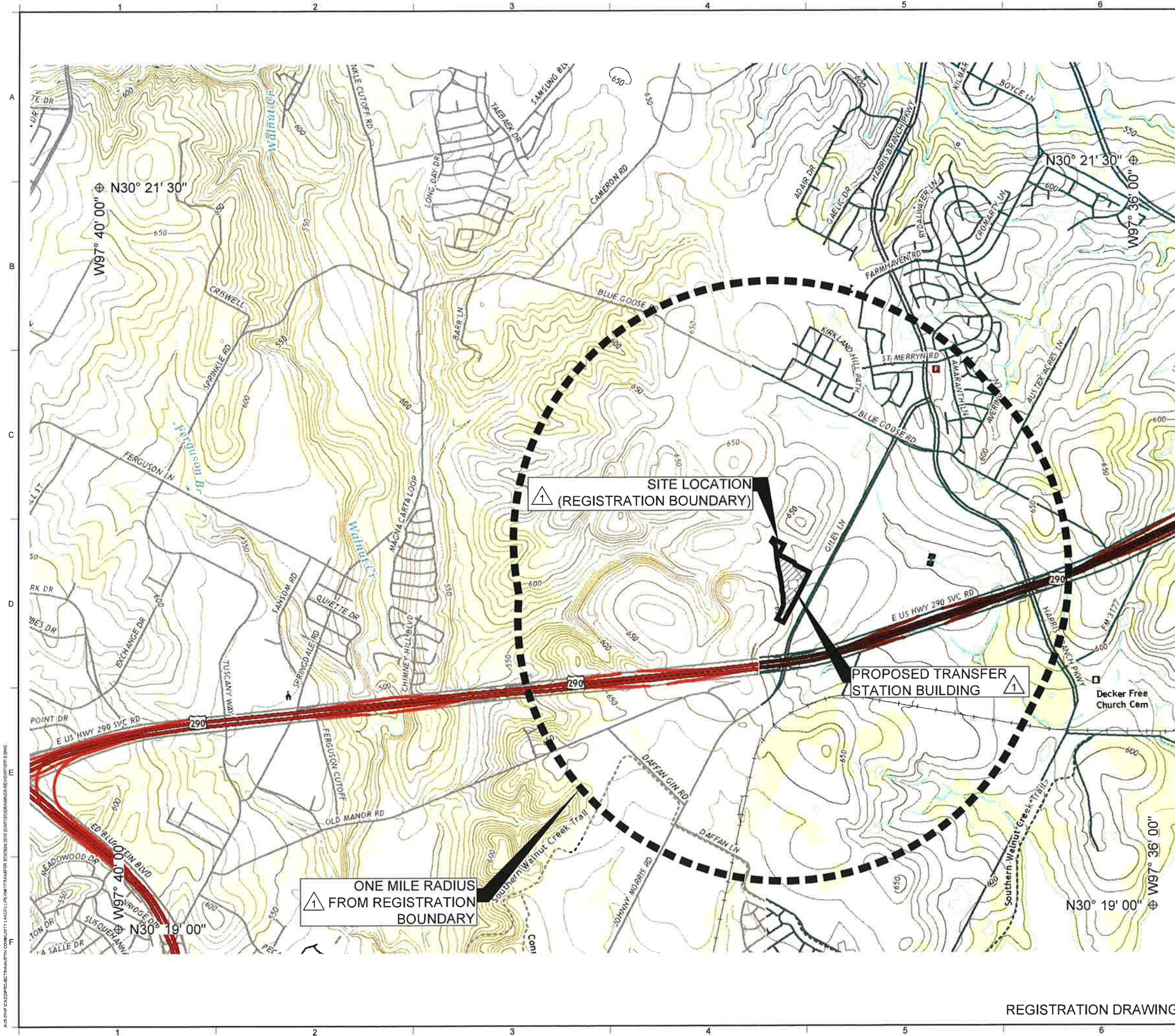
1/29/2020

[Signature]

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JV/KH	SMG			
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JV/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
<div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div></div><div><div><div>Geosyntec consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div></div><div>SITE ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245</div></div></div>							
TITLE							
DETAILED HIGHWAY MAP							
PROJECT:							
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY:	MC	PART NO.	DRAWING:
FILE	GW7107P-2	DRAWN BY	JJV / KH	APPROVED BY:	SMG	I/II	I/IIA-2

REGISTRATION DRAWING




ROAD CLASSIFICATION			
Interstate Route	State Route	US Route	4WD
Ramp	Local Road	US Route	State Route

NOTES:
1. MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAP OF EAST AUSTIN AND MANOR, TEXAS DATED 2013.




FOR REGISTRATION PURPOSES ONLY


1	JAN 2020	RESPONSE TO NOD 1	JW/KH	SMG			
*	SEP 2019	INITIAL SUBMITAL TO TCEQ	JW/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
		<div>WASTE MANAGEMENT OF TEXAS, INC.</div> <div><div>Geosyntec[®]</div><div>consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE 512.451.4003</div></div>					
TITLE							
GENERAL TOPOGRAPHIC MAP							
PROJECT							
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-3	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-3

REGISTRATION DRAWING



 SITE LOCATION
(REGISTRATION BOUNDARY)

PROPOSED
TRANSFER
BUILDING

 ONE MILE RADIUS
FROM REGISTRATION
BOUNDARY

REGISTRATION DRAWING

LEGEND

TRANSFER STATION REGISTRATION BOUNDARY


ONE MILE RADIUS FROM REGISTRATION BOUNDARY

NOTE:

1. IMAGE SOURCE FROM ESRI BASE MAPS DIGITAL DATA OBTAIN IN SEPTEMBER 2019.




FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1		JW/KH	SMG
*	SEP 2019	INITIAL SUBMITAL TO TCEQ		JW/KH	SMG
REV	DATE	DESCRIPTION		DRN	APP
		WASTE MANAGEMENT OF TEXAS, INC.		Geosyntec[®] consultants GEOSYNTec CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 6217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003	
TITLE		AERIAL PHOTOGRAPH OF SURROUNDINGS			
PROJECT		AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION			
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC
FILE	GW7107P-10	DRAWN BY	JJV / KH	APPROVED BY	SMG
				PART NO.	DRAWING:
				I/II	I/IIA-4

WASTE MANAGEMENT
OF TEXAS, INC.

SITE ADDRESS
9900 GILES RD
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Geosyntec 
consultants

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE 512 451.4003

AERIAL PHOTOGRAPH OF SURROUNDINGS

AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY REGISTRATION APPLICATION

PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING:
FILE	GW7107P-10	DRAWN BY	JJV / KH	APPROVED BY	SMG		



N

0

500

1000

SCALE IN FEET

LEGEND 1

TRANSFER STATION REGISTRATION BOUNDARY

EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D)
LANDFILL LIMIT OF WASTE FOOTPRINT

EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D)
PERMIT BOUNDARY

NOTE:
1. IMAGE SOURCE FROM ESRI BASE MAPS DIGITAL DATA OBTAIN IN SEPTEMBER 2019.

STATE OF TEXAS

SCOTT M. GRAVES

86557

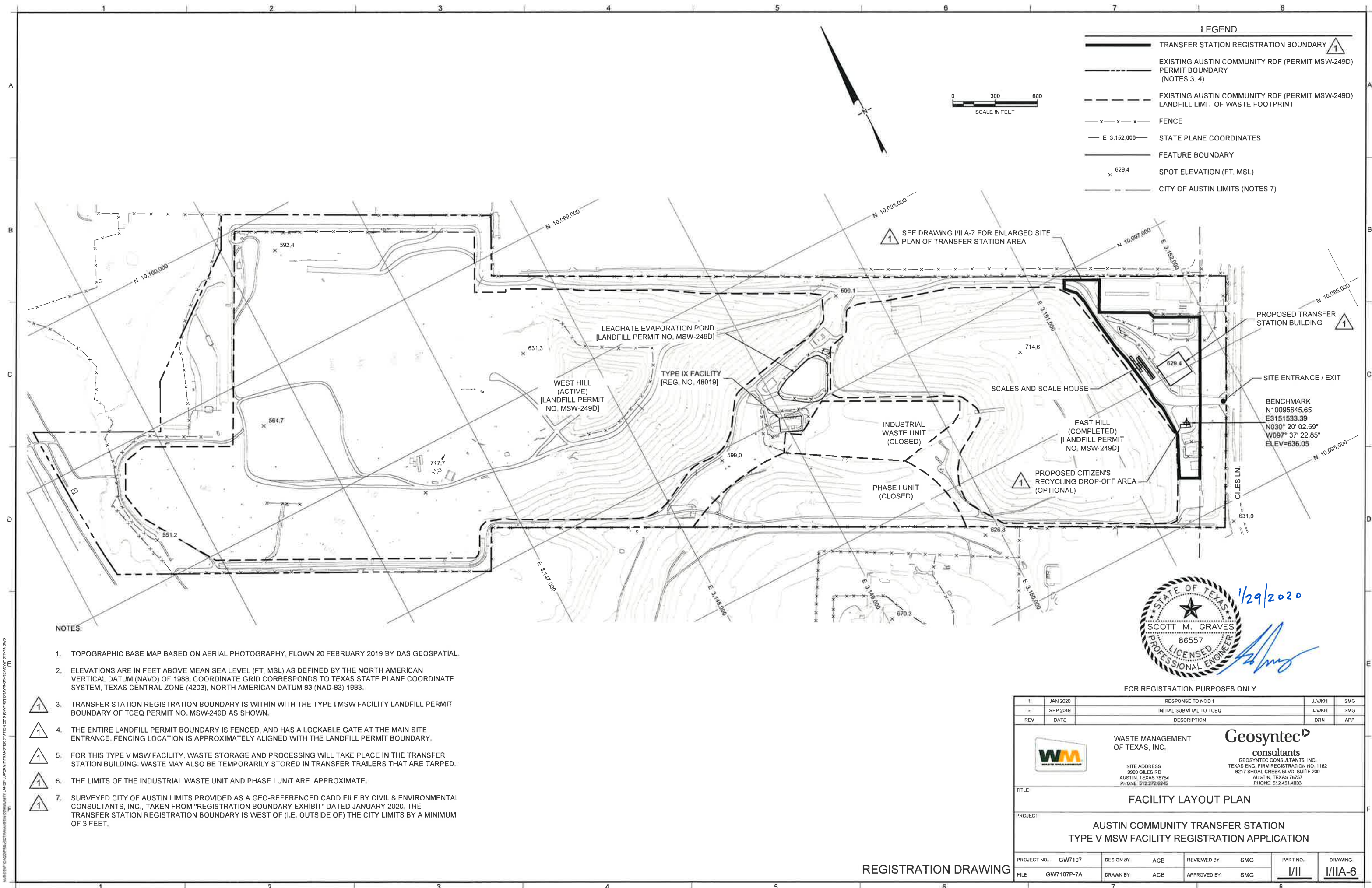
LICENSED PROFESSIONAL ENGINEER

1/29/2020

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO MOD 1	JJV/KH	SMG			
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
<div><div><div>WM</div><div>WASTE MANAGEMENT</div></div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div><div>SITE ADDRESS: 5900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.5245</div></div><div><div>Geosyntec</div><div>consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1162 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div></div></div>							
TITLE SITE AERIAL PHOTOGRAPH							
PROJECT AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-4	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-5

REGISTRATION DRAWING



- LEGEND
- TRANSFER STATION REGISTRATION BOUNDARY
 - EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D) PERMIT BOUNDARY (NOTES 3, 4)
 - EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D) LANDFILL LIMIT OF WASTE FOOTPRINT
 - FENCE
 - STATE PLANE COORDINATES
 - FEATURE BOUNDARY
 - SPOT ELEVATION (FT, MSL)
 - CITY OF AUSTIN LIMITS (NOTES 7)

NOTES:


- TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
- ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
- TRANSFER STATION REGISTRATION BOUNDARY IS WITHIN THE TYPE I MSW FACILITY LANDFILL PERMIT BOUNDARY OF TCEQ PERMIT NO. MSW-249D AS SHOWN.
- THE ENTIRE LANDFILL PERMIT BOUNDARY IS FENCED, AND HAS A LOCKABLE GATE AT THE MAIN SITE ENTRANCE. FENCING LOCATION IS APPROXIMATELY ALIGNED WITH THE LANDFILL PERMIT BOUNDARY.
- FOR THIS TYPE V MSW FACILITY, WASTE STORAGE AND PROCESSING WILL TAKE PLACE IN THE TRANSFER STATION BUILDING. WASTE MAY ALSO BE TEMPORARILY STORED IN TRANSFER TRAILERS THAT ARE TARPED.
- THE LIMITS OF THE INDUSTRIAL WASTE UNIT AND PHASE I UNIT ARE APPROXIMATE.
- SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CADD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., TAKEN FROM "REGISTRATION BOUNDARY EXHIBIT" DATED JANUARY 2020. THE TRANSFER STATION REGISTRATION BOUNDARY IS WEST OF (I.E., OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



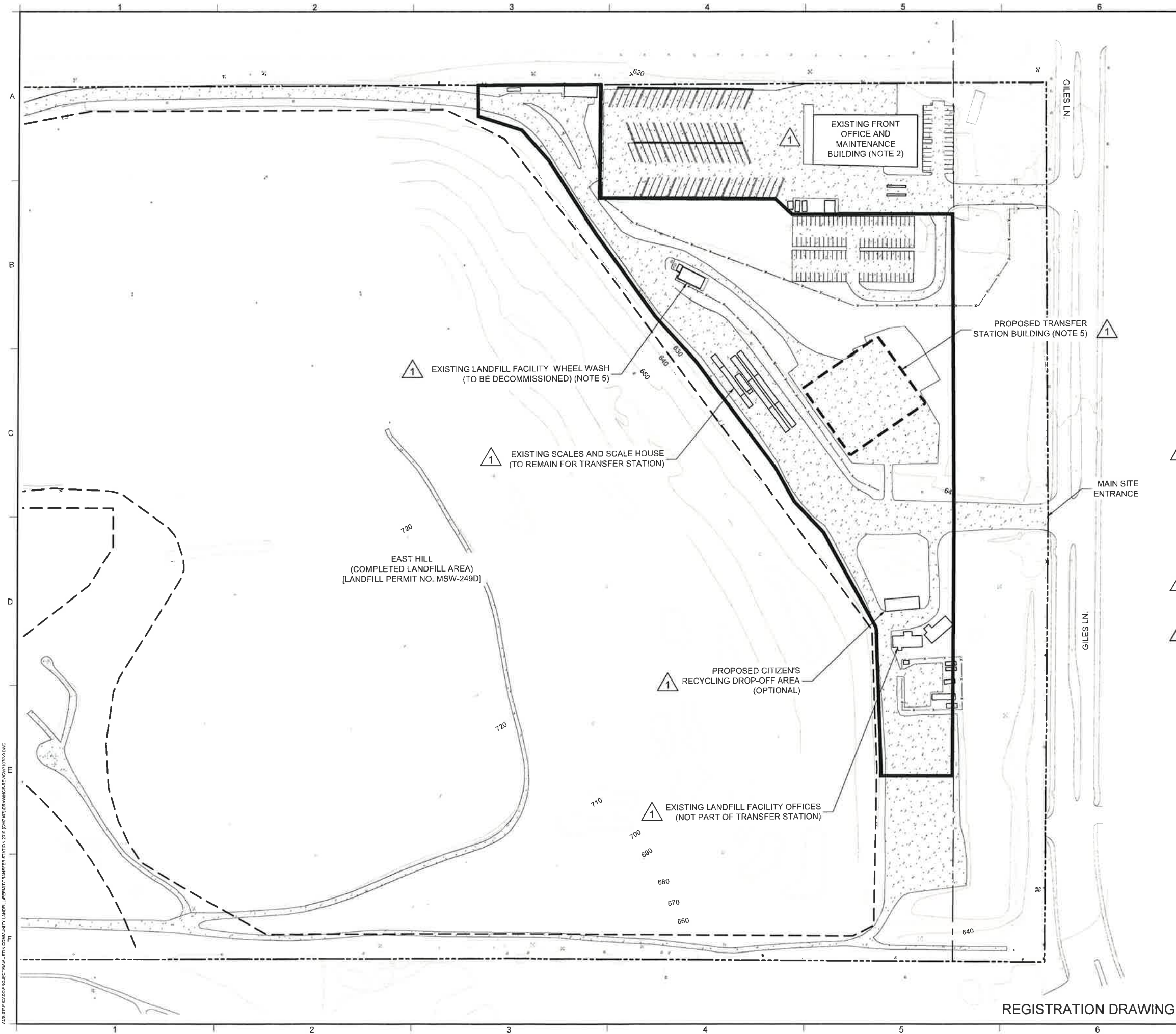
1/29/2020

Signature

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1		JJVKH	SMG
-	SEP 2019	INITIAL SUBMITAL TO TCEQ		JJVKH	SMG
REV	DATE	DESCRIPTION		DRN	APP
		WASTE MANAGEMENT OF TEXAS, INC.		<div>Geosyntec[®]</div> <div>consultants</div> <div>GEOSYNTEC CONSULTANTS, INC.</div> <div>TEXAS ENG. FIRM REGISTRATION NO. 1182</div> <div>8217 SHOAL CREEK BLVD, SUITE 200</div> <div>AUSTIN, TEXAS 78757</div> <div>PHONE: 512.451.4003</div>	
TITLE		FACILITY LAYOUT PLAN			
PROJECT					
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					
PROJECT NO.	GW7107	DESIGN BY	ACB	REVIEWED BY	SMG
FILE	GW7107P-7A	DRAWN BY	ACB	APPROVED BY	SMG
				PART NO. 1/II	
				DRAWING 1/IIA-6	

REGISTRATION DRAWING




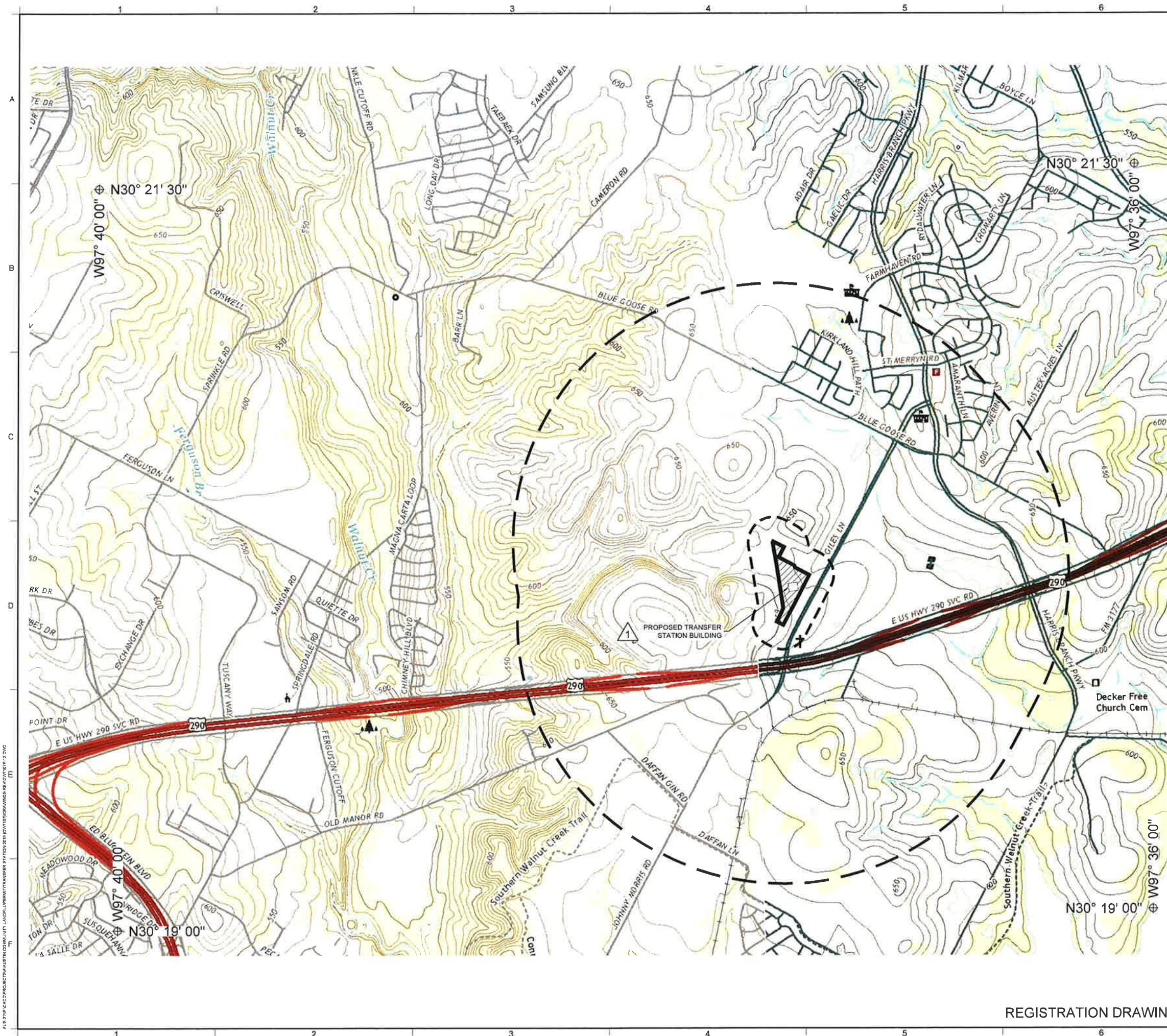
LEGEND

- TRANSFER STATION REGISTRATION BOUNDARY (NOTE 1)
- EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D) PERMIT BOUNDARY
- EXISTING LANDFILL UNIT BOUNDARY (TCEQ PERMIT NO. MSW-249D)
- EXISTING INTERIOR FENCING
- EXISTING BUILDINGS AND FEATURES (NOTES 2, 5)
- EXISTING ALL-WEATHER ROAD
- STATE PLANE COORDINATES
- CITY OF AUSTIN LIMITS (NOTE 6)

- NOTES:**
- THE TRANSFER STATION REGISTRATION BOUNDARY IS ENTIRELY WITHIN THE PERIMETER FENCING ASSOCIATED WITH THE LANDFILL PERMIT BOUNDARY.
 - BUILDINGS, PARKING, AND FEATURES IN NORTHEAST CORNER OF THE MAP OUTSIDE THE TRANSFER STATION REGISTRATION BOUNDARY ARE EXISTING, AND ARE FOR GENERAL ADMINISTRATIVE AND MAINTENANCE PURPOSES (NOT ASSOCIATED WITH TRANSFER STATION OPERATIONS).
 - TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
 - ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT. MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
 - PRIOR TO BUILDING THE TRANSFER STATION, SITE PREPARATION WILL BE PERFORMED TO DECOMMISSION (REMOVE) EXISTING INFRASTRUCTURE ITEMS IN AND AROUND THE PROPOSED TRANSFER STATION BUILDING AND ASSOCIATED ACCESS AREAS. (SEE PART III (SITE DEVELOPMENT PLAN) DRAWINGS III-1-4 AND II-1-5).
 - SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CADD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., TAKEN FROM "REGISTRATION BOUNDARY EXHIBIT" DATED JANUARY 2020. THE TRANSFER STATION REGISTRATION BOUNDARY IS WEST OF (I.E. OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



FOR REGISTRATION PURPOSES ONLY					
1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG	
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG	
REV	DATE	DESCRIPTION	DRN	APP	
<div><div><div>WASTE MANAGEMENT</div></div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div><div>SITE ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE 512.272.6245</div></div><div><div>Geosyntec</div><div>consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE 512.451.4003</div></div></div>					
TITLE TRANSFER STATION AREA SITE PLAN					
PROJECT AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					
PROJECT NO.	GW7107	DESIGN BY	ACB	REVIEWED BY	MC
FILE	GW7107P-9	DRAWN BY	ACB	APPROVED BY	SMG
				PART NO.	DRAWING
				I/II	I/IIA-7



LEGEND

- TRANSFER STATION REGISTRATION BOUNDARY
- ONE MILE RADIUS FROM REGISTRATION BOUNDARY
- 500 FOOT RADIUS FROM REGISTRATION BOUNDARY
- RELIGIOUS INSTITUTION
- SCHOOL OR DAY CARE FACILITY
- PARK (NOTE 6)
- HISTORICAL SITE (BARR MANSION)
- STREAM
- SURFACE WATER BODY

ROAD CLASSIFICATION

Interstate Route	State Route
US Route	Local Road
Ramp	4WD

Interstate Route US Route State Route

- NOTES:**
- MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAP OF EAST AUSTIN AND MANOR, TEXAS DATED 2013.
 - THERE ARE NO CEMETERIES, HOSPITALS, ARCHEOLOGICALLY SIGNIFICANT SITES, OR SITES HAVING EXCEPTIONAL AESTHETIC QUALITY WITHIN ONE MILE OF THE REGISTRATION BOUNDARY.
 - THERE ARE NO KNOWN SPRINGS WITHIN ONE MILE OF THE REGISTRATION BOUNDARY.
 - REFER TO FIGURE I/IIA-4 FOR AN AERIAL PHOTOGRAPH DEPICTING THE GENERAL CHARACTER OF AREAS ADJACENT TO THE FACILITY.
 - REFER TO THE PART I/II, NARRATIVE REPORT FOR DETAILED LAND USE AND ZONING INFORMATION. BASED ON THE INFORMATION PRESENTED IN THAT REPORT, THE CHARACTER OF THE SURROUNDINGS IS DESCRIBED BY THE FOLLOWING GENERAL LAND USES:

LAND USE	PERCENT OF TOTAL AREA WITHIN ONE MILE OF FACILITY
INDUSTRIAL	46.7
OPEN	30.3
COMMERCIAL	6.8
RECREATIONAL	6.7
RESIDENTIAL	6.5
WATER	2.0
INSTITUTIONAL	1.0
TOTAL	100



FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG
REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE: 512-272-6245

WASTE MANAGEMENT OF TEXAS, INC.

SITE ADDRESS
9900 GILES RD
AUSTIN, TEXAS 78754
PHONE: 512-272-6245

GENERAL LAND USE MAP

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY REGISTRATION APPLICATION**

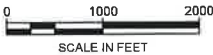
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-12	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-8

REGISTRATION DRAWING



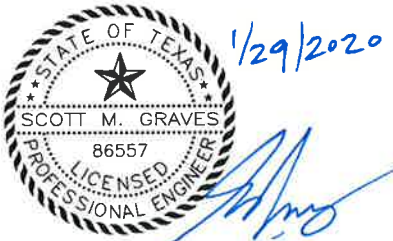
LEGEND OF LAND USE DESIGNATIONS (NOTE 1) 1

- SINGLE-FAMILY
- MOBILE HOMES
- MULTI-FAMILY
- COMMERCIAL / OFFICE
- GOLF COURSES
- MANUFACTURING / INDUSTRIAL
- LANDFILLS
- INSTITUTIONAL / EDUCATIONAL
- CEMETERY
- TRANSFER STATION REGISTRATION BOUNDARY
- PARKS / GREENBELTS
- DRAINAGE AREAS
- PRESERVES
- RETIREMENT HOUSING
- UTILITIES
- TRANSPORTATION FACILITIES
- UNDEVELOPED
- AGRICULTURAL
- ROAD RIGHT-OF-WAY




NOTES:

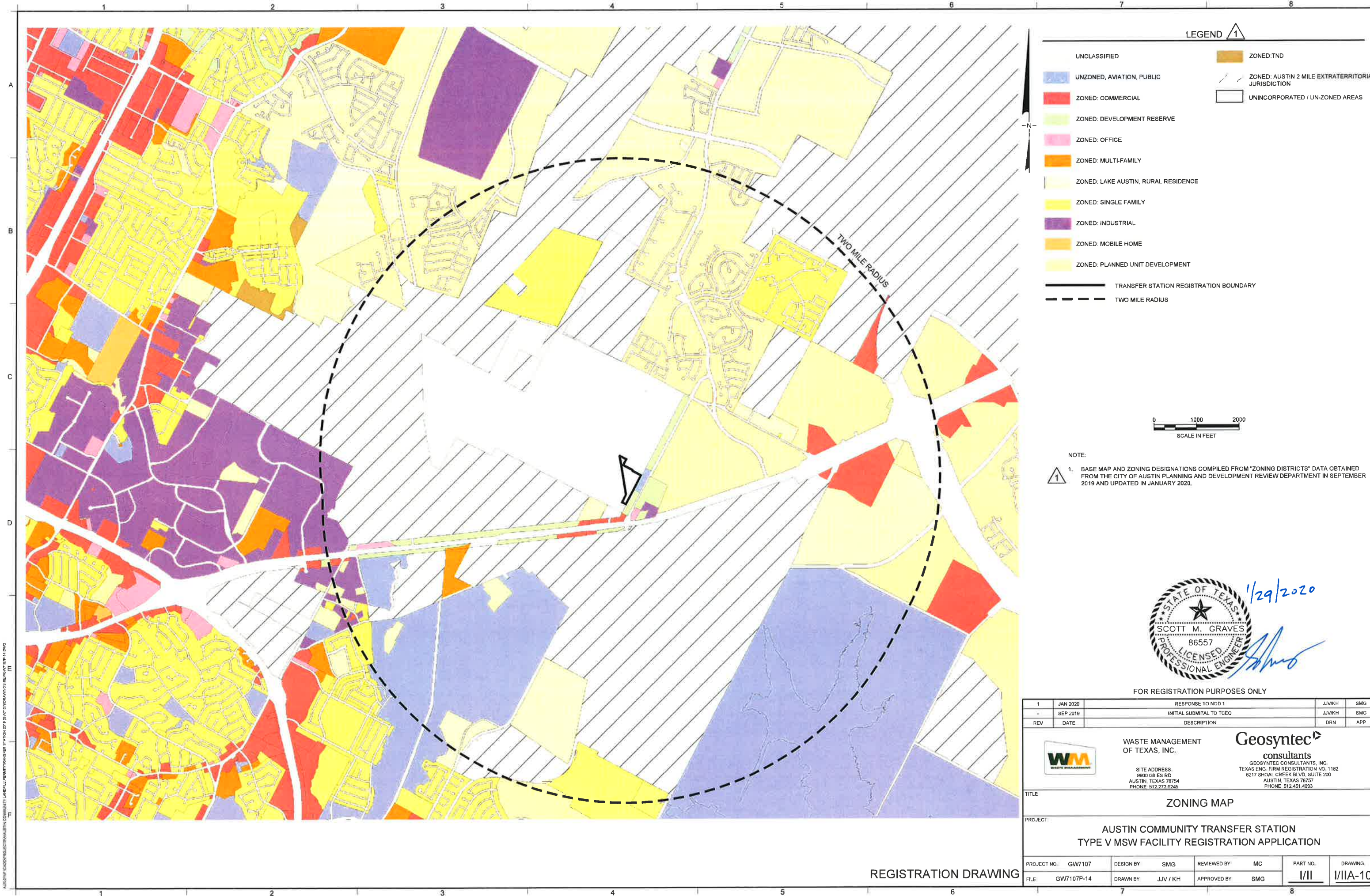
1. BASE MAP COMPILED FROM LATEST AVAILABLE (DATED 2016 AND OBTAINED IN NOVEMBER 2019) FROM THE CITY OF AUSTIN BUILDING AND DEVELOPMENT LAND DATABASE.
2. THERE ARE NO CEMETERIES OR HOSPITALS IDENTIFIED WITHIN ONE MILE OF THE REGISTRATION BOUNDARY.



FOR REGISTRATION PURPOSES ONLY

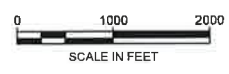
1	JAN 2020	RESPONSE TO NOD 1		JJV/KH	SMG		
+	SEP 2019	INITIAL SUBMITAL TO TCEQ		JJV/KH	SMG		
REV	DATE	DESCRIPTION		DRN	APP		
<div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div></div><div><div>SITE ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE 512 272 6245</div><div>Geosyntec consultants GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE 512.451.4003</div></div></div>							
TITLE DETAILED LAND USE MAP							
PROJECT AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-13	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-9

REGISTRATION DRAWING



LEGEND 1


- UNCLASSIFIED
- UNZONED, AVIATION, PUBLIC
- ZONED: COMMERCIAL
- ZONED: DEVELOPMENT RESERVE
- ZONED: OFFICE
- ZONED: MULTI-FAMILY
- ZONED: LAKE AUSTIN, RURAL RESIDENCE
- ZONED: SINGLE FAMILY
- ZONED: INDUSTRIAL
- ZONED: MOBILE HOME
- ZONED: PLANNED UNIT DEVELOPMENT
- ZONED: TND
- ZONED: AUSTIN 2 MILE EXTRATERRITORIAL JURISDICTION
- UNINCORPORATED / UN-ZONED AREAS
- TRANSFER STATION REGISTRATION BOUNDARY
- TWO MILE RADIUS



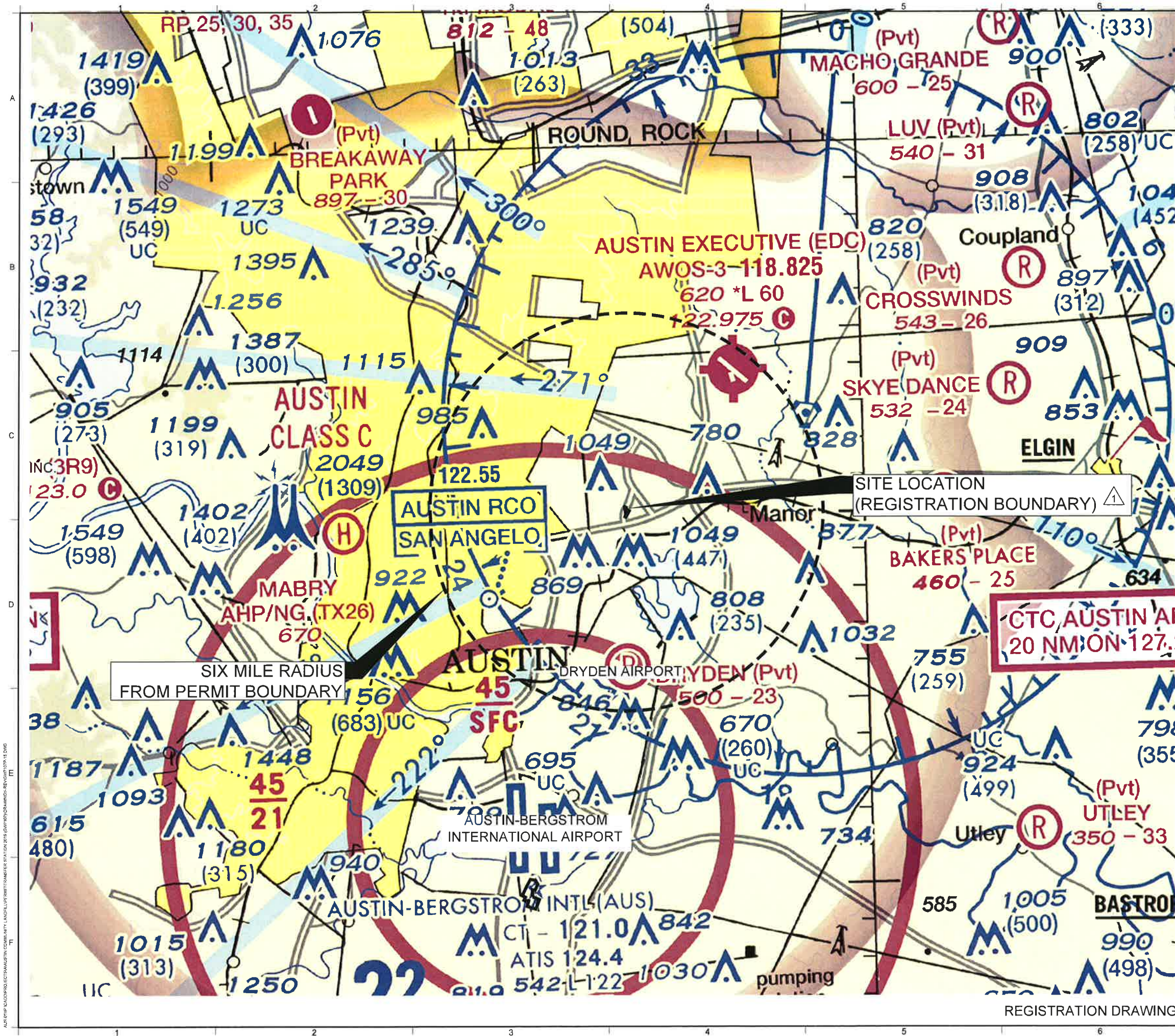
NOTE:
1. BASE MAP AND ZONING DESIGNATIONS COMPILED FROM "ZONING DISTRICTS" DATA OBTAINED FROM THE CITY OF AUSTIN PLANNING AND DEVELOPMENT REVIEW DEPARTMENT IN SEPTEMBER 2019 AND UPDATED IN JANUARY 2020.



FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NDD 1	JJV/KH	SMG			
*	SEP 2019	INITIAL SUBMITTAL TO TCEQ	JJV/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
		<div>WASTE MANAGEMENT OF TEXAS, INC.</div> <div><div>SITE ADDRESS 3900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245</div><div><div>Geosyntec[®] consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div></div></div>					
TITLE							
ZONING MAP							
PROJECT							
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-14	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-10

REGISTRATION DRAWING



AIRPORTS

- Other than hard-surfaced runways
- 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.

AIRPORT DATA

Box indicates FAR 91, Special Air Traffic Rules & Airport Traffic Patterns. Runways with Right Traffic Patterns (public use) RP * Special conditions exist - see AFD.

FSS - Flight Service Station
NO SVFR - Fixed-wing special VFR flight is prohibited.
CT - 118.3 * ATIS 123.8
285 L 72 122.95
RP 23, 34
VFR Advise 125.0
AOE - Airport of Entry

ADDITIONAL AIRPORT INFORMATION

- Private (Pvt) - Non-public use having emergency or landmark value
- Military - Other than hard-surfaced; all military airports are identified by abbreviations AFB, NAS, AAF, etc. DoD users, for complete airport information consult DoD FLIP.
- Helipad - Selected
- Unimproved
- Abandoned - paved having landmark value, 3000 ft. or greater
- Unimproved Flight Path - Selected

Services - fuel available and field landed during normal working hours depicted by use of ticks around basic airport symbol. (Normal working hours are Mon thru Fri 10:00 A.M. to 4:00 P.M.) Consult AFD for service availability at airports with hard-surfaced runways greater than 8069 ft.

★ Rotating airport beacon in operation Sunset to Sunrise

OBJECTIONABLE - Airport may adversely affect airspace use.

TOPOGRAPHIC INFORMATION

- Power Transmission Line
- Aerial Cable
- Lookout Tower 618 (Elevation Base of Tower)
- Mountain Pass 11823 (Elevation of Pass)

Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes.

OBSTRUCTIONS

- 1000 ft. and higher AGL
- Obstruction 1000 ft. AGL
- Group Obstruction
- Obstruction with high-intensity lights; may operate part-time
- Wind Turbine
- Wind Turbine Farm
- Elevation of the top above mean sea level
- Height above ground
- Under construction or reported: position and elevation unverified
- NOTICE: Guy wires may extend outward from structures.


NOTE:

1. BASE MAP IS A FEDERAL AVIATION ADMINISTRATION (FAA) SECTIONAL AERONAUTICAL CHART FOR SAN ANTONIO (83RD EDITION), OBTAINED IN SEPTEMBER 2019.

0 8000' 16000'

SCALE IN FEET



FOR REGISTRATION PURPOSES ONLY					
1	JAN 2020	RESPONSE TO NOD 1		JJV/KH	SMG
-	SEP 2019	INITIAL SUBMITAL TO TCEQ		JJV/KH	SMG
REV	DATE	DESCRIPTION		DRN	APP
		WASTE MANAGEMENT OF TEXAS, INC.		Geosyntec [®] consultants GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1192 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4023	
		SITE ADDRESS 5900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245			
TITLE AIRPORT MAP					
PROJECT AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					
PROJECT NO. GW7107		DESIGN BY SMG	REVIEWED BY MC	PART NO.	DRAWING
FILE GW7107P-15		DRAWN BY JJV / KH	APPROVED BY SMG	<u>I/II</u>	<u>I/IIA-11</u>



LEGEND

TRANSFER STATION REGISTRATION BOUNDARY
500 FOOT RADIUS FROM REGISTRATION BOUNDARY
STRUCTURE AND INHABITABLE BUILDINGS (NOTE 3)
STREAM
SURFACE WATER BODY

ROAD CLASSIFICATION

Interstate Route
US Route
Ramp
State Route
Local Road
4WD

Interstate Route
US Route
State Route

SCALE IN FEET
0 500 1000

WIND ROSE
WIND SPEED (KNOTS)
CALM WINDS 9.18%

1-3 4-6 7-10 11-16 17-21 +21

NOTES:

- MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAP OF MANOR AND AUSTIN EAST, TEXAS DATED 2016.
- WIND ROSE SOURCE: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FOR AUSTIN AREA, HISTORICAL PERIOD ANNUAL 1984-1992. WIND ROSE REPRESENTS AVERAGE PERCENT OF TIME WIND BLOWS FROM EACH OF THE 16 COMPASS POINTS SHOWN.
- BUILDINGS AND INHABITABLE STRUCTURES SHOWN ON THIS DRAWING WERE OBTAINED FROM CITY OF AUSTIN ONLINE SERVICES DATA AND VERIFIED BY GEOSYNTEC USING AERIAL PHOTOGRAPHY.

STATE OF TEXAS
SCOTT M. GRAVES
86557
LICENSED PROFESSIONAL ENGINEER

1/29/2020

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG
2	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG
REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE 512.451.4003

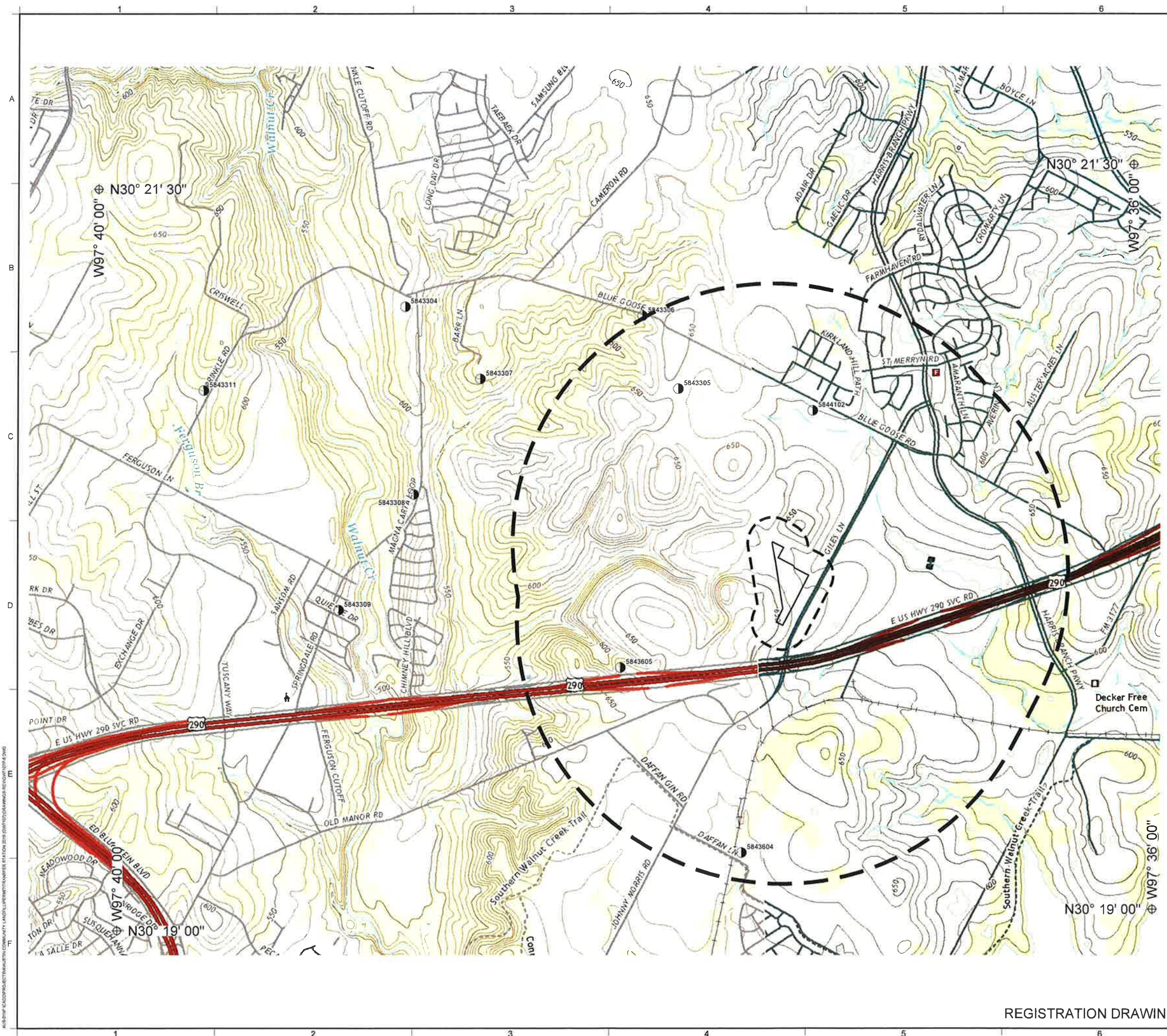
WASTE MANAGEMENT OF TEXAS, INC.
SITE ADDRESS
9900 GILES RD
AUSTIN, TEXAS 78754
PHONE 512.272.6245

TITLE
STRUCTURES AND INHABITABLE BUILDINGS MAP

PROJECT
AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY REGISTRATION APPLICATION

PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.		DRAWING	
FILE	GW7107P-5	DRAWN BY	JJV / KH	APPROVED BY	SMG		I/II	I/IIA-12	

REGISTRATION DRAWING



LEGEND

TRANSFER STATION REGISTRATION BOUNDARY

500 FOOT RADIUS FROM REGISTRATION BOUNDARY

ONE MILE RADIUS FROM REGISTRATION BOUNDARY

EXISTING WATER WELL (NOTE 2)

STREAM

SURFACE WATER BODY

Interstate Route

US Route

Ramp

Interstate Route

US Route

State Route

State Route

Local Road

4WD

0

1000

2000

SCALE IN FEET

SUMMARY OF WATER WELLS WITHIN 500-FT OF SITE AND ON-SITE					
WELL ID (NOTE 3)	APPROXIMATE DISTANCE FROM REGISTRATION BOUNDARY (FT)	INSTALL DATE	DEPTH	WELL USE	FORMATION
NONE ON-SITE OR WITHIN 500 FEET					

- NOTES:
- MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAP OF EAST AUSTIN AND MANOR, TEXAS DATED 2013.
 - WATER WELL LOCATIONS AND IDENTIFICATION NUMBERS AREA BASED ON A SEARCH OF PUBLICLY- AVAILABLE STATE WELL RECORDS OF THE TEXAS WATER DEVELOPMENT BOARD (TWDB) AND THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) HISTORICAL DATABASE.

STATE OF TEXAS



SCOTT M. GRAVES

86557

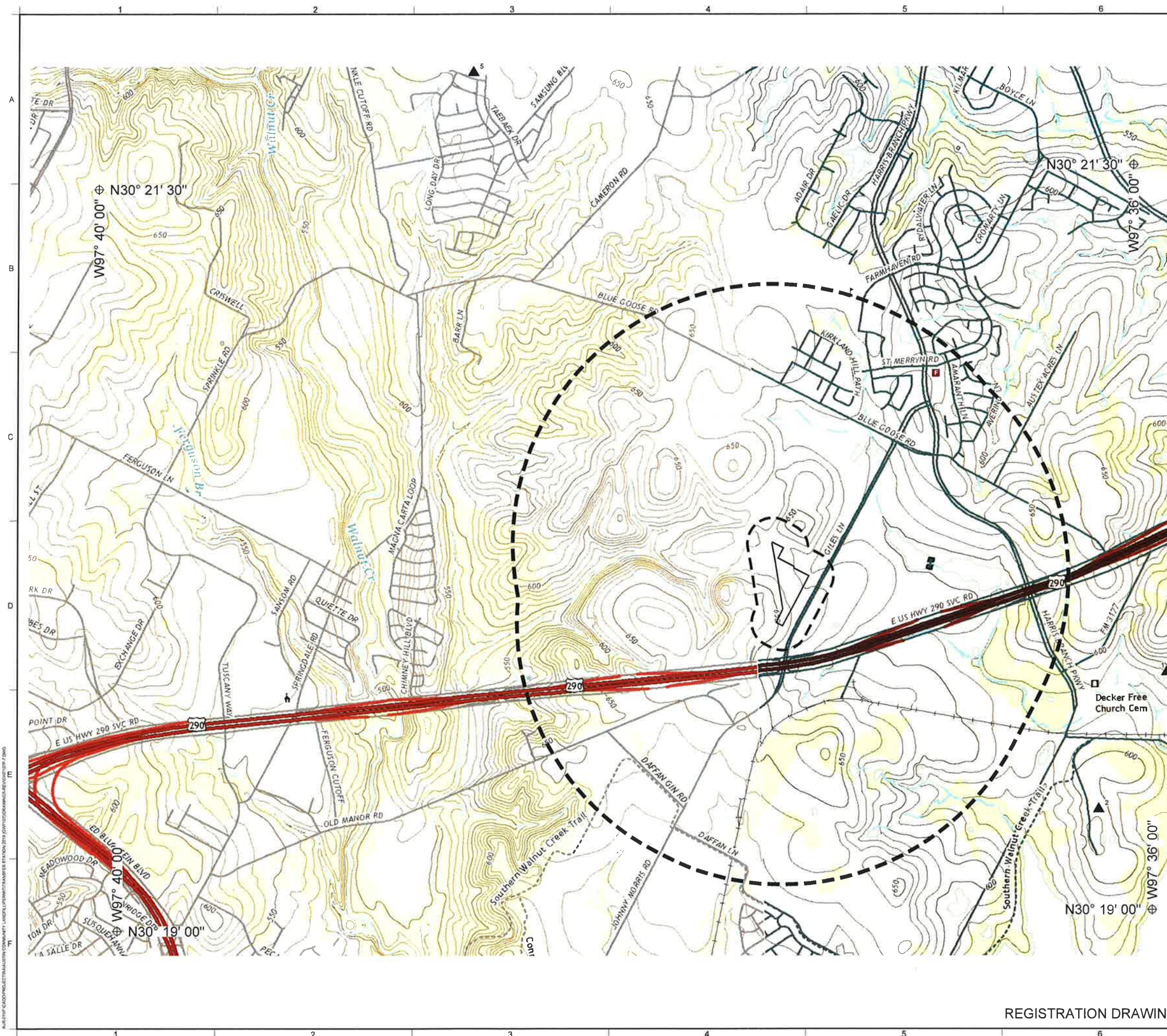
LICENSED PROFESSIONAL ENGINEER

1/29/2020

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG																																				
2	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG																																				
REV	DATE	DESCRIPTION	DRN	APP																																				
<div><div><div></div><div>WASTE MANAGEMENT OF TEXAS, INC.</div></div><div><div><div></div><div>Geosyntec consultants</div><div>GEOSYNTEC CONSULTANTS, INC.</div><div>TEXAS ENG. FIRM REGISTRATION NO. 1182</div><div>8217 SHOAL CREEK BLVD, SUITE 200</div><div>AUSTIN, TEXAS 78757</div><div>PHONE 512.451.4003</div></div></div></div> <tr><td colspan="5">TITLE</td></tr> <tr><td colspan="5">WATER WELLS MAP</td></tr> <tr><td colspan="5">PROJECT</td></tr> <tr><td colspan="5">AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION</td></tr> <tr><td>PROJECT NO.</td><td>GW7107</td><td>DESIGN BY</td><td>SMG</td><td>REVIEWED BY</td><td>MC</td><td>PART NO.</td><td>DRAWING</td></tr> <tr><td>FILE</td><td>GW7107P-6</td><td>DRAWN BY</td><td>JJV / KH</td><td>APPROVED BY</td><td>SMG</td><td>I/II</td><td>I/IIA-13</td></tr>					TITLE					WATER WELLS MAP					PROJECT					AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING	FILE	GW7107P-6	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-13
TITLE																																								
WATER WELLS MAP																																								
PROJECT																																								
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION																																								
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING																																	
FILE	GW7107P-6	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-13																																	

REGISTRATION DRAWING



LEGEND 1

TRANSFER STATION REGISTRATION BOUNDARY

ONE MILE RADIUS FROM REGISTRATION BOUNDARY

500 FOOT RADIUS FROM REGISTRATION BOUNDARY

EXISTING OIL AND GAS WELL (NOTE 2)

STREAM

SURFACE WATER BODY

ROAD CLASSIFICATION

Interstate Route

US Route

Ramp

State Route

Local Road

4WD

Interstate Route

US Route

State Route

0

1000

2000

SCALE IN FEET

- NOTES:
1. MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAP OF EAST AUSTIN AND MANOR, TEXAS DATED 2013.
 2. OIL AND GAS WELL OBTAINED FROM AVAILABLE RECORDS MADE PUBLIC BY THE RAILROAD COMMISSION OF TEXAS.
 3. THERE ARE NO OIL OR GAS WELLS ON-SITE OR WITHIN 500-FT OF THE PERMIT BOUNDARY.

SUMMARY OF OIL OR GAS WELLS WITHIN 500-FT OF SITE OR ON-SITE					
MAP ID	OWNER/OPERATOR	TOTAL DEPTH (FT)	DATE DRILLED	DATE PLUGGED	TYPE
NONE ON-SITE OR WITHIN 500-FT					



FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG
2	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG
REV	DATE	DESCRIPTION	DRN	APP

WASTE MANAGEMENT OF TEXAS, INC.

Geosyntec consultants
GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE 512.272.6245

TITLE

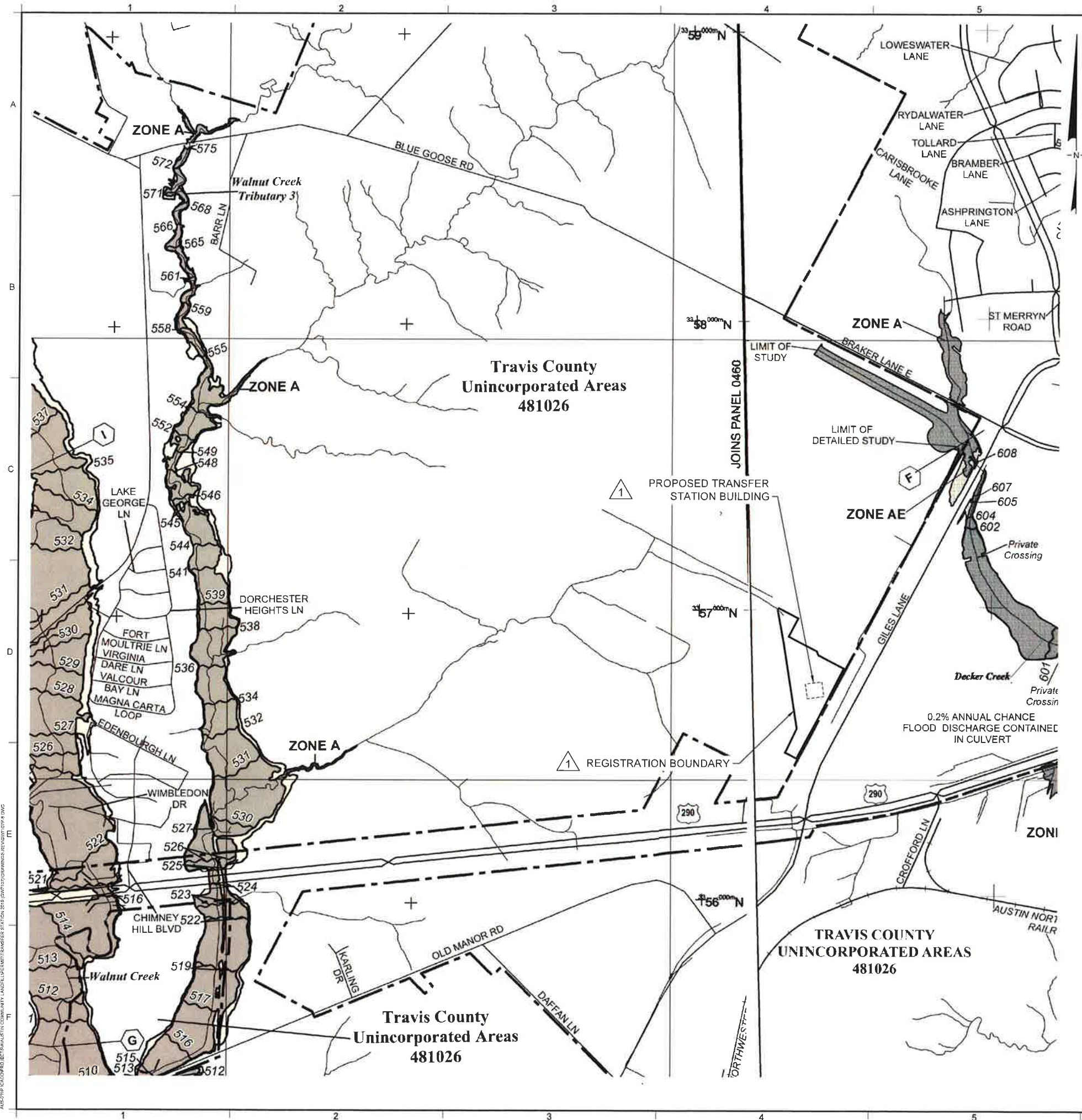
OIL AND GAS WELLS MAP

PROJECT

AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY REGISTRATION APPLICATION

PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-7	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-14

REGISTRATION DRAWING



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 Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently derelict. 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.
OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas

1% Annual Chance Floodplain Boundary
0.2% Annual Chance Floodplain Boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
Base Flood Elevation line and value, elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

Cross section line
Transect line
Culvert
Bridge
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83): Western Hemisphere
5000-foot Texas State Plane Central zone (FIPS Zone 4203), Lambert Conformal Conic projection
1000-meter Universal Transverse Mercator grid values, zone 14
Bench mark (see explanation in Notes to Users section of this FIRM panel)
River Station
MAP REPOSITORIES
Refer to Map Repositories list on Map Index
EFFECTIVE DATE OF COUNTY-WIDE FLOOD INSURANCE RATE MAP
June 15, 1993
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
June 5, 1997; January 19, 2000; April 15, 2002; September 26, 2008; August 18, 2014; January 6, 2015 - to update corporate limits; to change Special Flood Hazard Areas; to reflect updated topographic information; to incorporate previously issued Letters of Map Revision

FIRM
FLOOD INSURANCE RATE MAP
TRAVIS COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 460 OF 730
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY: AUSTIN CITY OF TRAVIS COUNTY
NUMBER: 48453C0460K
DATE: 2016
SHEET: 4

Notice to Users: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 48453C0460K
MAP REVISED JANUARY 6, 2016
Federal Emergency Management Agency

FIRM
FLOOD INSURANCE RATE MAP
TRAVIS COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 480 OF 730
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)


CONTAINS:
COMMUNITY: AUSTIN CITY OF TRAVIS COUNTY
NUMBER: 48453C0480J
DATE: 2014
SHEET: 4

Notice to Users: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 48453C0480J
MAP REVISED AUGUST 18, 2014
Federal Emergency Management Agency

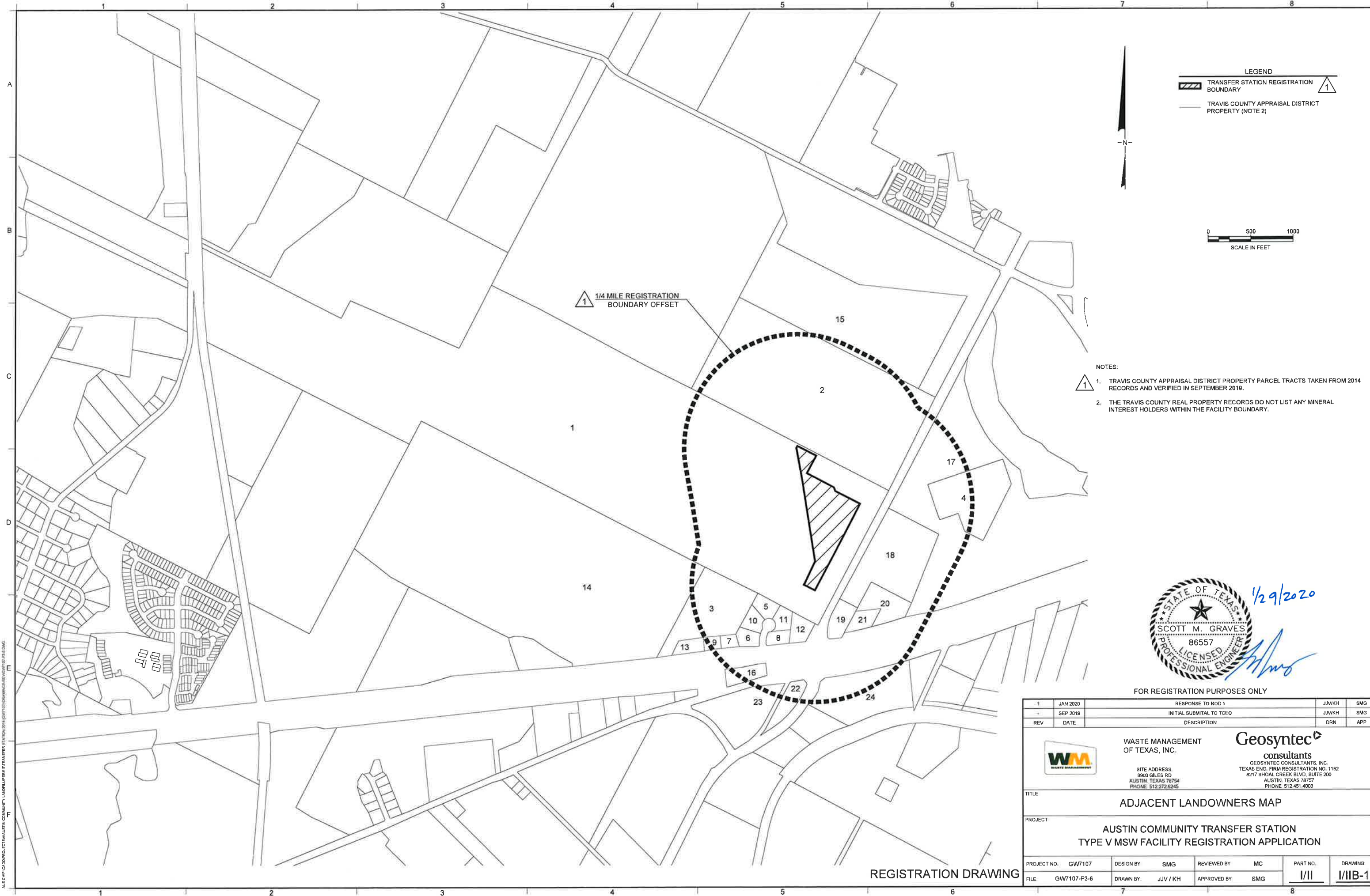
STATE OF TEXAS
SCOTT M. GRAVES
86557
LICENSED PROFESSIONAL ENGINEER
1/29/2020

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO MOD 1	JJ/VKH	SMG			
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJ/VKH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
		<div>WASTE MANAGEMENT OF TEXAS, INC.</div> <div>SITE ADDRESS: 9900 GILES RD AUSTIN, TEXAS 78754 PHONE 512.272.6245</div>					
		<div>Geosyntec consultants</div> <div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE 512.451.4003</div>					
TITLE							
FLOODPLAIN MAP							
PROJECT							
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING
FILE	GW7107P-8	DRAWN BY	JJV / KH	APPROVED BY	SMG	I/II	I/IIA-15

REGISTRATION DRAWING

APPENDIX I/IIB
ADJACENT LAND OWNERSHIP MAP AND LIST



LEGEND

TRANSFER STATION REGISTRATION BOUNDARY

TRAVIS COUNTY APPRAISAL DISTRICT PROPERTY (NOTE 2)


1/4 MILE REGISTRATION BOUNDARY OFFSET

- NOTES:
1. TRAVIS COUNTY APPRAISAL DISTRICT PROPERTY PARCEL TRACTS TAKEN FROM 2014 RECORDS AND VERIFIED IN SEPTEMBER 2018.
2. THE TRAVIS COUNTY REAL PROPERTY RECORDS DO NOT LIST ANY MINERAL INTEREST HOLDERS WITHIN THE FACILITY BOUNDARY.

1/29/2020

Signature

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG			
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
<div><div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div><div>SITE ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245</div></div></div><div><div>Geosyntec[®]</div><div>consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div></div></div>							
TITLE							
ADJACENT LANDOWNERS MAP							
PROJECT							
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	SMG	REVIEWED BY	MC	PART NO.	DRAWING:
FILE	GW7107-P3-6	DRAWN BY:	JJV / KH	APPROVED BY:	SMG	I/II	I/II B-1

REGISTRATION DRAWING

AUSTIN COMMUNITY TRANSFER STATION 2018 (CONTINUED) DRAWING NO. 101-01-001

LANDOWNER'S LIST

- | | | | |
|----|---|----|---|
| 1 | WASTE MANAGEMENT
OF TEXAS INC
PO BOX 1450
CHICAGO, IL 60690-1450 | 2 | BFI WASTE SYSTEMS OF NORTH
AMERICA
18500 N ALLIED WAY
PHEONIX, AZ 85054-6164 |
| 3 | CITY OF AUSTIN
P.O. BOX 1088
AUSTIN, TX 78761-1088 | 4 | APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 |
| 5 | TRABEV REAL ESTATE LTD
1500 SCENIC DR APT 105
AUSTIN, TX 78703-2049 | 6 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 7 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 | 8 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 9 | YESCAS HUMBERTO
6802 SPRUCE GUM LN
AUSTIN, TX 78744-4946 | 10 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 |
| 11 | BAHRAMI BEHZAD
P.O. BOX 82653
AUSTIN, TX 78708-2653 | 12 | 7-ELEVEN INC
P.O. BOX 711
DALLAS, TX 75221-0711 |

LANDOWNER'S LIST

- | | |
|---|--|
| 13 SUAREZ HUMBERTO
11717 PILLION PL
MANOR, TX 68653-3767 | 14 ROBERTSON FAMILY
290 PROPERTY LLC
3506 BONNIE RD
AUSTIN, TX 78703-2604 |
| 15 BFI WASTE SYSTEMS OF NORTH
AMERICA
18500 N ALLIED WAY
PHEONIX, AZ 85054-6164 | 16 CENTRAL TEXAS REGIONAL
MOBILTY AUTHORITY
515 CONGRESS AVE STE 2230
AUSTIN, TX 78701-3506 |
| 17 APPLIED MATERIALS INC
RUSSELL MANGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 | 18 APPLIED MATERIALS INC
RUSSELL MANGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 |
| 19 FIRST CHURCH OF GOD OF
AUSTIN INC
PO BOX 141005
AUSTIN, TX 78714-1005 | 20 APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 |
| 21 APPLIED MATERIALS INC
RUSSELL MAGINEL
9700 E HIGHWAY 290
AUSTIN, TX 78724-1102 | 22 C L THOMAS HOLDINGS LLC
PO BOX 1876
VICTORIA, TX 77902-1876 |
| 23 LAKE P FRANK TRUSTEES &
LIPCO REAL ESTATE LLC
P.O. BOX 2134
AUSTIN, TX 78768-2134 | 24 WALLACE H DALTON
9505 JOHNNY MORRIS RD
AUSTIN, TX 78724-1527 |

LANDOWNER'S LIST

ON-SITE MINERAL INTEREST OWNER'S LIST

Mineral interest ownership under the facility was investigated by reviewing the real property appraisal records available at the Travis County Appraisal District (District) and contacting the District regarding their records. As of September 2019, mineral interest ownership information is not listed in the real property appraisal records of the District.

APPENDIX I/IIC

**REGISTRATION BOUNDARY, PROPERTY OWNERSHIP, AND
EASEMENT INFORMATION**

LEGAL DESCRIPTION OF PROPERTY AND FACILITY REGISTRATION BOUNDARY

Contents:

- **Legal Description of Facility Registration Boundary - Metes and Bounds Description**
- **Survey Drawing of Registration Boundary**
- **Plat Record**

REGISTRATION BOUNDARY

BEING AN 10.807 ACRE TRACT OF LAND, LOCATED IN THE LUCAS MUNOS SURVEY 55, ABSTRACT 513, TRAVIS COUNTY, TEXAS, AND BEING A PORTION OF THE REMAINDER OF A CALLED 108.34 ACRE TRACT CONVEYED TO AUSTIN COMMUNITY DISPOSAL COMPANY, INC., PER DEED RECORDED IN VOLUME 5918, PAGE 1229 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS (D.R.T.C.T.), AND A PORTION OF THE REMAINDER OF A CALLED 108.272 ACRE TRACT CONVEYED TO TEXAS WASTE SYSTEMS, INC., PER DEED RECORDED IN VOLUME 7579, PAGE 500, D.R.T.C.T.; SAID 17.001 ACRES OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a ½-inch iron rod found at the easterly common corner of said 108.34 acre tract and of Kaye/Mark Subdivision No. 1, per plat recorded Book 86, Page 65B, of the Plat Records of Travis County, Texas; said point being on the westerly right-of-way line of Giles Lane as widened per deed to Travis County recorded in Volume 7743, Page 456, D.R.T.C.T., and by deed to the City of Austin recorded in Volume 10899, Page 103, D.R.T.C.T.;

THENCE, along the common line of said 108.34 acre tract and of said Kaye/Mark Subdivision No. 1, N62°09'16"W, a distance of 190.44 feet to a to a calculated point, being approximately 2.50 feet westerly of the City of Austin boundary line;

THENCE, over and across said 108.34 acre tract, N27°47'30"E, a distance of 377.96 feet to a calculated point, for the **POINT OF BEGINNING** hereof;

THENCE, over and across said 108.34 acre tract and said 108.272 acre tract, the following twelve (12) courses and distances:

1. N62°30'35"W, a distance of 145.16 feet to a calculated point;
2. N28°34'09"E, a distance of 17.22 feet to a calculated point;
3. N25°24'36"E, a distance of 286.41 feet to a calculated point;
4. N01°36'21"W, a distance of 222.94 feet to a calculated point;
5. N15°56'43"W, a distance of 86.31 feet to a calculated point;
6. N01°40'09"W, a distance of 78.97 feet to a calculated point;
7. N09°09'01"W, a distance of 272.11 feet to a calculated point;
8. N14°35'31"W, a distance of 123.41 feet to a calculated point;
9. N08°11'11"W, a distance of 209.68 feet to a calculated point;
10. N05°13'50"W, a distance of 178.02 feet to a calculated point;

10.807 ACRES
WASTE MANAGEMENT OF TEXAS, INC.
TRAVIS COUNTY, TX

PROJECT NO.:196-411
JANUARY 28, 2020

11. N13°59'47"W, a distance of 83.10 feet to a calculated point;
12. N44°57'09"W, a distance of 94.10 feet to a calculated point;
13. N27°18'58" E, a distance of 63.44 feet to a calculated point on the common line of said 108.272 acre tract and a called 73.20 acre tract conveyed to BFI Waste Systems of North America, L.L.C., per deed recorded in Document No. 2017004390, Official Public Records of Travis County, Texas;


THENCE, along the common line of said 108.272 acre tract and said 73.20 acre tract, S62°47'33"E, a distance of 250.16 feet to a calculated point;

THENCE, over and across the said 108.272 acre tract and said 108.34 acre tract the following six (6) courses and distances:

1. S27°49'22"W, a distance of 232.21 feet to a calculated point;
2. S62°12'48"E, a distance of 358.30 feet to a calculated point;
3. S19°52'42"E, a distance of 45.96 feet to a calculated point;
4. S62°32'36"E, a distance of 327.56 feet to a calculated point approximately 2.50 feet westerly of the City of Austin boundary line;
5. S27°05'16"W, a distance of 629.63 feet, parallel to and 2.50 feet westerly of the City of Austin boundary line to a calculated point;
6. S27°47'30"W, a distance of 520.78 feet, continuing parallel to and 2.50 feet westerly of the City of Austin boundary line, to the **POINT OF BEGINNING**, and containing 10.807 acres of land, more or less.

BEARING BASIS: TEXAS COORDINATE SYSTEM, NAD 83(2012A), CENTRAL ZONE, REFERENCING THE LEICA SMARTNET REFERENCE NETWORK.

Witness my hand and seal this 28th day of January, 2020.


Frank William Funk, R.P.L.S. 6803
KBGE, part of Civil & Environmental Consultants, Inc.
3711 S. MoPac Expressway, Building 1, Suite 550
Austin, TX 78746
Texas Registered Surveying Firm No. 10194419





SUBMITTAL & REVISION RECORD

NO	DATE	DESCRIPTION
1		

LEGEND:

●	IRON ROD FOUND
△	CALCULATED POINT
P.O.C.	POINT OF COMMENCING
P.O.B.	POINT OF BEGINNING
D.R.T.C.T.	DEED RECORDS OF TRAVIS COUNTY, TEXAS
P.R.T.C.T.	PLAT RECORDS OF TRAVIS COUNTY, TEXAS
O.P.R.T.C.T.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS

LINE TABLE		
LINE #	BEARING	DISTANCE
L1	N62°09'16"W	190.44'
L2	N27°47'30"E	377.96'
L3	N62°30'35"W	145.16'
L4	N28°34'09"E	17.22'
L5	N25°24'36"E	286.41'
L6	N01°36'21"W	222.94'
L7	N15°56'43"W	86.31'
L8	N01°40'09"W	78.97'
L9	N09°09'01"W	272.11'
L10	N14°35'31"W	123.41'
L11	N08°11'11"W	209.68'

LINE TABLE		
LINE #	BEARING	DISTANCE
L12	N05°13'50"W	178.02'
L13	N13°59'47"W	83.10'
L14	N44°57'09"W	94.10'
L15	N27°18'58"E	63.44'
L16	S62°47'33"E	250.16'
L17	S27°49'22"W	232.21'
L18	S62°12'48"E	358.30'
L19	S19°52'42"E	45.96'
L20	S62°32'36"E	327.56'
L21	S27°05'16"W	629.63'
L22	S27°47'30"W	520.78'

BFI WASTE SYSTEMS OF NORTH AMERICA, L.L.C.
73.20 ACRES
DOC. NO. 2017004390
O.P.R.T.C.T.

TEXAS WASTE SYSTEMS, INC.
REMAINDER OF 108.272 ACRES
VOL. 7579, PG. 500
D.R.T.C.T.

CITY OF AUSTIN LIMITS
ORDINANCE NO. 20190919-147

CITY OF AUSTIN
STREET DEED
VOL. 10899, PG. 103
D.R.T.C.T.

R.O.W. DEDICATION
VOL. 7743, PG. 456
D.R.T.C.T.

CENTERLINE OF GILES LANE
PER VOL. 7743, PG. 456
D.R.T.C.T.

GILES LANE
(R.O.W. VARIES)

R.O.W. DEDICATION
VOL. 7743, PG. 456
D.R.T.C.T.

CITY OF AUSTIN
STREET DEED
VOL. 10899, PG. 103
D.R.T.C.T.

P.O.B.

P.O.C.

KAYE/MARK SUBDIVISION NO. 1
BOOK 86, PG. 65B
P.R.T.C.T.

CITY OF AUSTIN
13.159 ACRES
VOL. 5097, PG. 1635
D.R.T.C.T.

LUCAS MUNOS SURVEY 55,
ABSTRACT 513

AUSTIN COMMUNITY
DISPOSAL COMPANY, INC.
REMAINDER OF 108.34 ACRES
VOL. 5918, PG. 1229
D.R.T.C.T.

SCALE IN FEET



CEC
Civil & Environmental Consultants, Inc.
3711 South MoPac Expressway · Building 1, Suite 550 · Austin, TX 78746
Ph: 512.439.0400 · Fax: 512.329.0096
Texas Registered Surveying Firm 10194419 www.cecinc.com Texas Registered Engineering Firm F-38

REGISTRATION BOUNDARY EXHIBIT

Situate In

TRAVIS COUNTY, TEXAS

Made For

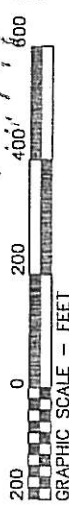
WASTE MANAGEMENT OF TEXAS, INC.
AUSTIN COMMUNITY TRANSFER STATION
GILES LANE

DATE:	JAN. 2020	SCALE:	1"=300'	DRAWING NO.:	1
DRAWN BY:	CEC	CHECKED BY:	JM	PROJECT NO:	196-411
APPROVED BY:	FWF				

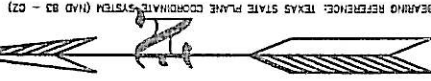
Application Page No. I/IIC-4
Submitted September 2019; Revised January 2020

WASTE MANAGEMENT

DATE PREPARED:
NOVEMBER 23, 2002



Course	Bearing	Distance
L115	N 01°57'38" W	57.22'
L116	N 01°57'38" W	57.22'



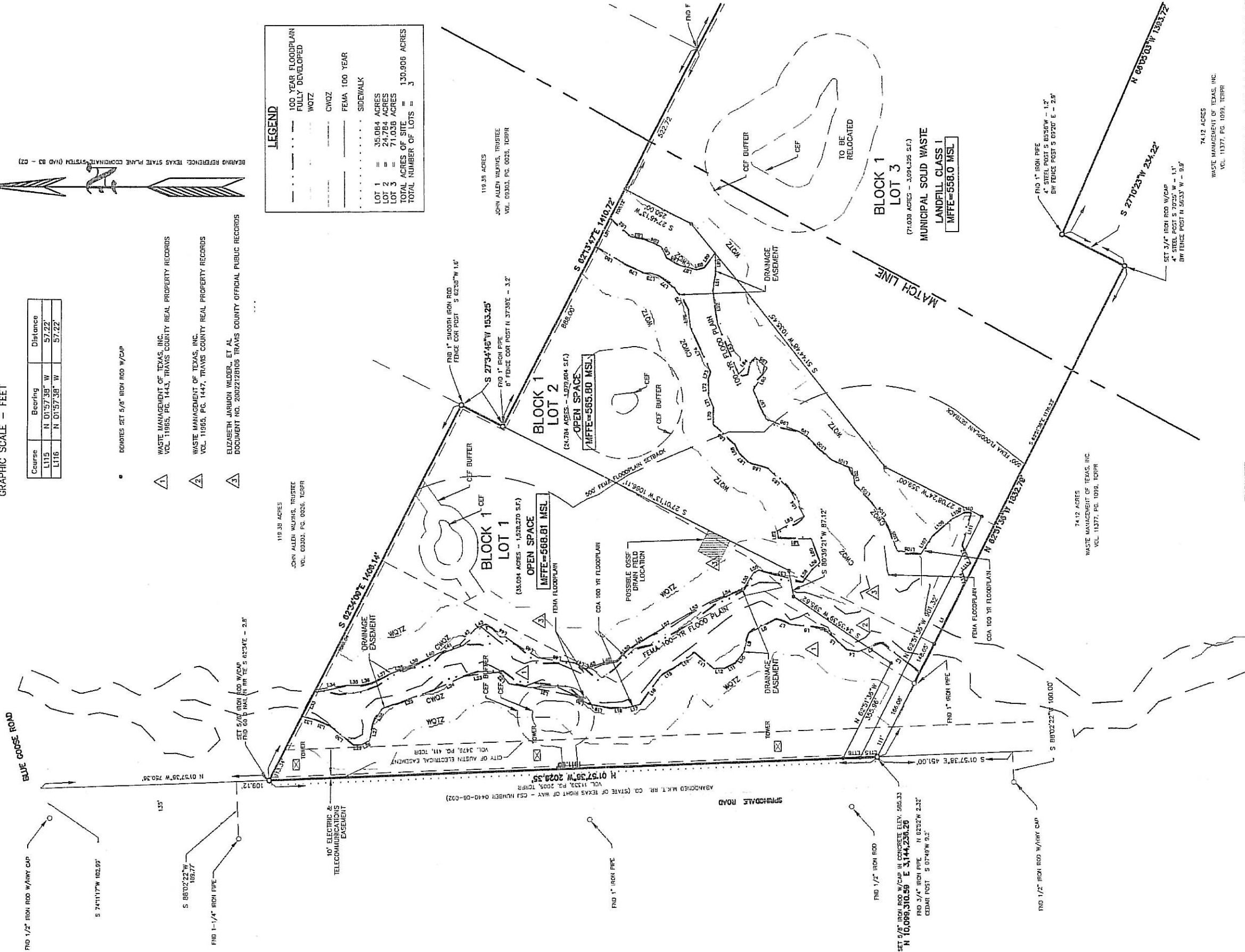
• DENOTES SET 5/8" IRON ROD W/CAP

△ WASTE MANAGEMENT OF TEXAS, INC.
VOL. 11955, PG. 1443, TRAVIS COUNTY REAL PROPERTY RECORDS

△ WASTE MANAGEMENT OF TEXAS, INC.
VOL. 11955, PG. 1447, TRAVIS COUNTY REAL PROPERTY RECORDS

△ ELIZABETH JARROUH WILDER, ET AL
DOCUMENT NO. 20022128105 TRAVIS COUNTY OFFICIAL PUBLIC RECORDS

LEGEND	
---	100 YEAR FLOODPLAIN
---	FULLY DEVELOPED
---	WOTZ
---	CVQZ
---	FEMA 100 YEAR
---	SIDEWALK
LOT 1	= 35.084 ACRES
LOT 2	= 24.284 ACRES
LOT 3	= 71.038 ACRES
TOTAL ACRES OF SITE	= 130.406 ACRES
TOTAL NUMBER OF LOTS	= 3



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ENGINEER
TurnerCollieBraden Inc.
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(512) 472-4519 FAX (512) 472-7519

WASTE MANAGEMENT
SHEET 1 OF 4
CASE # C8J-02-0235.0A

74.12 ACRES
WASTE MANAGEMENT OF TEXAS, INC.
VOL. 11377, PG. 1093, TCDPR

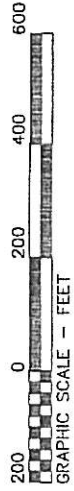
74.12 ACRES
WASTE MANAGEMENT OF TEXAS, INC.
VOL. 11377, PG. 1099, TCDPR

119.38 ACRES
JOHN ALLEN WILKINS, TRUSTEE
VOL. 09303, PG. 0025, TCDPR

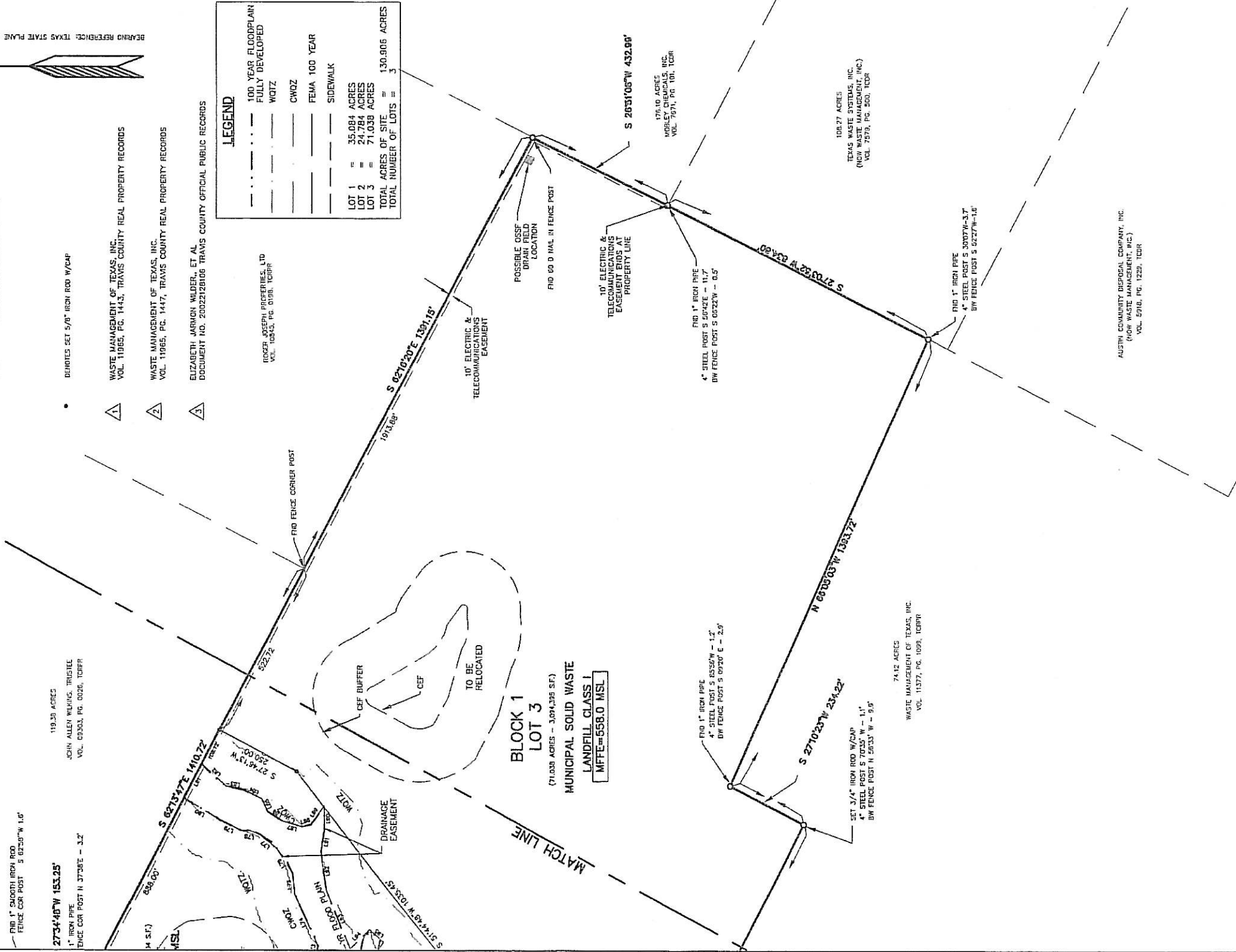
119.38 ACRES
JOHN ALLEN WILKINS, TRUSTEE
VOL. 09303, PG. 0025, TCDPR

WASTE MANAGEMENT

DATE PREPARED:
NOVEMBER 23, 2002



Course	Bearing	Distance
L115	N 01°57'36" W	57.22'
L116	N 01°57'38" W	57.22'



LEGEND	
---	100 YEAR FLOODPLAIN FULLY DEVELOPED
---	WQFZ
---	CWQZ
---	FEMA 100 YEAR
---	SIDEWALK
---	LOT 1 = 35.084 ACRES
---	LOT 2 = 24.784 ACRES
---	LOT 3 = 71.038 ACRES
---	TOTAL ACRES OF SITE = 130.906 ACRES
---	TOTAL NUMBER OF LOTS = 3

ROGER JOSEPH PROPERTIES, LTD
VOL. 10840, PG. 009, T08P

ELIZABETH JARON WILDER, ET AL
DOCUMENT NO. 20022128106 TRAVIS COUNTY OFFICIAL PUBLIC RECORDS

WASTE MANAGEMENT OF TEXAS, INC.
VOL. 10665, PG. 1443, TRAVIS COUNTY REAL PROPERTY RECORDS

WASTE MANAGEMENT OF TEXAS, INC.
VOL. 10665, PG. 1447, TRAVIS COUNTY REAL PROPERTY RECORDS

119.38 ACRES
JOHN ALLEN WELING TRUSTEE
VOL. 03303, PG. 0026, T08P

27°34'48" W 153.25'
1" IRON PIPE
FENCE COR POST N 37°08' E - 3.2'

DEVIOTES SET 5/8" IRON ROD W/CAP

WASTE MANAGEMENT OF TEXAS, INC.
VOL. 10665, PG. 1443, TRAVIS COUNTY REAL PROPERTY RECORDS

WASTE MANAGEMENT OF TEXAS, INC.
VOL. 10665, PG. 1447, TRAVIS COUNTY REAL PROPERTY RECORDS

ELIZABETH JARON WILDER, ET AL
DOCUMENT NO. 20022128106 TRAVIS COUNTY OFFICIAL PUBLIC RECORDS

ROGER JOSEPH PROPERTIES, LTD
VOL. 10840, PG. 009, T08P

FID FENCE CORNER POST

CEP BUFFER

TO BE RELOCATED

DRAINAGE EASEMENT

10' ELECTRIC & TELECOMMUNICATIONS EASEMENT

POSSIBLE OSSF DRAIN FIELD LOCATION

FID 60 D HAIL IN FENCE POST

10' ELECTRIC & TELECOMMUNICATIONS EASEMENT ENDS AT PROPERTY LINE

176.10 ACRES
MOSELEY CHEMICALS, INC.
VOL. 7691, PG. 101, T08P

4" STEEL POST S 05°42' E - 11.7'
BW FENCE POST S 05°22' W - 0.5'

4" STEEL POST S 05°42' E - 11.7'
BW FENCE POST S 05°22' W - 0.5'

4" STEEL POST S 05°42' E - 11.7'
BW FENCE POST S 05°22' W - 0.5'

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BW FENCE POST S 05°22' W - 0.5'

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BW FENCE POST S 05°22' W - 0.5'

4" STEEL POST S 05°42' E - 11.7'
BW FENCE POST S 05°22' W - 0.5'

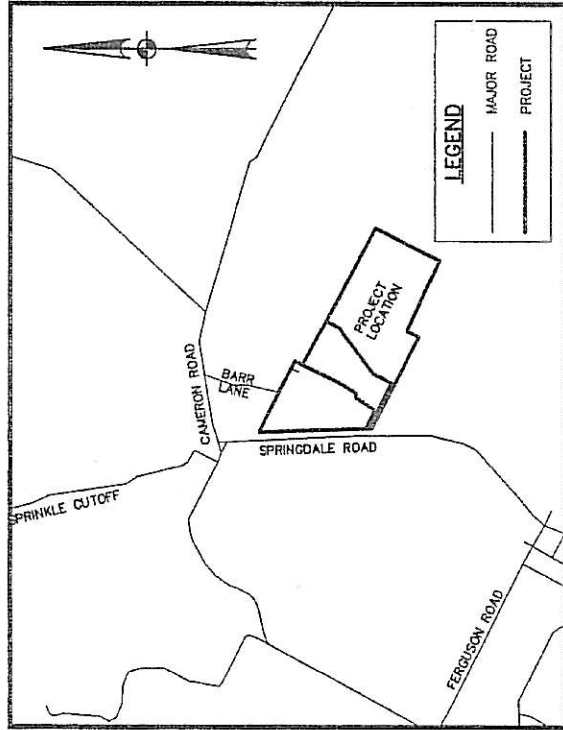
Course	Bearing	Distance
L1	N 62°51'56" W	340.28'
L2	N 37°38'13" E	161.23'
L3	N 19°37'49" W	83.94'
L4	N 10°45'36" E	39.03'
L5	N 42°48'03" E	105.67'
L6	N 06°54'54" E	111.78'
L7	N 21°43'18" E	40.98'
L8	N 26°27'30" W	104.23'
L9	N 74°23'45" W	67.54'
L10	N 53°27'02" W	44.36'
L11	N 27°15'19" W	39.86'
L12	N 01°10'09" W	35.56'
L13	N 41°20'17" E	84.03'
L14	N 37°13'52" W	90.90'
L15	N 30°01'52" W	46.36'
L16	N 53°27'02" W	119.08'
L17	N 14°22'26" W	44.38'
L18	N 01°10'09" W	59.84'
L19	N 11°02'43" E	73.19'
L20	N 30°46'44" E	55.53'
L21	N 10°47'22" E	219.73'
L22	N 49°38'35" E	50.18'
L23	N 07°21'29" W	127.80'
L24	N 24°01'37" W	110.67'
L25	N 19°51'55" W	183.79'
L26	N 57°28'42" W	53.17'
L27	N 77°14'31" W	63.03'
L28	N 27°15'19" W	30.80'
L29	N 01°10'09" W	25.12'
L30	N 38°39'15" E	104.27'
L31	N 23°24'47" E	47.53'
L32	N 14°12'05" E	49.03'
L33	S 62°34'09" E	101.08'
L34	N 07°24'47" W	104.92'
L35	N 00°11'16" W	44.82'
L36	S 12°35'21" E	40.86'
L37	S 25°20'41" E	73.59'
L38	N 18°59'46" W	48.14'
L39	N 24°11'14" W	67.75'
L40	N 25°50'36" W	51.71'
L41	S 22°45'22" E	76.42'
L42	N 44°37'53" W	76.42'
L43	S 24°18'37" E	35.80'
L44	N 34°50'26" E	121.94'
L45	N 31°41'11" E	84.86'
L46	N 08°20'11" E	119.67'
L47	N 29°33'04" E	44.14'
L48	N 18°49'00" E	56.81'
L49	N 11°08'55" W	52.51'
L50	S 41°02'29" E	69.60'
L51	N 31°05'14" W	68.76'
L52	N 29°27'16" W	141.76'
L53	N 26°57'35" W	100.43'
L54	N 20°53'17" W	108.97'
L55	N 57°34'56" W	61.44'
L56	S 27°15'19" E	20.42'
L57	S 15°12'56" W	151.46'
L58	S 52°49'50" E	51.06'
L59	S 41°47'56" E	36.84'
L60	N 70°07'15" E	81.69'
L61	N 01°11'53" E	111.10'
L62	N 83°11'17" E	24.88'
L63	S 20°20'14" E	101.99'
L64	N 61°35'20" E	100.49'
L65	N 42°22'57" E	103.14'
L66	N 17°58'42" E	66.17'
L67	N 43°51'16" E	39.18'
L68	N 64°07'11" E	35.72'
L69	N 44°28'03" E	97.80'
L70	S 85°16'04" E	56.47'
L71	N 67°55'17" E	42.39'
L72	S 89°59'57" E	54.57'
L73	S 71°06'17" E	24.40'
L74	N 65°43'44" E	161.59'
L75	N 84°00'40" E	60.23'
L76	N 57°10'10" E	83.19'
L77	N 37°31'24" E	66.25'
L78	N 10°10'11" E	51.42'
L79	N 25°32'49" E	68.14'
L80	N 30°20'29" E	109.12'
L81	S 62°13'46" E	109.12'
L82	S 42°17'30" W	92.72'
L83	S 11°02'47" W	50.00'
L84	S 25°52'49" W	60.14'
L85	S 64°07'11" W	39.37'
L86	S 31°14'01" W	49.70'
L87	S 16°08'25" W	57.98'
L88	S 15°05'37" E	26.67'
L89	S 53°47'03" E	63.45'
L90	S 89°36'31" W	70.02'
L91	N 80°19'13" W	50.38'
L92	S 62°03'10" W	110.23'
L93	S 67°42'04" W	179.29'
L94	S 45°03'36" E	78.22'
L95	S 42°14'10" W	53.62'
L96	N 56°54'07" W	86.08'
L97	S 66°27'30" W	106.07'
L98	S 21°03'57" W	119.62'
L99	S 33°15'01" W	26.59'
L100	S 43°35'00" W	117.40'
L101	S 22°49'58" W	73.76'
L102	S 80°45'15" W	54.16'
L103	S 47°23'24" W	82.24'
L104	S 54°42'05" W	85.04'
L105	S 69°12'27" W	93.40'
L106	S 07°43'14" W	80.40'
L107	S 56°59'30" E	68.82'
L108	S 40°46'36" E	66.07'
L109	S 27°15'19" E	47.05'
L110	S 01°10'09" E	24.24'
L111	N 74°10'37" W	113.45'
L112	S 65°53'26" W	64.15'
L113	N 43°51'15" W	39.55'
L114	S 69°16'16" W	35.59'

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SURVEYOR
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8810 WILL CLAYTON PARKWAY SUITE F
HUMBLE, TX 77338
(281) 446-8895 FAX (281) 446-8609

WASTE MANAGEMENT
SHEET 2 OF 4
CASE # C8U-02-0235.0A

WASTE MANAGEMENT



LOCATION MAP
N.T.S.

1. THIS PROJECT IS LOCATED IN THE WALNUT CREEK WATERSHED, A SUBURBAN WATERSHED.
2. ALL LOTS IN THIS SUBDIVISION SHALL HAVE USES OTHER THAN RESIDENTIAL.
3. NO DEVELOPMENT SHALL BE ALLOWED ON LOT 1 AND LOT 2 (OPEN SPACE LOT). OPEN SPACE LOT WILL BE MAINTAINED BY OWNER.
4. ALL STREETS WILL BE CONSTRUCTED TO APPLICABLE CITY OF AUSTIN AND TRAVIS COUNTY STANDARDS.
5. OFF-STREET LOADING AND UNLOADING FACILITIES SHALL BE PROVIDED ON ALL COMMERCIAL AND INDUSTRIAL LOTS.
6. WASTEWATER AND POTABLE WATER FOR LOT 3 WILL BE PROVIDED BY THE FACILITIES ON THE ADJACENT WASTEWATERMANAGEMENT PROPERTY. LOT 1 AND 2 DO NOT REQUIRE SERVICE BECAUSE THEY ARE OPENSPACE LOTS.
7. THE OWNER OF THIS SUBDIVISION, AND HIS OR HER SUCCESSORS AND ASSIGNS, ASSUMES RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH APPLICABLE CODES AND REQUIREMENTS OF THE CITY OF AUSTIN. THE OWNER SHALL UNDERSTAND AND ACKNOWLEDGES THAT PLAN VACATION OR REPLATING MAY BE REQUIRED, AT THE OWNER'S SOLE EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
8. THE OWNER OF THIS SUBDIVISION, AND HIS OR HER SUCCESSORS AND ASSIGNS, MUST MAKE PROVISIONS FOR PERPETUAL MAINTENANCE AND TAXATION FOR PRIVATELY HELD STREETS, ALLEYS, EASEMENTS, PARKS AND OTHER OPEN SPACES CONTAINED IN THIS SUBDIVISION.
9. PRIOR TO CONSTRUCTION, EXCEPT SINGLE FAMILY AND/OR DUPLEX ON ANY LOT IN THIS SUBDIVISION, A SITE DEVELOPMENT PERMIT MUST BE OBTAINED FROM THE CITY OF AUSTIN.
10. DRAINAGE EASEMENTS WITHIN LOT BOUNDARIES WILL BE KEPT CLEAR OF FENCES, BUILDINGS AND LANDSCAPING, AND OTHER OBSTRUCTIONS EXCEPT AS APPROVED BY THE CITY OF AUSTIN AND COUNTY OF TRAVIS.
11. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR ASSIGNS.
12. THE PROPERTY OWNER SHALL PROVIDE ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY GOVERNMENTAL AUTHORITIES.
13. PORTIONS OF THIS SITE ARE WITHIN THE 100 YEAR FLOODPLAIN AS DEFINED BY FEMA FIRM PANEL 483430120E DATED JUNE 16, 1993 AND/OR DRAINAGE STUDY BY TURNER COLUE AND BRADEN INC.
14. THE 100-YEAR FLOOD PLAIN SHALL BE CONTAINED WITHIN THE DRAINAGE EASEMENT AS SHOWN HEREON. NO LOTS SHALL BE DEVELOPED ADJACENT TO THE DRAINAGE EASEMENT UNTIL DRAINAGE IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED AND APPROVED BY THE COUNTY ENGINEER/CITY OF AUSTIN.
15. HEAVY EQUIPMENT AND WASTE HAULING VEHICLES WILL NOT ACCESS THE SITE FROM SPRINGDALE ROAD.
16. EROSION/SEDIMENTATION CONTROLS ARE REQUIRED FOR ALL CONSTRUCTION ON EACH LOT, PURSUANT TO LDC SECTION 25-8-181, AND THE ENVIRONMENTAL CRITERIA MANUAL.
17. WATER QUALITY CONTROLS ARE REQUIRED FOR ALL DEVELOPMENT WITH IMPERVIOUS COVER IN EXCESS OF 20% OF THE NET SITE AREA OF EACH LOT PURSUANT TO LDC SECTION 25-8-211.

18. CONSTRUCTION ON ALL LOTS WILL NOT CAUSE PONDING, EROSION OR INCREASED FLOW ON ADJACENT PROPERTIES.

19. PRIOR TO CONSTRUCTION ON LOTS IN THE SUBDIVISION, DRAINAGE PLANS WILL BE RESUBMITTED TO COA FOR REVIEW. RAINFALL RUNOFF SHALL BE LIMITED TO EXISTING UNDEVELOPED AMOUNT BY PONDING OR OTHER METHODS.
20. TRACTS OF LAND ACQUIRED ONLY BY MEANS OF DEDICATED EASEMENT WILL BE ASSIGNED ONLY ONE HOUSE NUMBER BASED UPON THE JUNCTURE OF THE EASEMENT WITH THE NAMED STREET. ALL TRACTS OF LAND THIS ACCESSSED WILL BE ASSIGNED UNIT NUMBERS BASED UPON THEIR RELATIVE LOCATION ON THE EASEMENT.
21. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
22. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
23. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
24. TRAVIS COUNTY DEVELOPMENT PERMIT REQUIRED PRIOR TO ANY SITE DEVELOPMENT.
25. SIDEWALKS ALONG SPRINGDALE ROAD ARE REQUIRED TO BE CONSTRUCTED BY THE PROPERTY OWNER AFTER THE ABUTTING ROADWAY IS IMPROVED AND CONCRETE CURBS ARE IN PLACE. FAILURE TO CONSTRUCT THE REQUIRED SIDEWALKS MAY RESULT IN THE WITH-HOLDING OF CERTIFICATES OF OCCUPANCE, BUILDING PERMITS, OR UTILITY CONNECTIONS BY THE GOVERNING BODY OR UTILITY COMPANY.
26. WITHIN A CRITICAL ENVIRONMENTAL FEATURE BUFFER ZONE, THE NATURAL VEGETATIVE COVER MUST BE RETAINED TO THE MAXIMUM EXTENT PRACTICABLE. CONSTRUCTION IS PROHIBITED, AND WASTEWATER DISPOSAL OR IRRIGATION IS PROHIBITED.

SURVEYOR
MARTIN SURVEY ASSOCIATES INC
8810 WILL CLAYTON PARKWAY SUITE F
HUMBLE, TX 77338
(281) 446-8899 FAX (281) 446-8609

AUSTIN, TEXAS 78701
(512) 472-4519 FAX (512) 472-7519

WASTE MANAGEMENT
SHEET 3 OF 4
CASE # C8J-02-0235.0A

26. THE CEF, A WETLAND STOCK POND, AND ITS 150' SETBACK ON LOT 3 WILL BE RELOCATED AT A 1:1 RATIO TO AN AREA ON LOT 3 OUTSIDE THE CWQZ DETERMINED BY THE OWNER TO NOT IMPEDE DEVELOPMENT. THE REPLACEMENT WETLAND LANDSCAPE WILL BE INSTALLED AS DIRECTED BY STANDARD SPECIFICATION MANUAL 609S ON DATE APPROVED.

27. IN ACCORDANCE WITH THE COA ENVIRONMENTAL REVIEW, THE RELOCATED WETLAND POND CAN BE COMBINED WITH A DETENTION OR WATER QUALITY POND TO FORM A WET POND.

2B. THE LOCATION AND SIZE OF CRITICAL ENVIRONMENTAL FEATURES SHOWN ON THE PLAT ARE APPROXIMATE.

DO NOT SIGN OR DATE THIS DOCUMENT UNTIL YOU HAVE REVIEWED IT AND AGREE WITH THE INFORMATION ON THIS SITE.

TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM NOTES

TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM NOTES

1. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR A PRIVATE ON-SITE WASTEWATER DISPOSAL SYSTEM APPROVED BY THE TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM.
2. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A POTABLE WATER SUPPLY FROM AN APPROVED WATER SYSTEM.
3. NO ON-SITE WASTEWATER DISPOSAL SYSTEM MAY BE INSTALLED WITHIN 100 FEET OF A PRIVATE WATER WELL NOR MAY AN ON-SITE WASTEWATER DISPOSAL SYSTEM BE INSTALLED WITHIN 150 FEET OF A PUBLIC WATER WELL.
4. NO CONSTRUCTION MAY BEGIN ON A LOT IN THIS SUBDIVISION UNTIL PLANS FOR THE PRIVATE ON-SITE WASTEWATER DISPOSAL SYSTEM ARE SUBMITTED TO AND APPROVED BY THE TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM.
5. ALL DEVELOPMENT ON ALL LOTS IN THIS SUBDIVISION MUST BE IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE CHAPTER 48 - TRAVIS COUNTY, RULES OF TRAVIS COUNTY, TEXAS FOR ON-SITE SEWAGE FACILITIES.

6. THESE RESTRICTIONS ARE ENFORCEABLE BY THE TRAVIS COUNTY ON-~~STATE~~ WASTEWATER PROGRAM AND/OR LOT OWNERS

Robert Wright, R.S.
ROBERT WRIGHT, R.S.

COMMISSIONERS' COURT RESOLUTION

IN APPROVING THIS PLAT, THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS, ASSUMES NO OBLIGATION TO BUILD THE STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR ANY BRIDGES OR CULVERTS IN CONNECTION THEREWITH, THE BUILDING OF ALL STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT, AND ALL BRIDGES AND CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IN SUCH STREETS, ROADS OR OTHER PUBLIC THOROUGHFARES OR IN CONNECTION THEREWITH, IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATION PRESCRIBED BY THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS.

THE OWNER(S) OF THE SUBDIVISION SHALL CONSTRUCT THE

THE SUBDIVISION'S STREET AND DRAINAGE IMPROVEMENTS (THE "IMPROVEMENTS") TO COUNTY STANDARDS IN ORDER FOR THE COUNTY TO ACCEPT THE PUBLIC IMPROVEMENTS FOR MAINTENANCE OR TO RELEASE FISCAL SECURITY POSTED TO SECURE PRIVATE IMPROVEMENTS. TO SECURE THIS OBLIGATION, THE OWNER(S) MUST POST FISCAL SECURITY WITH THE COUNTY IN THE AMOUNT OF THE ESTIMATED COST OF IMPROVEMENTS. THE OWNER(S) OBLIGATION TO CONTRIBUTE THE IMPROVEMENTS TO COUNTY STANDARDS AND TO POST THE FISCAL SECURITY TO SECURE SUCH CONSTRUCTION IS A CONTINUING OBLIGATION BINDING ON THE OWNERS AND THEIR SUCCESSORS AND ASSIGNS UNTIL THE PUBLIC IMPROVEMENTS HAVE BEEN ACCEPTED FOR MAINTENANCE BY THE COUNTY, OR THE PRIVATE IMPROVEMENTS HAVE BEEN CONSTRUCTED AND ARE PERFORMING TO COUNTY STANDARDS.

THE AUTHORIZATION OF THIS PLAT BY THE COMMISSIONERS FOR FILING OR THE SUBSEQUENT ACCEPTANCE FOR MAINTENANCE BY TRAVIS COUNTY, TEXAS, OF ROADS AND STREETS IN THE SUBDIVISION DOES NOT OBLIGATE THE COUNTY TO INSTALL STREET NAME SIGNS OR ERECT TRAFFIC CONTROL SIGNS, SUCH AS SPEED LIMIT, STOP SIGNS, AND YIELD SIGNS, WHICH IS CONSIDERED TO BE PART OF THE DEVELOPER'S CONSTRUCTION.

THIS SUBDIVISION PLAT WAS APPROVED AND RECORDED BEFORE THE

CONSTRUCTION AND ACCEPTANCE OF STREETS AND OTHER SUBDIVISION IMPROVEMENTS, PURSUANT TO THE TERMS OF A SUBDIVISION CONSTRUCTION AGREEMENT, BETWEEN THE SUBDIVIDER AND THE CITY OF AUSTIN, DATED 02-11-2003. THE SUBDIVIDER IS RESPONSIBLE FOR THE CONSTRUCTION OF ALL STREETS AND FACILITIES NEEDED TO SERVE THE LOTS WITHIN THE SUBDIVISION. THIS RESPONSIBILITY MAY BE ASSIGNED IN ACCORDANCE WITH THE TERMS OF THAT AGREEMENT. FOR THE CONSTRUCTION AGREEMENT PERTAINING TO THIS SUBDIVISION, SEE THE SEPARATE INSTRUMENT RECORDED IN DOCUMENT NUMBER 2003-000211 IN THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

STATE OF TEXAS:
COUNTY OF TRAVIS:

I, Dana DeBeauvoir, Clerk of the County Court, of Travis County, Texas do hereby certify that on the 25th day of March, A.D., 2023, the Commissioner's Court of Travis County, Texas passed an order authorizing the filing for record of this plat and that said order was duly entered in the minutes of said Court in Book 100 Page 10.

Witness my hand and seal of office of the County Court of said County, the
 day of August, 2004, A.D.

Dana DeBeauvoir, Clerk of Court
TRAVIS COUNTY, TEXAS

Deputy

STATE OF TEXAS:
COUNTY OF TRAVIS:

I, Dana DeBeauvoir, Clerk of Travis County, Texas do hereby certify that the foregoing instrument of writing and its certificate of authentication was filed for record in my office on the 15th day of JANUARY, 2015.
A.D. at 2:54 O'Clock P. M., duly recorded on the 15th day of JANUARY, 2015. A.D. at 2:54 O'Clock P. M., plat 22 of said County and State in Document Number 201500033 Official Public Records of Travis County.

Witness my hand and seal of office of the County Clerk, this 5th day of JANUARY, 2025, A.D.
Dana DeBeauvoir, County Clerk
TRAVIS COUNTY, TEXAS

B. Linder Deputy



15.05

280500003

\$111.00

WASTE MANAGEMENT

OWNERS:
DIANE HALE
ROBERT E. WILDER
JOHN W. WILDER
ELIZABETH WILDER
ALL ABOVE CARE OF:
ELIZABETH WILDER
1030 SAUSALITO
AUSTIN, TX 78759
WASTEMANAGEMENT
JAMES O. SMITH
9708 GILES LN
AUSTIN, TX 78754
512-563-4495
512-272-8960 (FAX)

STATE OF TEXAS
COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESENTS:

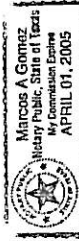
THAT JOHN W. WILDER, ROBERT E. WILDER, AND DIANE HALE, EACH BEING OWNERS OF A 8.33% UNDIVIDED INTEREST AND ELIZABETH WILDER, OWNER OF A 75% UNDIVIDED INTEREST IN THE 105.62 ACRE PROPERTY AS RECORDED IN DOC # 2002128106 OF THE OFFICIAL RECORDS OF TRAVIS COUNTY, TEXAS, AND THAT WASTE MANAGEMENT, ACTING HEREIN AND THROUGH JAMES O. SMITH, OWNERS OF 21.03 ACRES, AS RECORDED IN TRAVIS COUNTY REAL PROPERTY RECORDS VOL.11965, PG 1443 AND VOL. 11965, PG 1447,

DO HEREBY SUBDIVIDE SAID PROPERTY PURSUANT TO TITLE 25 OF THE AUSTIN CITY CODE, CHAPTERS 212 AND 232 OF THE TEXAS LOCAL GOVERNMENT CODE, AND IN ACCORDANCE WITH THE ATTACHED PLAT TO BE KNOWN AS "WASTE MANAGEMENT" SUBJECT TO ANY EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED, AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF ALL EASEMENTS SHOWN HEREON, EXCEPT AS PREVIOUSLY GRANTED, AS REFLECTED HEREON.

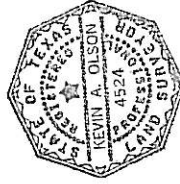
WITNESS MY HAND, THIS THE 6 DAY OF Aug, 2003, A.D.

BY: [Signature]
JOHN W. WILDER
10611 SAN SOUCI PLACE
AUSTIN, TEXAS 78759

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME
BY JOHN W. WILDER ON THE 6 DAY
OF August 2003, A.D.,



[Signature]
NOTARY PUBLIC, IN AND FOR TRAVIS COUNTY
MY COMMISSION EXPIRES: April 1, 2005



MARTIN SURVEYING ASSOCIATES INC.

[Signature]
KEVIN A. OLSON, R.P.L.S. NO. 4524
8810 WILL CLAYTON PARKWAY SUITE F.
HUMBLE, TEXAS 77338

I, KEVIN A. OLSON, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAT COMPLES WITH SURVEY-RELATED PORTIONS OF CHAPTER 25 OF THE AUSTIN CITY CODE OF 1999 AS AMENDED; IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE; AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND.

APPROVED, ACCEPTED, AND AUTHORIZED FOR RECORD BY THE
WATERSHED PROTECTION & DEVELOPMENT REVIEW DEPARTMENT,
CITY OF AUSTIN, COUNTY OF TRAVIS, THIS THE 14 DAY OF
August, 2003, A.D.

[Signature]
DIRECTOR
WATERSHED PROTECTION AND DEVELOPMENT REVIEW

THIS PLAT FALLS WITHIN THE 2 MILE ETJ OF THE CITY OF AUSTIN ON
THIS THE 14 DAY OF August, 2003.

AGGREGED AND AUTHORIZED FOR RECORD BY THE
CITY OF AUSTIN, COUNTY OF TRAVIS, THIS THE 14 DAY OF
August, 2003.



BY: [Signature]
DIANE W. HALE
10302 BARR LANE
AUSTIN, TEXAS 78754

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME
BY DIANE W. HALE ON THE 6 DAY
OF August 2003, A.D.,

[Signature]
NOTARY PUBLIC, IN AND FOR TRAVIS COUNTY
MY COMMISSION EXPIRES: Nov. 15, 2003

I, MARK T. BURSON, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING, AND HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT, COMPLIES WITH THE ENGINEERING RELATED PORTIONS OF CHAPTER 25 OF THE AUSTIN CITY CODE OF 1999 AS AMENDED, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

THE 100-YEAR FLOOD PLAIN IS CONTAINED WITHIN THE DRAINAGE EASEMENT AS SHOWN HEREON. A PORTION OF THIS TRACT IS WITHIN THE DESIGNATED FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) #48453C0120E TRAVIS COUNTY, TEXAS DATED 6/16/1993. THE 100 YEAR FLOODPLAIN WAS DETERMINED BY TCB FLOOD PLAIN STUDY. MINIMUM FINISHED FLOOR ELEVATION FOR ALL AFFECTED STRUCTURES SHALL BE ONE (1) FOOT ABOVE THE ELEVATION OF THE 100-YEAR FLOOD PLAIN AS SHOWN HEREON; LOT 1: 566.81 M.S.L. AND LOT 2: 565.80 M.S.L. AND LOT 3: 556.0 M.S.L.



[Signature]
MARK T. BURSON, P.E. NO.
TURNER COLLIE & BRADEN INC.
400 WEST 15TH STREET SUITE 500
AUSTIN, TEXAS 78701

DATE 4/18/03

BY: [Signature]
ELIZABETH WILDER
1030 SAUSALITO
AUSTIN, TEXAS 78759

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME
BY ELIZABETH WILDER ON THE 6 DAY
OF Aug, 2003, A.D.,



[Signature]
NOTARY PUBLIC, IN AND FOR TRAVIS COUNTY
MY COMMISSION EXPIRES: 4/1/2005

BY: [Signature]
JAMES O. SMITH
9708 GILES LANE
AUSTIN, TEXAS 78754

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME
BY JAMES O. SMITH ON THE 6 DAY
OF Aug, 2003, A.D.,



[Signature]
NOTARY PUBLIC, IN AND FOR TRAVIS COUNTY
MY COMMISSION EXPIRES: Nov. 15, 2003

SURVEYOR
MARTIN SURVEY ASSOCIATES INC.
8810 WILL CLAYTON PARKWAY SUITE F
HUMBLE, TX 77338
(281) 446-8899 FAX (281) 446-8609

ENGINEER
Turner Collie & Braden Inc.
400 WEST 15TH STREET, SUITE 500
AUSTIN, TEXAS 78701
(512) 472-4519 FAX (512) 472-7519

WASTE MANAGEMENT
SHEET 4 OF 4
CASE # C8J-02-0235.0A

EASEMENT SURVEY MAP

40' CITY OF PFLUGERVILLE WATERLINE EASEMENT
(30' WATER LINE)

POINT	NORTHING	EASTING
1277	10099297.2710	3144376.0771
1278	10098790.8748	3144393.6711
1279	10098701.1561	3144402.3994
1280	10098653.5017	3144497.6572
1281	10098350.0668	3144558.5975
1282	10098009.0634	3144659.3037
1283	10098034.0723	3144610.2101
1284	10098340.4451	3144519.7312
1285	10098626.4699	3144462.2874
1286	10098675.2755	3144364.7283
1287	10098788.2413	3144353.7384
1288	10099318.1589	3144335.3272



GRAPHIC SCALE

15' C. D. A. WASTEWATER EASEMENT
(8" GRAVITY AND 4" FORCE MAIN)

POINT	NORTHING	EASTING
1300	10098194.6856	3144294.9202
1301	10097407.0702	3145841.0391
1302	10096987.7253	3146655.6718
1303	10097001.0093	3146662.6395
1304	10097420.4069	3145847.9044
1305	10098212.4683	3144293.0582

40' C. D. A. TEMPORARY EASEMENT

POINT	NORTHING	EASTING
1303	10097001.0093	3146662.6395
1304	10097420.4069	3145847.9044
1305	10098212.4683	3144293.0582
1306	10098242.1061	3144289.9547
1307	10097442.7121	3145859.1956
1308	10097023.1493	3146674.2524

30' C. D. A. WATER & WASTEWATER EASEMENT
(54" WATER MAIN)

POINT	NORTHING	EASTING
1309	10095253.8062	3150677.6028
1310	10095280.3275	3150691.6248
1311	10094886.1445	3151437.1843
1312	10094859.6232	3151423.1623

C. D. A. WATER & WASTEWATER EASEMENT
(FIRE HYDRANT)

POINT	NORTHING	EASTING
1313	10094947.1496	3151515.7314
1314	10094961.5718	3151488.6413
1315	10094988.0529	3151502.7393
1316	10094973.6599	3151529.7745

7.5' C. D. A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1317	10095709.3279	3151883.5975
1318	10095840.4459	3151609.6093
1319	10095847.2111	3151612.8468
1320	10095716.0101	3151887.0085

C. D. A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1321	10096206.0959	3152137.1709
1322	10096377.3680	3151799.1895
1323	10096386.5124	3151803.2367
1324	10096232.1055	3152107.9369
1325	10096232.9751	3152150.8912

C. D. A. WATER MAIN EASEMENT

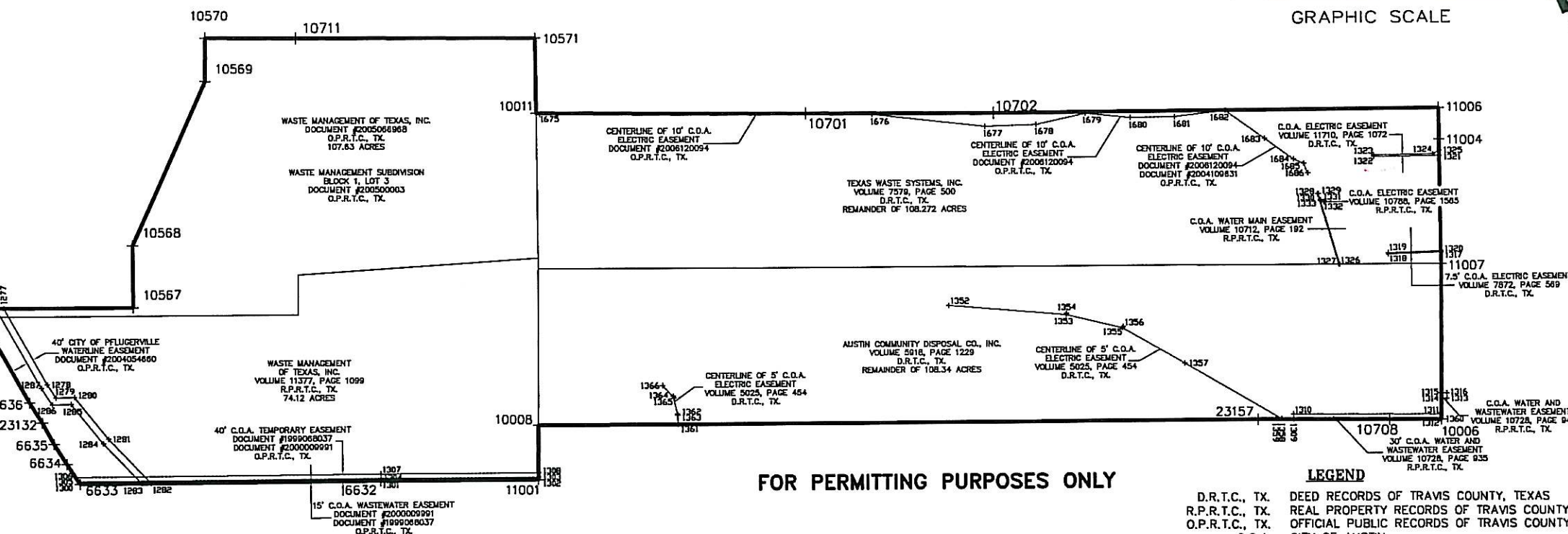
POINT	NORTHING	EASTING
1326	10095920.2104	3151334.7717
1327	10095924.8384	3151330.5891
1328	10096339.4412	3151412.4655
1329	10096338.4725	3151417.3708

C. D. A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1330	10096303.0467	3151410.3748
1331	10096284.0229	3151427.1748
1332	10096280.7132	3151423.4270
1333	10096296.8437	3151409.1821

5' C. D. A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1352	10096769.4993	3149223.5036
1353	10096405.6034	3149796.7581
1354	10096412.0832	3149801.4499
1355	10096185.1319	3150048.9829
1356	10096189.2633	3150055.8335
1357	10095834.6445	3150273.0690
1358	10095288.0201	3150619.2058
1359	10095304.4146	3150588.2830
1360	10094856.5596	3151433.0142



FOR PERMITTING PURPOSES ONLY

LEGEND

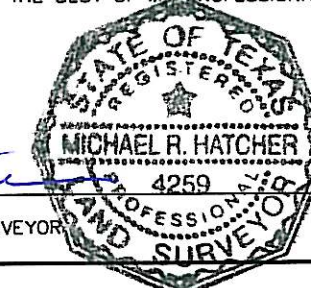
D.R.T.C., TX.	DEED RECORDS OF TRAVIS COUNTY, TEXAS
R.P.R.T.C., TX.	REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
O.P.R.T.C., TX.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS
C.O.A.	CITY OF AUSTIN

NOTES:

- THIS EXHIBIT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT.
- EASEMENT RECORDATION INFORMATION WAS PERFORMED BY MORGAN/BROOKS RESOURCES, INC. IN JULY, 2006.
- RIGHT-OF-WAY AGREEMENT DESCRIBED BY AGREEMENT RECORDED UNDER DOCUMENT NO. 2004228846, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS. DOES AFFECT.
- THERE ARE NO DRAINAGE OR PIPELINE EASEMENTS LOCATED ON THE SITE.
- THIS DRAWING DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY. SAM, INC. DRAWING No. W026-23127-01 WAS PREPARED TO SHOW A COMPLETE BOUNDARY SURVEY OF THE PROPERTY SHOWN ON THIS DRAWING. SAM, INC. DRAWING No.'s W026-25168-01, 02, 04 AND SAM, INC. PROPERTY DESCRIPTION No. F.N. 4252 WERE ALSO PREPARED IN CONNECTION WITH THIS PROPERTY.

THIS "DRAINAGE, PIPELINE AND UTILITY EASEMENT LOCATION MAP" WAS PREPARED UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Michael R. Hatcher
MICHAEL R. HATCHER
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 4259 - STATE OF TEXAS



AUGUST 7, 2006

PROJECT: WASTE MANAGEMENT OF TX, INC.
JOB NUMBER: 25168-01
DATE: AUGUST 7, 2006
SCALE: 1"=800'
PROJ.MANAGER: M.R.H.
TECHNICIAN: G. HANSON
DRAWING: BNDY-ESMT.DWG
FIELDNOTES: 4252
PARTYCHIEF: J. SANDOVAL
FIELDBOOKS:



5508 WEST HIGHWAY 290
BUILDING B
Austin, Texas 78735
(512) 447-0575
Fax: (512) 326-3029

DRAINAGE, PIPELINE AND UTILITY EASEMENT LOCATION MAP
AUSTIN COMMUNITY RECYCLING AND DISPOSAL FACILITY
TRAVIS COUNTY, TEXAS

FIGURE 1-5

PLAT No. W026-25168-03

40' CITY OF PFLUGERVILLE WATERLINE EASEMENT
(30" WATER LINE)

POINT	NORTHING	EASTING
1277	10099297.2710	3144376.0771
1278	10098790.8748	3144393.6711
1279	10098701.1561	3144402.3994
1280	10098653.5017	3144497.6572
1281	10098350.0668	3144558.5975
1282	10098009.0634	3144659.3037
1283	10098034.0723	3144610.2101
1284	10098340.4451	3144519.7312
1285	10098626.4699	3144462.2874
1286	10098675.2755	3144364.7283
1287	10098788.2413	3144353.7384
1288	10099318.1589	3144335.3272

15' C.D.A. WASTEWATER EASEMENT
(8" GRAVITY AND 4" FORCE MAIN)

POINT	NORTHING	EASTING
1300	10098194.6856	3144294.9202
1301	10097407.0702	3145841.0391
1302	10096987.7253	3146655.6718
1303	10097001.0093	3146662.6395
1304	10097420.4069	3145847.9044
1305	10098212.4683	3144293.0582

40' C.D.A. TEMPORARY EASEMENT

POINT	NORTHING	EASTING
1303	10097001.0093	3146662.6395
1304	10097420.4069	3145847.9044
1305	10098212.4683	3144293.0582
1306	10098242.1061	3144289.9547
1307	10097442.7121	3145859.1956
1308	10097023.1493	3146674.2524

30' C.D.A. WATER & WASTEWATER EASEMENT
(54" WATER MAIN)

POINT	NORTHING	EASTING
1309	10095253.8062	3150677.6028
1310	10095280.3275	3150691.6248
1311	10094886.1445	3151437.1843
1312	10094859.6232	3151423.1623

C.D.A. WATER & WASTEWATER EASEMENT
(FIRE HYDRANT)

POINT	NORTHING	EASTING
1313	10094947.1496	3151515.7314
1314	10094961.5718	3151488.6413
1315	10094988.0529	3151502.7393
1316	10094973.6599	3151529.7745

7.5' C.D.A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1317	10095709.3279	3151883.5975
1318	10095840.4459	3151609.6093
1319	10095847.2111	3151612.8468
1320	10095716.0101	3151887.0085

C.D.A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1321	10096206.0959	3152137.1709
1322	10096377.3680	3151799.1895
1323	10096386.5124	3151803.2367
1324	10096232.1055	3152107.9369
1325	10096232.9751	3152150.8912

C.D.A. WATER MAIN EASEMENT

POINT	NORTHING	EASTING
1326	10095920.2104	3151334.7717
1327	10095924.8384	3151330.5891
1328	10096339.4412	3151412.4655
1329	10096338.4725	3151417.3708

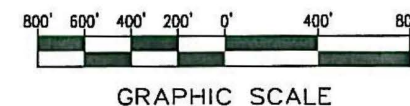
C.D.A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1330	10096303.0467	3151410.3748
1331	10096284.0229	3151427.1748
1332	10096280.7132	3151423.4270
1333	10096296.8437	3151409.1821

5' C.D.A. ELECTRIC EASEMENT

POINT	NORTHING	EASTING
1352	10096769.4993	3149223.5036
1353	10096405.6034	3149796.7581
1354	10096412.0832	3149801.4499
1355	10096185.1319	3150048.9829
1356	10096189.2633	3150055.8335
1357	10095834.6445	3150273.0690
1358	10095288.0201	3150619.2058
1359	10095304.4146	3150588.2830
1360	10094856.5596	3151433.0142

TRANSFER STATION REGISTRATION BOUNDARY AND PROPOSED BUILDING LOCATION
SUPERIMPOSED ON THIS FIGURE BY GEOSYNTEC CONSULTANTS, JANUARY 2020 TO
ILLUSTRATE THEIR LOCATIONS IN RELATION TO EASEMENTS ON THE PROPERTY.



TRANSFER STATION
REGISTRATION
BOUNDARY

PROPOSED
TRANSFER STATION
BUILDING

FOR PERMITTING PURPOSES ONLY

LEGEND

D.R.T.C., TX. DEED RECORDS OF TRAVIS COUNTY, TEXAS
R.P.R.T.C., TX. REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
O.P.R.T.C., TX. OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS
C.O.A. CITY OF AUSTIN

NOTES:

1. THIS EXHIBIT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT.
2. EASEMENT RECORDATION INFORMATION WAS PERFORMED BY MORGAN/BROOKS RESOURCES, INC. IN JULY, 2006.
3. RIGHT-OF-WAY AGREEMENT DESCRIBED BY AGREEMENT RECORDED UNDER DOCUMENT NO. 2004228846, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS. DOES AFFECT.
4. THERE ARE NO DRAINAGE OR PIPELINE EASEMENTS LOCATED ON THE SITE.
5. THIS DRAWING DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY. SAM, INC. DRAWING No. W026-23127-01 WAS PREPARED TO SHOW A COMPLETE BOUNDARY SURVEY OF THE PROPERTY SHOWN ON THIS DRAWING. SAM, INC. DRAWING No.'s W026-25168-01, 02, 04 AND SAM, INC. PROPERTY DESCRIPTION No. F.N. 4252 WERE ALSO PREPARED IN CONNECTION WITH THIS PROPERTY.

THIS "DRAINAGE, PIPELINE AND UTILITY EASEMENT LOCATION MAP" WAS PREPARED UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

MICHAEL R. HATCHER
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 4259 - STATE OF TEXAS



AUGUST 7, 2006

PROJECT: WASTE MANAGEMENT OF TX, INC.
AUSTIN COMMUNITY LANDFILL
JOB NUMBER: 25168-01
DATE: AUGUST 7, 2006
SCALE: 1"=800'
PROJ. MANAGER: M.R.H.
TECHNICIAN: G. HANSON
DRAWING: BNDY-ESMT.DWG
FIELD NOTES: 4252
PARTY CHIEF: J. SANDOVAL
FIELD BOOKS:



5508 WEST HIGHWAY 290
BUILDING B
AUSTIN, TEXAS 78735
(512) 447-0575
Fax: (512) 326-3029

DRAINAGE, PIPELINE AND UTILITY EASEMENT LOCATION MAP
AUSTIN COMMUNITY RECYCLING AND DISPOSAL FACILITY
TRAVIS COUNTY, TEXAS

FIGURE 1-5

PLAT No. W026-25168-03

APPENDIX I/II

EVIDENCE OF COMPETENCY

Management and Personnel

The WMTX principals and supervisors who will be involved in the management and operations of the facility are:

Mr. Donald J. Smith, Vice President

Mr. Smith holds the title of Area Vice President with WMTX and has responsibility for the overall management of WMTX and its wholly owned subsidiaries' operations throughout Texas. He has over 28 years of experience in the solid waste industry, and in addition to being currently responsible for all WMTX and affiliate operations in this geographic area, he also handles regulatory and legislative affairs in the state of Texas pertaining to the solid waste industry.

Mr. Steve Jacobs, Director of Disposal Operations

Mr. Jacobs has over 33 years of experience in the solid waste industry, in municipal solid waste and hazardous waste landfill operations and management and transfer station operations and management. He has held a variety of positions ranging from equipment operator, to landfill manager, to a corporate region manager and an area manager, and now as a director of disposal operations in a two-state corporate region. Through this he has gained a broad experience in the areas of landfill and earthwork construction, as well as management of transfer stations. Mr. Jacobs was affiliated with Browning Ferris Industries, Inc. (BFI) for 18 years and CECOS International (a wholly-owned subsidiary of BFI) for 4 years before moving to WMTX. Mr. Jacobs has held positions of steadily increasing responsibility for personnel management and corporate financial management. He joined WMTX as an area manager, and transitioned to greater responsibility into his current position where he is responsible for the operations of multiple municipal solid waste landfills in Texas and Oklahoma. He holds a current Texas MSW Facility Class A license for supervising or managing an MSW facility.

Mr. Charles Rivette, P.E., Director of Planning and Project Development

Mr. Rivette has over 28 years of experience in the operations and management of municipal and hazardous waste landfills and municipal solid waste transfer stations. He has been involved with all aspects of landfill and transfer station management during that period. Mr. Rivette was affiliated with BFI for 11 years prior to moving to WMTX. Presently, Mr. Rivette works daily with operations management of over 20 municipal solid waste landfill and transfer station facilities in Texas. These responsibilities include profit/loss; regulatory compliance; oversight of permitting, engineering, environmental compliance, landfill liner and final cover construction; personnel safety and training; and community relations activities. He holds a Texas Professional Engineer (P.E.) license, and holds a Texas MSW Facility Class A license for supervising or managing an MSW facility.

Mr. Tim Champagne, Environmental Protection Manager

Mr. Champagne is currently the environmental protection manager for various WMTX Texas MSW facilities. He has over 25 years of experience in the solid waste industry, including over 14 years of direct involvement with environmental compliance issues related to municipal solid waste in Texas. He is responsible for managing environmental compliance programs and related regulatory coordination at six municipal solid waste landfills, as well as eight other solid waste facilities in Texas.

Site Manager

The Site Manager will have and maintain a Class A or B license as a municipal solid waste facility supervisor in accordance with 30 TAC, Chapter 30, Subchapter F: Municipal Solid Waste Facility Supervisors. The Site Manager will be responsible for day-to-day operations.

Employees

The aforementioned management team and Site Manager will provide oversight and training for employees at the facility.

ORDINANCE NO. 20190919-147

AN ORDINANCE ADJUSTING THE CITY OF AUSTIN'S BOUNDARY LIMITS BY RELEASING APPROXIMATELY 818 ACRES GENERALLY LOCATED AT THE NORTHWEST CORNER OF GILES LANE AND HIGHWAY 290 EAST FROM THE CITY'S EXTRATERRITORIAL JURISDICTION.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. Texas Local Government Code Section 42.023 authorizes a city to reduce its extraterritorial jurisdiction by giving written consent by ordinance or resolution. The Austin City's Charter, Article I, Section 6, provides that the City may reduce its boundary by ordinance.

PART 2. Approximately 818 acres of land generally located at the northwest corner of Giles Lane and Highway 290 East and identified in **Exhibit "A"** attached to and incorporated as part of this ordinance is hereby released from the City of Austin's extraterritorial jurisdiction.

PART 3. This ordinance takes effect on September 30, 2019.

PASSED AND APPROVED

_____, September 19, 2019

§
§
§




Steve Adler
Mayor

APPROVED:



Anne L. Morgan
City Attorney

ATTEST:



Jannette S. Goodall
City Clerk

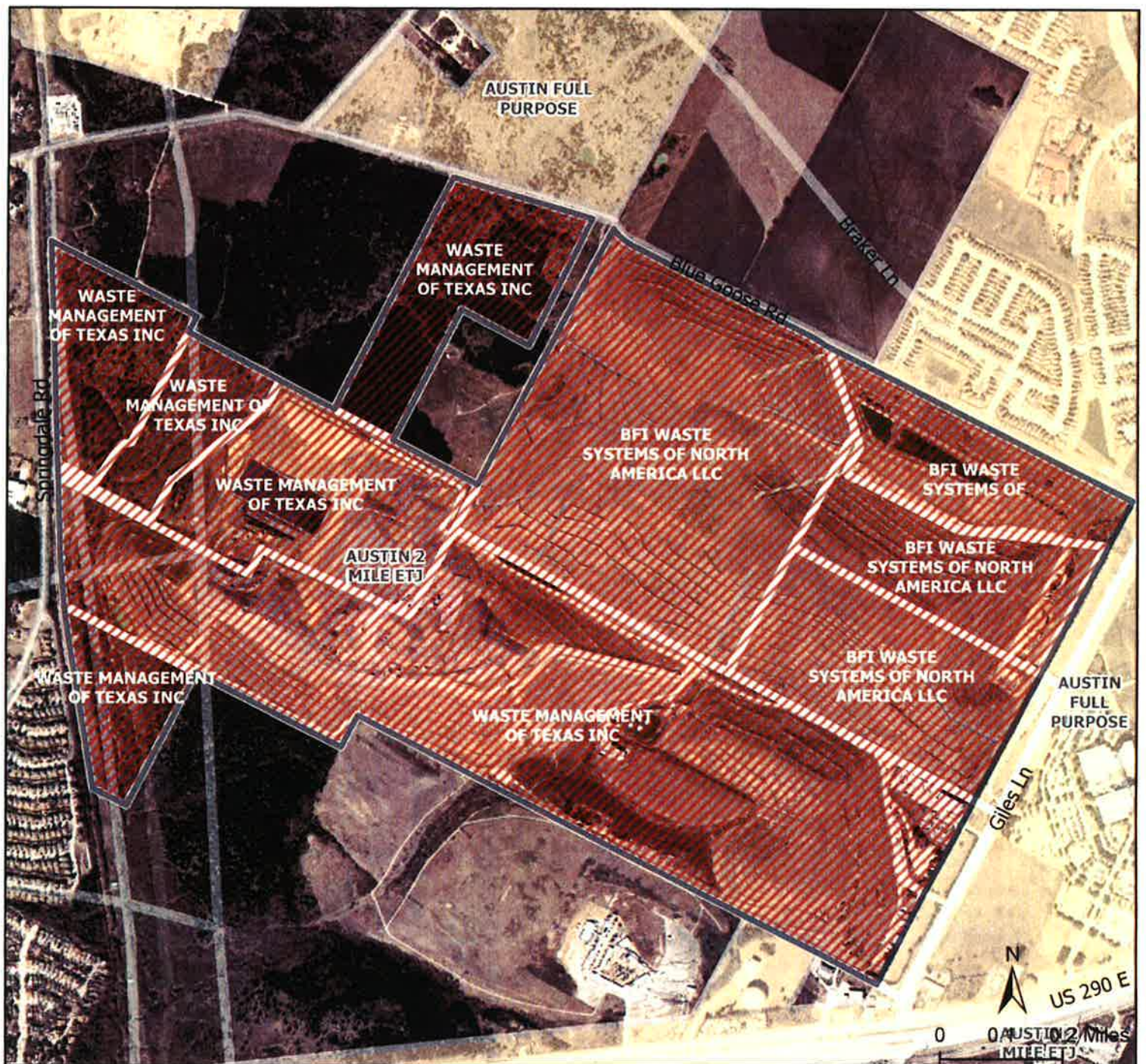


Exhibit A: Proposed Giles Lane/HWY 290 ETJ Release Area

Jurisdiction-Austin

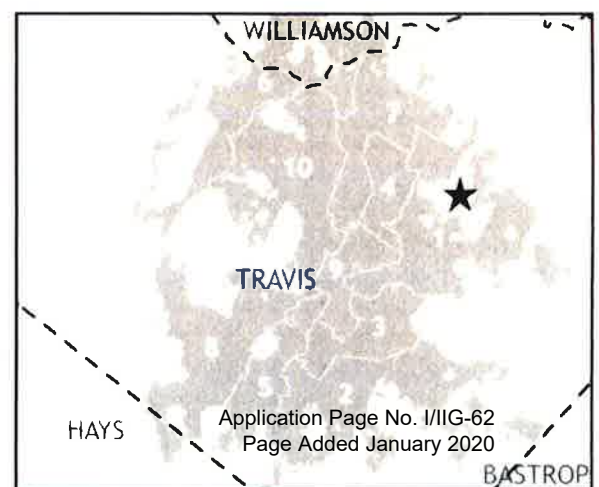
FULL PURPOSE

 ETJ RELEASE AREA



City of Austin
Planning and Zoning Department
September 2019

This product has been produced by the Planning and Zoning Department for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



Application Page No. I/IIG-62
Page Added January 2020



125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

October 22, 2019

Scott M. Graves, P.E.
Principal, Geosyntec Consultants
8217 Shoal Creek Blvd, Suite 200
Austin, TX 78757

Re: Coordination Letter and Request for TxDOT Review
Proposed Transfer Station
Type V MSW Facility
Austin Community Transfer Station
Austin, Travis County, Texas

Dear Mr. Graves:

The Texas Department of Transportation (TxDOT) has received your letter dated September 25, 2019 and appreciates you reaching out to TxDOT to address resulting traffic impacts to our roadway system. We have reviewed previous correspondence in regards to your client's proposed facility. Since this facility does not tie directly to our system, TxDOT prefers that you work through Travis County and the City of Austin to address impacts to our system through their permitting process. Travis County and the City of Austin will coordinate impacts of traffic to the adjacent intersections with the developer and their representatives.

In response to your question on restrictions, we do not have any current restrictions for legal load limits entering US 290. However, in the event an oversized or overweight permit is required, please contact our Motors Carrier Division at <https://www.txdmv.gov/motor-carriers/oversize-overweight-permits>. We have included representatives from Travis County and the City of Austin in this letter to facilitate communications on this issue. If you have any questions, please contact Victor Vargas, North Austin Area Engineer, at (512) 997-2202 or Victor.Vargas@txdot.gov.

Sincerely,

Tucker Ferguson, P.E.
Austin District Engineer

cc: Scott James, Asst. Director, Austin Transportation Department, City of Austin
Andre Betit, P.E., Traffic Engineering Division Manager, Travis County
Victor Vargas, P.E., North Austin Area Engineer, Austin District, TxDOT

Via Email (Victor.Vargas@txdot.gov)

29 January 2020

Mr. Victor Vargas, P.E.
North Austin Area Engineer
Texas Department of Transportation
7901 N. I-35
Austin, Texas 78753

**Subject: Traffic Coordination Follow-Up
Proposed Municipal Solid Waste Transfer Station (Type V MSW Facility)
Austin Community Transfer Station – Austin, Travis County, Texas**

Dear Mr. Vargas:

First and foremost, we want to thank Mr. Tucker Ferguson and the Texas Department of Transportation (TxDOT) for the October 22, 2019, response to our letter of September 25, 2019, informing TxDOT about Waste Management of Texas, Inc.'s (WMTX's) planned application to the Texas Commission on Environmental Quality (TCEQ) to register the above-referenced municipal solid waste (MSW) transfer station in Travis County. We appreciate Mr. Ferguson's prompt response advising us that TxDOT does not have any current restrictions for legal load limits entering U.S. Highway 290, which is the closest TxDOT-maintained roadway that will provide access to the proposed transfer station.

As you know, Mr. Ferguson's October 2019 letter lists you as the TxDOT point of contact for this matter going forward. We are happy to answer any questions you may have regarding this project.

We wish to make clear with this letter that the proposed transfer station, once operational, will result in a net reduction in site-generated traffic volumes as compared to the existing, current landfill operations at the site. As noted in our September 2019 letter, there is an existing, operational MSW landfill at the site proposed for the transfer station, and that landfill has an established historical traffic flow. The transfer station will be located entirely within the existing permitted boundary of the landfill facility (i.e., the transfer station and the landfill will be co-located facilities). The roads within one mile of the site that waste-hauling vehicles currently and have historically used to access the landfill facility will be the same roads that vehicles use to access the transfer station.

Operation of the transfer station will be phased in as the landfill phases out of operation – i.e., the transfer station will not commence operation until the landfill is nearing capacity and accepting only *de minimis* amounts of waste – thus the cumulative traffic impacts from the co-located facilities will be minimal as the two facilities will not be fully operational at the same time. Detailed information on expected transfer station-generated traffic volumes are provided in the enclosed table. As the traffic data in the enclosed table demonstrate, the proposed transfer station – even when operating at its theoretical maximum capacity – will generate significantly fewer vehicles per day than the landfill, on the same access roads that currently serve the landfill.

GW7107/Austin Transfer Station Follow Up Coord Ltr to TxDOT

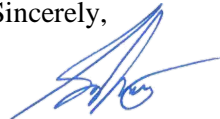
Mr. Victor Vargas, P.E.
29 January 2020
Page 2

We also acknowledge TxDOT's preference that we work with local jurisdictions regarding traffic issues on access roads outside of TxDOT's system. WMTX is committed to addressing all applicable local building and construction requirements regarding road and traffic issues at the appropriate time. At this point in the TCEQ application phase of the project, WMTX is addressing TCEQ's registration requirements. If the need to coordinate with local transportation agencies and departments arises outside of the TCEQ registration process, WMTX will address such needs as they arise – i.e., at such time as a local government requirement applies to the project and in accordance with applicable procedures.

Lastly, we want to take this opportunity to provide TxDOT with the revised ingress and egress plan for the proposed transfer station. WMTX's application to register the transfer station is under review by TCEQ, and WMTX has made certain revisions to the pending application, including a traffic-relevant revision to the Site Plan for the proposed facility. Enclosed is a copy of the revised Site Plan, which you will note no longer contains the secondary driveway along Giles Road in the southeast corner of the site that was previously envisioned for use by transfer trailers exiting the site. WMTX no longer proposes to use this secondary driveway. The existing main site driveway that the transfer station will use for ingress and egress is the same driveway currently and historically used for ingress and egress to the existing landfill, as discussed in the 2004 Transportation Study attached to Geosyntec's September 2019 letter.

If you have any questions or comments regarding this matter, or require additional information, please do not hesitate to contact me at (512) 451-4003, or by email at sgraves@geosyntec.com.

Sincerely,



Scott M. Graves, P.E.
Principal

Attachment

Copy to: Chuck Rivette, WMTX

TABLE

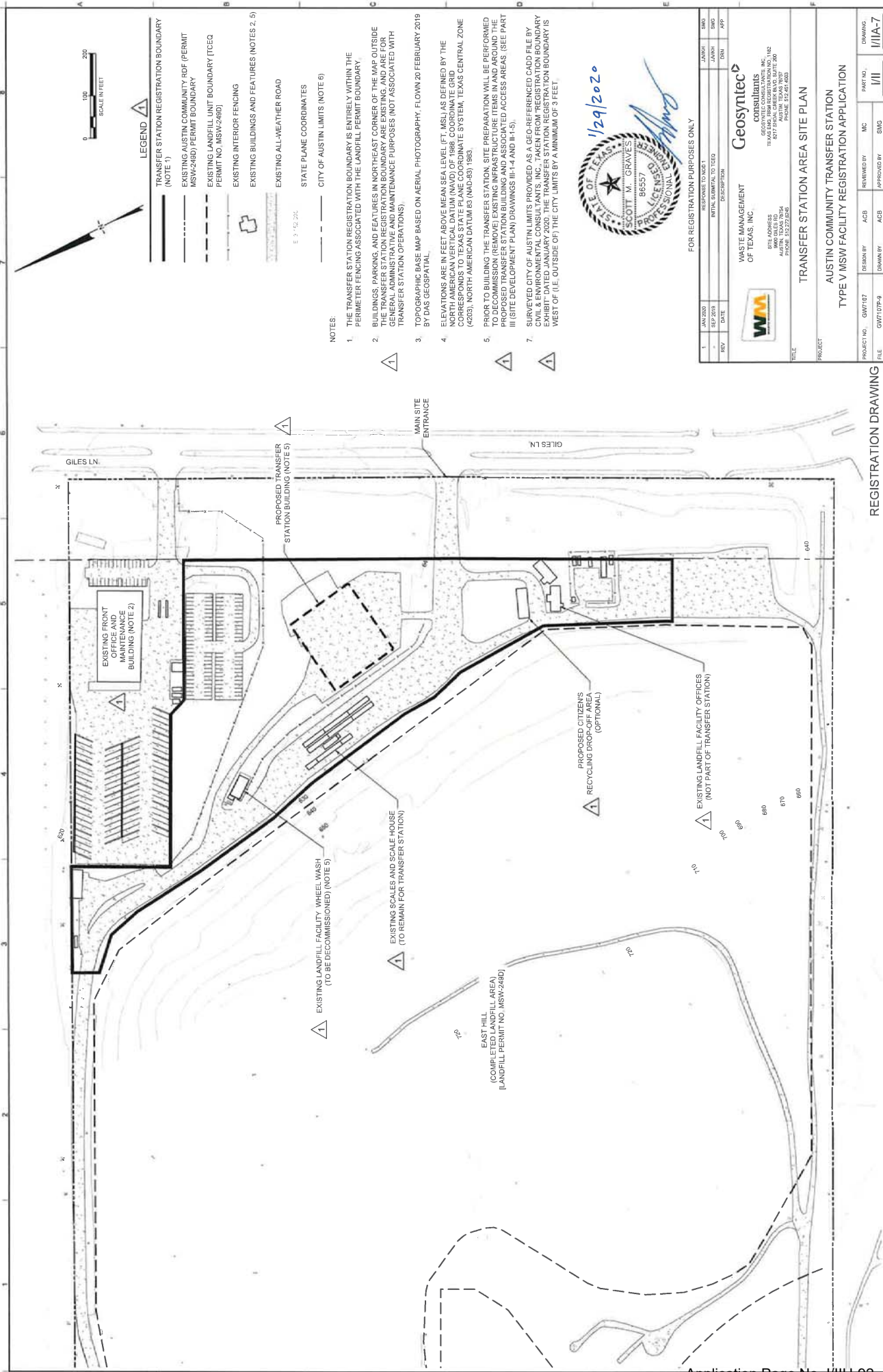
**COMPARISON OF TRANSFER STATION-
GENERATED TRAFFIC TO LANDFILL-
GENERATED TRAFFIC**

COMPARISON OF LANDFILL TRAFFIC TO TRANSFER STATION TRAFFIC
(AUSTIN COMMUNITY RDF LANDFILL VS. AUSTIN COMMUNITY TRANSFER STATION)

Item	2019 Landfill Daily Tonnage Values	2019 Landfill Daily Traffic Values	Transfer Station Daily Tonnage Estimates	Transfer Station Daily Traffic Estimates
Peak Day	5,213	623	3,200	573
Average of Busiest Day of Each Month	4,345	592	3,006	538
Average of M-F Operating Days	3,469	550	2,442	437
Average of All Operating Days	3,045	504	2,145	384

FIGURE

REVISED SITE PLAN



LEGEND

- TRANSFER STATION REGISTRATION BOUNDARY (NOTE 1)
- EXISTING AUSTIN COMMUNITY ROF (PERMIT MSW-2480) PERMIT BOUNDARY
- EXISTING LANDFILL UNIT BOUNDARY (TCEQ PERMIT NO. MSW-2480)
- EXISTING INTERIOR FENCING
- EXISTING BUILDINGS AND FEATURES (NOTES 2, 5)
- EXISTING ALL-WEATHER ROAD
- STATE PLANE COORDINATES
- CITY OF AUSTIN LIMITS (NOTE 6)

NOTES:

1. THE TRANSFER STATION REGISTRATION BOUNDARY IS ENTIRELY WITHIN THE PERIMETER FENCING ASSOCIATED WITH THE LANDFILL PERMIT BOUNDARY.
2. BUILDINGS, PARKING, AND FEATURES IN NORTHEAST CORNER OF THE MAP OUTSIDE THE TRANSFER STATION REGISTRATION BOUNDARY ARE EXISTING AND ARE FOR OFFICE USE ONLY. THESE ARE NOT ASSOCIATED WITH THE TRANSFER STATION OPERATIONS.
3. TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
4. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT. MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4205), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
5. PRIOR TO BUILDING THE TRANSFER STATION, SITE PREPARATION WILL BE PERFORMED TO DECOMMISSION (REMOVE) EXISTING INFRASTRUCTURE ITEMS IN AND AROUND THE PROPOSED TRANSFER STATION BUILDING AND ASSOCIATED ACCESS AREAS (SEE PART III (SITE DEVELOPMENT PLAN) DRAWINGS III-14 AND III-15).
6. SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CAD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. TAKEN FROM REGISTRATION BOUNDARY WEST OF (I.E. OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



1/29/2020

FOR REGISTRATION PURPOSES ONLY

REV	DATE	DESCRIPTION	BY	APP
1	JAN 2020	INITIAL SUBMITTAL TO TCEQ	JAN/20	SMC
2	SEP 2019		JAN/20	SMC

Geosyntec
CONSULTANTS
WASTE MANAGEMENT
OF TEXAS, INC.
8711 ADDRESS
AUSTIN, TEXAS 78754
PHONE: 512.222.8286
FAX: 512.222.8286

TRANSFER STATION AREA SITE PLAN

AUSTIN COMMUNITY TRANSFER STATION

TYPE V MSW FACILITY REGISTRATION APPLICATION

PROJECT NO.	GW1707	DESIGN BY	ACB	REVIEWED BY	MC	PART NO.	IIIA-7
FILE	GW1707-8	DRAWN BY	ACB	APPROVED BY	SMG		

REGISTRATION DRAWING



1001 E. PARMER LANE, SUITE B, AUSTIN, TEXAS 78753 | 512.997.2200 | WWW.TXDOT.GOV

January 30, 2020

Scott M. Graves, P.E.
Geosyntec Consultants
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757

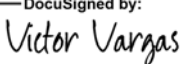
Re: Traffic Coordination Follow-up
Proposed Municipal Solid Waste Transfer Station (Type V MSW Facility)
Austin Community Transfer Station – Austin, Travis County, Texas

Dear Mr. Graves:

Thank you for your letter dated January 29, 2020, notifying Texas Department of Transportation (TxDOT) of the Transfer Station Proposed by Waste Management of Texas, Inc.'s (WMTX's). Please let this office know if there are any changes made as WMTX proceeds. We look forward to continuing working with you.

I may be reached in the future as follows:
Phone: 512-997-2201 or Email: Victor.Vargas@txdot.gov

Sincerely,

DocuSigned by:

65666A1473104FD...

Victor M. Vargas, P.E.
Area Engineer - North Austin Area Office
TxDOT Austin District

Hand-delivered via Courier

25 September 2019

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
108 W. 16th Street
Austin, Texas 78701

RECEIVED
SEP 25 2019

Subject: **Request for THC Project Review
Proposed Transfer Station
Type V MSW Facility
Austin Community Transfer Station
Austin, Travis County, Texas**

Dear Mr. Wolfe:

Geosyntec Consultants (Geosyntec) has prepared this letter on behalf of our client, Waste Management of Texas, Inc. (WMTX), who will be the owner and operator of the above-referenced proposed transfer station (i.e., a Type V municipal solid waste (MSW) facility as defined by the Texas Commission on Environmental Quality (TCEQ).

BACKGROUND

Please note that this proposed facility will be situated within the permitted boundary of an existing landfill, the Austin Community Recycling & Disposal Facility (RDF), Type I MSW Landfill, TCEQ Permit No. 249D. The site is on the east side of Travis County, just north of the intersection of US290 and Giles Road. The address of the facility is 9900 Giles Road, Austin, TX, 78754.

As part of previous landfill permitting efforts, THC coordination has taken place. Copies of previous THC coordination, including a "No Historic Properties Affected, Project May Proceed" determination in 2004, are attached to this letter.

REQUEST FOR CURRENT PROJECT

The purpose of this letter is to:

- Notify the THC of a proposed MSW transfer station situated within the permitted boundary of the existing landfill facility (and located on the east side of the property, east of the landfill areas (see attached figures)).
- Request review by THC for compliance of the proposed project with the Natural Resources Code, Chapter 191, Texas Antiquities Code, in accordance with TCEQ MSW regulation 30 TAC §330.71(o).

GW7107/Austin Transfer Station THC Coordination Ltr Sep 2019

- Request a written response from THC in the form of a review letter, acknowledging and documenting that, if THC concurs, the proposed transfer station facility will be compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code, via a “project may proceed” determination.

DESCRIPTION OF CURRENT PROJECT

While the overall permitted landfill boundary occupies approximately 359.6 acres situated between Giles Road and Walnut Creek, the current project (the proposed transfer station area) will only occupy relatively small in footprint compared to the overall facility boundary. The transfer station itself (i.e., the building) will be less than one (1) acre in size. In total, the area to actually be developed for transfer station operations (the building, associated all-weather access roads and vehicle turnaround areas, approach ramps, parking, support features, etc.) will be less than approximately 10 acres.

The proposed transfer station building will be a pre-engineered metal building with a roof, exterior walls, openings for collection vehicles to enter the building to unload, covered loadout areas on the sides of the building, and ancillary support features. Inside the building, solid waste will be unloaded and transferred to larger transfer trailer vehicles, who will transport the waste to an approved off-site landfill for disposal.

Figures and photographs from a site visit on September 24, 2019 are attached. As shown, the transfer station area is on already-developed land that includes gravel and paved roads and parking areas, office and maintenance buildings, truck scales, and landscaped areas with manicured grass and planted trees.

CLOSING

Geosyntec would appreciate your timely review of the information submitted with this letter, and are respectfully requesting a written response within 30 days of this letter, documenting that the proposed Austin Community Transfer Station be compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. This will allow us to proceed with the registration process. If you have any questions, comments, or require additional information, please do not hesitate to contact me at (512) 451-4003, or by email at sgraves@geosyntec.com.

Sincerely,

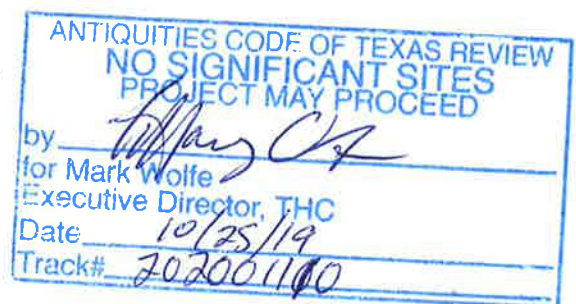


Scott M. Graves, P.E.
Principal

Attachments

Mr. Chuck Rivette, WMTX

GW7107/Austin Transfer Station THC Coordination Ltr Sep 2019



Via Hand Delivery

Mr. Kenneth May
Regional Programs Coordinator
Regional Services – Solid Waste Planning
Capital Area Council of Governments
6800 Burleson Road, Building 310, Suite 165
Austin, Texas 78744

31 January 2020

**Subject: Transmittal of Completed RSWMP Conformance Review Checklist
New TCEQ MSW Transfer Station Registration Application, No. MSW-40306
Austin Community Transfer Station, Travis County, Texas**

Dear Mr. May:

Thank you for the opportunity to attend the January 23, 2020, meeting of the Capital Area Council of Governments' (CAPCOG's) Solid Waste Advisory Committee (SWAC) and engage with the SWAC regarding the above-referenced municipal solid waste (MSW) transfer station registration application. We appreciated the opportunity to provide the SWAC with updated information, and to address the SWAC's questions, regarding the pending application and proposed facility.

As requested, Waste Management of Texas, Inc. (WMTX) has completed CAPCOG's Regional Solid Waste Management Plan (RSWMP) Conformance Review Checklist. Enclosed is the completed checklist and supporting information. Per the RSWMP, WMTX has completed the checklist to the best its ability to demonstrate how the proposed facility will help in promoting the goals and objectives of the RSWMP. *See* RSWMP, Vol. II, at 42-43.

Also enclosed are WMTX's responses to the Texas Commission on Environmental Quality's (TCEQ's) first round of comments on the pending registration application and WMTX's proposed revisions to Parts I and II of the application. We will continue to provide CAPCOG with any additional revisions to Parts I and II of the application that are submitted to TCEQ in the course of the agency's ongoing review of the application.

Returning briefly to the Conformance Review Checklist, WMTX understands that the checklist questions are intended track the goals and objectives of the RSWMP. *See* RSWMP, Vol. II, at 42. However, the law requires conformance with the RSWMP approved and adopted by TCEQ, not the checklist. *See* Tex. Health & Safety Code § 363.066(a). With respect to plan conformance, CAPCOG's RSWMP does not set forth any particular requirements for MSW applications or facilities. Instead, the RSWMP sets out goals and objectives, such as Goal #15 and its associated objectives, which pertain to "the Plan Conformance/Facility Application Review Process." RSWMP, Vol. I, at 4.


The objectives listed under Goal #15 of CAPCOG's RSWMP concern land use compatibility, roadway and drainage impacts, the applicant's compliance history as determined by TCEQ, buffer zones and visual screening, and practices to prevent and control windblown litter, stormwater runoff, vectors, odors, and nuisance conditions. *See* RSWMP, Vol. I, at 4-5. Each of these topics is addressed in WMTX's registration application and, in the case of compliance history, by TCEQ in the application review process, pursuant to TCEQ's rules in 30 Tex. Admin. Code Chapter 60.

Mr. Kenneth May
31 January 2020
Page 2

As such, WMTX's application provides the requisite information demonstrating that the waste management activities associated with the proposed Austin Community Transfer Station will conform to CAPCOG's RSWMP.

In addition to Goal #15, one objective of Goal #9 of the RSWMP is to "[c]ordinate the development of transfer stations . . . in areas of need." RSWMP, Vol. I, at 3 (Objective #9B). Consistent with this objective, CAPCOG recognized back in 2005 – when its Executive Committee approved the RSWMP – that "[a]s population continues to grow throughout the region, additional transfer stations may be necessary in the extended planning future." RSWMP, Vol II, at 23. As CAPCOG has observed, the population of Central Texas continues to grow at a rapid pace, particularly the City of Austin, Travis County, and other municipalities and counties currently and historically served by the Austin Community Recycling and Disposal Facility (Austin Community RDF). With the closing of the Sunset Farms Landfill in 2015 and the impending closure of the Austin Community RDF, there is an acute need for the Austin Community Transfer Station to continue to provide much needed waste management services to the CAPCOG communities served by the Austin Community RDF after the landfill has reached its disposal capacity. The transfer station will be located entirely within the existing permitted boundary of the Austin Community RDF, and operation of the transfer station will be phased in as the landfill phases out of operation – i.e., the transfer station will not commence operation until the landfill is nearing capacity and accepting only *de minimis* amounts of waste.

Please contact me at (512) 451-4003 or by email at sgraves@geosyntec.com if you have any questions or require any additional information. Alternately, you are welcome to contact Mr. Charles Rivette, a representative of WMTX, at (713) 647-5542 for further information or assistance.

Sincerely,

Scott M. Graves, P.E.
Principal, Geosyntec Consultants, Inc.

Enclosure

Copy to: Charles Rivette, Waste Management of Texas, Inc.

COMPLETED RSWMP CONFORMANCE CHECKLIST WITH ATTACHED SUPPORTING INFORMATION*

REGISTRATION APPLICATION MSW-40306 AUSTIN COMMUNITY TRANSFER STATION

*Note: For brevity and to avoid unnecessary duplication, the supporting information provided to CAPCOG is being omitted from this copy that is for insertion in the TCEQ Registration Application Part I/II, Appendix I/IIL. The supporting information is composed of excerpts from the TCEQ Registration Application and TCEQ Compliance History information.

CAPCOG AREA COUNCIL OF GOVERNMENTS REGIONAL SOLID WASTE MANAGEMENT PLAN CONFORMANCE REVIEW CHECKLIST

Adopted by CAPCOG Executive Committee January 12, 2005

Revised by CAPCOG Executive Committee on August 8, 2018

Updated Division and Division Director on December 12, 2018

The Texas Commission on Environmental Quality (TCEQ) requires that all municipal solid waste (MSW) facilities proposed for siting in the CAPCOG region conform to CAPCOG's Regional Solid Waste Management Plan (RSWMP). (Texas Health and Safety Code §363.066; 30 TAC §330.635.) It is the responsibility of the applicant to demonstrate conformance to the RSWMP.

CAPCOG, with the assistance of its Solid Waste Advisory Committee (SWAC), will review permit and registration applications filed with the TCEQ to determine their conformance to the RSWMP. All applicants must complete this Solid Waste Plan Conformance Checklist, and submit it to CAPCOG as described in Volume II of the RSWMP, to assist CAPCOG in making this determination.

The applicant's representative must complete the Checklist to demonstrate how the proposed facility will help in promoting the goals and objectives of the RSWMP. CAPCOG's Solid Waste Program Coordinator will return an incomplete Checklist to the applicant with a written explanation of its deficiencies. The applicant may resubmit the Checklist when all the deficiencies are corrected. As required under 30 TAC §330.57(e)(2), the applicant must submit any amendments to parts I or II of application to CAPCOG. If the applicant amends parts I or II of the application, the applicant must also submit an updated conformance review checklist with a cover letter explaining the changes. Failure to provide amended applications and checklists may be grounds for a non-conformance determination by CAPCOG.

If you need additional space to answer a Checklist question, or the question requires an attachment, attach letter-size continuation sheets, reduce or fold attachments to letter size if possible, and insert each continuation sheet and attachment following the Checklist page it supplements. Include the Checklist question number on the continuation sheet and attachment, and number the sheets in sequence—for example, the continuation sheets answering a question on Checklist page 3 should be numbered 3-1, 3-2, etc. The grade sheet that the SWAC will use to evaluate your responses to the Checklist is attached for your information.

Submit the completed Checklist to Ken May, Regional Programs Coordinator at kmay@capcog.org and Rachel Steele, Community & Economic Development at rsteale@capcog.org.

In order to review Volumes I and II of CAPCOG's RSWMP, local MSW facility siting ordinances, and CAPCOG's model local MSW facility siting ordinance, which includes recommended set-back distances between MSW facilities and various sensitive features, please visit:
<http://www.capcog.org/divisions/regional-services/solid-waste-planning>.

Section 1: General Applicant Information

- 1.1 Applicant's Name: Waste Management of Texas, Inc. (WMTX)
- 1.2 Location of proposed facility
Nearest City: Austin County: Travis
- 1.3 ☒ New facility or ☐ Amendment to current permit/registration
- 1.4 Is this a permit or a registration application?
☐ Permit No. _____ ☒ Registration No. 40306
- 1.5 What type of MSW facility is being registered or permitted?
☐ Type I Landfill ☐ Type IV AE Landfill
☐ Type I AE Landfill ☒ Type V Facility
☐ Type IV Landfill ☐ Other (please describe)
Describe "Other" below:

- 1.6 What types of waste(s) will be accepted at your facility?

The facility's Waste Acceptance Plan in the registration application describes all allowable waste streams (see Part I/II Report, Section 3.1). Additionally, Section 4.1 of the Site Operating Plan (SOP) further describes the typical properties and characteristics of the waste. Copies of this section of the SOP and other relevant sections of the SOP are being attached as "Exhibit A" to this package. The major classifications of solid waste to be accepted at the facility for transfer to a properly permitted MSW facility include household waste, yard waste, commercial waste, Class 2 and Class 3 non-hazardous industrial waste, construction-demolition waste, brush, rubbish, shredded or quartered tires, and wastes incidental to MSW (e.g., municipal household hazardous waste, small dead animals). Certain special wastes may also be accepted at the facility.

Consistent with 30 TAC §330.15, the facility will not accept Class 1 non-hazardous industrial wastes, regulated hazardous wastes, regulated asbestos-containing material (RACM), liquid wastes, radioactive wastes, polychlorinated biphenyl (PCB) wastes, untreated medical wastes, or other wastes prohibited by TCEQ regulations.

See also the response to Item 1.7 immediately below.

- 1.7 Do you currently or plan to accept special or industrial waste? If yes, which classes? If no, write "No."

Yes. The facility will accept Class 2 and Class 3 non-hazardous industrial solid waste. The facility will also accept certain special wastes (i.e., those special wastes identified as allowable for acceptance in the registration application (see Part I/II Report, Section 3.1)).

The facility's Waste Acceptance Plan also provides a list of prohibited wastes that the facility shall not accept. Please refer to Section 3.1 of the Part I/II Report for a complete list of prohibited wastes.

1.8 Do you currently or do you plan on accepting treatment plant sludge, treated sewage or any other potentially odorous wastes? ☐ Yes ☒ No

1.9 What entity or entities in the CAPCOG Region is this facility intended to serve?

The facility will serve individuals, businesses, communities, institutions, and private and public solid waste collection vehicles from the City of Austin, Travis County, and surrounding counties.

1.10 Does your facility have an operating or host agreement with any CAPCOG entity or entities? If so, please provide a copy. If not, do you plan to enter into one?

No. At this time there are no plans to enter into one.

1.11 If the proposed facility is other than a landfill, where will the stored or processed wastes be taken for disposal?

The disposal destination of the solid waste collected and transferred by the facility is a properly permitted Type I MSW landfill.

1.12 Do you wish to meet with CAPCOG's SWAC (or a SWAC subcommittee formed for the review of this application) prior to CAPCOG commencing its conformance review?

☒ Yes ☐ No

1.13 Do you wish to make a presentation to the SWAC when it considers a recommendation to CAPCOG's Executive Committee on this application's conformance to CAPCOG's RSWMP?

☒ Yes ☐ No

Section 2: Land Use Compatibility and Conformance to Regional Goals and Objectives

The following questions assess conformance to the Regional Solid Waste Management Plan. These questions are based on CAPCOG's Regional Goals and Objectives, which include land use compatibility and local community concerns.

- 2.1. What measures do you plan to take to make your facility accessible to the general public? (e.g., citizens' collection station, inclement weather plan, posted fee scales, map availability, public advertising methods, etc.)

The facility will be listed/advertised on the internet and in the Yellow Pages to make it convenient for customers (including members of the general public) to contact the facility regarding waste acceptance, hours of operation, and directions to the site. The site entrance and scales/gate house will be well marked, with signs indicating the site telephone number and hours of operation and the types of waste accepted/prohibited. All fees will be clearly posted for customers at the scales/gate house area and additional signage will be provided regarding safety requirements and restricted activities. All-weather roads will be provided and maintained to allow customers to access the transfer station building for unloading of waste, including during times of inclement weather. Finally, an optional citizen's recycling drop-off area has been added to the proposed facility, as reflected in the revisions to the application as submitted to TCEQ in January 2020 (copies of which, for Part I and II revisions, were provided to CAPCOG).

- 2.2. Describe your plans to deter illegal dumping through initiatives such as community cleanup events, free or reduced rate events, public education, etc.

WMTX will continue to support area-wide cleanup initiatives and community-sponsored cleanup events, and provide discounted rates on material resulting from community cleanup events. WMTX will also continue to provide public education and provide information on area recycling and disposal. These public education and outreach efforts promote awareness of the need for, and methods of, proper waste management, which will help deter illegal dumping.

It is also noted that the facility's operating procedures, as set forth in the registration application, will include checking for and cleaning up waste debris and litter along the public access roads serving the facility for a distance of two miles in either direction from the site entrance. The visibility of these activities on nearby roads will also serve to deter illegal dumping.

- 2.3. If applicable, how will your facility manage scrap/used tires? Please explain in detail.

The facility will accept only tires that are shredded or quartered. These will be managed in the same manner as the other allowable waste streams (i.e., generally speaking: unloaded in the transfer station building and transferred to transfer trailers for off-site disposal at a duly-permitted MSW facility), as set forth in the SOP included in the registration application. Whole scrap/used tires will not be accepted. In the event that a whole tire is discovered in an incoming load, the tire will be transported off-site to a permitted tire recycling facility.

- 2.4. What are your plans for managing yard waste and brush? Please explain in detail.

The facility will accept yard waste and brush. When practicable (e.g., when a load of yard waste and/or brush is a "clean" load (not mixed with other waste)), yard waste and/or brush will be

diverted for off-site processing into mulch.

2.5. Will any of the following items be diverted for recycling or reuse?

- | | |
|---|---|
| <input checked="" type="checkbox"/> Electronics | <input checked="" type="checkbox"/> Yard waste & brush |
| <input checked="" type="checkbox"/> White Goods | <input checked="" type="checkbox"/> Scrap Metal |
| <input type="checkbox"/> Construction/Demolition Debris | <input checked="" type="checkbox"/> Other (please describe) |
| <input checked="" type="checkbox"/> Tires | -Source-Separated Recyclable Material |

2.6. If the proposed facility is other than a landfill, what, if any, measures will be taken to minimize, reduce, or recycle the waste before it is hauled off for disposal?

The facility will be a transfer station. If "clean" loads (i.e., not mixed with other wastes) of recyclable materials of the types noted above in Item 2.5 are received, they will be diverted for recycling. The facility does not propose to conduct sorting of loads to locate these items for recycling/reuse. WMTX will divert recyclable materials from the transfer station by continuing to provide recycling services to customers throughout the service area. Recyclable materials collected through those collection programs will not be sent to the transfer station, but rather diverted to a Materials Recycling Facility.

As noted previously, the facility will include an optional citizen's recycling drop-off area, for non-commercial customers to drop-off small quantities of acceptable source-separated recyclables.

2.7. If the proposed authorization is a registration, how does the application qualify for a registration rather than a permit, and why – in light of the more limited opportunities for members of the public to contest a registration compared to a permit – a registration for this facility would better serve the public interest than a permit?

The proposed authorization is a registration. As explained in Section 3.6 of Part I/II of the registration application, per 30 TAC §330.9(b)(4), this transfer station facility qualifies for a registration because it will be located within the permitted boundaries of an MSW Type I landfill facility (namely, the Austin Community Recycling and Disposal Facility (RDF), TCEQ Permit No. MSW-249D). Public interest will be served by adhering to the registration process and opportunity for public participation established by the Texas Legislature and TCEQ through the applicable laws and regulations.

2.8. Is the site of your proposed facility subject to zoning or siting restrictions by federal, state or local governments? Please note that you must mark "yes" to this question if any local government with jurisdiction over the proposed location has adopted a MSW facility siting ordinance pursuant to Texas Health and Safety Code §363.112 or §364 and or adopted any floodplain regulations pursuant to Texas Water Code §16.315, regardless of whether or not the applicant believes that the ordinance applies to the proposed facility. ☒ Yes ☐ No

2.9. The applicant must demonstrate compliance with local land use regulations by (i) providing a written list of all local land use regulations relevant to the MSW facility, and (ii) providing documentation from the applicable zoning or siting entity stating that the proposed facility will

be in compliance with its regulations. Make sure to include consideration of any MSW facility siting ordinances and floodplain management ordinances adopted by the local government with jurisdiction over the proposed site. If the applicant believes that any such local ordinances do not apply to the facility, it must provide an explanation and verification of this claim from all local governments with jurisdiction over the proposed location.

As mentioned, the transfer station will be within the permit boundary of the Austin Community RDF. The Austin Community RDF holds a development permit from Travis County. The applicant expects that the County development permit may need to be either modified and updated to incorporate the development associated with the transfer station, or a new stand-alone development permit obtained, along with a building permit. As has been the case for ongoing development activities at the Austin Community RDF, these local development permit applications are made prior to the start of actual development activities. With respect to local ordinances, on the filing date of the TCEQ registration application, a portion of the transfer station registration boundary was within the city limits of the City of Austin and the remaining portion of the transfer station registration boundary was within the City of Austin ETJ. As such, any Travis County ordinance purporting to prohibit or limit waste storage, processing, or disposal does not apply to the facility. The proposed location of the transfer station building has been shifted slightly in response to a request from a neighboring church to provide greater buffer distances, along with a reduction in the registration boundary. This is reflected in revisions to the application as submitted to TCEQ in January 2020 (copies of which, for Part I and II revisions, were provided to CAPCOG). This relocation and reduction in the registration boundary results in the transfer station facility not being located within City of Austin city limits or zoning.

- 2.10. Please provide a map identifying all schools, land owned by school districts for future schools, public and private water wells, neighborhoods, individual residences, business establishments, day care facilities, places of worship, historic sites, health care facilities, areas of direct drainage to any public surface drinking supply, areas of direct drainage to a recharge aquifer, 100-year floodplain, parks, tourist attractions, scenic roads, airport runways used by piston-driven aircraft, airport runways used by turbojet-powered aircraft, wetland areas, fault areas that have shifted since the last Ice Age, seismic impact zones, habitat for state and federally listed species, and any other potentially sensitive features within a 1-mile radius of the outer boundary of the proposed facility site. See definitions listed in CAPCOG's 2004 Model MSW Facility Siting Ordinance if clarification is needed.

A series of maps (taken from the registration application unless otherwise noted) are attached as "Exhibit B." When present within a 1-mile radius of the facility boundary, the features requested above are identified on these maps. Note that the following features are not found within a 1-mile radius of the outer boundary of the proposed facility.

1. Land owned by school districts for future schools
2. Areas of direct drainage to a public surface drinking supply
3. An historic site
4. Areas of direct drainage to an aquifer recharge zone
5. a tourist attraction
6. a designated scenic road
7. Airport runways, both for piston-driven and turbojet-powered aircraft
8. Fault areas that have shifted since the last Ice Age
9. Seismic impact zones
10. Habitat for state-or-federally-listed endangered species

Also, it is noted that no other potentially sensitive features were found within a 1-mile radius of the outer boundary of the proposed facility site.

A site-specific wetlands study was performed for this project (Addressed in Part I/II Section 11.2 and Appendix I/II-I). No potentially-jurisdictional wetlands or other jurisdictional water bodies were found within the limits of disturbance of the transfer station area.

A site-specific endangered and threatened species study was performed for this project (addressed in Part I/II Section 12 and Appendix I/IIJ), and the findings are that facility development and operation is not expected to cause or result in the destruction or adverse modification or contribute to the taking or harming of any listed threatened or endangered species.

2.11. What is the shortest distance between the outer boundary of the proposed facility site and the following features within 1 mile of the proposed facility? (if a listed feature is not located within 1 mile of the outer boundary of the proposed facility, mark "N/A"):

- | | |
|---|-------------------|
| a. An existing school: | <u>5,030</u> feet |
| b. Land owned by a school district for a future school: | <u>N/A</u> feet |
| c. A public or private water well: | <u>2,810</u> feet |
| d. A neighborhood: | <u>3,030</u> feet |
| e. An individual residence: | <u>3,030</u> feet |
| f. A day care facility: | <u>3,580</u> feet |
| g. A place of worship: | <u>300</u> feet |
| h. An area of direct drainage to
any public surface drinking supply: | <u>N/A</u> feet |
| i. An historic site: | <u>N/A</u> feet |
| j. A health care facility: | <u>1,400</u> feet |
| k. An area of direct drainage to any recharge aquifers: | <u>N/A</u> feet |
| l. Any officially recognized 100-year floodplain | <u>1,720</u> feet |
| m. A park: | <u>3,680</u> feet |
| n. A tourist attraction | <u>N/A</u> feet |
| o. A designated scenic road: | <u>N/A</u> feet |
| p. An airport runway used by piston-driven aircraft | <u>N/A</u> feet |
| q. An airport runway used by turbojet-powered aircraft | <u>N/A</u> feet |
| r. A wetland area | <u>900</u> feet |
| s. A fault area that has shifted since the last Ice Age | <u>N/A</u> feet |
| t. A seismic impact zone | <u>N/A</u> feet |
| u. Habitat for state- or federally-listed species | <u>N/A</u> feet |

- 2.12. Have local governments with jurisdiction over the facility specifically identified this location as suitable for the type of MSW handling (disposal or processing) proposed for this location? (Under Vol. II of CAPCOG's RSWMP, if a local government has a MSW siting ordinance in place designating the proposed site as suitable for the proposed use, CAPCOG's RSWMP will not contradict it)

The transfer station facility will be sited within the permit boundary of the Austin Community RDF facility, which has been deemed suitable for processing and disposal of MSW by state and local governments through issuance of TCEQ Permit No. 249D and local government development permits under which the site is now being developed and operated.

- 2.13. The applicant must demonstrate that it has adequately addressed the risk of nuisance conditions from a MSW facility impacting nearby persons, property, or land uses by providing a written plan containing reasonable and appropriate measures to avoid if possible or minimize if avoidance is not possible such conditions through (i) controlling litter blown from the MSW facility or released from the operator's vehicles going to or from the MSW facility, (ii) managing the quantity and quality of stormwater from the facility, (iii) controlling birds and disease vectors from the facility, (iv) controlling odor from the MSW facility through the use of daily cover and other means, (v) controlling excessive noise or light pollution, and (vi) establishing appropriate buffers and setbacks. Note that full enclosure of the location where waste would be stored and processed ("full enclosure" defined here as enclosure above and at least $\frac{3}{4}$ around the storage or processing area laterally) and operation of active odor controls are presumed to be "reasonable" and "appropriate" measures to avoid or minimize odor conditions for any Type V transfer station. Where feasible, full enclosure of storage or processing areas and operation of active odor controls are also presumed to be "reasonable" and "appropriate" measures to avoid or minimize odor conditions for any other Type V facility. If an applicant is proposing a Type V facility without full enclosure and active odor controls for the processing and storage areas, the applicant should demonstrate either that: 1) other proposed odor control measures will be at least as effective at controlling odor as full enclosure and active odor controls or 2) full enclosure of the processing and storage areas would be infeasible for the facility.

The SOP in the registration application addresses the operational requirements of 30 TAC Chapter 330, Subchapter E (Operational Standards for Municipal Solid Waste Storage and Processing Facilities), which are specifically intended to prevent the occurrence of nuisance conditions. Copies of the relevant sections of the SOP are being attached as "Exhibit A" to this package, to provide information on the above topics.

The area where waste will be processed (i.e., the transfer station building) will have a roof over the building and will have walls around at least 3 of the 4 sides of the building laterally, and therefore it will have a "full enclosure" according to the CAPCOG definition stated above. As outlined in the SOP, the facility will also implement active odor control measures. Based on these features, it is apparent that the facility will comply with CAPCOG's recommendations and therefore can be presumed to be reasonable and appropriate to avoid or minimize odor conditions.

- 2.14. The applicant must demonstrate that road, drainage, and other infrastructure needs and/or problems created by a MSW facility have been fully addressed by providing documentation from appropriate governmental entities that such needs and problems have been addressed. At a

minimum, this must include documentation from: 1) the County, 2) if the proposed facility is located within the extra-territorial jurisdiction (ETJ) or city limits of a city government, the applicable City Government, and 3) if a local school district owns land within 1 mile of the outer boundary of the proposed facility, the applicable school district. In the event that such documentation cannot be obtained by the applicant, the applicant must present evidence that it has made a reasonable and good-faith effort to obtain such documentation.

The applicant has not sought to obtain the documentation requested by this item because it does not appear to be applicable to the proposed facility. Namely, the proposed facility is not proposing any off-site road, drainage, or infrastructure improvements (i.e., there are no off-site needs being requested from a County, City, or school district). Also, because the transfer station will utilize area roads in a similar manner as the Austin Community RDF landfill's traffic (as analyzed, designed, and approved for operation), but with a reduced amount of facility-generated traffic, the transfer station will not create road, drainage, or other infrastructure problems - and in fact may be considered an improvement of traffic conditions compared to landfill operations.

- 2.15. The applicant must demonstrate compatibility with existing and planned land uses in the vicinity of the MSW facility by providing documentation from appropriate governmental entities that the facility is not incompatible with existing and planned land uses. At a minimum, this must include documentation from: 1) the County, 2) if the proposed facility is located within the extra-territorial jurisdiction (ETJ) or city limits of a city government, the applicable City Government, and 3) if a local school district owns land within 1 mile of the outer boundary of the proposed facility, the applicable school district. In the event that such documentation cannot be obtained by the applicant, the applicant must present evidence that it has made a reasonable and good-faith effort to obtain such documentation.

Land use information and associated data are provided in Part I/II of the registration application. This includes information on existing and planned land uses, along with an assessment of land use compatibility based on the established presence of waste management activities in the area and limited ability to significantly change the land use of existing area landfills. While the applicant has fulfilled its regulatory obligations regarding the land use information provided in the registration application, it has not made efforts to contact local governmental entities regarding land use compatibility.

- 2.16. The applicant must demonstrate that it has addressed the likely visual and aesthetic impacts from a MSW facility on nearby persons, property, and land uses by providing a written plan for including reasonable buffers and setbacks, landscaping, or other "context sensitive" measures that the applicant will employ to minimize such impacts.

The transfer station building, where solid waste will be managed, has buffers to nearby potential off-site receptors that are greater than the regulatory minimum 50-ft set-back, as described below. Through these set-backs and other facility features, visual and aesthetic impacts will be minimized, for the reasons described below.

- The transfer station building will be a full enclosure, as described in Item 2.13 above.
- To the east, there will be an approximately 250-ft buffer distance between Giles Lane and the transfer station building. There is also an existing elevated earthen screening berm on the WMTX property along Giles Lane (vegetated and landscaped with mature trees) which will remain in-place.

- The transfer station building openings where vehicles will enter to unload waste will be oriented towards the interior of the WMTX property. The tipping floor (waste unloading and storage areas) will not be visible from Giles Lane, and this building orientation plus the larger buffer distance will mitigate visual and other potential aesthetic impacts (e.g., noise and odors).

- To the north, more than 500 ft from the transfer station building, the adjacent property is the closed Sunset Farms Landfill, which is built to such a height as to obscure the transfer station from neighboring vantage points further to the north.

- To the southeast, more than 850 ft from the transfer station building, the Community Bible Fellowship Church is on the other side of Giles Lane, and this set-back, along with the presence of the vegetated/treed screening berm and the lack of Sunday transfer station waste operations will minimize visual and aesthetic impacts.

- To the south, more than 1,000 ft from the transfer station building, the adjacent property are retail establishments which face south towards US Hwy 290, away from the transfer station. This set-back, along with the presence of trees, will help obscure the transfer station from the south.

- To the west, the on-site landscape is composed of the existing Austin Community RDF landfill, which is built to such a height as to obscure the transfer station from neighboring vantage points further to the west.

- 2.17. If the proposed facility is a landfill, what will be the maximum permitted and maximum potential (theoretical geometric calculation) fill height of the facility? (Please provide a final contour map of the proposed facility.)

N/A - not a landfill Feet above existing grade and _____ feet above mean sea level

- 2.18. If the permit or registration that is the subject of the application would raise the elevation of either an existing MSW facility or natural ground, the applicant must demonstrate that it has assessed potential impacts on the natural landscape by providing a written statement that identifies the highest elevation natural feature within two miles of the facility and a demonstration that the proposed elevation will not cause adverse off-site flooding impacts (as is required in part II of the application under 30 TAC §330.61(m)(1)).

N/A

- 2.19. Please provide compliance history for the past five years of all permitted or registered facilities operated by the applicant in Texas, using TCEQ records. Please explain what corrective actions have been taken to prevent recurrent violations, if any violations occurred. Please list the number of Notices of Violations (NOVs) received in the past 5 years for each permitted or registered facility operated in Texas. Please list the number of corrective actions taken in response to NOVs in the past 5 years for each permitted or registered facility operated in Texas. Please list all Enforcement Actions (EAs) for each permitted or registered facility operated in Texas. Please list all fines, settlements, or other outcomes of NOV or EA events at all permitted or registered facilities operating in Texas.

Enclosed as "Exhibit C" is the compliance history information for the applicant, Waste Management of Texas, Inc., compiled from TCEQ's online records. If any NOVs have been received in the past 5 years, the NOV records are included with the applicable compliance history report. All such NOVs have been resolved, as indicated in the enclosed TCEQ records. There are no records of recurrent violations or EAs (or Notices of Enforcement).

Section 3: Certification

I certify that I read and understood the requirements of this Checklist; that I am authorized to make this certification on behalf of the Applicant; and that, to the best of my knowledge, the information supplied by the Applicant for this Checklist is correct and complete.

Waste Management of Texas, Inc.

Name of Applicant

By

Signature

Steve Jacobs

Name

Director of Disposal Operations

Title

Date

SWAC CHECKLIST GRADE SHEET

Checklist item	Conforms (Y or N)	If NO, specified deficiency & suggestions for remedy (if appropriate)	Comments
2.1			
2.2			
2.3			
2.4			
2.5			
2.6			
2.7			
2.8			
2.9			
2.10			
2.11			
2.12			
2.13			
2.14			
2.15			
2.16			
2.17			
2.18			
2.19			

For each item, the SWAC will rate the response as either conforming or deficient. For each item rated deficient, the SWAC will detail the deficiency, including indicating which aspect of the RSWMP the response may indicate non-conformance. Where appropriate, the

SWAC may make suggestions as to potential remedy. The SWAC may also add comments and/or specific information that would be helpful in determining conformance. Any comments or suggestions by the SWAC are for guidance and do not relieve the applicant of responsibility for demonstrating conformance. This grade sheet is intended to help the SWAC in its conformance review recommendation to CAPCOG's Executive Committee. A grade of "YES" or "NO" on any item or items does not constrain the SWAC in its review and recommendation to the CAPCOG Executive Committee.

CAPCOG reserves the right to present any information to the SWAC and Executive Committee that could be relevant in assessing conformance to CAPCOG's RSWMP, not just the information provided by the applicant in this checklist or in parts I and II of the application. This may include, among other things, set-back distance criteria that have been incorporated into any local ordinance or that have been recommended in CAPCOG's 2004 model MSW facility siting ordinance. If, after the SWAC has made a recommendation to the Executive Committee, CAPCOG staff or SWAC members become aware of other relevant information not considered by the SWAC in making its recommendation, CAPCOG staff reserves the right to bring that information to the SWAC to reconsider their recommendation or to present that information directly to the Executive Committee for their consideration. It is therefore in the best interests of all parties involved that the applicant be as thorough and comprehensive in providing the requested information as early as possible. The CAPCOG Executive Committee will make the final determination of conformance.

Applicant:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN

AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION NO. MSW-40306 AUSTIN, TRAVIS COUNTY, TEXAS

Owner and Operator:
Waste Management of Texas, Inc.



FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

THE ABOVE P.E. SEAL APPLIES TO THIS TITLE PAGE ONLY. WITHIN PART III, EACH INDIVIDUAL ENGINEERING REPORT, PLAN, OR CALCULATION, AND EACH ENGINEERING DRAWING IS SIGNED, SEALED, AND DATED BY THE RESPONSIBLE ENGINEER AS REQUIRED BY THE TEXAS ENGINEERING PRACTICE ACT.

Physical Site Address:
9900 Giles Road
Austin, Texas 78754
(512) 272-6245

Submitted September 2019
Revised January 2020

PART III TABLE OF CONTENTS

SITE DEVELOPMENT PLAN

THE P.E. SEAL ON THIS PAGE APPLIES TO THIS TABLE OF CONTENTS PAGE ONLY. WITHIN PART III, EACH INDIVIDUAL ENGINEERING REPORT, PLAN, OR CALCULATION, AND EACH ENGINEERING DRAWING IS SIGNED, SEALED, AND DATED BY THE RESPONSIBLE ENGINEER AS REQUIRED BY THE TEXAS ENGINEERING PRACTICE ACT.



PART III SITE DEVELOPMENT PLAN NARRATIVE REPORT

ATTACHMENT 1 GENERAL FACILITY DESIGN

ATTACHMENT 2 SURFACE WATER DRAINAGE REPORT

ATT. 2A On-Site Drainage Analysis – Hydrology

ATTACHMENT 3 CLOSURE PLAN

ATTACHMENT 4 COST ESTIMATE FOR CLOSURE

FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN NARRATIVE REPORT

AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION NO. MSW-40306 AUSTIN, TRAVIS COUNTY, TEXAS

Prepared by:

Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757
(512) 451-4003



SEALED FOR THIS PART III NARRATIVE REPORT,
AND FOR REGISTRATION PURPOSES ONLY.

WITHIN EACH ATTACHMENT, ITEMS THAT REQUIRE
A SIGNATURE AND SEAL BY A LICENSED
PROFESSIONAL (E.G., ENGINEER, SURVEYOR, OR
GEOSCIENTIST) ARE SIGNED, SEALED, AND
DATED, AS APPROPRIATE, BY THE RESPONSIBLE
PROFESSIONAL.

Submitted September 2019
Revised January 2020

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FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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1/29/2020



GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. F-1182

ATTACHMENTS

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AND FOR REGISTRATION PURPOSES ONLY.

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Attachment 1	General Facility Design
Attachment 2	Surface Water Drainage Report
Attachment 3	Closure Plan
Attachment 4	Cost Estimate for Closure

1. INTRODUCTION

This Part III – Site Development Plan (SDP) Narrative Report has been prepared for the Austin Community Transfer Station (hereafter also referred to as the “facility” or “site”) consistent with the requirements of 30 TAC §330.63. The Part III SDP addresses the criteria used in the selection and design of this facility for safeguarding the health, welfare, and physical property of the public and the environment. This Part III narrative report includes discussion of the drainage, land use, zoning, adequacy of access roads and highways, and other considerations specific to this facility.

1.1 Background

The Austin Community Transfer Station will provide an efficient means to process the waste that is generated in the City of Austin, Travis County, and the surrounding areas and transfer the waste to a Texas Commission on Environmental Quality (TCEQ) permitted MSW landfill. This facility qualifies for a registration, per Title 30 Texas Administrative Code (TAC) §330.9(b)(4), by being located within the permitted boundaries of an MSW Type I facility (namely, the Austin Community Recycling and Disposal Facility (RDF), TCEQ Permit No. MSW-249D).

1.2 Site Location

The transfer station facility is located at 9900 Giles Road, approximately 500 feet north of the intersection of Giles Road and US Highway 290, in Travis County, Texas. The site location is shown on the general location maps in Part I/II, Appendix A (e.g., see Drawing I/IIA-1).

1.3 Land Use and Zoning

An analysis of land use and zoning, and potential impact on the area surrounding the facility, is presented in the Part I/II narrative report (see Section 5 of the Part I/II report).

1.4 Adequacy of Access Roads and Highways

Adequacy of access roads and highways is addressed in the Part I/II Supplemental Technical Report (see Section 7 of that report). The traffic evaluation presented in Part I/II of the application, with additional supporting documentation including a comprehensive Transportation Study contained in Appendix I/IIH, concludes that for this transfer station access roads are available and adequate.

A facility layout plan showing the access points is presented on Part III, Attachment 1, Drawing III-1-1.

Access to the transfer station will continue via the existing landfill (i.e., the Austin Community RDF) driveway on Giles Road. As discussed in Part I/II, Appendix I/III, the primary access routes to the site are via Giles Road, Johnny Morris Road, and US Highway 290. Routine maintenance of Giles Road and Johnny Morris Road by Travis County should be adequate to keep these roadways in good condition over the life of the facility. There are no known weight restrictions on these roads in one-mile proximity to the facility, other than the maximum legal weight limit of 80,000 pounds.

1.5 Organization of Part III (Site Development Plan)

The remainder of this report is organized as follows:

- the general facility design is presented in Section 2;
- the facility surface water drainage design is discussed in Section 3;
- the waste processing facility design is discussed in Section 4;
- the facility closure plan is discussed in Section 5; and
- cost estimate for closure is discussed in Section 6.

The attachments to the Site Development Plan are organized as follows:

- Attachment 1 provides drawings that present additional information on the general facility design (related to waste movement and access);
- Attachment 2 is the Facility Surface Water Drainage Report, with related drawings and calculations;
- Attachment 3 is the Closure Plan;
- Attachment 4 is the Cost Estimate for Closure.

2. GENERAL FACILITY DESIGN

2.1 Introduction

Section 2 of this report has been prepared to address the general facility design topics required by 30 TAC §330.63(b).

2.2 Facility Access Control

This section describes how access will be controlled for the facility, pursuant to 30 TAC §330.63(b)(1). The access controls described below are designed to prevent the entry of livestock, protect the public from exposure to potential health and safety hazards, and to discourage unauthorized entry and uncontrolled disposal of solid waste or hazardous materials. Refer to Section 8 of Part IV (the Site Operating Plan (SOP)) for operating requirements related to access control.

Fencing and gates will serve as the primary access controls. The perimeter of the Austin Community RDF (within which the transfer station facility will be situated) is fenced to control access and prevent unauthorized access, and has lockable gates. Fencing will be composed of (at minimum) a four-foot barbed wire fence or a six-foot chain-link fence or equivalent (e.g., iron or metal bar-style fencing). The operating area (i.e., the transfer station) is a building. The location of the main entrance/exit gate is shown on Part III, Attachment 1, Drawing III-1-2 and in greater detail on Drawing III-1-4.

A facility attendant will be on-site during operating hours and will monitor entrance to the facility. Entry to the transfer station will be restricted to designated personnel, appropriate subcontractors, approved waste haulers, the public, TCEQ personnel, and properly identified persons whose entry is authorized by facility management. The facility attendant will direct waste transport drivers to the transfer station. There, the drivers will be directed to a specific unloading area. Additionally, when appropriate, signs with directional arrows and/or barricades may be placed along site roads to direct traffic and control interior access.

During normal operating hours, facility personnel will be on duty at the scale house and in the vicinity of transfer station operations to control access. When the site is closed to the public, the entry gate at the main entrance/exit will be closed to prevent site access, and locked when no personnel are present on site.

2.3 Waste Movement

2.3.1 Waste Flow Diagram

Pursuant to §330.63(b)(2)(A), a waste flow diagram indicating the processing and storage sequences (there is no disposal) for wastes received is shown on Part III, Attachment 1, Drawing III-1-1.

2.3.2 Waste Process Schematic

Pursuant to §330.63(b)(2)(B), a schematic indicating the waste processing and storage areas is shown on the “Facility Layout Plan” in Part III, Attachment 1, Drawing III-1-2. As indicated on the Facility Layout Plan, waste storage and processing will take place in the transfer station building. Waste may also be temporarily stored in tarped transfer trailers awaiting transport off-site. The Facility Layout Plan shows the location of the transfer station building within the registration boundary, and also for informational purposes and context, references other features on the site that are not associated with the registration (e.g., the permitted landfill features of Permit No. MSW-249). Additional drawings are provided in Part III Attachment 1 to show the layout of the transfer station building within the registration boundary at an enlarged scale, and also to show the traffic flow patterns to help better define the waste process schematics. Note that there is no disposal proposed as part of this registration application, and that there is no phased sequence of development.

2.3.3 Ventilation and Odor Control

As required by §330.63(b)(2)(C), the transfer station building is designed to provide adequate ventilation. Ventilation in the transfer station building will be provided by the openings through which waste hauling vehicles will enter and exit, and vents which will be installed on the building roof. Excessive dust and particulates that occur at the transfer station facility will be controlled using water sprays or similar methods. No significant air emissions are expected to result from the operation of the transfer station.

The transfer station will be operated to provide ventilation for odor control and employee safety. The operator will prevent nuisance odors from leaving the transfer station registration boundary. If nuisance odors are detected near the transfer station registration boundary, the site will immediately take action to abate the condition. Odors are controlled by limiting operations to within the building and limiting the time solid waste may be stored on the tipping floor (refer to Part IV - SOP, Sections 4.2 and 8.2). All processing of solid waste will occur within the transfer

station building. Mist systems (using water) may be used within the transfer station building to suppress odors, if needed. The mist (or similar) systems may also be used to control odors through the addition of chemical deodorizers. Ponding water will be controlled to avoid objectionable odors; namely, through: (i) the enclosed transfer station building whose roof will prevent precipitation from coming in contact with waste; (ii) the slope of the tipping floor in the transfer station building (where waste will be managed and stored) towards a floor drain as described below; and (iii) through site grading of areas outside the transfer station building to drain and direct stormwater away from the transfer station building.

2.3.4 Generalized Construction Details

Waste processing activities (and storage) will take place in the transfer station building. The proposed transfer station building will be an enclosed structure (i.e., a pre-engineered metal building with a roof, exterior walls on three sides, openings on the fourth side for collection vehicles to enter the building to unload, covered loadout tunnels on the sides of the building with building openings at the loadout tunnels, and ancillary support features). The inside of the transfer station building will have a reinforced concrete slab tipping floor with an area of approximately 25,000 square feet, and reinforced concrete push walls to resist typical forces for transfer operations.

The tipping floor is designed with a slope to drain toward the south of the building. The building is oriented with the openings for collection vehicles to enter the tipping floor for unloading facing north. The east and west sides of the building have openings for loading of transfer trailer vehicles in the loadout tunnels. The tipping floor is designed with a slope to drain toward a grate drain at one end of the tipping floor. The grate drain will convey water (primarily wash water), which will be managed as contaminated water, to a minimum 2,000-gallon (nominal) holding tank.

Performance data on the transfer station is as follows (taken from computations in the Part I/II Report, Table I/II-2, with assumptions stated therein): The transfer station is designed with a theoretical capacity to receive and process/store a total of 5,700 tons/day. However, the transfer station registration application limits the maximum amount of waste to be received daily to 3,200 tons/day. Thus, on a day when the facility receives its maximum amount, the transfer station would be operating at 56% of its design capacity. In accordance with 30 TAC §330.241(a), the design capacity will not be exceeded during operation.

Engineering drawings presenting the site plan, general construction details, and associated design criteria for the transfer station are provided in Part III, Attachment 1.

2.3.5 Noise Pollution Control

As required by §330.63(b)(2)(I), the transfer station is designed to control noise pollution. Waste processing activities will take place in the transfer station building. Since these activities are confined to be indoors within the enclosed building, generated noise will be largely confined to the inside of the transfer station building. Waste transfer operations and associated noise are also screened and buffered from the public roadway (Giles Road) by an existing vegetated earthen berm and mature trees on registrant-owned property along Giles Road, along with a setback distance from the roadway of about 250 feet. The transfer station building is also located with setbacks of such a distance from adjacent landowners (including nearby residences and businesses) that activities at the site will not be readily visible, and at a distance and orientation such that potential noise pollution will be attenuated (i.e., by being blocked by the building walls, roof, and existing terrain, and/or by being dissipated across the setback distances from potential off-site receptors). For example, the transfer station building is located approximately 1,140 feet from the nearest business, and approximately 3,000 feet from the nearest residence. Also, there is one church near the southeast corner of the facility boundary, on the other side of Giles Road approximately 860 feet from the transfer station building. Not only is there a substantial distance buffering the church from transfer station operations, but the transfer station will also not accept and/or transfer waste on Sundays. There are no schools or aesthetically significant sites within a half-mile radius of the facility.

2.4 Sanitation and Water Pollution Control

As required by §330.63(b)(3) and (4), the transfer station will be designed to facilitate proper cleaning. The transfer station building will be an enclosed structure and will include a metal or equivalent material roof that covers the concrete slab waste processing and storage area (i.e., the tipping floor). Waste will be unloaded and processed on the concrete tipping floor. Floor washdown water management is discussed below. The transfer station site will be graded to prevent run-on drainage and flow of stormwater onto the tipping floor.

2.4.1 Surface Water and Groundwater Protection

As required by §330.63(b)(3)(A) and §330.63(b)(4), surface drainage in the vicinity of the facility will be controlled to prevent surface water runoff onto, into, and off the solid waste processing area. Based on the facility design information presented in this Site Development Plan, the transfer station is 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. The facility will be constructed, maintained, and operated to manage run-on and

runoff during the peak discharge of a 25-year rainfall event and prevent the off-site discharge of waste material, including, but not limited to, in-process and/or processed materials. Surface water drainage in and around the facility will be controlled to prevent surface water from running into, onto, and off the processing area. Since all contaminated water is managed in a controlled manner, as discussed above, surface water and groundwater is protected.

2.4.2 Floor Wash Down

As required by §330.63(b)(3)(A) through (D) and §330.243(a), the transfer station will be constructed to facilitate proper cleaning. Waste processing operations within the enclosed transfer station building will be conducted on the tipping floor. All floors in operating areas will be constructed of reinforced concrete. The push walls will be composed of reinforced concrete to resist typical forces on transfer operations and be able to be hosed down and scrubbed. Other walls in operating areas will be masonry, concrete, or other hard-surfaced materials that can be hosed down and scrubbed. A connection to a supply of water under pressure will be provided for cleaning. Tipping floor washdown water will drain through a grate drain and be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

2.5 Protection of Endangered Species

Pursuant to 30 TAC §330.61(n), §330.63(b)(5), and §330.551, site-specific endangered and threatened species assessments were conducted by a qualified biologist for this project site. The assessment included a review of state and federal reference information of the United States Fish and Wildlife Service (USFWS) and the Texas Parks and Wildlife Department (TPWD) and a field survey for threatened or endangered species and their habitats. The endangered species assessment and related documentation is provided in Part I/II, Appendix I/III.

The outcome of the assessment is that no federally-listed or state-listed endangered or threatened species, or any critical habitats for such species, were found at the site. The findings are that ongoing facility development and operation is not expected to cause or result in the destruction or adverse modification of critical habitats or contribute to the taking or harming of any endangered or threatened species.

3. SURFACE WATER DRAINAGE REPORT

3.1 Introduction

Section 3 of this report has been prepared to address the applicable surface water drainage design topics required by 30 TAC §330.63(c).

3.2 Drainage Design

The transfer station will be constructed, maintained, and operated to manage run-on and runoff during the peak discharge of a 25-year storm event and prevent the off-site discharge of waste material, including, but not limited to, in-process and/or processed materials. Surface water drainage in and around the facility will be controlled to minimize surface water running onto, into, and off the processing area. Details of the drainage system and associated design demonstrations are included in Part III, Attachment 2, Surface Water Drainage Report.

3.3 Floodplain Considerations

As shown on Drawing I/IIA-15 in Appendix I/IIA of Part I/II and documented/discussed further in Section 11 of the Part I/II Supplemental Technical Report, the transfer station facility is not located within a 100-year floodplain.

4. WASTE PROCESSING FACILITY DESIGN

4.1 Introduction

Section 4 of this report presents waste management unit design information, pursuant to 30 TAC §330.63(d)(1). The general facility design was previously addressed in Section 2. Attachment 1 of this SDP provides the supporting engineering drawings, plans, specifications, and calculations for the design of the waste processing facility.

4.2 Waste Operations

Pursuant to 30 TAC §330.63(d)(1)(A), the transfer station facility is designed for rapid processing and minimum detention of solid waste, up to and including the registered maximum daily waste acceptance rate as set forth in the Waste Acceptance Plan (see Section 3 of the Part I/II Supplemental Technical Report). The area to be used for waste transfer operations will be the tipping floor in the building, which is approximately 150 feet by 168 feet.

All solid waste capable of creating public health hazards or nuisances will be stored indoors within the building, processed and transferred promptly, and will not be allowed to result in a nuisance or public health hazard. All solid waste that is stored overnight at the facility will be either stored in tarped transfer trailers or stored indoors in the enclosed transfer station building on the tipping floor.

Procedures for the unloading of waste are provided in Section 8 of the SOP. This includes procedures for traffic control on-site, and procedures for the detection and prevention of unauthorized waste.

Unloading of waste in unauthorized areas is prohibited. Any waste that is identified as having been deposited in an unauthorized area will be immediately moved to the proper unloading areas.

4.3 Spill Prevention and Control

Pursuant to 30 TAC §330.63(d)(1)(B), the transfer station facility is designed to control and contain spills and contaminated water. Staging and processing areas at this facility will be located within the transfer station building. The unloading areas are designed to control and contain spills and contaminated water. The building walls in waste operations areas (discussed above in Section 2.4.2 of this report) will serve as a form of spill containment. Additionally, the tipping floor is designed with a slope to drain toward a grate drain at one end of the tipping floor. The grate drain will convey water (primarily wash water), which will be managed as contaminated water, to a

minimum 2,000-gallon (nominal) holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

Uncontaminated stormwater run-on and run-off will be directed away from the transfer station building entrances by site grading. The transfer station building interior where waste is managed will not result in any storm-generated run-off since the enclosed transfer station building will have a roof to prevent precipitation from coming in contact with waste.

4.4 Waste Storage Period

Pursuant to 30 TAC §330.63(d)(1)(A) and (C), the period of time that wastes will remain on-site will be limited. The facility will not accumulate solid waste in quantities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of other vectors. Solid waste will be stored in a manner to prevent fires, ensure safety, prevent a health hazard, and preclude food or harborage for animals and vectors, and contained to minimize windblown solid waste and litter. Solid waste that is stored overnight at the facility will be either stored in transfer trailers with a tarp cover or stored indoors in the enclosed transfer station building on the tipping floor. The maximum time waste material will be stored on-site is 48 hours.

5. CLOSURE PLAN

Pursuant to 30 TAC §330.63(h), a facility Closure Plan is included with Part III. This Plan is provided in Part III, Attachment 3. The Closure Plan has been prepared to meet the requirements of 30 TAC §330.459 (closure requirements for MSW Storage and Processing Units).

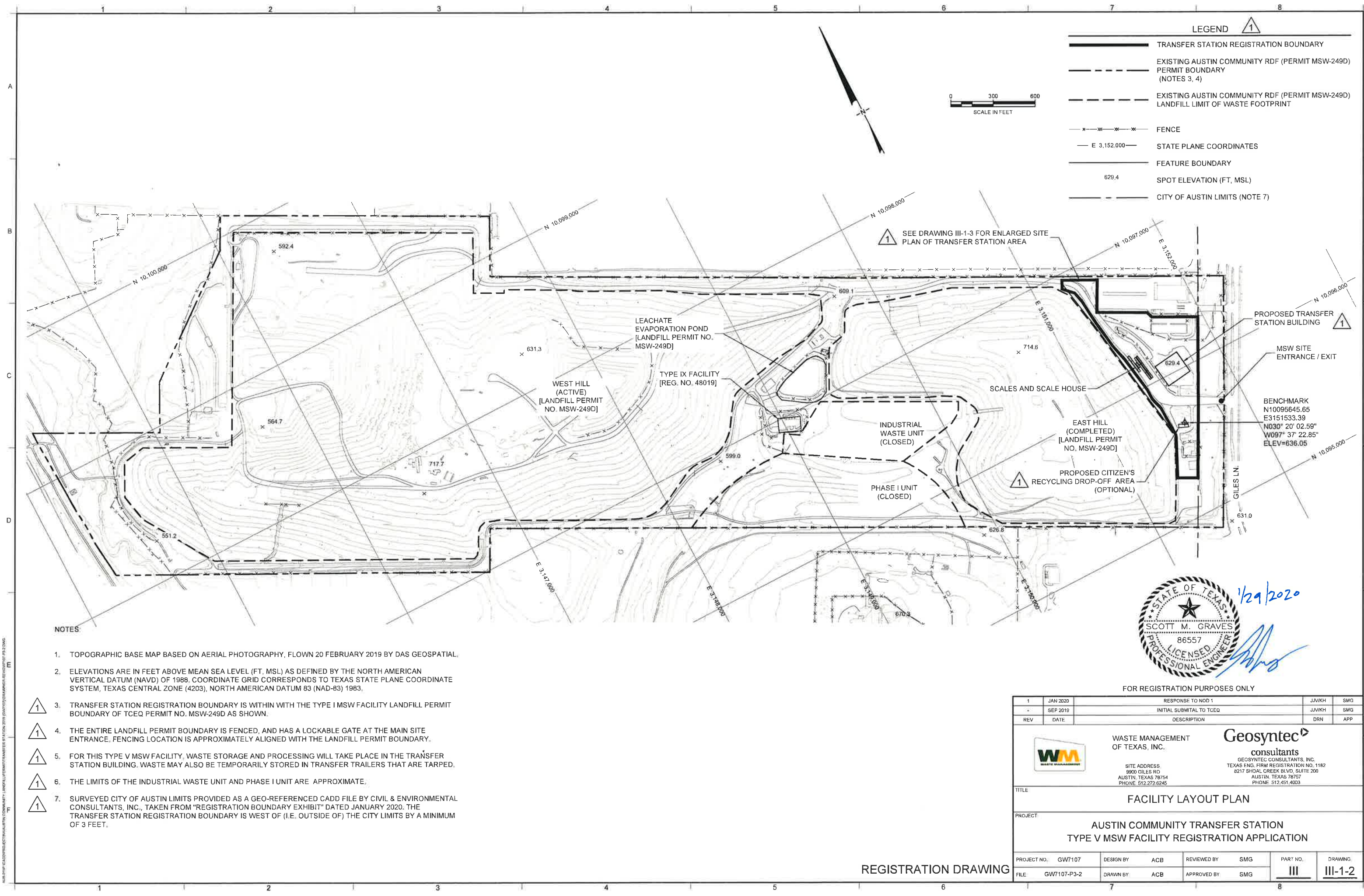
6. COST ESTIMATE FOR CLOSURE

Pursuant to 30 TAC §330.63(j), the cost estimate for closure is included with Part III. This information is provided in Part III, Attachment 4. The closure cost estimate has been prepared to meet the requirements of 30 TAC §330.505.

ATTACHMENT 1


GENERAL FACILITY DESIGN

LIST OF DRAWINGS		
Drawing No.	Title	Drawing Date (latest revision)
III-1-1	Flow Diagram	September 2019
III-1-2	Facility Layout Plan	January 2020
III-1-3	Existing Site Conditions - Transfer Station Area	January 2020
III-1-4	Transfer Station Site Plan	January 2020
III-1-5	Transfer Station Design	January 2020

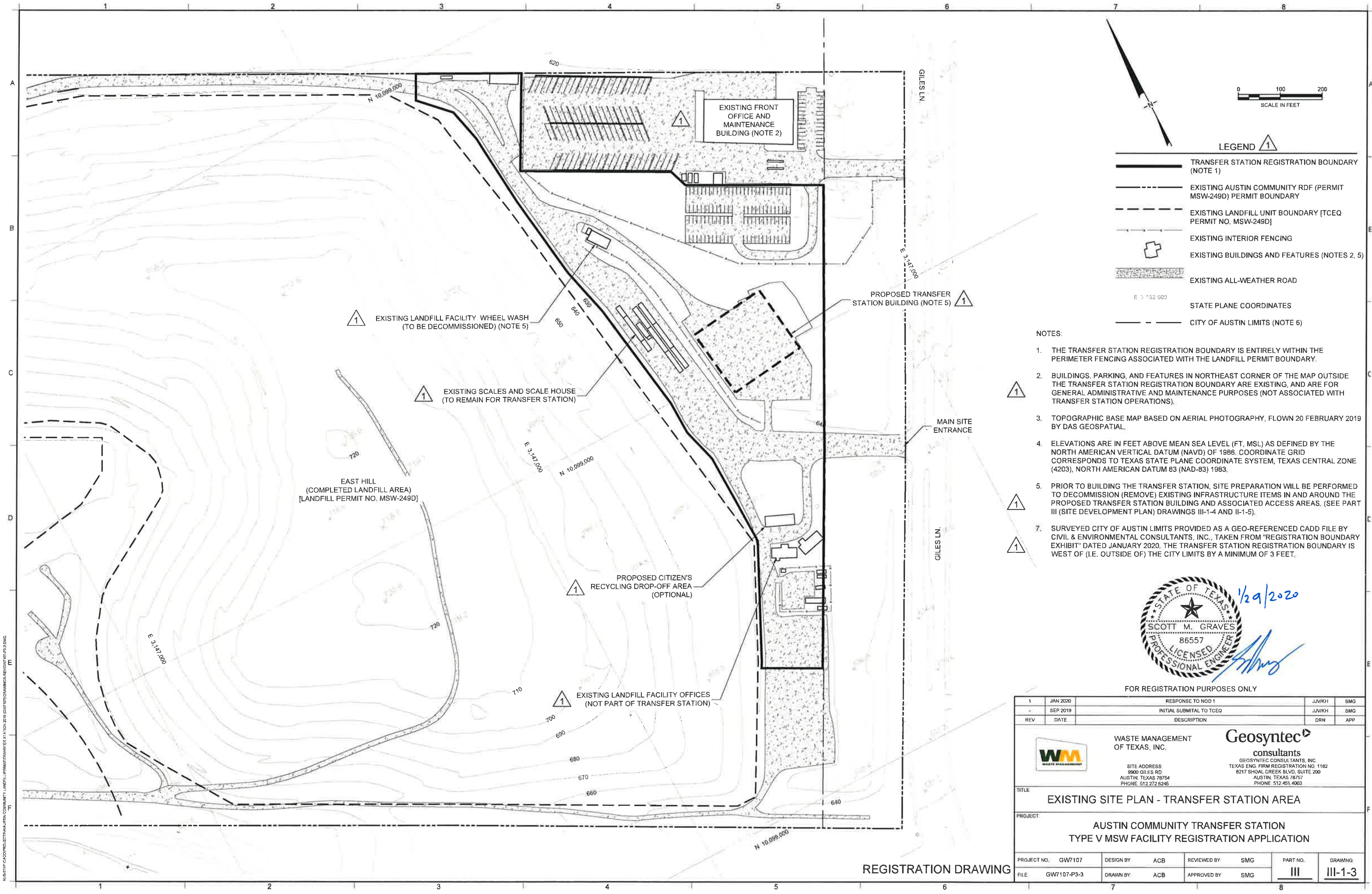


- NOTES:
1. TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
 2. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
 3. TRANSFER STATION REGISTRATION BOUNDARY IS WITHIN WITH THE TYPE I MSW FACILITY LANDFILL PERMIT BOUNDARY OF TCEQ PERMIT NO. MSW-249D AS SHOWN.
 4. THE ENTIRE LANDFILL PERMIT BOUNDARY IS FENCED, AND HAS A LOCKABLE GATE AT THE MAIN SITE ENTRANCE. FENCING LOCATION IS APPROXIMATELY ALIGNED WITH THE LANDFILL PERMIT BOUNDARY.
 5. FOR THIS TYPE V MSW FACILITY, WASTE STORAGE AND PROCESSING WILL TAKE PLACE IN THE TRANSFER STATION BUILDING. WASTE MAY ALSO BE TEMPORARILY STORED IN TRANSFER TRAILERS THAT ARE TARPED.
 6. THE LIMITS OF THE INDUSTRIAL WASTE UNIT AND PHASE I UNIT ARE APPROXIMATE.
 7. SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CADD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., TAKEN FROM "REGISTRATION BOUNDARY EXHIBIT" DATED JANUARY 2020. THE TRANSFER STATION REGISTRATION BOUNDARY IS WEST OF (I.E. OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



FOR REGISTRATION PURPOSES ONLY					
1	JAN 2020	RESPONSE TO NOD 1	JW/KH	SMG	
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JW/KH	SMG	
REV	DATE	DESCRIPTION	DRN	APP	
<div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div></div><div><div>Geosyntec consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE 512.451.4003</div></div></div> <div>TITLE</div> <div>FACILITY LAYOUT PLAN</div>					
PROJECT					
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					
PROJECT NO.	GW7107	DESIGN BY	ACB	REVIEWED BY	SMG
FILE	GW7107-P3-2	DRAWN BY	ACB	APPROVED BY	SMG
PART NO.				DRAWING	
III				III-1-2	

REGISTRATION DRAWING




LEGEND

- TRANSFER STATION REGISTRATION BOUNDARY (NOTE 1)
- EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D) PERMIT BOUNDARY
- EXISTING LANDFILL UNIT BOUNDARY [TCEQ PERMIT NO. MSW-249D]
- EXISTING INTERIOR FENCING
- EXISTING BUILDINGS AND FEATURES (NOTES 2, 5)
- EXISTING ALL-WEATHER ROAD
- STATE PLANE COORDINATES
- CITY OF AUSTIN LIMITS (NOTE 6)

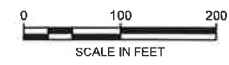
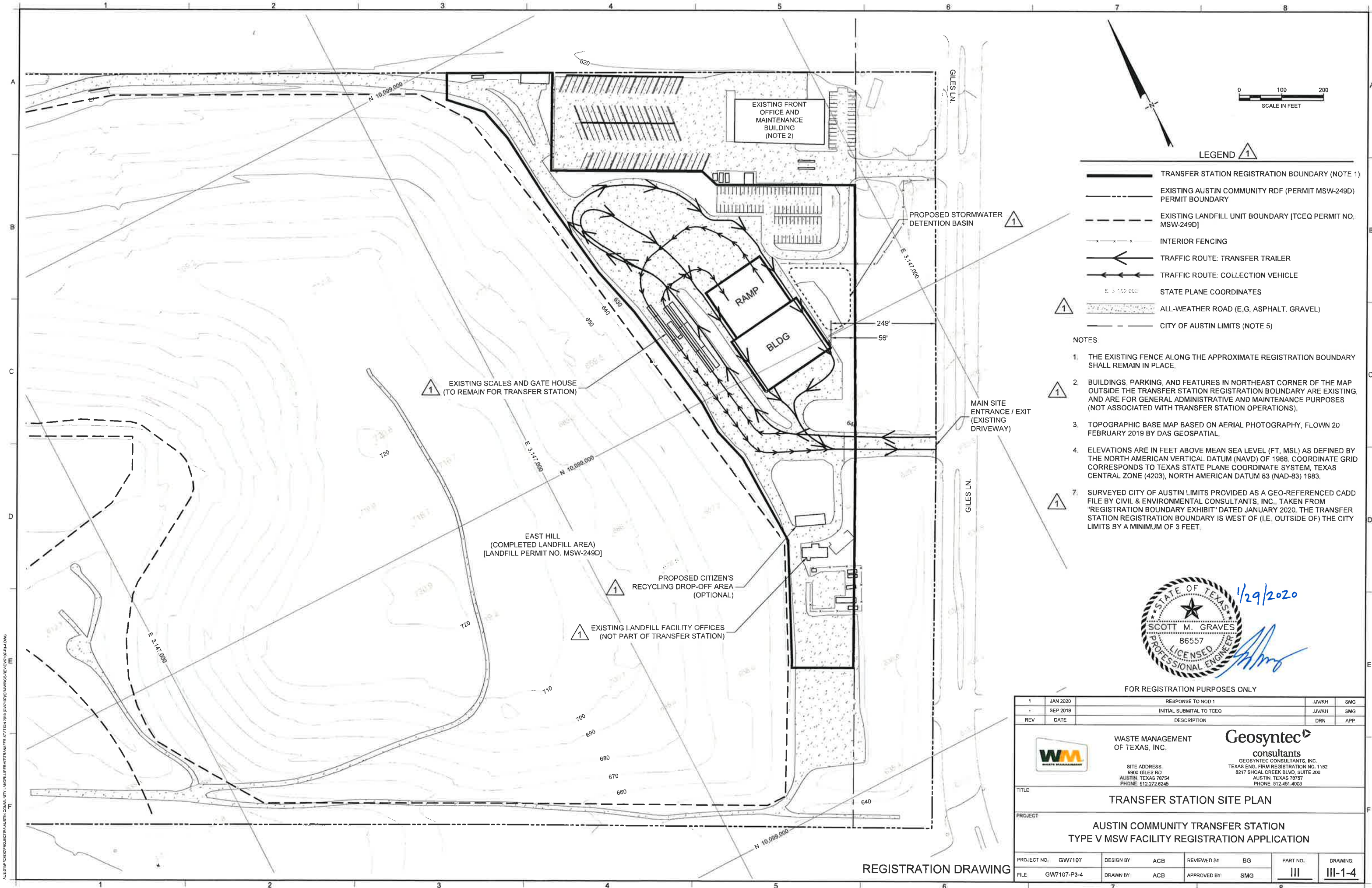
- NOTES:**
- THE TRANSFER STATION REGISTRATION BOUNDARY IS ENTIRELY WITHIN THE PERIMETER FENCING ASSOCIATED WITH THE LANDFILL PERMIT BOUNDARY.
 - BUILDINGS, PARKING, AND FEATURES IN NORTHEAST CORNER OF THE MAP OUTSIDE THE TRANSFER STATION REGISTRATION BOUNDARY ARE EXISTING, AND ARE FOR GENERAL ADMINISTRATIVE AND MAINTENANCE PURPOSES (NOT ASSOCIATED WITH TRANSFER STATION OPERATIONS).
 - TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
 - ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
 - PRIOR TO BUILDING THE TRANSFER STATION, SITE PREPARATION WILL BE PERFORMED TO DECOMMISSION (REMOVE) EXISTING INFRASTRUCTURE ITEMS IN AND AROUND THE PROPOSED TRANSFER STATION BUILDING AND ASSOCIATED ACCESS AREAS. (SEE PART III (SITE DEVELOPMENT PLAN) DRAWINGS III-1-4 AND II-1-5).
 - SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CADD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., TAKEN FROM "REGISTRATION BOUNDARY EXHIBIT" DATED JANUARY 2020. THE TRANSFER STATION REGISTRATION BOUNDARY IS WEST OF (I.E. OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



FOR REGISTRATION PURPOSES ONLY

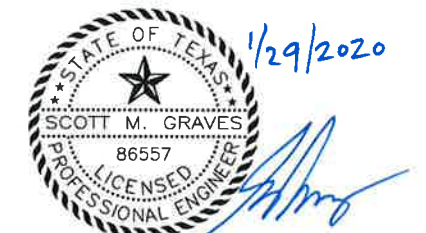
1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG			
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG			
REV	DATE	DESCRIPTION	DRN	APP			
		<div>WASTE MANAGEMENT OF TEXAS, INC.</div> <div>Geosyntec consultants</div> <div>GEOSYNTec CONSULTANTS, INC TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div> <div>SITe ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245</div>					
TITLE EXISTING SITE PLAN - TRANSFER STATION AREA							
PROJECT AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION							
PROJECT NO.	GW7107	DESIGN BY	ACB	REVIEWED BY	SMG	PART NO.	DRAWING
FILE	GW7107-P3-3	DRAWN BY	ACB	APPROVED BY	SMG	III	III-1-3

REGISTRATION DRAWING



- LEGEND**
- TRANSFER STATION REGISTRATION BOUNDARY (NOTE 1)
 - EXISTING AUSTIN COMMUNITY RDF (PERMIT MSW-249D) PERMIT BOUNDARY
 - EXISTING LANDFILL UNIT BOUNDARY (TCEQ PERMIT NO. MSW-249D)
 - INTERIOR FENCING
 - TRAFFIC ROUTE: TRANSFER TRAILER
 - TRAFFIC ROUTE: COLLECTION VEHICLE
 - STATE PLANE COORDINATES
 - ALL-WEATHER ROAD (E.G. ASPHALT, GRAVEL)
 - CITY OF AUSTIN LIMITS (NOTE 5)

- NOTES:**
- THE EXISTING FENCE ALONG THE APPROXIMATE REGISTRATION BOUNDARY SHALL REMAIN IN PLACE.
 - BUILDINGS, PARKING, AND FEATURES IN NORTHEAST CORNER OF THE MAP OUTSIDE THE TRANSFER STATION REGISTRATION BOUNDARY ARE EXISTING, AND ARE FOR GENERAL ADMINISTRATIVE AND MAINTENANCE PURPOSES (NOT ASSOCIATED WITH TRANSFER STATION OPERATIONS).
 - TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
 - ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.
 - SURVEYED CITY OF AUSTIN LIMITS PROVIDED AS A GEO-REFERENCED CADD FILE BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., TAKEN FROM "REGISTRATION BOUNDARY EXHIBIT" DATED JANUARY 2020. THE TRANSFER STATION REGISTRATION BOUNDARY IS WEST OF (I.E. OUTSIDE OF) THE CITY LIMITS BY A MINIMUM OF 3 FEET.



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1	JAN 2020	RESPONSE TO NOD 1	JJV/KH	SMG
-	SEP 2019	INITIAL SUBMITAL TO TCEQ	JJV/KH	SMG
REV	DATE	DESCRIPTION	DRN	APP



WASTE MANAGEMENT
OF TEXAS, INC.



Geosyntec
consultants

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE 512.451.4003

TITLE

TRANSFER STATION SITE PLAN

PROJECT

AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY REGISTRATION APPLICATION

PROJECT NO.	GW7107	DESIGN BY	ACB	REVIEWED BY	BG	PART NO.	DRAWING
FILE	GW7107-P3-4	DRAWN BY	ACB	APPROVED BY	SMG	III	III-1-4

REGISTRATION DRAWING



LEGEND

- TRANSFER STATION REGISTRATION BOUNDARY
- INTERIOR FENCING
- STATE PLANE COORDINATES
- ALL-WEATHER SITE ROAD



- NOTES:
- ALL FOUNDATION, SUBGRADE, CONTAMINATED WATER TANK, AND STRUCTURAL SPECIFICATIONS OF THE TYPE V TRANSFER STATION SHALL CONFORM WITH APPLICABLE LOCAL BUILDING CODES.
 - BUILDING CONSTRUCTION AND MATERIAL SELECTION SHALL CONFORM WITH APPLICABLE LOCAL BUILDING CODES WHILE MEETING THE MINIMUM DIMENSIONS SHOWN (I.E., PRE-FABRICATED STEEL OR EQUIVALENT).
 - TIPPING FLOOR SHALL BE CONSTRUCTED OF 8-INCH THICK (MIN) CONCRETE SLAB WITH STEEL REBAR REINFORCEMENT AND ACHIEVE A 3,500 PSI (MIN) 28-DAY COMPRESSIVE STRENGTH. OTHER REBAR, FOUNDATION, AND SUBGRADE REQUIREMENTS SHALL BE DESIGNED BY A TEXAS PROFESSIONAL ENGINEER, AS DETERMINED FROM A GEOTECHNICAL FIELD INVESTIGATION AND FOUNDATION LOADING ANALYSIS (I.E., BEARING CAPACITY ANALYSIS) OF THE TIPPING FLOOR AREA.
 - CONTAMINATED WATER TANK SHALL HAVE A MINIMUM 2,000 GALLON (NOMINAL) CAPACITY AND BE COMPATIBLE WITH LIQUIDS ASSOCIATED WITH TRANSFER ACTIVITIES OF MSW WASTE (I.E., HIGH-DENSITY POLYETHYLENE OR EQUIVALENT).
 - CONTAMINATED WATER TANK AND THE CONTRIBUTING TIPPING FLOOR DRAIN SHALL UTILIZE A RISER STRUCTURE OR OVERFLOW VALVE TO PREVENT CONTAMINATED OVERFLOW DURING HIGH-VOLUME MSW TRANSFER AND WASHDOWN ACTIVITIES. GRADING OF THE AREAS ADJACENT TO THE BUILDING, ROOF GUTTERS, AND ALL-WEATHER SITE ROAD SHALL ROUTE STORMWATER AWAY FROM THE BUILDING AND CONTAMINATED WATER TANK, SUCH THAT THE TIPPING FLOOR DRAIN AND CONTAMINATED WATER TANK ONLY RECEIVE LIQUIDS ASSOCIATED WITH WASTE TRANSFER AND WASHDOWN ACTIVITIES. A SECONDARY CONTAINMENT STRUCTURE (REINFORCED CONCRETE OR EQUIVALENT) SHALL BE INSTALLED AROUND THE WATER TANK. THE INSTALLATION, OPERATION, AND LEAK PREVENTION PROCEDURES OF THE CONTAMINATED WATER TANK AND CONTRIBUTING TIPPING FLOOR DRAIN SHALL BE PLACED INTO THE SITE OPERATING RECORDS.
 - TOPOGRAPHIC BASE MAP BASED ON AERIAL PHOTOGRAPHY, FLOWN 20 FEBRUARY 2019 BY DAS GEOSPATIAL.
 - ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. COORDINATE GRID CORRESPONDS TO TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD-83) 1983.

STATE OF TEXAS
SCOTT M. GRAVES
86557
LICENSED PROFESSIONAL ENGINEER

1/29/2020

FOR REGISTRATION PURPOSES ONLY

1	JAN 2020	RESPONSE TO NOD 1		JV/KH	SMG
-	SEP 2019	INITIAL SUBMITAL TO TCEQ		JV/KH	SMG
REV	DATE	DESCRIPTION		DRN	APP
<div><div><div>WASTE MANAGEMENT OF TEXAS, INC.</div></div><div><div>SITE ADDRESS 9900 GILES RD AUSTIN, TEXAS 78754 PHONE: 512.272.6245</div><div><div>Geosyntec[®]</div><div>consultants</div><div>GEOSYNTEC CONSULTANTS, INC. TEXAS ENG. FIRM REGISTRATION NO. 1182 8217 SHOAL CREEK BLVD, SUITE 200 AUSTIN, TEXAS 78757 PHONE: 512.451.4003</div></div></div></div>					
TITLE					
TRANSFER STATION DESIGN					
PROJECT					
AUSTIN COMMUNITY TRANSFER STATION TYPE V MSW FACILITY REGISTRATION APPLICATION					
PROJECT NO. GW7107		DESIGN BY ACB		REVIEWED BY BG	PART NO.
FILE GW7107-P3-5		DRAWN BY ACB		APPROVED BY SMG	III
					DRAWING: III-1-5

REGISTRATION DRAWING

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART III – SITE DEVELOPMENT PLAN ATTACHMENT 2

FACILITY SURFACE WATER DRAINAGE REPORT

AUSTIN COMMUNITY TRANSFER STATION AUSTIN, TRAVIS COUNTY, TEXAS

Prepared by:

Geosyntec 
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182

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FOR REGISTRATION PURPOSES ONLY

Submitted September 2019

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GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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ATTACHMENTS

Attachment 2A On-Site Drainage Analysis – Hydrology



FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

1. INTRODUCTION

1.1 Purpose

Pursuant to 30 TAC §330.63(c), this Facility Surface Water Drainage Report (Drainage Report) has been developed as part of the Type V Municipal Solid Waste (MSW) Transfer Station (TS) registration application for the Austin Community Transfer Station, Austin, Texas (site). This Drainage Report has been prepared to demonstrate that the facility design complies with the requirements of 30 TAC §330.303. The Drainage Report includes a narrative description of the drainage setting and features at the site under pre-development and post-development conditions and is accompanied by supporting hydrology and hydraulic structural design calculations for the site's drainage features. Specific objectives of this Drainage Report are to:

- establish the pre-development drainage conditions;
- summarize the proposed post-development surface water management system design and describe the drainage features and components within the TS facility area;
- describe the post-development drainage conditions;
- describe the hydrologic method and design parameters applied to estimate peak flow rates and runoff volumes for both the pre-development and post-development drainage conditions;
- compare pre-development versus post-development discharges from the site and provide analyses and discussion to demonstrate that the existing pre-development drainage patterns will not be adversely altered as a result of the proposed TS facility;
- describe the hydraulic methods and design parameters applied to analyze and design the features and components of the surface water management system;
- present the erosion and sediment control measures, including requirements for surface water inspections and maintenance; and
- present overall conclusions that summarize the results of the surface water drainage analysis and design.

1.2 Project Overview

The Austin Community TS facility is located at 9900 Giles Road, approximately 500 feet north of the intersection at Giles Road and US Highway 290, in Travis County, Texas. The Austin Community TS facility will provide an efficient means to process and transfer the waste that is generated in the City of Austin, Travis County, and the surrounding areas and transfer the waste to a Texas Commission on Environmental Quality (TCEQ) permitted MSW landfill.

This plan addresses surface water drainage design and erosion control as part of the MSW TS registration application. Consistent with the requirements of 30 TAC §330.63(c) and §330.303, the facility will be constructed, maintained, and operated to manage run-on and runoff during the peak discharge of a 25-year rainfall event and will prevent the off-site discharge of waste materials.

1.3 100-Year Floodplain Information

The proposed TS facility will not be located in a 100-year floodplain.

This is demonstrated and documented in Part I and II of the registration application (in particular, the Part I/II Supplemental Technical Report, Section 11.1, and floodplain map in Appendix I/IIA, Drawing I/IIA-15).

2. DESCRIPTION OF THE PRE-DEVELOPMENT CONDITION

Pre-development drainage areas for the transfer station facility location (registration boundary) were delineated based on current conditions, using the latest topographic survey (DAS, Inc., 2019). This pre-development assessment will allow a proper comparison to post-development conditions at the common points-of-interest (the outfalls where surface water exits the site) as discussed later in this report.

For this analysis, the pre-development drainage areas in the TS registration boundary are delineated on Figure 2A-1, presented in Attachment 2A of this Drainage Report. Figure 2A-1 delineates the approximately 10.8 acres of transfer station area under pre-development conditions that drain to the site outfall locations where surface water runoff leaves the TS registration boundary. Note that the western TS registration boundary follows a drainage divide. Surface water runoff flows generated west of this divide are part of the Austin Community Recycling and Disposal Facility (RDF) landfill drainage system, and such landfill systems will not be disturbed, modified, or otherwise affected by the proposed transfer station. Thus, there will be no surface water “run-on” flowing on to the TS registration boundary from adjacent areas. There are three outfall locations (see Figure 2A-1): i) OF-1 located at the outfall point of drainage area TS-1; ii) OF-2 located at the outfall point of drainage area TS-2; and iii) OF-3 located at the outfall point of drainage area TS-3. A description of the selected hydrologic method and the analysis/design parameters is presented subsequently in this Drainage Report.

3. PROPOSED SURFACE WATER MANAGEMENT SYSTEM

3.1 General

This section summarizes the proposed surface water management system design and describes the drainage features and components within the TS facility. The surface water management system has been designed and will be operated to achieve the following objectives:

1. Prevent the discharge of wastes or pollutants into or adjacent to waters of the United States.
2. Prevent the discharge of pollutants into waters of the United States.
3. Prevent the discharge of dredged or fill material to waters of the United States.
4. Prevent the discharge of nonpoint source pollution to waters of the United States.
5. Prevent erosion on areas within the registration boundary and where surface water runoff exits the site.

The TS facility consists of a building with a reinforced concrete slab (tipping floor) under a steel frame roofed structure, where unloading and transfer of waste from delivery vehicles to transfer trailers will occur. The TS site will be graded to prevent run-on drainage and flow of stormwater onto the tipping floor to prevent the potential for off-site discharge of waste materials. Surface water drainage in and around the facility is controlled to prevent surface water running onto, into, and off the TS facility tipping floor. Tipping floor washdown water will drain through a grate drain and be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank. All contaminated water will be managed in accordance with the procedures set forth in Section 5 of the SOP.

The TS facility site area will be graded to route stormwater runoff to off-site discharge using drainage patterns that are similar to the pre-developed drainage patterns.

3.2 Surface Water Management System Components

The drainage patterns for the post-development conditions are consistent with the pre-development drainage patterns. More specifically, there will be no change under post-development conditions to drainage area TS-1 or its outfall. The post-development drainage area TS-2 is similar to, but slightly larger than, the pre-development drainage area, and with the same outfall location. Under post-development conditions, TS-2 runoff will drain to a proposed stormwater detention pond (Detention Pond) located east of the TS building; the pond is designed to attenuate post-development flowrates. The TS site plan in Part III, Attachment 1, Drawing III-1-4 shows the detention pond layout. Ultimately, surface water will discharge from the Detention Pond at site

outfall OF-2 under post-development conditions via two 12-inch diameter culverts will serve as the Detention Pond outlet structure at site outfall OF-2. Finally, the post-development drainage area TS-3 is being reduced in size compared to pre-development conditions (because more area is being directed to drain to the Detention Pond in area TS-2), and maintaining the same outfall location.

4. DESCRIPTION OF THE POST-DEVELOPMENT CONDITION

The post-development conditions and resulting drainage areas are delineated on Figure 2A-2 presented in Attachment 2A of this Drainage Report. The post-development surface water management features at the site and the routing of surface water was discussed in Section 3. Figure 2A-2 shows that the total post-development drainage area is approximately 10.8 acres (consistent with pre-development drainage area conditions) and the same site outfalls are identified as in pre-development conditions.

A description of the hydrologic method and design parameters is presented subsequently in this Drainage Report. Also, in Section 5.5.1, comparisons of the pre-development and post-development conditions are discussed.

5. DRAINAGE CALCULATIONS

5.1 General

In accordance with 30 TAC §330.303(a), the surface water management system has been designed to be capable of conveying the peak discharges from the 25-year, 24-hour rainfall event. Design and analysis calculations are made to demonstrate that post-development peak discharges exiting the facility are less than pre-development flows exiting the facility from the 25-year, 24-hour rainfall event. Calculations have been performed to size the drainage features and to demonstrate that flow velocities and tractive stresses in conveyance components will not cause erosion. The hydrology calculations (i.e., calculations of peak runoff rates and total runoff volumes for the pre-development conditions and post-development conditions) related to the site surface water management features are presented as Attachment 2A to the Drainage Report.

5.2 Design Rainfall Event

As indicated above and pursuant to 30 TAC §330.63(c)(1)(D)(i), the 25-year, 24-hour rainfall depth was utilized as the design rainfall event for the surface water management system design. A rainfall depth of 8.65 inches was selected for this analysis to represent the 25-year, 24-hour rainfall in Travis County (NOAA Atlas 14, 2019).

5.3 Hydrologic Model

The U.S. Army Corps of Engineers Hydrologic Engineering Center – Hydrologic Modeling System (HEC-HMS) computer program was used to model the pre-development conditions and the post-development conditions. HEC-HMS is the successor to and replacement for the HEC-1 program. Modeling was used to calculate surface water runoff volumes, peak flow rates, routing of rainfall event hydrographs through channels, and runoff discharge quantities. Attachment 2A of this Drainage Report presents detailed drainage calculations, including a detailed discussion of the parameters used in the analyses and results of the hydrologic modeling efforts.

5.4 Hydraulics

Hydraulic computations for sizing surface water management system components (i.e., the proposed Detention Pond and its outfall structure) are found in the Attachment 2A – Hydrology to this Drainage Report.

5.5 Calculation Results Summary

5.5.1 Discharge Comparisons

Table 5-1 summarizes the pre- and post-development peak discharge, total discharge volume, peak velocities, and the time to the peak discharge rate. The pre- and post-development drainage sub-areas contributing to the discharge at the site outfalls are a combined area of approximately 10.8 acres. For post-development conditions, the Detention Pond discharge contributes to the site outfall OF-2. A more detailed description of the hydrologic analysis and modeling results summarized above are provided in Attachment 2A.

TABLE 5-1
**SUMMARY OF PEAK DISCHARGE CONDITIONS AT SITE OUTFALLS (PRE- VS. POST-
DEVELOPMENT COMPARISON)**

LOCATION	OUTPUT PARAMETER	<u>PRE- DEVELOPMENT CONDITIONS</u> (25-YEAR EVENT)	<u>POST- DEVELOPMENT CONDITIONS</u> (25-YEAR EVENT)
OF-1	PEAK DISCHARGE (CFS)	16.8	16.8
	TOTAL RUNOFF VOLUME (AC-FT)	1.4	1.4
	TIME TO PEAK DISCHARGE (MIN)	4	4
	PEAK VELOCITY (FPS)	1.2	1.2
OF-2	PEAK DISCHARGE (CFS)	37.6	29.4
	TOTAL RUNOFF VOLUME (AC-FT)	4.0	5.1
	TIME TO PEAK DISCHARGE (MIN)	12	15
	PEAK VELOCITY (FPS)	0.6	5.0
OF-3	PEAK DISCHARGE (CFS)	13.0	8.3
	TOTAL RUNOFF VOLUME (AC-FT)	1.3	0.7
	TIME TO PEAK DISCHARGE (MIN)	10	4
	PEAK VELOCITY (FPS)	2.5	2.8

Examination of the calculation results shown above indicates that the predicted peak post-development discharge rates are less than the peak pre-development discharge rates at the site outfalls. The computed runoff volumes are similar for pre-development and post-development conditions at the site outfalls. Additionally, the times to peak discharge are similar between pre- and post-development conditions for the site outfalls.

The calculated post-development flows leaving site outfalls OF-1 and OF-3 will be at low, non-erodible velocities. The calculated post-development flow leaving the culvert pipes of the Detention Pond near the OF-2 outfall as concentrated flow is at a higher velocity than under the pre-development sheet flow conditions. Accordingly, the culvert outlets will be equipped with an energy dissipator (riprap apron or equivalently-effective concrete dissipation device) to reduce flow velocity to a low, non-erodible level at OF-2.

Because the post-development flow rates are reduced, the final construction-level design may be further adjusted to optimize the Detention Pond size and outlet structure, and/or to include other detention devices such as rainwater collection cisterns to receive runoff from the building roof. Any such changes shall be made by a Professional Engineer licensed in Texas and must demonstrate that the post-development discharges achieve the required design criteria (i.e., post-development peak discharge less than pre-development, with acceptable non-erosive discharge velocities).

In summary, the proposed site outfalls will be in the same locations as the existing site outfalls, and surface water runoff under proposed post-development conditions is generally routed towards the site outfalls in a similar manner to pre-development conditions. The proposed drainage areas and patterns of runoff will be similar to the existing permitted pre-development drainage patterns. The reduced peak discharge rates under post-development conditions are considered to be beneficial given the importance of reducing runoff during storm events.

This information demonstrates that the existing pre-development drainage patterns will not be adversely affected by the proposed TS facility development.

6. EROSION AND SEDIMENT CONTROL

6.1 General

As required, the erosion control measures will be documented in the Stormwater Pollution Prevention Plan (SWPPP) required by the applicable Texas Pollutant Discharge Elimination System (TPDES) stormwater permitting requirements administered by TCEQ, that will be developed/updated by the operator for the TS facility before it begins operation, consistent with TPDES requirements. These features include the establishment of vegetation or other landscaping on the non-paved portion of the property. In addition, site grading is designed to convey runoff from the TS site to the on-site stormwater Detention Pond without causing erosion (i.e., runoff velocities are less than five feet per second).

6.2. Surface Water Maintenance Plan

6.2.1 General

During site construction activities and site operations, inspection and maintenance of disturbed areas and their surface water management system features will be conducted in accordance with the facility's TPDES Multi-Sector General Storm Water Permit that will be obtained and/or modified before the transfer station is placed into operation as required for appropriate TPDES permit coverage for this facility. Written records of these inspections and maintenance activities will be maintained as required by the TPDES permits.

6.2.2 Site Maintenance Activities

In general, the following procedures will be followed when deemed necessary by the inspections performed as part of the TPDES permit to maintain and ensure functionality of the surface water management system and erosion and sedimentation controls:

- Eroded areas or areas with ponding water will be regraded to their original slopes and reseeded or covered with an erosion resistant material. Upgrades to the original design specifications can be considered at this remedial stage depending upon the severity of systems degradation.
- Additional temporary erosion protection and sediment control measures using established BMPs will be implemented (seeding, temporary berms, ditches, silt fences, erosion mat, check dams, silt traps, etc.), as necessary, during operation to minimize

the amount of erosion and sedimentation. These measures can be removed once the erosion has been stopped and long-term vegetation is established and permanent conveyance structures are in place.

- Piped structures (i.e., Detention Pond outlet structure) will be kept free of debris to allow flows to achieve the design.
- Vegetated water conveyance areas will be mowed periodically to encourage healthy growth and to maintain design flow capacities and erosion resistance.
- Erosion control structures and drainage features will be cleaned periodically (removal of debris and sediment) in order to maintain design capacity. The excavated sediment will be transported to designated areas of the site for spreading and drying (must be surrounded by adequate temporary erosion controls).
- Areas of distressed vegetation will be identified and re-vegetated.
- Excess silt, weeds and other debris accumulated in drainage channels and other conveyances will be removed to restore their design configuration, followed by re-vegetating the disturbed areas as appropriate.

The decision on whether or not maintenance or repairs of site surface water features are needed and the timing on implementing any remedies will be selected based on the severity of the erosion or damage compared to the disturbance that will be caused by the repair and seasonal factors (weather patterns, growing season, etc.).

7. CONCLUSION

This Drainage Report has been prepared to demonstrate that the facility design complies with the requirements of 30 TAC §330.303 and to address the applicable requirements of 30 TAC Chapter 330, Subchapter G. The Drainage Report is accompanied by supporting hydrology calculations and hydraulic structural design calculations for the site's drainage features. The following conclusions summarize the results of the drainage analysis and design:

- The drainage design criteria selected meet the requirements of 30 TAC Chapter 330, Subchapter G.
- Erosion will be minimized through the interim and permanent design features and best management practices described herein.
- The post-development discharge rates from the site are less than the pre-development discharge rates, and the discharge volumes, velocities, and time-to-peak discharge for the pre- and post-development conditions are similar.
- The proposed TS facility is not within the 100-year floodway or 100-year floodplain and is on land that is at substantially higher elevation than off-site 100-year floodplain elevations. The TS facility is protected from the 100-year frequency flood event.
- The post-development drainage patterns will be similar to the existing pre-development drainage patterns and will direct surface water runoff to the same outfall locations. The existing pre-development drainage patterns will not be adversely altered.

8. REFERENCES

NOAA Atlas 14 (2019). Point Precipitation Frequency Estimates, Volume 11, Version 2, National Oceanic and Atmospheric Administration, National Weather Service, Silver Spring, Maryland.

ATTACHMENT 2A

ON-SITE DRAINAGE ANALYSIS – HYDROLOGY

Written by: O. Bramlet Date: 9/25/2019 Reviewed and Revised by: S. Graves Date: 1/29/2020
Client: WM Project: Austin Community TS Project No.: GW7107 Phase No.: 01

ON-SITE DRAINAGE ANALYSIS – HYDROLOGY AUSTIN COMMUNITY TRANSFER STATION



1/29/2020

SEALED FOR REGISTRATION PURPOSES;
CALCULATION PAGES 1 TO 29

GEOSYNTEC CONSULTANTS, INC.
TX ENG. FIRM REGISTRATION NO. F-1182

1 PURPOSE

The purpose of this calculation package is to present the hydrology analysis for the estimation of surface water runoff as a part of the Austin Community Transfer Station (TS) Registration Application in Austin, Texas. The specific objectives of the hydrologic analysis include calculating peak discharges and total runoff volumes from the site for the: (i) pre-development conditions and (ii) post-development conditions. The calculated values of peak discharge and runoff volume of the proposed surface water system presented in this calculation package are compared against pre-development conditions in order to demonstrate that the proposed Transfer Station development does not adversely alter, to any significant degree, the drainage patterns of the watershed in the vicinity of the site.

The following definitions pertain to the two conditions analyzed in this package:

- Pre-Development Conditions – represent the currently permitted existing drainage conditions of the area-of-interest before construction of the Transfer Station.
- Post-Development Conditions – represent conditions of the site once the Transfer Station has been fully developed, with the permanent surface water management system installed.

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Written by:	<u>O. Bramlet</u>	Date:	<u>9/25/2019</u>	Reviewed and Revised by:	<u>S. Graves</u>	Date:	<u>1/29/2020</u>
Client:	<u>WM</u>	Project:	<u>Austin Community TS</u>	Project No.:	<u>GW7107</u>	Phase No.:	<u>01</u>

2 METHODOLOGY

2.1 HEC-HMS Computer Model

Surface water discharges for the pre-development and post-development conditions are estimated using the Hydrologic Modeling System (HEC-HMS) computer program developed through the Hydraulic Engineering Center (HEC) of the United States Army Corps of Engineers (USACE). The program simulates natural and controlled precipitation-runoff and routing processes of a watershed. HEC-HMS is the successor to and replacement for the HEC-1 program (USACE, 2000). For precipitation-runoff-routing simulation, HEC-HMS provides the following components:

- Precipitation-specification options can describe an historical precipitation event, a frequency-based hypothetical precipitation event (i.e., design rainfall or storm event), or an event that represents the upper limit of precipitation possible at a given location. For this analysis, the 25-year (4% annual chance), 24-hour duration hypothetical precipitation event (herein referred to as the 25-year, 24-hour event) was used to compare pre-development and post-development conditions.
- Water loss models can estimate the volume of runoff given the precipitation and properties of the watershed. For this analysis, the Soil Conservation Service (SCS) Curve Number Loss Model was used (USDA, 1986).
- Direct runoff transform models can account for overland flow, storage, and energy losses as surface water runs off a watershed and into the drainage channels. For this analysis, the SCS Unit Hydrograph Model was selected.
- Hydraulic routing models account for storage and energy flux as surface water flows through drainage channels. The Kinematic Wave Model was selected for these analyses.
- Hydraulic models of water-control measures such as surface water pond outfall structures (i.e., outlet control structures).

HEC-HMS was used to model the pre-development conditions and the post-development conditions. More specifically, HEC-HMS modeling calculates surface water runoff volumes, peak flow rates, and flow characteristics for the surface water pond.

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Written by:	<u>O. Bramlet</u>	Date:	<u>9/25/2019</u>	Reviewed and Revised by:	<u>S. Graves</u>	Date:	<u>1/29/2020</u>
Client:	<u>WM</u>	Project:	<u>Austin Community TS</u>	Project No.:	<u>GW7107</u>	Phase No.:	<u>01</u>

2.2 Pre-Development Condition

Figure 2A-1 presents the pre-development conditions. Existing topographic information was compiled from photogrammetric methods based on aerial photography performed on 20 February 2019 by Dallas Aerial Surveys (DAS), Inc. Approximately 2.23 acres for pre-development flow to the site outfall OF-1 location, approximately 6.42 acres flow to the site outfall OF-2 location, and approximately 2.12 acres flow to the site outfall OF-3 location.

2.3 Post-Development Condition

The post-development drainage areas are delineated on Figure 2A-2. The proposed surface water management system will maintain similar drainage patterns to the pre-development condition. The proposed surface water management system will discharge at the site outfalls described in the pre-development condition section above. The post-development area TS-2 will drain to a stormwater detention pond (Detention Pond) located to the east of the TS building. Ultimately, surface water discharges from the Detention Pond at the site outfall OF-2. Under post-development conditions, approximately 2.23 acres flow to the site outfall OF-1 location, approximately 7.45 acres flow to the site outfall OF-2 location, and approximately 1.09 acres flow to the site outfall OF-3 location. Two culverts will serve as the Detention Pond outlet structure at the site outfall OF-2 and are modeled as 12-inches in diameter.

3 DESIGN PARAMETERS

The following data and assumptions were utilized in selecting engineering parameters to estimate surface water runoff.

3.1 Rainfall

- Rainfall Return Periods, Durations, and Depths – The Texas Department of Transportation (TxDOT) Hydraulic Design Manual (2019) provides guidance for rainfall frequency and duration depths. The rainfall depths corresponding to 24-hour duration hypothetical precipitation event and 25-year and 100-year frequency return periods for the site are 8.65 inches and 12.3 inches, respectively (NOAA Atlas 14, 2019). The design storm hyetograph is defined using a SCS Type III rainfall distribution as shown in Figure 2A-3 (USDA, 1986).

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Written by:	<u>O. Bramlet</u>	Date:	<u>9/25/2019</u>	Reviewed and Revised by:	<u>S. Graves</u>	Date:	<u>1/29/2020</u>
Client:	<u>WM</u>	Project:	<u>Austin Community TS</u>	Project No.:	<u>GW7107</u>	Phase No.:	<u>01</u>

3.2 Drainage Areas and Reaches

- **Drainage Areas** – The contributing watershed areas for each basin (drainage area) in the pre-development and post-development models are divided into multiple subbasins (subareas). Subbasins are modeled based on the receiving surface water drainage feature. The SCS Curve Number Loss Model was used to estimate the volume of runoff from a given subbasin. The SCS Unit Hydrograph Model was used to estimate the direct runoff flow rates from each subbasin. Each subbasin is assigned a curve number representing the type of ground cover for a given soil for the area. The subbasin area, curve number, and SCS Unit Hydrograph lag time input parameters are included in the HEC-HMS output in Appendix 2A-1.
- **Curve Number (CN)** – Curve numbers were selected based on local regulations/practice and conservative assumptions. A CN = 80 was selected for unpaved areas within the drainage areas which is representative of open space with good grass cover (>75%) and Hydrologic Soil Group D. A CN = 98 was selected for areas that were paved and the stormwater detention pond. An area-weighted average was then completed for pre- and post-development at each drainage area. Table 2A-1 summarizes the CNs chosen for the analyses performed documented within this calculation package.
- **Manning's Roughness Coefficients** – Values of Manning's roughness coefficients used in the reach routing calculations were obtained from the TxDOT *Hydraulic Design Manual* (2019). Table 2A-2 summarizes the Manning's coefficients used in this calculation package. It should be noted that for design purposes, the culverts assume a Manning's coefficient for a reinforced concrete pipe (RCP). Any culvert material type may be used provided that the Manning's coefficient is equal to or less than that for RCP.
- **Time of Concentration** – The time of concentration is the time needed for water to flow from the hydraulically most remote point in a watershed to the watershed outlet. Computation of the time of concentration for the pre-development analysis was completed according to the recommended methodology from USDA (1986). Table 2A-3 displays the pre-development time of concentration calculations. The time of concentration calculations for all post-development drainage areas are

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Written by:	<u>O. Bramlet</u>	Date:	<u>9/25/2019</u>	Reviewed and Revised by:	<u>S. Graves</u>	Date:	<u>1/29/2020</u>
Client:	<u>WM</u>	Project:	<u>Austin Community TS</u>	Project No.:	<u>GW7107</u>	Phase No.:	<u>01</u>

displayed in Table 2A-4.

3.3 Surface Water Pond

The proposed surface water Detention Pond is incorporated in the post-development analysis to temporarily detain surface water runoff and reduce discharge flow rates from the upstream areas. The pond is accounted for in the HEC-HMS program as a “reservoir” node. The elevation-area relationship is input for the post-development surface water pond to describe the volume of storage provided, which is computed based on the surface water pond geometry. Specifically, the surface area at various elevations throughout the pond was used to compute the elevation-area relationship. Design characteristics of the outflow structures include pond outflow pipe diameter and emergency spillway depth and breadth. Input and output files for the surface water ponds design are provided in Appendix 2A-1. The pond discharges via the outlet culverts and their energy dissipation devices (e.g., riprap aprons) at the site outfall OF-2.

3.4 Nodal Network Diagrams

Nodal network diagrams used in HEC-HMS for the pre-development and post-development analyses are provided and correspond to the output results included in Appendix 2A-1.

- Pre-Development Nodal Network – Figure 2A-4 of this calculation package presents the nodal network drawing for the pre-development conditions. The nodal network diagram represents the existing conditions draining to the site outfalls shown on Figure 2A-1.
- Post-Development Nodal Network – Figure 2A-5 of this calculation package presents the nodal network drawing for the post-development conditions. The post-development nodal network diagram shows the subbasins, surface water pond, and site outfalls. The nodal network diagram represents the proposed surface water management system and site outfalls shown on Figure 2A-2.

4 RESULTS

Modeling results from calculations presented in this calculation package indicate that post-development peak discharges from the facility are less than the pre-development peak

				Page	6	of	29
Written by:	O. Bramlet	Date:	9/25/2019	Reviewed and Revised by:	S. Graves	Date:	1/29/2020
Client:	WM	Project:	Austin Community TS	Project No.:	GW7107	Phase No.:	01

discharge rates at the site outfall for the 25-year, 24-hour precipitation event. Thus, the TS is not anticipated to adversely affect or significantly alter the drainage patterns in the vicinity of the site. Table 2A-4 summarizes analysis results for the pre- and post-development peak discharges and total discharge runoff volumes from the site. The calculation results described in Table 2A-4 are provided in Appendix 2A-1.

5 REFERENCES

- NOAA Atlas 14 (2019). Point Precipitation Frequency Estimates, Volume 11, Version 2, National Oceanic and Atmospheric Administration, National Weather Service, Silver Spring, Maryland.
- TxDOT (2019). *Hydraulic Design Manual*, Texas Department of Transportation, revised September 2019.
- USACE (2000). *Hydraulic Modeling System HEC-HMS Technical Reference Manual*, US Army Corps of Engineers, Hydrologic Engineering Center, CPD-74B, March 2000.
- USDA (1986). *Urban Hydrology for Small Watersheds*, Technical Release 55 (TR-55), United States Department of Agriculture, Science and Education Administration, Agriculture Handbook Number 537.

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- Table 2A-1. Summary of Curve Numbers used in Analysis (from USDA, 1986)
- Table 2A-2. Manning's n Values (from TxDOT, 2019)
- Table 2A-3. Pre-Development Time of Concentration
- Table 2A-4. Post Development Time of Concentration
- Table 2A-5. Summary of Peak Discharge and Total Discharge Volumes at Site Outfalls

Table 2A-1. Summary of Curve Numbers used in Analysis¹
(from USDA, 1986)

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89

Table 2A-2. Manning's n Values
(from TxDOT, 2019)

Type of channel	Manning's n
B. Excavated or dredged channels	
1. Earth, straight and uniform	
a. Clean, recently completed	0.016-0.020
b. Clean, after weathering	0.018-0.025
c. Gravel, uniform section, clean	0.022-0.030
d. With short grass, few weeds	0.022-0.033
2. Earth, winding and sluggish	
a. No vegetation	0.023-0.030
b. Grass, some weeds	0.025-0.033
c. Deep weeds or aquatic plants in deep channels	0.030-0.040
d. Earth bottom and rubble sides	0.028-0.035
e. Stony bottom and weedy banks	0.025-0.040
f. Cobble bottom and clean sides	0.030-0.050
g. Winding, sluggish, stony bottom, weedy banks	0.025-0.040
h. Dense weeds as high as flow depth	0.050-0.120
3. Dragline-excavated or dredged	
a. No vegetation	0.025-0.033
b. Light brush on banks	0.035-0.060
4. Rock cuts	
a. Smooth and uniform	0.025-0.040
b. Jagged and irregular	0.035-0.050
5. Unmaintained channels	
a. Dense weeds, high as flow depth	0.050-0.120
b. Clean bottom, brush on sides	0.040-0.080
c. Clean bottom, brush on sides, highest stage	0.045-0.110
d. Dense brush, high stage	0.080-0.140
C. Lined channels	
1. Asphalt	0.013-0.016
2. Brick (in cement mortar)	0.012-0.018
3. Concrete	
a. Trowel finish	0.011-0.015
b. Float finish	0.013-0.016
c. Unfinished	0.014-0.020
d. Gunite, regular	0.016-0.023
e. Gunite, wavy	0.018-0.025
4. Riprap (n-value depends on rock size)	0.020-0.035
5. Vegetal lining	0.030-0.500

Table 2A-3. Pre-Development Times of Concentration

PRE-DEVELOPMENT CONDITIONS			Watershed Characterization			Sheet Flow				Shallow Concentrated Flow					Open Channel Flow										Design	SCS Lag	HMS 25-yr	HMS 100-yr	
Subcatchment	Area A (mi ²)	Area A (acres)	Initial Abstraction (in)	Curve Number	Impervious Cover (%)	Flow Length (ft)	Manning's n	Slope (ft/ft)	Time T _c (min)	Flow Length (ft)	Velocity Factor (ft/s)	Slope (ft/ft)	Average Velocity (ft/s)	Time T _c (min)	Flow Length (ft)	Depth d (ft)	Area A (ft ²)	Wetted P (ft)	Hydraulic Radius (ft)	Manning's n	Slope (ft/ft)	Velocity (ft/s)	Time T _c (min)	T _c (min)					Time (min)
TS-1	0.00349	2.23	0.21	90.6	0.00	100	0.011	0.020	1.07	253	7.00	0.032	1.24	3.39											5.00	3.00	16.80	24.40	
										353	7.00	0.032	1.24	4.73															
TS-2	0.01003	6.42	0.21	90.6	0.00	100	0.011	0.010	1.41	636	7.00	0.008	0.62	17.08											18.49	11.09	37.60	54.60	
TS-3	0.00332	2.12	0.27	88.1	0.00	100	0.150	0.020	8.65	372	20.33	0.011	2.11	2.94											14.99	8.99	13.00	19.00	
										160	7.00	0.013	0.78	3.41															
Total Area			10.78	acres	-year, 24-hour Design Rainfall Depth =					4.11	inches	Bench Left Side Slope =										3.0	H:V						
												Bench Right Side Slope =										3.0	H:V						

Notes:

- 1) Curve numbers were approximated through area-weighted averages. A curve number of 50 was selected for areas that were unpaved and developed while a curve number of 98 was selected for any paved areas (Golder Associates, 2005).
- 2) Manning's roughness coefficient: n = 0.15 represents short grass prairie for sheet flow (USDA, 1954).
- 3) Manning's roughness coefficient: n = 0.011 represents smooth surfaces (concrete, asphalt, gravel, or bare soil) for sheet flow (USDA, 1954).
- 4) Manning's roughness coefficient: n = 0.027 represents an excavated earth channel that is straight and uniform with short grass and few weeds (Chow, 1959).
- 5) Travel Time (T_c) is calculated using Manning's kinematic solutions for sheet flow (USDA, 1956).

$$T_c = 0.007(nL)^{0.5} / (P_{2.24})^{0.5} S^{0.4}$$
- 6) Velocity factor of 7.0 ft/s corresponds to short grass pasture from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 7) Velocity factor of 20.33 ft/s corresponds to paved surfaces from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 8) Open channel flow velocity is calculated using Manning's equation (USDA, 1956).

$$V = (1.49r^{2/3} S^{1/2}) / n$$
where: r = hydraulic radius (ft) and is equal to A/P [area (ft²)/wetted perimeter (ft)]
- 9) Design rainfall depth taken from NOAA Atlas 14, Volume 11, Version 2.

Table 2A-4. Post Development Time of Concentration

POST-DEVELOPMENT CONDITIONS			Watershed Characterization			Sheet Flow				Shallow Concentrated Flow				Open Channel Flow														
Subcatchment	Area A (mi ²)	Area A (acres)	Initial	Curve	Impervious	Flow	Manning's	Slope	Time	Flow	Velocity	Slope	Average	Time	Flow	Depth	Area	Wetted	Hydraulic	Manning's	Slope	Velocity	Time	Design	SCS Lag	HMS	HMS	
Designation	A	A	Abstraction (in)	Number	Cover (%)	Length (ft)	n	(ft/ft)	T _c (min)	Length (ft)	Factor (ft/s)	(ft/ft)	Velocity (ft/s)	T _c (min)	Length (ft)	d (ft)	A (ft ²)	P (ft)	Radius (ft)	n	(ft/ft)	(ft/s)	T _c (min)	T _c (min)	Time (min)	Flow (cfs)	Flow (cfs)	
TS-1	0.00349	2.23	0.21	90.6	0.00	100	0.011	0.020	1.07	253	7.00	0.032	1.24	3.39									5.00	3.00	16.80	24.40		
TS-2	0.01165	7.45	0.07	96.7	0.00	100	0.011	0.010	1.41	650	20.33	0.008	1.82	5.96									7.37	4.42	55.90	79.70		
TS-3	0.00170	1.09	0.16	92.7	0.00	100	0.011	0.005	1.86	230	20.33	0.020	2.84	1.35									5.00	3.00	8.30	12.00		
Total Area		10.78	acres			-year, 24-hour Design Rainfall Depth =				4.11				inches				Bench Left Side Slope = 3.0 H:V Bench Right Side Slope = 3.0 H:V										

Notes:

- 1) Curve numbers were approximated through area-weighted averages. A curve number of 92 was selected for areas that were unpaved and developed while a curve number of 98 was selected for any paved areas (Golder Associates, 2008).
- 2) Manning's roughness coefficient: $n = 0.15$ represents short grass prairie for sheet flow (USDA, 1984).
- 3) Manning's roughness coefficient: $n = 0.011$ represents smooth surfaces (concrete, asphalt, gravel, or bare soil) for sheet flow (USDA, 1984).
- 4) Manning's roughness coefficient: $n = 0.027$ represents an excavated earth channel that is straight and uniform with short grass and few weeds (Chow, 1959).
- 5) Travel Time (T_c) is calculated using Manning's kinematic solutions for sheet flow (USDA, 1980).

$$T_c = 0.007(nL)^{0.8} / (P_{2.24})^{0.5} S^{0.4}$$
- 6) Velocity factor of 7.0 ft/s corresponds to short grass pasture from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 7) Velocity factor of 20.33 ft/s corresponds to paved surfaces from the Upland Method as reported by HydroCAD v.5 Owner's Manual.
- 8) Open channel flow velocity is calculated using Manning's equation (USDA, 1980).

$$V = (1.49r^{2/3} S^{1/2}) / n$$
where: r = hydraulic radius (ft) and is equal to A/P [area (ft²) / wetted perimeter (ft)]
- 9) Design rainfall depth taken from NOAA Atlas 14, Volume 11, Version 2.

**Table 2A-5. Summary of Peak Discharge and Total Discharge Volumes at Site
Outfall**

Location	Item	Pre- Development (25-year)	Post- Development (25-year)
OF-1	Peak Discharge (cfs)	16.8	16.8
	Total Runoff Volume (ac-ft)	1.4	1.4
OF-2	Peak Discharge (cfs)	37.6	29.4
	Total Runoff Volume (ac-ft)	4.0	5.1
OF-3	Peak Discharge (cfs)	13.0	8.3
	Total Runoff Volume (ac-ft)	1.3	0.7

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- Figure 2A-1. Pre-Development Drainage Areas
- Figure 2A-2. Post-Development Drainage Areas
- Figure 2A-3. SCS Rainfall Distributions (from USDA, 1986)
- Figure 2A-4. Pre-Development HEC-HMS Nodal Network
- Figure 2A-5. Post-Development HEC-HMS Nodal Network



Figure 2A-1. Pre-Development Drainage Areas



Figure 2A-2. Post-Development Drainage Areas

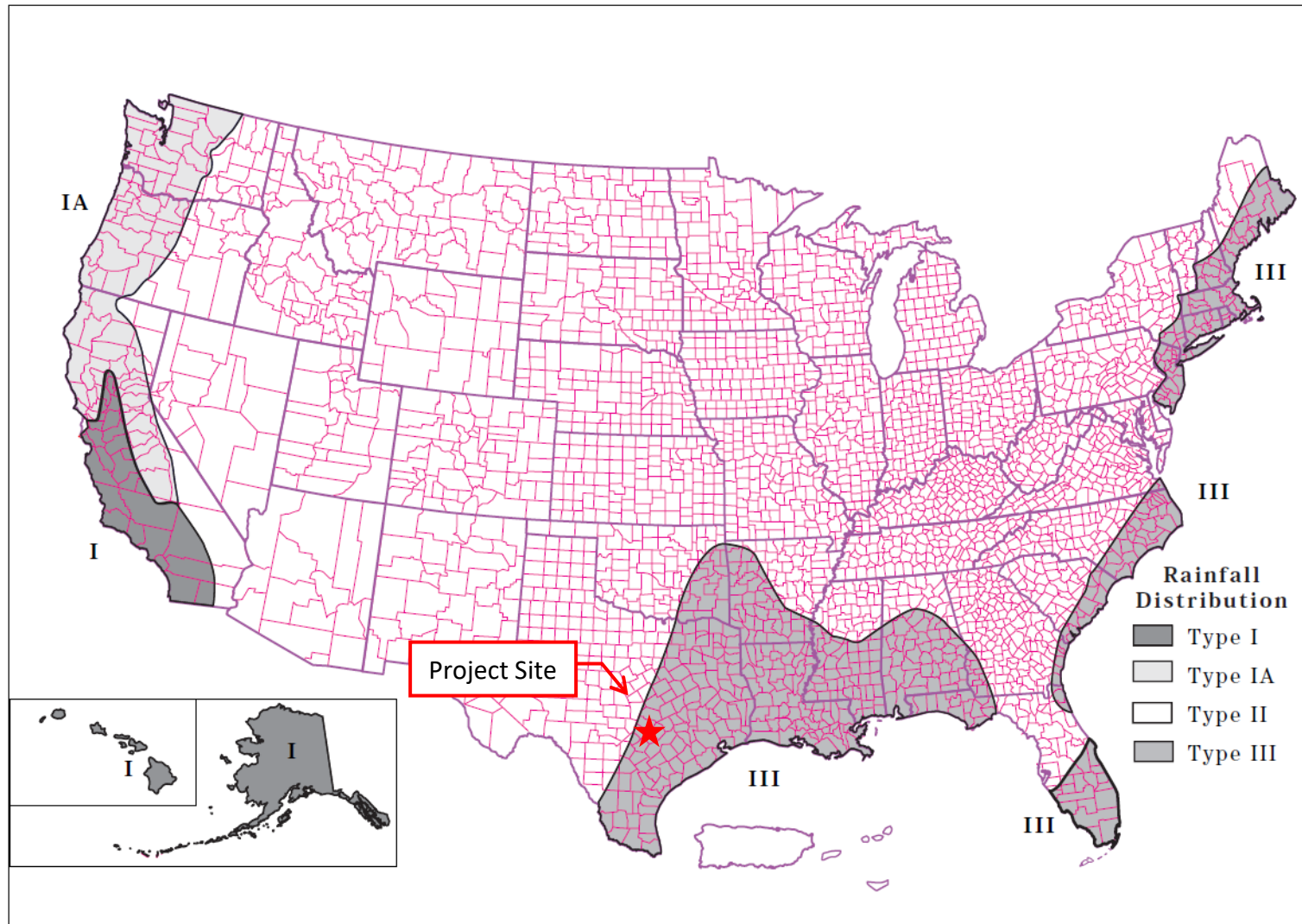


Figure 2A-3. SCS Rainfall Distributions (from USDA, 1986)

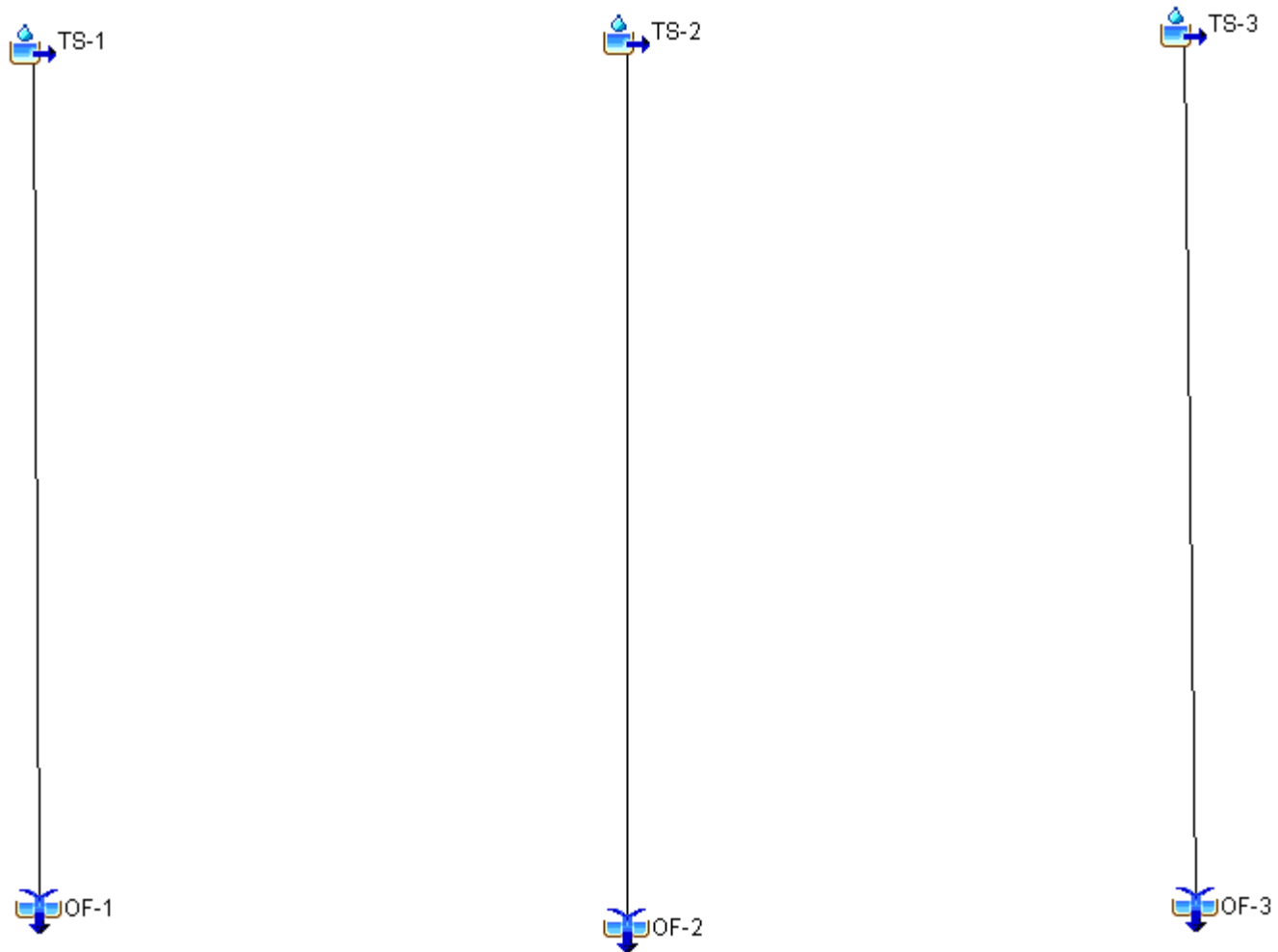


Figure 2A-4. Pre-Development HEC-HMS Nodal Network

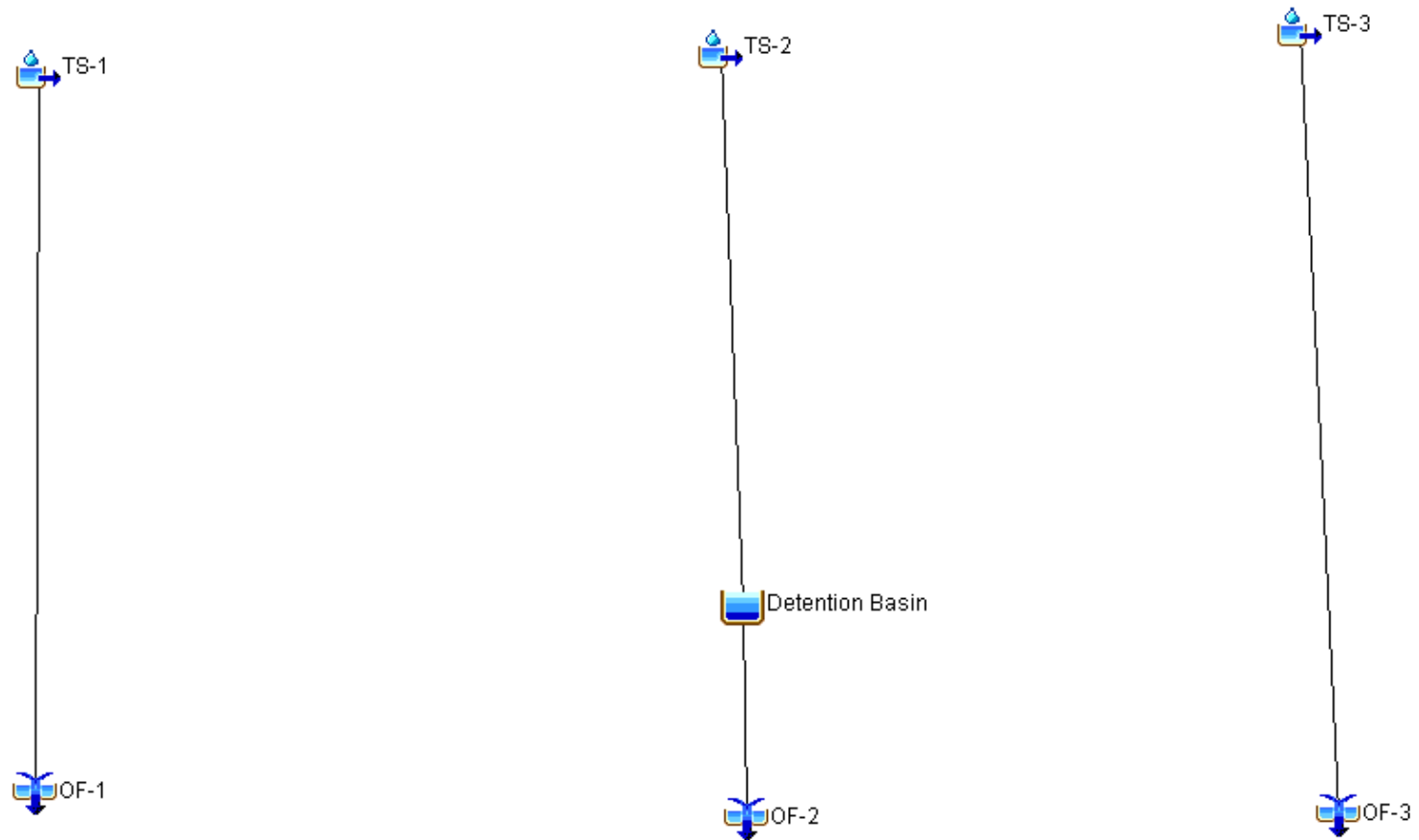


Figure 2A-5. Post-Development HEC-HMS Nodal Network

APPENDIX 2A-1

HEC-HMS HYDROLOGIC MODEL PARAMETERS

Table 2A-1-1. Pre-Development 25-year, 24-hour Precipitation Event Nodal Areas, Peak Flow Rates, and Runoff Volumes

Global Summary Results for Run "pre dev; 25 YR"				
Project: ACL_TransferStation_200123 Simulation Run: pre dev; 25 YR				
Start of Run: 01Jan2019, 00:00		Basin Model: Pre-Dev		
End of Run: 04Jan2019, 00:00		Meteorologic Model: 25YR 24HR		
Compute Time: 28Jan2020, 16:28:47		Control Specifications: Control 1		
Show Elements:	All Elements	Volume Units:	<input type="radio"/> IN <input checked="" type="radio"/> AC-FT	Sorting: Alphabetic
Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
OF-1	0.00	16.8	01Jan2019, 12:04	1.4
OF-2	0.01	37.6	01Jan2019, 12:12	4.0
OF-3	0.00	13.1	01Jan2019, 12:10	1.3
TS-1	0.00	16.8	01Jan2019, 12:04	1.4
TS-2	0.01	37.6	01Jan2019, 12:12	4.0
TS-3	0.00	13.1	01Jan2019, 12:10	1.3

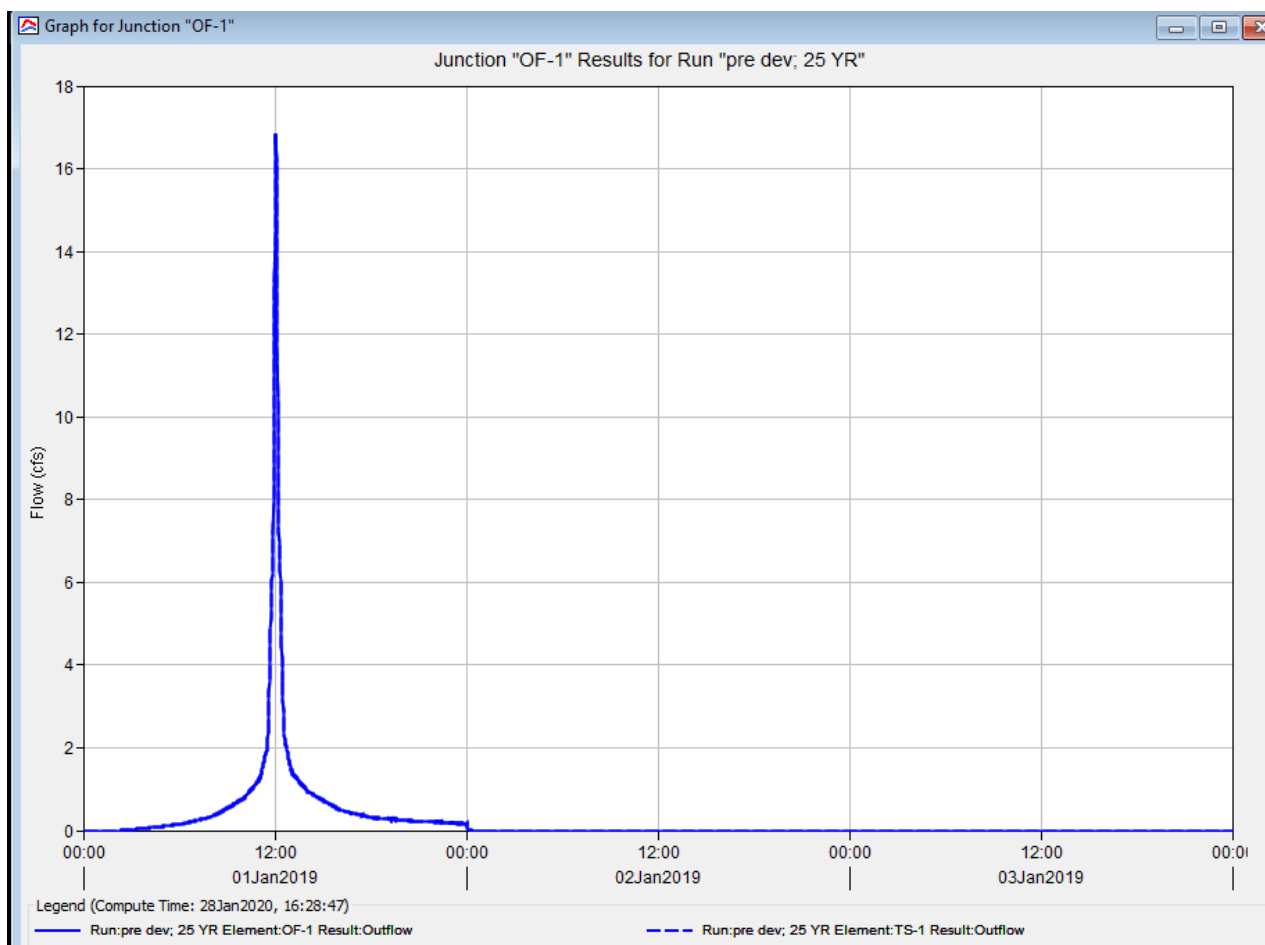


Figure 2A-1-1. Pre-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-1

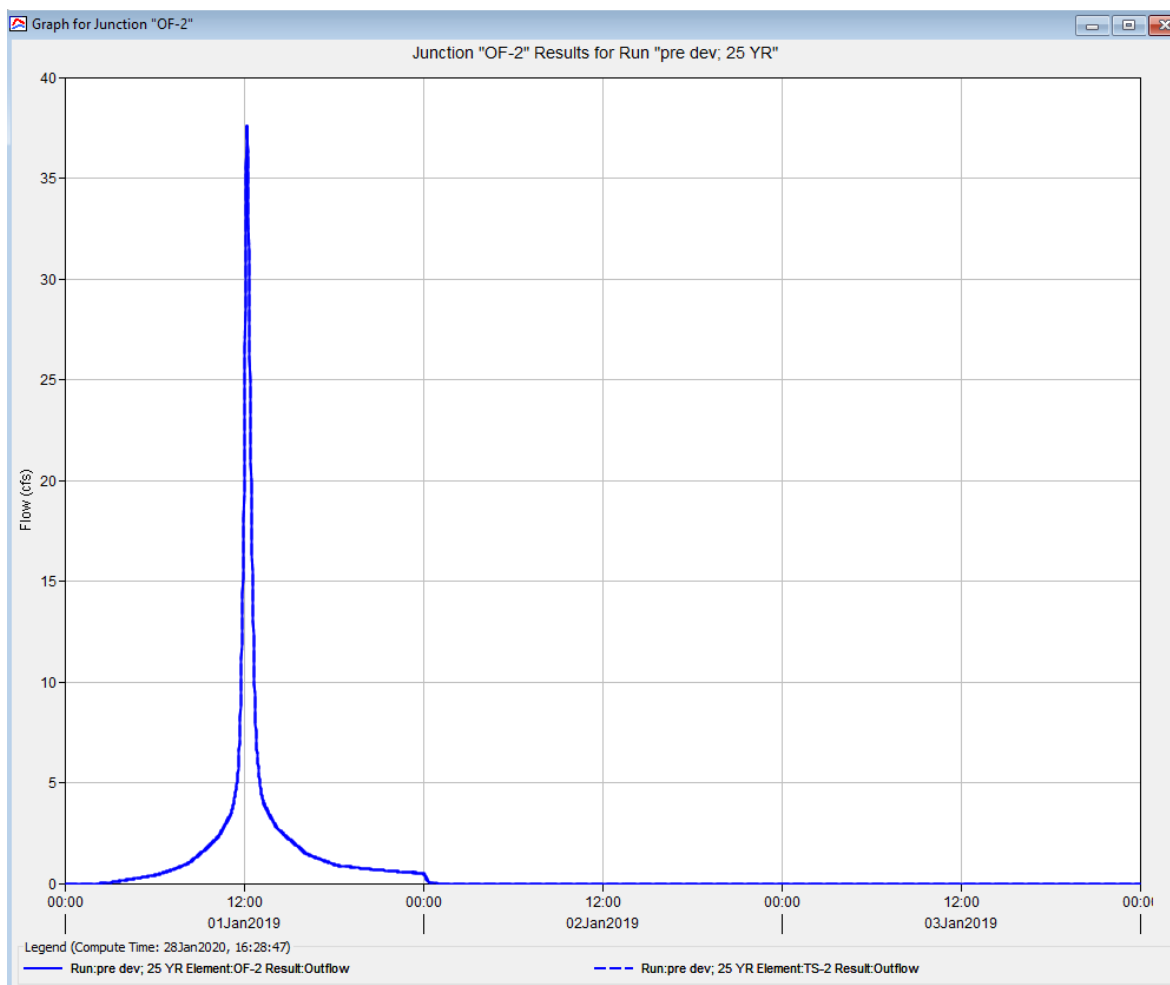


Figure 2A-1-2. Pre-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-2

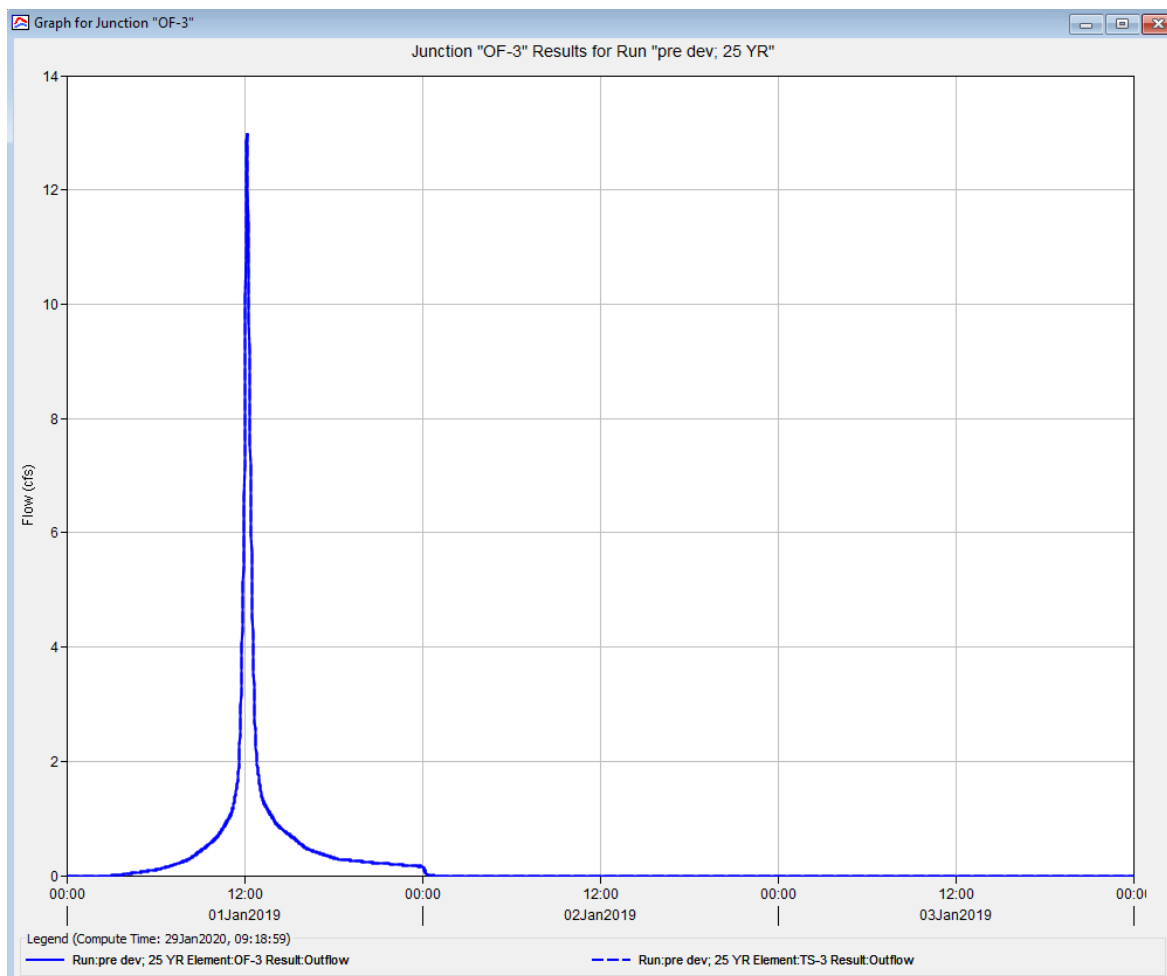


Figure 2A-1-3. Pre-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-3

Table 2A-1-2. Post-Development Surface Water Detention Pond Elevation-Area Relationship


 Paired Data		Table	Graph
Elevation (FT)		Area (AC)	
624.0		0.356	
628.0		0.525	

Table 2A-1-3. Post-Development 25-year, 24-hour Precipitation Event Nodal Areas, Peak Flow Rates, and Runoff Volumes

Global Summary Results for Run "post dev; 25YR"

Project: ACL_TransferStation_200123 Simulation Run: post dev; 25YR

Start of Run: 01Jan2019, 00:00 Basin Model: Post-Dev
End of Run: 04Jan2019, 00:00 Meteorologic Model: 25YR 24HR
Compute Time: 28Jan2020, 16:37:23 Control Specifications: Control 1

Show Elements: All Elements Volume Units: ☐ IN ☒ AC-FT Sorting: Alphabetic

Hydrologic Element	Drainage Area (MI ²)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
Detention Basin	0.01	29.4	01Jan2019, 12:15	5.1
OF-1	0.00	16.8	01Jan2019, 12:04	1.4
OF-2	0.01	29.4	01Jan2019, 12:15	5.1
OF-3	0.00	8.3	01Jan2019, 12:04	0.7
TS-1	0.00	16.8	01Jan2019, 12:04	1.4
TS-2	0.01	55.9	01Jan2019, 12:06	5.1
TS-3	0.00	8.3	01Jan2019, 12:04	0.7

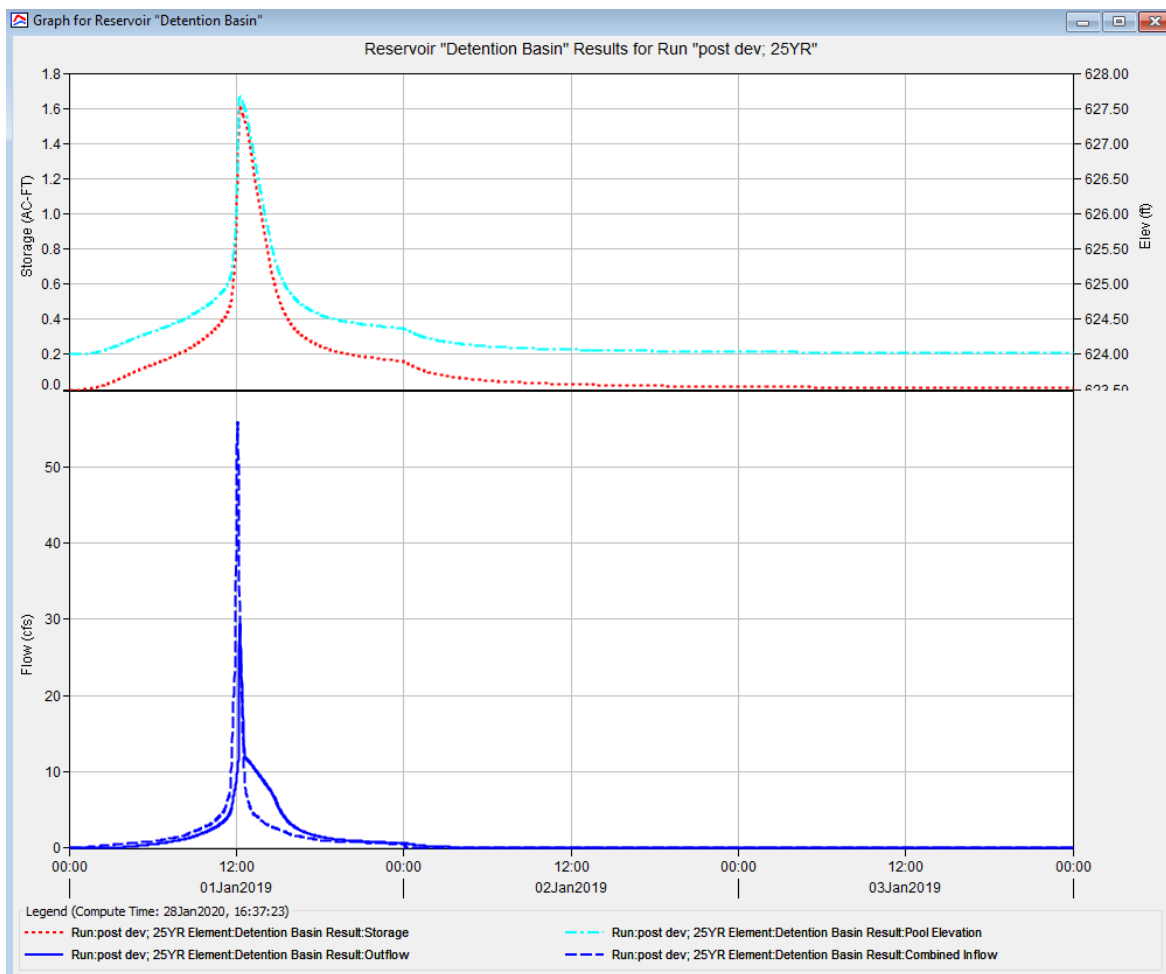


Figure 2A-1-4. Post-Development 25-year, 24-hour Precipitation Event Surface Water Detention Pond Hydrograph and Elevation/Storage Relationships

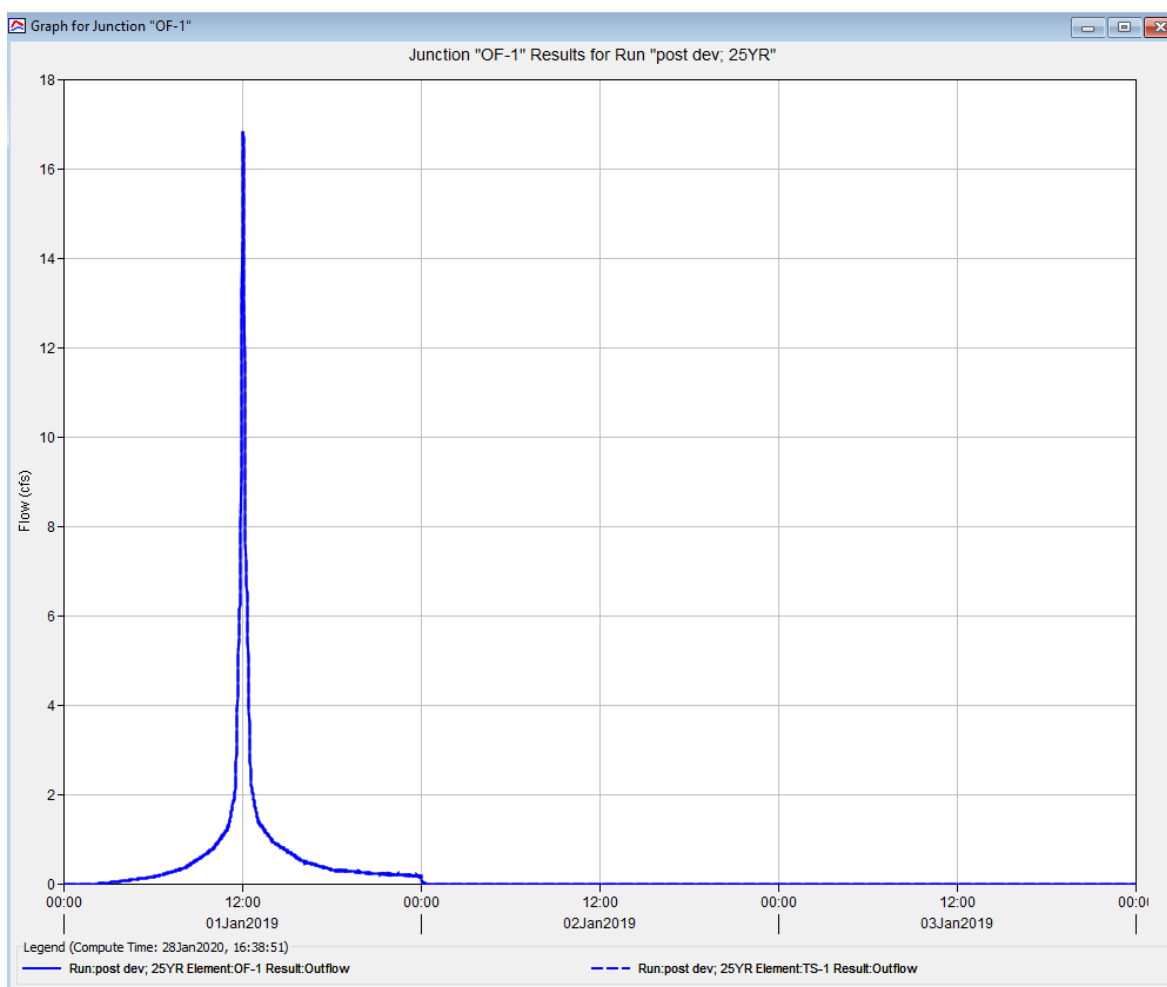


Figure 2A-1-5. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-1

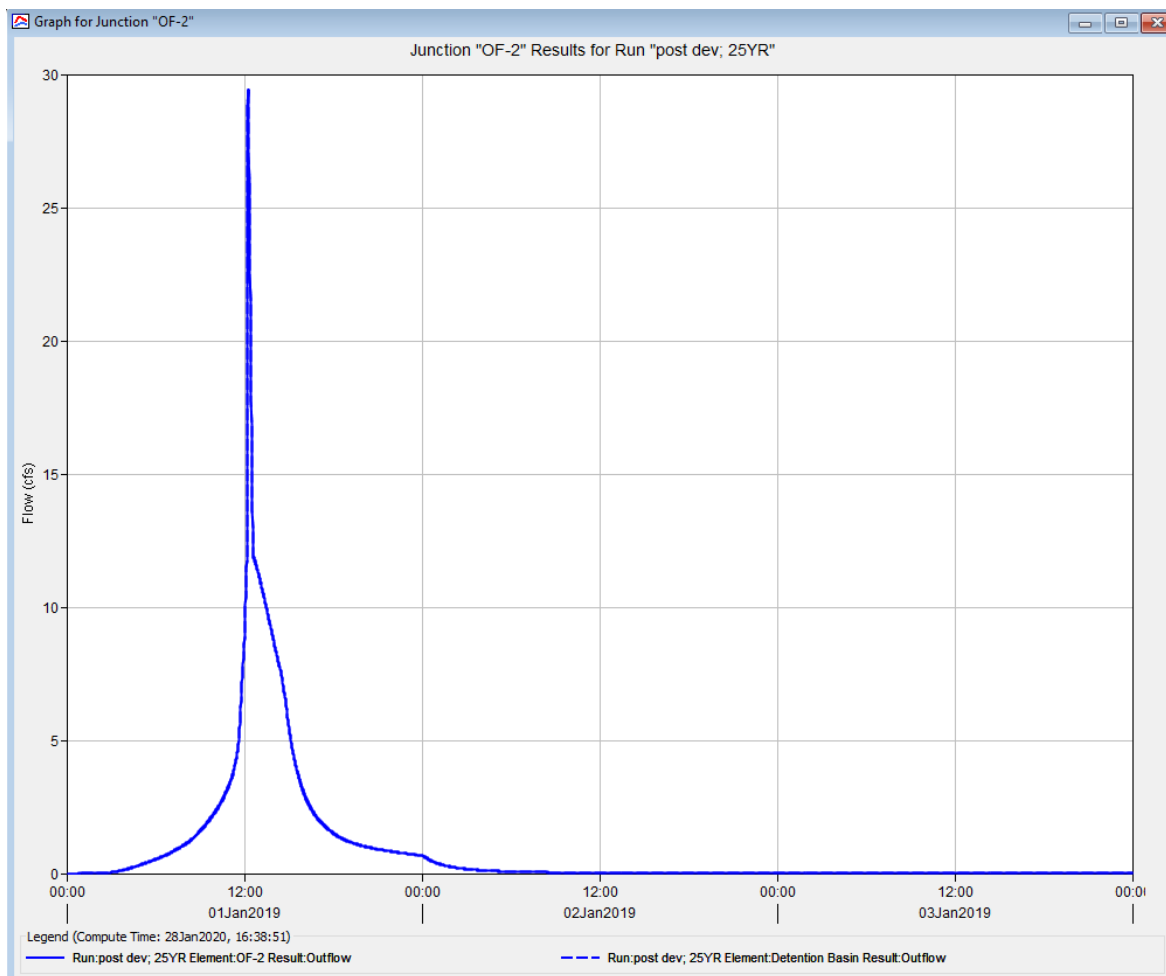


Figure 2A-1-6. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-2

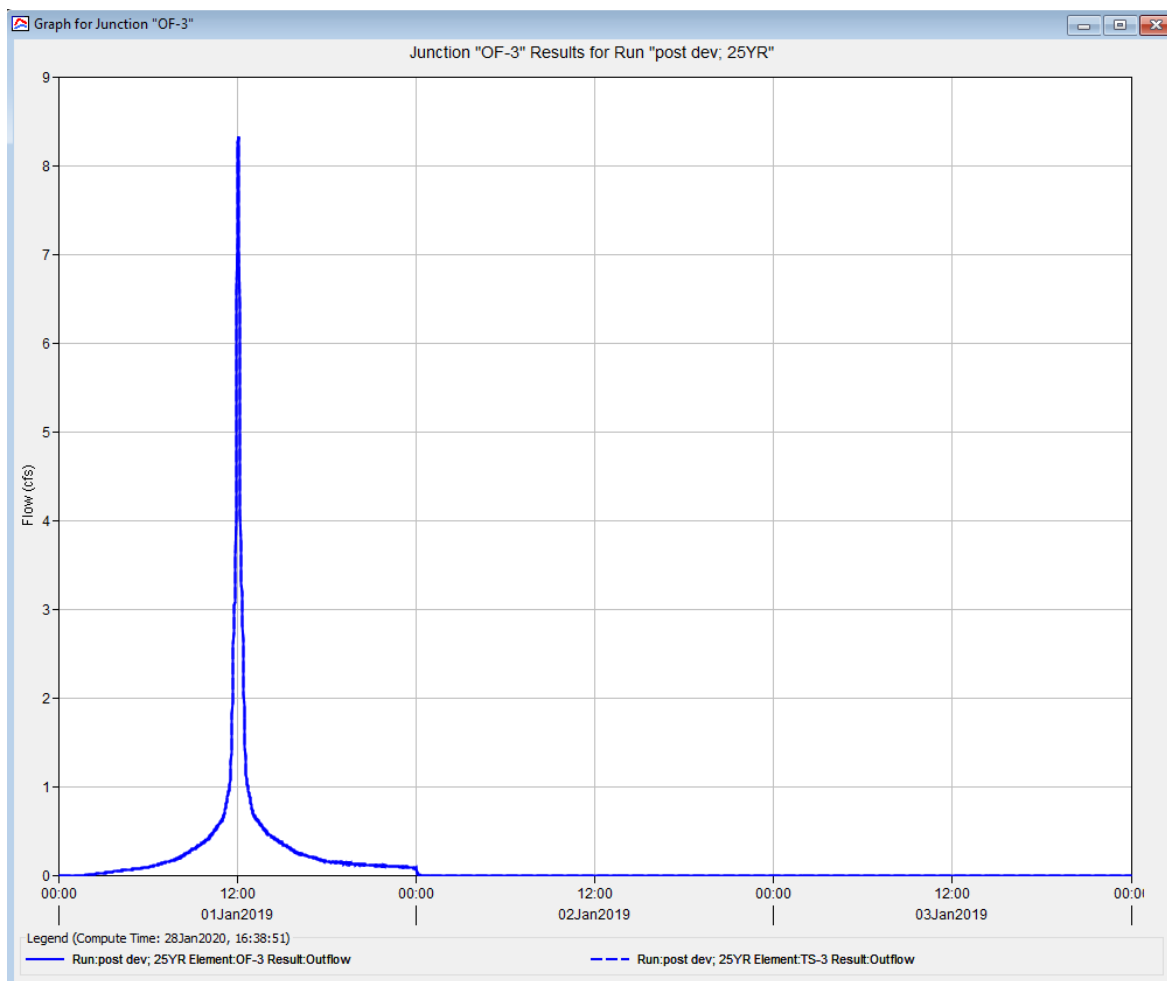


Figure 2A-1-7. Post-Development 25-year, 24-hour Precipitation Event Runoff Hydrograph at Site Outfall OF-3

Prepared for:
Waste Management of Texas, Inc.

REGISTRATION APPLICATION

PART IV – SITE OPERATING PLAN (SOP)

**AUSTIN COMMUNITY TRANSFER STATION
TYPE V MSW FACILITY
REGISTRATION NO. MSW-40306
AUSTIN, TRAVIS COUNTY, TEXAS**

Prepared by:

Geosyntec
consultants

Texas Board of Professional Engineers Firm Registration No. F-1182

8217 Shoal Creek Blvd, Suite 200

Austin, Texas 78757

(512) 451-4003



SEALED FOR THIS PART IV SITE OPERATING PLAN,
AND FOR REGISTRATION PURPOSES ONLY.

Submitted September 2019
Revised January 2020

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FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

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FOR REGISTRATION PURPOSES ONLY

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM
REGISTRATION NO. F-1182

SITE OPERATING PLAN (SOP)

1. INTRODUCTION

1.1 Terms of Reference

The Austin Community Transfer Station (hereafter also referred to as the “facility” or “site”) is a proposed Type V municipal solid waste (MSW) facility, owned and operated by Waste Management of Texas, Inc. (WMTX). This Site Operating Plan (SOP) provides general and facility-specific instructions for site management and personnel to operate the facility on a daily basis in a manner consistent with the design of the facility and with the applicable rules of the Texas Commission on Environmental Quality (TCEQ). This SOP complies with the requirements of Texas Administrative Code (TAC) Title 30, Chapter 330, Subchapter E, “Operational Standards for Municipal Solid Waste Landfill Storage and Processing Units,” applicable to Type V MSW transfer station registrations.

The specific procedures outlined in this SOP are operational requirements and must be understood, acknowledged, and followed by the site personnel. This SOP will be retained at the facility throughout the active life of the facility until after certification of closure.

References to the terms “Executive Director” or “TCEQ” used in this SOP shall refer to the Executive Director of the TCEQ or the designated representative(s) of the TCEQ. References to information in the “registration” or “registration application” for this facility shall refer to the most current version of those documents, including any amendments, modifications, or revisions as approved.

1.2 General Facility Information

The Austin Community Transfer Station is located on the east side of Austin, Texas, approximately 500 feet north of the intersection of Giles Road and US Highway 290. The facility will accept and process MSW from public and private waste hauling vehicles, and from the public generally (refer to Section 3 of this SOP for specific waste acceptance information), and then transfer this waste to a properly permitted MSW landfill for disposal.

2. RECORDKEEPING AND REPORTING REQUIREMENTS

The facility will maintain the Site Operating Record for the life of the facility until after certification of closure. The Site Operating Record will be maintained on-site, in an organized format, where information is readily locatable and retrievable, with the required records to be maintained as set forth herein. Site Operating Record files that are older than five (5) years may be stored off-site at a local Iron Mountain® records storage facility. Records stored off-site will be made available for review within 72 hours of a request. Records, including waste manifests, may be maintained electronically and/or in a manner consistent with the e-manifest database requirements. Consistent with 30 TAC §330.219, copies of documents that are part of the approved registration process and are considered part of the Site Operating Record for the facility are listed in Table IV-1.

A list of records required to be maintained is provided below in Table IV-1. These documents will be made available for inspection by TCEQ agency representatives or other interested parties.

2.1 Required Records to be Maintained

The facility will promptly record and retain in the Site Operating Record, either electronically or in physical format, the information and records listed below in Table IV-1.

Table IV-1. Recordkeeping Requirements

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
MSW Registration	Issuance of Registration	§330.219(a)
Approved Registration Application	Approval of Registration Application	§330.219(a)
Site Operating Plan	Approval of Registration Application	§330.219(a)
As-built set of construction plans and specifications	After completion of construction	§330.219(a)
Other required plans or related documents	As required	§330.219(a)

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
All location restriction demonstrations	Approval of Registration Application	§330.219(b)(1)
Inspection records and training procedures	Per occurrence	§330.219(b)(2)
Closure plans and any monitoring, testing, or analytical data relating to closure requirements	As required	§330.219(b)(3)
Cost estimates and financial assurance documentation relating to closure	Annually	§330.219(b)(4)
Copies of all correspondence and responses relating to facility operation, registration modifications, approvals, and technical assistance	Per occurrence	§330.219(b)(5)
All shipping documents, manifests, and trip tickets, etc., involving special waste	Per occurrence	§330.219(b)(6)
Any other document(s) specified in the registration or by the Executive Director	As required	§330.219(b)(7)
Trip tickets as required by §312.145(b)(2)	Per occurrence (retained for 5 years)	§330.219(b)(8)
Dates, times, and durations of alternative operating hours (e.g., if not as stated in Section 8.4)	As required	§330.229(d)
Fire Protection Plan	Approval of Registration Application	§330.221(c)
Personnel training records and detailed job descriptions	As needed	§330.219(b)(2)
Records to document the annual waste acceptance rate, including the annual solid waste summary report	Annually	§330.675(b)
Random load inspection records	Per occurrence	§330.225
Personnel operator licenses issued under 30 TAC Chapter 30, Subchapter F	As needed	§330.59(f)(3)
All facility inspection and maintenance documentation noted in Section 8.15 - Facility Inspection and Maintenance Schedule	As required	§§330.223-330.243

Records to be Maintained in the Site Operating Record	Frequency	Rule Citation (30 TAC)
Documentation that all wastes leaving the facility are being adequately managed by other licensed or permitted facilities	As needed	§330.205(a)

Note that the recordkeeping requirements of 30 TAC §330.219(d) are not applicable because this facility is not a permitted solid waste composting or landfill mining facility.

2.2 Report Signatories

The owner or operator will sign all reports and other information requested by the Executive Director as described in 30 TAC §305.44(a) if applicable, or they will be signed by a duly authorized representative of the owner or operator only if:

- The authorization is made in writing by the owner or operator as described in 30 TAC §305.44(a);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity or for environmental matters for the owner or operator (e.g., environmental manager, or a position of equivalent responsibility). A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- The written authorization is submitted to the Executive Director.

If an authorization under this section is no longer accurate because of a change in individuals or position, a new authorization satisfying the requirements of this section must be submitted to the Executive Director prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

Any person signing a report shall make the certification in 30 TAC §305.44(b).

2.3 Executive Director Access to Information

All information contained in the Site Operating Record will be furnished to the Executive Director upon request and will be made available at reasonable times at the facility for inspection by the Executive Director.

2.4 Record Retention

The facility will retain the Site Operating Record (all information contained within the Site Operating Record and all plans required for the facility) for the life of the facility until after certification of closure.

2.5 Alternative Schedules for Recordkeeping and Notifications

The Executive Director, in accordance with 30 TAC §330.219(g), may set alternative schedules for recordkeeping and notification requirements specified in 30 TAC §330.219(a)-(e).

2.6 Personnel Training Records and Licenses

The facility will maintain personnel training records and operator licenses. Personnel training requirements will be as set forth in Section 3 of this SOP. Personnel training records will be maintained until closure of the facility. The facility will maintain operator licenses for MSW supervisors as required by 30 TAC Chapter 30, Subchapter F. Personnel training records and operator licenses will be maintained in the Site Operating Record as indicated in Table IV-1.

2.7 Waste Acceptance Rate and Waste Acceptance Records

As indicated in Table IV-1, the facility will maintain records in the Site Operating Record to document the annual waste acceptance rate for the facility, and documents associated with waste acceptance (e.g., trip tickets, agency correspondence, and other waste acceptance records). The Site Operating Record will also include copies of documents involving special waste (e.g., manifests, shipping documents, trip tickets, approval forms).

The facility will also submit to the Executive Director the annual waste summary reports as required by 30 TAC §330.675(b) and will maintain copies of these annual waste summary reports in the Site Operating Record.

3. PERSONNEL AND TRAINING

3.1 Facility Personnel

The general organizational structure for facility personnel who will be involved in the operation of the facility will be as shown on the organizational chart provided below as Figure IV-1. The Site Manager will have overall responsibility for daily operations. Individual job titles and personnel are subject to change based on changes in operational conditions and changes in roles and responsibilities. However, the total number of key site personnel will be sufficient to meet the requirements outlined in Table IV-1. In addition, personnel training regarding duties and responsibilities will be maintained to ensure ongoing compliance with the requirements of this SOP.

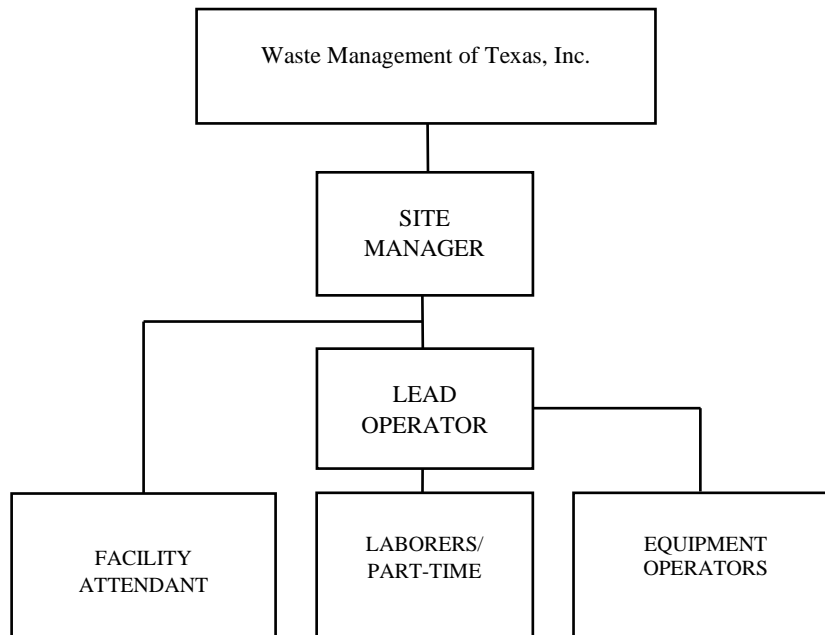


Figure IV-1. Austin Community Transfer Station Organizational Chart

A detailed description of roles and responsibilities of facility personnel are described in the remainder of this section.

3.1.1 Site Manager

The Site Manager will be ultimately responsible for daily facility operations. As such, this individual will be directly responsible for staff and equipment allocation to ensure operation of the facility in accordance with the approved Site Development Plan, SOP, and applicable local, state,

and federal regulations. The Site Manager serves as the emergency contact and coordinator for the facility and will be responsible for maintaining the Site Operating Record and required logs.

The Site Manager has overall responsibility for implementation and adherence to this SOP. Wherever this SOP describes procedures or requirements without naming a specific individual or position responsible for those requirements, the Site Manager shall have primary responsibility for those requirements. Where a specific individual or position is responsible for a particular task, that responsibility is described. Otherwise, the Site Manager may delegate authority and assign qualified personnel to accomplish the requirements of this SOP. The Site Manager will designate an individual(s) to fulfill his or her duties during periods when the Site Manager is absent.

The Site Manager will have a minimum education of a high school diploma or equivalent and will have experience in MSW processing operations. The Site Manager will have and maintain a MSW Facility Class A or B License as a MSW facility supervisor in accordance with 30 TAC Chapter 30, Subchapter F; and, as such, must meet the specific qualification standards (training, education, experience, applicable examination) contained in that Subchapter to obtain and maintain a Class B License. The Site Manager's designee will also have a Class A or B license.

3.1.2 Lead Operator

The Site Manager will appoint a Lead Operator who will be responsible for the safe operation of the equipment involved in the facility's operation. This individual will be responsible for detecting prohibited waste, potentially dangerous conditions, and potentially careless or improper actions of persons while on the premises. The Lead Operator will consider personnel safety and will direct Equipment Operators on a daily basis regarding waste processing operations. The Lead Operator will also perform other required tasks as directed by the Site Manager. The Lead Operator must have a minimum of one (1) year of solid waste processing operations experience, be familiar with SOP requirements, and have the aptitude to manage personnel and implement operational aspects of solid waste processing operations.

3.1.3 Facility Attendant

The Facility Attendant is primarily responsible for maintaining complete and accurate records of vehicles and solid waste entering the facility. The Facility Attendant will be trained in facility safety procedures, to visually check for unauthorized wastes, to weigh vehicles, to measure waste volumes if necessary, and to collect waste disposal fees. Specifically, the Facility Attendant is required to: (i) monitor the incoming vehicles for waste type(s) and to exclude prohibited waste; (ii) inspect waste loads to confirm that they are authorized for disposal; (iii) review manifests and other shipping documents; (iv) record incoming waste loads; (v) review and confirm special waste documents; and (vi) accept tipping fees. The Facility Attendant will be present at all hours when the transfer station facility is open to the

public. The facility attendant, at a minimum, will have a basic understanding of accounting principles and basic communication skills.

3.1.4 Equipment Operators

Equipment Operators' primary duties will include safe operation of the solid waste transfer-related and other facility equipment. Equipment Operators will be responsible for detecting potentially dangerous conditions and potentially careless or improper actions of persons while on the premises. Equipment Operators will monitor and direct unloading vehicles and are also responsible for maintenance, construction, litter abatement, and general facility cleanup. Equipment Operators will intervene as necessary to prevent accidents and report unsafe conditions immediately to the Lead Operator or Site Manager. Equipment Operators are also responsible for identifying prohibited wastes. Equipment Operators, at a minimum, must be experienced in the operation of heavy equipment and demonstrate the ability to be trained in MSW processing operations. Equipment operators will have a minimum of six (6) months experience in heavy equipment operation or supervised on-the-job training.

At all times when the facility is open to receive waste, at least one of the Equipment Operators will be designated as the Lead Operator on duty, who will assume the role and responsibilities as described above for that position.

3.1.5 Other Personnel (Laborers/Part-Time)

The Site Manager may hire other personnel or third-party outside workers to perform mechanic duties (e.g., equipment repairs, servicing, and fueling) as well as laborer activities (e.g., patrolling for and collecting litter, other cleanup, manual labor, and site maintenance activities). These personnel will be employed on an as-needed basis (e.g., part-time) and, accordingly, are not specifically reflected on the table of minimum personnel requirements.

3.2 Training

Training of facility personnel will consist of classroom instruction and/or on-the-job training that instructs site personnel in the performance of their duties and compliance with this SOP, the facility's registration requirements and provisions, and applicable regulations. Training will be directed by employees, supervisors, or other individuals experienced in waste management procedures and operations, health and safety, and related subjects needed for satisfactory job performance. This may include in-house training by qualified individuals within company affiliates, as well as training at TCEQ-sponsored training courses or training events provided by other organizations as deemed appropriate by facility management. Training will include instruction in the solid waste management and related skills, duties, and procedures relevant to

each position as set forth herein (e.g., fire prevention, facility safety, prohibited waste management procedures, etc.).

A description of the training provided to each employee will be maintained in the Site Operating Record.

3.3 Equipment

The minimum equipment required to operate the facility is one front-end loader. Refer to Section 8.2.1 of this SOP for a description of the equipment usage for the waste unloading and loading processes.

Additional company/affiliate-owned or rental equipment, such as road tractors, water trucks, backhoes, grapple loaders, etc., may be provided as necessary to enhance operational efficiency. Additionally, miscellaneous vehicles, pumps, portable lighting, litter fences, instruments, fire protection, and safety and training equipment may also be on-site as necessary to support operations. Whenever equipment breaks down or is taken out of service for maintenance or repair, back-up equipment will be rented from third parties or otherwise made available from other company-affiliated facilities.

Equipment used for waste staging and loading (e.g., the front-end loader) will be maintained in an operational state, and periodically will be cleaned (washing, sweeping) on an as-needed basis to prevent the accumulation of waste residue on the equipment and the creation of odors.

4. WASTE ACCEPTANCE AND ANALYSIS

4.1 Properties and Characteristics of Waste

The Part I/II Supplemental Technical Report presents the facility's comprehensive Waste Acceptance Plan, pursuant to 30 TAC §330.61(b). The major classifications of solid waste to be accepted at the facility for transfer to a properly permitted MSW facility include household waste, yard waste, commercial waste, Class 2 and Class 3 non-hazardous industrial waste, construction-demolition waste, brush, rubbish, shredded or quartered tires, and wastes incidental to MSW (e.g., municipal household hazardous waste, small dead animals). Certain special wastes may also be accepted at the facility (see Section 4.5 below for reference to the special waste acceptance and handling procedures). The waste classifications are defined in 30 TAC §330.3.

The facility will accept waste generated from residential, commercial, institutional, municipal, manufacturing, industrial, recreational, and construction sources within Travis County and surrounding counties. It is anticipated that accepted wastes will include paper, food wastes, glass, aluminum, metals, plastics, grass clippings, other organic wastes, wood wastes, textiles, bricks, and other inert materials.

Consistent with 30 TAC §330.15, the facility will not accept Class 1 non-hazardous industrial wastes, regulated hazardous wastes, regulated asbestos-containing material (RACM), liquid wastes, radioactive wastes, polychlorinated biphenyl (PCB) wastes, untreated medical wastes, or other wastes prohibited by TCEQ regulations.

Class 2 industrial solid waste is any individual industrial solid waste or combination of industrial solid wastes that cannot be described as Class 1 or Class 3, as defined in 30 TAC §335.506 (relating to Class 2 waste determination). Examples of Class 2 non-hazardous industrial waste include "plant trash" or waste originating in the facility offices or plant producing areas that are composed of paper and/or wooden packaging materials, glass, aluminum foil, aluminum cans, aluminum scrap, stainless steel, steel, iron scrap, Styrofoam, rope, twine, uncontaminated rubber, uncontaminated wooden materials, equipment belts, wiring, uncontaminated cloth, metal buildings, empty containers with a holding capacity of five gallons or less, uncontaminated floor sweepings, or food packaging that are produced as a result of plant production.

Class 3 industrial solid waste is any inert and essentially insoluble industrial solid waste, including materials such as rock, brick, glass, dirt, and certain plastics and rubber, etc., that are not readily decomposable as defined in 30 TAC §335.507 (relating to Class 3 waste determination). Class 2 and Class 3 industrial solid wastes may be accepted at the facility, provided processing of these wastes does not interfere with proper operation of the facility.

Bulky and large items arriving at the transfer station will be placed on the tipping floor so as to allow the front-end loader to crush and flatten the items prior to loading into the transfer trailer. Where this is not possible, bulky or large items will be loaded into transfer trailers that have been partially filled to prevent damage to the trailer from impact due to the heavy weight of the bulky and large items. Appliances potentially containing refrigerant will be inspected to ensure that any refrigerant has been extracted in accordance with Section 608 of the federal Clean Air Act. Items containing chlorinated fluorocarbons (CFCs) will be handled in accordance with the Code of Federal Regulations (CFR), Title 40, Part 82.

4.2 Volume and Rate of Transfer

The facility will serve, in general, the individuals, businesses, institutions, and public and private collection vehicles from Travis County and surrounding counties. The facility will process and transfer solid waste up to the registered maximum daily waste acceptance rate of 3,200 tons/day. The facility is designed for efficient waste processing. The area to be used for unloading and waste transfer operations will be approximately 150 feet by 168 feet. Facility layout drawings are included in the Site Development Plan (Part III, Attachment 1).

The following types and estimated percentages of waste are expected to be received at the facility. These waste types and percentages are estimates only and may vary based upon the actual wastes received at the facility.

<u>Type of Waste</u>	<u>Expected Percentage of Waste Stream</u>
Residential Waste	45 %
Commercial/Institutional Waste	30%
Const & Demo Waste	15%
Class 2 & 3 Non-Haz Industrial Waste	7%
Other Authorized Waste	3%

The facility is designed for the efficient transfer of MSW to trucks for transport to a permitted MSW landfill for disposal, typically on the same day the waste is received at the facility. As economic conditions, population growth, and waste generation rates change, the volume of incoming waste may vary. As noted in Section 2.7 of this SOP, the waste acceptance rate for the facility will be reported annually. The maximum amount of waste that may be temporarily stored at the facility is 2,500 tons. On average (i.e., under typical operating conditions), MSW accepted at the facility will be transferred on a daily basis (i.e., in less than 24-hours). The maximum length of time waste material will remain (i.e., be temporarily stored) on-site is 48 hours.

The destination of the MSW collected by the facility is a properly permitted Type I municipal solid waste facility where the waste will be disposed.

The facility will maintain documentation in the Site Operating Record that all wastes leaving the facility are being adequately managed by other authorized solid waste management facilities.

4.3 Facility-Generated Wastes

The only facility-generated waste is wastewater (i.e., wash water resulting from washing the tipping floor and, potentially, small amounts of liquids contained within the incoming waste loads). This water will be handled and managed as contaminated water, and will be transported to a duly-permitted off-site treatment and disposal facility in accordance with the provisions set forth in Section 5 of this SOP. All solid and liquid wastes generated by the facility must be processed or disposed of at an authorized facility.

4.4 Sampling and Analysis for Solid Waste Processing and Experimental Facilities

The requirements of 30 TAC §330.203(c) will be addressed by the facility as follows:

- This facility is not an experimental facility, and furthermore, will transfer only MSW. There is no on-site processing of grit trap wastes, sludge – nor the generation of effluent from a treatment process. As such, there will be no effluent discharged to a trap, interceptor, or treatment facility permitted under Texas Water Code, Chapter 26. Therefore, the sampling and analysis requirements of 30 TAC §330.203(c)(1) and (2) are not applicable.
- Management of contaminated water generated at the facility is discussed in Section 5.

4.5 Special Waste Acceptance and Handling Procedures

A Special Waste Acceptance Plan (SWAP) is provided in Section 10 of this SOP. The SWAP outlines the acceptance requirements and handling procedures for special wastes that are allowed for acceptance at this facility.

5. CONTAMINATED WATER MANAGEMENT

The facility shall manage contaminated water in accordance with 30 TAC §330.207. All potentially contaminated liquids resulting from the operation of the facility shall be disposed of in a manner that will not cause surface water or groundwater pollution, and the facility shall implement necessary steps to control and prevent the unauthorized discharge of contaminated water from the facility. As noted in the Site Development Plan (Part III narrative report, Section 2), the facility is designed to manage stormwater in a controlled manner in order to not cause surface water or groundwater pollution.

Contaminated water generated by the facility will consist of wash water resulting from washing the tipping floor and, potentially, small amounts of liquids contained within the incoming waste loads (i.e., leachate). This contaminated water will be directed to a minimum 2,000-gallon (nominal) contaminated water holding tank where it will be collected and contained until properly managed. The contaminated water collected in the holding tank will be pumped as necessary into a tanker truck (properly registered hauler) for transportation to a duly-permitted off-site treatment and disposal facility that is authorized to accept this type of wastewater. The Austin Community Transfer Station will adhere to the sampling and analysis (testing) requirements of the receiving treatment facility (and associated treatment facility concentration or other parametric limit requirements of acceptance for treatment).

The discharge of stormwater from the tipping floor area will not occur. All water coming in contact with waste will be managed as contaminated water. The transfer station will be operated consistent with 30 TAC §330.15(h)(1)-(4), prohibiting the discharge of solid wastes or pollutants into waters of the United States. The facility will not discharge contaminated water without a separate, specific written authorization from TCEQ under the authority of the Texas Pollutant Discharge Elimination System (TPDES).

Uncontaminated stormwater run-on and run-off will be directed away from the transfer station building entrances by site grading. The building interior where waste is processed will not result in any storm-generated run-off since the enclosed transfer station building will have a roof to prevent precipitation from coming in contact with waste. Stormwater will be managed by maintaining the stormwater patterns identified in the Site Development Plan (e.g., the Site Plan in Part III, Attachment 2) in areas outside of the transfer station building footprint.

6. STORAGE REQUIREMENTS

6.1 Solid Waste Storage

Solid waste storage will take place either indoors in the enclosed transfer station building on the tipping floor or in tarped transfer trailers awaiting transport off-site. All solid waste will be stored in such a manner that it does not constitute a fire, safety, or health hazard, or provide food or harborage for animals and vectors, or cause odors; and will be contained to prevent windblown solid waste and litter.

As shown on the Facility Layout Plan in Part III, Attachment 1, Drawing III-1-2, the facility has designated an optional Citizen's Recycling Drop-Off Area for potential on-site storage area for acceptable source-separated or recyclable materials in a location separate from the transfer station waste tipping area and transfer vehicle loading operations. Refer to Section 6.3 of this SOP for further information on the optional Citizen's Recycling Drop-Off Area and how it will be managed.

No solid waste loading or storage will occur within any easement, buffer zone, or right-of-way that crosses the facility. On-site storage of waste will comply with the maximum storage times and volumes set forth in Section 4.2 of this SOP. Waste that is stored overnight at the facility will be either stored in tarped transfer trailers or stored indoors in the enclosed transfer station building on the tipping floor .

The transfer station will not recover materials from solid waste that contains putrescible materials. The transfer station will not process liquid waste.

6.2 Approved Containers

It is required that all solid waste containing food wastes shall be stored in covered or closed containers that are leakproof, durable, and designed for safe handling and easy cleaning. This will be accomplished through the use of approved containers, along with the waste processing methods to limit the length of time waste is stored on the tipping floor, as follows: Incoming waste will be deposited onto the concrete tipping floor within the enclosed transfer station building. Waste will be transferred to transfer trailers on a daily basis (i.e., within less than 24-hours) under typical operating conditions, and under all circumstances waste will not be stored on-site for more than 48 hours. The transfer trailers will be maintained in a condition such that they do not create a nuisance or conditions conducive for the harborage, feeding, and propagation of vectors. The transfer trailers will be leak-proof, durable, and designed for safe handling and easy cleaning. The transfer trailers will be equipped with tarps or covers to be used during on-site storage and transport. These containers (mechanically handled) are designed to prevent spillage or leakage during storage, handling, and transport.

Non-reusable containers, if used, will be of suitable strength to minimize animal scavenging or rupturing during collection operations. All containers to be emptied manually will be capable of being serviced without the collector coming into contact with waste.

6.3 Citizen's Recycling Drop-Off Area

As mentioned in Section 6.1, an area of the facility has been designated for an optional Citizen's Recycling Drop-Off Area. The Citizen's Recycling Drop-Off Area will be used if there is sufficient customer demand. At this drop-off area (see Part III, Attachment 1, Drawings III-1-2 and III-1-4 for location), small-quantities (i.e., non-commercial customers such as area residents with household recyclables) of acceptable source-separated recyclable materials would be received and stored on-site. This area will be equipped with covered dumpsters or tarped roll-off containers where customers would be able to drop-off specified types of recyclable material. Each container would be dedicated to one type of recyclable material (e.g., one each for newspaper, glass, plastic, etc.).

When in use, signs will be posted next to the Citizen's Recycling Drop-Off Area listing the rules governing the use of the drop-off area (e.g., who may use it, what may be deposited, what shall not be deposited, etc.). The facility will remove the deposited recyclables when the containers are full and will transport them to an authorized off-site recycling facility where the material will be recycled or otherwise managed as recyclable material. The facility will visually monitor and inspect the drop-off area and will maintain it in a sanitary condition. Control of odors, vectors, and windblown material from this storage area shall be maintained by storing the recyclable material in covered dumpsters or tarped roll-off containers.

6.4 Stationary Compactors

A stationary compactor will not be provided at the facility. Therefore, the requirements of 30 TAC §330.215 are not applicable to this facility.

7. FIRE PROTECTION PLAN

This Fire Protection Plan describes the source(s) of fire protection (i.e., fire prevention and protection methodology), procedures for using the fire protection source(s), and employee training and safety procedures. This plan has been prepared to address compliance with local fire codes.

7.1 Fire Prevention

In order to minimize fire hazards at the facility, the following fire prevention steps or procedures will be implemented.

- Smoking is allowed only in designated areas. Smoking is specifically prohibited:
 - at fuel storage and dispensing areas;
 - at the active waste tipping and loading areas; and
 - other fire-sensitive areas.
- Fuels will be stored and dispensed only in authorized areas. Efforts will be made to contain and control fuel spills immediately upon discovery. Spilled fuel and impacted soil will be promptly collected, profiled, and properly disposed.
- The open burning of waste is prohibited at the facility.
- The facility will be equipped with readily-available fire extinguishers of a type, size, location, and number as recommended by the local fire department or the designated company fire prevention specialist. Each fire extinguisher will be fully-charged and ready for use at all times. Each extinguisher will be inspected on an annual basis and recharged as necessary. These inspections will be performed by a qualified service company, and all extinguishers will display a current inspection tag. Inspection and recharging will be performed following each use.
- An adequate supply of water under pressure will be available for fire-fighting purposes. The transfer station building will either be connected to a public water supply system or equipped with water storage tanks as the source of pressurized water for wash-down of the tipping floor, which will also be available for use by facility personnel for extinguishing fires.
- In conjunction with the building permit process, the transfer station building will be designed to comply with applicable local fire codes, including the provision of fire protection systems (e.g., fire alarm, fire extinguishing or smoke control systems,

approved water supply capable of supplying the required fire flow or fire hydrant access, as applicable) as required by code for the size and usage of the building.

- “Hot loads” (burning waste from incoming loads) will be prevented from being dumped in the active area of the transfer station. The Facility Attendants and Equipment Operators will be alert and will observe incoming loads for signs of burning waste such as smoke, steam, or heat. The vehicle will be directed to an area outside the transfer station building where waste can be safely discharged and isolated, and the fire extinguished. Upon extinguishing the fire, the waste will be immediately moved inside the transfer station building.

7.2 General Fire-Fighting Procedures

The following general procedures will be implemented in the event of a fire.

- If it can be done safely, fires will be promptly extinguished by trained site personnel.
- If necessary:
 - Contact the local fire department by calling 911.
 - Notify the Site Manager and alert other facility personnel.
 - Assess the extent of the fire and the potential for the fire to spread.
 - If safe, attempt to contain or extinguish the fire until the local fire department arrives.
 - Direct the local fire department to the fire and provide assistance as appropriate.
 - Do not attempt to fight the fire alone.
 - Do not attempt to fight the fire without adequate personal protective equipment.
 - Evacuate the facility as necessary.

In general, fire-fighting methods include separating burning material from other waste and spraying the burning material with water from the wash-down hoses or using a fire extinguisher. All transfer station equipment and vehicles will be equipped with a fire extinguisher, and two additional fire extinguishers will be located in the transfer station building.

7.3 Specific Fire-Fighting Procedures

The following specific procedures will be followed in the event of a fire.

- If a fire occurs on a vehicle or piece of equipment, the Equipment Operator should bring the vehicle or equipment to a safe stop. If the safety of personnel will allow, the vehicle must be parked outside of the facility away from fuel supplies, solid wastes, and other vehicles. The engine should be shut off and the brake engaged (or other methods implemented) to prevent movement of the vehicle or

equipment. Fire extinguishers should be used to extinguish the fire, if possible without risk to the Equipment Operator.

- If a fire is on the tipping floor, the burning area should be promptly isolated and pushed away from the other waste. The burning area should be sprayed with water from the wash-down hoses, or, if small enough, extinguished with a hand-held fire extinguisher.
- If burning waste materials are discovered after having been unloaded at the transfer station, the load will be extinguished with water or by fire extinguisher, as appropriate.
- Use the fire extinguishers located in the transfer station building and equipment, or the water hoses, to extinguish a fire, as appropriate.
- The facility water supply for fighting fires is supplied by the public water supply system, via the wash-down hoses.

7.4 Fire Protection Training

Facility operations personnel (not including personnel with administrative duties only) will receive annual training in the contents of this section of the SOP. The training will include:

- review and discussion of this Fire Protection Plan;
- fire prevention and hazard awareness;
- fire safety; and
- fire-fighting procedures

Administrative personnel will receive training relating to fire prevention and hazard awareness and fire safety. Records of fire protection training will be kept in the Site Operating Record.

7.5 TCEQ Notification

If a fire is not extinguished within 10 minutes of detection, the facility will make every reasonable effort to immediately contact the TCEQ Region 11 office by phone, but not later than four (4) hours after detection. The facility will provide the Region with a written description of the fire and resulting response within 14 days of the event.

8. OPERATIONAL PROCEDURES

8.1 Access Control

Public access to the site will be limited to the gated facility entrance. The Facility Attendant controls access and monitors vehicles entering and exiting the facility. The facility perimeter is fenced to control access and prevent unauthorized access and has lockable gates. Fencing will be composed of (at minimum) a four-foot barbed wire fence or a six-foot chain-link fence or equivalent (e.g., iron or metal bar-style fencing). The operating area (i.e., the transfer station) is a building.

8.1.1 Facility Security

Facility security measures are designed to prevent unauthorized persons from entering the facility, to protect the facility and its equipment from possible damage caused by trespassers, and to prevent disruption of facility operations caused by unauthorized facility entry.

Unauthorized entry into the facility is minimized by controlling access to the site with the perimeter fence and by locking the gate at the entrance. The gate will be locked when the facility is not accepting waste and the offices are closed.

A Facility Attendant or other designated operating personnel will be on-site during operating hours and will monitor the entrance to the facility. Entry to the facility will be restricted to designated personnel, appropriate subcontractors, approved waste haulers, the public, TCEQ personnel, and properly identified persons whose entry is authorized by facility management.

8.1.2 Traffic Control

Access to the facility will be provided via the facility entrance driveway on Giles Road, and through the gates into the facility. The Facility Attendant stationed at the scales will restrict facility access to authorized vehicles, will direct waste collection vehicles appropriately, and will monitor waste vehicle traffic to ensure vehicles are following the directed route. After leaving the scale area, waste collection vehicles will drive to the tipping floor unloading area. These vehicles will deposit their loads and then depart the site. Transfer trailers will drive to the waste loadout tunnels at the transfer station building where they will be loaded before departing the site.

In addition to the Facility Attendant and other facility personnel providing traffic directions to facilitate the safe movement of vehicles at the facility (including into and out of the transfer station building), appropriate signs will be positioned at the facility to guide users and indicate where vehicles are to unload. Signs will be placed along the entrance road to direct vehicles, at a frequency/spacing that is adequate to guide users to the proper areas and identify which roads are to be used. The use of forced access lanes through barricades, flagging, or other means will be

used in conjunction with signs for the prevention of indiscriminate dumping. Roads not being used for access will be blocked or otherwise marked for no entry. Signs will also direct vehicles to the facility exit.

8.1.3 On-Site Access Roads and Parking

The entrance and the on-site roads will be all-weather surfaced (e.g., gravel, asphalt, concrete) and will have a minimum width of two-lanes. The scale area is equipped with a bypass lane in each direction (inbound and outbound). The entrance and facility roads have been designed for the expected traffic flow, to provide safe on-site access for commercial collection vehicles and the public, to avoid disruption of normal traffic patterns, and to provide safe turning radii for vehicles that utilize the facility. Vehicle parking is provided at the facility for employees and visitors, located north-northeast of the scale area (see Part III, Attachment 1, Drawing III-1-4).

Equipment parking and staging will be directed by transfer station personnel so as not to block or hinder waste collection vehicles or transfer trailers from ingress or egress to the tipping floor and loadout tunnels.

Refer to Section 8.8 of this SOP for access road dust and mud control requirements.

8.2 Unloading of Waste

8.2.1 Waste Unloading Procedures

The Facility Attendant will monitor all incoming loads of waste (see Section 8.2.2). Incoming waste hauling traffic will be directed to the tipping floor (waste unloading area) once the vehicle's incoming weight or volume has been recorded at the scale area by the Facility Attendant. As mentioned in the above section on access control, signs will be located as needed along the route to the unloading area. Waste loading and unloading operations will only occur within the transfer station building and will be confined to as small an area as practical. Safety bumpers at hoppers will be provided for vehicles.

Collection vehicles will unload solid waste within the transfer station building on the tipping floor. Equipment Operators will monitor the unloading of incoming waste (see Section 8.2.2). A front-end loader will typically push the solid waste towards the transfer trailer loading area at the loadout tunnels on the sides of the tipping floor and transfer it to transfer trailers. The facility will provide sufficient equipment to effectively operate in accordance with the operational standards required by this SOP, applicable TCEQ regulations, and applicable local, state, and federal regulations.

Unloading of waste in unauthorized areas will be prohibited. Any waste which is identified as having been deposited in an unauthorized area will be immediately moved to the unloading areas.

8.2.2 Procedures for the Detection and Prevention of Unauthorized Waste

This section provides procedures for the detection and prevention of unauthorized waste, including regulated hazardous waste as defined in 40 CFR Part 261 and polychlorinated biphenyl (PCB) wastes as defined in 40 CFR Part 761.

Prohibited waste will not be accepted at the facility. Additionally, the facility is not required to accept any solid waste that the facility determines will cause or may cause problems in maintaining full and continuous compliance with this SOP and applicable TCEQ regulations.

The Facility Attendant is the first point of contact with the hauler. The hauler will be asked to inform the Facility Attendant of the content of the load. The Facility Attendant may visually inspect containers to verify contents. In the event prohibited wastes are identified in the load, the entire load is turned away from the gate and not allowed entrance to the site. In addition, if the waste hauling vehicle is delivering special or industrial waste, facility personnel may visually compare the material presented for disposal with the waste profile form to confirm that the physical characteristics (e.g., color, odor, appearance) of the material matches that detailed on the profile. In the event that the physical characteristics of the waste differ from the approved waste stream, the waste load will be rejected.

Equipment Operators will visually monitor the unloading of waste. Should any indication of prohibited waste be detected, appropriate facility personnel will stop the unloading of the vehicle to allow facility personnel to conduct a thorough evaluation of the load. The driver will be directed to a load inspection area, where the load will be discharged from the vehicle. The load inspector will break up the waste pile and inspect the material for any prohibited waste. Known prohibited waste will be placed back into the vehicle and the driver will be instructed to depart the facility. Should any regulated hazardous waste be detected, the entire load will be rejected.

Any prohibited waste that is not discovered by the facility until after it is unloaded will be returned to the vehicle that delivered the waste. That party will be responsible for the proper disposal of this rejected waste. In the event the unauthorized waste is not discovered until after the vehicle that delivered it has departed the site, the waste will be segregated and controlled as necessary. An effort will first be made to identify the entity that deposited the prohibited waste and have them return to the facility and properly dispose of the waste. In the event that identification of the responsible party is not possible, the facility will arrange for the proper management of the waste or will notify the TCEQ and seek guidance on how to dispose of the waste.

In addition to the above procedure, incoming loads will be visually inspected on a random basis. The Site Manager will be responsible for determining the random load inspection

schedule. The driver of the randomly selected load will be notified and instructed to proceed as above to a load inspection area.

The Site Manager will maintain and include in the operating record the load inspection reports for randomly inspected loads. Load inspection reports, recorded on standardized forms, will be completed for each inspected load. The reports will include at a minimum, the date and time of inspection, the name and address of the hauling company and driver, the type of vehicle, the size and source of the load, contents of the load, indicators of prohibited waste, and results of the inspection.

8.3 Spill Prevention and Control

The tipping floor (i.e., waste unloading, processing, and storage area) has been designed to control and contain spills and contaminated water from leaving the facility. Relevant transfer station design information is presented on Drawing III-1-5 of Part III, Attachment 1. Since the transfer station tipping floor will be in a roofed-building, and because liquid wastes are not allowed to be delivered to the transfer station, only small amounts of liquids incidental to MSW may be within the materials delivered to the transfer station (i.e., precipitation from storm events will not enter the enclosed transfer station building). The reinforced concrete transfer station tipping floor will be sloped towards a floor drain and will have exterior push walls to serve as containment of spills and wash waters. These liquids will be managed as contaminated water as described in Section 5 of this SOP.

8.4 Operating Hours

8.4.1 Proposed Operating Hours

The facility will be authorized to accept waste from operator-owned or affiliated-company waste haulers and from other commercial waste hauling companies between 3:00 a.m. on Monday through 7:00 p.m. on Saturday. Hours when the facility is open to the public may be at any times within these hours and will be posted on the facility entrance sign.

The facility will be allowed to process waste with heavy equipment, transfer it to transfer trailers, and transport waste and other materials on- or off-site any time between 3:00 a.m. on Monday through 7:00 p.m. on Saturday.

On-site construction or maintenance activities involving heavy equipment and transport of non-waste materials on- or off-site are allowed any time between 5:00 a.m. on Monday through 9:00 p.m. on Saturday, and between 7:00 a.m. to 7:00 p.m. on Sunday.

Other activities not involving waste operations or heavy equipment operation do not require specific approval and may be performed seven (7) days per week, 24 hours per day.

The facility may request TCEQ approval of alternate operating hours up to five (5) days in a calendar year period to accommodate special occasions, special purpose events, holidays, and other special occurrences. Also, the TCEQ Region 11 office may allow additional temporary waste acceptance hours to address disasters, emergency situations, or other unforeseen circumstances that could result in the disruption of waste management services in the area. The facility will record in the Site Operating Record the dates, times, and durations when any alternate operating hours are used.

8.4.2 Justifications for Proposed Transfer Station Operating Hours

Operating hours beyond the default hours in 30 TAC § 330.229(a) are necessary at the Austin Community Transfer Station to meet customer and community needs while maintaining safe, efficient, and cost-effective waste collection and transfer operations. WMTX reasonably expects that most (but not all) of the customers and haulers utilizing the Austin Community RDF for disposal will transition their waste deliveries to the Austin Community Transfer Station as WMTX transitions waste operations from the landfill to the transfer station and the landfill ceases to receive waste. The Austin Community RDF is currently authorized to operate from 9:00 p.m. Sunday through 7:00 p.m. Saturday and, if necessary, from 7:00 a.m. to 4:00 p.m. on Sunday. Given (1) the more limited transfer station operations as compared to the landfill (i.e., transfer vs. disposal); (2) the more limited maximum waste acceptance rate at the transfer station as compared to the landfill; (3) and the expected and estimated reduction in waste deliveries to the transfer station as compared to the landfill, WMTX estimates that waste processing operations on Sundays will not be necessary at the Austin Community Transfer Station.

In 2019, the Austin Community RDF accepted approximately 27% of its waste loads outside of the hours of 7:00 a.m. to 7:00 p.m. Also in 2019, the Austin Community RDF accepted approximately 28% of its waste tonnage outside of the hours of 7:00 a.m. to 7:00 p.m.

Certain of WMTX's and the Austin Community RDF's existing customers require waste collection services in the early morning hours prior to 7:00 a.m. Such contracts are commonplace in the industry for municipal and commercial/institutional customers, and WMTX expects to maintain and enter into such contracts when the Austin Community Transfer Station is operational. The transfer station will service collection vehicles that collect and haul waste pursuant to the terms of such contracts.

Collecting waste in urban areas in the pre-dawn hours keeps large waste collection and hauling vehicles out of the downtown, campus, and commercial areas during times of heavier traffic – when people are arriving at work, walking to class, or patronizing restaurants or other businesses. Collecting waste in urban areas after 6:00 a.m. can result in increased traffic congestion and it can be physically impossible to access the containers that need to be serviced due to the increased presence of other vehicles in the alleyways where the containers are located.

If the Austin Community Transfer Station was required to process all waste loads within the hours of 7:00 a.m. to 7:00 p.m. on weekdays only, the limited waste acceptance hours would result in an increase in the amount of traffic to and from the transfer station and within the facility during the busiest traffic hours of the day, and waste collection trucks would be lined up each morning for hours in front of the facility waiting for the gates to open, creating significant traffic congestion and safety issues and increasing air emissions.

For many decades, the Austin Community RDF has served as a convenient and viable local waste management option for area residents. If the Austin Community Transfer Station is to continue to provide this much needed public service, then the facility must be open during weekend hours for those individuals that work the typical Monday through Friday work-week. In 2019, 7,603 vehicles entered the Austin Community RDF during weekend hours and disposed of approximately 5% of the waste loads received at the facility during the year; the majority of these weekend waste loads were delivered by small haulers and members of the public.

The need for operating hours beyond the weekday hours of 7:00 a.m. to 7:00 p.m. is expected to increase in the coming years as the area economy continues to improve and as the population of Austin, Travis County, and neighboring communities and counties continues to grow.

WMTX has historically managed the Austin Community RDF's active hours of operation judiciously, opening the facility for waste acceptance and other operations in the evening, early morning, and weekend hours only as necessary to accommodate the needs of its customers and the community. WMTX will carry forward and apply this managerial approach to the operations of the Austin Community Transfer Station.

8.5 Facility Entrance Sign

A conspicuous sign measuring at least 4-ft by 4-ft will be maintained at the entrance to the facility through which wastes are received. The sign will be readable from the facility entrance and will state, at a minimum, in letters at least three (3) inches high:

- the name of the facility;
- the facility MSW registration number.
- the type of site (i.e., Type V MSW facility);
- the hours and days of operation for waste acceptance;
- a 24-hour emergency contact phone number(s);
- the emergency phone number of the local fire department (i.e., 911); and
- facility rules (e.g., regarding prohibited wastes, stating that all loads must be properly covered or otherwise secured, etc.).

Other relevant information may also be included on the sign. Note that waste acceptance hours may differ for commercial waste haulers versus the public, and, if different, both categories of waste acceptance hours will be posted on the facility sign. In no instance will normal waste acceptance hours be outside the allowable hours for waste acceptance as set forth in Section 8.4 of this SOP.

8.6 Control of Windblown Material and Litter

Windblown material and litter will be collected and properly managed to control unhealthy, unsafe, or unsightly conditions by the following methods:

- Waste transportation vehicles using this facility must be enclosed or use adequate covers, such as a tarp, net, or other means, to effectively secure the load consistent with §330.235 and Section 8.7. The adequacy of covers or other means to secure incoming wastes will be checked at the facility gatehouse/scale area.
- Windblown material and litter along the entrance road that has accumulated along fences and the registration boundary and throughout the facility will be collected once a day on days that the facility is in operation and returned to the tipping floor for processing.
- The transfer station building will be an enclosed structure as described in Section 2.3.4 of the Site Development Plan Narrative Report to facilitate the safe and efficient flow of vehicles through the facility while also minimizing windblown material and litter. Unloading and loading of waste will be performed within the enclosed building, which will help shield the waste from wind and prevent the generation and off-site transport of windblown material and litter. Should unhealthy, unsafe, or unsightly conditions occur, the facility will employ supplemental devices or other measures (e.g., portable litter control fences or wire mesh screening) to control windblown material and litter, as necessary.

8.7 Materials Along the Route to the Facility

The facility will take steps to encourage vehicles hauling waste to the facility to enclose or cover their loads with a tarp, net, or other means to properly secure the load. Transfer trailers loaded with waste that are leaving the facility will be tarped. These steps are necessary to prevent the escape of any part of the load by blowing or spilling. The facility will post a sign at the entrance notifying haulers of this requirement and associated enforcement measures. The facility will provide for the cleanup of waste materials spilled along and within the rights-of-way of the public access roads serving the facility for a distance of two miles in either direction from the entrance gate. Inspection and any necessary cleanup for the spilled materials will be performed once per day on days when the facility accepts waste. The facility will consult with TxDOT, county, and

local government officials concerning cleanup of roads and rights-of-way consistent with 30 TAC §330.235.

8.8 Facility Access Roads

The facility entrance and on-site access roads will be as described in Section 8.1.3 of this SOP. Because the facility roads will have an all-weather surface (e.g., gravel, asphalt, concrete), the formation of mud will be prevented (i.e., the provision of all-weather road surfaces will serve as mud prevention/controls); it is not anticipated that mud or other debris will be tracked onto Giles Road given the all-weather surface that will exist on the site roads, thus preventing the vehicles from coming in contact with mud.

The on-site access roads will be maintained in a reasonably mud- and dust-free condition by sweeping and/or periodic water spraying by a water truck dispatched to the site or with water obtained from the wash-down hoses, as necessary. The entrance, access, and internal roads will be maintained in a clean and safe condition. Grading and maintenance equipment will be used as needed to regrade the facility access roads to minimize depressions, ruts, and potholes.

8.9 Noise Pollution and Visual Screening

Since transfer activities will be enclosed within the transfer station building, generated noise will be largely confined to the inside of the the transfer station building, and the waste unloading and transfer operations will be visually-screened from the public to prevent adverse visual impacts. Waste transfer operations and associated noise are also screened and buffered via the building setback of about 250 feet from the public roadway (Giles Road) and an even greater setback from adjacent landowners. These setbacks, which are greater than the regulatory minimum 50-foot buffer, are such that waste transfer operations at the site will not be readily visible from off-site locations. Additionally, such operations will be at a distance and orientation such that potential noise pollution will be attenuated (i.e., by being blocked by the building walls, roof, and existing terrain, and/or by being dissipated across the setback distances from potential off-site receptors). Screening (for both noise and aesthetic purposes) will also be provided by a vegetated earthen berm and mature trees on top of the berm on registrant-owned property along Giles Road, and these features will remain in-place and be maintained throughout the operating life of the transfer station.

8.10 Overloading and Breakdown

As required by 30 TAC §330.241(a), the design capacity of the transfer station will not be exceeded during operation. The design capacity of the facility is computed in the Part I/II Report, Table I/II-2. Such overloading beyond the design capacity will be prevented by conducting real-time tracking of incoming waste tonnage received at the facility throughout each operating day (i.e.,

each load is weighed and the data are recorded by the facility). Through this real-time tracking of cumulative daily total waste receipts, the facility will continually monitor the incoming tonnage and will stop accepting waste before the registered maximum daily waste acceptance rate is exceeded, thus ensuring that the design capacity is not exceeded.

The waste storage volumes and times set forth in Section 4.2 of this SOP will not be exceeded, and the facility will not accumulate solid waste in quantities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of vectors. If such accumulations occur, additional solid waste will not be received until the adverse conditions are abated.

If a significant work stoppage should occur at the facility due to a mechanical breakdown or other causes, or the facility is expected to become inoperable for a period of 24 hours or more beyond the storage periods listed in Section 4.2 of this SOP, or the facility cannot operate in accordance with this SOP, the facility will restrict the receiving of solid waste and direct incoming solid waste to other approved processing or disposal facilities. If the work stoppage is anticipated to last long enough to create objectionable odors, insect breeding, or harborage of vectors, the accumulated solid waste will be removed from the facility to an approved backup processing or disposal facility. In no event will waste remain (i.e., be temporarily stored) on-site for more than 48 hours.

8.11 Sanitation

The tipping floor will be washed down at least once per week at the completion of the daily processing period, or more frequently if it is determined to be necessary to control odors within the transfer station facility. Wash waters will not be allowed to accumulate on the tipping floor; the tipping floor will be sloped towards a floor drain, where all wash water will be collected and managed as contaminated water, and properly disposed of in an authorized manner as set forth in Section 5 of this SOP.

8.12 Ventilation and Air Pollution Control

The facility is designed and will be operated to provide adequate ventilation for odor control and employee safety. Ventilation in the transfer station building will be provided by the openings through which waste hauling vehicles will enter and exit, and vents installed on the building roof.

The operator will prevent nuisance odors from leaving the boundary of the facility. The following measures will be employed:

- On-site buffer zones will be maintained. That is, all waste processing and storage will occur in areas setback from the facility boundary by a minimum of 50 feet (the setbacks from adjacent landowners are substantially greater than 50 feet). In particular, the transfer station building where waste will be unloaded, processed, and stored, will maintain setback buffers within the facility boundary that are greater than the minimum required 50-foot buffer zone (as illustrated on Drawing III-1-2 of Part III, Attachment 1).
- Solid waste processing will occur within the enclosed transfer station building.
- Stored solid waste will be kept in odor-retaining containers (i.e., either indoors in the enclosed transfer station building or in tarped transfer trailers awaiting transport off-site).
- Misting systems (using water) or non-aqueous odor control systems may be used to suppress odors, if needed. The misting system may also be used to control odors through the addition of chemical deodorizers in the water. Air authorization(s) will be obtained from TCEQ, as necessary, for the odor control system(s) used.
- Ponded water will be controlled to avoid objectionable odors and nuisance conditions (e.g., by the enclosed transfer station building whose roof will prevent precipitation from coming in contact with waste and the sloping of the tipping floor in the transfer station building (which is where waste will be managed and stored) towards a floor drain). In the event that objectionable odors do occur from any ponded water, appropriate measures shall be taken to alleviate the condition. The site will be graded to drain so that stormwater will not accumulate. Any unanticipated low spots where stormwater may pond will be addressed by filling or grading.

There are no proposed process areas that recover material from any solid waste that contains putrescible wastes. Additionally, the facility will not accept liquid waste; thus, there will be no exposure of liquid waste to the air. There is also no proposed mobile waste processing unit equipment at the facility.

Prior to operations, the appropriate air permit or authorization will be obtained, and the facility will operate in accordance with applicable air permit/authorization provisions so that air emissions from the transfer station facilities do not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.

8.13 Health and Safety

Facility personnel will be trained in accordance with the procedures and topics outlined in Section 3 of this SOP, which will include training on the facility's health and safety plan (which is addressed in Section 9 of this SOP).

8.14 Employee Sanitation Facilities

Potable water and sanitary facilities will be provided for all employees and visitors.

8.15 Facility Inspection and Maintenance Schedule

Table IV-2, presented on the following page, provides the facility inspection and maintenance schedule.

Table IV-2. Facility Inspection and Maintenance Schedule

Item	Task	Frequency	Inspector	Type of Inspection
Windblown Waste	Police working area, entrance area, and perimeter fence for loose trash. Clean up as necessary.	Daily	Site Manager or Designee	Document in the Operating Record
Materials along the Route to the Facility	Police the entrance area and public access roads for a distance of two (2) miles in either direction from the entrance for litter. Clean up as necessary.	Daily	Site Manager or Designee	Document in the Operating Record
Facility Access Roads	Inspect facility access road for damage from vehicle traffic, erosion, or excessive mud accumulation.	Weekly	Site Manager or Designee	Document in the Operating Record
Contaminated Water Holding Tank	Inspect integrity of the cover and check level in tank.	Weekly	Site Manager or Designee	Document in the Operating Record and Coordinate Contaminated Water Removal per Section 5

9. GENERAL INSTRUCTIONS

9.1 General Facility Safety

This section addresses general facility safety, and serves as a health and safety plan for the promotion of safe operations and activities at the facility. The facility may implement additional company policies regarding health and safety, but such policies are beyond the scope of this SOP.

Facility safety will be promoted by facility personnel using well-maintained equipment to perform standard work procedures. Facility safety will be enhanced by limiting access to working areas to only authorized personnel. In the event of an emergency, planned emergency response procedures will be followed.

Access to the facility will be limited to authorized personnel as described in the access control section of this SOP (Section 8.1). As indicated, access is controlled by physical barriers (i.e., fencing and lockable gates), and signage will be present to enhance access control and general facility safety. Facility personnel are responsible to be alert for the presence of unauthorized personnel or persons in prohibited areas.

In the event of an emergency, facility personnel will assess the situation, notify the Site Manager or designee, and take appropriate actions, such as rendering aid, calling for assistance, or closing access to the emergency scene. Additional measures specific to fire protection are provided in Section 7 of this SOP.

The **emergency phone number is 911**; this will be posted beside the telephone in the gatehouse.

10. SPECIAL WASTE ACCEPTANCE PLAN

10.1 Introduction

This Special Waste Acceptance Plan (SWAP) outlines the acceptance requirements and review and approval process that will be used to accept special waste. Special waste is defined by TCEQ's MSW regulations (30 TAC §330.3(148)). Only those special wastes specifically listed below will be accepted at this facility without prior written approval from the Executive Director.

- Dead animals and slaughterhouse waste that are incidental to routine collection of MSW and that can be systematically processed along with other solid waste.
- Drugs and contaminated foods, other than those contained in normal household waste.
- Empty containers that have been used for pesticides, herbicides, fungicides, or rodenticides provided the containers have been triple rinsed, crushed, or rendered unusable upon receipt at the gate.
- Incidental amounts of non-regulated asbestos-containing materials (non-RACM). An incidental amount is defined as the maximum of 10-percent of the waste received on an annual basis by scale weight (annual basis is defined as the most recent four consecutive quarters).
- Waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility. Only those wastes authorized for disposal at a solid waste management facility will be accepted.
- Waste generated outside of Texas that contains any industrial waste; any waste associated with oil, gas, and geothermal exploration, production, or development activities; or any material that is listed in the bullets above.
- Special waste other than as described above and approved for acceptance by the TCEQ Executive Director.

No special waste will be received at the facility unless it is compatible with the compaction and loading equipment operated at the facility or unless modifications are made to the facility to accommodate the special waste. Any changes in operations must be approved in writing by the Executive Director prior to implementation.

The following wastes will not be accepted at this facility:

- Regulated hazardous waste
- PCBs
- Liquid wastes
- Certain special wastes, including:
 - hazardous waste from conditionally exempt small-quantity generators that may be exempt from full controls under 30 TAC Chapter 335, Subchapter N (relating to Household Materials Which Could Be Classified as Hazardous Wastes);
 - Class 1 industrial nonhazardous waste;
 - untreated medical waste;
 - municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges;
 - septic tank pumpings;
 - grease and grit trap wastes;
 - wastes from commercial or industrial wastewater treatment plants; air pollution control facilities; and tanks, drums, or containers used for shipping or storing any material that has been listed as a hazardous constituent in 40 CFR, Part 261, Appendix VIII but has not been listed as a commercial chemical product in 40 CFR §261.33(e) or (f);
 - Soil contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligrams per kilogram total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1 of 30 TAC §335.521(a)(1).
 - incinerator ash;
 - used oil;
 - lead acid storage batteries; and
 - used-oil filters from internal combustion engines.

10.2 Special Waste Acceptance

Prior to being accepted at the facility, special wastes must be preapproved by the landfill that will be receiving the waste, in accordance with the receiving landfill's special waste screening and acceptance procedures. Special waste evaluation and approval will take place prior to delivery of the waste to the transfer station. Typically, the special waste analyst for the landfill will utilize

information provided by the generator (e.g., waste-specific chemical and characteristic information or process knowledge information) to determine the acceptability of a waste for disposal at the landfill. The special waste analyst will be responsible for maintaining and utilizing current regulatory guidelines and constituent limits for evaluation of wastes. The special waste analyst also will be responsible for knowing and applying applicable future changes to state and federal disposal regulations, review and acceptance procedures. This information will be provided to transfer station personnel prior to waste acceptance at the transfer station.

The preceding special waste review procedures will include the following.

- The Special Waste Profile (SWP) sheet or waste profile document will be reviewed for completeness. The SWP will typically be completed electronically through a Waste Management, Inc. portal set up for this process and may include electronic signatures. The review will include:
 - The SWP must be completely and legibly filled out by the generator of the waste with all appropriate addresses, contact names, phone and fax numbers, and signatures.
 - The “Waste Stream Information” must include sufficient information to provide the special waste analyst a clear understanding of the waste type(s), origin, shipping method, and anticipated frequency of disposal. This information will be used by the special waste analyst to compare the waste with applicable state and federal regulations. If the description is not explicit, additional information will be requested of the generator. The “Physical Characteristics of Waste” must include information on the chemical and physical properties of the waste sufficient to allow the special waste analyst to identify the waste and correlate the waste properties to applicable state and federal regulations.
 - The generator may be required to provide analytical data, safety data sheets (SDSs), or process knowledge information to the special waste analyst, showing the characteristics of the waste used as the basis to comply with 30 TAC §330.203(c)(2) and RG-003 for wastes regulated by the Railroad Commission and related wastes.
- Site Specific Evaluation - It will be confirmed that all special waste acceptance is acceptable in accordance with the following: (1) TCEQ and local regulations and (2) permit conditions of the receiving landfill. The special waste analyst may request additional information from the generator before rendering a decision. This may include additional analytical, process description, MSDS, or other applicable information.

As noted in Section 8.2.2 of this SOP, facility personnel may visually compare the material presented for disposal to the SWP to confirm that the physical characteristics (i.e., color, odor, and appearance) or manifest description of the material match those detailed on the SWP. In the event that the waste differs from the approved waste stream, the waste load will be held at the gate while the discrepancy is investigated and resolved; or if it cannot be resolved, the load will be rejected. The generator will be notified of the reasons for rejecting the load. Additional process information and/or chemical analyses may be required to further characterize the waste.

In accordance with 30 TAC §330.219(b)(6), the facility will maintain in the Site Operating Record all documents, manifests, shipping documents, trip tickets, etc., involving special waste.

10.3 Special Waste Operating Procedures

The transfer station facility will exercise appropriate care and safeguards when processing special wastes. Specific handling/disposal procedures are detailed in Table IV-3 for the special wastes that will be processed at this facility.

Drivers of transfer trucks containing special waste will provide the required documentation to the receiving landfill concerning the special waste contained within the transfer trailer. The receiving landfill will be responsible to ensure the transferred special waste is disposed of in accordance with the landfill's permit.

Table IV-3. Special Waste Processing Procedures

Special Waste Type	Special Handling Procedures
Slaughterhouse waste and dead animals	Slaughterhouse waste consisting primarily of plant trash, shipping and packaging waste will be accepted. Also, dead animals that are incidental to routine collection of municipal solid waste and that can be systematically processed along with other solid waste will be accepted at this facility. This waste may contain some animal remains; however, this facility will not accept bulk quantities of dead animals or animal remains in a specific shipment or load. All slaughterhouse waste, including contaminated packaging materials, and dead animals will be processed upon receipt or covered with a minimum of three feet of solid waste until it is processed into transfer trailers. The tipping floor and equipment will be cleaned at the end of each day when special waste containing dead animals or slaughterhouse waste is processed.
Drugs and contaminated foods that are not considered controlled substances	These wastes will be processed into transfer trailers promptly upon receipt. Operators will observe unloading and loading of these waste materials to ensure no scavenging or salvaging of the waste. The tipping floor and equipment will be cleaned at the end of each day when special waste of this type is processed.
Empty containers, including paper, cardboard, and metal that have been used for pesticides, herbicides, fungicides, or rodenticides	These containers will be processed in the transfer station upon receipt. These containers will not be allowed to accumulate on the tipping floor. All containers received will be handled in accordance with Title 30 TAC §330.171 and will be triple rinsed prior to arrival. If containers cannot be processed upon receipt they will be crushed with the loader and rendered unusable.
Incidental amounts of non-regulated asbestos-containing materials (non-RACM)	Loads of primarily non-RACM will be transferred directly from the tipping floor of the transfer station into the transfer trailers. The front-end loader will not attempt to compact or travel over the non-RACM. These procedures will minimize the handling of non-RACM so that the integrity of the material is maintained.

Special Waste Type	Special Handling Procedures
<p>Selected waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas</p>	<p>This waste will be accepted at this facility provided the incoming loads are delivered in quantities that will allow the waste to be processed safely and efficiently along with other solid waste. In addition, prior to acceptance at the transfer station, waste acceptance approval information from the landfill that will dispose of this waste will be obtained. The approval information will include all applicable information used to characterize this material. No liquids or sludges will be accepted. This waste material will only be accepted if the requirements set forth in TCEQ RG-003 are met.</p>
<p>Wastes generated outside the boundaries of Texas that contain any industrial waste; any waste associated with oil, gas, and geothermal exploration, production, or development activities; or any other special waste that is accepted at the transfer station</p>	<p>This waste shall be handled in accordance with the provisions outlined above and as indicated within this Special Waste Acceptance Plan for each specific type of waste.</p>