BAP Kennor C&D Recycling Facility

New Registration Application

Volume 1 of 1

TCEQ MSW Registration No. TBD

Tarrant County, Texas

Prepared For
BAP Kennor Landfill, LLC

Prepared By
Parkhill
3000 Internet Boulevard, Suite 550
Frisco, Texas 75034
TBPE F-560

Initial Submittal – March 2023

Parkhill Project # 011604.21

Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: 03/08/2023
Facility Name: BAP Kennor C&D Recycling Facility
Permit or Registration No.: TBD

Nature of Correspondence:
☒ Initial/New
☐ Response/Revision to TCEQ Tracking No.: _____ (from subject line of TCEQ letter regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☒ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☐ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☐ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
☐ New	☐ Annual/Biennial Site Activity Report
☐ Renewal	☐ CPT Plan/Result
☐ Post-Closure Order	☐ Closure Certification/Report
☐ Major Amendment	☐ Construction Certification/Report
☐ Minor Amendment	☐ CPT Plan/Result
☐ CCR Registration	☐ Extension Request
☐ CCR Registration Major Amendment	☐ Groundwater Monitoring Report
☐ CCR Registration Minor Amendment	☐ Interim Status Change
☐ Class 3 Modification	☐ Interim Status Closure Plan
☐ Class 2 Modification	☐ Soil Core Monitoring Report
☐ Class 1 ED Modification	☐ Treatability Study
☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

Parkhill

March 1, 2023

Ms. Megan Hensen, Manager
Municipal Solid Waste Permit Section, MC 124
Texas Commission on Environmental Quality (TCEQ)
Building A, Room 122
12100 Park 35 Circle
Austin, Texas 78753-1808

Re: BAP Kennor C&D Recycling Facility, Tarrant County
MSW Registration No. TBD
Municipal Solid Waste (MSW) Registration Application
RN102000650 / CN605967058

Dear Ms. Hensen:

On behalf of BAP Kennor Landfill, LLC, Parkhill is pleased to submit the enclosed MSW Registration Application for the registration of a new Type V Facility; BAP Kennor C&D Recycling Facility. The Application is submitted in accordance with §330.9(c) for a recycling facility established at a permitted MSW facility owned by the permittee (MSW Permit No. 1241). Please note that a permit modification to transfer MSW Permit No. 1241 to BAP Kennor Landfill, LLC is submitted to the TCEQ (under separate cover) for review.

Please find enclosed four copies (including one original) for your review.

If you or your staff have comments, questions, or need further information, please contact me directly at fpugsley@parkhill.com or 469-200-7384.

Sincerely,

PARKHILL

By Frank E Pugsley, P.E.
Frank E. Pugsley, PE
Sector Director | Principal

FEP
Enclosure: MSW Registration Application

Cc: Tom Noons, BAP Kennor Landfill, LLC
David Dugger, Osttend Landfill Ltd
Sonia Samir, PE, PhD, Parkhill

Parkhill

BAP Kennor C&D Recycling Facility

New Registration Application

Volume 1 of 1

TCEQ MSW Registration No. TBD

Tarrant County, Texas

Prepared For
BAP Kennor Landfill, LLC

Prepared By
Parkhill
3000 Internet Boulevard, Suite 550
Frisco, Texas 75034
TBPE F-560

Initial Submittal – March 2023

Parkhill Project # 011604.21

3/1/2023

Frank E Pugsley, P.E.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART I

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

MASTER TABLE OF CONTENTS

VOLUME 1 of 1

PART I

Administrative and Technical Review Checklist for MSW Permits, Registrations and Amendments Part I Form – TCEQ-0650

Attachment I-1 – Supplemental Technical Report

Attachment I-2 – Property and Facility Legal Descriptions

Attachment I-3 – Land Ownership Map and List
- Figure I-3.1 – Land Ownership Map

Attachment I-4 – General Maps
- Figure I-4.1 – General Location Map
- Figure I-4.2 – Land Use within 1 mile
- Figure I-4.3 – Water Wells, Springs and Surface Waters within 1 mile
- Figure I-4.4 – General Topographic Map
- Figure I-4.5 – Access Route Map
- Figure I-4.6 – Prevailing Wind Direction and Wind Rose

Attachment I-5 – Verification of Legal Status

Attachment I-6 – Property Owner Affidavit

Attachment I-7 – Evidence of Competency

Attachment I-8 – Notice of Appointment

Attachment I-9 – Fee Payment Documentation

Attachment I-10 – Core Data Form – TCEQ-10400

3/1/2023

Frank E Pugsley, P.E.

PART II

Appendix II-A – Existing Condition Summary & Waste Acceptance Plan

Appendix II-B – General Location Maps

Figure II-B.1 – General Location Map

Figure II-B.2 – Water Wells and Structures within 500 Feet

Figure II-B.3 – Surface Waters and Area Streams Map

Figure II-B.4 – FAA Airport Location Map

Figure II-B.5 – Prevailing Wind Direction and Wind Rose

Appendix II-C – Facility Layout Plans

Figure II-C.1 – Facility Layout Map

Figure II-C.2 – General Topographic Map

Figure II-C.3 – Aerial Imagery 2010 Map

Figure II-C.4 – Aerial Imagery 2012 Map

Figure II-C.5 – Aerial Imagery 2014 Map

Figure II-C.6 – Aerial Imagery 2016 Map

Figure II-C.7 – Aerial Imagery 2018 Map

Figure II-C.8 – Aerial Imagery 2020 Map

Figure II-C.9 – Land Use within 1-Mile

Figure II-C.10 – City Zoning Map within 2-Miles

Appendix II-D – Agency Correspondence

Attachment II-D.1 – THC Correspondence

Attachment II-D.2 – COG Correspondence

Appendix II-E – Texas Pollutant Discharge Elimination System (TPDES) Permit

Texas Pollutant Discharge Elimination System (TPDES) Certification Statement

Appendix II-F – Traffic Impact Analysis

3/1/2023

Frank E Pugsley, P.E.

PART III

Appendix III-A – General Facility Design

Figure III-A.1 Waste Movement Flow Diagram

Figure III-A.2 Site Layout Plan

Appendix III-B – Surface Water Design

Appendix III-C – Waste Management Unit Design

Appendix III-D – Closure Plan

Appendix III-E – Closure Cost Estimate and Financial Assurance

Attachment III-E.1 – Closure Cost Estimate Calculations

Attachment III-E.2 – Financial Assurance Documentation

Part IV – SITE OPERATING PLAN

3/1/2023

Frank E Pugsley, P.E.

Administrative and Technical Review Checklist for Municipal Solid Waste (MSW) Permits, Registrations and Amendments

This checklist is designed to provide guidance for the Municipal Solid Waste (MSW) rules found in Title 30 Texas Administrative Code (30 TAC) Chapter 330, for Type I, IV and V registration, permit, and permit amendment applications. Areas of the checklist that are shaded in gray are for information purposes only.

Please fill out application information before selecting and filling out a checklist.

Applicant Information

Company:	BAP Kennor Landfill, LLC				
First name:	Tom	Last name	Noons		
Applicant Title:	Managing Partner			Prefix:	Mr
Street Address:	PO Box 22790				
City:	Houston	State:	TX	Zip code:	77227
Applicant E-Mail:	tnoons@baphouston.com				

Consultant Information

First name:	Frank	Last name:	Pugsley		
Consultant Title:	Sector Director/ Principal			Prefix:	Mr
Consultant Firm:	Parkhill				
Consultant Address:	3000 Internet Boulevard, Suite 550				
City:	Frisco	State:	TX	Zip code:	75034
Consultant E-Mail:	fpugsley@parkhill.com				

Application Information

Facility Name:	BAP Kennor C&D Recycling Facility		
Application Date	03/08/2023		
CN:	CN605967058	MSW ID:	TBD
RN:	RN102000650	Authorization Type:	Registration
County:	Tarrant	Application Type:	New Registration

ID	App. Part	Checklist Item	Item Type	Citation	Complete?	Location	Applicant Comments	Application Area
1	General	Submit all four parts of the permit, permit amendment or registration application	Required	330.57(a) & (b)	Yes	Parts I, II, III, IV included with submittal		Format-Application
2	General	Submit TCEQ Part I Form (Form No. 0650)	Required	330.57(c)(1)	Yes	Included in Part I		Forms
8	General	Part II of the application contains location and coordination information.	Informational	330.57(c)(2)				Format-Application
9	General	Part III of the application contains design information	Informational	330.57(c)(3)				Format-Application
10	General	Part IV of the application contains the site operating plan	Informational	330.57(c)(4)				Format-Application
11	General	The application should address all aspects of application and design requirements, even to show why not applicable (N/A)	Informational	330.57(d)				Format-Application
12	General	Submit data of sufficient completeness, accuracy and clarity	Required	330.57(d)	Yes	Parts I, II, III, IV	Submitted data believed to be of sufficient completeness, accuracy and clarity	Format-Application
13	General	Failure to provide complete information may be cause for ED to return application.	Informational	330.57(d)				Format-Application
14	General	Provide 4 Copies for Initial Submittal (1 original and 3 copies)	Required	330.57(e)	Yes	Parts I, II, III, IV	Necessary copies provided	Format-Application
15	General	Provide 4 copies for NOD Responses including 1 copy with marked revisions (redline/strikeout)	Required	330.57(g)(6)	Yes	N/A	This is an initial submittal. Required copies will be provided should an NOD response be ncessary.	Format-Application
16	General	Application must be prepared in accordance with Texas Occupations Code, Texas Engineering Practice Act, Chapter 1001 and Texas Geoscience Practice Act, Chapter 1002	Informational	330.57(f)				Format-Application
17	General	Provide a PE signature, seal and date on the title page of each bound engineering report or individual engineering plan, and on each engineering drawing	Required	330.57(f)(1)	Yes	Part I, II, III, IV	PE seal with signature and date provided on appropriate title pages and figures	Format-Application
18	General	Provide PG sign, seal, & date for applicable items	Required	330.57(f)(2)	Yes	N/A	No items requiring PG seal	Format-Application
19	General	Applications that are not sealed are incomplete and shall be returned	Informational	330.57(f)(3)				Format-Application
20	General	Submit the application in three ring-binders	Required	330.57(g)(1)	Yes	Application submitted in three ring-binders.		Format-Application
21	General	Submit Title Page with Name, Application No., Site Operator Name, Operator Name (if applicable), Location, Date Prepared and Revision Date(s)	Required	330.57(g)(2)	Yes	Title page provided for each Part (I, II, III, IV) of Application		Format-Application
22	General	Provide Table of Contents with PE seal	Required	330.57(g)(3)	Yes	TOCs provided as necessary, with PE seal		Format-Application
23	General	Use 8.5x11 inch or 11x17 paper (folded to 8.5x11 inch)	Required	330.57(g)(4)	Yes	Full Application		Format-Application
24	General	Provide pages with date (original and revised) and sequential page numbers	Required	330.57(g)(5)	Yes	Full Application		Format-Application
25	General	Provide legible drawings/maps	Required	330.57(h)(1)	Yes	All required maps provided and legible.		Format-Maps/Drawings
26	General	Provide color coding on all figures and drawings that is legible and distinct after copying in black & white	Required	330.57(h)(2)	Yes	All color coding is legible and distinct		Format-Maps/Drawings
27	General	Provide a standard engineering scale on each figure or drawing	Required	330.57(h)(3)	Yes	Provided on all figures		Format-Maps/Drawings
28	General	Provide a dated title block on each figure or drawing	Required	330.57(h)(4)(A)	Yes	Provided on all figures		Format-Maps/Drawings
29	General	Provide a bar scale at least 1 inch on all figures and drawings	Required	330.57(h)(4)(B)	Yes	Provided on all figures		Format-Maps/Drawings
30	General	Provide a revision block on all figures and drawings	Required	330.57(h)(4)(C)	Yes	Provided on all figures		Format-Maps/Drawings
31	General	Provide a PE or PG seal ,if required, on all figures and drawings	Required	330.57(h)(4)(D)	Yes	PE seal provided on figures where required		Format-Maps/Drawings
32	General	Include drawing number and a page number on each drawing and figure	Required	330.57(h)(4)(E)	Yes	Provided on all figures		Format-Maps/Drawings

33	General	Include a north arrow on each map or plan drawing	Required	330.57(h)(5)(A)	Yes	Provided on all figures		Format-Maps/Drawings
34	General	Include a reference to base map & date of most current base map used, if the map is based upon another map	Required	330.57(h)(5)(B)	Yes	Provided on all figures where appropriate		Format-Maps/Drawings
35	General	Include a legend on each map or plan drawing	Required	330.57(h)(5)(C)	Yes	Provided on all figures where appropriate		Format-Maps/Drawings
36	General	Provide match lines and section lines that reference the drawing where the match or section is shown.	Required	330.57(h)(6)	Yes	Provided on all figures where appropriate		Format-Maps/Drawings
38	General	Provide a demonstration that the facility will recover 10% or more by weight or weight equivalent of the total incoming waste stream for reuse or recycling, ensure that the incoming waste has already been reduced by at least 10% through a source-separation recycling program; or, also operate one or more source-separation recycling programs in the county where the transfer station is located and those source-separation recycling programs manage a total weight or weight equivalent of recyclable materials equal to 10% or more by weight or weight equivalent of the incoming waste stream to all transfer stations to which credit is being applied	Required if Requested	330.9(f)(1)	Yes	N/A		Application Eligibility
45	General	Acknowledge that the construction and operation of the waste management facility shall 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. Owners or operators of these types of facilities should consult with the Air Permits Division on or before the date that the municipal solid waste application is filed with the executive director	Acknowledgement	330.55(a)	Yes	Part I, Attachment I-1, Section 1.1		Other Authorizations
46	General	Acknowledge that all liquids resulting from the operation of solid waste facilities shall be disposed of in a manner that will not cause surface water or groundwater pollution. Facilities shall provide for the treatment of wastewaters resulting from waste management activities and from cleaning and washing. Owners or operators shall ensure that storm water and wastewater management is in compliance with the regulations of the commission	Acknowledgement	330.55(a)	Yes	Part I, Attachment I-1, Section 1.1		Other Authorizations
49	General	It is the responsibility of an owner or operator to possess or acquire a sufficient interest in or right to the use of the surface estate of the property for which a permit is issued, including the access route. The granting of a permit does neither convey any property rights or interest in either real or personal property; nor does it authorize any injury to private property, invasion of personal rights, or impairment of previous contract rights; nor any infringement of federal, state, or local laws or regulations outside the scope of the authority under which a permit is issued	Informational	330.67(a)			Acknowledged	General Information
51	General	Executive director approval or a permit will be required if any on-site operations subsequent to closure of a landfill facility involve disturbing the cover or liner of the landfill.	Informational	330.67(c)			Acknowledged	General Information

52	General	It is the responsibility of an 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 system, etc.	Informational	330.67(d)			Acknowledged	General Information
54	General	The owner or operator shall provide notice of the opportunity to request a public meeting and post notice signs for all registration applications not later than 45 days of the executive director's receipt of the application in accordance with the procedures contained in 30 TAC §39.501(c)	Informational	330.69(b)			Acknowledged	General Information
55	General	The owner or operator and the commission shall hold a public meeting in the local area, prior to facility authorization, if a public meeting is required based on the criteria contained in 30 TAC §55.154(c) or by Texas Health and Safety Code, §361.111(c)	Informational	330.69(b)				General Information
56	General	Notice of a public meeting shall be provided as specified in §39.501(e)(3) and (4) of this title	Informational	330.69(b)				General Information
57	General	At the owner's or operator's expense, a sign or signs must be posted at the site of the proposed facility declaring that the application has been filed and stating the manner in which the commission and owner or operator may be contacted for further information. Such signs must be provided by the owner or operator and must substantially meet the requirements of 30 TAC §330.69(b)(1) - (3)	Informational	330.69(b)			Acknowledged	General Information
58	General	If at any time during the life of the facility the owner or operator becomes aware of any condition in the permit or registration that necessitates a change to accommodate new technology or improved methods or that makes it impractical to keep the facility in compliance, the owner or operator shall submit to the executive director requested changes to the permit or registration in accordance with 30 TAC §305.62 or §305.70 and must be approved prior to their implementation	Informational	330.73(a)			Acknowledged	General Information
60	General	The owner or operator shall obtain and submit certification by a Texas-licensed professional engineer that the facility has been constructed as designed in accordance with the issued registration or permit and in general compliance with the regulations prior to initial operation. The owner or operator shall maintain that certification on site for inspection	Informational	330.73(d)			Acknowledged	General Information
61	General	After all initial construction activity has been completed and prior to accepting any solid waste, the owner or operator shall contact the executive director and region office in writing and request a pre-opening inspection. A pre-opening inspection shall be conducted by the executive director within 14 days of notification by the owner or operator that all construction activities have been completed, accompanied by representatives of the owner or operator and the engineer	Informational	330.73(e)			Acknowledged	General Information

62	General	The MSW facility shall not accept solid waste until the executive director has confirmed in writing that all applicable submissions required by the permit or registration and this chapter have been received and found to be acceptable, and that construction is in compliance with the permit or registration and the approved site development plan. If the executive director has not provided a written or verbal response within 14 days of completion of the pre-opening inspection, the facility shall be considered approved for acceptance of waste	Informational	330.73(f)			Acknowledged	General Information
63	General	Identify if the Regulated Entity or Customer has any delinquent fees	Required	330.59(h), 330.671, 330.675	Yes	The customer does not have any delinquent fees		Delinquent Fees
64	Part I	Provide a copy of the application, including all revisions and supplements on a publicly accessible Web site	Required in Part I Form	330.57(i)(1)				Part I Form
65	Part I	Provide the commission with the Web address link for the application materials	Required in Part I Form	330.57(i)(1)			https://parkhill.com/tceq-permits/	Part I Form
66	Part I	Signature Page must have signature and notarization	Required in Part I Form	330.59(a)(1)				Part I Form
67	Part I	Applicant's name, mailing address & phone no.	Required in Part I Form	330.59(a)(1)				Part I Form
68	Part I	Description of the nature of the business	Required in Part I Form	330.59(a)(1)				Part I Form
69	Part I	Activities that require a permit (conducted at the facility)	Required in Part I Form	330.59(a)(1)				Part I Form
70	Part I	Location description, facility name & mailing address	Required in Part I Form	330.59(b)(1); 305.45(a)(1)				Part I Form
71	Part I	Access routes	Required in Part I Form	330.59(b)(2)			Also in Part I, Attachment I-1, Section 2.1	Part I Form
72	Part I	Lat. & Long. of the facility	Required in Part I Form	330.59(b)(3)			Also in Part I, Attachment I-1, Section 2.2	Part I Form
73	Part I	Lat. & Long. depicted	Required in Part I Form	330.59(c)(1)(A)			Also on Figures in Part I, Attachment I-4	Part I Form
74	Part I	All maps should show the facility location	Required in Part I Form	305.45(a)(6)				Part I Form
76	Part I	All maps should show other structures or locations regarding the regulated facility and associated activities	Required in Part I Form	305.45(a)(6)				Part I Form
77	Part I	At least one map with a scale not less than 1 inch = 1 mile	Required in Part I Form	305.45(a)(6)				Part I Form
78	Part I	Permit/Registration boundary and 1 mile beyond to show the following:	Required in Part I Form	330.59(c)(1)(B)				Part I Form
79	Part I	Wells, springs, surface water bodies	Required in Part I Form	305.45(a)(6)(A)				Part I Form
80	Part I	Character of adjacent land including public roads, towns, development as residential, commercial, agricultural, etc.	Required in Part I Form	305.45(a)(6)(B)				Part I Form
81	Part I	Location of any waste disposal activities conducted on the tract but not included in the application	Required in Part I Form	305.45(a)(6)(C)				Part I Form
82	Part I	General location map, TXDOT, scale of ½ inch = 1 mile and most current map used	Required in Part I Form	330.59(c)(2)			Part I, Attachment I-4, Figure I-4.1	Part I Form
83	Part I	Land Ownership Map, within ¼ mile & mineral interest ownership	Required in Part I Form	330.59(c)(3)(A)			Part I, Attachment I-3, Figure I-3.1	Part I Form
84	Part I	Land Ownership List both in hardcopy and electronic form (alternatively pre-printed mailing labels)	Required in Part I Form	330.59(c)(3)(B)			Hardcopy in Part I, Attachment I-3; Electronic copy on included USB flashdrive	Part I Form
85	Part I	Legal description of property or other documentation of ownership	Required in Part I Form	330.59(d)(1)(A)			Part I, Attachment I-2	Part I Form
86	Part I	If Platted; plat record with county, book, page number and acreage information	Required in Part I Form	330.59(d)(1)(B)				Part I Form
87	Part I	Signed, sealed and dated surveyed metes and bounds description of the facility	Required in Part I Form	330.59(d)(1)(C)			Part I, Attachment I-2	Part I Form
88	Part I	Signed & sealed metes & bounds drawing	Required in Part I Form	330.59(d)(1)(D)			Part I, Attachment I-2	Part I Form
89	Part I	Signed property owner affidavit	Required in Part I Form	330.59(d)(2)			Part I, Attachment I-6	Part I Form
90	Part I	Acknowledge that State may hold owner responsible	Required in Part I Form	330.59(d)(2)(A)			Part I, Attachment I-6	Part I Form
92	Part I	Acknowledge that the owner & State shall have access during life of the facility and during closure	Required in Part I Form	330.59(d)(2)(C)			Part I, Attachment I-6	Part I Form

94	Part I	Verified legal status of applicant and list of persons with 20% or more ownership in the facility	Required in Part I Form	330.59(e)			Part I, Attachment I-5	Part I Form
95	Part I	Ownership status as federal, state, private, public, or other	Required in Part I Form	305.45(a)(2)				Part I Form
96	Part I	List of all Texas solid waste sites that the owner or operator has owned or operated within the last ten years. The site name, site type, permit or registration number, county, and dates of operation shall also be submitted.	Required in Part I Form	330.59(f)(1)			Part I, Attachment I-7	Part I Form
97	Part I	List of all solid waste sites in all states, territories, or countries in which the owner or operator has a direct financial interest. The type of site shall be identified by location, operating dates, name, and address of the regulatory agency, and the name under which the site was operated.	Required in Part I Form	330.59(f)(2)			Part I, Attachment I-7	Part I Form
98	Part I	Shall employ a licensed solid waste facility supervisor before operating	Required in Part I Form	330.59(f)(3)			Part I, Attachment I-7	Part I Form
99	Part I	Names of principals & supervisors owner or operators organization together with previous affiliations with other organizations involved with solid waste activities	Required in Part I Form	330.59(f)(4)			Part I, Attachment I-7	Part I Form
101	Part I	Signatory meets 305.44, documentation of delegated signatory authority	Required in Part I Form	330.59(g)				Part I Form
102	Part I	Corporations – signed by a corporate officer	Required in Part I Form					Part I Form
103	Part I	Partnership or proprietorship –signed by a general partner or proprietor	Required in Part I Form					Part I Form
104	Part I	Municipality, public agency –signed by an executive officer or elected official	Required in Part I Form					Part I Form
105	Part I	Signatory certification statement	Required in Part I Form					Part I Form
106	Part I	Hazardous Waste Management	Required in Part I Form	305.45(a)(7)(A)				Part I Form
107	Part I	Underground Injection Control	Required in Part I Form	305.45(a)(7)(B)				Part I Form
108	Part I	NPDES	Required in Part I Form	305.45(a)(7)(C)				Part I Form
109	Part I	Prevention of Significant Deterioration	Required in Part I Form	305.45(a)(7)(D)				Part I Form
110	Part I	Nonattainment Program	Required in Part I Form	305.45(a)(7)(E)				Part I Form
111	Part I	NESHAPS	Required in Part I Form	305.45(a)(7)(F)				Part I Form
112	Part I	Ocean dumping permit	Required in Part I Form	305.45(a)(7)(G)				Part I Form
113	Part I	Dredge & fill permit	Required in Part I Form	305.45(a)(7)(H)				Part I Form
114	Part I	Licenses under the TRCA	Required in Part I Form	305.45(a)(7)(I)				Part I Form
115	Part I	Other environmental permits	Required in Part I Form	305.45(a)(7)(K)				Part I Form
116	Part I	Registration Application Fee is $150.00	Required in Part I Form	330.59(h)(1)				
117	Part I	A copy of the payment receipt to the MSW Permits Section, if paid by check.	Required in Part I Form	330.59(h)(1)			ePay receipt in Part I, Attachment I-9	Part I Form
118	Part I	Prepared by PE, PG, or qualified person	Required in Part I Form	330.57(f)			Part I, Attachment I-1, Section 1	Part I Form
119	Part I	Description of facility & systems	Required in Part I Form	305.45(a)(8)(A)			Part I, Attachment I-1, Section 2	Part I Form
120	Part I	Volume, average & max rate of disposal for each place of disposal	Required in Part I Form	305.45(a)(8)(B)(i)			Part I, Attachment I-1, Section 2.7	Part I Form
121	Part I	Physical, chemical, thermal, organic, bacteriological, radiological properties of waste	Required in Part I Form	305.45(a)(8)(B)(ii)			Part I, Attachment I-1, Section 2.8	Part I Form
122	Part I	Other reasonable information	Required in Part I Form	305.45(a)(8)(C)				Part I Form
123	Part II	Provide the sources and characteristics of all waste to be accepted.	Required	330.61(b)(1)	Yes	Part II, Appendix II-A, Section 2.1		Waste Acceptance Plan
124	Part II	Specify parametric limitations of each type of waste to be managed by the facility	Required	330.61(b)(1)	Yes	Part II, Appendix II-A, Section 2.1		Waste Acceptance Plan

125	Part II	Provide a brief description of the general sources and generation areas contributing wastes to the facility. This description shall include an estimate of the population or population equivalent served by the facility	Required	330.61(b)(1)(A)	Yes	Part II, Appendix II-A, Section 2.1		Waste Acceptance Plan
126	Part II	Provide a descriptive narrative that describes the percentage of incoming waste that must be recovered and its intended use	Required if Requested	330.61(b)(1)(A)	Yes	N/A		Waste Acceptance Plan
129		Provide information to establish why a facility qualifies for a registration in accordance with 30 TAC §330.9	Required	330.61(b)(2)	Yes	Part II, Appendix II-A, Section 2.2		
130	Part II	Provide any site specific conditions that require special design considerations & possible mitigation of conditions identified under sections (h) – (q)	Required	330.61(a)	Yes	Part II, Appendix II-A, Section 1		Facility Impact
131	Part II	Provide information regarding the likely impacts of the facility on cities, communities, groups of property owners, or individuals.	Required	330.61(h)	Yes	Part II, Appendix II-A, Section 7		Facility Impact
132	Part II	Provide information on the compatibility of the facility with surrounding land use, zoning in the vicinity, community growth patterns, and other factors associated with the public interest.	Required	330.61(h)	Yes	Part II, Appendix II-A, Sections 7.1, 7.2, & 7.3		Facility Impact
133	Part II	Provide information on the character of surrounding land use within one mile	Required	330.61(h)(2)	Yes	Part II, Appendix II-A, Section 7.2		Existing Conditions
134	Part II	Provide information about the growth trends within five miles & directions of development	Required	330.61(h)(3)	Yes	Part II, Appendix II-A, Section 7.3		Existing Conditions
135	Part II	Indicate the proximity to residences & items listed in 330.61(c)(4) & (12), ~ no. of residences & commercial establishments including direct & distance to nearest, population density, all within one mile	Required	330.61(h)(4)	Yes	Part II, Appendix II-A, Section 7.4		Existing Conditions
136	Part II	Indicate all wells and the well density within 500 ft.	Required	330.61(h)(5)	Yes	Part II, Appendix II-A, Section 7.5		Existing Conditions
137	Part II	Provide any other information requested by the ED	Required	330.61(h)(6)	Yes	N/A	No additional information has been requested at this time	Existing Conditions
138	Part II	Provide data on availability & adequacy of access roads	Required	330.61(i)(1)	Yes	Part II, Appendix II-A, Section 8.1		Transportation
139	Part II	Provide the existing & expected traffic volumes on access roads within one mile of the facility during the expected life of the facility	Required	330.61(i)(2)	Yes	Part II, Appendix II-A, Section 8.2		Transportation
140	Part II	Provide an estimate of traffic volume generated by the facility on access roads within one mile of the facility	Required	330.61(i)(3)	Yes	Part II, Appendix II-A, Section 8.3		Transportation
141	Part II	Provide documentation of coordination for roadway improvements and documentation of coordination with TXDOT for traffic and location restrictions	Required	330.61(i)(4)	Yes	Part II, Appendix II-A, Section 8		Transportation
146	Part II	Provide notice to the airport & the FAA for MSW units within 6 miles of a small airport or within 5 miles of a large commercial airport.	Required	330.545(b)	Yes	N/A	The proposed facility is not an MSW landfill unit, therefore §330.545(b) is not applicable.	Transportation
148	Part II	Discuss in general terms the geology and soils of the proposed site	Required	330.61(j)(1)	Yes	Part II, Appendix II-A, Section 9		Geology
152	Part II	Provide data on site specific groundwater conditions	Required	330.61(k)(1)	Yes	Part II, Appendix II-A, Section 10.1		Groundwater and Surface Water
153	Part II	Provide data on surface water at or near the site	Required	330.61(k)(2)	Yes	Part II, Appendix II-A, Section 10.2		Groundwater and Surface Water
154	Part II	Provide information on how facility will comply with applicable Texas Pollutant Discharge Elimination System (TPDES) storm water permitting requirements and the Clean Water Act, §402, as amended.. This may include the information requires by 30 TAC 330.61(k)(3)(A) & (B)	Required	330.61(k)(3)	Yes	Part II, Appendix II-A, Section 10.3		Groundwater and Surface Water
155	Part II	As applicable, provide a certification statement indicating the owner/operator will obtain the appropriate TPDES permit coverage when required	Required	330.61(k)(3)(A)	Yes	Certification statement in Part II, Appendix II-E		Groundwater and Surface Water
156	Part II	As applicable, provide a copy of permit number under an individual wastewater permit	Required	330.61(k)(3)(B)	Yes	Part II, Appendix II-A, Section 10.3	As indicated in Part II, Appendix II-A, Section 10.3, the Faciity will obtain the appropriate TPDES permit coverage when required	Groundwater and Surface Water

157	Part II	Provide the location of any water wells.	Required	330.61(l)(1)	Yes	Part II, Appendix II-A, Section 11.1		Abandoned Oil and Water Wells
158	Part II	All water supply wells must be outside monitoring system or approved in the permit	Informational	330.61(l)(1)				Abandoned Oil and Water Wells
160	Part II	Provide the location of oil & gas wells production wells may remain if identified & don't disrupt operations	Required	330.61(l)(2)	Yes	Part II, Appendix II-A, Section 11.2		Abandoned Oil and Water Wells
161	Part II	Production wells may remain if identified & they do not disrupt facility operations	Informational	330.61(l)(2)				Abandoned Oil and Water Wells
162	Part II	Indicate if the facility is within the 100yr floodplain. If facility within a floodplain see location restrictions in 30 TAC Chapter 330 Subchapter M	Required	330.61(m)(1)	Yes	Part II, Appendx II-A, Section 12		Floodplains and Wetlands
165	Part II	Acknowledge that the construction and operation of the facility shall not result in the destruction or adverse modification of the critical habitat or cause or contribute to the taking of endangered or threatened species.	Acknowledgement	330.61(n)(1)	Yes	Part II, Appendix II-A, Section 13		Endangered Species
165	Part II	Acknowledge that the construction and operation of the facility shall not result in the destruction or adverse modification of the critical habitat or cause or contribute to the taking of endangered or threatened species. If the WWTP permit contains a coordination and a review letter from the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department, the owner or operator shall submit these documents as an attachment/appendix to the registration application and by referencing where this information is addressed in the WWTP Permit and/or permit application.	Acknowledgement	330.61(n)(1)	Yes	N/A	This application is for a Type V Facility, not a WWTP	Endangered Species
166	Part II	Provide a demonstration of whether facility is located within species range and provide a biological assessment.	Required	330.61(n)(2)	Yes	Part II, Appendix II-A, Section 13		Endangered Species
166	Part II	Provide a demonstration of whether facility is located within species range and provide a biological assessment. If the WWTP permit contains a coordination and a review letter from the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department, the owner or operator shall submit these documents as an attachment/appendix to the registration application and by referencing where this information is addressed in the WWTP Permit and/or permit application.	Required	330.61(n)(2)	Yes	N/A	This application is for a Type V Facility, not a WWTP	Endangered Species
167	Part II	Provide documentation of compliance with Natural Resource Code, Chapter 191 (Texas Antiquities Code)	Required	330.61(o)	Yes	Part II, Appendix II-A, Section 14 and Appendix II-D, Attachment II-D.1		Historical Commission
167	Part II	Provide documentation of compliance with Natural Resource Code, Chapter 191 (Texas Antiquities Code). If the WWTP permit contains coordination and a review letter from the Texas Historical Commission, the owner or operator shall submit these documents as an attachment/appendix to the registration application and by referencing where this information is addressed in the WWTP Permit and/or permit application.	Required	330.61(o)	Yes	N/A	This application is for a Type V Facility, not a WWTP	Historical Commission
168	Part II	Provide 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.	Required	330.61(p)	Yes	Part II, Appendix II-A, Section 15 and Appendix II-D, Attachment II-D.2		COG Review

169	Part II	Acknowledgement that the owner or operator requested a review letter from any local government, 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.	Acknowledgement	330.61(p)	Yes	Part II, Appendix II-A, Section 15	The Facility is not located within any city's limits, therefore review by a local government is not required.	COG Review
170	Part II	Provide a constructed map showing boundary, zoning, & land use within one mile including info from 330.61(c)(4), (5), & (10) (schools, hospitals, etc.)	Required	330.61(g)	Yes	Boundary Zoning: Part II, Appendix II-C, Figure II-C.10 Land Use: Part II, Appendix II-C, Figure II-C.9		Maps/Drawings
171	Part II	Provide the prevailing wind direction with a wind rose.	Required	330.61(c)(1)	Yes	Part II, Appendix II-B, Figure II-B.5		Maps/Drawings
172	Part II	Provide the location of all known water wells within 500 feet of the proposed permit boundary with the state well numbering system designation for Water Development Board "located wells".	Required	330.61(c)(2)	Yes	Part II, Appendix II-B, Figure II-B.2		Maps/Drawings
173	Part II	Provide the location of all structures and inhabitable buildings within 500 feet of the facility	Required	330.61(c)(3)	Yes	Part II, Appendix II-B, Figure II-B.2		Maps/Drawings
174	Part II	Provide the location of all schools, licensed day-cares, churches, hospitals, cemeteries, ponds, lakes, residential, commercial, & recreational areas within one mile of the facility	Required	330.61(c)(4)	Yes	Part II, Appendix II-C, Figure II-C.9		Maps/Drawings
175	Part II	Provide the location and surface type of roads used for access within one mile of the facility	Required	330.61(c)(5)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
176	Part II	Provide the latitude & longitude of the facility	Required	330.61(c)(6)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
177	Part II	Provide the location of all area streams	Required	330.61(c)(7)	Yes	Part II, Appendix II-B, Figure II-B.3		Maps/Drawings
178	Part II	Provide the location of all airports within six miles	Required	330.61(c)(8)	Yes	Part II, Appendix II-B, Figure II-B.4		Maps/Drawings
179	Part II	Indicate the property boundary of facility	Required	330.61(c)(9)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
180	Part II	Indicate all drainage, pipeline, and utility easements within & adjacent to the facility	Required	330.61(c)(10)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
181	Part II	Provide the location of all access control features	Required	330.61(c)(11)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
182	Part II	Provide the location of all archaeological sites, historical sites, and sites with an aesthetic quality adjacent to the facility	Required	330.61(c)(12)	Yes	Part II, Appendix II-C, Figure II-C.9		Maps/Drawings
183	Part II	Provide a facility layout map	Required	330.61(d)	Yes	Part II, Appendix II-C, Figure II-C.1		Maps/Drawings
184	Part II	A set of maps may be provided	Informational	330.61(d)				Maps/Drawings
186	Part II	Provide the location of interior roads	Required	330.61(d)(2)	Yes	Part II, Appendix II-C, Figure II-C.1		Maps/Drawings
187	Part II	Indicate the location of monitor wells	Required	330.61(d)(3)	Yes	N/A	The proposed facility will not have any associated monitoring wells.	Maps/Drawings
188	Part II	Provide the location of all facility buildings	Required	330.61(d)(4)	Yes	Part II, Appendix II-B, Figure II-B.2	The proposed facility will be outdoors with no associated buildings. The referenced figure shows an existing building on-site associated with the Aggregate Production Operation	Maps/Drawings
189	Part II	Provide notes on sequence of development	Required	330.61(d)(5)	Yes	Part II, Appendix II, Figure II-C.1		Maps/Drawings
190	Part II	Indicate the location of all facility fencing	Required	330.61(d)(6)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
192	Part II	Indicate the location of site entrance roads	Required	330.61(d)(8)	Yes	Part II, Appendix II-B, Figure II-B.1		Maps/Drawings
198	Part II	Provide a general topographic maps: USGS 7.5 minute or equivalent one map at scale 1 in. = 2,000 ft.	Required	330.61(e)	Yes	Part I, Attachment I-4, Figure I-4.4		Maps/Drawings
199	Part II	Provide Aerial Photograph(s) that are at least 9 in. by 9 in. at scale range of one inch = 1,667-3,334 ft. that covers an area at least one mile in radius of the site. Facility boundary and fill areas (as applicable) must be shown.	Required	330.61(f)	Yes	Part II, Appendix II-C, Figures II-C.3, II-C.4, II-C.5, II-C.6, II-C.7, and II-C.8		Maps/Drawings
200	Part II	A series of photos showing growth trends may be used	Informational	330.61(f)(2)			A series of photos is provided	Maps/Drawings
201	Part II	All submitted prints & photocopies must be legible	Informational	330.61(f)(3)				Maps/Drawings

202	Part II	Provide zoning map within two miles and a copy of any nonconforming use or special permit required for the facility	Required	330.61(h)(1)	Yes	Part II, Appendix II-C, Figure II-C.10	The Facility is not subject to any city's zoning, therefore no nonconforming use or special permit is required.	Maps/Drawings
210	Part II	No solid waste disposal operations are permitted in the 100yr. floodway	Informational	330.547(a)				Floodplains and Wetlands
211	Part II	Demonstrate that, a facility located in 100 year flood plains, does not restrict the flow of the 100 yr. flood, reduce temporary storage capacity, or result in washout of solid waste so as to pose a hazard to human health and the environment	Required	330.547(b)	Yes	Part II, Appendix II-A, Section 12		Floodplains and Wetlands
212	Part II	Demonstrate that storage and processing facilities are located outside of the 100 year floodplain.	Required	330.547(c)	Yes	Part II, Appendix II-A, Section 12		Floodplains and Wetlands
213	Part II	For storage and processing facilities located within the 100 year floodplain, please provide a demonstration that the facility is designed to prevent washout during a 100 year storm event, or a conditional letter of map amendment from the Federal Emergency Management Administration administrator	Required	330.547(c)	Yes	Part II, Apendix II-A, Section 12		Floodplains and Wetlands
214	Part II	Acknowledge if the facility will be located in wetlands.	Acknowledgement	330.553(a) & (b)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
215	Part II	Demonstrate, if located within wetlands, that there is no practicable alternative location	Required	330.553(b)(1)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
216	Part II	Acknowledge that the facility's construction & operations shall not cause or contribute to violations of state water quality standards, violation of any applicable toxic effluent standard or prohibition under the Clean Water Act §307; jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973, or violate any requirement under the Marine protection, Research, & Sanctuaries Act	Acknowledgement	330.553(b)(2)(A) - (D)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
217	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing erosion, stability, & migration potential of native wetland soils, muds, and deposits used to support the landfill unit	Required	330.553(b)(3)(A)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
218	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing erosion, stability, & migration potential of dredged and fill materials used to support the landfill	Required	330.553(b)(3)(B)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
219	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing the volume and chemical nature of the waste managed in the landfill unit	Required	330.553(b)(3)(C)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
220	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing the impacts on fish, wildlife, and other aquatic resources and their habitat for the release of solid waste	Required	330.553(b)(3)(D)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
221	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing the potential effects of catastrophic release of waste to the wetlands and the resulting impacts on the environment	Required	330.553(b)(3)(E)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
222	Part II	If wetlands are located within the facility, submit a demonstration for the integrity of landfill unit by addressing any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected	Required	330.553(b)(3)(F)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands

223	Part II	Sufficient information shall be provided to the ED to allow a reasonable determination to be made with respect to the demonstrations cited in 30 TAC §330.553(b)	Informational	330.553(b)(5)			The Facility will not be located within wetlands	Floodplains and Wetlands
224	Part II	Provide the steps taken to achieve no net loss of wetlands	Required	330.553(b)(4)	Yes	Part II, Appendix II-A, Section 12 & Appendix II-C, Figure II-B.3A	The Facility will not be located within wetlands	Floodplains and Wetlands
225	Part II	Acknowledge that the operation of this facility shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species	Acknowledgement	330.551(a)	Yes	Part II, Appendix II-A, Section 13		Endangered Species
226	Part II	The term "Harassing" means; An intentional or negligent act or omission that creates the likelihood of injury to wildlife	Informational	330.551(b)(1)			Acknowledged	Endangered Species
227	Part II	The term "Harming" means; An act of omission that actually injures or kills wildlife, including acts that annoy it to such an extent as to significantly disrupt essential behavioral patterns	Informational	330.551(b)(2)			Acknowledged	Endangered Species
228	Part II	The term "Taking" means; collecting an endangered or threatened species or attempting to engage in such conduct	Informational	330.551(b)(3)			Acknowledged	Endangered Species
229	Part II	Acknowledge that no solid waste unloading, storage, disposal, or processing operations shall occur within any easement, buffer zone, or right-of-way that crosses the facility	Acknowledgement	330.543(a)	Yes	Part II, Appendix II-A, Section 16		Easements and Buffer Zone
268	Part II	Submit information for on-site local geologic or geomorphologic features	Required	330.559(2)	Yes	N/A	The proposed facility is not a landfill, therefore §330.559 is not applicable.	Geology
269	Part II	Identify local human-made features or events	Required	330.559(3)	Yes	N/A	The proposed facility is not a landfill, therefore §330.559 is not applicable.	Geology
270	Part III	Describe facility access control features	Required	330.63(b)(1)	Yes	Part III, Appendix III-A, Section 1		General Facility
271	Part III	Submit a process design for the facility [that includes items 330.63(b)(2)(A) through 330.63(b)(2)(I)]	Required	330.63(b)(2)	Yes	Part III, Appendix III-A, Section 2		General Facility Design
272	Part III	Submit a flow diagram(s) to describe the storage, processing, and disposal sequences for each type of waste and/or	Required	330.63(b)(2)(A)	Yes	Part III, Appendix III-A, Figure III-A.1		General Facility Design
273	Part III	Submit a schematic view drawing(s) showing phases for collection, separation and processing/disposal of each type of waste and/or feedstock/recyclable material	Required	330.63(b)(2)(B)	Yes	Part III, Appendix III-A, Figure III-A.2		General Facility Design
274	Part III	Provide ventilation & odor control measures for each unit	Required	330.63(b)(2)(C)	Yes	Part III, Appendix III-A, Section 2.3		General Facility
275	Part III	Provide construction details of storage, processing units & components, dimensions, capacity, materials used, etc.	Required	330.63(b)(2)(D)	Yes	Part III, Appendix III-A, Section 2.4		General Facility Design
276	Part III	Provide performance data for all storage and processing units and ancillary equipment	Required	330.63(b)(2)(D)	Yes	Part III, Appendix III-A, Section 2.4		General Facility
278	Part III	Submit location and engineering designs for containment of storage, processing and loading & unloading areas including freeboard	Required	330.63(b)(2)(F)	Yes	Part III, Appendix III-A, Sction 2.4		General Facility Design
280	Part III	Provide details of effluent disposal	Required	330.63(b)(2)(H)	Yes	Part III, Appendix III-A, Section 2.6		General Facility
281	Part III	Provide designs for noise pollution control	Required	330.63(b)(2)(I)	Yes	Part III, Appendix III-A, Section 2.7		General Facility
282	Part III	Describe how the processing areas will be designed for proper cleaning and to prevent surface water runoff onto, into, and off the treatment areas	Required	330.63(b)(3)(A)	Yes	Part III, Appendix III-A, Section 3		General Facility Design
283	Part III	Describe construction material used for walls and floors that can be hosed down and scrubbed	Required	330.63(b)(3)(B)	Yes	Part III, Appendix III-A, Section 3	The Facility will be fully outdoors.	General Facility Design
284	Part III	Describe water or steam connections and equipment for cleaning	Required	330.63(b)(3)(C)	Yes	Part III, Appendix III-A, Section 3		General Facility
285	Part III	Provide adequate floor drains and/or sumps	Required	330.63(b)(3)(D)	Yes	Part III, Appendix III-A, Section 3	The Facility will be fully outdoors. No floor drains or sumps will be necessary.	General Facility Design
286	Part III	Describe proper disposal of liquids resulting from waste processing, cleaning, and washing and provide for the treatment of waste water	Required	330.63(b)(4)	Yes	Part III, Appendix III-A, Section 4		General Facility Design
287	Part III	Describe how facility will be designed to protect endangered species	Required	330.63(b)(5)	Yes	Part III, Appendx III-A, Section 5		General Facility

336	Part III	Submit if applicable, a floodplain development permit from any agency with jurisdiction over the proposed improvements	Required if Requested	330.63(c)(2)(D)(ii)	Yes	N/A		Surface Water Drainage Report
337	Part III	Submit if applicable a Conditional Letter of Map Amendment from FEMA	Required if Requested	330.63(c)(2)(D)(iii)	Yes	N/A		Surface Water Drainage Report
338	Part III	Submit if applicable, Corps of Engineers Section 404 Specification of Disposal Sites for Dredged or Fill Material permit for construction of all necessary improvements	Required if Requested	330.63(c)(2)(D)(iv)	Yes	N/A		Surface Water Drainage Report
339	Part III	Provide for storage & transfer units a description of design features for the rapid processing and minimum detention of solid waste at the facility	Required	330.63(d)(1)(A)	Yes	Part III, Appendix III-C, Section 2.1		Waste Management Unit Design
340	Part III	Provide design features for a facility to prevent the creation of nuisances or public health hazards	Required	330.63(d)(1)(A)	Yes	Part III, Appendix III-C, Section 2.1		Waste Management Unit Design
545	Part III	Indicate that a characterization of the contaminated groundwater, including concentrations of assessment constituents as defined in §330.409	Required	330.63(f)(7)(A)	Yes	N/A	The proposed facility is not a landfill, therefore §330.63(b)(7)(A) is not applicable.	Groundwater Sampling & Analysis Plan
701	Part III	Specify in the closure plan that the operator will begin closure no later than 30 days after final receipt of waste or no later than one year if the unit has remaining capacity and additional waste may be received	Required	330.457(f)(3)	Yes	N/A	The proposed facility is not a landfill, therefore §330.457(f)(3) is not applicable.	Closure Plan
702	Part III	Provide for closure activities to be completed within 180 days of initiation	Required	330.457(f)(4)	Yes	N/A	The proposed facility is not a landfill, therefore §330.457(f)(4) is not applicable.	Closure Plan
704	Part III	Acknowledge that following receipt of closure documents and the inspection report by the TCEQ region, the ED may acknowledge termination of operation & closure & deem the facility properly closed	Acknowledgement	330.457(f)(6)	Yes	N/A	The proposed facility is not a landfill, therefore §330.457(f)(6) is not applicable.	Closure Plan
706	Part III	Indicate that notice of closure will be published in the newspaper of largest circulation 90 days prior to the initiation of a final facility closure. The notice shall provide the name, address, and physical location of the facility; the TCEQ authorization number; and the last date of intended receipt of waste.	Required	330.461(a)	Yes	Part III, Appendix III-D, Section 5		Closure Plan
707	Part III	Acknowledge that notice of closure will be provided to the ED 90 days prior to the initiation of a final facility closure and that the owner or operator will also make available an adequate number of copies of the approved final closure and post-closure plans (if applicable) for public access and review	Acknowledgement	330.461(a)	Yes	Part III, Appendix III-D, Section 5		Closure Plan
708	Part III	Acknowledge that least one closure sign will be posted at every point of access and notify all persons who utilize the facility of the date of closure and the prohibition against further receipt of waste materials.	Acknowledgement	330.461(b)	Yes	Part III, Appendix III-D, Section 6		Closure Plan
709	Part III	Indicate that suitable barriers will be installed at all access points to adequately prevent the unauthorized dumping of solid waste at the closed facility.	Required	330.461(b)	Yes	Part III, Appendix III-D, Section 6		Closure Plan
710	Part III	Indicate that an Affidavit to the Public will be submitted to the ED by registered mail, if waste will remain onsite and indicate that The Owner or Operator will also record a certified notation on the deed to the facility property that the land has been used as a landfill and submit a certified copy of the modified deed to the ED	Required if Requested	330.461(c)(1)	Yes	N/A	Wastes will not remain at the closed facility.	Closure Plan
711	Part III	Acknowledge that a certification, signed by a P.E., will be provided within 10 days of final closure activities, verifying that final facility closure has been completed in accordance with the approved closure plan and will include all applicable documentation necessary for certification	Acknowledgement	330.461(c)(2)	Yes	Part III, Appendix III-D, Section 7		Closure Plan

712	Part III	Acknowledge that a request for voluntary revocation will be submitted within 10 days of final closure activities	Acknowledgement	330.461(c)(3)	Yes	Part III, Appendix III-D, Section 7		Closure Plan
713	Part III	The owner or operator may request permission from the ED to remove the notation from the deed if all wastes are removed from the facility	Informational	330.461(d)				Closure Plan
714	Part III	Submit a closure plan for Storage and Processing units to remove all waste, waste residues, and any recovered materials. Units shall be dismantled and removed off-site or decontaminated.	Required	330.459(a)	Yes	Part III, Appendix III-D, Section 2		Closure Plan For Processing Facilities
715	Part III	Provide plans for the evacuation of all material on-site to an authorized facility and the disinfecting of all contaminated water handling units, tipping areas, processing and post-processing areas (as applicable)	Required	330.459(b)	Yes	Part III, Appendix III-D, Section 2.1		Closure Plan For Processing Facilities
716	Part III	Acknowledge that if there is evidence of a release, the ED may require an investigation, assessment, and or corrective action.	Acknowledgement	330.459(c)	Yes	Part III, Appendix III-D, Section 3		Closure Plan For Processing Facilities
717	Part III	Submit a plan (if combustible material is stored outdoors) for closure of a recycling facility that includes collecting processed and unprocessed materials, and transporting the materials to an authorized facility for disposition	Required	330.459(d)(1)	Yes	Part III, Appendix III-D, Section 4		Closure Plan For Processing Facilities
718	Part III	Provide for the closure plan to be implemented (if combustible material is stored outdoors) and completed within 180 days following the most recent acceptance of processed or unprocessed materials	Required	330.459(d)(2)	Yes	Part III, Appendix III-D, Section 4		Closure Plan For Processing Facilities
736	Part III	Indicate that a request for voluntary revocation will be submitted following certification of completion of post closure care, or following certification of final closure for processing facilities	Required	330.465(b)	Yes	Part III, Appendix III-D, Section 7		Post-Closure Plan
737	Part III	Submit cost estimates for closure & post-closure. Existing facilities must submit a copy of the financial assurance documentation. New facilities must submit financial assurance within 60 days prior to receipt of waste	Required	330.63(j)	Yes	Part III, Appendix III-E		Closure Cost Estimates
742	Part III	Provide cost estimates to close a Recycling facility that stores combustible materials outdoors.	Required	330.505(a)(1)	Yes	Part III, Appendix III-E.1		Closure Cost Estimates
743	Part III	Provide a closure cost estimate that equals the costs of closure of the facility, including disposition of the maximum inventories of all waste; processed and unprocessed combustible materials stored outdoors on site during the life of the facility	Required	330.505(a)(2)(A)	Yes	Part III, Appendix III-E, Section 2 & Attachment III-E.1		Closure Cost Estimates
744	Part III	Provide a closure cost estimate that is based on the costs of hiring a third party that is not affiliated with the owner or operator; and is based on a per cubic yard and/or short ton measure for collection and disposition costs.	Required	330.505(a)(2)(B-(C)	Yes	Part III, Appendix III-E, Section 2		Closure Cost Estimates
745	Part III	Provide for the closure cost estimate & financial assurance to be increased if conditions change which increase the maximum cost of closure at any time during the active life of the facility	Required	330.505(a)(3)	Yes	Part III, Appendix III-E, Section 3		Closure Cost Estimates
746	Part III	A reduction in the closure cost estimate and the amount of financial assurance may be approved if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the facility.	Required if Requested	330.505(a)(4)	Yes	Part III, Appendix III-E, Section 3		Closure Cost Estimates
747	Part III	Provide for the maintenance of financial assurance for Recycling facilities that store combustible materials outdoors or that pose a risk	Required	330.505(b)(1)	Yes	Part III, Appendix III-E, Section 4		Closure Cost Estimates
748	Part III	Provide for the maintenance of financial assurance until closure is approved by ED.	Required	330.505(b)(2)	Yes	Part III, Appendix III-E, Section 4		Closure Cost Estimates

758	Part IV	A site operating plan shall cover all on-site units in accordance with Subchapters D & E of Chapter 330.	Informational	330.65(a)				Site Operating Plan
785	Part IV	Indicate that the facility will provide the reports required by 30 TAC §330.675 to the Executive Director	Required	330.675	Yes	Part IV, Section 2		Site Operating Plan
988	Part IV	Provide information identifying any permit required under the TPDES and any permit requirements imposed by other agencies for a grease, grit, & septage processing facility	Required	330.65(d)	Yes	N/A	As stated in Part III, Appendix III-A, Sectoin 2.5, the proposed facility will not accept grease trap waste, grit trap waste, or septage.	Site Operating Plan
989	Part IV	Identify source & characteristics of wastes that will be received and Specify any limiting parameters that may influence the design and operation of the facility	Required	330.203(a)	Yes	Part IV, Section 5		Site Operating Plan
990	Part IV	Provide estimate of the amount of each waste to be received daily, max amount stored at any one time, max & average time waste will remain on-site, max & average processing time, intended destination of generated wastes, & description of how 10% will be recovered if applicable	Required	330.203(b)	Yes	Part IV, Section 5	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
991	Part IV	Acknowledge that 10% recovery of material for beneficial use is considered to be the recovery of fats, oil, and greases, but does not include the recovery of water.	Acknowledgement	330.203(b)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1000	Part IV	Acknowledge that failure to achieve the relevant 10 percent recycling rate in any two quarters within any one-year period will cause a registration to terminate and will require the owner or operator of the facility to obtain a permit to continue facility operations.	Acknowledgement	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1001	Part IV	Provide for a quarterly report to be submitted that will include volume of waste received, percent solids, and the method of determining the percent solids, processed, disposed, and recycled or reused.	Required	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1002	Part IV	Provide in the quarterly report, the method(s) utilized to achieve at least 10% recycling or reuse of incoming material	Required	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1003	Part IV	Submit a quarterly report that reconciles the volume of waste with the amounts on manifests, shipping documents, or trip tickets and indicate where the recyclable material was taken for recycling.	Required	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1004	Part IV	Acknowledge that the addition of any material such as lime, polymer, or flocculent added as part of the recycling process is not allowed to be considered as part of the 10% recovery of material from the waste stream and must be subtracted from the material considered as recycled.	Acknowledgement	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1005	Part IV	Acknowledge that diverting material from the waste stream without processing is not considered to be recycling as part of this activity.	Acknowledgement	330.9(g)(1)	Yes	N/A	A narrative describing how 10% of incoming waste will be recovered is not applicable.	Site Operating Plan
1006	Part IV	Provide the characteristics and constituent concentrations of wastes generated by the facility and indicate that documentation that all wastes leaving the facility can be adequately managed by other authorized facilities will be provided.	Required	330.205(a)	Yes	Part IV, Section 6		Site Operating Plan
1007	Part IV	Indicate that all wastes generated by a facility must be processed or disposed at an authorized solid waste management facility	Required	330.205(b)	Yes	Part IV, Section 6		Site Operating Plan
1008	Part IV	Indicate that all wastewaters generated by a facility shall be managed as contaminated water in accordance with 330.207	Required	330.205(c)	Yes	Part IV, Section 6		Site Operating Plan
1010	Part IV	Indicate that the facility shall be designed and operated to produce a sludge that is acceptable at municipal solid waste landfills and does not exceed standards specified in 30 TAC §330.205(d)	Required If Requested	330.205(d)	Yes	N/A	The proposed Facility will not produce sludge	Site Operating Plan

1011	Part IV	Indicate that sludges exceeding the limits shall not be disposed in municipal solid waste landfills and must be sent to an authorized facility for further processing or disposal as a hazardous waste, as appropriate or disposed in a municipal solid waste landfill with dedicated Class 1 industrial solid waste cells if the sludge is nonhazardous.	Required If Requested	330.205(d)	Yes	N/A	The proposed Facility will not produce sludge	Site Operating Plan
1012	Part IV	The owner or operator shall not discharge contaminated water without specific written authorization.	Informational	330.207(a)				Site Operating Plan
1014	Part IV	Indicate that contaminated water shall be collected and contained until properly managed.	Required	330.207(b)	Yes	Part IV, Section 7		Site Operating Plan
1015	Part IV	Indicate that leachate shall be collected and contained until properly managed.	Required	330.207(b)	Yes	Part IV, Section 7	N/A, The proposed Facility will not produce leachate	Site Operating Plan
1016	Part IV	Indicate that collection units other than storage tanks shall have a clay or synthetic liner and the liner shall be constructed in accordance with 30 TAC §330.331(b)	Required If Requested	330.207(b)	Yes	Part IV, Section 7	N/A, the proposed facility will not have any collection units	Site Operating Plan
1018	Part IV	Indicate that the use of leachate & gas condensate in mining process is prohibited.	Required	330.207(c)	Yes	Part IV, Section 7	N/A, The proposed Facility will not produce leachate or gas condensate	Site Operating Plan
1019	Part IV	Indicate that the facility will not discharge to a septic system	Required	330.207(d)	Yes	Part IV, Section 7	N/A, The proposed Facility will not process grease trap waste, grit trap waste, or septage	Site Operating Plan
1021	Part IV	Acknowledge that wastewaters discharged to a facility permitted under Texas Water Code, Chapter 26 must not interfere with or pass-through the treatment facility processes or operations, interfere with or pass-through its sludge processes, use, or disposal or otherwise be inconsistent with the prohibited discharge standards, including 40 Code of Federal Regulations Part 403, General Pretreatment Regulations for Existing and New Source Pollution	Acknowledgement	330.207(f)(1)	Yes	Part IV, Section 7		Site Operating Plan
1022	Part IV	Indicate that the daily effluent design standard for oil and grease concentration leaving the facility and entering a public sewer system shall not exceed 200 milligrams per liter, the concentration established in the wastewater discharge permit pretreatment limit or the concentration established by the treatment facility permitted under Texas Water Code, Chapter 26, the National Pollutant Discharge Elimination System, or the limits established in 30 TAC §330.207, if the discharge points do not require compliance with locally set limits.	Required	330.207(g)	Yes	Part IV, Section 7		Site Operating Plan
1023	Part IV	Indicate that lagoons, open-top storage tanks, open vessels, and underground storage units are prohibited at liquid waste transfer facilities	Required	330.207(h)	Yes	N/A	The proposed Facility is not a liquid waste transfer facility	Site Operating Plan
1024	Part IV	Provide plans demonstrating that all waste shall 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, and shall be contained or bundled so as not to result in litter.	Required	330.209(a)	Yes	Part IV, Section 8		Site Operating Plan
1025	Part IV	Provide a description of on-site storage area for source-separated or recyclable materials that is separate from a transfer station or process area and provides for the control of odors, vectors, and windblown waste	Required If Requested	330.209(b)	Yes	Part IV, Section 8		Site Operating Plan
1026	Part IV	Provide plans for process area of transfer stations that recover material from putrescible or liquid waste. Such plans shall provide for the storage of processed and unprocessed waste & recycled materials in enclosed buildings, vessels, or containers.	Required If Requested	330.209(c)	Yes	N/A	The proposed Facility is not a transfer station	Site Operating Plan
1027	Part IV	Provide a plan that describes how all waste containing food wastes shall be stored in covered or closed containers that are leak-proof, durable, and designed for safe handling and easy cleaning	Required	330.211	Yes	Part IV, Section 9	N/A, The propoed Facility will not accept any solid wastes containing food waste	Site Operating Plan

1028	Part IV	Indicate that nonreusable containers shall be of suitable strength to minimize vector scavenging or rupturing.	Required	330.211(1)	Yes	Part IV, Section 9	N/A, The propoed Facility will not accept any solid wastes containing food waste	Site Operating Plan
1029	Part IV	Indicate that reusable containers must be maintained in a clean condition as not to constitute a nuisance, harbor, feed, and propagate vectors.	Required	330.211(2)	Yes	Part IV, Section 9	N/A, The propoed Facility will not accept any solid wastes containing food waste	Site Operating Plan
1030	Part IV	Indicate that any containers emptied manually must be capable of being serviced without physical contact with waste.	Required	330.211(2)(A)	Yes	Part IV, Section 9	N/A, The propoed Facility will not accept any solid wastes containing food waste	Site Operating Plan
1031	Part IV	Indicate that containers that are mechanically handled must be designed to prevent spillage/leakage during storage, handling, and transport.	Required	330.211(2)(B)	Yes	Part IV, Section 9	N/A, The propoed Facility will not accept any solid wastes containing food waste	Site Operating Plan
1032	Part IV	Provide a plan that describes how a citizen's collection stations shall be operated in accordance with 30 TAC §330.213	Required If Requested	330.213(a)	Yes	N/A	The proposed Facility is not a citizen's collection station	Site Operating Plan
1033	Part IV	Indicate that it is the responsibility of the person that owns or operates the collection center to provide for the collection of deposited waste on a scheduled basis and supervise the facility in order to maintain it in a sanitary condition.	Required If Requested	330.213(a)	Yes	N/A	The proposed Facility is not a citizen's collection station	Site Operating Plan
1034	Part IV	A citizen's collection station may accept sharps from single-family or multi-family dwellings, hotels, motels, or other establishments that provide lodging and related services for the public. The sharps will not be considered medical waste, as defined in 30 TAC §330.3.	Required If Requested	330.213(b)	Yes	N/A	The proposed Facility is not a citizen's collection station	Site Operating Plan
1035	Part IV	Provide operational standards for stationary compactors that describe how they will operated and maintained in such a way as not to create a public nuisance through material loss or spillage, odor, vector breeding or harborage, or other condition.	Required If Requested	330.215(1) and (2)	Yes	Part IV, Section 10	N/A, the proposed Facility will not include stationary compactors	Site Operating Plan
1036	Part IV	Indicate that a copy of the permit or registration, application, and any other plans or related documents, and as-built plans will be maintained in the site operating record and shall be made available for inspections by agency representatives or other interested parties.	Required	330.219(a)	Yes	Part IV, Section 2, Table IV-1		Site Operating Plan
1037	Part IV	Indicate that operator shall record & retain location restriction demonstrations, inspection records, training procedures, closure plans, monitoring, testing, analytical data relating to closure, cost estimates, financial assurance documents, all correspondence, modification, approvals, manifests, shipping documents, tickets relating to special waste, & documents as specified by the executive director in the operating record.	Required	330.219(b)(1) – (7)	Yes	Part IV, Section 2, Table IV-1		Site Operating Plan
1038	Part IV	Indicate that trip tickets will be maintained according to the record retention provisions in 30 TAC §312.145.	Required	330.219(b)(8)	Yes	Part IV, Section 2, Table IV-1		Site Operating Plan
1039	Part IV	Indicate that recordkeeping provisions to justify, on a quarterly basis, that the relevant percentage of the incoming waste is processed to recover recycled products for applicable facilities, that failure to achieve the relevant percent recycling rate in any two quarters within any one-year period will cause a change in a facility's status and require the owner or operator of the facility to obtain a registration or permit, as appropriate, to continue facility operations and that the owner or operator shall submit an annual report to the executive director by March 1st summarizing the recycling activities and percent of incoming solid waste that was recycled during the past calendar year	Required	330.219(b)(9)	Yes	N/A		Site Operating Plan

1040	Part IV	Indicate that all reports will be signed by a person who is a duly authorized as a signatory for reports. A person is duly authorized if authorized in in writing by the owner or operator in accordance with 30 TAC §305.44(a) and the authorization specifies individual or position with responsibility and this written authorization is submitted to the executive director	Required	330.219(c)(1)(A) - (C)	Yes	Part IV, Section 2		Site Operating Plan
1041	Part IV	Acknowledge that if the authorization to sign is not longer accurate a new authorization will be submitted	Acknowledgement	330.219(c)(2)	Yes	Part IV, Section 2		Site Operating Plan
1042	Part IV	Indicate that any person signing a report shall make the certification in 305.44(b).	Required	330.219(c)(3)	Yes	Part IV, Section 2		Site Operating Plan
1043	Part IV	Indicate that the operator shall maintain records on-site, available for inspection by the executive director for a period consisting of the two most recent calendar years	Required	330.219(d)	Yes	N/A	The proposed Facility is not a solid waste composting or landfill mining facility	Site Operating Plan
1045	Part IV	Indicate that the results of final product testing under 30 TAC §330.613 or §332.71 will be maintained in the site operating record	Required	330.219(d)(2)	Yes	N/A	The proposed Facility is not a solid waste composting or landfill mining facility	Site Operating Plan
1046	Part IV	Indicate that copies of annual reports will be maintained in the site operating record for 5yrs	Required	330.219(d)(3)	Yes	N/A	The proposed Facility is not a solid waste composting or landfill mining facility	Site Operating Plan
1047	Part IV	Indicate that the site operating record shall be furnished and available for inspection by executive director.	Required	330.219(e)	Yes	Part IV, Section 2		Site Operating Plan
1048	Part IV	Indicate that the operator shall retain site operating record for the life of the facility.	Required	330.219(f)	Yes	Part IV. Section 2		Site Operating Plan
1049	Part IV	Indicate that the executive director may set alternative recordkeeping & notification schedules.	Required	330.219(g)	Yes	Part IV, Section 2		Site Operating Plan
1051	Part IV	Provide a fire protection plan that describes the source of fire protection (a local fire department, fire hydrants, fire extinguishers, water tanks, water well, etc.), procedures for using the fire protection source, and employee training and safety procedures. The fire protection plan shall comply with local fire codes	Required	330.221(c)	Yes	Part IV, Section 11		Site Operating Plan
1052	Part IV	Provide a description of the availability of water under pressure for firefighting purposes	Required	330.221(a)	Yes	Part IV, Section 11		Site Operating Plan
1053	Part IV	Provide a description of on-site firefighting equipment	Required	330.221(b)	Yes	Part IV, Section 11		Site Operating Plan
1054	Part IV	Indicate that all employees shall be trained in the contents and use of the fire protection plan	Required	330.221(c)	Yes	Part IV, Section 11		Site Operating Plan
1055	Part IV	Provide a description of the artificial barriers, natural barriers, or a combination of both, appropriate to protect human health and safety and the environment that are used to control access to the facility and indicate that uncontrolled access to the facility shall be prevented.	Required	330.223(a)	Yes	Part IV, Section 12		Site Operating Plan
1056	Part IV	Provide a description of the, minimum two lane, access road from the public road and how it is designed for expected traffic volumes and adequate turning radii.	Required	330.223(b)	Yes	Part IV, Section 12		Site Operating Plan
1057	Part IV	Provide a description of vehicle parking for equipment, employees, and visitors. Indicate that safety bumpers at hoppers must be provided for vehicles. And provide a description of the positive means to control dust and mud	Required	330.223(b)	Yes	Part IV, Section1 2		Site Operating Plan
1058	Part IV	Provide a description of perimeter control fencing that includes having lockable gates and attendant on site during operating hours. Operating and transport areas shall be enclosed by walls or fencing	Required	330.223(c)	Yes	Part IV, Section 12		Site Operating Plan
1059	Part IV	Provide a description of the unloading areas and indicate that unloading areas will be confined to as small an area as practical and be monitored by attendant.	Required	330.225(a)	Yes	Part IV, Section 13		Site Operating Plan

1060	Part IV	Provide a description of the signs & forced access lanes used to prevent indiscriminate dumping	Required	330.225(a)	Yes	Part IV, Section 13		Site Operating Plan
1061	Part IV	Indicate that the facility is not required to accept any solid waste that he/she determines will cause or may cause problems in maintaining full and continuous compliance	Required	330.225(a)	Yes	Part IV, Section 13		Site Operating Plan
1062	Part IV	Provide procedures to ensure that waste in unauthorized areas is removed immediately and disposed of properly.	Required	330.225(b)	Yes	Part IV, Section 13		Site Operating Plan
1063	Part IV	Provide procedures for the detection and prevention of the unloading of processing of prohibited wastes.	Required	3330.225©	Yes	Part IV, Section 13		Site Operating Plan
1064	Part IV	Indicate that prohibited waste must be returned immediately to the transporter or generator.	Required	330.225(c)	Yes	Part IV, Section 13		Site Operating Plan
1065	Part IV	Provide a description of how storage & processing areas are designed to control and contain worst case spill or release and will account for precipitation from a 25-year, 24-hour storm.	Required	330.227	Yes	Part IV, Section 14		Site Operating Plan
1066	Part IV	Specify the waste acceptance and facility operating hours	Required	330.229(a)	Yes	Part IV, Section 15		Site Operating Plan
1067	Part IV	The waste acceptance hours may be any time between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, unless otherwise approved by the executive director or commission for a permit. The operating hours for operating heavy equipment and transporting materials on- or off-site may be any time between the hours of 5:00 a.m. and 9:00 p.m., Monday through Friday, unless otherwise approved in the authorization.	Required	330.229(a)	Yes	Part IV, Section 15		Site Operating Plan
1068	Part IV	Specify alternative operating hours of up to five days in a calendar year to accommodate special occasions, special purpose events, holidays, or other special occurrences	Required	330.229(b)	Yes	Part IV, Section 15		Site Operating Plan
1069	Part IV	Indicate that the facility will record in the site operating record the dates, times, and duration when any alternative operating hours are utilized.	Required	330.229(d)	Yes	Part IV, Section 15		Site Operating Plan
1070	Part IV	Indicate that the commission's regional offices may allow additional temporary operating hours to address disaster or other emergency situations, or other unforeseen circumstances that could result in the disruption of waste management services in the area	Required	330.229(c)	Yes	Part IV, Section 15		Site Operating Plan
1071	Part IV	Indicate that a sign measuring at least 4' X 4' must be displayed at all entrances. Indicate that information on the sign must including the facility name and type, hours and days of operation, authorization number, and facility rules.	Required	330.231	Yes	Part IV, Section 16		Site Operating Plan
1072	Part IV	Indicate that windblown material and litter shall be collected as necessary, throughout the facility, along fences and access roads, and at the gate, at least once per day on days that the facility is in operation, to minimize unhealthy, unsafe, or unsightly conditions.	Required	330.233(a)	Yes	Part IV, Section 17		Site Operating Plan
1073	Part IV	Indicate the measures used to control windblown waste.	Required	330.233(a)(1)	Yes	Part IV, Section 17		Site Operating Plan
1075	Part IV	Provide procedures to encourage waste hauling vehicles to cover loads that may include posting signs, reporting offenders, and assessing surcharges.	Required	330.235	Yes	Part IV, Section 18		Site Operating Plan
1077	Part IV	Provide a description of all weather access roads at the facility and how the tracking of mud and debris onto public roadways will be minimized.	Required	330.237(a)	Yes	Part IV, Section 19		Site Operating Plan

1078	Part IV	Provide procedures use to ensure that dust from on-site and other access roadways shall not become a nuisance to surrounding areas and indicate that a water source and necessary equipment or other means of dust control shall be provided.	Required	330.237(b)	Yes	Part IV, Section 19		Site Operating Plan
1079	Part IV	Provide procedures to be used to maintain on site roads and minimize depressions, ruts, and potholes.	Required	330.237(c)	Yes	Part IV, Section 19		Site Operating Plan
1080	Part IV	Describe screening or other means used to prevent noise pollution & adverse visual impacts.	Required	330.239	Yes	Part IV, Section 20		Site Operating Plan
1081	Part IV	Provide procedures used to ensure that the design capacity of the facility shall not be exceeded and that waste will not be allowed to accumulate in quantities that create a nuisance, create odors, or harbor vectors.	Required	330.241(a)	Yes	Part IV, Section 21		Site Operating Plan
1082	Part IV	Provide procedures that describe how unprocessed grease, grit, & septage will only be stored up to 72hrs.	Required	330.241(a)(1)	Yes	Part IV, Section 21	N/A, The proposed Facility will not process grease trap waste, grit trap waste, or septage	Site Operating Plan
1083	Part IV	Provide procedures that provide for the restriction, diversion or removal of waste if the facility experiences a significant work stoppage.	Required	330.241(b)	Yes	Part IV, Section 21		Site Operating Plan
1084	Part IV	Provide an alternative processing/disposal procedures for when facility is inoperable for more than 24hrs.	Required	330.241(c)	Yes	Part IV, Section 21		Site Operating Plan
1085	Part IV	Provide procedures for washing down all working surfaces in contact with waste at least weekly or twice per week for facilities that operate continuously.	Required	330.243(a)	Yes	Part IV, Section 22		Site Operating Plan
1086	Part IV	Provide procedures to ensure that wash water shall not be allowed to accumulate without proper treatment.	Required	330.243(b)	Yes	Part IV, Section 22		Site Operating Plan
1087	Part IV	Provide procedures that demonstrate that wash water shall be collected & disposed of in an authorized manner.	Required	330.243(c)	Yes	Part IV, Section 22		Site Operating Plan
1088	Part IV	Acknowledge that air emissions from municipal solid waste facilities must not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.	Acknowledgement	330.245(a)	Yes	Part IV, Section 23		Site Operating Plan
1090	Part IV	Provide a description of odor-retaining containers & vessels used to store liquid and solid waste	Required	330.245(c)	Yes	N/A	N/A, The proposed facility will not accept liquid waste	Site Operating Plan
1091	Part IV	Provide a description of how the facility has been designed and will be operated to provide adequate ventilation and prevent nuisance odors from leaving boundary of facility	Required	330.245(d)	Yes	Part IV, Section 23		Site Operating Plan
1092	Part IV	Indicate that air pollution emission capture & abatement equipment shall be cleaned and maintained per manufacturer's recommendations and as necessary so that the equipment efficiency can be adequately maintained.	Required	330.245(e)	Yes	Part IV, Section 23		Site Operating Plan
1093	Part IV	Provide a description of the measures/equipment, in accordance with 30 TAC §330.245(f)(1) – (4), that will be use to control odor at the facility.	Required	330.245(f)(1) – (4)	Yes	Part IV, Section 23		Site Operating Plan
1094	Part IV	Indicate that the process areas that recover material from solid waste that contains putrescibles shall be maintained totally within an enclosed building and describe how openings to the process area shall be controlled to prevent releases of nuisance odors from leaving the property boundary of the facility.	Required	330.245(g)	Yes	N/A	The proposed facility will not accept any solid waste that contains putrescibles.	Site Operating Plan
1095	Part IV	Provide a description of how facility shall be designed to allow a minimal time of exposure of liquid waste to the air and minimize waste contact with air during unloading of liquid waste into the facility.	Required	330.245(h)	Yes	N/A	The proposed facilty will not accept any liquid wastes.	Site Operating Plan

1096	Part IV	Acknowledge that the reporting of emissions events shall be made in accordance with §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) and reporting of scheduled maintenance shall be made in accordance with §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements)	Acknowledgement	330.245(j)	Yes	Part IV, Section 23		Site Operating Plan
1097	Part IV	Provide procedures for the control of ponded water to avoid its becoming a nuisance and alleviate any objectionable odors	Required	330.245(k)	Yes	Part IV, Section 23		Site Operating Plan
1098	Part IV	Indicate that facility personnel will be trained in the appropriate sections of the facility's health and safety plan.	Required	330.247	Yes	Part IV, Section 24		Site Operating Plan
1099	Part IV	Indicate that the facility shall provide potable water and sanitary facilities for all employees and visitors.	Required	330.249	Yes	Part IV, Section 25		Site Operating Plan

Texas Commission on Environmental Quality

Part I Application Form for New Permit, Permit Amendment, or Registration for a Municipal Solid Waste Facility

Application Tracking Information

Facility Name: BAP Kennor C&D Recycling Facility

Permittee or Registrant Name: BAP Kennor Landfill, LLC

MSW Authorization Number: TBD

Initial Submission Date: 03/08/2023

Revision Date: _____

Instructions for completing this Part I Application Form are provided in TCEQ 00650-instr[1]. Include a Core Data Form (TCEQ 10400)[2] with the application for the facility owner, and another Core Data Form for the operator if different from the owner. If you have questions, contact the Municipal Solid Waste Permits Section by email to mswper@tceq.texas.gov, or by phone at 512-239-2335.

Application Data

1. Submission Type	
■ Initial Submission	☐ Notice of Deficiency (NOD) Response

2. Authorization Type	
☐ Permit	■ Registration

3. Application Type	
☐ New Permit	
☐ Permit Major Amendment	☐ Permit Limited Scope Major Amendment
■ New Registration	

[1] www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf
[2] www.tceq.texas.gov/goto/coredata

4. Application Fee

Amount

☐ $2,050—New Landfill Permits, and Landfill Permit Major Amendments Described in 30 TAC 305.62(j)(1)

☒ $150—Other Permits, Landfill Limited Scope Major Amendments, Permit Amendments for Storage and Processing Facilities, and Registrations

Payment Method

☐ Check

☒ Online through ePay portal www3.tceq.texas.gov/epay/

If paid online, enter ePay Trace Number: 582EA000500316

5. Application URL

For applications other than those for arid exempt landfills, provide the URL address of a publicly accessible internet web site where the application and all revisions to the application will be posted.

https://parkhill.com/tceq-permits/

6. Party Responsible for Publishing Notice

Indicate who will be responsible for publishing notice:

☐ Applicant ☐ Agent in Service ☒ Consultant

Contact Name: Frank E Puglsey

Title: Sector Director / Principal

Email Address: Fpugsley@parkhill.com

7. Alternative Language Notice

Use the Alternative Language Checklist on Public Notice Verification Form TCEQ-20244-Waste-NORI, TCEQ-20244-Waste-NAPD, or TCEQ-20244-Waste-NAORPM available at www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_notice.html to determine if an alternative language notice is required.

Is an alternative language notice required for this application?

☒ Yes ☐ No

Indicate the alternative language: Spanish

8. Public Place for Copy of Application

Name of the Public Place: White Settlement Library

Physical Address: 8215 White Settlement Rd

City: Fort Worth County: Tarrant State: TX Zip Code: 76108

Phone Number: (817) 367-0166

9. Consolidated Permit Processing

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

☐ Yes ■ No

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

10. Confidential Documents

Does the application contain confidential documents?

☐ Yes ■ No

If "Yes", reference the confidential documents in the application, but submit the confidential documents as an attachment in a separate binder marked "CONFIDENTIAL."

11. Permits and Construction Approvals

Mark the following table to indicate status of other permits or approvals.

Table 1. Permits and Construction Approvals.

Permit or Approval	Received	Pending	Not Applicable
Hazardous Waste Management Program under Texas Solid Waste Disposal Act			X
Underground Injection Control Program under Texas Injection Well Act			X
National Pollutant Discharge Elimination System Program under Clean Water Act; Waste Discharge Program under Texas Water Code, Chapter 26			X
Prevention of Significant Deterioration Program under Federal Clean Air Act (FCAA); Nonattainment Program under the FCAA			X
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA			X

Permit or Approval	Received	Pending	Not Applicable
Ocean Dumping Permits under Marine Protection Research and Sanctuaries Act			X
Dredge or Fill Permits under Clean Water Act			X
Licenses under the Texas Radiation Control Act			X
Other (describe): MSW Permit No. 1241	X		
Other (describe):			

12. Facility General Information

Facility Name: BAP Kennor C&D Recycling Facility

Contact Name: Tom Noons Title: Managing Partner

MSW Authorization Number (if existing): _____

Regulated Entity Reference Number: **RN** 102000650

Physical or Street Address (if available): 3411 Silver Creek Road

City: Fort Worth County: Tarrant State: TX Zip Code: 76108

Phone Number: (469) 591-1380

Latitude (Degrees, Minutes Seconds): 32° 48' 1.11" N

Longitude (Degrees, Minutes Seconds): 97° 30' 32.42" W

Benchmark Elevation (above mean sea level): 636.23 feet

Description of facility location with respect to known or easily identifiable landmarks:

The Facility is located west of the City of Fort Worth, approximately 3.1 miles northwest of the intersection of Interstate Highways 820 and 30, and approximately half a mile west of Lake Worth.

Access routes from the nearest United States or state highway to the facility:

From Interstate Highway 820, exit on Silver Creek Road and travel west approximately 3 miles to the facility entrance on the west side of Silver Creek Road.

Coastal Management Program

Is the facility within the Coastal Management Program boundary?

☐ Yes ■ No

13. Facility Types

☐ Type I ☐ Type IV ☐ Type V

☐ Type IAE ☐ Type IVAE ☐ Type VI

14. Activities Conducted at the Facility

☒ Storage ☒ Processing ☐ Disposal

15. Facility Waste Management Units

Check the box for each type of waste management unit proposed.

☐ Landfill Unit(s)
☐ Container(s)
☐ Incinerator(s)
☒ Roll-off Boxes
☐ Class 1 Landfill Unit(s)
☐ Surface Impoundment
☐ Process Tank(s)
☐ Autoclave(s)
☐ Storage Tank(s)
☐ Refrigeration Unit(s)
☒ Tipping Floor
☐ Mobile Processing Unit(s)
☒ Storage Area
☐ Compost Pile(s) or Vessel(s)
☒ Other (specify): Recycling Facility

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.

The proposed recycling facility will accept materials authorized for a Type IV facility (e.g. brush, construction or demolition waste, and/or rubbish) as defined under 30 TAC §330.5(a)(2). The Facility may include equipment to shred, bale, salvage, separate, recycle and/or store the accepted materials. Feedstock will be stored until processed and processed materials will be stored until sold or hauled off-site.

17. Facility Contact Information

Site Operator (Permittee or Registrant)

Name: BAP Kennor Landfill, LLC

Customer Reference Number: **CN** 605967058

Contact Name: Tom Noons Title: Managing Partner

Mailing Address: PO Box 22790

City: Houston County: Harris State: TX Zip Code: 77227

Phone Number: (469) 591-1380

Email Address: tnoons@baphouston.com

Texas Secretary of State (SOS) Filing Number: 0804128458

Operator (if different from *Site Operator*)

Name: Same

Customer Reference Number: **CN** _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: ____ Zip Code: _____

Phone Number: _____

Email Address: _____

Texas Secretary of State (SOS) Filing Number: _____

Consultant (if applicable)

Firm Name: Parkhill

Consultant Name: Frank Pugsley

Texas Board of Professional Engineers Firm Registration Number: 560

Contact Name: Frank Pugsley Title: Sector Director / Principal

Mailing Address: 3000 Internet Blvd, Suite 550

City: Frisco County: Collin State: TX Zip Code: 75304

Phone Number: (469) 200-7384

Email Address: Fpuglsey@parkhill.com

Agent in Service (required for out-of-state applicants)

Name: N/A

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

18. Facility Supervisor License

Indicate the level of Municipal Solid Waste Facility Supervisor license, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations, Subchapter F that the individual who supervises or manages the operations will obtain prior to commencing operations.

☐ Class A Supervisor License ■ Class B Supervisor License

19. Ownership Status of the Facility

Business Type

■ Corporation	☐ County Government
☐ Individual	☐ State Government
☐ Sole Proprietorship	☐ Federal Government
☐ General Partnership	☐ Other Government
☐ Limited Partnership	☐ Military
☐ City Government	☐ Other (specify): _____

Facility Owner

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

■ Yes ☐ No

If "No", provide the following information for other owners.

Owner Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

20. Other Government Entities Information

Texas Department of Transportation

District: Fort Worth

District Engineer's Name: Carl L. Johnson, P.E.

Mailing Address: 2501 S W Loop 820

City: Fort Worth County: Tarrant State: TX Zip Code: 76133

Phone Number: (817) 370-6514

Email Address: Carl.L.Johnson@txdot.gov

Local Government Authority Responsible for Road Maintenance (if applicable)

Government or Agency Name: Tarrant County Transportation Dept, Precinct 4

Contact Person's Name: Randy Skinner, Department Director

Mailing Address: 601 Longhorn Road

City: Saginaw County: Tarrant State: TX Zip Code: 76179

Phone Number: (817) 306-4000

Email Address: rvskinner@tarrantcounty.com

City Mayor Information

City Mayor's Name: N/A

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

City Health Authority

Authority Name: N/A

Contact Person's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

County Judge Information

County Judge's Name: Tim O'Hare

Mailing Address: 100 E Weatherford St

City: Fort Worth County: Tarrant State: TX Zip Code: 76196

Phone Number: (817) 884-1441

Email Address: countyjudge@tarrantcountytx.gov

County Health Authority

Agency Name: Tarrant County Public Health

Contact Person's Name: Alma Espinoza, Executive Secretary

Mailing Address: 1101 S. Main Street

City: Fort Worth County: Tarrant State: TX Zip Code: 76104

Phone Number: (817) 321-5300

Email Address: arespinoza@tarrantcounty.com

State Representative Information

District Number: 99

State Representative's Name: Charlie Geren

District Office Mailing Address: 6713 Telephone Rd, Suite 301

City: Lake Worth County: Tarrant State: TX Zip Code: 76135

Phone Number: (817) 237-2251

Email Address: Charlie.Geren@house.texas.gov

State Senator Information

District Number: 9

State Senator's Name: Kelly Hancock

District Office Mailing Address: 306 W Seventh Street, Suite 508

City: Fort Worth County: Tarrant State: TX Zip Code: 76102

Phone Number: (817) 332-1131

Email Address: kelly.hancock@senate.texas.gov

Council of Governments (COG)

COG Name: North Central Texas

COG Representative's Name: R. Michael Eastland

COG Representative's Title: Executive Director

Mailing Address: 616 Six Flags Dr.

City: Arlington County: Tarrant State: TX Zip Code: 76011

Phone Number: (817) 640-7806

Email Address: Meastland@nctcog.org

River Basin Authority

Authority Name: Trinity River Authority

Contact Person's Name: J. Kevin Ward, General Manager

Watershed Sub-Basin Name: Lower West Fork Trinity

Mailing Address: 5300 S. Collins

City: Arlington County: Tarrant State: TX Zip Code: 76018

Phone Number: (817) 467-4343

Email Address: WardK@trinityra.org

U.S. Army Corps of Engineers District

Indicate the U.S. Army Corps of Engineers district in which the facility is located:

☐ Albuquerque, NM ☐ Galveston, TX

☒ Ft. Worth, TX ☐ Tulsa, OK

Local Government Jurisdiction

Within City Limits of: N/A

Within Extraterritorial Jurisdiction of: Fort Worth

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 ■ No

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

Signature Page

Site Operator or Authorized Signatory

I 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.

Name: Thomas F. Noons Title: Managing Member

Email Address: tnoons@gmail.com

Signature: Thomas F. Noons
Thomas F. Noons (Mar 8, 2023 15:58 CST) Date: Mar 8, 2023

Operator or Principal Executive Officer Designation of Authorized Signatory

To be completed by the operator if the application is signed by an authorized representative for the operator.

I hereby designate _____ 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.

Operator or Principal Executive Officer Name: _____

Email Address: _____

Signature: _____ Date: _____

Notary

SUBSCRIBED AND SWORN to before me by the said Thomas F Noons

On this 8 day of March, 2023

My commission expires on the 10 day of August, 2024

Monica Sowards

Notary Public in and for

Collin County, Texas

MONICA MAXWELL SOWARDS
Notary Public, State of Texas
Comm. Expires 08-10-2024
Notary ID 132614660

Note: Application Must Bear Signature & Seal of Notary Public

Part I Attachments

Refer to instruction document 00650-instr for professional engineer seal requirements.

Attachments Table 1. Required attachments.

Required Attachments	Attachment Number
Supplementary Technical Report	I-1
Property Legal Description	I-2
Property Metes and Bounds Description	I-2
Facility Legal Description	I-2
Facility Metes and Bounds Description	I-2
Metes and Bounds Drawings	I-2
On-Site Easements Drawing	I-2
Land Ownership Map	I-3
Landowners List	I-3
Mailing Labels (printed and electronic)	I-3
Texas Department of Transportation (TxDOT) County Map	I-4
General Location Map	I-4
General Topographic Map	I-4
Verification of Legal Status	I-5
Property Owner Affidavit	I-6
Evidence of Competency	I-7

Attachments Table 2. Additional attachments as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
■ TCEQ Core Data Form(s)	I-10
☐ Signatory Authority Delegation	
■ Fee Payment Receipt	I-9
☐ Confidential Documents	
☐ Waste Storage, Processing and Disposal Ordinances	
☐ Final Plat Record of Property	

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
■ Certificate of Fact (Certificate of Incorporation)	I-5
☐ Assumed Name Certificate	
Other (describe): Notice of Appointment	I-8
Other (describe):	
Other (describe):	

Texas Commission on Environmental Quality

Plain Language Summary of Municipal Solid Waste Permit or Permit Amendment Application

Applicants are required by public notice rules in Title 30 Texas Administrative Code, Chapter 39, Section 39.405(k)[1] to provide this summary of an application.

A. Purpose of the Proposed Facility

The proposed facility is a Type V municipal solid waste (MSW) processing facility. The proposed facility will sort and process construction and demolition waste for recycling.

B. Information About the Applicant

Name: BAP Kennor Landfill, LLC

Applicant Type: Corporation

Facility Name: BAP Kennor C&D Recycling Facility

Permit Application Number: TBD

Customer Number (CN): CN605967058

Regulated Entity Reference Number (RN): RN102000650

C. Location of the Proposed Facility

Facility Address (or description of site location if no address):

The facility is located 4.3 miles northwest of the intersection if Interstate Highways IH-820 and IH-30, and 1.5 miles south of Farm to Market Road FM-1886.

Link to Map of Facility Location (TCEQ Location Mapper[2]): https://arcg.is/TCaGO0

D. Information about Facility Operation

What types of waste would be received?

Materials authorized for a Type IV facility (defined under 330.5(a)(2)) and deemed as recyclable will be accepted. These materials will be free of putrescible and household waste and may include, but are not limited to, construction and demolition materials such as brush, lumber, glass, metals, concrete, and bricks. Materials may be accepted from residential, commercial, industrial, and municipal sources.

What geographical area would the wastes come from?

Recyclable materials may be accepted from Tarrant and surrounding counties (i.e. Parker, Denton, Dallas, and Johnson).

[1] www.tceq.texas.gov/goto/view-30tac
[2] www.tceq.texas.gov/gis/hb-610-viewer

What days and hours would the facility operate?

Materials Acceptance Hours: 7am to 7pm, Monday through Friday;
Operating Hours: 5am to 9pm, Monday through Friday

At what rate would wastes be accepted?

The facility may accept up to 450 tons of recyclable materials per day.

How would wastes be managed?

Processing at the facility will generally be limited to separating materials by size and type. Processing may also include shredding and/or mulching. Processed materials would be sold for re-use/recycling. Any non-recyclable wastes would disposed of at an appropriately authorized facility.

E. Pollution Control Methods

What methods would the facility use for containing wastes and odors, and monitoring for releases?

Material unloading, processing and storage will only occur in designated areas. Any non-recyclable wastes will be stored in leak proof or covered containers. Only non-putrescible materials will be accepted and objectionable odors from these materials are not anticipated. Due to the nature of the materials being processed, the facility is not anticipated to generate any contaminated water.

What methods would the facility use or require for preventing litter or spills, and for cleanup of litter and spills?

Facility staff will collect any windblown material and litter along the route to the facility and within the facility at least once per day on days when the facility is in operation. Portable litter fences or other screening may be used to minimize windblown materials from any unenclosed processing or storage areas. It is anticipated that spills will be limited to incidental spills from haul vehicles or site equipment. Spill kits will be maintained on-site and any spills will be promptly cleaned with absorbent material, which will be collected and disposed of properly.

Comisión de Calidad Ambiental de Texas

Resumen en lenguaje sencillo de la solicitud de permiso municipal de residuos sólidos o de modificación del permiso

Los solicitantes están obligados por las normas de notificación pública del Título 30 del Código Administrativo de Texas, Capítulo 39, Sección 39.405(k)[1] a proporcionar este resumen de una solicitud.

A. Objetivo de la instalación propuesta

La instalación propuesta es una instalación de procesamiento de residuos sólidos municipales (MSW) Tipo V. La instalación propuesta clasificará y procesará los residuos de construcción y demolición para su reciclaje.

B. Información sobre el solicitante

Nombre: BAP Kennor Landfill, LLC

Tipo de solicitante: Corporación

Nombre de la instalación: BAP Kennor C&D Recycling Facility

Número de solicitud de permiso:

Número de cliente (CN): CN605967058

Número de referencia de la entidad regulada (RN): RN102000650

C. Ubicación de la instalación propuesta

Dirección del establecimiento (o descripción de la ubicación del sitio si no hay dirección):

La instalación está ubicada 4.3 millas al noroeste de la intersección de las autopistas interestatales IH-820 e IH-30, y 1.5 millas al sur de Farm to Market Road FM-1886.

Enlace al mapa de ubicación de las instalaciones en TCEQ Location Mapper[2]:

https://arcg.is/TCaGO0

D. Información sobre el funcionamiento de las instalaciones

¿Qué tipos de residuos se recibirían?

Se aceptarán los materiales autorizados para una instalación Tipo IV (definidos en 330.5(a)(2)) y considerados reciclables. Estos materiales estarán libres de desechos putrescibles y domésticos y pueden incluir, entre otros, materiales de construcción y demolición como maleza, madera, vidrio, metales, concreto y ladrillos. Se pueden aceptar materiales de fuentes residenciales, comerciales, industriales y mu

¿De qué zona geográfica procederían los residuos?

Se pueden aceptar materiales reciclables de Tarrant y los condados circundantes (es decir, Parker, Denton, Dallas y Johnson).

[1] www.tceq.texas.gov/goto/view-30tac
[2] www.tceq.texas.gov/gis/hb-610-viewer

¿Qué días y horas funcionará la instalación?

Horario de recepción de materiales: 7 am a 7 pm, de lunes a viernes;
Horario de atención: 5 am a 9 pm, de lunes a viernes

¿A qué ritmo se aceptarían los residuos?

La instalación puede aceptar hasta 450 toneladas de materiales reciclables por día.

¿Cómo se gestionarían los residuos?

El procesamiento en la instalación generalmente se limitará a separar los materiales por tamaño y tipo. El procesamiento también puede incluir trituración. Los materiales procesados •13•13se venderían para su reutilización/reciclaje. Los residuos no reciclables se eliminarán en una instalación debidamente autorizada.

E. Métodos de control de la contaminación

¿Qué métodos utilizará la instalación para contener los residuos y los olores, y para controlar las emisiones?

La descarga, el procesamiento y el almacenamiento de materiales solo se realizarán en las áreas designadas. Los residuos no reciclables se almacenarán en contenedores a prueba de fugas o tapados. Solo se aceptarán materiales no putrefactos y no se prevén olores objetables de estos materiales. Debido a la naturaleza de los materiales que se procesan, no se prevé que la instalación genere agua contaminada.

¿Qué métodos utilizaría o exigiría la instalación para evitar la basura o los derrames, y para la limpieza de la basura y los derrames?

El personal de la instalación recolectará cualquier material arrastrado por el viento y la basura a lo largo de la ruta hacia la instalación y dentro de la instalación al menos una vez al día en los días en que la instalación esté en funcionamiento. Se pueden usar cercas portátiles para desechos u otras protecciones para minimizar los materiales arrastrados por el viento desde cualquier área de procesamiento o almacenamiento no cerrada. Se anticipa que los derrames se limitarán a derrames incidentales de vehículos de transporte o equipo del sitio. Los kits para derrames se mantendrán en el sitio y cualquier derrame se limpiará rápidamente con material absorbente, que se recolectará y desechará adecuadamente.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-1 – SUPPLEMENTAL TECHNICAL REPORT

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

ATTACHMENT I-1 – SUPPLEMENTAL TECHNICAL REPORT

TABLE OF CONTENTS

ACRONYMS AND DEFINITIONS 1
1. GENERAL DESCRIPTION 2
1.1. Other Authorizations §330.55, §305.45(a)(7) 2
1.2. Application Fees §330.59(h) 3
2. FACILITY DESCRIPTION §305.45(a), §330.59(b)(1) 4
2.1. Access Routes §330.59(b)(2) 4
2.2. Latitude & Longitude of the Facility §330.59(b)(3) 4
2.3. Maps §330.59(c) 4
2.4. Wells, Springs and Surface Water Bodies §305.45(a)(6)(A) 4
2.5. Character of Adjacent Land and Development §305.45(a)(6)(B) 5
2.6. Location of Waste Disposal On-Site §305.45(a)(6)(C) 5
2.7. Waste Volume §305.45(a)(8)(B)(i) 5
2.8. Properties of Waste §305.45(a)(8)(B)(ii) 5
3. PROPERTY OWNER INFORMATION §330.59(d) 6
3.1. Legal Description §330.59(d)(1) 6
3.2. Property Owner Affidavit §330.59(d)(2) 6
4. LEGAL STATUS AND OWNERSHIP STATUS OF APPLICANT §330.59(e), §305.45(a)(2) 7
5. EVIDENCE OF COMPETENCY §330.59(f) 8

3/1/2023

Frank E Pugsley, P.E.

ACRONYMS AND DEFINITIONS

FCAA – Federal Clean Air Act

MSL – Mean Sea Level

MSW – Municipal Solid Waste

STR – Supplemental Technical Report

TAC – Texas Administrative Code

TCEQ – Texas Commission on Environmental Quality

1. GENERAL DESCRIPTION

This Supplemental Technical Report (STR) has been prepared under the direction of a Texas licensed professional engineer in accordance with 30 TAC §305.45(a)(8). This STR is submitted in conjunction with the application for a new Type V MSW facility registration for a recycling facility in Tarrant County, the BAP Kennor C&D Recycling Facility. BAP Kennor Landfill, LLC owns and will operate the Facility.

This application has been prepared consistent with 30 TAC Chapter 330 Municipal Solid Waste Management Regulations adopted by the Texas Commission on Environmental Quality (TCEQ). This registration application is being submitted in accordance with 30 TAC §330.9(c) for a recycling facility established at a permitted MSW facility (MSW Permit No. 1241).

1.1. Other Authorizations §330.55, §305.45(a)(7)

The Facility will receive any necessary air authorizations in accordance with 30 TAC §330.55(a).

In accordance with 30 TAC §330.55(b), all 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 any wastewaters resulting from waste management activities and from cleaning and washing. The owner or operator will ensure that stormwater and wastewater compliance is in accordance with the regulations of the commission.

In accordance with 30 TAC §330.45(a)(7), a listing of all permits or construction approvals received or applied for are listed below:

- Hazardous Waste Management Program under the Texas Solid Waste Disposal Act – Not Applicable
- Underground Injection Control Program under the Texas Injection Well Act – Not Applicable
- National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26 – Not Applicable
- Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA) – Not Applicable
- Nonattainment Program under the FCAA – Not Applicable
- National emissions standards for hazardous air pollutants preconstruction approval under the FCAA – Not Applicable
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act – Not Applicable
- Dredge or fill permits under the FCAA – Not Applicable
- Licenses under the Texas Radiation Control Act – Not Applicable
- Subsurface area drip dispersal system permits under the Texas Water Code, Chapter 32 – Not Applicable

1.2. Application Fees §330.59(h)

In accordance with 30 TAC §330.59(h), the required fee of $150 for a registration application has been submitted to the TCEQ electronically. A copy of the transaction receipt including the ePay trace number is provided in Attachment I-9 – Fee Payment Documentation.

2. FACILITY DESCRIPTION §305.45(a), §330.59(b)(1)

This application is for the registration of a new recycling facility, the BAP Kennor C&D Recycling Facility (Facility), to be located within a permitted area of 6.613 acres on a 141.727-acre tract of land in western Tarrant county. The Facility is located west of the City of Fort Worth, approximately 4.3 miles northwest of the intersection of interstate highways 820 and 30, and approximately half a mile west of Lake Worth.

The Facility is located within the permit boundary of a permitted, currently inactive, Type IV landfill (MSW Permit No. 1241). The Landfill site currently does not contain any other waste storage, processing, or disposal facilities. The recycling facility will be located outside the existing landfilled waste footprint. An active Aggregate Production Operation for sand and gravel mining is also located on site.

2.1. Access Routes §330.59(b)(2)

The nearest highway to the facility is Interstate Highway 820 (I-820). From I-820, exit on Silver Creek Road and travel west approximately 3 miles to the facility entrance on the west side of Silver Creek Road.

2.2. Latitude & Longitude of the Facility §330.59(b)(3)

The coordinates of the facility benchmark are:

- Latitude: N 32° 48’ 1.11”
- Longitude: W 97° 30’ 32.42”
- Elevation (above MSL): 636.23’

2.3. Maps §330.59(c)

Maps have been prepared in accordance with 30 TAC §330.59(c) and §305.45(a)(6) and are included in Attachment I-4 – General Location Maps.

Records of the Tarrant County Appraisal District were searched to compile the list of property owners within 1/4 mile of the proposed facility boundary. The Land Ownership Map and Land Owners List are included in Attachment I-4 – Landownership Map and List.

2.4. Wells, Springs and Surface Water Bodies §305.45(a)(6)(A)

In accordance with 30 TAC §305.45(a)(6)(A), all known wells, springs, and surface water bodies or other waters of the state within one-mile of the site property boundary are shown in Figure I-4.3 – Water Wells and Surface Water Locations within 1 Mile.

2.5. Character of Adjacent Land and Development §305.45(a)(6)(B)

In accordance with 30 TAC §305.45(a)(6)(B), the general character of the areas adjacent to the facility, including public roads, towns, and the nature of development of adjacent lands (such as residential, commercial, agricultural, recreational, undeveloped, and so forth) is shown in Figure I-4.2 – Land Use within 1 Mile.

2.6. Location of Waste Disposal On-Site §305.45(a)(6)(C)

In accordance with 30 TAC §305.45(a)(6)(C), the location of waste disposed of on-site, placed as authorized under MSW Permit No. 1241, is shown on Figure II-C.1.

2.7. Waste Volume §305.45(a)(8)(B)(i)

The Facility may accept up to 450 tons, or 1,800 cubic yards, of recyclable material for processing per day. Recyclable material will be processed according to the rates recommended by the processing equipment manufacturer.

2.8. Properties of Waste §305.45(a)(8)(B)(ii)

The facility will only accept materials authorized for a Type IV facility and further deemed to be recyclable. Acceptable recyclable materials will be free of putrescible and household wastes and may include, but are not limited to, construction and demolition materials such as, brush, lumber, glass, metals, concrete, and bricks. No special wastes will be accepted, and the only industrial recyclable materials which may be accepted are Class 3 non-hazardous industrial materials.

3. PROPERTY OWNER INFORMATION §330.59(d)

3.1. Legal Description §330.59(d)(1)

The legal description of the property including the boundary metes and bounds description of the facility is included in Attachment I-2.

3.2. Property Owner Affidavit §330.59(d)(2)

A signed Property Owner Affidavit is included in Attachment I-6 – Property Owner Affidavit. The affidavit includes all of the requirements in 30 TAC §330.59(d)(2).

4. LEGAL STATUS AND OWNERSHIP STATUS OF APPLICANT §330.59(e), §305.45(a)(2)

The legal authority and status of the applicant has been verified as required by §330.59(e) and §305.45(a)(2). The Facility is privately owned by and will be operated by BAP Kennor Landfill, LLC. No other person or entity will own more than 20% of the Facility. A copy of the Certificate of Fact for BAP Kennor Landfill, LLC issued by the Office of the Secretary of State is included in Attachment I-5 – Verification of Legal Status.

5. EVIDENCE OF COMPETENCY §330.59(f)

Evidence of competency is included in Attachment I-7 addressing all of the requirements in 30 TAC §330.59(f).

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

APPENDIX I-2 – PROPERTY & FACILITY LEGAL DESCRIPTIONS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

Parkhill Project No.: 011604.21

APPENDIX I-2 – PROPERTY & FACILITY LEGAL DESCRIPTIONS

TABLE OF CONTENTS

1. **Property Metes and Bounds Description**
2. **Property Metes and Bounds Drawing**
3. **Facility Metes and Bounds Description**
4. **Facility Metes and Bounds Drawing**

3/1/2023

Frank E Pugsley, P.E.

A 141.727-ACRE TRACT IN THE JOHN KISOR SURVEY, ABSTRACT NO. 917, TARRANT COUNTY, TEXAS

A 141.727-acre tract of land in the John Kisor Survey, Abstract Number 917, Tarrant County, Texas, being that same tract of land conveyed to Bruce E. Fentress and Sharon L. Fentress, described in a general warranty deed with vendor's lien recorded in Instrument D186512266, Volume 8453, Page 631 of the Official Public Records of Tarrant County, Texas, said 141.727-acre tract being further described by metes and bounds as follows:

BEGINNING at a 5/8-inch iron rod found at the southwest corner of said John Kisor Survey for the southwest corner of this tract, said beginning point having coordinates of NORTHING: 6,973,746.48 and EASTING: 2,272,395.39, Texas Coordinate System, North Central Zone 4202, North American Datum of 1983;

(1) THENCE *North 00 degrees 29 minutes 01 seconds West* a distance of 2646.74 feet to a 1-inch iron rod found at the northwest corner of said John Kisor Survey for the northwest corner of this tract;

(2) THENCE *South 89 degrees 57 minutes 04 seconds East*, along the north line of said John Kisor Survey, a distance of 724.22 feet to a 1-inch iron rod found in the west line of a 19.128-acre tract of land conveyed to Kevin Lavender and Amanda Lavender, described in a special warranty deed recorded in Instrument D220143843 of the Official Public Records of Tarrant County, Texas, at a point of intersection for a corner of this tract;

(3) THENCE *South 05 degrees 44 minutes 04 seconds East*, along the south line of said 19.128-acre tract, a distance of 47.22 feet to a point of intersection for a corner of this tract;

(4) THENCE *South 24 degrees 44 minutes 04 seconds East*, along the south line of said 19.128-acre tract, a distance of 108.33 feet to a point of intersection for a corner of this tract;

(5) THENCE *South 31 degrees 59 minutes 04 seconds East*, along the south line of said 19.128-acre tract, a distance of 72.22 feet to a point of intersection for a corner of this tract;

(6) THENCE *South 39 degrees 44 minutes 04 seconds East*, along the south line of said 19.128-acre tract, a distance of 58.33 feet to a point of intersection for a corner of this tract;

(7) THENCE *North 87 degrees 45 minutes 56 seconds East*, along the south line of said 19.128-acre tract, a distance of 102.78 feet to a point of intersection for a corner of this tract;

(8) THENCE *North 59 degrees 11 minutes 56 seconds East*, along the south line of said 19.128-acre tract, a distance of 55.56 feet to a point of intersection for a corner of this tract;

(9) THENCE *North 40 degrees 45 minutes 56 seconds East*, along the south line of said 19.128-acre tract, a distance of 288.67 feet to a point in the north line of said John Kisor Survey, at a point of intersection for a corner of this tract;

(10) THENCE *South 89 degrees 57 minutes 04 seconds East* a distance of 1515.33 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of said John Kisor survey and the northeast corner of this tract;

(11) THENCE *South 00 degrees 06 minutes 19 seconds West*, along the east line of said John Kisor Survey, a distance of 962.72 feet to a 1-inch iron rod found at the northeast corner of a 1.349-acre tract of land conveyed to Silver Creek RV Resort, LLC, described in a special warranty deed with vendor's lien recorded in Instrument D219296513 of the Official Public Records of Tarrant County, Texas, at a point of intersection for the most easterly southeast corner of this tract, whence a 1/2-inch iron rod found at the southeast corner of said John Kisor Survey bears *South 00 degrees 06 minutes 19 seconds West* a distance of 1666.70 feet;

(12) THENCE *North 89 degrees 45 minutes 59 seconds West* a distance of 175.16 feet to a 1-inch iron rod found at the northwest corner of said 1.349-acre tract, in the west line of a tract of land conveyed to Silver Creek RV Resort, LLC, described in a special warranty deed with vendor's lien recorded in Instrument D219297364 of the Official Public Records of Tarrant County, Texas, at a point of intersection for a corner of this tract;

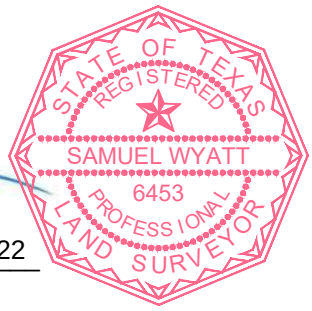
(13) THENCE *South 15 degrees 42 minutes 46 seconds West*, along the west line of said Silver Creek RV tract, a distance of 893.10 feet to a 1-inch iron rod found at a point of intersection for a corner of this tract;

(14) THENCE *North 89 degrees 49 minutes 19 seconds West*, along the north line of said Silver Creek RV tract, at a distance of 284.32 feet pass a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set at a point in reference, continuing for a total distance of 316.83 feet to a point of intersection for a corner of this tract;

(15) THENCE *South 00 degrees 05 minutes 59 seconds West*, along the west line of said Silver Creek RV tract, at a distance of 38.02 feet pass a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set at a point in reference, continuing at a distance of 779.89 feet pass a 5/8-inch iron rod found at a point in reference, continuing for a total distance of 812.75 feet to a "MAG" nail with a washer stamped "PSC RPLS 6453" set in the south line of said John Kisor survey, at a point of intersection for the most southerly southeast corner of this tract, whence said 1/2-inch iron rod found at the southeast corner of the John Kisor Survey bears *North 89 degrees 40 minutes 51 seconds East* a distance of 732.22 feet;

(16) THENCE *South 89 degrees 40 minutes 51 seconds West*, along the south line of said John Kisor Survey, a distance of 1944.71 feet to the **POINT OF BEGINNING**. Bearings and coordinates called in this description are based on the Texas Coordinate System, North Central Zone 4202, North American Datum of 1983. Distances called in this description are at surface. Areas called in this description are based on calculations made from surface distances.

Surveyed on the ground June 09, 2022

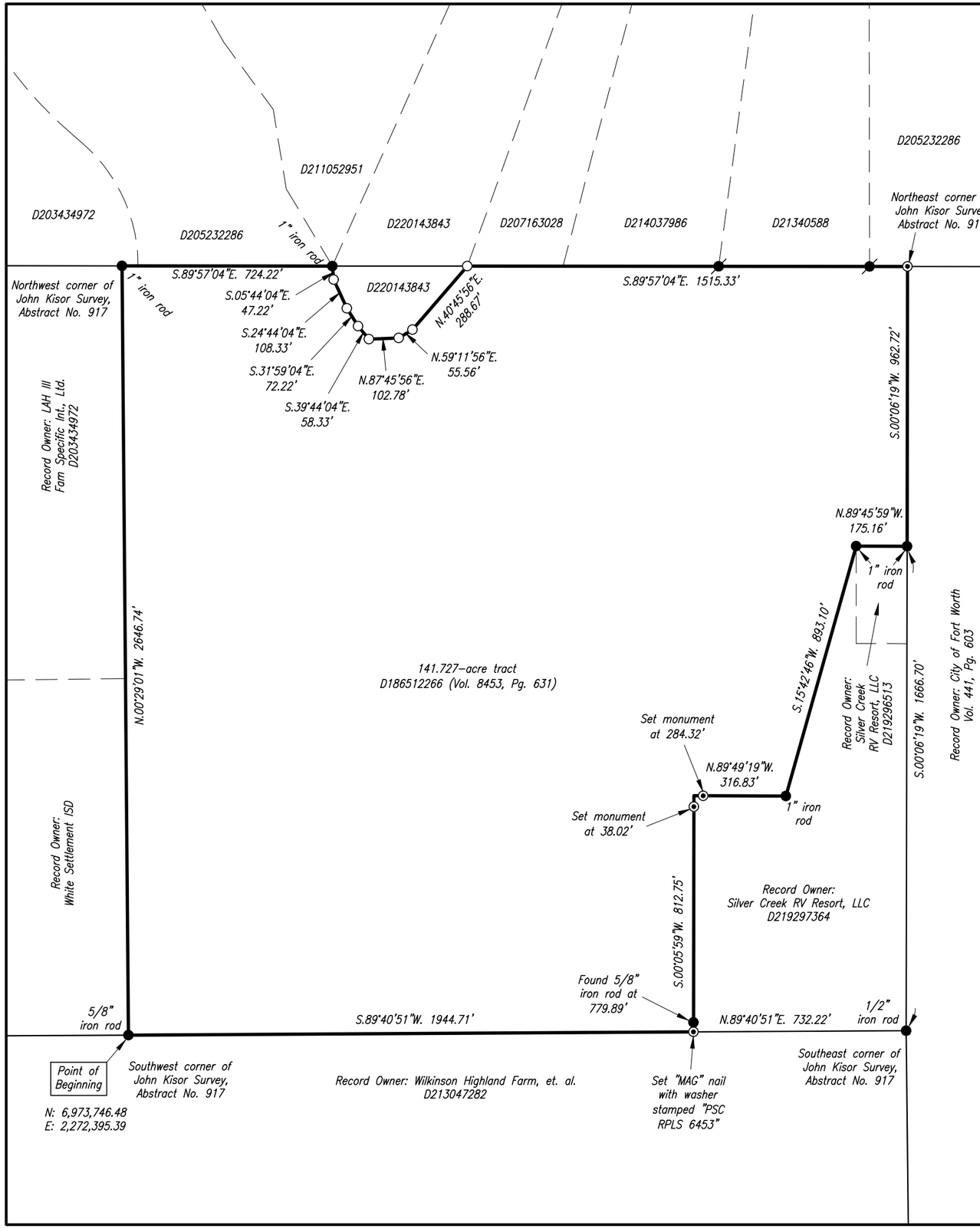


07/20/2022

Samuel Wyatt, R.P.L.S. 6453

A 141.727-ACRE TRACT IN THE JOHN KISOR SURVEY, ABSTRACT NO. 917, TARRANT COUNTY, TEXAS

TRACT: D186512266, VOLUME 8453, PAGE 631,
OFFICIAL PUBLIC RECORDS OF TARRANT COUNTY, TEXAS



NORTH

0 400' 800' 1200' 1600' 2000'

LEGEND:

SCALE: 1" = 400'

- ○ = CALCULATED POINT
- ◉ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453" (UNLESS OTHERWISE SPECIFIED)
- ● = FOUND IRON ROD (SEE NOTE FOR DIMENSION)
- ⊘ = FOUND 1/2" IRON ROD WITH CAP.

BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE 4202, NAD83.
DISTANCES REPORTED HEREON ARE AT SURFACE.
AREAS REPORTED HEREON ARE BASED ON CALCULATIONS MADE AT SURFACE DISTANCES.

THIS SURVEY IS SUBJECT TO ANY FACTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH. RECORD DOCUMENTS OTHER THAN THOSE SHOWN MAY AFFECT THIS TRACT.

MONUMENTS INDICATED AS FOUND BY THIS SURVEY ARE NOT "PHYSICAL MONUMENTS OF RECORD DIGNITY" UNLESS SO NOTED.

FOUND MONUMENTS ARE ACCEPTED BY THIS SURVEYOR AS CONTROLLING EVIDENCE DUE TO SUBSTANTIAL AGREEMENT WITH RECORD DOCUMENTS.

A METES AND BOUNDS DESCRIPTION OF THIS TRACT IS INCLUDED ON PAGES 1 AND 2 OF THIS DOCUMENT.

STATE OF TEXAS
REGISTERED
SAMUEL WYATT
6453
PROFESSIONAL
LAND SURVEYOR

07/20/2022

Parkhill
Parkhill.com
TBPELS FIRM REGISTRATION NO. 10194091

BAP KENNOR C & D RECYCLING CENTER FACILITY PERMIT BOUNDARY, A 6.613-ACRE TRACT OF LAND IN THE JOHN KISOR SURVEY, ABSTRACT NO. 917, TARRANT COUNTY, TEXAS

The BAP Kennor C & D Recycling Center Facility Permit Boundary, a 6.613-acre tract of land in the John Kisor Survey, Abstract Number 917, Tarrant County, Texas, being situated in that certain tract of land conveyed to Bruce E. Fentress and Sharon L. Fentress, described in a general warranty deed with vendor's lien recorded in Instrument D186512266, Volume 8453, Page 631 of the Official Public Records of Tarrant County, Texas, said 6.613-acre tract being further described by metes and bounds as follows:

BEGINNING at a point for the northwest corner of this tract, said beginning point having coordinates of NORTHING: 6,976,182.05 and EASTING: 2,275,046.85, Texas Coordinate System, North Central Zone 4202, North American Datum of 1983, whence a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of said John Kisor Survey bears *South 89 degrees 53 minutes 41 seconds East* a distance of 29.47 feet and *North 00 degrees 06 minutes 19 seconds East* a distance of 208.47 feet;

(1) THENCE *South 06 degrees 11 minutes 45 seconds East* a distance of 197.31 feet to a point of intersection for a corner of this tract;

(2) THENCE *South 06 degrees 55 minutes 55 seconds West* a distance of 215.09 feet to a point of intersection for a corner of this tract;

(3) THENCE *South 03 degrees 14 minutes 52 seconds East* a distance of 79.71 feet to a point of curvature for a corner of this tract;

(4) THENCE southwesterly, along a curve to the right, an arc distance of 54.30 feet, said curve having a radius of 39.00 feet, a delta angle of *79 degrees 46 minutes 48 seconds,* a chord bearing of *South 36 degrees 38 minutes 31 seconds West* and a chord distance of 50.03 feet to a point of tangency for a corner of this tract;

(5) THENCE *South 76 degrees 31 minutes 55 seconds West* a distance of 175.74 feet to a point of intersection for a corner of this tract;

(6) THENCE *North 36 degrees 50 minutes 21 seconds West* a distance of 44.61 feet to a point of intersection for a corner of this tract;

(7) THENCE *South 19 degrees 33 minutes 15 seconds West* a distance of 214.66 feet to a point of intersection for the most southerly corner of this tract;

(8) THENCE *North 68 degrees 45 minutes 54 seconds West* a distance of 173.21 feet to a point of intersection for a corner of this tract;

(9) THENCE *North 31 degrees 30 minutes 55 seconds West* a distance of 411.10 feet to a point of intersection for the northwest corner of this tract;

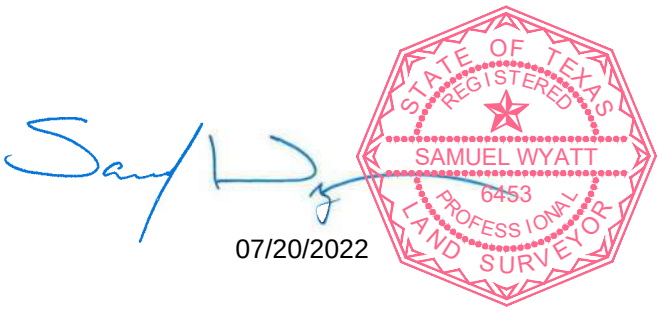
(10) THENCE *North 61 degrees 47 minutes 24 seconds East* a distance of 300.92 feet to a point of intersection for a corner of this tract;

(11) THENCE *North 54 degrees 51 minutes 19 seconds East* a distance of 128.38 feet to a point of intersection for a corner of this tract;

(12) THENCE *South 72 degrees 07 minutes 40 seconds East* a distance of 55.63 feet to a point of intersection for a corner of this tract;

(13) THENCE *North 77 degrees 14 minutes 08 seconds East* a distance of 82.23 feet to a point of intersection for a corner of this tract;

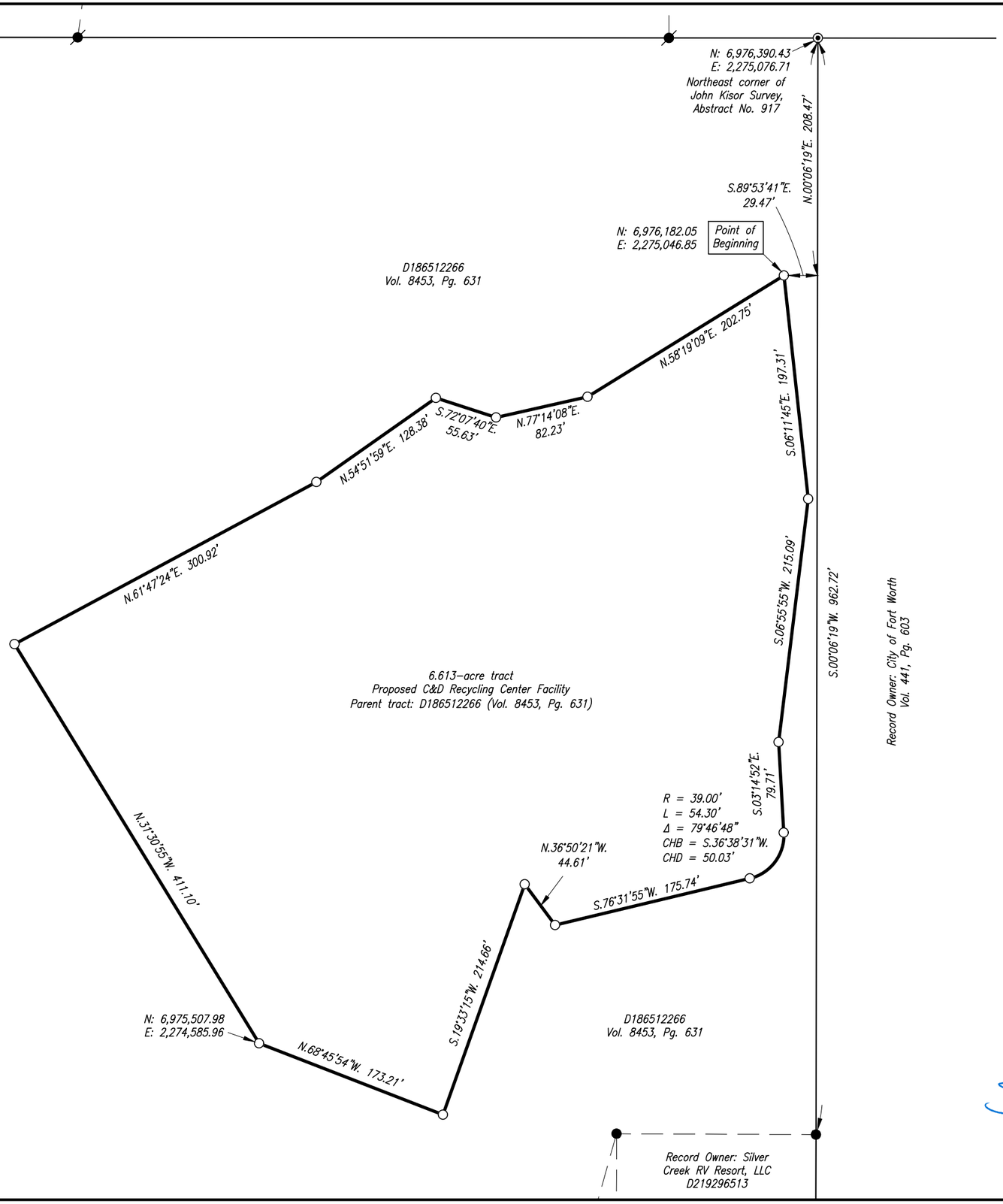
(14) THENCE *North 58 degrees 19 minutes 09 seconds East* a distance of 202.75 feet to the **POINT OF BEGINNING**. Bearings and coordinates called in this description are based on the Texas Coordinate System, North Central Zone 4202, North American Datum of 1983. Distances called in this description are at surface. Areas called in this description are based on calculations made from surface distances.



07/20/2022

BAP KENNOR C & D RECYCLING CENTER FACILITY PERMIT BOUNDARY, A 6.613-ACRE TRACT IN THE JOHN KISOR SURVEY, ABSTRACT NO. 917, TARRANT COUNTY, TEXAS

PARENT TRACT: D186512266, VOLUME 8453, PAGE 631,
OFFICIAL PUBLIC RECORDS OF TARRANT COUNTY, TEXAS



LEGEND:

SCALE: 1" = 100'

- ○ = CALCULATED POINT
- ◉ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453"
- ● = FOUND 1" IRON ROD
- ● = FOUND 1/2" IRON ROD WITH CAP.

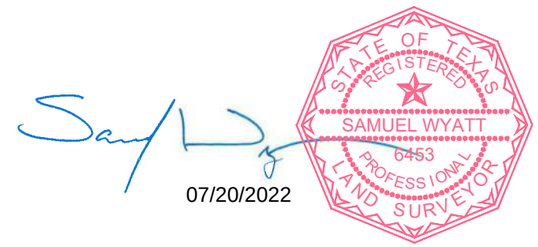
BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE 4202, NAD83.
DISTANCES REPORTED HEREON ARE AT SURFACE.
AREAS REPORTED HEREON ARE BASED ON CALCULATIONS MADE AT SURFACE DISTANCES.

THIS SURVEY IS SUBJECT TO ANY FACTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH. RECORD DOCUMENTS OTHER THAN THOSE SHOWN MAY AFFECT THIS TRACT.

MONUMENTS INDICATED AS FOUND BY THIS SURVEY ARE NOT "PHYSICAL MONUMENTS OF RECORD DIGNITY" UNLESS SO NOTED.

FOUND MONUMENTS ARE ACCEPTED BY THIS SURVEYOR AS CONTROLLING EVIDENCE DUE TO SUBSTANTIAL AGREEMENT WITH RECORD DOCUMENTS.

A METES AND BOUNDS DESCRIPTION OF THIS TRACT IS INCLUDED ON PAGES 1 AND 2 OF THIS DOCUMENT.



07/20/2022

Parkhill
Parkhill.com
TBPELS FIRM REGISTRATION NO. 10194091

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-3 – LAND OWNERSHIP MAP AND LIST

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

ATTACHMENT I-3 – LAND OWNERSHIP MAP AND LIST

TABLE OF CONTENTS

Land Ownership List……I-3-1

FIGURES

FIGURE I-3.1 – LAND OWNERSHIP MAP

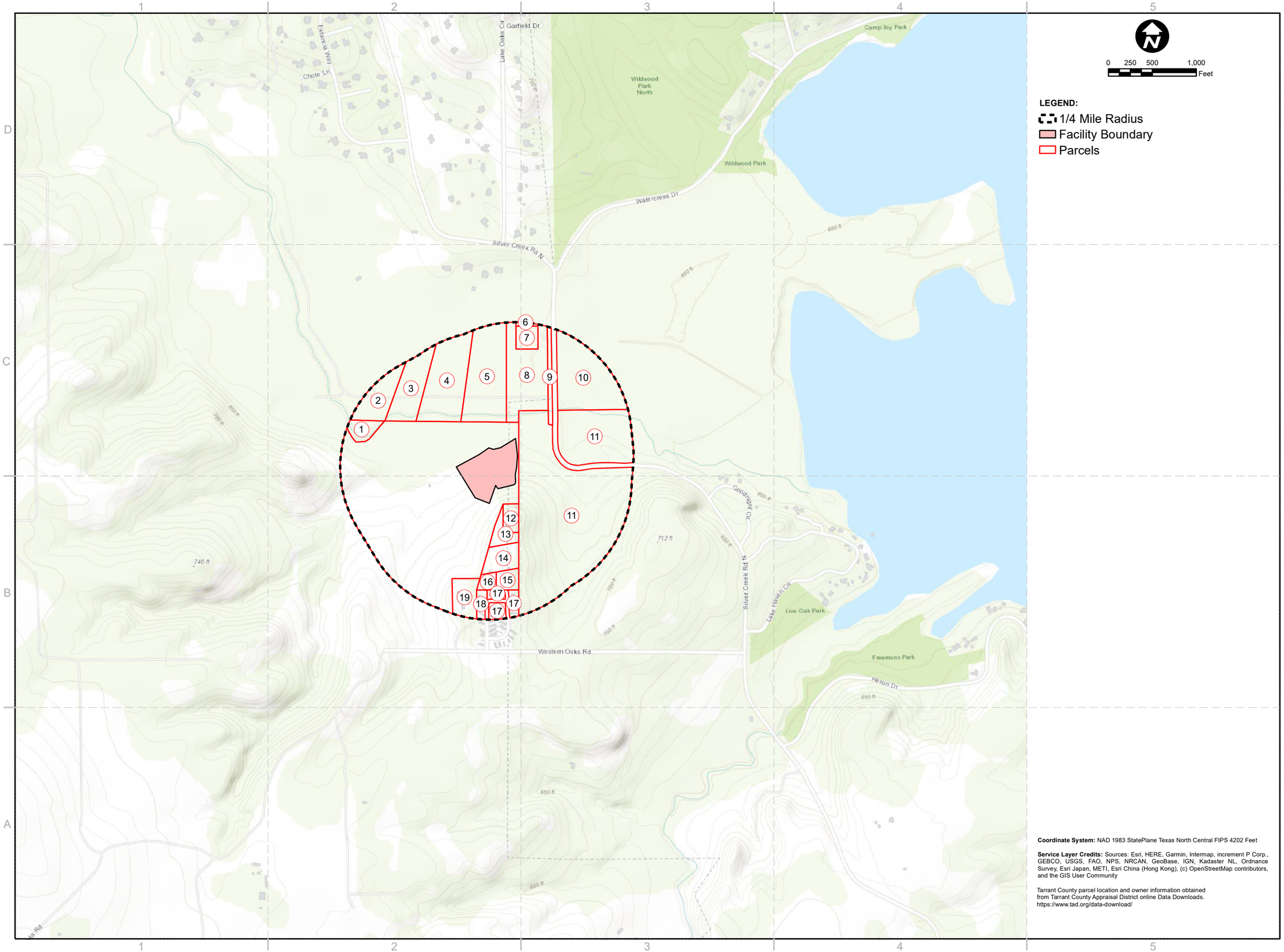
3/1/2023

Frank E Pugsley, P.E.

LAND OWNERSHIP LIST

Property ownership information obtained from Tarrant Central Appraisal District on November 21, 2022. Refer to Figure I-3.1 - Land Ownership Map, for location of the parcel corresponding to the MAP ID number.

MAP ID	OWNER NAME	OWNER ADDRESS	CITY	STATE	ZIP
1	LAVENDER, KEVIN	4460 BETHEL RD	WEATHERFORD	TEXAS	76087
2	LAVENDER, KEVIN	4460 BETHEL RD	WEATHERFORD	TEXAS	76087
3	ULRICH, YVONNE	3925 SILVER CREEK RD	FORT WORTH	TEXAS	76108
4	YOUNGBLOOD, KEVIN	3901 SILVER CREEK RD	FORT WORTH	TEXAS	76108
5	FAMILY TRUST OF WALLY D SCHWAR	3851 SILVER CREEK RD	FORT WORTH	TEXAS	76108
6	TOTAL E&P USA REAL ESTATE LLC	PO BOX 17180	FORT WORTH	TEXAS	76102
7	TOTAL E&P USA REAL ESTATE LLC	PO BOX 17180	FORT WORTH	TEXAS	76102
8	OMNI QUEST VENTURES INC	306 W 7TH ST STE 701	FORT WORTH	TEXAS	76102
9	ONCOR ELECTRIC DELIVERY CO LLC	PO BOX 139100	DALLAS	TEXAS	75313
10	FORT WORTH, CITY OF	200 TEXAS ST	FORT WORTH	TEXAS	76102
11	FORT WORTH, CITY OF	200 TEXAS ST	FORT WORTH	TEXAS	76102
12	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
13	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
14	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
15	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
16	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
17	THE BBQ RANCH INC	10250 WESTERN OAKS RD	FORT WORTH	TEXAS	76108
18	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
19	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126
20	SILVER CREEK RV RESORT LLC	14531 HIGHWAY 37 SOUTH	FORT WORTH	TEXAS	76126



Coordinate System: NAD 1983 StatePlane Texas North Central FIPS 4202 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Tarrant County parcel location and owner information obtained from Tarrant County Appraisal District online Data Downloads. https://www.tad.org/data-download/

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TCEQ MSW REGISTRATION NO. TBD
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

LAND OWNERSHIP MAP

FIGURE I-3.1

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-4 – GENERAL MAPS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

ATTACHMENT I-4 – GENERAL MAPS

TABLE OF CONTENTS

FIGURES

FIGURE I-4.1 – GENERAL LOCATION MAP

FIGURE I-4.2 – LAND USE WITHIN 1 MILE

FIGURE I-4.3 – WATER WELLS, SPRINGS AND SURFACE WATERS WITHIN 1 MILE

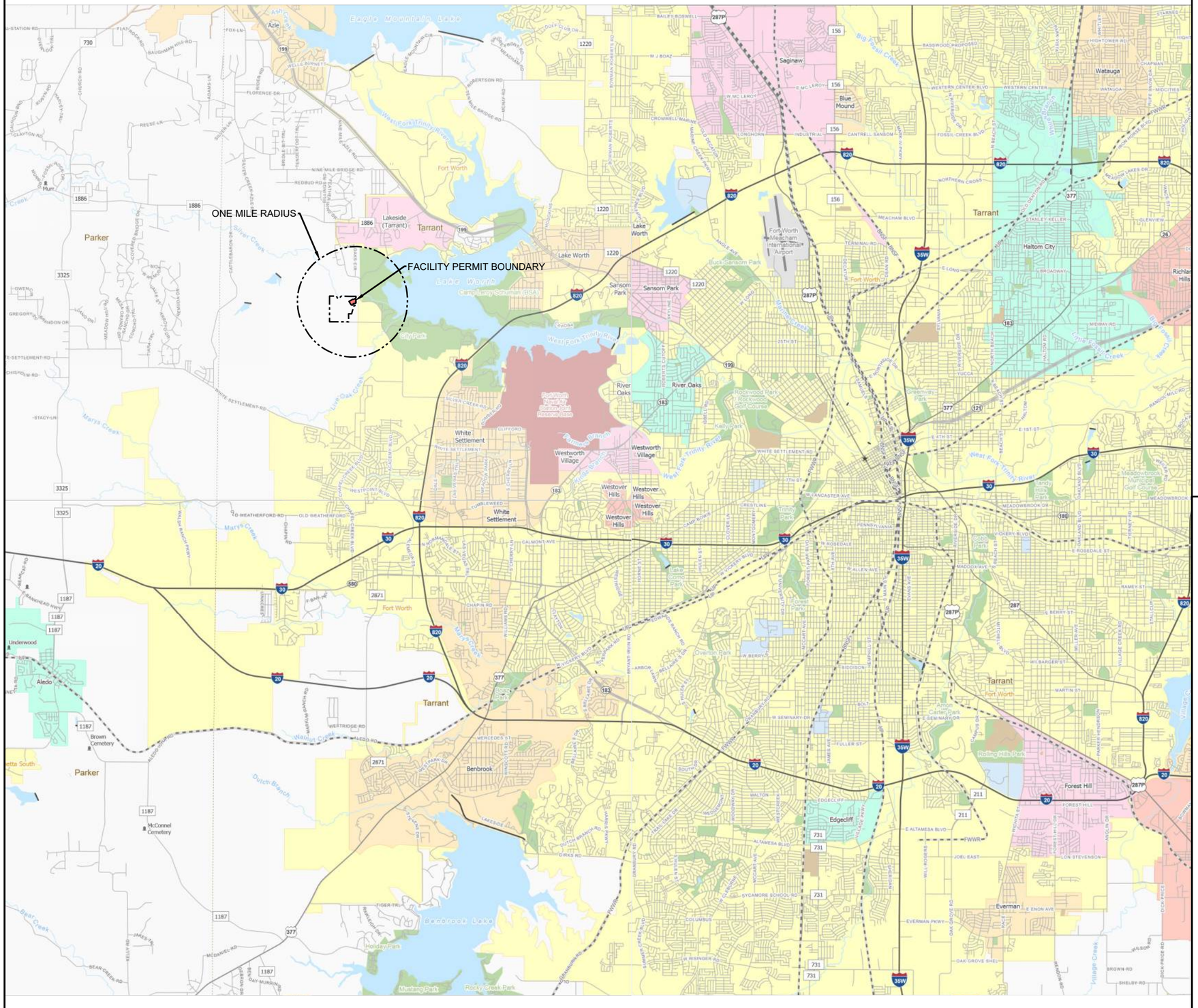
FIGURE I-4.4 – GENERAL TOPOGRAPHIC MAP

FIGURE I-4.5 – ACCESS ROUTE MAP

FIGURE I-4.6 – PREVAILING WIND DIRECTION AND WIND ROSE

3/1/2023

Frank E Pugsley, P.E.



N

0 1 2

SCALE IN MILES

NOTES:

1. SITE IS LOCATED AT:
   LAT: N 32° 48' 1.11"
   LONG: W 97° 30' 32.42"
2. SITE IS LOCATED APPROXIMATELY 2.5 MILES NORTHWEST OF THE INTERSECTION OF IH 820 AND SILVER CREEK ROAD IN FORTH WORTH, TEXAS.

LEGEND

PROPERTY BOUNDARY

FACILITY PERMIT BOUNDARY

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC
BAP KENNOR RECYCLING FACILITY
P.O. BOX 22790
HOUSTON, TX 77227

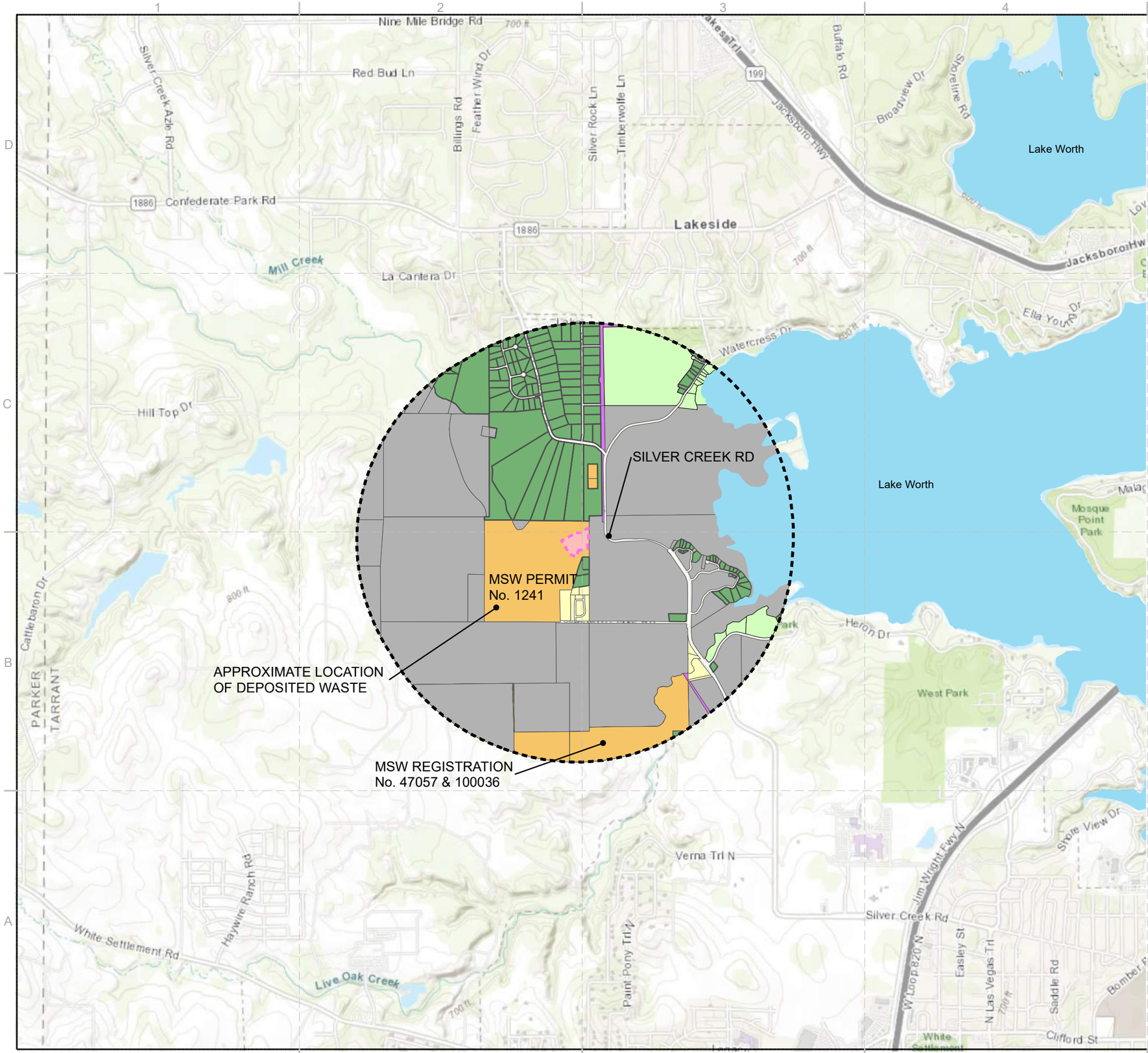
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

GENERAL LOCATION MAP

FIGURE I-4.1

FILE NAME: A:\2021\1604.2103_DSGN\01_DWG\050_CIVIL\02_CONTENTIFIG\I-4.1_Gen-Loc-Map.dwg LAYOUT NAME: FIGURE I-4.1 PRINTED: Thursday, March 16, 2023 - 10:52am USER: afranklin



0 625 1,250 2,500 Feet

LEGEND:

- 1-Mile Radius
- Facility Boundary
- Property Boundary
- Lake Worth
- Commercial
- Industrial
- Open Space
- Recreational
- Residential
- Utility

NOTE:
1. WASTE DISPOSAL ACTIVITIES HAVE BEEN CONDUCTED AT THE PROPERTY IN ASSOCIATION WITH MSW PERMIT No. 1241. THE APPROXIMATE LOCATION OF DEPOSITED WASTE IS SHOWN.
2. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Coordinate System: NAD 1983 StatePlane Texas North Central FIPS 4202 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Tarrant County parcel location and land use information obtained from Tarrant County Appraisal District online Data Downloads. https://www.tad.org/data-download/

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

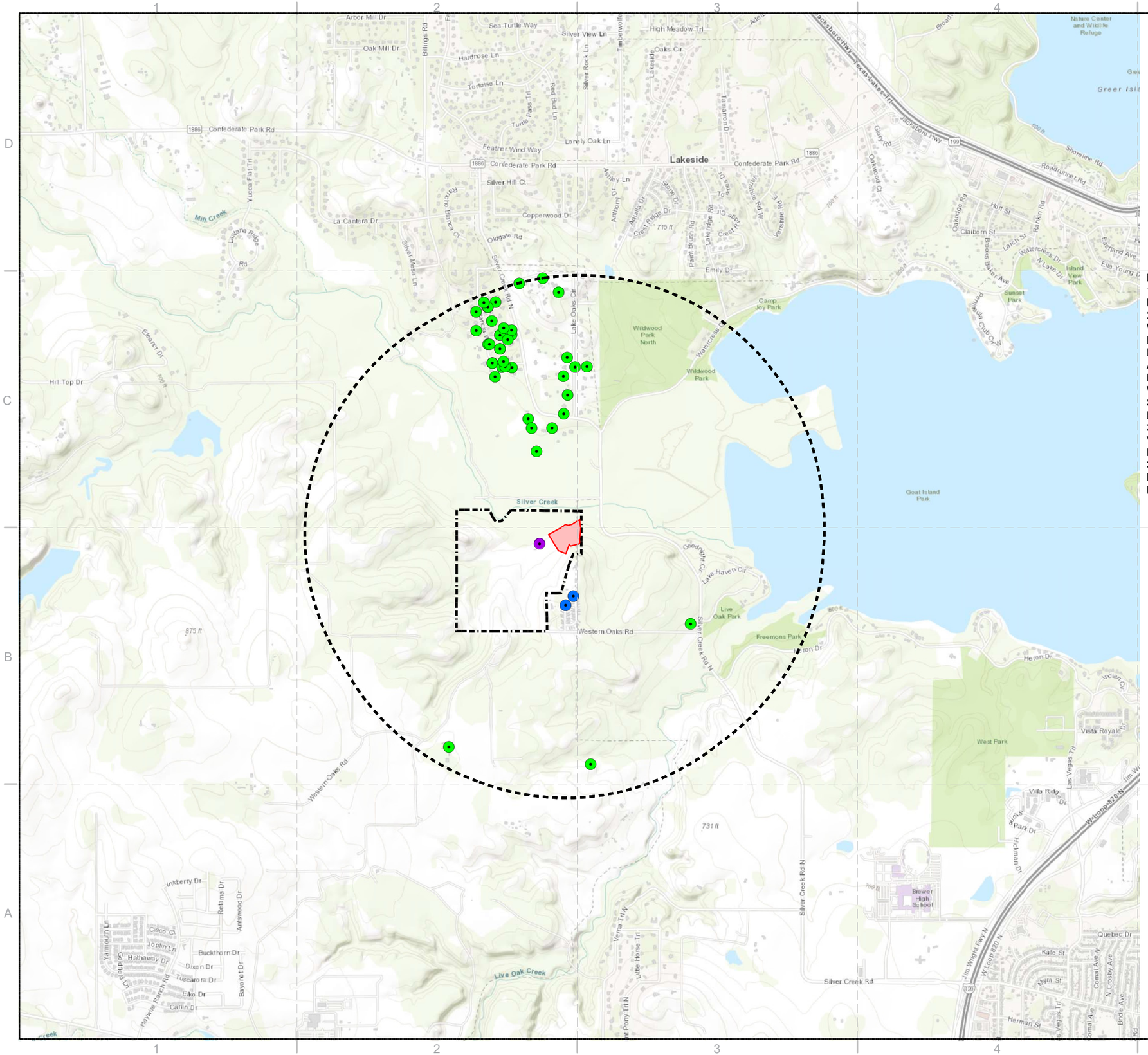
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

LAND USE WITHIN 1 MILE

FIGURE I-4.2



0 500 1,000 2,000 Feet

LEGEND:

- 1-Mile Radius
- Facility Boundary
- On-Site Well
- Submitted Driller Report
- Groundwater Well
- Property Boundary

NOTES:

1. THERE ARE NO KNOWN NATURAL SPRINGS LOCATED WITHIN 1 MILE OF THE PROPERTY.
2. WELL REPORT #151213 FROM THE TEXAS WATER DEVELOPMENT BOARD'S SUBMITTED DRILLER'S REPORT DATABASE WAS REMOVED FROM THIS FIGURE. THE COORDINATES AND ADDRESS WITHIN THE DATABASE DO NOT MATCH. THE ADDRESS OF THE WELL, 10995 WESTERN OAKS RD, IS APPROXIMATELY 1-MILE SOUTH-SOUTHEAST OF THE PROPOSED PERMITTED PROPERTY.
3. ON-SITE WELL OBSERVED DURING SITE VISIT. NO WELL REPORT ON TEXAS WATER DEVELOPMENT BOARD'S WELL DATABASE.
3. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Water well locations obtained from:
Texas Water Development Board GIS Data
(http://www.twdb.texas.gov/mapping/gisdata.asp). Well locations updated nightly.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

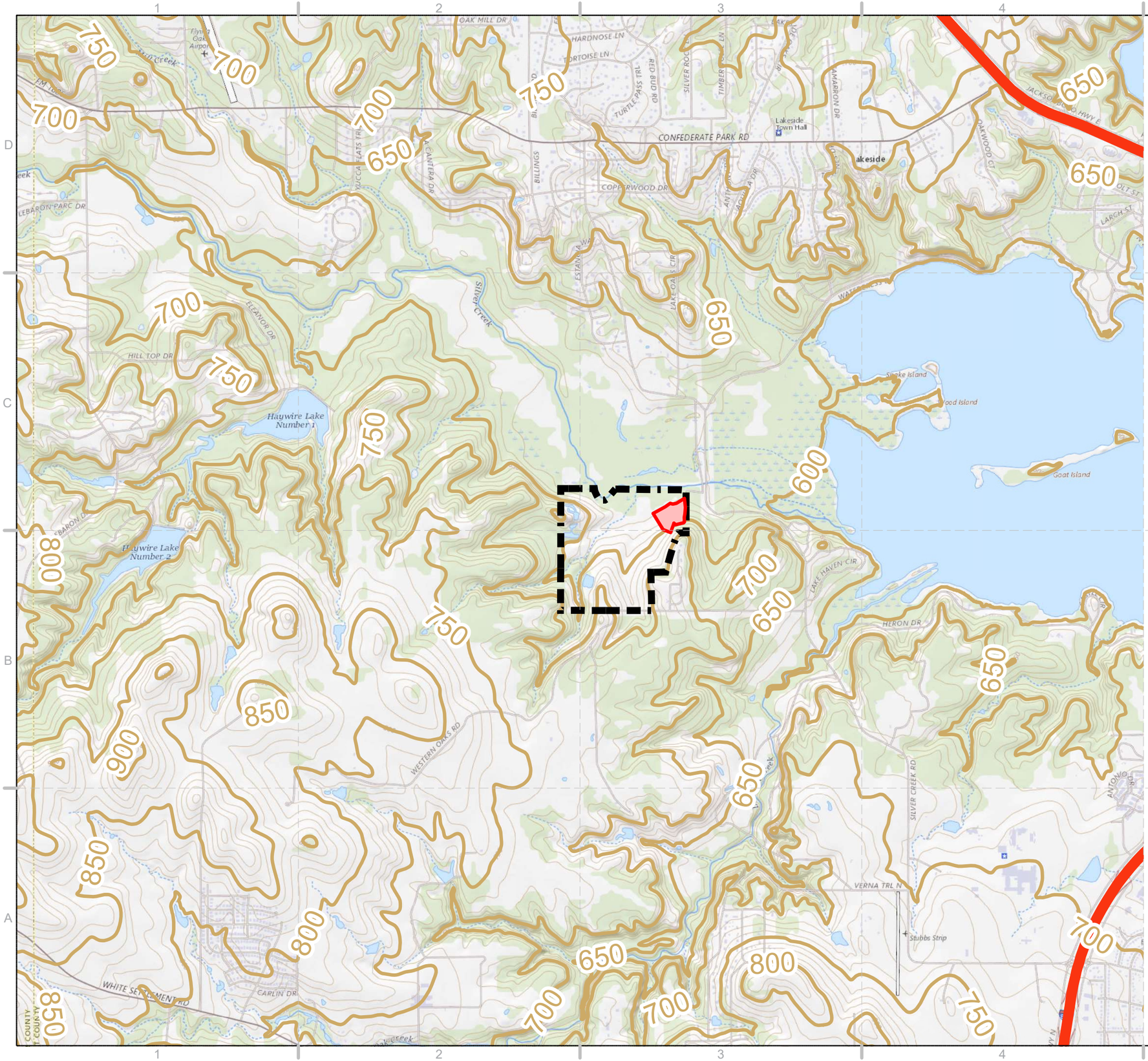
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

WATER WELLS, SPRINGS, AND SURFACE WATERS WITHIN 1 MILE

FIGURE I-4.3

FILE NAME: A:\2021\1604.2\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_I-4.3_Well_Springs_Location_Map_v1.2.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 21, 2022 - 2:06:00 PM USER: afranklin



0 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- Highway
- USGS Contour

NOTES:
1. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2022.

USGS 7.5 X 7.5 Minute Quad Map

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

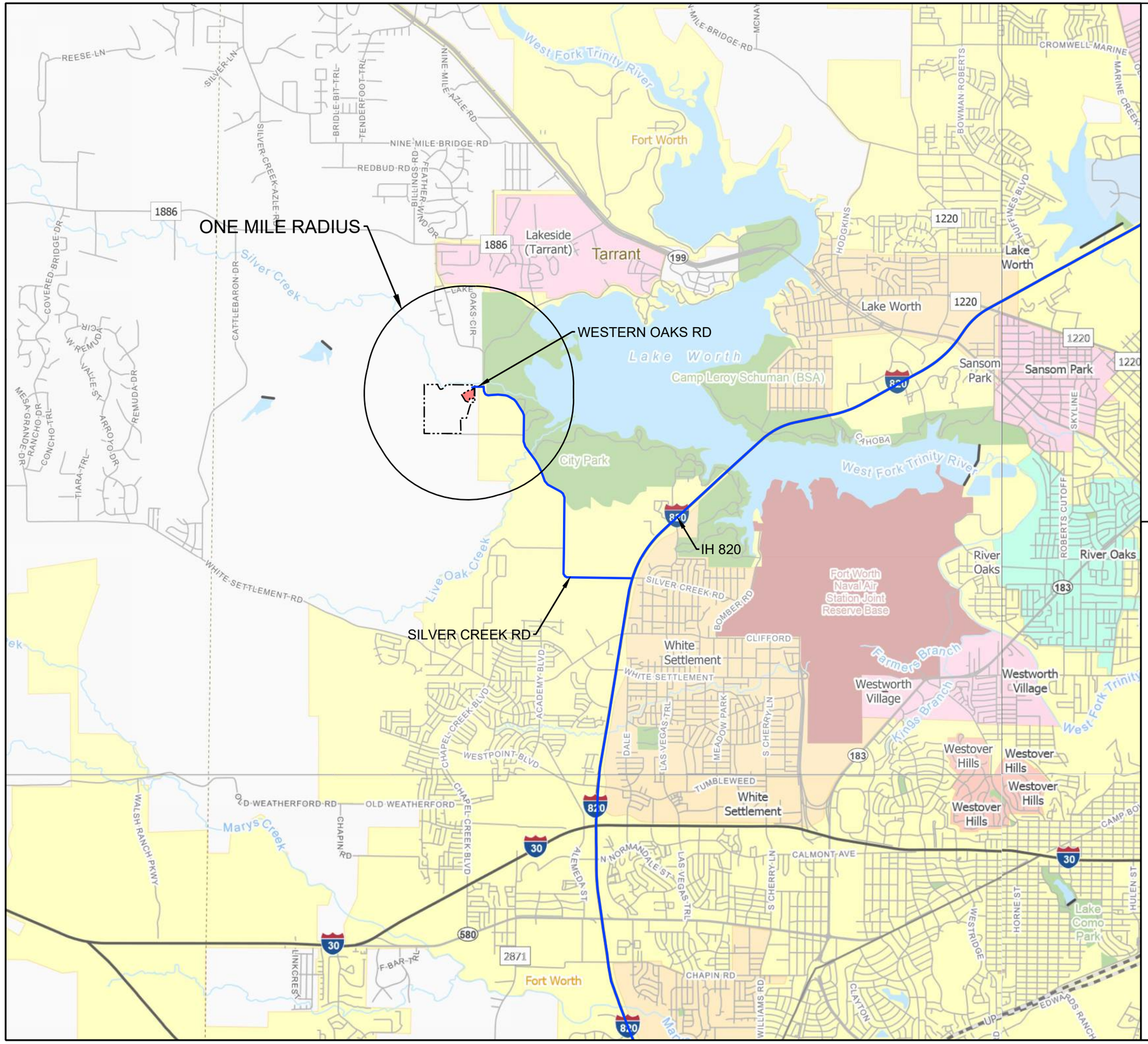
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

GENERAL TOPOGRAPHIC MAP

FIGURE I-4.4

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure I-4.4_General_Topographic_Map_v12.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 1:31:57 PM USER: afranklin



N

0 0.5 1

SCALE IN MILES

NOTES:

1. SITE IS LOCATED AT:
   LAT: N 32° 48' 1.11"
   LONG: W 97° 30' 32.42"
2. SITE IS LOCATED APPROXIMATELY 3.1 MILES NORTHWEST OF THE INTERSECTION OF INTERSTATE HIGHWAY 820 AND SILVER CREEK ROAD IN FORTH WORTH, TEXAS.
3. INTERSTATE HIGHWAY 820 SURFACE TYPE: CONCRETE
4. SILVER CREED ROAD SURFACE TYPE: ASPHALT
5. WESTERN OAKS ROAD SURFACE TYPE: CALICHE

Texas Department of Transportation

- Unincorporated Community
- County Seat
- Border Crossing
- Cemetery
- Cemetery (Inside City)
- Deep Draft Port
- Shallow Draft Port
- Railroad
- Dam
- River or Stream
- TXDOT District
- Lakes
- Education
- Military
- Airport Runway
- Airport
- Prison
- Parks and Other Public Land

LEGEND

- PROPERTY BOUNDARY
- FACILITY PERMIT BOUNDARY
- PRIMARY ACCESS ROUTE

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

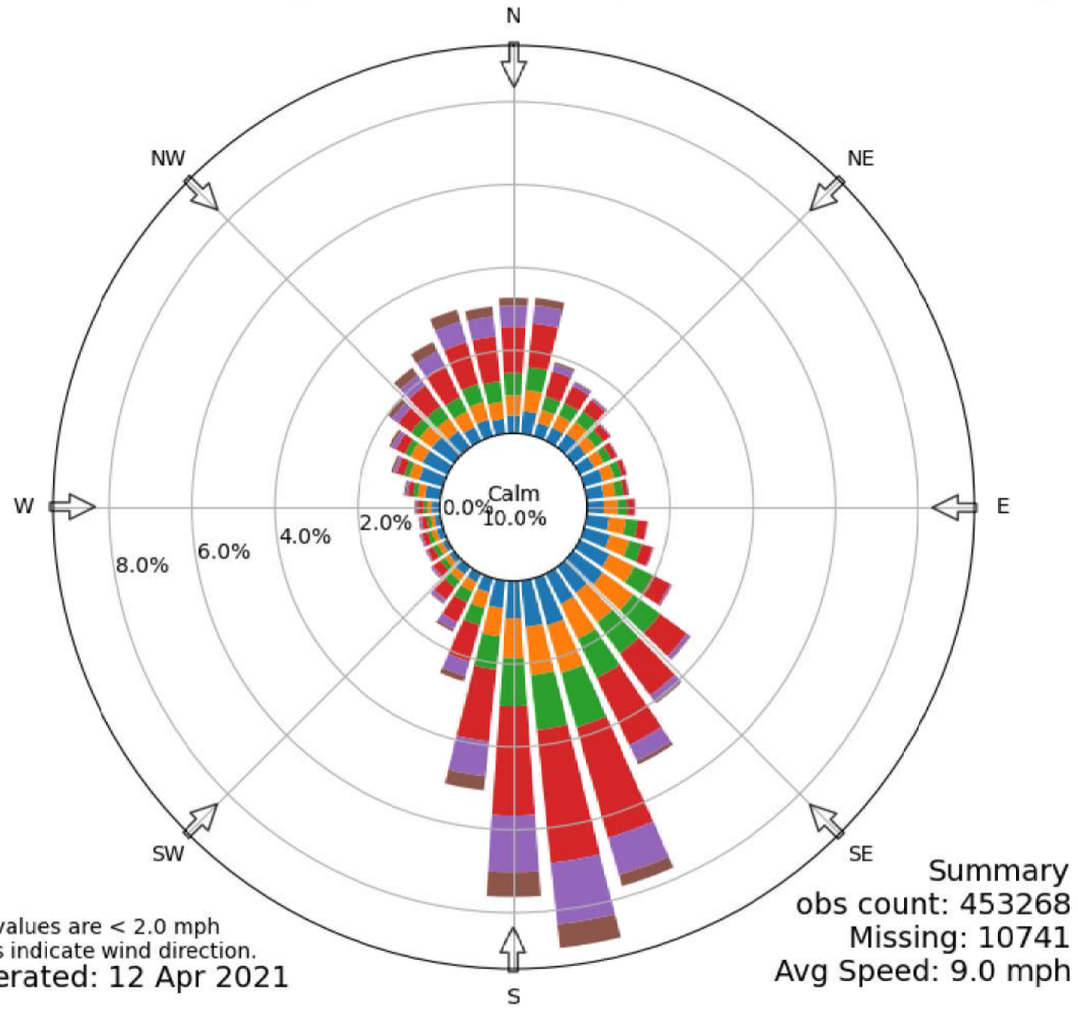
#	DATE	DESCRIPTION

ACCESS ROUTE MAP

FIGURE I-4.5

FILE NAME: A:\2021\1604.2103_DSGN\01_DWG\050_CIVIL\02_CONTENTIFIG.I.4-5_Detailed_Highway_Map.dwg LAYOUT NAME: FIGURE I-4.5 PRINTED: Monday, November 14, 2022 - 1:36pm USER: afranklin

[NFW] FORT WORTH NAS
Windrose Plot
Time Bounds: 01 Jan 1970 01:00 AM - 12 Apr 2021 02:52 AM America/Chicago



Calm values are < 2.0 mph
Arrows indicate wind direction.
Generated: 12 Apr 2021

Summary
obs count: 453268
Missing: 10741
Avg Speed: 9.0 mph

NOTES:
1. WINDROSE GENERATED FROM THE NEAREST AIRPORT, NAVAL AIR STATION JOINT RESERVE BASE FORTH WORTH.
2. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Windrose data was generated by the Iowa State University Iowa Environmental Mesonet.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
Houston, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

PREVAILING WIND DIRECTION AND WIND ROSE

FIGURE I-4.6

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-5 – VERIFICATION OF LEGAL STATUS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

John B. Scott
Secretary of State

Office of the Secretary of State

Certificate of Fact

The undersigned, as Secretary of State of Texas, does hereby certify that according to the most recent information in the records of this office the following persons are listed as managerial officials for BAP Kennor Landfill, LLC, a Domestic Limited Liability Company (LLC), file number 804128458.

Tom Noons
Managing Member

410 Pierce Street
Houston
Tx - 77002

Shane Shoulders
Managing Member

706 Valencia Street
Dallas
Tx - 75223

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on July 25, 2022.

John B. Scott
Secretary of State

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-6 – PROPERTY OWNER AFFIDAVIT

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

PROPERTY OWNER AFFIDAVIT

On this day, Thomas F. Noons, on belahlf of BAP Kennor Landfill, LLC, appeared before me, the undersigned notary public, and after I administered an oath to him upon his oath he said:

"My name is Thomas F. Noons, I am more than 21 years of age and capable of making this affidavit."

BAP Kennor Landfill, LLC, hereafter referred to as the property owner, acknowledges that:

- The State of Texas may hold BAP Kennor Landfill, LLC either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the Facility.
- BAP Kennor Landfill, LLC has a responsibility to file with the county deed records, an affidavit to the public advising that the land will be used for a solid waste facility, and to file a final recording upon completion of disposal operations and closure of the landfill units in accordance with Title 30 Texas Administrative Code (TAC) §330.19, relating to Deed Recordation.
- The site owner or operator and the State of Texas shall have access to the property described herein during the active life and post-closure care period, if required, after closure for the purpose of operation, inspection, and maintenance of the site.

Thomas F. Noons
Thomas F. Noons (Mar 3, 2023 21:11 CST)
PROPTERY OWNER SIGNATURE

Mar 3, 2023
DATE

Thomas F. Noons
NAME

Managing Member
TITLE

SUBSCRIBED AND SWORN to before me by Thomas F. Noons
PROPERTY OWNER

On this 3 day of March, 2023

My commission expires on the 10 day of August, 2024

Monica Sowards
NOTARY PUBLIC in and for

Collin County, Texas

MONICA MAXWELL SOWARDS
Notary Public, State of Texas
Comm. Expires 08-10-2024
Notary ID 132614660

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-7 – EVIDENCE OF COMPTENCY

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

EVIDENCE OF COMPETENCY (30 TAC §330.59(f))

30 TAC §330.59(f)(1)

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operators, submit a list of all Texas solid waste sites that the owner and operator have owned or operated within the last ten years.

Site Name	Site Type	Permit/Reg. No.	County	Dates of Operation
CRWC Type IV Landfill	IV	2278	Collin	09/21/2019 to present

30 TAC §330.59(f)(2)

Submit a list of all solid waste sites in all states, territories, or countries in which the owner and operator have a direct financial interest.

Site Name	Location	Dates of Operation	Regulatory Agency (Name & Address)
CRWC Type IV Landfill	McKinney, Texas	09/21/2019 to present	TCEQ

30 TAC §330.59(f)(3)

A licensed solid waste facility supervisor, as defined in 30 TAC Chapter 30, (relating to Occupational Licenses and Registrations), will be employed before commencing facility operation.

30 TAC §330.59(f)(4)

Provide the names of the principals and supervisors of the owner's and operator's organization.

Name	Affiliation	Other Organization
Tom Noons	Principal, BAP Kennor Landfill, LLC	Construction Recycling and Waste Corporation (CRWC)
Shane Shoulders	Principal, BAP Kennor Landfill, LLC	Construction Recycling and Waste Corporation (CRWC)
David Dugger	General Manager, BAP Kennor Landfill, LLC	Osttend Landfill, Ltd.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-8 – NOTICE OF APPOINTMENT

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

NOTICE OF APPOINTMENT

Engineer's Appointment

Mr. Chance Goodin, Manager
Municipal Solid Waste Permits Section, MC 124
Texas Commission on Environmental Quality
Building A Room 122
12100 Park 35 Circle
Austin, Texas 78753-1808

Re: BAP Kennor Recycling Facility – Notice of Appointment

Dear Mr. Goodin:

This is to advise you that officials of BAP Kennor Landfill, LLC duly appoint Parkhill as consulting and designing engineers in submitting a MSW Registration Application for the referenced solid waste processing facility.

Parkhill is an engineering firm employing processional engineers in good standing in accordance with State statutes, and the firm possesses experience in designing similar facilities. Frank E. Pugsley, P.E. with Parkhill is the Engineer of Record for this application. He is licensed with the State of Texas with more than 18 years of experience in environmental engineering.

I 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(s) who manage the system, or those 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.

We hereby authorize you to review and comment on reports, planning material, correspondence, and data on this Project as Parkhill may submit to you.

ATTEST:

By _____
David Shane Shoulders, Managing Partner
BAP Kennor Landfill, LLC

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-9 – FEE PAYMENT DOCUMENTATION

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000500316
Date: 07/29/2022 10:47 AM
Payment Method: CC - Authorization 0000004711
ePay Actor: SONIA SAMIR
Actor Email: ssamir@parkhill.com
IP: 12.233.245.139
TCEQ Amount: $150.00
Texas.gov Price: $153.63*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: SONIA SAMIR
Company: PARKHILL
Address: 10304 FORT STOCKTON PL, MCKINNEY, TX 75071
Phone: 817-709-6294

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
586868	MSW PERMIT/REGISTRATION/AMEND/MOD/TEMP AUTHORIZATIONS APPLICATION FEE		$100.00
586869	30 TAC 305.53B MWP NOTIFICATION FEE		$50.00
		TCEQ Amount:	$150.00

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT I-10 – Core Data Form

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 605967058		**RN 102000650**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy) XX/XX/2023

☐ New Customer ☐ Update to Customer Information ☒ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

BAP Kennor Landfill, LLC

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
804128458	32079909092		

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

PO Box 22790

City	Houston	**State**	TX	**ZIP**	77227	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	tnoons@baphouston.com

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(469) 591-1380		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Bajemit Tarrant West Landfill

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	3411 Silver Creek Road							
	City	Fort Worth	**State**	TX	**ZIP**	76108	**ZIP + 4**	
24. County	Tarrant							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	3.1 miles NW of intersection of IH-820 with IH-30, 1.5 miles S of FM-1886				
26. Nearest City			**State**	**Nearest ZIP Code**	
Fort Worth			TX	76108	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	32.80031		**28. Longitude (W) In Decimal:**	-97.50901	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
32	48	1.11	97	30	32.42

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4953		562212	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Landfilling and Recycling

34. Mailing Address:	**PO Box 22790**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77227**	**ZIP + 4**	

35. E-Mail Address:	**tnoons@baphouston.com**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
( ) -		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☒ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
1241				
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Frank E. Pugsley	**41. Title:**	Sector Director / Principal
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(469) 200-7384		( ) -	Fpugsley@parkhill.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	BAP Kennor Landfill, LLC	**Job Title:**	Managing Partner
Name *(In Print):*	Thomas F. Noons	**Phone:**	713 828-1776
Signature:	Thomas F. Noons Thomas F. Noons (Mar 8, 2023 15:58 CST)	**Date:**	Mar 8, 2023

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART II

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

APPENDIX II-A – Existing Conditions Summary and Waste Acceptance Plan

Prepared for:

BAP Kennor Landfill, LLC

Mar 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX II-A – Existing Conditions Summary and Waste Acceptance Plan

TABLE OF CONTENTS

ACRONYMS AND DEFINITIONS 1
1. EXISTING CONDITIONS SUMMARY §330.61(a) 2
2. WASTE ACCEPTANCE PLAN §330.61(b) 3
2.1. Sources and Characteristics of Waste §330.61(b)(1) 3
2.2. Recycling Center Registration Qualification §330.61(b)(2) 3
3. GENERAL LOCATION MAPS §330.61(c) 4
4. FACILITY LAYOUT MAPS §330.61(d) 5
5. GENERAL TOPOGRAPHIC MAPS & AERIAL PHOTOGRAPHS §330.61(e) & (f) 6
6. LAND USE MAP §330.61(g) 7
7. IMPACT ON SURROUNDING AREA §330.61(h) 8
7.1. Local Zoning §330.61(h)(1) 8
7.2. Surrounding Land Use §330.61(h)(2) 8
7.3. Surrounding Growth Trends §330.61(h)(3) 9
7.4. Proximity to Residences & Others Listed in §330.61(c)(4) & (12) 9
7.5. Wells and Well Density within 500 ft §330.61(h)(5) 10
8. TRANSPORTATION §330.61(i) 11
8.1. Availability and Adequacy of Roads §330.61(i)(1) 11
8.2. Airport and FAA Notice §330.61(i)(5) & §330.545 11
9. GENERAL GEOLOGY §330.61(j)(1) 12
10. GROUNDWATER AND SURFACE WATER §330.61(k) 13
10.1. Groundwater §330.61(k)(1) 13

3/1/2023

Frank E Pugsley, P.E.

10.2. Surface Water §330.61(k)(2) 13
10.3. Stormwater Permit §330.61(k)(3) 13
11. OIL AND WATER WELLS §330.61(l) 15
11.1. Water Wells §330.61(l)(1) 15
11.2. Oil and Gas Wells §330.61(l)(2) 15
12. FLOODPLAINS AND WETLANDS §330.61(m), §330.547 & §330.553 16
13. ENDANGERED OR THREATENED SPECIES §330.61(n), §330.551 17
14. TEXAS HISTORICAL COMMISSION REVIEW §330.61(o) 18
15. COUNCIL OF GOVERNMENTS AND LOCAL GOVERNMENT REVIEW §330.61(p) 19
16. EASEMENTS AND BUFFER ZONES §330.543 20

TABLES

TABLE II-A.1 – SURROUNDING LAND USE SUMMARY 8
TABLE II-A.2 – POPULATION DATA 9

3/1/2023

Frank E Pugsley, P.E.

ACRONYMS AND DEFINITIONS

Ac - Acre

ETJ – Extraterritorial Jurisdiction

FAA – Federal Aviation Administration

MSW – Municipal Solid Waste

NCTCOG – North Central Texas Council of Governments

RRC – Texas Railroad Commission

THC – Texas Historical Commission

TAC – Texas Administrative Code

TCEQ – Texas Commission on Environmental Quality

TPDES – Texas Pollutant Discharge Elimination System

TWDB – Texas Water Development Board

TxDOT – Texas Department of Transportation

USDA – United States Department of Agriculture

USGS – United Stated Geological Survey

1. EXISTING CONDITIONS SUMMARY §330.61(a)

The BAP Kennor Recycling Facility (Facility) is located in western Tarrant County, on Silver Creek Road approximately 3.1 miles north west of the intersection of Silver Creek Road and Interstate 820. The property consists of 141.727 acres of land. The Recycling Facility Permit area is 6.613 acres. The Facility is located within the property of a permitted, currently inactive, Type IV landfill (MSW Permit No. 1241), and an Aggregate Production Operation. The recycling facility will be outside the existing landfilled waste.

A detailed discussion of site-specific conditions that may require special design considerations as set forth in 30 TAC §330.61(a), including impact on surrounding area, transportation, geology, soils, groundwater, surface water, abandoned oil and water wells, floodplains, wetlands, endangered or threatened species, and Texas Historical Commission (THC) review is included in Sections 7 - 14. As documented, there are no known existing site-specific conditions that require special design considerations or possible mitigation.

2. WASTE ACCEPTANCE PLAN §330.61(b)

2.1. Sources and Characteristics of Waste §330.61(b)(1)

The Facility may only accept materials authorized for a Type IV facility and deemed to be recyclable, generally characterized as inert and essentially insoluble recyclable material usually including, but not limited to, construction and demolition materials such as concrete, rock, brick, glass, dirt, wood, lumber, brush, metals, and certain plastics. Recyclable material may be accepted from residential, commercial, industrial, and municipal sources, however the only industrial materials which will be accepted are Class 3 non-hazardous industrial materials. Municipal solid waste facilities may not receive regulated hazardous waste. There are no anticipated limiting parameters for acceptable recyclable materials for the facility.

The facility may accept recyclable materials from Tarrant County, and surrounding counties i.e. Parker, Denton, Dallas, and Johnson counties. According to the Texas Demographic Center, the combined population of these counties in 2020 was estimated to be 5,958,750.

2.2. Recycling Center Registration Qualification §330.61(b)(2)

The Facility qualifies for a registration under 30 TAC §330.9(c), for a recycling facility established at a permitted MSW facility owned by the permittee.

3. GENERAL LOCATION MAPS §330.61(c)

General location maps are provided in Appendix II-B. These maps accurately show proximity to surrounding features as required in 30 TAC §330.61(c):

(1) the prevailing wind direction with a wind rose;

(2) all known water wells within 500 feet of the proposed permit boundary with the state well numbering system designation for Water Development Board "located wells";

(3) all structures and inhabitable buildings within 500 feet of the proposed facility;

(4) schools, licensed day-care facilities, churches, hospitals, cemeteries, ponds, lakes, and residential, commercial, and recreational areas within one mile of the facility;

(5) the location and surface type of all roads within one mile of the facility that will normally be used by the owner or operator for entering or leaving the facility;

(6) latitudes and longitudes;

(7) area streams;

(8) airports within six miles of the facility;

(9) the property boundary of the facility;

(10) drainage, pipeline, and utility easements within or adjacent to the facility;

(11) facility access control features; and

(12) archaeological sites, historical sites, and sites with exceptional aesthetic qualities adjacent to the facility.

4. FACILITY LAYOUT MAPS §330.61(d)

Facility layout maps are provided in Appendix II-C. These maps accurately show proximity to surrounding features and depict those items as required in 30 TAC §330.61(d).

(1) the outline of the units;

(2) general locations of main interior facility roadways;

(3) locations of monitor wells;

(4) locations of buildings;

(5) any other graphic representations or marginal explanatory notes necessary to communicate the proposed construction sequence of the facility;

(6) fencing;

(7) provisions for the maintenance of any natural windbreaks, such as greenbelts, where they will improve the appearance and operation of the facility and, where appropriate, plans for screening the facility from public view;

(8) all site entrance roads from public access roads; and

5. GENERAL TOPOGRAPHIC MAPS & AERIAL PHOTOGRAPHS §330.61(e) & (f)

The Unites States Geological Survey (USGS) General Topographic Map is provided in Appendix II-C, with topographic information derived from USGS 7.5-minute quadrangle sheets. The map shows the facility/permit boundary overlain on the USGS data, presented at a scale of 1-inch equals 2,000 feet as required in 30 TAC §330.61(e).

A series of aerial photographs are provided in Appendix II-C. In accordance with 30 TAC §330.61(f), this series of aerial photographs depicts the growth trends of the area within at least a 1-mile radius of the facility boundary.

6. LAND USE MAP §330.61(g)

The land use map is provided in Appendix II-C. In accordance with 30 TAC §330.61(g), the land use map includes the facility boundary and existing land uses (such as agricultural, residential, commercial etc). The locations of residences, commercial establishments, schools, licensed daycare facilities, churches, cemeteries, lakes, and recreational areas within one mile of the facility boundary are all included in this map. No known schools, day care facilities, or hospitals are located within one mile of the facility boundary.

7. IMPACT ON SURROUNDING AREA §330.61(h)

The Facility is expected to have no adverse impact on human health and the environment. There are no known schools, churches, hospitals, or sites having exceptional aesthetic qualities within one mile of the facility. The facility will be built on a property that has been previously disturbed by the landfill associated with MSW Permit No. 1241, and an aggregate production operation (AP0003656). The site is screened by terrain and vegetation to block the view of operations from the surrounding area as much as practical.

7.1. Local Zoning §330.61(h)(1)

The Facility property is located within the extraterritorial jurisdiction (ETJ) of the City of Fort Worth, in an unincorporated area of Tarrant county. No zoning requirements have been established for the property; therefore the site will not require approval as a nonconforming use nor a specific use permit for development.

7.2. Surrounding Land Use §330.61(h)(2)

The character of the surrounding land within one mile of the Facility, presented in Figure II-C.9 – Land Use Within One Mile, was determined by investigation of land use data obtained from the Tarrant County Appraisal District, review of aerial images, and driving observational surveys. The majority of the land within this radius is designated as open space (64%). Table II-A.1 summarizes the approximate acreage, and percentage of the area within the 1-mile radius, occupied by each land use (excluding area occupied by Lake Worth).

TABLE II-A.1 – SURROUNDING LAND USE SUMMARY

Land Use	Area (ac.)	Percentage of Total Area within 1 Mile of Site[1]
Residential	369	18%
Commercial	20	1%
Industrial	229	11%
Open Space	1340	64%
Recreational	117	6%
Utility	11	<1%

[1]Rounded to nearest whole number

Located approximately 2,900 feet south of the site is an industrial land use containing a large aggregate production surface mine, as well as MSW Registration No. 47057 (for a compost facility) and 100036 (for a recycling facility). The proposed Facility is generally compatible with the surrounding land use.

7.3. Surrounding Growth Trends §330.61(h)(3)

A review of satellite aerial imagery from the last 10 years found that major development within 5 miles of the Facility has generally been concentrated in an area south of the site, within the Fort Worth city limits. There was no discernible direction of major development.

According to the U.S. Census Bureau, the population of the City of Fort Worth increased by approximately 177,709 people from 2010 to 2020. The Texas Water Development Board's (TWDB) 2021 Region C Water Plan estimates an average growth rate of 1.11% for Tarrant County from 2020 to 2050. Table II-A.2 summarizes available population data for the City of Fort Worth and Tarrant County.

TABLE II-A.2 – POPULATION DATA

	Fort Worth[1]		Tarrant County[2]			
Year	2010	2020	2020	2030	2040	2050
Population	741,206	918,915	2,004,609	2,279,113	2,580,325	2,799,127

[1]According to U.S. Census Bureau 2020 and 2010 Census
[2]According to TWDB 2021 Region C Water Plan

7.4. Proximity to Residences & Others Listed in §330.61(c)(4) & (12)

A review of recent satellite aerial imagery found approximately 70 residences within 1-mile of the facility. The closest residence is located approximately 410 feet from the proposed facility boundary, on property that abuts the site property to the southeast.

A review of satellite aerial imagery from 2021 found two commercial establishments within 1-mile of the facility. Both commercial establishments are Recreational Vehicle (RV) Parks. The closest commercial establishment is located approximately 1,170 feet from the proposed facility boundary, on property that abuts the site property to the southeast.

According to the Texas Historic Commission's (THC) "Texas Historic Sites Atlas", there are two cemeteries within 1 mile of the Facility. The Isbell Cemetery is located on the adjacent property, approximately 2,580 feet to the west of the facility boundary. The Tannahill cemetery is located on the site property, approximately 1,680 feet to the west of the facility boundary. The locations of both cemeteries are shown on Figure II-C.9.

The Eldred W. Foster house, listed on the Federal Register of Historic Places, is located approximately 1 mile east of the site. The location of this historic structure is shown on Figure II-C.9.

7.5. Wells and Well Density within 500 ft §330.61(h)(5)

A review of the TWDB's water well records, and the Texas Railroad Commission's (RRC) oil and gas well records, found no known wells within 500 feet of the facility boundary. During site visits, however, a water wall was observed approximately 400 feet west of the facility permit boundary as shown on Figure I-4.3 – Water Wells, Springs, and Surface Waters within 1 Mile. The well provided water to a scalehouse used for quarry operations. The scalehouse has been abandoned, and the well is no longer in use.

8. TRANSPORTATION §330.61(i)

A Traffic Impact Analysis was conducted by Lee Engineering and is included in Appendix II-F. Access road traffic volume and projected traffic generation are provided in the Traffic Impact Analysis.

8.1. Availability and Adequacy of Roads §330.61(i)(1)

Facility access will be provided by a drive connecting the site to Silver Creek Road from the east side of the property. Silver Creek Road is a two-lane undivided road with an asphalt-paved surface without curbs. The Traffic Impact Analysis conducted by Lee Engineering indicates that Silver Creek Road provides adequate access to the proposed site, and no improvements are necessary to accommodate site traffic.

8.2. Airport and FAA Notice §330.61(i)(5) & §330.545

The proposed facility is not a municipal solid waste landfill unit, therefore analysis of the impact of the facility on airports and coordination with the Federal Aviation Administration (FAA) for compliance with airport location restrictions are not applicable.

9. GENERAL GEOLOGY §330.61(j)(1)

Tarrant county is located in an area designated as the East-Central Province of the Texas Coastal Plain. The site is located in the physiographic subdivision identified as the Western Cross Timbers. The Western Cross Timbers belt, which occupies the northwest quarter of Tarrant County, is generally characterized by steep hills, deep ravines, and is heavily forested with post and black-jack oak. Surficial geology in the area of the site consists of mainly Cretaceous sediments comprised of Paluxy sand and Walnut clay.

Local stratigraphy consists of Cretaceous-age sediments. Units present beneath the site (starting at ground surface) consists of early Cretaceous Paluxy formation (Kp), with deeper Glen Rose (Kgl) and Twin Mountains (Ktw) formations to a depth of approximately 690 feet below ground surface. Quaternary alluvium and terrace deposits overlie Cretaceous sediments in the stream valley immediately north of the Facility. In general, the Cretaceous sediments in this region consist of limestone, sands, silts, shales, clays, and some basal conglomerates, deposited as seas advanced and withdrew throughout the Cretaceous period in this area. These strata are the main water bearing layers which comprise the aquifers (i.e., Trinity and Woodbine). There is no surface evidence of recent faulting at the proposed site or surrounding area. Neither surface nor deep buried faults have been documented at the proposed site. No geotechnical sub-surface investigation were performed within the facility boundary. However, based on the geotechnical sub-surface investigation within the property boundary, natural soil type for the recycling facility is anticipated to be clay with some traces of calcium, lime and sandy soil.

10. GROUNDWATER AND SURFACE WATER §330.61(k)

10.1. Groundwater §330.61(k)(1)

The major regional aquifer supplying groundwater to this area of Tarrant County is identified as the Trinity Aquifer ("the Trinity") by the TWDB's GIS data website (https://www.twdb.texas.gov/mapping/gisdata.asp). The Trinity contains several distinct water-bearing units/formations, including the Antlers, Glen Rose, Paluxy, Twin Mountains and Travis Peak, comprised of limestone, sand, clay, gravel, and basal conglomerates. The combined saturated thickness of the Trinity ranges from 600 feet in North Texas to approximately 1,900 feet in Central Texas. In the vicinity of the Facility, the saturated thickness is estimated to be 690-700 feet. The shallower Paluxy formation, which is made up of fine sand, silt, and shale, crops out at the Facility, and is the source of groundwater in the local area. Wells completed within the Paluxy formation yield low to moderate quantities of water that exhibits high degrees of hardness (200 to 1,500 mg/L TDS). Groundwater within the Paluxy formation and greater Trinity aquifer, flows to the southeast at approximately 2 feet/year. The Trinity aquifer is one of the most highly used sources of groundwater in the state. No minor aquifer has been identified in the vicinity of the Facility. The closest minor aquifer is the Woodbine aquifer.

Groundwater at the Facility is encountered at an average of 600 feet elevation (between 10 feet and 70 feet below ground surface), and the general regional calculated groundwater flow direction is down-dip to the southeast. Immediately north of the Facility is Silver Creek, which may contribute small amounts of water to the Paluxy sands at the northern boundary of the site. This may cause depths to groundwater to be slightly shallower in this area.

10.2. Surface Water §330.61(k)(2)

Surface water at and near the site includes Silver Creek, abutting the property to the north, and Lake Worth, located approximately 3,500 feet to the east of the northeast corner of the property. As shown on Figure II-B.3, other nearby surface water includes Haywire Lakes 1 and 2, and Live Oak Creek.

Silver Creek flows generally from west to east, until it discharges to Lake Worth. All natural discharge from the property flows into Silver Creek, and ultimately to Lake Worth.

10.3. Stormwater Permit §330.61(k)(3)

The facility has been designed to prevent the discharge of pollutants into waters of the State of Texas or the United States as defined by the Texas Water Code and the Federal Clean Water Act, respectively. The BAP Kennor Recycling Facility will obtain appropriate coverage under the TPDES Industrial Multi-Sector General Permit No. TXR050000 for stormwater discharge associated with industrial activities. A signed statement certifying that appropriate coverage will be obtained is included

in Appendix II-E – TPDES Permit. A copy of the permit coverage authorization number, once issued, will be maintained with the site records.

11. OIL AND WATER WELLS §330.61(l)

11.1. Water Wells §330.61(l)(1)

According to the TWDB Groundwater Database, and as indicated on Figure I-4.3, there are no known existing or abandoned water wells situated within the property. As discussed in Section 7.5, 1 water well was discovered on the property during site visits. There are currently 2 known groundwater monitoring wells (associated with MSW Permit No. 1241) located within the property. A third well is identified in MSW Permit No. 1241 records, but it is believed to have been destroyed. No surface evidence of this well has been found. No wells are present within the recycling facility permit boundary.

11.2. Oil and Gas Wells §330.61(l)(2)

According to the RRC GIS data, and as indicated on Figure I-4.3, there are no known existing or abandoned crude oil or natural gas wells situated within the property.

12. FLOODPLAINS AND WETLANDS §330.61(m), §330.547 & §330.553

Facility storage and processing areas will be located outside the limits of the 100-year floodplain. No recyclable material processing or storage activities will occur within the 100-year floodplain.

The U.S. Fish and Wildlife Service's National Wetlands Inventory identifies wetlands based on analysis of visible hydrology, geography, and vegetation from high-altitude imagery. The Inventory identified on-site wetlands as shown on Figure II-B.3A – Site Wetlands Map. All identified wetlands are outside of the proposed facility boundary, and no material storage or processing will occur within any known wetland area.

Further, construction and operation of the Facility will not:

- Cause or contribute to violations of any applicable state water quality standard.
- Violate any applicable toxic effluent standard or prohibition under the Clean Water Act, §307.
- Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973.
- Violate any requirement under the Marine Protections, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary.

13. ENDANGERED OR THREATENED SPECIES §330.61(n), §330.551

Construction of the Facility and the operation of the 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.

Submission of the Endangered Species Act compliance demonstration to determine whether the facility is in the range of endangered or threatened species as listed under 30 TAC §330.61(n)(2) is only required for landfill applications, and therefore is not applicable to this application. No biological assessment has been prepared by a qualified biologist to determine the effect of the facility on the endangered or threatened species in accordance with standard procedures of the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department to determine the effect of the facility on the endangered or threatened species.

14. TEXAS HISTORICAL COMMISSION REVIEW §330.61(o)

Consistent with 30 TAC §330.61(o), a request was submitted for a review letter from the THC documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. Correspondence with the THC is included in Attachment II-D.1 – THC Correspondence.

15. COUNCIL OF GOVERNMENTS AND LOCAL GOVERNMENT REVIEW §330.61(p)

Consistent with 30 TAC §330.61(p), Parts I and II of the application were submitted for review to the North Central Texas Council of Governments (NCTCOG) to determine conformance with regional solid waste plans. The Facility is not located within any city's limits, therefore review by an appropriate local government is not required. Documentation of coordination with the NCTCOG is provided in Attachment II-D.2 – Council of Governments Review.

16. EASEMENTS AND BUFFER ZONES §330.543

No recyclable material unloading, storage, or processing will occur within any easement, buffer zone or right of way, or within 25 feet of the centerline of any utility or pipeline easement. There are no known pipelines or utility easements that cross the 141.727-acre site.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

APPENDIX II-B – GENERAL LOCATION MAPS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX II-B – GENERAL LOCATION MAPS

TABLE OF CONTENTS

FIGURE II-B.1 – GENERAL LOCATION MAP

FIGURE II-B.2 – WATER WELLS AND STRUCTURES WITHIN 500 FEET

FIGURE II-B.3 – SURFACE WATERS AND AREA STREAMS MAP

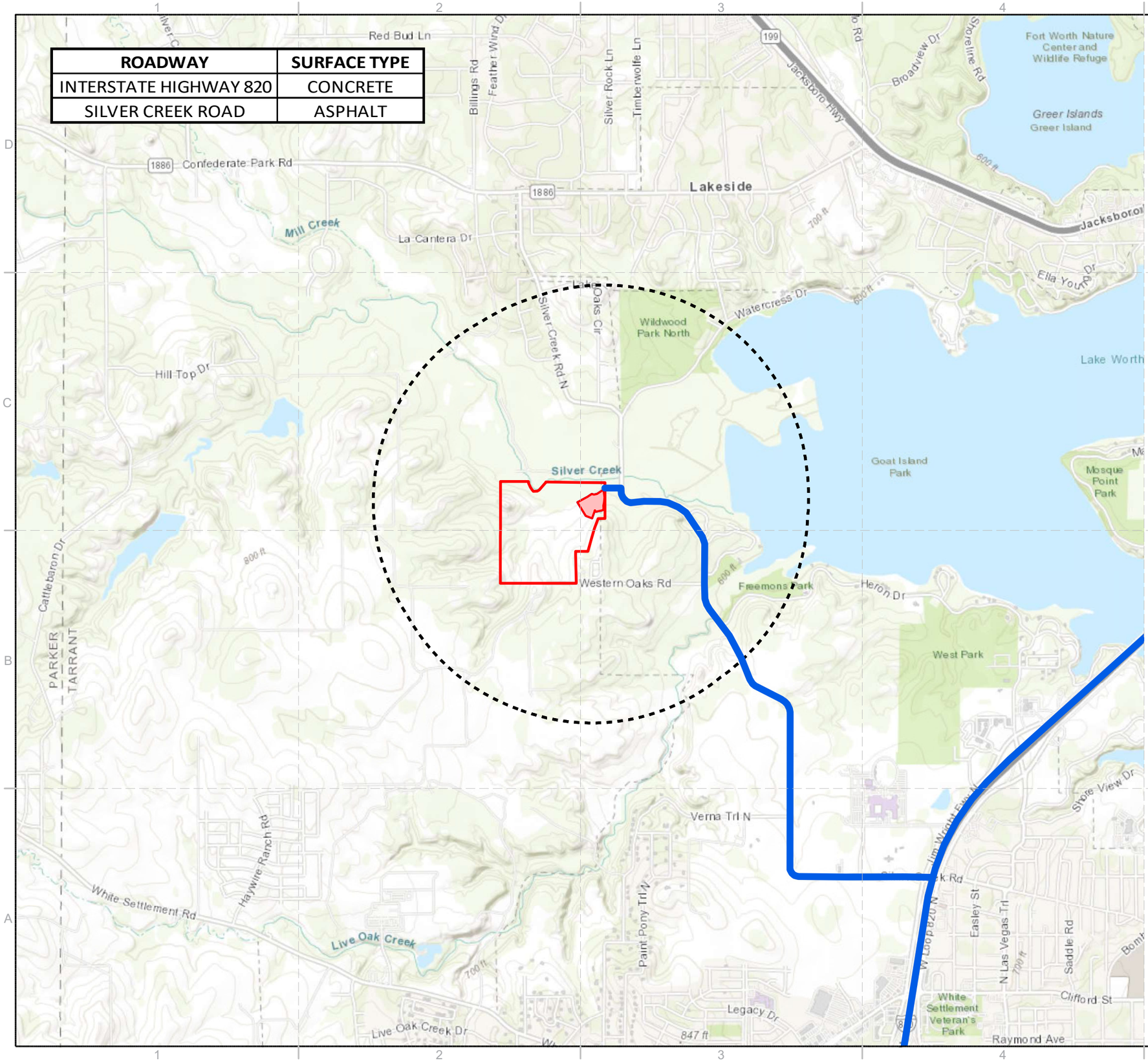
FIGURE II-B.4 – FAA AIRPORT LOCATION MAP

FIGURE II-B.5 – PREVAILING WIND DIRECTION AND WIND ROSE

3/1/2023

Frank E Pugsley, P.E.

ROADWAY	SURFACE TYPE
INTERSTATE HIGHWAY 820	CONCRETE
SILVER CREEK ROAD	ASPHALT



0 625 1,250 2,500 Feet

LEGEND:

- Facility Boundary
- 1-Mile Radius
- Property Boundary
- Access Route

NOTE:
1. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"
2. ACCESS TO THE FACILITY WILL BE CONTROLLED BY A COMBINATION OF NATURAL BARRIERS AND PERIMETER FENCE, WITH A LOCKABLE GATE AT THE FACILITY ENTRANCE, AS DESCRIBED IN PART IV, SECTION 12.
3. THERE ARE NO KNOWN DRAINAGE, PIPELINE, OR UTILITY EASEMENTS WITHIN OR ADJACENT TO THE PROPERTY.

Coordinate System: NAD 1983 StatePlane Texas North Central FIPS 4202 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Cemetary and Historic Site data obtained from the Texas Historical Sites Atlas maintained by the Texas Historical Commission on 1/4/2022.
https://atlas.thc.state.tx./Data/GISData

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

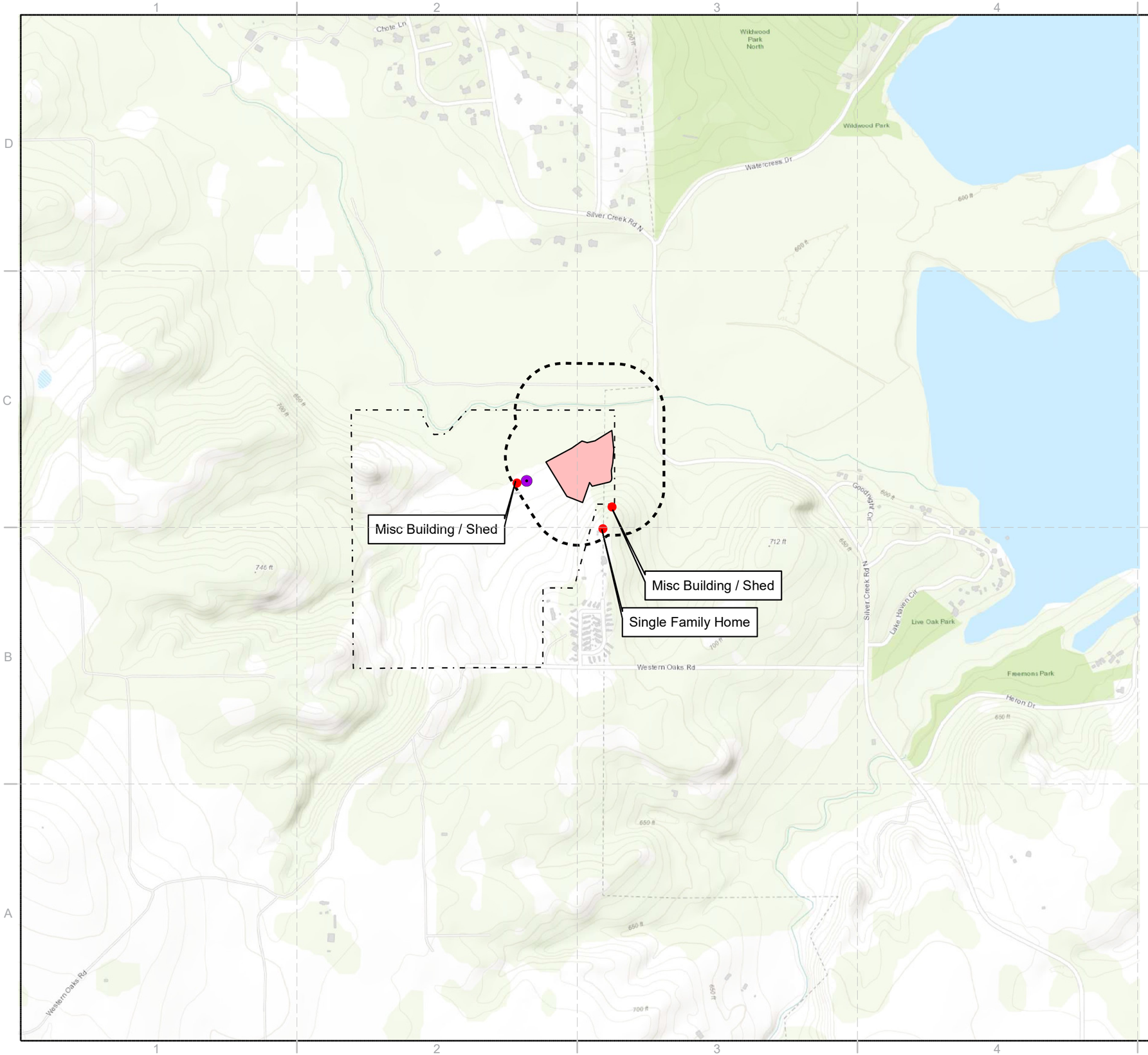
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

GENERAL LOCATION MAP

FIGURE II-B.1

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-B.1_Gen_Loc_Map_v1.1.mxd LAYOUT NAME: Layers PRINTED: Monday, November 14, 2022 - 1:47:17 PM USER: afranklin



0 250 500 1,000 Feet

LEGEND:

- Structures
- On-Site Well
- Facility Boundary
- Property Boundary
- 500 Foot Radius

NOTES:
1. THE ON-SITE WELL OBSERVED DURING SITE VISIT WAS NOT FOUND ON THE TEXAS WATER DEVELOPMENT BOARD'S DATABASE
2. ONE SINGLE FAMILY HOME AND TWO MISCELLANEOUS SHEDS OR BUILDINGS EXIST WITHIN 500 FEET OF THE PERMIT BOUNDARY.

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Structures and inhabitable buildings identified through Google Earth and Google Map imagery.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

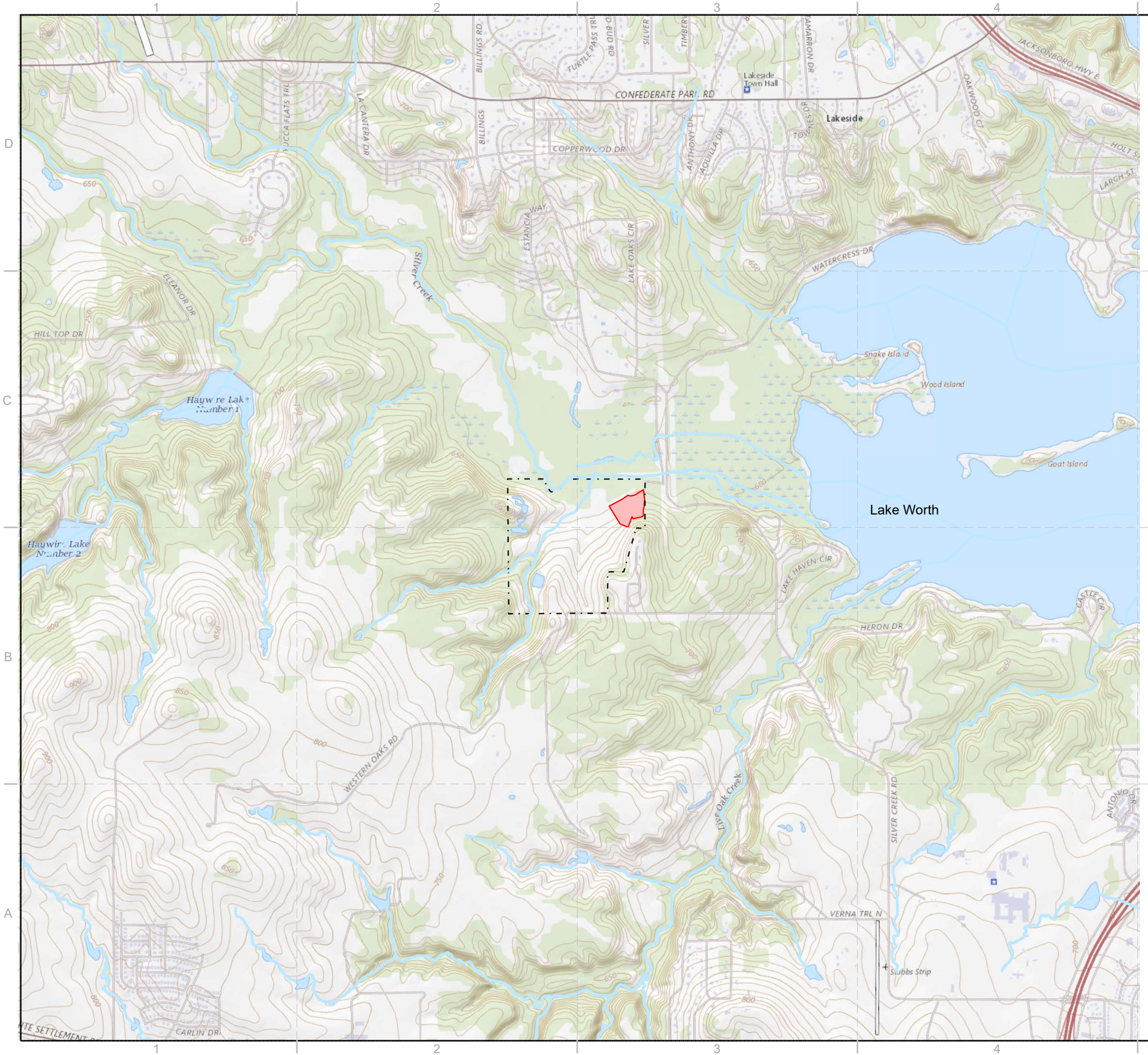
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

WATER WELLS AND STRUCTURES WITHIN 500 FEET

FIGURE II-B.2



0 500 1,000 2,000 Feet

LEGEND:

- Streams
- Property Boundary
- Facility Boundary

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2022.

FILE NAME: A:\2021\1604.21\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-B.3_Surface_Waters_&_Streams_Map_v1.1.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 2:16:20 PM USER: afranklin

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

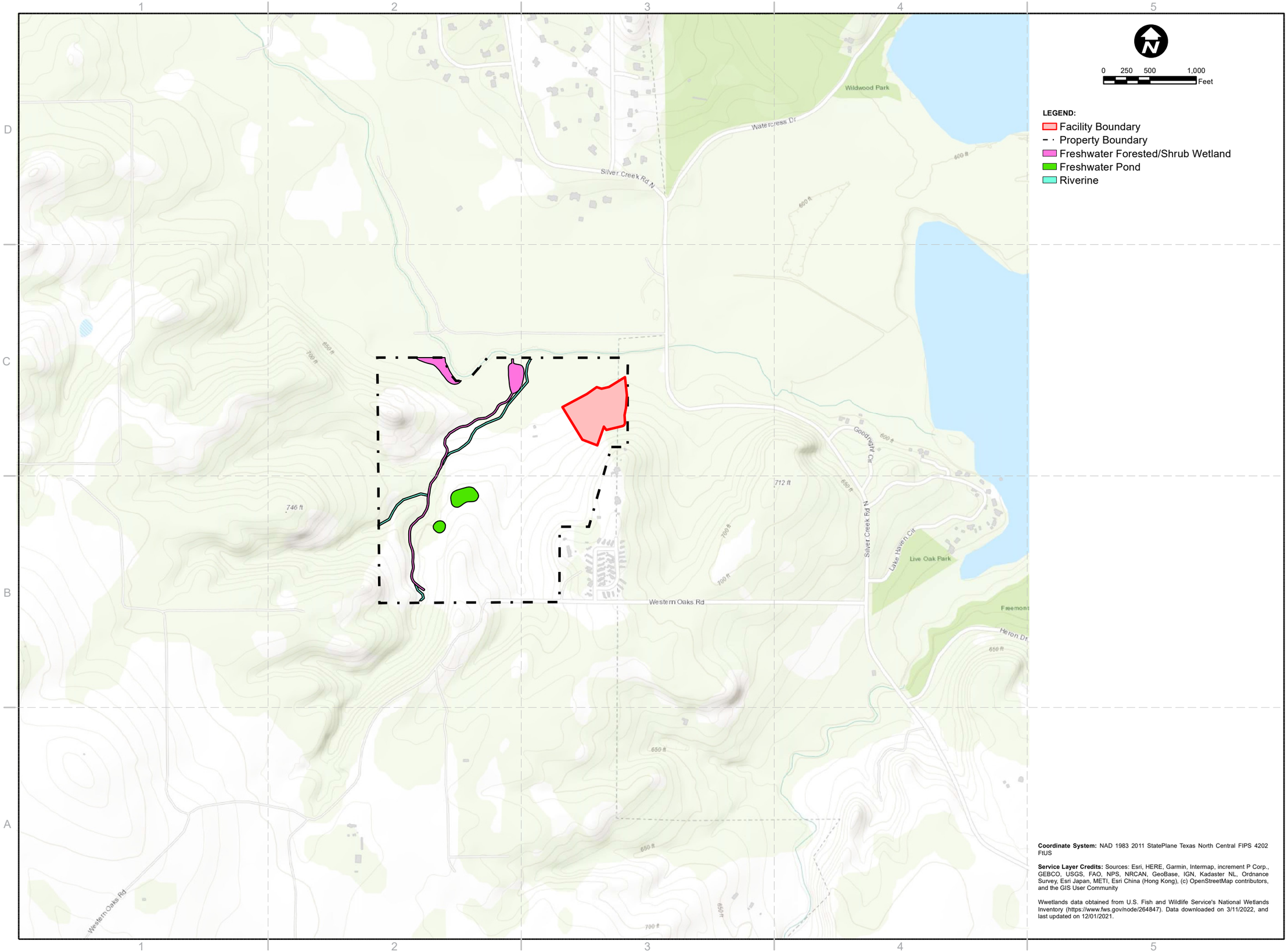
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

SURFACE WATERS AND AREA STREAMS MAP

FIGURE II-B.3



0 250 500 1,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Wwetlands data obtained from U.S. Fish and Wildlife Service's National Wetlands Inventory (https://www.fws.gov/node/264847). Data downloaded on 3/11/2022, and last updated on 12/01/2021.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

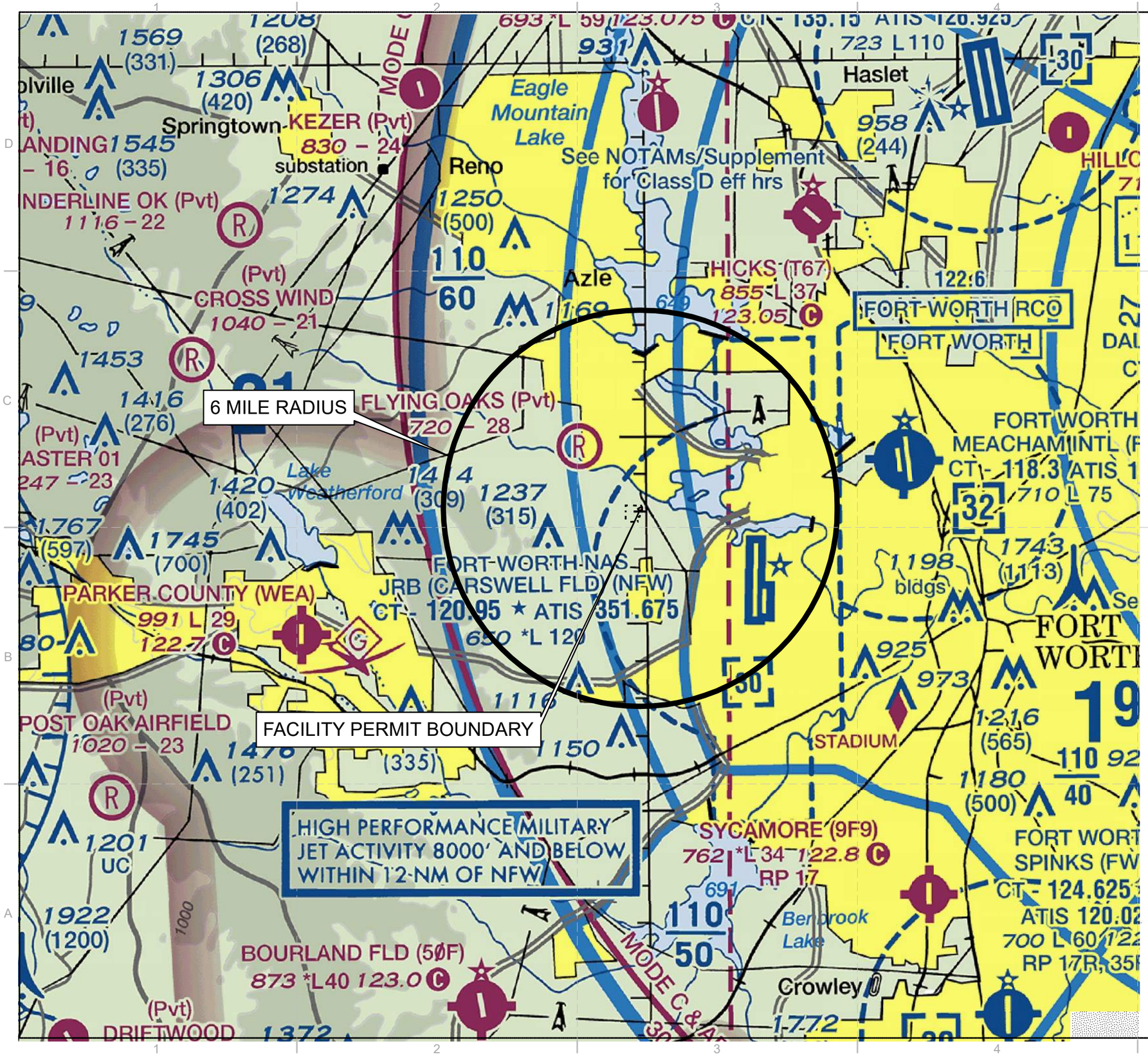
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

SITE WETLANDS MAP

FIGURE II-B.3A



0 1 2 4 Miles

LEGEND:

- Property Boundary
- Facility Boundary
- Six Mile Radius

AIRPORTS

Other than hard-surfaced runways
Seaplane Base
Hard-surfaced runways 1500 ft. to 8069 ft. in length
Hard-surfaced runways greater than 8069 ft. or some multiple runways less than 8069 ft.
Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, or VORTAC location.
All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

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.
Heliport Selected
Unverified
Abandoned - paved having landmark value, 3000 ft. or greater
Ultralight Flight Park Selected

OBSTRUCTIONS

1000 ft and higher AGL
Above 200 ft & below 1000 ft AGL (above 299 ft AGL in urban area)
Wind Turbine
Group Obstruction
Wind Turbine Farm
2894' UC
Elevation of the top above mean sea level
Height above ground
2049 (1149) UC
Under construction or reported; position and elevation unverified
Obstruction with high-intensity lights; may operate part-time
NOTICE: Guy wires may extend outward from structures.

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

FAA SECTIONAL AERONAUTICAL CHART FORTH WORTH, PREPARED BY THE FEDERAL AVIATION ADMINISTRATION.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

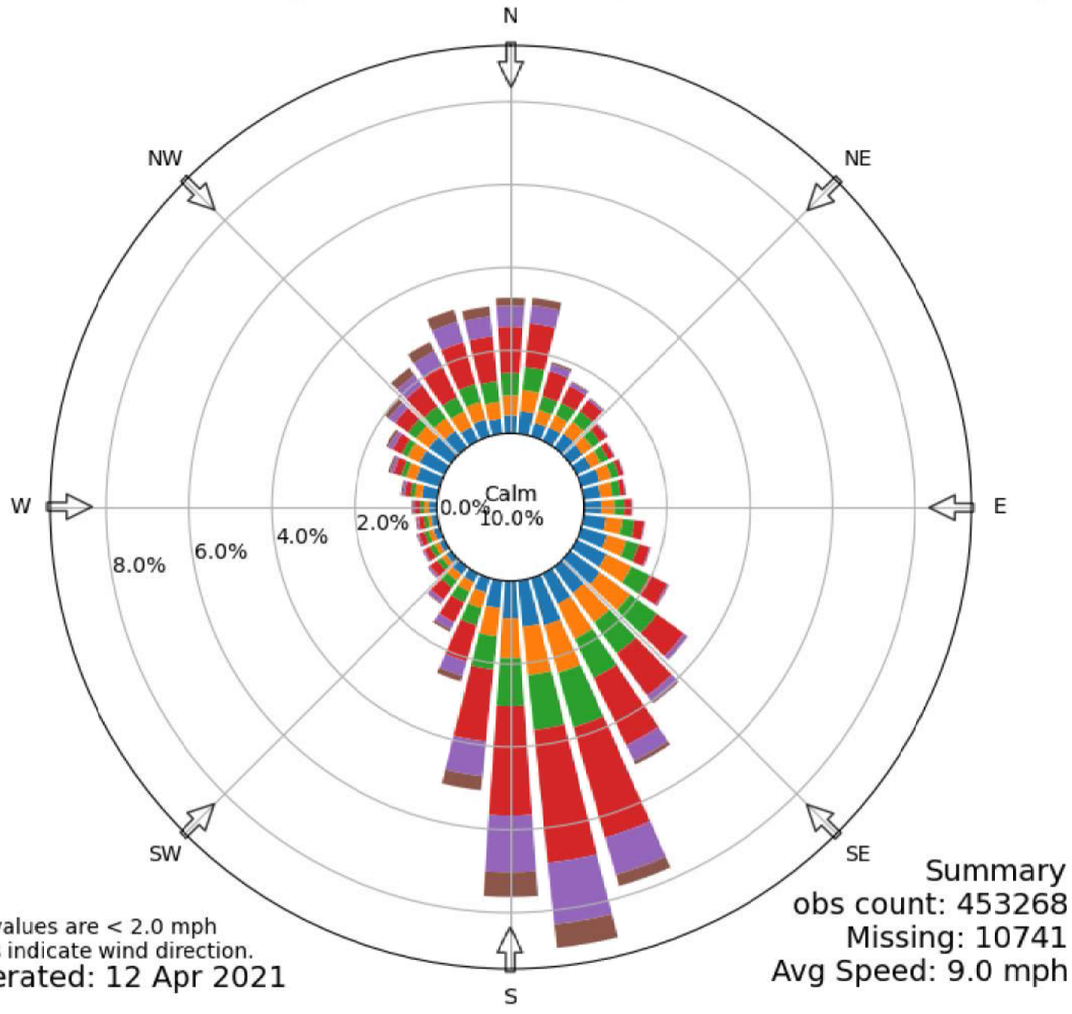
#	DATE	DESCRIPTION

FAA AIRPORT LOCATION MAP

FIGURE II-B.4

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-B.4_Airports_6Mile.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 2:32:30 PM USER: afranklin

[NFW] FORT WORTH NAS
Windrose Plot
Time Bounds: 01 Jan 1970 01:00 AM - 12 Apr 2021 02:52 AM America/Chicago



Calm values are < 2.0 mph
Arrows indicate wind direction.
Generated: 12 Apr 2021

Summary
obs count: 453268
Missing: 10741
Avg Speed: 9.0 mph

NOTES:
1. WINDROSE GENERATED FROM THE NEAREST AIRPORT, NAVAL AIR STATION JOINT RESERVE BASE FORTH WORTH.
2. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Windrose data was generated by the Iowa State University Iowa Environmental Mesonet.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
Houston, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

PREVAILING WIND DIRECTION AND WIND ROSE

FIGURE II-B.5

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

APPENDIX II-C – FACILITY LAYOUT PLANS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX II-C – FACILITY LAYOUT PLANS

TABLE OF CONTENTS

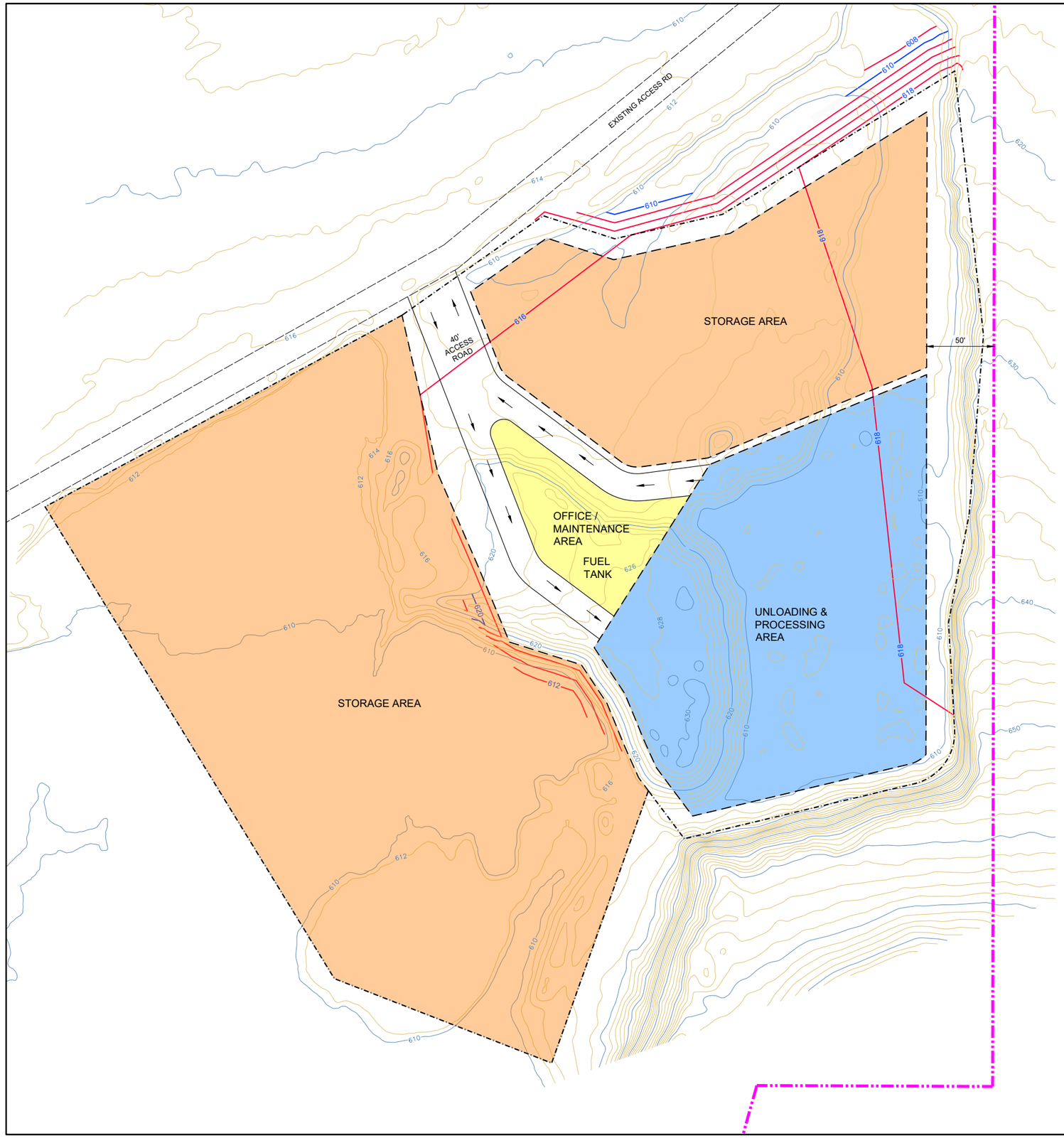
Summary of Zoning Districts of the City of Fort Worth……II-C-1

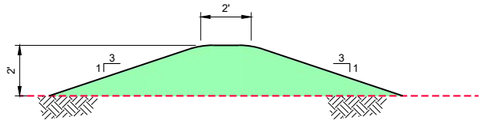
FIGURES

FIGURE II-C.1 – FACILITY LAYOUT MAP
FIGURE II-C.2 – GENERAL TOPOGRAPHIC MAP
FIGURE II-C.3 – AERIAL IMAGERY 2010 MAP
FIGURE II-C.4 – AERIAL IMAGERY 2012 MAP
FIGURE II-C.5 – AERIAL IMAGERY 2014 MAP
FIGURE II-C.6 – AERIAL IMAGERY 2016 MAP
FIGURE II-C.7 – AERIAL IMAGERY 2018 MAP
FIGURE II-C.8 – AERIAL IMAGERY 2020 MAP
FIGURE II-C.9 – LAND USE WITHIN 1 MILE
FIGURE II-C.10 – CITY ZONING MAP WITHIN 2 MILES

3/1/2023

Frank E Pugsley, P.E.





C5 TYPICAL CONTAINMENT BERM
SCALE: 1" = 3'

GENERAL NOTES

1. THE RECYCLABLES PROCESSING AND STORAGE AREA WILL BE ON A PAVED OR IMPROVED SURFACE (MINIMUM 6-INCH THICK COMPACTED FLEXIBLE BASE MATERIAL OR GRAVEL, RECYCLED CONCRETE OR EQUIVALENT).
2. THE FACILITY DOES NOT RECEIVE OR PROCESS WASTES CONTAINING PUTRESCIBLE MATERIALS.
3. THE MATERIAL SORTING AREA IS OUTDOORS.
4. RECOVERED METALS ARE STORED IN STEEL ROLL OFF CONTAINERS, SIZED FROM 20 T0 40 CUBIC YARDS, OR ENCLOSED STEEL SHIPPING CONTAINERS.
5. RECOVERED WOOD, LUMBER AND CARDBOARD PACKAGINGS ARE STORED IN STOCKPILES FOR GRINDING OR REMOVAL BY A THIRD PARTY.

LEGEND

- PROPERTY BOUNDARY
- FACILITY LIMITS
- 2' HIGH CONTAINMENT BERM (SEE DETAIL C5)
- EXISTING CONTOUR - 10FT
- 620 EXISTING CONTOUR - 2FT
- 618 NEW EXCAVATION CONTOUR - 10FT
- 600 NEW EXCAVATION CONTOUR - 2FT
- 602 EXISTING UNPAVED ROADWAY
- DIRECTION OF TRAFFIC

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

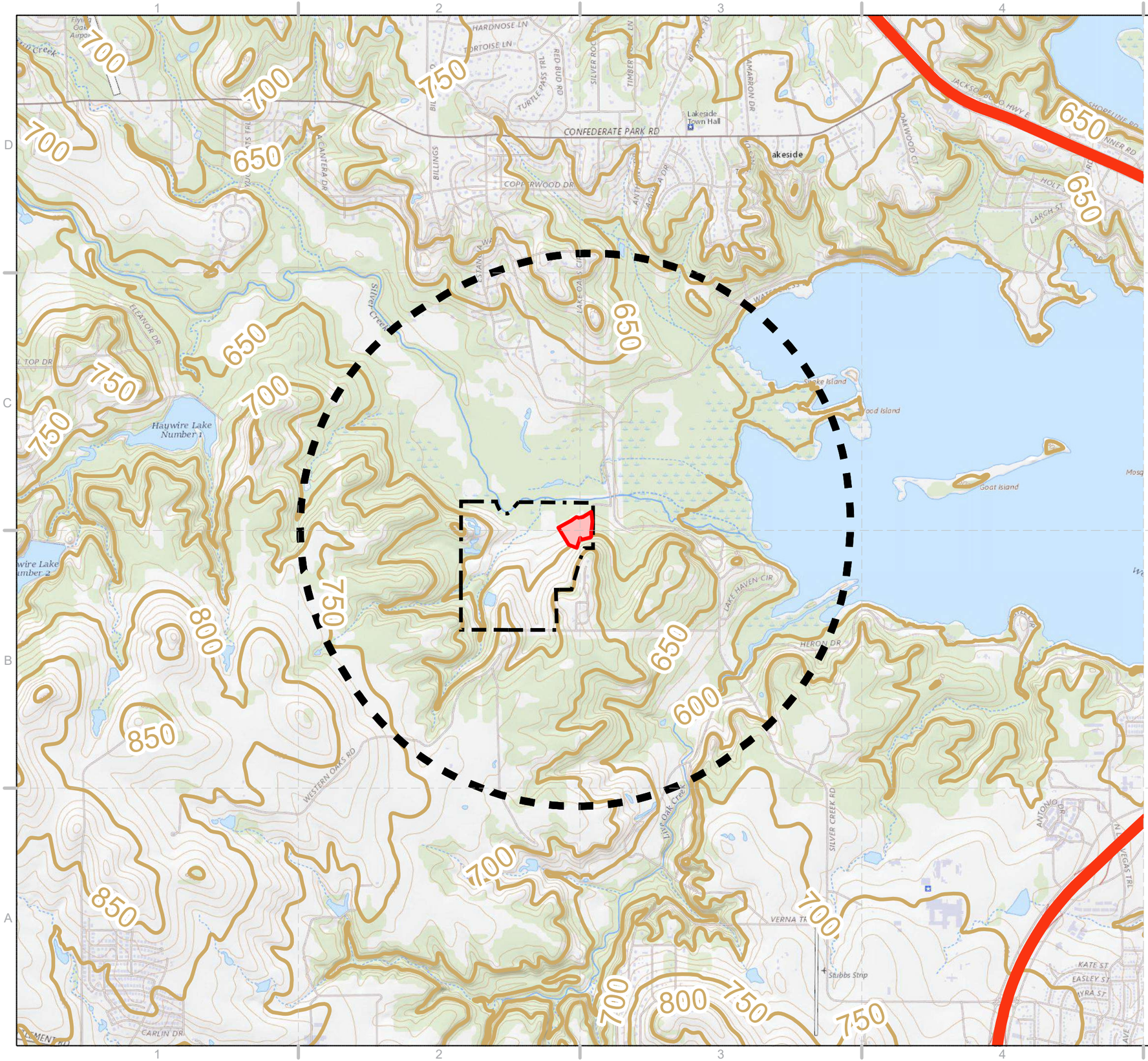
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

Facility Site Plan

FIG.II.C.1



NOTES:
1. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2022.

USGS 7.5 X 7.5 Minute Quad Map

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

BAP KENNOR RECYCLING FACILITY
P.O. BOX 22790
HOUSTON, TX 77227

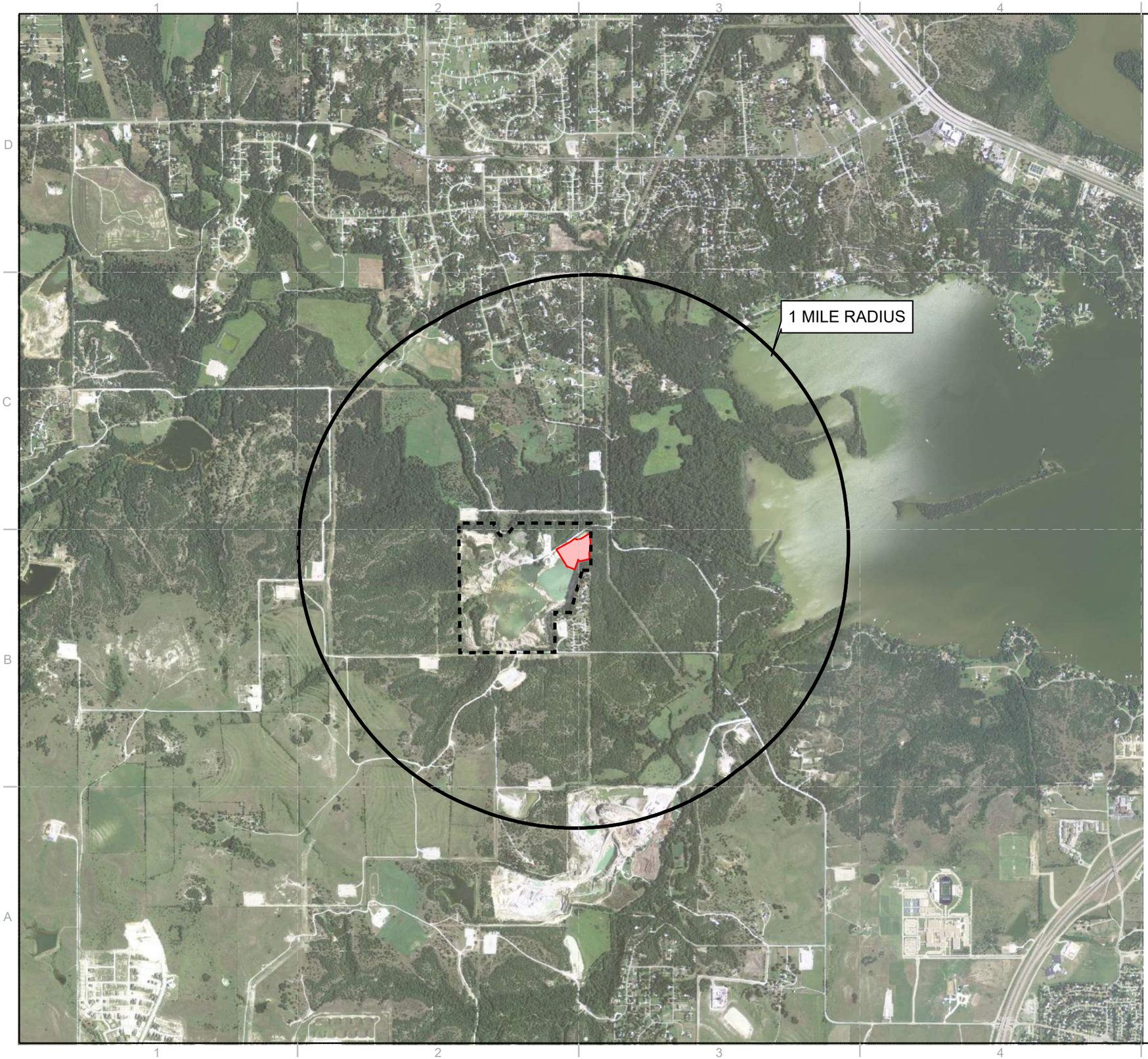
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

GENERAL TOPOGRAPHIC MAP

FIGURE II-C.2

FILE NAME: A:\2021\1604.2103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.2_Gen_Topo_Map.mxd LAYOUT NAME: Layout1 PRINTED: Thursday, July 21, 2022 - 1:24:22 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Property Boundary
- 1-Mile Radius
- Facility Boundary

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2010.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY
TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

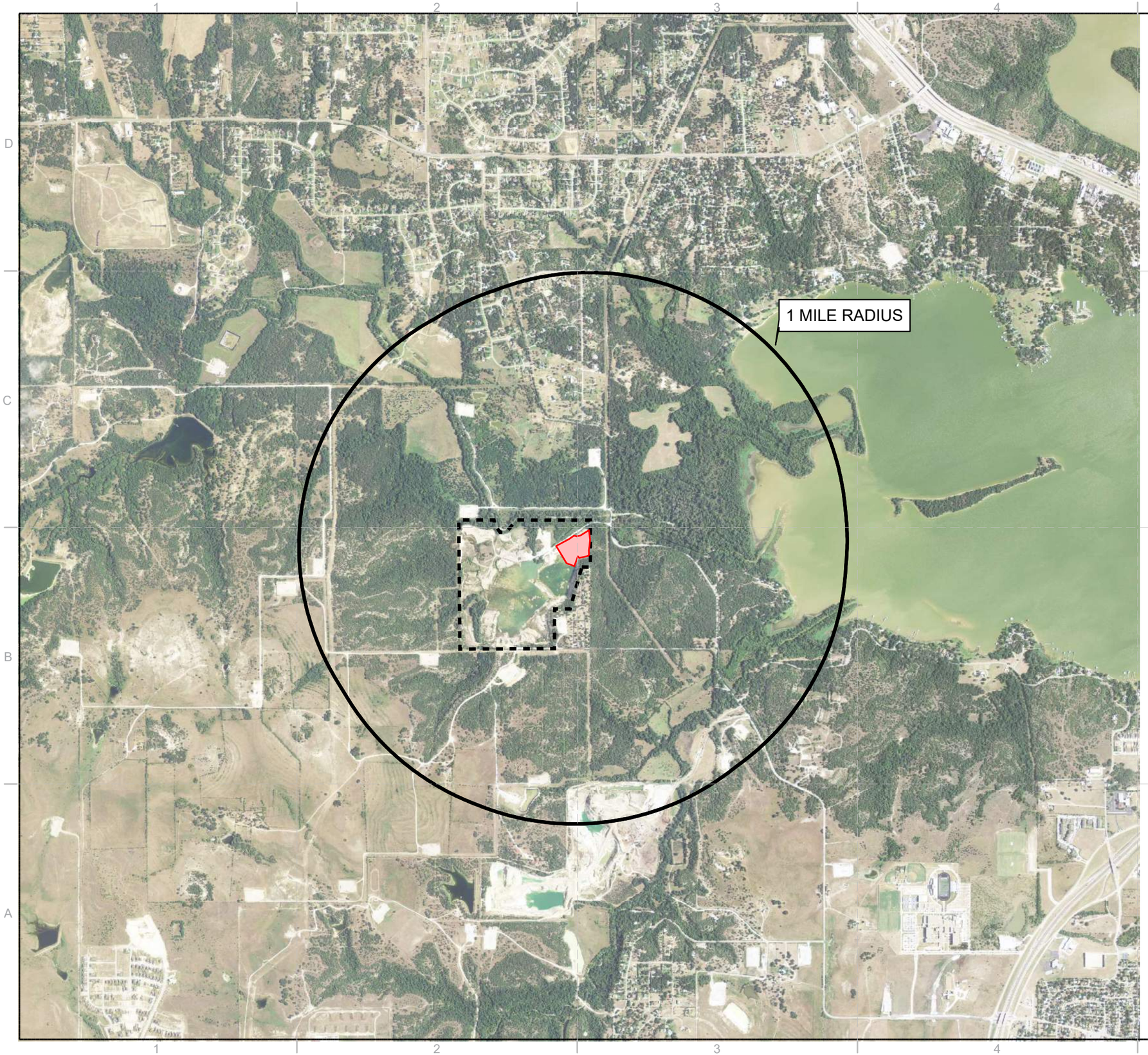
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2010 MAP

FIGURE II-C.3

FILE NAME: A:\2021\1604.21\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.3_2010_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:23:18 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- 1-Mile Radius

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2012.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

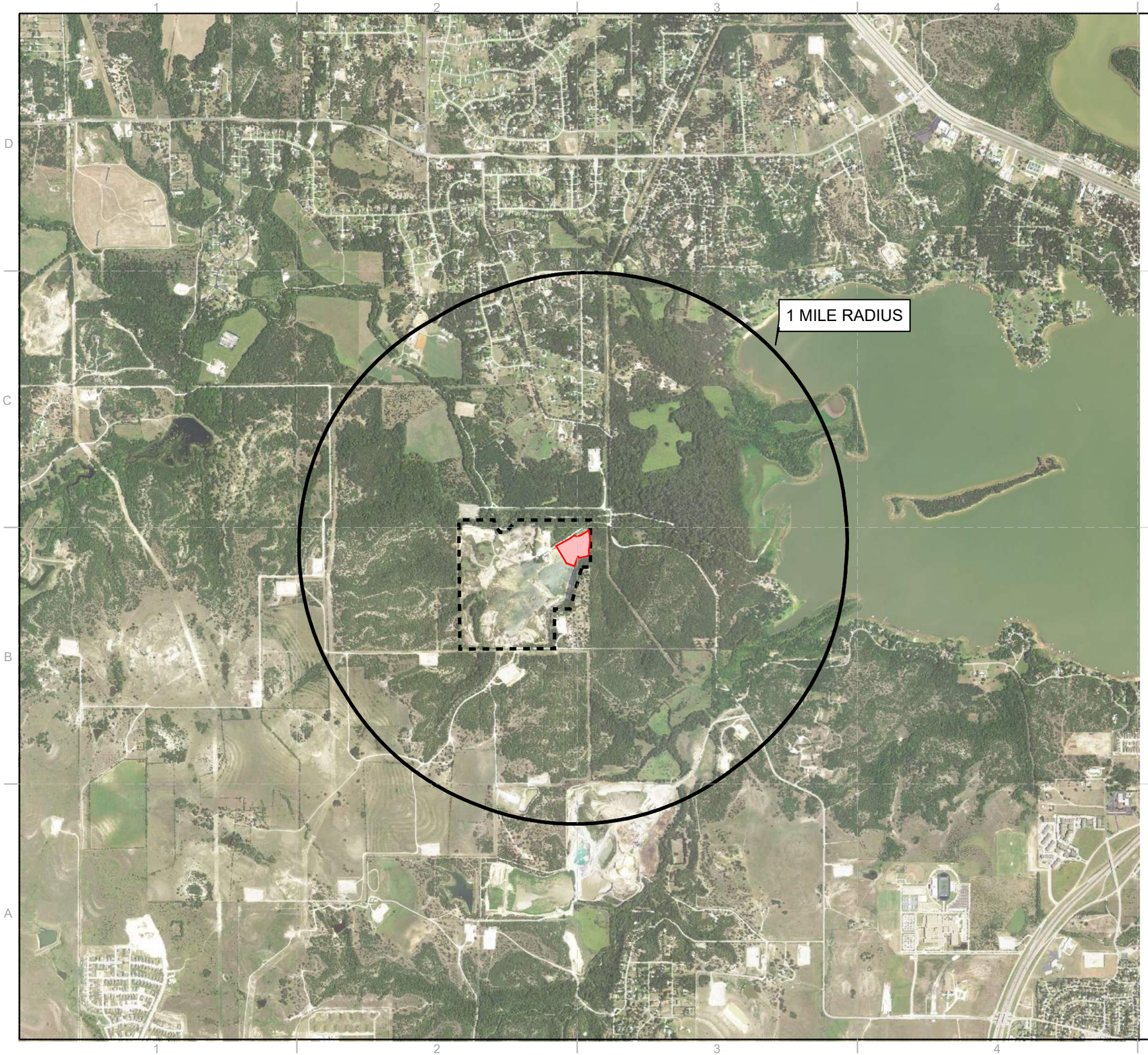
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2012 MAP

FIGURE II-C.4

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.4_2012_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:21:57 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- 1-Mile Radius

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2014.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

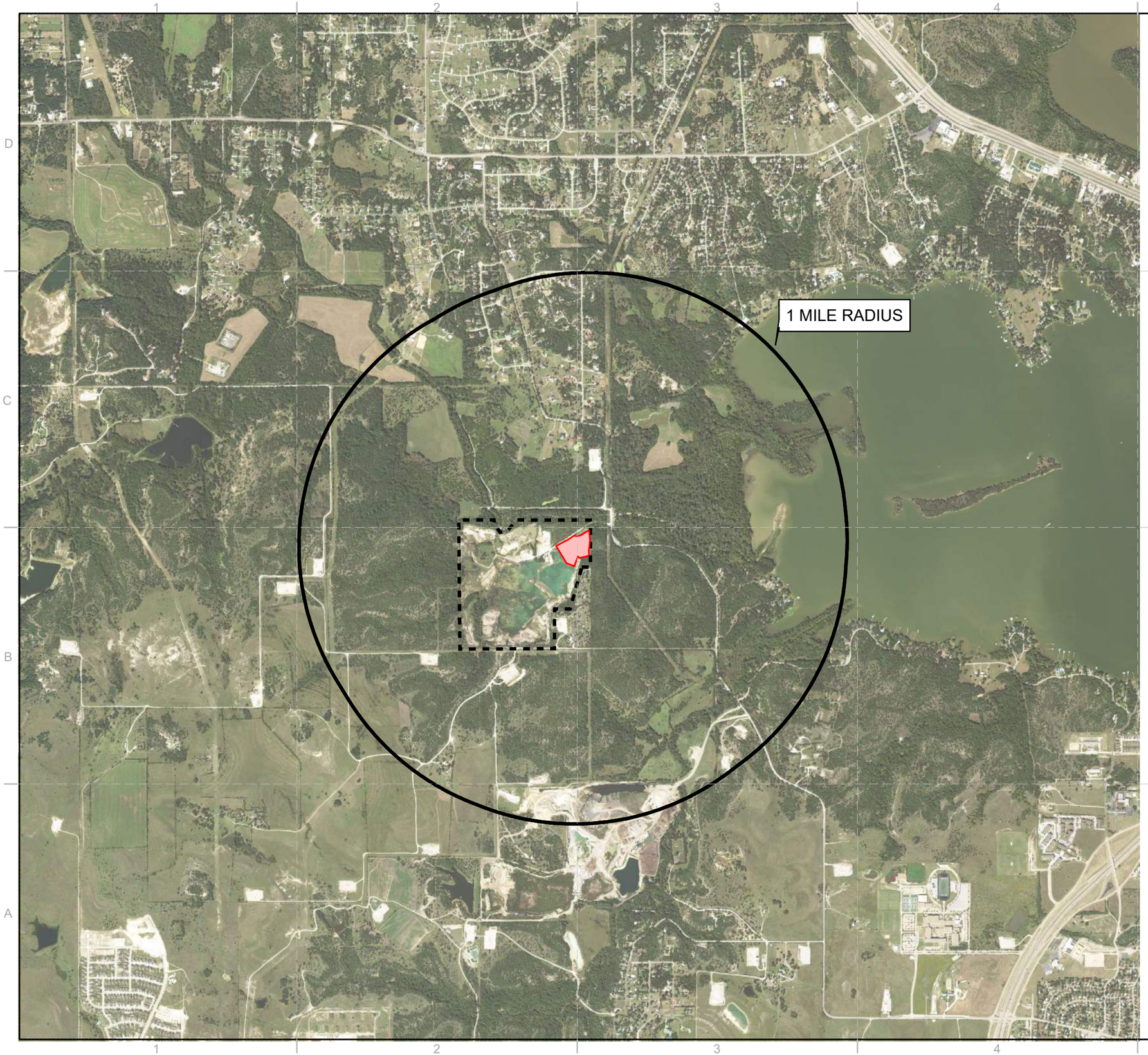
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2014 MAP

FIGURE II-C.5

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.5_2014_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:25:14 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- 1-Mile Radius

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2016.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

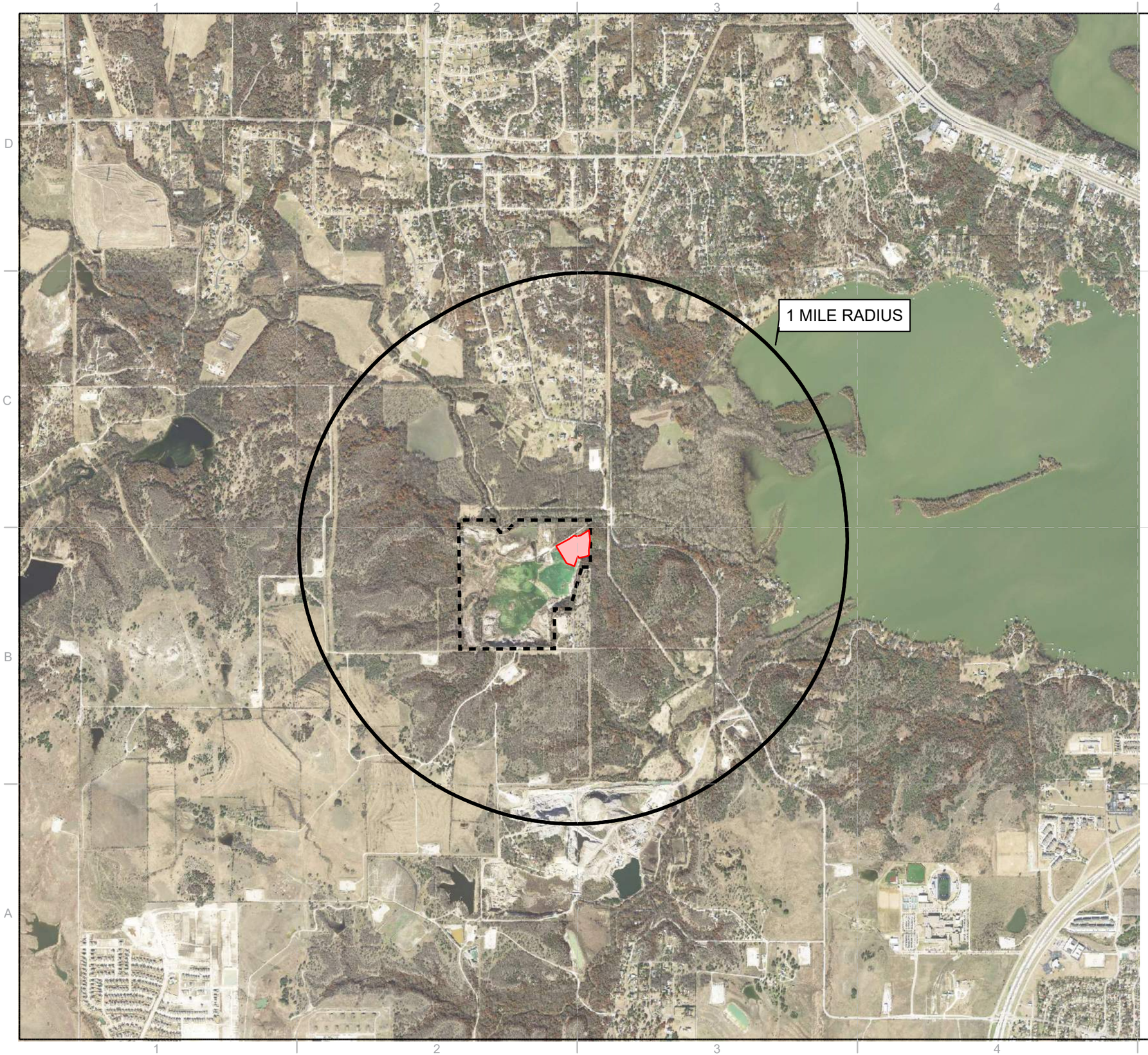
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2016 MAP

FIGURE II-C.6

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.6_2016_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:26:26 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- 1-Mile Radius

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2018.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

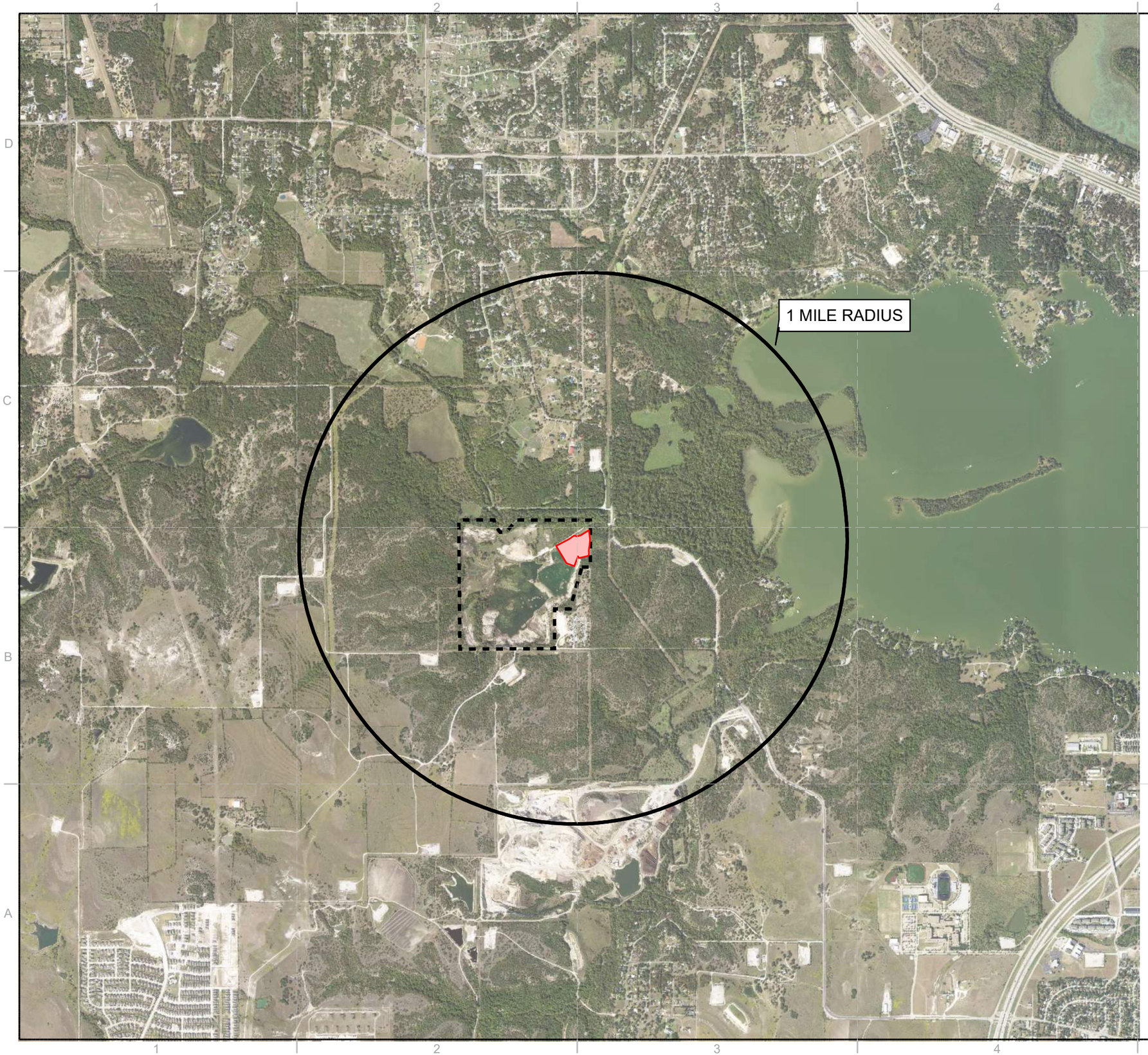
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2018 MAP

FIGURE II-C.7

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.7_2018_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:27:24 PM USER: afranklin



0 500 1,000 2,000 Feet

LEGEND:

- Facility Boundary
- Property Boundary
- 1-Mile Radius

Coordinate System: NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS

Service Layer Credits:

Imagery sourced by the Texas Natural Resources Information System (TNRIS) GIS DataHub. Images are compilation of the Texas NAIP Imagery program for 2020.

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

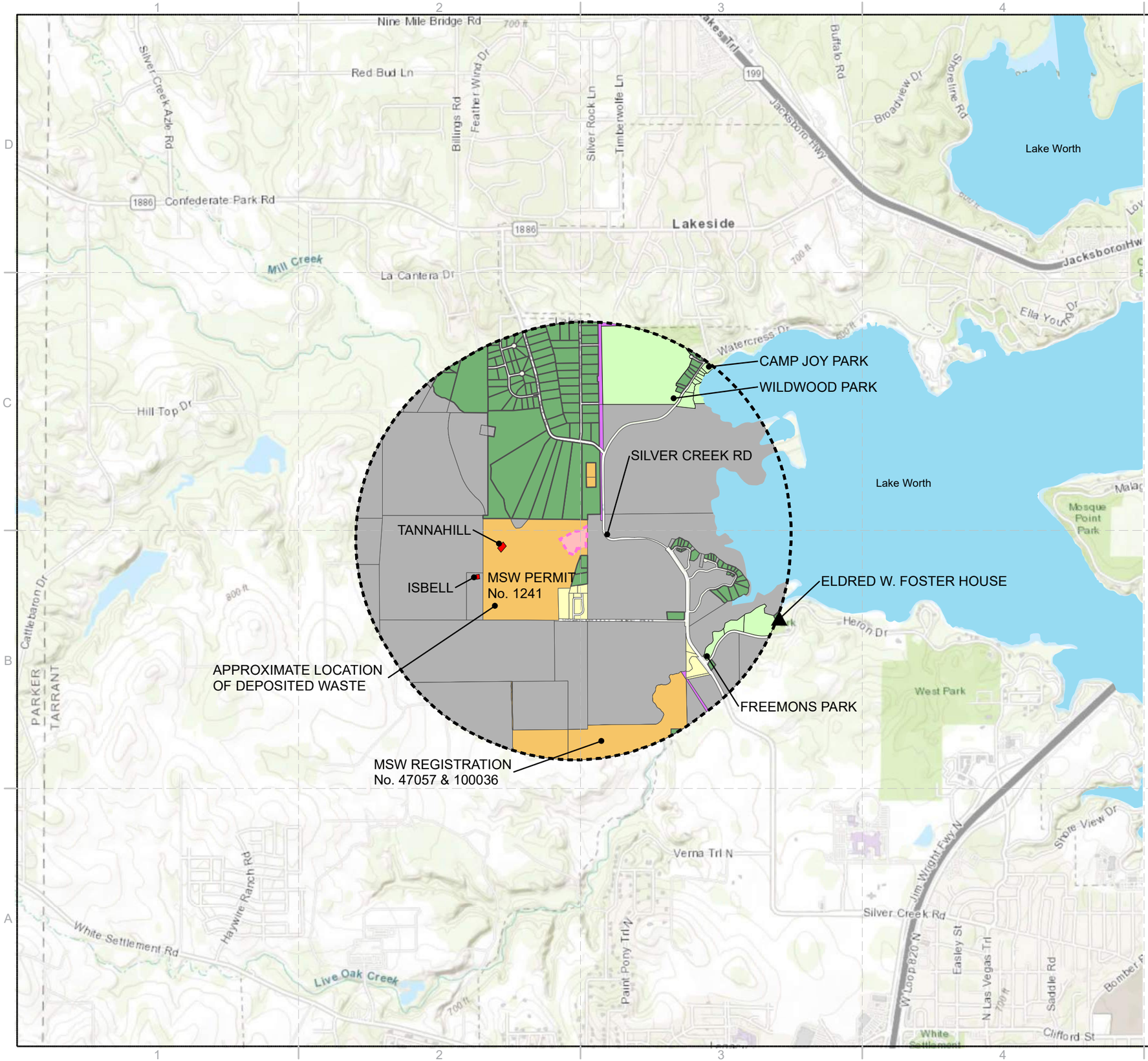
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

AERIAL IMAGERY 2020 MAP

FIGURE II-C.8

FILE NAME: A:\2021\1604.2\103_DSGN\01_DWG\050_CIVIL\02_CONTENT\Figure_II-C.8_2020_Imagery.mxd LAYOUT NAME: Layout1 PRINTED: Monday, November 14, 2022 - 3:28:27 PM USER: afranklin



0 625 1,250 2,500 Feet

LEGEND:

- Facility Boundary
- Utility
- 1-Mile Radius
- Property Boundary
- Lake Worth
- Cemetery
- Commercial
- Industrial
- Open Space
- Recreational
- Residential

NOTE:
1. WASTE DISPOSAL ACTIVITIES HAVE BEEN CONDUCTED AT THE PROPERTY IN ASSOCIATION WITH MSW PERMIT No. 1241. THE APPROXIMATE LOCATION OF DEPOSITED WASTE IS SHOWN.
2. THERE ARE NO KNOWN SCHOOLS, DAY CARE FACILITIES, OR HOSPITALS WITHIN ONE MILE OF THE FACILITY
2. SITE IS LOCATED AT:
LAT: N 32° 48' 1.11"
LONG: W 97° 30' 32.42"

Coordinate System: NAD 1983 StatePlane Texas North Central FIPS 4202 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Tarrant County parcel location and land use information obtained from Tarrant County Appraisal District online Data Downloads. https://www.tad.org/data-download/

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

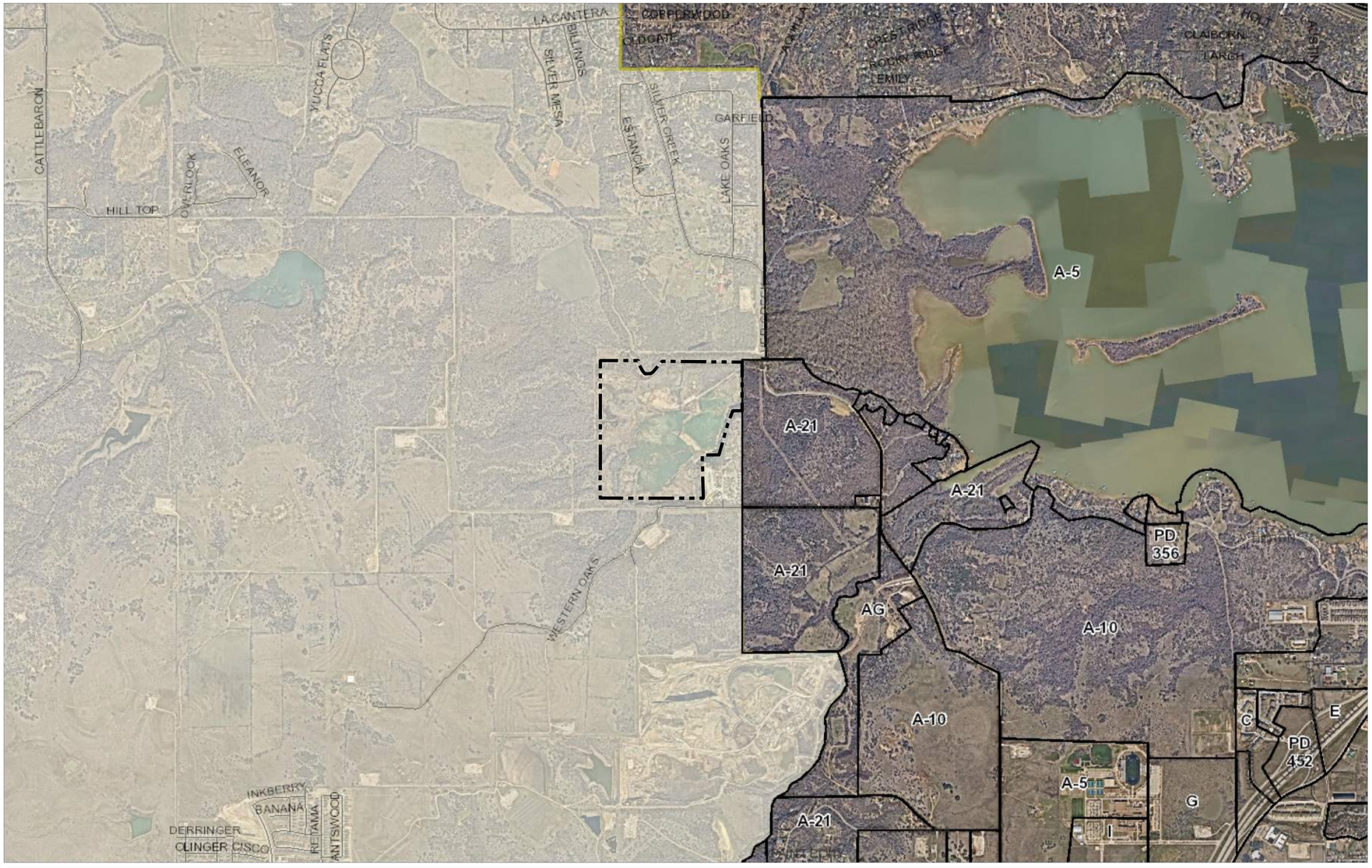
PROJECT NO.
1604.21

#	DATE	DESCRIPTION

LAND USE WITHIN 1 MILE

FIGURE II-C.9

City of Fort Worth Zoning Map



Legend

- Zoning Outline
- Streets
- Tarrant County Streets
- Extraterritorial Jurisdiction (ETJ)
- Parker County Streets
- Denton County Streets
- PROPERTY LINE

0.7 0 0.33 0.7 Miles

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. The City of Fort Worth assumes no responsibility for the accuracy of said data.

NCTCOG ORTHOPHOTOGRAPHY

12/15/21 2:10 PM

1: 21,120

FILE NAME: A:\2021\1604.21\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\1604-21_FIGII-C.10.dwg LAYOUT NAME: FIGURE II-C.10 PRINTED: Monday, November 14, 2022 - 3:33pm USER: afranklin

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP Kennor Landfill, LLC

P.O. BOX 22790
HOUSTON, TX

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

CITY ZONING MAP WITHIN 2-MILES

FIGURE II-C.10

FORT WORTH

Planning and Development Department

Summary of Zoning Districts of the City of Fort Worth

Type	Special Districts
"AG" Agricultural	Farms, ranches or nurseries for the growing of plants and raising of livestock. Also permitted are public service facilities such as churches, schools, libraries, etc.
"CF" Community Facilities	Public facilities including churches, govt. offices, health services, public safety, colleges and schools, community and group homes, and recreation facilities.
"MH" Manufactured Hsg.	Manufactured Housing / Mobile Home Parks and Subdivisions, and their related uses. (dwelling purposes only)
"PD" Planned Developmt.	Special district permitting specific residential, commercial, industrial and mixed uses, normally requiring site plan approval prior to development.
	Overlay Districts
"DD" Demolition Delay "HC" Historic and Cultural "HSE" Highly Sig. Endang.	Special overlay districts to provide for protection and preservation of places and areas of historic and cultural importance and significance. Subject to review by Historic and Cultural Landmarks Commission.
"DUDD" Downtown "TUP" Trinity Uptown Island) Peripheral I-35W/N/Central/S	Design overlay districts to provide for additional review and/or requirements as appropriate in the context of the site. Subject to review by Urban Design Commission or Downtown Design Review Board. (Panther
"CUZ" Compatible Use Zone "AO" Airport Overlay	Airport overlay districts to provide additional regulations to ensure compatibility with airport flight operations.
"TCU Residential"	Residential overlay district to limit the number of unrelated persons living in a one-family district as a family in a single housekeeping unit.
"CUP" Conditional Use Permit	Special overlay districts adding specific residential, commercial, and industrial uses requiring site plan approval prior to development. Provides for time limits and renewal considerations.
One-Family Detached Residential	
"A-2.5A" One-Family	One-family detached dwellings (min. lot size **2 ½ acres),** churches, schools, parks, etc.
"A-43" One-Family	One-family detached dwellings (min. lot size **1 acre**), churches, schools, parks, etc.
"A-21" One-Family	One-family detached dwellings (min. lot size **½ acre**), churches, schools, parks, etc.
"A-10" One-Family	One-family detached dwellings (min. lot size **10,000** sq. ft.), churches, schools, parks, etc.
"A-7.5" One-Family	One-family detached dwellings (min. lot size **7,500** sq. ft.), churches, schools, parks, etc.
"A-5" One-Family	One-family detached dwellings (min. lot size **5,000** sq. ft.), churches, schools, parks, etc.
"AR" One-Family Restricted	One-family detached zero-lot line dwellings (min. lot size **3,500** sq. ft.), churches, schools, parks, etc.
One-Family and Two-Family, Detached and Attached	
"B" Two-Family	One-family and two-family detached and attached (min. lot size **5,000** sq. ft. for two attached dwellings on a single lot; and **7,500** sq. ft. min. lot size for two detached on a single lot); plus all "A-5" and "AR" uses.
"R1" Zero Lot Line / Cluster	One-family detached min. **3,000** sq. ft. lot; one-family zero lot line min. **2,500** sq. ft. lot; two-family attached zero lot line min. **2,500** sq. ft. lot, plus all "B" uses.
"R2" Townhouse/Cluster	One-family attached townhouse / rowhouse dwellings, w/ min. 15% open space, and max. of **24 dwelling units / ac**. on average, maximum building façade length 250 ft.; plus all "R1" uses.
Multifamily	
"CR" Low Density	Multifamily dwelling units at a maximum density of **16 dwelling units / acre** with design standards

"C" Medium Density	Multifamily dwelling units at a maximum density of **24 dwelling units / acre** with design standards
"D" High Density	Multifamily dwelling units at a maximum density of **32 dwelling units / acre** with design standards
"UR" Urban Residential	Higher density, residential only, form-based development for mixed-use growth centers and urban villages, to provide multi family land use in transitional areas between mixed use and one- and two-family. Height range 2-3 stories with available height bonus to 4 stories.

Mixed-Use/Form Based

"MU-1" Low Intensity Mixed-Use	Higher density, mixed-use, pedestrian-oriented development for designated mixed-use growth centers and urban villages, so as to concentrate a variety of housing types among neighborhood-serving commercial and institutional uses. MU-1 is encouraged in the central city. Maximum height 3-5 stories with available height bonus. Subject to review by Urban Design Commission.
"MU-2" High Intensity Mixed-Use	Higher density, mixed-use, pedestrian-oriented development for designated mixed-use growth centers and urban villages, so as to concentrate a variety of housing types among commercial, institutional, and select light industrial uses. Maximum height 5-10 stories with available height bonus not to exceed 10 stories. Subject to review by Urban Design Commission.
"CB" Camp Bowie	High density, mixed-use, pedestrian-oriented development for designated area along Camp Bowie Blvd. corridor south of I-30 to SW Loop 820. Subject to review by Urban Design Commission.
"NS" Near Southside	High density, mixed-use, pedestrian-oriented development for designated area south of Downtown. Subject to review by Urban Design Commission. **Bars and Light Industrial uses prohibited in NS/T4R.**
"PI" Panther Island	High density, mixed-use, pedestrian-oriented development for designated area north of Downtown. Subject to review by Urban Design Commission.
"TL" Trinity Lakes	High density, mixed-use, pedestrian-oriented development for designated area at East 820 and Trinity Blvd. Subject to review by Urban Design Commission.
"BU" Berry University	High density, mixed-use and higher density residential, pedestrian-oriented development for designated area on Berry from University to Cleburne Rd. Subject to review by Urban Design Commission.

Commercial

Low Intensity

"ER" Neighborhood Commercial Restricted	Beauty/barber shops, bookstores, drug stores, studios, offices, public and civic uses and health care. **Alcohol sales prohibited.** Maximum 35 ft. height.
"E" Neighborhood Commercial	All uses permitted in "ER", plus retail sales, banks, restaurants, gasoline sales, bakeries, and alcohol sales for off premise consumption and as part of food service. Maximum 45 ft. height.

Moderate Intensity

"FR" General Commercial Restricted	All uses permitted in "E", plus theaters, auto sales & repair, hotels, health care facilities, commercial and business clubs, bowling alleys, large retail stores, home improvement centers. **Alcohol sales prohibited.** Maximum 45 ft. height.
"F" General Commercial	All uses permitted in "FR", plus amusement e.g. nightclubs, bars, skating rinks, etc. **Alcohol sales and on-premises consumption permitted** in "F" thru "K" districts. Maximum 45 ft. height.

High Intensity

"G" Intensive Commercial	All uses permitted in "F" with maximum 12-story/120 ft. height.
"H" Central Business	All uses permitted in "G", plus multifamily residential, printing/publishing. No height restrictions and permissive area regulations. Restricted to designated Central Business District. DUDD overlay.

Industrial

"I" Light Industrial	All uses permitted in "G", plus food processing, animal hospitals and outdoor kennels, trans. terminals, temp. batch plant, warehousing, outside sales/storage, printing and light manuf. Max. 55 ft. height.
"J" Medium Industrial	All uses permitted in "I", plus breweries, cement products, power plants, grain elevators, poultry slaughtering, and light manufacturing. Max. 120 ft. height.
"K" Heavy Industrial	All uses permitted in "J", plus heavy industrial uses incl. metal fabrication, asphalt mixing plants, machine shops, soap manufacturing, stock yards, permanent batch plants, welding shops, etc. Max. 120 ft. height.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT II-D – AGENCY CORRESPONDENCE

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

ATTACHMENT II-D.1
THC CORRESPONDENCE

Parkhill

July 22, 2022

Mr. Mark Wolfe, Executive Director
Texas Historical Commission
P.O Box 12276
Austin, Texas 78711-2276

Re: BAP Kennor C&D Recycling Facility, Tarrant County
Municipal Solid Waste (MSW) Registration Application
MSW Registration No. TBD

Dear Mr. Wolfe:

BAP Kennor Landfill, LLC has retained the services of Parkhill to prepare and submit a Registration Application to the Texas Commission on Environmental Quality (TCEQ) for a Type V Municipal Solid Waste Facility Registration for the BAP Kennor C&D Recycling Facility. The proposed facility will be located on an approximately 140-acre site in northeast Tarrant County, Texas, as illustrated on the enclosed map.

In accordance with TCEQ requirements, the applicant requests a review by the Texas Historical Commission to determine if the project falls under Title 30 of the Texas Administrative Code, paragraph 330.61(o) for compliance with Natural Resource Code, Chapter 191, Antiquities Code of Texas. Please note that this site was previously disturbed by sand and gravel mining as well as a Type IV landfill. We recommend BAP Kennor Landfill, LLC be allowed to proceed with registration and construction of the facility. We request that the Texas Historical Commission concur with our recommendation.

Please contact me directly at fpugsley@parkhill.com or 469-200-7384 for any questions.

Sincerely,

PARKHILL

By Frank E Pugsley, P.E.
Frank E. Pugsley, PE
Sector Director | Principal

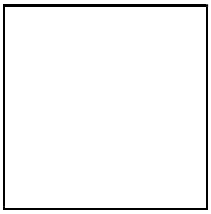
FEP
Enclosure: General Location Map

Cc: Tom Noons, BAP Kennor Landfill, LLC
David Dugger, Osttend Landfill Ltd
Sonia Samir, PE, PhD, Parkhill

Austin Franklin

Subject: FW: Section 106 Submission

From: noreply@thc.state.tx.us <noreply@thc.state.tx.us>
Sent: Tuesday, September 6, 2022 10:57 AM
To: Frank Pugsley <Fpugsley@parkhill.com>; reviews@thc.state.tx.us; matthew.udenenwu@tceq.texas.gov
Subject: Section 106 Submission



Re: Project Review under the Antiquities Code of Texas
THC Tracking #202213456
Date: 09/06/2022
BAP Kennor C&D Recycling Facility

Description: type V municipal solid waste facility

Dear Client:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the Executive Director of the Texas Historical Commission (THC), pursuant to review under the Antiquities Code of Texas.

The review staff, led by Arlo McKee, has completed its review and has made the following determinations based on the information submitted for review:

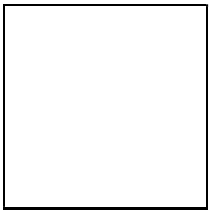
Archeology Comments

- No effect on identified archeological sites or other cultural resources. However, if cultural materials are encountered during project activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: Arlo.McKee@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,



for Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

cc: matthew.udenenwu@tceq.texas.gov

ATTACHMENT II-D.2
COG CORRESPONDENCE

Parkhill

March 8, 2023

Mr. Mike Eastland, Executive Director
North Central Texas Council of Governments
616 Six Flags Dr.
Arlington, Texas 76011

Re: BAP Kennor C&D Recycling Facility, Tarrant County
Municipal Solid Waste (MSW) Registration Application
MSW Registration No. TBD

Dear Mr. Eastland:

BAP Kennor Landfill, LLC has retained the services of Parkhill to prepare and submit a Registration Application to the Texas Commission on Environmental Quality (TCEQ) for a Type V Municipal Solid Waste Facility Registration for the BAP Kennor C&D Recycling Facility. The proposed facility will be located on an approximately 140-acre site in northeast Tarrant County, Texas, as illustrated on the enclosed map.

In accordance with 30 TAC §330.61(p), please find attached Parts I and II of the Registration Application for review by the North Central Texas Council of Governments to evaluate conformance with the regional solid waste plan.

Please contact me directly at fpugsley@parkhill.com or 469-200-7384 for any questions.

Sincerely,

PARKHILL

By Frank E Pugsley, P.E.
Frank E. Pugsley, PE
Sector Director | Principal

FEP
Enclosure: Parts I and II of the Permit Application

Cc: Tom Noons, BAP Kennor Landfill, LLC
David Dugger, Osttend Landfill Ltd
Sonia Samir, PE, PhD, Parkhill

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

APPENDIX II-E – TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES)

CERTIFICATION STATEMENT

I, Shane Shoulders
(Owner or Operator)

Confirm that BAP Kennor Recycling Facility will pursue coverage under the Texas Pollutant Discharge Elimination System (TPDES) general permit when required, in accordance with 30 TAC §330.61(k)(3), pending TCEQ approval of this registration application.

SIGNATURE

Manager
TITLE

07/25/22
DATE

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

ATTACHMENT II-F – TRAFFIC IMPACT ANALYSIS

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

PARKHILL Project No.: 011604.21

TRAFFIC IMPACT ANALYSIS FOR BAP KENNOR C&D RECYCLING FACILITY FORT WORTH, TEXAS

Prepared for:
Parkhill
300 Internet Boulevard, Suite 550
Frisco, TX 75034

Prepared by:

LEE ENGINEERING
3030 LBJ Freeway, Suite 1660
Dallas, Texas 75234
(972) 248-3006
TBPE Firm F-450

November 14, 2022

TABLE OF CONTENTS

EXECUTIVE SUMMARY 5

INTRODUCTION 7

EXISTING TRAFFIC VOLUMES 11

BACKGROUND TRAFFIC VOLUMES 13

SITE DATA AND TOTAL TRAFFIC 16

ROADWAY CAPACITY ANALYSIS 23

INTERSECTION CAPACITY ANALYSIS 25

AUXILIARY LANE ANALYSIS 29

SIGHT DISTANCE ANALYSIS 31

CONCLUSIONS & RECOMMENDATIONS 33

APPENDIX 34

LIST OF TABLES

Table 1: TxDOT Count Map Volumes 13

Table 2: Vehicles Accessing Facility..... 16

Table 3: Estimated Hourly Site Traffic Volumes 21

Table 4: Facility Traffic as a Proportion of Traffic on Silver Creek Road..... 22

Table 5: NCTCOG Roadway Capacity Analysis and Level of Service Guidelines 23

Table 6: Roadway Capacity Analysis – Silver Creek Road 24

Table 7: Level of Service Criteria for Intersections..... 25

Table 8: Intersection Capacity Analyses Results – Existing (2022) Traffic..... 26

Table 9: Intersection Capacity Analyses Results – Site Opening (2023) Background Traffic 26

Table 10: Intersection Capacity Analyses Results – Site Closure (2043) Background Traffic.... 27

Table 11: Intersection Capacity Analyses Results – Site Opening (2023) Total Traffic..... 27

Table 12: Intersection Capacity Analyses Results – Site Closure (2043) Total Traffic 28

Table 13: Sight Distance Evaluation..... 31

LIST OF FIGURES

Figure 1: Vicinity Map 8

Figure 2: Existing (2022) Intersection Lane Configurations and Proposed Driveway Location 10

Figure 3: Existing (2022) Peak Hour and Daily Traffic Volumes 12

Figure 4. Site Opening (2023) Background Peak Hour Traffic Volumes 14

Figure 5. Site Closure (2043) Background Peak Hour Traffic Volumes 15

Figure 6. Assumed Directional Distribution 17

Figure 7. Site Generated Traffic Volumes 18

Figure 8. Site Opening (2023) Total Peak Hour Traffic Volumes 19

Figure 9. Site Closure (2043) Total Peak Hour Traffic Volumes 20

Figure 10: Guidelines for Right-turn Lanes at Unsignalized intersections and Driveways – 2 Lanes 29

EXECUTIVE SUMMARY

The purpose of this traffic study is to determine the adequacy of the surrounding transportation infrastructure with respect to the proposed BAP Kennor C&D Recycling Facility to be located in western Tarrant County, on Silver Creek Road, approximately 3.1 miles northwest of the intersection of Silver Creek Road and Interstate 820. The property consists of 141.727 acres of land. The Recycling Facility Permit area is 6.613 acres. The Facility is located within the property of a permitted, currently inactive, Type IV landfill (MSW Permit No 1241), and an Aggregate Production Operation. The recycling facility will be outside the limits of existing landfilled waste.

Year 2022, 2023 (projected site opening) and 2043 (projected facility closure/design life) analyses are presented in this study. The total traffic analysis added the predicted peak hour traffic from the proposed site to the surrounding roadways during the AM peak hour, PM peak hour, and the anticipated site peak hour.

Based on the results of this study for the BAP Kennor C&D Recycling Facility, the following conclusions are made:

- Silver Creek Road provides adequate access to the proposed site. No roadway improvements are necessary to accommodate site traffic.
- The proposed site is predicted to generate 144 trips per day when the facility is anticipated to open in 2023. Facility peak hourly trip generation is predicted to be 16 trips, 8 inbound and 8 outbound trips.
- Roadway link capacity analyses for the year 2023 and 2043 for the study roadways was performed and poor levels of service in the peak directions of travel indicated the need for intersection level of service analysis that was also conducted for the site access point along the proposed access route. Roadway operations are not predicted to further degrade as a result of site traffic.
- Intersection capacity analysis indicates the following:
    - The proposed site access intersection with Silver Creek Road is anticipated to operate at Level of Service A or B under total traffic conditions in 2023 and 2043.
    - The existing unsignalized intersection of Watercress Drive and Silver Creek Road is predicted to operate at acceptable levels of service for each scenario throughout the study.
- No southbound right turn lane is necessary to serve the site because no site access route exists for traffic from the north. Furthermore, the bridge north of the driveway makes a turn lane infeasible.

- A northbound left-turn lane serving the site appears to be required by the City of Fort Worth Access Management Policy. A northbound left-turn lane serving the site access drive is not necessary for the following reasons:
    - The posted speed limit is 35 mph in the vicinity of the site.
    - The site entering volumes are predicted to range from 6 to 8 vehicles per hour throughout most of the day. This is one (1) vehicle every 7.5 to 10 minutes.
    - Silver Creek Road is planned to be realigned in the future based on the City's Thoroughfare plan, thus reducing background traffic in the vicinity of the site.
- Adequate stopping sight distance is present along Silver Creek Road in the vicinity of the proposed site access. Vegetation to the north of the site access restricts intersection sight distance. The existing vegetation between Silver Creek to the north and the driveway should be cleared during construction to provide improved intersection (desirable) sight distance.

INTRODUCTION

The purpose of this traffic study is to determine the adequacy of the surrounding transportation infrastructure with respect to the proposed recyclable operations at the BAP Kennor C&D Recycling Facility to be located along Silver Creek Road, south of Watercress Drive, in Tarrant County, Texas. The facility is designed to provide recyclable drop-off services to residents of Tarrant County and businesses in the County and surrounding areas.

The primary access route to the facility is via the proposed site access driveway on Silver Creek Road from the south only. The proposed facility is proposed to accept recyclable materials from 7:00 AM to 7:00 PM Monday through Friday. **Figure 1** presents a vicinity map that depicts the general location of the proposed facility and the surrounding roadway network. A larger exhibit is included in the appendix.

TCEQ Municipal Solid Waste Regulations require data and analysis for the expected life of the facility – currently estimated to be the year 2043. Other transportation industry organizations recommend shorter planning horizons.

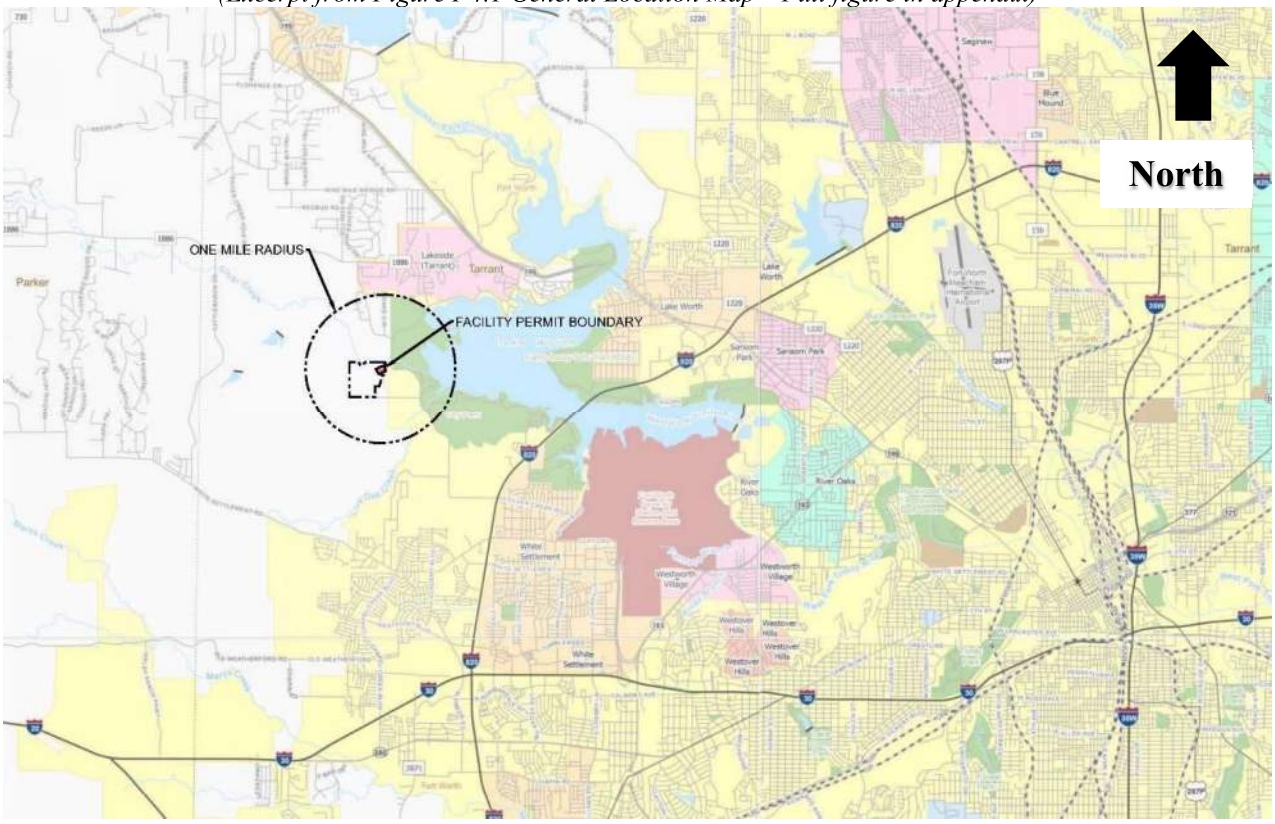
Three (3) analysis scenarios for the proposed facility are addressed as part of this study:

- Scenario 1: Existing Year (2022)
- Scenario 2: Assumed Site Opening Year (2023)
- Scenario 3: Peak Year Operations in the Year 2043 Prior to Site Closure

For each scenario, the AM peak hour, PM peak hour, and peak hour of the facility were analyzed at the study intersection Silver Creek Road and Watercress Drive.

Figure 1: Vicinity Map

(Excerpt from Figure I-4.1 General Location Map – Full figure in appendix)



The study area for this traffic study is based on a review of likely access routes within one mile of the facility. A brief description of the existing area roadways selected for study is provided below:

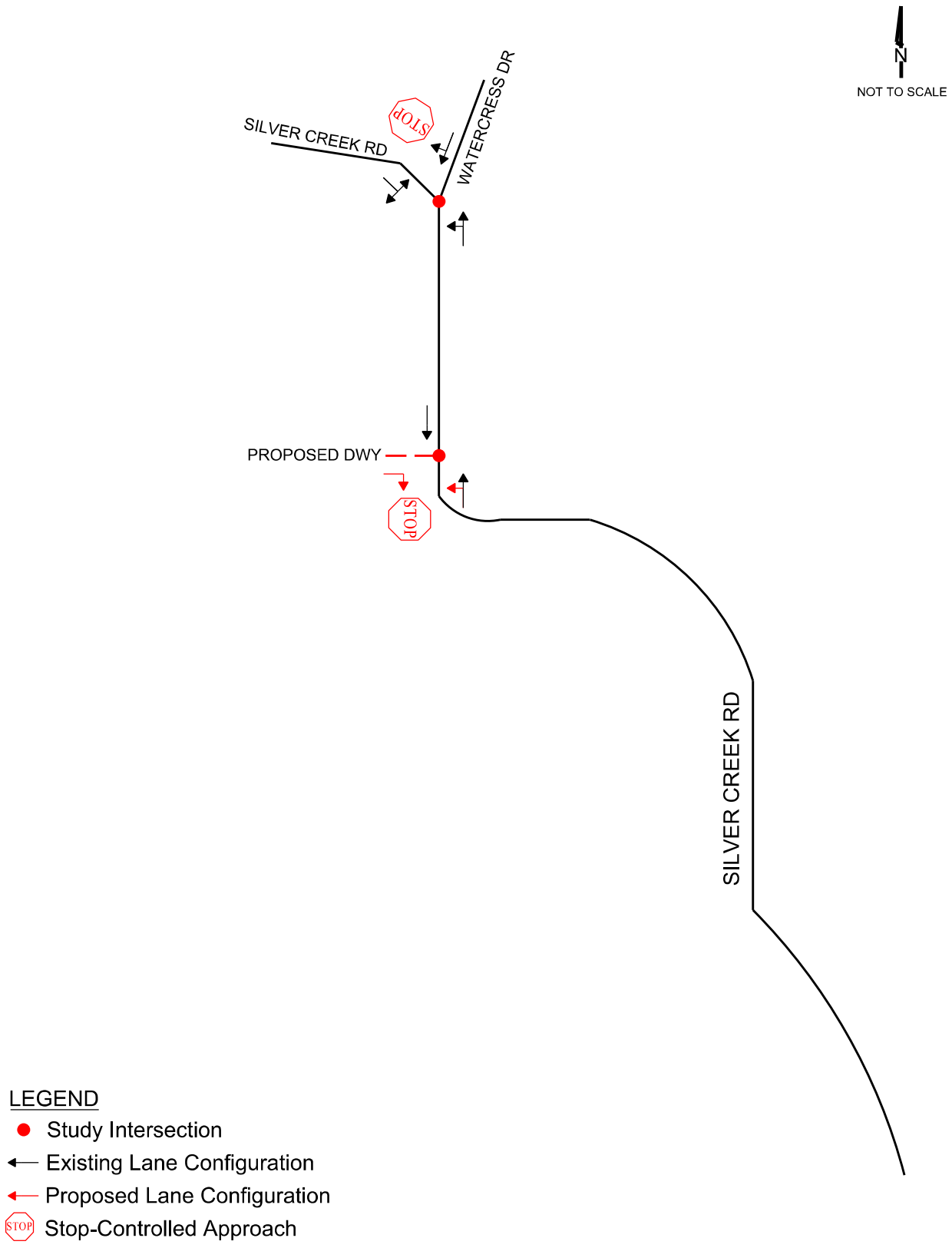
Silver Creek Road – Silver Creek Road is a two-lane undivided asphalt roadway with a posted speed limit of 35 mph in the vicinity of the site. It is a four-lane divided roadway near the Brewer High School Access roadway.

Silver Creek Road is classified as a Neighborhood Connector on the City of Fort Worth *Master Thoroughfare Plan* (2016) south of the site. Based on the City's thoroughfare plan, Silver Creek Road is planned to be realigned southwest of the site. Based on TxDOT's *Statewide Planning Map*, Silver Creek Road is classified as a Major Collector. The proposed site will have one (1) site driveway along Silver Creek Road located where an existing driveway is located south of Silver Creek.

The existing Silver Creek Road roadway has a weight restriction of 42,000 pounds gross vehicle weight (tandem axle 24,000 pounds) at a bridge approximately 1,000 feet north of the site access connection. No access route is proposed to the north of the site at this time and the load restriction should not impact site operations.

Watercress Drive – Watercress Drive is a two-lane undivided asphalt roadway with no posted speed limit which intersects Silver Creek Road. Watercress Drive is not classified on the City of Fort Worth *Master Thoroughfare Plan* (2016). Watercress Drive is the nearest intersection to the north and is not on an access route to the site.

The existing intersection lane configurations, existing traffic control, and the proposed driveway location are shown in **Figure 2**.



3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Existing (2022) Intersection Lane Configurations and Proposed Driveway Location

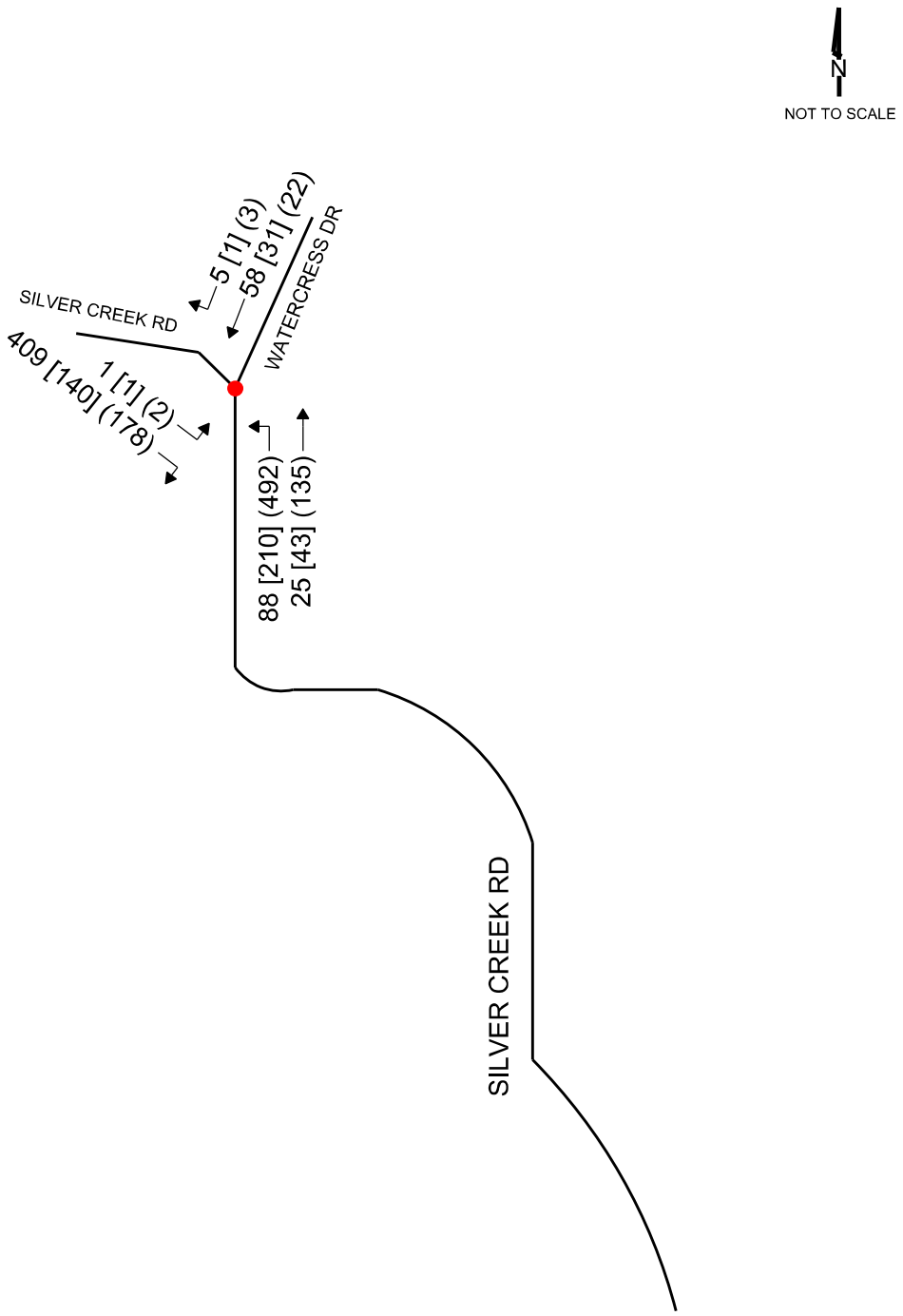
Figure 2

EXISTING TRAFFIC VOLUMES

Twenty-four-hour turning movement traffic volumes were collected at the study intersection Silver Creek Road and Watercress Drive on Wednesday, January 12, 2022.

In addition to the roadway AM and PM peak hours, the 2:00 PM to 3:00 PM site peak hour will be presented because the BAP Kennor C&D Recycling Facility peak traffic volumes are anticipated to occur during that time period (Facility Peak Hour).

Peak hour turning movement volumes for Existing (2022) conditions are shown in **Figure 3**. All raw traffic data is included in the Appendix.



LEGEND

- Study Intersection
- ← AM Peak Hour [SitePeak Hour] (PM Peak Hour)

3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Existing (2022) Peak Hour and Daily Traffic Volumes

Figure 3

BACKGROUND TRAFFIC VOLUMES

Lee Engineering gathered TxDOT historical count volumes from the TxDOT Traffic Count Data System (TCDS) at locations near the proposed site. These volumes are presented in **Table 1** below. As can be seen from the historical data, the traffic volumes near the proposed site have been fairly consistent over the past several years.

Table 1: TxDOT Count Map Volumes

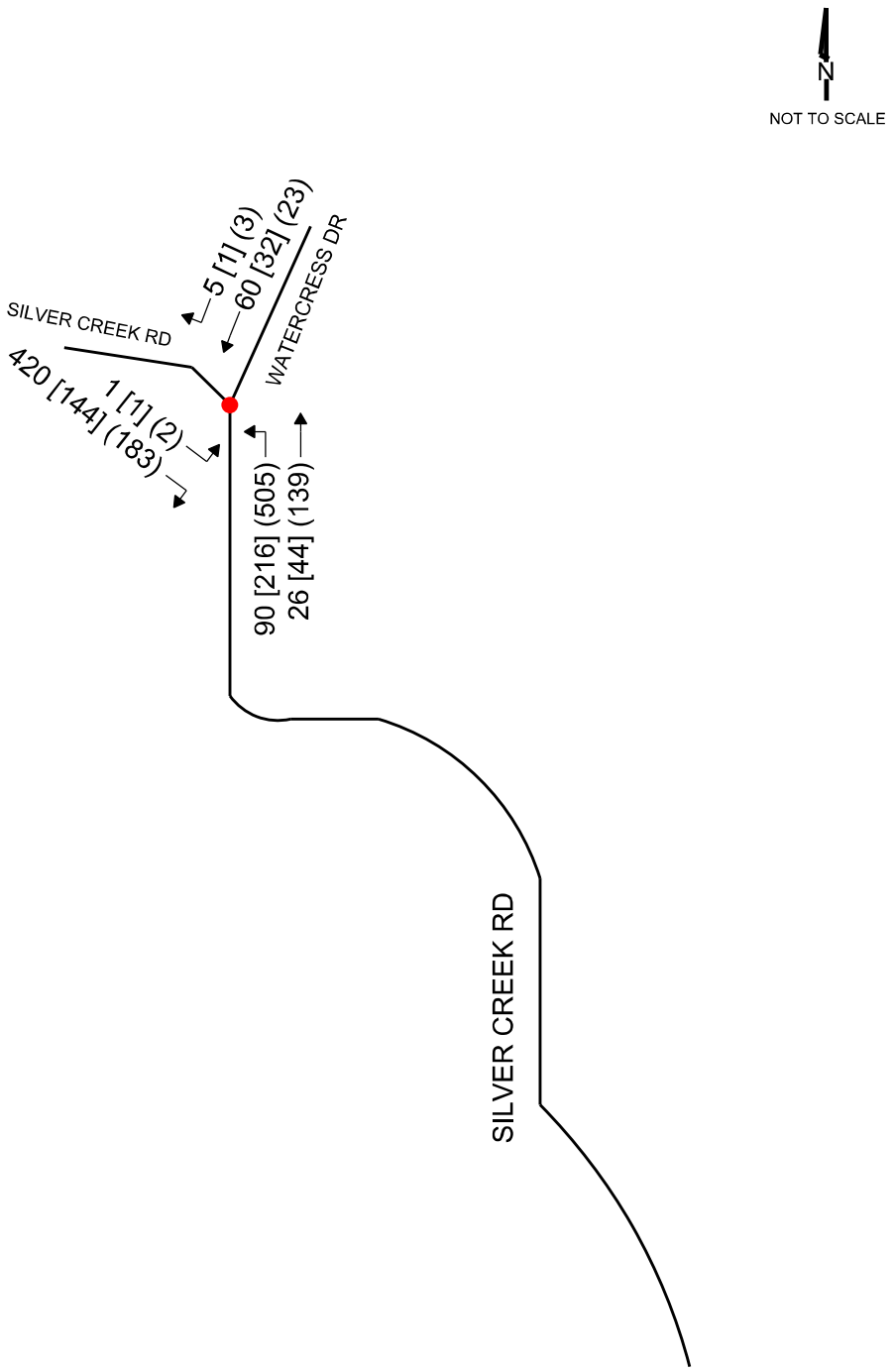
TxDOT Count Year	Silver Creek Road South of Proposed Driveway	Silver Creek Road North of Live Oak Creek
2009	6,330	6,460
2014	5,357	5,472
2019	---	5,269
2022	6,617[1]	---
Average Annual Growth	**2.7%**	**-2%**

[1]Traffic volume obtained from existing TMC volumes at Watercress Drive and Silver Creek Road

Historic TxDOT traffic volumes from 2009 and 2014 were compared to the collected 2022 daily traffic volumes along Silver Creek Road allowing an estimate of growth in the area. The calculated average annual growth rate of 2.7% for the TxDOT count location nearest the site was utilized in estimating the Site Opening (2023) background traffic volumes. The locations of the projected TxDOT historical TCDS count sites are provided in the Appendix. The Site Opening (2023) Background traffic volumes were estimated by growing the existing traffic volumes (Figure 3) by 2.7% for one year. The projected Site Opening (2023) Background traffic volumes are shown in **Figure 4**.

TxDOT's statewide planning map was used to develop the long range growth rate used to estimate the background traffic volumes for the Site Closure (2043) analysis. The section of Silver Creek Road nearest the site had 2041 and 2009 AADT estimates allowing for the calculation of an average annual growth rate 1.01% based on the long range projections. This growth rate was rounded up slightly to 1.1% and applied to background traffic from 2023 to 2043 to estimate the ultimate background traffic volumes along Silver Creek Road. The location of the projected 2041 TxDOT traffic volumes is provided in the Appendix.

The projected Site Opening (2023) Background traffic volumes shown in Figure 4 were grown at an annual rate of 1.1% to the year 2043 and the projected Site Closure (2043) Background traffic volumes are shown in **Figure 5**.



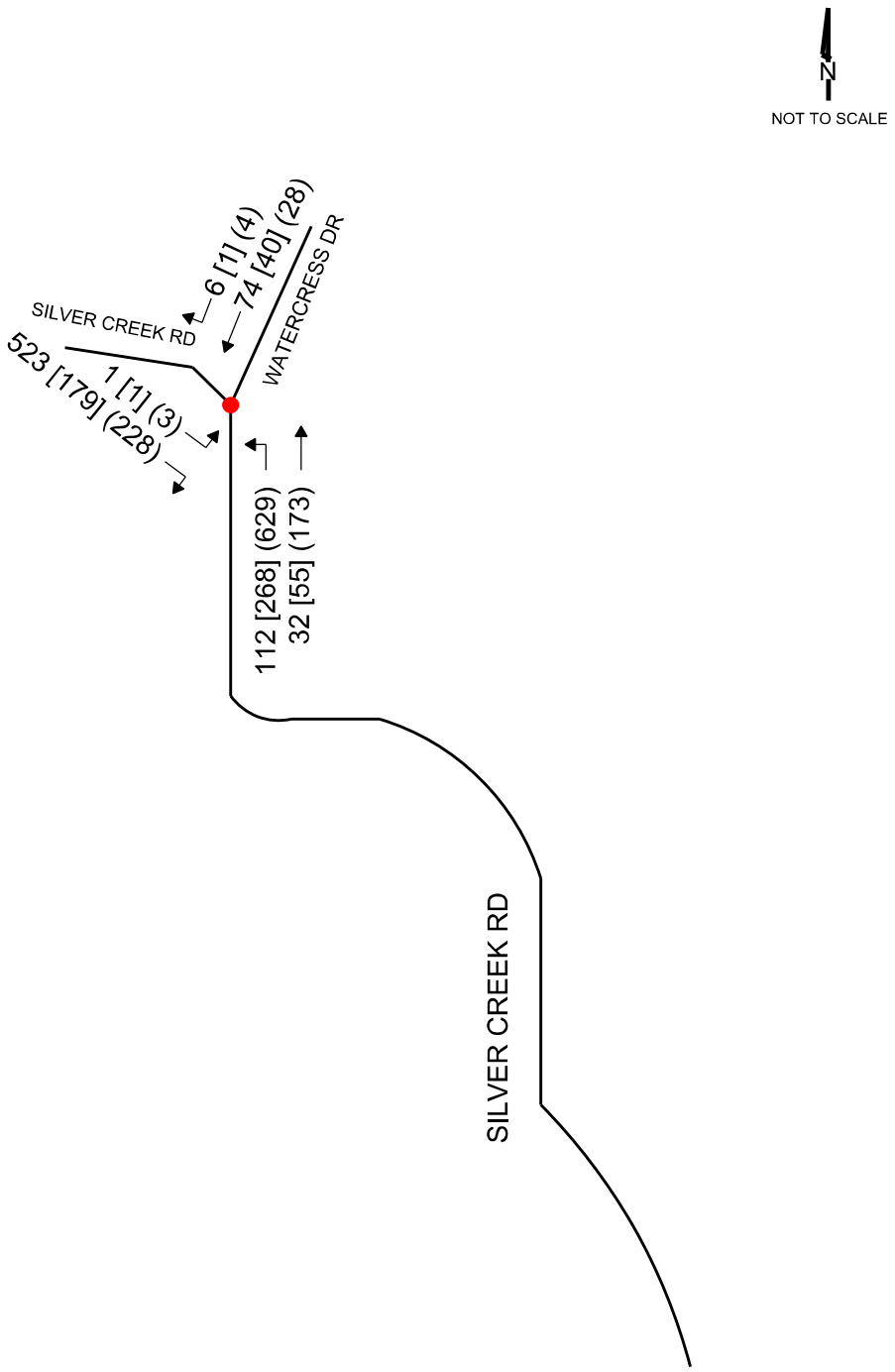
LEGEND

- Study Intersection
- ← AM Peak Hour [SitePeak Hour] (PM Peak Hour)

3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Site Opening (2023)
Background Peak Hour Traffic Volumes

Figure 4



LEGEND

- Study Intersection
- ← AM Peak Hour [SitePeak Hour] (PM Peak Hour)

3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Site Closure (2043)
Background Peak Hour Traffic Volumes

Figure 5

SITE DATA AND TOTAL TRAFFIC

Based on information provided by the client, the daily traffic volume entering and exiting the site is 72 inbound vehicles and 72 outbound vehicles during a 24-hour period. The number of vehicles accessing the site for critical time periods are shown in **Table 2**. As shown, the peak hour of the facility occurred between 2:00 PM and 3:00 PM.

Table 2: Vehicles Accessing Facility

Time Period	Vehicles per Period		
	Entering	Exiting	Total
AM Peak Hour	6	6	12
Facility Peak Hour (2:00 PM to 3:00 PM)	8	8	16
PM Peak Hour	6	6	12
Average Daily Trips	**72**	**72**	**144**

Parkhill representatives provided the average inbound number of vehicles accessing the existing proposed recycling facility in each hour of the day, based on previous collected data. Information was provided for weekday operation and is included in the Appendix. It was assumed that the same number of entering and exiting trips would occur over the course of the day.

Trip Distribution

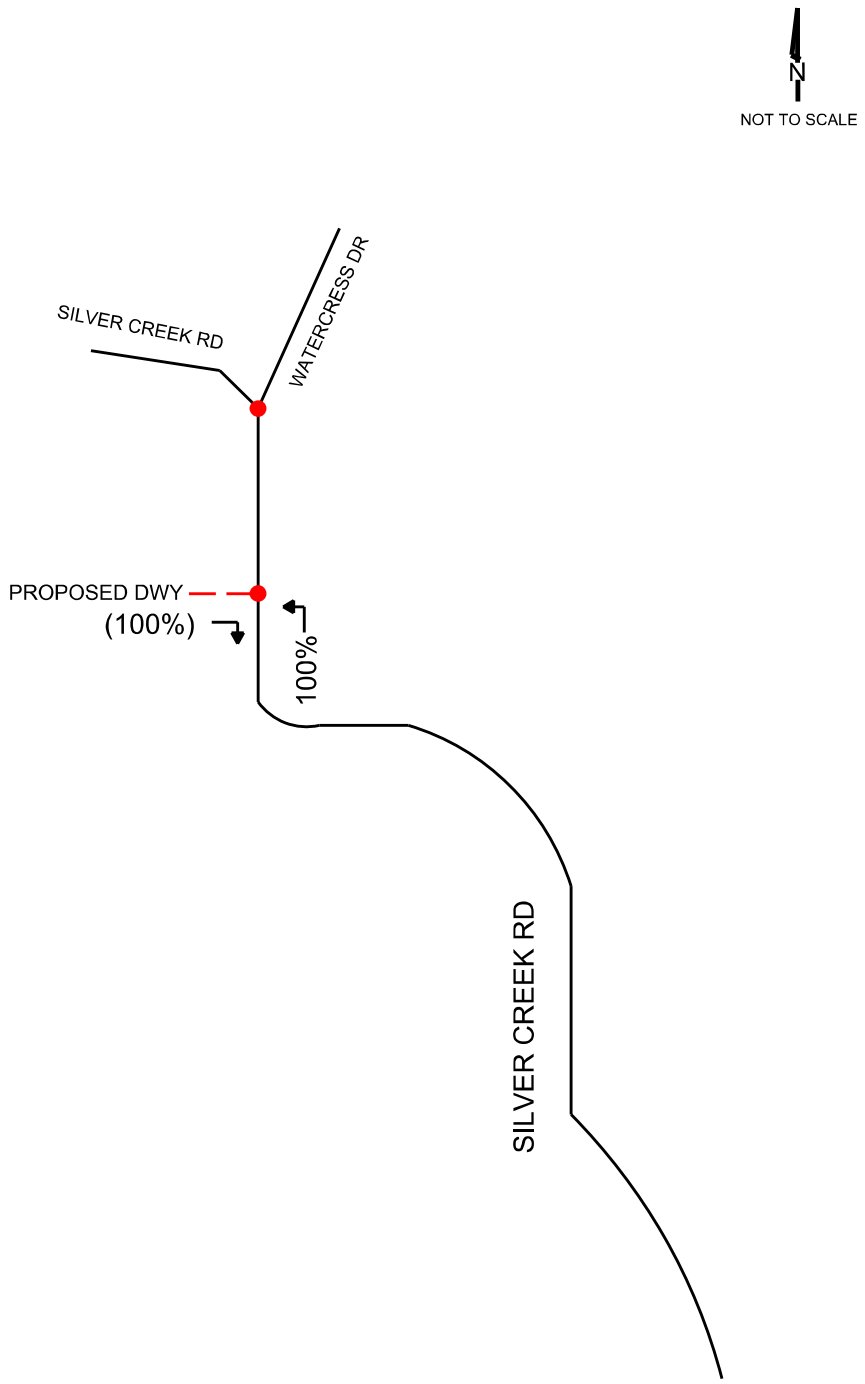
The distribution and assignment of site generated trips to the study area roadways and intersections were performed based on the local traffic patterns, knowledge of the study area, and the proposed location of the site access point. Based on discussions with the client, the preliminary access route to the site will be along Silver Creek Road from the south only. The assumed directional distribution percentages for the proposed development are shown in **Figure 6**.

Site Traffic Assignment

Traffic volumes expected to be generated by the proposed development were assigned to the area roadways and site access point based on the assumed directional distribution identified in Figure 6. The estimated site generated traffic volumes for the proposed development are shown in **Figure 7** during the weekday AM peak, site peak, and PM peak hours. The entering and exiting site traffic volumes for each scenario were previously identified in Table 2.

Projected Total Traffic Volumes

To obtain the projected total traffic volumes at Site Opening (2023), the estimated site generated traffic volumes (Figure 7) were added to the 2023 background traffic volumes (Figure 4). The projected total traffic volumes for Site Opening (2023) are shown in **Figure 8**. Similarly, to obtain the projected total traffic volumes at Site Closure (2043), the estimated site generated traffic volumes (Figure 7) were added to the 2043 background traffic volumes (Figure 5). The projected total traffic volumes for Site Closure (2043) are shown in **Figure 9**.



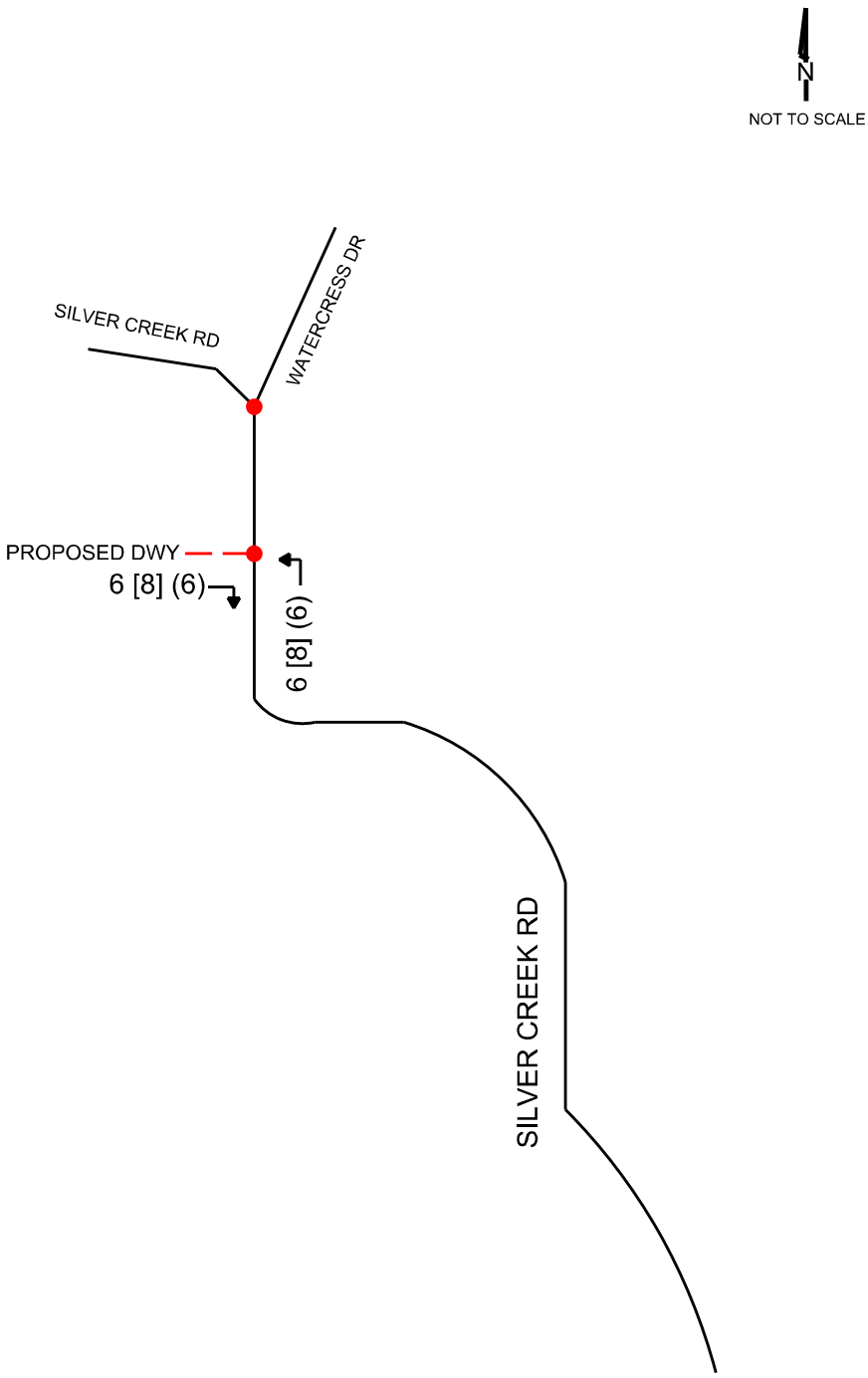
LEGEND

- Study Intersection
- ← Inbound (Outbound) Percentage

LEE ENGINEERING
3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Assumed Directional Distribution

Figure 6



LEGEND

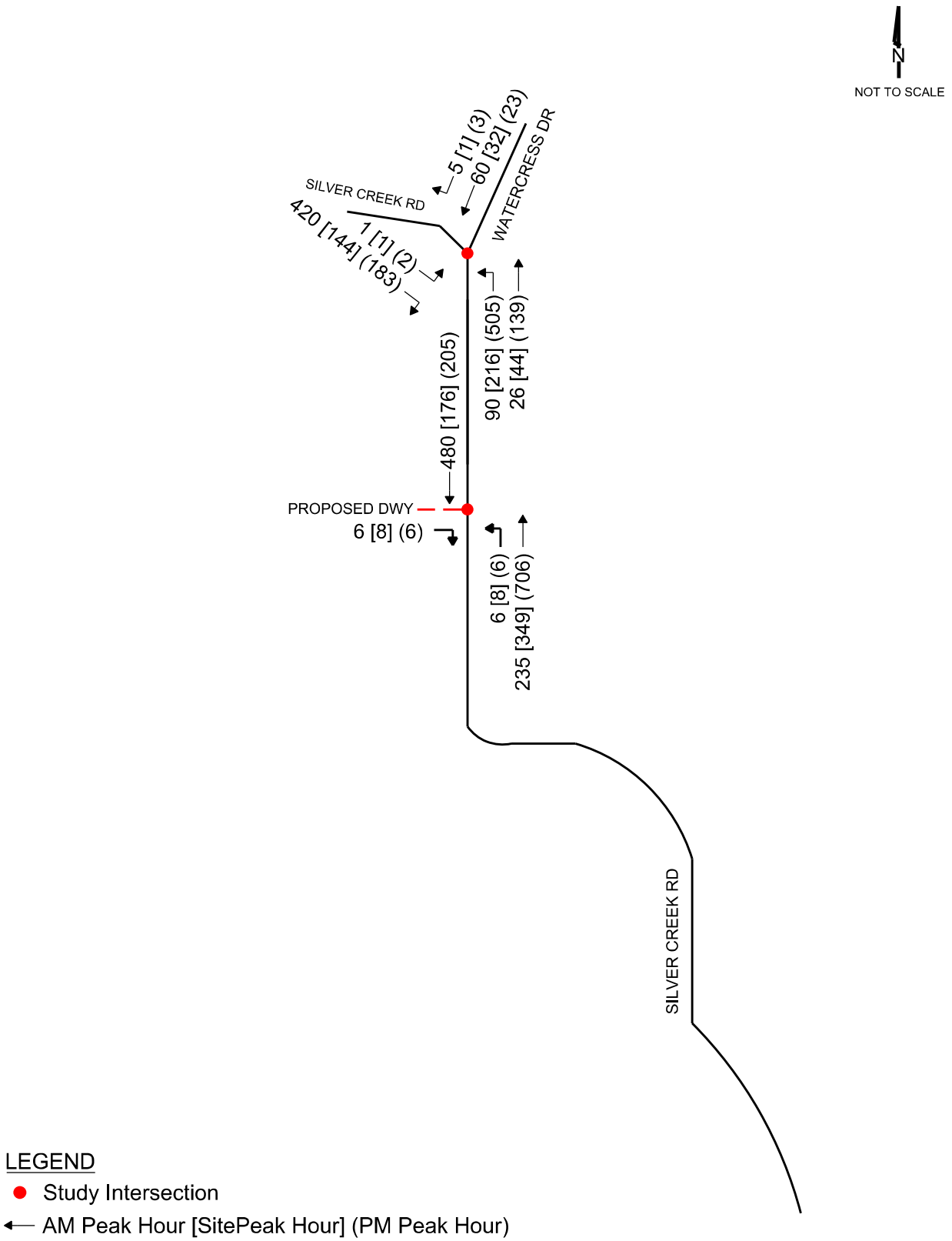
- Study Intersection
- ← AM Peak Hour [SitePeak Hour] (PM Peak Hour)

3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855

LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Site Generated Traffic Volumes

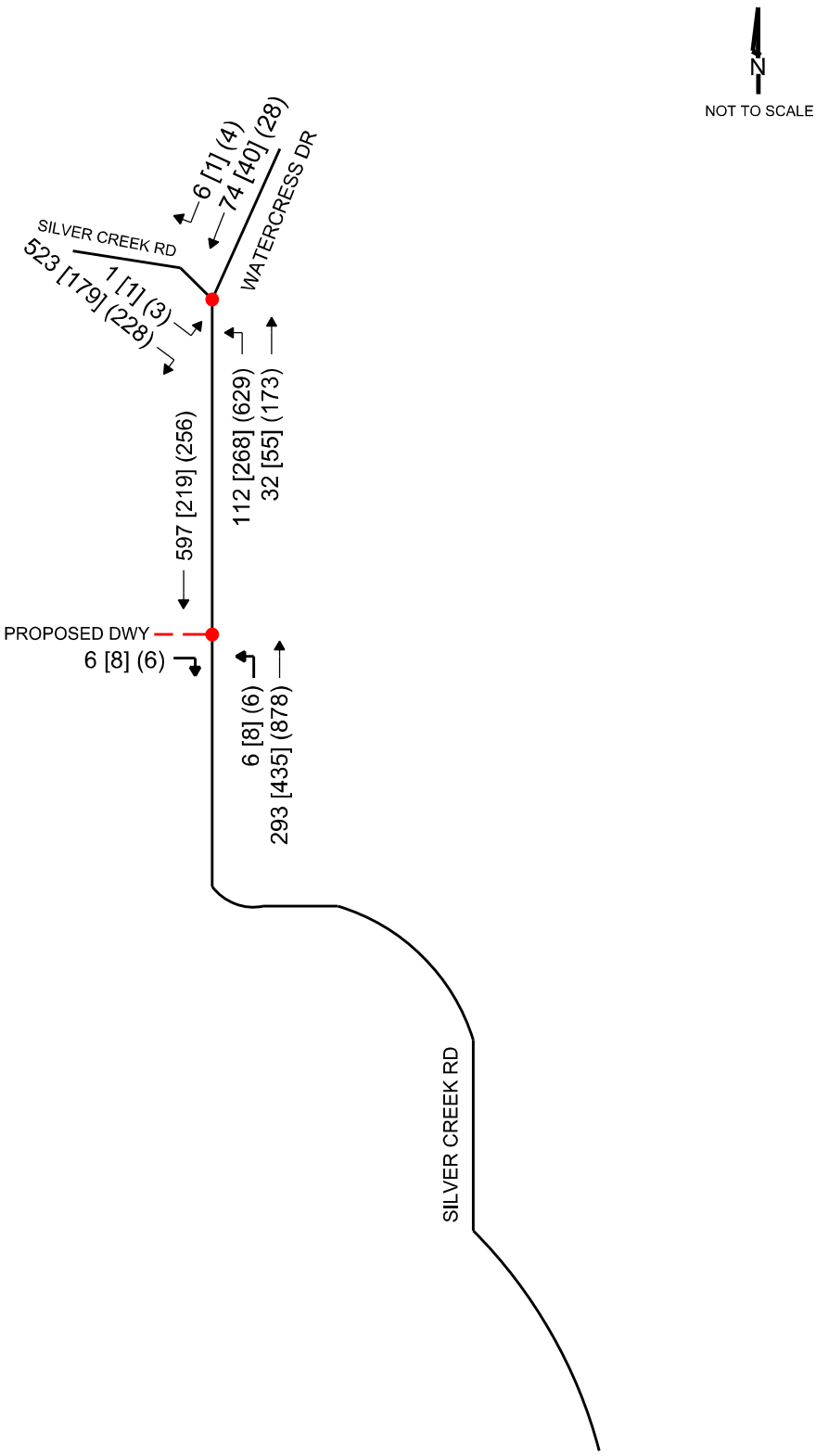
Figure 7



3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Site Opening (2023)
Total Peak Hour Traffic Volumes

Figure 8



3030 LBJ FREEWAY
SUITE 1660
DALLAS, TEXAS 75234
972-248-3006 FAX 972-248-3855
LEE ENGINEERING
DALLAS - PHOENIX - ALBUQUERQUE
OKLAHOMA CITY - SAN ANTONIO

Site Closure (2043)
Total Peak Hour Traffic Volumes

Figure 9

Based on information from BAP Kennor representatives, the estimated hourly site traffic volumes entering and exiting the site are shown in **Table 3**. Based on the data provided by the operator, the facility is expected to generate approximately ten percent (10%) of the daily facility traffic during the 10:00 AM, 11:00 AM, and 2:00 PM peak hours. The percentage of daily traffic was multiplied by the projected daily volume to obtain the estimated trips in vehicles per hour for each hour of the operating day.

Table 3: Estimated Hourly Site Traffic Volumes

Time	% of Daily	Trips (VPH)		
		In	Out	Total
7:00 AM	7.72%	6	6	12
8:00 AM	6.48%	5	5	10
9:00 AM	8.60%	7	7	14
10:00 AM	10.20%	8	8	16
11:00 AM	10.07%	8	8	16
12:00 PM	9.86%	7	7	14
1:00 PM	9.74%	7	7	14
2:00 PM	10.23%	8	8	16
3:00 PM	9.81%	7	7	14
4:00 PM	8.22%	6	6	12
5:00 PM	7.82%	6	6	12
6:00 PM	1.26%	1	1	2
7:00 PM	7.72%	6	6	12
Total[1]	100.0%	72	72	144

[1] It is important to note that the projected daily site traffic volume is 72 entering and 72 exiting vehicles to and from the site. Because the hourly site traffic was estimated and rounded up to the next vehicle, a conservative practice for analysis purposes, the volumes in the table below sum to more than 72 entering and 72 exiting vehicles. Again, this is due to rounding.

It is important to note that background traffic in the area is the primary contributor to the levels of service on Silver Creek Road, as the facility traffic constitutes less than 3.6% of the directional traffic during the site peak hour and less than 2.5% of the total traffic along Silver Creek Road in either the AM, site peak, or PM peak hours. For reference, the estimated percentage of site traffic on Silver Creek Road is shown in **Table 4**. Volumes are shown for the Peak Year (2043).

Table 4: Facility Traffic as a Proportion of Traffic on Silver Creek Road

Time Period	Volume	Silver Creek Road South of Proposed Driveway		
		NB	SB	Total
2043 AM Peak	Total	299	603	902
	Site	6	6	12
	Percentage	2.0%	1.0%	1.3%
2043 PM Peak	Total	884	262	1146
	Site	6	6	12
	Percentage	0.7%	2.3%	1.0%
2043 Site Peak	Total	443	227	670
	Site	8	8	16
	Percentage	1.8%	3.5%	2.4%

As shown, the facility accounts for less than 1.5% of overall projected traffic on Silver Creek Road south of the proposed driveway during the AM or PM peak hours. During off peak hours, when background traffic is lower, the facility makes up approximately 2.4% of overall projected traffic along Silver Creek Road.

ROADWAY CAPACITY ANALYSIS

Planning level capacity analysis allows for the assessment of a roadway's ability to adequately serve the projected traffic volumes by comparing projected volumes to the capacity of the roadway. The North Central Texas Council of Governments (NCTCOG) maintains a regional travel demand model that contains service volumes for various roadway and area types. The service volumes from the NCTCOG model are used in this analysis to conduct the roadway link analysis for each segment on the primary access roadways. These service volumes represent the planning level capacity of each roadway type. Capacity values by area type, facility type, and functional class are presented in **Table 5**.

Table 5: NCTCOG Roadway Capacity Analysis and Level of Service Guidelines

Hourly Service Volume per Lane*
(Undivided Roads)

Area Type	Functional Class						
	Freeway	Principal Arterial	Minor Arterial	Collector	Ramp	Frontage Road	HOV
CBD	n/a	650	650	425	1250	650	n/a
Outer Business District	n/a	725	725	450	1375	725	n/a
Urban Residential	n/a	775	750	475	1425	750	n/a
Suburban Residential	n/a	875	825	525	1600	825	n/a
Rural	n/a	925	875	550	1725	875	n/a

* Service volumes at Level of Service E (the model requires LOS E service volumes)

The *Highway Capacity Manual* defines levels of service for automobiles within a range from "A" to "F" with "A" being free-flow, higher-speed, low-density operation and "F" being a dense traffic stream with constrained or congested operations. Typically, Level of Service "D" is the desirable level of service within a built-up urban environment.

For purposes of the roadway link analysis, the volume to capacity ratio, V/C, was calculated. Level of Service (LOS) was then estimated for each facility based on the V/C ratio according to the following breakdown.

- if Volume/Service Volume Ratio is <= 0.45, then LOS = A or B
- if Volume/Service Volume Ratio is > 0.45 and <= 0.65, then LOS = C
- if Volume/Service Volume Ratio is > 0.65 and <= 0.80, then LOS = D
- if Volume/Service Volume Ratio is > 0.80 and <= 1.00, then LOS = E
- if Volume/Service Volume Ratio is > 1.00, then LOS = F

As previously stated, Silver Creek Road is classified as a Neighborhood Connector on the City of Fort Worth *Master Thoroughfare Plan* (2016) and a Major Collector on the TxDOT Statewide Planning Map. For this study, Silver Creek Road was assumed to be a Collector roadway in a Rural area based on the NCTCOG area types. Silver Creek Road is a two-lane undivided roadway

west of the Brewer High School Access roadway and a four-lane divided roadway east of the Brewer High School Access. Based on that information, the appropriate capacity volume would be 550 vehicles per hour in each direction (550 vehicles/hour/lane x 1 lane) west of the Brewer High School Access roadway.

The resulting roadway link level of service values for the roadway links within each scenario are provided in **Table 6**. Shaded cells indicate roadway links operating at LOS E or F.

Table 6: Roadway Capacity Analysis – Silver Creek Road

Silver Creek Road (South of Proposed Site Driveway)												
Analysis Period	**Direction**	**Configuration**	**Capacity[1]**	**Volume**			**V/C**			**LOS**		
				AM	**Site Peak**	**PM**	**AM**	**Site Peak**	**PM**	**AM**	**Site Peak**	**PM**
Existing (2022)	NB	2U	550	229	340	687	0.42	0.62	1.25	A/B	C	F
	SB		550	467	171	200	0.85	0.31	0.36	E	A/B	A/B
Site Opening (2023) Background	NB	2U	550	235	349	706	0.43	0.63	1.28	A/B	C	F
	SB		550	480	176	205	0.87	0.32	0.37	E	A/B	A/B
Site Opening (2023) Total	NB	2U	550	241	357	712	0.44	0.65	1.29	A/B	C	F
	SB		550	486	184	211	0.88	0.33	0.38	E	A/B	A/B
Site Closure (2043) Background	NB	2U	550	293	435	878	0.53	0.79	1.60	C	D	F
	SB		550	597	219	256	1.09	0.40	0.47	F	A/B	C
Site Closure (2043) Total	NB	2U	550	299	443	884	0.54	0.81	1.61	C	E	F
	SB		550	603	227	262	1.10	0.41	0.48	F	A/B	C

[1] – Refer to page 22 for NCTCOG Service Volume

INTERSECTION CAPACITY ANALYSIS

The Level of Service (LOS) of an intersection is a qualitative measure of capacity and operating conditions and is directly related to vehicle delay. The LOS criteria for unsignalized and signalized intersections are shown in **Table 7**. LOS is given a letter designation from A to F, with LOS A representing very short delays and LOS F representing very long delays or over-capacity conditions. For both signalized and unsignalized intersections, LOS D is typically considered as the minimum acceptable condition.

Table 7: Level of Service Criteria for Intersections

Level-of-Service (LOS)	Average Delay (seconds/vehicle)	
	Unsignalized	Signalized
A	≤ 10.0	≤ 10.0
B	10.1 to 15.0	10.1 to 20.0
C	15.1 to 25.0	20.1 to 35.0
D	25.1 to 35.0	35.1 to 55.0
E	35.1 to 50.0	55.1 to 80.0
F	> 50.0 or Volume exceeds Capacity	> 80.0 or Volume exceeds Capacity

SOURCE: *Highway Capacity Manual (HCM) 6th Edition*, Transportation Research Board, 2016

Capacity analyses were conducted for the study area intersections under the following analysis scenarios:

- Existing (2022) traffic conditions;
- Assumed Site Opening Year (2023) traffic conditions; and
- Peak Year Operations in the Year (2043) Prior to Site Closure traffic conditions.

Results were obtained using the macroscopic traffic analysis software package *Synchro 11*. Software output sheets are included in the Appendix. It should be noted that HCM methodology does not provide intersection-wide delay or level of service for intersections operating under two-way stop control.

Existing (2022) Traffic Conditions

Table 8 presents the results of the 2022 existing capacity analysis for the study area intersection. The existing lane configurations shown in Figure 2 and the traffic volumes shown in Figure 3 were used for this analysis.

Table 8: Intersection Capacity Analyses Results – Existing (2022) Traffic

1: Watercress Road at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB	SB Left
AM Peak	---	---	13.0 (B)	0.0 (A)	7.5 (A)
Site Peak	---	---	11.2 (B)	0.0 (A)	7.8 (A)
PM Peak	---	---	15.6 (C)	0.0 (A)	8.9 (A)

Note: 1 - Delay in seconds/vehicle (Level of Service)
2 – Two-Way Stop-Control (TWSC)

As can be seen in the above table, the analysis indicates that the approaches and movements at the existing study intersection operate at acceptable Levels of Service under existing traffic conditions.

Site Opening (2023) Background Traffic Conditions

Table 9 presents the results of the 2023 background capacity analysis for the study area intersection. The existing lane configurations shown in Figure 2 and the traffic volumes shown in Figure 4 were used for this analysis.

Table 9: Intersection Capacity Analyses Results – Site Opening (2023) Background Traffic

1: Watercress Road at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB	SB Left
AM Peak	---	---	13.2 (B)	0.0 (A)	7.5 (A)
Site Peak	---	---	11.3 (B)	0.0 (A)	7.8 (A)
PM Peak	---	---	16.0 (C)	0.0 (A)	9.0 (A)

Note: 1 - Delay in seconds/vehicle (Level of Service)
2 – Two-Way Stop-Control (TWSC)

As can be seen in the above table, the analysis indicates that the approaches and movements at the existing study intersection are predicted to operate similar to existing traffic conditions.

Site Closure (2043) Background Traffic Conditions

Table 10 presents the results of the 2043 background capacity analysis for the study area intersections. The existing lane configurations shown in Figure 2 and the traffic volumes shown in Figure 5 were used for this analysis.

Table 10: Intersection Capacity Analyses Results – Site Closure (2043) Background Traffic

1: Watercress Road at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB	SB Left
AM Peak	---	---	15.5 (C)	0.0 (A)	7.5 (A)
Site Peak	---	---	12.3 (B)	0.0 (A)	8.0 (A)
PM Peak	---	---	20.1 (C)	0.0 (A)	9.6 (A)

Note: 1 - Delay in seconds/vehicle (Level of Service)
2 – Two-Way Stop-Control (TWSC)

As can be seen in the above table, the analysis indicates that the approaches and movements at the study intersection are predicted to operate similar to the predicted 2023 background traffic volumes.

Site Opening (2023) Total Traffic Conditions

Table 11 presents the results of the 2023 total capacity analysis for the study area intersections. The proposed lane configurations shown in Figure 2 and the traffic volumes shown in Figure 8 were used for this analysis.

Table 11: Intersection Capacity Analyses Results – Site Opening (2023) Total Traffic

1: Watercress Road at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB	SB Left
AM Peak	---	---	13.2 (B)	0.0 (A)	7.5 (A)
Site Peak	---	---	11.3 (B)	0.0 (A)	7.8 (A)
PM Peak	---	---	16.0 (C)	0.0 (A)	9.0 (A)
2: Proposed Site Access at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB Left	SB
AM Peak	---	11.6 (B)	---	8.5 (A)	0.0 (A)
Site Peak	---	9.3 (A)	---	7.6 (A)	0.0 (A)
PM Peak	---	9.4 (A)	---	7.7 (A)	0.0 (A)

Note: 1 - Delay in seconds/vehicle (Level of Service)
2 – Two-Way Stop-Control (TWSC)

As can be seen in the above table, the analysis indicates that the approaches and movements at the study intersections are predicted to operate similar to the 2023 site opening background conditions.

Site Closure (2043) Total Traffic Conditions

Table 12 presents the results of the 2043 total capacity analysis for the study area intersections. The proposed lane configurations shown in Figure 2 and the traffic volumes shown in Figure 9 were used for this analysis.

Table 12: Intersection Capacity Analyses Results – Site Closure (2043) Total Traffic

1: Watercress Road at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB	SB Left
AM Peak	---	---	15.5 (C)	0.0 (A)	7.5 (A)
Site Peak	---	---	12.3 (B)	0.0 (A)	8.0 (A)
PM Peak	---	---	20.1 (C)	0.0 (A)	9.6 (A)
2: Proposed Driveway at Silver Creek Road (Unsignalized – TWSC)					
Peak Hour	Intersection [2]	EB	WB	NB Left	SB
AM Peak	---	12.8 (B)	---	8.9 (A)	0.0 (A)
Site Peak	---	9.5 (A)	---	7.7 (A)	0.0 (A)
PM Peak	---	9.8 (A)	---	7.8 (A)	0.0 (A)

Note: 1 - Delay in seconds/vehicle (Level of Service)
2 – Two-Way Stop-Control (TWSC)

As can be seen in the above table, the analysis indicates that the approaches and movements at the study intersections are predicted to operate similar to the predicted 2024 background traffic volumes during the peak hours.

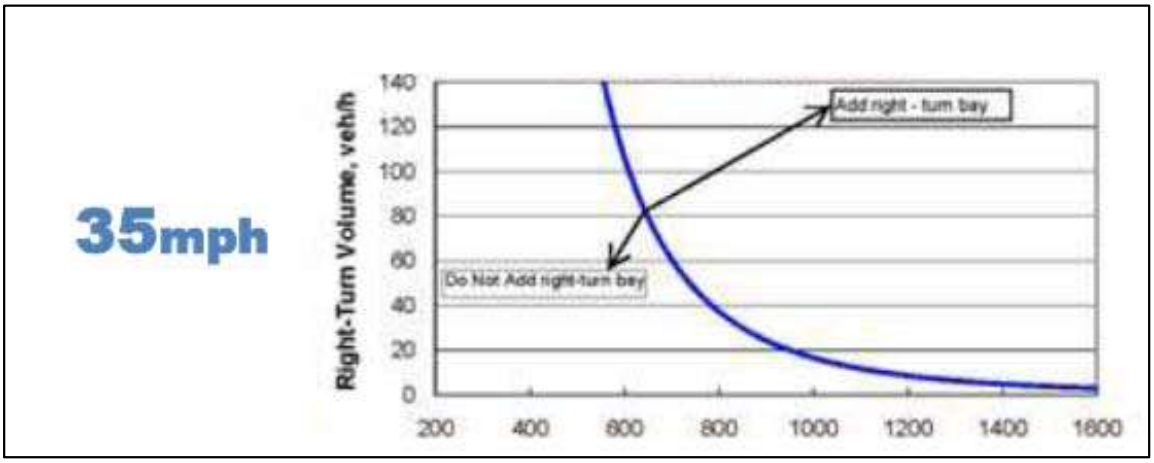
AUXILIARY LANE ANALYSIS

As part of this study, access management/auxiliary lane analyses were performed to consider the need for deceleration lanes at the site access roadway.

Right Turn Deceleration Lane Analysis
At the site access point, there are no predicted southbound right-turn volumes entering the proposed site driveway during the peak hours. Therefore, a dedicated southbound right-turn lane is not necessary at the proposed site driveway. A southbound right turn lane is also not feasible due to the proximity of the bridge structure to the north.

As identified in the City of Fort Worth's *Access Management Policy*, the graphs in Figure 4.1 of this document (provided below) was used, which consider the roadway characteristics (number of lanes, posted speed) and projected right turning and through traffic volumes on the adjacent roadway.

Figure 10: Guidelines for Right-turn Lanes at Unsignalized intersections and Driveways – 2 Lanes



Left Turn Deceleration Lane Analysis

The City of Fort Worth *Access Management Policy* identifies the following five (5) scenarios where left-turn lanes must be provided:

1) Along a Thoroughfare at all driveways or street intersections where left turns are allowed
2) All approaches to an existing (or future) signalized intersection
3) Along a Connecting Street/Driveway that intersects with System Link, Commercial Connectors or Neighborhood Connectors (two-way ADT > 1,000 vpd)
4) Along streets with medians
5) Along Collector streets at intersections serving non-residential or high-density residential development

Silver Creek Road is classified as a Neighborhood Connector on the City of Fort Worth *Master Thoroughfare Plan* (2016) south of the site but is planned to be realigned south and west of the site. Based on TxDOT's *Statewide Planning Map*, Silver Creek Road is classified as a Major Collector. For the purposes of this analysis, Silver Creek Road was considered to be a Collector street.

Since the proposed site driveway is located on a Collector Street (Silver Creek Road) and serves a commercial land use, the City's criteria indicate that a left-turn deceleration lane should be installed. However, a left-turn lane that is required based on the City's criteria can be omitted if it is shown that traffic safety and operations are not negatively impacted if a left turn lane is not provided.

As stated in the City of Fort Worth's *Access Management Policy*, "Left- and right-turn lanes allow vehicles to slow and queue without undue disruption to the through vehicles in the traffic stream. In particular, this helps reduce the speed differential between through and turning vehicles until the turning vehicles are safely in the turn lane."

With the existing posted speed limit of 35 mph on Silver Creek Road, motorists will be travelling at a low speed which helps to minimize the impact a northbound left turning vehicle would have on southbound Silver Creek Road traffic. The site entering volumes are predicted to range from 6 to 8 vehicles per hour throughout most of the day. This is one (1) vehicle every 7.5 to 10 minutes. Therefore, for the reasons identified above, it is believed that the installation of a northbound left turn deceleration lane at the proposed site driveway on Silver Creek Road is not necessary.

SIGHT DISTANCE ANALYSIS

As part of this traffic study, the available, desirable (intersection) and required (stopping) sight distances for motorists on the adjacent roadway and accessing the adjacent roadway from the proposed driveway and access roadways were analyzed. Guidelines for providing sight distance on roadways and intersections are provided by the American Association of State Highway and Transportation Officials (AASHTO) and provided in the 2018 edition of *A Policy on Geometric Design of Highways and Streets*. Text from Section 9.5.1 which discusses the minimum required (stopping sight) and desirable (intersection) sight distance is provided below:

> *Stopping sight distance is provided continuously along each roadway or street so that drivers have a view of the roadway ahead that is sufficient to allow drivers to stop. The provision of stopping sight distance at all locations along each roadway, including intersection approaches, is fundamental to intersection operation.*
>
> *If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, a major-road vehicle may need to slow or stop to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.*

Table 13 presents the required and available sight distance for vehicles exiting the proposed development driveway.

Table 13: Sight Distance Evaluation

Major Roadway	Silver Creek Road
Posted Speed Limit	35 mph
Minor Roadway	Proposed Driveway
Design Vehicle	Passenger Car
Stopping Sight Distance (Required)	250 feet
Available Stopping Sight Distance from the Left	>1,000 feet
Available > Required?	YES
Available Stopping Sight Distance from the Right	>500 feet
Available > Required?	YES
Intersection Sight Distance (Desirable)	390 feet
Available Sight Distance to the Left	~285 feet
Available > Desirable?	NO
Available Sight Distance to the Right	~450 feet
Available > Desirable?	YES

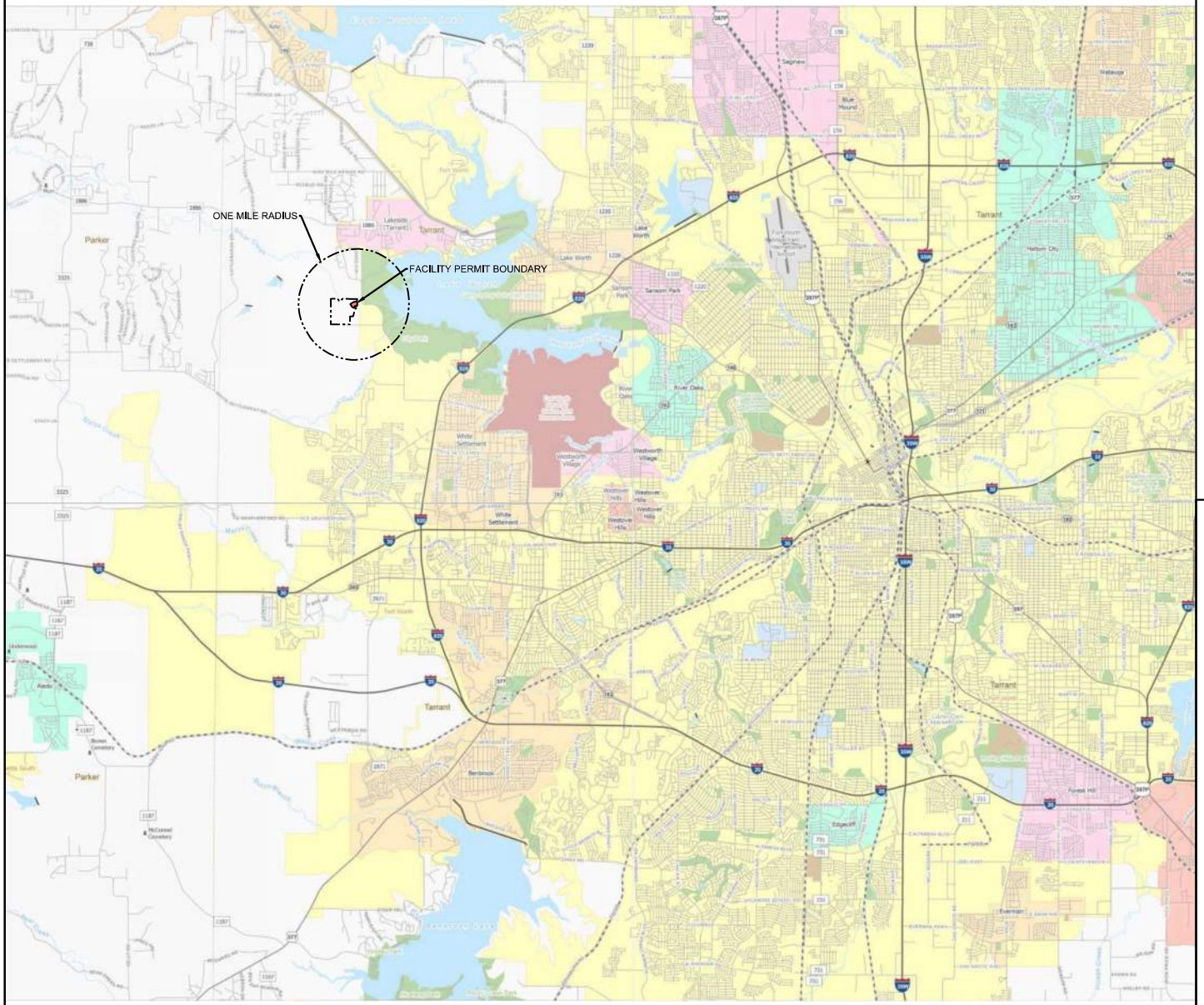
Based on conditions that existed in the field when sight distance observations/measurements were performed, adequate stopping (required) sight distance is predicted to be provided at the proposed site driveway. However, there is not enough intersection (desirable) sight distance looking to the left due to the existing vegetation along Silver Creek Road. The existing vegetation between Silver Creek and the driveway should be cleared during construction to provide improved intersection (desirable) sight distance is available at the proposed driveway.

CONCLUSIONS & RECOMMENDATIONS

Based on the results of this study for the BAP Kennor C&D Recycling Facility in Tarrant County, Texas, the following conclusions are made:

- Silver Creek Road provides adequate access to the proposed site. No roadway improvements are necessary to accommodate site traffic.
- The proposed site is predicted to generate 144 trips per day when the facility is anticipated to open in 2023. Facility peak hourly trip generation is predicted to be 16 trips, 8 inbound and 8 outbound trips.
- Roadway link capacity analyses for the year 2023 and 2043 for the study roadways was performed and poor levels of service in the peak directions of travel indicated the need for intersection level of service analysis that was also conducted for the site access point along the proposed access route. Roadway operations are not predicted to further degrade as a result of site traffic.
- Intersection capacity analysis indicates the following:
    - The proposed site access intersection with Silver Creek Road is anticipated to operate at Level of Service A or B under total traffic conditions in 2023 and 2043.
    - The existing unsignalized intersection of Watercress Drive and Silver Creek Road is predicted to operate at acceptable levels of service for each scenario throughout the study.
- No southbound right turn lane is necessary to serve the site because no site access route exists for traffic from the north. Furthermore, the bridge north of the driveway makes a turn lane infeasible.
- A northbound left-turn lane serving the site appears to be required by City of Fort Worth Access Management Policy. A northbound left-turn lane serving the site access drive is not necessary for the following reasons:
    - The posted speed limit is 35 mph in the vicinity of the site.
    - The site entering volumes are predicted to range from 6 to 8 vehicles per hour throughout most of the Day. This is one (1) vehicle every 7.5 to 10 minutes.
    - Silver Creek Road is planned to be realigned, in the future based on the City's Thoroughfare plan, thus reducing background traffic in the vicinity of the site.
- Adequate stopping sight distance is present along Silver Creek Road in the vicinity of the proposed site access. Vegetation to the north of the site access restricts intersection sight distance. The existing vegetation between Silver Creek to the north and the driveway should be cleared during construction to provide improved intersection (desirable) sight distance. The facility currently generates 144 trips per day with 72 vehicles entering and 72 vehicles existing the proposed facility.

APPENDIX



N

0 1 2
SCALE IN MILES

NOTES:

1. SITE IS LOCATED AT:
   LAT: N 32° 48' 1.11"
   LONG: W 97° 30' 32.42"
2. SITE IS LOCATED APPROXIMATELY 2.5 MILES NORTHWEST OF THE INTERSECTION OF IH 820 AND SILVER CREEK ROAD IN FORTH WORTH, TEXAS.

Texas Department of Transportation

- Unincorporated Community
- County Seat
- Border Crossing
- Cemetery
- Cemetery (Inside City)
- Deep Draft Port
- Shallow Draft Port
- Railroad
- Dam
- River or Stream
- TXDOT District
- Lakes
- Education
- Military
- Airport Runway
- Airport
- Prison
- Parks and Other Public Land

LEGEND

- PROPERTY BOUNDARY
- FACILITY PERMIT BOUNDARY

DRAFT RELEASED BY
JOHN DENHOLM PE 97330
FOR REVIEW PURPOSES ONLY
TBPE F-450

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER

07/22/2022
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC
BAP KENNOR RECYCLING FACILITY
P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

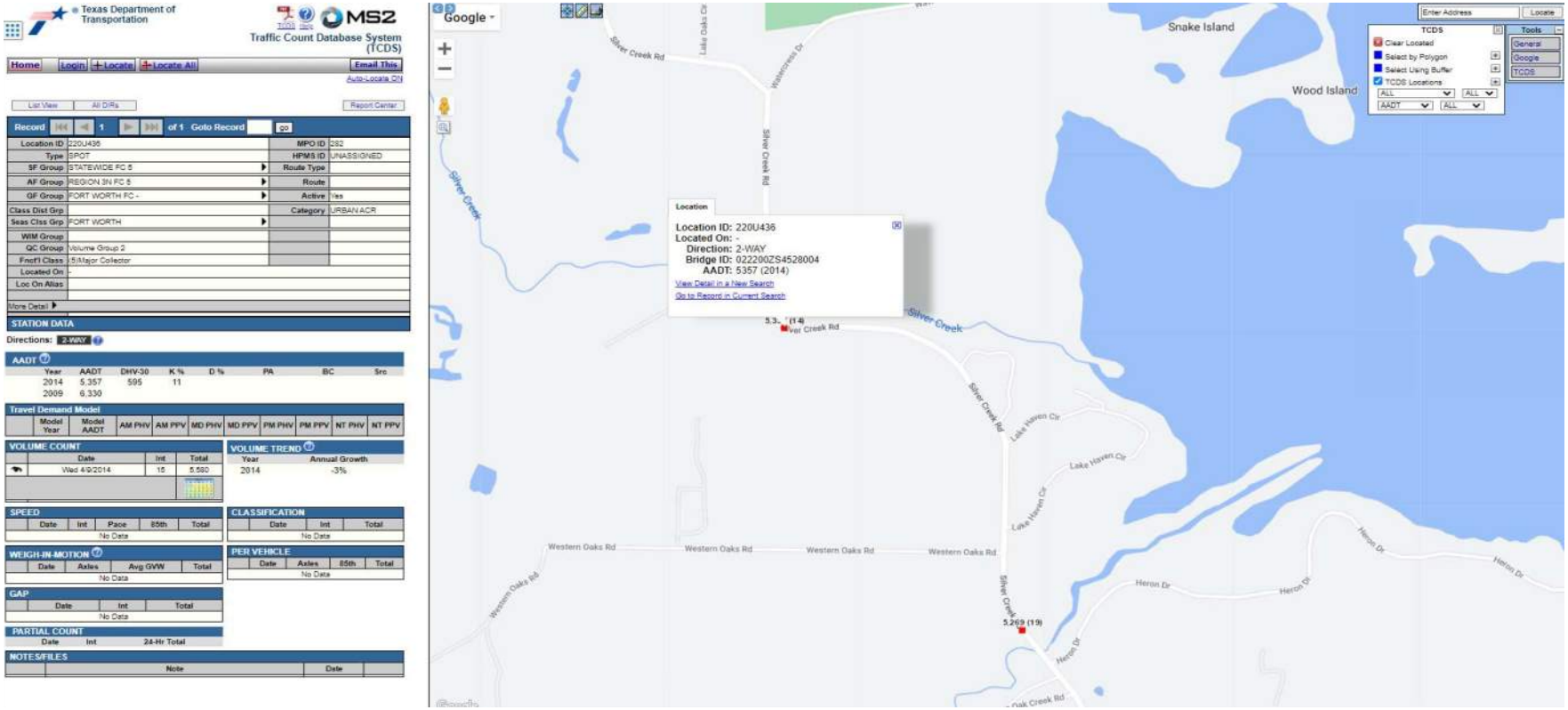
GENERAL LOCATION MAP

FIGURE I-4.1

FILE NAME: A:\2021\1604.21\03_DSGN\01_DWG\050_CIVIL\02_CONTENTVFIG.I.A.1_General_Location_Map_v1.1.dwg LAYOUT NAME: FIGURE I-4.1 PRINTED: Thursday, July 21, 2022 - 11:54am USER: sfranklin

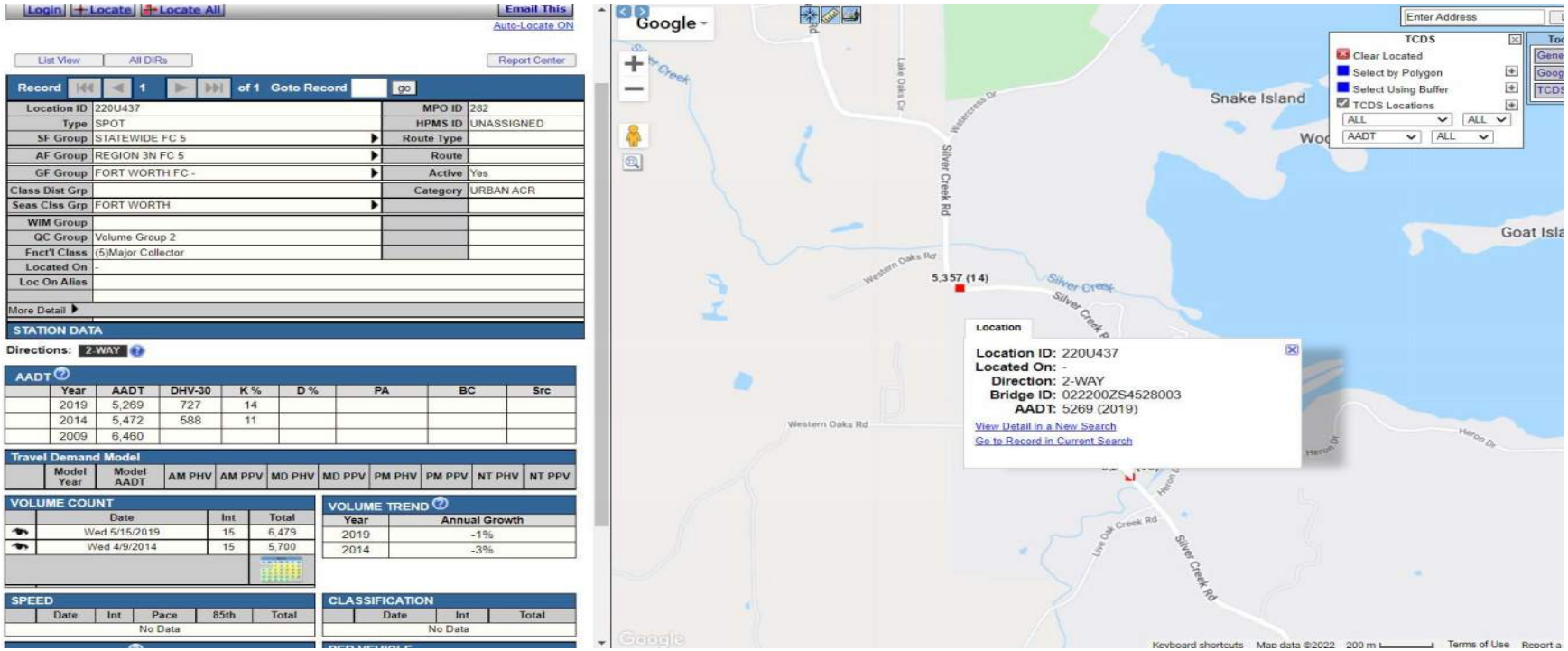
Year	24 Hour Volume	% Growth Silver Creek Road S of Proposed Site Driveway																
		Yearly	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2009	6,330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010		-1.000	-1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011		#####	-1.000	#####	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012		#####	-1.000	#####	#####	-	-	-	-	-	-	-	-	-	-	-	-	-
2013		#####	-1.000	#####	#####	#####	-	-	-	-	-	-	-	-	-	-	-	-
2014	5,357	#####	-0.033	#####	#####	#####	#####	-	-	-	-	-	-	-	-	-	-	-
2015		-1.000	-1.000	#####	#####	#####	#####	-1.000	-	-	-	-	-	-	-	-	-	-
2016		#####	-1.000	#####	#####	#####	#####	-1.000	#####	-	-	-	-	-	-	-	-	-
2017		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	-	-	-	-	-	-	-	-
2018		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	-	-	-	-	-	-	-
2019		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-	-	-	-	-	-
2020		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	#####	-	-	-	-	-
2021		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	#####	#####	-	-	-	-
2022	6,617	#####	0.003	#####	#####	#####	#####	0.027	#####	#####	#####	#####	#####	#####	#####	-	-	-
2023		-1.000	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	#####	#####	#####	-1.000	-	-
2024		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	#####	#####	#####	-1.000	#####	-
2025		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	#####	#####	#####	-1.000	#####	#####

2022 volumes from 2022 TMC at Watercress and Silver Creek Road intersection (NB + SB)


Texas Department of Transportation
MS2
Traffic Count Database System (TCDS)
Home
Login
Locate
Locate All
Email This
Auto-Locate ON
List View
All DIRs
Report Center
Record
of 1
Goto Record
go
Location ID 220U436
Type SPOT
SF Group STATEWIDE FC 6
AF Group REGION 3N FC 6
GF Group FORT WORTH FC -
Class Dist Grp
Seas Clss Grp FORT WORTH
WIM Group
QC Group Volume Group 2
Fnct'l Class 5|Major Collector
Located On -
Loc On Alias
More Detail
MPO ID 282
HPMS ID UNASSIGNED
Route Type
Route
Active Yes
Category URBAN ACR
STATION DATA
Directions: 2-WAY
AADT
Year AADT DHV-30 K % D % PA BC Src
2014 5,357 595 11
2009 6,330
Travel Demand Model
Model Year
Model AADT
AM PHV
AM PPV
MD PHV
MD PPV
PM PHV
PM PPV
NT PHV
NT PPV
VOLUME COUNT
Date
Int
Total
Wed 4/9/2014
15
5,580
VOLUME TREND
Year
Annual Growth
2014
-3%
SPEED
Date
Int
Pace
85th
Total
No Data
CLASSIFICATION
Date
Int
Total
No Data
WEIGH-IN-MOTION
Date
Axles
Avg GVW
Total
No Data
PER VEHICLE
Date
Axles
85th
Total
No Data
GAP
Date
Int
Total
No Data
PARTIAL COUNT
Date
Int
24-Hr Total
NOTES/FILES
Note
Date
Google
Location
Location ID: 220U436
Located On: -
Direction: 2-WAY
Bridge ID: 022200ZS4528004
AADT: 5357 (2014)
View Detail in a New Search
Go to Record in Current Search
Silver Creek Rd
Lake Oaks Cir
Waterscene Dr
Silver Creek
Snake Island
Wood Island
Enter Address
Locate
TCDS
Clear Located
Select by Polygon
Select Using Buffer
TCDS Locations
ALL
AADT
Tools
General
Google
TCDS
Lake Haven Cir
Western Oaks Rd
Heron Dr
5,269 (19)
Oak Creek Rd

Year	24 Hour Volume	% Growth Silver Creek Road N of Live Oak Creek														
		Yearly	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
2009	6,460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010		-1.000	-1.000	-	-	-	-	-	-	-	-	-	-	-	-	-
2011		#####	-1.000	#####	-	-	-	-	-	-	-	-	-	-	-	-
2012		#####	-1.000	#####	#####	-	-	-	-	-	-	-	-	-	-	-
2013		#####	-1.000	#####	#####	#####	-	-	-	-	-	-	-	-	-	-
2014	5,472	#####	-0.033	#####	#####	#####	#####	-	-	-	-	-	-	-	-	-
2015		-1.000	-1.000	#####	#####	#####	#####	-1.000	-	-	-	-	-	-	-	-
2016		#####	-1.000	#####	#####	#####	#####	-1.000	#####	-	-	-	-	-	-	-
2017		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	-	-	-	-	-	-
2018		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	-	-	-	-	-
2019	5,269	#####	-0.020	#####	#####	#####	#####	-0.008	#####	#####	#####	#####	-	-	-	-
2020		-1.000	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	-	-	-
2021		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	#####	-	-
2022		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	-
2023		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####
2024		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####
2025		#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####	#####	-1.000	#####	#####	#####

SCREEN CAPTURE OF TXDOT TCDS COUNT LOCATIONS NEAR SITE



Login | Locate | Locate All | Email This

Auto-Locate ON

List View | All DIRs | Report Center

Record 1 of 1 Goto Record go

Location ID	220U437	MPO ID	282
Type	SPOT	HPMS ID	UNASSIGNED
SF Group	STATEWIDE FC 5	Route Type	
AF Group	REGION 3N FC 5	Route	
GF Group	FORT WORTH FC -	Active	Yes
Class Dist Grp		Category	URBAN ACR
Seas Clss Grp	FORT WORTH		
WIM Group			
QC Group	Volume Group 2		
Fnct'l Class	(5)Major Collector		
Located On	-		
Loc On Alias			

More Detail

STATION DATA

Directions: 2-WAY

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2019	5,269	727	14				
	2014	5,472	588	11				
	2009	6,460						

Travel Demand Model

	Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV

VOLUME COUNT

	Date	Int	Total
	Wed 5/15/2019	15	6,479
	Wed 4/9/2014	15	5,700

VOLUME TREND

Year	Annual Growth
2019	-1%
2014	-3%

SPEED

	Date	Int	Pace	85th	Total
No Data					

CLASSIFICATION

	Date	Int	Total
No Data			

Google

Enter Address

TCDS
Clear Located
Select by Polygon
Select Using Buffer
TCDS Locations
ALL ALL
AADT ALL

Snake Island

Goat Isla

Silver Creek Rd

Western Oaks Rd

5,357 (14)

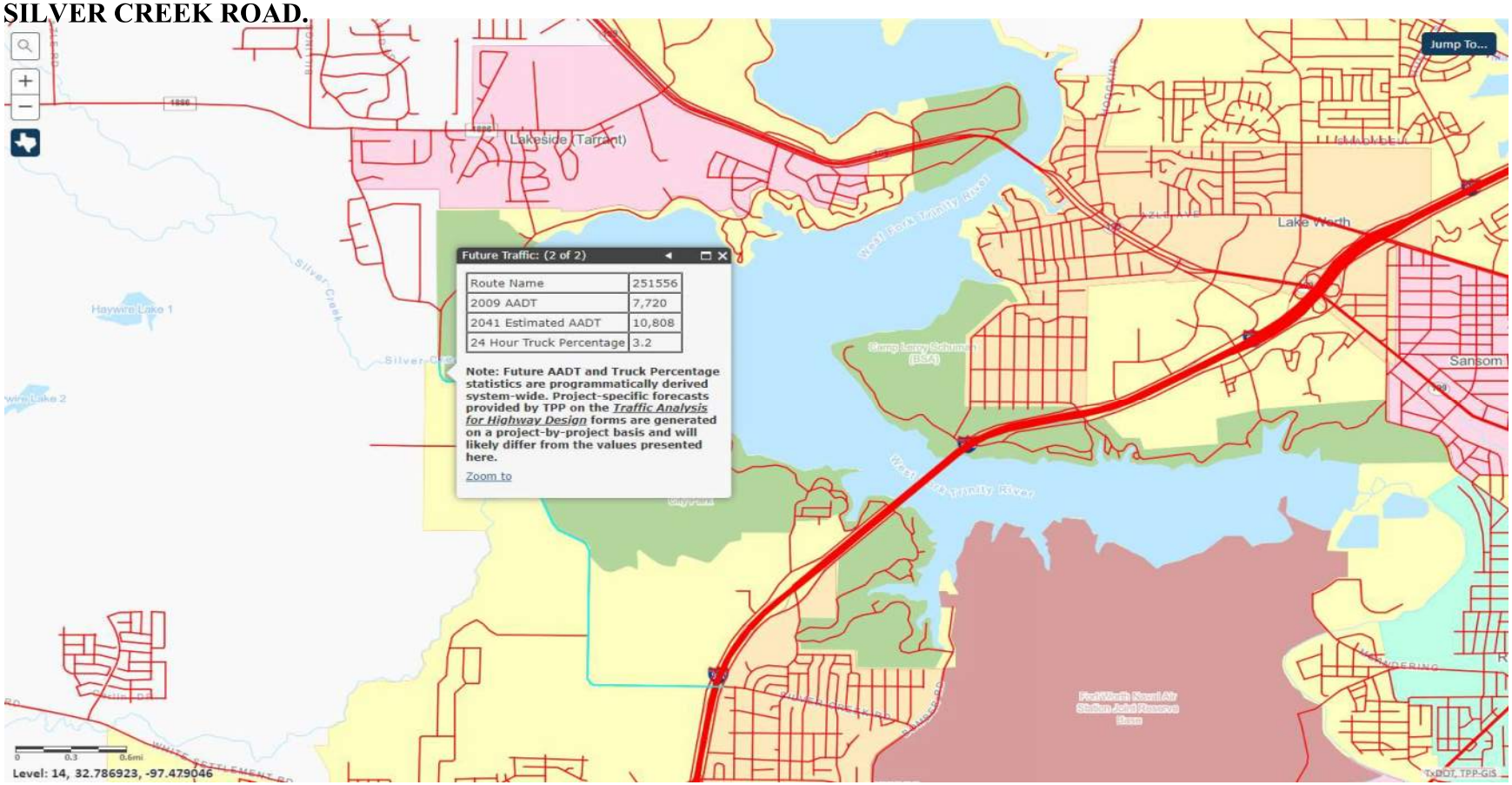
Location
Location ID: 220U437
Located On: -
Direction: 2-WAY
Bridge ID: 022200ZS4528003
AADT: 5269 (2019)
View Detail in a New Search
Go to Record in Current Search

Live Oak Creek Rd

Heron Dr

Keyboard shortcuts Map data ©2022 200 m Terms of Use Report a

SCREEN CAPTURE OF TXDOT STATEWIDE PLANNING MAP SHOWING ROADWAY LINK VOLUMES FOR SILVER CREEK ROAD.



GRAM Traffic North Texas, Inc.

1120 W Lovers Lane
Arlington, TX 76013

SILVER CREEK RD N OF WESTERN OAKS RD - SPEED W 4 SEC FILTER
Site Code: 822
Station ID:

Latitude: 0' 0.0000 South
Longitude: 0' 0.0000 East

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
01/12/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	0	0	0	0	**1**	**15**	**36**	**16**	0	0	0	0	0	0	**68**	46	48
11:00	0	0	0	**2**	1	12	27	15	**2**	0	0	0	0	0	59	47	49
12 PM	0	**1**	0	0	**1**	**21**	37	12	1	0	0	0	0	0	73	45	48
13:00	0	0	**1**	0	1	17	**40**	**20**	**4**	0	0	0	0	0	**83**	47	49
Total	0	1	1	2	4	65	140	63	7	0	0	0	0	0	283		
Percent	0.0%	0.4%	0.4%	0.7%	1.4%	23.0%	49.5%	22.3%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak				11:00	10:00	10:00	10:00	10:00	11:00						10:00		
Vol.				2	1	15	36	16	2						68		
PM Peak		12:00	13:00		12:00	12:00	13:00	13:00	13:00						13:00		
Vol.		1	1		1	21	40	20	4						83		
Total	0	1	1	2	4	65	140	63	7	0	0	0	0	0	283		
Percent	0.0%	0.4%	0.4%	0.7%	1.4%	23.0%	49.5%	22.3%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	37 MPH
50th Percentile :	42 MPH
85th Percentile :	47 MPH
95th Percentile :	49 MPH

Stats

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	205
Percent in Pace :	72.4%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	43 MPH

GRAM Traffic North Texas, Inc.

1120 W Lovers Lane
Arlington, TX 76013

SILVER CREEK RD N OF WESTERN OAKS RD - SPEED W 4 SEC FILTER
Site Code: 822
Station ID:

Latitude: 0' 0.0000 South
Longitude: 0' 0.0000 East

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
01/12/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	0	0	0	0	1	17	**66**	**25**	**5**	0	0	0	0	0	**114**	47	49
11:00	0	0	0	**1**	**3**	**20**	48	21	5	0	0	0	0	0	98	47	50
12 PM	0	0	0	**1**	3	**32**	**45**	17	1	0	0	0	0	0	**99**	45	48
13:00	0	0	0	1	**6**	21	37	**20**	**2**	**1**	0	0	0	0	88	47	49
Total	0	0	0	3	13	90	196	83	13	1	0	0	0	0	399		
Percent	0.0%	0.0%	0.0%	0.8%	3.3%	22.6%	49.1%	20.8%	3.3%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak				11:00	11:00	11:00	10:00	10:00	10:00						10:00		
Vol.				1	3	20	66	25	5						114		
PM Peak				12:00	13:00	12:00	12:00	13:00	13:00	13:00					12:00		
Vol.				1	6	32	45	20	2	1					99		
Total	0	0	0	3	13	90	196	83	13	1	0	0	0	0	399		
Percent	0.0%	0.0%	0.0%	0.8%	3.3%	22.6%	49.1%	20.8%	3.3%	0.3%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	37 MPH
	50th Percentile :	42 MPH
	85th Percentile :	47 MPH
	95th Percentile :	49 MPH
Stats	10 MPH Pace Speed :	36-45 MPH
	Number in Pace :	286
	Percent in Pace :	71.7%
	Number of Vehicles > 55 MPH :	1
	Percent of Vehicles > 55 MPH :	0.3%
	Mean Speed(Average) :	43 MPH

GRAM Traffic North Texas, Inc.

1120 W Lovers Lane
Arlington, TX 76013

SILVER CREEK RD N OF WESTERN OAKS RD - SPEED W 4 SEC FILTER
Site Code: 822
Station ID:

Latitude: 0' 0.0000 South
Longitude: 0' 0.0000 East

NB, SB

Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		85th	95th
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Percent	Percent
01/12/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	0	0	0	0	2	**32**	**102**	**41**	5	0	0	0	0	0	**182**	47	49
11:00	0	0	0	**3**	**4**	32	75	36	**7**	0	0	0	0	0	157	47	49
12 PM	0	**1**	0	**1**	4	**53**	**82**	29	2	0	0	0	0	0	**172**	45	48
13:00	0	0	**1**	1	**7**	38	77	**40**	**6**	**1**	0	0	0	0	171	47	49
Total	0	1	1	5	17	155	336	146	20	1	0	0	0	0	682		
Percent	0.0%	0.1%	0.1%	0.7%	2.5%	22.7%	49.3%	21.4%	2.9%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak				11:00	11:00	10:00	10:00	10:00	11:00						10:00		
Vol.				3	4	32	102	41	7						182		
PM Peak		12:00	13:00	12:00	13:00	12:00	12:00	13:00	13:00	13:00					12:00		
Vol.		1	1	1	7	53	82	40	6	1					172		
Total	0	1	1	5	17	155	336	146	20	1	0	0	0	0	682		
Percent	0.0%	0.1%	0.1%	0.7%	2.5%	22.7%	49.3%	21.4%	2.9%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	37 MPH
50th Percentile :	42 MPH
85th Percentile :	47 MPH
95th Percentile :	49 MPH

Stats

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	491
Percent in Pace :	72.0%
Number of Vehicles > 55 MPH :	1
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	43 MPH

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022

Turning Movement Data

Start Time	SILVER CREEK RD Southbound					WATERCRESS DR Westbound					SILVER CREEK RD Northbound					Eastbound St. Eastbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
12:00 AM	0	2	0	0	2	0	0	0	0	0	0	14	3	0	17	0	0	0	0	0	19
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	11	2	0	13	0	0	0	0	0	13
12:30 AM	0	1	0	0	1	1	0	0	0	1	0	3	2	0	5	0	0	0	0	0	7
12:45 AM	0	1	0	0	1	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	8
Hourly Total	0	4	0	0	4	1	0	0	0	1	0	34	8	0	42	0	0	0	0	0	47
1:00 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
1:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
1:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Hourly Total	0	4	0	0	4	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	11
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	4
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
2:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hourly Total	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	8
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	4
3:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	3
3:30 AM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	5
3:45 AM	0	3	0	0	3	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	7
Hourly Total	0	7	0	0	7	1	0	0	0	1	0	7	4	0	11	0	0	0	0	0	19
4:00 AM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
4:15 AM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	11
4:30 AM	0	11	0	0	11	2	0	0	0	2	0	0	1	0	1	0	0	0	0	0	14
4:45 AM	0	6	0	0	6	2	0	0	1	3	0	3	1	0	4	0	0	0	0	0	13
Hourly Total	0	28	0	0	28	4	0	0	1	5	0	10	2	0	12	0	0	0	0	0	45
5:00 AM	0	10	0	0	10	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	14
5:15 AM	0	28	0	0	28	4	0	0	1	5	0	1	0	0	1	0	0	0	0	0	34
5:30 AM	0	35	0	0	35	4	0	1	0	5	0	5	0	0	5	0	0	0	0	0	45
5:45 AM	0	49	0	0	49	6	0	0	0	6	0	4	1	0	5	0	0	0	0	0	60
Hourly Total	0	122	0	0	122	17	0	1	1	19	0	11	1	0	12	0	0	0	0	0	153
6:00 AM	0	58	0	0	58	9	0	0	0	9	0	11	0	0	11	0	0	0	0	0	78
6:15 AM	0	58	0	0	58	6	0	0	0	6	0	11	2	0	13	0	0	0	0	0	77
6:30 AM	0	75	0	0	75	16	0	0	0	16	0	9	2	0	11	0	0	0	0	0	102
6:45 AM	0	78	0	0	78	10	0	0	0	10	0	13	3	0	16	0	0	0	0	0	104
Hourly Total	0	269	0	0	269	41	0	0	0	41	0	44	7	0	51	0	0	0	0	0	361
7:00 AM	1	99	0	0	100	13	0	1	0	14	0	14	1	0	15	1	0	0	0	1	130
7:15 AM	0	103	0	0	103	15	0	1	0	16	0	26	11	0	37	0	0	0	0	0	156
7:30 AM	0	99	0	0	99	22	0	1	0	23	0	18	4	0	22	0	0	0	0	0	144
7:45 AM	0	108	0	0	108	8	0	2	0	10	0	30	9	0	39	0	0	0	0	0	157

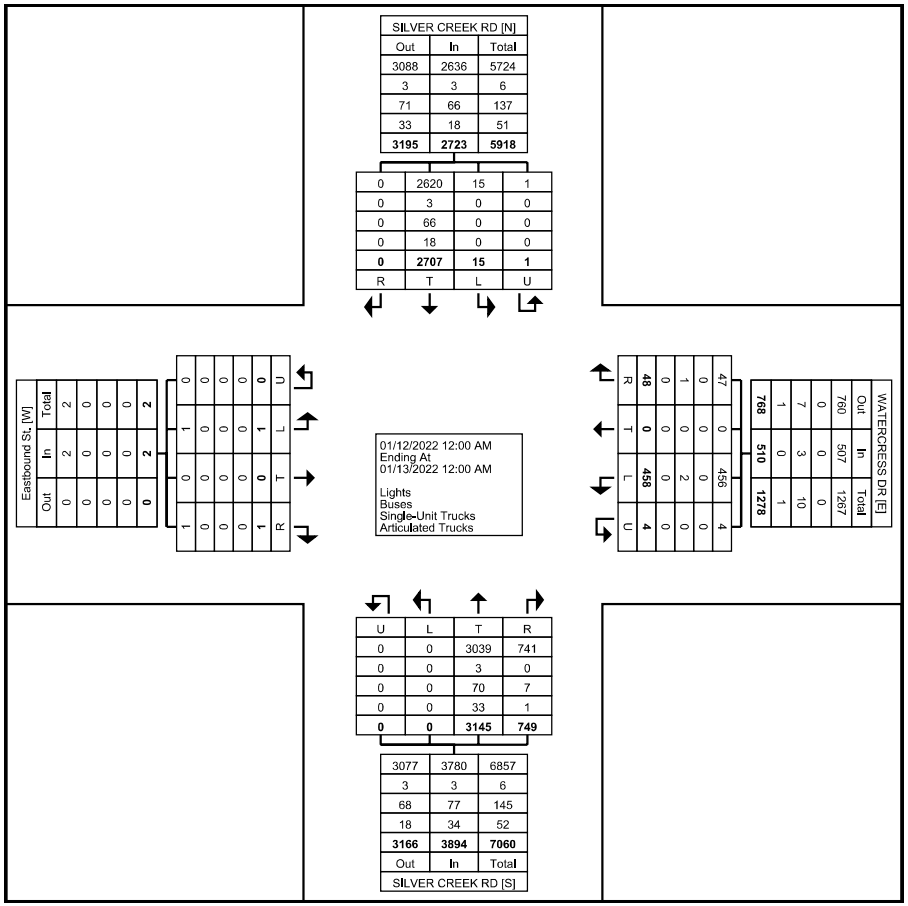
Hourly Total	1	409	0	0	410	58	0	5	0	63	0	88	25	0	113	1	0	0	0	1	587
8:00 AM	0	80	0	0	80	9	0	0	0	9	0	31	7	0	38	0	0	0	0	0	127
8:15 AM	0	57	0	0	57	11	0	0	0	11	0	34	3	0	37	0	0	0	0	0	105
8:30 AM	0	60	0	0	60	11	0	1	0	12	0	29	4	0	33	0	0	0	0	0	105
8:45 AM	0	56	0	0	56	4	0	1	0	5	0	24	9	0	33	0	0	0	0	0	94
Hourly Total	0	253	0	0	253	35	0	2	0	37	0	118	23	0	141	0	0	0	0	0	431
9:00 AM	0	41	0	0	41	4	0	3	0	7	0	18	2	0	20	0	0	0	0	0	68
9:15 AM	1	39	0	0	40	5	0	1	0	6	0	19	7	0	26	0	0	0	0	0	72
9:30 AM	0	54	0	0	54	11	0	0	0	11	0	22	8	0	30	0	0	0	0	0	95
9:45 AM	0	39	0	0	39	9	0	0	0	9	0	19	6	0	25	0	0	0	0	0	73
Hourly Total	1	173	0	0	174	29	0	4	0	33	0	78	23	0	101	0	0	0	0	0	308
10:00 AM	0	34	0	0	34	7	0	1	0	8	0	22	9	0	31	0	0	0	0	0	73
10:15 AM	0	39	0	0	39	4	0	0	0	4	0	24	6	0	30	0	0	0	0	0	73
10:30 AM	0	30	0	0	30	12	0	1	0	13	0	27	9	0	36	0	0	0	0	0	79
10:45 AM	0	48	0	0	48	4	0	1	0	5	0	39	4	0	43	0	0	0	0	0	96
Hourly Total	0	151	0	0	151	27	0	3	0	30	0	112	28	0	140	0	0	0	0	0	321
11:00 AM	0	34	0	0	34	5	0	1	0	6	0	32	2	0	34	0	0	0	0	0	74
11:15 AM	2	34	0	0	36	7	0	2	0	9	0	21	4	0	25	0	0	0	0	0	70
11:30 AM	0	29	0	0	29	7	0	0	0	7	0	41	9	0	50	0	0	0	0	0	86
11:45 AM	0	41	0	0	41	7	0	0	0	7	0	27	6	0	33	0	0	0	0	0	81
Hourly Total	2	138	0	0	140	26	0	3	0	29	0	121	21	0	142	0	0	0	0	0	311
12:00 PM	0	24	0	0	24	5	0	0	0	5	0	40	8	0	48	0	0	0	0	0	77
12:15 PM	0	52	0	0	52	5	0	0	0	5	0	42	10	0	52	0	0	0	0	0	109
12:30 PM	0	42	0	0	42	7	0	2	0	9	0	49	6	0	55	0	0	0	0	0	106
12:45 PM	0	28	0	1	29	2	0	1	0	3	0	34	10	0	44	0	0	0	0	0	76
Hourly Total	0	146	0	1	147	19	0	3	0	22	0	165	34	0	199	0	0	0	0	0	368
1:00 PM	1	19	0	0	20	10	0	0	0	10	0	44	9	0	53	0	0	0	0	0	83
1:15 PM	0	30	0	0	30	5	0	1	0	6	0	34	10	0	44	0	0	0	0	0	80
1:30 PM	0	42	0	0	42	9	0	3	0	12	0	40	11	0	51	0	0	0	0	0	105
1:45 PM	0	29	0	0	29	5	0	0	0	5	0	35	7	0	42	0	0	0	0	0	76
Hourly Total	1	120	0	0	121	29	0	4	0	33	0	153	37	0	190	0	0	0	0	0	344
2:00 PM	0	34	0	0	34	7	0	0	1	8	0	51	8	0	59	0	0	0	0	0	101
2:15 PM	1	32	0	0	33	12	0	0	0	12	0	50	12	0	62	0	0	0	0	0	107
2:30 PM	0	45	0	0	45	6	0	1	0	7	0	50	10	0	60	0	0	0	0	0	112
2:45 PM	0	29	0	0	29	6	0	0	0	6	0	59	13	0	72	0	0	0	0	0	107
Hourly Total	1	140	0	0	141	31	0	1	1	33	0	210	43	0	253	0	0	0	0	0	427
3:00 PM	0	46	0	0	46	7	0	0	0	7	0	72	18	0	90	0	0	0	0	0	143
3:15 PM	0	35	0	0	35	5	0	1	0	6	0	109	22	0	131	0	0	0	0	0	172
3:30 PM	0	35	0	0	35	6	0	1	0	7	0	81	25	0	106	0	0	0	0	0	148
3:45 PM	0	45	0	0	45	11	0	0	0	11	0	119	30	0	149	0	0	0	0	0	205
Hourly Total	0	161	0	0	161	29	0	2	0	31	0	381	95	0	476	0	0	0	0	0	668
4:00 PM	0	26	0	0	26	5	0	1	0	6	0	104	22	0	126	0	0	0	0	0	158
4:15 PM	2	42	0	0	44	10	0	0	0	10	0	117	32	0	149	0	0	0	0	0	203
4:30 PM	1	57	0	0	58	3	0	1	0	4	0	124	37	0	161	0	0	0	0	0	223
4:45 PM	0	44	0	0	44	3	0	1	0	4	0	126	36	0	162	0	0	0	0	0	210
Hourly Total	3	169	0	0	172	21	0	3	0	24	0	471	127	0	598	0	0	0	0	0	794
5:00 PM	0	31	0	0	31	10	0	0	0	10	0	107	29	0	136	0	0	0	0	0	177
5:15 PM	1	46	0	0	47	6	0	1	0	7	0	135	33	0	168	0	0	0	0	0	222
5:30 PM	0	44	0	0	44	9	0	1	0	10	0	130	31	0	161	0	0	0	0	0	215
5:45 PM	2	23	0	0	25	5	0	4	0	9	0	112	23	0	135	0	0	0	0	0	169
Hourly Total	3	144	0	0	147	30	0	6	0	36	0	484	116	0	600	0	0	0	0	0	783
6:00 PM	1	38	0	0	39	7	0	0	0	7	0	91	26	0	117	0	0	0	0	0	163

6:15 PM	0	34	0	0	34	7	0	1	0	8	0	79	23	0	102	0	0	0	0	0	144
6:30 PM	0	24	0	0	24	7	0	1	0	8	0	62	21	0	83	0	0	0	0	0	115
6:45 PM	0	25	0	0	25	4	0	1	0	5	0	42	9	0	51	0	0	0	0	0	81
Hourly Total	1	121	0	0	122	25	0	3	0	28	0	274	79	0	353	0	0	0	0	0	503
7:00 PM	0	10	0	0	10	4	0	0	0	4	0	49	4	0	53	0	0	0	0	0	67
7:15 PM	1	15	0	0	16	1	0	0	0	1	0	38	9	0	47	0	0	0	0	0	64
7:30 PM	0	15	0	0	15	1	0	0	0	1	0	42	8	0	50	0	0	0	0	0	66
7:45 PM	1	8	0	0	9	3	0	1	0	4	0	31	6	0	37	0	0	0	0	0	50
Hourly Total	2	48	0	0	50	9	0	1	0	10	0	160	27	0	187	0	0	0	0	0	247
8:00 PM	0	19	0	0	19	2	0	0	0	2	0	24	5	0	29	0	0	0	0	0	50
8:15 PM	0	16	0	0	16	5	0	1	0	6	0	26	2	0	28	0	0	0	0	0	50
8:30 PM	0	10	0	0	10	2	0	0	0	2	0	23	3	0	26	0	0	0	0	0	38
8:45 PM	0	4	0	0	4	5	0	2	0	7	0	24	4	0	28	0	0	0	0	0	39
Hourly Total	0	49	0	0	49	14	0	3	0	17	0	97	14	0	111	0	0	0	0	0	177
9:00 PM	0	16	0	0	16	0	0	1	0	1	0	17	3	0	20	0	0	0	0	0	37
9:15 PM	0	8	0	0	8	0	0	0	0	0	0	15	6	0	21	0	0	0	0	0	29
9:30 PM	0	4	0	0	4	2	0	0	0	2	0	11	5	0	16	0	0	0	0	0	22
9:45 PM	0	2	0	0	2	2	0	0	0	2	0	12	0	0	12	0	0	0	0	0	16
Hourly Total	0	30	0	0	30	4	0	1	0	5	0	55	14	0	69	0	0	0	0	0	104
10:00 PM	0	1	0	0	1	1	0	0	0	1	0	12	4	0	16	0	0	0	0	0	18
10:15 PM	0	3	0	0	3	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	14
10:30 PM	0	6	0	0	6	1	0	0	0	1	0	4	3	0	7	0	0	0	0	0	14
10:45 PM	0	3	0	0	3	0	0	1	0	1	0	6	5	0	11	0	0	0	0	0	15
Hourly Total	0	13	0	0	13	3	0	1	0	4	0	32	12	0	44	0	0	0	0	0	61
11:00 PM	0	1	0	0	1	2	0	0	0	2	0	9	3	0	12	0	0	0	0	0	15
11:15 PM	0	2	0	0	2	1	0	1	0	2	0	12	1	0	13	0	0	0	0	0	17
11:30 PM	0	2	0	0	2	1	0	0	1	2	0	3	1	0	4	0	0	1	0	1	9
11:45 PM	0	1	0	0	1	1	0	1	0	2	0	5	2	0	7	0	0	0	0	0	10
Hourly Total	0	6	0	0	6	5	0	2	1	8	0	29	7	0	36	0	0	1	0	1	51
Grand Total	15	2707	0	1	2723	458	0	48	4	510	0	3145	749	0	3894	1	0	1	0	2	7129
Approach %	0.6	99.4	0.0	0.0	-	89.8	0.0	9.4	0.8	-	0.0	80.8	19.2	0.0	-	50.0	0.0	50.0	0.0	-	-
Total %	0.2	38.0	0.0	0.0	38.2	6.4	0.0	0.7	0.1	7.2	0.0	44.1	10.5	0.0	54.6	0.0	0.0	0.0	0.0	0.0	-
Lights	15	2620	0	1	2636	456	0	47	4	507	0	3039	741	0	3780	1	0	1	0	2	6925
% Lights	100.0	96.8	-	100.0	96.8	99.6	-	97.9	100.0	99.4	-	96.6	98.9	-	97.1	100.0	-	100.0	-	100.0	97.1
Buses	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
% Buses	0.0	0.1	-	0.0	0.1	0.0	-	0.0	0.0	0.0	-	0.1	0.0	-	0.1	0.0	-	0.0	-	0.0	0.1
Single-Unit Trucks	0	66	0	0	66	2	0	1	0	3	0	70	7	0	77	0	0	0	0	0	146
% Single-Unit Trucks	0.0	2.4	-	0.0	2.4	0.4	-	2.1	0.0	0.6	-	2.2	0.9	-	2.0	0.0	-	0.0	-	0.0	2.0
Articulated Trucks	0	18	0	0	18	0	0	0	0	0	0	33	1	0	34	0	0	0	0	0	52
% Articulated Trucks	0.0	0.7	-	0.0	0.7	0.0	-	0.0	0.0	0.0	-	1.0	0.1	-	0.9	0.0	-	0.0	-	0.0	0.7

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022
Page No: 4



Turning Movement Data Plot

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022

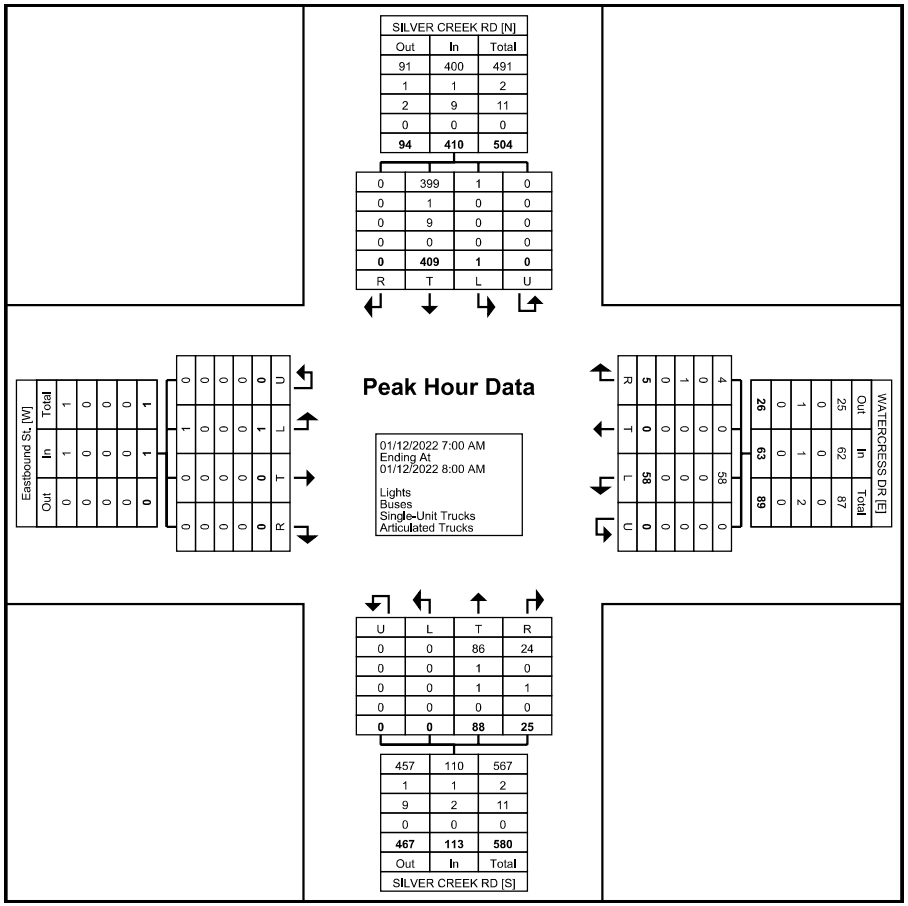
Turning Movement Peak Hour Data (7:00 AM)

Start Time	SILVER CREEK RD Southbound					WATERCRESS DR Westbound					SILVER CREEK RD Northbound					Eastbound St. Eastbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
7:00 AM	1	99	0	0	100	13	0	1	0	14	0	14	1	0	15	1	0	0	0	1	130
7:15 AM	0	103	0	0	103	15	0	1	0	16	0	26	11	0	37	0	0	0	0	0	156
7:30 AM	0	99	0	0	99	22	0	1	0	23	0	18	4	0	22	0	0	0	0	0	144
7:45 AM	0	108	0	0	108	8	0	2	0	10	0	30	9	0	39	0	0	0	0	0	157
Total	1	409	0	0	410	58	0	5	0	63	0	88	25	0	113	1	0	0	0	1	587
Approach %	0.2	99.8	0.0	0.0	-	92.1	0.0	7.9	0.0	-	0.0	77.9	22.1	0.0	-	100.0	0.0	0.0	0.0	-	-
Total %	0.2	69.7	0.0	0.0	69.8	9.9	0.0	0.9	0.0	10.7	0.0	15.0	4.3	0.0	19.3	0.2	0.0	0.0	0.0	0.2	-
PHF	0.250	0.947	0.000	0.000	0.949	0.659	0.000	0.625	0.000	0.685	0.000	0.733	0.568	0.000	0.724	0.250	0.000	0.000	0.000	0.250	0.935
Lights	1	399	0	0	400	58	0	4	0	62	0	86	24	0	110	1	0	0	0	1	573
% Lights	100.0	97.6	-	-	97.6	100.0	-	80.0	-	98.4	-	97.7	96.0	-	97.3	100.0	-	-	-	100.0	97.6
Buses	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Buses	0.0	0.2	-	-	0.2	0.0	-	0.0	-	0.0	-	1.1	0.0	-	0.9	0.0	-	-	-	0.0	0.3
Single-Unit Trucks	0	9	0	0	9	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	12
% Single-Unit Trucks	0.0	2.2	-	-	2.2	0.0	-	20.0	-	1.6	-	1.1	4.0	-	1.8	0.0	-	-	-	0.0	2.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	0.0	0.0

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022
Page No: 6



Turning Movement Peak Hour Data Plot (7:00 AM)

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022

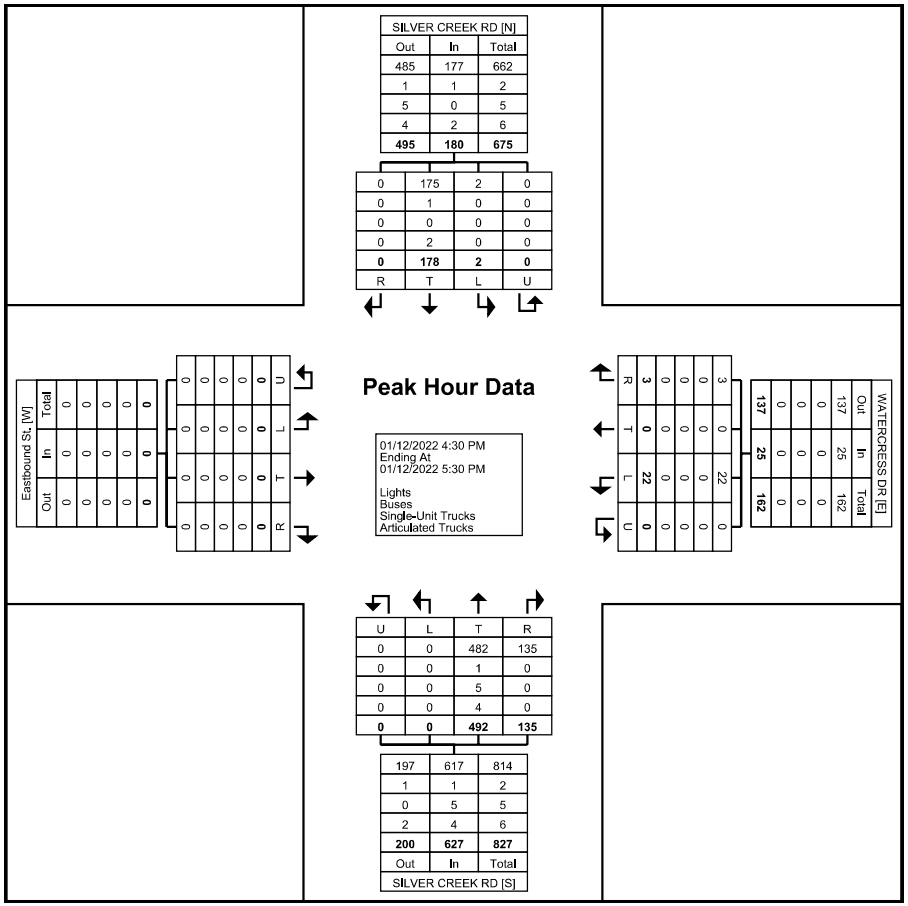
Turning Movement Peak Hour Data (4:30 PM)

Start Time	SILVER CREEK RD Southbound					WATERCRESS DR Westbound					SILVER CREEK RD Northbound					Eastbound St. Eastbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
4:30 PM	1	57	0	0	58	3	0	1	0	4	0	124	37	0	161	0	0	0	0	0	223
4:45 PM	0	44	0	0	44	3	0	1	0	4	0	126	36	0	162	0	0	0	0	0	210
5:00 PM	0	31	0	0	31	10	0	0	0	10	0	107	29	0	136	0	0	0	0	0	177
5:15 PM	1	46	0	0	47	6	0	1	0	7	0	135	33	0	168	0	0	0	0	0	222
Total	2	178	0	0	180	22	0	3	0	25	0	492	135	0	627	0	0	0	0	0	832
Approach %	1.1	98.9	0.0	0.0	-	88.0	0.0	12.0	0.0	-	0.0	78.5	21.5	0.0	-	0.0	0.0	0.0	0.0	-	-
Total %	0.2	21.4	0.0	0.0	21.6	2.6	0.0	0.4	0.0	3.0	0.0	59.1	16.2	0.0	75.4	0.0	0.0	0.0	0.0	0.0	-
PHF	0.500	0.781	0.000	0.000	0.776	0.550	0.000	0.750	0.000	0.625	0.000	0.911	0.912	0.000	0.933	0.000	0.000	0.000	0.000	0.000	0.933
Lights	2	175	0	0	177	22	0	3	0	25	0	482	135	0	617	0	0	0	0	0	819
% Lights	100.0	98.3	-	-	98.3	100.0	-	100.0	-	100.0	-	98.0	100.0	-	98.4	-	-	-	-	-	98.4
Buses	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Buses	0.0	0.6	-	-	0.6	0.0	-	0.0	-	0.0	-	0.2	0.0	-	0.2	-	-	-	-	-	0.2
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
% Single-Unit Trucks	0.0	0.0	-	-	0.0	0.0	-	0.0	-	0.0	-	1.0	0.0	-	0.8	-	-	-	-	-	0.6
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
% Articulated Trucks	0.0	1.1	-	-	1.1	0.0	-	0.0	-	0.0	-	0.8	0.0	-	0.6	-	-	-	-	-	0.7

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SILVER CREEK RD @ WATERCRESS DR
Site Code:
Start Date: 01/12/2022
Page No: 8



Turning Movement Peak Hour Data Plot (4:30 PM)

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	58	5	88	25	1	409
Future Vol, veh/h	58	5	88	25	1	409
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	62	5	94	27	1	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	545	108	0	0	121	0
Stage 1	108	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	499	899	-	-	1467	-
Stage 1	916	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	499	899	-	-	1467	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	517	1467	-
HCM Lane V/C Ratio	-	-	0.13	0.001	-
HCM Control Delay (s)	-	-	13	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	1	210	43	1	140
Future Vol, veh/h	31	1	210	43	1	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	33	1	223	46	1	149

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	246	0	0	269	0
Stage 1	246	-	-	-	-	-
Stage 2	151	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	608	751	-	-	1295	-
Stage 1	795	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	607	751	-	-	1295	-
Mov Cap-2 Maneuver	607	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	876	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	611	1295	-
HCM Lane V/C Ratio	-	-	0.056	0.001	-
HCM Control Delay (s)	-	-	11.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	3	492	135	2	178
Future Vol, veh/h	22	3	492	135	2	178
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	3	529	145	2	191

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	797	602	0	0	674	0
Stage 1	602	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	356	500	-	-	917	-
Stage 1	547	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	355	500	-	-	917	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	368	917	-
HCM Lane V/C Ratio	-	-	0.073	0.002	-
HCM Control Delay (s)	-	-	15.6	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	5	90	26	1	420
Future Vol, veh/h	60	5	90	26	1	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	64	5	96	28	1	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	559	110	0	0	124	0
Stage 1	110	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	490	897	-	-	1463	-
Stage 1	915	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	490	897	-	-	1463	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	508	1463	-
HCM Lane V/C Ratio	-	-	0.136	0.001	-
HCM Control Delay (s)	-	-	13.2	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	1	216	44	1	144
Future Vol, veh/h	32	1	216	44	1	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1	227	46	1	152

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	404	250	0	0	273	0
Stage 1	250	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	603	789	-	-	1290	-
Stage 1	792	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	602	789	-	-	1290	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	873	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	606	1290	-
HCM Lane V/C Ratio	-	-	0.057	0.001	-
HCM Control Delay (s)	-	-	11.3	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	3	505	139	2	183
Future Vol, veh/h	23	3	505	139	2	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	3	543	149	2	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	819	618	0	0	692	0
Stage 1	618	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	345	489	-	-	903	-
Stage 1	538	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	344	489	-	-	903	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	356	903	-
HCM Lane V/C Ratio	-	-	0.079	0.002	-
HCM Control Delay (s)	-	-	16	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	6	112	32	1	523
Future Vol, veh/h	74	6	112	32	1	523
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	79	6	119	34	1	556

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	694	136	0	0	153	0
Stage 1	136	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	409	867	-	-	1428	-
Stage 1	890	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	409	867	-	-	1428	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	426	1428	-
HCM Lane V/C Ratio	-	-	0.2	0.001	-
HCM Control Delay (s)	-	-	15.5	7.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	1	268	55	1	179
Future Vol, veh/h	40	1	268	55	1	179
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	1	282	58	1	188

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	501	311	0	0	340	0
Stage 1	311	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	530	729	-	-	1219	-
Stage 1	743	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	529	729	-	-	1219	-
Mov Cap-2 Maneuver	529	-	-	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	533	1219	-
HCM Lane V/C Ratio	-	-	0.081	0.001	-
HCM Control Delay (s)	-	-	12.3	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	4	629	173	3	228
Future Vol, veh/h	28	4	629	173	3	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	676	186	3	245

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1020	769	0	0	862	0
Stage 1	769	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	262	401	-	-	780	-
Stage 1	457	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	401	-	-	780	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	457	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	273	780	-
HCM Lane V/C Ratio	-	-	0.126	0.004	-
HCM Control Delay (s)	-	-	20.1	9.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	5	90	26	1	420
Future Vol, veh/h	60	5	90	26	1	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	64	5	96	28	1	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	559	110	0	0	124	0
Stage 1	110	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	490	897	-	-	1463	-
Stage 1	915	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	490	897	-	-	1463	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	508	1463	-
HCM Lane V/C Ratio	-	-	0.136	0.001	-
HCM Control Delay (s)	-	-	13.2	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	6	235	480	0
Future Vol, veh/h	0	6	6	235	480	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	7	255	522	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	791	522	522	0	-	0
Stage 1	522	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	358	555	1044	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	355	555	1044	-	-	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	590	-	-	-	-	-
Stage 2	776	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1044	-	555	-	-
HCM Lane V/C Ratio	0.006	-	0.012	-	-
HCM Control Delay (s)	8.5	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	1	216	44	1	144
Future Vol, veh/h	32	1	216	44	1	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1	227	46	1	152

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	404	250	0	0	273	0
Stage 1	250	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	603	789	-	-	1290	-
Stage 1	792	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	602	789	-	-	1290	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	873	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	606	1290	-
HCM Lane V/C Ratio	-	-	0.057	0.001	-
HCM Control Delay (s)	-	-	11.3	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	349	176	0
Future Vol, veh/h	0	8	8	349	176	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	379	191	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	588	191	191	0	-	0
Stage 1	191	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	471	851	1383	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	467	851	1383	-	-	-
Mov Cap-2 Maneuver	467	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	679	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1383	-	851	-	-
HCM Lane V/C Ratio	0.006	-	0.01	-	-
HCM Control Delay (s)	7.6	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	3	505	139	2	183
Future Vol, veh/h	23	3	505	139	2	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	3	543	149	2	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	819	618	0	0	692	0
Stage 1	618	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	345	489	-	-	903	-
Stage 1	538	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	344	489	-	-	903	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	356	903	-
HCM Lane V/C Ratio	-	-	0.079	0.002	-
HCM Control Delay (s)	-	-	16	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	6	706	205	0
Future Vol, veh/h	0	6	6	706	205	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	7	767	223	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1004	223	223	0	-	0
Stage 1	223	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	268	817	1346	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	266	817	1346	-	-	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	451	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	817	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	6	112	32	1	523
Future Vol, veh/h	74	6	112	32	1	523
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	20	2	4	2	2
Mvmt Flow	79	6	119	34	1	556

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	694	136	0	0	153	0
Stage 1	136	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Critical Hdwy	6.42	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.48	-	-	2.218	-
Pot Cap-1 Maneuver	409	867	-	-	1428	-
Stage 1	890	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	409	867	-	-	1428	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	426	1428	-
HCM Lane V/C Ratio	-	-	0.2	0.001	-
HCM Control Delay (s)	-	-	15.5	7.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	6	293	597	0
Future Vol, veh/h	0	6	6	293	597	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	7	318	649	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	981	649	649	0	-	0
Stage 1	649	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	277	470	937	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	275	470	937	-	-	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	937	-	470	-	-
HCM Lane V/C Ratio	0.007	-	0.014	-	-
HCM Control Delay (s)	8.9	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	1	268	55	1	179
Future Vol, veh/h	40	1	268	55	1	179
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	1	282	58	1	188

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	501	311	0	0	340	0
Stage 1	311	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	530	729	-	-	1219	-
Stage 1	743	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	529	729	-	-	1219	-
Mov Cap-2 Maneuver	529	-	-	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	533	1219	-
HCM Lane V/C Ratio	-	-	0.081	0.001	-
HCM Control Delay (s)	-	-	12.3	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	435	219	0
Future Vol, veh/h	0	8	8	435	219	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	473	238	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	729	238	238	0	-	0
Stage 1	238	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	390	801	1329	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	386	801	1329	-	-	-
Mov Cap-2 Maneuver	386	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	615	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1329	-	801	-	-
HCM Lane V/C Ratio	0.007	-	0.011	-	-
HCM Control Delay (s)	7.7	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	4	629	173	3	228
Future Vol, veh/h	28	4	629	173	3	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	676	186	3	245

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1020	769	0	0	862	0
Stage 1	769	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	262	401	-	-	780	-
Stage 1	457	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	401	-	-	780	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	457	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	273	780	-
HCM Lane V/C Ratio	-	-	0.126	0.004	-
HCM Control Delay (s)	-	-	20.1	9.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	6	878	256	0
Future Vol, veh/h	0	6	6	878	256	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	7	954	278	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1246	278	278	0	-	0
Stage 1	278	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	192	761	1285	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	190	761	1285	-	-	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1285	-	761	-	-
HCM Lane V/C Ratio	0.005	-	0.009	-	-
HCM Control Delay (s)	7.8	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

APPENDIX III-A – GENERAL FACILITY DESIGN

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX III-A – GENERAL FACILITY DESIGN

TABLE OF CONTENTS

1. FACILITY ACCESS §330.63(b)(1) 1
2. WASTE MOVEMENT §330.63(b)(2) 2
2.1. Flow Diagram §330.63(b)(2)(A) 2
2.2. Schematic View §330.63(b)(2)(B) 2
2.3. Ventilation and Odor Control Measures §330.63(b)(2)(C) 3
2.4. Construction Details and Engineering Design §330.63(b)(2)(D), (E), & (F) 3
2.5. Grease, Oil and Sludge §330.63(b)(2)(G) 3
2.6. Effluent Disposal §330.63(b)(2)(H) 4
2.7. Noise Pollution Control §330.63(b)(2)(I) 4
3. SANITATION §330.63(b)(3) 5
4. WATER POLLUTION CONTROL §330.63(b)(4) 6
5. ENDANGERED SPECIES PROTECTION §330.63(b)(5) 7

TABLES

TABLE III-A.1 – FACILITY EQUIPMENT 3

FIGURES

FIGURE III-A.1 – WASTE MOVEMENT FLOW DIAGRAM
FIGURE III-A.2 – SITE LAYOUT PLAN

3/1/2023

Frank E Pugsley, P.E.

1. FACILITY ACCESS §330.63(b)(1)

Access to the Facility will be controlled to prevent the entry of livestock, to protect the public from exposure to potential health and safety hazards, and to discourage unauthorized entry or uncontrolled disposal of solid waste or hazardous materials. Facility access will be controlled by dense vegetation, difficult terrain, perimeter fencing and lockable gates at the site entrance. The perimeter fencing will consist of barbed wire, woven wire, wooden fencing, pipe fencing, or other materials suitable for access control.

2. WASTE MOVEMENT §330.63(b)(2)

Incoming loads will be weighed and documented at a scale, or the volume of waste in the load will be recorded, and the load will be directed to the designated unloading area or tipping area to be unloaded. Unloading will be observed by facility staff, and any unacceptable materials will be rejected, and returned to the hauler. Acceptable material will be processed, segregated, and stored until sold or hauled off-site. Only the allowable materials indicated in the Waste Acceptance Plan (Part II, Section 2) will be accepted by the Facility. Any accepted materials that cannot be recycled will be properly disposed of at an appropriate authorized facility.

2.1. Flow Diagram §330.63(b)(2)(A)

A flow diagram indicating the storage, processing, and disposal sequence, in accordance with 30 TAC §330.63(b)(2)(A), is included in Figure III-A.1. Incoming loads of recyclable materials will be directed to the designated unloading area. Material will be unloaded onto the tipping floor, which will be an improved surface in the unloading area. The load will be screened for unacceptable materials. Unacceptable materials will be returned to the hauler, and acceptable materials will be moved by a front-end loader or excavator to the sorting/loading conveyor belt. An optional shredder may be included before the loading belt for reducing the particle size. If a shredder is included, a front-end loader or excavator will load the materials to the shredder and the shredded materials will be automatically loaded to the sorting/loading belt. Any residuals or contaminated materials (materials which cannot be recycled) will be removed and stored in leak proof or covered containers (such as dumpsters or roll-off containers) until hauled off-site. The recyclable materials will proceed to the ballistic separator. Magnets will be used to pull metals from the conveyor belt to be stored in leak proof or covered containers on-site until hauled off-site. The ballistic separator is designed for sorting “2D” materials (e.g., plastic film, paper, cardboard, and fibers) and “3D” materials (containers, plastic bottles, cans, stone, wood, etc.). It also sorts fine particles that can be further sorted with optional variable sized screen. Fines, “2D” materials and “3D” materials will stored in separate stockpiles on improved surfaces and/or in roll-off containers.

2.2. Schematic View §330.63(b)(2)(B)

A schematic view indicating the various phases of collection, separation, and processing, in accordance with 30 TAC §330.63(b)(2)(B), is included in Figure III-A.2.

2.3. Ventilation and Odor Control Measures §330.63(b)(2)(C)

The Facility will accept only non-putrescible materials, and it is anticipated that these materials will not generate objectionable odors. Unloading of recyclable materials will occur within designated area(s), outdoors with natural ventilation.

Processing activities at the Facility will take place outdoors, and will be naturally ventilated. Facility staff will ensure that the recycling facility does not violate any applicable rule requirements of the approved state implementation plan developed under the Federal Clean Air Act §110, as amended.

Processed materials will be stored outdoors, in accordance with Part IV, Section 8. The facility is designed, and will be maintained, to provide positive drainage and prevent odors associated with stagnant ponded water.

2.4. Construction Details and Engineering Design §330.63(b)(2)(D), (E), & (F)

The facility will include space for a tipping floor, feedstock storage, processing equipment, and stockpile areas for the processed materials. The tipping floor and feedstock storage areas will be located on an improved surface (concrete, gravel, or similar). The processing equipment will be located on either a concrete slab, or concrete footings. Slabs and footings will be designed according to the processing equipment manufacturer's recommendations, by a licensed professional engineer. A containment berm will be constructed around all material storage, processing, loading and unloading areas. Berms will be constructed according to the typical containment berm detail shown in Figure III-A.2.

Minimum processing equipment for the Facility will include the following:

TABLE III-A.1 – FACILITY EQUIPMENT

Equipment Type	Minimum Size	Minimum Quantity
Ballistic Separator	BRT Hartner BSV 40 or equivalent	1
Conveyor Belt	N/A	1
Wheel Loader	CAT 903D or equivalent	1
Bulldozer	CAT D1, equivalent, or larger	1
Excavator	CAT 313 GC, equivalent, or larger	1
Water Pump	3 inch or larger	1

2.5. Grease, Oil and Sludge §330.63(b)(2)(G)

No grease, oil or sludge will be accepted at this facility, so 30 TAC §330.63(b)(2)(G) is not applicable.

2.6. Effluent Disposal §330.63(b)(2)(H)

The proposed processing operations are not anticipated to generate effluent, other than wash waters from periodic cleaning. Disposal of wastewater generated from cleaning is discussed in Section 4.

2.7. Noise Pollution Control §330.63(b)(2)(I)

According to 30 TAC §330.63(b)(2)(I), design for noise pollution control is only required for transfer stations and therefore noise pollution control design requirement is not applicable to this facility.

3. SANITATION §330.63(b)(3)

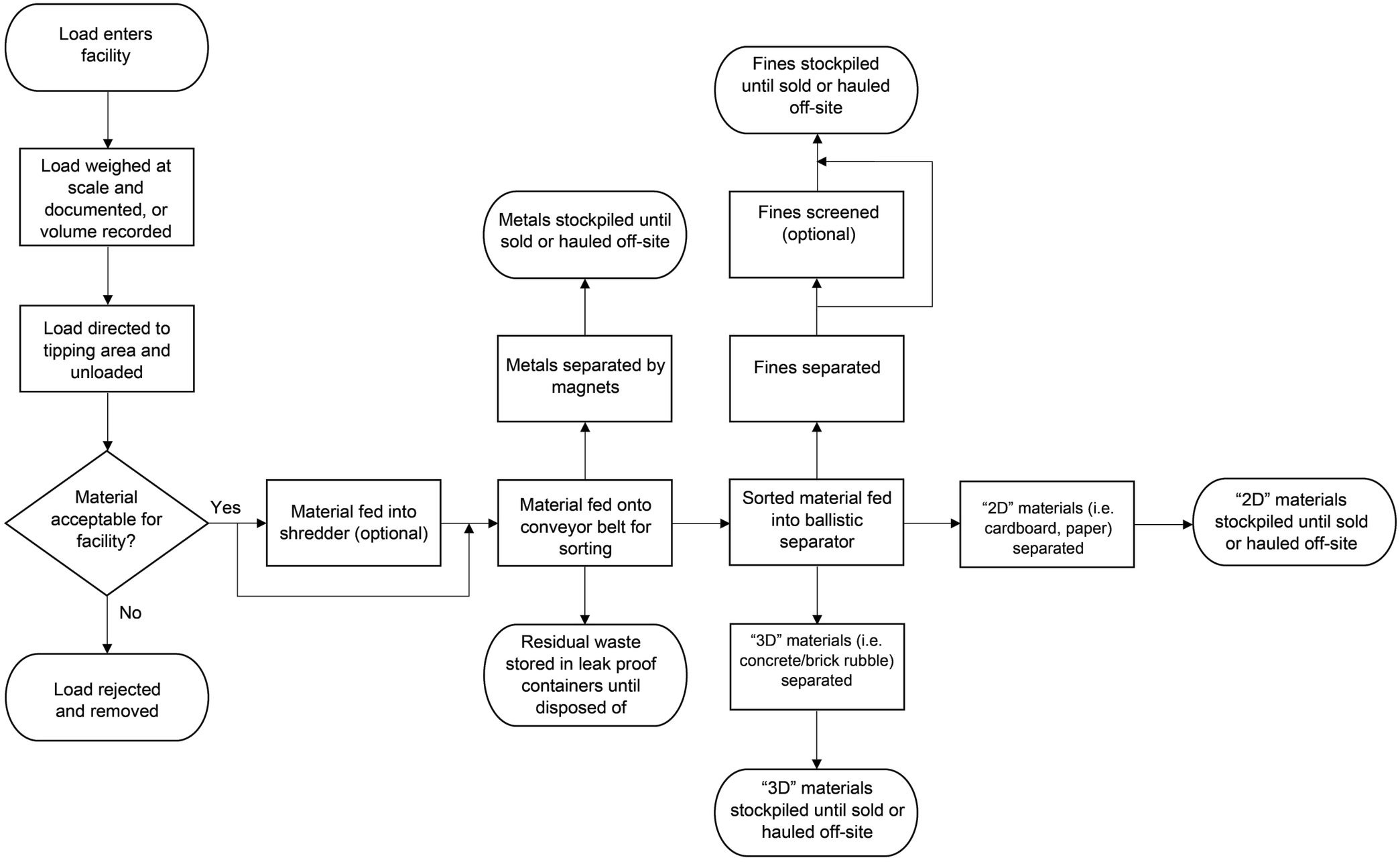
The recycling facility will be designed to facilitate proper cleaning. Due to the nature of the materials to be accepted and processed, it is anticipated that no specific sanitation procedures beyond good housekeeping will be required for the Facility. Surface drainage in the vicinity of the processing and storage areas will be controlled by grading and berms to prevent surface water runoff on to, into, and off those areas. Necessary connections and/or equipment to permit thorough cleaning with water or steam will be provided.

4. WATER POLLUTION CONTROL §330.63(b)(4)

Operators of solid waste facilities must manage liquids resulting from facility operations, including process wastewater, and wastewater from washing or cleaning to prevent pollution of surface waters or groundwater. The proposed processing (generally sorting of recyclable materials) will not generate wastewater. The facility will only process inert materials, so it is anticipated that water generated from washdown of working surfaces, and any stormwater that comes into contact with unprocessed or processed materials will not require treatment. Any residuals or contaminated materials will be stored in leak proof or covered containers (such as dumpsters or roll-off containers).

5. ENDANGERED SPECIES PROTECTION §330.63(b)(5)

According to the Texas Parks and Wildlife Department's Rare, Threatened, and Endangered Species map (https://tpwd.texas.gov/gis/rtest/), the Facility is not located within the range of any critical habitats for endangered or threatened species. The recycling facility is located at a permitted landfill facility, on property that was previously disturbed by an aggregate production operation. The recycling facility will not disturb any additional area, nor result in the destruction or adverse modification of any federally designated critical habitat for any threatened or endangered species. Further discussion is provided in Part II, Appendix II-A, Section 13.



FILE NAME: A:\2021\1604.21\03_DSGN\01_DWG\050_CIVIL\03_RECYCLING REGISTRATION\1604-21_FIG-III-A1.dwg LAYOUT NAME: FIGURE III-A.1 PRINTED: Monday, November 14, 2022 - 3:35pm USER: afranklin

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP Kennor Landfill, LLC

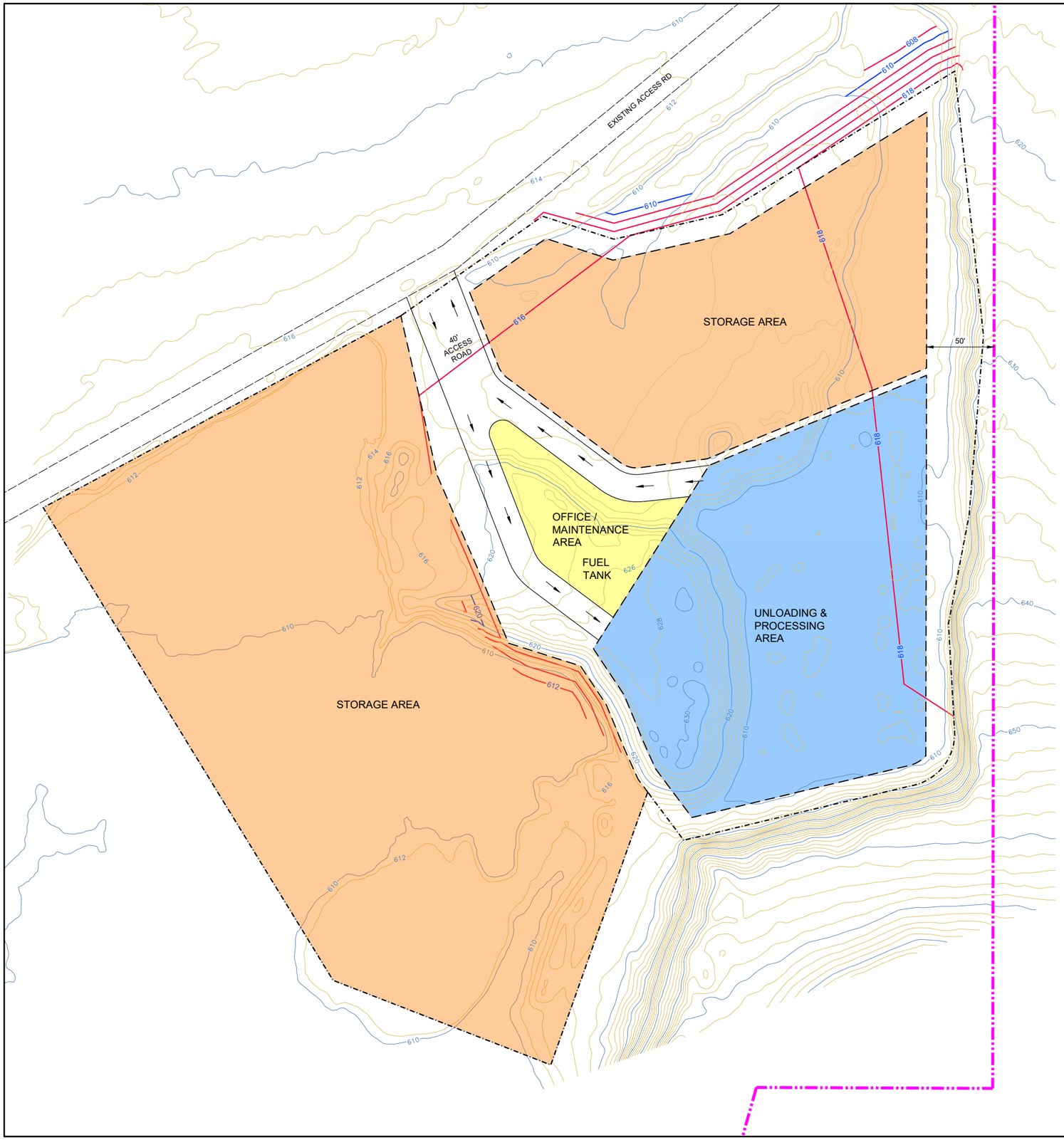
P.O. BOX 22790
HOUSTON, TX

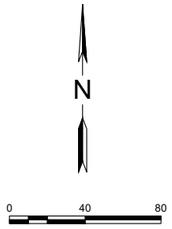
PROJECT NO.
1604.21

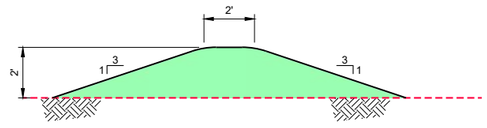
#	DATE	DESCRIPTION

WASTE MOVEMENT FLOW DIAGRAM

FIGURE III-A.1







C5 TYPICAL CONTAINMENT BERM
SCALE: 1" = 3'

GENERAL NOTES

1. THE RECYCLABLES PROCESSING AND STORAGE AREA WILL BE ON A PAVED OR IMPROVED SURFACE (MINIMUM 6-INCH THICK COMPACTED FLEXIBLE BASE MATERIAL OR GRAVEL, RECYCLED CONCRETE OR EQUIVALENT).
2. THE FACILITY DOES NOT RECEIVE OR PROCESS WASTES CONTAINING PUTRESCIBLE MATERIALS.
3. THE MATERIAL SORTING AREA IS OUTDOORS.
4. RECOVERED METALS ARE STORED IN STEEL ROLL OFF CONTAINERS, SIZED FROM 20 T0 40 CUBIC YARDS, OR ENCLOSED STEEL SHIPPING CONTAINERS.
5. RECOVERED WOOD, LUMBER AND CARDBOARD PACKAGINGS ARE STORED IN STOCKPILES FOR GRINDING OR REMOVAL BY A THIRD PARTY.

LEGEND

- PROPERTY BOUNDARY
- FACILITY LIMITS
- 2' HIGH CONTAINMENT BERM (SEE DETAIL C5)
- EXISTING CONTOUR - 10FT
- 620 EXISTING CONTOUR - 2FT
- 618 NEW EXCAVATION CONTOUR - 10FT
- 600 NEW EXCAVATION CONTOUR - 2FT
- 602 EXISTING UNPAVED ROADWAY
- DIRECTION OF TRAFFIC

Parkhill

STATE OF TEXAS
SONIA SAMIR
129340
LICENSED
PROFESSIONAL ENGINEER
Sonia Samir
03/01/2023
FOR PERMITTING PURPOSES ONLY
Parkhill.com

BAP KENNOR RECYCLING FACILITY

TARRANT COUNTY, TEXAS

CLIENT
BAP KENNOR LANDFILL, LLC

P.O. BOX 22790
HOUSTON, TX 77227

PROJECT NO.
1604.21

#	DATE	DESCRIPTION

Facility Site Plan

FIG.III.A.2

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

APPENDIX III-B – SURFACE WATER DESIGN

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX III-B – SURFACE WATER DESIGN

TABLE OF CONTENTS

1. Introduction 1
2. Surface Water Drainage §330.303 1
3. Drainage Analysis and Design §330.63(c)(1) 1
4. Flood Control and Analysis §330.63(c)(2) 1

3/1/2023

Frank E Pugsley, P.E.

1. Introduction

This appendix has been prepared consistent with the applicable requirements of 30 TAC §330.63(c) and the facility design complies with the requirements of 30 TAC §330.303.

2. Surface Water Drainage §330.303

The Facility is designed, and 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 and feedstock 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 via grading.

3. Drainage Analysis and Design §330.63(c)(1)

According to 30 TAC §330.63(c)(1), a surface water drainage report is only required for landfills and composting units and is therefore not applicable to this facility.

4. Flood Control and Analysis §330.63(c)(2)

The requirements of 30 TAC §330.63(c)(2) apply to landfills and composting units, and therefore are not applicable to this facility. Additionally, Facility operations including unloading, storage, and processing will be located outside of the 100-year floodplain.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

APPENDIX III-C – WASTE MANAGEMENT UNIT DESIGN

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX III-C – WASTE MANAGEMENT UNIT DESIGN

TABLE OF CONTENTS

1. INTRODUCTION..... 1

2. STORAGE AND TRANSFER UNITS §330.63(d)(1)..... 2

2.1. Rapid Processing and Minimum Detention §330.63(d)(1)(A)..... 2

2.2. Control and Containment of Spills and Contaminated Water §330.63(d)(1)(B).. 2

2.3. Maximum Allowable Time for On-Site Storage 330.63(d)(1)(C)..... 2

3/1/2023

Frank E Pugsley, P.E.

1. INTRODUCTION

In accordance with 30 TAC §330.63(d)(1), this appendix presents the general waste management unit design for the BAP Kennor Recycling Facility. This section discusses the facility operation for rapid processing and minimum detention of solid waste at the facility to prevent creating public health hazards or nuisances.

2. STORAGE AND TRANSFER UNITS §330.63(d)(1)

2.1. Rapid Processing and Minimum Detention §330.63(d)(1)(A)

The Facility will accept non-putrescible recyclable materials, and it is not anticipated that the materials which will be accepted at this facility are capable of creating public health hazards or nuisances. All solid waste will be stored in a manner to prevent fires, and control vectors, odors, windblown waste, and litter. The recyclable material volume received will typically be processed on the same day it is received. The design capacity of the Facility will not be exceeded during operation. Processing equipment will be operated according to manufacturer recommendations. The Facility will not accumulate recyclable materials in quantities that cannot be processed within such time as to preclude the creation of odors, insect breeding, or harborage of other vectors, (although the materials are not expected to be capable of creating these nuisance conditions). If the Facility accumulates recyclable material that cannot be processed in accordance with §330.63(d)(1)(A), additional material shall not be received until the adverse conditions are abated. Processed materials will be stored on-site until hauled off-site or sold to third party vendors. Materials may be kept on-site up to the allowable amount of time specified in Section 2.3.

2.2. Control and Containment of Spills and Contaminated Water §330.63(d)(1)(B)

It is anticipated that spills will be limited to incidental spills from haul vehicles or site equipment. Spill kits will be maintained on-site, and any outdoor spills will be promptly cleaned with absorbent material, which will be collected and properly disposed of. A fuel tank will be located as shown on Figure II-C.1. This tank will be dual-walled to prevent spills. Residuals, contaminated recyclable materials, and metals will be stored in leak proof or covered containers to prevent contact with, and contamination of, stormwater. The remaining processed recyclable materials are anticipated to be inert and may be stored on improved surfaces or in roll-off containers. Water used in dust suppression and cleaning will be collected through grading and perimeter ditches.

2.3. Maximum Allowable Time for On-Site Storage 330.63(d)(1)(C)

The Facility will limit accumulation of unprocessed materials as discussed in Section 2.1. Unprocessed recyclable materials must be processed or removed within 180 days of being received at the Facility. Any residuals or contaminated recyclable materials (materials which cannot be recycled) must be removed and disposed of within 7 days of being received. Processed materials may remain on site for up to 180 days after processing.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

APPENDIX III-D – CLOSURE PLAN

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX III-D – CLOSURE PLAN

TABLE OF CONTENTS

1. INTRODUCTION 1
2. CLOSURE PLAN FOR STORAGE AND PROCESSING UNITS §330.459(a) 2
2.1. CLOSURE PLAN FOR EVACUATION OF MATERIAL ON-SITE §330.459(b) .. 2
3. ACKNOWLEDGEMENT OF RELEASE INVESTIGATION §330.459(c) 3
4. RECYCING FACILITY WITH COMBUSTIBLE MATERIALS STORED OUTDOORS §330.459(d) 4
5. CERTIFICATION OF FINAL FACILITY CLOSURE §330.461(a) 5
6. ACCESS CONTROL §330.461(b) 6
7. FINAL CLOSURE NOTIFICATION §330.461(c) 7

3/1/2023

Frank E Pugsley, P.E.

1. INTRODUCTION

This Closure Plan has been developed for the BAP Kennor Recycling Facility in accordance with the requirements of 30 TAC §330.63(h) and §330.459.

2. CLOSURE PLAN FOR STORAGE AND PROCESSING UNITS §330.459(a)

At the time of closure, the owner or operator will transport any remaining waste, waste residues, and materials (feedstock, in process, and processed) to an appropriate authorized facility. The processing equipment will either be dismantled and removed off-site, or be decontaminated (if necessary).

2.1. CLOSURE PLAN FOR EVACUATION OF MATERIAL ON-SITE §330.459(b)

At the time of closure, the owner or operator will arrange for the removal of any remaining material on-site (unprocessed feedstock, in process materials, and processed materials) to an authorized facility for further processing or disposal. Due to the nature of the materials to be accepted by the facility, no leachate generation is anticipated from the processing of waste at the facility. Disinfection of the tipping area(s), processing area(s) and the storage areas will not be necessary.

3. ACKNOWLEDGEMENT OF RELEASE INVESTIGATION §330.459(c)

The facility is designed and operated to prevent any release. If there is evidence of a release from the recycling facility, the TCEQ executive director may require an investigation into the nature and extent of the release, and an assessment of measures necessary to correct an impact to groundwater.

4. RECYCING FACILITY WITH COMBUSTIBLE MATERIALS STORED OUTDOORS §330.459(d)

The Facility may store combustible materials (such as unprocessed or processed brush or lumber) outside and will therefore comply with the following additional closure requirements;

(1) Closure of the facility must include the collection and removal of any unprocessed or processed materials remaining on-site, unless otherwise approved or directed in writing by the TCEQ executive director.

(2) Closure of the facility must be completed within 180 days following the most recent acceptance of processed or unprocessed materials unless otherwise directed or approved in writing by TCEQ executive director.

5. CERTIFICATION OF FINAL FACILITY CLOSURE §330.461(a)

In order to complete final facility closure, the Owner or Operator shall complete the following final closure activities:

1. Publish a notice of final facility closure in the newspaper(s) of largest circulation in the vicinity of the facility, no later than 90 days before initiation of a final facility closure. The notice shall contain:
   a. Name, address, and physical location of the facility,
   b. Registration number, and
   c. Last date of intended receipt of waste.
2. Make an adequate number of copies of the approved final closure and post-closure plans available for public access and review.
3. Provide written notification to the TCEQ executive director of the intent to close the facility and place this notice of intent in the operating record.

6. ACCESS CONTROL §330.461(b)

Following notification to the TCEQ executive director of final facility closure, owner or operator shall post at a minimum one sign at the main facility entrance, and all other frequently used points of access for the facility, notifying all persons who may utilize the facility of the date of closing for the facility and the prohibition against further receipt of waste materials after the stated date. Suitable barriers shall be installed at all gates or access points to adequately prevent the unauthorized dumping of solid waste at the closed facility.

7. FINAL CLOSURE NOTIFICATION §330.461(c)

Within 10 days of completion of final closure activities, the Facility shall submit a certification, signed by an independent licensed professional engineer, verifying that final facility closure has been completed in accordance with the approved closure plan and the applicable rule provisions of 30 TAC Chapter 330, Subchapter K. The submittal to the executive director shall be submitted by registered mail and include all applicable documentation necessary for certification of final facility closure. The Facility will not require post-closure care and will submit a request for voluntary revocation of the facility registration.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART III

APPENDIX III-E – CLOSURE COST ESTIMATE AND FINANCIAL ASSURANCE

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

APPENDIX III-E – CLOSURE COST ESTIMATE AND FINANCIAL ASSURANCE

TABLE OF CONTENTS

1. INTRODUCTION 1

2. CLOSURE COST ESTIMATE FOR STORAGE AND PROCESSING UNITS §330.63(j), §330.505(a) 1

3. CHANGES TO CLOSURE COST AND FINANCIAL ASSURANCE §330.505(a)(3) & (4) 1

4. FINANCIAL ASSURANCE REQUIREMENT §330.505(b) 1

ATTACHMENTS

ATTACHMENT III-E.1 – CLOSURE COST ESTIMATE CALCULATIONS

ATTACHMENT III-E.2 – FINANCIAL ASSURANCE DOCUMENTATION

3/1/2023

Frank E Pugsley, P.E.

1. INTRODUCTION

This Closure Plan has been developed for the BAP Kennor Recycling Facility in accordance with the requirements of 30 TAC §330.63(j) and §330.505.

2. CLOSURE COST ESTIMATE FOR STORAGE AND PROCESSING UNITS §330.63(j), §330.505(a)

The cost estimate is based on the cost of hiring a third party (not affiliated with the owner or operator) to complete closure of the facility, including disposition of the maximum inventories of all processed and unprocessed combustible materials stored outdoors, on-site, at any point in the remaining lifetime of the facility. The closure cost estimate calculations are included in Attachment III-E1.

3. CHANGES TO CLOSURE COST AND FINANCIAL ASSURANCE §330.505(a)(3) & (4)

An increase in the closure cost estimate and the amount of financial assurance will be provided to TCEQ, if changes to the facility conditions increase the maximum cost of closure at any time during the active life of the facility. A decrease in the closure cost estimate and the amount of financial assurance may be approved if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the facility, and the owner or operator provides written notice to the TCEQ executive director of the detailed justification for this reduction. A reduction in the cost estimate and the financial assurance must be submitted as a registration modification.

4. FINANCIAL ASSURANCE REQUIREMENT §330.505(b)

The Facility will store materials which may be combustible, and therefore will establish and maintain financial assurance for closure in accordance with 30 TAC, Chapter 37, Subchapter J (relating to Financial Assurance for Recycling Facilities). Continuous financial assurance for closure will be provided until all requirements of the final closure plan have been completed, and the site is determined to be closed in writing by the TCEQ executive director. An estimate of the total amount of financial assurance responsibility is included with the closure cost estimate in Attachment III-E.1.

ATTACHMENT III-E.1 – CLOSURE COST ESTIMATE CALCULATIONS

Parkhill
3000 Internet Blvd., Suite 550
Frisco, Texas 75034
TBPE F-560

Project # 1604.21

Client	BAP Kennor Landfill, LLC	Prepared By	AMF	on	5/24/2022
Project	BAP Kennor C&D Recycling Facility Registration Application	Reviewed By	SS	on	5/26/2022
Subject	Closure Cost Estimate Calculations	Approved By	SS	on	5/26/2022

A Required

In accordance with 30 TAC §330.505, estimate the cost to hire a third party to complete closure tasks including disposition of the maximum inventories of all processed and unprocessed combustible materials stored outdoors on site during the life of the facility.

B Solution

B.1 Determine maximum amount (by type) of combustible materials (including unprocessed feedstocks, material in process, and processed materials) that will be stored outdoors at any time.

Anticipate maximum of 450 tons of materials received daily.

Unprocessed materials may remain on-site up to 180 days, however site will limit materials accumulation according to Part III, Appendix III-C, Section 2.1 if materials cannot be processed.

Processed materials may remain on-site up to 180 days.

Assume the following based on Table 4-4 of TCEQ 2021 Recycling Market Development Plan:

- 7.2% of received materials are Paper/Cardboard
- 3.3% of received materials are Brush and Green Waste
- 10.1% of received materials are Scrap Lumber/Wood Packaging
- 20.6% of received materials are combustible

Assume maximum of 450 tons of materials are processed daily, and all materials are processed within one day.

$$V_{max} = V_{UP} + V_P \times t \qquad V_{C,max} = 0.206(V_{max})$$

Where:
- V_{max} is the maximum volume of materials stored outdoors
- $V_{C,max}$ is the maximum volume of combustible materials stored outdoors
- V_{UP} is the anticipated maximum volume of unprocessed materials to be received daily
- V_P is the anticipated maximum volume of materials to be processed daily
- t is the maximum time that processed materials may remain on-site

$$V_{max} = 450 + 450 \times 180 = 81{,}450\ tons$$

$$V_{c,max} = 0.206(81{,}450)16{,}780\ tons$$

PARKHILL SMITH & COOPER, INC. F-560 STATE OF TEXAS FRANK E. PUGSLEY 98460 LICENSED PROFESSIONAL ENGINEER

3/1/2023

TABLE 4-4: COMPOSITION OF C&D MATERIALS DISPOSED BY MATERIAL CATEGORY (2019)

Material Group	Material Category[1]	Percentage[2]	Tonnage Disposed
C&D Materials	Concrete/Cement	28.5%	2,215,302
	Bricks/Cinder Blocks[4]	6.5%	505,244
	Asphalt[4]	5.4%	419,741
	Drywall/ Gypsum	3.9%	303,147
	Subtotal	**44.3%**	**3,443,434**
Paper	Cardboard	5.9%	458,606
	Other	1.3%	101,049
	Subtotal	**7.2%**	**559,655**
Metals	Ferrous	5.0%	388,649
	Subtotal	**5.0%**	**388,649**
Organics	Yard Trimmings, Brush, and Green Waste[3,4]	3.3%	256,509
	Wood Packaging[5]	2.7%	209,871
	Scrap Lumber[5]	7.4%	575,201
	Soil	21.1%	1,640,101
	Subtotal	**34.5%**	**2,681,682**
Other	Refuse	1.6%	124,368
	Other	7.4%	575,201
	Subtotal	9.0%	699,569
Subtotal Recyclable		**42.7%**	**3,319,066**
Subtotal Non-Recyclable		**57.3%**	**4,453,923**
TOTAL		**100.0%**	**7,772,989**

1. *Shaded rows represent materials that are recyclable and generally an emphasis of recycling programs.*
2. *Percentages rounded for ease of presentation.*
3. *Includes estimated quantity of brush disposed as C&D based on tonnage of C&D disposed reported in Municipal Solid Waste in Texas: A Year in Review FY 2019 Data Summary and Analysis by Texas Commission on Environmental Quality, 2020. Excludes brush disposed as MSW or Brush.*
4. *Yard trimmings, brush, and green waste in C&D is generally brush. The Project Team used the category Yard Trimmings, Brush, and Green Waste to be consistent with the RMDP definitions.*
5. *These materials are recyclable but have not been a point of emphasis in recycling programs. For a conservative estimate, the Project Team decided against including these materials in the estimated tonnage of materials that could potentially be recycled.*

Source: TCEQ 2021 Recycling Market Development Plan

3/1/2023

Frank E Pugsley, P.E.

Appendix C
Closure Cost Estimate Worksheet

1. List the types and maximum amounts of combustible materials stored outdoors at your facility at any time. Specify material amounts in tons or cubic yards.

Type of Material	Maximum Amount Stored Outdoors[a]
Paper	**7.2%(434,400) = 5,865 tons**
Brush/Green Waste	**3.3%(434,400) = 2,688 tons**
Wood Packaging/Scrap Lumber	**10.1%(434,400) = 8,227 tons**

2. Total amount of combustible materials stored outdoors (from Item 1): **16,780 tons**

3. Attach quotes for disposition of any or all of these materials. Each quote should specify the type(s) and amount(s) of material it covers, and a cost for disposition of each.

4. Total amount of materials covered by quotes: **0 tons**

5. Total cost of disposition covered by quotes: $**0**

6. Subtract the total amount of materials covered by quotes (Item 4) from the total amount of materials from Item 2:

   Item 2 total **16,780 tons**

   Item 4 total **0 tons**

   = **16,780 tons**

   If the number you entered for Item 6 is zero, the dollar figure entered for Item 5 is your financial assurance cost estimate. If this number is greater than zero, complete items 7 - 19 to determine the cost of disposition for materials not covered by quotes.

7. Nearest disposal facility authorized to accept materials on your site:

   Republic Services Fort Worth Southeast Landfill (MSW Permit No. 218C)

8. Tipping fee (disposal charge) at this facility (*use the same unit of measurement as in Item 2*):

   8(a) _____ per cubic yard or

   8(b) **$38.60**[a] per ton

9. Disposal cost = Item 6 x Item 8(a) or 8(b) = $**647,670**

a. Average tipping cost for 2020 from TCEQ's ***Municipal Solid Waste in Texas: A Year in Review; 2020 Data Summary and Analysis***

10. Collection cost for materials not covered by quotes:

    Multiply the number recorded on Item 6 by $0.80 if calculated in cubic yards, or
    Multiply the number recorded on Item 6 by $1.00 if calculated in tons.

    Collection cost: $_____**16,780**_____ (if this number is less than $500, enter $500 on this line)

11. Transportation cost for materials not covered by quotes:

    Distance from your facility to the disposal facility named on Item 7: _____**23**_____ miles

12. Use the chart in Appendix B to determine the density of each type of combustible material stored outdoors at your facility.

13. Total volume of materials with densities of less than 500 pounds per cubic yard:

    _____**77,997**_____ cubic yards

14. Total weight of materials with densities greater than 500 pounds per cubic yard:

    _____**10,915**_____ tons

15. Divide the number of cubic yards entered for Item 13 by 100:_____**779.97**_____

16. Divide the number of tons entered for Item 14 by 25: _____**436.6**_____

17. Add the numbers you have entered for Items 15 and 16: _____**1,217**_____

    This is the number of truckloads necessary to transport your materials for disposition.

18. Multiply the number you entered for Item 17 by the number of miles from your facility to the nearest authorized disposal facility (Item 11). _____**27,991**_____

    This is the number of "loaded miles" required for transportation to a disposal facility.

19. Multiply the number you entered for Item 18 by $2.50: $_____**69,978**_____

    This is the cost of transportation for materials not covered by quotes.

20. Total closure cost: Add the dollar figures you entered for

    Item 5: $ _____**0**_____

    Item 9: $ _____**647,670**_____

    Item 10: $ _____**16,780**_____

    Item 19: $ _____**69,978**_____

    Total amount of your financial assurance responsibility: $ _____**734,428**_____

ATTACHMENT III-E.2 – FINANCIAL ASSURANCE DOCUMENTATION

This page is intentionally left blank. This page will be replaced with documentation of an acceptable financial assurance mechanism prior to receipt of materials or as approved by the Executive Director in accordance with 30 TAC Chapter 37, Subchapter J relating to Financial Assurance for Recycling Facilities.

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART IV

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

BAP Kennor C&D Recycling Facility

TCEQ MSW Registration No. TBD

Tarrant County, Texas

PART IV – SITE OPERATING PLAN

Prepared for:

BAP Kennor Landfill, LLC

March 2023

Prepared by:

Parkhill
3000 Internet Blvd, Suite 550
Frisco, Texas 75034
TBPE F-560

3/1/2023

Frank E Pugsley, P.E.

PARKHILL Project No.: 011604.21

PART IV – SITE OPERATING PLAN

TABLE OF CONTENTS

ACRONYMS AND DEFINITIONS 1
1. INTRODUCTION 2
2. RECORDKEEPING AND REPORTING REQUIREMENTS §330.219 & §330.675 . 3
3. PERSONNEL §330.127(1) 5
3.1. Training 5
3.1.1. Facility Orientation Training 6
3.1.2. Fire Safety Training 6
3.1.3. Health and Safety Training 7
3.1.4. Waste Screening Training 7
4. EQUIPMENT §330.127(2) 8
5. WASTE ACCEPTANCE AND ANALYSIS §330.203 9
6. FACILITY GENERATED WASTES §330.205 10
7. CONTAMINATED WATER MANAGEMENT §330.207 11
8. STORAGE REQUIREMENTS §330.209 12
9. APPROVED CONTAINERS §330.211 13
10. REQUIREMENTS FOR STATIONARY COMPACTORS §330.215 14
11. FIRE PROTECTION §330.221 15
11.1. Fire Protection Plan 15
12. ACCESS CONTROL §330.223 17
13. UNLOADING WASTE §330.225 18
14. SPILL PREVENTION AND CONTROL §330.227 19

3/1/2023

Frank E Pugsley, P.E.

15. OPERATING HOURS §330.229 20
16. FACILITY SIGN §330.231 21
17. CONTROL OF WINDBLOWN MATERIAL AND LITTER §330.233 22
18. MATERIALS ALONG THE ROUTE TO THE FACILITY §330.235 23
19. FACILITY ACCESS ROADS §330.237 24
20. NOISE POLLUTION AND VISUAL SCREENING §330.239 25
21. OVERLOADING AND BREAKDOWN §330.241 26
22. SANITATION §330.243 27
23. VENTILATION AND AIR POLLUTION CONTROL §330.245 28
24. HEALTH AND SAFETY §330.247 29
25. EMPLOYEE SANITATION FACILITIES §330.249 30

TABLES

TABLE IV-1 – RECORDKEEPING REQUIREMENTS 4
TABLE IV-2 – FACILITY EQUIPMENT 8

3/1/2023

Frank E Pugsley, P.E.

ACRONYMS AND DEFINITIONS

ED – TCEQ Executive Director

MSW – Municipal Solid Waste

PCBs – Polychlorinated Biphenyl Wastes

PPE – Personal Protective Equipment

RACM – Regulated Asbestos-Containing Material

SOP – Site Operating Plan

SOR – Site Operating Record

TAC – Texas Administrative Code

TCEQ – Texas Commission on Environmental Quality

TxDOT – Texas Department of Transportation

1. INTRODUCTION

BAP Kennor Recycling Facility is located in western Tarrant County. The facility is located west of the City of Fort Worth, approximately 4.3 miles northwest of the intersection of interstate highways 820 and 30, and approximately half a mile west of Lake Worth. The Facility is located within the property boundary of a permitted, Type IV landfill (MSW Permit No. 1241). The recycling facility will be outside the existing landfilled waste. The landfill currently does not contain any other waste storage, processing, or disposal facilities. An active Aggregate Production Operation for sand and gravel mining is also located on site.

This Site Operating Plan (SOP) consists of information required by Title 30, Texas Administrative Code (TAC), Chapter 330, Subchapter E: Operational Standards for Municipal Solid Waste Storage and Processing units, 30 TAC §330.201–§330.249. This SOP provides guidance to site management and operating personnel to meet general and site-specific requirements of these rules. This SOP facilitates site operation in compliance with applicable TCEQ regulations and current standards of practice. Facility operations reflect current standards of practice in the solid waste industry and are compatible with facility-permitted design. The SOP will also serve as a reference source and be used as a training tool for facility personnel.

2. RECORDKEEPING AND REPORTING REQUIREMENTS §330.219 & §330.675

A copy of the registration, the approved registration application, and other required plans or related documents will be maintained at the Facility, at all times, in hard copy or electronic format. Upon completion of construction at the facility, an as-built set of constructed plans and specifications will be maintained at the Facility, at all times, in hard copy or electronic format. All noted documents will be available for inspection by agency representatives or other interested parties at the Facility. These plans and documents will be part of the Site Operating Record (SOR) for the Facility.

The documentation and information presented in Table IV-1 shall be promptly recorded and retained in the SOR throughout facility operation. All information contained in the SOR will be furnished upon request to the TCEQ Executive Director (ED) and shall be made available at all reasonable times for inspection by the ED. All information contained in the SOR and different required plans, will be retained for the active life of the facility in accordance with §330.219(f).

All reports will be signed by the owner or operator in accordance with §305.44(a), or by a duly authorized representative of the owner or operator as outlined in §330.219(c)(1)(A-C). Reports shall include the certification statement in §305.44(b). If authorization to sign is no longer accurate, a new authorization will be submitted. The ED may set alternate recordkeeping and notification requirements.

The Facility will provide the reports required by 30 TAC §330.675 to the ED.

TABLE IV-1 – RECORDKEEPING REQUIREMENTS

Records to be Maintained	Rule Citation
Copy of the registration, the approved registration application, and any other required plan or other related document shall be maintained at the Facility during construction. After completion of construction, an as-built set of construction plans, and specifications shall be maintained at the Facility or at an alternative location approved by the ED. This requirement shall be considered a part of the SOR.	§330.219(a)
Any/all location-restriction demonstrations.	§330.219(b)(1)
Any/all inspection records and training procedures.	§330.219 (b)(2)
Any/all closure plans and any monitoring, testing, or analytical data relating to closure requirements.	§330.219(b)(3)
Any/all cost estimates and financial assurance documentation relating to financial assurance for closure.	§330.219(b)(4)
Any/all copies of correspondence and responses relating to the operation of the facility, modifications to the registration, approvals, and other matters pertaining to technical assistance.	§330.219(b)(5)
Any/all documents, manifests, shipping documents, trip ticket, etc., involving special waste.	§330.219(b)(6)
Other document(s) as specified by approved authorization or the ED.	§330.219(b)(7)
Record retention provisions for trip tickets as required by §312.145(b)(2).	§330.219(b)(8)
Alternative schedules and notification requirements, if applicable.	§330.219(g)
Any/all inspection and training procedures pertaining to fire protection.	§330.221
Any/all alternative operating dates, times, and durations.	§330.229(d)

3. PERSONNEL §330.127(1)

The site personnel will include, at a minimum, one facility supervisor, one equipment operator, one gate attendant, and one laborer. The organizational chart (Figure IV-1) at the end of this section provides the positions and chain-of-command of personnel necessary to operate the facility.

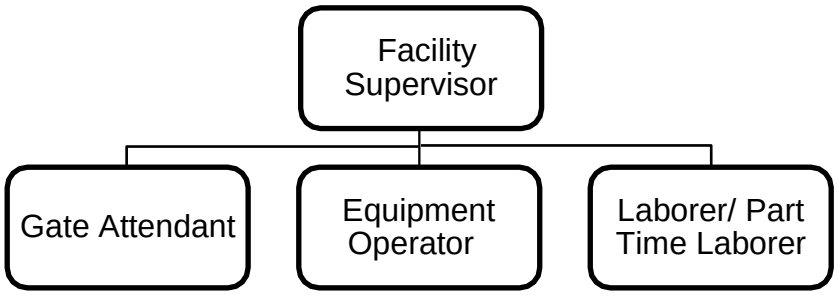
The Facility supervisor will manage daily operations at the site. The supervisor will be responsible for ensuring that Facility operations comply with this SOP and registration application, as well as all applicable local, state, and federal regulations. The supervisor will supervise all other site employees and will have the authority to direct site employees. The supervisor must obtain and maintain an MSW Class B or Class A license.

The gate attendant will be responsible for documenting incoming loads, completing initial load screening, and collecting appropriate fees.

The equipment operator will be responsible for operating all site heavy equipment and processing equipment. The equipment operator will also screen loads for unacceptable materials as they are un-loaded.

The laborer will assist the supervisor and equipment operator as necessary. The laborer's job functions may include, but are not limited to, collecting windblown litter, cleaning facility equipment, loading processing equipment, inspecting and maintaining perimeter fencing and gate, and other manual labor.

Figure IV-1 – Facility Organizational Chart



3.1. Training

Facility personnel will complete a training program that may involve classroom and/or on-the-job training that teaches how to perform their duties to ensure facility compliance with regulations.

Training will be directed by someone trained or experienced in waste management procedures. All staff will receive an orientation program before beginning facility work. Further training will be in alignment

with employee job requirements as well as safety and fire training required for all staff. All employees will receive the following training with annual training review and periodic training updates:

- Facility Orientation
- Fire Safety
- Health and Safety Program
- Waste Screening

3.1.1. Facility Orientation Training

When hired, staff will be provided with facility orientation training. At a minimum, this training will cover:

- Facility communication and alarm systems;
- Facility and process unit layout;
- Process flow diagram;
- Processing equipment operation, repair, and replacement procedures (equipment operators and facility supervisor);
- Emergency response actions; and
- Procedures for shutdown of facility operations and process equipment (equipment operators and facility supervisor).

3.1.2. Fire Safety Training

Staff will be trained when hired, and annually thereafter, regarding fire prevention, fire control, firefighting procedures, and notification requirements. These general rules are in place for fire response in the event of a fire at the facility:

- If a fire cannot be safely extinguished by hand-held extinguishers, call the Fire Department by dialing 911.
- Do not attempt to fight a fire alone. Alert other facility personnel.
- Be familiar with use and limitations of firefighting equipment available at the facility.
- Do not attempt to fight a fire without adequate personal protective equipment (PPE).

3.1.3. Health and Safety Training

Health and Safety Training will be conducted in accordance with the Health and Safety Plan described in Section 24 – Health and Safety, herein.

3.1.4. Waste Screening Training

All employees involved with waste receiving operations will be trained to recognize unauthorized waste, regulated hazardous waste, and PCBs through observation of waste color, physical state, odor, ignitability, and pH. Staff are also trained to compare characteristics of waste shipment with characterization required before approval of waste for processing.

4. EQUIPMENT §330.127(2)

At a minimum, the equipment in Table IV-2 will be maintained for site operations.

TABLE IV-2 – FACILITY EQUIPMENT

Equipment Type	Minimum Size	Minimum Quantity	Function
Ballistic Separator	BRT Hartner BSV 40, equivalent, or larger	1	Material sorting
Conveyor Belt	N/A	1	Material movement
Wheel Loader	CAT 903D, equivalent, or larger	1	Material movement, loading sorting equipment
Bulldozer	CAT D1, equivalent, or larger	1	Maintenance of site roads
Excavator	CAT 313 GC, equivalent, or larger	1	Soil excavation, ditch maintenance, material movement
Water Pump	3 inch or larger	1	Ponded water control, fire fighting

5. WASTE ACCEPTANCE AND ANALYSIS §330.203

Consistent with §330.15(e), the Facility will not knowingly or intentionally accept lead acid batteries, Class I non-hazardous industrial wastes, regulated hazardous wastes, regulated asbestos-containing material (RACM), liquid wastes, radioactive wastes, PCB wastes, infectious medical wastes, or other waste prohibited by TCEQ or Federal regulations.

The Facility will only accept materials authorized for a Type IV facility, and deemed to be recyclable, generally characterized as inert and essentially insoluble recyclable material usually including, but not limited to, construction and demolition materials such as concrete, rock, brick, glass, dirt, wood, lumber, brush, metals, and certain plastics. Recyclable material may be accepted from residential, commercial, industrial, and municipal sources. The only industrial materials which will be accepted are Class 3 non-hazardous industrial materials. All received materials will be free of putrescible and household waste. There are no anticipated limiting parameters (i.e. pH, fats, oil and grease concentrations, TSS, COD, BOD, organic and metal constituent, water content, etc.) for acceptable wastes for the Facility.

The Facility may accept up to 450 tons, or 1,800 cubic yards, of recyclable material for processing per day. Recyclable materials will be processed according to the rates recommended by the processing equipment manufacturer. The design capacity of the Facility will not be exceeded during operation. Processing equipment will be operated according to manufacturer recommendations. The Facility will not accumulate recyclable materials in quantities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of other vectors. If such accumulations inadvertently occur, additional recyclable materials shall not be received until the adverse conditions are abated. Unprocessed materials may remain on-site for up to 180 days after receipt. The maximum amount of material to be stored at the Facility at any time shall not exceed 81,450 tons, or 325,800 cubic yards. Processed materials may remain on-site for up to 180 days after being processed.

6. FACILITY GENERATED WASTES §330.205

Wastes generated by the recycling facility will be limited to materials accepted by the Facility, which cannot be processed or recycled, and will generally have the same characteristics and constituents as waste accepted at a Type IV MSW facility, as discussed in Section 5. In accordance with §330.205(b), all facility generated wastes will be disposed of at a permitted facility authorized to, and accepting the designated type and/or class of material. The recycling facility will maintain documentation that all wastes leaving the facility can be adequately managed by other licensed or permitted facilities. Wastewaters generated by the Facility will be managed as contaminated water in accordance with Section 7 – Contaminated Water Management.

7. CONTAMINATED WATER MANAGEMENT §330.207

All liquids resulting from the operations at the Facility will be disposed of in a manner that will not cause surface water or groundwater pollution in accordance with §330.207(a).

Surface water runoff will be directed away from material unloading, storage, and processing areas by grading, berms, or other diversion or conveyance systems, to prevent contact with recyclable materials. Any residuals or contaminated materials will be stored in leak proof or covered containers (such as dumpsters or roll-off containers) that do not allow contact with rainwater or wash water. It is anticipated that the Facility will not generate any contaminated water.

No leachate or gas condensate is anticipated to be produced by the Facility. The Facility will not process grease trap waste, grit trap waste, septage, or any liquid wastes. No off-site discharge of contaminated waters will be made without approval under the Texas Pollutant Discharge Elimination System authority.

Wastewaters discharged to a facility permitted under Texas Water Code, Chapter 26 must not

- Interfere with or pass-through the treatment facility processes or operations;
- Interfere with or pass through its sludge processes, use, or disposal, or;
- Otherwise, be inconsistent with the prohibited discharge standards, including 40 Code of Federal Regulations Part 403, General Pretreatment Regulations for Existing and New Source Pollution.

The Facility will not accept or process any materials that can contribute oil and grease to the Facility's wastewater.

8. STORAGE REQUIREMENTS §330.209

In accordance with §330.209(a), all solid waste will be stored in a manner that does not constitute a fire, safety, or health hazard or provide food or harborage for animals and vectors and will be contained or bundled so as not to result in litter. Control of odors, vectors, and windblown waste from the storage area will be maintained. The facility will not accumulate recyclable materials in quantities that cannot be processed within such time as to avoid creation of nuisance conditions such as odor, insect breeding or harborage of other vectors. If such accumulation occurs, additional solid waste will not be received until the adverse conditions are corrected.

9. APPROVED CONTAINERS §330.211

The Facility will not accept any solid wastes containing food waste, so 30 TAC §330.211 is not applicable.

10. REQUIREMENTS FOR STATIONARY COMPACTORS §330.215

The Facility will not have a stationary compactor, so 30 TAC §330.215 is not applicable.

11. FIRE PROTECTION §330.221

The Fire Protection Plan provides guidance to facility staff on proper procedures in the event of a fire. All employees will be trained in the contents and use of the Fire Protection Plan, and emergency procedures related to potential fires at the Facility. An adequate supply of water under pressure will be available for firefighting purposes. Water will be available for use by local fire department(s) and emergency responder(s) in the event of a fire. The Facility will be equipped with fire extinguishers of the type, size, location, and number as recommended by Tarrant County fire codes. All fire extinguishers will be fully charged and ready for use. Extinguishers will be inspected, according to manufacturer and local fire code recommendations, by a qualified individual(s), and all extinguishers will display a current inspection tag.

11.1. Fire Protection Plan

The following steps will be taken to prevent fires:

- Prohibit open burning of waste
- Monitor incoming loads for signs of burning materials such as smoke, steam, or heat and prevent from dumping within the facility.
- Equipment used at the facility will be routinely cleaned through the use of water or steam cleaners. The water or steam cleaning will remove combustible material and caked material which can cause equipment overheating and equipment fire.
- Fuel spills will be contained and cleaned up immediately.
- Prohibit smoking near operations within the facility.

In the event of fire, alert other facility personnel and call local fire department by dialing 911.

- If a fire is observed on stationary vehicle or piece of equipment, the first priority will be worker safety and getting all personnel safely away from the fire.
- If the fire is on moving equipment, if possible, the vehicle or piece of equipment should be brought to a stop at a location away from any fuel supplies, recyclable materials, and/or other vehicles. The driver will shut off the engine, engage the brake, or use some other appropriate method to prevent subsequent movement of the vehicle. In extenuating emergency circumstances, a driver may abandon the vehicle before it is safely secure. The Facility's primary safety concern is worker safety.
- If a small fire is discovered in the processing or storage areas, an attempt to isolate the burning material should be implemented quickly. If this is not possible, efforts to cover the burning material with earth should be initiated immediately in an attempt to smother the fire. The on-

site fire extinguishers can also be used to attempt to fight the fire. If any of these options are not possible or is considered unsafe, the area should be cleared of personnel and a path cleared for the Fire Department.

12. ACCESS CONTROL §330.223

In accordance with §330.223(a), public access to the Facility will be controlled through a combination of natural barriers and fences and gates. Uncontrolled Facility access will be prevented.

A perimeter fence will be maintained along the north side of the property, from the northwest corner to Silver Creek. The creek and adjacent dense natural vegetation will serve as a natural barrier along the remainder of the north side of the property. From the northeast corner, a perimeter fence will be maintained along the east side of the property to the start of the quarry cliff face. The quarry cliff face and dense natural vegetation will prevent access along the remainder of the east, south, and west sides of the property.

In accordance with §330.223(c), fencing will consist of a four-foot barbed wire fence, a six-foot chain link fence or equivalent and include a lockable gate at the Facility entrance. The boundary fence, gate, and natural barriers created by the property's topography are appropriate to prevent unauthorized access, and protect human health and safety and the environment.

Facility access will consist of a two-lane road, with an improved surface designed to accommodate vehicles anticipated to access the site to transport and unload recyclable material. Adequate turning radii and vehicle circulation lanes will be provided to allow efficient and uninterrupted traffic flow under normal operating conditions. Vehicle parking will be provided for equipment, employees, and visitors. Mud and dust control will be provided according to Section 19.

Access will be further controlled by onsite staff present during operating hours to observe and direct traffic flow as required. The operating area and storage areas will be enclosed by walls, fencing, berms, and/or other barriers to control access to the area. Customers will be limited to disposing material during facility posted hours and an attendant will be on-site during operating hours. When the facility is not open to the public, the access gate will be closed and locked.

13. UNLOADING WASTE §330.225

Recyclable material unloading will only occur in designated areas, and will be confined to as small an area as practical. The Facility is not required to accept any material that is determined to cause or potentially cause problems in maintaining full compliance with site permits and applicable regulations.

In accordance with §330.225(a), a trained gate attendant will be on-site during operating hours to monitor all incoming loads. Facility staff, paved access roads, site signage, and/or portable barriers will be used to direct vehicles to the appropriate unloading location, and prevent indiscriminate dumping.

In accordance with §330.255(b), the unloading of materials in unauthorized areas is prohibited. Facility staff will monitor the site to ensure that any material deposited in an unauthorized area will be promptly removed by the transporter and disposed of properly.

The Facility will only accept materials authorized for a Type IV MSW facility and deemed to be recyclable. All other materials are prohibited. A trained staff person will monitor all waste unloading. Any unauthorized material discovered will be immediately removed and returned to the transporter in accordance with §330.225(c).

14. SPILL PREVENTION AND CONTROL §330.227

Material unloading, sorting, and storage areas are designed to control/contain spills and contaminated water from leaving the facility in accordance with 30 TAC §330.227. It is anticipated that spills will be limited to small incidental spills from haul vehicles, and site vehicles or equipment. Spill kits with absorbent material will be maintained on site for spill response. All fuel for on-site equipment will be stored in a dual-walled container.

The Facility will not have any unenclosed containment areas, therefore storage to account for the 25 year, 24-hour storm is not required.

15. OPERATING HOURS §330.229

The Facility may only accept recyclable materials from 7 a.m. to 7 p.m., Monday through Friday. The Facility's operating hours for operating equipment and transporting materials on or off site will be from 5:00 a.m. to 9:00 p.m., Monday through Friday.

In addition to hours of normal operation, the Facility may include alternative operating hours of up to five days (New Year Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day) in a calendar-year period to accommodate special occasions, special purpose events, holidays, or other special occurrences.

In accordance with §330.229(c), the Facility may request approval from the TCEQ's regional office to allow additional temporary operating hours to address disaster or other emergency situations, or other disruption of waste management services in the area. The Facility will document and record in the site operating record any alternative operating dates, times, and durations.

16. FACILITY SIGN §330.231

The Facility will conspicuously display a facility sign at the site entrance. Posting of erroneous or misleading information shall constitute a violation of §330.231. The facility sign will measure at least four feet by four feet and will display (with letters at least three inches in height) the following:

- Facility Name: BAP Kennor Recycling Facility
- Type of Facility: Type V
- TCEQ MSW Registration Number: TBD
- Waste Acceptance Hours: 7:00 a.m. to 7:00 p.m., Monday through Friday
- Facility Rules (as applicable)

17. CONTROL OF WINDBLOWN MATERIAL AND LITTER §330.233

Facility staff will collect windblown material and litter scattered throughout the facility, along fences and access roads, and at the gate at least once per day, on days when the facility is in operation, to minimize unhealthy, unsafe, or unsightly conditions.

A portable litter fence may be employed to confine windblown material resulting from any outdoor unloading. If a portable fence is not practical, other suitable practices shall be employed to control windblown material. The owner or operator shall deploy a wire (or other suitable type) fencing or screening when necessary to minimize windblown materials from any unenclosed processing or storage areas which contain materials that may become windblown.

18. MATERIALS ALONG THE ROUTE TO THE FACILITY §330.235

The Facility will take step to encourage that vehicles hauling recyclable materials to the facility are enclosed or provide a tarpaulin, net, or other means to effectively secure the load in order to prevent escape of any part of the load by blowing or spilling. The owner or operator shall take actions such as posting signs, reporting offenders to proper law enforcement officers, or adding surcharges.

On days when the Facility in in operation, the owner or operator shall be responsible for at least once per day clean-up of materials spilled along and within the right-of-way of public access roads within two miles in either direction from the entrance to the facility. The facility operator will consult with TxDOT, county, and/or local governments with maintenance authority over the roads, concerning clean up of public access roads and right-of-way.

19. FACILITY ACCESS ROADS §330.237

All weather roads will be provided within the facility to the unloading area(s) designated for wet-weather operation. These roads may be paved, gravel, or other aggregate that will provide sufficient stability and traction for operation of waste hauling vehicles and site equipment in wet weather. The tracking of mud and debris onto public roadways form the Facility shall be minimized.

Dust from on-site and other access roadways shall not become a nuisance to the surrounding areas. A water source and necessary equipment for wetting roads or removing dust or other appropriate means of dust control shall be provided.

All on-site and other access roadways shall be maintained on a regular basis. Access roadways shall be maintained and repaired as needed to minimize depressions, ruts, and potholes.

20. NOISE POLLUTION AND VISUAL SCREENING §330.239

The noise pollution and visual screening requirements of 30 TAC §330.239 are only applicable for transfer stations and therefore do not apply to this Facility. However, the natural vegetation and topography and the buffer zone surrounding the Facility will minimize noise pollution and adverse visual impacts.

21. OVERLOADING AND BREAKDOWN §330.241

The design capacity of the Facility will not be exceeded during operation. Processing equipment will be operated according to manufacturer recommendations. The facility will not accumulate recyclable materials in capacities that cannot be processed within such time as will preclude the creation of odors, insect breeding, or harborage of other vectors. If such accumulations inadvertently occur, additional solid waste shall not be received until the adverse conditions area abated.

If a significant work stoppage should occur at the Facility (due to a mechanical breakdown or other cause) the Facility will accordingly restrict the receipt of solid waste. Haulers will be notified of the conditions and will be responsible for diverting incoming waste to an alternate processing or disposal facility. If the work stoppage is anticipated to last long enough to create objectionable odors, insect breeding, or harborage of vectors, steps shall be taken to remove any accumulated unprocessed materials from the Facility to an approved backup processing or disposal facility.

If the Facility becomes inoperable for periods longer than 24 hours, the owner or operator will arrange for any accumulated unprocessed materials to be transported to another approved facility for processing or disposal.

22. SANITATION §330.243

All impervious working surfaces that come in contact with waste (including asphalt and/or concrete unloading surfaces and processing equipment) will be washed down on a weekly basis.

Wash waters will not be allowed to accumulate on site without proper treatment to prevent the creation of odors or an attraction to vectors. All wash waters will be collected and disposed of in an authorized manner as discussed in Section 7.

23. VENTILATION AND AIR POLLUTION CONTROL §330.245

No significant air pollution emissions are expected to result from operations of the facility. In accordance with 30 TAC §330.245(a), air emissions will not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.

The Facility will only accept non-putrescible recyclable materials, and it is anticipated that these materials will be generally odor-free. However, a buffer zone between the Facility and the property boundary will be maintained to prevent any odors from migrating offsite. The Facility is designed, and will be maintained, to provide positive drainage and prevent odors associated with stagnant ponded water.

If applicable, reporting of emissions events will be made in accordance with 30 TAC §101.201, and reporting of scheduled maintenance will be made in accordance with 30 TAC §101.211.

24. HEALTH AND SAFETY §330.247

The owner or operator will develop and maintain a Health and Safety Plan. All staff shall be annually trained (at minimum) in accordance with this plan. In case of an emergency, facility staff should dial 911 for access to fire and medical emergency services.

25. EMPLOYEE SANITATION FACILITIES §330.249

The Facility will provide potable water and will be equipped with sanitary facilities including toilets and sinks for all employees and visitors. The Facility may utilize portable facilities to meet this requirement.